Market Basket Site
ONTARIO COUNTY, NEW YORK

Final Engineering Report

NYSDEC Site Number: B00018

Prepared for:

City of Geneva
47 Castle Street
Geneva, NY 14456

Prepared by:

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FEBRUARY 2017

CERTIFICATIONS

I, David K. Meixell, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan and the Remedial Action Work Plan Addendum was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and Remedial Action Work Plan Addendum and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in deed restrictions created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols in place at the time and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable in place at the time and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, David K. Meixell, of Plumley Engineering, P.C., 8232 Loop Road, Baldwinsville, New York, 13027, am certifying as Owner’s Designated Site Representative for the site.

075577-1	02/10/2017	
NYS Professional Engineer #	Date	Signature

TABLE OF CONTENTS

CERTIFICATIONS I

TABLE OF CONTENTS II

LIST OF ACRONYMS 1

FINAL ENGINEERING REPORT 2

1.0 BACKGROUND AND SITE DESCRIPTION 2

2.1 REMEDIAL ACTION OBJECTIVES 3

2.2 DESCRIPTION OF SELECTED REMEDY 3

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS 5

4.1 GOVERNING DOCUMENTS 9

4.1.1 Site Specific Health & Safety Plan (HASP) 9
4.1.2 Quality Assurance Project Plan (QAPP) 9
4.1.3 Storm-Water Pollution Prevention Plan (SWPPP) 9
4.1.4 Community Air Monitoring Plan (CAMP) 9
4.1.5 Contractors Site Operations Plans (SOPs) 9
4.1.6 Community Participation Plan 9

4.2 REMEDIAL PROGRAM ELEMENTS 10

4.2.1 Contractors and Consultants 10
4.2.2 Site Preparation 10
4.2.3 General Site Controls 11
4.2.4 Nuisance controls 12
4.2.5 CAMP results 12
4.2.6 Reporting 12

4.3 CONTAMINATED MATERIALS REMOVAL 12
4.3.1 Contaminated Soil 12
4.4 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING 14
4.5 IMPORTED BACKFILL 15
4.6 CONTAMINATION REMAINING AT THE SITE 16
4.7 ENGINEERING CONTROLS 17
4.8 INSTITUTIONAL CONTROLS 17
4.9 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN 17
LIST OF TABLES 18
LIST OF FIGURES 19
LIST OF APPENDICES 20

LIST OF ACRONYMS

Acronym	Definition
CAMP	Community Air Monitoring Program
CQAP	Construction Quality Assurance Plan
FER	Final Engineering Report
HASP	Health and Safety Plan
IRM	Interim Remedial Measure
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety & Health Administration
PID	Photoionization Detector
PRAP	Proposed Remedial Action Plan
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RAO	Remedial Action Objectives
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan
RD	Remedial Design
ROD	Record of Decision
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidance
SI	Site Investigation
S/MMP	Soils/Material Management Plan
SOP	Site Operation Plan
SVOC	Semi-volatile Organic Compound
VOC	Volatile Organic Compound

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

The City of Geneva entered into a State Assistance Contract (SAC) with the New York State Department of Environmental Conservation (NYSDEC) in March 1999, to investigate and remediate a 2.5-acre property located in Geneva, New York. The property was remediated to restricted commercial use.

The site is located in the County of Ontario, New York and is identified as tax parcels 090.15-4-67 and 90.20-1-11 on Ontario County Tax Maps # 090.15 and 090.20. The site is situated on an approximately 2.5-acre area bounded by Avenue F to the north, a warehouse to the south, Univar (formerly H.B. Fuller Company) and vacant property to the east, and Lehigh Street to the west (see Figures 1 and 2). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

An electronic copy of this FER with all supporting documentation is included as Appendix B.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site in the March 2002 Record of Decision (ROD).

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. The overall remedial goal is to meet all standards, criteria, and guidance (SCGs) and be protective of human health and the environment. At a minimum, the remedy selected must eliminate or mitigate all significant threats to the public health and to the environment presented by the hazardous substances disposed at the site through the proper application of scientific and engineering principles.

The future use for the Market Basket site will be restricted commercial and industrial. The goals selected for this site are:

- Reduce, control, or eliminate to the extent practicable the contamination present within the soils/waste on site.
- Eliminate to the extent practicable the potential for direct human contact with the contaminated soils or groundwater on site.
- Provide for attainment of SCGs for groundwater quality at the site, to the extent practicable.

2.2 DESCRIPTION OF SELECTED REMEDY

The site was remediated in accordance with the remedy selected by the NYSDEC in the Record of Decision (ROD) dated March 2002.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Any uncertainties identified during the SI/RAR will be resolved.

2. Building demolition.

3. Sub-slab soil characterization.

4. Excavation and off-site disposal of contaminated soils to level consistent with TAGM 4046 (Standards at time of ROD). A baseline figure of 1,000 cubic yards is assumed due to uncertainties prior to completing the sub-slab soil evaluation. This figure assumes that all soils demonstrating elevated metal concentrations in the southeast area will not be removed. Rather, the source sludge material in this area will be removed and some pockets of metal contamination in soils may remain. Excavation will be backfilled with clean fill material.

5. Since the selected remedy will not immediately meet groundwater standards, a monitoring program will be instituted for a minimum of five years. This program will allow the effectiveness of the selected remedy to be monitored and will be a component of the operation and maintenance for the site. This monitoring program will be evaluated after five years to determine whether further monitoring is necessary.

6. Deed Restrictions will be used to prohibit the use of groundwater as a potable or process water source without treatment to achieve New York State standards; and ensure that if the site soil is excavated, it is managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. The deed restrictions will also require owners to annually certify to NYSDEC that the restrictions have been adhered to and that the conditions at the site are fully protective of public health and the environment in accordance with the Record of Decision.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

The remedy for this site was performed as a single project, and no interim remedial measures, operable units or separate construction contracts were performed.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

The Remedial Action at the site was conducted in 2 phases. Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved June 2007 Remedial Action Work Plan (RAWP) and the July 2016 RAWP Addendum for the Market Basket site (July 2005). All deviations from the RAWPs are noted below.

Phase 1 Remedial activities occurred at the 3 locations noted on Figure 2 and Figure 6, and are described below:

- **Impacted Soil/Fill Material at SB-2**

  An area of soil that had been impacted with chlorinated compounds was identified in the vicinity of SB-2 on the north block. See Figure 2 and Figure 6. The excavation area was approximately 20 ft. x 20 ft. x 20 ft. centered at this location. Excavated soil/fill material was field screened with a photoionization detector (PID) using a screening level of 10 ppm. The excavated soil/fill material was staged in separate stockpiles based on the PID readings and visual observations. The excavation area was extended until it appeared that impacted soils had been removed. One confirmation soil sample was collected from each side of the excavation (north, east, south and west) and two soil samples were collected from the bottom of the excavation. Analytical results from these samples are included in Table 3-1 and Appendix H. Soils presenting evidence of impacts were segregated from non-impacted soils. Following receipt of analytical data from the confirmation soil samples and approval from NYSDEC, the excavation was backfilled with approved, imported fill from a site on Gates Road owned by Paul Malcuria. Analytical data from five grab samples of the imported fill are in Table 4-1 and Appendix K. Fill material was placed in the excavation and was compacted using the excavator bucket and tracked construction equipment.

  The excavation around SB-2 required the removal of monitoring well MW-10. Two new downgradient wells (MW-12 and MW-13) were installed in locations immediately downgradient of the SB-2 excavation area. The monitoring well installations were in accordance with the July 2003 Sampling Plan for the Pre-Design Remedial Investigation.

- **Former Underground Storage Tank**

  Fill in the former underground storage tank (UST) pit was excavated at the same time as the excavation activities associated with SB-2. See Figure 2 and Figure 6. The excavation progress was monitored visually and screened with a PID. Piping which was previously observed during the UST removal activities that extended northward from the UST pit was followed and removed. The surrounding soils were evaluated in accordance with Section 3.9(a)5 of DER-10. The excavation area was approximately 23 ft. x 20 ft. x 10 ft. centered at this location. One confirmation soil sample was collected from each side of the excavation (north, east, south and west) and two soil samples were collected from the bottom of the excavation. Analytical

results from these samples are included in Table 3-1 and Appendix H. Excavated soil/fill material was field screened with a photoionization detector (PID) using a screening level of 10 ppm. The excavated soil/fill material was staged in separate stockpiles based on the PID readings and visual observations. The excavation area was extended until it appeared that impacted soils had been removed. Soils presenting evidence of impacts were segregated from non-impacted soils. The piping was not connected on the other end and appeared to have been cut in during the removal of the dispensing pump. Waste characterization samples were collected of the soil/fill material excavated - one grab and one composite soil sample. The soil/fill material samples were analyzed for VOCs and SVOCs, via USEPA Methods 8020/8021 and 8270, respectively, as well as total lead via USEPA Method 6010. The sample locations chosen were based the PID screening results as well as visual and olfactory observations. The excavated soil/fill material was disposed off-site in accordance with applicable regulations.

Following receipt of analytical data from the confirmation soil samples and approval from NYSDEC, the excavation was backfilled with approved, imported fill from a site on Gates Road owned by Paul Malcuria. Analytical data from five grab samples of the imported fill are in Table 4-1 and Appendix K. Fill material was placed in the excavation and was compacted using the excavator bucket and tracked construction equipment.

- **Trench Area at the South Building**

Impacted soil/fill material, visual observations and PID readings, in the trench area located at the eastern end of the former South Building (see Figure 2 and Figure 6) was excavated and removed. Buried piping was encountered, traced, removed, and screened using visual observations and PID readings. The trench area excavation was approximately 20 feet by five feet by 1 to 2 feet deep (5.6 cubic yards). Six (6) soil samples were collected for confirmation purposes. Four (4) surface and two (2) subsurface soil samples were collected in the trench area excavation. Surface soil samples were collected from a depth of 0 to 2 inches beneath any vegetative cover and excluded any non-representative material such as large gravel or cobbles. The surface soil samples were collected based on visual observations and PID readings. The subsurface soil samples were collected at depths of one to two feet below grade. The collected soil samples were submitted to an ELAP certified laboratory, Life Sciences Laboratory, Inc., for analysis of VOCs and SVOCs via USEPA Methods 8020/8021 and 8270. The samples were also analyzed for TAL metals.

The excavations were monitored with a PID as they progressed, using a screening level of 10 ppm. When it appeared that impacted soil had been removed (based on visual observations and PID readings), confirmation samples were collected as noted above. Laboratory results were compared to SCOs as summarized in Table 3-1. Full analytical data are included in Appendix H. The excavated soil/fill material was

disposed off-site in accordance with applicable regulations.

Following receipt of analytical data from the confirmation soil samples and approval from NYSDEC, the excavation was backfilled with approved, imported fill from a site on Gates Road owned by Paul Malcuria. Analytical data from five grab samples of the imported fill are in Table 4-1 and Appendix K. Fill material was placed in the excavation and was compacted using the excavator bucket and tracked construction equipment.

Phase 2 Remedial activities occurred at 1 locations noted on Figure 2 and Figure 6.

- **Removal of Hydraulic Cylinder**

A subsurface hydraulic was encountered during the removal of vegetation on the south block. See Figure 2 and Figure 6 for the location. The structure was removed in September 2016 with NYSDEC oversight. The top of the cylinder was first uncovered via hand digging during the clearing of overgrown vegetation on the site. Excavated soil/fill material was field screened (visual, olfactory, and PID screening – screening level of 10 ppm). The excavated soil/fill material was segregated and staged based on field screening results. All excavated soil/fill material was staged on and covered with a minimum of 12-ml poly sheeting. The northern and southern sides of the cylinder were excavated to determine if any releases/impacts. The excavation was extended in the northerly and southerly direction until field screening indicated no potential for impacts. When field screening indicated no evidence of impacts, the cylinder was removed from the excavation and the excavation advanced to the east and west. The excavated was extended until field screening indicated no evidence of impacts. The excavation measured 7 ft. x 9 ft. x 8 ft. deep. Confirmation samples were collected from each sidewall of the excavation and the 1 bottom sample was collected for laboratory analysis. Confirmation samples were analyzed for TCL VOCs, TCL SVOCs, and PCBs. The confirmation sample analytical results showed no exceedances of the Site's restricted commercial SCOS. See Table 3-1 and Appendix H. The excavation area was restored to existing site grade. The excavation was backfilled with clean topsoil. The backfill material was from Montemorano Brothers, Inc. Topsoil, Sand & Gravel and NYSDEC approved. See Table 4-3 and Appendix K.

All excavated soils from both phases of remedy implementation were stored on, and covered with, plastic sheeting to prevent run-off from the staged soils. Access to staged soil was controlled via fencing and locked gates. Samples were collected from the piles for waste characterization. The excavated soil/fill material was disposed off-site in accordance with applicable regulations.

Groundwater was not encountered during the removal of the hydraulic cylinder and groundwater samples were not collected.

4.1 GOVERNING DOCUMENTS

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP was included as Attachment 10 of the Remedial Action Work Plans approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/quality control activities designed to achieve the project data quality objectives.

4.1.3 Storm-Water Pollution Prevention Plan (SWPPP)

The erosion and sediment controls for all remedial construction were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control.

4.1.4 Community Air Monitoring Plan (CAMP)

NYSDOH's Community Air Monitoring Plan (found in Appendix 1A of NYSDEC's DER-10) was incorporated by reference as part of the RAWP. In addition, a site-specific CAMP was prepared prior to remedial activities. During site remediation, real-time monitoring for particulates and VOCs was performed at one upwind and one downwind location.

4.1.5 Contractors Site Operations Plans (SOPs)

The Remediation Engineer reviewed all plans and submittals for this remedial project (i.e., those listed above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the RAWP. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.6 Community Participation Plan

As part of the Market Basket environmental restoration process, a number of Citizen Participation activities were undertaken in an effort to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- A Fact Sheet was mailed to announce the beginning of field work at the site for remedy implementation was issued in 2008.

- A Fact Sheet will be issued within 10 days of the issuance of the Certificate of Completion announcing that the City of Geneva has met the program requirements and the Certificate of Completion has been issued by the NYSDEC.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

The remedy implementation was conducted in two (2) phases by the following contractors and consultants:

- O'Brien & Gere – environmental consultant
- Plumley Engineering – environmental consultant
- Eddington Environmental – consultant
- John H. Kenyon Trucking, Inc.
  US Bulk Transport, Inc.
- Ontario County Landfill
- Envirite of Ohio, Inc.
- Life Sciences Laboratory
- Pace Laboratories
- Environmental Laboratory Services
- SGS Accutest
- Engineer of Record: Dave Meixell, P.E., Plumley Engineering, P.C.
- Paul R. Malcuria – imported topsoil
- Hanson Aggregates – imported fill
- Montemorano Brothers, Inc. – imported topsoil
- Dox's Finger Lakes Auto Recycling, Inc. – recycled hydraulic cylinder

4.2.2 Site Preparation

The remedial action (remedy implementation) was conducted in two (2) phases: 1st phase was from 2008 to 2014 and the 2nd phase was from September 2016 to December 2016.

Remedial Action Phase 1:

- A pre-construction meeting was held with NYSDEC and all contractors on August 11, 2008.

- Documentation of agency approvals required by the RAWP is included in Appendix D.

- All SEQRA requirements and all substantive compliance requirements for attainment of applicable natural resource or other permits were achieved during this Remedial Action.

- A NYSDEC-approved project sign was erected at the project entrance and remained in place during all phases of the Remedial Action.

Second Phase:

- A pre-construction meeting was held with NYSDEC and all contractors on July 29, 2016.

- Documentation of agency approvals required by the RAWP is included in Appendix D.

- All SEQRA requirements and all substantive compliance requirements for attainment of applicable natural resource or other permits were achieved during this Remedial Action.

4.2.3 General Site Controls

During both phases of the remedy implementation the following general site controls were implemented.

- The site was fully fenced during remedial activities to provide security and to protect the public.

- Job site record keeping was maintained in the City Engineer's office located in City Hall.

- Erosion and sediment controls were not required following the completion of remedial activities due to the level topography of the site. Silt fencing was however installed along the down gradient site boundaries to minimize potential impacts to stormwater.

- Lined decontamination structures were used to contain wash waters generated from equipment decontamination. The collected wash water was disposed at approved off-site disposal facilities.

- Field screening was conducted for all excavated soil/fill material during the remedial action. Field screening included visual and olfactory screening and the use of a PID to screen for residual VOCs with a screening value of 10 parts per million.

- Confirmation samples were collected following the completion of each excavation as per the RAWP to confirm site SCOs were obtained.

- Excavated soils were placed on polyethylene sheeting and covered until characterization and approval was received from the off-site landfill for disposal.

4.2.4 Nuisance controls

Site ingress and egress was controlled via locked gates located near the northwest corner of the north parcel and the east end of the south parcel. Remedial activities involving excavations occurred over single day periods, and excavated soils covered at the completion of each excavation. Fence gates were closed and locked at the end of each work day. Dust generation was monitored in compliance with the approved CAMP. The CAMP monitoring did not indicate the need for additional dust controls. Trucks removing excavated materials were covered prior to leaving the site. The City did not receive any complaints during the remedial activities.

4.2.5 CAMP results

Community Air Monitoring was performed during both phases of the remedial activities and the results of this monitoring are included in Appendix G. Exceedances of action levels were not encountered and response actions were not necessary.

4.2.6 Reporting

A digital photo log, a log is included in Appendix E.

4.3 CONTAMINATED MATERIALS REMOVAL

The first phase of remedial activities was conducted in accordance with the Remedial Action Work Plan dated June 2007. The second phase of remedial activities was conducted in accordance with the Supplemental RAWP dated June 2016.

A list of the soil cleanup objectives (SCOs) for the contaminants of concern for this project is provided in Table 1.

A figure of the location of original sources and areas where excavations were performed is shown in Figure 2 and Figure 6.

4.3.1 Contaminated Soil

Impacted Soil/Fill Material at

- **SB-2:** 622 cubic yards
- **Former Underground Storage Tank:** 170 cubic yards
- **Trench Area at the South Building:** 6 cubic yards

Phase 2 Remedial activities occurred at 1 locations noted on Figure 2 and Figure 6.

- **Removal of Hydraulic Cylinder:** 16 yards

4.3.1.1 Soil Disposal Details

Remedial Action Phase 1:

- Excavated soil/fill material was disposed from October 7, 2008 to October 14, 2008.
- The total quantities disposed off-site is 798 cubic yards.
  - Area of SB-2: 622 cubic yards
  - Area of Former UST: 170 cubic yards
  - Trench Area at South Building: 6 cubic yards
- The excavated soil/fill was disposed at the Ontario Landfill Facility located in Stanley, New York.
- Excavated soils were placed on, and covered with, polyethylene sheeting. Composite soil samples from the piles were collected and submitted for TCLP analyses of VOCs, SVOCs, and metals. Analytical results are summarized in Table 2 and full analytical results are included in Appendix F.
- The excavated soil/fill was transported by Kenyon Trucking (transport #8A-841).
- Letters from Applicant to disposal facility owners and acceptance letters from disposal facility owners are attached in Appendix F.
- Manifests and bills of lading are included in electronic format in Appendix F.

Remedial Action Phase 2:

- Excavated soil/fill material was disposed from November 17, 2016 to November 18, 2016.

- The total quantities disposed off-site is 16 cubic yards.

- The excavated soil/fill was disposed at Envirite of Ohio, Inc. located in Canton, Ohio.

- The initial near-surface soils that were excavated were placed in a pile designated as the “small pile.” Subsequent excavated soils were designated the “large pile.” One composite soil sample was collected from each pile and submitted for laboratory analyses as required by the disposal site. Waste characterization results are included in Appendix F and summarized in Table 2.

- The excavated soil was transported by US Bulk Transport, Inc. (U.S. EPA ID Number PAD 987 347 515).

- Letters from Applicant to disposal facility owners and acceptance letters from disposal facility owners are attached in Appendix F.

- Manifests and bills of lading are included in electronic format in Appendix F.

4.4 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

During each of the remedial action phases, the excavations were field screened (visual, olfactory, and screened with a PID). When field screening indicated that there was no evidence of impacts, end-point samples (confirmation samples) were collected from the excavation sidewalls and the excavation bottom based on the size of the excavation. The sidewall and bottom confirmation samples were analyzed for VOCs and SVOCs. In addition, soil samples from the former UST were analyzed for total lead, and samples from the trench area on the south block were analyzed for the following metals: beryllium, chromium, copper, iron, mercury, nickel, and zinc. The appropriate QA/QC samples were collected based on the QAPP. Analytical results of the confirmation samples indicates that there were no exceedances of Site’s SCOs at the two areas remediated on the north block (area around SB-2 and the former UST), or at the bottom samples collected from the trench area on the south block. These results are included in Table 3-1 and Appendix H. However, the four surface soil samples collected adjacent to the trench area at the south building exceeded Site SCOs for several SVOCs and metals. Additional soil was removed from this area, but subsequent confirmatory samples (SS-5, SS-6, SS-7 and SS-8) still marginally exceeded SCOs for the following compounds: benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, chromium, copper, mercury, nickel and zinc. These results are included in Table 3-1 and Appendix H. This area of the Site will be managed under the Site Management Plan.

A table and figure summarizing all end-point sampling is included in Table 3-1 and Figure 3, respectively, and all exceedances of SCOs are highlighted.

Data Usability Summary Reports (DUSRs) were prepared for all data generated in this remedial performance evaluation program. The DUSRs are included in Appendix I.

4.5 IMPORTED BACKFILL

Following the completion of the Remedial Actions Phase 1 and 2 excavations, the Site was restored to the existing grade with imported backfill material approved by NYSDEC. Prior to being accepted for use on the Site, the sources were sampled. Analytical results from the sampling are included in Tables 4-1, 4-2, and 4-3.

Remedial Action Phase 1:

- Area of SB-2: Approximately 622 cubic yards of imported fill from the Malcuria site was used to fill the excavation that resulted from the remedial excavation at the SB-2 location.

- Area of Former UST: Approximately 170 cubic yards of imported fill from the Malcuria site was used to fill the excavation that resulted from the remedial excavation at the former UST location.

- Trench Area at South Building: Approximately 6 cubic yards of imported fill from the Malcuria site was used to fill the excavation that resulted from the remedial excavation at the trench area at the South Building.

Approximately 1,100 yd^3 of topsoil was purchased by the City from Mr. Paul Malcuria and was stockpiled at the Site. The topsoil material originated from an agricultural field owned by Mr. Malcuria. The topsoil material was sampled to determine if it met the Site's SCOs for importation to the Site. Five grab samples of the topsoil were collected. The topsoil samples were analyzed for the full suite of analytical parameters – TCL VOCs, TCL SVOCs, TAL Metals, Cyanide, Pesticides, and PCBs. The analytical data indicated that the topsoil material met the Site's restricted commercial SOCs for all constituents. See Appendix L of this document for DER-10 Appendix 5 Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e).

In November and December of 2013, final grading was performed on the northern portion of the Site. An additional 2,600 yd^3 of sandy soil material was purchased from Hanson Aggregates' facility located in Oaks Corners, New York. The soil material was sampled to determine if the material met the Site's SCOs for importation to the Site. Two composite soil samples were collected. The soil samples were analyzed for the full suite of analytical parameters – TCL VOCs, TCL SVOCs, TAL Metals, Cyanide, Pesticides, and PCBs. The analytical data indicated that the soil material met the Site's restricted commercial SOCs for all constituents. The sandy soil material was used as a sub-base across the graded site. The previously purchased topsoil from Mr. Malcuria was placed on top of the sandy soil material purchased from Hanson Aggregates. The site was hydro-seeded in the spring of 2014 to establish a grass vegetative cover that has been maintained by the City of Geneva.

Remedial Action Phase 2:

- Hydraulic Cylinder Excavation: Approximately 6 cubic yards of imported fill from the Malcuria site was used to fill the excavation that resulted from the remedial excavation at the trench area at the South Building.

Approximately 500 yd^3 of topsoil was purchased by the City from Montemorano Brothers, Inc., a supplier of topsoil, sand and gravel. The topsoil material was sampled to determine if it met the Site's SCOs for importation to the Site. Six grab samples and two composite samples of the topsoil were collected. The topsoil samples were analyzed for the full suite of analytical parameters – TCL VOCs, TCL SVOCs, TAL Metals, Cyanide, Pesticides, and PCBs. The analytical data indicated that the topsoil material met the Site's restricted commercial SOCs for all constituents. See Appendix L of this document for DER-10 Appendix 5 Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e). A table of all sources of imported backfill with quantities for each source is shown in Table 3-2. Tables summarizing chemical analytical results for backfill, in comparison to allowable levels, are provided in Tables 4-1, 4-2 and 4-3. A figure showing the site locations where backfill was used at the site is shown in Appendix J.

Documentation of chemical analytical results for backfill, bills of lading, and NYSDEC approvals are provided in Appendix D and the DUSRs are located in Appendix I.

4.6 CONTAMINATION REMAINING AT THE SITE

After the completion of Remedial Action Phase 1 and Phase 2 there is contaminated soil and groundwater remaining at the Site. The confirmation sampling completed during the Remedial Action Phase 1 indicated that a limited area of near surface soils that exceeded restricted commercial SCOs remained at the north and south edges of the trench area that was remediated at the south building. This area was subsequently covered with soil cover cap. These exceedances, along with the restricted commercial SCOs and the unrestricted SCOs are included in Table 5 and included the following constituents: benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, chromium and copper.

Confirmatory samples from the Phase 2 remedial action indicate that Unrestricted SCOs and Restricted Commercial SCOs were met.

Table 5 summarize the results of all soil samples remaining at the Site after completion of Remedial Action Phase 1 and Phase 2 that exceed the Unrestricted Use SCOs and the Restricted Commercial SCOs.

Figure 3 presents the locations of the remaining soil contamination that exceed the Unrestricted Use SCOs and the restricted commercial SCOs after the completion of Remedial Action Phase 1 and Phase 2.

Table 6 presents the remaining groundwater contamination at the Site after the completion of Remedial Action Phase 1 and Phase 2.

Figure 5 presents the remaining groundwater monitoring wells and the groundwater flow direction at the Site.

Since contaminated soil and groundwater remains at the Site after completion of the Remedial Action Phase 1 and Phase 2, Institutional Controls (ICs) are required to protect human health and the environment. The ICs implemented at the Site are described in the following sections. Long-term management of these ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

4.7 ENGINEERING CONTROLS

The remedy for the site did not require the construction of any engineering control systems.

4.8 INSTITUTIONAL CONTROLS

The Site remedy requires that deed restriction be placed on the property to (1) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (2) limit the use and development of the site to restricted commercial or industrial uses only.

The deed restriction for the Site was executed by the NYSDEC in 2013, and filed with the Ontario County Clerk on June 11, 2013. The County Recording Control number for this filing is 201306110068. Copies of the deed restrictions and proof of filing is provided in Appendix C.

4.9 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN

The remedial actions resulted in the following deviations from the Remedial Action Work Plan:

- Monitoring well MW-3 was damaged during the demolition of the buildings and was replaced with MW-3R.

- Monitoring well MW-1 was also damaged during the building demolition and was replaced with MW-11.

- Monitoring well MW-10 was removed during the remedial excavation at the SB-2 area. Two additional wells, MW-12 and MW-13, were installed down gradient of the remedial excavation.

LIST OF TABLES

1 Soil Cleanup Objectives (SCOs) for the Project

2 Waste Characterization Samples by Area and/or Material Type

3-1 Remedial Performance/Documentation Sampling Results (by Area)

3-2 Backfill Quantities and Sources Analytical Results and Associated Limits for Imported Material

4-1 Paul Malcuria - Gates Road Imported Fill

4-2 Hanson Aggregates Imported Fill

4-3 Montemorano Brothers, Inc. Imported Fill

5 Soils Exceeding Restricted Commercial SCOs After the Remedial Action

6 Remaining Groundwater Contamination After the Remedial Action

LIST OF FIGURES

1 Site Location Map

2 Site Layout Map

3 Exceedances of Unrestricted SCOs (After Remedy)

4 Groundwater Contour Map

5 Remaining Groundwater Sample Exceedances

6 Excavation As-Built

LIST OF APPENDICES

A Survey Map, Metes and Bounds

B Digital Copy of the FER (CD)

C Deed Restriction

D NYSDEC Approvals of Substantive Technical Requirements

E Project Photo Log

F Soil /Waste Characterization Documentation

- Waste Hauler Permit Certificates
- Disposal Facility Approval and Approval Letters
- Facility Permit Certificates
- Tabulated Load Summaries
- Waste Manifests or Bills of Lading (CD)
- Liquid Disposal Manifests (CD)

G CAMP Field Data Sheets and Air Monitoring Data (Incl. CD)

H Raw Analytical Laboratory Data (Included on CD)

I DUSRs For All Endpoint Samples (Included on CD)

J EC As-Built Drawings, Documentation, and Drawings

K Imported Materials Documentation

L DER-10 Appendix 5 Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e).

TABLES

TABLE 1
SOIL CLEANUP OBJECTIVES (SCOs)
MARKET BASKET SITE
Gates Avenue
Geneva, New York

CONTAMINANT	RESTRICTED COMMERCIAL[1]
Volatile Organic Compounds (VOCs) - mg/kg	
1,1,1-Trichloroethane	500
1,1-Dichloroethane	240
1,1-Dichloroethene	500
1,2-Dichlorobenzene	500
1,2-Dichloroethane	30
cis-1,2-Dichloroethene	500
trans-1,2-Dichloroethene	500
1,3-Dichlorobenzene	280
1,4-Dichlorobenzene	130
1,4-Dioxane	130
Acetone	500
Benzene	44
Butylbenzene	500
Carbon tetrachloride	22
Chlorobenzene	500
Chloroform	350
Ethylbenzene	390
Hexachlorobenzene	6
Methyl ethyl ketone	500
Methyl tert-butyl ether	500
Methylene chloride	500
Propylbenzene-n	500
sec-Butylbenzene	500
tert-Butylbenzene	500
Tetrachloroethene	150
Toluene	500
Trichloroethene	200
Trimethylbenzene-1,2,4	190
Trimethylbenzene-1,3,5	190
Vinyl chloride	13
Xylene (mixed)	500

TABLE 1
SOIL CLEANUP OBJECTIVES (SCOs)
MARKET BASKET SITE
Gates Avenue
Geneva, New York

CONTAMINANT	RESTRICTED COMMERCIAL[1]
Semi-Volatile Organic Compounds (SVOCs) - mg/kg	
Acenaphthene	500
Acenapthylene	500
Anthracene	500
Benz(a)anthracene	5.6
Benzo(a)pyrene	1
Benzo(b)fluoranthene	5.6
Benzo(g,h,i)perylene	500
Benzo(k)fluoranthene	56
Chrysene	56
Dibenz(a,h)anthracene	0.56
Fluoranthene	500
Fluorene	500
Indeno(1,2,3-cd)pyrene	5.6
m-Cresol(s)	500
Naphthalene	500
o-Cresol(s)	500
p-Cresol(s)	500
Pentachlorophenol	6.7
Phenanthrene	500
Phenol	500
Pyrene	500
Metals - mg/kg	
Arsenic	16
Barium	400
Beryllium	590
Cadmium	9.3
Chromium, hexavalent	400
Chromium, trivalent	1,500
Copper	270
Total Cyanide	27
Lead	1,000
Manganese	10,000
Total Mercury	2.8

TABLE 1
SOIL CLEANUP OBJECTIVES (SCOs)
MARKET BASKET SITE
Gates Avenue
Geneva, New York

CONTAMINANT	RESTRICTED COMMERCIAL[1]
Metals - mg/kg (Continued)	
Nickel	310
Selenium	1,500
Silver	1,500
Zinc	10,000
PCBs / Pesticides - mg/kg	
2,4,5-TP Acid (Silvex)	500
4,4’-DDE	62
4,4’-DDT	47
4,4'-DDD	92
Aldrin	0.68
alpha-BHC	3.4
beta-BHC	3
Chlordane (alpha)	24
delta-BHC	500
Dibenzofuran	350
Dieldrin	1.4
Endosulfan I	200
Endosulfan II	200
Endosulfan sulfate	200
Endrin	89
Heptachlor	15
Lindane	9.2
Polychlorinated biphenyls	1

Notes:

[1] From Table 375-6.8(b) from 6 NYCRR 375-6.8(b)
mg/kg milligrams per kilogram, equivalent to parts per million (ppm)

Table 2
Waste Characterization Samples by Area and/or Material Type
Market Basket Site - Geneva, New York
(mg/Kg –dry wt.)

2008

Constituent	486383	486384
TCLP Volatiles	<0.100 mg/l	<0.100 mg/l
TCLP Semivolatiles	<0.100 mg/l	<0.100 mg/l
TCLP Mercury	<20 µg/l	<20 µg/l
TCLP Arsenic	<1.0 mg/l	<1.0 mg/l
TCLP Barium	<2.0 mg/l	<1.0 mg/l
TCLP Cadmium	<0.05 mg/l	<1.0 mg/l
TCLP Chromium	<0.10 mg/l	<1.0 mg/l
TCLP Lead	<0.50 mg/l	<1.0 mg/l
TCLP Selenium	<1.0 mg/l	<1.0 mg/l
TCLP Silver	<0.10 mg/l	<1.0 mg/l

2016

Constituent	Large Pile	Small Pile
Acetone	0.0096 mg/kg JB	<0.012 mg/kg
Methylene chloride	0.0024 mg/kg	0.0012 mg/kg
Toluene	0.0023 mg/kg JB	0.00079 mg/kg
Trichloroethene	0.00091 mg/kg J	<0.0023 mg/kg
Acenaphthene	0.0947 mg/kg	<0.40 mg/kg
Acenaphthylene	0.915 mg/kg	<0.46 mg/kg
Anthracene	1.87 mg/kg	<0.47 mg/kg
Benzo(a)anthracene	6.42 mg/kg	0.785 mg/kg
Benzo(a)pyrene	5.54 mg/kg	4.81 mg/kg
Benzo(b)fluoranthene	4.68 mg/kg	3.26 mg/kg
Benzo(g,h,i)perylene	3.99 mg/kg	<0.56 mg/kg
Benzo(k)fluoranthene	3.83 mg/kg	3.92 mg/kg
Carbazole	0.109 mg/kg	<0.50 mg/kg
Chrysene	4.51 mg/kg	0.708 mg/kg
Dibenzo(a,h)anthracene	0.997 mg/kg	<0.48 mg/kg
Dibenzofuran	0.184 mg/kg	<0.45 mg/kg
Di-n-butyl phthalate		1.15 mg/kg
Fluoranthene	15.8 mg/kg	1.66 mg/kg
Fluorene	0.495 mg/kg	<0.64 mg/kg
Indeno(1,2,3-cd)pyrene	4.46 mg/kg	4.08 mg/kg
2-Methylnaphthalene	0.0468 mg/kg	<0.69 mg/kg
Naphthalene	0.214 mg/kg	<0.49 mg/kg
Phenanthrene	4.57 mg/kg	0.726 mg/kg
Pyrene	11.8 mg/kg	1.56 mg/kg
PCBs	ND	ND
TCLP Mercury	<0.000034 mg/l	<0.000034
TCLP Arsenic	<0.0020 mg/l	<0.0020 mg/l
TCLP Barium	0.59 mg/l	0.66 mg/l
TCLP Cadmium	<0.0018 mg/l B	0.0032 mg/l B
TCLP Chromium	<0.0011 mg/l	0.0013 mg/l B
TCLP Lead	6.6 mg/l	0.59 mg/l
TCLP Selenium	<0.0034 mg/l	<0.0034 mg/l
TCLP Silver	<0.0014 mg/l	<0.0014 mg/l
Ignitability	>230 Deg. F	>230 Deg. F

ND: Not Detected J: Estimated B: Also found in blank

Table 3-1
Remedial Performance/Documentation Sampling Results (by Area)
Market Basket Site – Geneva, New York
(mg/Kg)

2008 Excavation at Boring SB-2

Constituent	Bot-1	South	East	North	West	Bot-2	Res. Com. SCO	Unrest SCO
Volatile Organic Compounds (mg/Kg)								
Carbon Disulfide	0.0011 J	<0.0006	<0.0006	<0.00056	<0.00057	0.00059 J	NL	NL
Methylene Chloride[1]	0.0039 J	0.00099 J	0.00099 J	0.0011 J	0.0010 J	0.0013 J	500	0.05
Trichloroethene	<0.0012	<0.0012	0.0014 J	<0.0011	<0.0011	<0.0012	200	0.47
Chlorobenzene	<0.0012	0.0062	0.090	0.0019 J	<0.0011	<0.0012	500	1.1
1,3-Dichlorobenzene	<0.0006	0.020	0.760	0.190	0.0044	<0.00059	280	2.4
1,4-Dichlorobenzene	<0.0006	0.017	0.510	0.067	0.0041	<0.00059	130	1.8
1,2-Dichlorobenzene	<0.0006	0.016	0.530	0.190	0.0046	<0.00059	500	1.1
1,2,4-Trichlorobenzene	<0.0006	<0.0006	<0.0006	0.031	<0.00057	<0.00059	NL	NL
SVOCs	ND	ND	ND	ND	ND	ND	ND	NA

1. Also detected in the trip blank at 1.2 J
2. J: Estimated value NL: Not listed ND: Not detected NA: Not applicable

2008 Former 8,000-gal UST

Constituent	Bot-1	North	Bot-2	East	West	South	Rest. Com SCO	Unrest SCO
Volatile Organic Compounds (mg/Kg)								
Carbon Disulfide	0.0036 J	<0.00057	<0.00056	0.0013 J	<0.00066	<0.00068	NL	NL
Methylene Chloride	0.0049 J	0.00092 J	0.00085 J	0.0010 J	0.0012 J	0.0017 J	500	0.05
Metals (mg/Kg)								
Lead	7.3	4.7	6.5	3.0	3.1	3.2	1,000	63

J: Estimated value NL: Not listed

Table 3-1
Remedial Performance/Documentation Sampling Results (by Area)
Market Basket Site – Geneva, New York
(mg/Kg)

2008 South Block Trench

Constituent	Bot-1	Bot-2	Restrict. Com. SCO	Unrestrict. SCO
Acetone	0.050 J	**0.058**	500	0.05
Carbon Disulfide	0.0015 J	0.0017 J	NL	NL
Methylene Chloride	0.001 J	0.0011 J	500	0.05
cis-1,2-Dichloroethene	0.0016 J	<0.00063	500	0.25
SVOCs	ND	ND	NA	NA
Berylium	0.50 J	0.52 J	590	7.2
Chromium	10	12	1,500	30
Copper	6.1	6.9	270	50
Iron	12,000	12,000	NL	NL
Nickel	11	13	310	30
Zinc	34	39	10,000	109
Mercury	0.047 J	0.053 J	2.8	0.18

ND: Not Detected NL: Not Listed NA: Not Applicable J: Estimated value
Bold indicates exceedances of Unrestricted SCOs

Table 3-1
Remedial Performance/Documentation Sampling Results (by Area)
Market Basket Site – Geneva, New York
(mg/Kg)

Constituent	SS-5	SS-6	SS-7	SS-8	Restrict. Com. SCO	Unrestrict. SCO
Volatile Organic Compounds						
Methylene chloride	0.0013 J	0.0015 J	0.0014 J	0.00069 J	500	0.05
Trichloroethene	0.0034	0.0047	0.0076	0.011	200	0.47
Toluene	<0.0028	<0.0028	<0.003	0.00069 J	500	0.7
Tetrachloroethene	0.0012 J	0.0035	<0.003	0.0018 J	150	1.3
Semivolatile Organic Compounds						
1,1-Biphenyl	<0.032	1.3 J	0.47 J	0.35 J	NL	NL
2-Methylnaphthalene	0.280 J	0.88	1.6	0.46 J	NL	NL
Acenaphthene	0.080 J	<0.16	0.24 J	0.24 J	500	20
Acenaphthylene	0.500 J	<0.16	0.51 J	0.62 J	500	100
Acetophenone	0.073 J	<0.16	<0.033	<0.035	NL	NL
Anthracene	0.280 J	0.18 J	0.69 J	0.79 J	500	100
Benzo[a]anthracene	**1.8**	0.82	**2.5**	**3.2**	5.6	1
Benzo[a]pyrene	**2.3**	<0.16	**2.5**	**3.4**	1	1
Benzo[b]fluoranthene	**4.7**	<0.16	**5.1**	**6.5**	5.6	1
Benzo[g,h,i]perylene	0.930	<0.48	1.2	1.3	500	100
Benzo[k]fluoranthene	**1.7**	<0.16	**1.7**	**2.4**	56	0.8
bis(2-ethylhexyl)phthalate	0.190 J	<0.16	0.13 J	0.39 J	NL	NL
Butyl benzyl phthalate	0.300 J	<0.16	<0.033	<0.035	NL	NL
Carbazole	0.096 J	<0.16	0.35 J	0.37 J	NL	NL
Chrysene	**2.0**	0.83 J	**2.9**	**3.5**	56	1
Di-n-butyl phthalate	0.67 J	<0.16	<0.033	0.042	NL	NL
Dibenzofuran	0.140 J	<0.16	0.4 J	0.29 J	NL	NL
Fluoranthene	2.8	1.1 J	5.1	6.1	500	100
Fluorene	0.087 J	<0.16	0.23 j	0.24 J	500	30
Indeno[1,2,3-cd]pyrene	0.320 J	<0.48	0.41 J	0.46 J	5.6	0.5
Naphthalene	0.270 J	0.5 J	0.72 J	0.46 J	500	12
Phenanthrene	1.1	0.88 J	3.8	4.3	500	100
Pyrene	4.3	1.9 J	7.8	9.1	500	100
Metals						
Beryllium	6.4	0.32 J	0.67 J	3.1	590	7.2
Chromium	**120**	**1,000**	**330**	**100**	1,500	30
Copper	**390**	**690**	**2,000**	**410**	270	50
Iron	31,000	53,000	41,000	25,000	NL	NL
Nickel	**72**	**71**	**120**	**77**	310	30
Zinc	**890**	**2,100**	**950**	**790**	10,000	109
Mercury	0.13	**0.47**	**0.29**	0.11 J	2.8	0.18

NL: Not Listed J: Estimated value
Bold type indicates exceedances of Unrestricted SCOs
Underline indicates exceedances of Restricted Commercial SCOs

Table 3-1
Remedial Performance/Documentation Sampling Results (by Area)
Market Basket Site – Geneva, New York
(mg/Kg)

2016 Hydraulic Cylinder Removal

Constituent	Bottom	North	South	West	East	Restrict. Com. SCO	Unrestrict. SCO
Acetone	0.0050 JB	0.0054 J[1]	0.0049 JB	0.0061 JB	<0.0037	500	0.05
Carbon disulfide	0.0014 JB	<0.00043	<0.00046	0.00094 JB	<0.00046	NL	NL
Cis-1,2-Dichloroethene	0.0015 J	<0.00038	<0.00040	<0.00045	<0.00041	500	0.25
Methylene chloride	0.0025	0.0021	0.0012 J	0.0033	0.0023	500	0.05
Toluene	0.0018 JB	0.0020 JB	0.0029 JB	0.0022 JB	0.0018 JB	500	0.7
Trichloroethene	0.019	0.0026	<0.00034	0.0097	<0.00035	200	0.47
Di-n-butyl phthalate	0.0376 JB	<0.013	<0.012	<0.013	<0.013	NL	NL
bis (2-Ethylhexyl) phthalate	0.100 J	<0.012	0.0838 J	<0.012	<0.012	NL	NL

J: Estimated value
B: Found in blank
NL: Not listed

[1] Initial Calibration Verification outside of acceptance criteria. Sample result may be biased high.

Table 3-2
Backfill Quantities and Sources
Market Basket Site – Geneva, New York

Year	Source	Volume
2002	Paul R. Malcuria Gates Road, Geneva	1,100 yd^3
2013	Hanson Aggregates, Phelps, New York	2,600 yd^3
2016	Montemorano Brothers, Inc.	500 yd^3

Table 4-1
Analytical Results and Associated Limits for Imported Material from Gates Road Site
Market Basket Site - Geneva, New York
(mg/Kg –dry wt.)

Constituent	TS-1	TS-2	TS-3	TS-4	TS-5	Unrestrict. SCO	Commercial SCO
Volatile organic compounds (VOCs)	ND	ND	ND	ND	ND	NA	NA
2-Methylnaphthalene	<0.015	<0.015	0.021 J	<0.016	<0.016	NL	NL
Acenaphthylene	0.020 J	<0.015	<0.015	<0.016	<0.016	100	500
Anthracene	0.063 J	<0.015	<0.015	<0.016	<0.016	100	500
Benzo[a]anthracene	0.270 J	<0.015	0.021 J	<0.016	<0.016	1	5.6
Benzo[a]pyrene	0.380 J	<0.015	<0.015	<0.016	<0.016	1	1
Benzo[b]fluoranthene	0.390	<0.015	<0.015	<0.016	<0.016	1	5.6
Benzo[g,h,i]perylene	0.170 J	<0.046	<0.045	<0.047	<0.049	100	500
Benzo[k]fluoranthene	0.120 J	<0.015	<0.015	<0.016	<0.016	0.8	1.7
bis[2-Ethylhexyl)phthalate	0.035 J	0.018 J	0.025 J	0.018 J	0.035 J	NL	NL
Carbazole	0.037 J	<0.015	<0.015	<0.016	<0.016	NL	NL
Chrysene	0.230 J	<0.015	<0.015	<0.016	<0.016	1	56
Dibenzofuran	0.025 J	<0.015	<0.015	<0.016	<0.016	NL	NL
Dimethyl phthalate	0.038 J	0.018 J	<0.015	<0.016	<0.016	NL	NL
Fluoranthene	0.490	<0.015	0.025 J	<0.016	<0.016	100	500
Fluorene	0.031 J	<0.015	<0.015	<0.016	<0.016	30	500
Indeno[1,2,3-cd]pyrene	0.095 J	<0.046	<0.045	<0.047	<0.049	0.5	5.6
Naphthalene	0.022 J	<0.015	<0.015	<0.016	<0.016	12	500
Phenanthrene	0.370 J	<0.015	0.023 J	<0.016	<0.016	100	500
Pyrene	0.0420	<0.015	0.025 J	<0.016	<0.016	100	500
Organochlorene Pesticides	ND	ND	ND	ND	ND	NA	NA
Polychlorinated Biphenyls (PCBs)	ND	ND	ND	ND	ND	NA	NA
Aluminum	9,700	11,000	9,800	10,000	12,000	NL	NL
Arsenic	9.2	3.7	3.1	3.2	3.7	13	16
Barium	180	100	90	93	110	350	400
Beryllium	0.46 J	0.53 J	0.45 J	0.48 J	0.54 J	7.2	590
Cadmium	1.2	0.25 J	0.21 J	0.21 J	0.24 J	2.5	9.3
Calcium	35,000	5,200	10,000	5,300	7,600	NL	NL
Chromium	16	14	13	13	14	30	1,500
Cobalt	6.7	4.9 J	4.4 J	4.4 J	4.9 J	NL	NL
Copper	39	16	16	14	17	50	270
Iron	22,000	16,000	14,000	14,000	16,000	NL	NL
Lead	**280**	15	16	12	19	63	1,000
Magnesium	5,900	2,800	3,700	2,700	3,400	NL	NL
Manganese	450	270	260	240	260	1,600	10,000
Nickel	14	12	12	11	13	30	310
Potassium	1,500	970	890	880	1,200	NL	NL
Selenium	1.1 J	0.89 J	0.61 J	0.71 J	0.89 J	3.9	1,500
Sodium	93 J	42 J	53 J	44 J	44 J	NL	NL
Vanadium	21	21	19	20	22	NL	NL
Zinc	**280**	54	55	51	61	109	10,000
Mercury	0.30	0.074 J	0.057 J	0.066 J	0.071 J	0.18	2.8
Cyanide	<0.58	<0.58	<0.56	<0.59	<0.61	27	27

BOLD type indicates exceedance of Unrestricted SCOs
NS – Not Detected NL – Not Listed NA – Not Applicable

Table 4-2
Analytical Results and Associated Limits for Imported Material from Hanson Site
Market Basket Site - Geneva, New York
(mg/Kg –dry wt.)

Constituent	Composite 1	Composite 2	Unrestricted SCOs	Commercial SCOs
Volatile organic compounds	ND	ND	NA	NA
Semivolatile organic compounds	ND	ND	NA	NA
Organochlorene Pesticides	ND	ND	NA	NA
Polychlorinated Biphenyls (PCBs)	ND	ND	NA	NA
Arsenic	3.05	2.22	13	16
Barium	45.2	41.8	350	400
Beryllium	<0.422	<0.418	7.2	590
Cadmium	<0.422	<0.418	2.5	9.3
Chromium	6.50	6.22	30	1,500
Copper	13.0	9.03	50	270
Lead	6.05	3.86	63	1,000
Manganese	373	385	1,600	10,000
Nickel	7.20	6.08	30	310
Selenium	<1.05	<1.04	3.9	1,500
Silver	<0.738	<0.731	2.0	1,500
Zinc	32.0	28.3	109	10,000
Mercury	<0.0413	<0.0420	0.18	2.8
Cyanide	<2.26	4.04	27	27

NS – Not Detected NL – Not Listed NA – Not Applicable

Table 4-3
Analytical Results and Associated Limits for Imported Material from Montenorano Site
Market Basket Site - Geneva, New York
(mg/Kg –dry wt.)

Constituent	610565 (grab)	610568 (grab)	610557 (grab)	610566 (grab)	610560 (grab)	610563 (grab)	563364 (comp.)	563374 (comp.)	Unrestricted SCOs	Commercial SCOs
Volatile organic compounds	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Semivolatile organic compounds	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	<0.005	0.0072	0.0033	62
4,4'-DDT	NA	NA	NA	NA	NA	NA	<0.005	0.0105	0.0033	47
Polychlorinated Biphenyls (PCBs)	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA
Aluminum	NA	NA	NA	NA	NA	NA	7,700	8,510	NL	NL
Antimony	NA	NA	NA	NA	NA	NA	<0.67	<0.41	NL	NL
Arsenic	NA	NA	NA	NA	NA	NA	1.7	2.7	13	16
Barium	NA	NA	NA	NA	NA	NA	57.8	20.8	350	400
Beryllium	NA	NA	NA	NA	NA	NA	0.25	0.33	7.2	590
Boron	NA	NA	NA	NA	NA	NA	<5.5	<3.4	NL	NL
Cadmium	NA	NA	NA	NA	NA	NA	<0.33	<0.21	2.5	9.3
Calcium	NA	NA	NA	NA	NA	NA	1,720	911	NL	NL
Chromium	NA	NA	NA	NA	NA	NA	8.1	9.2	30	1,500
Cobalt	NA	NA	NA	NA	NA	NA	2.0	6.3	NL	NL
Copper	NA	NA	NA	NA	NA	NA	4.2	8.5	50	270
Iron	NA	NA	NA	NA	NA	NA	6,950	12,800	NL	NL
Lead	NA	NA	NA	NA	NA	NA	6.7	6.6	63	1,000
Magnesium	NA	NA	NA	NA	NA	NA	1,250	1,490	NL	NL
Manganese	NA	NA	NA	NA	NA	NA	60.4	370	1,600	10,000
Molybdenum	NA	NA	NA	NA	NA	NA	<2.2	<1.4	NL	NL
Nickel	NA	NA	NA	NA	NA	NA	4.5	6.5	30	310
Potassium	NA	NA	NA	NA	NA	NA	618	631	NL	NL
Selenium	NA	NA	NA	NA	NA	NA	<0.89	<0.55	3.9	1,500
Silver	NA	NA	NA	NA	NA	NA	<0.67	<0.41	2.0	1,500
Sodium	NA	NA	NA	NA	NA	NA	<554	<344	NL	NL
Thallium	NA	NA	NA	NA	NA	NA	<2.2	<1.4	NL	NL
Vanadium	NA	NA	NA	NA	NA	NA	13.8	18.5	NL	NL
Zinc	NA	NA	NA	NA	NA	NA	25.8	24.0	109	10,000
Mercury	NA	NA	NA	NA	NA	NA	<0.15	<0.11	0.18	2.8

ND – Not Detected NL – Not Listed NA – Not Analyzed

Table 5
Soils Exceeding Restricted Residential SCOs After the Remedial Action
2009 Remediation
Market Basket Site - South Block
Geneva, New York
(mg/Kg – dry weight)

Constituent	SS-5	SS-6	SS-7	SS-8	Restricted Commercial SCO[1]	Unrestricted SCO[1]
Volatile Organic Compounds						
No exceedances						
Semivolatile Organic Compounds						
Benzo[a]anthracene	**1.8**	0.820 J	**2.5**	**3.2**	5.6	1
Benzo[a]pyrene	**2.3**	<0.16	**2.5**	**3.4**	1	1
Benzo[b]fluoranthene	**4.7**	<0.16	**5.1**	**6.5**	5.6	1
Metals						
Chromium	120	**1,000**	**330**	100	1,500	30
Copper	**390**	**690**	**2,000**	**410**	270	50

J: Estimated value **BOLD** – indicates exceedance of Unrestricted Use SCO

Underline – indicates exceedance of Restricted Commercial Use SCO

1. Soil cleanup objectives as noted in 6 NYCRR Part 375-6.8(b) for Restricted Residential use

Table 6
Remaining Groundwater Contamination After the Remedial Action
Market Basket Site
Geneva, New York
(ug/L, unless otherwise noted)

Constituent	MW-2	MW-3R	MW-4	MW-5	MW-6	MW-7	Class GA
Volatile Organic Compounds							
Chloromethane	0.49 J	1.24	<0.33	0.52 J	0.55 J	0.77 J	5
Vinyl chloride	<0.33	<0.33	<0.33	0.61 J	1.36	<0.33	2
1,1-Dichloroethene	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	5
Acetone	<1.00	2.10 J	<1.00	<1.00	<1.00	1.09 J	NL
trans-1,2-Dichloroethene	<0.10	<0.10	<0.10	0.25 J	2.98	<0.10	5
1,1-Dichloroethane	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	5
cis-1,2-Dichloroethene	<0.10	0.46 J	<0.10	**11.0**	4.72	0.41 J	5
Chloroform	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	7
1,1,1-Trichloroethane	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	5
Cyclohexane	1.78	<0.10	<0.10	<0.10	<0.10	<0.10	NL
Benzene	<0.10	<0.10	<0.10	<0.10	0.11 J	<0.10	1
Trichloroethene	<0.10	**9.97**	<0.10	**12.4**	0.66	0.64	5
Methylcyclohexane	0.97	<0.10	<0.10	<0.10	<0.10	<0.10	NL
1,1,2-Trichloroethane	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	1
Tetrachloroethene	<0.10	1.06	<0.10	0.15 J	<0.10	<0.10	5
Chlorobenzene	0.15 J	<0.10	<0.10	<0.10	<0.10	<0.10	5
Isopropylbenzene	0.36 J	<0.10	<0.10	<0.10	<0.10	<0.10	5
1,3-Dichlorobenzene	0.40 J	<0.10	<0.10	<0.10	<0.10	<0.10	3
1,4-Dichlorobenzene	0.27 J	<0.16	<0.16	<0.16	<0.16	<0.16	3
1,2-Dichlorobenzene	0.30 J	<0.10	<0.10	<0.10	<0.10	<0.10	3
1,2,4-Trichlorobenzene	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	5
Semivolatile Organic Compounds							
2,4-Dichlorophenol	<0.084	<0.084	<0.084	<0.082	<0.082	<0.084	1

Constituent	MW-8	MW-9	MW-11R	MW-12	MW-13	Class GA
Volatile Organic Compounds						
Chloromethane	1.09	O.42 J	1.11	<0.33	0.59 J	5
Vinyl chloride	<0.33	<0.33	<0.33	<0.33	<0.33	2
1,1-Dichloroethene	<0.16	**8.59**	<0.16	<0.16	<0.16	5
Acetone	1.24 J	<1.00	1.59 J	<1.00	<1.00	NL
trans-1,2-Dichloroethene	<0.10	<0.10	<0.10	<0.10	<0.10	5
1,1-Dichloroethane	<0.10	**5.02**	<0.10	<0.10	<0.10	5
cis-1,2-Dichloroethene	<0.10	**7.45**	<0.10	0.19 J	<0.10	5
Chloroform	<0.10	0.19 J	<0.10	<0.10	<0.10	7
1,1,1-Trichloroethane	<0.10	**27.9**	<0.10	<0.10	<0.10	5
Cyclohexane	<0.10	<0.10	<0.10	<0.10	<0.10	NL
Benzene	<0.10	<0.10	<0.10	0.72	<0.10	1
Trichloroethene	<0.10	**28.7**	<0.10	0.82	<0.10	5
Methylcyclohexane	<0.10	<0.10	<0.10	<0.10	<0.10	NL
1,1,2-Trichloroethane	<0.16	0.19 J	<0.16	<0.16	<0.16	1
Tetrachloroethene	<0.10	0.19 J	<0.10	0.57	<0.10	5
Chlorobenzene	<0.10	<0.10	<0.10	**63.6**	<0.10	5
Isopropylbenzene	<0.10	<0.10	<0.10	<0.10	<0.10	5
1,3-Dichlorobenzene	<0.10	<0.10	<0.10	**214**	0.18 J	3
1,4-Dichlorobenzene	<0.16	<0.16	<0.16	**155**	<0.16	3
1,2-Dichlorobenzene	<0.10	<0.10	<0.10	**155**	0.11 J	3
1,2,4-Trichlorobenzene	<0.10	<0.10	<0.10	0.42 J	<0.10	5
Semivolatile Organic Compounds						
2,4-Dichlorophenol	<0.084	<0.082	<0.082	2.3 J	<0.082	1

FIGURES

REF.: USGS - GENEVA NORTH (NY) QUAD., 2013, 7.5 MIN. SCALE: 1"=2000'

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PROJECT: MARKET BASKET PROPERTY
ENVIRONMENTAL RESTORATION PROGRAM

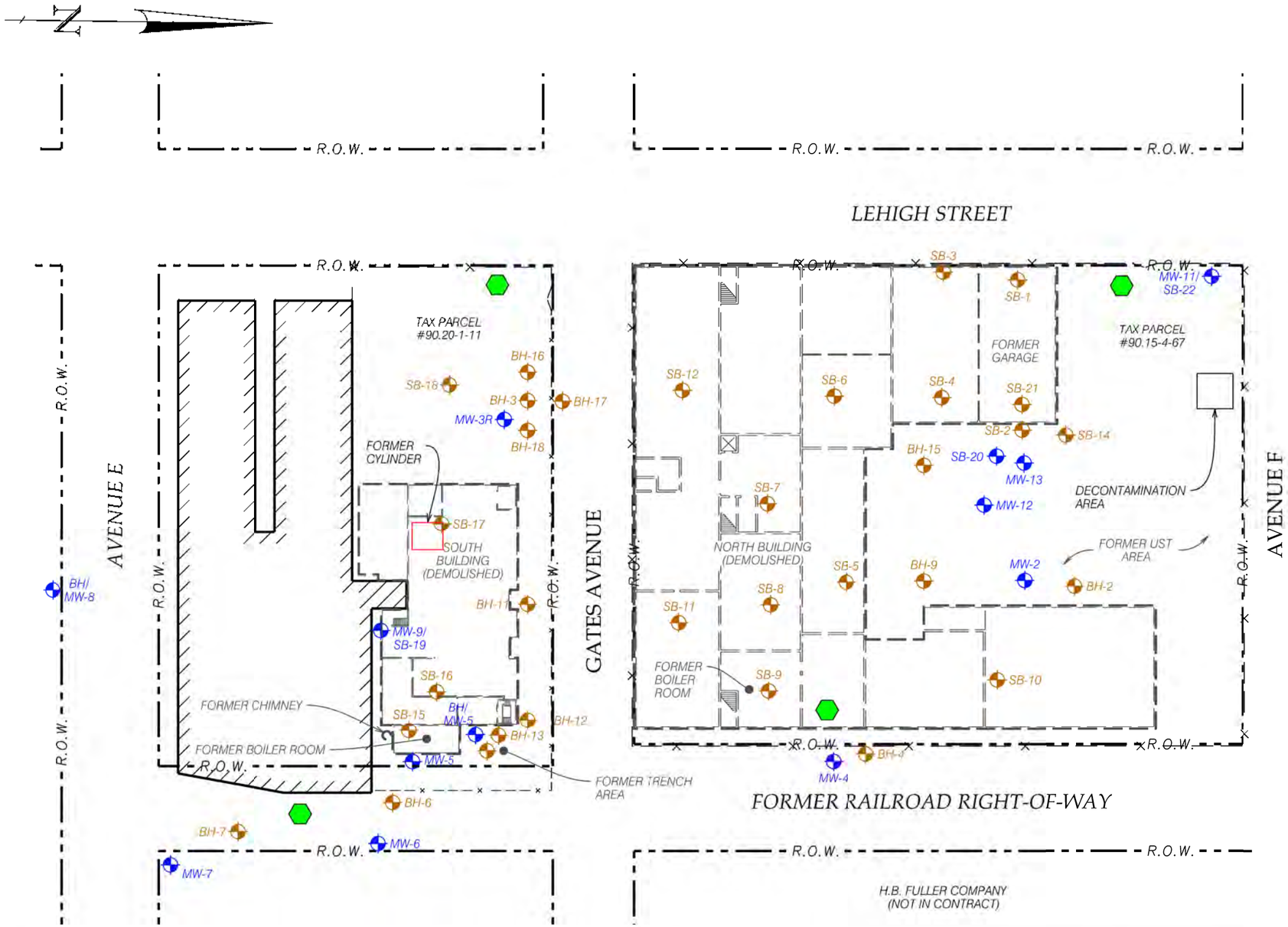
DWG. TITLE: SITE LOCATION MAP

CLIENT: CITY OF GENEVA

LOCATION: CITY OF GENEVA, ONTARIO COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2016018
FILE NAME.:	FIGURE 1
SCALE:	AS NOTED
DATE:	AUG. 2016
ENG'D BY:	DKM
DRAWN BY:	JMD
CHECKED BY:	DKM



Key

- R.O.W. — Site Boundaries and Right of Way
- Soil/Borehole
- Soil Boring w/ Monitoring Well
- Typical Camp Monitoring Locations based on Prevailing West/Northwest Winds

Note: Buildings were Demolished During 2002

Plan View

1" = 60' SCALE — 30 0 30 60 FEET

Basemap Reference:

"City of Geneva, Former Market Basket Property, Environmental Resoration Program, Ontario County, New York"; Prepared by: Obrien Gere Engineers, Inc.; Dated: January 2009; File No.: 1740.30852.101.

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PROJECT: MARKET BASKET PROPERTY ENVIRONMENTAL RESTORATION PROGRAM

DWG. TITLE: SITE LAYOUT MAP

CLIENT: CITY GENEVA

LOCATION: CITY OF GENEVA, ONTARIO COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2016018
FILE NAME.:	Figure2
SCALE:	AS NOTED
DATE:	AUG. 2016
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SHEET NO.: FIGURE 2

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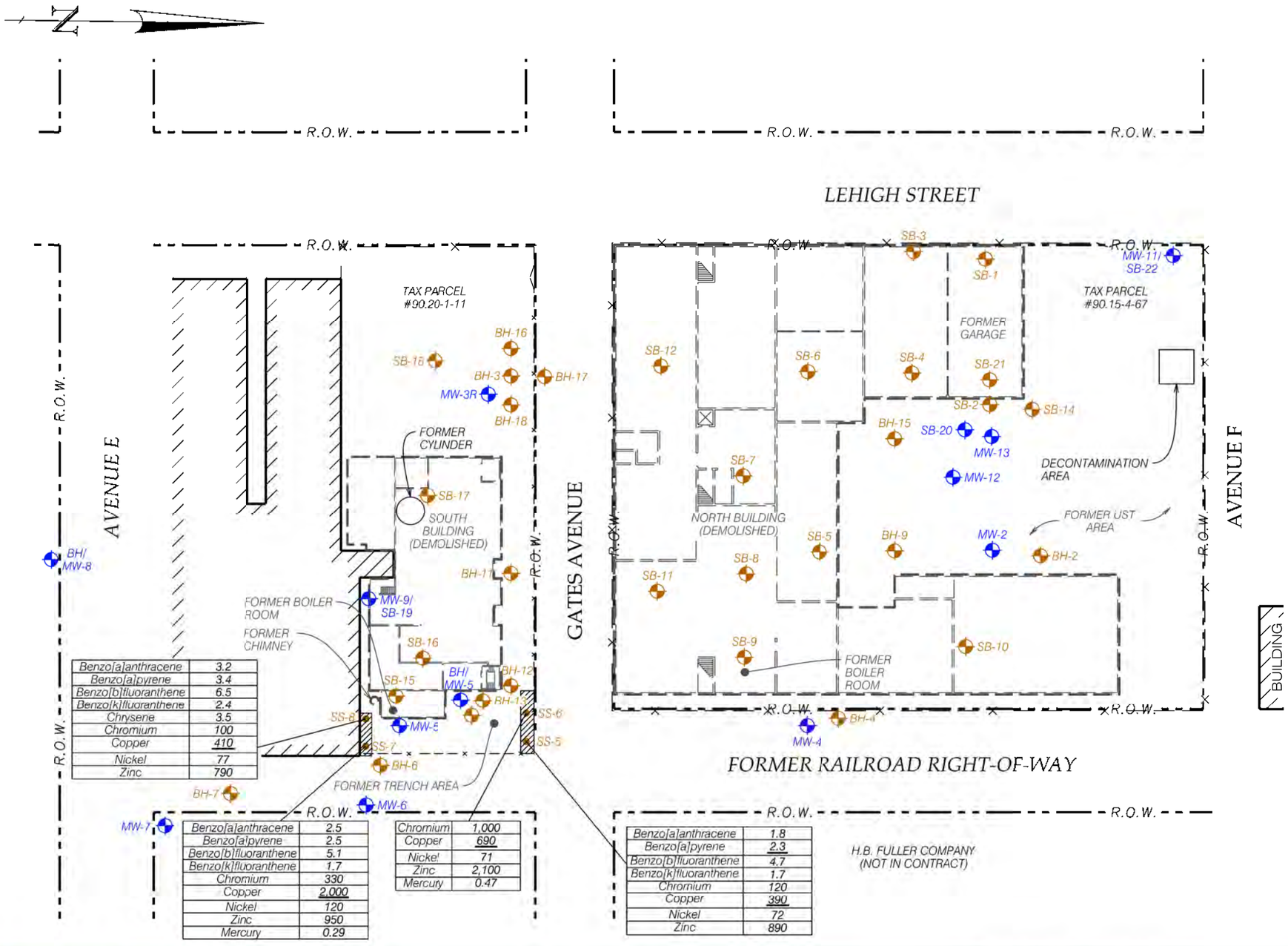

Benzo[a]anthracene	3.2
Benzo[a]pyrene	3.4
Benzo[b]fluoranthene	6.5
Benzo[k]fluoranthene	2.4
Chrysene	3.5
Chromium	100
Copper	410
Nickel	77
Zinc	790

Benzo[a]anthracene	2.5
Benzo[a]pyrene	2.5
Benzo[b]fluoranthene	5.1
Benzo[k]fluoranthene	1.7
Chromium	330
Copper	2,000
Nickel	120
Zinc	950
Mercury	0.29

Chromium	1,000
Copper	690
Nickel	71
Zinc	2,100
Mercury	0.47

Benzo[a]anthracene	1.8
Benzo[a]pyrene	2.3
Benzo[b]fluoranthene	4.7
Benzo[k]fluoranthene	1.7
Chromium	120
Copper	390
Nickel	72
Zinc	890

Key

- R.O.W. — Right of Way
- Soil Boring
- Soil Boring w/ Monitoring Well
- Soil Sample
- Area w/ Remaining Exceedances

Notes:

1. Bold Type Indicates Exceedances of Unrestricted SCDs.

   Underline Indicates Exceedances of Restricted Commercial SCDs.

2. Units are mg/Kg.

Plan View

1" = 60' SCALE — 30 0 30 60 FEET

Basemap Reference:

"City of Geneva, Former Market Basket Property, Environmental Resoration Program, Ontario County, New York"; Prepared by: Obrien Gere Engineers, Inc.; Dated: January 2009; File No.: 1740.30852.101

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PROJECT: MARKET BASKET PROPERTY ENVIRONMENTAL RESTORATION PROGRAM

DWG. TITLE: REMAINING SOIL SAMPLE EXCEEDANCES

CLIENT: CITY GENEVA

LOCATION: CITY OF GENEVA, ONTARIO COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2016018
FILE NAME.:	Figure3
SCALE:	AS NOTED
DATE:	AUG. 2016
ENG'D BY:	DKM
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SHEET NO.: FIGURE 3

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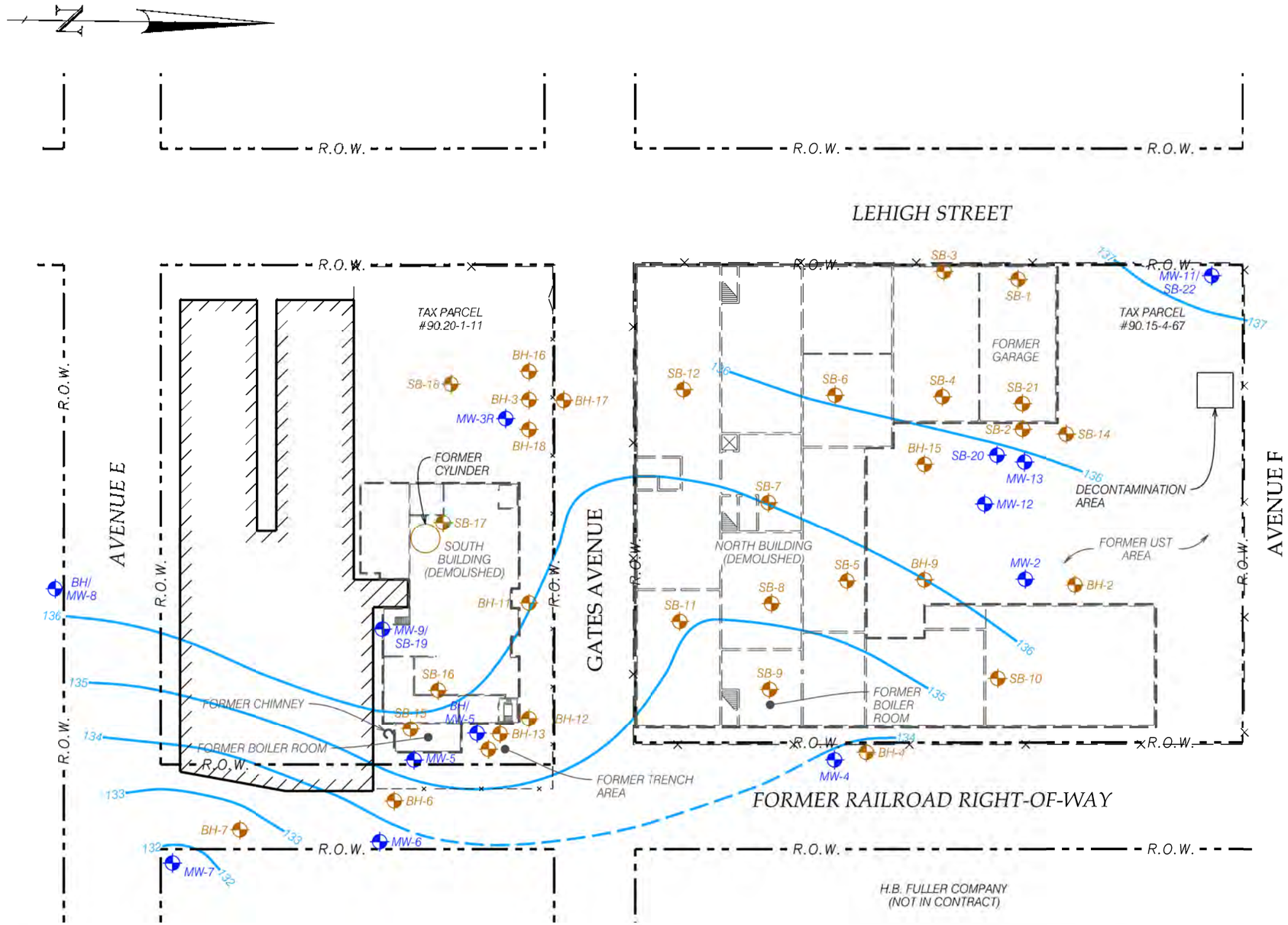

Key

- R.O.W. — Right of Way
- Soil Boring
- Soil Boring w/ Monitoring Well
- 137 — Groundwater Contour (December 2008)

Plan View

1" = 60' SCALE — 30 0 30 60 FEET

Basemap Reference:

"City of Geneva, Former Market Basket Property, Environmental Resoration Program, Ontario County, New York"; Prepared by: Obrien Gere Engineers, Inc.; Dated: January 2009; File No.: 1740.30852.101

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PROJECT: MARKET BASKET PROPERTY ENVIRONMENTAL RESTORATION PROGRAM

DWG. TITLE: GROUNDWATER CONTOUR MAP - DECEMBER 2008

CLIENT: CITY GENEVA

LOCATION: CITY OF GENEVA, ONTARIO COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2016018
FILE NAME.:	Figure4
SCALE:	AS NOTED
DATE:	AUG. 2016
ENG'D BY:	DKM
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SHEET NO.: FIGURE 4

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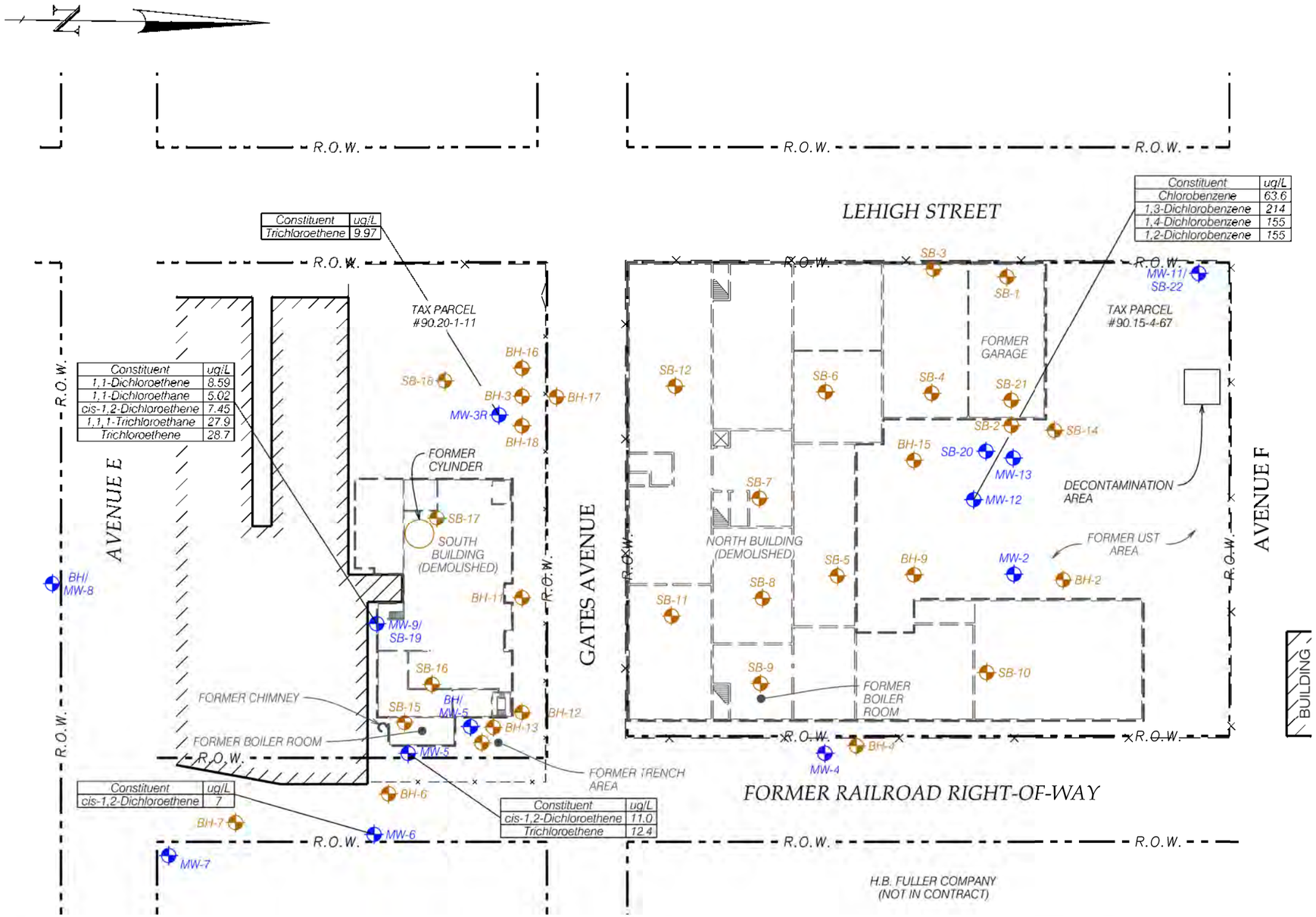

Constituent	ug/L
Trichloroethene	9.97

Constituent	ug/L
1,1-Dichloroethene	8.59
1,1-Dichloroethane	5.02
cis-1,2-Dichloroethene	7.45
1,1,1-Trichloroethane	27.9
Trichloroethene	28.7

Constituent	ug/L
cis-1,2-Dichloroethene	7

Constituent	ug/L
cis-1,2-Dichloroethene	11.0
Trichloroethene	12.4

Constituent	ug/L
Chlorobenzene	63.6
1,3-Dichlorobenzene	214
1,4-Dichlorobenzene	155
1,2-Dichlorobenzene	155

Key

- R.O.W. — Right of Way
- Soil Boring
- Soil Boring w/ Monitoring Well

Plan View

1" = 60' SCALE — 30 0 30 60 FEET

Basemap Reference:

"City of Geneva, Former Market Basket Property, Environmental Resoration Program, Ontario County, New York"; Prepared by: Obrien Gere Engineers, Inc.; Dated: January 2009; File No.: 1740.30852.101

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PROJECT: MARKET BASKET PROPERTY ENVIRONMENTAL RESTORATION PROGRAM

DWG. TITLE: REMAINING GROUNDWATER SAMPLE EXCEEDANCES

CLIENT: CITY GENEVA

LOCATION: CITY OF GENEVA, ONTARIO COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2016018
FILE NAME.:	Figure5
SCALE:	AS NOTED
DATE:	AUG. 2016
ENG'D BY:	DKM
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SHEET NO.: FIGURE 5

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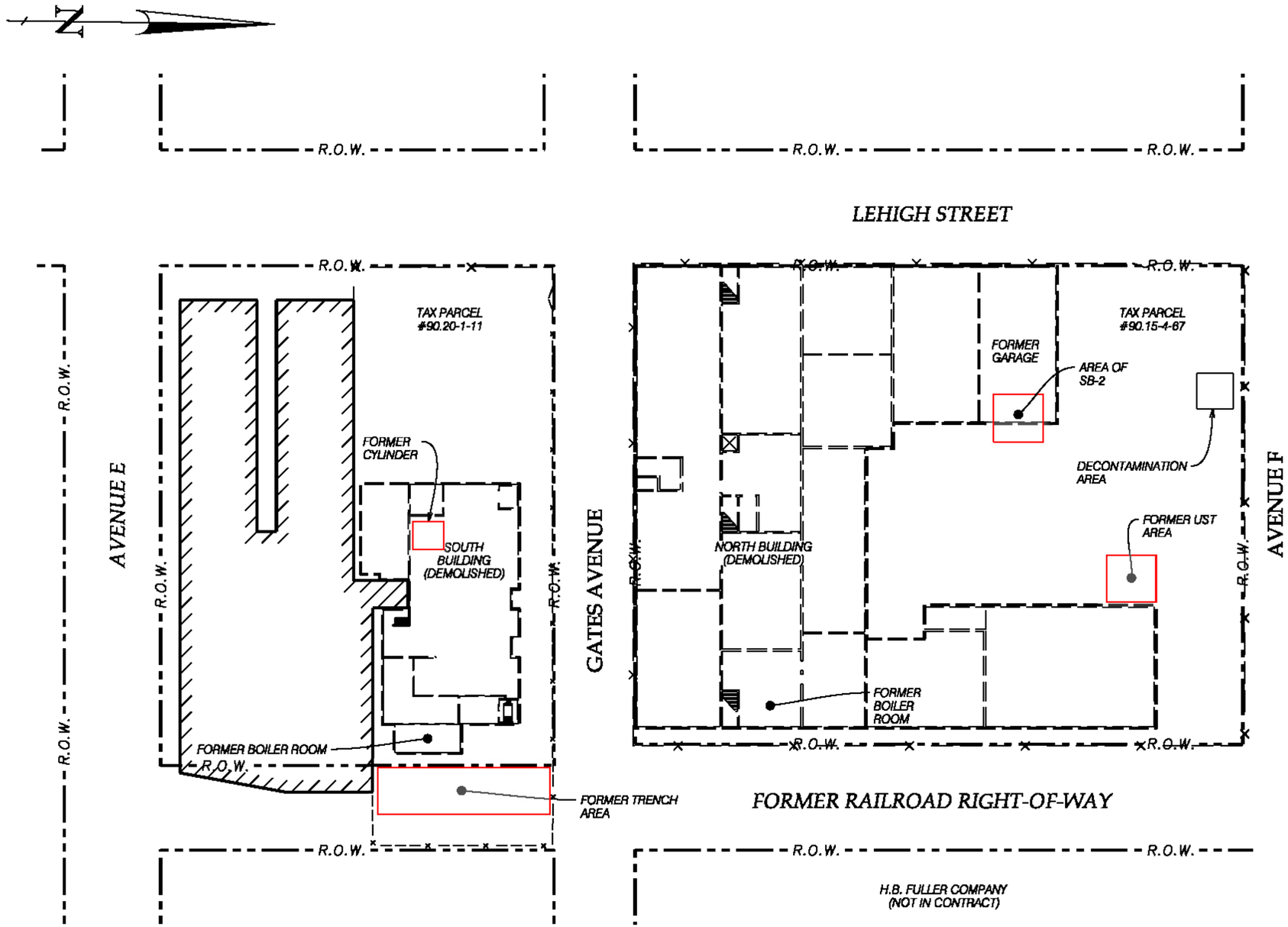

Key

R.O.W. — Right of Way

Areas of Excavation

Plan View

1" = 60'
SCALE 30 0 30 60 FEET

Basemap Reference:

"City of Geneva, Former Market Basket Property, Environmental Resoration Program, Ontario County, New York"; Prepared by: Obrien Gere Engineers, Inc.; Dated: January 2009; File No.: 1740.30852.101.

STATE OF NEW YORK
DAVID K. MERRILL
LICENSED PROFESSIONAL ENGINEER

12-12-16

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PROJECT: MARKET BASKET PROPERTY
ENVIRONMENTAL RESTORATION PROGRAM

DWG. TITLE: EXCAVATION AS-BUILT

CLIENT: CITY GENEVA

LOCATION: CITY OF GENEVA, ONTARIO COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2016018
FILE NAME.:	EV01P
SCALE:	AS NOTED
DATE:	DEC. 2016
ENG'D BY:	DKM
DRAWN BY:	JMD
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SHEET NO.: FIGURE 6

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APPENDICES

APPENDIX A

SURVEY MAP, METES AND BOUNDS

SCHEDULE "A"

Description

CITY OF GENEVA - PARCEL A

All that tract or parcel of land situate in the City of Geneva, County of Ontario, State of New York. All of which is shown on a map prepared by David M. Clark, PLS #049807, entitled ***"Map Showing Lands Of City Of Geneva"*** Job #2815.00. Last dated April 8, 2013. Being more particularly described as follows.

Beginning at a point, marked by an iron pin, at the intersection of the apparent easterly line of Lehigh Street and the apparent northerly line of Gates Avenue. Thence the following four (4) courses and distances.

1. Thence, N 00° 51' 50" W along the apparent easterly line of Lehigh Street a distance of 320.00 feet to a point, marked by an iron pin;

2. Thence, N 89° 08' 05" E along the southerly line of lands of the City of Geneva (L. 1106 P. 981) (Avenue E – Paper Street) a distance of 250.00 feet to a point, marked by an iron pin;

3. Thence, S 00° 51' 50" E along the westerly line of lands of the Ontario County IDA – Finger Lakes Railway (L. 956 P.501) (Ontario Street – Paper Street) a distance of 320.00 feet to a point, marked by an iron pin, in the apparent northerly line of Gates Avenue;

4. Thence, S 89° 08' 05" W along the apparent northerly line of Gates Avenue a distance of 250.00 feet back to the point of beginning.

Containing 80,000± Sq. Ft. or 1.837 Acres of land.

Subject to easements, rights of way or encumbrances of record, if any.

Intending to describe the lands conveyed to the City of Geneva by deed dated April 26, 1988 and recorded in the Ontario County Clerk's Office in liber 873 of deeds, page 783.

file:2815Add.doc

SCHEDULE "A"

Description

CITY OF GENEVA - PARCEL B

All that tract or parcel of land situate in the City of Geneva, County of Ontario, State of New York. All of which is shown on a map prepared by David M. Clark, PLS #049807, entitled ***"Map Showing Lands Of City Of Geneva"*** Job #2815.00. Last dated April 8, 2013. Being more particularly described as follows.

Beginning at a point, marked by an iron pipe, at the intersection of the apparent easterly line of Lehigh Street and the apparent southerly line of Gates Avenue. Thence the following six (6) courses and distances.

1. Thence, N 89° 08' 05" E along the apparent southerly line of Gates Avenue a distance of 309.31 feet to a point, marked by an iron pin;
2. Thence, S 00° 53' 00" E along the lands of the City of Geneva IDA (L. 1014 P. 805) (Ontario Street – Paper Street) a distance of 83.50 feet to a point;
3. Thence, S 89° 15' 44" W along the northerly line of lands of The Cracker Factory, Inc. (L. 1194 P. 415) a distance of 151.83 feet to a point;
4. Thence, S 00° 56' 16" E along the lands of The Cracker Factory, Inc. (L. 1194 P. 415) a distance of 12.78 feet to a point;
5. Thence, S 89° 03' 44" W along the northerly line lands of The Cracker Factory, Inc. (L. 1194 P. 415) a distance of 157.49 feet to a point, marked by an iron pin, in the apparent easterly line of Lehigh Street;
6. Thence, N 00° 53' 00" W along the apparent easterly line of Lehigh Street a distance of 96.14 back to the point of beginning.

Containing 27,777± Sq. Ft. or 0.638 Acres of land.

Subject to easements, rights of way or encumbrances of record, if any.

Intending to describe the lands conveyed to the City of Geneva by deed dated April 26, 1988 and recorded in the Ontario County Clerk's Office in liber 873 of deeds, page 786.

file:2815Bdd.doc

Clark SURVEYORS
Land Surveying & Mapping
33 Banks Street
Phelps, NY 14532
Phone (315) 548-4045
324 West North Street
Geneva, NY 14456
Phone (315) 789-3896

References

1. Deeds To City of Geneva – Liber 873 Page 783 and Liber 873 Page 786
2. Map prepared by Ronald M. Phillips, PLS titled "A Map Of A Survey Of A Parcel Owned By K & L Realty Company" last dated November 1, 1979. Ontario County Filed Map #9033.
3. Map prepared by Leonard O. Gardner, PLS titled "Survey Map Property of Multochem, Inc." last dated September 10, 1998 Job No. 98-172.
4. Map prepared by David M. Clark, PLS titled "Map Showing Lands Of Joseph M. D'Amico & Chanee M. D'Amico" last dated October 17, 2007. Ontario County Filed Map #30310.
5. Map prepared by Michael O. O'Neill, PLS titled "Lands of American National Can Company" last dated October 12, 1990. Ontario County Filed Map #19483.
6. Map of Torrey Park Land Company prepared by S.F. Morris, C.E. Ontario County Filed Map #97 & 253A.

Abstract of Title

No abstract of title was provided. An abstract would include items (such as easements, right of ways, agreements, etc.) that could possibly have an effect on the title. This survey is subject to facts that a full and up to date title search would include.

Only copies from the original of this survey bearing the signature and the land surveyors inked seal (RED INK ONLY) or embossed seal shall be considered as true and valid copies.

Certifications indicated hereon, unless otherwise indicated, signify that this survey was prepared in accordance with the existing code of practice for land surveys as adopted by the NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, the GENESEE VALLEY LAND SURVEYORS ASSOCIATION and the MONROE COUNTY BAR ASSOCIATION. Said certifications shall be valid only to the party for whom the survey was prepared, and on that party's behalf to title company, governmental agency and lending institution listed hereon for mortgage proposed for said party for whom the survey was prepared. Certifications are not transferable to additional institutions or subsequent owners than as may be expressly stated hereon.

I, David M. Clark, PLS hereby certify that this map was prepared on APRIL 8, 2013 from notes of an instrument survey completed on MARCH 18, 2013 and from various references listed hereon. No search was made for any easements, restrictions or encumbrances affecting this property other than those found in the references.

By: David M. Clark
DAVID M. CLARK P.L.S. #049807

STATE OF NEW YORK
DAVID M. CLARK
049807
LICENSED LAND SURVEYOR

Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of Section 7209, Subdivision 2 of the New York State Education Law.

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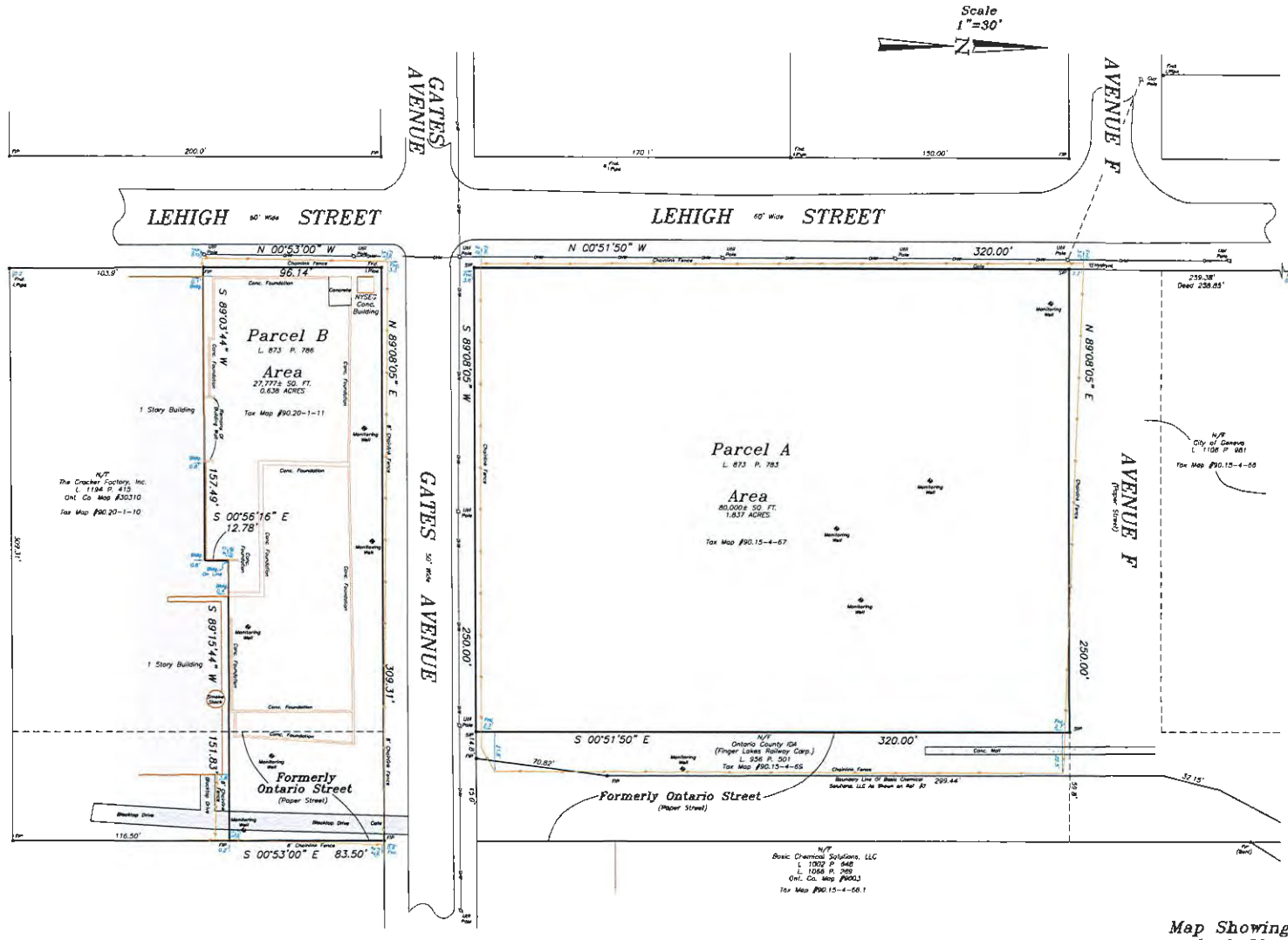

Map Showing
Lands Of
CITY OF GENEVA
Situate In
City Of Geneva
County Of Ontario
State Of New York

Job #2815.00

APPENDIX B

DIGITAL COPY OF THE FER (CD)

APPENDIX C

DEED RESTRICTIONS

Ontario County Clerk Recording Page

Return To

FRONTIER ABSTRACT
30 W BROAD ST
ROCHESTER, NY 14614

Matthew J. Hoose, County Clerk
Ontario County Clerk
20 Ontario Street
Canandaigua, New York 14424
(585) 396-4200

Document Type: **DECLARATION**

Receipt Number: 120036

Grantor (Party 1)
GENEVA CITY

Grantee (Party 2)

Fees	
Recording Fee	$20.00
Pages Fee	$45.00
State Surcharge	$20.00
Total Fees Paid:	$85.00

Control #: 201306110068

State of New York
County of Ontario

Recorded on June 11th, 2013 at 10:17:39 AM
in Liber **01298** of **Deeds**
beginning at page **0193**, ending at page **0201**,
with a total page count of **9**.

Matthew J. Hoose

Ontario County Clerk

This sheet constitutes the Clerk's endorsement required by section 319 of the Real Property Law of the State of New York

SL

Do Not Detach

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 8th day of May 2013, by City of Geneva, New York, a municipal corporation and having an office for the transaction of business at 47 Castle Street, Geneva, New York 14456.

WHEREAS, Market Basket Site is the subject of a State Assistance Contract executed by the City of Geneva as part of the New York State Department of Environmental Conservation's (the "Department's) Environmental Restoration Program, namely that parcel of real property located at the address of 63 Gates Avenue – North & South Side and Lehigh Street in the City of Geneva, County of Ontario, State of New York, being part of lands conveyed by William E. Yalden to City of Geneva by deed dated April 26, 1988 and recorded in Liber 873 at Page 783 [North Side] known and designated on the tax map of the County Clerk of Ontario as tax map parcel numbers: Block 16 Lot(s) 286 & 312A and deed dated April 26, 1988 and recorded in Liber 873 at page 786 [South Side] in the Ontario County Clerk's Office, and being more particularly described in Appendix "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, City of Geneva, New York, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Appendix "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which are described in the SMP, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for Commercial or Industrial use as defined in 6 NYCRR Part 375 1.8 (g) (2) (iii) & (iv) without the express written waiver of such prohibition by the Department or Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency

Sixth, the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the State Assistance Contract requires to be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

Ninth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

By: _____

Print Name: Mathew D. Horn

Title: City Manager Date: 4/5/2013

Grantor's Acknowledgment

STATE OF NEW YORK)

) s.s.:

COUNTY OF) in the Ontario County Clerk's Office

On the 5th day of April, in the year 2013 before me, the undersigned, personally appeared Mathew D. Horn, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

JILL E. BUYCK
Notary Public, State of New York
Wayne County No. 4377378
Commission Expires Jan. 20, 2015

Notary Public State of New York

EXHIBIT "A"

SCHEDULE "A"

Description

CITY OF GENEVA - PARCEL A

All that tract or parcel of land situate in the City of Geneva, County of Ontario, State of New York. All of which is shown on a map prepared by David M. Clark, PLS #049807, entitled ***"Map Showing Lands Of City Of Geneva"*** Job #2815.00. Last dated April 8, 2013. Being more particularly described as follows.

Beginning at a point, marked by an iron pin, at the intersection of the apparent easterly line of Lehigh Street and the apparent northerly line of Gates Avenue. Thence the following four (4) courses and distances.

1. Thence, N 00° 51' 50" W along the apparent easterly line of Lehigh Street a distance of 320.00 feet to a point, marked by an iron pin;

2. Thence, N 89° 08' 05" E along the southerly line of lands of the City of Geneva (L. 1106 P. 981) (Avenue E – Paper Street) a distance of 250.00 feet to a point, marked by an iron pin;

3. Thence, S 00° 51' 50" E along the westerly line of lands of the Ontario County IDA – Finger Lakes Railway (L. 956 P.501) (Ontario Street – Paper Street) a distance of 320.00 feet to a point, marked by an iron pin, in the apparent northerly line of Gates Avenue;

4. Thence, S 89° 08' 05" W along the apparent northerly line of Gates Avenue a distance of 250.00 feet back to the point of beginning.

Containing 80,000± Sq. Ft. or 1.837 Acres of land.

Subject to easements, rights of way or encumbrances of record, if any.

Intending to describe the lands conveyed to the City of Geneva by deed dated April 26, 1988 and recorded in the Ontario County Clerk's Office in liber 873 of deeds, page 783.

file:2815Add.doc

SCHEDULE "A"

Description

CITY OF GENEVA - PARCEL B

All that tract or parcel of land situate in the City of Geneva, County of Ontario, State of New York. All of which is shown on a map prepared by David M. Clark, PLS #049807, entitled ***"Map Showing Lands Of City Of Geneva"*** Job #2815.00. Last dated April 8, 2013. Being more particularly described as follows.

Beginning at a point, marked by an iron pipe, at the intersection of the apparent easterly line of Lehigh Street and the apparent southerly line of Gates Avenue. Thence the following six (6) courses and distances.

1. Thence, N 89° 08' 05" E along the apparent southerly line of Gates Avenue a distance of 309.31 feet to a point, marked by an iron pin;
2. Thence, S 00° 53' 00" E along the lands of the City of Geneva IDA (L. 1014 P. 805) (Ontario Street – Paper Street) a distance of 83.50 feet to a point;
3. Thence, S 89° 15' 44" W along the northerly line of lands of The Cracker Factory, Inc. (L. 1194 P. 415) a distance of 151.83 feet to a point;
4. Thence, S 00° 56' 16" E along the lands of The Cracker Factory, Inc. (L. 1194 P. 415) a distance of 12.78 feet to a point;
5. Thence, S 89° 03' 44" W along the northerly line lands of The Cracker Factory, Inc. (L. 1194 P. 415) a distance of 157.49 feet to a point, marked by an iron pin, in the apparent easterly line of Lehigh Street;
6. Thence, N 00° 53' 00" W along the apparent easterly line of Lehigh Street a distance of 96.14 back to the point of beginning.

Containing 27,777± Sq. Ft. or 0.638 Acres of land.

Subject to easements, rights of way or encumbrances of record, if any.

Intending to describe the lands conveyed to the City of Geneva by deed dated April 26, 1988 and recorded in the Ontario County Clerk's Office in liber 873 of deeds, page 786.

file:2815Bdd.doc

EXHIBIT "B"

Clark SURVEYORS
Land Surveying & Mapping
33 Banks Street
Phelps, NY 14532
Phone (315) 548-4045
324 West North Street
Geneva, NY 14456
Phone (315) 789-3896

References

1. Deeds To City of Geneva – Liber 873 Page 783 and Liber 873 Page 786
2. Map prepared by Ronald M. Phillips, PLS titled "A Map Of A Survey Of A Parcel Owned By K & L Realty Company" last dated November 1, 1979. Ontario County Filed Map #9033.
3. Map prepared by Leonard O. Gardner, PLS titled "Survey Map Property of Holtzschem, Inc." last dated September 10, 1998 Job No. 98-172.
4. Map prepared by David M. Clark, PLS titled "Map Showing Lands Of Joseph M. D'Amico & Chanee M. D'Amico" last dated October 17, 2007. Ontario County Filed Map #30310.
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6. Map of Torrey Park Land Company prepared by S.F. Morris, C.E. Ontario County Filed Map #97 & 253A.

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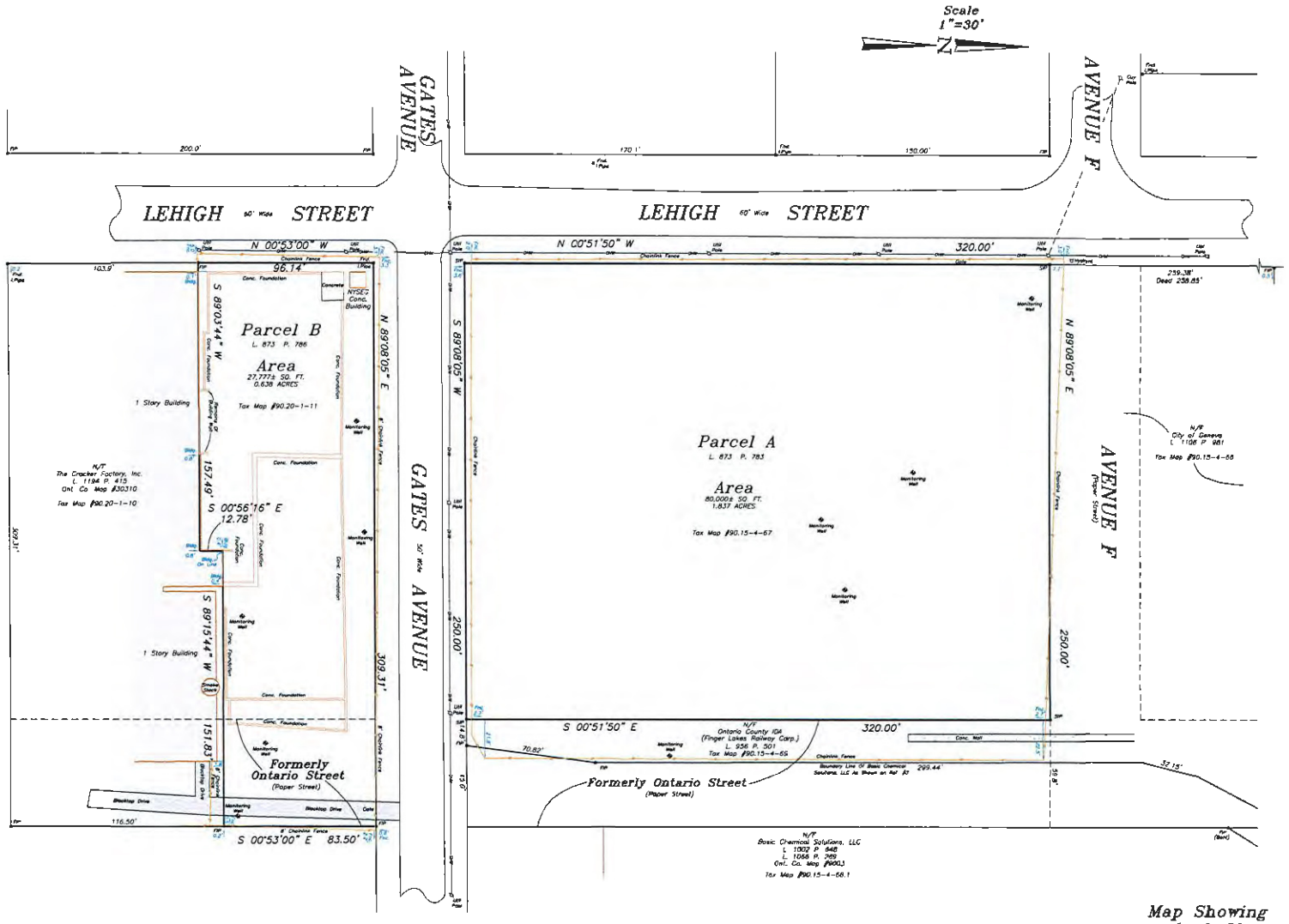

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By: David M. Clark
DAVID M. CLARK P.L.S. #049807

STATE OF NEW YORK
DAVID M. CLARK
LICENSED LAND SURVEYOR

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Map Showing Lands Of CITY OF GENEVA

Situate In
City Of Geneva
County Of Ontario
State Of New York

Job #2815.00

APPENDIX D

DEC APPROVALS OF SUBSTANTIVE TECHNICAL REQUIREMENTS

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, New York 14414-9519
Phone: (585) 226-5353 • **FAX:** (585) 226-8696
Website: www.dec.state.ny.us

Alexander B. Grannis
Commissioner

March 7, 2008

Mr. Gordon Eddington
Director of Public Works
Engineering Department
City Hall
47 Castle Street
Geneva, NY 14456

Re: Remedial Action Work Plan
Market Basket ERP Site (B00018-8)
Geneva (C), Ontario (Co)

Dear Mr. Eddington:

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has completed its review of the June 2007 Remedial Action Work Plan (RAWP) and November 2007 Health and Safety Plan (HASP) for the subject property. The Department is providing the following modifications to the RAWP:

1. Section 3. Location and Description of Construction Activities - Since marginally elevated levels of chlorobenzenes remaining in soils at a depth of 15-16 feet below grade in boring SB-2 may act as a continuing source to groundwater, the excavation to remove the contaminated soil in this area is to extend to a minimum depth of 20 feet below grade.

2. Section 3. Location and Description of Construction Activities - As part of the excavation of impacted soils in the area of SB-2, it is understood that monitoring well MW-10 is likely to be damaged or removed. Two new groundwater monitoring wells are to be installed in locations immediately downgradient of this excavation area after it is complete. Based on the groundwater elevation contours provided, this would likely include locations to the north and south of the excavation area. An additional round of groundwater elevation data is to be collected for confirmation of groundwater flow prior to implementing the excavation work. Proposed monitoring well locations, in relation to the excavation area and groundwater elevation contours, are to be provided for approval prior to installation of these wells. The groundwater monitoring wells are to be installed and developed in accordance with procedures outlined in the July 2003 Sampling Plan for Pre-Design Remedial Investigation.

3. Section 3. Location and Description of Construction Activities - A round of groundwater samples is to be collected from all existing and new monitoring wells at the site after a minimum period of two weeks following development of the new monitoring wells. Low-flow groundwater sampling is to be performed in accordance with procedures outlined in the July 2003 Sampling Plan for Pre-Design Remedial Investigation. Groundwater samples are to be analyzed for TCL VOCs and SVOCs.

4. Section 3. Location and Description of Construction Activities - Access to staged soil needs to be limited by the use of appropriate site security measures, such as fencing and signage. In addition, contaminant run-off from the staged soils to the ground surface is to be prevented. The duration the soil is to remain at the site should be minimized to the extent possible to mitigate these concerns.

5. Section 6. Confirmation Sampling and Site Restoration Plan - As described in Section 3.2, six confirmatory soil samples are to be collected in association with the former trench area excavation (rather than the 5 samples noted in this section for other excavation areas). Additional confirmatory soil samples may be required following removal of piping that is associated with the former tank pit and trench areas in accordance with Section 3.9(a) 5 of the Draft DER 10 Technical Guidance Document.

6. Section 10. Institutional Controls to be Implemented - In addition to the items noted, the Site Management Plan (SMP) is to include the Operation, Maintenance and Monitoring Program as discussed in Section 11. Rather than deed restrictions, the Department prefers that institutional controls be provided in the form of an environmental easement (a boilerplate example is attached for future use).

7. The NYSDOH Community Air Monitoring Plan, which is found in Appendix 1A to Draft DER 10 and is attached, is to be considered part of the final RAWP. It is to be implemented and strictly adhered to during all ground intrusive fieldwork associated with the project.

8. Prior to the start of the remedial work, a sign is to be posted at the site in accordance with the attached specifications.

Please notify the Department in writing within 30 days of receipt of this letter as to your acceptance of these modifications. If accepting the modifications, this letter is to be attached to and become part of the final approved Remedial Action Work Plan. Please provide this office with a minimum notice of one week prior to implementing any fieldwork under the approved work plan. The Department will issue a fact sheet prior to the start of fieldwork. If you should have any questions, I can be reached at (585) 226-5356 or via email at gbmaclea@gw.dec.state.ny.us.

Sincerely,

Gregory B. MacLean, P.E.
Environmental Engineer 2
Division of Environmental Remediation

Enc. Boilerplate Environmental Easement
NYSDOH Community Air Monitoring Plan
Generic Sign Specifications

ec: B. Putzig - NYSDEC
R. Knizek - NYSDEC
D. McNaughton - NYSDOH
D. Meixell - O'Brien & Gere

THIS INDENTURE made this ____day of _____, 20 __, between ***Name of title owner(s) of the site*** residing at (or having an office at) ***Title owner's address - no PO Boxes***, (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("brownfield sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of environmental easements as an enforceable means of ensuring the performance of maintenance, monitoring or operation requirements and of ensuring the potential restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to be effective, or which requires groundwater use restrictions; and

WHEREAS, the Legislature of the State of New York has declared that environmental easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a brownfield site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and;

WHEREAS, Grantor, is the owner of real property located in the City/Town/Village of _____, _____County, New York known and designated on the tax map of the _____ of _____ as ***insert tax map information***, being the same as that property conveyed to Grantor by deed on _____, and recorded in the Land Records of the _____ County Clerk at ***insert Liber and page or computerized system tracking/ identification number***, comprised of approximately ***#*** acres, and hereinafter more fully described in Schedule A attached hereto and made a part hereof (the " Controlled Property"); and;
Attach an adequate legal description of the property subject to the easement, or reference a recorded map. If the easement is on only a part of a parcel of land which is not subdivided into encumbered and unencumbered portions, a legal description needs to be created by a survey bearing the seal and signature of a licensed land surveyor with reference to a metes and bounds description.

WHEREAS, the Commissioner does hereby acknowledge that the Department accepts this

Environmental Easement in order to ensure the protection of human health and the environment and to achieve the requirements for remediation established at this Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36;and

NOW THEREFORE, in consideration of the covenants and mutual promises contained herein and the terms and conditions of (**STRIKE INAPPROPRIATE REFERENCE) Brownfield Cleanup Agreement Number_____/State Assistance Contract Number_____/Order on Consent Number_____**, Grantor grants, conveys and releases to Grantee a permanent Environmental Easement pursuant to Article 71, Title 36 of the ECL in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of maintenance, monitoring or operation requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The following controls apply to the use of the Controlled Property, run with the land are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees, and any person using the Controlled Property:

A. The Controlled Property may be used for **STRIKE INAPPROPRIATE LANGUAGE residential/commercial/industrial use as long as the following the long-term engineering controls are employed:**

STATE THE CONTROLS. FOR EXAMPLE:

(i) any soil on the property must be covered by a demarcation layer and a barrier layer approved by NYSDEC such as concrete, asphalt or structures or must be covered with a _____layer of clean soil and this demarcation layer and barrier layer must be maintained; and

(ii) any proposed soil excavation on the property below the _____ cover or below the demarcation layer requires prior notification and prior approval of NYSDEC in accordance with the Site Management Plan approved by NYSDEC for this Controlled Property and the excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.

B. The Controlled Property may not be used for a higher level of use such as **STRIKE INAPPROPRIATE LANGUAGE residential/commercial use** and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant of Title 36 to Article 71 of the Environmental Conservation Law.

C. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

D. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Controlled Property, including:

1. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

2. The right to give, sell, assign, or otherwise transfer the underlying fee interest to the Controlled Property by operation of law, by deed, or by indenture, subject and subordinate to this

Environmental Easement;

5. Enforcement.

A. This environmental easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this environmental easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person intentionally violates this environmental easement, the Grantee may revoke the Certificate of Completion provided under ECL Article 27, Title 14, or the Satisfactory Completion of Project provided under ECL Article 56, Title 5 with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach. Grantor shall then have a reasonable amount of time from receipt of such notice to cure. At the expiration of said second period, Grantee may commence any proceedings and take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement in accordance with applicable law to require compliance with the terms of this Environmental Easement.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar its enforcement rights in the event of a subsequent breach of or noncompliance with any of the terms of this Environmental easement.

6. Notice. Whenever notice to the State (other than the annual certification) or approval from the State is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the its County tax map number or the Liber and Page or computerized system tracking/ identification number and address correspondence to:

Division of Environmental Enforcement
Office of General Counsel
New York State Department of Environmental Conservation
625 Broadway
Albany New York 12233-5500

Such correspondence shall be delivered by hand, or by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. This environmental easement may be amended only by an amendment executed by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This environmental easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. Costs and Liabilities. Grantor shall retain all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property, including but not limited to the obligation to maintain adequate liability insurance coverage.

12. Taxes. Grantor shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority.

13. Successors. The term "Grantor", wherever used herein, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors, and assigns.

14. Compliance with Law. This Environmental easement shall not remove the necessity of Grantor to obtain any permit and/or approval from any governmental agency having jurisdiction over any activity conducted or to be conducted on the Controlled Property.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Grantor's Name

By:_____

Title:_____

Date:_____

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Thriugh the Department of Environmental Conservation

By: _____
Erin M. Crotty, Commissioner

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the _____ day of _____, in the year 200_, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the _____ day of _____, in the year 200_, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis

of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

New York State Department of Health
Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

P:\BEEI\Bureau\Common\CAMP\GCAMPR1.DOC

SITE SIGNS FOR REMEDIAL PROGRAMS

Instructions

Signs are required at sites where remedial actions are being performed under one of the following remedial programs: State Superfund, Voluntary Cleanup Program (VCP), Brownfield Cleanup Program (BCP), and Environmental Restoration Program (ERP). They will not be required during the investigation and design phases. The cost of the sign will be borne by the parties performing the remedial action based on the legal document the activities are being performed under (i.e. volunteers/participants would pay 100% of the cost under the BCP; municipalities would pay 100% and then would be reimbursed for the cost under the ERP).

Sign Requirements

Size: Horizontal format - 96" wide by 48" high

Construction Materials: Aluminum or wood blank sign boards with vinyl sheeting.

Inserts: "Site Name", "Site Number", "Name of Party Performing Remedial Activities" and "Municipal Executive".
Indicate position, size and topography for specific inserts.

Color Scheme: Copy surrounding DEC logo - "NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION" - PMS 355

DEC logo: PMS 301 Blue
PMS 355 Green

Text:

Program (choose one):	PMS 301
Brownfield Cleanup Program	
Voluntary Cleanup Program	
State Superfund Program	
1996 Clean Water/Clean Air Bond Act - Environmental Restoration Program	
Site Name, Site Number, Party Performing Remedial Activities	PMS 355
Names of Governor, Commissioner, Municipal Executive	PMS 301
Transform the Past.....Build for the Future	PMS 355

Type Specifications: All type is Caslon 540, with the exception of the logotype.
Format is: center each line of copy with small caps and initial caps.

Production Notes: 96" wide x 48" high aluminum blanks will be covered with vinyl sheeting to achieve background color. Copy and logo will be silk screened on this surface.

See attached format

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5353 | F: (585) 226-8139
www.dec.ny.gov

August 5, 2016

Matthew Horn
City of Geneva City Manager
City Hall, 47 Castle Street
Geneva, New York 14456

Re: Remedial Action Work Plan Addendum
Market Basket Site
Site No. B00018
Geneva (C), Ontario (C)

Dear Mr. Horn:

The New York State Department of Environmental Conservation (the Department) has completed its review of the Remedial Action Work Plan Addendum dated April 2016, the Health and Safety Plan dated July 2016, and the site plan figure dated July 2016 (the 3 documents collectively known as the Addendum) for Market Basket site (Site) located at corner of Gates Avenue and Lehigh Street in the City of Geneva, Ontario County. Based on the information presented in the Addendum, the Addendum is conditionally approved with the following modifications and clarifications.

1. The Department understands that a utility clearance will be completed at the Site prior to any ground intrusive activities.

2. The Department understands that the soil/fill material will be staged on-site on 12 mil poly sheeting. The Department is amendable to having the soil/fill material direct loaded into trucks and/or roll-offs. If the roll-offs and/or staged soil piles remain on-site then the roll-offs and/or staged soil piles will be covered with 12 mil poly sheeting daily to prevent precipitation and wind erosion.

3. The Department understands that each bucket of soil/fill material will be screened with a photoionization detector (PID) and will also be screened for evidence of impacts (visual and olfactory). The PID screening level will be 10 parts per million (ppm).

4. The Department understands that the soil/fill material will be screened and staged as follows:
   - Less than or equal to 10 ppm PID reading and showing no evidence of impacts (visual and odor) will be staged on and covered with 12 mil poly sheeting.
   - Greater than 10 ppm PID reading and/or showing evidence of impacts (visual impacts or odor) will be staged on and covered with 12 mil poly sheeting.

5. The Department understands that the staged soil/fill material that is less than or equal to 10 ppm PID reading and no evidence of impacts (visual and olfactory) can be placed back in the excavation as backfill material but must be placed below the cover system (i.e., placed at a depth greater than 1 foot below ground surface).

6. The Department understands that the staged soil/fill material that has PID readings greater than 10 ppm and/or has evidence of impacts (visual or olfactory) will be disposed off-site at a permitted landfill facility in accordance with all local, state, and federal regulations.

7. The Department understands that all grossly contaminated as well as any soil/fill material showing evidence of impacts (PID, visual, olfactory) will be excavated the extent feasible (e.g., up to the property boundary) and disposed off-site at a permitted landfill facility in accordance with all local, state, and federal regulations.

8. The Department understands that if excavation water (groundwater or precipitation) is encountered then the excavation water will be containerized, characterized, and disposed off-site at a permitted facility in accordance with all local, state, and federal regulations. If the excavation water is to be discharged to a sanitary sewer system all proper permits and approvals must be obtained. Prior to any discharges to the sanitary sewer, a copy of all approvals and permits must be submitted to the Department's project manager.

9. The Department understands that all liquids associated with the elevator cylinder and the ancillary piping (free and decontamination liquids) will be containerized, characterized, and will be disposed off-site at a permitted facility.

10. The Department understands that if concrete material (e.g., footers, slabs) is encountered or removed as part of the excavation activities the concrete material will be staged on and covered with 12 mil poly sheeting. The concrete material visual inspected. If the concrete material shows no evidence of impacts (visual and/or olfactory) then the concrete material could be recycled at a concrete recycling facility. If the concrete material shows any evidence of impacts (visual and/or olfactory) then the concrete material must be disposed off-site at a permitted landfill facility in accordance with all local, state, and federal regulations.

11. The Department understands that once the elevator cylinder and any ancillary piping/equipment has been removed from the excavation the documentation/confirmation sampling completed in accordance with DER-10 Section 5.4(b). The sample collection location will be biased towards that showing elevated PID readings or evidence of impacts (visual and olfactory). The Department understands that the documentation/confirmation soil samples will be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) plus tentatively identified compounds (TICs), TCL semi-volatile organic compounds (SVOCs), and PCBs.

    If the backfilling of the excavation is contingent upon the laboratory analytical results then the Department would suggest a rapid turnaround on the analysis of the documentation/confirmatory soil/fill samples collected from the excavation.

12. The Department understands that the laboratory data package will be Analytical Services Protocol (ASP) Category B data deliverables. The laboratory data package will have a data usability summary report (DUSR) completed in accordance with DER-10 Section 2.0 and Appendix 2B of DER-10.

13. The Department understands that all data deliverables will be submitted in an electronic data deliverable (EDD) that complies with the Department's Electronic Data Warehouse Standards (EDWS). Additional information relevant the EDD and EDWS can be found on the Department's public website: http://www.dec.ny.gov/chemical/62440.html

14. The Department understands that the excavation will be backfilled to meet the existing grade of the Site. The Department also understands that the backfill material imported to the Site will be in accordance with DER-10 Section 5.4(e). Department approval for backfill material must be obtained prior to importation to the Site. Attached is the Request to Import/Reuse Fill or Soil form (hard copy and electronic) to be used to obtain approval for the reuse or importation of backfill material to the Site. Please use this form when submitting a request for Department's approval of backfill material. It must be noted that the soil material must be sampled to demonstrate that soil material meets the Site's soil cleanup objectives for restricted commercial use for all compounds as presented in Appendix 5 of DER-10. Attached is Appendix 5 of DER-10 which provides the compounds and values for restricted commercial use. DER-10 Table 5.4(e)10 titled Recommended Number of Soil Samples for Soil Imported To or Exported From a Site provides the number of samples to be collected for laboratory analysis based on the quantity of soil material to be imported to the Site.

    Please note that the Department must see 80 sieve analysis documentation for material other than soil to be imported to the Site.

15. The Department understands that the elevator cylinder will either be disposed off-site at a permitted landfill facility or the elevator cylinder will be decommissioned/decontaminated and will be sent to a recycling facility in accordance with all applicable local, state and federal regulations.

16. The Department understands that equipment to be used in the excavation and cover installation fieldwork activities will arrive at the Site in a clean condition (i.e.; decontaminated from previous job site). If any equipment arrives at the Site unclean (i.e.; not decontaminated from previous job site) the equipment will not be allowed entry to the Site. Once decontamination has been completed at an off-site location then the equipment will be granted access to the Site. All equipment used in the excavation and cover system installation activities will be decontaminated prior to the exiting the Site.

17. The Department understands that a decontamination pad will be constructed so that no soil/fill material and/or liquid will be tracked from the Site onto the streets/roadways. If in the event that soil/fill material and/or liquid is tracked/discharged onto the streets/roadways then all of the material will be cleaned up immediately and the Department's project manager will be notified of the issue and the corrective measures must be taken to mitigate the tracking/discharging issues.

18. The Department understands that if the soil/fill material is saturated and needs to be dewatered then the staging area will have a sump built into it to collect the dewatering fluids. If saturated soil/fill material is trucked off-site for disposal the trucks will be lined to prevent the discharge of liquids to the environment (e.g., streets, roadways). All dewatering liquids will be containerized, characterized, and disposed off-site at a permitted landfill facility in accordance with all local, state, and federal regulations.

19. If groundwater monitoring wells need to be decommissioned as part of the remedial activities notification must be given the Department's project manager prior to decommissioning the monitoring wells. The groundwater monitoring wells will be decommissioned in accordance with the Department's CP-43 Commissioner Policy on Monitoring Well Decommissioning. The Department understands that if groundwater monitoring wells need to be decommissioned for the implementation of the remedial activities then the need for those decommissioned groundwater monitoring wells to be re-installed will be evaluated to determine which wells are needed for the site management phase of the project.

20. The Department understands that the trucks for transporting material for off-site disposal will not be queued and will be not sit idling in the neighborhoods adjacent to and surrounding the Site.

21. The Department understands that waste generated (e.g., decon liquids, disposable personal protection equipment) as part of the elevator excavation and cover system installation will be managed in accordance with IDW will be managed in accordance with DER-10 section 3.3(e).

22. The Department understands that all individuals involved with the remedial activities will be HAZWOPER 40 hr. trained and will have current 8 hr. refresher certifications. The certifications will be made available upon request by the Department and New York State Department of Health (NYSDOH).

23. In future submittals of HASPs, a map that shows the route to be taken to the nearest hospital must be provided. Attached is a copy of a map that presents the route to be taken to the nearest hospital based on the directions given in the HASP.

24. The Department understands that the community air monitoring plan (CAMP) locations will be based on the wind direction of that day and the locations will be adjusted as needed as the wind direction changes during the course of the work day. The Department also understands that the CAMP monitoring readings will be recorded and presented as supporting documentation within the Final Engineering Report (FER).

    The CAMP will be implemented for any and all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include but not limited to soil/waste excavation and handling, test pitting, trenching, soil borings, monitoring well installation.

    Dust suppression techniques/methods (e.g., misting the excavation area) must be implemented if the CAMP levels are exceeded as well as if fugitive dust is seen leaving the Site.

25. The Department understands that the reference on page 16 of the July 2016 HASP for Attachment C is actually Attachment B in the submitted document.

26. The Department understands that if odors issues arise during the excavation activities appropriate odor suppression techniques/methods will be implemented at the Site.

27. Once the remedial action has been completed on the southern portion of the Site, the City of Geneva will submit to the Department the details regarding the placement of the cover material and establishment of grass cover, all supporting documentation to obtain approval for importation of cover material, and details on and figure showing the final grade of the Site.

28. During the meeting held at the Department's Region 8 office on July 29, 2016, there was some uncertainty as the if the groundwater monitoring wells requested in the Department's March 7, 2008 approval letter for the June 2007 Remedial Action Work Plan prepared by O'Brien and Gere had been completed. The Department is requesting that a groundwater monitoring well inventory be completed at the Site to document the number and condition of the groundwater monitoring wells. The groundwater monitoring well inventory findings need to be presented to the Department's project manager. Based on the groundwater monitoring well inventory findings the next steps forward will be determined.

29. As discussed during the July 29, 2016 meeting, the FER and SMP need to be developed using the current template available on the Department's public website. The FER will document all remedial activities completed at the Site after the Record of Decision was signed and will need to have the necessary supporting documentation as well as as-built drawings for the Site. DER-10 Section 5.8 provides all the necessary components needed in a FER. Also, use the checklist provided on the Department's public website to make certain the key components for the FER and SMP are in the documents to be submitted for review and approval. The following website will provide all the templates and checklists needed to close out the Site: http://www.dec.ny.gov/chemical/48236.html

30. As per the State Assistance Contract and 6 NYCRR Part 375-1.6(a)(4) the Department will be notified at least 7 days in advance of and be allowed to attend any field work activities to be completed under a Department approved work plan as well as any pre-bid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

31. There are less than 150 days till December 31, 2016 and a reasonable amount of work yet to be completed, documents to be developed, reviewed, and approved. With that said the Department is proposing the following schedule for the start of excavation fieldwork activities, the installation of the cover system, and the submittal of documents to achieve the issuance of the Certificate of Completion.

    - 30 days from the date of this letter the Remedial Action Work Plan Addendum (start of excavation activities) will begin at the Site.
    - Construction activities – excavation, cover installation, monitoring well installation (as needed), and groundwater sampling will be completed by October 1, 2016.
    - The draft FER will be submitted to the Department by October 1, 2016.
    - The draft SMP will be submitted to the Department by September 15, 2016.
    - The FER and SMP (in final form) will be submitted to the Department by November 15, 2016.

The draft FER and SMP documents can be submitted electronically – the complete documents (text, tables, figures, supporting documentation) in pdf format and the text of each document, the FER and the SMP including the Excavation Work Plan, in Microsoft Word.

Within 15 days of the date of this letter, the City of Geneva shall elect in writing (e-mail is acceptable) one of the following options:

A. Accept the Department modified work plan; or
B. Invoke dispute resolution as set forth in paragraph 375-1.5(b)(2).

If the City of Geneva elects option A then a copy of the Remedial Action Work Plan Addendum along with this letter including attachments must be placed in the document repository within 7 days of the acceptance and prior to the start of any fieldwork activities at the Site. Documentation of placement of the Remedial Action Work Plan Addendum along with this letter including attachments in the document repository must be submitted to the Department. If you have any questions or concerns regarding this letter or need further assistance with the Site, please feel free to contact me at 585-226-5354 or via e-mail at charlotte.theobald@dec.ny.gov.

Sincerely,

Charlotte B. Theobald
Environmental Engineer 1

ec:
David Meixell (Plumley Engineering)
Gordon Eddington (City of Geneva)
Justin Deming (NYS. Dept. of Health – Albany)
Bernette Schilling (NYSDEC)
Todd Caffoe (NYSDEC)

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Choose an item

Have Ecological Resources been identified? Choose an item

Is this soil originating from the site? Choose an item

How many cubic yards of soil will be imported/reused? Choose an item

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? Choose an item

Does it contain less than 10%, by weight, material that would pass a size 80 sieve? Choose an item

Is this virgin material from a permitted mine or quarry? Choose an item

Is this material recycled concrete or brick from a DEC registered processing facility? Choose an item

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

_____ _____
Signature Date

_____
Print Name

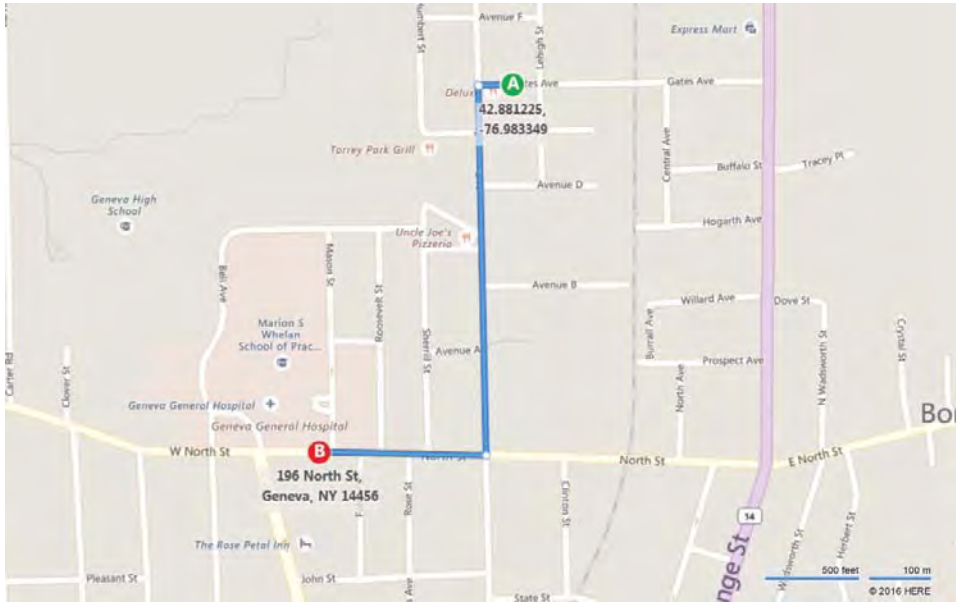
_____
Firm

Revised August 2014

bing maps

A 132 Gates Ave, Geneva, NY 14456
B 196 North St, Geneva, NY 14456

03 min, 0.6 mi
Moderate traffic (2 min without traffic)
Via N Genesee St, North St



These directions are subject to the Microsoft® Service Agreement and are for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2016 HERE™.

Appendix 5
Allowable Constituent Levels for Imported Fill or Soil
Subdivision 5.4(e)

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375-6.8(a) is the source for unrestricted use and Table 375-6.8(b) is the source for restricted use.

Note: For constituents not included in this table, refer to the contaminant for supplemental soil cleanup objectives (SSCOs) in the Commissioner Policy on *Soil Cleanup Guidance*. If an SSCO is not provided for a constituent, contact the DER PM to determine a site-specific level.

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Metals					
Arsenic	13	16	16	16	13
Barium	350	350	400	400	433
Beryllium	7.2	14	47	47	10
Cadmium	2.5	2.5	4.3	7.5	4
Chromium, Hexavalent[1]	1 [3]	19	19	19	1 [3]
Chromium, Trivalent[1]	30	36	180	1500	41
Copper	50	270	270	270	50
Cyanide	27	27	27	27	NS
Lead	63	400	400	450	63
Manganese	1600	2000	2000	2000	1600
Mercury (total)	0.18	0.73	0.73	0.73	0.18
Nickel	30	130	130	130	30
Selenium	3.9	4	4	4	3.9
Silver	2	8.3	8.3	8.3	2
Zinc	109	2200	2480	2480	109
PCBs/Pesticides					
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8	3.8	NS
4,4'-DDE	0.0033 [3]	1.8	8.9	17	0.0033 [3]
4,4'-DDT	0.0033 [3]	1.7	7.9	47	0.0033 [3]
4,4'-DDD	0.0033 [3]	2.6	13	14	0.0033 [3]
Aldrin	0.005	0.019	0.097	0.19	0.14
Alpha-BHC	0.02	0.02	0.02	0.02	0.04 [4]
Beta-BHC	0.036	0.072	0.09	0.09	0.6
Chlordane (alpha)	0.094	0.91	2.9	2.9	1.3
Delta-BHC	0.04	0.25	0.25	0.25	0.04 [4]
Dibenzofuran	7	14	59	210	NS
Dieldrin	0.005	0.039	0.1	0.1	0.006
Endosulfan I	2.4[2]	4.8	24	102	NS
Endosulfan II	2.4[2]	4.8	24	102	NS
Endosulfan sulfate	2.4[2]	4.8	24	200	NS
Endrin	0.014	0.06	0.06	0.06	0.014
Heptachlor	0.042	0.38	0.38	0.38	0.14
Lindane	0.1	0.1	0.1	0.1	6
Polychlorinated biphenyls	0.1	1	1	1	1

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Semi-volatile Organic Compounds					
Acenaphthene	20	98	98	98	20
Acenaphthylene	100	100	100	107	NS
Anthracene	100	100	100	500	NS
Benzo(a)anthracene	1	1	1	1	NS
Benzo(a)pyrene	1	1	1	1	2.6
Benzo(b)fluoranthene	1	1	1	1.7	NS
Benzo(g,h,i)perylene	100	100	100	500	NS
Benzo(k)fluoranthene	0.8	1	1.7	1.7	NS
Chrysene	1	1	1	1	NS
Dibenz(a,h)anthracene	0.33 [3]	0.33 [3]	0.33 [3]	0.56	NS
Fluoranthene	100	100	100	500	NS
Fluorene	30	100	100	386	30
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	NS
m-Cresol(s)	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	NS
Naphthalene	12	12	12	12	NS
o-Cresol(s)	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	NS
p-Cresol(s)	0.33	0.33	0.33	0.33	NS
Pentachlorophenol	0.8 [3]	0.8 [3]	0.8 [3]	0.8 [3]	0.8 [3]
Phenanthrene	100	100	100	500	NS
Phenol	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	30
Pyrene	100	100	100	500	NS
Volatile Organic Compounds					
1,1,1-Trichloroethane	0.68	0.68	0.68	0.68	NS
1,1-Dichloroethane	0.27	0.27	0.27	0.27	NS
1,1-Dichloroethene	0.33	0.33	0.33	0.33	NS
1,2-Dichlorobenzene	1.1	1.1	1.1	1.1	NS
1,2-Dichloroethane	0.02	0.02	0.02	0.02	10
1,2-Dichloroethene(cis)	0.25	0.25	0.25	0.25	NS
1,2-Dichloroethene(trans)	0.19	0.19	0.19	0.19	NS
1,3-Dichlorobenzene	2.4	2.4	2.4	2.4	NS
1,4-Dichlorobenzene	1.8	1.8	1.8	1.8	20
1,4-Dioxane	0.1 [3]	0.1 [3]	0.1 [3]	0.1 [3]	0.1
Acetone	0.05	0.05	0.05	0.05	2.2
Benzene	0.06	0.06	0.06	0.06	70
Butylbenzene	12	12	12	12	NS
Carbon tetrachloride	0.76	0.76	0.76	0.76	NS
Chlorobenzene	1.1	1.1	1.1	1.1	40
Chloroform	0.37	0.37	0.37	0.37	12
Ethylbenzene	1	1	1	1	NS
Hexachlorobenzene	0.33 [3]	0.33 [3]	1.2	3.2	NS
Methyl ethyl ketone	0.12	0.12	0.12	0.12	100
Methyl tert-butyl ether	0.93	0.93	0.93	0.93	NS
Methylene chloride	0.05	0.05	0.05	0.05	12

Volatile Organic Compounds (continued)					
Propylbenzene-n	3.9	3.9	3.9	3.9	NS
Sec-Butylbenzene	11	11	11	11	NS
Tert-Butylbenzene	5.9	5.9	5.9	5.9	NS
Tetrachloroethene	1.3	1.3	1.3	1.3	2
Toluene	0.7	0.7	0.7	0.7	36
Trichloroethene	0.47	0.47	0.47	0.47	2
Trimethylbenzene-1,2,4	3.6	3.6	3.6	3.6	NS
Trimethylbenzene-1,3,5	8.4	8.4	8.4	8.4	NS
Vinyl chloride	0.02	0.02	0.02	0.02	NS
Xylene (mixed)	0.26	1.6	1.6	1.6	0.26

All concentrations are in parts per million (ppm)
NS = Not Specified

Footnotes:
[1] The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.
[2] The SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.
[3] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.
[4] This SCO is derived from data on mixed isomers of BHC.

From: Theobald, Charlotte B (DEC) <charlotte.theobald@dec.ny.gov>
Sent: Monday, October 31, 2016 10:11 AM
To: David K. Meixell
Cc: Gordon Eddington; mhorn@geneva.ny.us; Caffoe, Todd (DEC)
Subject: RE: Market Basket Analytical Results

Dave:

Based on the preliminary data it appears that the confirmation shows no exceedances above the Site's SCOs. All Department and NYDOH remedial decisions on analytical data is made from validated data. The Site will have a cover system; therefore, any future intrusive activities below the cover system will be in accordance with the Site Management Plan. Also, it has come to my attention the soil pile at the Site is not covered. The soil pile needs to remain covered while on Site. Any idea when that material will be disposed off-site at a permitted landfill facility? I want the material off the Site and disposed at a permitted landfill facility as soon as possible. It has been on the Site too long now. Let me know when the material is disposed off-site. The disposal records will need to be included in the final version of the FER.

Best Regards,
Charlotte

From: David K. Meixell [mailto:dmeixell@plumleyeng.com]
Sent: Thursday, October 27, 2016 2:35 PM
To: Theobald, Charlotte B (DEC) <charlotte.theobald@dec.ny.gov>
Cc: Gordon Eddington <gedding1@yahoo.com>; mhorn@geneva.ny.us
Subject: FW: Market Basket Analytical Results

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Charlotte,

Thank you for your response on the request for the off-site fill. I just wanted to verify that the Department is OK with the confirmation samples (see below) before we complete the cover.

Thank you,

Dave Meixell

From: David K. Meixell
Sent: Thursday, September 29, 2016 11:53 AM
To: 'Theobald, Charlotte B (DEC)' <charlotte.theobald@dec.ny.gov>
Cc: 'Gordon Eddington' <gedding1@yahoo.com>; mhorn@geneva.ny.us
Subject: Market Basket Analytical Results

Charlotte,

The summary table for the analytical data from the removal of the hydraulic cylinder from the Market Basket site in Geneva is attached. There were no exceedances for the Restricted Residential SCOs. The results for the characterization samples have been submitted to the Ontario County Landfill for their approval.

We will forward the results from the samples of the potential soil cover source upon our receipt, along with the application form.

Please contact me if you have any questions or comments.

Thank you,

Dave Meixell

David K. Meixell, P.E.
Senior Engineer
PLUMLEY ENGINEERING, P.C.
8232 Loop Road
Baldwinsville, NY 13027

(315) 638-8587 (Office)
(315) 638-9740 (Fax)
(315) 396-6631 (Cell)
dmeixell@plumleyeng.com

APPENDIX E

PROJECT PHOTO LOG

Photo 1: Initial 2008 excavation at north block (2008)

Photo 2: North block excavation (2008)

Photo 3: North block excavation (2008)

Photo 4: North block excavation being covered (2008)

Photo 5:North block excavation being secured (2008). Site is also fenced.

Photo 6: Debris uncovered on north block (2008)

Photo 7: Assessing potential VOCs in south block trench (2008)

Photo 8: Pipe flanges uncovered in south block trench (2008)

Photo 9: Piping and flanges uncovered in south block trench (2008)

Photo 10: Contaminated soil and debris stockpiled on sheet plastic adjacent to south block trench (2008)

Photo 11: South block trench being excavated (2008)

Photo 12: South block 2009 excavation

Photo 13: Structure for decontaminating equipment at 2009 south block remedial action

Photo 14: Remedial activity during 2009 south block remediation

Photo 15: Excavated hydraulic cylinder

Photo 16: Excavation following removal of hydraulic cylinder

Photo 17: Secured soil piles and excavation following removal of hydraulic cylinder

Photo 18: South block after placement of cover

APPENDIX F

SOIL/WASTE CHARACTERIZATION DOCUMENTATION

- **Waste Hauler Permit Certificates**
- **Disposal Facility Approval and Approval Letters**
- **Facility Permit Certificates**
- **Tabulated Load Summaries**
- **Waste Manifests or Bills of Lading**
- **Liquid Disposal Manifests**

WASTE HAULER PERMIT CERTIFICATES

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF MATERIALS MANAGEMENT

PART 364
WASTE TRANSPORTER PERMIT NO. 7A-402

Pursuant to Article 27 ,Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

RICCELLI ENTERPRISES, INC.
6131 E TAFT ROAD
P.O. BOX 6418
N SYRACUSE, NY 13217

PERMIT TYPE:

☐ NEW
■ RENEWAL
☐ MODIFICATION

CONTACT NAME:	MICHAEL RELF	EFFECTIVE DATE:	08/01/2016
COUNTY:	ONONDAGA	EXPIRATION DATE:	**07/31/2017**
TELEPHONE NO:	(315)433-5115	US EPA ID NUMBER:	NYR000059246

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
Albany Rapp Road	Albany , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
Allegany County Landfill	Angelica , NY	Non-Hazardous Industrial/Commercial	
AUBURN (C) STP	AUBURN , NY	Non-Hazardous Industrial/Commercial Sludge from Sewage or Water Supply Treatment Plant	
Auburn Landfill No. 2	Auburn , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil	
Ava Landfill	Boonville , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
Bath Sanitary Landfill	Bath , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
Bristol Hill SLF	Fulton , NY	Asbestos Waste Tires	
Broome County Landfill	Binghamton , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	

*** AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) ***

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS: New York State Department of Environmental Conservation
Division of Materials Management - Waste Transporter Program
625 Broadway, 9th Floor
Albany, NY 12233-7251

AUTHORIZED SIGNATURE: _____ Date: 07/29/16

NOTICE

This renewed permit is not valid until the effective date listed on the permit.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF MATERIALS MANAGEMENT

PART 364
WASTE TRANSPORTER PERMIT NO. 7A-402

Pursuant to Article 27 ,Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

RICCELLI ENTERPRISES, INC.
6131 E TAFT ROAD
P.O. BOX 6418
N SYRACUSE, NY 13217

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CONTACT NAME:	MICHAEL RELF	EFFECTIVE DATE:	08/01/2016
COUNTY:	ONONDAGA	EXPIRATION DATE:	**07/31/2017**
TELEPHONE NO:	(315)433-5115	US EPA ID NUMBER:	NYR000059246

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)
The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
BUD NO 1018-7-38 NYS DEC APPROVED SITES ONLY	VARIOUS , NY	Non-Hazardous Industrial/Commercial	SALT CONT. SOIL
Cayuga Ash Disposal Facility	Lansing , NY	Non-Hazardous Industrial/Commercial Sludge from Sewage or Water Supply Treatment Plant	
Chaffee Landfill	Sardinia , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
Chemung County Sanitary Landfill	Chemung , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
Chenango County Landfill	Norwich , NY	Non-Hazardous Industrial/Commercial Asbestos Waste Tires	
Clinton County MRF / Casella	Morrisonville , NY	Petroleum Contaminated Soil Waste Tires	
Colonie (T) SWMF	Colonie , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
Covanta Niagara, L.P.	Niagara Falls , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Grease Trap Waste Sludge from Sewage or Water Supply Treatment Plant	
CWM CHEMICAL SERVICES LLC	MODEL CITY , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
Development Authority of the North Country Landfill	Rodman , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
ESMI of New York	Fort Edward , NY	Petroleum Contaminated Soil	
Finch Municipal Solid Waste Facility	Gansevoort , NY	Non-Hazardous Industrial/Commercial	

*** AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) ***

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF MATERIALS MANAGEMENT

PART 364
WASTE TRANSPORTER PERMIT NO. 7A-402

Pursuant to Article 27 ,Titles 3 and 15 of the Environmental Conservation Law ; and 6 NYCRR 364

PERMIT ISSUED TO:

RICCELLI ENTERPRISES, INC.
6131 E TAFT ROAD
P.O. BOX 5418
N SYRACUSE, NY 13217

PERMIT TYPE:

☐ NEW
■ RENEWAL
☐ MODIFICATION

CONTACT NAME:	MICHAEL RELF	EFFECTIVE DATE:	08/01/2016
COUNTY:	ONONDAGA	EXPIRATION DATE:	**07/31/2017**
TELEPHONE NO:	(315)433-5115	US EPA ID NUMBER:	NYR000059246

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)
The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
Finch Municipal Solid Waste Facility	Gansevoort , NY	Petroleum Contaminated Soil	
FRANK E. VAN LARE WWTP	ROCHESTER , NY	Non-Hazardous Industrial/Commercial	LEACHATE
Franklin County Regional Landfill	Constable , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Waste Tires Sludge from Sewage or Water Supply Treatment Plant	
Fulton County Landfill	Johnstown , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
Hakes C&D Disposal Inc	Painted Post , NY	Waste Tires	
High Acres Western Expansion Landfill	Fairport , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Waste Tires Sludge from Sewage or Water Supply Treatment Plant	
Hyland Landfill	Angelica , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Waste Tires Sludge from Sewage or Water Supply Treatment Plant	
Industrial Oil Tank Used Oil Storage Facility	Orfskany , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Waste Oil	
Madison County West Side Extension LF	Canastota , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Waste Tires Sludge from Sewage or Water Supply Treatment Plant	
Mill Seat SLF	Riga , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
Modern Landfill	Model City , NY	Non-Hazardous Industrial/Commercial	

*** AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) ***

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF MATERIALS MANAGEMENT

PART 364
WASTE TRANSPORTER PERMIT NO. 7A-402

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

RICCELLI ENTERPRISES, INC.
6131 E TAFT ROAD
P.O. BOX 6418
N SYRACUSE, NY 13217

PERMIT TYPE:

☐ NEW
■ RENEWAL
☐ MODIFICATION

CONTACT NAME:	MICHAEL RELF	EFFECTIVE DATE:	08/01/2016
COUNTY:	ONONDAGA	EXPIRATION DATE:	**07/31/2017**
TELEPHONE NO:	(315)433-5115	US EPA ID NUMBER:	NYR000059246

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)
The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
Modern Landfill	Model City , NY	Waste Tires	
NEWARK WASTEWATER TREATMENT FAC	NEWARK , NY	Non-Hazardous Industrial/Commercial	
North Youngmann Commerce Center	Tonawanda , NY	Petroleum Contaminated Soil	
NYS CANAL CORPORATION	PALMYRA , NY	Non-Hazardous Industrial/Commercial	CANAL SED.
NYS CANAL CORPORATION	SPENCERPORT , NY	Petroleum Contaminated Soil	
NYS CANAL CORPORATION	PITTSFORD , NY	Petroleum Contaminated Soil	
NYS CANAL CORPORATION	MACEDON , NY	Non-Hazardous Industrial/Commercial	CANAL SED.
Ontario County Sanitary Landfill	Stanley , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Waste Tires Sludge from Sewage or Water Supply Treatment Plant	
OSWEGO (C) WEST SIDE WWTF	OSWEGO , NY	Non-Hazardous Industrial/Commercial	
Oswego County Energy Recovery Facility	Fulton , NY	Non-Hazardous Industrial/Commercial Waste Tires	
RED CREEK REGIONAL WASTEWATER TREATMENT FACILITY	RED CREEK , NY	Non-Hazardous Industrial/Commercial	
ROME MUNICIPAL STP	ROME , NY	Non-Hazardous Industrial/Commercial Septage only (residential) Residential Raw Sewage including Portable Toilet Waste	
SCHENECTADY (C) WPCP	SCHENECTADY , NY	Non-Hazardous Industrial/Commercial Septage only (residential) Residential Raw Sewage Including Portable Toilet Waste Non-Residential Raw Sewage or Sewage-Contaminated Wastes Sludge from Sewage or Water Supply Treatment Plant	
Seneca Meadows LF	Waterloo , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Waste Tires Sludge from Sewage or Water Supply Treatment Plant	
SYRACUSE INNER HARBOR - CANAL WORK PERMIT C3W120077	SYRACUSE , NY	Non-Hazardous Industrial/Commercial	DREDGE
WATERTOWN (C) WPCP	WATERTOWN , NY	Septage only (residential) Residential Raw Sewage including Portable Toilet Waste	

*** AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) ***

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF MATERIALS MANAGEMENT

PART 364
WASTE TRANSPORTER PERMIT NO. 7A-402

Pursuant to Article 27 ,Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

RICCELLI ENTERPRISES, INC.
6131 E TAFT ROAD
P.O. BOX 6418
N SYRACUSE, NY 13217

PERMIT TYPE:

☐ NEW
■ RENEWAL
☐ MODIFICATION

CONTACT NAME:	MICHAEL RELF	EFFECTIVE DATE:	08/01/2016
COUNTY:	ONONDAGA	EXPIRATION DATE:	**07/31/2017**
TELEPHONE NO:	(315)433-5115	US EPA ID NUMBER:	NYR000059246

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)
The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
WATERTOWN (C) WPCP	WATERTOWN , NY	Sludge from Sewage or Water Supply Treatment Plant	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF MATERIALS MANAGEMENT

PART 364
WASTE TRANSPORTER PERMIT NO. 7A-402

Pursuant to Article 27 ,Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

RICCELLI ENTERPRISES, INC.
6131 E TAFT ROAD
P.O. BOX 6418
N SYRACUSE, NY 13217

PERMIT TYPE:

☐ NEW
■ RENEWAL
☐ MODIFICATION

CONTACT NAME:	MICHAEL RELF	EFFECTIVE DATE:	08/01/2016
COUNTY:	ONONDAGA	EXPIRATION DATE:	**07/31/2017**
TELEPHONE NO:	(315)433-6115	US EPA ID NUMBER:	NYR000059246

AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Waste:

(Vehicles enclosed in <>'s are authorized to haul Residential Raw Sewage and/or Septage only)

209 (Two Hundred and Nine) Permitted Vehicle(s)

NY 10797PC	NY 16691PC	NY 3283C1	NY 98773MG	NY BC12593
NY 10798PC	NY 1700C8	NY 3284C1	NY 98774MG	NY BD20025
NY 10799PC	NY 1701C8	NY 3285C1	NY AH67406	NY BF79147
NY 11419PC	NY 1723C7	NY 3286C1	NY AH67407	NY BG30561
NY 11420PC	NY 17264PC	NY 3287C1	NY AH67408	NY BG30835
NY 11421PC	NY 1729C7	NY 3288C1	NY AH67409	NY BH59312
NY 11422PC	NY 1782C9	NY 3289C1	NY AH67410	NY BK29320
NY 11423PC	NY 1811C7	NY 3290C1	NY AL52081	NY BK57416
NY 11980PC	NY 1828C8	NY 3291C1	NY AM30359	NY BK95741
NY 11981PC	NY 18389PB	NY 33674PC	NY AM30361	PA AF91136
NY 11982PC	NY 18390PB	NY 3627C8	NY AM41050	PA AF91137
NY 12549JV	NY 18391PB	NY 37042PC	NY AM41060	PA AF91138
NY 12811PC	NY 18396PB	NY 37043PC	NY AM41087	PA AF91139
NY 12985PC	NY 18397PB	NY 3817C8	NY AM41088	PA AF91140
NY 13057PC	NY 18651PB	NY 3819C8	NY AM41089	PA AF91141
NY 13058PC	NY 18653PB	NY 39329KA	NY AM41090	PA AF91142
NY 13060PC	NY 18654PB	NY 40505PC	NY AN62544	PA AF91143
NY 13063PC	NY 18656PB	NY 44790JD	NY AN62658	PA AF91144
NY 13064PC	NY 18657PB	NY 44805JD	NY AN74690	PA AF92499
NY 13065PC	NY 18658PB	NY 46112PC	NY AR28920	PA AF93028
NY 13066PC	NY 19484PB	NY 46113PC	NY AR40449	PA AF93029
NY 13070PC	NY 19485PB	NY 46114PC	NY AR40867	PA AF93030
NY 1468C7	NY 19961MD	NY 47673PC	NY AR95079	PA AF93031
NY 1469C7	NY 19962MD	NY 47674PC	NY AR96080	PA AF93032
NY 1472C7	NY 19963MD	NY 48391MH	NY AR96315	PA AF93033
NY 1532C8	NY 19964MD	NY 48392MH	NY AR96316	PA AF93034
NY 1542C7	NY 19965MD	NY 48393MH	NY AR96317	PA AF93035
NY 1543C7	NY 19967MD	NY 48394MH	NY AR96353	PA AF93036
NY 1555C9	NY 19968MD	NY 48395MH	NY AS56204	PA AF93037
NY 1559C9	NY 19969MD	NY 48400MH	NY AS56302	End of List
NY 1560C9	NY 20049PC	NY 48401MH	NY AS56350	
NY 1565C9	NY 20101MJ	NY 48813PC	NY AS56368	
NY 1566C9	NY 20121JX	NY 51469PC	NY AS56369	
NY 1567C9	NY 21605PB	NY 51471PC	NY AS56370	
NY 1568C9	NY 2576C8	NY 51473PC	NY AT24328	
NY 1573C9	NY 2577C8	NY 53383PC	NY AT24331	
NY 15743PC	NY 2578C8	NY 58069JZ	NY AT24843	
NY 1574C9	NY 2579C8	NY 70326MA	NY AU59417	
NY 1575C9	NY 2580C8	NY 72121JR	NY AU59418	
NY 1576C9	NY 2591C8	NY 76207PA	NY AU59419	
NY 1585C9	NY 29137ME	NY 81775MC	NY AW34480	
NY 1586C9	NY 3275C1	NY 86108PA	NY AW54858	
NY 1588C9	NY 3276C1	NY B9132JD	NY AW55319	
NY 1589C9	NY 3277C1	NY 94702MB	NY AW92391	
NY 1691B3	NY 3278C1	NY 98772MG	NY BA74727	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

PART 364
WASTE TRANSPORTER PERMIT NO. 8A-841

Pursuant to Article 27,Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

SUNSHINE BULK COMMODITIES, INC.
2094 ROUTE 96
CLIFTON SPRINGS, NY 14432

CONTACT NAME: CHRISTOPHER MIX
COUNTY: ONTARIO
TELEPHONE NO: (315)548-2383

PERMIT TYPE:

☐ NEW
☐ RENEWAL
■ MODIFICATION

EFFECTIVE DATE: 10/02/2008
EXPIRATION DATE: **09/15/2009**
US EPA ID NUMBER: NYR0000757 70

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:
The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)
AUBURN WWTF	AUBURN , NY	Sludge from Sewage or Water Supply Treatment Plant
Bath Sanitary Landfill	Bath , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant
BFI NIAGARA FALLS LANDFILL FACILITY	NIAGARA FALLS , NY	Non-Hazardous Industrial/Commercial Waste Tires Asbestos Petroleum Contaminated Soil Grease Trap Waste Septage only (residential) Residential Raw Sewage including Portable Toilet Waste Non-Residential Raw Sewage or Sewage-Contaminated Wastes Sludge from Sewage or Water Supply Treatment Plant
Chautauqua Landfill	Ellery , NY	Non-Hazardous Industrial/Commercial
Chemung County Solid Waste Management District	Elmira , NY	Petroleum Contaminated Soil
High Acres Western Expansion Landfill	Fairport , NY	Non-Hazardous Industrial/Commercial Sludge from Sewage or Water Supply Treatment Plant
HYLAND LANDFILL	ANGELICA , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil

*** AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) ***

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS:
New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials - Waste Transporter Program
625 Broadway, 9th Floor
Albany, NY 12233-7253

AUTHORIZED SIGNATURE: Sally Rowland Date: 10 / 2 / 08

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

PART 364
WASTE TRANSPORTER PERMIT NO. 8A-841

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

SUNSHINE BULK COMMODITIES, INC.
2094 ROUTE 96
CLIFTON SPRINGS, NY 14432

CONTACT NAME: CHRISTOPHER MIX
COUNTY: ONTARIO
TELEPHONE NO: (315)548-2383

PERMIT TYPE:

☐ NEW
☐ RENEWAL
■ MODIFICATION

EFFECTIVE DATE: 10/02/2008
EXPIRATION DATE: **09/15/2009**
US EPA ID NUMBER: NYR0000757 70

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)
The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)
HYLAND LANDFILL	ANGELICA , NY	Sludge from Sewage or Water Supply Treatment Plant
J.P. ROUTHIER & SONS INC	LITTLETON , MA	Waste Tires
MASCOMA NY LLC	ROME , NY	Sludge from Sewage or Water Supply Treatment Plant
Mill Seat LGRF	Bergen , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil
NAUGATUCK TREATMENT COMPANY	NAUGATUCK , CT	Non-Hazardous Industrial/Commercial Sludge from Sewage or Water Supply Treatment Plant
NEW YORK RUBBER RECYCLING LLC	SCHENECTADY , NY	Waste Tires
Ontario County SLF	Stanley , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant
Seneca Meadows LF	Waterloo , NY	Non-Hazardous Industrial/Commercial Waste Tires Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

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PERMIT ISSUED TO:

SUNSHINE BULK COMMODITIES, INC.
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PERMIT TYPE:

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CONTACT NAME: CHRISTOPHER MIX
COUNTY: ONTARIO
TELEPHONE NO: (315)548-2383

EFFECTIVE DATE: 10/02/2008
EXPIRATION DATE: **09/15/2009**
US EPA ID NUMBER: NYR0000757 70

AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Waste:

(Vehicles enclosed in <>'s are authorized to haul Residential Raw Sewage and/or Septage only)

62 (Sixty Two) Permitted Vehicle(s)

NY 19367JX Kenyon
NY 23896JX Lamoreaux
NY 81534JX Kenyon
NY 81547JX Kenyon
NY 81548JX Kenyon
NY 84510JV Kenyon
NY 84529JV Kenyon
NY 84531JV Kenyon
NY 84532JV Kenyon
NY AA56279 G181
NY AA56280 G184
NY AA56394 G189
NY AA94729 G164
NY AB88751 G168
NY AB88769 TR110
NY AC31666 G174
NY AC31667 G173
NY AC31668 G172
NY AC44931 TR112
NY AC44932 TR113
NY AC44933 TR114
NY AC44936 TR117
NY AD94106 G170
NY AE45464 TR99
NY AE51895 TR101
NY AE51920 TR102
NY AE51958 TR104
NY AE52278 TR106
NY AE52293 TR107
NY AE79344 Lamoreaux
NY AF18387 TR96
NY AF35784 G171
NY AH74203 G176
NY AH74205 G178
NY AK52109 manwaring
NY AL22048 TR118
NY AL22049 TR119
NY AL22102 G163
NY AL22103 G159
NY AL83699 A115
NY AL90022 TR120
NY AL90024 TR122
NY AL90075 TR123
NY AL90076 TR124
NY AL90077 TR125
NY AL90164 TR126
NY AL90165 TR128
NY AL90166 TR129
NY AL90191 TR130
NY AM77651 TR131
NY AN10067 Dieter
NY AN99004 Shamele SS
NY AP68569 A115
NY AR63916 LOHS
NY AR75445 TR133
NY AR75446 G194
NY AS69318 G188
NY AS69390 G197
NY AS69553 G196
NY AT33975 Kenyon
NY AT50024 TR116
NY AT65216 Lamoreaux
End of List

Alliance for Uniform HazMat Transportation Procedures
Uniform Program Credentials

ALLIANCE FOR UNIFORM HAZMAT TRANSPORTATION PROCEDURES

U S BULK TRANSPORT INC
205 PENNBRIAR DR.
ERIE, PA 16509

USDOT Census #	00461965	
MC Docket #	00248896	
EPA Transporter ID #	PAD987347515	93212
Intrastate Motor Carrier #:	N/A	145202

Phone Number to call in case of a accident or emergency: 814-881-2853

Uniform Program ID:	UPW0461965OH		
Certified By:	Smith, Priscilla		
Issuance Date:	08-Aug-2016	Expiration Date:	01-Oct-2017
Issuing Agency:	PUBLIC UTILITIES COMMISSION OF OHIO		
Agency Telephone:	(614) 466-3392		

THE PUBLIC UTILITIES COMMISSION OF OHIO

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

HAZARDOUS MATERIALS CERTIFICATE OF REGISTRATION FOR REGISTRATION YEAR(S) 2016-2019

Registrant: U S BULK TRANSPORT INC
Attn: GARY GOODELLE
205 PENNBRIAR DRIVE
ERIE, PA 16509

This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this document.

Reg. No: 060716 552 099YA **Effective: 07/01/2016** **Expires: 06/30/2019**

HM Company ID: 057616

Record Keeping Requirements for the Registration Program

The following must be maintained at the principal place of business for a period of three years from the date of issuance of this Certificate of Registration:

(1) A copy of the registration statement filed with PHMSA; and
(2) This Certificate of Registration

Each person subject to the registration requirement must furnish that person's Certificate of Registration (or a copy) and all other records and information pertaining to the information contained in the registration statement to an authorized representative or special agent of the U. S. Department of Transportation upon request.

Each motor carrier (private or for-hire) and each vessel operator subject to the registration requirement must keep a copy of the current Certificate of Registration or another document bearing the registration number identified as the "U.S. DOT Hazmat Reg. No." in each truck and truck tractor or vessel (trailers and semi-trailers not included) used to transport hazardous materials subject to the registration requirement. The Certificate of Registration or document bearing the registration number must be made available, upon request, to enforcement personnel.

For information, contact the Hazardous Materials Registration Manager, PHH-52, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, telephone (202) 366-4109.

United States Environmental Protection Agency

ACKNOWLEDGEMENT OF NOTIFICATION OF REGULATED WASTE ACTIVITY (VERIFICATION)

This is to acknowledge that you have filed a Notification of Regulated Waste Activity for the installation located at the address shown below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation is identified below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Biennial Reports that generators of hazardous waste, and owner and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA ID No.:
PAD987347515

Installation Address:
US BULK TRANSPORT INC
205 PENNBRIAR DR
ERIE PA 16509

Mailing Address:
205 PENNBRIAR DR
ERIE PA 16509
ATTN: GARY GOODELLE, PRESIDENT

DISPOSAL FACILITY APPROVAL AND APPROVAL LETTERS

casella WASTE SERVICES

FOR STATE USE ONLY		
SITE NO.	APPLICATION NO.	DATE RECEIVED
DEPARTMENT ACTION ☐ Approved ☐ Disapproved		DATE

SPECIAL WASTE CHARACTERIZATION PROFILE

Disposal Facility Location (Choose One or More)			*Disposal Option*
Hyland Facility Associates 6653 Herdman Road Angelica, NY 14709 Ph: 585.466.7271 Fax: 585.466.3206 ☐	Chemung County Landfill 1488 Cty Rte. 60 Lowman, NY 14861 Ph: 607.737.2980 Fax:607.737.2967 ☐	Ontario County Landfill 1879 Rt. 5&20 Stanley, NY 14561 Ph: 585.526.4420 Fax: 585.526.5459 ☒	☐Waste ☐BUD: _____ ADC, _____ Other (describe) _____

1) Company Generating Waste	Address of Facility Generating Waste (Street, City, State, Zip)		County of Origin
City of Geneva	47 Castle St. Geneva, NY 14456		Ontario
2) Representative of Generator (same as generator's signature)	**Mailing Address of Representative**	**Telephone No.**	**Fax No.**
Gordon Eddington	47 Castle St. Geneva, NY 14456	315-789-3101	315-828-6599

3) Description of Facility/Process Generating Waste

Abandonded factory

4) Description of waste (debris-containing, composition, uniform or mixture, etc.)

Soil

5) Is Waste Hazardous

☐ Yes ☒ No

6) Expected Annual Amount of Waste To Be Delivered	Approximate Density of Waste
1000 tons/year _____ cubic yards/year	_____ pounds/cubic yard

7) Expected Frequency of Delivery

✓ one-time

_____ daily _____ weekly _____ monthly _____ other (specify, if known)

8) Hauler Name	Address	NYSDEC Permit No.	Telephone No.
Riccelli Trucking	Gifford Rd Phelps NY	7A-402	315-548-4049

9) Method of Delivery. If other, specify.

_____ roll-off _____ packer truck _____ tractor trailer X dump other

10) Previous Disposal Location	Address	Phone	Contact Person

Waste Characterization Data

11) Is the waste classified as a "listed" or "characteristic" hazardous waste as defined by USEPA, or State of origin, or State where disposed? (If yes, explain.)

No

12) Describe all hazardous or nuisance properties associated with the waste.

None

13) Does the waste require any special handling or disposal procedures? If so, explain.

None

14) Analytical Data Submitted (TCLP/Other).	Type of Samples (indicate No. of each type in space provided)
Yes-attached	_____ grab ___X___ composite

New England Waste Services of N.Y., Inc. requires, at a minimum, the submittal of full TCLP (Metals-RCRA 8, VOC, SVOC, PCBs, Pesticides/Herbicides), pH, Reactivity, Ignitibility, and % solids testing results for any special waste submitted for landfill acceptance unless the applicant can provide an acceptable justification for submittal of less comprehensive data. The generator is responsible for proper waste characterization.

15) Justification for not submitting full TCLP data.

GENERATOR CERTIFICATION

I hereby certify that all information submitted on this form and on supplemental materials is complete and accurate to the best of my knowledge and ability to determine. I further certify that there is no deliberate or willful omissions of data necessary to characterize the waste material and that all known or suspected hazards have been disclosed.

Generator's Authorized Representative - Signature:	Print name:	Print Title:	Date:
Gordon P. Eddington	Gordon P. Eddington	Director of Public Works	10/2/08

DISPOSITION (to be completed by Casella Waste Systems, Inc.)

Received by:		Date Received:	Date Logged In:
Submitted by:		Project Name:	
Title:			
Submitted to Casella PC&E	Date:	Casella PC&E Approval	Date:
Submitted to NYSDEC	Date:	NYSDEC Approval	Date:

SUBMIT ALL DATA TO THE CASELLA REPRESENTATIVE LISTED BELOW, PLEASE CHECK BOX:

☐ Joe Boyles
Permits, Compliance & Engineering
Hyland Facility Associates
6653 Herdman Road
Angelica, New York 14709

1

TCLP - 8 metals

Volatiles

Semi Vol

PCB's

Corrosivity

Reactivity

Flash Point

% Solids

Paint filter

Environmental
LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park, North Syracuse, NY 13212
(315) 458-8033, FAX (315) 458-0526, (800) 842-4667

Certified in:
Connecticut
Massachusetts
New Jersey
New York
Pennsylvania

Laboratory Analysis Report

GENEVA, CITY OF WWTP
Marsh Creek WWTP
47 Castle Street
Geneva, NY 14456
ATTN: Mr. Gordon P. Eddington

PROJECT #: 230238
RECEIVED: 09/10/2008 @ 16:05

Site Address:
GATES AVE.

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 486383 CLIENT SAMPLE ID:	GATES AVE. NORTH SIDE			**DATE/TIME SAMPLED:**	09/10/08 @ 11:00
Semi-Volatile - TCLP-SEMIVOLATILES					
2,4,5-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4-dinitrotoluene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobutadiene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachloroethane	<0.100	MG/L	09/13/08	EPA 8270C	ASI
nitrobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pentachlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pyridine	<0.100	MG/L	09/13/08	EPA 8270C	ASI
total cresol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
Surrogate (2-fluorophenol): 37% recovery,(phenol-d6): 22% recovery,(nitrobenzene-d5): 73% recovery,(2-fluorobiphenyl): 68% recovery,(2,4,6-tribromophenol): 92% recovery,(terphenyl-d14): 155% recovery,					
Surrogate recovery acceptance limits are 50-130%.					
Continuing Calibration Standard recoveries for Hexachloroethane and pentachlorophenol were below the established acceptance limits.					
Results for these analytes may be biased low.					
Aqueous Separatory Funnel Extraction			09/12/08	EPA 3510C	JZY
TCLP MERCURY	<20	UG/L	09/15/08	EPA 7470A	ABO
TCLP-Semi/Non-Volatile Prep/Extraction			09/10/08	EPA 1311	BDR
TCLP Mercury Prep			09/15/08	EPA 7470A	BDR
TCLP METALS (RCRA7)					
arsenic	<1.0	MG/L	09/12/08	EPA 6010	ABO
barium	<2.0	MG/L	09/12/08	EPA 6010	ABO
cadmium	<0.05	MG/L	09/12/08	EPA 6010	ABO
chromium	<0.10	MG/L	09/12/08	EPA 6010	ABO
lead	<0.50	MG/L	09/12/08	EPA 6010	ABO
selenium	<1.0	MG/L	09/12/08	EPA 6010	ABO
silver	<0.10	MG/L	09/12/08	EPA 6010	ABO
Metals Digestion			09/11/08	EPA 3010A	BDR
Volatile - TCLP VOLATILES					
1,1-dichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
1,2-dichloroethane	<0.100	MG/L	09/15/08	EPA 8260B	DBA

Your Full-Service Analytical Laboratory • A Certified Woman-Owned Business • www.els-lab.com

GENEVA, CITY OF WWTP
Marsh Creek WWTP
47 Castle Street
Geneva, NY 14456
ATTN: Mr. Gordon P. Eddington

PROJECT #: 230238
RECEIVED: 09/10/2008 @ 16:05

Site Address:
GATES AVE.

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 486383 CLIENT SAMPLE ID: GATES AVE. NORTH SIDE				**DATE/TIME SAMPLED:** 09/10/08 @ 11:00	
Volatile - TCLP VOLATILES					
1,4-dichlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
2-butanone	<0.100	MG/L	09/15/08	EPA 8260B	DBA
benzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
carbon tetrachloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chloroform	<0.100	MG/L	09/15/08	EPA 8260B	DBA
tetrachloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
trichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
vinyl chloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
Surrogate (toluene-d8): 92 % recovery,(bromofluorobenzene): 92 % recovery,(1,2-dichlorobenzene-d4): 101 % recovery, Surrogate recovery acceptance limits are 85-115%.					
TCLP-ZHE Prep/Extraction			09/10/08	EPA 1311	BDR
SAMPLE #: 486384 CLIENT SAMPLE ID: GATES AVE. SOUTH SIDE				**DATE/TIME SAMPLED:** 09/10/08 @ 11:00	
Semi-Volatile - TCLP-SEMIVOLATILES					
2,4,5-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4-dinitrotoluene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobutadiene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachloroethane	<0.100	MG/L	09/13/08	EPA 8270C	ASI
nitrobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pentachlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pyridine	<0.100	MG/L	09/13/08	EPA 8270C	ASI
total cresol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
Surrogate (2-fluorophenol): 32% recovery,(phenol-d6): 21% recovery,(nitrobenzene-d5): 70% recovery,(2-fluorobiphenyl): 70% recovery,(2,4,6-tribromophenol): 71% recovery,(terphenyl-d14): 163% recovery, Surrogate recovery acceptance limits are 50-130%. Continuing Calibration Standard recoveries for Hexachloroethane and pentachlorophenol were below the established acceptance limits Results for these analytes may be biased low.					
Aqueous Separatory Funnel Extraction			09/12/08	EPA 3510C	JZY
TCLP MERCURY	<20	UG/L	09/15/08	EPA 7470A	ABO
TCLP-Semi/Non-Volatile Prep/Extraction			09/10/08	EPA 1311	BDR
TCLP Mercury Prep			09/15/08	EPA 7470A	BDR
TCLP METALS (RCRA7)					
arsenic	<1.0	MG/L	09/12/08	EPA 6010	ABO
barium	<2.0	MG/L	09/12/08	EPA 6010	ABO
cadmium	<0.05	MG/L	09/12/08	EPA 6010	ABO
chromium	<0.10	MG/L	09/12/08	EPA 6010	ABO
lead	<0.50	MG/L	09/12/08	EPA 6010	ABO
selenium	<1.0	MG/L	09/12/08	EPA 6010	ABO

GENEVA, CITY OF WWTP
Marsh Creek WWTP
47 Castle Street
Geneva, NY 14456
ATTN: Mr. Gordon P. Eddington

PROJECT #: 230238
RECEIVED: 09/10/2008 @ 16:05

Site Address:
GATES AVE.

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 486384 **CLIENT SAMPLE ID:**	GATES AVE. SOUTH SIDE			**DATE/TIME SAMPLED:** 09/10/08 @ 11:00	
TCLP METALS (RCRA7)					
silver	<0.10	MG/L	09/12/08	EPA 6010	ABO
Metals Digestion			09/11/08	EPA 3010A	BDR
Volatile - TCLP VOLATILES					
1,1-dichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
1,2-dichloroethane	<0.100	MG/L	09/15/08	EPA 8260B	DBA
1,4-dichlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
2-butanone	<0.100	MG/L	09/15/08	EPA 8260B	DBA
benzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
carbon tetrachloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chloroform	<0.100	MG/L	09/15/08	EPA 8260B	DBA
tetrachloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
trichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
vinyl chloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
Surrogate (toluene-d8): 94 % recovery,(bromofluorobenzene): 90 % recovery,(1,2-dichlorobenzene-d4): 102 % recovery, Surrogate recovery acceptance limits are 85-115%,					
TCLP-ZHE Prep/Extraction			09/10/08	EPA 1311	BDR

Sample Receipt Temperature: 22 Degrees C
Samples received above acceptable temperature requirements of 0-6 degrees C.

David R. Hill
Laboratory Director

09/16/2008
Print Date

All tests performed under NYS ELAP Laboratory Certification # 11375 unless otherwise stated. Report relates only to the samples as received by the laboratory and shall not be reproduced except in full, without written approval from Environmental Laboratory Services.

Environmental
LABORATORY SERVICES

Environmental
LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park North Syracuse, NY 13212
(315) 456-8033 FAX (315) 456-0526 (866) LAB TIME

230238

CHAIN OF CUSTODY RECORD
and Authorization for Analysis
www.els-lab.com

Billing Information:
Name: Gordon Eddington
Company: City of Geneva
Address: 47 Castle St.
City, State, Zip: Geneva, NY 14456

Quote No.
Job No.
PO No.
Telephone No.

E-mail Address: gpe@geneva.ny.us
Fax
☒ E-mail Results
☐ Fax Results

Site Address: Gates Ave

Sample Receipt Temperature 22 °C

Standard Turn Around Time is end of day, 10 Work Days after lab receipt. Surcharges may apply for Express Service.

- ☐ Same Day
- ☐ 1 Work Day
- ☐ 2 Work Days
- ☐ 3 Work Days
- ☐ 4 Work Days
- ☐ 5 Work Days
- ☐ Standard
- ☐ Other Due 9/16

Time Required: _____

Matrix Codes:
AR - Air
DW - Drinking Water
FT - Filter
GW - Ground Water
OL - Oil
PC - Paint Chips
PR - Product
SL - Sludge
SD - Solid/Soil
SW - Surface Water
SB - Swab
TP - Tape
WP - Wipe
WW - Waste Water

Sample(s) State of Origin:
CT ☐
DE ☐
MA ☐
MD ☐
NH ☐
NJ ☐
NY ☐
PA ☐
RI ☐
VT ☐
— ☐

Remarks/Special Instructions:

ELS Use Only	Date	Time	Comp/ Grab	Matrix	Sampling Location/Sample ID	Number of Containers	Plastic / No Preservatives	Plastic / HNO_3	Plastic / H_2SO_4	Plastic / NaOH+Ascorbic Acid	Plastic / Zinc Acetate + NaOH	Plastic/ Glass/Sodium Thiosulfate	Glass / No Preservative	Glass / H_2SO_4	VOA / HCL	Other: (specify)	Analyses Required
486383	9/10/08	11:00 Am	Comp	SD	Gates Ave North Side	1							✓				TCLP, Metals, SemiVol
486384	9/10/08	11:00 Am	Comp	↓	Gates Ave. South Side	1							✓				Volatile Organics

Relinquished by:	Date 9/10/08	Time 2:15pm	Received by:	Date	Time
Relinquished by:	Date 9/12/08	Time 4:05	Received by:	Date	Time
Relinquished by:	Date	Time	Received at Lab by:	Date 9/10/08	Time 16:05
Sampler Signature:					

Your signature authorizes ELS to analyze the sample(s) as indicated.

White - LABORATORY
Canary - ACCOMPANIES RESULTS
Please return completed form and all sample containers to Environmental Laboratory Services.

2217.ELS.905.0301 (REV. 9/07)

Environmental
LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park, North Syracuse, NY 13212
(315) 458-8033, FAX (315) 458-0526, (800) 842-4667

Certified in:
- Connecticut
- Massachusetts
- New Jersey
- New York
- Pennsylvania

Laboratory Analysis Report

GENEVA, CITY OF WWTP
Marsh Creek WWTP
47 Castle Street
Geneva, NY 14456
ATTN: Mr. Gordon P. Eddington

PROJECT #: 230238
RECEIVED: 09/10/2008 @ 16:05

Site Address:
GATES AVE.

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 486383 **CLIENT SAMPLE ID:** GATES AVE. NORTH SIDE				**DATE/TIME SAMPLED:** 09/10/08 @ 11:00	
Semi-Volatile - TCLP-SEMIVOLATILES					
2,4,5-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4-dinitrotoluene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobutadiene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachloroethane	<0.100	MG/L	09/13/08	EPA 8270C	ASI
nitrobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pentachlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pyridine	<0.100	MG/L	09/13/08	EPA 8270C	ASI
total cresol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
Surrogate (2-fluorophenol): 37% recovery,(phenol-d6): 22% recovery,(nitrobenzene-d5): 73% recovery,(2-fluorobiphenyl): 68% recovery,(2,4,6-tribromophenol): 92% recovery,(terphenyl-d14): 155% recovery,					
Surrogate recovery acceptance limits are 50-130%.					
Continuing Calibration Standard recoveries for Hexachloroethane and pentachlorophenol were below the established acceptance limits.					
Results for these analytes may be biased low.					
Aqueous Separatory Funnel Extraction			09/12/08	EPA 3510C	JZY
TCLP MERCURY	<20	UG/L	09/15/08	EPA 7470A	ABO
TCLP-Semi/Non-Volatile Prep/Extraction			09/10/08	EPA 1311	BDR
TCLP Mercury Prep			09/15/08	EPA 7470A	BDR
TCLP METALS (RCRA7)					
arsenic	<1.0	MG/L	09/12/08	EPA 6010	ABO
barium	<2.0	MG/L	09/12/08	EPA 6010	ABO
cadmium	<0.05	MG/L	09/12/08	EPA 6010	ABO
chromium	<0.10	MG/L	09/12/08	EPA 6010	ABO
lead	<0.50	MG/L	09/12/08	EPA 6010	ABO
selenium	<1.0	MG/L	09/12/08	EPA 6010	ABO
silver	<0.10	MG/L	09/12/08	EPA 6010	ABO
Metals Digestion			09/11/08	EPA 3010A	BDR
Volatile - TCLP VOLATILES					
1,1-dichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
1,2-dichloroethane	<0.100	MG/L	09/15/08	EPA 8260B	DBA

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GENEVA, CITY OF WWTP
Marsh Creek WWTP
47 Castle Street
Geneva, NY 14456
ATTN: Mr. Gordon P. Eddington

PROJECT #: 230238
RECEIVED: 09/10/2008 @ 16:05

Site Address:
GATES AVE.

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 486383 **CLIENT SAMPLE ID:** GATES AVE. NORTH SIDE				**DATE/TIME SAMPLED:** 09/10/08 @ 11:00	
Volatile - TCLP VOLATILES					
1,4-dichlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
2-butanone	<0.100	MG/L	09/15/08	EPA 8260B	DBA
benzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
carbon tetrachloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chloroform	<0.100	MG/L	09/15/08	EPA 8260B	DBA
tetrachloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
trichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
vinyl chloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
Surrogate (toluene-d8): 92 % recovery,(bromofluorobenzene): 92 % recovery,(1,2-dichlorobenzene-d4): 101 % recovery, Surrogate recovery acceptance limits are 85-115%.					
TCLP-ZHE Prep/Extraction			09/10/08	EPA 1311	BDR
SAMPLE #: 486384 **CLIENT SAMPLE ID:** GATES AVE. SOUTH SIDE				**DATE/TIME SAMPLED:** 09/10/08 @ 11:00	
Semi-Volatile - TCLP-SEMIVOLATILES					
2,4,5-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
2,4-dinitrotoluene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachlorobutadiene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
hexachloroethane	<0.100	MG/L	09/13/08	EPA 8270C	ASI
nitrobenzene	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pentachlorophenol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
pyridine	<0.100	MG/L	09/13/08	EPA 8270C	ASI
total cresol	<0.100	MG/L	09/13/08	EPA 8270C	ASI
Surrogate (2-fluorophenol): 32% recovery,(phenol-d6): 21% recovery,(nitrobenzene-d5): 70% recovery,(2-fluorobiphenyl): 70% recovery,(2,4,6-tribromophenol): 71% recovery,(terphenyl-d14): 163% recovery, Surrogate recovery acceptance limits are 50-130%. Continuing Calibration Standard recoveries for Hexachloroethane and pentachlorophenol were below the established acceptance limits. Results for these analytes may be biased low.					
Aqueous Separatory Funnel Extraction			09/12/08	EPA 3510C	JZY
TCLP MERCURY	<20	UG/L	09/15/08	EPA 7470A	ABO
TCLP-Semi/Non-Volatile Prep/Extraction			09/10/08	EPA 1311	BDR
TCLP Mercury Prep			09/15/08	EPA 7470A	BDR
TCLP METALS (RCRA7)					
arsenic	<1.0	MG/L	09/12/08	EPA 6010	ABO
barium	<2.0	MG/L	09/12/08	EPA 6010	ABO
cadmium	<0.05	MG/L	09/12/08	EPA 6010	ABO
chromium	<0.10	MG/L	09/12/08	EPA 6010	ABO
lead	<0.50	MG/L	09/12/08	EPA 6010	ABO
selenium	<1.0	MG/L	09/12/08	EPA 6010	ABO

GENEVA, CITY OF WWTP
Marsh Creek WWTP
47 Castle Street
Geneva, NY 14456
ATTN: Mr. Gordon P. Eddington

PROJECT #: 230238
RECEIVED: 09/10/2008 @ 16:05

Site Address:
GATES AVE.

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 486384 **CLIENT SAMPLE ID:**	GATES AVE. SOUTH SIDE			**DATE/TIME SAMPLED:** 09/10/08 @ 11:00	
TCLP METALS (RCRA7)					
silver	<0.10	MG/L	09/12/08	EPA 6010	ABO
Metals Digestion			09/11/08	EPA 3010A	BDR
Volatile - TCLP VOLATILES					
1,1-dichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
1,2-dichloroethane	<0.100	MG/L	09/15/08	EPA 8260B	DBA
1,4-dichlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
2-butanone	<0.100	MG/L	09/15/08	EPA 8260B	DBA
benzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
carbon tetrachloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chlorobenzene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
chloroform	<0.100	MG/L	09/15/08	EPA 8260B	DBA
tetrachloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
trichloroethene	<0.100	MG/L	09/15/08	EPA 8260B	DBA
vinyl chloride	<0.100	MG/L	09/15/08	EPA 8260B	DBA
Surrogate (toluene-d8): 94 % recovery,(bromofluorobenzene): 90 % recovery,(1,2-dichlorobenzene-d4): 102 % recovery, Surrogate recovery acceptance limits are 85-115%,					
TCLP-ZHE Prep/Extraction			09/10/08	EPA 1311	BDR

Sample Receipt Temperature: 22 Degrees C
Samples received above acceptable temperature requirements of 0-6 degrees C.

David R. Hill
Laboratory Director

09/16/2008
Print Date

All tests performed under NYS ELAP Laboratory Certification # 11375 unless otherwise stated. Report relates only to the samples as received by the laboratory and shall not be reproduced except in full, without written approval from Environmental Laboratory Services.

Environmental
LABORATORY SERVICES

Environmental
LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park North Syracuse, NY 13212
(315) 458-8033 FAX (315) 458-0526 (866) LAB TIME

230238

CHAIN OF CUSTODY RECORD
and Authorization for Analysis
www.els-lab.com

Billing Information:
Name: Gordon Eddington
Company: City of Geneva
Address: 47 Castle St.
City, State, Zip: Geneva, NY 14456

Quote No.
Job No.
PO No.
Telephone No.

E-mail Address: gpe@geneva.ny.us
Fax
☒ E-mail Results
☐ Fax Results

Site Address: Gates Ave

Sample Receipt Temperature: 22 °C

Standard Turn Around Time is end of day, 10 Work Days after lab receipt. Surcharges may apply for Express Service.

- ☐ Same Day
- ☐ 1 Work Day
- ☐ 2 Work Days
- ☐ 3 Work Days
- ☐ 4 Work Days
- ☐ 5 Work Days
- ☐ Standard
- ☐ Other Due 9/16

Time Required: _____

Matrix Codes:
- AR - Air
- DW - Drinking Water
- FT - Filter
- GW - Ground Water
- OL - Oil
- PC - Paint Chips
- PR - Product
- SL - Sludge
- SD - Solid/Soil
- SW - Surface Water
- SB - Swab
- TP - Tape
- WP - Wipe
- WW - Waste Water

Sample(s) State of Origin:
CT ☐ DE ☐ MA ☐ MD ☐ NH ☐ NJ ☐ NY ☐ PA ☐ RI ☐ VT ☐ — ☐

Remarks/Special Instructions:

ELS Use Only	Date	Time	Comp/ Grab	Matrix	Sampling Location/Sample ID	Number of Containers	Plastic / No Preservatives	Plastic / HNO_3	Plastic / H_2SO_4	Plastic / NaOH+Ascorbic Acid	Plastic / Zinc Acetate + NaOH	Plastic/ Glass/Sodium Thiosulfate	Glass / No Preservative	Glass / H_2SO_4	VOA / HCL	Other: (specify)	Analyses Required
486383	9/10/08	11:00 Am	Comp	SD	Gates Ave North Side	1											TCLP, Metals, SemiVol
486384	9/10/08	11:00 Am	Comp	↓	Gates Ave, South Side	1											Volatile Organics

Relinquished by:	Date 9/10/08	Time 2:15pm	Received by:	Date	Time
Relinquished by:	Date 9/10/08	Time 4:05	Received by:	Date	Time
Relinquished by:	Date	Time	Received at Lab by:	Date 9/10/08	Time 16:05

Your signature authorizes ELS to analyze the sample(s) as indicated

Sampler Signature:

White - LABORATORY Canary - ACCOMPANIES RESULTS

Please return completed form and all sample containers to Environmental Laboratory Services.

2217.ELS.905 0301 (REV. 9/07)

US ecology

GENERATOR APPROVAL NOTIFICATION

Customer: THE ENVIRONMENTAL SERVICE GRP January 9, 2017

ENVIRONMENTAL MANAGER
CITY OF GENEVA
GATES AVENUE & LEHIGH STREET
GENEVA, NY 14456

This Generator Approval Notification acknowledges the acceptability of waste material(s) into the noted EQ facility(s) identified below and ensures that each facility has the appropriate permit(s) issued by federal and state regulatory agencies to properly transport, treat, and/or dispose of the waste material(s).

The Approval(s) listed below are based upon characterization information supplied to EQ by the Customer and the Generator (if other than the Customer). The Customer is ultimately responsible for the accuracy and completeness of all such information, whether provided by the Customer or the Generator. The Customer must notify EQ immediately upon knowledge of any changes to this information. The Approval and all wastes which are transported, delivered, or tendered to EQ under this Approval shall be subject to the Standard Terms and Conditions associated with the original Waste Profile Form. (The Standard Terms and Conditions are incorporated into the Waste Profile Form as Page 4.)

The Approval(s) will expire on the date(s) noted. Any new Approvals obtained from EQ on future business will be valid for a period of one (1) year from the date of issuance. Within 60 days of the Approval Expiration Date, you will be notified of the requirements for recertification.

Generator: CITY OF GENEVA
EPA ID No.: NYR000071811
Waste Common Name: Lead Soil
Waste Code(s): D008
Comments:

Approval No.: K160051EOH-OTS **Expiration Date:** 11/03/2017
EQ Facility Name & ID Number: EQ Ohio (OHD980568992)

FACILITY PERMIT CERTIFICATES

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEC PERMIT NUMBER		EFFECTIVE DATE
8-3244-00004/00001-0		01/21/2015
FACILITY/PROGRAM NUMBER(S)	**PERMIT**	MODIFIED
35S11	**Under the Environmental Conservation Law (ECL)**	
		EXPIRATION DATE(S)
		01/20/2025

TYPE OF PERMIT ☐ NEW X RENEWAL MODIFICATION X PERMIT TO CONSTRUCT X PERMIT TO OPERATE

☐ Article 15, Title 5: Protection of Waters

☐ Article 15, Title 15: Water Supply

☐ Article 15, Title 15: Water Transport

☐ Article 15, Title 15: Long Island Wells

☐ Article 15, Title 27: Wild, Scenic and Recreational Rivers

☐ 6NYCRR 608: Water Quality Certification

☐ Article 17, Titles 7, 8: SPDES

☐ Article 19: Air Pollution Control

☐ Article 23, Title 27: Mined Land Reclamation

☐ Article 24: Freshwater Wetlands

☐ Article 25: Tidal Wetlands

X Article 27, Title 7; 6NYCRR 360: Solid Waste Management

☐ Article 27, Title 9; 6NYCRR 373: Hazardous Waste Management

☐ Article 34: Coastal Erosion Management

☐ Articles 1, 3, 17, 19, 27, 37; NYCRR 380: Radiation Control

☐ Other:

PERMIT ISSUED TO			TELEPHONE NUMBER
Ontario County			**585-396-4400**
ADDRESS OF PERMITTEE			
20 Ontario Street, Canandaigua, NY 14424			
CONTACT PERSON FOR PERMITTED WORK			TELEPHONE NUMBER
John Garvey, Ontario County Administrator			**585-396-4400**
Robert Walls, Casella Waste Management			**585-526-4420**
NAME AND ADDRESS OF PROJECT/FACILITY			
Ontario County Landfill, 1879 Route 5&20, Stanley, NY 14561			
LOCATION OF PROJECT/FACILITY			
South side of Route 5&20 just west of the intersection of County Road 5			
COUNTY	TOWN	WATERCOURSE	NYTM COORDINATES
Ontario	**Seneca**	Water Body:	E:330000 N:4746830
DESCRIPTION OF AUTHORIZED ACTIVITY			
CONSTRUCTION AND OPERATION OF MIXED SOLID WASTE LANDFILL WITH AN APPROVED DESIGN CAPACITY OF 2999 TONS PER DAY. CASELLA WASTE MANAGEMENT IS THE PRESENT OPERATOR OF THE FACILITY UNDER A LONG TERM LEASE AGREEMENT WITH ONTARIO COUNTY.			

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified **(see page 2)** and any Special Conditions included as part of this permit.

PERMIT ADMINISTRATOR:	ADDRESS	
Kimberly A. Merchant	6274 E. Avon-Lima Rd, Avon, NY 14414	
AUTHORIZED SIGNATURE Kimberly A. Merchant	DATE 7/22/2014	Page 1 of 17

OHIO E.P.A.

JUL 17 2014

ENTERED DIRECTOR'S JOURNAL

OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO HAZARDOUS WASTE FACILITY INSTALLATION AND OPERATION PERMIT RENEWAL

Permittee:	Envirite of Ohio, Inc.
Mailing Address:	Envirite of Ohio, Inc. 2050 Central Avenue, SE Canton, OH 44707
Owner:	Envirite of Ohio, Inc. 2050 Central Avenue, SE Canton, OH 44707
Operator:	Envirite of Ohio, Inc. 2050 Central Avenue, SE Canton, OH 44707
Location:	Envirite of Ohio, Inc. 2050 Central Avenue, SE Canton, OH 44707

US EPA ID:	OHD 980 568 992
Issue Date:	July 17, 2014
Effective Date:	July 17, 2014
Expiration Date:	July 17, 2024

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

By: [signature] **Date:** 7-17-14

AUTHORIZED ACTIVITIES

In reference to the application of Envirite of Ohio, Inc. for an Ohio Hazardous Waste Facility Installation and Operation Renewal Permit under Ohio Revised Code (ORC) Chapter 3734 and the record in this matter, you are authorized to conduct at the above-named facility the following hazardous waste management activities:

- Storage in containers and tanks
- Treatment in tanks and miscellaneous units
- Corrective Action

PERMIT APPROVAL

[signature]

Craig W. Butler, Director
Ohio Environmental Protection Agency

This permit approval is based upon the record in this matter which is maintained at the offices of the Ohio Environmental Protection Agency. The Director has considered the application, accompanying information, inspection reports of the facility, a report regarding the facility's compliance or noncompliance with the terms and conditions of its permit and rules adopted by the Director under this chapter, and such other information as is relevant to the operation of the facility. The Director has determined that the facility under the existing permit has a history of compliance with ORC Chapter 3734, rules adopted under it, the existing permit, or orders entered to enforce such requirements that demonstrate sufficient reliability, expertise, and competency to operate the facility henceforth under this chapter, rules adopted under it, and the renewal permit.

Entered into the Journal of the Director this 17th day of July, 2014

By [signature] of the Ohio Environmental Protection Agency

TABULATED LOAD SUMMARIES

Tabulated Disposal Summary
Market Basket Site
Geneva, New York

October 7, 2008

Ticket	Tons	Ticket	Tons	Ticket	Tons
252915	20.64	252943	22.82	252985	19.53
253026	15.77	253070	19.36	252924	21.24
252956	23.11	252989	16.59	253035	15.08
253079	14.09	252927	19.32	252961	19.47
252995	18.45	253038	19.07	253076	19.17
253011	19.22	252975	16.68	252939	24.13
252911	18.65	253051	19.51	252894	16.99
252930	24.33	252965	18.09	253004	21.40
253058	17.66	252976	19.26	253020	14.67
252940	17.54	252912	20.56	253071	18.68
253029	18.18	252986	20.99	252944	20.87
252917	21.44	253054	18.84		

October 8, 2008

Ticket	Tons	Ticket	Tons	Ticket	Tons
253335	21.09	253336	15.82	253377	19.17
253410	19.59	253441	19.34	253372	19.76
253401	20.47	253436	19.80	253468	21.24
253389	17.83	253348	19.65	253447	20.42
253413	18.11	253462	16.34	253412	18.96
253346	20.48	253388	17.29		

October 9, 2008

Ticket	Tons	Ticket	Tons	Ticket	Tons
253946	19.45	253995	20.32	254070	20.56
254033	18.76				

November 17, 2016
Manifest #016690117: 17.12 tons

WASTE MANIFESTS OR BILLS OF LADING

JOHN KENYON TRUCKING INC.

3272 WHITNEY ROAD • STANLEY, NY 14561
585-526-5125 • CELL: 585-314-6955 OR 585-314-6951
FAX: 585-526-5120 DATE

CHARGE TO City of Geneva

JOB SITE Gates ave

MATERIAL Solid Ventura Dirt

	IN	OUT	
AM	7:00	12:00	HOURS 5
PM	12:00	3:30	HOURS 3 1/2

LOADS 5 TOTAL 8 1/2

	Ticket #	Weight		Ticket #	Weight
1	252915	20.6400	7		
2	252943	22.8200	8		
3	252985	19.5300	9		
4	253026	15.7700	10		
5	253070	19.3600	11		
6			12		

RECEIVED BY [signature]

DRIVER'S SIGNATURE [signature]

TRUCK NO. JK-01 FUEL 27

White Office Canary Billing Pink Foreman

№ 13593

TICKET: 252915
DATE: 10/07/2008
TIME: 09:50 - 10:13

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

P.O.:
GROSS: 71100 LBS
TARE: 29820 LBS
NET: 41280 LBS

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OD / ONTARIO
TRUCK: JK01 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768 CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.6400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver: [signature]

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
SA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: RON KOSINSKI | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gan | Signature | Month 10 | Day 7 | Year 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252943
DATE: 10/07/2008
TIME: 11:10 - 11:29

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 79120 LBS
ORIGIN: OO / ONTARIO
TARE: 33480 LBS
TRUCK: JK01 TRAILER:
NET: 45640 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	22.8200	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa P: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

Ron Rosin

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Canton

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature: [signature] | Month 10 | Day 7 | Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RON ROSINSKI | Signature: [signature] | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 19.

Printed/Typed Name: Lisa Carr | Signature: [signature] | Month 10 | Day 7 | Year 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252985
DATE: 10/07/2008
TIME: 12:30 - 12:49

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 69880 LBS
ORIGIN: OO / ONTARIO
TARE: 30820 LBS
TRUCK: JK01 TRAILER:
NET: 39060 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.5300	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking
6. US EPA ID Number
8A-841
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 7 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RON KOSINSKI
Signature:
Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gaw
Signature:
Month Day Year

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253026
DATE: 10/07/2008
TIME: 13:52 - 14:12

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK01 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 62200 LBS
TARE: 30660 LBS
NET: 31540 LBS
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	15.7700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789 - 3101

5. Transporter 1 Company Name
Kenson Trucking
6. US EPA ID Number
8A-841
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington	Gordon P. Eddington	10	7	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ron Kosinski	Ron Kosinski	10	7	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Coan				

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253070
DATE: 10/07/2008
TIME: 15:14 - 15:35

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 70560 LBS
ORIGIN: OO / ONTARIO
TARE: 31840 LBS
TRUCK: JK01 TRAILER:
NET: 38720 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.3600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: ~~Lisa~~ B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

Roger Hosmer

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington	[signature]	10	7	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ron Kosinski	[signature]	10	07	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Coar	[signature]			

GENERATOR — TRANSPORTER — FACILITY

ORIGINAL - RETURN TO GENERATOR

IN KENYON TRUCKING INC.

WHITNEY ROAD • STANLEY, NY 14561
-526-5125 • CELL: 585-314-6955 OR 585-314-6951
X: 585-526-5120 DATE 10-7-08

CHARGE TO City of Geneva

JOB SITE

MATERIAL Spoil - Ap# 1768

	IN	OUT	
AM	700	—	HOURS
PM	—	400	HOURS

LOADS 5 TOTAL 9.0

	Ticket #	Weight		Ticket #	Weight
1	2924	21.24	7		
2	2956	23.11	8		
3	2989	16.59	9		
4	3033	15.08	10		
5			11		
6			12		

RECEIVED BY [signature]

DRIVER'S SIGNATURE [signature]

TRUCK NO. 03 FUEL

White Office Canary Billing Pink Foreman

№ 13562

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252924
DATE: 10/07/2008
TIME: 10:13 - 10:33

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK03 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 74360 LBS
TARE: 31880 LBS
NET: 42480 LBS

CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	21.2400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver: [signature]

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252956
DATE: 10/07/2008
TIME: 11:29 - 11:53

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 77400 LBS
ORIGIN: OO / ONTARIO
TARE: 31180 LBS
TRUCK: JK03 TRAILER:
NET: 46220 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	23.1100	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252989
DATE: 10/07/2008
TIME: 12:46 - 12:58

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 64460 LBS
ORIGIN: OO / ONTARIO
TARE: 31280 LBS
TRUCK: JK03 TRAILER:
NET: 33180 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	16.5900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253035
DATE: 10/07/2008
TIME: 14:10 - 14:24

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK03 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 61560 LBS
TARE: 31400 LBS
NET: 30160 LBS
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	15.0800	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253079
DATE: 10/07/2008
TIME: 15:27 - 15:55

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK03 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 59160 LBS
TARE: 30980 LBS
NET: 28180 LBS
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	14.0900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

#1768

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: George Doty | Signature | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coan | Signature | Month 10 | Day 7 | Year 08

PRINTED BY G.O. SELLER & ASSOCIATES, INC.

ORIGINAL - RETURN TO GENERATOR

12-BLC-M5

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington		10	7	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
George Doty		10	7	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Gary		10	7	08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

1768

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature: [signature] | Month 10 Day 17 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: George Doty | Signature: [signature] | Month 10 Day 17 Year 08

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Cain | Signature | Month 10 Day 17 Year 08

GENERATOR

TRANSPORTER

FACILITY

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kanyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington		10	7	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
George Doty		10	7	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Carr		10	7	08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

JOHN KENYON TRUCKING INC.

3272 WHITNEY ROAD • STANLEY, NY 14561
585-526-5125 • CELL: 585-314-6955 OR 585-314-6951
FAX: 585-526-5120

DATE 10-7-08

CHARGE TO City of Geneva

JOB SITE Gates Ave

MATERIAL Dirt

	IN	OUT	
AM	7:00	12:00	HOURS 5
PM	12:00	4:00	HOURS 4

LOADS 5 TOTAL 9

Ticket #	Weight		Ticket #	Weight
252927	19.32	7		
252911	19.47	8		
252925	18.45	9		
253038	19.07	10		
253022	19.17	11		
6		12		

RECEIVED BY Michael Kenyon

DRIVER'S SIGNATURE Doug

TRUCK NO. JK06 FUEL

White Office Canary Billing Pink Foreman

№ 13750

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252927
DATE: 10/07/2008
TIME: 10:10 - 10:43

This is a Reprint Ticket

CUSTOMER: LEW0163 / RICCELLI
HAULCUST:
ORIGIN: OO / ONTARIO
TRUCK: JK06 City of Geneva TRAILER:
GENERATOR: NA / ~~NON APPLICABLE~~ PROFILE #: 1768
HAULER: NA / NON APPLICABLE ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 65640 LBS
TARE: 27000 LBS
NET: 38640 LBS
CELL/TANK: 04

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.3200	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-DC OUT: Lisa B: PCSCALE-DC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
SA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon R. Eddington | Signature | Month 10 | Day 7 | Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Doug Grimes | Signature | Month 10 | Day 07 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Conn | Signature | Month 10 | Day 7 | Year 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252961
DATE: 10/07/2008
TIME: 11:34 - 11:59

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 65940 LBS
ORIGIN: OO / ONTARIO
TARE: 27000 LBS
TRUCK: JK06 TRAILER:
NET: 38940 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.4700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252995
DATE: 10/07/2008
TIME: 12:57 - 13:14

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 63880 LBS
ORIGIN: OO / ONTARIO
TARE: 26980 LBS
TRUCK: JK06 TRAILER:
NET: 36900 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.4500	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	1768

GENERATOR

3. Generator's Name and Mailing Address: City of Geneva

4. Generator's Phone: 315 789-3101

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
Kenyon Trucking	8A-841	
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
Ontario County Landfill, Flint, NY		

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Carlon P. Eddington	[signature]	10	7	08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Doug Cross	[signature]	10	7	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Cosna	[signature]	10	7	08

Printed by J.J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 12/98

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253038
DATE: 10/07/2008
TIME: 14:14 - 14:27

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 65080 LBS
ORIGIN: OO / ONTARIO
TARE: 26940 LBS
TRUCK: JK06 TRAILER:
NET: 38140 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.0700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature: [signature] | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Dory Capps | Signature: [signature] | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coa | Signature: [signature] | Month | Day | Year

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253076
DATE: 10/07/2008
TIME: 15:36 - 15:49

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 65280 LBS
ORIGIN: OO / ONTARIO
TARE: 26940 LBS
TRUCK: JK06 TRAILER:
NET: 38340 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.1700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature: [signature] | Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Doug Crips | Signature: [signature] | Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gann | Signature: [signature] | Month Day Year

ORIGINAL - RETURN TO GENERATOR

JOHN KENYON TRUCKING INC.
3272 WHITNEY ROAD • STANLEY, NY 14561
585-526-5125 • CELL: 585-314-6955 OR 585-314-6951
FAX: 585-526-5120

DATE 10/7/08

CHARGE TO City of Geneva

JOB SITE Gates Ave

MATERIAL Dirty Dirt

	IN	OUT	HOURS
AM	700	1200	5
PM	1200	330	3 1/2

TOTAL 8 1/2

LOADS 4

no lunch

	Ticket #	Weight		Ticket #	Weight
1	252911	18.65	7		
2	252939	24.13	8		
3	252975	16.68	9		
4	253011	19.22	10		
5			11		
6			12		

RECEIVED BY Michael Vinson

DRIVER'S SIGNATURE [signature]

TRUCK NO. JK-05 FUEL

White Office Canary Billing Pink Foreman

№ 13603

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253011
DATE: 10/07/2008
TIME: 13:29 - 13:49

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK05 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768

P.O.:
GROSS: 67820 LBS
TARE: 29380 LBS
NET: 38440 LBS
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.2200	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

JK-05

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			19.22	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 7 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chuck Ostrowski
Signature:
Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Loan
Signature:
Month Day Year

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252975
DATE: 10/07/2008
TIME: 12:12 - 12:32

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 62720 LBS
ORIGIN: OO / ONTARIO
TARE: 29360 LBS
TRUCK: JK05 TRAILER:
NET: 33360 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	16.6800	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

TK-05

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789 3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			26-68	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 7 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chuck Ostrowski
Signature:
Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Cary
Signature:
Month 10 Day 10 Year 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1870 NYS Route 5&20
Stanley, NY 14561

TICKET: 252939
DATE: 10/07/2008
TIME: 10:58 - 11:22

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 77640 LBS
ORIGIN: OO / ONTARIO
TARE: 29380 LBS
TRUCK: JK05 TRAILER:
NET: 48260 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	24.1300	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

JK-05

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			27.13	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chris Ostrowski | Signature | Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: RICHARD | Signature | Month 10 Day 7 Year 08

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252911
DATE: 10/07/2008
TIME: 09:41 - 10:03

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK05 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 66680 LBS
TARE: 29380 LBS
NET: 37300 LBS
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.6500	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

JK-05

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			18.05	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P Eddington | Signature | Month 10 | Day 7 | Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chuck Ostrowski | Signature | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Carr | Signature | Month | Day | Year 10 07 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

JOHN KENYON TRUCKING INC.

3272 WHITNEY ROAD • STANLEY, NY 14561
585-526-5125 • CELL: 585-314-6955 OR 585-314-6951
FAX: 585-526-5120

DATE 10/7/08

CHARGE TO City of Geneva

JOB SITE Gates

MATERIAL

	IN	OUT	
AM	7:00	12:00	HOURS 5
PM	12:00	3:00	HOURS 3

LOADS _____ TOTAL 8 hrs

Ticket #	Weight		Ticket #	Weight
1 252894	16.99	7		
2 252930	24.33	8		
3 252965	18.09	9		
4 253004	21.40	10		
5 253051	19.51	11		
6		12		

RECEIVED BY [signature]

DRIVER'S SIGNATURE J. Kenyon

TRUCK NO JK12 FUEL _____

White Office Canary Billing Pink Foreman

№ 12268

TICKET: 253051
DATE: 10/07/2008
TIME: 14:33 - 14:52

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

P.O.:
GROSS: 68190 LBS
TARE: 29160 LBS
NET: 39020 LBS

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OD / ONTARIO
TRUCK: JK12 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768 CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.5100	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: POSCALE-OC OUT: Lisa B: POSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252894
DATE: 10/07/2008
TIME: 09:08 - 09:26

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 62640 LBS
ORIGIN: OO / ONTARIO
TARE: 28660 LBS
TRUCK: JK12 TRAILER:
NET: 33980 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	16.9900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252930
DATE: 10/07/2008
TIME: 10:31 - 10:53

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 77560 LBS
ORIGIN: OO / ONTARIO
TARE: 28900 LBS
TRUCK: JK12 TRAILER:
NET: 48660 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	24.3300	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252965
DATE: 10/07/2008
TIME: 11:47 - 12:10

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 65560 LBS
ORIGIN: OO / ONTARIO
TARE: 29380 LBS
TRUCK: JK12 TRAILER:
NET: 36180 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.0900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253004
DATE: 10/07/2008
TIME: 13:21 - 13:38

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 71660 LBS
ORIGIN: OO / ONTARIO
TARE: 28860 LBS
TRUCK: JK12 TRAILER:
NET: 42800 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	21.4000	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
SA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil 1768				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington	[signature]	10	7	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
	[signature]	10	7	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
John H. Kenyon				

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva
4. Generator's Phone (315 789-3101

5. Transporter 1 Company Name
Kenyon Trucking
6. US EPA ID Number
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil 1768				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon R. Eddington	Gordon R. Eddington	10	7	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
John Kenyon	John Kenyon			

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Gaar				

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone 315 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil 1768				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature: [signature] | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: John H. Kenyon | Signature: [signature] | Month 10 | Day 7 | Year 08

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coan | Signature: [signature] | Month 10 | Day 7 | Year 08

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil 1768				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon R. Eddington | Signature | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: John H. Kenyon | Signature: John Kenyon | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Gary Gaib | Signature | Month | Day | Year

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: John H. Kenyon | Signature | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coor | Signature | Month | Day | Year 10 7 08

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253058
DATE: 10/07/2008
TIME: 14:52 - 15:10

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 67980 LBS
ORIGIN: OO / ONTARIO
TARE: 32660 LBS
TRUCK: JK07 TRAILER:
NET: 35320 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	17.6600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

ENYON TRUCKING INC.
Y ROAD • STANLEY, NY 14561
25 • CELL: 585-314-6955 OR 585-314-6951
.. 585-526-5120

DATE 10-7-08

CHARGE TO City of Geneva

JOB SITE

MATERIAL Spoils

	IN	OUT	HOURS
AM	700	1200	5
PM	1200	330	3 1/2

LOADS TOTAL 8 1/2

	Ticket #	Weight		Ticket #	Weight
1	253012	20.56	7		
2	940	17.54	8		
3	974	19.26	9		
4	020	17.67	10		
5	058	17.66	11		
6			12		

RECEIVED BY Michael Kennedy
DRIVER'S SIGNATURE
TRUCK NO. JK-07 FUEL

White Office Canary Billing Pink Foreman

№ 13883

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
PA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			17.66	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LeVesque | Signature | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Cam | Signature | Month 10 | Day 7 | Year 08

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252976
DATE: 10/07/2008
TIME: 12:14 - 12:33

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 71300 LBS
ORIGIN: OO / ONTARIO
TARE: 32780 LBS
TRUCK: JK07 TRAILER:
NET: 38520 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.2600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253020
DATE: 10/07/2008
TIME: 13:43 - 14:04

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 62040 LBS
ORIGIN: OO / ONTARIO
TARE: 32700 LBS
TRUCK: JK07 TRAILER:
NET: 29340 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	14.6700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil 1768			19.26	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
~~Permit #~~ Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 Day 7 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LeVesque | Signature | Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Garza | Signature | Month 10 Day 7 Year 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			14.67	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken Levesque | Signature | Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gan | Signature | Month Day Year 08

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252940
DATE: 10/07/2008
TIME: 11:01 - 11:23

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 67760 LBS
ORIGIN: OO / ONTARIO
TARE: 32680 LBS
TRUCK: JK07 TRAILER:
NET: 35080 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	17.5400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252912
DATE: 10/07/2008
TIME: 09:44 - 10:04

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 73900 LBS
ORIGIN: OO / ONTARIO
TARE: 32780 LBS
TRUCK: JK07 TRAILER:
NET: 41120 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.5600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil 1768			17.54	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington	Gordon P. Eddington	10	7	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ken LaJesque	[illegible]	10	7	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Gorse				

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

JKO7

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

1768

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone 315 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			20.56	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddy | Signature | Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LaVesque | Signature | Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Cox | Signature | Month 10 Day 7 Year 08

ORIGINAL - RETURN TO GENERATOR

JOHN KENYON TRUCKING INC.

3272 WHITNEY ROAD • STANLEY, NY 14561
585-526-5125 • CELL: 585-314-6955 OR 585-314-6951
FAX: 585-526-5120

TUES.
DATE 10/07/08

CHARGE TO GENEVA

JOB SITE GATE AVE.

MATERIAL SOIL (WASTE)

	IN	OUT	
AM	7:00	12:00	HOURS 5
PM	12:00	3:30	HOURS 3.5

LOADS 5 TOTAL 8.5

	Ticket #	Weight		Ticket #	Weight
1	252917	21.44 TN	7		
2	252944	20.47 TN	8		
3	252986	20.99 TN	9		
4	253029	18.18 TN	10		
5	253071	19.68 TN	11		
6			12		

RECEIVED BY

DRIVER'S SIGNATURE

TRUCK NO. JK-10 FUEL

White Office Canary Billing Pink Foreman

№ 13569

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253071
DATE: 10/07/2008
TIME: 15:17 - 15:36

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK10 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 65440 LBS
TARE: 28080 LBS
NET: 37360 LBS
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.6800	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster:
Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

18.68 TN

253071

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Canandaigua

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: George Doty | Signature | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Gregg | Signature | Month 10 | Day 7 | Year 08

ORIGINAL - RETURN TO GENERATOR

(4)

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253029
DATE: 10/07/2008
TIME: 13:57 - 14:15

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 64360 LBS
ORIGIN: OO / ONTARIO
TARE: 28000 LBS
TRUCK: JK10 TRAILER:
NET: 36360 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.1800	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver: Ray F.

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

(3)

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 252986
DATE: 10/07/2008
TIME: 12:31 - 12:50

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 70040 LBS
ORIGIN: OO / ONTARIO
TARE: 28060 LBS
TRUCK: JK10 TRAILER:
NET: 41980 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.9900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver: Ray F.

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A:841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS | Signature | Month 10 Day 07 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Good | Signature | Month | Day | Year

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS | Signature | Month 10 | Day 07 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coa | Signature | Month | Day | Year

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

(2)

TICKET: 252944
DATE: 10/07/2008
TIME: 11:18 - 11:31

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 69140 LBS
ORIGIN: OO / ONTARIO
TARE: 27400 LBS
TRUCK: JK10 TRAILER:
NET: 41740 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.8700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

(1)

TICKET: 252917
DATE: 10/07/2008
TIME: 10:00 - 10:25

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 69720 LBS
ORIGIN: OO / ONTARIO
TARE: 26840 LBS
TRUCK: JK10 TRAILER:
NET: 42880 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	21.4400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS | Signature | Month 10 | Day 07 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Good | Signature | Month | Day | Year

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

#1768

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
NA-891

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: [illegible] | Signature: [illegible] | Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS | Signature: Raymond F. Stubbs | Month 10 Day 07 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Cogan | Signature: [illegible] | Month Day Year

ORIGINAL - RETURN TO GENERATOR

#1

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253054
DATE: 10/07/2008
TIME: 14:48 - 15:00

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 66980 LBS
ORIGIN: OO / ONTARIO
TARE: 29300 LBS
TRUCK: JK05 TRAILER:
NET: 37680 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.8400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

20.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A:841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature: [signature] | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS | Signature: [signature] | Month 10 | Day 07 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Cook | Signature: [signature] | Month | Day | Year

ORIGINAL - RETURN TO GENERATOR

#1768

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 85

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS | Signature | Month 10 | Day 10 | Year 85

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Carr | Signature | Month | Day | Year

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

1768.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva
4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking
6. US EPA ID Number
8A 841
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gunter P. Eddington
Signature:
Month 10 Day 7 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS
Signature: Raymond F. Stubbs
Month 10 Day 07 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Loan
Signature
Month Day Year

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL - RETURN TO GENERATOR

#1

JK-05

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-891

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			18.84	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chuck Ostrowski | Signature | Month 10 | Day 7 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gam | Signature | Month | Day | Year

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

#1

TICKET: 253335
DATE: 10/08/2008
TIME: 07:59 - 08:15

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 72980 LBS
ORIGIN: OO / ONTARIO
TARE: 30800 LBS
TRUCK: JK01 TRAILER:
NET: 42180 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	21.0900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789 - 3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A - 841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			21.09	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ron Kosinski
Signature:
Month 10 Day 08 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coar
Signature:
Month Day Year

ORIGINAL - RETURN TO GENERATOR

(1)

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253336
DATE: 10/08/2008
TIME: 08:05 - 08:16

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 60020 LBS
ORIGIN: OO / ONTARIO
TARE: 28380 LBS
TRUCK: JK10 TRAILER:
NET: 31640 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	15.8200	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver: Ray F.

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

(2)

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253377
DATE: 10/08/2008
TIME: 09:11 - 09:29

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 66760 LBS
ORIGIN: OO / ONTARIO
TARE: 28420 LBS
TRUCK: JK10 TRAILER:
NET: 38340 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.1700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver: Ray F.

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			15.82	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington	[signature]	10	8	08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
RAYMOND F. STUBBS	Raymond F. Stubbs	10	08	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Carr	[signature]	10	8	08

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-891

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			19,17	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS
Signature:
Month 10 Day 08 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coan
Signature:
Month Day Year 10 8 08

ORIGINAL - RETURN TO GENERATOR

12 BLC-M5

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

(3)

TICKET: 253410
DATE: 10/08/2008
TIME: 10:24 - 10:44

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK10 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 67640 LBS
TARE: 28460 LBS
NET: 39180 LBS
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.5900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver: Ray F. [illegible]

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

(4)

TICKET: 253441
DATE: 10/08/2008
TIME: 11:40 - 11:53

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK10 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 67180 LBS
TARE: 28500 LBS
NET: 38680 LBS
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.3400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver: Ray F. [illegible]

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			19.59	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature: Gordon P. Eddington
Month 10 Day 7 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS
Signature: Raymond F. Stubbs
Month 10 Day 08 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gar
Signature
Month Day Year 10 8 08

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL - RETURN TO GENERATOR

12-BLC-M5

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Oneida

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			A.34	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approved # 1728

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon F. Eddington
Signature: [signature]
Month 10 Day 8 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS
Signature: Raymond F. Stubbs
Month 10 Day 08 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Carr
Signature: [signature]
Month 10 Day 8 Year 08

KELLER & ASSOCIATES, INC.

ORIGINAL – RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

#2

TICKET: 253372
DATE: 10/08/2008
TIME: 09:04 - 09:21

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 70300 LBS
ORIGIN: OG / ONTARIO
TARE: 30780 LBS
TRUCK: JK01 TRAILER:
NET: 39520 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.7600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

Ra Kar

#2

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			19.76	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 7 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: ~~Gordon P. Eddington~~ Ron Kos, Inc.
Signature: Ron Kos
Month 10 Day 7 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Garro
Signature:
Month 10 Day 8 Year 08

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

#3

TICKET: 253401
DATE: 10/08/2008
TIME: 10:17 - 10:33

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK01 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768

P.O.:
GROSS: 71860 LBS
TARE: 30920 LBS
NET: 40940 LBS
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.4700	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

#3

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789 - 3101

5. Transporter 1 Company Name
Benson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			20.47	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 7 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ron Kosinski
Signature:
Month 10 Day 08 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coons
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

4

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253436
DATE: 10/08/2008
TIME: 11:29 - 11:45

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK01 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768

P.O.:
GROSS: 70500 LBS
TARE: 30900 LBS
NET: 39600 LBS

CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.8000	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

4

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Doc. No.
2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva
4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking
6. US EPA ID Number
8A-841
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			19.80	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1728

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifestare not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature: [signature]
Month 10 Day 8 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: KON KOSINSKI
Signature: [signature]
Month 10 Day 08 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Carr
Signature: [signature]
Month 10 Day 8 Year 08

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253468
DATE: 10/08/2008
TIME: 12:44 - 12:59

#5

CUSTOMER: LE00017 / CITY OF GENEVA
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 73300 LBS
ORIGIN: OO / ONTARIO
TARE: 30820 LBS
TRUCK: JK01 TRAILER:
NET: 42480 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	21.2400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

Ron Kasin

TO REORDER CALL 1-800-327-6868

#5

Please print or type

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			21.24	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1728

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Gordon P. Eddington	[signature]	10	8	08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ron Kosinski	[signature]	10	08	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Cook	[signature]	10	8	08

GENERATOR

TRANSPORTER

FACILITY

Printed by J.J. KELLER & ASSOCIATES, INC. Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253389
DATE: 10/08/2008
TIME: 09:31 - 09:46

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: 00 / ONTARIO
TRUCK: JK07 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768

P.O.:
GROSS: 68420 LBS
TARE: 32760 LBS
NET: 35660 LBS
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	17.8300	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253348
DATE: 10/08/2008
TIME: 08:30 - 08:42

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WO: 0 APPROVAL #:
ORIGIN: 00 / ONTARIO
TRUCK: JK07 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 72180 LBS
TARE: 32880 LBS
NET: 39300 LBS
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.6500	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			17.33	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 8 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LeBesque | Signature | Month 10 | Day 8 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gado | Signature | Month 10 | Day 8 | Year 08

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			1965	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 Day 08 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LaVesque | Signature | Month 10 Day 08 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gan | Signature | Month 10 Day 8 Year 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253447
DATE: 10/08/2008
TIME: 11:54 - 12:07

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 70820 LBS
ORIGIN: OO / ONTARIO
TARE: 29980 LBS
TRUCK: JK07 TRAILER:
NET: 40840 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.4200	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253413
DATE: 10/08/2008
TIME: 10:46 - 11:01

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 68940 LBS
ORIGIN: OO / ONTARIO
TARE: 32720 LBS
TRUCK: JK07 TRAILER:
NET: 36220 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.1100	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Doc. No.
2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva
4. Generator's Phone 315 789-3101

5. Transporter 1 Company Name
Kenyon Trucking
6. US EPA ID Number
PA-841
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			20.42	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature: Gordon P. Eddington
Month 10 Day 8 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ken Levesque
Signature
Month 10 Day 8 Year 08

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Carr
Signature
Month 10 Day 8 Year 08

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			18.4	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 8 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken Leursoue | Signature | Month 10 | Day 8 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coana | Signature | Month | Day | Year

TRANSPORTER #1

#2

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253462
DATE: 10/08/2008
TIME: 12:24 - 12:39

This is a Reprint Ticket

CUSTOMER: LE00017 / CITY OF GENEVA P.O.:
HAULCUST: WO: 0 APPROVAL #: GROSS: 61940 LBS
ORIGIN: OO / ONTARIO TARE: 29260 LBS
TRUCK: JK05 TRAILER: NET: 32680 LBS
GENERATOR: CB / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: 1768 CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	16.3400	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

377-45

#2

Please print or type
(Form designed for use on elite (12-pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Doc. No.
2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva
4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kanyon Trucking
6. US EPA ID Number
8A-841
A. Transporter's Phone

7. Transporter 2 Company Name
6. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			16-34	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Carla P. Eddington		10	8	08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Chuck Ostrowski		10	8	08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lisa Garze		10	8	08

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 12/98

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

#3

TICKET: 253412
DATE: 10/08/2008
TIME: 10:44 - 10:59

CUSTOMER: LE00163 / RICCELLI
HAULCUST: WD: 0 APPROVAL #:
ORIGIN: OO / ONTARIO
TRUCK: JK05 TRAILER:
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768

P.O.:
GROSS: 67220 LBS
TARE: 29300 LBS
NET: 37920 LBS

CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.9600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

#3

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of
JK-[illegible]

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-891

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			18.96	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature:
Month 10 Day 8 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chuck Ostrowski
Signature:
Month 10 Day 8 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gage
Signature:
Month Day Year 10 8 08

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

TICKET: 253346
DATE: 10/08/2008
TIME: 08:24 - 08:38

#4

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 70360 LBS
ORIGIN: OO / ONTARIO
TARE: 29400 LBS
TRUCK: JK05 TRAILER:
NET: 40960 LBS
GENERATOR: C6 / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: APP1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.4800	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC

#4

JK-05

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			20.48	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 7 | Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chuck Ostrowski | Signature | Month 10 | Day 8 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Coari | Signature | Month 10 | Day 8 | Year 08

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

#5

TICKET: 253388
DATE: 10/08/2008
TIME: 09:30 - 09:45

CUSTOMER: LE00163 / RICCELLI
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 64180 LBS
ORIGIN: OO / ONTARIO
TARE: 29600 LBS
TRUCK: JK05 TRAILER:
NET: 34580 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: app1768
CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	17.2900	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.

Weighmaster: Driver:

IN: Lisa B: PCSCALE-OC OUT: Lisa B: PCSCALE-OC 18.96

#5

JK-05

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenson Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			17.29	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington | Signature | Month 10 | Day 8 | Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chuck Ostrowski | Signature | Month 10 | Day 8 | Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Lisa Gara | Signature | Month | Day | Year

ORIGINAL - RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			21.07	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #1728

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature: [signature]
Month 10 Day 8 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: RAYMOND F. STUBBS
Signature: [signature]
Month 10 Day 08 Year 08

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Tim Carr
Signature: [signature]
Month 10 Day 8 Year 08

GENERATOR

TRANSPORTER

FACILITY

Printed by J.J. KELLER & ASSOCIATES, INC. Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 12/98

NEWS NE / ONTARIO COUNTY LANDFILL #1 TICKET: 253946
A Division of Casella Waste Systems DATE: 10/09/2008
1879 NYS Route 5&20 TIME: 10:56 - 11:09
Stanley, NY 14561

CUSTOMER: LE00017 / CITY OF GENEVA P.O.:
HAULCUST: WO: 0 APPROVAL #: GROSS: 72060 LBS
ORIGIN: OO / ONTARIO TARE: 33160 LBS
TRUCK: JK07 TRAILER: NET: 38900 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: 1768 CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	19.4500	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: NANCY B: PCSCALE-OC OUT: NANCY B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL #2 TICKET: 253995
A Division of Casella Waste Systems DATE: 10/09/2008
1879 NYS Route 5&20 TIME: 12:31 - 12:47
Stanley, NY 14561

CUSTOMER: LE00017 / CITY OF GENEVA P.O.:
HAULCUST: WO: 0 APPROVAL #: GROSS: 74960 LBS
ORIGIN: OO / ONTARIO TARE: 34320 LBS
TRUCK: JK07 TRAILER: NET: 40640 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: 1768 CELL/TANK: P5

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.3200	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: NANCY B: PCSCALE-OC OUT: NANCY B: PCSCALE-OC

#1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Doc. No.
2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
NA-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			19.45	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval ~~#1728~~ 1768 !!

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon F. Eddington
Signature:
Month 10 Day 09 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LaVesque
Signature:
Month 10 Day 9 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
Signature
Month 10 Day 9 Year 8

GENERATOR
TRANSPORTER
FACILITY

Printed by J.J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL -- RETURN TO GENERATOR

#2

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva

4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking

6. US EPA ID Number
8A-841

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			20.32	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # ~~[illegible]~~ 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Ellington | Signature | Month 10 Day 9 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LaVesque | Signature | Month 10 Day 9 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

TRANSPORTER

FACILITY

Printed by J. J. KELLER & ASSOCIATES, INC. Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

#3

TICKET: 254070
DATE: 10/09/2008
TIME: 15:04 - 15:22

CUSTOMER: LE00017 / CITY OF GENEVA
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 74120 LBS
ORIGIN: OO / ONTARIO
TARE: 33000 LBS
TRUCK: JK07 TRAILER:
NET: 41120 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: 1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	20.5600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: NANCY B: PCSCALE-OC OUT: NANCY B: PCSCALE-OC

NEWS NE / ONTARIO COUNTY LANDFILL
A Division of Casella Waste Systems
1879 NYS Route 5&20
Stanley, NY 14561

#4

TICKET: 254033
DATE: 10/09/2008
TIME: 13:50 - 14:15

CUSTOMER: LE00017 / CITY OF GENEVA
P.O.:
HAULCUST: WO: 0 APPROVAL #:
GROSS: 70580 LBS
ORIGIN: OO / ONTARIO
TARE: 33060 LBS
TRUCK: JK07 TRAILER:
NET: 37520 LBS
GENERATOR: CG / CITY OF GENEVA PROFILE #: 1768
HAULER: RIC / RICCELLI ROUTE: NA / NON APPLICABLE
COMMENT: 1768
CELL/TANK: P4

MATERIAL	QUANTITY	UNIT
AC / ALTERNATIVE DAILY COVER	18.7600	ST

I Certify under penalty of perjury that I am familiar with wastes authorized at this facility and that to the best of my knowledge all waste contained in this load is authorized for disposal at this facility.
Weighmaster: Driver:

IN: NANCY B: PCSCALE-OC OUT: NANCY B: PCSCALE-OC

3

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Doc. No.
2. Page 1 of

3. Generator's Name and Mailing Address
City of Geneva
4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kenyon Trucking
6. US EPA ID Number
8A-841
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			20.5	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval # ~~[illegible]~~ 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature: Gordon P. Eddington
Month 10 Day 8 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken LeVesque
Signature: [illegible]
Month 10 Day 9 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: [illegible]
Signature: [illegible]
Month Day Year

GENERATOR
TRANSPORTER
FACILITY

Printed by J.J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

4

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Doc. No.
2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
City of Geneva
4. Generator's Phone (315) 789-3101

5. Transporter 1 Company Name
Kluyon Trucking
6. US EPA ID Number
8A-841
A. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Ontario County Landfill
Flint, NY
10. US EPA ID Number
C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Contaminated Soil			18.26	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Approval # ~~[illegible]~~ 1768

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Gordon P. Eddington
Signature: Gordon P. Eddington
Month 10 Day 8 Year 08

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ken LeVesque
Signature:
Month 10 Day 9 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Martin
Signature:
Month 10 Day 9 Year 8

Printed by J. J. KELLER & ASSOCIATES, INC. Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

171

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYR 000 071 811

2. Page 1 of 1

3. Emergency Response Phone: 724.843.7100

4. Manifest Tracking Number: 016690117 JJK

GENERATOR

5. Generator's Name and Mailing Address: CITY OF GENEVA
GATES AVENUE & LEHIGH STREET
GENEVA, NY 14456
Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: US Bulk Transport, Inc
U.S. EPA ID Number: PAD 987 347 515

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, SE
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1NA3077, Hazardous waste, solid, n.o.s. (Lead), 9, PGIII, ERG #171	001	DT	15 Est	T	D008		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
K160051EOH / Lead Soil loaded all material on Job

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Gordon P. Eddington
Signature: [signature]
Month 11 Day 17 Year 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Shannon Adams
Signature: [signature]
Month 11 Day 17 Year 16

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H110 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Eric Dunlevy
Signature: [signature]
Month 11 Day 18 Year 16

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

ENVIRITE OF OHIO, INC.

CANTON, OHIO 44707

WEIGHT TALLY NUMBER _____

REMARKS: GENEVA

K160051

BULK

66360 lb 07:14 am 11/18/16

66360 lb Gross

34240 lb Net

32720 lb Tare

07:37 am 11/18/16

☐ LPU ☐ SPU

ENVIRITE OF OHIO, INC., WEIGHER

BRECHBUHLER SCALES

THE ENVIRONMENTAL QUALITY COMPANY
MANIFEST CHECKLIST

In an effort to serve you better, EQ - The Environmental Quality Company is providing assistance in completion of your U.S. EPA Uniform Hazardous Waste Manifest. For your convenience, a portion of the manifest has been completed for you.

Prior to releasing your waste for transport, please review all information, and complete the sections checked below. Accurately completing the required sections will help ensure compliance with applicable DOT regulations and minimize delays at the TSDF.

If you have any questions, comments or concerns regarding any of the following information, please contact your Customer Service Specialist at (800) 592-5489. A complete set of manifesting instructions is available on the back of your Uniform Hazardous Waste Manifest.

Manifest Number(s):

Please complete the checked sections prior to releasing the waste for transport:

- ☐ Generator ID Number
- ☐ Page Number
- ☑ Emergency Response Phone
- ☐ Offeror's Name and/or Contract Number
- ☐ Generator's Name and Mailing Address
- ☐ Generator's Site Address (if different than mailing address)
- ☐ Generator's Phone
- ☐ Transporter 1 Company Name
- ☐ Transporter U.S. EPA ID Number
- ☐ Designated Facility Name and Site Address
- ☐ Facility's Phone
- ☐ U.S. EPA ID Number
- ☐ HM
- ☐ U.S. DOT Description
- ☐ Containers ☐ No ☐ Type
- ☑ Total Quantity
- ☐ Unit Wt./Vol.
- ☐ Waste Codes
- ☐ Special Handling Instructions and Additional Information

Please remember to send a completed Land Disposal Restriction Form with your first shipment. If you need a copy of the LDR form, please call Customer Service at 800-592-5489.

US ecology

LAND DISPOSAL RESTRICTION AND CERTIFICATION FORM

Generator: CITY OF GENEVA
GATES AVENUE & LEHIGH STREET , GENEVA, NY 14456

U.S. EPA ID No.: NYR000071811

Manifest:

Page - Line
1 - 01 **Approval:** K160051EOH NWW

Waste Code(s): D008

Hazardous Constituents: 19 Benz(a)anthracene, 22 Benzo(a)pyrene, 25 Benzo(g,h,i)perylene, 52 Chrysene, 112 Fluoranthene, 123 Indeno(1.2.3-c,d)pyrene, 173 Pyrene

Subcategory(s): None

Certification: GENERATORS OF CONTAMINATED SOIL.
THIS CONTAMINATED SOIL DOES NOT CONTAIN LISTED HAZARDOUS WASTE AND DOES EXHIBIT A CHARACTERISTIC OF HAZARDOUS WASTE AND COMPLIES WITH THE SOIL TREATMENT STANDARDS AS PROVIDED BY 268.49(c) OR THE UNIVERSAL TREATMENT STANDARDS.

I hereby certify that all information submitted on this and all associated documents, is complete and accurate to the best of my knowledge and information.

Generator Signature: _____ **Title:** _____

Printed Name: _____ **Date:** _____

For questions regarding this form, please call Customer Service at (800) 592-5489.

APPENDIX G

CAMP FIELD DATA SHEETS AND AIR MONITORING DATA

City of Geneva Market Basket Remediation
CAMP Readings

Monitors: DustTrak DRX Aerosol Monitors located at upwind and downwind locations
Onsite Photoionization Detector

August 12, 2008 Readings

Time	Upwind Reading	Downwind	Difference
9:15	0.0	0.0	0.0
9:45	0.0	0.0	0.0
10:15	0.0	0.0	0.0
10:45	0.0	0.4	0.4
11:15	0.0	0.0	0.0
11:45	0.0	0.052	0.052
Mean	0.0	0.075	0.075

August 10, 2009

Notes: Upwind DustTrak instrument recorded reading 135 mg/m^3 higher than downwind unit

Time	Upwind Reading	Corrected Upwind	Downwind	Difference
8:55	0.210	0.075	0.071	-0.004
9:10	0.163	0.028	0.070	0.042
9:25	0.170	0.035	0.540	0.505
9:44	0.139	0.004	0.040	0.036
10:20	0.145	0.010	0.045	0.035
10:55	0.165	0.030	0.052	0.022
12:00	0.182	0.047	0.057	0.010
12:20	0.185	0.050	0.001	-0.049
1:00	0.190	0.055	0.098	0.043
Mean	0.172	0.037	0.108	0.071

Instrument Name	DustTrak DRX
Model Number	8533
Serial Number	8533113407
Firmware Version	3.4
Calibration Date	6/22/2016
Test Name	MANUAL_001
Test Start Time	7:45:55 AM
Test Start Date	9/12/2016
Test Length [D:H:M]	0:02:30
Test Interval [M:S]	15:00
PM1 Average [mg/m3]	0.003
PM1 Minimum [mg/m3]	0
PM1 Maximum [mg/m3]	0.011
PM1 TWA [mg/m3]	0.001
PM2.5 Average [mg/m3]	0.003
PM2.5 Minimum [mg/m3]	0
PM2.5 Maximum [mg/m3]	0.011
PM2.5 TWA [mg/m3]	0.001
PM4 Average [mg/m3]	0.003
PM4 Minimum [mg/m3]	0
PM4 Maximum [mg/m3]	0.012
PM4 TWA [mg/m3]	0.001
PM10 Average [mg/m3]	0.004
PM10 Minimum [mg/m3]	0.001
PM10 Maximum [mg/m3]	0.017
PM10 TWA [mg/m3]	0.001
TOTAL Average [mg/m3]	0.005
TOTAL Minimum [mg/m3]	0.001
TOTAL Maximum [mg/m3]	0.022
TOTAL TWA [mg/m3]	0.001
Photometric User Cal	1
Size Correction User Cal	1
Flow User Cal	0
Errors	
Number of Samples	10

Elapsed Time [s]	PM1 [mg/m3]	PM2.5 [mg/m3]	PM4 [mg/m3]	PM10 [mg/m3]	TOTAL [mg/m3]	Alarms	Errors
900	0.011	0.011	0.012	0.017	0.022		
1800	0.009	0.009	0.009	0.01	0.01		
2700	0.003	0.003	0.003	0.004	0.004		
3600	0.002	0.002	0.002	0.002	0.003		
4500	0.001	0.001	0.001	0.002	0.002		
5400	0.001	0.001	0.001	0.001	0.001		
6300	0	0	0	0.001	0.001		
7200	0	0.001	0.001	0.001	0.001		
8100	0.001	0.001	0.001	0.001	0.001		
9000	0.001	0.001	0.002	0.002	0.002		

Instrument Name	DustTrak DRX
Model Number	8533
Serial Number	8533124807
Firmware Version	3.3
Calibration Date	4/3/2015
Test Name	MANUAL_001
Test Start Time	7:55:24 AM
Test Start Date	9/12/2016
Test Length [D:H:M]	0:07:25
Test Interval [M:S]	1:00
PM1 Average [mg/m3]	0.118
PM1 Minimum [mg/m3]	0
PM1 Maximum [mg/m3]	0.197
PM1 TWA [mg/m3]	0.11
PM2.5 Average [mg/m3]	0.118
PM2.5 Minimum [mg/m3]	0
PM2.5 Maximum [mg/m3]	0.197
PM2.5 TWA [mg/m3]	0.11
PM4 Average [mg/m3]	0.119
PM4 Minimum [mg/m3]	0
PM4 Maximum [mg/m3]	0.199
PM4 TWA [mg/m3]	0.11
PM10 Average [mg/m3]	0.119
PM10 Minimum [mg/m3]	0
PM10 Maximum [mg/m3]	0.202
PM10 TWA [mg/m3]	0.11
TOTAL Average [mg/m3]	0.12
TOTAL Minimum [mg/m3]	0
TOTAL Maximum [mg/m3]	0.204
TOTAL TWA [mg/m3]	0.111
Photometric User Cal	0.97
Size Correction User Cal	1.04
Flow User Cal	0
Errors	
Number of Samples	146

Elapsed Time [s]	PM1 [mg/m3]	PM2.5 [mg/m3]	PM4 [mg/m3]	PM10 [mg/m3]	TOTAL [mg/m3]	Alarms	Errors
60	0.197	0.197	0.199	0.202	0.204		
120	0.181	0.181	0.182	0.184	0.185		
180	0.18	0.18	0.181	0.181	0.181		
240	0.179	0.179	0.18	0.18	0.18		
300	0.178	0.179	0.179	0.18	0.18		
360	0.176	0.177	0.177	0.177	0.178		
420	0.175	0.176	0.176	0.176	0.176		
480	0.175	0.175	0.175	0.176	0.176		
540	0.174	0.174	0.175	0.175	0.175		
600	0.172	0.172	0.172	0.172	0.173		
660	0.171	0.171	0.172	0.172	0.172		
720	0.175	0.175	0.175	0.177	0.185		
780	0.166	0.166	0.166	0.166	0.166		
840	0.164	0.164	0.165	0.165	0.165		
900	0.164	0.164	0.164	0.164	0.164		
960	0.162	0.163	0.163	0.163	0.163		
1020	0.162	0.163	0.163	0.163	0.163		
1080	0.161	0.162	0.162	0.162	0.162		
1140	0.16	0.161	0.161	0.161	0.161		
1200	0.158	0.158	0.158	0.158	0.158		
1260	0.158	0.158	0.159	0.159	0.159		
1320	0.157	0.157	0.157	0.158	0.158		
1380	0.155	0.155	0.155	0.155	0.155		
1440	0.152	0.152	0.152	0.152	0.152		
1500	0.147	0.147	0.147	0.148	0.148		
1560	0.124	0.124	0.124	0.124	0.124		
1620	0.125	0.125	0.125	0.125	0.125		
1680	0.134	0.134	0.134	0.134	0.134		
1740	0.133	0.133	0.133	0.133	0.133		
1800	0.126	0.126	0.126	0.126	0.127		
1860	0.115	0.115	0.115	0.115	0.115		
1920	0.121	0.121	0.121	0.122	0.122		
1980	0.119	0.119	0.119	0.119	0.119		
2040	0.118	0.118	0.118	0.118	0.118		
2100	0.117	0.117	0.118	0.118	0.118		
2160	0.116	0.116	0.116	0.116	0.116		
2220	0.116	0.116	0.117	0.117	0.117		
2280	0.118	0.118	0.118	0.118	0.118		
2340	0.117	0.117	0.117	0.117	0.117		
2400	0.118	0.118	0.118	0.118	0.118		
2460	0.119	0.119	0.119	0.119	0.119		
2520	0.119	0.119	0.119	0.119	0.119		

2580	0.119	0.119	0.119	0.119	0.119
2640	0.12	0.12	0.12	0.121	0.121
2700	0.121	0.121	0.121	0.121	0.121
2760	0.119	0.119	0.119	0.119	0.119
2820	0.119	0.119	0.119	0.119	0.119
2880	0.117	0.117	0.117	0.117	0.117
2940	0.113	0.113	0.114	0.114	0.114
3000	0.112	0.112	0.112	0.112	0.112
3060	0.114	0.114	0.114	0.115	0.115
3120	0.114	0.114	0.114	0.114	0.115
3180	0.112	0.112	0.112	0.112	0.112
3240	0.112	0.112	0.112	0.112	0.112
3300	0.112	0.112	0.112	0.112	0.112
3360	0.112	0.112	0.112	0.112	0.112
3420	0.112	0.112	0.113	0.113	0.113
3480	0.112	0.113	0.113	0.113	0.113
3540	0.113	0.113	0.113	0.113	0.113
3600	0.114	0.114	0.114	0.114	0.114
3660	0.114	0.114	0.115	0.115	0.115
3720	0.114	0.114	0.114	0.114	0.114
3780	0.112	0.112	0.112	0.112	0.112
3840	0.114	0.114	0.114	0.114	0.114
3900	0.113	0.113	0.113	0.113	0.114
3960	0.108	0.108	0.108	0.109	0.109
4020	0.109	0.109	0.109	0.109	0.109
4080	0.113	0.113	0.113	0.113	0.113
4140	0.107	0.107	0.107	0.108	0.108
4200	0.108	0.108	0.109	0.109	0.109
4260	0.108	0.108	0.108	0.108	0.108
4320	0.115	0.115	0.115	0.115	0.115
4380	0.115	0.115	0.115	0.115	0.115
4440	0.115	0.115	0.116	0.116	0.116
4500	0.113	0.113	0.113	0.114	0.114
4560	0.103	0.103	0.104	0.104	0.104
4620	0.102	0.102	0.102	0.103	0.103
4680	0.103	0.103	0.103	0.103	0.103
4740	0.111	0.111	0.111	0.111	0.112
4800	0.105	0.105	0.105	0.105	0.105
4860	0.103	0.103	0.103	0.103	0.103
4920	0.102	0.102	0.102	0.102	0.102
4980	0.102	0.102	0.103	0.103	0.103
5040	0.103	0.103	0.104	0.104	0.104
5100	0.103	0.103	0.103	0.103	0.103
5160	0.104	0.104	0.104	0.104	0.104
5220	0.107	0.108	0.108	0.108	0.108
5280	0.103	0.103	0.103	0.103	0.103
5340	0.104	0.104	0.104	0.104	0.104
5400	0.104	0.104	0.104	0.104	0.104
5460	0.102	0.102	0.102	0.102	0.102
5520	0.109	0.109	0.109	0.109	0.109
5580	0.104	0.104	0.104	0.104	0.104
5640	0.104	0.104	0.104	0.104	0.104
5700	0.104	0.104	0.104	0.104	0.104
5760	0.109	0.109	0.109	0.109	0.109
5820	0.103	0.103	0.103	0.103	0.103
5880	0.103	0.103	0.103	0.103	0.103
5940	0.104	0.105	0.105	0.105	0.105
6000	0.109	0.109	0.109	0.109	0.11
6060	0.107	0.107	0.107	0.107	0.107
6120	0.099	0.099	0.099	0.1	0.1
6180	0.102	0.102	0.102	0.102	0.103
6240	0.104	0.104	0.104	0.104	0.104
6300	0.099	0.099	0.099	0.099	0.099
6360	0.099	0.1	0.1	0.1	0.1
6420	0.102	0.102	0.102	0.102	0.102
6480	0.101	0.101	0.101	0.102	0.102
6540	0.102	0.102	0.102	0.102	0.102
6600	0.103	0.103	0.103	0.104	0.104
6660	0.104	0.104	0.104	0.105	0.105
6720	0.103	0.103	0.103	0.104	0.104
6780	0.103	0.103	0.103	0.103	0.103
6840	0.102	0.102	0.102	0.102	0.102
6900	0.102	0.102	0.102	0.102	0.102
6960	0.102	0.102	0.102	0.102	0.102
7020	0.103	0.103	0.103	0.103	0.103
7080	0.103	0.103	0.103	0.103	0.103
7140	0.103	0.103	0.103	0.103	0.104
7200	0.108	0.109	0.109	0.11	0.111
7260	0.101	0.102	0.102	0.102	0.102
7320	0.098	0.098	0.098	0.098	0.098
7380	0.103	0.103	0.103	0.103	0.103

7440	0.102	0.102	0.102	0.103	0.103
7500	0.102	0.102	0.102	0.102	0.102
7560	0.102	0.102	0.102	0.102	0.102
7620	0.107	0.107	0.107	0.107	0.107
7680	0.101	0.101	0.102	0.102	0.102
7740	0.103	0.103	0.103	0.103	0.103
7800	0.109	0.109	0.109	0.109	0.11
7860	0.103	0.103	0.103	0.103	0.103
7920	0.103	0.103	0.103	0.103	0.103
7980	0.104	0.104	0.104	0.104	0.105
8040	0.104	0.104	0.104	0.104	0.104
8100	0.108	0.108	0.108	0.108	0.108
8160	0.11	0.11	0.11	0.11	0.11
8220	0.104	0.104	0.104	0.105	0.105
8280	0.101	0.101	0.101	0.102	0.102
8340	0.1	0.1	0.1	0.1	0.1
8400	0.103	0.103	0.103	0.103	0.103
8460	0.108	0.108	0.108	0.109	0.109
26481	0	0	0	0	0
26520	0.102	0.103	0.104	0.113	0.128
26580	0.11	0.111	0.112	0.125	0.143
26640	0.111	0.112	0.113	0.123	0.139
26700	0.113	0.113	0.114	0.121	0.13

APPENDIX H

RAW ANALYTICAL LABORATORY DATA

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Monday, September 08, 2008

Dave Miexell
O'Brien & Gere Engineers, Inc.
5000 Brittonfield Parkway
PO Box 4873
Syracuse, NY 13221-4873

TEL:

Project: CITY OF GENEVA- MARKET BASKET SITE
RE: Analytical Results Order No.: 0808068, 0808076

Dear Dave Miexell:

Life Science Laboratories, Inc. received samples on 8/12/2008-8/13/2008 for the analyses presented in the following report.

Very truly yours,
Life Science Laboratories, Inc.

Monika Santucci
Project Manager

Sample Data Summary Package

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I
SAMPLE IDENTIFICATION AND ANALYTICAL SUMMARY

			Analytical Requirements					
NYS DEC SAMPLE ID	LABORATORY SAMPLE ID	Type	VOA GC/MS Method #	BNA GC/MS Method #	VOA GC Method #	MISC GC Method #	METALS Method #	OTHER Method #
SB-2-Bot-1	0808068-001	SAMP	SW8260B	SW8270C				SM 2540 G
SB-2-South	0808068-002	SAMP	SW8260B	SW8270C				SM 2540 G
SB-2-East	0808068-003	SAMP	SW8260B	SW8270C				SM 2540 G
SB-2-North	0808068-004	SAMP	SW8260B	SW8270C				SM 2540 G
SB-2-West	0808068-005	SAMP	SW8260B	SW8270C				SM 2540 G
SB-2-Bot-2	0808068-006	SAMP	SW8260B	SW8270C				SM 2540 G
Trip Blank	0808068-007	SAMP	SW8260B					
UST-Bot-1	0808076-001	SAMP	SW8260B	SW8270C			SW6010B	SM 2540 G
UST-North	0808076-002	SAMP	SW8260B	SW8270C			SW6010B	SM 2540 G
UST-Bot-2	0808076-003	SAMP	SW8260B	SW8270C			SW6010B	SM 2540 G
UST-East	0808076-004	DUP						SM 2540 G
UST-East	0808076-004	MS	SW8260B	SW8270C			SW6010B	
UST-East	0808076-004	MSD	SW8260B	SW8270C			SW6010B	
UST-East	0808076-004	SAMP	SW8260B	SW8270C			SW6010B	SM 2540 G
UST-West	0808076-005	SAMP	SW8260B	SW8270C			SW6010B	SM 2540 G
UST-South	0808076-006	SAMP	SW8260B	SW8270C			SW6010B	SM 2540 G
Field Dup	0808076-007	SAMP	SW8260B	SW8270C			SW6010B	SM 2540 G
Trench-Bot-1	0808076-008	SAMP	SW8260B	SW8270C			SW6010B SW7471A	SM 2540 G
Trench-Bot-2	0808076-009	SAMP	SW8260B	SW8270C			SW6010B SW7471A	SM 2540 G

SW8260B
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-IIb
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0808068-001A	Soil	08/12/08	08/12/08		08/14/08
0808068-002A	Soil	08/12/08	08/12/08		08/14/08
0808068-003A	Soil	08/12/08	08/12/08		08/14/08
0808068-003ADL	Soil	08/12/08	08/12/08		08/15/08
0808068-004A	Soil	08/12/08	08/12/08		08/14/08
0808068-004ADL	Soil	08/12/08	08/12/08		08/15/08
0808068-005A	Soil	08/12/08	08/12/08		08/15/08
0808068-006A	Soil	08/12/08	08/12/08		08/15/08
0808068-007A	Water Q	08/12/08	08/12/08		08/15/08
0808076-001A	Soil	08/13/08	08/13/08		08/18/08
0808076-001ADL	Soil	08/13/08	08/13/08		08/19/08
0808076-002A	Soil	08/13/08	08/13/08		08/18/08
0808076-003ADL	Soil	08/13/08	08/13/08		08/19/08
0808076-003A	Soil	08/13/08	08/13/08		08/18/08
0808076-004A	Soil	08/13/08	08/13/08		08/18/08
0808076-004AMS	Soil	08/13/08	08/13/08		08/18/08
0808076-004AMSD	Soil	08/13/08	08/13/08		08/18/08
0808076-005A	Soil	08/13/08	08/13/08		08/18/08
0808076-006A	Soil	08/13/08	08/13/08		08/18/08
0808076-007A	Soil	08/13/08	08/13/08		08/18/08
0808076-007ADL	Soil	08/13/08	08/13/08		08/19/08
0808076-008A	Soil	08/13/08	08/13/08		08/18/08
0808076-008ADL	Soil	08/13/08	08/13/08		08/19/08
0808076-009A	Soil	08/13/08	08/13/08		08/18/08
0808076-009ADL	Soil	08/13/08	08/13/08		08/19/08

SW8260B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY

VOLATILE ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0808068-001A	Soil	SW8260B	NONE	NONE	0.98X
0808068-002A	Soil	SW8260B	NONE	NONE	0.98X
0808068-003A	Soil	SW8260B	NONE	NONE	0.98X
0808068-003ADL	Soil	SW8260B	NONE	NONE	4.54X
0808068-004A	Soil	SW8260B	NONE	NONE	0.96X
0808068-004ADL	Soil	SW8260B	NONE	NONE	5X
0808068-005A	Soil	SW8260B	NONE	NONE	0.96X
0808068-006A	Soil	SW8260B	NONE	NONE	0.98X
0808068-007A	Water Q	SW8260B	NONE	NONE	1X
0808076-001A	Soil	SW8260B	NONE	NONE	0.98X
0808076-001ADL	Soil	SW8260B	NONE	NONE	5X
0808076-002A	Soil	SW8260B	NONE	NONE	0.98X
0808076-003A	Soil	SW8260B	NONE	NONE	0.94X
0808076-003ADL	Soil	SW8260B	NONE	NONE	4.54X
0808076-004A	Soil	SW8260B	NONE	NONE	1X
0808076-004AMS	Soil	SW8260B	NONE	NONE	1X
0808076-004AMSD	Soil	SW8260B	NONE	NONE	1X
0808076-005A	Soil	SW8260B	NONE	NONE	1X
0808076-006A	Soil	SW8260B	NONE	NONE	0.98X
0808076-007A	Soil	SW8260B	NONE	NONE	0.98X
0808076-007ADL	Soil	SW8260B	NONE	NONE	4.54X
0808076-008A	Soil	SW8260B	NONE	NONE	0.98X
0808076-008ADL	Soil	SW8260B	NONE	NONE	4.54X
0808076-009A	Soil	SW8260B	NONE	NONE	0.96X
0808076-009ADL	Soil	SW8260B	NONE	NONE	4.54X

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIa

SAMPLE PREPARATION AND ANALYSIS SUMMARY

SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0808068-001B	Soil	08/12/08	08/12/08	08/15/08	08/21/08
0808068-002B	Soil	08/12/08	08/12/08	08/15/08	08/21/08
0808068-003B	Soil	08/12/08	08/12/08	08/15/08	08/21/08
0808068-004B	Soil	08/12/08	08/12/08	08/15/08	08/21/08
0808068-005B	Soil	08/12/08	08/12/08	08/15/08	08/21/08
0808068-006B	Soil	08/12/08	08/12/08	08/15/08	08/21/08
0808076-001B	Soil	08/13/08	08/13/08	08/15/08	08/21/08
0808076-002B	Soil	08/13/08	08/13/08	08/15/08	08/21/08
0808076-003B	Soil	08/13/08	08/13/08	08/15/08	08/21/08
0808076-004B	Soil	08/13/08	08/13/08	08/15/08	08/21/08
0808076-004BMS	Soil	08/13/08	08/13/08	08/15/08	08/21/08
0808076-004BMSD	Soil	08/13/08	08/13/08	08/15/08	08/22/08
0808076-005B	Soil	08/13/08	08/13/08	08/15/08	08/21/08
0808076-006B	Soil	08/13/08	08/13/08	08/15/08	08/22/08
0808076-007B	Soil	08/13/08	08/13/08	08/15/08	08/22/08
0808076-008B	Soil	08/13/08	08/13/08	08/15/08	08/22/08
0808076-009B	Soil	08/13/08	08/13/08	08/15/08	08/22/08

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY

SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0808068-001B	Soil	SW8270C	SW3550B	NONE	1X
0808068-002B	Soil	SW8270C	SW3550B	NONE	1X
0808068-003B	Soil	SW8270C	SW3550B	NONE	1X
0808068-004B	Soil	SW8270C	SW3550B	NONE	1X
0808068-005B	Soil	SW8270C	SW3550B	NONE	1X
0808068-006B	Soil	SW8270C	SW3550B	NONE	1X
0808076-001B	Soil	SW8270C	SW3550B	NONE	1X
0808076-002B	Soil	SW8270C	SW3550B	NONE	1X
0808076-003B	Soil	SW8270C	SW3550B	NONE	1X
0808076-004B	Soil	SW8270C	SW3550B	NONE	1X
0808076-004BMS	Soil	SW8270C	SW3550B	NONE	1X
0808076-004BMSD	Soil	SW8270C	SW3550B	NONE	1X
0808076-005B	Soil	SW8270C	SW3550B	NONE	1X
0808076-006B	Soil	SW8270C	SW3550B	NONE	1X
0808076-007B	Soil	SW8270C	SW3550B	NONE	1X
0808076-008B	Soil	SW8270C	SW3550B	NONE	1X
0808076-009B	Soil	SW8270C	SW3550B	NONE	1X

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

LABORATORY SAMPLE ID	MATRIX	METALS REQUESTED	DATE REC'D AT LAB	DATE DIGESTED	DATE ANALYZED
0808076-001B	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-002B	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-003B	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-004B	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-004BMS	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-004BMSD	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-005B	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-006B	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-007B	Soil	Pb	08/13/2008	08/26/2008	08/27/2008
0808076-008B	Soil	Be Cr Cu Fe Ni Zn	08/13/2008	08/26/2008	08/27/2008
0808076-009B	Soil	Be Cr Cu Fe Ni Zn	08/13/2008	08/26/2008	08/27/2008

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

LABORATORY SAMPLE ID	MATRIX	METALS REQUESTED	DATE REC'D AT LAB	DATE DIGESTED	DATE ANALYZED
0808076-008B	Soil	Hg	08/13/2008	08/27/2008	08/27/2008
0808076-009B	Soil	Hg	08/13/2008	08/27/2008	08/27/2008
0808076-009BMS	Soil	Hg	08/13/2008	08/27/2008	08/27/2008
0808076-009BMSD	Soil	Hg	08/13/2008	08/27/2008	08/27/2008

NARRATIVE

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from O'Brien & Gere Engineers, Inc. for the City of Geneva project. Immediately following the narratives are the Work Order Sample Summary and Dates Report.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The coolers were received intact. When the coolers were received by the laboratory, the sample custodian(s) opened and inspected the shipments for damage, custody inconsistencies and proper preservation. The chain of custody forms documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

Discrepancies noted upon receipt are listed on the sample receipt checklist located in the chain of custody section of the report. The temperatures of the iced coolers were 0.2°C and 2.2°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1
Semivolatile Organics	SW8270C	1
ICP Metals	SW6010B	1
Mercury	SW7471A	1
Percent Moisture	SM 2540G	2

1) New York State Department of Environmental Conservation Analytical Services Protocol, June 2000.

2) Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992

QUALITY CONTROL

QA/QC results are summarized in the Laboratory Report Package and are also included in the raw data.

RAW DATA

The raw data is organized in the New York State Department of Environmental Conservation Analytical Services Protocol Category B order of data requirements.

Total # of pages in report. _____

GC/MS Volatile Organics Case Narrative

Client: OBG
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0808068, 0808076
Methodology: 8260B

Analyzed/Reviewed by (Initials/Date): AP 8/22/08
Supervisor/Reviewed by (Initials/Date): MT 8/29/08
QA/QC Review (Initials/Date): CL 9/3/08

File Name: G:\Narratives\MSVoa\0808068vnar.doc

GC/MS Volatile Organics
The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 40 m x 0.18 mm ID capillary column (MS01 & MS03), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), and Restek Rtx-VMS, 60 m x 0.25mm ID capillary column (MS04), and a Vocarb 3000 adsorbent trap.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Aqueous samples had a pH of < 2.

Laboratory Control Sample
The following compound(s) did not meet laboratory control sample recovery criteria:

LCS No.	Compound	Corrective Action
LCS-14526, LCS-14527	Cyclohexane	1
LCS-14529	1,1-Dichloroethene	1
	Carbon disulfide	1
	Cyclohexane	1
LCS/LCSD-14531	Cyclohexane	1
LCSD-14531	Carbon disulfide	1,2
	1,1,2,2-Tetrachloroethane	1,2
	1,2-Dibromo-3-chloropropane	1,2

1 The recovery exceeded the upper control limit and was not detected above the PQL/RL in the associated samples. No corrective action was taken.

2 The primary LCS met acceptance limits.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MSB	MSB-14529	Carbon disulfide	X		1
		Cyclohexane	X		1

GC/MS Volatile Organics Case Narrative - Page 2

Client: OBG
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0808068, 0808076
Methodology: 8260B

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
UST-East	0808076-004A MSD	Cyclohexane	X		1

1 The recovery exceeded the upper control limit and was not detected above the PQL/RL in the associated sample. No corrective action was taken.

Surrogate Standards
The following sample(s) did not meet surrogate recovery criteria:

Sample Description	Sample #	Surrogate	Corrective Action
UST-Bot-1	0808076-001A	4-Bromofluorobenzene	1
UST-Bot-2	0808076-003A	4-Bromofluorobenzene	2
Field Dup	0808076-007A	4-Bromofluorobenzene	2

1 The recovery was confirmed by analysis of the sample at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

2 The recovery met acceptance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken

Internal Standards
The internal standard area for the following sample(s) did not meet abundance criteria:

Sample Description	Sample #	Internal Standard	Corrective Action
UST-Bot-1	0808076-001A	1,4-dichlorobenzene-d4	1
UST-Bot-2	0808076-003A	1,4-dichlorobenzene-d4	1
Field Dup	0808076-007A	1,4-dichlorobenzene-d4	1
Trench-Bot-1	0808076-008A	1,4-dichlorobenzene-d4	2
Trench-Bot-2	0808076-009A	1,4-dichlorobenzene-d4	2

1 The recovery was confirmed by analysis of the sample at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

2 The internal standard area met abundance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

GC/MS Semi-Volatile Organics Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva-Mark Basket Site
Work Order #: 0808068,0808076
Methodology: 8270C

Analyzed/Reviewed by (Initials/Date): MS 8/27/08
Supervisor/Reviewed by (Initials/Date): (DW) 8-27-08
QA/QC Review (Initials/Date): Sh 9/2/08

File Name: G:\Narratives\MSSemi\0808068svnar.doc

GC/MS Semi-Volatile Organics
The GC/MS Semi-volatile instruments used a J & W DB-5MS, 30 m x 0.25 mm ID capillary column.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
Matrix Spike Blank	MSB-7957	Caprolactam	X		1

1 The recovery exceeded the upper control limit and was not detected above the PQL/RL in the associated samples. The associated LCS met acceptance limits. No corrective action was taken.

Surrogate Standards
All surrogate standard recoveries met method and/or project specific QC criteria.

Internal Standards
All internal standard areas met method and/or project specific QC criteria.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva- Market Basket Site
Work Order #: 0808076
Methodology: ICP metals – SW 6010B

Analyzed/Reviewed by (Date/Initials): 8-29-08 CT
Supervisor/Reviewed by (Date/Initials): 9-2-08 KM
QA/QC Review (Date/Initials): 9/3/08 Sh

Trace Metals
There were no excursions to note. All QC results were within established control limits.

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Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva- Market Basket Site
Work Order #: 0808076
Methodology: Mercury – SW 7471A

Analyzed/Reviewed by (Date/Initials): 9-2-08 CT
Supervisor/Reviewed by (Date/Initials): 9-2-08 KM
QA/QC Review (Date/Initials): 9/2/08 Sh

Trace Metals
There were no excursions to note. All QC results were within established control limits.

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Life Science Laboratories, Inc. Date: *08-Sep-08*

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab Order: 0808068

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0808068-001A	SB-2-Bot-1		8/12/2008	8/12/2008
0808068-001B	SB-2-Bot-1		8/12/2008	8/12/2008
0808068-002A	SB-2-South		8/12/2008	8/12/2008
0808068-002B	SB-2-South		8/12/2008	8/12/2008
0808068-003A	SB-2-East		8/12/2008	8/12/2008
0808068-003B	SB-2-East		8/12/2008	8/12/2008
0808068-004A	SB-2-North		8/12/2008	8/12/2008
0808068-004B	SB-2-North		8/12/2008	8/12/2008
0808068-005A	SB-2-West		8/12/2008	8/12/2008
0808068-005B	SB-2-West		8/12/2008	8/12/2008
0808068-006A	SB-2-Bot-2		8/12/2008	8/12/2008
0808068-006B	SB-2-Bot-2		8/12/2008	8/12/2008
0808068-007A	Trip Blank		8/12/2008	8/12/2008

Life Science Laboratories, Inc.

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab Order: 0808076

Date: 08-Sep-08

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0808076-001A	UST-Bot-1		8/13/2008	8/13/2008
0808076-001B	UST-Bot-1		8/13/2008	8/13/2008
0808076-002A	UST-North		8/13/2008	8/13/2008
0808076-002B	UST-North		8/13/2008	8/13/2008
0808076-003A	UST-Bot-2		8/13/2008	8/13/2008
0808076-003B	UST-Bot-2		8/13/2008	8/13/2008
0808076-004A	UST-East		8/13/2008	8/13/2008
0808076-004B	UST-East		8/13/2008	8/13/2008
0808076-005A	UST-West		8/13/2008	8/13/2008
0808076-005B	UST-West		8/13/2008	8/13/2008
0808076-006A	UST-South		8/13/2008	8/13/2008
0808076-006B	UST-South		8/13/2008	8/13/2008
0808076-007A	Field Dup		8/13/2008	8/13/2008
0808076-007B	Field Dup		8/13/2008	8/13/2008
0808076-008A	Trench-Bot-1		8/13/2008	8/13/2008
0808076-008B	Trench-Bot-1		8/13/2008	8/13/2008
0808076-009A	Trench-Bot-2		8/13/2008	8/13/2008
0808076-009B	Trench-Bot-2		8/13/2008	8/13/2008

16

Life Science Laboratories, Inc.

08-Sep-08

Lab Order: 0808068
Client: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Sit

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0808068-001A	SB-2-Bot-1	8/12/2008 11:15:00 AM	Soil	Volatile Organic Compounds by GC/MS			8/14/2008
0808068-001B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
0808068-002A	SB-2-South	8/12/2008 11:45:00 AM		Volatile Organic Compounds by GC/MS			8/14/2008
0808068-002B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
0808068-003A	SB-2-East	8/12/2008 12:05:00 PM		Volatile Organic Compounds by GC/MS			8/14/2008
				Volatile Organic Compounds by GC/MS			8/15/2008
0808068-003B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
0808068-004A	SB-2-North	8/12/2008 2:05:00 PM		Volatile Organic Compounds by GC/MS			8/15/2008
				Volatile Organic Compounds by GC/MS			8/14/2008
0808068-004B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
0808068-005A	SB-2-West			Volatile Organic Compounds by GC/MS			8/15/2008
0808068-005B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
0808068-006A	SB-2-Bot-2	8/12/2008 3:10:00 PM		Volatile Organic Compounds by GC/MS			8/15/2008
0808068-006B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
0808068-007A	Trip Blank	8/12/2008 11:15:00 AM	Water Q	Volatile Organic Compounds by GC/MS			8/15/2008

17

Life Science Laboratories, Inc.

08-Sep-08

Lab Order: 0808076
Client: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Sit

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0808076-001A	UST-Bot-1	8/13/2008 9:50:00 AM	Soil	Volatile Organic Compounds by GC/MS			8/19/2008
				Volatile Organic Compounds by GC/MS			8/18/2008
0808076-001B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-002A	UST-North	8/13/2008 10:50:00 AM		Volatile Organic Compounds by GC/MS			8/18/2008
0808076-002B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-003A	UST-Bot-2	8/13/2008 10:55:00 AM		Volatile Organic Compounds by GC/MS			8/18/2008
				Volatile Organic Compounds by GC/MS			8/19/2008
0808076-003B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-004A	UST-East	8/13/2008 11:05:00 AM		Volatile Organic Compounds by GC/MS			8/18/2008
0808076-004B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-005A	UST-West	8/13/2008 11:50:00 AM		Volatile Organic Compounds by GC/MS			8/18/2008
0808076-005B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/21/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-006A	UST-South	8/13/2008 12:00:00 PM		Volatile Organic Compounds by GC/MS			8/18/2008
0808076-006B				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/22/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-007A	Field Dup	8/13/2008		Volatile Organic Compounds by GC/MS			8/18/2008
				Volatile Organic Compounds by GC/MS			8/19/2008

18

Life Science Laboratories, Inc.

08-Sep-08

Lab Order: 0808076
Client: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Sit

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0808076-007B	Field Dup	8/13/2008	Soil	Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/22/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-008A	Trench-Bot-1	8/13/2008 3:10:00 PM		Volatile Organic Compounds by GC/MS			8/18/2008
				Volatile Organic Compounds by GC/MS			8/19/2008
0808076-008B				Mercury		8/27/2008	8/27/2008
				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/22/2008
				Total Metals by ICP		8/26/2008	8/27/2008
0808076-009A	Trench-Bot-2	8/13/2008 3:35:00 PM		Volatile Organic Compounds by GC/MS			8/18/2008
				Volatile Organic Compounds by GC/MS			8/19/2008
0808076-009B				Mercury		8/27/2008	8/27/2008
				Percent Moisture			8/14/2008
				Semivolatile Organic Compounds by GC/MS		8/15/2008	8/22/2008
				Total Metals by ICP		8/26/2008	8/27/2008

19

Analytical Results

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808068-001A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***SB-2-Bot-1***
W Order:	0808068	**Collection Date:**	08/12/08 11:15
Matrix:	SOIL	**Date Received:**	08/12/08 17:52
Inst. ID:	MS03 10	**PrepDate:**	
Sample Size:	5.1 g		
ColumnID:	Rtx-VMS	**BatchNo:**	R14526
%Moisture:	18.4		
Revision:	08/20/08 8:43	**FileID:**	1-SAMP-J6857.D
TestCode:	8260S7 OLM42		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Acetone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:13
Carbon disulfide	1.1	J	3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/14/08 14:13
Methylene chloride	3.9	J	6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:13
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:13
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380704 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808068-001A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***SB-2-Bot-1***
W Order:	0808068	**Collection Date:**	08/12/08 11:15
Matrix:	SOIL	**Date Received:**	08/12/08 17:52
Inst. ID:	MS03 10	**PrepDate:**	
Sample Size:	5.1 g		
ColumnID:	Rtx-VMS	**BatchNo:**	R14526
%Moisture:	18.4		
Revision:	08/20/08 8:43	**FileID:**	1-SAMP-J6857.D
TestCode:	8260S7 OLM42		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:13
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/14/08 14:13
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,3-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,4-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Surr: 1,2-Dichloroethane-d4	103		71-128	0.60	%REC	0.98	08/14/08 14:13
Surr: Toluene-d8	107		75-125	0.60	%REC	0.98	08/14/08 14:13
Surr: 4-Bromofluorobenzene	124		59-125	0.60	%REC	0.98	08/14/08 14:13

Qualifiers:
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380704 **Project Supervisor:** Monika Santucci

Form I TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6857.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 1 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.7	BatchNo: R14526
Revision:	08/20/08 8:43	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6858.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Acetone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:47
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/14/08 14:47
Methylene chloride	0.99	J	6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:47
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:47
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Practical Quantitation Limit (PQL)
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Print Date: 08/20/08 9:11 380705 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.7	BatchNo: R14526
Revision:	08/20/08 8:43	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6858.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:47
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Chlorobenzene	6.2		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/14/08 14:47
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,3-Dichlorobenzene	20		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,4-Dichlorobenzene	17		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dichlorobenzene	16		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Surr: 1,2-Dichloroethane-d4	96.0		71-128	0.60	%REC	0.98	08/14/08 14:47
Surr: Toluene-d8	99.8		75-125	0.60	%REC	0.98	08/14/08 14:47
Surr: 4-Bromofluorobenzene	107		59-125	0.60	%REC	0.98	08/14/08 14:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380705 Project Supervisor: Monika Santucci

Form I TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-South

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6858.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: (ml)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 2 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14526
Revision:	08/20/08 8:43	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Acetone	ND		48	24	µg/Kg-dry	0.98	08/14/08 15:20
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/14/08 15:20
Methylene chloride	0.99	J	6.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/14/08 15:20
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Trichloroethene	1.4	J	3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 15:20
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380706 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14526
Revision:	08/20/08 8:43	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 15:20
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Chlorobenzene	90		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/14/08 15:20
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,3-Dichlorobenzene	510	E	3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,4-Dichlorobenzene	390	E	3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dichlorobenzene	410	E	3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Surr: 1,2-Dichloroethane-d4	103		71-128	0.60	%REC	0.98	08/14/08 15:20
Surr: Toluene-d8	97.0		75-125	0.60	%REC	0.98	08/14/08 15:20
Surr: 4-Bromofluorobenzene	92.6		59-125	0.60	%REC	0.98	08/14/08 15:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380706 Project Supervisor: Monika Santucci

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: SB-2-East

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLS Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6859.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ml)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 4 SW8260B

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-DL-J6874.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Chloromethane	ND		28	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Vinyl chloride	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Bromomethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Chloroethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Trichlorofluoromethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,1-Dichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Acetone	ND		220	110	µg/Kg-dry	4.54	08/15/08 14:17
Carbon disulfide	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Methyl acetate	ND		14	55	µg/Kg-dry	4.54	08/15/08 14:17
Methylene chloride	4.4	J	28	2.8	µg/Kg-dry	4.54	08/15/08 14:17
trans-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Methyl tert-butyl ether	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
cis-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
2-Butanone	ND		220	110	µg/Kg-dry	4.54	08/15/08 14:17
Chloroform	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1,1-Trichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Cyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Carbon tetrachloride	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Benzene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Trichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Methylcyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dichloropropane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Bromodichloromethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
cis-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
4-Methyl-2-pentanone	ND		28	11	µg/Kg-dry	4.54	08/15/08 14:17
Toluene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
trans-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1,2-Trichloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Tetrachloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380720 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-DL-J6874.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		28	11	µg/Kg-dry	4.54	08/15/08 14:17
Dibromochloromethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dibromoethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Chlorobenzene	85		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Ethylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Xylenes (total)	ND		28	8.3	µg/Kg-dry	4.54	08/15/08 14:17
Styrene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Bromoform	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Isopropylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1,2,2-Tetrachloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,3-Dichlorobenzene	760		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,4-Dichlorobenzene	510		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dichlorobenzene	530		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dibromo-3-chloropropane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,2,4-Trichlorobenzene	ND		28	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Surr: 1,2-Dichloroethane-d4	102		71-128	2.8	%REC	4.54	08/15/08 14:17
Surr: Toluene-d8	98.7		75-125	2.8	%REC	4.54	08/15/08 14:17
Surr: 4-Bromofluorobenzene	93.4		59-125	2.8	%REC	4.54	08/15/08 14:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380720 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5.2 g	BatchNo:	R14526
ColumnID:	Rtx-VMS	%Moisture:	15.0
Revision:	08/20/08 8:43	TestCode:	8260S7 OLM42
FileID:	1-SAMP-J6860.D	Col Type:	

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Chloromethane	ND		5.6	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Vinyl chloride	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Bromomethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Chloroethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Trichlorofluoromethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,1-Dichloroethene	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Acetone	ND		45	23	µg/Kg-dry	0.96	08/14/08 15:54
Carbon disulfide	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Methyl acetate	ND		2.8	11	µg/Kg-dry	0.96	08/14/08 15:54
Methylene chloride	1.1	J	5.6	0.56	µg/Kg-dry	0.96	08/14/08 15:54
trans-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Methyl tert-butyl ether	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
cis-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
2-Butanone	ND		45	23	µg/Kg-dry	0.96	08/14/08 15:54
Chloroform	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1,1-Trichloroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Cyclohexane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Carbon tetrachloride	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Benzene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Trichloroethene	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Methylcyclohexane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dichloropropane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Bromodichloromethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
cis-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
4-Methyl-2-pentanone	ND		5.6	2.3	µg/Kg-dry	0.96	08/14/08 15:54
Toluene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
trans-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1,2-Trichloroethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Tetrachloroethene	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380707 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5.2 g	BatchNo:	R14526
ColumnID:	Rtx-VMS	%Moisture:	15.0
Revision:	08/20/08 8:43	TestCode:	8260S7 OLM42
FileID:	1-SAMP-J6860.D	Col Type:	

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.6	2.3	µg/Kg-dry	0.96	08/14/08 15:54
Dibromochloromethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dibromoethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Chlorobenzene	1.9	J	2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Ethylbenzene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Xylenes (total)	ND		5.6	1.7	µg/Kg-dry	0.96	08/14/08 15:54
Styrene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Bromoform	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Isopropylbenzene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1,2,2-Tetrachloroethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,3-Dichlorobenzene	190		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,4-Dichlorobenzene	67		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dichlorobenzene	240	E	2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dibromo-3-chloropropane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,2,4-Trichlorobenzene	31		5.6	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Surr: 1,2-Dichloroethane-d4	99.9		71-126	0.56	%REC	0.96	08/14/08 15:54
Surr: Toluene-d8	100		75-125	0.56	%REC	0.96	08/14/08 15:54
Surr: 4-Bromofluorobenzene	98.7		59-125	0.56	%REC	0.96	08/14/08 15:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380707 Project Supervisor: Monika Santucci

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-North

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6860.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 15 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.96

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 5 SW8260B

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	1 g	BatchNo:	R14527
ColumnID:	Rtx-VMS	%Moisture:	15.0
Revision:	08/20/08 8:34	TestCode:	8260S7 OLM42
FileID:	1-DL-J6875.D	Col Type:	

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Chloromethane	ND		29	2.9	µg/Kg-dry	5	08/15/08 14:51
Vinyl chloride	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Bromomethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Chloroethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Trichlorofluoromethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
1,1-Dichloroethene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Acetone	ND		240	120	µg/Kg-dry	5	08/15/08 14:51
Carbon disulfide	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Methyl acetate	ND		15	59	µg/Kg-dry	5	08/15/08 14:51
Methylene chloride	5.9	J	29	2.9	µg/Kg-dry	5	08/15/08 14:51
trans-1,2-Dichloroethene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Methyl tert-butyl ether	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1-Dichloroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
cis-1,2-Dichloroethene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
2-Butanone	ND		240	120	µg/Kg-dry	5	08/15/08 14:51
Chloroform	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1,1-Trichloroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Cyclohexane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Carbon tetrachloride	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Benzene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dichloroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Trichloroethene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Methylcyclohexane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dichloropropane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Bromodichloromethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
cis-1,3-Dichloropropene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
4-Methyl-2-pentanone	ND		29	12	µg/Kg-dry	5	08/15/08 14:51
Toluene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
trans-1,3-Dichloropropene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1,2-Trichloroethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Tetrachloroethene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380721 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	1 g		
ColumnID:	Rtx-VMS	%Moisture: 15.0	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-DL-J6875.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		29	12	µg/Kg-dry	5	08/15/08 14:51
Dibromochloromethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dibromoethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Chlorobenzene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Ethylbenzene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Xylenes (total)	ND		29	8.8	µg/Kg-dry	5	08/15/08 14:51
Styrene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Bromoform	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Isopropylbenzene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1,2,2-Tetrachloroethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,3-Dichlorobenzene	140		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,4-Dichlorobenzene	55		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dichlorobenzene	190		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dibromo-3-chloropropane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
1,2,4-Trichlorobenzene	33		29	2.9	µg/Kg-dry	5	08/15/08 14:51
Surr: 1,2-Dichloroethane-d4	102		71-128	2.9	%REC	5	08/15/08 14:51
Surr: Toluene-d8	99.4		75-125	2.9	%REC	5	08/15/08 14:51
Surr: 4-Bromofluorobenzene	105		59-125	2.9	%REC	5	08/15/08 14:51

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380721 Project Supervisor: Monika Santucci

36

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5.2 g		
ColumnID:	Rtx-VMS	%Moisture: 16.2	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6873.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Chloromethane	ND		5.7	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Vinyl chloride	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Bromomethane	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Chloroethane	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Trichlorofluoromethane	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
1,1-Dichloroethene	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Acetone	ND		46	23	µg/Kg-dry	0.96	08/15/08 13:43
Carbon disulfide	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Methyl acetate	ND		2.9	11	µg/Kg-dry	0.96	08/15/08 13:43
Methylene chloride	1.0 J		5.7	0.57	µg/Kg-dry	0.96	08/15/08 13:43
trans-1,2-Dichloroethene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Methyl tert-butyl ether	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,1-Dichloroethane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
cis-1,2-Dichloroethene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
2-Butanone	ND		46	23	µg/Kg-dry	0.96	08/15/08 13:43
Chloroform	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,1,1-Trichloroethane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Cyclohexane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Carbon tetrachloride	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Benzene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dichloroethane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Trichloroethene	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Methylcyclohexane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dichloropropane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Bromodichloromethane	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
cis-1,3-Dichloropropene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
4-Methyl-2-pentanone	ND		5.7	2.3	µg/Kg-dry	0.96	08/15/08 13:43
Toluene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
trans-1,3-Dichloropropene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,1,2-Trichloroethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Tetrachloroethene	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380719 Project Supervisor: Monika Santucci

37

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5.2 g		
ColumnID:	Rtx-VMS	%Moisture: 16.2	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6873.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.7	2.3	µg/Kg-dry	0.96	08/15/08 13:43
Dibromochloromethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dibromoethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Chlorobenzene	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Ethylbenzene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Xylenes (total)	ND		5.7	1.7	µg/Kg-dry	0.96	08/15/08 13:43
Styrene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Bromoform	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Isopropylbenzene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,1,2,2-Tetrachloroethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,3-Dichlorobenzene	4.4		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,4-Dichlorobenzene	4.1		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dichlorobenzene	4.6		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dibromo-3-chloropropane	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
1,2,4-Trichlorobenzene	ND		5.7	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Surr: 1,2-Dichloroethane-d4	99.1		71-128	0.57	%REC	0.96	08/15/08 13:43
Surr: Toluene-d8	100		75-125	0.57	%REC	0.96	08/15/08 13:43
Surr: 4-Bromofluorobenzene	114		59-125	0.57	%REC	0.96	08/15/08 13:43

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380719 Project Supervisor: Monika Santucci

38

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068C

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6873.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/15/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.96

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 7 SW8260B

39

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5.1 g		
ColumnID:	Rtx-VMS	%Moisture: 16.4	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6869.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Chloromethane	ND		5.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Vinyl chloride	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Bromomethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Chloroethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Trichlorofluoromethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,1-Dichloroethene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Acetone	ND		47	23	µg/Kg-dry	0.98	08/15/08 11:27
Carbon disulfide	0.59	J	2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Methyl acetate	ND		2.9	12	µg/Kg-dry	0.98	08/15/08 11:27
Methylene chloride	1.3	J	5.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
trans-1,2-Dichloroethene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Methyl tert-butyl ether	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
cis-1,2-Dichloroethene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
2-Butanone	ND		47	23	µg/Kg-dry	0.98	08/15/08 11:27
Chloroform	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1,1-Trichloroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Cyclohexane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Carbon tetrachloride	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Benzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Trichloroethene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Methylcyclohexane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dichloropropane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Bromodichloromethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
cis-1,3-Dichloropropene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
4-Methyl-2-pentanone	ND		5.9	2.3	µg/Kg-dry	0.98	08/15/08 11:27
Toluene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
trans-1,3-Dichloropropene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1,2-Trichloroethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Tetrachloroethene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380716 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5.1 g		
ColumnID:	Rtx-VMS	%Moisture: 16.4	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6869.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.9	2.3	µg/Kg-dry	0.98	08/15/08 11:27
Dibromochloromethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dibromoethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Chlorobenzene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Ethylbenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Xylenes (total)	ND		5.9	1.8	µg/Kg-dry	0.98	08/15/08 11:27
Styrene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Bromoform	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Isopropylbenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1,2,2-Tetrachloroethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,3-Dichlorobenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,4-Dichlorobenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dichlorobenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dibromo-3-chloropropane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,2,4-Trichlorobenzene	ND		5.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Surr: 1,2-Dichloroethane-d4	96.4		71-126	0.59	%REC	0.98	08/15/08 11:27
Surr: Toluene-d8	104		75-125	0.59	%REC	0.98	08/15/08 11:27
Surr: 4-Bromofluorobenzene	124		59-125	0.59	%REC	0.98	08/15/08 11:27

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380716 Project Supervisor: Monika Santucci

Form I TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OSG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6869.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/15/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 8 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	WATER Q	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5 mL		
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R14527
Revision:	08/21/08 15:24	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6876.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Chloromethane	ND		5.0	0.50	µg/L	1	08/15/08 15:25
Vinyl chloride	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Bromomethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Chloroethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Trichlorofluoromethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
1,1-Dichloroethene	ND		2.5	1.0	µg/L	1	08/15/08 15:25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Acetone	ND		40	20	µg/L	1	08/15/08 15:25
Carbon disulfide	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Methyl acetate	ND		2.5	10	µg/L	1	08/15/08 15:25
Methylene chloride	1.2	J	5.0	0.50	µg/L	1	08/15/08 15:25
trans-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Methyl tert-butyl ether	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1-Dichloroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
cis-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
2-Butanone	ND		40	20	µg/L	1	08/15/08 15:25
Chloroform	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1,1-Trichloroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Cyclohexane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Carbon tetrachloride	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Benzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dichloroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Trichloroethene	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Methylcyclohexane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
1,2-Dichloropropane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Bromodichloromethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
cis-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
4-Methyl-2-pentanone	ND		5.0	2.0	µg/L	1	08/15/08 15:25
Toluene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
trans-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1,2-Trichloroethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Tetrachloroethene	ND		2.5	1.0	µg/L	1	08/15/08 15:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/21/08 15:25 380722 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	WATER Q	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5 ml.	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R14527
Revision:	08/21/08 15:24	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6876.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.0	2.0	µg/L	1	08/15/08 15:25
Dibromochloromethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dibromoethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Chlorobenzene	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Ethylbenzene	ND		2.5	0.60	µg/L	1	08/15/08 15:25
Xylenes (total)	ND		5.0	1.5	µg/L	1	08/15/08 15:25
Styrene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Bromoform	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Isopropylbenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,3-Dichlorobenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,4-Dichlorobenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dichlorobenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dibromo-3-chloropropane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
1,2,4-Trichlorobenzene	ND		5.0	0.50	µg/L	1	08/15/08 15:25
Surr: 1,2-Dichloroethane-d4	100		71-128	0.50	%REC	1	08/15/08 15:25
Surr: Toluene-d8	98.9		75-125	0.50	%REC	1	08/15/08 15:25
Surr: 4-Bromofluorobenzene	115		59-125	0.50	%REC	1	08/15/08 15:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/21/08 15:25 380722 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Trip Blank

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: J6876.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. Date Analyzed: 8/15/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 9 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.9	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6922.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Acetone	ND		48	24	µg/Kg-dry	0.98	08/18/08 12:02
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/18/08 12:02
Methylene chloride	1.5	J	6.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/18/08 12:02
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 12:02
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380766 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.9	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6922.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 12:02
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/18/08 12:02
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,3-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,4-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Surr: 1,2-Dichloroethane-d4	113		71-128	0.60	%REC	0.98	08/18/08 12:02
Surr: Toluene-d8	115		75-125	0.60	%REC	0.98	08/18/08 12:02
Surr: 4-Bromofluorobenzene	129	S	59-125	0.60	%REC	0.98	08/18/08 12:02

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380766 Project Supervisor: Monika Santucci

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0808060

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6922.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ml)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 1 SW8260B

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14531
Revision:	08/20/08 9:10	FileID:	1-DL-J6962.D
Col Type:			

Sample Size: 1 g; %Moisture: 17.9; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Chloromethane	ND		30	3.0	µg/Kg-dry	5	08/19/08 10:38
Vinyl chloride	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Bromomethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Chloroethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Trichlorofluoromethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
1,1-Dichloroethene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Acetone	ND		240	120	µg/Kg-dry	5	08/19/08 10:38
Carbon disulfide	3.6 J		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Methyl acetate	ND		15	61	µg/Kg-dry	5	08/19/08 10:38
Methylene chloride	4.9 J		30	3.0	µg/Kg-dry	5	08/19/08 10:38
trans-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Methyl tert-butyl ether	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1-Dichloroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
cis-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
2-Butanone	ND		240	120	µg/Kg-dry	5	08/19/08 10:38
Chloroform	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1,1-Trichloroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Cyclohexane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Carbon tetrachloride	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Benzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dichloroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Trichloroethene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Methylcyclohexane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
1,2-Dichloropropane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Bromodichloromethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
cis-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
4-Methyl-2-pentanone	ND		30	12	µg/Kg-dry	5	08/19/08 10:38
Toluene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
trans-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1,2-Trichloroethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Tetrachloroethene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380805 Project Supervisor: Monika Santucci

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14531
Revision:	08/20/08 9:10	FileID:	1-DL-J6962.D
Col Type:			

Sample Size: 1 g; %Moisture: 17.9; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		30	12	µg/Kg-dry	5	08/19/08 10:38
Dibromochloromethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dibromoethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Chlorobenzene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Ethylbenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Xylenes (total)	ND		30	9.1	µg/Kg-dry	5	08/19/08 10:38
Styrene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Bromoform	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Isopropylbenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1,2,2-Tetrachloroethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,3-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,4-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dibromo-3-chloropropane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
1,2,4-Trichlorobenzene	ND		30	3.0	µg/Kg-dry	5	08/19/08 10:38
Surr: 1,2-Dichloroethane-d4	109		71-128	3.0	%REC	5	08/19/08 10:38
Surr: Toluene-d8	106		75-125	3.0	%REC	5	08/19/08 10:38
Surr: 4-Bromofluorobenzene	129 S		59-125	3.0	%REC	5	08/19/08 10:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380805 Project Supervisor: Monika Santucci

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6923.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 14.7; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Chloromethane	ND		5.7	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Vinyl chloride	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Bromomethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Chloroethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Trichlorofluoromethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,1-Dichloroethene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Acetone	ND		46	23	µg/Kg-dry	0.98	08/18/08 12:36
Carbon disulfide	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Methyl acetate	ND		2.9	11	µg/Kg-dry	0.98	08/18/08 12:36
Methylene chloride	0.92 J		5.7	0.57	µg/Kg-dry	0.98	08/18/08 12:36
trans-1,2-Dichloroethene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Methyl tert-butyl ether	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1-Dichloroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
cis-1,2-Dichloroethene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
2-Butanone	ND		46	23	µg/Kg-dry	0.98	08/18/08 12:36
Chloroform	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1,1-Trichloroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Cyclohexane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Carbon tetrachloride	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Benzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dichloroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Trichloroethene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Methylcyclohexane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dichloropropane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Bromodichloromethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
cis-1,3-Dichloropropene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
4-Methyl-2-pentanone	ND		5.7	2.3	µg/Kg-dry	0.98	08/18/08 12:36
Toluene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
trans-1,3-Dichloropropene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1,2-Trichloroethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Tetrachloroethene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380767 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-002A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***UST-North***
W Order:	0808076	**Collection Date:**	08/13/08 10:50
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	MS03 10	**Sample Size:** 5.1 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moistore:** 14.7	**BatchNo:** R14529
Revision:	08/20/08 8:57	**TestCode:** 8260S7 OLM42	**FileID:** 1-SAMP-J6923.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.7	2.3	µg/Kg-dry	0.98	08/18/08 12:36
Dibromochloromethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dibromoethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Chlorobenzene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Ethylbenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Xylenes (total)	ND		5.7	1.7	µg/Kg-dry	0.98	08/18/08 12:36
Styrene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Bromoform	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Isopropylbenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1,2,2-Tetrachloroethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,3-Dichlorobenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,4-Dichlorobenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dichlorobenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dibromo-3-chloropropane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,2,4-Trichlorobenzene	ND		5.7	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Surr: 1,2-Dichloroethane-d4	104		71-128	0.57	%REC	0.98	08/18/08 12:36
Surr: Toluene-d8	99.3		75-125	0.57	%REC	0.98	08/18/08 12:36
Surr: 4-Bromofluorobenzene	112		59-125	0.57	%REC	0.98	08/18/08 12:36

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380767 **Project Supervisor:** Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

UST-North

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6923.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 15 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 2 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-003A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***UST-Bot-2***
W Order:	0808076	**Collection Date:**	08/13/08 10:55
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	MS03 10	**Sample Size:** 5.3 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:** 16.7	**BatchNo:** R14529
Revision:	08/20/08 8:57	**TestCode:** 8260S7 OLM42	**FileID:** 1-SAMP-J6924.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Chloromethane	ND		5.6	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Vinyl chloride	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Bromomethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Chloroethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Trichlorofluoromethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,1-Dichloroethene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Acetone	ND		45	23	µg/Kg-dry	0.94	08/18/08 13:10
Carbon disulfide	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Methyl acetate	ND		2.8	11	µg/Kg-dry	0.94	08/18/08 13:10
Methylene chloride	0.85	J	5.6	0.56	µg/Kg-dry	0.94	08/18/08 13:10
trans-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Methyl tert-butyl ether	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
cis-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
2-Butanone	ND		45	23	µg/Kg-dry	0.94	08/18/08 13:10
Chloroform	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1,1-Trichloroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Cyclohexane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Carbon tetrachloride	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Benzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Trichloroethene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Methylcyclohexane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dichloropropane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Bromodichloromethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
cis-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
4-Methyl-2-pentanone	ND		5.6	2.3	µg/Kg-dry	0.94	08/18/08 13:10
Toluene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
trans-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1,2-Trichloroethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Tetrachloroethene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380768 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-003A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***UST-Bot-2***
W Order:	0808076	**Collection Date:**	08/13/08 10:55
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	MS03 10	**Sample Size:** 5.3 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:** 16.7	**BatchNo:** R14529
Revision:	08/20/08 8:57	**TestCode:** 8260S7 OLM42	**FileID:** 1-SAMP-J6924.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.6	2.3	µg/Kg-dry	0.94	08/18/08 13:10
Dibromochloromethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dibromoethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Chlorobenzene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Ethylbenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Xylenes (total)	ND		5.6	1.7	µg/Kg-dry	0.94	08/18/08 13:10
Styrene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Bromoform	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Isopropylbenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1,2,2-Tetrachloroethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,3-Dichlorobenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,4-Dichlorobenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dichlorobenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dibromo-3-chloropropane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,2,4-Trichlorobenzene	ND		5.6	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Surr: 1,2-Dichloroethane-d4	109		71-128	0.56	%REC	0.94	08/18/08 13:10
Surr: Toluene-d8	114		75-125	0.56	%REC	0.94	08/18/08 13:10
Surr: 4-Bromofluorobenzene	132	S	59-125	0.56	%REC	0.94	08/18/08 13:10

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380768 **Project Supervisor:** Monika Santucci

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6924.D

level: LOW Date Received: 8/13/2008

% Moisture: not dec. 17 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.94

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 3 SW8260B

LSL Life Science Laboratories, Inc. **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. **Lab ID:** 0808076-003ADL
Project: City of Geneva- Market Basket Site **Client Sample ID:** *UST-Bot-2*
W Order: 0808076 **Collection Date:** 08/13/08 10:55
Matrix: SOIL **Date Received:** 08/13/08 17:10
Inst. ID: MS03 10 **Sample Size:** 1.1 g **PrepDate:**
ColumnID: Rtx-VMS **%Moisture:** 16.7 **BatchNo:** R14531
Revision: 08/20/08 9:10 **TestCode:** 8260S7 OLM42 **FileID:** 1-DL-J6963.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Chloromethane	ND		27	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Vinyl chloride	ND		27	5.6	µg/Kg-dry	4.54	08/19/08 11:12
Bromomethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Chloroethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Trichlorofluoromethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,1-Dichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Acetone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:12
Carbon disulfide	2.9	J	14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Methyl acetate	ND		14	55	µg/Kg-dry	4.54	08/19/08 11:12
Methylene chloride	3.9	J	27	2.7	µg/Kg-dry	4.54	08/19/08 11:12
trans-1,2-Dichloroethene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Methyl tert-butyl ether	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
cis-1,2-Dichloroethene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
2-Butanone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:12
Chloroform	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1,1-Trichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Cyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Carbon tetrachloride	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Benzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Trichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Methylcyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dichloropropane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Bromodichloromethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
cis-1,3-Dichloropropene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
4-Methyl-2-pentanone	ND		27	11	µg/Kg-dry	4.54	08/19/08 11:12
Toluene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
trans-1,3-Dichloropropene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1,2-Trichloroethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Tetrachloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380806 **Project Supervisor:** Monika Santucci

LSL Life Science Laboratories, Inc. **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. **Lab ID:** 0808076-003ADL
Project: City of Geneva- Market Basket Site **Client Sample ID:** *UST-Bot-2*
W Order: 0808076 **Collection Date:** 08/13/08 10:55
Matrix: SOIL **Date Received:** 08/13/08 17:10
Inst. ID: MS03 10 **Sample Size:** 1.1 g **PrepDate:**
ColumnID: Rtx-VMS **%Moisture:** 16.7 **BatchNo:** R14531
Revision: 08/20/08 9:10 **TestCode:** 8260S7 OLM42 **FileID:** 1-DL-J6963.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		27	11	µg/Kg-dry	4.54	08/19/08 11:12
Dibromochloromethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dibromoethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Chlorobenzene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Ethylbenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Xylenes (total)	ND		27	8.2	µg/Kg-dry	4.54	08/19/08 11:12
Styrene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Bromoform	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Isopropylbenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1,2,2-Tetrachloroethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,3-Dichlorobenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,4-Dichlorobenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dichlorobenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dibromo-3-chloropropane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,2,4-Trichlorobenzene	ND		27	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Surr: 1,2-Dichloroethane-d4	112		71-126	2.7	%REC	4.54	08/19/08 11:12
Surr: Toluene-d8	104		75-125	2.7	%REC	4.54	08/19/08 11:12
Surr: 4-Bromofluorobenzene	122		59-125	2.7	%REC	4.54	08/19/08 11:12

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380806 **Project Supervisor:** Monika Santucci

LSL Life Science Laboratories, Inc. **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. **Lab ID:** 0808076-004A
Project: City of Geneva- Market Basket Site **Client Sample ID:** *UST-East*
W Order: 0808076 **Collection Date:** 08/13/08 11:05
Matrix: SOIL **Date Received:** 08/13/08 17:10
Inst. ID: MS03 10 **Sample Size:** 5 g **PrepDate:**
ColumnID: Rtx-VMS **%Moisture:** 15.4 **BatchNo:** R14529
Revision: 08/20/08 8:57 **TestCode:** 8260S7 OLM42 **FileID:** 1-SAMP-J6925.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Chloromethane	ND		5.9	0.59	µg/Kg-dry	1	08/18/08 13:44
Vinyl chloride	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Bromomethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Chloroethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Trichlorofluoromethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Acetone	ND		47	24	µg/Kg-dry	1	08/18/08 13:44
Carbon disulfide	1.3	J	3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Methyl acetate	ND		3.0	12	µg/Kg-dry	1	08/18/08 13:44
Methylene chloride	1.0	J	5.9	0.59	µg/Kg-dry	1	08/18/08 13:44
trans-1,2-Dichloroethene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Methyl tert-butyl ether	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
cis-1,2-Dichloroethene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
2-Butanone	ND		47	24	µg/Kg-dry	1	08/18/08 13:44
Chloroform	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Benzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
cis-1,3-Dichloropropene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
4-Methyl-2-pentanone	ND		5.9	2.4	µg/Kg-dry	1	08/18/08 13:44
Toluene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
trans-1,3-Dichloropropene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1,2-Trichloroethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380769 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 15.4	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: I-SAMP-J6925.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.9	2.4	µg/Kg-dry	1	08/18/08 13:44
Dibromochloromethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dibromoethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Ethylbenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Xylenes (total)	ND		5.9	1.8	µg/Kg-dry	1	08/18/08 13:44
Styrene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Bromoform	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Isopropylbenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1,2,2-Tetrachloroethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,3-Dichlorobenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,4-Dichlorobenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dichlorobenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dibromo-3-chloropropane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
1,2,4-Trichlorobenzene	ND		5.9	0.59	µg/Kg-dry	1	08/18/08 13:44
Surr: 1,2-Dichloroethane-d4	107		71-126	0.59	%REC	1	08/18/08 13:44
Surr: Toluene-d8	100		75-125	0.59	%REC	1	08/18/08 13:44
Surr: 4-Bromofluorobenzene	108		59-125	0.59	%REC	1	08/18/08 13:44

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380769 Project Supervisor: Monika Santucci

60

Form I TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

UST-East

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6925.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 15 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 4 SW8260B

61

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 24.4	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: I-SAMP-J6926.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Chloromethane	ND		6.6	0.66	µg/Kg-dry	1	08/18/08 14:18
Vinyl chloride	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Bromomethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Chloroethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Trichlorofluoromethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
1,1-Dichloroethene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Acetone	ND		53	26	µg/Kg-dry	1	08/18/08 14:18
Carbon disulfide	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Methyl acetate	ND		3.3	13	µg/Kg-dry	1	08/18/08 14:18
Methylene chloride	1.2	J	6.6	0.66	µg/Kg-dry	1	08/18/08 14:18
trans-1,2-Dichloroethene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Methyl tert-butyl ether	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
cis-1,2-Dichloroethene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
2-Butanone	ND		53	26	µg/Kg-dry	1	08/18/08 14:18
Chloroform	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1,1-Trichloroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Cyclohexane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Carbon tetrachloride	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Benzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Trichloroethene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Methylcyclohexane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
1,2-Dichloropropane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Bromodichloromethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
cis-1,3-Dichloropropene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
4-Methyl-2-pentanone	ND		6.6	2.6	µg/Kg-dry	1	08/18/08 14:18
Toluene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
trans-1,3-Dichloropropene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1,2-Trichloroethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Tetrachloroethene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380770 Project Supervisor: Monika Santucci

62

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 24.4	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: I-SAMP-J6926.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.6	2.6	µg/Kg-dry	1	08/18/08 14:18
Dibromochloromethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dibromoethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Chlorobenzene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Ethylbenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Xylenes (total)	ND		6.6	2.0	µg/Kg-dry	1	08/18/08 14:18
Styrene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Bromoform	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Isopropylbenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1,2,2-Tetrachloroethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,3-Dichlorobenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,4-Dichlorobenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dichlorobenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dibromo-3-chloropropane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
1,2,4-Trichlorobenzene	ND		6.6	0.66	µg/Kg-dry	1	08/18/08 14:18
Surr: 1,2-Dichloroethane-d4	104		71-126	0.66	%REC	1	08/18/08 14:18
Surr: Toluene-d8	100		75-125	0.66	%REC	1	08/18/08 14:18
Surr: 4-Bromofluorobenzene	107		59-125	0.66	%REC	1	08/18/08 14:18

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380770 Project Supervisor: Monika Santucci

63

Form I TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OSG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6926.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 5 SW8260B

LSL Life Science Laboratories, Inc. **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-006A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***UST-South***
W Order:	0808076	**Collection Date:**	08/13/08 12:00
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	MS03 10 **Sample Size:** 5.1 g	**PrepDate:**	
ColumnID:	Rtx-VMS **%Moisture:** 27.8	**BatchNo:**	R14529
Revision:	08/20/08 8:57 **TestCode:** 8260S7 OLM42	**FileID:**	1-SAMP-J6927.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Chloromethane	ND		6.8	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Vinyl chloride	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Bromomethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Chloroethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Trichlorofluoromethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,1-Dichloroethene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Acetone	ND		54	27	µg/Kg-dry	0.98	08/18/08 14:52
Carbon disulfide	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Methyl acetate	ND		3.4	14	µg/Kg-dry	0.98	08/18/08 14:52
Methylene chloride	1.7	J	6.8	0.68	µg/Kg-dry	0.98	08/18/08 14:52
trans-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Methyl tert-butyl ether	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
cis-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
2-Butanone	ND		54	27	µg/Kg-dry	0.98	08/18/08 14:52
Chloroform	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1,1-Trichloroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Cyclohexane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Carbon tetrachloride	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Benzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Trichloroethene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Methylcyclohexane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dichloropropane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Bromodichloromethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
cis-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
4-Methyl-2-pentanone	ND		6.8	2.7	µg/Kg-dry	0.98	08/18/08 14:52
Toluene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
trans-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1,2-Trichloroethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Tetrachloroethene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380771 **Project Supervisor:** Monika Santucci

LSL Life Science Laboratories, Inc. **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-006A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***UST-South***
W Order:	0808076	**Collection Date:**	08/13/08 12:00
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	MS03 10 **Sample Size:** 5.1 g	**PrepDate:**	
ColumnID:	Rtx-VMS **%Moisture:** 27.8	**BatchNo:**	R14529
Revision:	08/20/08 8:57 **TestCode:** 8260S7 OLM42	**FileID:**	1-SAMP-J6927.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		6.8	2.7	µg/Kg-dry	0.98	08/18/08 14:52
Dibromochloromethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dibromoethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Chlorobenzene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Ethylbenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Xylenes (total)	ND		6.8	2.0	µg/Kg-dry	0.98	08/18/08 14:52
Styrene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Bromoform	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Isopropylbenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1,2,2-Tetrachloroethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,3-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,4-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dibromo-3-chloropropane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,2,4-Trichlorobenzene	ND		6.8	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Surr: 1,2-Dichloroethane-d4	111		71-128	0.68	%REC	0.98	08/18/08 14:52
Surr: Toluene-d8	101		75-125	0.68	%REC	0.98	08/18/08 14:52
Surr: 4-Bromofluorobenzene	107		59-125	0.68	%REC	0.98	08/18/08 14:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380771 **Project Supervisor:** Monika Santucci

Form I TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-South

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OSG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6927.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 28 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 6 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 18.3	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6928.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Acetone	ND		48	24	µg/Kg-dry	0.98	08/18/08 15:26
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/18/08 15:26
Methylene chloride	1.2	J	6.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/18/08 15:26
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 15:26
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380772 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 18.3	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6928.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 15:26
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/18/08 15:26
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,3-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,4-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Surr: 1,2-Dichloroethane-d4	113		71-128	0.60	%REC	0.98	08/18/08 15:26
Surr: Toluene-d8	114		75-125	0.60	%REC	0.98	08/18/08 15:26
Surr: 4-Bromofluorobenzene	130.5		59-125	0.60	%REC	0.98	08/18/08 15:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380772 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Field Dup

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-007A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6928.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ml)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 18.3	BatchNo: R14531
Revision:	08/20/08 9:10	TestCode: 8260S7 OLM42	FileID: 1-DL-J6964.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Chloromethane	ND		28	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Vinyl chloride	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Bromomethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Chloroethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Trichlorofluoromethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,1-Dichloroethene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Acetone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:46
Carbon disulfide	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Methyl acetate	ND		14	56	µg/Kg-dry	4.54	08/19/08 11:46
Methylene chloride	4.3	J	28	2.8	µg/Kg-dry	4.54	08/19/08 11:46
trans-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Methyl tert-butyl ether	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1-Dichloroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
cis-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
2-Butanone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:46
Chloroform	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1,1-Trichloroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Cyclohexane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Carbon tetrachloride	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Benzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dichloroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Trichloroethene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Methylcyclohexane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dichloropropane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Bromodichloromethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
cis-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
4-Methyl-2-pentanone	ND		28	11	µg/Kg-dry	4.54	08/19/08 11:46
Toluene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
trans-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1,2-Trichloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Tetrachloroethene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380807 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14531
Revision:	08/20/08 9:10	FileID:	1-DL-J6964.D
Col Type:			

Sample Size: 1.1 g; %Moisture: 18.3; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		28	11	µg/Kg-dry	4.54	08/19/08 11:46
Dibromochloromethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dibromoethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Chlorobenzene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Ethylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Xylenes (total)	ND		28	8.3	µg/Kg-dry	4.54	08/19/08 11:46
Styrene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Bromoform	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Isopropylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1,2,2-Tetrachloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,3-Dichlorobenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,4-Dichlorobenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dichlorobenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dibromo-3-chloropropane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,2,4-Trichlorobenzene	ND		28	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Surr: 1,2-Dichloroethane-d4	110		71-128	2.8	%REC	4.54	08/19/08 11:46
Surr: Toluene-d8	105		75-125	2.8	%REC	4.54	08/19/08 11:46
Surr: 4-Bromofluorobenzene	125		59-125	2.8	%REC	4.54	08/19/08 11:46

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380807 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6929.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 27.2; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Chloromethane	ND		6.7	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Vinyl chloride	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Bromomethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Chloroethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Trichlorofluoromethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,1-Dichloroethene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Acetone	50 J		54	27	µg/Kg-dry	0.98	08/18/08 16:00
Carbon disulfide	1.5 J		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Methyl acetate	ND		3.4	13	µg/Kg-dry	0.98	08/18/08 16:00
Methylene chloride	1.0 J		6.7	0.67	µg/Kg-dry	0.98	08/18/08 16:00
trans-1,2-Dichloroethene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Methyl tert-butyl ether	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1-Dichloroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
cis-1,2-Dichloroethene	1.6 J		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
2-Butanone	ND		54	27	µg/Kg-dry	0.98	08/18/08 16:00
Chloroform	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1,1-Trichloroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Cyclohexane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Carbon tetrachloride	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Benzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dichloroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Trichloroethene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Methylcyclohexane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dichloropropane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Bromodichloromethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
cis-1,3-Dichloropropene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
4-Methyl-2-pentanone	ND		6.7	2.7	µg/Kg-dry	0.98	08/18/08 16:00
Toluene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
trans-1,3-Dichloropropene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1,2-Trichloroethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Tetrachloroethene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380773 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6929.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 27.2; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.7	2.7	µg/Kg-dry	0.98	08/18/08 16:00
Dibromochloromethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dibromoethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Chlorobenzene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Ethylbenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Xylenes (total)	ND		6.7	2.0	µg/Kg-dry	0.98	08/18/08 16:00
Styrene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Bromoform	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Isopropylbenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1,2,2-Tetrachloroethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,3-Dichlorobenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,4-Dichlorobenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dichlorobenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dibromo-3-chloropropane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,2,4-Trichlorobenzene	ND		6.7	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Surr: 1,2-Dichloroethane-d4	108		71-128	0.67	%REC	0.98	08/18/08 16:00
Surr: Toluene-d8	102		75-125	0.67	%REC	0.98	08/18/08 16:00
Surr: 4-Bromofluorobenzene	115		59-125	0.67	%REC	0.98	08/18/08 16:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380773 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Trench-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-008A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6929.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 27 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ml)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 8 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 27.2	BatchNo: R14531
Revision:	08/20/08 9:10	TestCode: 8260S7 OLM42	FileID: 1-DL-J6965.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Chloromethane	ND		31	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Vinyl chloride	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Bromomethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Chloroethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Trichlorofluoromethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,1-Dichloroethene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Acetone	ND		250	120	µg/Kg-dry	4.54	08/19/08 12:20
Carbon disulfide	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Methyl acetate	ND		16	62	µg/Kg-dry	4.54	08/19/08 12:20
Methylene chloride	6.7	J	31	3.1	µg/Kg-dry	4.54	08/19/08 12:20
trans-1,2-Dichloroethene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Methyl tert-butyl ether	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1-Dichloroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
cis-1,2-Dichloroethene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
2-Butanone	ND		250	120	µg/Kg-dry	4.54	08/19/08 12:20
Chloroform	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1,1-Trichloroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Cyclohexane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Carbon tetrachloride	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Benzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dichloroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Trichloroethene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Methylcyclohexane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dichloropropane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Bromodichloromethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
cis-1,3-Dichloropropene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
4-Methyl-2-pentanone	ND		31	12	µg/Kg-dry	4.54	08/19/08 12:20
Toluene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
trans-1,3-Dichloropropene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1,2-Trichloroethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Tetrachloroethene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380808 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 27.2	BatchNo: R14531
Revision:	08/20/08 9:10	TestCode: 8260S7 OLM42	FileID: 1-DL-J6965.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		31	12	µg/Kg-dry	4.54	08/19/08 12:20
Dibromochloromethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dibromoethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Chlorobenzene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Ethylbenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Xylenes (total)	ND		31	9.4	µg/Kg-dry	4.54	08/19/08 12:20
Styrene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Bromoform	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Isopropylbenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1,2,2-Tetrachloroethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,3-Dichlorobenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,4-Dichlorobenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dichlorobenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dibromo-3-chloropropane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,2,4-Trichlorobenzene	ND		31	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Surr: 1,2-Dichloroethane-d4	109		71-128	3.1	%REC	4.54	08/19/08 12:20
Surr: Toluene-d8	101		75-125	3.1	%REC	4.54	08/19/08 12:20
Surr: 4-Bromofluorobenzene	106		59-125	3.1	%REC	4.54	08/19/08 12:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380808 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.2 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 24.4	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6930.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Chloromethane	ND		6.3	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Vinyl chloride	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Bromomethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Chloroethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Trichlorofluoromethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,1-Dichloroethene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Acetone	58		51	25	µg/Kg-dry	0.96	08/18/08 16:34
Carbon disulfide	1.7	J	3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Methyl acetate	ND		3.2	13	µg/Kg-dry	0.96	08/18/08 16:34
Methylene chloride	1.1	J	6.3	0.63	µg/Kg-dry	0.96	08/18/08 16:34
trans-1,2-Dichloroethene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Methyl tert-butyl ether	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
cis-1,2-Dichloroethene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
2-Butanone	ND		51	25	µg/Kg-dry	0.96	08/18/08 16:34
Chloroform	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1,1-Trichloroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Cyclohexane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Carbon tetrachloride	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Benzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Trichloroethene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Methylcyclohexane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dichloropropane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Bromodichloromethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
cis-1,3-Dichloropropene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
4-Methyl-2-pentanone	ND		6.3	2.5	µg/Kg-dry	0.96	08/18/08 16:34
Toluene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
trans-1,3-Dichloropropene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1,2-Trichloroethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Tetrachloroethene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380774 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.2 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 24.4	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6930.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.3	2.5	µg/Kg-dry	0.96	08/18/08 16:34
Dibromochloromethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dibromoethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Chlorobenzene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Ethylbenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Xylenes (total)	ND		6.3	1.9	µg/Kg-dry	0.96	08/18/08 16:34
Styrene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Bromoform	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Isopropylbenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1,2,2-Tetrachloroethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,3-Dichlorobenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,4-Dichlorobenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dichlorobenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dibromo-3-chloropropane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,2,4-Trichlorobenzene	ND		6.3	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Surr: 1,2-Dichloroethane-d4	109		71-128	0.63	%REC	0.96	08/18/08 16:34
Surr: Toluene-d8	102		75-125	0.63	%REC	0.96	08/18/08 16:34
Surr: 4-Bromofluorobenzene	119		59-125	0.63	%REC	0.96	08/18/08 16:34

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380774 Project Supervisor: Monika Santucci

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Trench-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-009A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6930.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.96

Extract Volume: (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 9 SW8260B

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 24.4	BatchNo: R14531
Revision:	08/20/08 9:10	TestCode: 8260S7 OLM42	FileID: 1-DL-J6966.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Chloromethane	ND		30	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Vinyl chloride	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Bromomethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Chloroethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Trichlorofluoromethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1-Dichloroethene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Acetone	ND		240	120	µg/Kg-dry	4.54	08/19/08 12:54
Carbon disulfide	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Methyl acetate	ND		15	60	µg/Kg-dry	4.54	08/19/08 12:54
Methylene chloride	5.3	J	30	3.0	µg/Kg-dry	4.54	08/19/08 12:54
trans-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Methyl tert-butyl ether	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1-Dichloroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
cis-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
2-Butanone	ND		240	120	µg/Kg-dry	4.54	08/19/08 12:54
Chloroform	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,1-Trichloroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Cyclohexane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Carbon tetrachloride	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Benzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dichloroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Trichloroethene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Methylcyclohexane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dichloropropane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Bromodichloromethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
cis-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
4-Methyl-2-pentanone	ND		30	12	µg/Kg-dry	4.54	08/19/08 12:54
Toluene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
trans-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,2-Trichloroethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Tetrachloroethene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380809 Project Supervisor: Monika Santucci

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 24.4	BatchNo: R14531
Revision:	08/20/08 9:10	TestCode: 8260S7 OLM42	FileID: 1-DL-J6966.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		30	12	µg/Kg-dry	4.54	08/19/08 12:54
Dibromochloromethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dibromoethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Chlorobenzene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Ethylbenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Xylenes (total)	ND		30	9.0	µg/Kg-dry	4.54	08/19/08 12:54
Styrene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Bromoform	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Isopropylbenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,2,2-Tetrachloroethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,3-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,4-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dibromo-3-chloropropane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2,4-Trichlorobenzene	ND		30	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Surr: 1,2-Dichloroethane-d4	108		71-128	3.0	%REC	4.54	08/19/08 12:54
Surr: Toluene-d8	100		75-125	3.0	%REC	4.54	08/19/08 12:54
Surr: 4-Bromofluorobenzene	109		59-125	3.0	%REC	4.54	08/19/08 12:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380809 Project Supervisor: Monika Santucci

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-1*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 18.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMI*-K4740.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.3	µg/Kg-dry	1	08/21/08 18:23
2,4,5-Trichlorophenol	ND		2000	26	µg/Kg-dry	1	08/21/08 18:23
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/21/08 18:23
2,4-Dichlorophenol	ND		400	4.7	µg/Kg-dry	1	08/21/08 18:23
2,4-Dimethylphenol	ND		400	82	µg/Kg-dry	1	08/21/08 18:23
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 18:23
2,4-Dinitrotoluene	ND		400	6.9	µg/Kg-dry	1	08/21/08 18:23
2,6-Dinitrotoluene	ND		400	6.9	µg/Kg-dry	1	08/21/08 18:23
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 18:23
2-Chlorophenol	ND		400	6.3	µg/Kg-dry	1	08/21/08 18:23
2-Methylnaphthalene	ND		400	2.0	µg/Kg-dry	1	08/21/08 18:23
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 18:23
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 18:23
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 18:23
3,3'-Dichlorobenzidine	ND		810	49	µg/Kg-dry	1	08/21/08 18:23
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 18:23
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 18:23
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 18:23
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 18:23
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/21/08 18:23
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 18:23
4-Nitrophenol	ND		2000	82	µg/Kg-dry	1	08/21/08 18:23
Acenaphthene	ND		400	4.1	µg/Kg-dry	1	08/21/08 18:23
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 18:23
Acetophenone	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
Anthracene	ND		400	2.9	µg/Kg-dry	1	08/21/08 18:23
Atrazine	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/21/08 18:23
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 18:23
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 18:23
Benzo[g,h,i]perylene	ND		400	16	µg/Kg-dry	1	08/21/08 18:23

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381959 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-1*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 18.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4740.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 18:23
bis(2-Chloroethoxy)methane	ND		400	3.8	µg/Kg-dry	1	08/21/08 18:23
bis(2-chloroethyl)ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 18:23
bis(2-chloroisopropyl)ether	ND		400	7.0	µg/Kg-dry	1	08/21/08 18:23
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 18:23
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 18:23
Caprolactam	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 18:23
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 18:23
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 18:23
Dibenz(a,h)anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 18:23
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 18:23
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 18:23
Dimethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/21/08 18:23
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
Fluorene	ND		400	4.2	µg/Kg-dry	1	08/21/08 18:23
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/21/08 18:23
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/21/08 18:23
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 18:23
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
Indeno(1,2,3-cd)pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 18:23
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 18:23
N-Nitroso-di-n-propylamine	ND		400	4.7	µg/Kg-dry	1	08/21/08 18:23
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 18:23
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 18:23
Nitrobenzene	ND		400	4.4	µg/Kg-dry	1	08/21/08 18:23
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 18:23
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 18:23
Phenol	ND		400	3.8	µg/Kg-dry	1	08/21/08 18:23
Pyrene	ND		400	2.8	µg/Kg-dry	1	08/21/08 18:23
Surr: 2,4,6-Tribromophenol	94.2		20-143	0	%REC	1	08/21/08 18:23
Surr: 2-Fluorobiphenyl	80.7		46-130	0	%REC	1	08/21/08 18:23
Surr: 2-Fluorophenol	78.8		22-130	0	%REC	1	08/21/08 18:23

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381959 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-1*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 18.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4740.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	82.3		39-130	0	%REC	1	08/21/08 18:23
Surr: Phenol-d5	83.0		33-130	0	%REC	1	08/21/08 18:23
Surr: Terphenyl-d14	104		36-146	0	%REC	1	08/21/08 18:23

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381959 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-001B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4740.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.67	960	BJ
2.	aldol	7.19	30000	BJA

FORM I TIC 1 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4741.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 19:01
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 19:01
2,4,6-Trichlorophenol	ND		400	5.9	µg/Kg-dry	1	08/21/08 19:01
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 19:01
2,4-Dimethylphenol	ND		400	81	µg/Kg-dry	1	08/21/08 19:01
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 19:01
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/21/08 19:01
2,6-Dinitrotoluene	ND		400	6.8	µg/Kg-dry	1	08/21/08 19:01
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 19:01
2-Chlorophenol	ND		400	5.2	µg/Kg-dry	1	08/21/08 19:01
2-Methylnaphthalene	ND		400	1.9	µg/Kg-dry	1	08/21/08 19:01
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 19:01
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 19:01
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
3,3'-Dichlorobenzidine	ND		800	49	µg/Kg-dry	1	08/21/08 19:01
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 19:01
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 19:01
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 19:01
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 19:01
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/21/08 19:01
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 19:01
4-Nitrophenol	ND		2000	61	µg/Kg-dry	1	08/21/08 19:01
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 19:01
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 19:01
Acetophenone	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Anthracene	ND		400	2.8	µg/Kg-dry	1	08/21/08 19:01
Atrazine	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/21/08 19:01
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 19:01
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 19:01
Benzo[g,h,i]perylene	ND		400	15	µg/Kg-dry	1	08/21/08 19:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381960 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4741.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 19:01
bis(2-Chloroethoxy)methane	ND		400	3.7	µg/Kg-dry	1	08/21/08 19:01
bis(2-chloroethyl)ether	ND		400	5.2	µg/Kg-dry	1	08/21/08 19:01
bis(2-chloroisopropyl)ether	ND		400	5.9	µg/Kg-dry	1	08/21/08 19:01
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 19:01
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
Caprolactam	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 19:01
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 19:01
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 19:01
Dibenz[a,h]anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 19:01
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 19:01
Dimethyl phthalate	ND		400	4.1	µg/Kg-dry	1	08/21/08 19:01
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
Fluorene	ND		400	4.1	µg/Kg-dry	1	08/21/08 19:01
Hexachlorobenzene	ND		400	6.5	µg/Kg-dry	1	08/21/08 19:01
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/21/08 19:01
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 19:01
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Indeno[1,2,3-cd]pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 19:01
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 19:01
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 19:01
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 19:01
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 19:01
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 19:01
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 19:01
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 19:01
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 19:01
Surr: 2,4,6-Tribromophenol	90.8		20-143	0	%REC	1	08/21/08 19:01
Surr: 2-Fluorobiphenyl	80.5		46-130	0	%REC	1	08/21/08 19:01
Surr: 2-Fluorophenol	81.9		22-130	0	%REC	1	08/21/08 19:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381960 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4741.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	85.0		39-130	0	%REC	1	08/21/08 19:01
Surr: Phenol-d5	85.5		33-130	0	%REC	1	08/21/08 19:01
Surr: Terphenyl-d14	94.2		35-146	0	%REC	1	08/21/08 19:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381960 Project Supervisor: Monika Santucci

Form 1 TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-South

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-002B

Sample wt/vol: 30 (g/mL) G Lab File ID: K4741.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.68	980	BJ
2.	aldol	7.21	30000	BJA

FORM I TIC 2 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.8	BatchNo: 7957/R14569
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4731.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 13:01
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 13:01
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/21/08 13:01
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:01
2,4-Dimethylphenol	ND		400	81	µg/Kg-dry	1	08/21/08 13:01
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:01
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/21/08 13:01
2,6-Dinitrotoluene	ND		400	6.8	µg/Kg-dry	1	08/21/08 13:01
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:01
2-Chlorophenol	ND		400	6.2	µg/Kg-dry	1	08/21/08 13:01
2-Methylnaphthalene	ND		400	1.9	µg/Kg-dry	1	08/21/08 13:01
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:01
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 13:01
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 13:01
3,3'-Dichlorobenzidine	ND		800	49	µg/Kg-dry	1	08/21/08 13:01
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:01
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 13:01
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 13:01
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 13:01
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/21/08 13:01
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:01
4-Nitrophenol	ND		2000	81	µg/Kg-dry	1	08/21/08 13:01
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 13:01
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 13:01
Acetophenone	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Anthracene	ND		400	2.8	µg/Kg-dry	1	08/21/08 13:01
Atrazine	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/21/08 13:01
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:01
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:01
Benzo[g,h,i]perylene	ND		400	16	µg/Kg-dry	1	08/21/08 13:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381914 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.8	BatchNo: 7957/R14569
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: I-SAMP-K4731.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:01
bis(2-Chloroethoxy)methane	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:01
bis(2-chloroethyl)ether	ND		400	6.2	µg/Kg-dry	1	08/21/08 13:01
bis(2-chloroisopropyl)ether	ND		400	6.9	µg/Kg-dry	1	08/21/08 13:01
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 13:01
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 13:01
Caprolactam	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:01
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 13:01
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 13:01
Dibenz(a,h)anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 13:01
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 13:01
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:01
Dimethyl phthalate	ND		400	4.1	µg/Kg-dry	1	08/21/08 13:01
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
Fluorene	ND		400	4.1	µg/Kg-dry	1	08/21/08 13:01
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/21/08 13:01
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:01
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 13:01
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Indeno(1,2,3-cd)pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 13:01
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:01
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:01
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:01
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 13:01
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:01
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:01
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 13:01
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:01
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:01
Surr: 2,4,6-Tribromophenol	92.7		20-143	0	%REC	1	08/21/08 13:01
Surr: 2-Fluorobiphenyl	80.4		46-130	0	%REC	1	08/21/08 13:01
Surr: 2-Fluorophenol	81.7		22-130	0	%REC	1	08/21/08 13:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381914 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.8	BatchNo: 7957/R14569
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: I-SAMP-K4731.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	87.2		38-130	0	%REC	1	08/21/08 13:01
Surr: Phenol-d5	85.3		33-130	0	%REC	1	08/21/08 13:01
Surr: Terphenyl-d14	94.8		36-146	0	%REC	1	08/21/08 13:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381914 Project Supervisor: Monika Santucci

Form I TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-East

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-003B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4731.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs Found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.68	960	BJ
2.	aldol	7.22	28000	BJA

FORM I TIC 3 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 15.0	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: I-SAMP-K4742.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1 -Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 19:40
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 19:40
2,4,6-Trichlorophenol	ND		390	6.7	µg/Kg-dry	1	08/21/08 19:40
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 19:40
2,4-Dimethylphenol	ND		390	76	µg/Kg-dry	1	08/21/08 19:40
2,4-Dinitrophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 19:40
2,4-Dinitrotoluene	ND		390	5.7	µg/Kg-dry	1	08/21/08 19:40
2,6-Dinitrotoluene	ND		390	6.6	µg/Kg-dry	1	08/21/08 19:40
2-Chloronaphthalene	ND		390	4.3	µg/Kg-dry	1	08/21/08 19:40
2-Chlorophenol	ND		390	6.0	µg/Kg-dry	1	08/21/08 19:40
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 19:40
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 19:40
2-Nitroaniline	ND		2000	5.9	µg/Kg-dry	1	08/21/08 19:40
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 19:40
3,3'-Dichlorobenzidine	ND		780	47	µg/Kg-dry	1	08/21/08 19:40
3-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 19:40
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 19:40
4-Bromophenyl phenyl ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 19:40
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
4-Chloroaniline	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
4-Chlorophenyl phenyl ether	ND		390	4.8	µg/Kg-dry	1	08/21/08 19:40
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 19:40
4-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 19:40
4-Nitrophenol	ND		2000	78	µg/Kg-dry	1	08/21/08 19:40
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 19:40
Acenaphthylene	ND		390	4.7	µg/Kg-dry	1	08/21/08 19:40
Acetophenone	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Anthracene	ND		390	2.7	µg/Kg-dry	1	08/21/08 19:40
Atrazine	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Benzaldehyde	ND		390	5.9	µg/Kg-dry	1	08/21/08 19:40
Benzo(a)anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 19:40
Benzo(a)pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
Benzo(b)fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 19:40
Benzo(g,h,i)perylene	ND		390	16	µg/Kg-dry	1	08/21/08 19:40

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381961 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 15.0	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4742.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 19:40
bis(2-Chloroethoxy)methane	ND		390	3.6	µg/Kg-dry	1	08/21/08 19:40
bis(2-chloroethyl)ether	ND		390	6.0	µg/Kg-dry	1	08/21/08 19:40
bis(2-chloroisopropyl)ether	ND		390	6.7	µg/Kg-dry	1	08/21/08 19:40
bis(2-Ethylhexyl)phthalate	ND		390	17	µg/Kg-dry	1	08/21/08 19:40
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 19:40
Caprolactam	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 19:40
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 19:40
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 19:40
Dibenz[a,h]anthracene	ND		390	16	µg/Kg-dry	1	08/21/08 19:40
Dibenzofuran	ND		390	5.4	µg/Kg-dry	1	08/21/08 19:40
Diethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 19:40
Dimethyl phthalate	ND		390	4.0	µg/Kg-dry	1	08/21/08 19:40
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
Fluorene	ND		390	4.0	µg/Kg-dry	1	08/21/08 19:40
Hexachlorobenzene	ND		390	6.3	µg/Kg-dry	1	08/21/08 19:40
Hexachlorobutadiene	ND		390	3.6	µg/Kg-dry	1	08/21/08 19:40
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 19:40
Hexachloroethane	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 19:40
Isophorone	ND		390	3.2	µg/Kg-dry	1	08/21/08 19:40
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 19:40
N-Nitrosodiphenylamine	ND		390	2.6	µg/Kg-dry	1	08/21/08 19:40
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 19:40
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 19:40
Pentachlorophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 19:40
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 19:40
Phenol	ND		390	3.6	µg/Kg-dry	1	08/21/08 19:40
Pyrene	ND		390	2.6	µg/Kg-dry	1	08/21/08 19:40
Surr: 2,4,6-Tribromophenol	90.3		20-143	0	%REC	1	08/21/08 19:40
Surr: 2-Fluorobiphenyl	82.2		46-130	0	%REC	1	08/21/08 19:40
Surr: 2-Fluorophenol	85.3		22-130	0	%REC	1	08/21/08 19:40

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381961 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 15.0	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4742.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	88.7		39-130	0	%REC	1	08/21/08 19:40
Surr: Phenol-d5	89.4		33-130	0	%REC	1	08/21/08 19:40
Surr: Terphenyl-d14	101		36-146	0	%REC	1	08/21/08 19:40

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381961 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-North

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-004B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4742.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 15 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.67	960	BJ
2.	aldol	7.21	28000	BJA

FORM I TIC 4 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.2	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4743.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 20:18
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 20:18
2,4,6-Trichlorophenol	ND		390	6.8	µg/Kg-dry	1	08/21/08 20:18
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 20:18
2,4-Dimethylphenol	ND		390	80	µg/Kg-dry	1	08/21/08 20:18
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:18
2,4-Dinitrotoluene	ND		390	5.8	µg/Kg-dry	1	08/21/08 20:18
2,6-Dinitrotoluene	ND		390	6.7	µg/Kg-dry	1	08/21/08 20:18
2-Chloronaphthalene	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:18
2-Chlorophenol	ND		390	6.1	µg/Kg-dry	1	08/21/08 20:18
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 20:18
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:18
2-Nitroaniline	ND		2000	7.0	µg/Kg-dry	1	08/21/08 20:18
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
3,3'-Dichlorobenzidine	ND		790	48	µg/Kg-dry	1	08/21/08 20:18
3-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:18
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 20:18
4-Bromophenyl phenyl ether	ND		390	6.2	µg/Kg-dry	1	08/21/08 20:18
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
4-Chloroaniline	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
4-Chlorophenyl phenyl ether	ND		390	4.9	µg/Kg-dry	1	08/21/08 20:18
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 20:18
4-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:18
4-Nitrophenol	ND		2000	80	µg/Kg-dry	1	08/21/08 20:18
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 20:18
Acenaphthylene	ND		390	4.8	µg/Kg-dry	1	08/21/08 20:18
Acetophenone	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
Anthracene	ND		390	2.8	µg/Kg-dry	1	08/21/08 20:18
Atrazine	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
Benzaldehyde	ND		390	8.0	µg/Kg-dry	1	08/21/08 20:18
Benzo[a]anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:18
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 20:18
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 20:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381962 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.2	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4743.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 20:18
bis(2-Chloroethoxy)methane	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:18
bis(2-chloroethyl)ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 20:18
bis(2-chloroisopropyl)ether	ND		390	6.8	µg/Kg-dry	1	08/21/08 20:18
bis(2-Ethylhexyl)phthalate	ND		390	18	µg/Kg-dry	1	08/21/08 20:18
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
Caprolactam	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:18
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 20:18
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 20:18
Dibenz[a,h]anthracene	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
Dibenzofuran	ND		390	5.5	µg/Kg-dry	1	08/21/08 20:18
Diethyl phthalate	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:18
Dimethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:18
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
Fluorene	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:18
Hexachlorobenzene	ND		390	6.4	µg/Kg-dry	1	08/21/08 20:18
Hexachlorobutadiene	ND		390	3.8	µg/Kg-dry	1	08/21/08 20:18
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 20:18
Hexachloroethane	ND		390	46	µg/Kg-dry	1	08/21/08 20:18
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
Isophorone	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:18
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 20:18
N-Nitrosodiphenylamine	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:18
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 20:18
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:18
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:18
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 20:18
Phenol	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:18
Pyrene	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:18
Surr: 2,4,6-Tribromophenol	90.3		20-143	0	%REC	1	08/21/08 20:18
Surr: 2-Fluorobiphenyl	81.1		46-130	0	%REC	1	08/21/08 20:18
Surr: 2-Fluorophenol	83.2		22-130	0	%REC	1	08/21/08 20:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381962 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.2	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4743.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	86.8		39-130	0	%REC	1	08/21/08 20:18
Surr: Phenol-d5	86.4		33-130	0	%REC	1	08/21/08 20:18
Surr: Terphenyl-d14	103		36-146	0	%REC	1	08/21/08 20:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381962 Project Supervisor: Monika Santucci

Form I TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-005B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4743.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.68	980	BJ
2.	aldol	7.21	30000	BJA

FORM I TIC 5 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4744.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.2	µg/Kg-dry	1	08/21/08 20:57
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 20:57
2,4,6-Trichlorophenol	ND		390	8.8	µg/Kg-dry	1	08/21/08 20:57
2,4-Dichlorophenol	ND		390	4.6	µg/Kg-dry	1	08/21/08 20:57
2,4-Dimethylphenol	ND		390	80	µg/Kg-dry	1	08/21/08 20:57
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:57
2,4-Dinitrotoluene	ND		390	5.8	µg/Kg-dry	1	08/21/08 20:57
2,6-Dinitrotoluene	ND		390	6.7	µg/Kg-dry	1	08/21/08 20:57
2-Chloronaphthalene	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:57
2-Chlorophenol	ND		390	6.1	µg/Kg-dry	1	08/21/08 20:57
2-Methylnaphthalene	ND		390	1.8	µg/Kg-dry	1	08/21/08 20:57
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:57
2-Nitroaniline	ND		2000	7.0	µg/Kg-dry	1	08/21/08 20:57
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 20:57
3,3'-Dichlorobenzidine	ND		790	48	µg/Kg-dry	1	08/21/08 20:57
3-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:57
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 20:57
4-Bromophenyl phenyl ether	ND		390	6.2	µg/Kg-dry	1	08/21/08 20:57
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
4-Chloroaniline	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
4-Chlorophenyl phenyl ether	ND		390	4.9	µg/Kg-dry	1	08/21/08 20:57
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 20:57
4-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:57
4-Nitrophenol	ND		2000	80	µg/Kg-dry	1	08/21/08 20:57
Acenaphthene	ND		390	4.0	µg/Kg-dry	1	08/21/08 20:57
Acenaphthylene	ND		390	4.8	µg/Kg-dry	1	08/21/08 20:57
Acetophenone	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
Anthracene	ND		390	2.8	µg/Kg-dry	1	08/21/08 20:57
Atrazine	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
Benzaldehyde	ND		390	6.0	µg/Kg-dry	1	08/21/08 20:57
Benzo[a]anthracene	ND		390	4.3	µg/Kg-dry	1	08/21/08 20:57
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 20:57
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 20:57

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381963 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4744.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 20:57
bis(2-Chloroethoxy)methane	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:57
bis(2-chloroethyl)ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 20:57
bis(2-chloroisopropyl)ether	ND		390	6.8	µg/Kg-dry	1	08/21/08 20:57
bis(2-Ethylhexyl)phthalate	ND		390	18	µg/Kg-dry	1	08/21/08 20:57
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 20:57
Caprolactam	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:57
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 20:57
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 20:57
Dibenz[a,h]anthracene	ND		390	16	µg/Kg-dry	1	08/21/08 20:57
Dibenzofuran	ND		390	5.5	µg/Kg-dry	1	08/21/08 20:57
Diethyl phthalate	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:57
Dimethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:57
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
Fluorene	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:57
Hexachlorobenzene	ND		390	6.4	µg/Kg-dry	1	08/21/08 20:57
Hexachlorobutadiene	ND		390	3.6	µg/Kg-dry	1	08/21/08 20:57
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 20:57
Hexachloroethane	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 20:57
Isophorone	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:57
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 20:57
N-Nitrosodiphenylamine	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:57
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 20:57
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:57
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:57
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 20:57
Phenol	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:57
Pyrene	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:57
Surr: 2,4,6-Tribromophenol	83.1		20-143	0	%REC	1	08/21/08 20:57
Surr: 2-Fluorobiphenyl	80.2		46-130	0	%REC	1	08/21/08 20:57
Surr: 2-Fluorophenol	82.0		22-130	0	%REC	1	08/21/08 20:57

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381963 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4744.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	86.0		39-130	0	%REC	1	08/21/08 20:57
Surr: Phenol-d5	65.5		33-130	0	%REC	1	08/21/08 20:57
Surr: Terphenyl-d14	98.7		36-146	0	%REC	1	08/21/08 20:57

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381963 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-006B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4744.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	990	BJ
2.	aldol	7.21	30000	BJA

FORM I TIC 6 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.9	BatchNo: 7957/R14569
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4732.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 13:39
2,4,5-Trichlorophenol	ND		2000	26	µg/Kg-dry	1	08/21/08 13:39
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/21/08 13:39
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:39
2,4-Dimethylphenol	ND		400	81	µg/Kg-dry	1	08/21/08 13:39
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:39
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/21/08 13:39
2,6-Dinitrotoluene	ND		400	6.8	µg/Kg-dry	1	08/21/08 13:39
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:39
2-Chlorophenol	ND		400	6.2	µg/Kg-dry	1	08/21/08 13:39
2-Methylnaphthalene	ND		400	1.9	µg/Kg-dry	1	08/21/08 13:39
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:39
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 13:39
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
3,3'-Dichlorobenzidine	ND		800	49	µg/Kg-dry	1	08/21/08 13:39
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:39
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 13:39
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 13:39
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 13:39
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 13:39
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 13:39
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/21/08 13:39
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:39
4-Nitrophenol	ND		2000	81	µg/Kg-dry	1	08/21/08 13:39
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 13:39
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 13:39
Acetophenone	ND		400	49	µg/Kg-dry	1	08/21/08 13:39
Anthracene	ND		400	2.6	µg/Kg-dry	1	08/21/08 13:39
Atrazine	ND		400	49	µg/Kg-dry	1	08/21/08 13:39
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/21/08 13:39
Benzo(a)anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:39
Benzo(a)pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 13:39
Benzo(b)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:39
Benzo(g,h,i)perylene	ND		400	16	µg/Kg-dry	1	08/21/08 13:39

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381915 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14569
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4732.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.9; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:39
bis(2-Chloroethoxy)methane	ND		400	3.8	µg/Kg-dry	1	08/21/08 13:39
bis(2-chloroethyl)ether	ND		400	6.2	µg/Kg-dry	1	08/21/08 13:39
bis(2-chloroisopropyl)ether	ND		400	6.9	µg/Kg-dry	1	08/21/08 13:39
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 13:39
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
Caprolactam	ND		400	49	µg/Kg-dry	1	08/21/08 13:39
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 13:39
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:39
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 13:39
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 13:39
Dibenz[a,h]anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 13:39
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:39
Dimethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:39
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 13:39
Fluorene	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:39
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/21/08 13:39
Hexachlorobutadiene	ND		400	5.7	µg/Kg-dry	1	08/21/08 13:39
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 13:39
Hexachloroethane	ND		400	46	µg/Kg-dry	1	08/21/08 13:39
Indeno(1,2,3-cd)pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:39
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:39
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:39
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 13:39
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:39
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:39
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 13:39
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:39
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:39
Surr: 2,4,6-Tribromophenol	97.6		20-143	0	%REC	1	08/21/08 13:39
Surr: 2-Fluorobiphenyl	86.0		46-130	0	%REC	1	08/21/08 13:39
Surr: 2-Fluorophenol	88.1		22-130	0	%REC	1	08/21/08 13:39

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381915 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14569
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4732.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.9; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	92.8		39-130	0	%REC	1	08/21/08 13:39
Surr: Phenol-d5	92.2		33-130	0	%REC	1	08/21/08 13:39
Surr: Terphenyl-d14	103		36-146	0	%REC	1	08/21/08 13:39

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381915 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-001B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4732.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.68	1000	BJ
2.	aldol	7.22	30000	BJA

FORM I TIC 7 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4745.D
Col Type:			

Sample Size: 30 g; %Moisture: 14.7; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 21:35
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 21:35
2,4,6-Trichlorophenol	ND		390	5.6	µg/Kg-dry	1	08/21/08 21:35
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 21:35
2,4-Dimethylphenol	ND		390	78	µg/Kg-dry	1	08/21/08 21:35
2,4-Dinitrophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 21:35
2,4-Dinitrotoluene	ND		390	5.7	µg/Kg-dry	1	08/21/08 21:35
2,6-Dinitrotoluene	ND		390	6.6	µg/Kg-dry	1	08/21/08 21:35
2-Chloronaphthalene	ND		390	4.3	µg/Kg-dry	1	08/21/08 21:35
2-Chlorophenol	ND		390	6.0	µg/Kg-dry	1	08/21/08 21:35
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 21:35
2-Methylphenol	ND		390	4.3	µg/Kg-dry	1	08/21/08 21:35
2-Nitroaniline	ND		2000	6.9	µg/Kg-dry	1	08/21/08 21:35
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 21:35
3,3'-Dichlorobenzidine	ND		770	47	µg/Kg-dry	1	08/21/08 21:35
3-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 21:35
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 21:35
4-Bromophenyl phenyl ether	ND		390	5.1	µg/Kg-dry	1	08/21/08 21:35
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
4-Chloroaniline	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
4-Chlorophenyl phenyl ether	ND		390	4.8	µg/Kg-dry	1	08/21/08 21:35
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 21:35
4-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 21:35
4-Nitrophenol	ND		2000	78	µg/Kg-dry	1	08/21/08 21:35
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 21:35
Acenaphthylene	ND		390	4.7	µg/Kg-dry	1	08/21/08 21:35
Acetophenone	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Anthracene	ND		390	2.7	µg/Kg-dry	1	08/21/08 21:35
Atrazine	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Benzaldehyde	ND		390	5.6	µg/Kg-dry	1	08/21/08 21:35
Benzo[a]anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 21:35
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 21:35
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 21:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381964 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 14.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4745.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 21:35
bis(2-Chloroethoxy)methane	ND		390	3.6	µg/Kg-dry	1	08/21/08 21:35
bis(2-chloroethyl)ether	ND		390	6.0	µg/Kg-dry	1	08/21/08 21:35
bis(2-chloroisopropyl)ether	ND		390	6.7	µg/Kg-dry	1	08/21/08 21:35
bis(2-Ethylhexyl)phthalate	ND		390	17	µg/Kg-dry	1	08/21/08 21:35
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 21:35
Caprolactam	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 21:35
Di-n-butyl phthalate	ND		390	99	µg/Kg-dry	1	08/21/08 21:35
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 21:35
Dibenz[a,h]anthracene	ND		390	16	µg/Kg-dry	1	08/21/08 21:35
Dibenzofuran	ND		390	5.4	µg/Kg-dry	1	08/21/08 21:35
Diethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 21:35
Dimethyl phthalate	ND		390	4.0	µg/Kg-dry	1	08/21/08 21:35
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
Fluorene	ND		390	4.0	µg/Kg-dry	1	08/21/08 21:35
Hexachlorobenzene	ND		390	5.3	µg/Kg-dry	1	08/21/08 21:35
Hexachlorobutadiene	ND		390	3.5	µg/Kg-dry	1	08/21/08 21:35
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 21:35
Hexachloroethane	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 21:35
Isophorone	ND		390	3.2	µg/Kg-dry	1	08/21/08 21:35
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 21:35
N-Nitrosodiphenylamine	ND		390	2.8	µg/Kg-dry	1	08/21/08 21:35
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 21:35
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 21:35
Pentachlorophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 21:35
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 21:35
Phenol	ND		390	3.6	µg/Kg-dry	1	08/21/08 21:35
Pyrene	ND		390	2.6	µg/Kg-dry	1	08/21/08 21:35
Surr: 2,4,6-Tribromophenol	93.4		20-143	0	%REC	1	08/21/08 21:35
Surr: 2-Fluorobiphenyl	85.9		46-130	0	%REC	1	08/21/08 21:35
Surr: 2-Fluorophenol	68.1		22-130	0	%REC	1	08/21/08 21:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381964 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 14.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4745.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	91.1		39-130	0	%REC	1	08/21/08 21:35
Surr: Phenol-d5	92.1		33-130	0	%REC	1	08/21/08 21:35
Surr: Terphenyl-d14	105		36-146	0	%REC	1	08/21/08 21:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381964 Project Supervisor: Monika Santucci

Form I TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-North

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-002B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4745.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 15 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		unknown	6.69	1000	BJ
2.		aldol	7.22	31000	BJA

FORM I TIC 8 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4746.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1 -Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 22:13
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 22:13
2,4,6-Trichlorophenol	ND		400	6.8	µg/Kg-dry	1	08/21/08 22:13
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 22:13
2,4-Dimethylphenol	ND		400	80	µg/Kg-dry	1	08/21/08 22:13
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 22:13
2,4-Dinitrotoluene	ND		400	5.8	µg/Kg-dry	1	08/21/08 22:13
2,6-Dinitrotoluene	ND		400	6.7	µg/Kg-dry	1	08/21/08 22:13
2-Chloronaphthalene	ND		400	4.4	µg/Kg-dry	1	08/21/08 22:13
2-Chlorophenol	ND		400	6.1	µg/Kg-dry	1	08/21/08 22:13
2-Methylnaphthalene	ND		400	1.9	µg/Kg-dry	1	08/21/08 22:13
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 22:13
2-Nitroaniline	ND		2000	7.1	µg/Kg-dry	1	08/21/08 22:13
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
3,3'-Dichlorobenzidine	ND		790	48	µg/Kg-dry	1	08/21/08 22:13
3-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 22:13
4,6-Dinitro-2-methylphenol	ND		2000	206	µg/Kg-dry	1	08/21/08 22:13
4-Bromophenyl phenyl ether	ND		400	5.2	µg/Kg-dry	1	08/21/08 22:13
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
4-Chloroaniline	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
4-Chlorophenyl phenyl ether	ND		400	4.9	µg/Kg-dry	1	08/21/08 22:13
4-Methylphenol	ND		400	3.4	µg/Kg-dry	1	08/21/08 22:13
4-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 22:13
4-Nitrophenol	ND		2000	80	µg/Kg-dry	1	08/21/08 22:13
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 22:13
Acenaphthylene	ND		400	4.8	µg/Kg-dry	1	08/21/08 22:13
Acetophenone	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
Anthracene	ND		400	2.8	µg/Kg-dry	1	08/21/08 22:13
Atrazine	ND		400	46	µg/Kg-dry	1	08/21/08 22:13
Benzaldehyde	ND		400	6.0	µg/Kg-dry	1	08/21/08 22:13
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 22:13
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 22:13
Benzo[g,h,i]perylene	ND		400	16	µg/Kg-dry	1	08/21/08 22:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381965 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4746.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		400	13	µg/Kg-dry	1	08/21/08 22:13
bis(2-Chloroethoxy)methane	ND		400	3.7	µg/Kg-dry	1	08/21/08 22:13
bis(2-chloroethyl)ether	ND		400	6.1	µg/Kg-dry	1	08/21/08 22:13
bis(2-chloroisopropyl)ether	ND		400	6.8	µg/Kg-dry	1	08/21/08 22:13
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 22:13
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
Caprolactam	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 22:13
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 22:13
Di-n-octyl phthalate	ND		400	2.3	µg/Kg-dry	1	08/21/08 22:13
Dibenz(a,h)anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
Dibenzofuran	ND		400	5.5	µg/Kg-dry	1	08/21/08 22:13
Diethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/21/08 22:13
Dimethyl phthalate	ND		400	4.1	µg/Kg-dry	1	08/21/08 22:13
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
Fluorene	ND		400	4.1	µg/Kg-dry	1	08/21/08 22:13
Hexachlorobenzene	ND		400	6.5	µg/Kg-dry	1	08/21/08 22:13
Hexachlorobutadiene	ND		400	3.6	µg/Kg-dry	1	08/21/08 22:13
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 22:13
Hexachloroethane	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
Indeno(1,2,3-cd)pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
Isophorone	ND		400	3.3	µg/Kg-dry	1	08/21/08 22:13
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 22:13
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 22:13
Naphthalene	ND		400	3.0	µg/Kg-dry	1	08/21/08 22:13
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 22:13
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 22:13
Phenanthrene	ND		400	1.7	µg/Kg-dry	1	08/21/08 22:13
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 22:13
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 22:13
Surr: 2,4,6-Tribromophenol	85.9		20-143	0	%REC	1	08/21/08 22:13
Surr: 2-Fluorobiphenyl	83.8		46-130	0	%REC	1	08/21/08 22:13
Surr: 2-Fluorophenol	84.1		22-130	0	%REC	1	08/21/08 22:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument's calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381965 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4746.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	88.5		39-130	0	%REC	1	08/21/08 22:13
Surr: Phenol-d5	88.0		33-130	0	%REC	1	08/21/08 22:13
Surr: Terphenyl-d14	103		36-146	0	%REC	1	08/21/08 22:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381965 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-003B

Sample wt/vol: 30 (g/ml) g Lab File ID: K4746.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 17 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	1000	BJ
2.	aldol	7.21	31000	BJA

FORM I TIC 9 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 15.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4747.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 22:52
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 22:52
2,4,6-Trichlorophenol	ND		390	5.7	µg/Kg-dry	1	08/21/08 22:52
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 22:52
2,4-Dimethylphenol	ND		390	79	µg/Kg-dry	1	08/21/08 22:52
2,4-Dinitrophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 22:52
2,4-Dinitrotoluene	ND		390	5.7	µg/Kg-dry	1	08/21/08 22:52
2,6-Dinitrotoluene	ND		390	6.6	µg/Kg-dry	1	08/21/08 22:52
2-Chloronaphthalene	ND		390	4.3	µg/Kg-dry	1	08/21/08 22:52
2-Chlorophenol	ND		390	6.1	µg/Kg-dry	1	08/21/08 22:52
2-Methylnaphthalene	ND		390	1.8	µg/Kg-dry	1	08/21/08 22:52
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 22:52
2-Nitroaniline	ND		2000	7.0	µg/Kg-dry	1	08/21/08 22:52
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 22:52
3,3'-Dichlorobenzidine	ND		780	47	µg/Kg-dry	1	08/21/08 22:52
3-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 22:52
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 22:52
4-Bromophenyl phenyl ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 22:52
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
4-Chloroaniline	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
4-Chlorophenyl phenyl ether	ND		390	4.8	µg/Kg-dry	1	08/21/08 22:52
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 22:52
4-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 22:52
4-Nitrophenol	ND		2000	79	µg/Kg-dry	1	08/21/08 22:52
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 22:52
Acenaphthylene	ND		390	4.7	µg/Kg-dry	1	08/21/08 22:52
Acetophenone	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Anthracene	ND		390	2.8	µg/Kg-dry	1	08/21/08 22:52
Atrazine	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Benzaldehyde	ND		390	5.9	µg/Kg-dry	1	08/21/08 22:52
Benzo[a]anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 22:52
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 22:52
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 22:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381966 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4747.D
Col Type:			

Sample Size: 30 g; %Moisture: 15.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 22:52
bis(2-Chloroethoxy)methane	ND		390	3.6	µg/Kg-dry	1	08/21/08 22:52
bis(2-chloroethyl)ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 22:52
bis(2-chloroisopropyl)ether	ND		390	6.7	µg/Kg-dry	1	08/21/08 22:52
bis(2-Ethylhexyl)phthalate	ND		390	18	µg/Kg-dry	1	08/21/08 22:52
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 22:52
Caprolactam	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 22:52
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 22:52
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 22:52
Dibenz[a,h]anthracene	ND		390	15	µg/Kg-dry	1	08/21/08 22:52
Dibenzofuran	ND		390	5.4	µg/Kg-dry	1	08/21/08 22:52
Diethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 22:52
Dimethyl phthalate	ND		390	4.0	µg/Kg-dry	1	08/21/08 22:52
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
Fluorene	ND		390	4.0	µg/Kg-dry	1	08/21/08 22:52
Hexachlorobenzene	ND		390	6.4	µg/Kg-dry	1	08/21/08 22:52
Hexachlorobutadiene	ND		390	3.6	µg/Kg-dry	1	08/21/08 22:52
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 22:52
Hexachloroethane	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 22:52
Isophorone	ND		390	3.2	µg/Kg-dry	1	08/21/08 22:52
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 22:52
N-Nitrosodiphenylamine	ND		390	2.8	µg/Kg-dry	1	08/21/08 22:52
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 22:52
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 22:52
Pentachlorophenol	ND		2000	380	µg/Kg-dry	1	08/21/08 22:52
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 22:52
Phenol	ND		390	3.6	µg/Kg-dry	1	08/21/08 22:52
Pyrene	ND		390	2.7	µg/Kg-dry	1	08/21/08 22:52
Surr: 2,4,6-Tribromophenol	92.4		20-143	0	%REC	1	08/21/08 22:52
Surr: 2-Fluorobiphenyl	85.3		46-130	0	%REC	1	08/21/08 22:52
Surr: 2-Fluorophenol	88.1		22-130	0	%REC	1	08/21/08 22:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381966 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4747.D
Col Type:			

Sample Size: 30 g; %Moisture: 15.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	91.0		39-130	0	%REC	1	08/21/08 22:52
Surr: Phenol-d5	92.4		33-130	0	%REC	1	08/21/08 22:52
Surr: Terphenyl-d14	106		36-146	0	%REC	1	08/21/08 22:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381966 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-East

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLR Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-004B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4747.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 15 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.68	1000	BJ
2.	aldol	7.22	31000	BJA

FORM I TIC 12 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14569
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4733.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		440	5.7	µg/Kg-dry	1	08/21/08 14:18
2,4,5-Trichlorophenol	ND		2200	28	µg/Kg-dry	1	08/21/08 14:18
2,4,6-Trichlorophenol	ND		440	7.5	µg/Kg-dry	1	08/21/08 14:18
2,4-Dichlorophenol	ND		440	5.0	µg/Kg-dry	1	08/21/08 14:18
2,4-Dimethylphenol	ND		440	88	µg/Kg-dry	1	08/21/08 14:18
2,4-Dinitrophenol	ND		2200	440	µg/Kg-dry	1	08/21/08 14:18
2,4-Dinitrotoluene	ND		440	6.4	µg/Kg-dry	1	08/21/08 14:18
2,6-Dinitrotoluene	ND		440	7.4	µg/Kg-dry	1	08/21/08 14:18
2-Chloronaphthalene	ND		440	4.9	µg/Kg-dry	1	08/21/08 14:18
2-Chlorophenol	ND		440	6.8	µg/Kg-dry	1	08/21/08 14:18
2-Methylnaphthalene	ND		440	2.1	µg/Kg-dry	1	08/21/08 14:18
2-Methylphenol	ND		440	4.9	µg/Kg-dry	1	08/21/08 14:18
2-Nitroaniline	ND		2200	7.8	µg/Kg-dry	1	08/21/08 14:18
2-Nitrophenol	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
3,3'-Dichlorobenzidine	ND		870	53	µg/Kg-dry	1	08/21/08 14:18
3-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/21/08 14:18
4,6-Dinitro-2-methylphenol	ND		2200	220	µg/Kg-dry	1	08/21/08 14:18
4-Bromophenyl phenyl ether	ND		440	6.9	µg/Kg-dry	1	08/21/08 14:18
4-Chloro-3-methylphenol	ND		440	13	µg/Kg-dry	1	08/21/08 14:18
4-Chloroaniline	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
4-Chlorophenyl phenyl ether	ND		440	5.4	µg/Kg-dry	1	08/21/08 14:18
4-Methylphenol	ND		440	3.8	µg/Kg-dry	1	08/21/08 14:18
4-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/21/08 14:18
4-Nitrophenol	ND		2200	88	µg/Kg-dry	1	08/21/08 14:18
Acenaphthene	ND		440	4.4	µg/Kg-dry	1	08/21/08 14:18
Acenaphthylene	ND		440	5.3	µg/Kg-dry	1	08/21/08 14:18
Acetophenone	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
Anthracene	ND		440	3.1	µg/Kg-dry	1	08/21/08 14:18
Atrazine	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
Benzaldehyde	ND		440	6.6	µg/Kg-dry	1	08/21/08 14:18
Benzo[a]anthracene	ND		440	4.6	µg/Kg-dry	1	08/21/08 14:18
Benzo[a]pyrene	ND		440	13	µg/Kg-dry	1	08/21/08 14:18
Benzo[b]fluoranthene	ND		440	15	µg/Kg-dry	1	08/21/08 14:18
Benzo[g,h,i]perylene	ND		440	18	µg/Kg-dry	1	08/21/08 14:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381916 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14569
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4733.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		440	15	µg/Kg-dry	1	08/21/08 14:18
bis(2-Chloroethoxy)methane	ND		440	4.1	µg/Kg-dry	1	08/21/08 14:18
bis(2-chloroethyl)ether	ND		440	6.8	µg/Kg-dry	1	08/21/08 14:18
bis(2-chloroisopropyl)ether	ND		440	7.5	µg/Kg-dry	1	08/21/08 14:18
bis(2-Ethylhexyl)phthalate	ND		440	20	µg/Kg-dry	1	08/21/08 14:18
Butyl benzyl phthalate	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
Caprolactam	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
Carbazole	ND		440	13	µg/Kg-dry	1	08/21/08 14:18
Chrysene	ND		440	3.7	µg/Kg-dry	1	08/21/08 14:18
Di-n-butyl phthalate	ND		440	110	µg/Kg-dry	1	08/21/08 14:18
Di-n-octyl phthalate	ND		440	2.6	µg/Kg-dry	1	08/21/08 14:18
Dibenz[a,h]anthracene	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
Dibenzofuran	ND		440	6.1	µg/Kg-dry	1	08/21/08 14:18
Diethyl phthalate	ND		440	4.6	µg/Kg-dry	1	08/21/08 14:18
Dimethyl phthalate	ND		440	4.5	µg/Kg-dry	1	08/21/08 14:18
Fluoranthene	ND		440	13	µg/Kg-dry	1	08/21/08 14:18
Fluorene	ND		440	4.5	µg/Kg-dry	1	08/21/08 14:18
Hexachlorobenzene	ND		440	7.1	µg/Kg-dry	1	08/21/08 14:18
Hexachlorobutadiene	ND		440	4.0	µg/Kg-dry	1	08/21/08 14:18
Hexachlorocyclopentadiene	ND		440	220	µg/Kg-dry	1	08/21/08 14:18
Hexachloroethane	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
Indeno[1,2,3-cd]pyrene	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
Isophorone	ND		440	3.7	µg/Kg-dry	1	08/21/08 14:18
N-Nitroso-di-n-propylamine	ND		440	5.0	µg/Kg-dry	1	08/21/08 14:18
N-Nitrosodiphenylamine	ND		440	3.0	µg/Kg-dry	1	08/21/08 14:18
Naphthalene	ND		440	3.3	µg/Kg-dry	1	08/21/08 14:18
Nitrobenzene	ND		440	4.7	µg/Kg-dry	1	08/21/08 14:18
Pentachlorophenol	ND		2200	440	µg/Kg-dry	1	08/21/08 14:18
Phenanthrene	ND		440	1.9	µg/Kg-dry	1	08/21/08 14:18
Phenol	ND		440	4.1	µg/Kg-dry	1	08/21/08 14:18
Pyrene	ND		440	3.0	µg/Kg-dry	1	08/21/08 14:18
Surr: 2,4,6-Tribromophenol	91.1		20-143	0	%REC	1	08/21/08 14:18
Surr: 2-Fluorobiphenyl	62.0		46-130	0	%REC	1	08/21/08 14:18
Surr: 2-Fluorophenol	64.3		22-130	0	%REC	1	08/21/08 14:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381916 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14569
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4733.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	88.3		39-130	0	%REC	1	08/21/08 14:18
Surr: Phenol-d5	88.6		33-130	0	%REC	1	08/21/08 14:18
Surr: Terphenyl-d14	98.8		36-146	0	%REC	1	08/21/08 14:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381916 Project Supervisor: Monika Santucci

Form 1 TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-005B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4733.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.67	600	BJ
2.	aldol	7.22	33000	BJA

FORM 1 TIC 13 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4750.D
Col Type:			

Sample Size: 30 g; %Moisture: 27.8; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		460	6.0	µg/Kg-dry	1	08/22/08 0:47
2,4,5-Trichlorophenol	ND		2300	29	µg/Kg-dry	1	08/22/08 0:47
2,4,6-Trichlorophenol	ND		460	7.8	µg/Kg-dry	1	08/22/08 0:47
2,4-Dichlorophenol	ND		460	5.3	µg/Kg-dry	1	08/22/08 0:47
2,4-Dimethylphenol	ND		460	92	µg/Kg-dry	1	08/22/08 0:47
2,4-Dinitrophenol	ND		2300	450	µg/Kg-dry	1	08/22/08 0:47
2,4-Dinitrotoluene	ND		460	6.7	µg/Kg-dry	1	08/22/08 0:47
2,6-Dinitrotoluene	ND		460	7.8	µg/Kg-dry	1	08/22/08 0:47
2-Chloronaphthalene	ND		460	5.1	µg/Kg-dry	1	08/22/08 0:47
2-Chlorophenol	ND		460	7.1	µg/Kg-dry	1	08/22/08 0:47
2-Methylnaphthalene	ND		460	2.2	µg/Kg-dry	1	08/22/08 0:47
2-Methylphenol	ND		460	5.1	µg/Kg-dry	1	08/22/08 0:47
2-Nitroaniline	ND		2300	8.2	µg/Kg-dry	1	08/22/08 0:47
2-Nitrophenol	ND		460	16	µg/Kg-dry	1	08/22/08 0:47
3,3'-Dichlorobenzidine	ND		910	55	µg/Kg-dry	1	08/22/08 0:47
3-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 0:47
4,6-Dinitro-2-methylphenol	ND		2300	230	µg/Kg-dry	1	08/22/08 0:47
4-Bromophenyl phenyl ether	ND		460	7.2	µg/Kg-dry	1	08/22/08 0:47
4-Chloro-3-methylphenol	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
4-Chloroaniline	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
4-Chlorophenyl phenyl ether	ND		460	5.7	µg/Kg-dry	1	08/22/08 0:47
4-Methylphenol	ND		460	4.0	µg/Kg-dry	1	08/22/08 0:47
4-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 0:47
4-Nitrophenol	ND		2300	92	µg/Kg-dry	1	08/22/08 0:47
Acenaphthene	ND		460	4.8	µg/Kg-dry	1	08/22/08 0:47
Acenaphthylene	ND		460	5.5	µg/Kg-dry	1	08/22/08 0:47
Acetophenone	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Anthracene	ND		460	3.2	µg/Kg-dry	1	08/22/08 0:47
Atrazine	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Benzaldehyde	ND		460	6.9	µg/Kg-dry	1	08/22/08 0:47
Benzo[a]anthracene	ND		460	4.8	µg/Kg-dry	1	08/22/08 0:47
Benzo[a]pyrene	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
Benzo[b]fluoranthene	ND		460	16	µg/Kg-dry	1	08/22/08 0:47
Benzo[g,h,i]perylene	ND		460	18	µg/Kg-dry	1	08/22/08 0:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381969 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 27.8	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4750.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		460	15	µg/Kg-dry	1	08/22/08 0:47
bis(2-Chloroethoxy)methane	ND		460	4.3	µg/Kg-dry	1	08/22/08 0:47
bis(2-chloroethyl)ether	ND		460	7.1	µg/Kg-dry	1	08/22/08 0:47
bis(2-chloroisopropyl)ether	ND		460	7.9	µg/Kg-dry	1	08/22/08 0:47
bis(2-Ethylhexyl)phthalate	ND		460	21	µg/Kg-dry	1	08/22/08 0:47
Butyl benzyl phthalate	ND		460	18	µg/Kg-dry	1	08/22/08 0:47
Caprolactam	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Carbazole	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
Chrysene	ND		460	3.9	µg/Kg-dry	1	08/22/08 0:47
Di-n-butyl phthalate	ND		460	120	µg/Kg-dry	1	08/22/08 0:47
Di-n-octyl phthalate	ND		460	2.7	µg/Kg-dry	1	08/22/08 0:47
Dibenz[a,h]anthracene	ND		460	18	µg/Kg-dry	1	08/22/08 0:47
Dibenzofuran	ND		460	6.3	µg/Kg-dry	1	08/22/08 0:47
Diethyl phthalate	ND		460	4.9	µg/Kg-dry	1	08/22/08 0:47
Dimethyl phthalate	ND		460	4.7	µg/Kg-dry	1	08/22/08 0:47
Fluoranthene	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
Fluorene	ND		460	4.7	µg/Kg-dry	1	08/22/08 0:47
Hexachlorobenzene	ND		460	7.5	µg/Kg-dry	1	08/22/08 0:47
Hexachlorobutadiene	ND		460	4.2	µg/Kg-dry	1	08/22/08 0:47
Hexachlorocyclopentadiene	ND		460	230	µg/Kg-dry	1	08/22/08 0:47
Hexachloroethane	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Indeno[1,2,3-cd]pyrene	ND		460	18	µg/Kg-dry	1	08/22/08 0:47
Isophorone	ND		460	3.8	µg/Kg-dry	1	08/22/08 0:47
N-Nitroso-di-n-propylamine	ND		460	5.3	µg/Kg-dry	1	08/22/08 0:47
N-Nitrosodiphenylamine	ND		460	3.1	µg/Kg-dry	1	08/22/08 0:47
Naphthalene	ND		460	3.5	µg/Kg-dry	1	08/22/08 0:47
Nitrobenzene	ND		460	4.9	µg/Kg-dry	1	08/22/08 0:47
Pentachlorophenol	ND		2300	460	µg/Kg-dry	1	08/22/08 0:47
Phenanthrene	ND		460	2.0	µg/Kg-dry	1	08/22/08 0:47
Phenol	ND		460	4.3	µg/Kg-dry	1	08/22/08 0:47
Pyrene	ND		460	3.1	µg/Kg-dry	1	08/22/08 0:47
Surr: 2,4,6-Tribromophenol	92.0		20-143	0	%REC	1	08/22/08 0:47
Surr: 2-Fluorobiphenyl	83.8		46-130	0	%REC	1	08/22/08 0:47
Surr: 2-Fluorophenol	88.8		22-130	0	%REC	1	08/22/08 0:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381969 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 27.8	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4750.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	89.4		39-130	0	%REC	1	08/22/08 0:47
Surr: Phenol-d5	91.6		33-130	0	%REC	1	08/22/08 0:47
Surr: Terphenyl-d14	102		36-146	0	%REC	1	08/22/08 0:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381969 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-South

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-006B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4750.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 28 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.70	1300	BJ
2.	aldol	7.22	37000	BJA

FORM I TIC 14 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 46	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 18.3	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4751.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.3	µg/Kg-dry	1	08/22/08 1:25
2,4,5-Trichlorophenol	ND		2000	26	µg/Kg-dry	1	08/22/08 1:25
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/22/08 1:25
2,4-Dichlorophenol	ND		400	4.7	µg/Kg-dry	1	08/22/08 1:25
2,4-Dimethylphenol	ND		400	82	µg/Kg-dry	1	08/22/08 1:25
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/22/08 1:25
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/22/08 1:25
2,6-Dinitrotoluene	ND		400	6.9	µg/Kg-dry	1	08/22/08 1:25
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/22/08 1:25
2-Chlorophenol	ND		400	6.3	µg/Kg-dry	1	08/22/08 1:25
2-Methylnaphthalene	ND		400	2.0	µg/Kg-dry	1	08/22/08 1:25
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/22/08 1:25
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/22/08 1:25
2-Nitrophenol	ND		400	18	µg/Kg-dry	1	08/22/08 1:25
3,3'-Dichlorobenzidine	ND		810	49	µg/Kg-dry	1	08/22/08 1:25
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/22/08 1:25
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/22/08 1:25
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/22/08 1:25
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/22/08 1:25
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/22/08 1:25
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/22/08 1:25
4-Nitrophenol	ND		2000	82	µg/Kg-dry	1	08/22/08 1:25
Acenaphthene	ND		400	4.1	µg/Kg-dry	1	08/22/08 1:25
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/22/08 1:25
Acetophenone	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Anthracene	ND		400	2.9	µg/Kg-dry	1	08/22/08 1:25
Atrazine	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/22/08 1:25
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/22/08 1:25
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/22/08 1:25
Benzo[g,h,i]perylene	ND		400	15	µg/Kg-dry	1	08/22/08 1:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381970 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4751.D
Col Type:			

Sample Size: 30 g; %Moisture: 18.3; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		400	14	µg/Kg-dry	1	08/22/08 1:25
bis(2-Chloroethoxy)methane	ND		400	3.8	µg/Kg-dry	1	08/22/08 1:25
bis(2-chloroethyl)ether	ND		400	6.3	µg/Kg-dry	1	08/22/08 1:25
bis(2-chloroisopropyl)ether	ND		400	7.0	µg/Kg-dry	1	08/22/08 1:25
bis(2-Ethylhexyl)phthalate	600		400	18	µg/Kg-dry	1	08/22/08 1:25
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/22/08 1:25
Caprolactam	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Carbazole	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/22/08 1:25
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/22/08 1:25
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/22/08 1:25
Dibenz(a,h)anthracene	ND		400	16	µg/Kg-dry	1	08/22/08 1:25
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/22/08 1:25
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/22/08 1:25
Dimethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/22/08 1:25
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
Fluorene	ND		400	4.2	µg/Kg-dry	1	08/22/08 1:25
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/22/08 1:25
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/22/08 1:25
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/22/08 1:25
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Indeno(1,2,3-cd)pyrene	ND		400	16	µg/Kg-dry	1	08/22/08 1:25
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/22/08 1:25
N-Nitroso-di-n-propylamine	ND		400	4.7	µg/Kg-dry	1	08/22/08 1:25
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/22/08 1:25
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/22/08 1:25
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/22/08 1:25
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/22/08 1:25
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/22/08 1:25
Phenol	ND		400	3.8	µg/Kg-dry	1	08/22/08 1:25
Pyrene	ND		400	2.8	µg/Kg-dry	1	08/22/08 1:25
Surr: 2,4,6-Tribromophenol	95.0		20-143	0	%REC	1	08/22/08 1:25
Surr: 2-Fluorobiphenyl	86.8		46-130	0	%REC	1	08/22/08 1:25
Surr: 2-Fluorophenol	91.0		22-130	0	%REC	1	08/22/08 1:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381970 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4751.D
Col Type:			

Sample Size: 30 g; %Moisture: 18.3; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	92.2		39-130	0	%REC	1	08/22/08 1:25
Surr: Phenol-d6	93.4		33-130	0	%REC	1	08/22/08 1:25
Surr: Terphenyl-d14	105		38-146	0	%REC	1	08/22/08 1:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381970 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Field Dup

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water): SOIL Lab Sample ID: 0808076-007B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4751.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	1100	BJ
2.	aldol	7.22	34000	BJA

FORM I TIC 15 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4752.D
Col Type:			

Sample Size: 30 g; %Moisture: 27.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		450	5.9	µg/Kg-dry	1	08/22/08 2:03
2,4,5-Trichlorophenol	ND		2300	29	µg/Kg-dry	1	08/22/08 2:03
2,4,6-Trichlorophenol	ND		450	7.8	µg/Kg-dry	1	08/22/08 2:03
2,4-Dichlorophenol	ND		450	5.2	µg/Kg-dry	1	08/22/08 2:03
2,4-Dimethylphenol	ND		450	92	µg/Kg-dry	1	08/22/08 2:03
2,4-Dinitrophenol	ND		2300	460	µg/Kg-dry	1	08/22/08 2:03
2,4-Dinitrotoluene	ND		450	6.6	µg/Kg-dry	1	08/22/08 2:03
2,6-Dinitrotoluene	ND		450	7.7	µg/Kg-dry	1	08/22/08 2:03
2-Chloronaphthalene	ND		450	5.0	µg/Kg-dry	1	08/22/08 2:03
2-Chlorophenol	ND		450	7.0	µg/Kg-dry	1	08/22/08 2:03
2-Methylnaphthalene	ND		450	2.2	µg/Kg-dry	1	08/22/08 2:03
2-Methylphenol	ND		450	5.1	µg/Kg-dry	1	08/22/08 2:03
2-Nitroaniline	ND		2300	8.1	µg/Kg-dry	1	08/22/08 2:03
2-Nitrophenol	ND		450	18	µg/Kg-dry	1	08/22/08 2:03
3,3'-Dichlorobenzidine	ND		910	55	µg/Kg-dry	1	08/22/08 2:03
3-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 2:03
4,6-Dinitro-2-methylphenol	ND		2300	230	µg/Kg-dry	1	08/22/08 2:03
4-Bromophenyl phenyl ether	ND		450	7.1	µg/Kg-dry	1	08/22/08 2:03
4-Chloro-3-methylphenol	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
4-Chloroaniline	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
4-Chlorophenyl phenyl ether	ND		450	5.6	µg/Kg-dry	1	08/22/08 2:03
4-Methylphenol	ND		450	3.9	µg/Kg-dry	1	08/22/08 2:03
4-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 2:03
4-Nitrophenol	ND		2300	92	µg/Kg-dry	1	08/22/08 2:03
Acenaphthene	ND		450	4.5	µg/Kg-dry	1	08/22/08 2:03
Acenaphthylene	ND		450	5.5	µg/Kg-dry	1	08/22/08 2:03
Acetophenone	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Anthracene	ND		450	3.2	µg/Kg-dry	1	08/22/08 2:03
Atrazine	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Benzaldehyde	ND		450	6.9	µg/Kg-dry	1	08/22/08 2:03
Benzo(a)anthracene	ND		450	4.8	µg/Kg-dry	1	08/22/08 2:03
Benzo(a)pyrene	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
Benzo(b)fluoranthene	ND		450	16	µg/Kg-dry	1	08/22/08 2:03
Benzo(g,h,i)perylene	ND		450	18	µg/Kg-dry	1	08/22/08 2:03

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381971 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4752.D
Col Type:			

Sample Size: 30 g; %Moisture: 27.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		450	15	µg/Kg-dry	1	08/22/08 2:03
bis(2-Chloroethoxy)methane	ND		450	4.2	µg/Kg-dry	1	08/22/08 2:03
bis(2-chloroethyl)ether	ND		450	7.0	µg/Kg-dry	1	08/22/08 2:03
bis(2-chloroisopropyl)ether	ND		450	7.8	µg/Kg-dry	1	08/22/08 2:03
bis(2-Ethylhexyl)phthalate	ND		450	20	µg/Kg-dry	1	08/22/08 2:03
Butyl benzyl phthalate	ND		450	18	µg/Kg-dry	1	08/22/08 2:03
Caprolactam	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Carbazole	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
Chrysene	ND		450	3.8	µg/Kg-dry	1	08/22/08 2:03
Di-n-butyl phthalate	ND		450	120	µg/Kg-dry	1	08/22/08 2:03
Di-n-octyl phthalate	ND		450	2.7	µg/Kg-dry	1	08/22/08 2:03
Dibenz[a,h]anthracene	ND		450	18	µg/Kg-dry	1	08/22/08 2:03
Dibenzofuran	ND		450	6.3	µg/Kg-dry	1	08/22/08 2:03
Diethyl phthalate	ND		450	4.8	µg/Kg-dry	1	08/22/08 2:03
Dimethyl phthalate	ND		450	4.7	µg/Kg-dry	1	08/22/08 2:03
Fluoranthene	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
Fluorene	ND		450	4.7	µg/Kg-dry	1	08/22/08 2:03
Hexachlorobenzene	ND		450	7.4	µg/Kg-dry	1	08/22/08 2:03
Hexachlorobutadiene	ND		450	4.1	µg/Kg-dry	1	08/22/08 2:03
Hexachlorocyclopentadiene	ND		450	230	µg/Kg-dry	1	08/22/08 2:03
Hexachloroethane	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Indeno(1,2,3-cd)pyrene	ND		450	18	µg/Kg-dry	1	08/22/08 2:03
Isophorone	ND		450	3.8	µg/Kg-dry	1	08/22/08 2:03
N-Nitroso-di-n-propylamine	ND		450	5.2	µg/Kg-dry	1	08/22/08 2:03
N-Nitrosodiphenylamine	ND		450	3.1	µg/Kg-dry	1	08/22/08 2:03
Naphthalene	ND		450	3.5	µg/Kg-dry	1	08/22/08 2:03
Nitrobenzene	ND		450	4.9	µg/Kg-dry	1	08/22/08 2:03
Pentachlorophenol	ND		2300	460	µg/Kg-dry	1	08/22/08 2:03
Phenanthrene	ND		450	2.0	µg/Kg-dry	1	08/22/08 2:03
Phenol	ND		450	4.2	µg/Kg-dry	1	08/22/08 2:03
Pyrene	ND		450	3.1	µg/Kg-dry	1	08/22/08 2:03
Surr: 2,4,6-Tribromophenol	100		20-143	0	%REC	1	08/22/08 2:03
Surr: 2-Fluorobiphenyl	88.2		46-130	0	%REC	1	08/22/08 2:03
Surr: 2-Fluorophenol	91.8		22-130	0	%REC	1	08/22/08 2:03

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381971 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4752.D
Col Type:			

Sample Size: 30 g; %Moisture: 27.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	92.4		39-130	0	%REC	1	08/22/08 2:03
Surr: Phenol-d5	95.5		33-130	0	%REC	1	08/22/08 2:03
Surr: Terphenyl-d14	108		36-146	0	%REC	1	08/22/08 2:03

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381971 Project Supervisor: Monika Santucci

Form I TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Trench-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-008B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4752.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 27 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.69	1300	BJ
2.	aldol	7.22	38000	BJA

FORM I TIC 16 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4752.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		440	5.7	µg/Kg-dry	1	08/22/08 2:42
2,4,5-Trichlorophenol	ND		2200	28	µg/Kg-dry	1	08/22/08 2:42
2,4,6-Trichlorophenol	ND		440	7.5	µg/Kg-dry	1	08/22/08 2:42
2,4-Dichlorophenol	ND		440	5.0	µg/Kg-dry	1	08/22/08 2:42
2,4-Dimethylphenol	ND		440	88	µg/Kg-dry	1	08/22/08 2:42
2,4-Dinitrophenol	ND		2200	440	µg/Kg-dry	1	08/22/08 2:42
2,4-Dinitrotoluene	ND		440	6.4	µg/Kg-dry	1	08/22/08 2:42
2,6-Dinitrotoluene	ND		440	7.4	µg/Kg-dry	1	08/22/08 2:42
2-Chloronaphthalene	ND		440	4.9	µg/Kg-dry	1	08/22/08 2:42
2-Chlorophenol	ND		440	6.8	µg/Kg-dry	1	08/22/08 2:42
2-Methylnaphthalene	ND		440	2.1	µg/Kg-dry	1	08/22/08 2:42
2-Methylphenol	ND		440	4.9	µg/Kg-dry	1	08/22/08 2:42
2-Nitroaniline	ND		2200	7.6	µg/Kg-dry	1	08/22/08 2:42
2-Nitrophenol	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
3,3'-Dichlorobenzidine	ND		870	53	µg/Kg-dry	1	08/22/08 2:42
3-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/22/08 2:42
4,6-Dinitro-2-methylphenol	ND		2200	220	µg/Kg-dry	1	08/22/08 2:42
4-Bromophenyl phenyl ether	ND		440	6.9	µg/Kg-dry	1	08/22/08 2:42
4-Chloro-3-methylphenol	ND		440	13	µg/Kg-dry	1	08/22/08 2:42
4-Chloroaniline	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
4-Chlorophenyl phenyl ether	ND		440	5.4	µg/Kg-dry	1	08/22/08 2:42
4-Methylphenol	ND		440	3.8	µg/Kg-dry	1	08/22/08 2:42
4-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/22/08 2:42
4-Nitrophenol	ND		2200	88	µg/Kg-dry	1	08/22/08 2:42
Acenaphthene	ND		440	4.4	µg/Kg-dry	1	08/22/08 2:42
Acenaphthylene	ND		440	5.3	µg/Kg-dry	1	08/22/08 2:42
Acetophenone	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Anthracene	ND		440	3.1	µg/Kg-dry	1	08/22/08 2:42
Atrazine	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Benzaldehyde	ND		440	6.6	µg/Kg-dry	1	08/22/08 2:42
Benzo[a]anthracene	ND		440	4.5	µg/Kg-dry	1	08/22/08 2:42
Benzo[a]pyrene	ND		440	13	µg/Kg-dry	1	08/22/08 2:42
Benzo[b]fluoranthene	ND		440	15	µg/Kg-dry	1	08/22/08 2:42
Benzo[g,h,i]perylene	ND		440	18	µg/Kg-dry	1	08/22/08 2:42

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381972 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4753.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		440	15	µg/Kg-dry	1	08/22/08 2:42
bis(2-Chloroethoxy)methane	ND		440	4.1	µg/Kg-dry	1	08/22/08 2:42
bis(2-chloroethyl)ether	ND		440	6.8	µg/Kg-dry	1	08/22/08 2:42
bis(2-chloroisopropyl)ether	ND		440	7.5	µg/Kg-dry	1	08/22/08 2:42
bis(2-Ethylhexyl)phthalate	ND		440	20	µg/Kg-dry	1	08/22/08 2:42
Butyl benzyl phthalate	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
Caprolactam	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Carbazole	ND		440	15	µg/Kg-dry	1	08/22/08 2:42
Chrysene	ND		440	3.7	µg/Kg-dry	1	08/22/08 2:42
Di-n-butyl phthalate	ND		440	110	µg/Kg-dry	1	08/22/08 2:42
Di-n-octyl phthalate	ND		440	2.6	µg/Kg-dry	1	08/22/08 2:42
Dibenz[a,h]anthracene	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
Dibenzofuran	ND		440	6.1	µg/Kg-dry	1	08/22/08 2:42
Diethyl phthalate	ND		440	4.8	µg/Kg-dry	1	08/22/08 2:42
Dimethyl phthalate	ND		440	4.5	µg/Kg-dry	1	08/22/08 2:42
Fluoranthene	ND		440	13	µg/Kg-dry	1	08/22/08 2:42
Fluorene	ND		440	4.5	µg/Kg-dry	1	08/22/08 2:42
Hexachlorobenzene	ND		440	7.1	µg/Kg-dry	1	08/22/08 2:42
Hexachlorobutadiene	ND		440	4.0	µg/Kg-dry	1	08/22/08 2:42
Hexachlorocyclopentadiene	ND		440	220	µg/Kg-dry	1	08/22/08 2:42
Hexachloroethane	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Indeno[1,2,3-cd]pyrene	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
Isophorone	ND		440	3.7	µg/Kg-dry	1	08/22/08 2:42
N-Nitroso-di-n-propylamine	ND		440	5.0	µg/Kg-dry	1	08/22/08 2:42
N-Nitrosodiphenylamine	ND		440	3.0	µg/Kg-dry	1	08/22/08 2:42
Naphthalene	ND		440	3.3	µg/Kg-dry	1	08/22/08 2:42
Nitrobenzene	ND		440	4.7	µg/Kg-dry	1	08/22/08 2:42
Pentachlorophenol	ND		2200	440	µg/Kg-dry	1	08/22/08 2:42
Phenanthrene	ND		440	1.9	µg/Kg-dry	1	08/22/08 2:42
Phenol	ND		440	4.1	µg/Kg-dry	1	08/22/08 2:42
Pyrene	ND		440	3.0	µg/Kg-dry	1	08/22/08 2:42
Surr: 2,4,6-Tribromophenol	93.1		20-143	0	%REC	1	08/22/08 2:42
Surr: 2-Fluorobiphenyl	82.2		46-130	0	%REC	1	08/22/08 2:42
Surr: 2-Fluorophenol	85.2		22-130	0	%REC	1	08/22/08 2:42

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381972 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4753.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	87.8		36-130	0	%REC	1	08/22/08 2:42
Surr: Phenol-d5	88.2		33-130	0	%REC	1	08/22/08 2:42
Surr: Terphenyl-d14	100		36-148	0	%REC	1	08/22/08 2:42

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381972 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Trench-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBC-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-009B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4753.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	1200	BJ
2.	aldol	7.22	35000	BJA

FORM I TIC 17 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	PrepDate:	08/26/08 0:00
ColumnID:		BatchNo:	8003/R14620
Revision:	08/27/08 15:02	FileID:	1-SAMP-51265
Col Type:			

Sample Size: 0.5 g; %Moisture: 17.9; TestCode: 6010S

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	7.5		1.2	0.17	mg/Kg-dry	1	08/27/08 12:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383218 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 14.7	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51266
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	4.7		1.2	0.17	mg/Kg-dry	1	08/27/08 12:31

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383219 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 16.7	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51267
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	6.5		1.2	0.17	mg/Kg-dry	1	08/27/08 12:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383220 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 15.4	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51268
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	3.0		1.2	0.17	mg/Kg-dry	1	08/27/08 12:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383221 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 24.4	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51273
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	3.1		1.3	0.19	mg/Kg-dry	1	08/27/08 12:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383226 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 27.8	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51277
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	3.2		1.4	0.20	mg/Kg-dry	1	08/27/08 13:10

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383230 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 18.3	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51278
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	8.7		1.2	0.17	mg/Kg-dry	1	08/27/08 13:14

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383231 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 27.2	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51279
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.50 J		1.4	0.0076	mg/Kg-dry	1	08/27/08 13:17
Chromium	10		1.4	0.19	mg/Kg-dry	1	08/27/08 13:17
Copper	6.1		1.4	0.55	mg/Kg-dry	1	08/27/08 13:17
Iron	12000		6.9	0.64	mg/Kg-dry	1	08/27/08 13:17
Nickel	11		6.9	0.27	mg/Kg-dry	1	08/27/08 13:17
Zinc	34		2.7	1.1	mg/Kg-dry	1	08/27/08 13:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383232 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 24.4	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51280
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.52 J		1.3	0.0075	mg/Kg-dry	1	08/27/08 13:21
Chromium	12		1.3	0.19	mg/Kg-dry	1	08/27/08 13:21
Copper	5.6		1.3	0.53	mg/Kg-dry	1	08/27/08 13:21
Iron	12000		6.6	0.62	mg/Kg-dry	1	08/27/08 13:21
Nickel	13		6.6	0.26	mg/Kg-dry	1	08/27/08 13:21
Zinc	39		2.6	1.1	mg/Kg-dry	1	08/27/08 13:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383233 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 08/27/08 10:00
ColumnID:		%Moisture: 27.2	BatchNo: 8011/R14621
Revision:	08/27/08 16:16	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.047	J	0.14	0.0046	mg/Kg-dry	1	08/27/08 14:36

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 09/02/08 9:13 383266 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 08/27/08 10:00
ColumnID:		%Moisture: 24.4	BatchNo: 8011/R14621
Revision:	08/27/08 16:16	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.053	J	0.13	0.0045	mg/Kg-dry	1	08/27/08 14:43

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 09/02/08 9:13 383269 Project Supervisor: Monika Santucci

Quality Control Results

GC/MS Volatile Organics Data

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No. _____ SDG No.: 0808068D

Level:(low/med) LOW

	EPA SAMPLE NO.	LSL ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #				TOT OUT
01	LCS-14526	LCS-14526	97	92	105				0
02	MB-14526	MB-14526	96	101	110				0
03	SB-2-Bot-1	0808068-001A	103	107	124				0
04	SB-2-South	0808068-002A	96	100	107				0
05	SB-2-East	0808068-003A	103	97	93				0
06	SB-2-North	0808068-004A	100	100	99				0
07	LCS-14527	LCS-14527	95	94	104				0
08	MB-14527	MB-14527	95	101	116				0
09	SB-2-Bot-2	0808068-006A	96	104	124				0
10	SB-2-West	0808068-005A	99	100	114				0
11	SB-2-EastDL	0808068-003ADL	102	99	93				0
12	SB-2-NorthDL	0808068-004ADL	102	99	105				0
13	Trip Blank	0808068-007A	100	99	115				0
14	LCS-14529	LCS-14529	96	94	98				0
15	MSB-14529	MSB-14529	96	94	98				0
16	UST-EastMS	0808076-004AMS	99	93	102				0
17	UST-EastMSD	0808076-004AMSD	93	96	104				0
18	MB-14529	MB-14529	93	101	110				0
19	UST-Bot-1	0808076-001A	113	115	129 *				1
20	UST-North	0808076-002A	104	99	112				0
21	UST-Bot-2	0808076-003A	109	114	132 *				1
22	UST-East	0808076-004A	107	100	108				0
23	UST-West	0808076-005A	104	100	107				0
24	UST-South	0808076-006A	111	101	107				0
25	Field Dup	0808076-007A	113	114	130 *				1
26	Trench-Bot-1	0808076-008A	108	102	115				0
27	Trench-Bot-2	0808076-009A	109	102	119				0

		QC Limit
SMC1	(DCE) 1 = 1,2-Dichloroethane-d4	71-128
SMC2	(TOL) 1 = Toluene-d8	75-125
SMC3	(BFB) 1 = 4-Bromofluorobenzene	59-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 1 of 2 FORM II VOA-2 SW8260B

156

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No. _____ SDG No.: 0808068D

Level:(low/med) LOW

	EPA SAMPLE NO.	LSL ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #				TOT OUT
28	LCS-14531	LCS-14531	101	93	100				0
29	MB-14531	MB-14531	102	101	110				0
30	UST-Bot-1DL	0808076-001ADL	109	106	129 *				1
31	UST-Bot-2DL	0808076-003ADL	112	104	122				0
32	Field DupDL	0808076-007ADL	110	105	125				0
33	Trench-Bot-1DL	0808076-008ADL	109	101	106				0
34	Trench-Bot-2DL	0808076-009ADL	108	100	109				0
35	LCSD-14531	LCSD-14531	109	93	102				0

		QC Limit
SMC1	(DCE) 1 = 1,2-Dichloroethane-d4	71-128
SMC2	(TOL) 1 = Toluene-d8	75-125
SMC3	(BFB) 1 = 4-Bromofluorobenzene	59-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 2 of 2 FORM II VOA-2 SW8260B

157

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMS SampType: MS TestCode: 826057_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/16/2008 SeqNo: 350757
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	59.1	5.9	59.1	0	100	43	151				
Chloromethane	72.6	5.9	59.1	0	123	52	151				
Vinyl chloride	62.9	5.9	59.1	0	106	57	148				
Bromomethane	44.7	5.9	59.1	0	76	44	145				
Chloroethane	61.7	5.9	59.1	0	104	49	161				
Trichlorofluoromethane	44.1	5.9	59.1	0	75	59	156				
1,1-Dichloroethene	60.0	3.0	59.1	0	102	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	63.0	3.0	59.1	0	107	70	143				
Acetone	137	47	118	0	116	25	175				
Carbon disulfide	71.6	3.0	59.1	1.26	119	58	140				
Methyl acetate	69.0	3.0	59.1	0	117	70	130				
Methylene chloride	62.7	5.9	59.1	1	104	68	132				
trans-1,2-Dichloroethene	59.2	3.0	59.1	0	100	70	130				
Methyl tert-butyl ether	61.8	3.0	59.1	0	105	70	155				
1,1-Dichloroethane	61.3	3.0	59.1	0	104	70	133				
cis-1,2-Dichloroethene	59.0	3.0	59.1	0	100	70	130				
2-Butanone	133	47	118	0	112	30	152				
Chloroform	57.3	3.0	59.1	0	97	70	130				
1,1,1-Trichloroethane	53.9	3.0	59.1	0	91	70	142				
Cyclohexane	74.9	3.0	59.1	0	127	70	130				
Carbon tetrachloride	53.9	3.0	59.1	0	91	69	140				
Benzene	63.7	3.0	59.1	0	108	70	130				
1,2-Dichloroethane	58.5	3.0	59.1	0	99	68	135				
Trichloroethene	56.8	3.0	59.1	0	96	70	130				
Methylcyclohexane	69.6	3.0	59.1	0	118	70	130				
1,2-Dichloropropane	65.7	3.0	59.1	0	111	70	130				
Bromodichloromethane	60.7	3.0	59.1	0	103	68	138				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Page 27 of 44

158

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMS SampType: MS TestCode: 826057_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/16/2008 SeqNo: 350757
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	55.7	3.0	59.1	0	111	55	139				
4-Methyl-2-pentanone	136	5.9	118	0	115	50	150				
Toluene	61.7	3.0	59.1	0	104	70	130				
trans-1,3-Dichloropropene	61.4	3.0	59.1	0	104	53	135				
1,1,2-Trichloroethane	62.9	3.0	59.1	0	106	70	132				
Tetrachloroethene	51.9	3.0	59.1	0	88	63	145				
2-Hexanone	129	5.9	118	0	109	38	150				
Dibromochloromethane	56.5	3.0	59.1	0	96	68	141				
1,2-Dibromoethane	57.4	3.0	59.1	0	97	70	130				
Chlorobenzene	53.2	3.0	59.1	0	90	70	130				
Ethylbenzene	57.7	3.0	59.1	0	98	70	130				
Xylenes (total)	189	5.9	177	0	95	70	130				
Styrene	53.5	3.0	59.1	0	91	70	130				
Bromoform	50.3	3.0	59.1	0	85	59	137				
Isopropylbenzene	63.7	3.0	59.1	0	108	57	168				
1,1,2,2-Tetrachloroethane	68.4	3.0	59.1	0	116	63	175				
1,3-Dichlorobenzene	58.8	3.0	59.1	0	100	70	138				
1,4-Dichlorobenzene	57.1	3.0	59.1	0	97	70	131				
1,2-Dichlorobenzene	59.6	3.0	59.1	0	101	70	132				
1,2-Dibromo-3-chloropropane	72.7	5.9	59.1	0	123	70	138				
1,2,4-Trichlorobenzene	81.0	5.9	59.1	0	103	48	131				
Surr: 1,2-Dichloroethane-d4	58.5	0.12	59.1	0	99	71	128				
Surr: Toluene-d8	58.1	0.12	59.1	0	98	75	125				
Surr: 4-Bromofluorobenzene	60.1	0.12	59.1	0	102	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Page 28 of 44

159

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: MSB-14529 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	52.6	5.0	50	0	105	43	151				
Chloromethane	65.8	5.0	50	0	132	52	151				
Vinyl chloride	58.1	5.0	50	0	116	57	145				
Bromomethane	39.6	5.0	50	0	79	44	145				
Chloroethane	54.9	5.0	50	0	110	49	151				
Trichlorofluoromethane	40.6	5.0	50	0	81	59	156				
1,1-Dichloroethene	68.0	2.5	50	0	136	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	64.3	2.5	50	0	129	70	143				
Acetone	111	40	100	0	111	25	175				
Carbon disulfide	74.2	2.5	50	0	148	58	140				S
Methyl acetate	59.0	2.5	50	0	118	70	130				
Methylene chloride	53.4	5.0	50	0	107	68	132				
trans-1,2-Dichloroethene	52.5	2.5	50	0	105	70	130				
Methyl tert-butyl ether	49.2	2.5	50	0	98	70	135				
1,1-Dichloroethane	53.8	2.5	50	0	108	70	133				
cis-1,2-Dichloroethene	49.8	2.5	50	0	100	70	130				
2-Butanone	111	40	100	0	111	30	152				
Chloroform	49.3	2.5	50	0	99	70	130				
1,1,1-Trichloroethane	48.3	2.5	50	0	97	70	142				
Cyclohexane	66.6	2.5	50	0	133	70	130				S
Carbon tetrachloride	48.3	2.5	50	0	97	69	140				
Benzene	55.2	2.5	50	0	110	70	130				
1,2-Dichloroethane	48.5	2.5	50	0	97	68	135				
Trichloroethene	50.5	2.5	50	0	101	70	130				
Methylcyclohexane	59.8	2.5	50	0	120	70	130				
1,2-Dichloropropane	54.8	2.5	50	0	109	70	130				
Bromodichloromethane	50.8	2.5	50	0	102	68	138				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

162

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	59.9	5.9	59.1	0	101	43	151	59.1	1.4	20	
Chloromethane	72.6	5.9	59.1	0	123	52	151	72.6	0	20	
Vinyl chloride	65.4	5.9	59.1	0	111	57	146	62.9	3.8	24	
Bromomethane	44.7	5.9	59.1	0	76	44	145	44.7	0.1	21	
Chloroethane	61.5	5.9	59.1	0	104	49	161	61.7	0.3	20	
Trichlorofluoromethane	45.8	5.9	59.1	0	77	59	156	44.1	3.7	20	
1,1-Dichloroethene	64.0	3.0	59.1	0	108	70	144	60	6.4	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	65.4	3.0	59.1	0	111	70	143	63	3.7	20	
Acetone	123	47	118	0	104	25	175	137	10	50	
Carbon disulfide	73.6	3.0	59.1	1.26	122	58	140	71.6	2.8	20	
Methyl acetate	61.5	3.0	59.1	0	104	70	130	69	11	20	
Methylene chloride	62.5	5.9	59.1	1	104	68	132	62.7	0.4	20	
trans-1,2-Dichloroethene	60.6	3.0	59.1	0	103	70	130	59.2	2.3	20	
Methyl tert-butyl ether	59.6	3.0	59.1	0	101	70	135	61.8	3.6	20	
1,1-Dichloroethane	62.9	3.0	59.1	0	106	70	133	61.3	2.5	20	
cis-1,2-Dichloroethene	58.8	3.0	59.1	0	100	70	130	59	0.3	20	
2-Butanone	118	47	118	0	99	30	152	133	12	50	
Chloroform	57.3	3.0	59.1	0	97	70	130	57.3	0.1	20	
1,1,1-Trichloroethane	56.0	3.0	59.1	0	95	70	142	53.9	3.8	20	
Cyclohexane	78.9	3.0	59.1	0	133	70	130	74.9	5.2	20	S
Carbon tetrachloride	56.0	3.0	59.1	0	95	69	140	53.9	3.6	20	
Benzene	64.6	3.0	59.1	0	109	70	130	63.7	1.5	20	
1,2-Dichloroethane	56.3	3.0	59.1	0	95	68	135	58.5	4.0	20	
Trichloroethene	58.5	3.0	59.1	0	99	70	130	56.8	2.8	20	
Methylcyclohexane	72.3	3.0	59.1	0	122	70	130	69.6	3.9	20	
1,2-Dichloropropane	65.7	3.0	59.1	0	111	70	130	65.7	0	20	
Bromodichloromethane	59.0	3.0	59.1	0	100	68	138	60.7	2.0	20	

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

160

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: MSB-14529 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	54.1	2.5	50	0	108	55	139				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.0	2.5	50	0	106	70	130				
trans-1,3-Dichloropropene	50.8	2.5	50	0	102	53	135				
1,1,2-Trichloroethane	52.7	2.5	50	0	105	70	132				
Tetrachloroethene	45.5	2.5	50	0	91	63	145				
2-Hexanone	103	5.0	100	0	103	38	150				
Dibromochloromethane	46.2	2.5	50	0	92	68	141				
1,2-Dibromoethane	47.9	2.5	50	0	96	70	130				
Chlorobenzene	45.9	2.5	50	0	92	70	130				
Ethylbenzene	51.0	2.5	50	0	102	70	130				
Xylenes (total)	147	5.0	150	0	98	70	130				
Styrene	46.4	2.5	50	0	93	70	130				
Bromoform	42.1	2.5	50	0	84	59	137				
Isopropylbenzene	56.2	2.5	50	0	112	57	168				
1,1,2,2-Tetrachloroethane	58.4	2.5	50	0	117	63	175				
1,3-Dichlorobenzene	51.0	2.5	50	0	102	70	139				
1,4-Dichlorobenzene	49.0	2.5	50	0	98	70	131				
1,2-Dichlorobenzene	50.6	2.5	50	0	101	70	132				
1,2-Dibromo-3-chloropropane	61.9	5.0	50	0	124	70	138				
1,2,4-Trichlorobenzene	53.1	5.0	50	0	106	48	131				
Surr: 1,2-Dichloroethane-d4	47.8	0.10	50	0	96	71	128				
Surr: Toluene-d8	47.1	0.10	50	0	94	75	125				
Surr: 4-Bromofluorobenzene	49.1	0.10	50	0	98	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

163

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	64.4	3.0	59.1	0	109	55	139	65.7	2.0	20	
4-Methyl-2-pentanone	121	5.9	118	0	102	50	150	136	12	50	
Toluene	62.8	3.0	59.1	0	106	70	130	61.7	1.7	20	
trans-1,3-Dichloropropene	58.3	3.0	59.1	0	99	53	135	61.4	5.2	20	
1,1,2-Trichloroethane	60.5	3.0	59.1	0	102	70	132	62.9	3.9	20	
Tetrachloroethene	54.4	3.0	59.1	0	92	63	145	51.9	4.7	21	
2-Hexanone	112	5.9	118	0	95	38	150	129	14	50	
Dibromochloromethane	55.6	3.0	59.1	0	94	68	141	55.5	0.2	20	
1,2-Dibromoethane	55.9	3.0	59.1	0	95	70	130	57.4	2.7	20	
Chlorobenzene	54.8	3.0	59.1	0	93	70	130	53.2	2.9	20	
Ethylbenzene	60.5	3.0	59.1	0	102	70	130	57.7	4.7	20	
Xylenes (total)	177	5.9	177	0	100	70	130	169	4.8	20	
Styrene	55.1	3.0	59.1	0	93	70	130	53.5	2.9	20	
Bromoform	47.8	3.0	59.1	0	81	59	137	50.3	5.1	20	
Isopropylbenzene	70.0	3.0	59.1	0	118	57	168	63.7	9.4	20	
1,1,2,2-Tetrachloroethane	67.1	3.0	59.1	0	113	63	175	68.4	2.0	24	
1,3-Dichlorobenzene	60.4	3.0	59.1	0	102	70	139	56.8	6.7	20	
1,4-Dichlorobenzene	58.0	3.0	59.1	0	98	70	131	57.1	1.6	24	
1,2-Dichlorobenzene	60.6	3.0	59.1	0	102	70	132	59.6	1.5	20	
1,2-Dibromo-3-chloropropane	67.0	5.9	59.1	0	113	70	138	72.7	8.2	24	
1,2,4-Trichlorobenzene	59.9	5.9	59.1	0	101	48	131	61	1.8	24	
Surr: 1,2-Dichloroethane-d4	54.7	0.12	59.1	0	93	71	128	0		0	
Surr: Toluene-d8	56.8	0.12	59.1	0	96	75	125	0		0	
Surr: 4-Bromofluorobenzene	61.4	0.12	59.1	0	104	59	125	0		0	

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

161

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14527 SampType: LCS TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380712
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	46.1	5.0	50	0	92	55	142				
Chloromethane	58.9	5.0	50	0	118	62	141				
Vinyl chloride	51.0	5.0	50	0	102	68	135				
Bromomethane	38.7	5.0	50	0	77	56	147				
Chloroethane	44.7	5.0	50	0	89	63	142				
Trichlorofluoromethane	37.2	5.0	50	0	74	67	136				
1,1-Dichloroethene	55.0	2.5	50	0	110	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	52.7	2.5	50	0	105	80	134				
Acetone	99.1	40	100	0	99	25	175				
Carbon disulfide	61.5	2.5	50	0	123	73	130				
Methyl acetate	55.8	2.5	50	0	112	67	147				
Methylene chloride	52.3	5.0	50	0	105	75	124				
trans-1,2-Dichloroethene	52.2	2.5	50	0	104	77	123				
Methyl tert-butyl ether	52.5	2.5	50	0	105	76	126				
1,1-Dichloroethane	54.0	2.5	50	0	108	76	124				
cis-1,2-Dichloroethene	51.0	2.5	50	0	102	79	120				
2-Butanone	105	40	100	0	105	42	154				
Chloroform	48.8	2.5	50	0	98	77	121				
1,1,1-Trichloroethane	47.9	2.5	50	0	96	78	132				
Cyclohexane	69.0	2.5	50	0	138	80	128				S
Carbon tetrachloride	46.9	2.5	50	0	94	74	138				
Benzene	55.4	2.5	50	0	111	80	121				
1,2-Dichloroethane	48.5	2.5	50	0	97	73	127				
Trichloroethene	49.2	2.5	50	0	98	80	120				
Methylcyclohexane	59.6	2.5	50	0	119	80	128				
1,2-Dichloropropane	56.1	2.5	50	0	112	80	125				
Bromodichloromethane	50.4	2.5	50	0	101	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

166 : 20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14526 SampType: LCS TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14526
Client ID: ZZZZZ Batch ID: R14526 Method: SW8260B Analysis Date: 8/14/2008 SeqNo: 380700
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	47.4	5.0	50	0	95	55	142				
Chloromethane	61.9	5.0	50	0	124	62	141				
Vinyl chloride	52.7	5.0	50	0	105	68	135				
Bromomethane	39.2	5.0	50	0	78	56	147				
Chloroethane	44.3	5.0	50	0	89	63	142				
Trichlorofluoromethane	37.9	5.0	50	0	76	67	136				
1,1-Dichloroethene	53.8	2.5	50	0	108	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	51.6	2.5	50	0	103	80	134				
Acetone	104	40	100	0	104	25	175				
Carbon disulfide	63.2	2.5	50	0	126	73	130				
Methyl acetate	59.1	2.5	50	0	118	67	147				
Methylene chloride	53.3	5.0	50	0	107	75	124				
trans-1,2-Dichloroethene	50.7	2.5	50	0	101	77	123				
Methyl tert-butyl ether	50.6	2.5	50	0	101	76	126				
1,1-Dichloroethane	53.6	2.5	50	0	107	76	124				
cis-1,2-Dichloroethene	49.7	2.5	50	0	99	79	120				
2-Butanone	114	40	100	0	114	42	154				
Chloroform	48.5	2.5	50	0	97	77	121				
1,1,1-Trichloroethane	46.9	2.5	50	0	94	78	132				
Cyclohexane	66.6	2.5	50	0	133	80	128				S
Carbon tetrachloride	45.6	2.5	50	0	91	74	138				
Benzene	54.6	2.5	50	0	109	80	121				
1,2-Dichloroethane	48.8	2.5	50	0	98	73	127				
Trichloroethene	48.4	2.5	50	0	97	80	120				
Methylcyclohexane	56.9	2.5	50	0	114	80	128				
1,2-Dichloropropane	55.3	2.5	50	0	111	80	125				
Bromodichloromethane	49.4	2.5	50	0	99	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

164 : 20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14527 SampType: LCS TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380712
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	55.6	2.5	50	0	111	80	125				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.2	2.5	50	0	106	80	121				
trans-1,3-Dichloropropene	51.7	2.5	50	0	103	78	124				
1,1,2-Trichloroethane	52.3	2.5	50	0	105	80	122				
Tetrachloroethene	42.5	2.5	50	0	85	74	125				
2-Hexanone	102	5.0	100	0	102	50	150				
Dibromochloromethane	46.0	2.5	50	0	92	76	135				
1,2-Dibromoethane	48.3	2.5	50	0	97	80	124				
Chlorobenzene	45.2	2.5	50	0	90	80	120				
Ethylbenzene	50.3	2.5	50	0	101	80	121				
Xylenes (total)	147	5.0	150	0	98	76	124				
Styrene	46.2	2.5	50	0	92	78	122				
Bromoform	40.5	2.5	50	0	81	70	138				
Isopropylbenzene	58.0	2.5	50	0	116	78	131				
1,1,2,2-Tetrachloroethane	58.8	2.5	50	0	118	69	138				
1,3-Dichlorobenzene	50.6	2.5	50	0	101	80	120				
1,4-Dichlorobenzene	48.7	2.5	50	0	97	80	120				
1,2-Dichlorobenzene	51.4	2.5	50	0	103	80	120				
1,2-Dibromo-3-chloropropane	59.0	5.0	50	0	118	69	132				
1,2,4-Trichlorobenzene	52.9	5.0	50	0	106	71	127				
Surr: 1,2-Dichloroethane-d4	47.4	0.10	50	0	95	71	128				
Surr: Toluene-d8	47.0	0.10	50	0	94	75	125				
Surr: 4-Bromofluorobenzene	52.0	0.10	50	0	104	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

167 : 20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14526 SampType: LCS TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14526
Client ID: ZZZZZ Batch ID: R14526 Method: SW8260B Analysis Date: 8/14/2008 SeqNo: 380700
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropane	53.7	2.5	50	0	107	80	125				
4-Methyl-2-pentanone	117	5.0	100	0	117	50	150				
Toluene	52.2	2.5	50	0	104	80	121				
trans-1,3-Dichloropropene	50.2	2.5	50	0	100	78	124				
1,1,2-Trichloroethane	52.4	2.5	50	0	105	80	122				
Tetrachloroethene	40.9	2.5	50	0	82	74	125				
2-Hexanone	108	5.0	100	0	108	50	150				
Dibromochloromethane	44.0	2.5	50	0	88	76	135				
1,2-Dibromoethane	46.9	2.5	50	0	94	80	124				
Chlorobenzene	43.9	2.5	50	0	88	80	120				
Ethylbenzene	48.8	2.5	50	0	98	80	121				
Xylenes (total)	140	5.0	150	0	94	76	124				
Styrene	44.1	2.5	50	0	88	78	122				
Bromoform	38.6	2.5	50	0	77	70	138				
Isopropylbenzene	56.8	2.5	50	0	114	78	131				
1,1,2,2-Tetrachloroethane	60.9	2.5	50	0	122	69	138				
1,3-Dichlorobenzene	49.0	2.5	50	0	98	80	120				
1,4-Dichlorobenzene	47.8	2.5	50	0	96	80	120				
1,2-Dichlorobenzene	50.3	2.5	50	0	101	80	120				
1,2-Dibromo-3-chloropropane	61.2	5.0	50	0	122	69	132				
1,2,4-Trichlorobenzene	49.7	5.0	50	0	99	71	127				
Surr: 1,2-Dichloroethane-d4	48.7	0.10	50	0	97	71	128				
Surr: Toluene-d8	46.2	0.10	50	0	92	75	125				
Surr: 4-Bromofluorobenzene	52.3	0.10	50	0	105	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

165 : 20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14531 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380802
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	51.0	5.0	50	0	102	55	142				
Chloromethane	65.5	5.0	50	0	131	62	141				
Vinyl chloride	57.6	5.0	50	0	115	68	135				
Bromomethane	40.4	5.0	50	0	81	56	147				
Chloroethane	57.6	5.0	50	0	115	63	142				
Trichlorofluoromethane	40.7	5.0	50	0	81	67	136				
1,1-Dichloroethene	56.2	2.5	50	0	112	76	136				
1,1,2-Trichloro-1,2,2-trifluoroethane	55.0	2.5	50	0	110	60	134				
Acetone	105	40	100	0	105	25	175				
Carbon disulfide	63.7	2.5	50	0	127	73	130				
Methyl acetate	59.5	2.5	50	0	119	67	147				
Methylene chloride	56.7	5.0	50	0	113	75	124				
trans-1,2-Dichloroethene	52.6	2.5	50	0	105	77	123				
Methyl tert-butyl ether	53.2	2.5	50	0	104	76	126				
1,1-Dichloroethane	56.6	2.5	50	0	113	76	124				
cis-1,2-Dichloroethene	51.6	2.5	50	0	103	79	120				
2-Butanone	112	40	100	0	112	42	154				
Chloroform	52.5	2.5	50	0	105	77	121				
1,1,1-Trichloroethane	50.9	2.5	50	0	102	78	132				
Cyclohexane	67.6	2.5	50	0	135	80	128				S
Carbon tetrachloride	50.0	2.5	50	0	100	74	138				
Benzene	56.9	2.5	50	0	114	80	121				
1,2-Dichloroethane	52.6	2.5	50	0	105	73	127				
Trichloroethene	51.5	2.5	50	0	103	80	120				
Methylcyclohexane	57.3	2.5	50	0	115	80	128				
1,2-Dichloropropane	57.0	2.5	50	0	114	80	125				
Bromodichloromethane	53.4	2.5	50	0	107	80	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

170

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14529 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380755
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	52.6	5.0	50	0	105	55	142				
Chloromethane	65.8	5.0	50	0	132	62	141				
Vinyl chloride	58.1	5.0	50	0	116	68	135				
Bromomethane	39.6	5.0	50	0	79	56	147				
Chloroethane	54.9	5.0	50	0	110	63	142				
Trichlorofluoromethane	40.6	5.0	50	0	81	67	136				
1,1-Dichloroethene	68.0	2.5	50	0	136	76	136				S
1,1,2-Trichloro-1,2,2-trifluoroethane	64.3	2.5	50	0	129	60	134				
Acetone	111	40	100	0	111	25	175				
Carbon disulfide	74.2	2.5	50	0	148	73	130				S
Methyl acetate	59.0	2.5	50	0	118	67	147				
Methylene chloride	53.4	5.0	50	0	107	75	124				
trans-1,2-Dichloroethene	52.5	2.5	50	0	105	77	123				
Methyl tert-butyl ether	49.2	2.5	50	0	98	76	126				
1,1-Dichloroethane	53.8	2.5	50	0	108	76	124				
cis-1,2-Dichloroethene	49.8	2.5	50	0	100	79	120				
2-Butanone	111	40	100	0	111	42	154				
Chloroform	49.3	2.5	50	0	99	77	121				
1,1,1-Trichloroethane	48.3	2.5	50	0	97	78	132				
Cyclohexane	66.6	2.5	50	0	133	80	128				S
Carbon tetrachloride	48.3	2.5	50	0	97	74	138				
Benzene	55.2	2.5	50	0	110	80	121				
1,2-Dichloroethane	48.5	2.5	50	0	97	73	127				
Trichloroethene	50.5	2.5	50	0	101	80	120				
Methylcyclohexane	59.8	2.5	50	0	120	80	128				
1,2-Dichloropropane	54.6	2.5	50	0	109	80	125				
Bromodichloromethane	50.8	2.5	50	0	102	80	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

168

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14531 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380802
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	56.5	2.5	50	0	113	80	125				
4-Methyl-2-pentanone	115	5.0	100	0	115	50	150				
Toluene	54.8	2.5	50	0	110	80	121				
trans-1,3-Dichloropropene	54.4	2.5	50	0	109	78	124				
1,1,2-Trichloroethane	55.0	2.5	50	0	110	80	122				
Tetrachloroethene	44.2	2.5	50	0	88	74	126				
2-Hexanone	105	5.0	100	0	105	50	150				
Dibromochloromethane	46.0	2.5	50	0	92	76	135				
1,2-Dibromoethane	48.3	2.5	50	0	97	80	124				
Chlorobenzene	46.1	2.5	50	0	92	80	120				
Ethylbenzene	50.0	2.5	50	0	100	80	121				
Xylenes (total)	145	5.0	150	0	97	76	124				
Styrene	46.1	2.5	50	0	92	78	122				
Bromoform	40.7	2.5	50	0	81	70	138				
Isopropylbenzene	56.1	2.5	50	0	112	76	131				
1,1,2,2-Tetrachloroethane	59.0	2.5	50	0	118	69	138				
1,3-Dichlorobenzene	50.7	2.5	50	0	101	80	120				
1,4-Dichlorobenzene	48.9	2.5	50	0	98	80	120				
1,2-Dichlorobenzene	51.6	2.5	50	0	103	80	120				
1,2-Dibromo-3-chloropropane	61.3	5.0	50	0	123	69	132				
1,2,4-Trichlorobenzene	49.8	5.0	50	0	100	71	127				
Surr: 1,2-Dichloroethane-d4	50.7	0.10	50	0	101	71	128				
Surr: Toluene-d8	46.3	0.10	50	0	93	75	125				
Surr: 4-Bromofluorobenzene	50.1	0.10	50	0	100	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

171

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14529 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380755
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	54.1	2.5	50	0	108	80	125				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.0	2.5	50	0	106	80	121				
trans-1,3-Dichloropropene	50.9	2.5	50	0	102	78	124				
1,1,2-Trichloroethane	52.7	2.5	50	0	105	80	122				
Tetrachloroethene	45.5	2.5	50	0	91	74	126				
2-Hexanone	103	5.0	100	0	103	50	150				
Dibromochloromethane	46.2	2.5	50	0	92	76	135				
1,2-Dibromoethane	47.9	2.5	50	0	96	80	124				
Chlorobenzene	45.9	2.5	50	0	92	80	120				
Ethylbenzene	51.0	2.5	50	0	102	80	121				
Xylenes (total)	147	5.0	150	0	98	76	124				
Styrene	46.4	2.5	50	0	93	78	122				
Bromoform	42.1	2.5	50	0	84	70	138				
Isopropylbenzene	55.2	2.5	50	0	112	76	131				
1,1,2,2-Tetrachloroethane	58.4	2.5	50	0	117	69	138				
1,3-Dichlorobenzene	51.0	2.5	50	0	102	80	120				
1,4-Dichlorobenzene	49.0	2.5	50	0	98	80	120				
1,2-Dichlorobenzene	50.6	2.5	50	0	101	80	120				
1,2-Dibromo-3-chloropropane	61.9	5.0	50	0	124	69	132				
1,2,4-Trichlorobenzene	53.1	5.0	50	0	106	71	127				
Surr: 1,2-Dichloroethane-d4	47.8	0.10	50	0	96	71	128				
Surr: Toluene-d8	47.1	0.10	50	0	94	75	125				
Surr: 4-Bromofluorobenzene	49.1	0.10	50	0	98	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

169

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-14531 SampType: LCSD TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380810
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	45.4	5.0	50	0	91	55	142	51	12	20	
Chloromethane	66.4	5.0	50	0	133	62	141	65.5	1.3	20	
Vinyl chloride	55.5	5.0	50	0	111	68	135	57.6	3.8	24	
Bromomethane	41.8	5.0	50	0	84	56	147	40.4	3.5	21	
Chloroethane	60.4	5.0	50	0	121	63	142	57.6	4.8	20	
Trichlorofluoromethane	43.2	5.0	50	0	86	67	136	40.7	5.9	20	
1,1-Dichloroethene	55.5	2.5	50	0	111	78	135	56.2	1.1	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	54.3	2.5	50	0	109	80	134	55	1.2	20	
Acetone	109	40	100	0	109	25	175	105	3.8	50	
Carbon disulfide	67.3	2.5	50	0	135	73	130	63.7	5.5	20	S
Methyl acetate	64.0	2.5	50	0	128	67	147	59.5	7.2	20	
Methylene chloride	58.2	5.0	50	0	116	75	124	56.7	2.7	20	
trans-1,2-Dichloroethene	53.0	2.5	50	0	106	77	123	52.6	0.8	20	
Methyl tert-butyl ether	52.0	2.5	50	0	104	76	126	52.2	0.3	20	
1,1-Dichloroethane	58.4	2.5	50	0	117	76	124	56.6	3.2	20	
cis-1,2-Dichloroethene	52.0	2.5	50	0	104	79	120	51.6	0.8	20	
2-Butanone	116	40	100	0	116	42	154	112	4.0	50	
Chloroform	54.8	2.5	50	0	110	77	121	52.5	4.2	20	
1,1,1-Trichloroethane	53.2	2.5	50	0	106	78	132	50.9	4.4	20	
Cyclohexane	65.9	2.5	50	0	132	80	128	67.6	2.4	20	S
Carbon tetrachloride	50.9	2.5	50	0	102	74	138	50	1.8	20	
Benzene	58.6	2.5	50	0	117	80	121	56.9	2.9	20	
1,2-Dichloroethane	54.9	2.5	50	0	110	73	127	52.6	4.3	20	
Trichloroethene	52.4	2.5	50	0	105	80	120	51.5	1.6	20	
Methylcyclohexane	54.1	2.5	50	0	108	80	128	57.3	5.8	20	
1,2-Dichloropropane	58.0	2.5	50	0	116	80	125	57	1.6	20	
Bromodichloromethane	54.4	2.5	50	0	109	80	129	53.4	1.7	20	

Qualifiers:
B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL)
R RPD exceeds accepted precision limit
S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-14531 SampType: LCSD TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380810
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	55.6	2.5	50	0	111	80	125	56.5	1.7	20	
4-Methyl-2-pentanone	117	5.0	100	0	117	50	150	115	2.3	50	
Toluene	55.5	2.5	50	0	111	80	121	54.8	1.3	20	
trans-1,3-Dichloropropene	53.4	2.5	50	0	107	78	124	54.4	1.7	20	
1,1,2-Trichloroethane	57.3	2.5	50	0	115	80	122	55	4.1	20	
Tetrachloroethene	42.5	2.5	50	0	85	74	125	44.2	4.0	21	
2-Hexanone	104	5.0	100	0	104	50	150	105	0.7	50	
Dibromochloromethane	46.7	2.5	50	0	93	76	135	46	1.6	20	
1,2-Dibromoethane	49.4	2.5	50	0	99	80	124	48.3	2.1	20	
Chlorobenzene	46.0	2.5	50	0	92	80	120	46.1	0.3	20	
Ethylbenzene	49.8	2.5	50	0	100	80	121	50	0.5	20	
Xylenes (total)	139	5.0	150	0	93	76	124	145	4.1	20	
Styrene	44.6	2.5	50	0	89	78	122	46.1	3.2	20	
Bromoform	41.9	2.5	50	0	84	70	138	40.7	3.0	20	
Isopropylbenzene	61.1	2.5	50	0	122	78	131	56.1	8.5	20	
1,1,2,2-Tetrachloroethane	70.0	2.5	50	0	140	69	138	59	17	24	S
1,3-Dichlorobenzene	50.7	2.5	50	0	101	80	120	50.7	0.1	20	
1,4-Dichlorobenzene	49.1	2.5	50	0	98	80	120	48.9	0.5	24	
1,2-Dichlorobenzene	54.2	2.5	50	0	108	80	120	51.6	4.9	20	
1,2-Dibromo-3-chloropropane	73.2	5.0	50	0	146	69	132	61.3	18	24	S
1,2,4-Trichlorobenzene	41.0	5.0	50	0	82	71	127	49.8	19	24	
Surr: 1,2-Dichloroethane-d4	54.3	0.10	50	0	109	71	128	0		0	
Surr: Toluene-d8	46.6	0.10	50	0	93	75	125	0		0	
Surr: 4-Bromofluorobenzene	51.0	0.10	50	0	102	59	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL)
R RPD exceeds accepted precision limit
S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.: MB-14526

Lab Name: Life Science Laboratorie Contract: ________
Lab Code: LSLB Case No.: OBG-MS SAS No.: ________ SDG No.: 0808068D
Lab File ID: J6856.D Lab Sample ID: MB-14526
Date Analyzed: 8/14/2008 Time Analyzed: 13:39
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y
Instrument ID: MS03 10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-14526	LCS-14526	J6851.D	10:46
02	SB-2-Bot-1	0808068-001A	J6857.D	14:13
03	SB-2-South	0808068-002A	J6858.D	14:47
04	SB-2-East	0808068-003A	J6859.D	15:20
05	SB-2-North	0808068-004A	J6860.D	15:54

COMMENTS: ____________________

page 1 of 1

FORM IV 826057_OLM42

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14526 SampType: MBLK TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14526
Client ID: ZZZZZ Batch ID: R14526 Method: SW8260B Analysis Date: 8/14/2008 SeqNo: 380703
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	1.35	5.0									J
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL)
R RPD exceeds accepted precision limit
S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14526 | SampType: MBLK | TestCode: 826057_OLM | Units: µg/Kg | Prep Date: | RunNo: 14526
Client ID: ZZZZZ | Batch ID: R14526 | Method: SW8260B | Analysis Date: 8/14/2008 | SeqNo: 390703
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	48.1	0.10	50	0	96	71	128				
Surr: Toluene-d8	50.4	0.10	50	0	101	75	125				
Surr: 4-Bromofluorobenzene	54.8	0.10	50	0	110	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

176

Lab Name: Life Science Laboratories, Inc. Contract: ____ SAMPLE NO.
Lab Code: LSLB Case No.: OBG-NS SAS No.: ____ SDG No.: 0808068 MB-14527
Lab File ID: J6868.D Lab Sample ID: MB-14527
Date Analyzed: 8/15/2008 Time Analyzed: 10:52
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y
Instrument ID: MS03_10

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 LCS-14527	LCS-14527	J6864.D	8:38
02 SB-2-Bot-2	0808068-006A	J6869.D	11:27
03 SB-2-West	0808068-005A	J6873.D	13:43
04 SB-2-EastDL	0808068-003ADL	J6874.D	14:17
05 SB-2-NorthDL	0808068-004ADL	J6875.D	14:51
06 Trip Blank	0808068-007A	J6876.D	15:25

COMMENTS:

FORM IV VOLATILE METHOD BLANK SUMMARY 4A

826057_OLM2

178

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14527 | SampType: MBLK | TestCode: 826057_OLM | Units: µg/Kg | Prep Date: | RunNo: 14527
Client ID: ZZZZZ | Batch ID: R14527 | Method: SW8260B | Analysis Date: 8/15/2008 | SeqNo: 390715
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	1.77	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

179

Lab Name: Life Science Laboratories, Inc. Contract: ____ CLIENT SAMPLE NO.
Lab Code: LSLB Case No.: OBG-NS SAS No.: ____ SDG No.: 0808068 MB-14526
Matrix: (soil/water) SOIL Lab Sample ID: MB-14526
Sample wt/vol: 5 (g/ml) G Lab File ID: J6856.D
Level: LOW Date Received:
% Moisture: not dec. Date Analyzed: 8/14/2008
GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00
Extract Volume: ____ (ml)

Number TICs found: 0 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 10 SW8260B

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

177

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14527 | SampType: MBLK | TestCode: 8260S7_OLM | Units: µg/Kg | Prep Date: | RunNo: 14527
Client ID: ZZZZZ | Batch ID: R14527 | Method: SW8260B | Analysis Date: 8/15/2008 | SeqNo: 380715
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	47.4	0.10	50	0	95	71	128				
Surr: Toluene-d8	50.3	0.10	50	0	101	75	125				
Surr: 4-Bromofluorobenzene	57.8	0.10	50	0	116	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

180

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MB-14527

Lab Name: Life Science Laboratories, Inc. | Contract:
Lab Code: LSLB | Case No.: OBG-MS | SAS No.: | SDG No.: 0808068
Matrix: (soil/water) SOIL | Lab Sample ID: MB-14527
Sample wt/vol: 5 (g/ml) G | Lab File ID: J6868.D
Level: LOW | Date Received:
% Moisture: not dec. | Date Analyzed: 8/15/2008
GC Column: Rtx-VMS ID: 0.18 (mm) | Dilution Factor: 1.00
Extract Volume: (ml)

Number TICs found: 0 | CONCENTRATION UNITS: ug/kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

SW8260B
MS03 TIC 12

181

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14529 | SampType: MBLK | TestCode: 8260S7_OLM | Units: µg/Kg | Prep Date: | RunNo: 14529
Client ID: ZZZZZ | Batch ID: R14529 | Method: SW8260B | Analysis Date: 8/18/2008 | SeqNo: 380759
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	0.030	5.0									J
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

183

4A
VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.
MB-14529

Lab Name: Life Science Laboratories | Contract:
Lab Code: LSLB | Case No.: OBG-MS | SAS No.: | SDG No.: 0808080
Lab File ID: J6915.D | Lab Sample ID: MB-14529
Date Analyzed: 8/18/2008 | Time Analyzed: 6:05
GC Column: Rtx-VMS ID: 0.18 (mm) | Heated Purge: (Y/N) Y
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MSB-14529	MSB-14529	J6911.D	5:48
02	LCS-14529	LCS-14529	J6911.D	5:48
03	UST-EastMS	0808076-004AMS	J6912.D	6:23
04	UST-EastMSD	0808076-004AMSD	J6913.D	6:58
05	UST-Bot-1	0808076-001A	J6922.D	12:02
06	UST-North	0808076-002A	J6923.D	12:36
07	UST-Bot-2	0808076-003A	J6924.D	13:10
08	UST-East	0808076-004A	J6925.D	13:44
09	UST-West	0808076-005A	J6926.D	14:18
10	UST-South	0808076-006A	J6927.D	14:52
11	Field Dup	0808076-007A	J6928.D	15:25
12	Trench-Bot-1	0808076-008A	J6929.D	16:00
13	Trench-Bot-2	0808076-009A	J6930.D	16:34

COMMENTS:

Page 1 of 4 FORM IV SW8260/SVOA

182

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: **MB-14529**	SampType: **MBLK**	TestCode: **8260S7_OLM**	Units: **µg/Kg**	Prep Date:		RunNo: **14529**	
Client ID: **ZZZZZ**	Batch ID: **R14529**	Method: **SW8260B**		Analysis Date: **8/18/2008**		SeqNo: **380759**	
Instrument: **MS03_10**	ColumnID: **Rtx-VMS**		Rtx-VMS, 1.0 df				

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	46.5	0.10	50	0	93	71	128				
Surr: Toluene-d8	50.5	0.10	50	0	101	75	125				
Surr: 4-Bromofluorobenzene	54.9	0.10	50	0	110	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Page 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MB-14529

Lab Name: Life Science Laboratories, Inc. Contract:
Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0808076D
Matrix: (soil/water) SOIL Lab Sample ID: MB-14529
Sample wt/vol: 5 (g/ml) G Lab File ID: J6915.D
Level: LOW Date Received:
% Moisture: not dec. Date Analyzed: 8/18/2008
GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00
Extract Volume: (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 14 SW8260B

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: **MB-14531**	SampType: **MBLK**	TestCode: **8260S7_OLM**	Units: **µg/Kg**	Prep Date:		RunNo: **14531**	
Client ID: **ZZZZZ**	Batch ID: **R14531**	Method: **SW8260B**		Analysis Date: **8/19/2008**		SeqNo: **380803**	
Instrument: **MS03_10**	ColumnID: **Rtx-VMS**		Rtx-VMS, 1.0 df				

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	0.930	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.
MB-14531

Lab Name: Life Science Laboratories Contract:
Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0808076D
Lab File ID: J6960.D Lab Sample ID: MB-14531
Date Analyzed: 8/19/2008 Time Analyzed: 9:31
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS 14531	LCS-14531	J6958.D	8:23
02	UST-Bq-1DL	0808076-001ADL	J6962.D	10:36
03	UST-Bq-2DL	0808076-003ADL	J6963.D	11:12
04	Field Dup2L	0808076-007ADL	J6964.D	11:46
05	Trench-Bq-1DL	0808076-009ADL	J6965.D	12:20
06	Trench-Bq-2DL	0808076-009ADL	J6966.D	12:54
07	LCSD-14531	LCSD-14531	J6967.D	13:28

COMMENTS:

FORM IV 826057 OLM42

Page 1 of 1

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808076
Project: City of Geneva Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14531 | SampType: MBLK | TestCode: 826057_OLM | Units: µg/Kg | Prep Date: | RunNo: 14531
Client ID: ZZZZZ | Batch ID: R14531 | Method: SW8260B | Analysis Date: 8/19/2008 | SeqNo: 386903
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 dt

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	50.8	0.10	50	0	102	71	128				
Surr: Toluene-d8	50.3	0.10	50	0	101	73	125				
Surr: 4-Bromofluorobenzene	55.2	0.10	50	0	110	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Values exceeds the instrument calibration range
R RPD exceeds accepted precision limit
* Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

188

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MB-14531

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: MB-14531

Sample wt/vol: 5 (g/mL) G Lab File ID: J6960.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 8/19/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

189

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 08080680

Lab Code: LSLB

Lab File ID (Standard): J6850.D Date Analyzed: 08/14/2008

Instrument ID: MS03_10 Time Analyzed: 10:13

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4517420	10.90	1891515	15.81	1342593	19.87
UPPER LIMIT	9034840	11.40	3783030	16.31	2685186	20.37
LOWER LIMIT	2258710	10.40	945758	15.31	671297	19.37
SAMPLE NO.						
01 LCS-14526 (LCS-14526)	4304282	10.90	1959535	15.81	1374402	19.87
02 MB-14526 (MB-14526)	4324885	10.90	1749223	15.81	1218592	19.87
03 SB-2-Bot-1 (0808068-001A)	4533914	10.90	1466077	15.80	786048	19.88
04 SB-2-South (0808068-002A)	4427645	10.90	1822491	15.81	1094966	19.88
05 SB-2-East (0808068-003A)	4362104	10.90	1866934	15.81	1311421	19.88
06 SB-2-North (0808068-004A)	4385981	10.90	1806926	15.81	1184224	19.87

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

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

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

190

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 08080680

Lab Code: LSLB

Lab File ID (Standard): J6863.D Date Analyzed: 08/15/2008

Instrument ID: MS03_10 Time Analyzed: 8:04

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4908672	10.90	1983495	15.80	1463393	19.88
UPPER LIMIT	9817344	11.40	3966990	16.30	2926786	20.38
LOWER LIMIT	2454336	10.40	991748	15.30	731697	19.38
SAMPLE NO.						
01 LCS-14527 (LCS-14527)	5092773	10.90	2049497	15.81	1483169	19.87
02 MB-14527 (MB-14527)	4538864	10.90	1661718	15.81	1080329	19.88
03 SB-2-Bot-2 (0808068-005A)	4384173	10.90	1536709	15.81	873049	19.88
04 SB-2-West (0808068-006A)	3999502	10.90	1458791	15.81	898860	19.88
05 SB-2-EastDL (0808068-003ADL)	4005819	10.90	1503603	15.81	1152378	19.87
06 SB-2-NorthDL (0808068-004ADL)	3936884	10.90	1461609	15.81	971128	19.88
07 Trip Blank (0808068-007A)	3919047	10.90	1452767	15.81	880827	19.88

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

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

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

191

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc SDG No. 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6910.D Date Analyzed: 08/18/2008

Instrument ID: MS03_10 Time Analyzed: 5:15

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4264248	10.90	1758436	15.81	1312941	19.88
UPPER LIMIT	8528496	11.40	3516872	16.31	2625882	20.38
LOWER LIMIT	2132124	10.40	879218	15.31	656471	19.38
SAMPLE NO.						
01 LCS-14529 (LCS-14529)	4243327	10.90	1711358	15.81	1270838	19.87
02 MSB-14529 (MSB-14529)	4243327	10.90	1711358	15.81	1270838	19.87
03 UST-EastMS (0808076-004AMS)	4057942	10.90	1655472	15.81	1236778	19.87
04 UST-EastMSD (0808076-004AMSD)	4639371	10.90	1826690	15.81	1312793	19.87
05 MB-14529 (MB-14529)	4283969	10.90	1572309	15.81	1042714	19.87
06 UST-Bot-1 (0808076-001A)	3074071	10.90	898803	15.81	373213*	19.88
07 UST-North (0808076-002A)	3477617	10.90	1346302	15.81	815792	19.88
08 UST-Bot-2 (0808076-003A)	3253976	10.90	986173	15.81	424754*	19.88
09 UST-East (0808076-004A)	3332893	10.90	1234147	15.81	754774	19.88
10 UST-West (0808076-005A)	3325057	10.90	1229237	15.81	748111	19.88
11 UST-South (0808076-006A)	3249239	10.90	1196374	15.81	731469	19.87
12 Field Dup (0808076-007A)	2996637	10.90	905201	15.81	364534*	19.87
13 Trench-Bot-1 (0808076-008A)	3191969	10.90	1165181	15.81	648193*	19.87
14 Trench-Bot-2 (0808076-009A)	3226367	10.90	1160184	15.81	617675*	19.88

IS1 = Fluorobenzene

IS2 = Chlorobenzene-d5

IS3 = 1,4-Dichlorobenzene-d4

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc SDG No. 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6967.D Date Analyzed: 08/19/2008

Instrument ID: MS03_10 Time Analyzed: 7:49

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	3668640	10.90	1559594	15.81	1148436	19.87
UPPER LIMIT	7337280	11.40	3119188	16.31	2296876	20.37
LOWER LIMIT	1834320	10.40	779797	15.31	574219	19.37
SAMPLE NO.						
01 LCS-14531 (LCS-14531)	3748091	10.90	1563602	15.81	1143954	19.87
02 MB-14531 (MB-14531)	3399779	10.90	1266675	15.81	791486	19.88
03 UST-Bot-1DL (0808076-001ADL)	3108185	10.90	1057633	15.81	511626*	19.88
04 UST-Bot-2DL (0808076-003ADL)	3121246	10.90	1089879	15.81	560009*	19.88
05 Field DupDL (0808076-007ADL)	3021648	10.90	1031281	15.81	500849*	19.88
06 Trench-Bot-1DL (0808076-008ADL)	3124700	10.90	1153552	15.81	734258	19.88
07 Trench-Bot-2DL (0808076-009ADL)	3074810	10.90	1138830	15.81	764702	19.88
08 LCSD-14531 (LCSD-14531)	3310937	10.90	1363607	15.80	896791	19.87

IS1 = Fluorobenzene

IS2 = Chlorobenzene-d5

IS3 = 1,4-Dichlorobenzene-d4

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

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

GC/MS Semivolatile Organics Data

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No. _____ SDG No.: 0808068O

Level: (low/med) LOW

EPA SAMPLE NO.	LSL ID	S1 (2FP) 1 #	S2 (FBP) 1 #	S3 (NBZ) 1 #	S4 (PHL) 1 #	S5 (TBP) 1 #	S6 (TPH) 1 #	TOT OUT
01 SB-2-East	0808068-003B	82	80	87	85	93	95	0
02 UST-Bot-1	0808076-001B	88	86	93	92	98	103	0
03 UST-West	0808076-005B	84	82	88	89	91	99	0
04 MB-7957	MB-7957	89	87	95	94	82	107	0
05 LCS-7957	LCS-7957	93	90	98	96	106	109	0
06 MSB-7957	MSB-7957	91	89	95	94	107	110	0
07 SB-2-Bot-1	0808068-001B	79	81	82	83	94	104	0
08 SB-2-South	0808068-002B	82	80	85	86	91	94	0
09 SB-2-North	0808068-004B	85	82	89	89	90	101	0
10 SB-2-West	0808068-005B	83	81	87	86	90	103	0
11 SB-2-Bot-2	0808068-006B	82	80	86	86	83	99	0
12 UST-North	0808076-002B	88	86	91	92	93	105	0
13 UST-Bot-2	0808076-003B	84	84	88	88	86	103	0
14 UST-East	0808076-004B	88	85	91	92	93	106	0
15 UST-EastMS	0808076-004BMS	84	83	87	87	96	102	0
16 UST-EastMSD	0808076-004BMSD	85	84	87	87	99	102	0
17 UST-South	0808076-006B	89	84	89	92	92	102	0
18 Field Dup	0808076-007B	91	87	92	93	95	105	0
19 Trench-Bot-1	0808076-008B	92	88	92	96	100	108	0
20 Trench-Bot-2	0808076-009B	85	82	88	88	93	100	0

		QC Limit
S1 (2FP) 1	= 2-Fluorophenol	22-130
S2 (FBP) 1	= 2-Fluorobiphenyl	46-130
S3 (NBZ) 1	= Nitrobenzene-d5	35-130
S4 (PHL) 1	= Phenol-d5	33-130
S5 (TBP) 1	= 2,4,6-Tribromophenol	70-143
S6 (TPH) 1	= Terphenyl-d14	36-146

Column to be used to flag recovery values

* Values outside of contract required QC limits

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: 0808076-004BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381967
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1670	390	1970	0	85	23	130				
Indeno[1,2,3-cd]pyrene	2230	390	1970	0	113	10	134				
Isophorone	1920	390	1970	0	98	43	130				
N-Nitroso-di-n-propylamine	1820	390	1970	0	92	35	130				
N-Nitrosodiphenylamine	2050	390	1970	0	104	44	130				
Naphthalene	2040	390	1970	0	103	40	130				
Nitrobenzene	1920	390	1970	0	97	45	130				
Pentachlorophenol	1630	2000	1970	0	83	10	130				J
Phenanthrene	2250	390	1970	0	114	45	130				
Phenol	1850	390	1970	0	94	33	130				
Pyrene	2320	390	1970	0	118	18	164				
Surr: 2,4,6-Tribromophenol	5660	0	5910	0	96	20	145				
Surr: 2-Fluorobiphenyl	3270	0	3940	0	83	46	130				
Surr: 2-Fluorophenol	4960	0	5910	0	84	22	130				
Surr: Nitrobenzene-d5	3430	0	3940	0	87	39	130				
Surr: Phenol-d5	5160	0	5910	0	87	33	130				
Surr: Terphenyl-d14	4030	0	3940	0	102	38	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

198 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: 0808076-004BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381967
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1990	390	1970	0	101	30	130				
2,4,5-Trichlorophenol	1830	2000	1970	0	93	34	130				J
2,4,6-Trichlorophenol	1790	390	1970	0	91	33	130				
2,4-Dichlorophenol	1890	390	1970	0	96	39	130				
2,4-Dimethylphenol	1860	390	1970	0	95	22	130				
2,4-Dinitrophenol	619	2000	1970	0	31	10	130				J
2,4-Dinitrotoluene	1930	390	1970	0	98	40	130				
2,6-Dinitrotoluene	1890	390	1970	0	96	36	130				
2-Chloronaphthalene	1860	390	1970	0	94	46	130				
2-Chlorophenol	1770	390	1970	0	90	39	130				
2-Methylnaphthalene	1890	390	1970	0	96	43	130				
2-Methylphenol	1840	390	1970	0	93	43	130				
2-Nitroaniline	1930	2000	1970	0	98	42	130				J
2-Nitrophenol	1840	390	1970	0	93	34	130				
3,3'-Dichlorobenzidine	2100	780	1970	0	106	10	130				
3-Nitroaniline	1540	2000	1970	0	78	11	130				J
4,6-Dinitro-2-methylphenol	1160	2000	1970	0	59	13	130				J
4-Bromophenyl phenyl ether	1910	390	1970	0	97	43	130				
4-Chloro-3-methylphenol	1900	390	1970	0	96	38	130				
4-Chloroaniline	1120	390	1970	0	57	10	130				
4-Chlorophenyl phenyl ether	1890	390	1970	0	96	45	130				
4-Methylphenol	1830	390	1970	0	93	42	130				
4-Nitroaniline	1970	2000	1970	0	100	23	130				J
4-Nitrophenol	1800	2000	1970	0	92	10	144				J
Acenaphthene	2150	390	1970	0	109	43	130				
Acenaphthylene	2100	390	1970	0	106	46	130				
Acetophenone	1650	390	1970	0	84	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

196 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	2040	390	1970	0	104	30	130	1990	2.7	60	
2,4,5-Trichlorophenol	1890	2000	1970	0	96	34	130	1830	3.3	44	J
2,4,6-Trichlorophenol	1840	390	1970	0	93	33	130	1790	2.7	45	
2,4-Dichlorophenol	1870	390	1970	0	95	39	130	1890	1.1	53	
2,4-Dimethylphenol	1830	390	1970	0	93	22	130	1860	2.2	52	
2,4-Dinitrophenol	643	2000	1970	0	33	10	130	619	3.8	60	J
2,4-Dinitrotoluene	1950	390	1970	0	99	40	130	1930	0.7	32	
2,6-Dinitrotoluene	1950	390	1970	0	99	36	130	1890	3.0	43	
2-Chloronaphthalene	1860	390	1970	0	94	46	130	1860	0.5	30	
2-Chlorophenol	1750	390	1970	0	89	39	130	1770	1.1	38	
2-Methylnaphthalene	1860	390	1970	0	94	43	130	1890	1.6	35	
2-Methylphenol	1810	390	1970	0	92	43	130	1840	1.4	60	
2-Nitroaniline	1930	2000	1970	0	98	42	130	1930	0.1	34	J
2-Nitrophenol	1820	390	1970	0	92	34	130	1840	1.3	48	
3,3'-Dichlorobenzidine	2020	780	1970	0	103	10	130	2100	3.7	60	
3-Nitroaniline	1510	2000	1970	0	77	11	130	1540	1.9	40	J
4,6-Dinitro-2-methylphenol	1170	2000	1970	0	59	13	130	1160	1.2	60	J
4-Bromophenyl phenyl ether	1950	390	1970	0	99	43	130	1910	1.9	37	
4-Chloro-3-methylphenol	1920	390	1970	0	97	38	130	1900	1.1	30	
4-Chloroaniline	1060	390	1970	0	54	10	130	1120	5.7	48	
4-Chlorophenyl phenyl ether	1940	390	1970	0	98	45	130	1890	2.6	32	
4-Methylphenol	1830	390	1970	0	93	42	130	1830	0	53	
4-Nitroaniline	1950	2000	1970	0	99	23	130	1970	1.0	37	J
4-Nitrophenol	1840	2000	1970	0	93	10	144	1800	2.1	30	J
Acenaphthene	2150	390	1970	0	110	43	130	2150	0.6	30	
Acenaphthylene	2100	390	1970	0	106	46	130	2100	0.1	30	
Acetophenone	1700	390	1970	0	86	30	130	1650	2.6	60	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

199 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: 0808076-004BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381967
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2270	390	1970	0	115	37	130				
Atrazine	1770	390	1970	0	90	30	130				
Benzaldehyde	1730	390	1970	0	88	30	130				
Benzo[a]anthracene	2240	390	1970	0	114	40	130				
Benzo[a]pyrene	2170	390	1970	0	110	44	130				
Benzo[b]fluoranthene	2190	390	1970	0	111	29	154				
Benzo[g,h,i]perylene	2200	390	1970	0	112	10	130				
Benzo[k]fluoranthene	2280	390	1970	0	116	35	143				
bis(2-Chloroethoxy)methane	1990	390	1970	0	101	43	130				
bis(2-chloroethyl)ether	1830	390	1970	0	93	41	130				
bis(2-chloroisopropyl)ether	1840	390	1970	0	93	34	130				
bis(2-Ethylhexyl)phthalate	2190	390	1970	0	111	42	154				
Butyl benzyl phthalate	2140	390	1970	0	109	34	160				
Caprolactam	2340	390	1970	0	119	30	130				
Carbazole	2110	390	1970	0	107	42	130				
Chrysene	2280	390	1970	0	115	43	130				
Di-n-butyl phthalate	2180	390	1970	0	111	50	133				
Di-n-octyl phthalate	2170	390	1970	0	110	48	146				
Dibenz[a,h]anthracene	2320	390	1970	0	118	16	135				
Dibenzofuran	1880	390	1970	0	95	45	150				
Diethyl phthalate	1990	390	1970	0	101	48	150				
Dimethyl phthalate	1920	390	1970	0	97	45	150				
Fluoranthene	2260	390	1970	0	115	45	150				
Fluorene	2190	390	1970	0	111	45	150				
Hexachlorobenzene	2010	390	1970	0	102	50	150				
Hexachlorobutadiene	1710	390	1970	0	87	37	150				
Hexachlorocyclopentadiene	1270	390	1970	0	64	10	150				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

197 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 8/15/2008 RunNo: 14571
Client ID: ZZZZZZ Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381958
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1840	330	1670	0	111	30	130				
2,4,5-Trichlorophenol	1790	1700	1670	0	108	34	130				
2,4,6-Trichlorophenol	1730	330	1670	0	104	33	130				
2,4-Dichlorophenol	1740	330	1670	0	104	39	130				
2,4-Dimethylphenol	1700	330	1670	0	102	22	130				
2,4-Dinitrophenol	910	1700	1670	0	55	10	130				J
2,4-Dinitrotoluene	1840	330	1670	0	110	40	130				
2,6-Dinitrotoluene	1840	330	1670	0	110	36	130				
2-Chloronaphthalene	1740	330	1670	0	105	46	130				
2-Chlorophenol	1650	330	1670	0	99	39	130				
2-Methylnaphthalene	1750	330	1670	0	105	43	130				
2-Methylphenol	1710	330	1670	0	102	43	130				
2-Nitroaniline	1860	1700	1670	0	111	42	130				
2-Nitrophenol	1720	330	1670	0	103	34	130				
3,3'-Dichlorobenzidine	2000	660	1670	0	120	10	130				
3-Nitroaniline	1540	1700	1670	0	92	11	130				J
4,6-Dinitro-2-methylphenol	1380	1700	1670	0	83	13	130				J
4-Bromophenyl phenyl ether	1850	330	1670	0	111	43	130				
4-Chloro-3-methylphenol	1760	330	1670	0	107	38	130				
4-Chloroaniline	1320	330	1670	0	79	10	130				
4-Chlorophenyl phenyl ether	1800	330	1670	0	108	45	130				
4-Methylphenol	1710	330	1670	0	103	42	130				
4-Nitroaniline	1850	1700	1670	0	111	23	130				
4-Nitrophenol	1720	1700	1670	0	103	10	144				
Acenaphthene	1990	330	1670	0	119	43	130				
Acenaphthylene	1960	330	1670	0	118	46	130				
Acetophenone	1550	330	1670	0	93	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

202 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2290	390	1970	0	116	37	130	2270	0.9	30	
Atrazine	1860	390	1970	0	94	30	130	1770	4.7	60	
Benzaldehyde	1750	390	1970	0	89	30	130	1730	1.4	60	
Benzo[a]anthracene	2220	390	1970	0	113	40	130	2240	1	30	
Benzo[a]pyrene	2160	390	1970	0	109	44	130	2170	0.8	30	
Benzo[b]fluoranthene	2130	390	1970	0	108	29	154	2190	2.9	32	
Benzo[g,h,i]perylene	2150	390	1970	0	109	10	130	2200	2.6	30	
Benzo[k]fluoranthene	2280	390	1970	0	116	35	143	2280	0.2	30	
bis(2-Chloroethoxy)methane	1940	390	1970	0	98	43	130	1990	2.6	40	
bis(2-chloroethyl)ether	1800	390	1970	0	92	41	130	1830	1.4	30	
bis(2-chloroisopropyl)ether	1820	390	1970	0	92	34	130	1840	1.3	30	
bis(2-Ethylhexyl)phthalate	2160	390	1970	0	110	42	154	2190	1.1	36	
Butyl benzyl phthalate	2140	390	1970	0	109	34	160	2140	0.1	37	
Caprolactam	2410	390	1970	0	122	30	130	2340	3.1	60	
Carbazole	2110	390	1970	0	107	42	130	2110	0.3	36	
Chrysene	2240	390	1970	0	114	43	130	2280	1.5	30	
Di-n-butyl phthalate	2150	390	1970	0	109	50	133	2180	1.4	39	
Di-n-octyl phthalate	2150	390	1970	0	109	48	146	2170	1.2	31	
Dibenz[a,h]anthracene	2270	390	1970	0	115	16	135	2320	2.1	30	
Dibenzofuran	1900	390	1970	0	96	45	130	1880	1.1	30	
Diethyl phthalate	2010	390	1970	0	102	48	130	1990	1.1	30	
Dimethyl phthalate	1950	390	1970	0	99	46	130	1920	1.7	39	
Fluoranthene	2260	390	1970	0	115	45	130	2260	0.1	30	
Fluorene	2230	390	1970	0	113	45	130	2190	1.6	30	
Hexachlorobenzene	2010	390	1970	0	102	50	130	2010	0	31	
Hexachlorobutadiene	1680	390	1970	0	85	37	130	1710	1.3	41	
Hexachlorocyclopentadiene	1260	390	1970	0	64	10	130	1270	0.2	58	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

200 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 8/15/2008 RunNo: 14571
Client ID: ZZZZZZ Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381958
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2120	330	1670	0	127	37	130				
Atrazine	1630	330	1670	0	98	30	130				
Benzaldehyde	1590	330	1670	0	96	30	130				
Benzo[a]anthracene	2080	330	1670	0	125	40	130				
Benzo[a]pyrene	2040	330	1670	0	122	44	130				
Benzo[b]fluoranthene	2010	330	1670	0	121	29	154				
Benzo[g,h,i]perylene	2140	330	1670	0	129	10	130				
Benzo[k]fluoranthene	2120	330	1670	0	127	35	143				
bis(2-Chloroethoxy)methane	1830	330	1670	0	110	43	130				
bis(2-chloroethyl)ether	1730	330	1670	0	104	41	130				
bis(2-chloroisopropyl)ether	1720	330	1670	0	103	34	130				
bis(2-Ethylhexyl)phthalate	1980	330	1670	0	119	42	154				
Butyl benzyl phthalate	1990	330	1670	0	119	34	160				
Caprolactam	2210	330	1670	0	133	30	130				S
Carbazole	1970	330	1670	0	118	42	130				
Chrysene	2100	330	1670	0	126	43	130				
Di-n-butyl phthalate	1970	330	1670	0	118	50	133				
Di-n-octyl phthalate	2010	330	1670	0	121	48	146				
Dibenz[a,h]anthracene	2220	330	1670	0	133	16	135				
Dibenzofuran	1790	330	1670	0	107	45	130				
Diethyl phthalate	1890	330	1670	0	113	48	130				
Dimethyl phthalate	1830	330	1670	0	110	46	130				
Fluoranthene	2090	330	1670	0	125	45	130				
Fluorene	2050	330	1670	0	123	45	130				
Hexachlorobenzene	1890	330	1670	0	113	50	130				
Hexachlorobutadiene	1630	330	1670	0	98	37	130				
Hexachlorocyclopentadiene	1410	330	1670	0	85	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

203 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1670	390	1970	0	85	23	130	1670	0	37	
Indeno[1,2,3-cd]pyrene	2200	390	1970	0	112	10	134	2230	1.6	30	
Isophorone	1870	390	1970	0	95	43	130	1920	3.0	40	
N-Nitroso-di-n-propylamine	1770	390	1970	0	90	35	130	1820	2.6	30	
N-Nitrosodiphenylamine	2070	390	1970	0	105	44	130	2050	1.2	52	
Naphthalene	1980	390	1970	0	101	40	130	2040	2.7	33	
Nitrobenzene	1870	390	1970	0	95	45	130	1920	2.7	51	
Pentachlorophenol	1670	2000	1970	0	85	10	130	1630	2.5	53	J
Phenanthrene	2250	390	1970	0	114	45	130	2250	0.1	30	
Phenol	1810	390	1970	0	92	33	130	1850	2.3	34	
Pyrene	2290	390	1970	0	116	16	164	2320	1.5	36	
Surr: 2,4,6-Tribromophenol	5860	0	5910	0	99	20	143	0		0	
Surr: 2-Fluorobiphenyl	3310	0	3940	0	84	46	130	0		0	
Surr: 2-Fluorophenol	5030	0	5910	0	85	22	130	0		0	
Surr: Nitrobenzene-d5	3430	0	3940	0	87	39	130	0		0	
Surr: Phenol-d5	5150	0	5910	0	87	33	130	0		0	
Surr: Terphenyl-d14	4040	0	3940	0	102	36	146	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

201 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-7957 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 8/15/2008 RunNo: 14571
Client ID: ZZZZZ Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381957
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2070	330	1670	0	124	60	125				
Atrazine	1580	330	1670	0	95	30	130				
Benzaldehyde	1640	330	1670	0	99	30	130				
Benzo[a]anthracene	2050	330	1670	0	123	60	125				
Benzo[a]pyrene	1970	330	1670	0	118	53	129				
Benzo[b]fluoranthene	2000	330	1670	0	120	55	126				
Benzo[g,h,i]perylene	2090	330	1670	0	126	51	134				
Benzo[k]fluoranthene	2020	330	1670	0	121	49	132				
bis(2-Chloroethoxy)methane	1870	330	1670	0	112	49	125				
bis(2-chloroethyl)ether	1740	330	1670	0	105	44	125				
bis(2-chloroisopropyl)ether	1740	330	1670	0	105	39	125				
bis(2-Ethylhexyl)phthalate	1970	330	1670	0	118	51	145				
Butyl benzyl phthalate	1960	330	1670	0	118	50	144				
Caprolactam	2120	330	1670	0	127	30	130				
Carbazole	1950	330	1670	0	117	51	131				
Chrysene	2090	330	1670	0	125	65	137				
Di-n-butyl phthalate	1940	330	1670	0	116	56	140				
Di-n-octyl phthalate	1990	330	1670	0	119	46	150				
Dibenz[a,h]anthracene	2170	330	1670	0	130	47	140				
Dibenzofuran	1790	330	1670	0	108	48	125				
Diethyl phthalate	1850	330	1670	0	111	52	137				
Dimethyl phthalate	1800	330	1670	0	108	51	134				
Fluoranthene	2050	330	1670	0	123	54	131				
Fluorene	2020	330	1670	0	121	50	126				
Hexachlorobenzene	1850	330	1670	0	111	43	139				
Hexachlorobutadiene	1640	330	1670	0	98	39	132				
Hexachlorocyclopentadiene	1430	330	1670	0	86	25	125				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

206 22-Aug-08 Page 5 of 13

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: MSB-7957 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 8/15/2008 RunNo: 14571
Client ID: ZZZZZ Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381958
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1610	330	1670	0	96	23	130				
Indeno[1,2,3-cd]pyrene	2210	330	1670	0	132	10	134				
Isophorone	1780	330	1670	0	107	43	130				
N-Nitroso-di-n-propylamine	1670	330	1670	0	100	35	130				
N-Nitrosodiphenylamine	1920	330	1670	0	115	44	130				
Naphthalene	1890	330	1670	0	113	40	130				
Nitrobenzene	1780	330	1670	0	107	46	130				
Pentachlorophenol	1710	1700	1670	0	103	10	130				
Phenanthrene	2100	330	1670	0	126	45	130				
Phenol	1670	330	1670	0	100	33	130				
Pyrene	2120	330	1670	0	127	18	164				
Surr: 2,4,6-Tribromophenol	5360	0	5000	0	107	20	143				
Surr: 2-Fluorobiphenyl	2950	0	3330	0	89	46	130				
Surr: 2-Fluorophenol	4560	0	5000	0	91	22	130				
Surr: Nitrobenzene-d5	3170	0	3330	0	95	39	130				
Surr: Phenol-d5	4690	0	5000	0	94	33	130				
Surr: Terphenyl-d14	3660	0	3330	0	110	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

204 22-Aug-08 Page 9 of 15

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-7957 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 8/15/2008 RunNo: 14571
Client ID: ZZZZZ Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381957
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1620	330	1670	0	97	41	125				
Indeno[1,2,3-cd]pyrene	2180	330	1670	0	131	48	138				
Isophorone	1820	330	1670	0	109	48	125				
N-Nitroso-di-n-propylamine	1690	330	1670	0	101	40	128				
N-Nitrosodiphenylamine	1880	330	1670	0	113	48	135				
Naphthalene	1920	330	1670	0	115	46	125				
Nitrobenzene	1820	330	1670	0	109	47	125				
Pentachlorophenol	1610	1700	1670	0	96	25	129				J
Phenanthrene	2060	330	1670	0	124	58	125				
Phenol	1680	330	1670	0	101	41	125				
Pyrene	2110	330	1670	0	126	55	127				
Surr: 2,4,6-Tribromophenol	5280	0	5000	0	106	20	143				
Surr: 2-Fluorobiphenyl	3010	0	3330	0	90	46	130				
Surr: 2-Fluorophenol	4640	0	5000	0	93	22	130				
Surr: Nitrobenzene-d5	3270	0	3330	0	98	39	130				
Surr: Phenol-d5	4780	0	5000	0	96	33	130				
Surr: Terphenyl-d14	3630	0	3330	0	109	38	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

207 22-Aug-08 Page 6 of 13

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-7957 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 8/15/2008 RunNo: 14571
Client ID: ZZZZZ Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381957
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1860	330	1670	0	111	30	130				
2,4,5-Trichlorophenol	1760	1700	1670	0	106	43	131				
2,4,6-Trichlorophenol	1700	330	1670	0	102	44	125				
2,4-Dichlorophenol	1760	330	1670	0	105	41	125				
2,4-Dimethylphenol	1700	330	1670	0	102	25	128				
2,4-Dinitrophenol	632	1700	1670	0	38	25	125				J
2,4-Dinitrotoluene	1800	330	1670	0	108	54	136				
2,6-Dinitrotoluene	1780	330	1670	0	107	48	136				
2-Chloronaphthalene	1740	330	1670	0	105	49	126				
2-Chlorophenol	1640	330	1670	0	99	41	125				
2-Methylnaphthalene	1780	330	1670	0	107	44	125				
2-Methylphenol	1720	330	1670	0	103	40	125				
2-Nitroaniline	1810	1700	1670	0	109	50	129				
2-Nitrophenol	1740	330	1670	0	104	44	125				
3,3'-Dichlorobenzidine	1850	660	1670	0	111	25	125				
3-Nitroaniline	1340	1700	1670	0	80	26	125				J
4,6-Dinitro-2-methylphenol	1050	1700	1670	0	63	33	126				J
4-Bromophenyl phenyl ether	1780	330	1670	0	107	44	137				
4-Chloro-3-methylphenol	1750	330	1670	0	105	44	126				
4-Chloroaniline	1030	330	1670	0	62	25	125				
4-Chlorophenyl phenyl ether	1770	330	1670	0	106	46	132				
4-Methylphenol	1730	330	1670	0	104	40	125				
4-Nitroaniline	1820	1700	1670	0	109	47	132				
4-Nitrophenol	1870	1700	1670	0	100	37	140				J
Acenaphthene	2000	330	1670	0	120	49	125				
Acenaphthylene	1960	330	1670	0	117	47	125				
Acetophenone	1560	330	1670	0	93	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

205 22-Aug-08 Page 4 of 15

EPA SAMPLE NO.

MB-7957

Lab Name: Life Science Laboratories Contract: Life Science

Lab Code: LSLB Case No.: CSC-MS SAS No.: _____ SDG No.: 0808068

Lab File ID: K4751.D Lab Sample ID: MB-7957

Instrument ID: MS06.4D Date Received: 8/15/2008

Matrix: (soil/water) SOIL Date Analyzed: 8/21/2008

Level: (low/med) Time Analyzed: 18:28

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-2-East	0808068-003B	K4731.D	13:01
02	UST-Bot-1	0808076-001B	K4732.D	13:39
03	UST-West	0808076-005B	K4733.D	14:18
04	LCS-7957	LCS-7957	K4734.D	17:06
05	MSB-7957	MSB-7957	K4739.D	17:44
06	SB-2-Bot-1	0808068-001B	K4740.D	18:23
07	SB-2-South	0808068-002B	K4741.D	19:01
08	SB-2-North	0808068-004B	K4742.D	19:40
09	SB-2-West	0808068-005B	K4743.D	20:18
10	SB-2-Bot-2	0808068-006B	K4744.D	20:57
11	UST-North	0808076-002B	K4745.D	21:35
12	UST-Bot-2	0808076-003B	K4746.D	22:13
13	UST-East	0808076-004B	K4747.D	22:52
14	UST-EastMS	0808076-004BMS	K4748.D	23:30
15	UST-EastMSD	0808076-004BMSD	K4749.D	0:09
16	UST-South	0808076-006B	K4750.D	0:47
17	Field Dup	0808076-007B	K4751.D	1:25
18	Trench-Bot-1	0808076-008B	K4752.D	2:03
19	Trench-Bot-2	0808076-009B	K4753.D	2:42

CC0808MS03:

page 1 of 1

Form IV

62703_OLM42

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-7957	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 8/15/2008	RunNo: 14571		
Client ID: ZZZZZ	Batch ID: 7957	Method: SW8270C	(SW3550B)	Analysis Date: 8/21/2008	SeqNo: 381956		
Instrument: MS06_40	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	330									
Atrazine	ND	330									
Benzaldehyde	ND	330									
Benzo[a]anthracene	ND	330									
Benzo[a]pyrene	ND	330									
Benzo[b]fluoranthene	ND	330									
Benzo[g,h,i]perylene	ND	330									
Benzo[k]fluoranthene	ND	330									
bis(2-Chloroethoxy)methane	ND	330									
bis(2-chloroethyl)ether	ND	330									
bis(2-chloroisopropyl)ether	ND	330									
bis(2-Ethylhexyl)phthalate	ND	330									
Butyl benzyl phthalate	ND	330									
Caprolactam	ND	330									
Carbazole	ND	330									
Chrysene	ND	330									
Di-n-butyl phthalate	ND	330									
Di-n-octyl phthalate	ND	330									
Dibenz[a,h]anthracene	ND	330									
Dibenzofuran	ND	330									
Diethyl phthalate	ND	330									
Dimethyl phthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	330									
Hexachlorocyclopentadiene	ND	330									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-7957	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 8/15/2008	RunNo: 14571		
Client ID: ZZZZZ	Batch ID: 7957	Method: SW8270C	(SW3550B)	Analysis Date: 8/21/2008	SeqNo: 381956		
Instrument: MS06_40	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	330									
Indeno[1,2,3-cd]pyrene	ND	330									
Isophorone	ND	330									
N-Nitroso-di-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1700									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 2,4,6-Tribromophenol	4080	0	5000	0	82	20	143				
Surr: 2-Fluorobiphenyl	2900	0	3330	0	87	48	130				
Surr: 2-Fluorophenol	4470	0	5000	0	89	22	130				
Surr: Nitrobenzene-d5	3150	0	3330	0	95	39	130				
Surr: Phenol-d5	4690	0	5000	0	94	33	130				
Surr: Terphenyl-d14	3570	0	3330	0	107	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-7957	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 8/15/2008	RunNo: 14571		
Client ID: ZZZZZ	Batch ID: 7957	Method: SW8270C	(SW3550B)	Analysis Date: 8/21/2008	SeqNo: 381956		
Instrument: MS06_40	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	330									
2,4,5-Trichlorophenol	ND	1700									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	330									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1700									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1700									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									
3-Nitroaniline	ND	1700									
4,6-Dinitro-2-methylphenol	ND	1700									
4-Bromophenyl phenyl ether	ND	330									
4-Chloro-3-methylphenol	ND	330									
4-Chloroaniline	ND	330									
4-Chlorophenyl phenyl ether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1700									
4-Nitrophenol	ND	1700									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Acetophenone	ND	330									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Form I TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MB-7957

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: MB-7957

Sample wt/vol: 30 (g/mL) g Lab File ID: K4737.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 3 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	970	J
2.	aldol	7.23	28000	JA
3.	unknown (18.80)	18.80	340	J

FORM I TIC 2 SW8270C

212

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4725.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 9:11

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	266914	9.95	995096	12.32	530726	15.66	966144	18.52
UPPER LIMIT	533828	10.45	1990192	12.82	1061452	16.16	1932288	19.02
LOWER LIMIT	133457	9.45	497548	11.82	265363	15.16	483072	18.02
SAMPLE NO.								
01 CC08210886 OLM (CC08210886 OLM)	217998	9.95	818434	12.31	442945	15.65	788579	18.51
02 SB-2-East (0808068-003B)	210152	9.96	792404	12.31	430204	15.65	791283	18.50
03 UST-Bot-1 (0808076-001B)	212701	9.95	809457	12.31	433837	15.66	796215	18.51
04 UST-West (0808076-005B)	211062	9.96	807781	12.31	434938	15.65	791634	18.51

IS1 (DCB) = 1,4-Dichlorobenzene-d4 IS3 (ANT) = Acenaphthene-d10

IS2 (NPT) = Naphthalene-d8 IS4 (PHN) = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Values outside of QC limits.

FORM VIII Page 1 of 4 SW8270C

213

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4725.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 9:11

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	763418	23.58	743587	26.82				
UPPER LIMIT	1526836	24.08	1487174	27.12				
LOWER LIMIT	381709	23.08	371794	26.12				
SAMPLE NO.								
01 CC08210886 OLM (CC08210886 OLM)	660264	23.58	621736	26.60				
02 SB-2-East (0808068-003B)	660366	23.56	625109	26.60				
03 UST-Bot-1 (0808076-001B)	651025	23.57	610954	26.60				
04 UST-West (0808076-005B)	651672	23.56	607739	26.60				

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Values outside of QC limits.

FORM VIII Page 2 of 4 SW8270C

214

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4735.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 15:12

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	265252	9.96	1013278	12.32	539141	15.66	991247	18.52
UPPER LIMIT	530504	10.46	2026556	12.82	1078282	16.16	1982494	19.02
LOWER LIMIT	132626	9.46	506639	11.82	269571	15.16	495624	18.02
SAMPLE NO.								
01 CC08210886 OLM (CC08210886 OLM)	238743	9.96	967973	12.31	493567	15.66	887131	18.51
02 MB-7957 (MB-7957)	201893	9.95	767521	12.31	417692	15.66	761849	18.51
03 LCS-7957 (LCS-7957)	202222	9.96	770119	12.32	417628	15.66	764851	18.51
04 MSB-7957 (MSB-7957)	195213	9.96	752580	12.32	406162	15.66	742262	18.52
05 SB-2-Bot-1 (0808068-001B)	176447	9.95	674432	12.31	365518	15.66	656309	18.51
06 SB-2-South (0808068-002B)	191758	9.95	732944	12.31	395609	15.66	721625	18.51
07 SB-2-North (0808068-004B)	199618	9.95	759123	12.31	409934	15.66	746059	18.51
08 SB-2-West (0808068-005B)	190034	9.96	722335	12.31	392374	15.66	711373	18.51
09 SB-2-Bot-2 (0808068-006B)	198308	9.95	762166	12.31	406260	15.66	738136	18.51
10 UST-North (0808076-002B)	195876	9.96	752020	12.32	404828	15.65	733129	18.51
11 UST-Bot-2 (0808076-003B)	190443	9.96	735064	12.31	388452	15.65	705426	18.51
12 UST-East (0808076-004B)	194839	9.96	743546	12.31	404316	15.65	734231	18.51
13 UST-EastMS (0808076-004BMS)	197338	9.96	752062	12.32	410754	15.66	748740	18.51
14 UST-EastMSD (0808076-004BMSD)	193133	9.96	747819	12.31	402786	15.66	737516	18.51
15 UST-South (0808076-006B)	201441	9.96	775428	12.31	416997	15.66	770616	18.50
16 Field Dup (0808076-007B)	189305	9.96	731770	12.31	394686	15.65	715159	18.51
17 Trench-Bot-1 (0808076-008B)	192572	9.96	741380	12.31	400728	15.65	743737	18.51
18 Trench-Bot-2 (0808076-009B)	201849	9.96	788660	12.31	420748	15.66	773464	18.50

IS1 (DCB) = 1,4-Dichlorobenzene-d4 IS3 (ANT) = Acenaphthene-d10

IS2 (NPT) = Naphthalene-d8 IS4 (PHN) = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Values outside of QC limits.

FORM VIII Page 3 of 4 SW8270C

215

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808085O

Lab Code: LSLB

Lab File ID (Standard): K4735.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 15:12

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	790954	23.58	758622	26.62				
UPPER LIMIT	1581928	24.08	1517244	27.12				
LOWER LIMIT	395482	23.08	379311	26.12				
SAMPLE NO.								
01 CC08210806 OLM (CC08210806 OLM)	745070	23.57	695863	26.61				
02 MB-7957 (MB-7957)	622014	23.57	572831	26.61				
03 LCS-7957 (LCS-7957)	605001	23.58	586344	26.62				
04 MSB-7957 (MSB-7957)	591714	23.58	567131	26.61				
05 SB-2-Bot-1 (0808068-001B)	534471	23.56	492431	26.60				
06 SB-2-South (0808068-002B)	592193	23.57	547130	26.60				
07 SB-2-North (0808068-004B)	597226	23.57	553117	26.60				
08 SB-2-West (0808068-005B)	574389	23.56	522824	26.60				
09 SB-2-Bot-2 (0808068-006B)	583012	23.56	544319	26.60				
10 UST-North (0808076-002B)	593122	23.56	535533	26.60				
11 UST-Bot-2 (0808076-003B)	576964	23.56	521055	26.60				
12 UST-East (0808076-004B)	599603	23.56	542283	26.60				
13 UST-EastMS (0808076-004BMS)	594744	23.58	553880	26.61				
14 UST-EastMSD (0808076-004BMSD)	594726	23.58	554776	26.61				
15 UST-South (0808076-006B)	628863	23.56	560980	26.60				
16 Field Dup (0808076-007B)	577874	23.56	532542	26.60				
17 Trench-Bot-1 (0808076-008B)	605408	23.56	546029	26.60				
18 Trench-Bot-2 (0808076-009B)	632735	23.56	570931	26.60				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

Trace Metals Data

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMS	SampType: MS	TestCode: 6010S	Units: mg/Kg-dry	Prep Date: 8/25/08	RunNo: 14620
Client ID: UST-East	Batch ID: 8003	Method: SW6010B	(SW3050B)	Analysis Date: 8/27/08	SeqNo: 383222
Instrument:	ColumnID:				

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	48.7	1.2	47.3	3.01	97	80	140				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD	SampType: MSD	TestCode: 6010S	Units: mg/Kg-dry	Prep Date: 8/25/08	RunNo: 14630
Client ID: UST-East	Batch ID: 8003	Method: SW6010B	(SW3050B)	Analysis Date: 8/27/08	SeqNo: 383223
Instrument:	ColumnID:				

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	50.5	1.2	47.3	3.01	100	80	140	48.7	4	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8003 | SampType: LCS | TestCode: 6010S | Units: mg/Kg | Prep Date: 8/26/2008 | RunNo: 14620
Client ID: ZZZZZ | Batch ID: 8003 | Method: SW6010B | (SW3050B) | Analysis Date: 8/27/2008 | SeqNo: 383208
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	98.7	10	100	0	99	85	115				
Antimony	20.0	6.0	20	0	100	85	115				
Arsenic	19.9	1.0	20	0	99	85	115				
Barium	18.9	10	20	0	95	85	115				
Beryllium	20.0	1.0	20	0	100	85	115				
Boron	47.6	5.0	50	0	95	85	115				
Cadmium	19.6	1.0	20	0	98	85	115				
Calcium	993	100	1000	0	99	85	115				
Chromium	19.8	1.0	20	0	99	85	115				
Cobalt	19.6	5.0	20	0	98	85	115				
Copper	19.7	1.0	20	0	99	85	115				
Iron	102	5.0	100	0	102	85	115				
Lead	20.1	1.0	20	0	100	85	115				
Magnesium	995	100	1000	0	99	85	115				
Manganese	19.7	5.0	20	0	99	85	115				
Molybdenum	19.0	5.0	20	0	95	85	115				
Nickel	20.1	5.0	20	0	100	85	115				
Potassium	1000	500	1000	0	100	85	115				
Selenium	19.4	1.0	20	0	97	85	115				
Silver	4.78	1.0	5	0	96	85	115				
Sodium	939	100	1000	0	94	85	115				
Strontium	19.4	5.0	20	0	97	85	115				
Thallium	19.5	2.0	20	0	97	85	115				
Tin	20.5	5.0	20	0	103	85	115				
Titanium	19.8	5.0	20	0	99	85	115				
Vanadium	19.7	5.0	20	0	98	85	115				
Zinc	20.3	2.0	20	0	101	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
I Analyte detected below the PQL.
S Spike Recovery outside accepted recovery limits

03-Sep-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-009BMS | SampType: MS | TestCode: HG7471S | Units: mg/Kg-dry | Prep Date: 8/27/08 | RunNo: 14621
Client ID: Trench-Bot-2 | Batch ID: 8011 | Method: SW7471A | (SW7471A) | Analysis Date: 8/27/08 | SeqNo: 383270
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.486	0.13	0.442	0.0531	98	27	153				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
I Analyte detected below the PQL.
S Spike Recovery outside accepted recovery limits

02-Sep-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8003 | SampType: MBLK | TestCode: 6010S | Units: mg/Kg | Prep Date: 8/26/2008 | RunNo: 14620
Client ID: ZZZZZ | Batch ID: 8003 | Method: SW6010B | (SW3050B) | Analysis Date: 8/27/2008 | SeqNo: 383207
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	10									
Antimony	ND	6.0									
Arsenic	ND	1.0									
Barium	ND	10									
Beryllium	ND	1.0									
Boron	ND	5.0									
Cadmium	ND	1.0									
Calcium	3.41	100									J
Chromium	ND	1.0									
Cobalt	ND	5.0									
Copper	ND	1.0									
Iron	1.16	5.0									J
Lead	0.180	1.0									J
Magnesium	ND	100									
Manganese	ND	5.0									
Molybdenum	ND	5.0									
Nickel	ND	5.0									
Potassium	ND	500									
Selenium	ND	1.0									
Silver	ND	1.0									
Sodium	ND	100									
Strontium	ND	5.0									
Thallium	ND	2.0									
Tin	ND	5.0									
Titanium	ND	5.0									
Vanadium	ND	5.0									
Zinc	ND	2.0									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
I Analyte detected below the PQL.
S Spike Recovery outside accepted recovery limits

03-Sep-08

Mercury Data

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8011 | SampType: MBLK | TestCode: HG7471S | Units: mg/Kg | Prep Date: 8/27/08 | RunNo: 14621
Client ID: ZZZZZ | Batch ID: 8011 | Method: SW7471A | (SW7471A) | Analysis Date: 8/27/08 | SeqNo: 383258
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

226 : 02-Sep-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-009BMSD | SampType: MSD | TestCode: HG7471S | Units: mg/Kg-dry | Prep Date: 8/27/08 | RunNo: 14621
Client ID: Trench-Bot-2 | Batch ID: 8011 | Method: SW7471A | (SW7471A) | Analysis Date: 8/27/08 | SeqNo: 383271
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.486	0.13	0.442	0.0531	98	27	153	0.486	0.1	15	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

224 : 02-Sep-08

Sample Data Package

227

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8011 | SampType: LCS | TestCode: HG7471S | Units: mg/Kg | Prep Date: 8/27/08 | RunNo: 14621
Client ID: ZZZZZ | Batch ID: 8011 | Method: SW7471A | (SW7471A) | Analysis Date: 8/27/08 | SeqNo: 383259
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.808	0.10	0.835	0	97	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

225 : 02-Sep-08

NARRATIVE

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from O'Brien & Gere Engineers, Inc. for the City of Geneva project. Immediately following the narratives are the Work Order Sample Summary and Dates Report.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The coolers were received intact. When the coolers were received by the laboratory, the sample custodian(s) opened and inspected the shipments for damage, custody inconsistencies and proper preservation. The chain of custody forms documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

Discrepancies noted upon receipt are listed on the sample receipt checklist located in the chain of custody section of the report. The temperatures of the iced coolers were 0.2°C and 2.2°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1
Semivolatile Organics	SW8270C	1
ICP Metals	SW6010B	1
Mercury	SW7471A	1
Percent Moisture	SM 2540G	2

1) New York State Department of Environmental Conservation Analytical Services Protocol, June 2000.

2) Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992

QUALITY CONTROL

QA/QC results are summarized in the Laboratory Report Package and are also included in the raw data.

RAW DATA

The raw data is organized in the New York State Department of Environmental Conservation Analytical Services Protocol Category B order of data requirements.

Total # of pages in report: _____

GC/MS Volatile Organics Case Narrative

Client: OBG
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0808068, 0808076
Methodology: 8260B

Analyzed/Reviewed by (Initials/Date): 8/27/08
Supervisor/Reviewed by (Initials/Date): 8/29/08
QA/QC Review (Initials/Date): 9/3/08
File Name: G:\Narratives\MSVoa\0808068vnar.doc

GC/MS Volatile Organics
The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 40 m x 0.18 mm ID capillary column (MS01 & MS03), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), and Restek Rtx-VMS, 60 m x 0.25mm ID capillary column (MS04), and a Vocarb 3000 adsorbent trap.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Aqueous samples had a pH of < 2.

Laboratory Control Sample
The following compound(s) did not meet laboratory control sample recovery criteria:

LCS No.	Compound	Corrective Action
LCS-14526, LCS-14527	Cyclohexane	1
LCS-14529	1,1-Dichloroethene	1
	Carbon disulfide	1
	Cyclohexane	1
LCS/LCSD-14531	Cyclohexane	1
LCSD-14531	Carbon disulfide	1,2
	1,1,2,2-Tetrachloroethane	1,2
	1,2-Dibromo-3-chloropropane	1,2

1 The recovery exceeded the upper control limit and was not detected above the PQL/RL in the associated samples. No corrective action was taken.

2 The primary LCS met acceptance limits.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MSB	MSB-14529	Carbon disulfide	X		1
		Cyclohexane	X		1

GC/MS Volatile Organics Case Narrative - Page 2

Client: OBG
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0808068, 0808076
Methodology: 8260B

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
UST-East	0808076-004A MSD	Cyclohexane	X		1

1 The recovery exceeded the upper control limit and was not detected above the PQL/RL in the associated sample. No corrective action was taken.

Surrogate Standards
The following sample(s) did not meet surrogate recovery criteria:

Sample Description	Sample #	Surrogate	Corrective Action
UST-Bot-1	0808076-001A	4-Bromofluorobenzene	1
UST-Bot-2	0808076-003A	4-Bromofluorobenzene	2
Field Dup	0808076-007A	4-Bromofluorobenzene	2

1 The recovery was confirmed by analysis of the sample at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

2 The recovery met acceptance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken

Internal Standards
The internal standard area for the following sample(s) did not meet abundance criteria:

Sample Description	Sample #	Internal Standard	Corrective Action
UST-Bot-1	0808076-001A	1,4-dichlorobenzene-d4	1
UST-Bot-2	0808076-003A	1,4-dichlorobenzene-d4	1
Field Dup	0808076-007A	1,4-dichlorobenzene-d4	1
Trench-Bot-1	0808076-008A	1,4-dichlorobenzene-d4	2
Trench-Bot-2	0808076-009A	1,4-dichlorobenzene-d4	2

1 The recovery was confirmed by analysis of the sample at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

2 The internal standard area met abundance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

GC/MS Semi-Volatile Organics Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva-Mark Basket Site
Work Order #: 0808068,0808076
Methodology: 8270C

Analyzed/Reviewed by (Initials/Date): 8/27/08
Supervisor/Reviewed by (Initials/Date): 8-27-08
QA/QC Review (Initials/Date): 9/2/08
File Name: G:\Narratives\MSSemi\0808068svnar.doc

GC/MS Semi-Volatile Organics
The GC/MS Semi-volatile instruments used a J & W DB-5MS, 30 m x 0.25 mm ID capillary column.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
Matrix Spike Blank	MSB-7957	Caprolactam	X		1

1 The recovery exceeded the upper control limit and was not detected above the PQL/RL in the associated samples. The associated LCS met acceptance limits. No corrective action was taken.

Surrogate Standards
All surrogate standard recoveries met method and/or project specific QC criteria.

Internal Standards
All internal standard areas met method and/or project specific QC criteria.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva- Market Basket Site
Work Order #: 0808076
Methodology: ICP metals - SW 6010B

Analyzed/Reviewed by (Date/Initials): 8-29-08 CT

Supervisor/Reviewed by (Date/Initials): 8-29-08 MM

QA/QC Review (Date/Initials): 9/3/08 dh

Trace Metals

There were no excursions to note. All QC results were within established control limits.

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Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva- Market Basket Site
Work Order #: 0808076
Methodology: Mercury – SW 7471A

Analyzed/Reviewed by (Date/Initials): 9-2-08 CT

Supervisor/Reviewed by (Date/Initials): 9-2-08 MM

QA/QC Review (Date/Initials): 9/2/08 dh

Trace Metals

There were no excursions to note. All QC results were within established control limits.

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Life Science Laboratories, Inc.

Date: *08-Sep-08*

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab Order: 0808068

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0808068-001A	SB-2-Bot-1		8/12/2008	8/12/2008
0808068-001B	SB-2-Bot-1		8/12/2008	8/12/2008
0808068-002A	SB-2-South		8/12/2008	8/12/2008
0808068-002B	SB-2-South		8/12/2008	8/12/2008
0808068-003A	SB-2-East		8/12/2008	8/12/2008
0808068-003B	SB-2-East		8/12/2008	8/12/2008
0808068-004A	SB-2-North		8/12/2008	8/12/2008
0808068-004B	SB-2-North		8/12/2008	8/12/2008
0808068-005A	SB-2-West		8/12/2008	8/12/2008
0808068-005B	SB-2-West		8/12/2008	8/12/2008
0808068-006A	SB-2-Bot-2		8/12/2008	8/12/2008
0808068-006B	SB-2-Bot-2		8/12/2008	8/12/2008
0808068-007A	Trip Blank		8/12/2008	8/12/2008

Life Science Laboratories, Inc.

Date: *08-Sep-08*

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab Order: 0808076

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0808076-001A	UST-Bot-1		8/13/2008	8/13/2008
0808076-001B	UST-Bot-1		8/13/2008	8/13/2008
0808076-002A	UST-North		8/13/2008	8/13/2008
0808076-002B	UST-North		8/13/2008	8/13/2008
0808076-003A	UST-Bot-2		8/13/2008	8/13/2008
0808076-003B	UST-Bot-2		8/13/2008	8/13/2008
0808076-004A	UST-East		8/13/2008	8/13/2008
0808076-004B	UST-East		8/13/2008	8/13/2008
0808076-005A	UST-West		8/13/2008	8/13/2008
0808076-005B	UST-West		8/13/2008	8/13/2008
0808076-006A	UST-South		8/13/2008	8/13/2008
0808076-006B	UST-South		8/13/2008	8/13/2008
0808076-007A	Field Dup		8/13/2008	8/13/2008
0808076-007B	Field Dup		8/13/2008	8/13/2008
0808076-008A	Trench-Bot-1		8/13/2008	8/13/2008
0808076-008B	Trench-Bot-1		8/13/2008	8/13/2008
0808076-009A	Trench-Bot-2		8/13/2008	8/13/2008
0808076-009B	Trench-Bot-2		8/13/2008	8/13/2008

Chain of Custody

External Chain of Custody

Life Science Laboratories, Inc.
Brittonfield Lab

5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: City of Geneva
Project: Market Basket
Sampled by: CM/DKM
Client Contact: Dave Meixell Phone # (315)437-6100

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	8260	8270						Comments
SB-2-Bot-1	8/12/08	11:15	Soil	G	2	X	X						
SB-2-South	8/12/08	11:45	Soil	G	2	X	X						
SB-2 East	8/12/08	12:05	Soil	G	2	X	X						
SB-2-North	8/12/08	2:05	Soil	G	2	X	X						
SB-2-West	8/12/08	2:05	Soil	G	2	X	X						

Relinquished by: Christopher M. McKenzie Date: 8/12/08 Time: 1748 Received by: Date: Time:
Relinquished by: Date: Time: 1748 Received by: Date: Time:
Relinquished by: Date: Time: Received by Lab: [signature] Date: 8/13/08 Time: 0800
Shipment Method: Airbill Number:

Turnaround Time Required: Comments:
Routine______
Rush (Specify)______
Temperature: 0.2°C on ice

Original - Laboratory
Copy - Client

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: OBG-MS Date and Time Received: 8/12/2008 5:52:00 PM
Work Order Number: 0808068 Received by: ads

Checklist completed by: [signature] (Initials) 8/13/08 (Date) Reviewed by: MS (Initials) 8/13/08 (Date)

Matrix: Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Comments:
Samples for "SB2-Bot-2" were received but not listed on COC. Trip Blanks not listed on COC.

Corrective Action:
Logged in "SB2-Bot-2" and Trip Blanks

CASE FILE FORM

PROGRAM INFORMATION

CLIENT: Christopher M. McKenzie DIV. 082 REF. No. _____

PROGRAM: City of Geneva

CUSTODY SEAL: _____ INTACT _____ NOT INTACT _____ NA

AFTER HOURS CUSTODY

RELINQUISHED BY:			RECEIVED BY:		
CLIENT: Christopher M. McKenzie	DATE 8/13/08	TIME 1757	SECURITY GUARD: Don Sauer	DATE 8/13/8	TIME 1750
GUARD TO COOLER: Don Sauer	DATE 8/13/08	TIME 1800	SAMPLE CUSTODIAN: [illegible]	DATE 8/13/08	TIME 0800

COMMENTS/DISCREPANCIES:

RESOLUTION/CLIENT COMMENT:

SIGNED: _____

DATE: _____

QA/QC APROVAL: _____

SIGNED: _____

DATE: _____

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Client/Project 0808068 086-MS Geneva

Sample Control Record

Sample ID	Frac	Client Sample ID	Removed By	Date and Time Removed	Analysis	Date and Time Returned
080806-MS-001 → 006	B		MR	8/14/08 800	82705	8/14/08 845
080806-MS-006	B		[illegible]	8/14/08 1145	PMOST	8/14/08 1232
001 → 007A	A		[illegible]	8-14-08 0945	8260	8-14-08 1400
003 → 7A	A		[illegible]	8-15-08 1000	8260	8-15-08 1430

AQC\forms\Generalt.aboratory\Sign out.xls

Life Science Laboratories, Inc.
Brittonfield Lab

5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: City of Geneva
Project: Market Basket
Sampled by: CMM/Dan
Client Contact: Dave Maxwell Phone # (315) 437-6100

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	VOCs 8260	SVOCs 8270	Total Lead (6010)	Boron (Flame Emission Atomic Emission)	Mercury	Comments
UST-Bat-1	8/13/08	9:50	Soil	G	2	X	X				
UST-North	8/13/08	10:30	Soil	G	2	X	X				
UST-Bat-2	8/13/08	10:55	Soil	G	2	X	X				
UST-East	8/13/08	11:05	Soil	G	2	X	X				
UST-East-MS	8/13/08	11:10	Soil	G	2	X	X				
UST-East-MSD	8/13/08	11:15	Soil	G	2	X	X				
UST-West	8/13/08	11:30	Soil	G	2	X	X	X			
UST-South	8/13/08	12:00	Soil	G	2	X	X	X			
Field Dup	8/13/08		Soil	G	2	X	X	X			
Trench-Bat-1	8/13/08	3:10	Soil	G	2	X	X		X	X	
Trench-Bat-2	8/13/08	3:35	Soil	G	2	X	X		X	X	

Relinquished by: Christopher M. McKenzie Date: 8/13/08 Time: 1710 Received by: Date: Time:
Relinquished by: Date: Time: Received by: Date: Time:
Relinquished by: Date: Time: Received by Lab: [illegible] Date: 8/14/08 Time: 0800
Shipment Method: Airbill Number:

Turnaround Time Required:
Routine
Rush (Specify)

Comments:

Temperature: 2.2°C on ice

Original - Laboratory
Copy - Client

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: OBG-MS — Date and Time Received: 8/13/2008 5:10:00 PM
Work Order Number 0808076 — Received by: ada
Checklist completed by: [illegible] (initials) 8/14/08 (Date) — Reviewed by: MS (Initials) 8/14/08 (Date)
Matrix: — Carrier name: Hand Delivered

	Yes	No	Not Present
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shipping container/cooler?	☐	☐	☑
Custody seals intact on sample bottles?	☐	☐	☑
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Water - VOA vials have zero headspace?	☐	☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	☐	☐	Not Applicable ☑

Comments:

Corrective Action:

CASE FILE FORM

PROGRAM INFORMATION

CLIENT: _____ DIV. _____ REF. No. _____

PROGRAM: _____

CUSTODY SEAL: _____ INTACT _____ NOT INTACT _____ NA

AFTER HOURS CUSTODY

RELINQUISHED BY:			RECEIVED BY:		
CLIENT: Chris McKenzie	DATE 8/13/08	TIME 1710	SECURITY GUARD: Don Gaspel	DATE 8/13/08	TIME 1710
GUARD TO COOLER: Don Gaspel	DATE 8/13/08	TIME 1712	SAMPLE CUSTODIAN: [signature]	DATE 8/14/08	TIME 0800

COMMENTS/DISCREPANCIES:

RESOLUTION/CLIENT COMMENT:

SIGNED: _____

DATE: _____

QA/QC APROVAL: _____

SIGNED: _____

DATE: _____

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Client/Project GENEVA 0808076

Sample Control Record

Sample ID	Frac	Client Sample ID	Removed By	Date and Time Removed	Analysis	Date and Time Returned
0808076-001-009	B		[signature]	8/14/08 11:45	PNAOS/8270	8/14/08 12:32
0808076-001-009	B		[signature]	8/15/08 1830		8/15/08 2100
001→9	A		(MW)	8-18-08 0500	8260	8-18-08 0615
001→9	A		(MW)	8-19-08 0530	8260	8-19-08 0600

AQCforms\GeneralLaboratorySign out.xls

Internal Chain of Custody

GC/MS SEMIVOLATILE ORGANICS SAMPLE CONTROL LOG

QC Batch #: 7957 Date Extracted: 8/15/08

Client/Job Number	Laboratory Sample Number Range	Date/Time Stored in Refrigerator	Relinquished By	Laboratory Sample Number Removed	Date/Time Removed	By	Method Analyzed For	Date/Time Returned	By
DBGMS	0808068-0018 → 0033	8-21-08 10:00	C.M.	0808068-0018 0020 0023 0033	8/21/08 12:00	MG	8270	8/22/08 12:00	MG
	0808076-0018 → 0033								

Reviewed by: (MW) 8-26-08 Date: _____

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ICP METALS SAMPLE CONTROL LOG

QC Batch # : 8003 Date Digested : 8/26/08

Client / Job Number	Laboratory Sample Number Range	Laboratory Sample Numbers Removed	Removed By	Date Removed	Time Removed	Time Returned
City of Geneva	0808076-001B → 0098	← Same	C. Tran	8/27/08	10:00	16:00

Raw Data

GC/MS Volatile Organics Data

QC Summary

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No. _____ SDG No.: 0808068O

Level: (low/med) LOW

	EPA SAMPLE NO.	LSL ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #			TOT OUT
01	LCS-14526	LCS-14526	97	92	105			0
02	MB-14526	MB-14526	96	101	110			0
03	SB-2-Bot-1	0808068-001A	103	107	124			0
04	SB-2-South	0808068-002A	96	100	107			0
05	SB-2-East	0808068-003A	103	97	93			0
06	SB-2-North	0808068-004A	100	100	99			0
07	LCS-14527	LCS-14527	95	94	104			0
08	MB-14527	MB-14527	95	101	116			0
09	SB-2-Bot-2	0808068-006A	96	104	124			0
10	SB-2-West	0808068-005A	99	100	114			0
11	SB-2-EastDL	0808068-003ADL	102	99	93			0
12	SB-2-NorthDL	0808068-004ADL	102	99	105			0
13	Trip Blank	0808068-007A	100	99	115			0
14	LCS-14529	LCS-14529	96	94	98			0
15	MSB-14529	MSB-14529	96	94	98			0
16	UST-EastMS	0808076-004AMS	99	93	102			0
17	UST-EastMSD	0808076-004AMSD	93	96	104			0
18	MB-14529	MB-14529	93	101	110			0
19	UST-Bot-1	0808076-001A	113	115	129 *			1
20	UST-North	0808076-002A	104	99	112			0
21	UST-Bot-2	0808076-003A	109	114	132 *			1
22	UST-East	0808076-004A	107	100	108			0
23	UST-West	0808076-005A	104	100	107			0
24	UST-South	0808076-006A	111	101	107			0
25	Field Dup	0808076-007A	113	114	136 *			1
26	Trench-Bot-1	0808076-008A	108	102	115			0
27	Trench-Bot-2	0808076-009A	109	102	119			0

QC Limit

SMC1 (DCE) 1 = 1,2-Dichloroethane-d4 71-128

SMC2 (TOL) 1 = Toluene-d8 75-125

SMC3 (BFB) 1 = 4-Bromofluorobenzene 59-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 1 of 2 FORM II VOA-2 SW8260B

252

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No. _____ SDG No.: 0808068O

Level: (low/med) LOW

	EPA SAMPLE NO.	LSL ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #			TOT OUT
28	LCS-14531	LCS-14531	101	93	100			0
29	MB-14531	MB-14531	102	101	110			0
30	UST-Bot-1DL	0808076-001ADL	109	106	129 *			1
31	UST-Bot-2DL	0808076-003ADL	112	104	122			0
32	Field DupDL	0808076-007ADL	110	105	125			0
33	Trench-Bot-1DL	0808076-008ADL	109	101	106			0
34	Trench-Bot-2DL	0808076-009ADL	108	100	109			0
35	LCSD-14531	LCSD-14531	109	93	102			0

QC Limit

SMC1 (DCE) 1 = 1,2-Dichloroethane-d4 71-128

SMC2 (TOL) 1 = Toluene-d8 75-125

SMC3 (BFB) 1 = 4-Bromofluorobenzene 59-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 2 of 2 FORM II VOA-2 SW8260B

253

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMS SampType: MS TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14528
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380757
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	56.1	5.9	59.1	0	100	43	161				
Chloromethane	72.6	5.9	59.1	0	123	52	151				
Vinyl chloride	62.9	5.9	59.1	0	106	57	146				
Bromomethane	44.7	5.9	59.1	0	76	44	145				
Chloroethane	61.7	5.9	59.1	0	104	49	161				
Trichlorofluoromethane	44.1	5.9	59.1	0	75	59	150				
1,1-Dichloroethene	60.0	3.0	59.1	0	102	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	63.0	3.0	59.1	0	107	70	143				
Acetone	137	47	118	0	116	25	175				
Carbon disulfide	71.6	3.0	59.1	1.26	119	58	140				
Methyl acetate	60.0	3.0	59.1	0	117	70	130				
Methylene chloride	62.7	5.9	59.1	1	104	68	132				
trans-1,2-Dichloroethene	59.2	3.0	59.1	0	100	70	130				
Methyl tert-butyl ether	61.8	3.0	59.1	0	105	70	135				
1,1-Dichloroethane	61.3	3.0	59.1	0	104	70	133				
cis-1,2-Dichloroethene	59.0	3.0	59.1	0	100	70	130				
2-Butanone	133	47	118	0	112	30	162				
Chloroform	57.3	3.0	59.1	0	97	70	130				
1,1,1-Trichloroethane	53.9	3.0	59.1	0	91	70	142				
Cyclohexane	74.9	3.0	59.1	0	127	70	130				
Carbon tetrachloride	53.9	3.0	59.1	0	91	69	140				
Benzene	63.7	3.0	59.1	0	108	70	130				
1,2-Dichloroethane	58.5	3.0	59.1	0	99	68	135				
Trichloroethene	56.8	3.0	59.1	0	96	70	130				
Methylcyclohexane	69.6	3.0	59.1	0	118	70	130				
1,2-Dichloropropane	65.7	3.0	59.1	0	111	70	130				
Bromodichloromethane	60.7	3.0	59.1	0	103	68	138				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDL or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

254

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMS SampType: MS TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14528
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380757
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	65.7	3.0	59.1	0	111	56	139				
4-Methyl-2-pentanone	135	5.9	118	0	115	50	150				
Toluene	61.7	3.0	59.1	0	104	70	130				
trans-1,3-Dichloropropene	61.4	3.0	59.1	0	104	53	135				
1,1,2-Trichloroethane	62.9	3.0	59.1	0	106	70	132				
Tetrachloroethene	51.9	3.0	59.1	0	88	63	145				
2-Hexanone	129	5.9	118	0	109	38	150				
Dibromochloromethane	55.5	3.0	59.1	0	94	66	141				
1,2-Dibromoethane	57.4	3.0	59.1	0	97	70	130				
Chlorobenzene	53.2	3.0	59.1	0	90	70	130				
Ethylbenzene	57.7	3.0	59.1	0	98	70	130				
Xylenes (total)	189	5.9	177	0	95	70	130				
Styrene	53.5	3.0	59.1	0	91	70	130				
Bromoform	50.3	3.0	59.1	0	85	59	137				
Isopropylbenzene	63.7	3.0	59.1	0	108	57	168				
1,1,2,2-Tetrachloroethane	68.4	3.0	59.1	0	116	63	175				
1,3-Dichlorobenzene	58.6	3.0	59.1	0	100	70	139				
1,4-Dichlorobenzene	57.1	3.0	59.1	0	97	70	131				
1,2-Dichlorobenzene	59.6	3.0	59.1	0	101	70	132				
1,2-Dibromo-3-chloropropane	72.7	5.9	59.1	0	123	70	138				
1,2,4-Trichlorobenzene	61.0	5.9	59.1	0	103	48	131				
Surr: 1,2-Dichloroethane-d4	56.5	0.12	59.1	0	99	71	128				
Surr: Toluene-d8	55.1	0.12	59.1	0	93	75	125				
Surr: 4-Bromofluorobenzene	60.1	0.12	59.1	0	102	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDL or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

255

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: MSB-14529 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380756
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	52.6	5.0	50	0	105	43	161				
Chloromethane	65.8	5.0	50	0	132	52	151				
Vinyl chloride	58.1	5.0	50	0	116	57	146				
Bromomethane	39.6	5.0	50	0	79	44	145				
Chloroethane	54.9	5.0	50	0	110	49	161				
Trichlorofluoromethane	40.6	5.0	50	0	81	59	156				
1,1-Dichloroethene	68.0	2.5	50	0	136	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	64.3	2.5	50	0	129	70	143				
Acetone	111	40	100	0	111	25	175				
Carbon disulfide	74.2	2.5	50	0	148	58	140				S
Methyl acetate	59.0	2.5	50	0	118	70	130				
Methylene chloride	53.4	5.0	50	0	107	68	132				
trans-1,2-Dichloroethene	52.5	2.5	50	0	105	70	130				
Methyl tert-butyl ether	49.2	2.5	50	0	98	70	135				
1,1-Dichloroethane	53.8	2.5	50	0	108	70	133				
cis-1,2-Dichloroethene	49.8	2.5	50	0	100	70	130				
2-Butanone	111	40	100	0	111	30	162				
Chloroform	49.3	2.5	50	0	99	70	130				
1,1,1-Trichloroethane	48.3	2.5	50	0	97	70	142				
Cyclohexane	66.6	2.5	50	0	133	70	130				S
Carbon tetrachloride	48.3	2.5	50	0	97	69	140				
Benzene	55.2	2.5	50	0	110	70	130				
1,2-Dichloroethane	48.5	2.5	50	0	97	68	135				
Trichloroethene	50.5	2.5	50	0	101	70	130				
Methylcyclohexane	59.8	2.5	50	0	120	70	130				
1,2-Dichloropropane	54.5	2.5	50	0	109	70	130				
Bromodichloromethane	50.8	2.5	50	0	102	68	138				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

258

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	59.9	5.9	59.1	0	101	43	161	59.1	1.4	20	
Chloromethane	72.6	5.9	59.1	0	123	52	151	72.6	0	20	
Vinyl chloride	65.4	5.9	59.1	0	111	57	146	62.9	3.8	24	
Bromomethane	44.7	5.9	59.1	0	76	44	145	44.7	0.1	21	
Chloroethane	61.5	5.9	59.1	0	104	49	161	61.7	0.3	20	
Trichlorofluoromethane	45.8	5.9	59.1	0	77	59	156	44.1	3.7	20	
1,1-Dichloroethene	84.0	3.0	59.1	0	108	70	144	60	6.4	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	65.4	3.0	59.1	0	111	70	143	63	3.7	20	
Acetone	123	47	118	0	104	25	175	137	10	50	
Carbon disulfide	73.6	3.0	59.1	1.26	122	58	140	71.6	2.8	20	
Methyl acetate	61.5	3.0	59.1	0	104	70	130	59	11	20	
Methylene chloride	62.5	5.9	59.1	1	104	68	132	62.7	0.4	20	
trans-1,2-Dichloroethene	60.8	3.0	59.1	0	103	70	130	59.2	2.3	20	
Methyl tert-butyl ether	59.6	3.0	59.1	0	101	70	135	61.8	3.6	20	
1,1-Dichloroethane	62.9	3.0	59.1	0	106	70	133	61.3	2.5	20	
cis-1,2-Dichloroethene	58.8	3.0	59.1	0	100	70	130	59	0.3	20	
2-Butanone	118	47	118	0	99	30	162	133	12	50	
Chloroform	57.3	3.0	59.1	0	97	70	130	57.3	0.1	20	
1,1,1-Trichloroethane	56.0	3.0	59.1	0	95	70	142	53.9	3.8	20	
Cyclohexane	78.9	3.0	59.1	0	133	70	130	74.9	5.2	20	S
Carbon tetrachloride	56.0	3.0	59.1	0	95	69	140	53.9	3.8	20	
Benzene	64.6	3.0	59.1	0	109	70	130	63.7	1.5	20	
1,2-Dichloroethane	56.3	3.0	59.1	0	95	68	135	58.5	4.0	20	
Trichloroethene	58.5	3.0	59.1	0	99	70	130	56.8	2.8	20	
Methylcyclohexane	72.3	3.0	59.1	0	122	70	130	69.6	3.9	20	
1,2-Dichloropropane	65.7	3.0	59.1	0	111	70	130	65.7	0	20	
Bromodichloromethane	59.0	3.0	59.1	0	100	68	138	60.7	3.0	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

256

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: MSB-14529 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380756
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	54.1	2.5	50	0	108	55	139				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.0	2.5	50	0	106	70	130				
trans-1,3-Dichloropropene	50.8	2.5	50	0	102	53	135				
1,1,2-Trichloroethane	52.7	2.5	50	0	105	70	132				
Tetrachloroethene	45.5	2.5	50	0	91	63	145				
2-Hexanone	103	5.0	100	0	103	38	150				
Dibromochloromethane	46.2	2.5	50	0	92	68	141				
1,2-Dibromoethane	47.9	2.5	50	0	96	70	130				
Chlorobenzene	45.9	2.5	50	0	92	70	130				
Ethylbenzene	51.0	2.5	50	0	102	70	130				
Xylenes (total)	147	5.0	150	0	98	70	130				
Styrene	46.4	2.5	50	0	93	70	130				
Bromoform	42.1	2.5	50	0	84	59	137				
Isopropylbenzene	56.2	2.5	50	0	112	57	168				
1,1,2,2-Tetrachloroethane	58.4	2.5	50	0	117	63	175				
1,3-Dichlorobenzene	51.0	2.5	50	0	102	70	139				
1,4-Dichlorobenzene	49.0	2.5	50	0	98	70	131				
1,2-Dichlorobenzene	50.6	2.5	50	0	101	70	132				
1,2-Dibromo-3-chloropropane	61.9	5.0	50	0	124	70	138				
1,2,4-Trichlorobenzene	53.1	5.0	50	0	106	48	131				
Surr: 1,2-Dichloroethane-d4	47.8	0.10	50	0	96	71	128				
Surr: Toluene-d8	47.1	0.10	50	0	94	75	125				
Surr: 4-Bromofluorobenzene	49.1	0.10	50	0	98	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

259

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	64.4	3.0	59.1	0	109	55	139	65.7	2.0	20	
4-Methyl-2-pentanone	121	5.9	118	0	102	50	150	136	12	50	
Toluene	62.8	3.0	59.1	0	106	70	130	61.7	1.7	20	
trans-1,3-Dichloropropene	58.3	3.0	59.1	0	99	53	135	61.4	5.2	20	
1,1,2-Trichloroethane	60.5	3.0	59.1	0	102	70	132	62.9	3.9	20	
Tetrachloroethene	54.4	3.0	59.1	0	92	63	145	51.9	4.7	21	
2-Hexanone	112	5.9	118	0	95	38	150	129	14	50	
Dibromochloromethane	55.6	3.0	59.1	0	94	68	141	55.5	0.2	20	
1,2-Dibromoethane	55.9	3.0	59.1	0	95	70	130	57.4	2.7	20	
Chlorobenzene	54.8	3.0	59.1	0	93	70	130	53.2	2.9	20	
Ethylbenzene	60.5	3.0	59.1	0	102	70	130	57.7	4.7	20	
Xylenes (total)	177	5.9	177	0	100	70	130	169	4.8	20	
Styrene	55.1	3.0	59.1	0	93	70	130	53.5	2.9	20	
Bromoform	47.8	3.0	59.1	0	81	59	137	50.3	5.1	20	
Isopropylbenzene	70.0	3.0	59.1	0	118	57	168	63.7	9.4	20	
1,1,2,2-Tetrachloroethane	67.1	3.0	59.1	0	113	63	175	68.4	2.0	24	
1,3-Dichlorobenzene	60.4	3.0	59.1	0	102	70	139	58.8	2.7	20	
1,4-Dichlorobenzene	58.0	3.0	59.1	0	98	70	131	57.1	1.6	24	
1,2-Dichlorobenzene	60.8	3.0	59.1	0	103	70	132	59.8	1.5	20	
1,2-Dibromo-3-chloropropane	67.0	5.9	59.1	0	113	70	138	72.7	8.2	24	
1,2,4-Trichlorobenzene	59.9	5.9	59.1	0	101	48	131	61	1.9	24	
Surr: 1,2-Dichloroethane-d4	54.7	0.12	59.1	0	93	71	128	0		0	
Surr: Toluene-d8	56.8	0.12	59.1	0	96	75	125	0		0	
Surr: 4-Bromofluorobenzene	61.4	0.12	59.1	0	104	59	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

257

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14527 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380712
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	46.1	5.0	50	0	92	55	142				
Chloromethane	58.9	5.0	50	0	118	62	141				
Vinyl chloride	51.0	5.0	50	0	102	68	135				
Bromomethane	38.7	5.0	50	0	77	56	147				
Chloroethane	44.7	5.0	50	0	89	63	142				
Trichlorofluoromethane	37.2	5.0	50	0	74	67	136				
1,1-Dichloroethene	55.0	2.5	50	0	110	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	52.7	2.5	50	0	105	80	134				
Acetone	99.1	40	100	0	99	25	175				
Carbon disulfide	61.5	2.5	50	0	123	73	130				
Methyl acetate	55.8	2.5	50	0	112	67	147				
Methylene chloride	52.3	5.0	50	0	105	75	124				
trans-1,2-Dichloroethene	52.2	2.5	50	0	104	77	123				
Methyl tert-butyl ether	52.5	2.5	50	0	105	76	126				
1,1-Dichloroethane	54.0	2.5	50	0	108	76	124				
cis-1,2-Dichloroethene	51.0	2.5	50	0	102	79	120				
2-Butanone	105	40	100	0	105	42	154				
Chloroform	48.8	2.5	50	0	98	77	121				
1,1,1-Trichloroethane	47.9	2.5	50	0	96	78	132				
Cyclohexane	69.0	2.5	50	0	138	80	126				S
Carbon tetrachloride	46.9	2.5	50	0	94	74	138				
Benzene	55.4	2.5	50	0	111	80	121				
1,2-Dichloroethane	48.5	2.5	50	0	97	73	127				
Trichloroethene	49.2	2.5	50	0	98	80	120				
Methylcyclohexane	59.8	2.5	50	0	119	80	128				
1,2-Dichloropropane	56.1	2.5	50	0	112	80	125				
Bromodichloromethane	50.4	2.5	50	0	101	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14526 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14526
Client ID: ZZZZZ Batch ID: R14526 Method: SW8260B Analysis Date: 8/14/2008 SeqNo: 380700
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	47.4	5.0	50	0	95	55	142				
Chloromethane	61.9	5.0	50	0	124	62	141				
Vinyl chloride	52.7	5.0	50	0	105	68	135				
Bromomethane	39.2	5.0	50	0	78	56	147				
Chloroethane	44.3	5.0	50	0	89	63	142				
Trichlorofluoromethane	37.9	5.0	50	0	76	67	136				
1,1-Dichloroethene	53.8	2.5	50	0	108	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	51.6	2.5	50	0	103	80	134				
Acetone	104	40	100	0	104	25	175				
Carbon disulfide	63.2	2.5	50	0	126	73	130				
Methyl acetate	58.1	2.5	50	0	116	67	147				
Methylene chloride	53.3	5.0	50	0	107	75	124				
trans-1,2-Dichloroethene	50.7	2.5	50	0	101	77	123				
Methyl tert-butyl ether	50.6	2.5	50	0	101	76	126				
1,1-Dichloroethane	53.6	2.5	50	0	107	76	124				
cis-1,2-Dichloroethene	49.7	2.5	50	0	99	79	120				
2-Butanone	114	40	100	0	114	42	154				
Chloroform	48.5	2.5	50	0	97	77	121				
1,1,1-Trichloroethane	46.9	2.5	50	0	94	78	132				
Cyclohexane	66.6	2.5	50	0	133	80	126				S
Carbon tetrachloride	45.6	2.5	50	0	91	74	138				
Benzene	54.6	2.5	50	0	109	80	121				
1,2-Dichloroethane	48.8	2.5	50	0	98	73	127				
Trichloroethene	48.4	2.5	50	0	97	80	120				
Methylcyclohexane	56.9	2.5	50	0	114	80	128				
1,2-Dichloropropane	55.3	2.5	50	0	111	80	125				
Bromodichloromethane	49.4	2.5	50	0	99	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14527 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380712
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	55.6	2.5	50	0	111	80	125				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.2	2.5	50	0	106	80	121				
trans-1,3-Dichloropropene	51.7	2.5	50	0	103	78	124				
1,1,2-Trichloroethane	52.3	2.5	50	0	105	80	122				
Tetrachloroethene	42.8	2.5	50	0	85	74	125				
2-Hexanone	102	5.0	100	0	102	50	150				
Dibromochloromethane	46.0	2.5	50	0	92	76	135				
1,2-Dibromoethane	48.3	2.5	50	0	97	80	124				
Chlorobenzene	45.2	2.5	50	0	90	80	120				
Ethylbenzene	50.3	2.5	50	0	101	80	121				
Xylenes (total)	147	5.0	150	0	98	76	124				
Styrene	46.2	2.5	50	0	92	78	122				
Bromoform	40.5	2.5	50	0	81	70	138				
Isopropylbenzene	58.0	2.5	50	0	116	78	131				
1,1,2,2-Tetrachloroethane	58.8	2.5	50	0	118	69	138				
1,3-Dichlorobenzene	50.6	2.5	50	0	101	80	120				
1,4-Dichlorobenzene	48.7	2.5	50	0	97	80	120				
1,2-Dichlorobenzene	51.4	2.5	50	0	103	80	120				
1,2-Dibromo-3-chloropropane	59.0	5.0	50	0	118	69	132				
1,2,4-Trichlorobenzene	52.9	5.0	50	0	106	71	127				
Surr: 1,2-Dichloroethane-d4	47.4	0.10	50	0	95	71	128				
Surr: Toluene-d8	47.0	0.10	50	0	94	75	125				
Surr: 4-Bromofluorobenzene	52.0	0.10	50	0	104	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14526 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14526
Client ID: ZZZZZ Batch ID: R14526 Method: SW8260B Analysis Date: 8/14/2008 SeqNo: 380700
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	53.7	2.5	50	0	107	80	125				
4-Methyl-2-pentanone	117	5.0	100	0	117	50	150				
Toluene	52.2	2.5	50	0	104	80	121				
trans-1,3-Dichloropropene	50.2	2.5	50	0	100	78	124				
1,1,2-Trichloroethane	52.4	2.5	50	0	105	80	122				
Tetrachloroethene	40.9	2.5	50	0	82	74	125				
2-Hexanone	106	5.0	100	0	106	50	150				
Dibromochloromethane	44.0	2.5	50	0	88	76	135				
1,2-Dibromoethane	46.9	2.5	50	0	94	80	124				
Chlorobenzene	43.9	2.5	50	0	88	80	120				
Ethylbenzene	48.8	2.5	50	0	98	80	121				
Xylenes (total)	140	5.0	150	0	94	76	124				
Styrene	44.1	2.5	50	0	88	78	122				
Bromoform	38.8	2.5	50	0	77	70	138				
Isopropylbenzene	56.8	2.5	50	0	114	78	131				
1,1,2,2-Tetrachloroethane	60.9	2.5	50	0	122	69	138				
1,3-Dichlorobenzene	49.0	2.5	50	0	98	80	120				
1,4-Dichlorobenzene	47.8	2.5	50	0	96	80	120				
1,2-Dichlorobenzene	50.3	2.5	50	0	101	80	120				
1,2-Dibromo-3-chloropropane	61.2	5.0	50	0	122	69	132				
1,2,4-Trichlorobenzene	49.7	5.0	50	0	99	71	127				
Surr: 1,2-Dichloroethane-d4	48.7	0.10	50	0	97	71	128				
Surr: Toluene-d8	46.2	0.10	50	0	92	75	125				
Surr: 4-Bromofluorobenzene	52.3	0.10	50	0	105	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-14531 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380802
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	51.0	5.0	50	0	102	55	142				
Chloromethane	65.5	5.0	50	0	131	62	141				
Vinyl chloride	57.6	5.0	50	0	115	68	135				
Bromomethane	40.4	5.0	50	0	81	56	147				
Chloroethane	57.6	5.0	50	0	115	63	142				
Trichlorofluoromethane	40.7	5.0	50	0	81	67	138				
1,1-Dichloroethene	56.2	2.5	50	0	112	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	55.0	2.5	50	0	110	80	134				
Acetone	105	40	100	0	105	25	175				
Carbon disulfide	63.7	2.5	50	0	127	73	130				
Methyl acetate	59.5	2.5	50	0	119	67	147				
Methylene chloride	56.7	5.0	50	0	113	75	124				
trans-1,2-Dichloroethene	52.6	2.5	50	0	105	77	123				
Methyl tert-butyl ether	52.2	2.5	50	0	104	76	126				
1,1-Dichloroethane	56.6	2.5	50	0	113	76	124				
cis-1,2-Dichloroethene	51.6	2.5	50	0	103	79	120				
2-Butanone	112	40	100	0	112	42	154				
Chloroform	52.5	2.5	50	0	105	77	121				
1,1,1-Trichloroethane	50.9	2.5	50	0	102	78	132				
Cyclohexane	67.6	2.5	50	0	135	80	128				S
Carbon tetrachloride	50.0	2.5	50	0	100	74	138				
Benzene	56.9	2.5	50	0	114	80	121				
1,2-Dichloroethane	52.6	2.5	50	0	105	73	127				
Trichloroethene	51.5	2.5	50	0	103	80	120				
Methylcyclohexane	57.3	2.5	50	0	115	80	128				
1,2-Dichloropropane	57.0	2.5	50	0	114	80	125				
Bromodichloromethane	53.4	2.5	50	0	107	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

266

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-14529 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380755
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	52.6	5.0	50	0	105	55	142				
Chloromethane	65.8	5.0	50	0	132	62	141				
Vinyl chloride	58.1	5.0	50	0	116	68	135				
Bromomethane	39.6	5.0	50	0	79	56	147				
Chloroethane	54.9	5.0	50	0	110	63	142				
Trichlorofluoromethane	40.6	5.0	50	0	81	67	138				
1,1-Dichloroethene	68.0	2.5	50	0	136	76	135				E
1,1,2-Trichloro-1,2,2-trifluoroethane	64.3	2.5	50	0	129	80	134				
Acetone	111	40	100	0	111	25	175				
Carbon disulfide	74.2	2.5	50	0	148	73	130				S
Methyl acetate	59.0	2.5	50	0	118	67	147				
Methylene chloride	53.4	5.0	50	0	107	75	124				
trans-1,2-Dichloroethene	52.5	2.5	50	0	105	77	123				
Methyl tert-butyl ether	49.2	2.5	50	0	98	76	126				
1,1-Dichloroethane	53.8	2.5	50	0	108	76	124				
cis-1,2-Dichloroethene	49.8	2.5	50	0	100	79	120				
2-Butanone	111	40	100	0	111	42	154				
Chloroform	49.3	2.5	50	0	99	77	121				
1,1,1-Trichloroethane	48.3	2.5	50	0	97	78	132				
Cyclohexane	66.6	2.5	50	0	133	80	128				S
Carbon tetrachloride	48.3	2.5	50	0	97	74	138				
Benzene	55.2	2.5	50	0	110	80	121				
1,2-Dichloroethane	48.5	2.5	50	0	97	73	127				
Trichloroethene	50.5	2.5	50	0	101	80	120				
Methylcyclohexane	59.8	2.5	50	0	120	80	128				
1,2-Dichloropropane	54.6	2.5	50	0	109	80	125				
Bromodichloromethane	50.8	2.5	50	0	102	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

264

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-14531 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380802
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	56.5	2.5	50	0	113	80	125				
4-Methyl-2-pentanone	115	5.0	100	0	115	50	150				
Toluene	54.8	2.5	50	0	110	80	121				
trans-1,3-Dichloropropene	54.4	2.5	50	0	109	78	124				
1,1,2-Trichloroethane	55.0	2.5	50	0	110	80	122				
Tetrachloroethene	44.2	2.5	50	0	88	74	125				
2-Hexanone	105	5.0	100	0	105	50	150				
Dibromochloromethane	46.0	2.5	50	0	92	76	135				
1,2-Dibromoethane	48.3	2.5	50	0	97	80	124				
Chlorobenzene	46.1	2.5	50	0	92	80	120				
Ethylbenzene	50.0	2.5	50	0	100	80	121				
Xylenes (total)	145	5.0	150	0	97	76	124				
Styrene	46.1	2.5	50	0	92	78	122				
Bromoform	40.7	2.5	50	0	81	70	138				
Isopropylbenzene	56.1	2.5	50	0	112	76	131				
1,1,2,2-Tetrachloroethane	59.0	2.5	50	0	118	69	138				
1,3-Dichlorobenzene	50.7	2.5	50	0	101	80	120				
1,4-Dichlorobenzene	48.9	2.5	50	0	98	80	120				
1,2-Dichlorobenzene	51.6	2.5	50	0	103	80	120				
1,2-Dibromo-3-chloropropane	61.3	5.0	50	0	123	69	132				
1,2,4-Trichlorobenzene	49.8	5.0	50	0	100	71	127				
Surr: 1,2-Dichloroethane-d4	50.7	0.10	50	0	101	71	128				
Surr: Toluene-d8	46.3	0.10	50	0	93	75	125				
Surr: 4-Bromofluorobenzene	50.1	0.10	50	0	100	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

267

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-14529 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380755
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	54.1	2.5	50	0	108	80	125				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.0	2.5	50	0	106	80	121				
trans-1,3-Dichloropropene	50.8	2.5	50	0	102	78	124				
1,1,2-Trichloroethane	52.7	2.5	50	0	105	80	122				
Tetrachloroethene	45.5	2.5	50	0	91	74	125				
2-Hexanone	103	5.0	100	0	103	50	150				
Dibromochloromethane	46.2	2.5	50	0	92	76	135				
1,2-Dibromoethane	47.9	2.5	50	0	96	80	124				
Chlorobenzene	45.9	2.5	50	0	92	80	120				
Ethylbenzene	51.0	2.5	50	0	102	80	121				
Xylenes (total)	147	5.0	150	0	98	76	124				
Styrene	46.4	2.5	50	0	93	78	122				
Bromoform	42.1	2.5	50	0	84	70	138				
Isopropylbenzene	56.2	2.5	50	0	112	76	131				
1,1,2,2-Tetrachloroethane	58.4	2.5	50	0	117	69	138				
1,3-Dichlorobenzene	51.0	2.5	50	0	102	80	120				
1,4-Dichlorobenzene	49.0	2.5	50	0	98	80	120				
1,2-Dichlorobenzene	50.6	2.5	50	0	101	80	120				
1,2-Dibromo-3-chloropropane	61.9	5.0	50	0	124	69	132				
1,2,4-Trichlorobenzene	53.1	5.0	50	0	106	71	127				
Surr: 1,2-Dichloroethane-d4	47.8	0.10	50	0	96	71	128				
Surr: Toluene-d8	47.1	0.10	50	0	94	75	125				
Surr: 4-Bromofluorobenzene	49.1	0.10	50	0	98	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

265

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-14531 SampType: LCSD TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380810
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	45.4	5.0	50	0	91	55	142	51	12	20	
Chloromethane	66.4	5.0	50	0	133	62	141	65.5	1.3	20	
Vinyl chloride	55.5	5.0	50	0	111	68	135	57.6	3.8	24	
Bromomethane	41.8	5.0	50	0	84	56	147	40.4	3.5	21	
Chloroethane	60.4	5.0	50	0	121	63	142	57.6	4.8	20	
Trichlorofluoromethane	43.2	5.0	50	0	86	67	138	46.7	5.9	20	
1,1-Dichloroethene	55.5	2.5	50	0	111	76	135	56.2	1.1	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	54.3	2.5	50	0	109	60	134	55	1.2	20	
Acetone	109	40	100	0	109	25	175	105	3.8	50	
Carbon disulfide	67.3	2.5	50	0	135	73	130	63.7	5.5	20	S
Methyl acetate	64.0	2.5	50	0	128	67	147	59.5	7.2	20	
Methylene chloride	58.2	5.0	50	0	116	75	124	56.7	2.7	20	
trans-1,2-Dichloroethene	53.0	2.5	50	0	106	77	123	52.6	0.8	20	
Methyl tert-butyl ether	52.0	2.5	50	0	104	76	126	52.2	0.3	20	
1,1-Dichloroethane	58.4	2.5	50	0	117	78	124	56.6	3.2	20	
cis-1,2-Dichloroethene	52.0	2.5	50	0	104	79	120	51.6	0.8	20	
2-Butanone	118	40	100	0	118	42	154	112	4.0	50	
Chloroform	54.8	2.5	50	0	110	77	121	52.5	4.2	20	
1,1,1-Trichloroethane	53.2	2.5	50	0	106	78	132	50.9	4.4	20	
Cyclohexane	65.9	2.5	50	0	132	80	128	67.6	2.4	20	S
Carbon tetrachloride	50.9	2.5	50	0	102	74	138	50	1.8	20	
Benzene	58.6	2.5	50	0	117	80	121	56.9	2.9	20	
1,2-Dichloroethane	54.9	2.5	50	0	110	73	127	52.6	4.3	20	
Trichloroethene	52.4	2.5	50	0	105	80	120	51.5	1.6	20	
Methylcyclohexane	54.1	2.5	50	0	108	80	128	57.3	5.8	20	
1,2-Dichloropropane	58.0	2.5	50	0	116	80	125	57	1.6	20	
Bromodichloromethane	54.4	2.5	50	0	109	80	129	53.4	1.7	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Life Science Laboratories Contract: SAMPLE NO.
Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0808076B MB-14526
Lab File ID: J6856.D Lab Sample ID: MB-14526
Date Analyzed: 8/14/2008 Time Analyzed: 13:39
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-14526	LCS-14526	J6851.D	10:46
02	SB-2 Bot-1	0808068-001A	J6857.D	14:13
03	SB-2-South	0808068-002A	J6858.D	14:47
04	SB-2-East	0808068-003A	J6859.D	15:20
05	SB-2-North	0808068-004A	J6860.D	15:54

COMMENTS:

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-14531 SampType: LCSD TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380810
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	55.6	2.5	50	0	111	80	125	56.5	1.7	20	
4-Methyl-2-pentanone	117	5.0	100	0	117	50	150	115	2.3	50	
Toluene	55.5	2.5	50	0	111	80	121	54.8	1.3	20	
trans-1,3-Dichloropropene	53.4	2.5	50	0	107	78	124	54.4	1.7	20	
1,1,2-Trichloroethane	57.3	2.5	50	0	115	80	122	55	4.1	20	
Tetrachloroethene	42.5	2.5	50	0	85	74	125	44.2	4.0	21	
2-Hexanone	104	5.0	100	0	104	50	150	105	0.7	50	
Dibromochloromethane	46.7	2.5	50	0	93	78	135	46	1.6	20	
1,2-Dibromoethane	49.4	2.5	50	0	99	80	124	48.3	2.1	20	
Chlorobenzene	46.0	2.5	50	0	92	80	120	46.1	0.3	20	
Ethylbenzene	49.8	2.5	50	0	100	80	121	50	0.5	20	
Xylenes (total)	139	5.0	150	0	93	76	124	145	4.1	20	
Styrene	44.6	2.5	50	0	89	78	122	46.1	3.2	20	
Bromoform	41.9	2.5	50	0	84	70	138	40.7	3.0	20	
Isopropylbenzene	61.1	2.5	50	0	122	76	131	56.1	8.5	20	
1,1,2,2-Tetrachloroethane	70.0	2.5	50	0	140	69	138	59	17	24	S
1,3-Dichlorobenzene	50.7	2.5	50	0	101	80	120	50.7	0.1	20	
1,4-Dichlorobenzene	49.1	2.5	50	0	98	80	120	48.9	0.5	24	
1,2-Dichlorobenzene	54.2	2.5	50	0	108	80	120	51.6	4.9	20	
1,2-Dibromo-3-chloropropane	73.2	5.0	50	0	146	69	132	61.3	18	24	S
1,2,4-Trichlorobenzene	41.0	5.0	50	0	82	71	127	49.8	19	24	
Surr: 1,2-Dichloroethane-d4	54.3	0.10	50	0	109	71	128	0		0	
Surr: Toluene-d8	46.6	0.10	50	0	93	75	125	0		0	
Surr: 4-Bromofluorobenzene	51.0	0.10	50	0	102	59	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Life Science Laboratories Contract: SAMPLE NO.
Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0808076B MB-14527
Lab File ID: J6868.D Lab Sample ID: MB-14527
Date Analyzed: 8/19/2008 Time Analyzed: 10:53
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-14527	LCS-14527	J6864.D	8:38
02	SB-2 Bot-2	0808068-006A	J6869.D	11:27
03	SB-2-West	0808068-005A	J6873.D	13:43
04	SB-2-EastDL	0808068-003ADL	J6874.D	14:17
05	SB-2-NorthDL	0808068-004ADL	J6875.D	14:51
06	Trip Blank	0808068-007A	J6876.D	15:25

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB-14529

Lab Name: Life Science Laboratorie Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Lab File ID: J6915.D Lab Sample ID: MB-14529

Date Analyzed: 8/19/2008 Time Analyzed: 8:04

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: MS03 10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MSB-14529	MSB-14529	J6911.D	5:49
02	LCS-14529	LCS-14529	J6911.D	5:49
03	UST-EastMS	0808076-004AMS	J6912.D	6:23
04	UST-EastMSD	0808076-004AMSD	J6913.D	6:56
05	UST-Bot-1	0808076-001A	J6922.D	12:02
06	UST-North	0808076-002A	J6923.D	12:36
07	UST-Bot-2	0808076-003A	J6924.D	13:10
08	UST-East	0808076-004A	J6925.D	13:44
09	UST-West	0808076-005A	J6926.D	14:18
10	UST-South	0808076-006A	J6927.D	14:52
11	Field Dup	0808076-007A	J6928.D	15:26
12	Trench-Bot-1	0808076-008A	J6929.D	16:00
13	Trench-Bot-2	0808076-009A	J6930.D	16:34

COMMENTS: _____

Page 3 of 4

FORM IV 826037 OLM42

272

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB-14531

Lab Name: Life Science Laboratorie Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Lab File ID: J6960.D Lab Sample ID: MB-14531

Date Analyzed: 8/19/2008 Time Analyzed: 3:31

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: MS03 10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-14531	LCS-14531	J6956.D	8:23
02	UST-Bot-1DL	0808076-001ADL	J6962.D	10:38
03	UST-Bot-2DL	0808076-003ADL	J6963.D	11:12
04	Field DupDL	0808076-007ADL	J6964.D	11:46
05	Trench-Bot-1DL	0808076-008ADL	J6965.D	12:20
06	Trench-Bot-2DL	0808076-009ADL	J6966.D	12:54
07	LCSD-14531	LCSD-14531	J6967.D	13:28

COMMENTS: _____

page 4 of 4

FORM IV 826037 OLM42

273

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Lab File ID: TA\J6537.D BFB Injection Date: 5/30/2008

Instrument ID: MS03 10 BFB Injection Time: 6:52

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.4
75	30.0 - 66.0% of mass 95	50.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 120.0% of mass 95	69.8
175	4.0 - 9.0% of mass 174	5.0 (7.1)1
176	93.0 - 101.0% of mass 174	66.9 (95.8)1
177	5.0 - 9.0% of mass 176	4.4 (6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ICAL 2.0 PPB	ICAL 2.0 PPB	J6538.D	05/30/08	7:21
02	ICAL 5.0 PPB	ICAL 5.0 PPB	J6539.D	05/30/08	7:56
03	ICAL 20 PPB	ICAL 20 PPB	J6540.D	05/30/08	8:30
04	ICAL 50 PPB	ICAL 50 PPB	J6541.D	05/30/08	9:05
05	ICAL 100 PPB	ICAL 100 PPB	J6542.D	05/30/08	9:41
06	ICAL 150 PPB	ICAL 150 PPB	J6543.D	05/30/08	10:17
07	ICAL 200 PPB	ICAL 200 PPB	J6544.D	05/30/08	10:53

page 1 of 5

FORM V VOA SW8260B

274

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Lab File ID: TA\J6849.D BFB Injection Date: 8/14/2008

Instrument ID: MS03 10 BFB Injection Time: 9:39

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.7
75	30.0 - 66.0% of mass 95	48.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.4 (0.6)1
174	50.0 - 120.0% of mass 95	66.0
175	4.0 - 9.0% of mass 174	4.7 (7.1)1
176	93.0 - 101.0% of mass 174	62.8 (95.3)1
177	5.0 - 9.0% of mass 176	4.3 (6.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-14526	CCV-14526	J6850.D	08/14/08	10:13
02	LCS-14526	LCS-14526	J6851.D	08/14/08	10:46
03	MB-14526	MB-14526	J6856.D	08/14/08	13:39
04	SB-2-Bot-1	0808068-001A	J6857.D	08/14/08	14:13
05	SB-2-South	0808068-002A	J6858.D	08/14/08	14:47
06	SB-2-East	0808068-003A	J6859.D	08/14/08	15:20
07	SB-2-North	0808068-004A	J6860.D	08/14/08	15:54

page 2 of 5

FORM V VOA SW8260B

275

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Lab File ID: TA\J6863.D BFB Injection Date: 8/15/2008

Instrument ID: MS03 10 BFB Injection Time: 8:04

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.3
75	30.0 - 66.0% of mass 95	46.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.1 (0.2)1
174	50.0 - 120.0% of mass 95	68.5
175	4.0 - 9.0% of mass 174	5.0 (7.2)1
176	93.0 - 101.0% of mass 174	63.8 (96.0)1
177	5.0 - 9.0% of mass 176	4.2 (6.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-14527	CCV-14527	J6863.D	08/15/08	8:04
02	LCS-14527	LCS-14527	J6864.D	08/15/08	8:38
03	MB-14527	MB-14527	J6868.D	08/15/08	10:53
04	SB-2-Bot-2	0808068-006A	J6869.D	08/15/08	11:27
05	SB-2-West	0808068-005A	J6873.D	08/15/08	13:43
06	SB-2-EastDL	0808068-003ADL	J6874.D	08/15/08	14:17
07	SB-2-NorthDL	0808068-004ADL	J6875.D	08/15/08	14:51
08	Trip Blank	0808068-007A	J6876.D	08/15/08	15:25

page 2 of 4

FORM V VOA SW8260B

276

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Lab File ID: TA\J6910.D BFB Injection Date: 8/18/2008

Instrument ID: MS03 10 BFB Injection Time: 5:15

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.0
75	30.0 - 66.0% of mass 95	46.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.1 (0.1)1
174	50.0 - 120.0% of mass 95	71.1
175	4.0 - 9.0% of mass 174	4.9 (6.9)1
176	93.0 - 101.0% of mass 174	68.0 (95.6)1
177	5.0 - 9.0% of mass 176	4.5 (6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-14529	CCV-14529	J6910.D	08/18/08	5:15
02	MSB-14529	MSB-14529	J6911.D	08/18/08	5:49
03	LCS-14529	LCS-14529	J6911.D	08/18/08	5:49
04	UST-EastMS	0808075-004AMS	J6912.D	08/18/08	6:23
05	UST-EastMSD	0808075-004AMSD	J6913.D	08/18/08	6:56
06	MB-14529	MB-14529	J6915.D	08/18/08	8:04
07	UST-Bot-1	0808075-001A	J6922.D	08/18/08	12:02
08	UST-North	0808075-002A	J6923.D	08/18/08	12:36
09	UST-Bot-2	0808075-003A	J6924.D	08/18/08	13:10
10	UST-East	0808075-004A	J6925.D	08/18/08	13:44
11	UST-West	0808075-005A	J6926.D	08/18/08	14:18
12	UST-South	0808075-006A	J6927.D	08/18/08	14:52
13	Field Dup	0808075-007A	J6928.D	08/18/08	15:26
14	Trench-Bot-1	0808075-008A	J6929.D	08/18/08	16:00
15	Trench-Bot-2	0808075-009A	J6930.D	08/18/08	16:34

page 3 of 4

FORM V VOA SW8260B

277

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Lab File ID: TA\J6957.D BFB Injection Date: 8/19/2008

Instrument ID: MS03 10 BFB Injection Time: 7:49

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.3
75	30.0 - 66.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 120.0% of mass 95	73.3
175	4.0 - 9.0% of mass 174	5.0 (6.9)1
176	93.0 - 101.0% of mass 174	70.2 (95.7)1
177	5.0 - 9.0% of mass 176	4.5 (6.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-14531	CCV-14531	J6957.D	08/19/08	7:49
02	LCS-14531	LCS-14531	J6958.D	08/19/08	8:23
03	MB-14531	MB-14531	J6960.D	08/19/08	9:31
04	UST-Bot-1DL	0808075-001ADL	J6962.D	08/19/08	10:38
05	UST-Bot-2DL	0808075-003ADL	J6963.D	08/19/08	11:12
06	Field DupDL	0808075-007ADL	J6964.D	08/19/08	11:46
07	Trench-Bot-1DL	0808075-008ADL	J6965.D	08/19/08	12:20
08	Trench-Bot-2DL	0808075-009ADL	J6966.D	08/19/08	12:54
09	LCSD-14531	LCSD-14531	J6967.D	08/19/08	13:28

page 4 of 4

FORM V VOA SW8260B

278

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No. 0808068Q

Lab Code: LSLB

Lab File ID (Standard): J6850.D Date Analyzed: 08/14/2008

Instrument ID: MS03_10 Time Analyzed: 10:13

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4517420	10.90	1891515	15.81	1342593	19.87
UPPER LIMIT	9034840	11.40	3783030	16.31	2685186	20.37
LOWER LIMIT	2258710	10.40	945758	15.31	671297	19.37
SAMPLE NO.						
01 LCS-14529 (LCS-14529)	4804282	10.90	1959535	15.81	1374402	19.87
02 MB-14529 (MB-14529)	4824885	10.90	1749221	15.81	1218592	19.87
03 SB-2-Bot-1 (0808068-001A)	4533914	10.90	1456077	15.80	798046	19.88
04 SB-2-South (0808068-002A)	4427645	10.90	1622491	15.81	1094566	19.88
05 SB-2-East (0808068-003A)	4362194	10.90	1858924	15.81	1311421	19.88
06 SB-2-North (0808068-004A)	4385981	10.90	1508928	15.81	1184224	19.87

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

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

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

FORM VIII Page 1 of 8 SW8260B

279

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6863.D Date Analyzed: 08/15/2008

Instrument ID: MS03_10 Time Analyzed: 8:04

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #		
12 HOUR STD	4908672	10.90	1983495	15.80	1463393	19.88		
UPPER LIMIT	9817344	11.40	3966990	16.30	2926786	20.38		
LOWER LIMIT	2454336	10.40	991748	15.30	731697	19.38		
SAMPLE NO.								
01 LCS-14527 (LCS-14527)	5092773	10.90	2049497	15.81	1483160	19.87		
02 MB-14527 (MB-14527)	4538958	10.90	1661710	15.81	1080328	19.88		
03 SB-2-Bot-2 (0808068-006A)	4384173	10.90	1536700	15.81	873049	19.88		
04 SB-2-West (0808068-005A)	3969502	10.90	1459791	15.81	898880	19.88		
05 SB-2-EastDL (0808068-003ADL)	4005818	10.90	1509603	15.81	1152378	19.87		
06 SB-2-NorthDL (0808068-004ADL)	3938684	10.90	1461909	15.81	971128	19.88		
07 Trip Blank (0808068-007A)	3919047	10.90	1452767	15.81	880827	19.88		

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

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

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

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6910.D Date Analyzed: 08/18/2008

Instrument ID: MS03_10 Time Analyzed: 5:15

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #		
12 HOUR STD	4264248	10.90	1758436	15.81	1312941	19.88		
UPPER LIMIT	8528496	11.40	3516872	16.31	2625882	20.38		
LOWER LIMIT	2132124	10.40	879218	15.31	656471	19.38		
SAMPLE NO.								
01 LCS-14529 (LCS-14529)	4243327	10.90	1711358	15.81	1270838	19.87		
02 MSB-14529 (MSB-14529)	4243327	10.90	1711358	15.81	1270838	19.87		
03 UST-EastMS (0808076-004AMS)	4057942	10.90	1665472	15.81	1236776	19.87		
04 UST-EastMSD (0808076-004AMSD)	4639371	10.90	1826800	15.81	1312793	19.87		
05 MB-14529 (MB-14529)	4283969	10.90	1572309	15.81	1042714	19.87		
06 UST-Bot-1 (0808076-001A)	3074071	10.90	898603	15.81	373213*	19.88		
07 UST-North (0808076-002A)	3477817	10.90	1346302	15.81	815792	19.88		
08 UST-Bot-2 (0808076-003A)	3253876	10.90	986173	15.81	424794*	19.88		
09 UST-East (0808076-004A)	3332693	10.90	1234147	15.81	794774	19.88		
10 UST-West (0808076-005A)	3325067	10.90	1229237	15.81	748111	19.88		
11 UST-South (0808076-006A)	3249236	10.90	1196374	15.81	731468	19.87		
12 Field Dup (0808076-007A)	2998637	10.90	905201	15.81	364534*	19.87		
13 Trench-Bot-1 (0808076-008A)	3191599	10.90	1165181	15.81	646193*	19.87		
14 Trench-Bot-2 (0808076-009A)	3226387	10.90	1163194	15.81	617675*	19.88		

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

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

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

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6957.D Date Analyzed: 08/19/2008

Instrument ID: MS03_10 Time Analyzed: 7:49

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #		
12 HOUR STD	3668640	10.90	1559594	15.81	1148438	19.87		
UPPER LIMIT	7337280	11.40	3119188	16.31	2296876	20.37		
LOWER LIMIT	1834320	10.40	779797	15.31	574219	19.37		
SAMPLE NO.								
01 LCS-14531 (LCS-14531)	3748091	10.90	1563802	15.81	1143954	19.87		
02 MB-14531 (MB-14531)	3399779	10.90	1266675	15.81	791468	19.88		
03 UST-Bot-1DL (0808076-001ADL)	3108165	10.90	1057833	15.81	511926*	19.88		
04 UST-Bot-2DL (0808076-003ADL)	3121246	10.90	1089870	15.81	560009*	19.88		
05 Field DupDL (0808076-007ADL)	3021648	10.90	1031281	15.81	500849*	19.88		
06 Trench-Bot-1DL (0808076-008ADL)	3124700	10.90	1153552	15.81	734258	19.88		
07 Trench-Bot-2DL (0808076-009ADL)	3074610	10.90	1138830	15.81	704702	19.88		
08 LCSD-14531 (LCSD-14531)	3310937	10.90	1383607	15.80	896791	19.87		

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

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

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

GC/MS Volatile Combined MDL Study Summary

Instrument ID(s): MS2/HP5970, MS3/HP5973 — Column ID(s): Rtx-502.2, 0.53 mm x105m, 3.0 df, Rtx-VMS, 0.18 mm x40m, 1.0 df — MDL Sample Size = 5 g

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/Kg)	Std Dev	MDL (ug/Kg)	MDL VER (ug/Kg)
8260B	5035	Soil	Dichlorodifluoromethane	01/10/06	0.40	0.41	0.38	0.36	0.35	0.44	0.38	1.00	0.026	0.08	1.0
8260B	5035	Soil	Chloromethane	01/10/06	0.52	0.58	0.54	0.73	0.45	0.69	0.56	1.00	0.098	0.31	0.5
8260B	5035	Soil	Vinyl chloride	01/10/06	0.35	0.46	0.36	0.42	0.36	0.43	0.40	1.00	0.042	0.13	1.0
8260B	5035	Soil	Bromomethane	01/10/06	0.57	0.59	0.52	0.58	0.48	0.56	0.50	1.00	0.043	0.13	1.0
8260B	5035	Soil	Chloroethane	01/10/06	0.15	0.05	0.10	0.23	0.07	0.10	0.26	1.00	0.080	0.25	1.0
8260B	5035	Soil	Trichlorofluoromethane	01/10/06	0.51	0.56	0.49	0.54	0.53	0.56	0.51	1.00	0.027	0.08	1.0
8260B	5035	Soil	Acetone	01/05/06	0.88	0.83	0.77	1.02	0.90	1.00	0.80	0.60	0.096	0.30	20.0
8260B	5035	Soil	Acrolein	01/23/06	16.62	16.54	16.77	16.48	16.55	14.39	20.98	25.00	1.965	6.18	
8260B	5035	Soil	1,1-Dichloroethene	01/10/06	0.58	0.71	0.56	0.63	0.59	0.63	0.61	1.00	0.049	0.15	1.0
8260B	5035	Soil	Methyl iodide	01/10/06	0.45	0.44	0.38	0.38	0.36	0.42	0.44	1.00	0.039	0.12	10.0
8260B	5035	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	01/10/06	0.44	0.52	0.47	0.55	0.48	0.51	0.51	1.00	0.036	0.11	1.0
8260B	5035	Soil	Methyl acetate	01/10/06	0.83	0.85	0.85	0.81	0.83	0.93	0.91	1.00	0.048	0.15	10.0
8260B	5035	Soil	Acrylonitrile	01/10/06	2.99	2.59	2.38	2.52	2.75	3.20	2.56	5.00	0.276	0.87	5.0
8260B	5035	Soil	Methylene chloride	01/10/06	1.49	1.97	1.98	2.09	1.87	1.97	1.92	1.00	0.192	0.60	0.5
8260B	5035	Soil	Carbon disulfide	01/05/06	0.30	0.30	0.28	0.25	0.25	0.32	0.30	0.30	0.027	0.08	0.5
8260B	5035	Soil	trans-1,2-Dichloroethene	01/10/06	0.69	0.74	0.71	0.72	0.67	0.78	0.68	1.00	0.038	0.12	0.5
8260B	5035	Soil	Methyl tert-Butyl ether	01/05/06	0.12	0.05	0.14	0.10	0.11	0.05	0.15	0.30	0.040	0.13	0.5
8260B	5035	Soil	1,1-Dichloroethane	01/10/06	0.72	0.71	0.68	0.70	0.65	0.72	0.65	1.00	0.025	0.08	1.0
8260B	5035	Soil	Vinyl acetate	01/10/06	0.52	0.50	0.57	0.51	0.48	0.50	0.46	1.00	0.034	0.11	1.0
8260B	5035	Soil	2-Butanone	01/10/06	1.57	1.60	1.67	1.68	1.33	1.44	1.66	2.00	0.133	0.42	20.0
8260B	5035	Soil	cis-1,2-Dichloroethene	01/05/06	0.16	0.16	0.13	0.16	0.08	0.10	0.03	0.30	0.050	0.16	0.5
8260B	5035	Soil	Bromochloromethane	01/10/06	0.71	0.69	0.70	0.69	0.53	0.70	0.68	1.00	0.063	0.20	1.0
8260B	5035	Soil	Chloroform	01/05/06	0.18	0.20	0.21	0.17	0.24	0.20	0.20	0.30	0.022	0.07	0.5
8260B	5035	Soil	2,2-Dichloropropane	01/10/06	0.56	0.64	0.59	0.67	0.56	0.59	0.60	1.00	0.041	0.13	1.0
8260B	5035	Soil	Cyclohexane	01/10/06	0.41	0.60	0.52	0.52	0.53	0.56	0.55	1.00	0.059	0.18	1.0
8260B	5035	Soil	Dibromofluoromethane	01/05/06	0.46	0.44	0.49	0.46	0.42	0.45	0.45	0.30	0.021	0.07	*
8260B	5035	Soil	1,2-Dichloroethane-d4	01/05/06	0.51	0.53	0.53	0.49	0.51	0.53	0.56	0.30	0.022	0.07	0.5
8260B	5035	Soil	1,2-Dichloroethane	01/05/06	0.13	0.12	0.19	0.17	0.16	0.10	0.10	0.30	0.035	0.11	1.0
8260B	5035	Soil	1,1,1-Trichloroethane	01/05/06	0.17	0.12	0.14	0.03	0.12	0.10	0.13	0.30	0.044	0.14	1.0
8260B	5035	Soil	1,1-Dichloropropene	01/10/06	0.56	0.67	0.59	0.64	0.50	0.64	0.59	1.00	0.059	0.19	1.0
8260B	5035	Soil	Carbon tetrachloride	01/10/06	0.46	0.54	0.49	0.52	0.48	0.57	0.51	1.00	0.037	0.12	1.0

5-23-08

GC/MS Volatile Combined MDL Study Summary

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/Kg)	Std Dev	MDL (ug/Kg)	MDL VER
8260B	5035	Soil	Benzene	01/05/06	0.23	0.23	0.24	0.22	0.20	0.24	0.24	0.30	0.015	0.05	0.5
8260B	5035	Soil	Trichloroethene	01/10/06	0.63	0.66	0.64	0.63	0.56	0.68	0.63	1.00	0.037	0.12	1.0
8260B	5035	Soil	Dibromomethane	01/05/06	0.12	0.09	0.17	0.12	0.16	0.08	0.12	0.30	0.038	0.12	1.0
8260B	5035	Soil	Methylcyclohexane	01/10/06	0.42	0.56	0.48	0.45	0.46	0.51	0.38	1.00	0.059	0.18	1.0
8260B	5035	Soil	1,2-Dichloropropane	01/10/06	0.86	0.74	0.69	0.65	0.55	0.75	0.61	1.00	0.071	0.22	1.0
8260B	5035	Soil	Bromodichloromethane	01/05/06	0.25	0.29	0.27	0.29	0.26	0.31	0.28	0.30	0.020	0.06	1.0
8260B	5035	Soil	2-Chloroethylvinyl ether	01/10/06	0.53	0.87	0.99	0.73	0.94	0.55	0.36	1.00	0.232	0.73	50.0
8260B	5035	Soil	4-Methyl-2-pentanone	01/10/06	1.48	1.58	1.50	1.51	1.26	1.41	1.47	2.00	0.101	0.32	2.0
8260B	5035	Soil	cis-1,3-Dichloropropene	01/05/06	0.12	0.16	0.15	0.10	0.19	0.14	0.15	0.30	0.029	0.09	0.5
8260B	5035	Soil	Toluene-d8	01/05/06	0.32	0.33	0.29	0.28	0.30	0.30	0.30	0.30	0.017	0.05	0.5
8260B	5035	Soil	Toluene	01/05/06	0.12	0.12	0.15	0.16	0.12	0.15	0.14	0.30	0.017	0.05	0.5
8260B	5035	Soil	trans-1,3-Dichloropropene	01/05/06	0.11	0.13	0.04	0.02	0.15	0.08	0.08	0.30	0.047	0.15	0.5
8260B	5035	Soil	1,1,2-Trichloroethane	01/10/06	0.73	0.78	0.67	0.72	0.54	0.75	0.72	1.00	0.078	0.25	0.5
8260B	5035	Soil	2-Hexanone	01/10/06	0.92	1.13	1.08	1.07	0.84	1.04	0.83	2.00	0.122	0.38	2.0
8260B	5035	Soil	1,2-Dibromoethane	01/05/06	0.28	0.29	0.23	0.24	0.27	0.28	0.30	0.30	0.027	0.08	0.5
8260B	5035	Soil	1,3-Dichloropropane	01/05/06	0.28	0.26	0.26	0.30	0.26	0.32	0.32	0.30	0.028	0.09	0.5
8260B	5035	Soil	Dibromochloromethane	01/05/06	0.09	0.07	0.12	0.07	0.11	0.09	0.06	0.30	0.022	0.07	0.5
8260B	5035	Soil	Tetrachloroethene	01/10/06	0.58	0.67	0.60	0.62	0.60	0.63	0.57	1.00	0.034	0.11	1.0
8260B	5035	Soil	1-Chlorohexane	01/10/06	0.42	0.55	0.51	0.54	0.44	0.51	0.46	1.00	0.051	0.16	1.0
8260B	5035	Soil	1,1,1,2-Tetrachloroethane	01/10/06	0.73	0.70	0.70	0.70	0.63	0.80	0.73	1.00	0.051	0.16	1.0
8260B	5035	Soil	Chlorobenzene	01/05/06	0.32	0.31	0.30	0.31	0.29	0.36	0.31	0.30	0.022	0.07	1.0
8260B	5035	Soil	Ethylbenzene	01/05/06	0.33	0.34	0.33	0.34	0.34	0.34	0.23	0.30	0.041	0.13	0.5
8260B	5035	Soil	(m+p)-Xylene	01/05/06	0.34	0.24	0.31	0.26	0.28	0.24	0.29	0.60	0.040	0.13	1.0
8260B	5035	Soil	o-Xylene	01/10/06	0.55	0.68	0.59	0.63	0.53	0.65	0.60	1.00	0.053	0.17	0.5
8260B	5035	Soil	Styrene	01/05/06	0.16	0.14	0.16	0.12	0.12	0.06	0.09	0.30	0.037	0.12	0.5
8260B	5035	Soil	Bromoform	01/10/06	0.30	0.28	0.26	0.30	0.16	0.34	0.33	1.00	0.053	0.17	1.0
8260B	5035	Soil	Bromofluorobenzene	01/05/06	0.39	0.36	0.40	0.39	0.36	0.31	0.32	0.30	0.035	0.11	0.5
8260B	5035	Soil	trans-1,4-Dichloro-2-butene	01/23/06	2.59	3.08	3.09	3.64	3.65	3.20	4.45	5.00	0.594	1.87	10.0
8260B	5035	Soil	1,1,2,2-Tetrachloroethane	01/05/06	0.30	0.36	0.37	0.41	0.38	0.44	0.40	0.30	0.044	0.14	0.5
8260B	5035	Soil	Isopropylbenzene	01/05/06	0.19	0.17	0.19	0.22	0.19	0.19	0.17	0.30	0.017	0.05	0.5
8260B	5035	Soil	1,2,3-Trichloropropane	01/05/06	0.23	0.23	0.27	0.29	0.25	0.31	0.09	0.30	0.072	0.23	0.5
8260B	5035	Soil	Bromobenzene	01/05/06	0.14	0.10	0.21	0.07	0.11	0.07	0.14	0.30	0.049	0.15	0.5
8260B	5035	Soil	n-Propylbenzene	01/05/06	0.16	0.16	0.17	0.14	0.15	0.15	0.18	0.30	0.010	0.03	0.5

GC/MS Volatile Combined MDL Study Summary

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/Kg)	Std Dev	MDL (ug/Kg)	MDL VER
8260B	5035	Soil	2-Chlorotoluene	01/05/06	0.24	0.21	0.23	0.24	0.22	0.21	0.21	0.30	0.014	0.04	0.5
8260B	5035	Soil	4-Chlorotoluene	01/05/06	0.18	0.20	0.24	0.22	0.19	0.21	0.18	0.30	0.022	0.07	0.5
8260B	5035	Soil	1,3,5-Trimethylbenzene	01/05/06	0.16	0.12	0.15	0.14	0.15	0.05	0.11	0.30	0.025	0.08	0.5
8260B	5035	Soil	tert-Butylbenzene	01/05/06	0.16	0.15	0.15	0.15	0.12	0.10	0.10	0.30	0.026	0.08	0.5
8260B	5035	Soil	1,2,4-Trimethylbenzene	01/05/06	0.14	0.15	0.16	0.11	0.14	0.11	0.13	0.30	0.019	0.06	0.5
8260B	5035	Soil	sec-Butylbenzene	01/05/06	0.17	0.15	0.16	0.13	0.14	0.13	0.14	0.30	0.015	0.05	0.5
8260B	5035	Soil	1,3-Dichlorobenzene	01/05/06	0.23	0.18	0.20	0.14	0.20	0.17	0.13	0.30	0.035	0.11	0.5
8260B	5035	Soil	p-Isopropyltoluene	01/05/06	0.19	0.07	0.18	0.00	0.12	0.04	0.09	0.30	0.054	0.17	0.5
8260B	5035	Soil	1,4-Dichlorobenzene	01/05/06	0.24	0.24	0.25	0.22	0.24	0.20	0.20	0.30	0.021	0.06	0.5
8260B	5035	Soil	n-Butylbenzene	01/05/06	0.18	0.16	0.15	0.09	0.13	0.07	0.10	0.30	0.040	0.13	0.5
8260B	5035	Soil	1,2-Dichlorobenzene	01/05/06	0.20	0.21	0.20	0.19	0.17	0.16	0.20	0.30	0.018	0.06	0.5
8260B	5035	Soil	1,2-Dibromo-3-chloropropane	01/10/06	1.12	0.94	1.04	0.94	0.82	1.17	0.96	1.00	0.099	0.31	1.0
8260B	5035	Soil	1,2,4-Trichlorobenzene	01/05/06	0.30	0.27	0.22	0.11	0.15	0.00	0.11	0.30	0.105	0.33	0.5
8260B	5035	Soil	Hexachlorobutadiene	01/10/06	0.46	0.75	0.74	0.63	0.49	0.56	0.49	1.00	0.122	0.38	0.5
8260B	5035	Soil	Naphthalene	01/05/06	0.52	0.47	0.39	0.40	0.36	0.40	0.32	0.30	0.067	0.21	0.5
8260B	5035	Soil	1,2,3-Trichlorobenzene	01/05/06	0.40	0.28	0.31	0.06	0.21	0.05	0.12	0.30	0.130	0.41	0.5

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984.

MDL = (S Dev) x (t-value)

The GC/MS instrument minimum threshold quantitation level is set to 0.5 ug/Kg.

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

MDL Verifications: * not verified, surrogate no longer utilized.
MS2
MS3: 2/21/08

Sample Data

LSL Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	0808068-001A
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*SB-2-Bot-1*
W Order:	0808068	**Collection Date:**	08/12/08 11:15
Matrix:	SOIL	**Date Received:**	08/12/08 17:52
Inst. ID:	MS03 10	**PrepDate:**	
ColumnID:	Rtx-VMS	**BatchNo:**	R14526
Revision:	08/20/08 8:43	**FileID:**	1-SAMP-J6857.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 18.4; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Acetone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:13
Carbon disulfide	1.1	J	3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/14/08 14:13
Methylene chloride	3.9	J	6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:13
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:13
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-1*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14526
Revision:	08/20/08 8:43	FileID:	1-SAMP-J6857.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 18.4; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:13
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/14/08 14:13
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,3-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,4-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:13
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:13
Surr: 1,2-Dichloroethane-d4	103		71-128	0.60	%REC	0.98	08/14/08 14:13
Surr: Toluene-d8	107		75-125	0.60	%REC	0.98	08/14/08 14:13
Surr: 4-Bromofluorobenzene	124		59-125	0.60	%REC	0.98	08/14/08 14:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim/Conf column SD or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 330704 **Project Supervisor:** Monika Santucci

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
SB-2-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6857.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 1 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6857.D Vial: 9
Acq On : 14 Aug 2008 14:13 Operator: MSV
Sample : 0808068-001A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:36 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

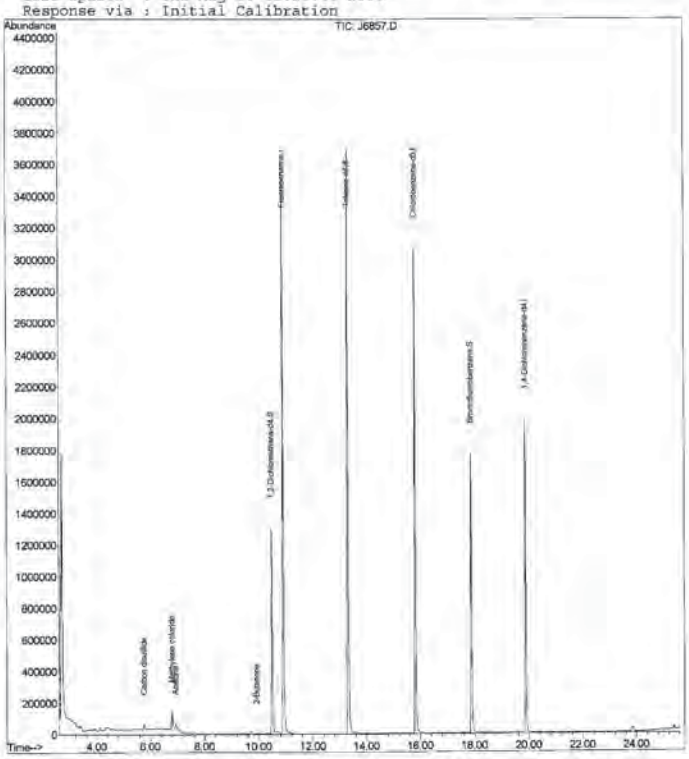
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4533914	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.80	82	1466077	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	786048	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1184664	51.54 ug/L	0.00
Spiked Amount 50.000			Recovery	= 103.08%	
37) Toluene-d8	13.31	98	3856272	53.57 ug/L	0.00
Spiked Amount 50.000			Recovery	= 107.14%	
49) Bromofluorobenzene	17.87	95	1024741	62.10 ug/L	0.00
Spiked Amount 50.000			Recovery	= 124.20%	
Target Compounds					Qvalue
9) Carbon disulfide	5.77	76	58130	0.88 ug/L	95
11) Methylene chloride	6.80	84	75746	3.22 ug/L	98
12) Acetone	6.94	43	73041	13.78 ug/L	98
22) 2-Butanone	9.92	43	8205	1.06 ug/L #	37

(#) = qualifier out of range (m) = manual integration
J6857.D J5300LMS.M Mon Aug 18 08:37:12 2008 Pa

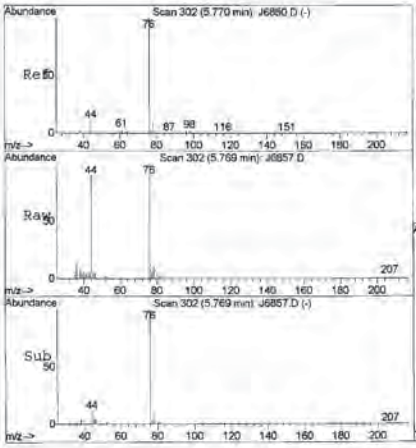
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6857.D Vial: 9
Acq On : 14 Aug 2008 14:13 Operator: MSV
Sample : 0808068-001A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:36 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration



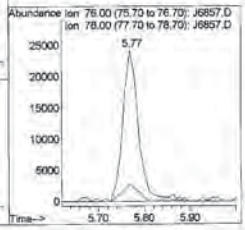
J6857.D J5300LMS.M Mon Aug 18 08:37:13 2008 Pa

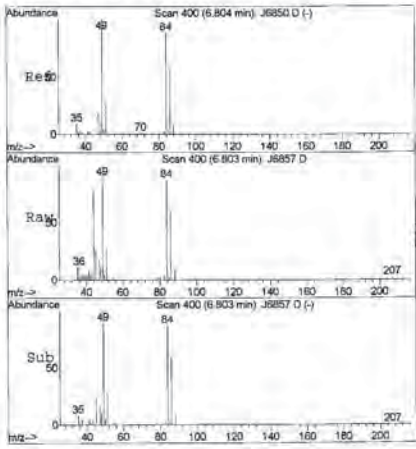


#9
Carbon disulfide
Concen: 0.88 ug/L
RT: 5.77 min Scan# 302
Delta R.T. -0.00 min
Lab File: J6857.D
Acq: 14 Aug 2008 14:13

Tgt Ion: 76 Resp: 58130

Ion	Ratio	Lower	Upper
76	100		
78	12.2	0.0	40.2

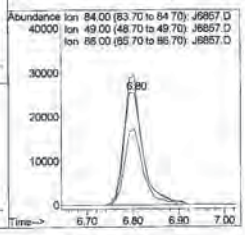




#11
Methylene chloride
Concen: 3.22 ug/L
RT: 6.80 min Scan# 400
Delta R.T. -0.00 min
Lab File: J6857.D
Acq: 14 Aug 2008 14:13

Tgt Ion: 84 Resp: 75746

Ion	Ratio	Lower	Upper
84	100		
49	108.2	81.6	141.6
86	64.8	34.5	94.5



Tentatively Identified Compound (LSC) summary

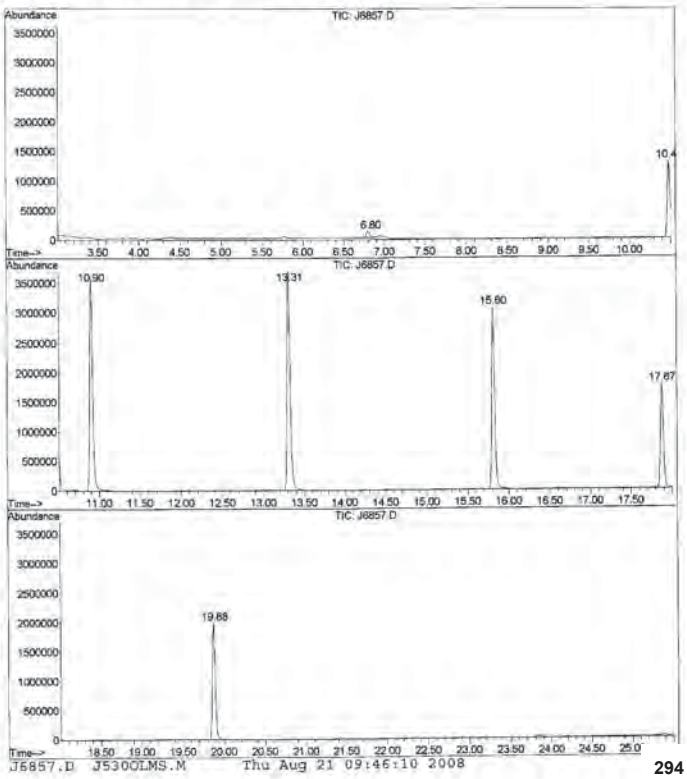
Operator ID: MSV Date Acquired: 14 Aug 2008 14:13
Data File: C:\HPCHEM\1\DATA\J6857.D
Name: 0808068-001A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6857.D J5300LMS.M Thu Aug 21 09:46:10 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6857.D
Operator : MSV
Acquired : 14 Aug 2008 14:13 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808068-001A
Misc Info : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 9
Quant File :J5300LMS.RES (RTE Integrator)



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.7	BatchNo: R14526
Revision:	08/20/08 8:43	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6858.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Acetone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:47
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/14/08 14:47
Methylene chloride	0.99	J	6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/14/08 14:47
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:47
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380705 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 — StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808068-002A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***SB-2-South***
W Order:	0808068	**Collection Date:**	08/12/08 11:45
Matrix:	SOIL	**Date Received:**	08/12/08 17:52
Inst. ID:	MS03 10 — **Sample Size:** 5.1 g	**PrepDate:**	
ColumnID:	Rtx-VMS — **%Moisture:** 17.7	**BatchNo:**	R14526
Revision:	08/20/08 8:43 — **TestCode:** 8260S7 OLM42	**FileID:**	1-SAMP-J6858.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 14:47
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Chlorobenzene	6.2		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/14/08 14:47
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,3-Dichlorobenzene	20		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,4-Dichlorobenzene	17		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dichlorobenzene	18		3.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 14:47
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 14:47
Surr: 1,2-Dichloroethane-d4	96.0		71-125	0.60	%REC	0.98	08/14/08 14:47
Surr: Toluene-d8	99.6		75-125	0.60	%REC	0.98	08/14/08 14:47
Surr: 4-Bromofluorobenzene	107		59-125	0.60	%REC	0.98	08/14/08 14:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380705 **Project Supervisor:** Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-South

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6858.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 2 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6858.D Vial: 10
Acq On : 14 Aug 2008 14:47 Operator: MSV
Sample : 0808068-002A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:37 2008 Quant Results File: J530OLMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J530OLMS

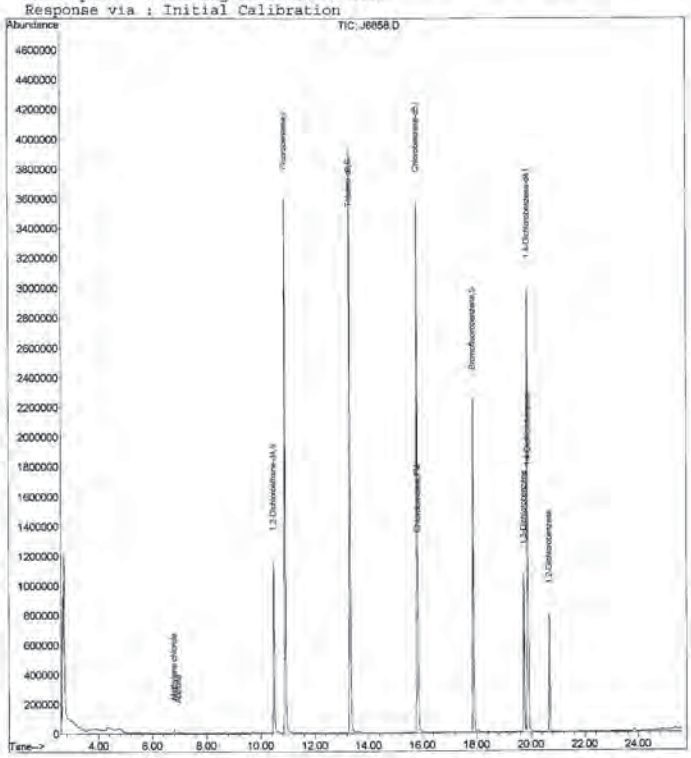
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4427645	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1622491	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	1094566	50.00 ug/L	0.01
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1077820	48.01 ug/L	0.00
Spiked Amount 50.000			Recovery =	96.02%	
37) Toluene-d8	13.30	98	1967815	49.81 ug/L	0.00
Spiked Amount 50.000			Recovery =	99.62%	
49) Bromofluorobenzene	17.87	95	1228093	53.44 ug/L	0.00
Spiked Amount 50.000			Recovery =	106.88%	
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	19085	0.83 ug/L	97
12) Acetone	6.96	43	19111	3.69 ug/L	91
41) Chlorobenzene	15.84	112	350857	5.21 ug/L	96
51) 1,3-Dichlorobenzene	19.74	146	672127	16.53 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	569872	14.39 ug/L	97
53) 1,2-Dichlorobenzene	20.68	146	513265	13.80 ug/L	98

(#) = qualifier out of range (m) = manual integration
J6858.D J530OLMS.M Mon Aug 18 08:38:41 2008 Pa

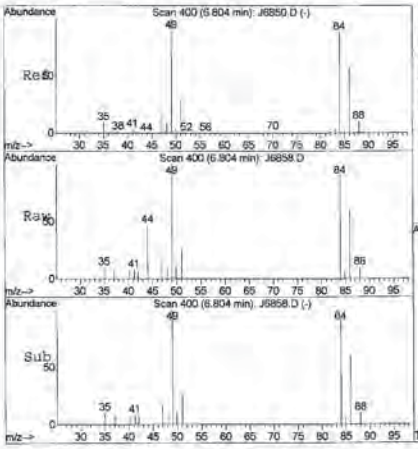
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6858.D Vial: 10
Acq On : 14 Aug 2008 14:47 Operator: MSV
Sample : 0808068-002A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:37 2008 Quant Results File: J530OLMS.RES

Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration



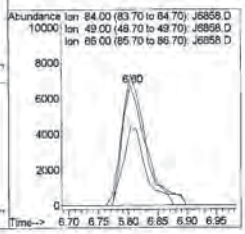
J6858.D J530OLMS.M Mon Aug 18 08:38:42 2008 Pa

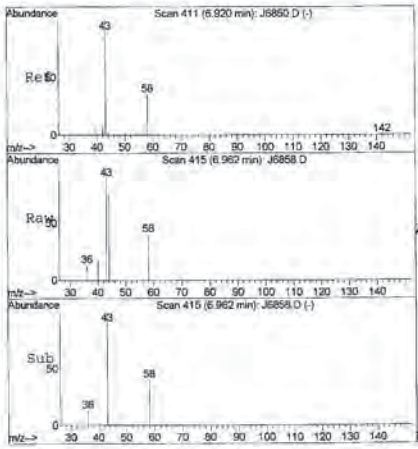


#11
Methylene chloride
Concen: 0.83 ug/L
RT: 6.80 min Scan# 400
Delta R.T. -0.00 min
Lab File: J6858.D
Acq: 14 Aug 2008 14:47

Tgt Ion: 84 Resp: 19085

Ion	Ratio	Lower	Upper
84	100		
49	109.5	81.6	141.6
86	61.4	34.5	94.5

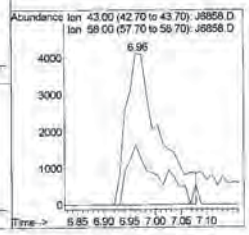


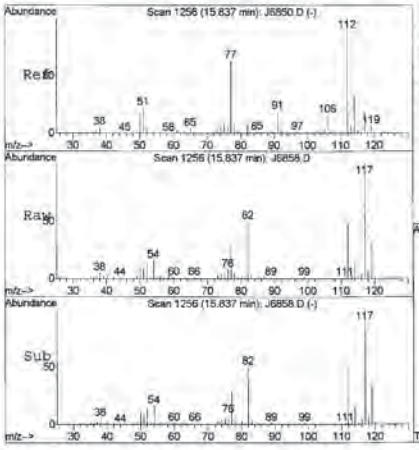


#12
Acetone
Concen: 3.69 ug/L
RT: 6.96 min Scan# 415
Delta R.T. 0.04 min
Lab File: J6858.D
Acq: 14 Aug 2008 14:47

Tgt Ion: 43 Resp: 19111

Ion	Ratio	Lower	Upper
43	100		
58	27.2	2.3	62.3

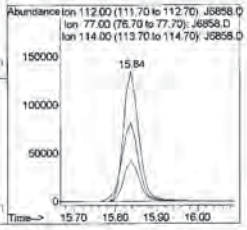


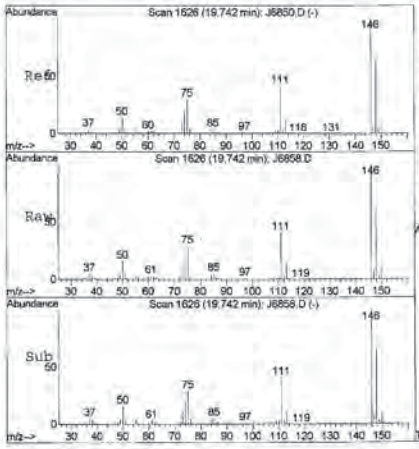


#41
Chlorobenzene
Concen: 5.21 ug/L
RT: 15.84 min Scan# 1256
Delta R.T. -0.00 min
Lab File: J6858.D
Acq: 14 Aug 2008 14:47

Tgt Ion:112 Resp: 350857

Ion	Ratio	Lower	Upper
112	100		
77	66.0	40.8	100.8
114	31.7	1.8	61.8

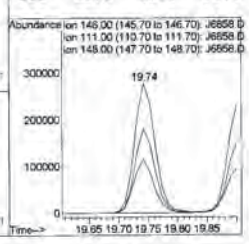


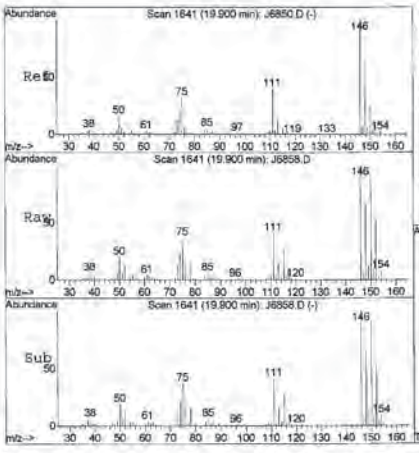


#51
1,3-Dichlorobenzene
Concen: 16.53 ug/L
RT: 19.74 min Scan# 1626
Delta R.T. -0.00 min
Lab File: J6858.D
Acq: 14 Aug 2008 14:47

Tgt Ion:146 Resp: 672127

Ion	Ratio	Lower	Upper
146	100		
111	40.9	8.8	68.8
148	63.6	33.8	93.8

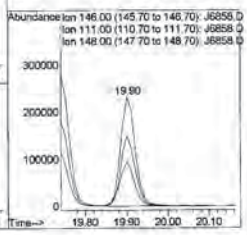


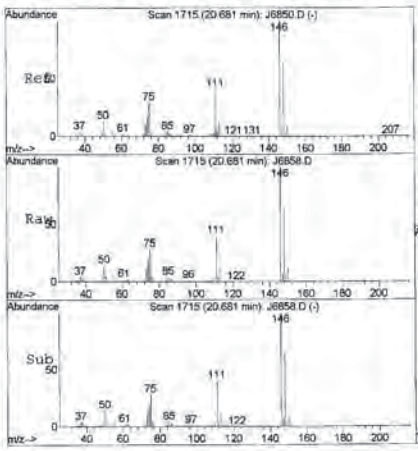


#52
1,4-Dichlorobenzene
Concen: 14.39 ug/L
RT: 19.90 min Scan# 1641
Delta R.T. -0.00 min
Lab File: J6858.D
Acq: 14 Aug 2008 14:47

Tgt Ion:146 Resp: 569872

Ion	Ratio	Lower	Upper
146	100		
111	42.6	8.7	68.7
148	63.2	33.3	93.3

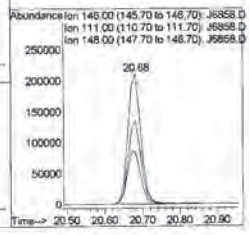




#53
1,2-Dichlorobenzene
Concen: 13.80 ug/L
RT: 20.68 min Scan# 1715
Delta R.T. -0.00 min
Lab File: J6858.D
Acq: 14 Aug 2008 14:47

Tgt Ion:146 Resp: 513265

Ion	Ratio	Lower	Upper
146	100		
111	42.1	9.9	69.9
148	63.7	33.5	93.5



Tentatively Identified Compound (LSC) summary

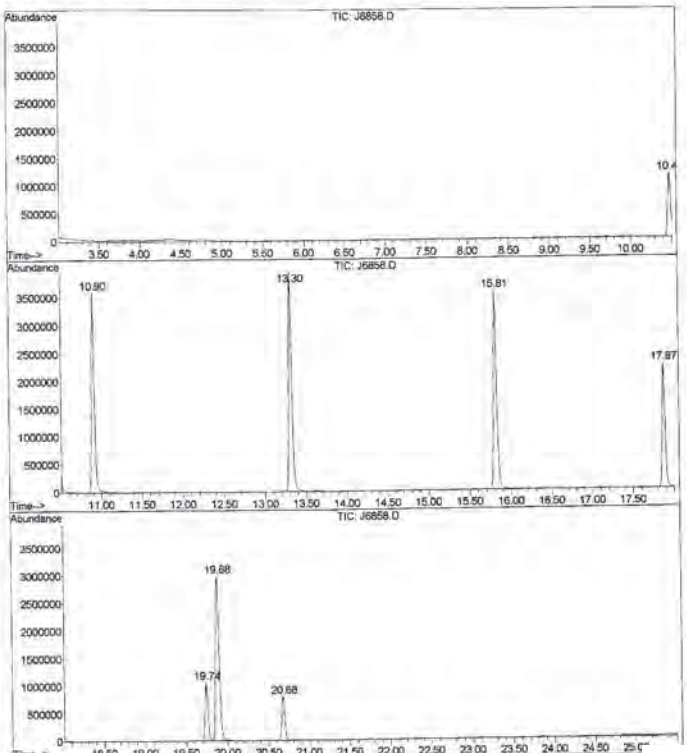
Operator ID: MSV Date Acquired: 14 Aug 2008 14:47
Data File: C:\HPCHEM\1\DATA\J6858.D
Name: 0808068-002A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6858.D J5300LMS.M Thu Aug 21 09:46:12 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J6858.D
Operator    : MSV
Acquired    : 14 Aug 2008  14:47     using AcqMethod J5300LMS
Instrument  :   #3MS10
Sample Name: 0808068-002A
Misc Info   : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 10
Quant File :J5300LMS.RES (RTE Integrator)
```



J6858.D J5300LMS.M Thu Aug 21 09:46:12 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14526
Revision:	08/20/08 8:43	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Acetone	ND		48	24	µg/Kg-dry	0.98	08/14/08 15:20
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/14/08 15:20
Methylene chloride	0.99 J		6.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/14/08 15:20
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Trichloroethene	1.4 J		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 15:20
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380706 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14526
Revision:	08/20/08 8:43	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/14/08 15:20
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Chlorobenzene	90		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/14/08 15:20
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,3-Dichlorobenzene	510	E	3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,4-Dichlorobenzene	390	E	3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dichlorobenzene	410	E	3.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/14/08 15:20
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/14/08 15:20
Surr: 1,2-Dichloroethane-d4	103		71-128	0.60	%REC	0.98	08/14/08 15:20
Surr: Toluene-d8	97.0		75-125	0.60	%REC	0.98	08/14/08 15:20
Surr: 4-Bromofluorobenzene	92.6		59-125	0.60	%REC	0.98	08/14/08 15:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380706 Project Supervisor: Monika Santucci

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-East

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OSG-MS SAS No.: _____ SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6859.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 4 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6859.D
Acq On : 14 Aug 2008 15:20
Sample : 0808068-003A
Misc : SAMP,8260S7_OLM42, 5.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:40 2008

Vial: 11
Operator: MSV
Inst : #3MS10
Multiplr: 0.98
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4362104	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1656924	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	1311421	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1133600	51.26 ug/L	0.00
Spiked Amount 50.000			Recovery = 102.52%		
37) Toluene-d8	13.30	98	3947643	48.52 ug/L	0.00
Spiked Amount 50.000			Recovery = 97.04%		
49) Bromofluorobenzene	17.87	95	1275259	46.32 ug/L	0.00
Spiked Amount 50.000			Recovery = 92.64%		
Target Compounds					Qvalue
11) Methylene chloride	6.81	84	18824	0.83 ug/L	98
12) Acetone	6.97	43	15645	3.07 ug/L	72
27) Trichloroethene	11.16	95	29490	1.17 ug/L	87
38) Tetrachloroethene	14.02	166	16727	0.68 ug/L	96
41) Chlorobenzene	15.84	112	5178852	75.23 ug/L	90
51) 1,3-Dichlorobenzene	19.74	146	20766147	426.14 ug/L	78
52) 1,4-Dichlorobenzene	19.90	146	15687182	330.52 ug/L	89
53) 1,2-Dichlorobenzene	20.68	146	15429184	346.29 ug/L	89

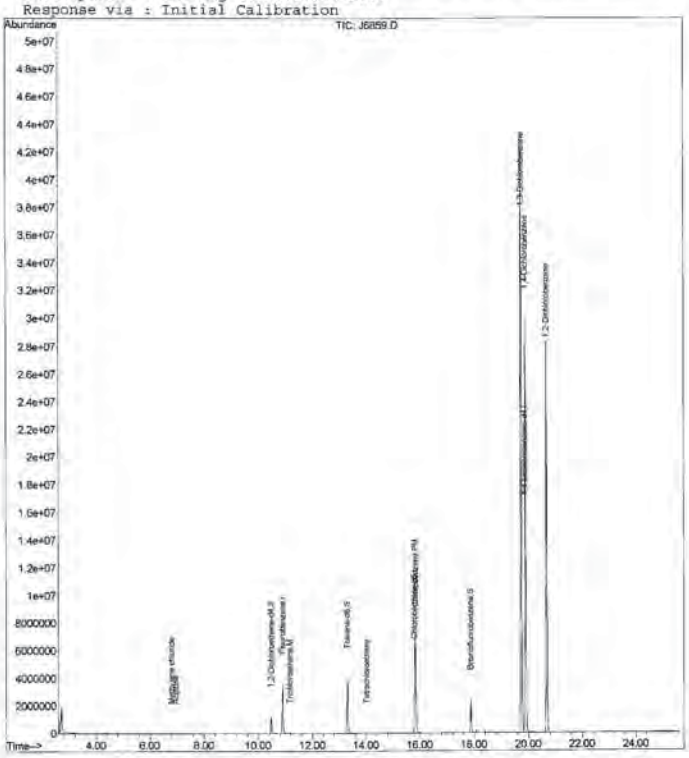
(#) = qualifier out of range (m) = manual integration
J6859.D J5300LMS.M Mon Aug 18 08:40:37 2008 Pa

Quantitation Report

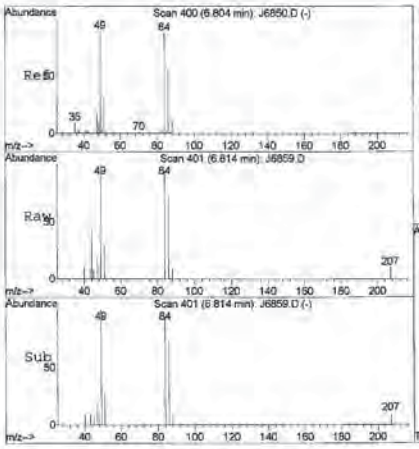
Data File : C:\HPCHEM\1\DATA\J6859.D
Acq On : 14 Aug 2008 15:20
Sample : 0808068-003A
Misc : SAMP,8260S7_OLM42, 5.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:40 2008

Vial: 11
Operator: MSV
Inst : #3MS10
Multiplr: 0.98
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration



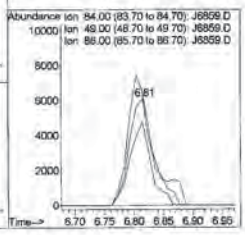
J6859.D J5300LMS.M Mon Aug 18 08:40:38 2008 Pa

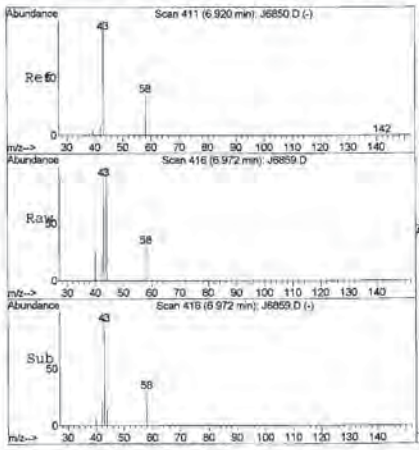


#11
Methylene chloride
Concen: 0.83 ug/L
RT: 6.81 min Scan# 401
Delta R.T. 0.01 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion: 84 Resp: 18824

Ion	Ratio	Lower	Upper
84	100		
49	108.2	81.6	141.6
86	63.8	34.5	94.5

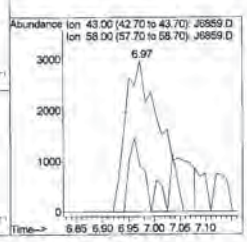




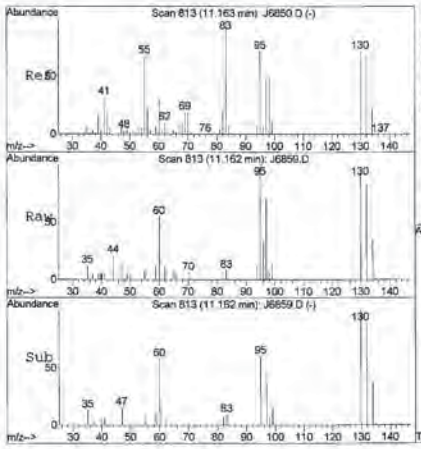
#12
Acetone
Concen: 3.07 ug/L
RT: 6.97 min Scan# 416
Delta R.T. 0.05 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion: 43 Resp: 15645

Ion	Ratio	Lower	Upper
43	100		
58	16.8	2.3	62.3



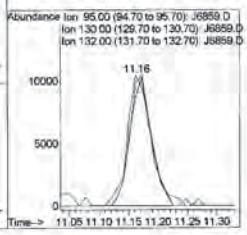
J6859.D J5300LMS.M Mon Aug 18 08:40:38 2008 Pa

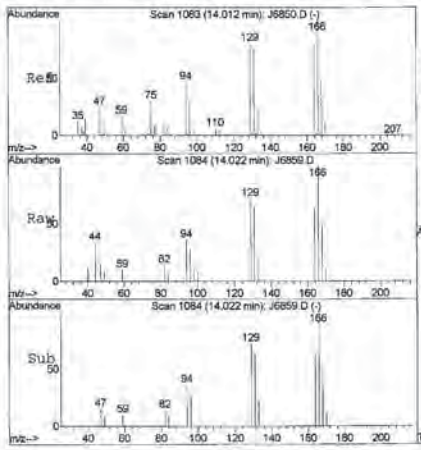


#27
Trichloroethene
Concen: 1.17 ug/L
RT: 11.16 min Scan# 813
Delta R.T. -0.00 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion: 95 Resp: 29490

Ion	Ratio	Lower	Upper
95	100		
130	91.6	75.4	135.4
132	89.0	71.2	131.2

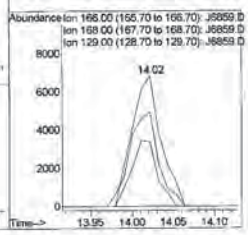




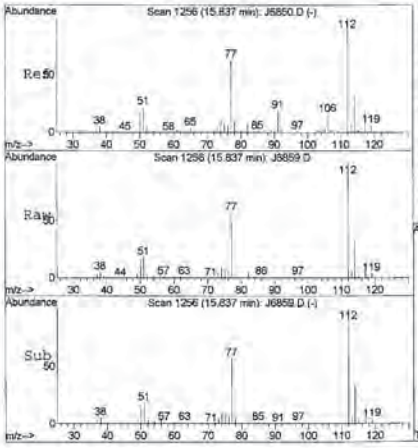
#38
Tetrachloroethene
Concen: 0.68 ug/L
RT: 14.02 min Scan# 1084
Delta R.T. 0.01 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion:166 Resp: 16727

Ion	Ratio	Lower	Upper
166	100		
168	44.7	17.2	77.2
129	72.4	45.8	105.8



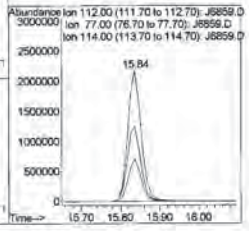
J6859.D J5300LMS.M Mon Aug 18 08:40:39 2008 Pa

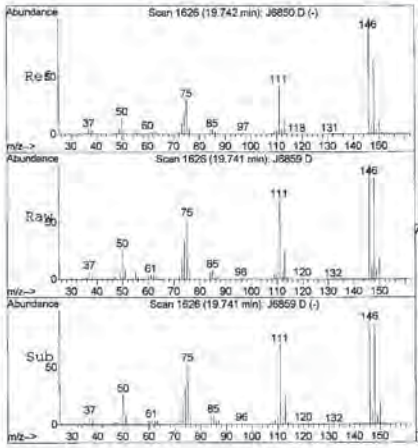


#41
Chlorobenzene
Concen: 75.23 ug/L
RT: 15.84 min Scan# 1256
Delta R.T. -0.00 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion:112 Resp: 5178852

Ion	Ratio	Lower	Upper
112	100		
77	58.8	40.8	100.8
114	32.1	1.8	61.8

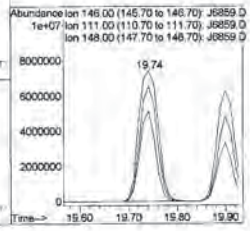


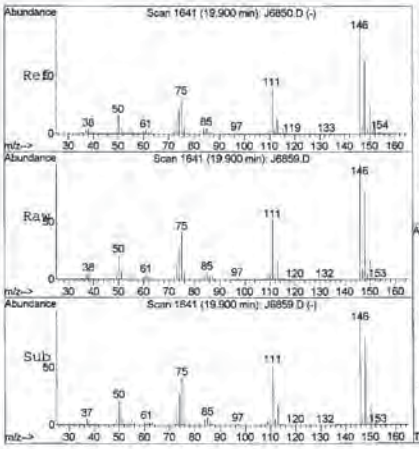


#51
1,3-Dichlorobenzene
Concen: 426.14 ug/L
RT: 19.74 min Scan# 1626
Delta R.T. -0.00 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion:146 Resp:20766147

Ion	Ratio	Lower	Upper
146	100		
111	56.7	8.8	68.8
148	78.0	33.8	93.8

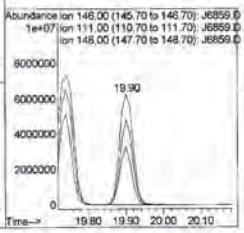


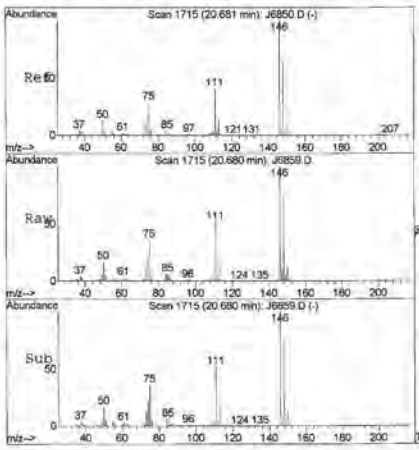


#52
1,4-Dichlorobenzene
Concen: 330.52 ug/L
RT: 19.90 min Scan# 1641
Delta R.T. -0.00 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion:146 Resp:15687182

Ion	Ratio	Lower	Upper
146	100		
111	46.3	8.7	68.7
148	70.5	33.3	93.3

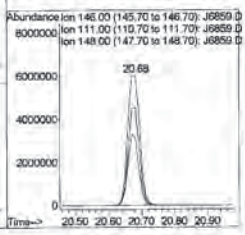




#53
1,2-Dichlorobenzene
Concen: 346.29 ug/L
RT: 20.68 min Scan# 1715
Delta R.T. -0.00 min
Lab File: J6859.D
Acq: 14 Aug 2008 15:20

Tgt Ion:146 Resp:15429184

Ion	Ratio	Lower	Upper
146	100		
111	48.9	9.9	69.9
148	70.2	33.5	93.5



Tentatively Identified Compound (LSC) summary

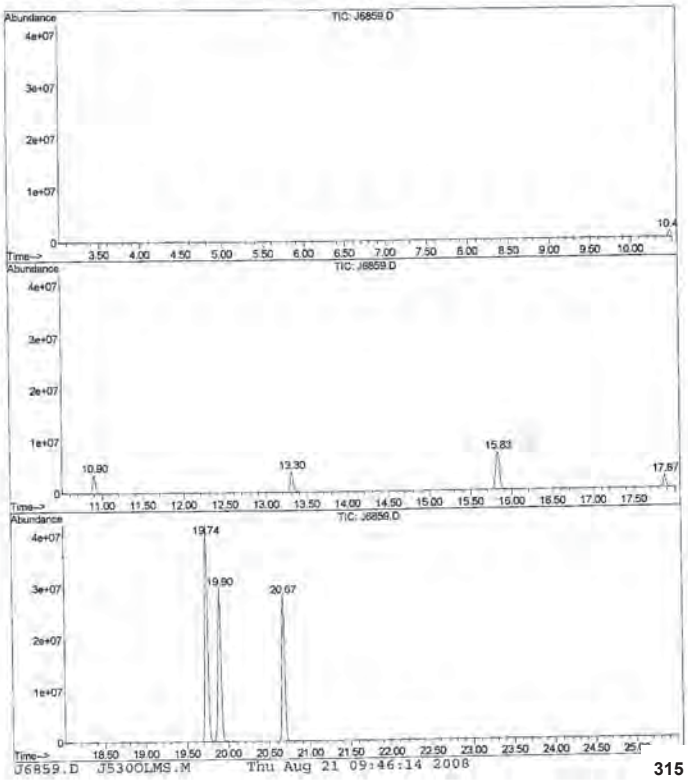
Operator ID: MSV Date Acquired: 14 Aug 2008 15:20
Data File: C:\HPCHEM\1\DATA\J6859.D
Name: 0808068-003A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6859.D J5300LMS.M Thu Aug 21 09:46:14 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6859.D
Operator : MSV
Acquired : 14 Aug 2008 15:20 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808068-003A
Misc Info : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 11
Quant File :J5300LMS.RES (RTE Integrator)



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-DL-J6874.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Chloromethane	ND		28	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Vinyl chloride	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Bromomethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Chloroethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Trichlorofluoromethane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,1-Dichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Acetone	ND		220	110	µg/Kg-dry	4.54	08/15/08 14:17
Carbon disulfide	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Methyl acetate	ND		14	55	µg/Kg-dry	4.54	08/15/08 14:17
Methylene chloride	4.4	J	28	2.8	µg/Kg-dry	4.54	08/15/08 14:17
trans-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Methyl tert-butyl ether	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
cis-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
2-Butanone	ND		220	110	µg/Kg-dry	4.54	08/15/08 14:17
Chloroform	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1,1-Trichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Cyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Carbon tetrachloride	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Benzene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Trichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Methylcyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dichloropropane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Bromodichloromethane	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
cis-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
4-Methyl-2-pentanone	ND		28	11	µg/Kg-dry	4.54	08/15/08 14:17
Toluene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
trans-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1,2-Trichloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Tetrachloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380720 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-DL-J6874.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		28	11	µg/Kg-dry	4.54	08/15/08 14:17
Dibromochloromethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dibromoethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Chlorobenzene	85		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Ethylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Xylenes (total)	ND		28	8.3	µg/Kg-dry	4.54	08/15/08 14:17
Styrene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Bromoform	ND		14	5.5	µg/Kg-dry	4.54	08/15/08 14:17
Isopropylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,1,2,2-Tetrachloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,3-Dichlorobenzene	760		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,4-Dichlorobenzene	510		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dichlorobenzene	530		14	2.8	µg/Kg-dry	4.54	08/15/08 14:17
1,2-Dibromo-3-chloropropane	ND		28	5.5	µg/Kg-dry	4.54	08/15/08 14:17
1,2,4-Trichlorobenzene	ND		28	2.8	µg/Kg-dry	4.54	08/15/08 14:17
Surr: 1,2-Dichloroethane-d4	102		71-126	2.8	%REC	4.54	08/15/08 14:17
Surr: Toluene-d8	98.7		75-125	2.8	%REC	4.54	08/15/08 14:17
Surr: 4-Bromofluorobenzene	93.4		59-125	2.8	%REC	4.54	08/15/08 14:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380720 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J6874.D                    Vial: 20
Acq On    : 15 Aug 2008  14:17                       Operator: MSV
Sample    : 0808068-003ADL                           Inst    : #3MS10
Misc      : SAMP,8260S7_OLM42, 1.1 g                 Multiplr: 4.54
MS Integration Params: RTEINT.P
 Quant Time: Aug 18 10:23 2008                 Quant Results File: J530OLMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J530OLMS
```

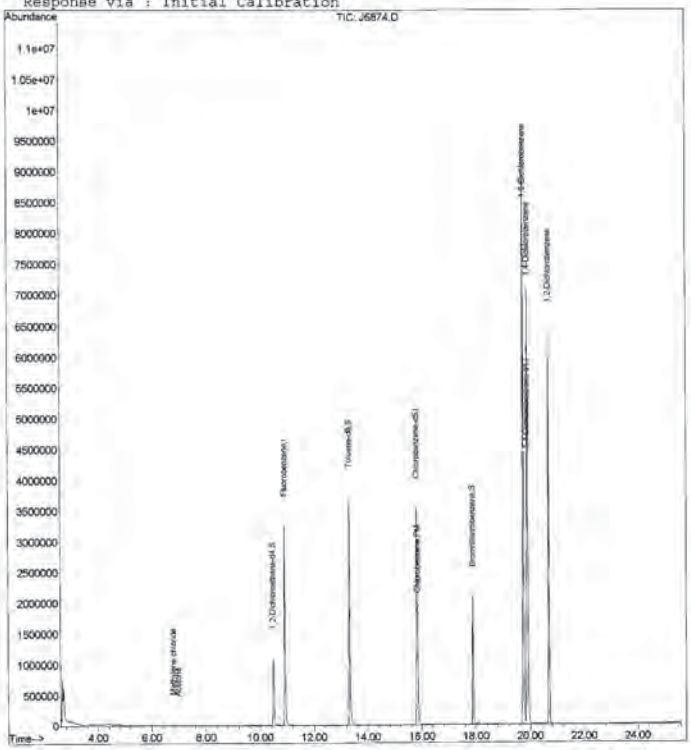
Internal Standards	R.T.	Qion	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.90	96	4005818	50.00	ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1503603	50.00	ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1152378	50.00	ug/L	0.00
System Monitoring Compounds						
24) 1,2-Dichloroethane-d4	10.47	65	1031822	50.81	ug/L	0.00
Spiked Amount 50.000			Recovery	=	101.62%	
37) Toluene-d8	13.31	98	3645055	49.37	ug/L	0.00
Spiked Amount 50.000			Recovery	=	98.74%	
49) Bromofluorobenzene	17.88	95	1129779	46.70	ug/L	0.00
Spiked Amount 50.000			Recovery	=	93.40%	
Target Compounds						Qvalue
11) Methylene chloride	6.81	84	16356	0.79	ug/L	93
12) Acetone	6.97	43	17577m	3.75	ug/L	
41) Chlorobenzene	15.84	112	964752	15.44	ug/L	93
51) 1,3-Dichlorobenzene	19.74	146	5858566	136.81	ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	3877295	92.97	ug/L	99
53) 1,2-Dichlorobenzene	20.67	146	3726955	95.19	ug/L	98

(#) = qualifier out of range (m) = manual integration
J6874.D J530OLMS.M Mon Aug 18 10:23:51 2008 Pa

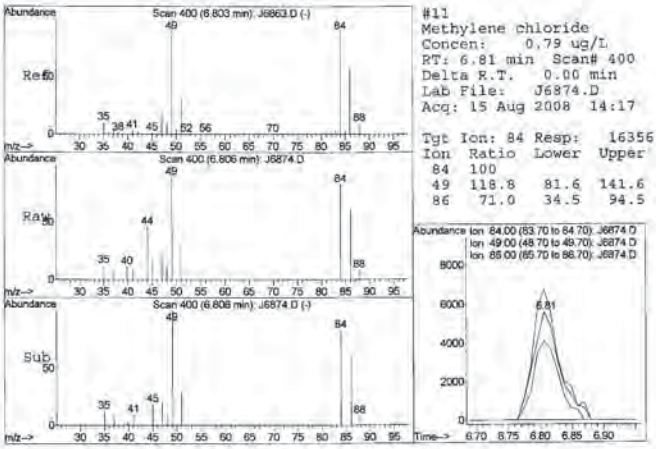
Quantitation Report

```
Data File : C:\HPCHEM\1\DATA\J6874.D                    Vial: 20
Acq On    : 15 Aug 2008  14:17                       Operator: MSV
Sample    : 0808068-003ADL                           Inst    : #3MS10
Misc      : SAMP,8260S7_OLM42, 1.1 g                 Multiplr: 4.54
MS Integration Params: RTEINT.P
Quant Time: Aug 18 10:23 2008                 Quant Results File: J530OLMS.RES

Method       : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
```



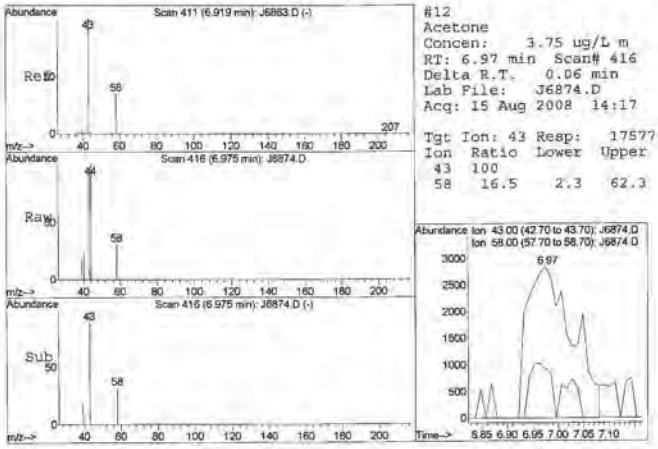
J6874.D J530OLMS.M Mon Aug 18 10:23:52 2008 Pa



#11
Methylene chloride
Concen: 0.79 ug/L
RT: 6.81 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6874.D
Acq: 15 Aug 2008 14:17

Tgt Ion: 84 Resp: 16356

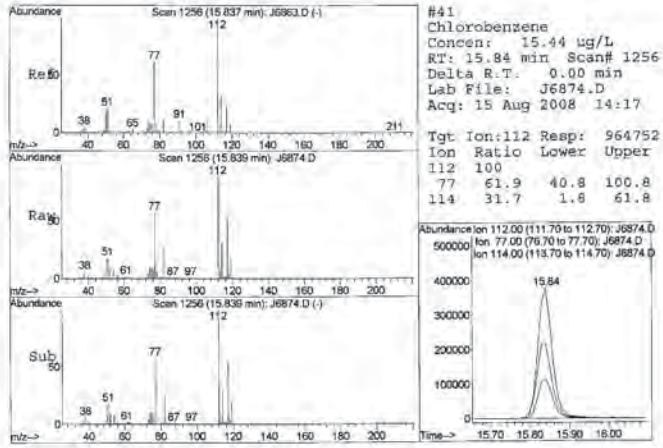
Ion	Ratio	Lower	Upper
84	100		
49	118.8	81.6	141.6
86	71.0	34.5	94.5



#12
Acetone
Concen: 3.75 ug/L m
RT: 6.97 min Scan# 416
Delta R.T. 0.06 min
Lab File: J6874.D
Acq: 15 Aug 2008 14:17

Tgt Ion: 43 Resp: 17577

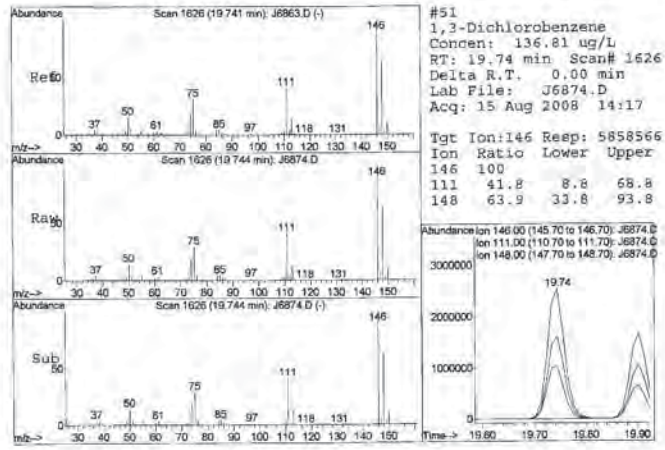
Ion	Ratio	Lower	Upper
43	100		
58	16.5	2.3	62.3



#41
Chlorobenzene
Concen: 15.44 ug/L
RT: 15.84 min Scan# 1256
Delta R.T. 0.00 min
Lab File: J6874.D
Acq: 15 Aug 2008 14:17

Tgt Ion:112 Resp: 964752

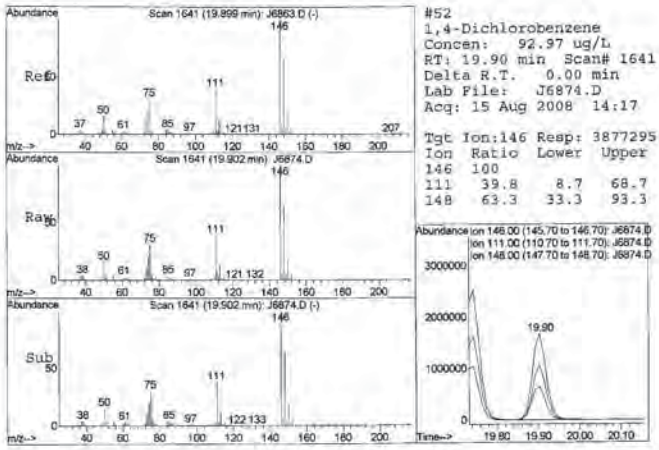
Ion	Ratio	Lower	Upper
112	100		
77	61.9	40.8	100.8
114	31.7	1.8	61.8



#51
1,3-Dichlorobenzene
Concen: 136.81 ug/L
RT: 19.74 min Scan# 1626
Delta R.T. 0.00 min
Lab File: J6874.D
Acq: 15 Aug 2008 14:17

Tgt Ion:146 Resp: 5858566

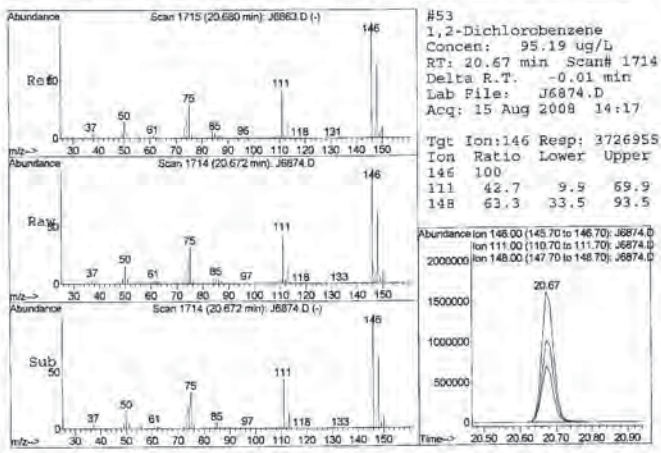
Ion	Ratio	Lower	Upper
146	100		
111	41.8	8.8	68.8
148	63.9	33.8	93.8



#52
1,4-Dichlorobenzene
Concen: 92.97 ug/L
RT: 19.90 min Scan# 1641
Delta R.T. 0.00 min
Lab File: J6874.D
Acq: 15 Aug 2008 14:17

Tgt Ion:146 Resp: 3877295

Ion	Ratio	Lower	Upper
146	100		
111	39.8	8.7	68.7
148	63.3	33.3	93.3



#53
1,2-Dichlorobenzene
Concen: 95.19 ug/L
RT: 20.67 min Scan# 1714
Delta R.T. -0.01 min
Lab File: J6874.D
Acq: 15 Aug 2008 14:17

Tgt Ion:146 Resp: 3726955

Ion	Ratio	Lower	Upper
146	100		
111	42.7	9.9	69.9
148	63.3	33.5	93.5

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808068-004A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***SB-2-North***
W Order:	0808068	**Collection Date:**	08/12/08 14:05
Matrix:	SOIL	**Date Received:**	08/12/08 17:52
Inst. ID:	MS03 10	**Sample Size:** 5.2 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:** 15.0	**BatchNo:** R14526
Revision:	08/20/08 8:43	**TestCode:** 8260S7 OLM42	**FileID:** 1-SAMP-J6860.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Chloromethane	ND		5.6	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Vinyl chloride	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Bromomethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Chloroethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Trichlorofluoromethane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,1-Dichloroethene	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Acetone	ND		45	23	µg/Kg-dry	0.96	08/14/08 15:54
Carbon disulfide	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Methyl acetate	ND		2.8	11	µg/Kg-dry	0.96	08/14/08 15:54
Methylene chloride	11	J	5.6	0.56	µg/Kg-dry	0.96	08/14/08 15:54
trans-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Methyl tert-butyl ether	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
cis-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
2-Butanone	ND		45	23	µg/Kg-dry	0.96	08/14/08 15:54
Chloroform	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1,1-Trichloroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Cyclohexane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Carbon tetrachloride	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Benzene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Trichloroethene	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Methylcyclohexane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dichloropropane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Bromodichloromethane	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
cis-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
4-Methyl-2-pentanone	ND		5.6	2.3	µg/Kg-dry	0.96	08/14/08 15:54
Toluene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
trans-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1,2-Trichloroethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Tetrachloroethene	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380707 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10 — Sample Size: 5.2 g	PrepDate:	
ColumnID:	Rtx-VMS — %Moisture: 15.0	BatchNo:	R14526
Revision:	08/20/08 8:43 — TestCode: 8260S7 OLM42	FileID:	1-SAMP-J6860.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.6	2.3	µg/Kg-dry	0.96	08/14/08 15:54
Dibromochloromethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dibromoethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Chlorobenzene	1.9 J		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Ethylbenzene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Xylenes (total)	ND		5.6	1.7	µg/Kg-dry	0.96	08/14/08 15:54
Styrene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Bromoform	ND		2.8	1.1	µg/Kg-dry	0.96	08/14/08 15:54
Isopropylbenzene	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,1,2,2-Tetrachloroethane	ND		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,3-Dichlorobenzene	190		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,4-Dichlorobenzene	57		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dichlorobenzene	240 E		2.8	0.56	µg/Kg-dry	0.96	08/14/08 15:54
1,2-Dibromo-3-chloropropane	ND		5.6	1.1	µg/Kg-dry	0.96	08/14/08 15:54
1,2,4-Trichlorobenzene	31		5.6	0.56	µg/Kg-dry	0.96	08/14/08 15:54
Surr: 1,2-Dichloroethane-d4	99.9		71-128	0.56	%REC	0.96	08/14/08 15:54
Surr: Toluene-d8	106		75-125	0.56	%REC	0.96	08/14/08 15:54
Surr: 4-Bromofluorobenzene	98.7		59-125	0.56	%REC	0.96	08/14/08 15:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column: %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380707 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-North

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6860.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 15 Date Analyzed: 8/14/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.96

Extract Volume: (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 5 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6860.D Vial: 12
Acq On : 14 Aug 2008 15:54 Operator: MSV
Sample : 0808068-004A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.2 g Multiplr: 0.96
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:42 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

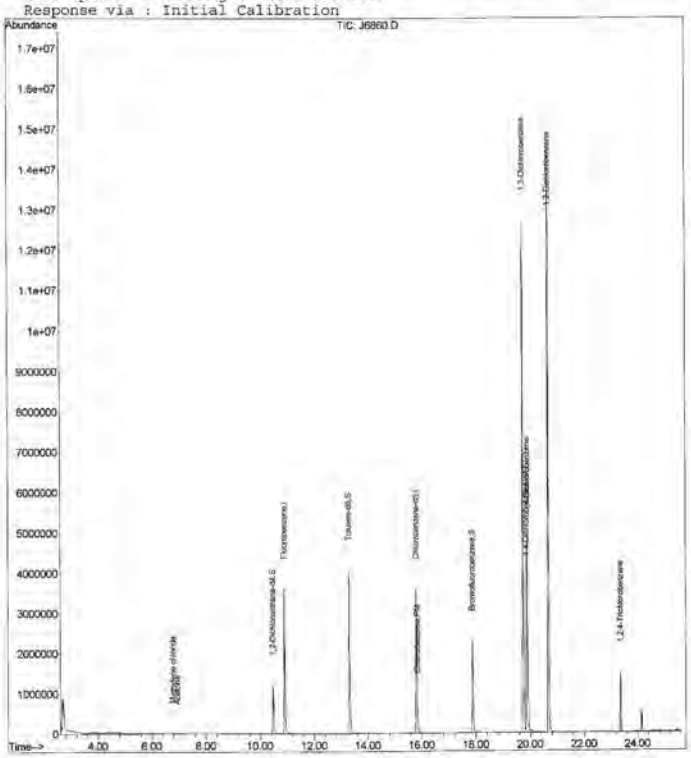
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4385981	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1606926	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1184224	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1110983	49.96 ug/L	0.00
Spiked Amount 50.000			Recovery	= 99.92%	
37) Toluene-d8	13.30	98	3952810	50.10 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.20%	
49) Bromofluorobenzene	17.87	95	1226450	49.33 ug/L	0.00
Spiked Amount 50.000			Recovery	= 98.66%	
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	21251	0.93 ug/L	95
12) Acetone	6.96	43	18976	3.70 ug/L #	42
41) Chlorobenzene	15.84	112	111067	1.66 ug/L	91
51) 1,3-Dichlorobenzene	19.74	146	7567328	171.97 ug/L	97
52) 1,4-Dichlorobenzene	19.90	146	2534492	59.14 ug/L	99
53) 1,2-Dichlorobenzene	20.67	146	8420999	209.30 ug/L	97
55) 1,2,4-Trichlorobenzene	23.36	180	546645	27.36 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6860.D J5300LMS.M Mon Aug 18 08:43:07 2008 Pa

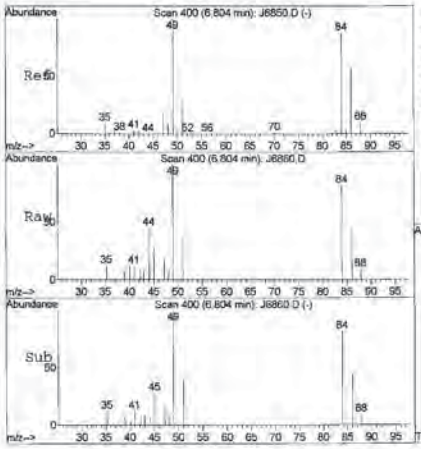
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6860.D Vial: 12
Acq On : 14 Aug 2008 15:54 Operator: MSV
Sample : 0808068-004A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.2 g Multiplr: 0.96
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:42 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration



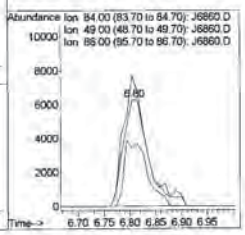
J6860.D J5300LMS.M Mon Aug 18 08:43:08 2008 Pa

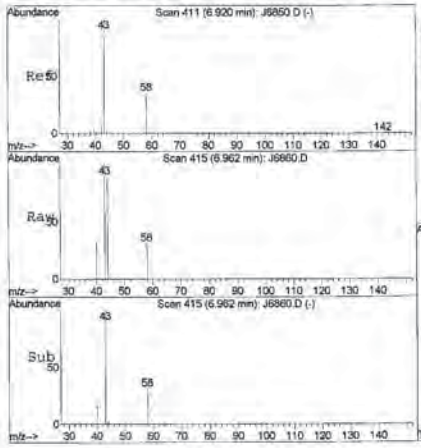


#11
Methylene chloride
Concen: 0.93 ug/L
RT: 6.80 min Scan# 400
Delta R.T. -0.00 min
Lab File: J6860.D
Acq: 14 Aug 2008 15:54

Tgt Ion: 84 Resp: 21251

Ion	Ratio	Lower	Upper
84	100		
49	114.1	81.6	141.6
86	56.2	34.5	94.5

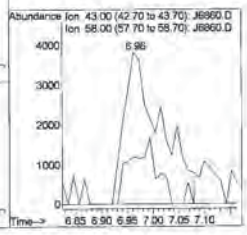


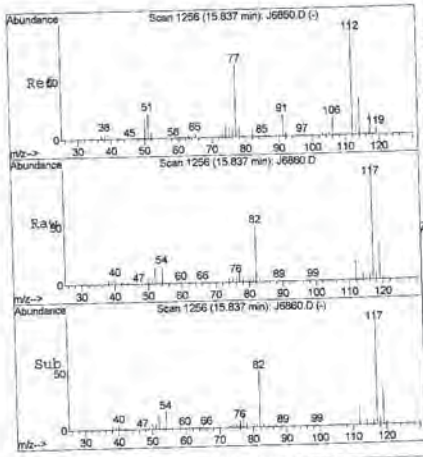


#12
Acetone
Concen: 3.70 ug/L
RT: 6.96 min Scan# 415
Delta R.T. 0.04 min
Lab File: J6860.D
Acq: 14 Aug 2008 15:54

Tgt Ion: 43 Resp: 18976

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	62.3#

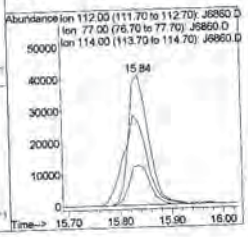


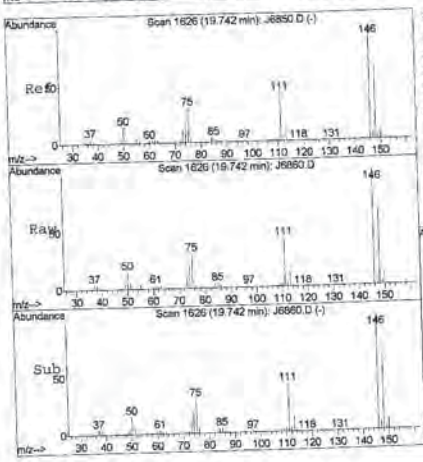


#41
Chlorobenzene
Concen: 1.66 ug/L
RT: 15.84 min Scan# 1256
Delta R.T. -0.00 min
Lab File: J6860.D
Acq: 14 Aug 2008 15:54

Tgt Ion:112 Resp: 111067

Ion	Ratio	Lower	Upper
112	100		
77	81.8	40.8	100.8
114	31.8	1.8	61.8

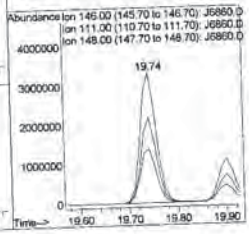


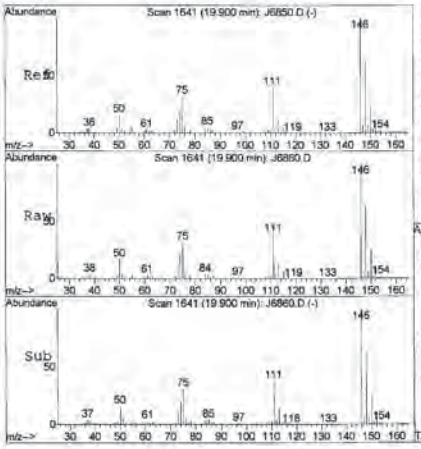


#51
1,3-Dichlorobenzene
Concen: 171.97 ug/L
RT: 19.74 min Scan# 1626
Delta R.T. -0.00 min
Lab File: J6860.D
Acq: 14 Aug 2008 15:54

Tgt Ion:146 Resp: 7567328

Ion	Ratio	Lower	Upper
146	100		
111	42.2	8.8	68.8
148	64.7	33.8	93.8

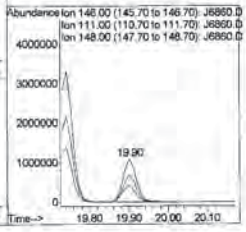


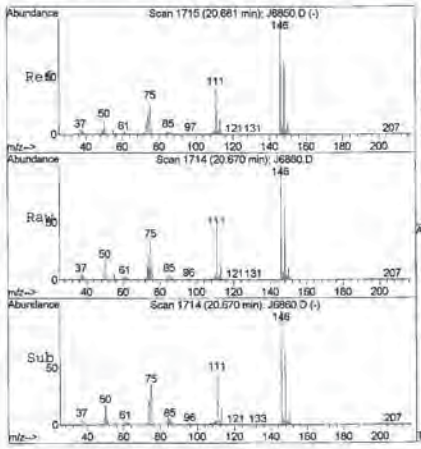


#52
1,4-Dichlorobenzene
Concen: 59.14 ug/L
RT: 19.90 min Scan# 1641
Delta R.T. -0.00 min
Lab File: J6860.D
Acq: 14 Aug 2008 15:54

Tgt Ion:146 Resp: 2534492

Ion	Ratio	Lower	Upper
146	100		
111	40.3	8.7	68.7
148	63.2	33.3	93.3

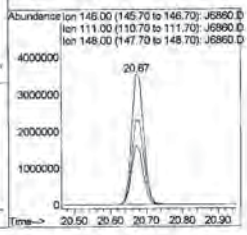


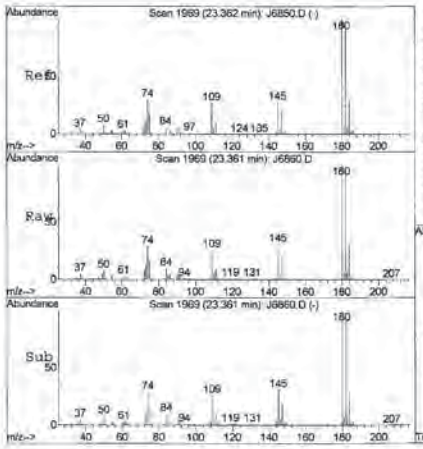


#53
1,2-Dichlorobenzene
Concen: 209.30 ug/L
RT: 20.67 min Scan# 1714
Delta R.T. -0.01 min
Lab File: J6860.D
Acq: 14 Aug 2008 15:54

Tgt Ion:146 Resp: 8420999

Ion	Ratio	Lower	Upper
146	100		
111	44.0	9.9	69.9
148	64.6	33.5	93.5

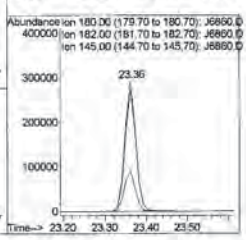




#55
1,2,4-Trichlorobenzene
Concen: 27.36 ug/L
RT: 23.36 min Scan# 1969
Delta R.T. -0.00 min
Lab File: J6860.D
Acq: 14 Aug 2008 15:54

Tgt Ion:180 Resp: 546645

Ion	Ratio	Lower	Upper
180	100		
182	92.9	64.6	124.6
145	31.4	1.3	61.3



Tentatively Identified Compound (LSC) summary

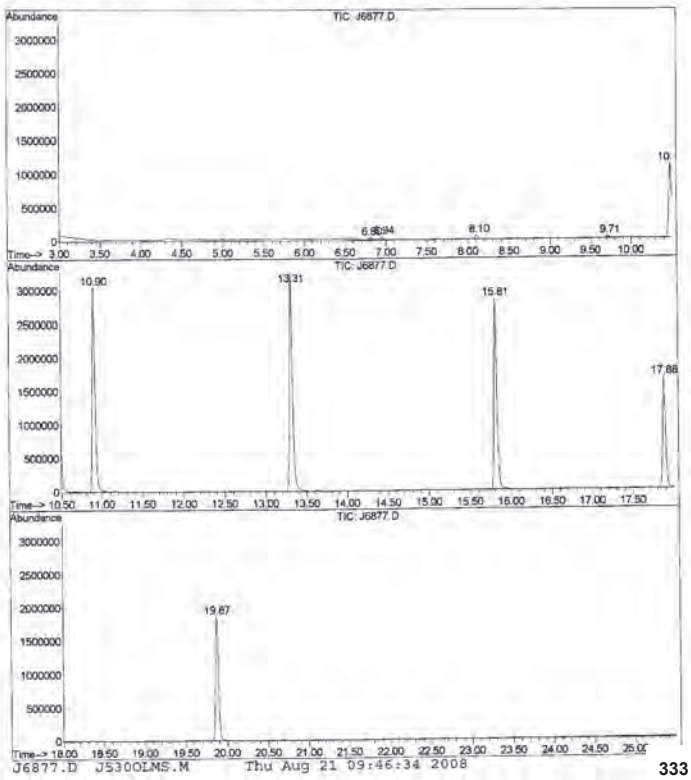
Operator ID: MSV Date Acquired: 15 Aug 2008 15:58
Data File: C:\HPCHEM\1\DATA\J6877.D
Name: 0808070-004A
Misc: SAMP,8260S7_OLM42, 5.0 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6877.D J5300LMS.M Thu Aug 21 09:46:34 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6877.D
Operator : MSV
Acquired : 15 Aug 2008 15:58 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808070-004A
Misc Info : SAMP,8260S7_OLM42, 5.0 g
Vial Number: 23
Quant File :J5300LMS.RES (RTE Integrator)



J6877.D J5300LMS.M Thu Aug 21 09:46:34 2008

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results
StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
W Order: 0808068
Matrix: SOIL
Inst. ID: MS03 10 Sample Size: 1 g
ColumnID: Rtx-VMS %Moisture: 15.0
Revision: 08/20/08 8:34 TestCode: 8260S7 OLM42
Col Type:

Lab ID: 0808068-004ADL
Client Sample ID: *SB-2-North*
Collection Date: 08/12/08 14:05
Date Received: 08/12/08 17:52
PrepDate:
BatchNo: R14527
FileID: 1-DL-J6875.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Chloromethane	ND		29	2.9	µg/Kg-dry	5	08/15/08 14:51
Vinyl chloride	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Bromomethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Chloroethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
Trichlorofluoromethane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
1,1-Dichloroethene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Acetone	ND		240	120	µg/Kg-dry	5	08/15/08 14:51
Carbon disulfide	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Methyl acetate	ND		15	59	µg/Kg-dry	5	08/15/08 14:51
Methylene chloride	5.9	J	29	2.9	µg/Kg-dry	5	08/15/08 14:51
trans-1,2-Dichloroethene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Methyl tert-butyl ether	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1-Dichloroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
cis-1,2-Dichloroethene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
2-Butanone	ND		240	120	µg/Kg-dry	5	08/15/08 14:51
Chloroform	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1,1-Trichloroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Cyclohexane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Carbon tetrachloride	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Benzene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dichloroethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Trichloroethene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Methylcyclohexane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dichloropropane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Bromodichloromethane	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
cis-1,3-Dichloropropene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
4-Methyl-2-pentanone	ND		29	12	µg/Kg-dry	5	08/15/08 14:51
Toluene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
trans-1,3-Dichloropropene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1,2-Trichloroethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Tetrachloroethene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380721 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results
StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
W Order: 0808068
Matrix: SOIL
Inst. ID: MS03 10 Sample Size: 1 g
ColumnID: Rtx-VMS %Moisture: 15.0
Revision: 08/20/08 8:34 TestCode: 8260S7 OLM42
Col Type:

Lab ID: 0808068-004ADL
Client Sample ID: *SB-2-North*
Collection Date: 08/12/08 14:05
Date Received: 08/12/08 17:52
PrepDate:
BatchNo: R14527
FileID: 1-DL-J6875.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		29	12	µg/Kg-dry	5	08/15/08 14:51
Dibromochloromethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dibromoethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Chlorobenzene	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Ethylbenzene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Xylenes (total)	ND		29	8.8	µg/Kg-dry	5	08/15/08 14:51
Styrene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
Bromoform	ND		15	5.9	µg/Kg-dry	5	08/15/08 14:51
Isopropylbenzene	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,1,2,2-Tetrachloroethane	ND		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,3-Dichlorobenzene	140		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,4-Dichlorobenzene	55		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dichlorobenzene	190		15	2.9	µg/Kg-dry	5	08/15/08 14:51
1,2-Dibromo-3-chloropropane	ND		29	5.9	µg/Kg-dry	5	08/15/08 14:51
1,2,4-Trichlorobenzene	33		29	2.9	µg/Kg-dry	5	08/15/08 14:51
Surr: 1,2-Dichloroethane-d4	102		71-128	2.9	%REC	5	08/15/08 14:51
Surr: Toluene-d8	99.4		75-125	2.9	%REC	5	08/15/08 14:51
Surr: 4-Bromofluorobenzene	105		59-125	2.9	%REC	5	08/15/08 14:51

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380721 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6875.D
Acq On : 15 Aug 2008 14:51
Sample : 0808068-004ADL
Misc : SAMP,8260S7_OLM42, 1.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 10:24 2008

Vial: 21
Operator: MSV
Inst : #3MS10
Multiplr: 5.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3936684	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1461909	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	971128	50.00 ug/L	0.00
Syatem Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1019138	51.06 ug/L	0.00
Spiked Amount 50.000			Recovery	= 102.12%	
37) Toluene-d8	13.30	98	3569147	49.72 ug/L	0.00
Spiked Amount 50.000			Recovery	= 99.44%	
49) Bromofluorobenzene	17.87	95	1075197	52.74 ug/L	0.00
Spiked Amount 50.000			Recovery	= 105.48%	
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	20520	1.00 ug/L	91
12) Acetone	6.96	43	16432	3.57 ug/L	97
51) 1,3-Dichlorobenzene	19.74	146	845194	23.42 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	329669	9.38 ug/L	94
53) 1,2-Dichlorobenzene	20.68	146	1060943	32.16 ug/L	98
55) 1,2,4-Trichlorobenzene	23.36	180	93299	5.69 ug/L	98

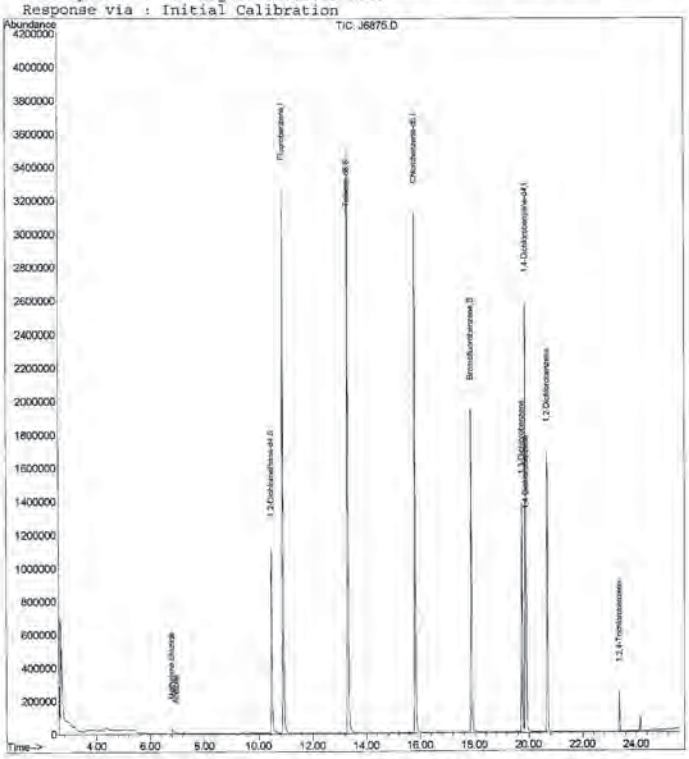
(#) = qualifier out of range (m) = manual integration

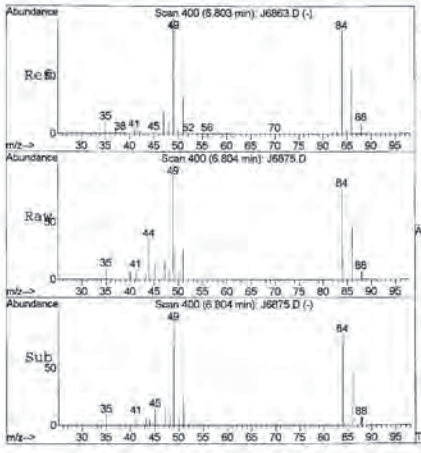
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6875.D
Acq On : 15 Aug 2008 14:51
Sample : 0808068-004ADL
Misc : SAMP,8260S7_OLM42, 1.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 10:24 2008

Vial: 21
Operator: MSV
Inst : #3MS10
Multiplr: 5.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration

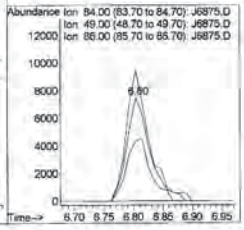


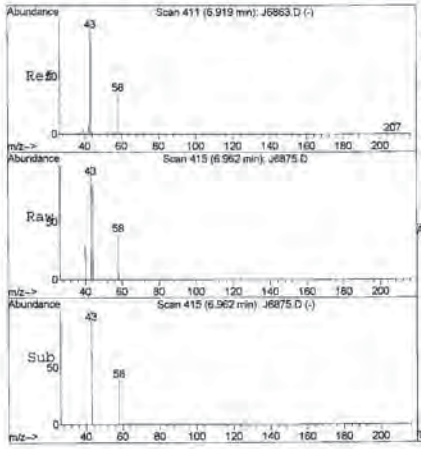


#11
Methylene chloride
Concen: 1.00 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6875.D
Acq: 15 Aug 2008 14:51

Tgt Ion: 84 Resp: 20520

Ion	Ratio	Lower	Upper
84	100		
49	124.7	81.6	141.6
86	62.1	34.5	94.5

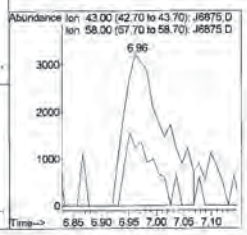


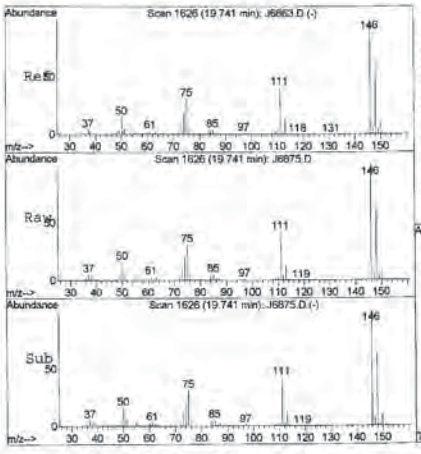


#12
Acetone
Concen: 3.57 ug/L
RT: 6.96 min Scan# 415
Delta R.T. 0.04 min
Lab File: J6875.D
Acq: 15 Aug 2008 14:51

Tgt Ion: 43 Resp: 16432

Ion	Ratio	Lower	Upper
43	100		
58	33.9	2.3	62.3

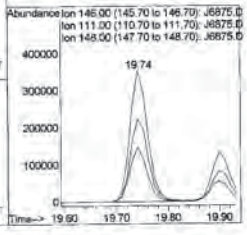


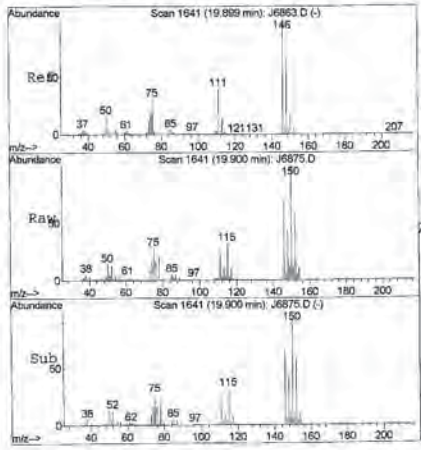


#51
1,3-Dichlorobenzene
Concen: 23.42 ug/L
RT: 19.74 min Scan# 1626
Delta R.T. 0.00 min
Lab File: J6875.D
Acq: 15 Aug 2008 14:51

Tgt Ion:146 Resp: 845194

Ion	Ratio	Lower	Upper
146	100		
111	41.6	8.8	68.8
148	64.2	33.8	93.8

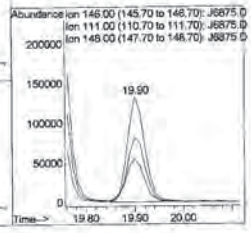


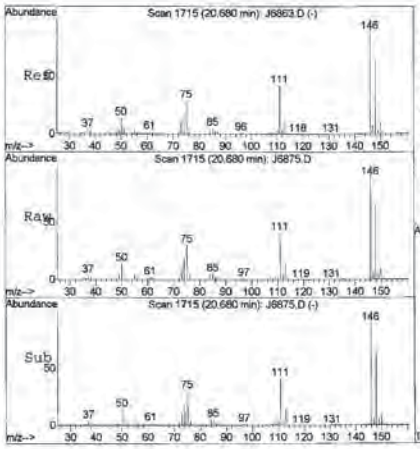


#52
1,4-Dichlorobenzene
Concen: 9.38 ug/L
RT: 19.90 min Scan# 1641
Delta R.T. 0.00 min
Lab File: J6875.D
Acq: 15 Aug 2008 14:51

Tgt Ion:146 Resp: 329669

Ion	Ratio	Lower	Upper
146	100		
111	45.4	8.7	68.7
148	65.7	33.3	93.3

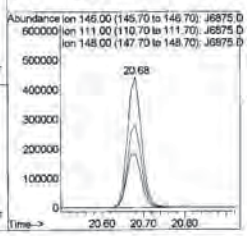


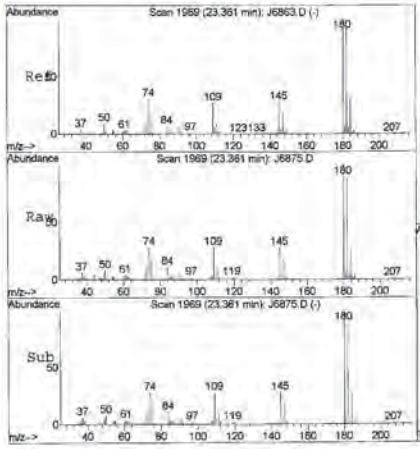


#53
1,2-Dichlorobenzene
Concen: 32.16 ug/L
RT: 20.68 min Scan# 1715
Delta R.T. 0.00 min
Lab File: J6875.D
Acq: 15 Aug 2008 14:51

Tgt Ion:146 Resp: 1060943

Ion	Ratio	Lower	Upper
146	100		
111	43.4	9.9	69.9
148	63.4	33.5	93.5

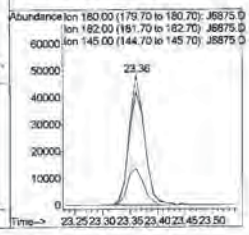




#55
1,2,4-Trichlorobenzene
Concen: 5.69 ug/L
RT: 23.36 min Scan# 1969
Delta R.T. 0.00 min
Lab File: J6875.D
Acq: 15 Aug 2008 14:51

Tgt Ion:180 Resp: 93299

Ion	Ratio	Lower	Upper
180	100		
182	92.7	64.6	124.6
145	29.8	1.3	61.3



J6875.D J5300LMS.M Mon Aug 18 10:25:17 2008 Pa

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5.2 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 16.2	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6873.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.7	2.3	µg/Kg-dry	0.96	08/15/08 13:43
Dibromochloromethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dibromoethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Chlorobenzene	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Ethylbenzene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Xylenes (total)	ND		5.7	1.7	µg/Kg-dry	0.96	08/15/08 13:43
Styrene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Bromoform	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Isopropylbenzene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,1,2,2-Tetrachloroethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,3-Dichlorobenzene	4.4		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,4-Dichlorobenzene	4.1		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dichlorobenzene	4.6		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dibromo-3-chloropropane	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
1,2,4-Trichlorobenzene	ND		5.7	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Surr: 1,2-Dichloroethane-d4	99.1		71-128	0.57	%REC	0.96	08/15/08 13:43
Surr: Toluene-d8	100		75-125	0.57	%REC	0.96	08/15/08 13:43
Surr: 4-Bromofluorobenzene	114		59-125	0.57	%REC	0.96	08/15/08 13:43

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380719 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

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ColumnID:	Rtx-VMS	%Moisture: 16.2	BatchNo: R14527
Revision:	08/20/08 8:34	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6873.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.7	2.3	µg/Kg-dry	0.96	08/15/08 13:43
Dibromochloromethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dibromoethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Chlorobenzene	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Ethylbenzene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Xylenes (total)	ND		5.7	1.7	µg/Kg-dry	0.96	08/15/08 13:43
Styrene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Bromoform	ND		2.9	1.1	µg/Kg-dry	0.96	08/15/08 13:43
Isopropylbenzene	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,1,2,2-Tetrachloroethane	ND		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,3-Dichlorobenzene	4.4		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,4-Dichlorobenzene	4.1		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dichlorobenzene	4.6		2.9	0.57	µg/Kg-dry	0.96	08/15/08 13:43
1,2-Dibromo-3-chloropropane	ND		5.7	1.1	µg/Kg-dry	0.96	08/15/08 13:43
1,2,4-Trichlorobenzene	ND		5.7	0.57	µg/Kg-dry	0.96	08/15/08 13:43
Surr: 1,2-Dichloroethane-d4	99.1		71-128	0.57	%REC	0.96	08/15/08 13:43
Surr: Toluene-d8	100		75-125	0.57	%REC	0.96	08/15/08 13:43
Surr: 4-Bromofluorobenzene	114		59-125	0.57	%REC	0.96	08/15/08 13:43

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
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- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380719 Project Supervisor: Monika Santucci

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6873.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/15/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.96

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 7 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6873.D
Acq On : 15 Aug 2008 13:43
Sample : 0808068-005A
Misc : SAMP,8260S7_OLM42, 5.2 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 10:21 2008

Vial: 19
Operator: MSV
Inst : #3MS10
Multiplr: 0.96
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3969502	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1459791	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	898660	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	997222	49.55 ug/L	0.00
Spiked Amount 50.000			Recovery = 99.10%		
37) Toluene-d8	13.31	98	3597278	50.19 ug/L	0.00
Spiked Amount 50.000			Recovery = 100.38%		
49) Bromofluorobenzene	17.87	95	1076905	57.08 ug/L	0.00
Spiked Amount 50.000			Recovery = 114.16%		
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	18089	0.88 ug/L	92
12) Acetone	6.96	43	20510	4.42 ug/L	93
51) 1,3-Dichlorobenzene	19.74	146	127839	3.83 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	115073	3.54 ug/L	91
53) 1,2-Dichlorobenzene	20.68	146	121908	3.99 ug/L	97

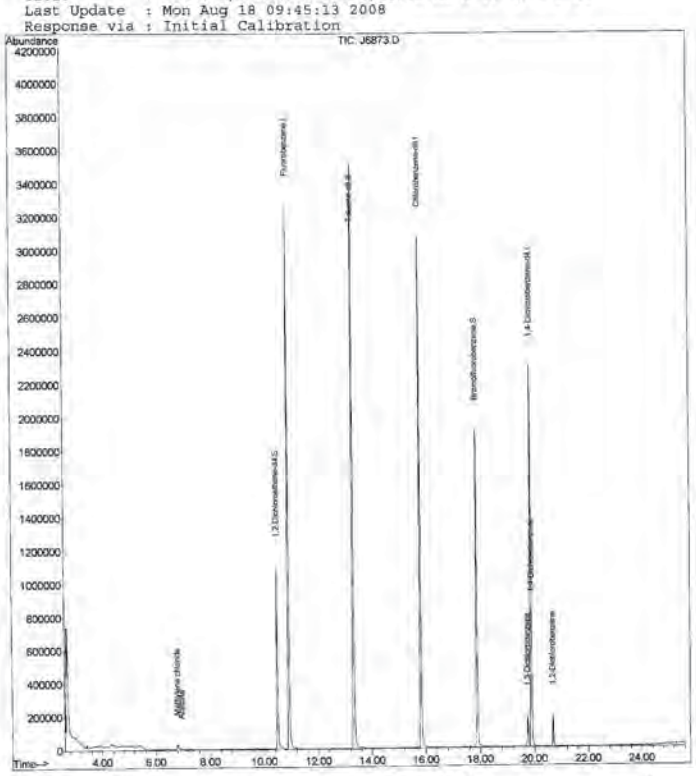
(#) = qualifier out of range (m) = manual integration
J6873.D J5300LMS.M Mon Aug 18 10:22:11 2008

Quantitation Report

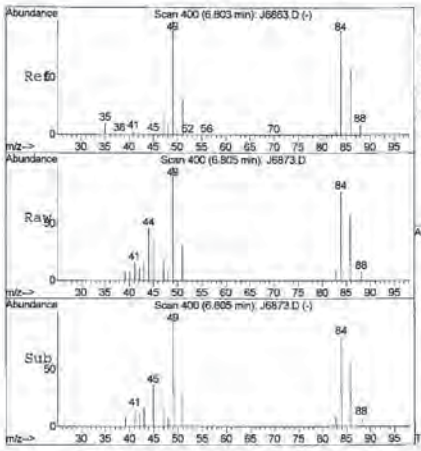
Data File : C:\HPCHEM\1\DATA\J6873.D
Acq On : 15 Aug 2008 13:43
Sample : 0808068-005A
Misc : SAMP,8260S7_OLM42, 5.2 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 10:21 2008

Vial: 19
Operator: MSV
Inst : #3MS10
Multiplr: 0.96
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration



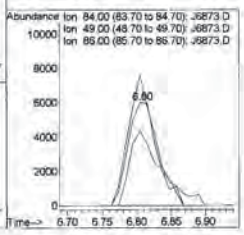
J6873.D J5300LMS.M Mon Aug 18 10:22:12 2008

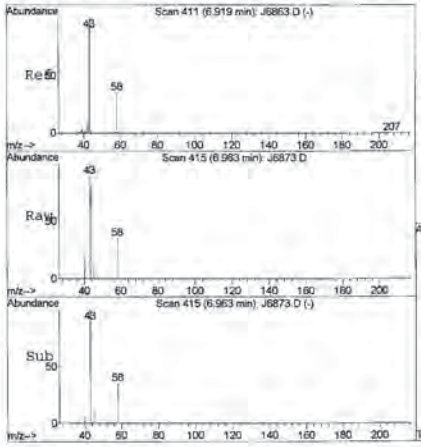


#11
Methylene chloride
Concen: 0.88 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6873.D
Acq: 15 Aug 2008 13:43

Tgt Ion: 84 Resp: 18089

Ion	Ratio	Lower	Upper
84	100		
49	121.0	81.6	141.6
86	68.9	34.5	94.5

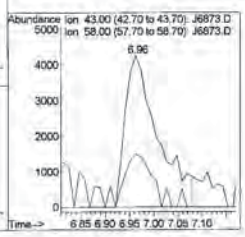




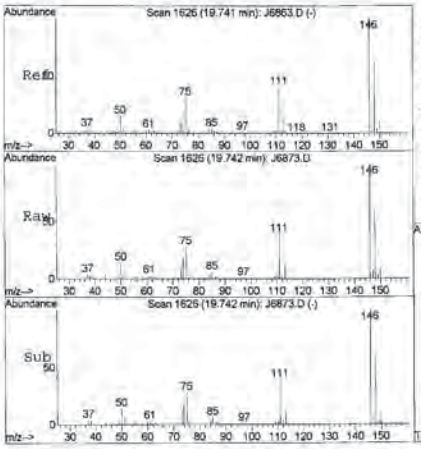
#12
Acetone
Concen: 4.42 ug/L
RT: 6.96 min Scan# 415
Delta R.T. 0.04 min
Lab File: J6873.D
Acq: 15 Aug 2008 13:43

Tgt Ion: 43 Resp: 20510

Ion	Ratio	Lower	Upper
43	100		
58	28.2	2.3	62.3



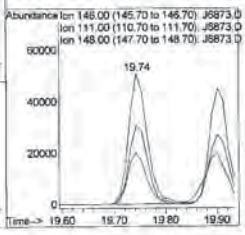
J6873.D J5300LMS.M Mon Aug 18 10:22:12 2008

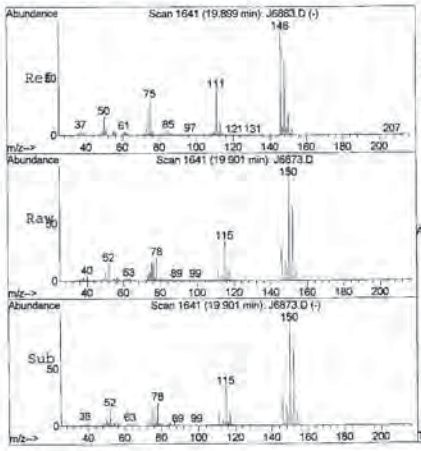


#51
1,3-Dichlorobenzene
Concen: 3.83 ug/L
RT: 19.74 min Scan# 1626
Delta R.T. 0.00 min
Lab File: J6873.D
Acq: 15 Aug 2008 13:43

Tgt Ion:146 Resp: 127839

Ion	Ratio	Lower	Upper
146	100		
111	39.0	8.8	68.8
148	60.8	33.8	93.8

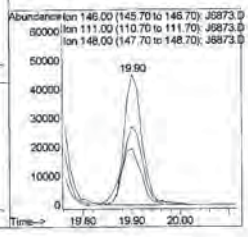




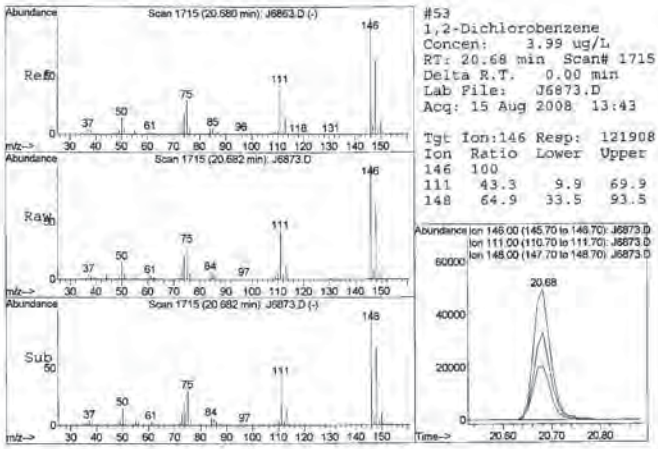
#52
1,4-Dichlorobenzene
Concen: 3.54 ug/L
RT: 19.90 min Scan# 1641
Delta R.T. 0.00 min
Lab File: J6873.D
Acq: 15 Aug 2008 13:43

Tgt Ion:146 Resp: 115073

Ion	Ratio	Lower	Upper
146	100		
111	51.8	8.7	68.7
148	64.4	33.3	93.3



J6873.D J5300LMS.M Mon Aug 18 10:22:13 2008



#53
1,2-Dichlorobenzene
Concen: 3.99 ug/L
RT: 20.68 min Scan# 1715
Delta R.T. 0.00 min
Lab File: J6873.D
Acq: 15 Aug 2008 13:43

Tgt Ion:146 Resp: 121908

Ion	Ratio	Lower	Upper
146	100		
111	43.3	9.9	69.9
148	64.9	33.5	93.5

J6873.D J5300LMS.M Mon Aug 18 10:22:13 2008 Pa

Tentatively Identified Compound (LSC) summary

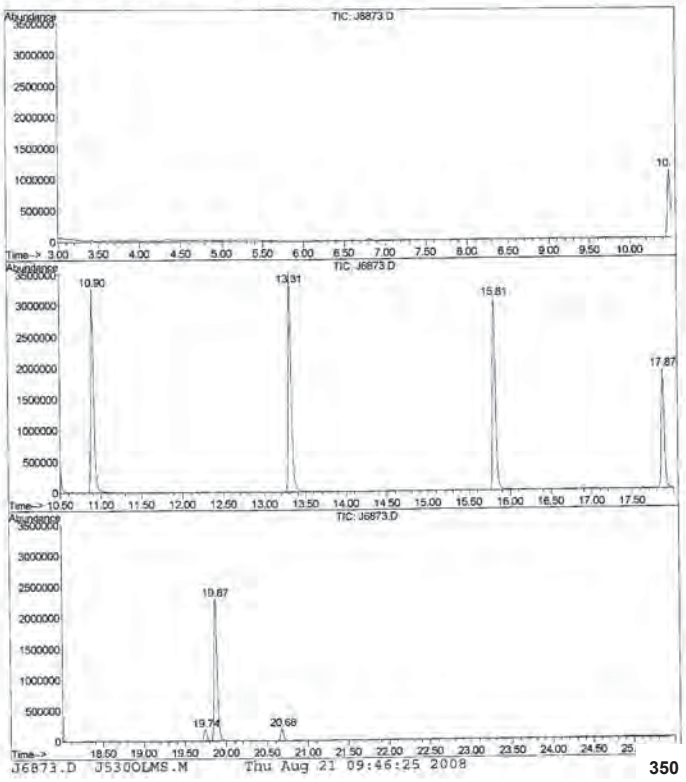
Operator ID: MSV Date Acquired: 15 Aug 2008 13:43
Data File: C:\HPCHEM\1\DATA\J6873.D
Name: 0808068-005A
Misc: SAMP,8260S7_OLM42, 5.2 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6873.D J5300LMS.M Thu Aug 21 09:46:25 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6873.D
Operator : MSV
Acquired : 15 Aug 2008 13:43 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808068-005A
Misc Info : SAMP,8260S7_OLM42, 5.2 g
Vial Number: 19
Quant File :J5300LMS.RES (RTE Integrator)



J6873.D J5300LMS.M Thu Aug 21 09:46:25 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808068-006A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***SB-2-Bot-2***
W Order:	0808068	**Collection Date:**	08/12/08 15:10
Matrix:	SOIL	**Date Received:**	08/12/08 17:52
Inst. ID:	MS03 10	**Sample Size:** 5.1 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:** 16.4	**BatchNo:** R14527
Revision:	08/20/08 8:34	**TestCode:** 8260S7_OLM42	**FileID:** 1-SAMP-J6869.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Chloromethane	ND		5.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Vinyl chloride	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Bromomethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Chloroethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Trichlorofluoromethane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,1-Dichloroethene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Acetone	ND		47	23	µg/Kg-dry	0.98	08/15/08 11:27
Carbon disulfide	0.59	J	2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Methyl acetate	ND		2.9	12	µg/Kg-dry	0.98	08/15/08 11:27
Methylene chloride	1.3	J	5.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
trans-1,2-Dichloroethene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Methyl tert-butyl ether	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
cis-1,2-Dichloroethene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
2-Butanone	ND		47	23	µg/Kg-dry	0.98	08/15/08 11:27
Chloroform	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1,1-Trichloroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Cyclohexane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Carbon tetrachloride	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Benzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Trichloroethene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Methylcyclohexane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dichloropropane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Bromodichloromethane	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
cis-1,3-Dichloropropene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
4-Methyl-2-pentanone	ND		5.9	2.3	µg/Kg-dry	0.98	08/15/08 11:27
Toluene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
trans-1,3-Dichloropropene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1,2-Trichloroethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Tetrachloroethene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits.

Print Date: 08/20/08 9:11 380716 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14527
Revision:	08/20/08 8:34	FileID:	1-SAMP-J6869.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 16.4; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.9	2.3	µg/Kg-dry	0.98	08/15/08 11:27
Dibromochloromethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dibromoethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Chlorobenzene	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Ethylbenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Xylenes (total)	ND		5.9	1.8	µg/Kg-dry	0.98	08/15/08 11:27
Styrene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Bromoform	ND		2.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
Isopropylbenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,1,2,2-Tetrachloroethane	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,3-Dichlorobenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,4-Dichlorobenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dichlorobenzene	ND		2.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
1,2-Dibromo-3-chloropropane	ND		5.9	1.2	µg/Kg-dry	0.98	08/15/08 11:27
1,2,4-Trichlorobenzene	ND		5.9	0.59	µg/Kg-dry	0.98	08/15/08 11:27
Surr: 1,2-Dichloroethane-d4	96.4		71-128	0.59	%REC	0.98	08/15/08 11:27
Surr: Toluene-d8	104		75-125	0.59	%REC	0.98	08/15/08 11:27
Surr: 4-Bromofluorobenzene	124		69-125	0.59	%REC	0.98	08/15/08 11:27

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:11 380716 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6869.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/15/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 8 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6869.D
Acq On : 15 Aug 2008 11:27
Sample : 0808068-006A
Misc : SAMP,8260S7_OLM42, 5.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 9:54 2008

Vial: 14
Operator: MSV
Inst : #3MS10
Multiplr: 0.98
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4384173	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1536709	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	873049	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1071276	48.20 ug/L	0.00
Spiked Amount 50.000			Recovery	= 96.40%	
37) Toluene-d8	13.31	98	3915467	51.89 ug/L	0.00
Spiked Amount 50.000			Recovery	= 103.78%	
49) Bromofluorobenzene	17.87	95	1135598	61.96 ug/L	0.00
Spiked Amount 50.000			Recovery	= 123.92%	
Target Compounds					Qvalue
9) Carbon disulfide	5.78	76	32328	0.50 ug/L	97
11) Methylene chloride	6.80	84	24511	1.08 ug/L	100
12) Acetone	6.95	43	27678	5.40 ug/L	97

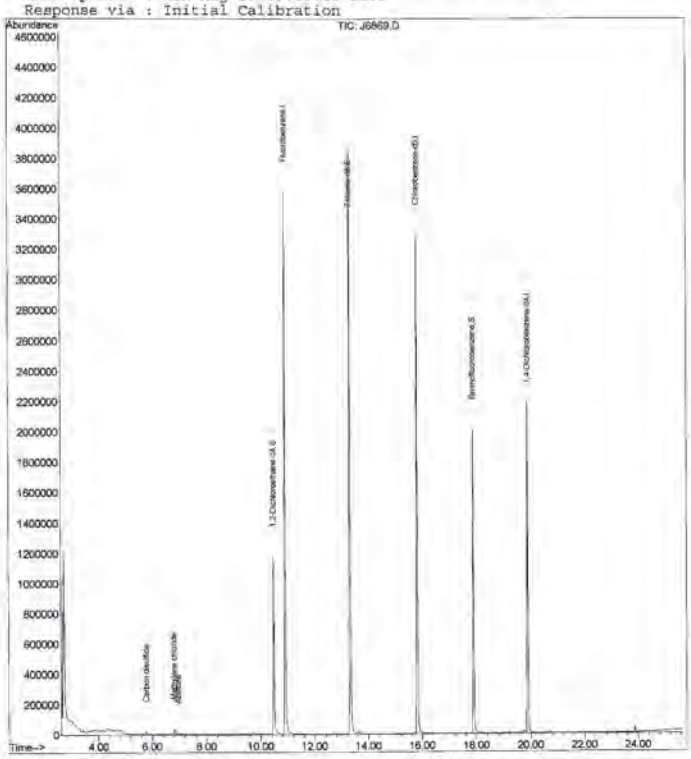
(#) = qualifier out of range (m) = manual integration
J6869.D J5300LMS.M Mon Aug 18 10:03:41 2008

Quantitation Report

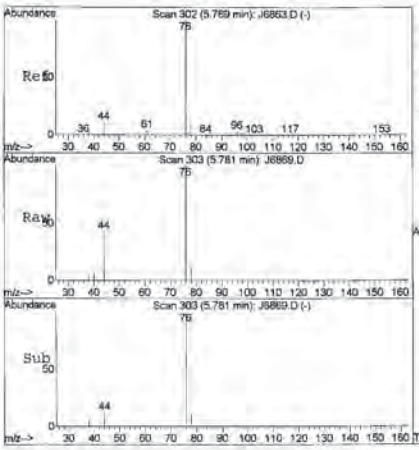
Data File : C:\HPCHEM\1\DATA\J6869.D
Acq On : 15 Aug 2008 11:27
Sample : 0808068-006A
Misc : SAMP,8260S7_OLM42, 5.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 9:54 2008

Vial: 14
Operator: MSV
Inst : #3MS10
Multiplr: 0.98
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration



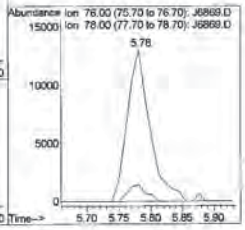
J6869.D J5300LMS.M Mon Aug 18 10:03:42 2008

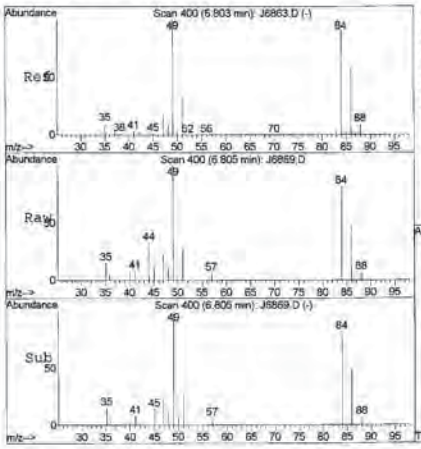


#9
Carbon disulfide
Concen: 0.50 ug/L
RT: 5.78 min Scan# 303
Delta R.T. 0.01 min
Lab File: J6869.D
Acq: 15 Aug 2008 11:27

Tgt Ion: 76 Resp: 32328

Ion	Ratio	Lower	Upper
76	100		
78	9.1	0.0	40.2

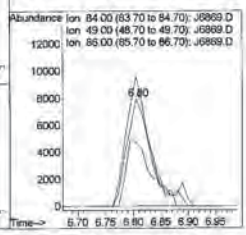




#11
Methylene chloride
Concen: 1.08 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6869.D
Acq: 15 Aug 2008 11:27

Tgt Ion: 84 Resp: 24511

Ion	Ratio	Lower	Upper
84	100		
49	112.1	81.6	141.6
86	64.4	34.5	94.5



Tentatively Identified Compound (LSC) summary

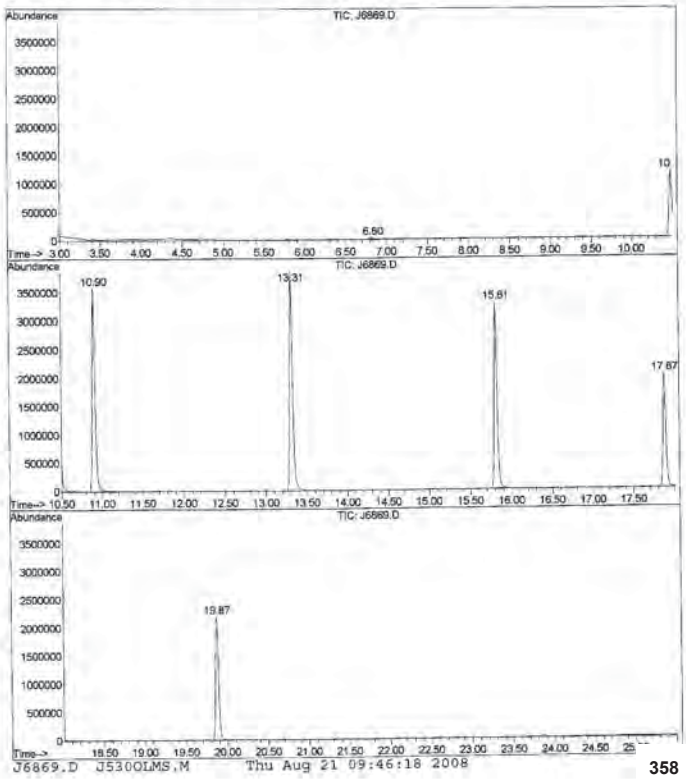
Operator ID: MSV Date Acquired: 15 Aug 2008 11:27
Data File: C:\HPCHEM\1\DATA\J6869.D
Name: 0808068-006A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6869.D J5300LMS.M Thu Aug 21 09:46:18 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6869.D
Operator : MSV
Acquired : 15 Aug 2008 11:27 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808068-006A
Misc Info : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 14
Quant File :J5300LMS.RES (RTE Integrator)



J6869.D J5300LMS.M Thu Aug 21 09:46:18 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808068-007A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***Trip Blank***
W Order:	0808068	**Collection Date:**	08/12/08 11:15
Matrix:	WATER Q	**Date Received:**	08/12/08 17:52
Inst. ID:	MS03 10	**Sample Size:** 5 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R14527
Revision:	08/21/08 15:24	**TestCode:** 8260S7 OLM42	**FileID:** 1-SAMP-J6876.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Chloromethane	ND		5.0	0.50	µg/L	1	08/15/08 15:25
Vinyl chloride	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Bromomethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Chloroethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
Trichlorofluoromethane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
1,1-Dichloroethene	ND		2.5	1.0	µg/L	1	08/15/08 15:25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Acetone	ND		40	20	µg/L	1	08/15/08 15:25
Carbon disulfide	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Methyl acetate	ND		2.5	10	µg/L	1	08/15/08 15:25
Methylene chloride	1.2	J	5.0	0.50	µg/L	1	08/15/08 15:25
trans-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Methyl tert-butyl ether	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1-Dichloroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
cis-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
2-Butanone	ND		40	20	µg/L	1	08/15/08 15:25
Chloroform	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1,1-Trichloroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Cyclohexane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Carbon tetrachloride	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Benzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dichloroethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Trichloroethene	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Methylcyclohexane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
1,2-Dichloropropane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Bromodichloromethane	ND		2.5	1.0	µg/L	1	08/15/08 15:25
cis-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
4-Methyl-2-pentanone	ND		5.0	2.0	µg/L	1	08/15/08 15:25
Toluene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
trans-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1,2-Trichloroethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Tetrachloroethene	ND		2.5	1.0	µg/L	1	08/15/08 15:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/21/08 15:25 380722 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	WATER Q	Date Received:	08/12/08 17:52
Inst. ID:	MS03 10	Sample Size: 5 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R14527
Revision:	08/21/08 15:24	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6876.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.0	2.0	µg/L	1	08/15/08 15:25
Dibromochloromethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dibromoethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Chlorobenzene	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Ethylbenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Xylenes (total)	ND		5.0	1.5	µg/L	1	08/15/08 15:25
Styrene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
Bromoform	ND		2.5	1.0	µg/L	1	08/15/08 15:25
Isopropylbenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,3-Dichlorobenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,4-Dichlorobenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dichlorobenzene	ND		2.5	0.50	µg/L	1	08/15/08 15:25
1,2-Dibromo-3-chloropropane	ND		5.0	1.0	µg/L	1	08/15/08 15:25
1,2,4-Trichlorobenzene	ND		5.0	0.50	µg/L	1	08/15/08 15:25
Surr: 1,2-Dichloroethane-d4	100		71-128	0.50	%REC	1	08/15/08 15:25
Surr: Toluene-d8	98.9		75-125	0.50	%REC	1	08/15/08 15:25
Surr: 4-Bromofluorobenzene	115		59-125	0.50	%REC	1	08/15/08 15:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/21/08 15:25 380722 Project Supervisor: Monika Santucci

Form I TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
Trip Blank

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBC-MS SAS No.: SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: J6876.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. Date Analyzed: 8/15/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 9 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6876.D Vial: 22
Acq On : 15 Aug 2008 15:25 Operator: MSV
Sample : 0808068-007A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0 mL Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 18 10:25 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

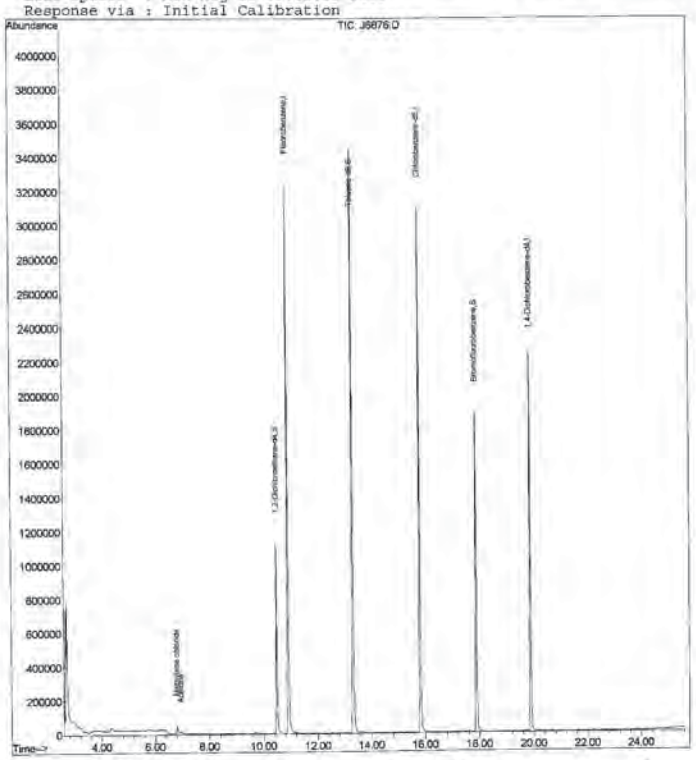
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3919047	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1452767	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	880827	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	994623	50.06 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.12%	
37) Toluene-d8	13.31	98	3528680	49.47 ug/L	0.00
Spiked Amount 50.000			Recovery	= 98.94%	
49) Bromofluorobenzene	17.87	95	1061367	57.39 ug/L	0.00
Spiked Amount 50.000			Recovery	= 114.78%	
Target Compounds					Qvalue
11) Methylene chloride	6.60	84	23745	1.17 ug/L	93
12) Acetone	6.95	43	33715m(M)	7.36 ug/L	

(#) = qualifier out of range (m) = manual integration
J6876.D J5300LMS.M Mon Aug 18 10:26:38 2008

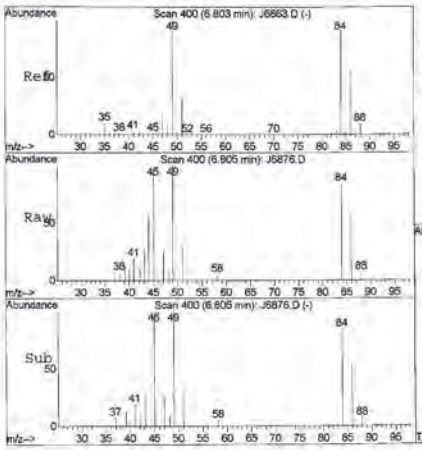
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6876.D Vial: 22
Acq On : 15 Aug 2008 15:25 Operator: MSV
Sample : 0808068-007A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0 mL Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 18 10:25 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration



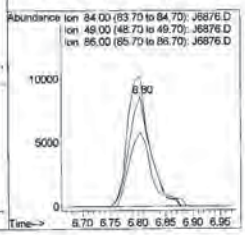
J6876.D J5300LMS.M Mon Aug 18 10:26:39 2008

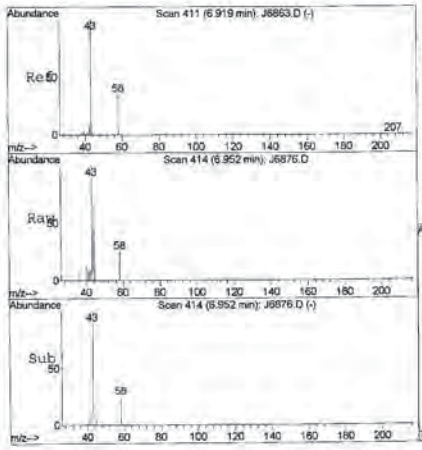


#11
Methylene chloride
Concen: 1.17 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6876.D
Acq: 15 Aug 2008 15:25

Tgt Ion: 84 Resp: 23745

Ion	Ratio	Lower	Upper
84	100		
49	119.9	81.6	141.6
86	67.9	34.5	94.5

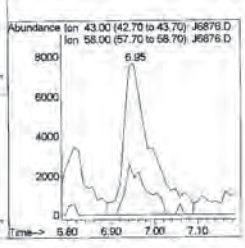




#12
Acetone
Concen: 7.36 ug/L m
RT: 6.95 min Scan# 414
Delta R.T. 0.03 min
Lab File: J6876.D
Acq: 15 Aug 2008 15:25

Tgt Ion: 43 Resp: 33715

Ion	Ratio	Lower	Upper
43	100		
58	26.3	2.3	62.3



J6876.D J5300LMS.M Mon Aug 18 10:26:39 2008

Tentatively Identified Compound (LSC) summary

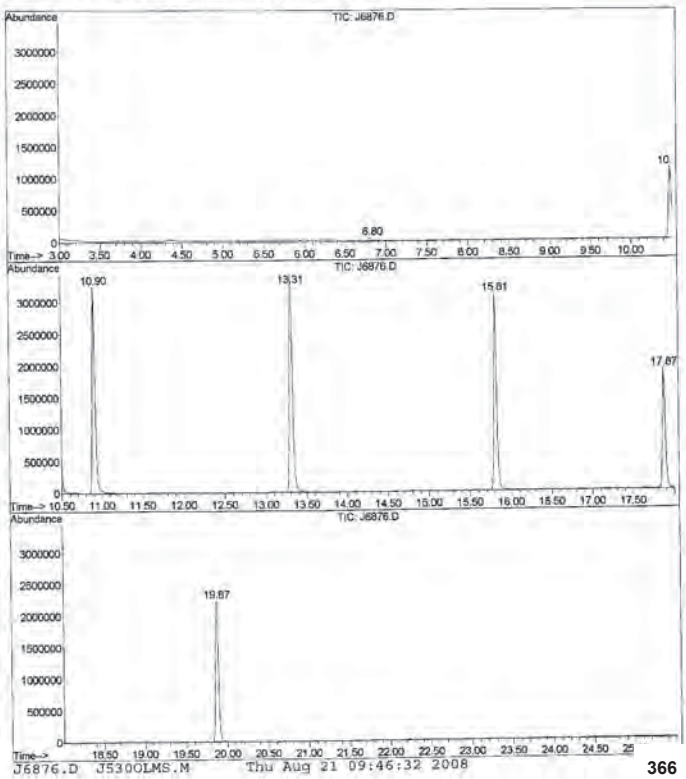
Operator ID: MSV Date Acquired: 15 Aug 2008 15:25
Data File: C:\HPCHEM\1\DATA\J6876.D
Name: 0808068-007A
Misc: SAMP,8260S7_OLM42, 5.0 mL
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6876.D J5300LMS.M Thu Aug 21 09:46:32 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6876.D
Operator : MSV
Acquired : 15 Aug 2008 15:25 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808068-007A
Misc Info : SAMP,8260S7_OLM42, 5.0 mL
Vial Number: 22
Quant File :J5300LMS.RES (RTE Integrator)



J6876.D J5300LMS.M Thu Aug 21 09:46:32 2008

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6922.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 17.9; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Acetone	ND		48	24	µg/Kg-dry	0.98	08/18/08 12:02
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/18/08 12:02
Methylene chloride	1.5	J	6.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/18/08 12:02
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 12:02
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380766 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10 Sample Size: 5.1 g	PrepDate:	
ColumnID:	Rtx-VMS %Moisture: 17.9	BatchNo:	R14529
Revision:	08/20/08 8:57 TestCode: 8260S7_OLM42	FileID:	1-SAMP-J6922.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 12:02
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/18/08 12:02
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,3-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,4-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 12:02
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 12:02
Surr: 1,2-Dichloroethane-d4	113		71-128	0.60	%REC	0.98	08/18/08 12:02
Surr: Toluene-d8	115		75-125	0.60	%REC	0.98	08/18/08 12:02
Surr: 4-Bromofluorobenzene	129	S	59-125	0.60	%REC	0.98	08/18/08 12:02

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380766 Project Supervisor: Monika Santucci

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: UST-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6922.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 1 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6922.D Vial: 50
Acq On : 18 Aug 2008 12:02 Operator: MSV
Sample : 0808076-001A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:35 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

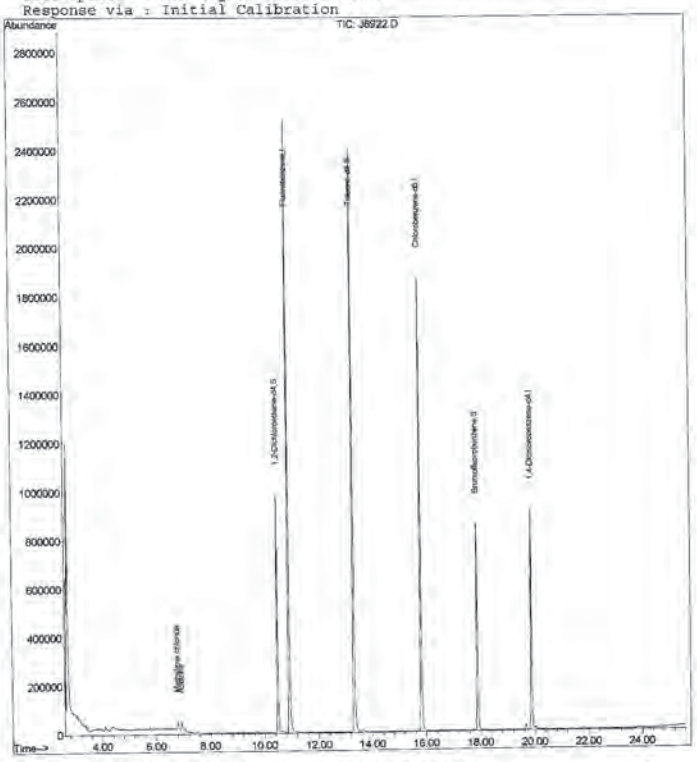
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3074071	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	898603	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	373213 #	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	878096	56.34 ug/L	0.00
Spiked Amount 50.000			Recovery	= 112.68%	
37) Toluene-d8	13.30	98	2538628	57.54 ug/L	0.00
Spiked Amount 50.000			Recovery	= 115.08%	
49) Bromofluorobenzene	17.87	95	505111	64.47 ug/L	0.00
Spiked Amount 50.000			Recovery	= 128.94% #	
Target Compounds					Qvalue
11) Methylene chloride	6.79	84	19950	1.25 ug/L	92
12) Acetone	6.93	43	56162	15.63 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6922.D J5300LMS.M Mon Aug 18 13:35:27 2008 Pa

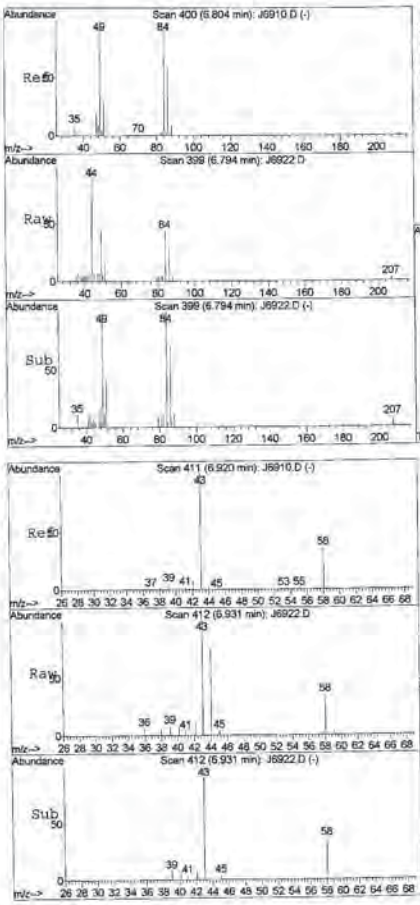
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6922.D Vial: 50
Acq On : 18 Aug 2008 12:02 Operator: MSV
Sample : 0808076-001A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:35 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



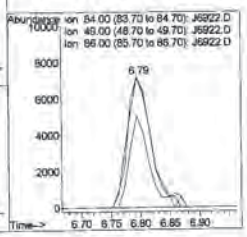
J6922.D J5300LMS.M Mon Aug 18 13:35:27 2008 Pa



#11
Methylene chloride
Concen: 1.25 ug/L
RT: 6.79 min Scan# 399
Delta R.T. -0.01 min
Lab File: J6922.D
Acq: 18 Aug 2008 12:02

Tgt Ion: 84 Resp: 19950

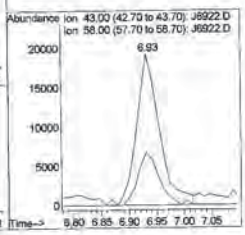
Ion	Ratio	Lower	Upper
84	100		
49	102.2	81.6	141.6
86	59.9	34.5	94.5



#12
Acetone
Concen: 15.63 ug/L
RT: 6.93 min Scan# 412
Delta R.T. 0.01 min
Lab File: J6922.D
Acq: 18 Aug 2008 12:02

Tgt Ion: 43 Resp: 56162

Ion	Ratio	Lower	Upper
43	100		
58	32.5	2.3	62.3



J6922.D J5300LMS.M Mon Aug 18 13:35:28 2008

Tentatively Identified Compound (LSC) summary

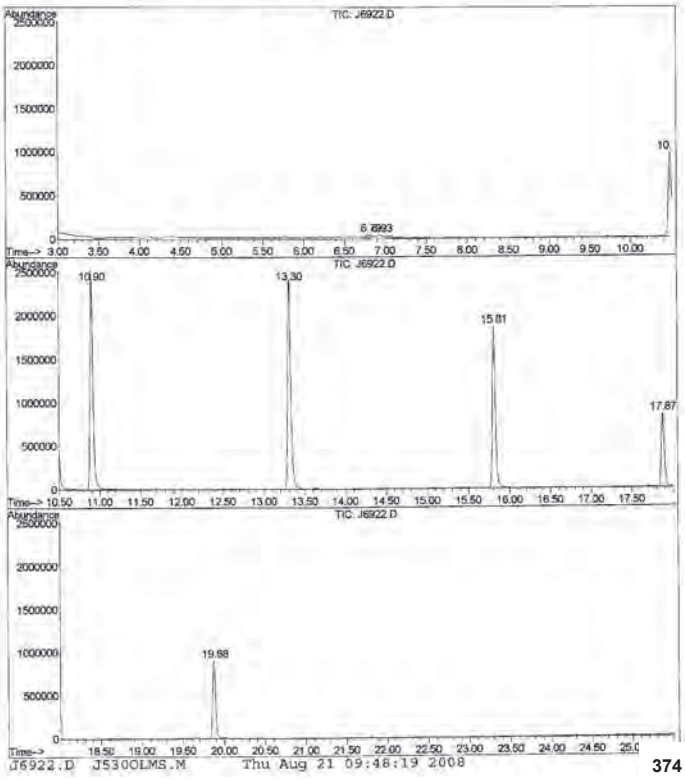
Operator ID: MSV Date Acquired: 18 Aug 2008 12:02
Data File: C:\HPCHEM\1\DATA\J6922.D
Name: 0808076-001A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 dF
Library Searched: C:\DATABASE\NBS75K.L

TIC	Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6922.D J5300LMS.M Thu Aug 21 09:48:19 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6922.D
Operator : MSV
Acquired : 18 Aug 2008 12:02 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808076-001A
Misc Info : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 50
Quant File :J5300LMS.RES (RTE Integrator)



J6922.D J5300LMS.M Thu Aug 21 09:48:19 2008

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.9	BatchNo: R14531
Revision:	08/20/08 9:10	TestCode: 8260S7 OLM42	FileID: 1-DL-J6962.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Chloromethane	ND		30	3.0	µg/Kg-dry	5	08/19/08 10:38
Vinyl chloride	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Bromomethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Chloroethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
Trichlorofluoromethane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
1,1-Dichloroethene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Acetone	ND		240	120	µg/Kg-dry	5	08/19/08 10:38
Carbon disulfide	3.6	J	15	3.0	µg/Kg-dry	5	08/19/08 10:38
Methyl acetate	ND		15	61	µg/Kg-dry	5	08/19/08 10:38
Methylene chloride	4.9	J	30	3.0	µg/Kg-dry	5	08/19/08 10:38
trans-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Methyl tert-butyl ether	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1-Dichloroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
cis-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
2-Butanone	ND		240	120	µg/Kg-dry	5	08/19/08 10:38
Chloroform	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1,1-Trichloroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Cyclohexane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Carbon tetrachloride	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Benzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dichloroethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Trichloroethene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Methylcyclohexane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
1,2-Dichloropropane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Bromodichloromethane	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
cis-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
4-Methyl-2-pentanone	ND		30	12	µg/Kg-dry	5	08/19/08 10:38
Toluene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
trans-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1,2-Trichloroethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Tetrachloroethene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. columns %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380805 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14531
Revision:	08/20/08 9:10	FileID:	1-DL-J6962.D
Col Type:			

Sample Size: 1 g; %Moisture: 17.9; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		30	12	µg/Kg-dry	5	08/19/08 10:38
Dibromochloromethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dibromoethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Chlorobenzene	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Ethylbenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Xylenes (total)	ND		30	9.1	µg/Kg-dry	5	08/19/08 10:38
Styrene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
Bromoform	ND		15	6.1	µg/Kg-dry	5	08/19/08 10:38
Isopropylbenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,1,2,2-Tetrachloroethane	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,3-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,4-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	5	08/19/08 10:38
1,2-Dibromo-3-chloropropane	ND		30	6.1	µg/Kg-dry	5	08/19/08 10:38
1,2,4-Trichlorobenzene	ND		30	3.0	µg/Kg-dry	5	08/19/08 10:38
Surr: 1,2-Dichloroethane-d4	109		71-128	3.0	%REC	5	08/19/08 10:38
Surr: Toluene-d8	106		75-125	3.0	%REC	5	08/19/08 10:38
Surr: 4-Bromofluorobenzene	128 S		59-125	3.0	%REC	5	08/19/08 10:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380805 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6962.D
Acq On : 19 Aug 2008 10:38
Sample : 0808076-001A
Misc : DL ,8260S7_OLM42, 1.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:48 2008

Vial: 19
Operator: MSV
Inst : #3MS10
Multiplr: 5.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3108195	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1057933	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	511926*	50.00 ug/L	0.01
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	857271	54.40 ug/L	0.00
Spiked Amount 50.000				Recovery = 108.80%	
37) Toluene-d8	13.30	98	2759450	53.12 ug/L	0.00
Spiked Amount 50.000				Recovery = 106.24%	
49) Bromofluorobenzene	17.87	95	693294	64.51 ug/L	0.00
Spiked Amount 50.000				Recovery = 129.02%*	
Target Compounds					Qvalue
9) Carbon disulfide	5.78	76	26679	0.59 ug/L	96
11) Methylene chloride	6.81	84	12893	0.80 ug/L	99
12) Acetone	6.95	43	17335m	4.77 ug/L	

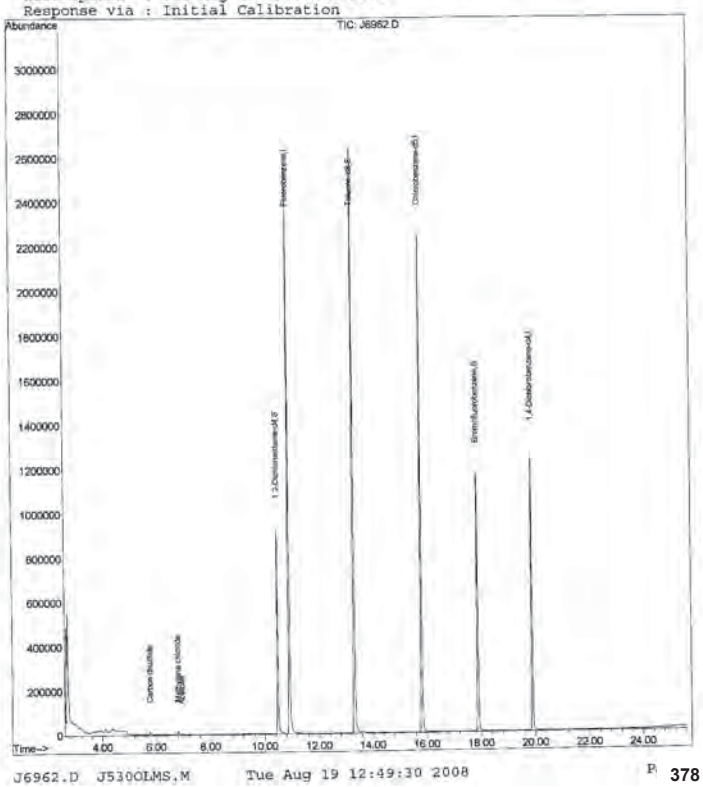
(#) = qualifier out of range (m) = manual integration
J6962.D J5300LMS.M Tue Aug 19 12:49:29 2008

Quantitation Report

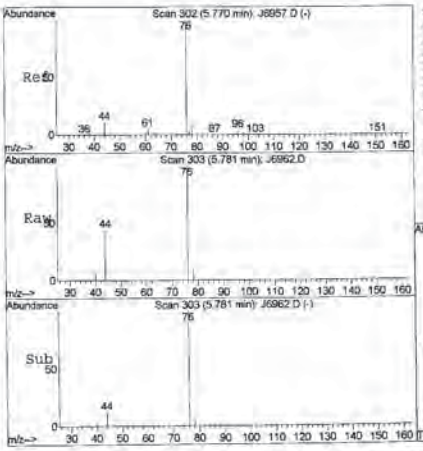
Data File : C:\HPCHEM\1\DATA\J6962.D
Acq On : 19 Aug 2008 10:38
Sample : 0808076-001A
Misc : DL ,8260S7_OLM42, 1.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:48 2008

Vial: 19
Operator: MSV
Inst : #3MS10
Multiplr: 5.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



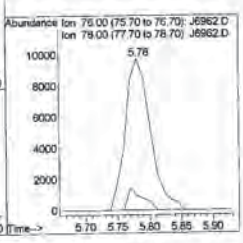
J6962.D J5300LMS.M Tue Aug 19 12:49:30 2008

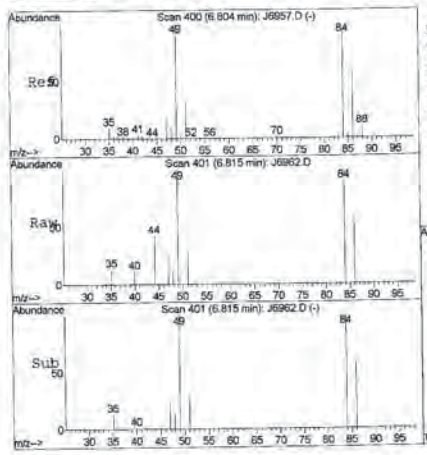


#9
Carbon disulfide
Concen: 0.59 ug/L
RT: 5.78 min Scan# 303
Delta R.T. 0.01 min
Lab File: J6962.D
Acq: 19 Aug 2008 10:38

Tgt Ion: 76 Resp: 26679

Ion	Ratio	Lower	Upper
76	100		
78	8.8	0.0	40.2

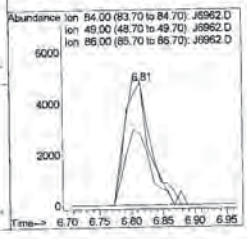




#11
Methylene chloride
Concen: 0.80 ug/L
RT: 6.81 min Scan# 401
Delta R.T. 0.01 min
Lab File: J6962.D
Acq: 19 Aug 2008 10:38

Tgt Ion: 84 Resp: 12893

Ion	Ratio	Lower	Upper
84	100		
49	110.6	81.6	141.6
86	63.2	34.5	94.5



J6962.D J5300LMS.M Tue Aug 19 12:49:30 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 14.7	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6923.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Chloromethane	ND		5.7	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Vinyl chloride	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Bromomethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Chloroethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Trichlorofluoromethane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,1-Dichloroethene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Acetone	ND		46	23	µg/Kg-dry	0.98	08/18/08 12:36
Carbon disulfide	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Methyl acetate	ND		2.9	11	µg/Kg-dry	0.98	08/18/08 12:36
Methylene chloride	0.92	J	5.7	0.57	µg/Kg-dry	0.98	08/18/08 12:36
trans-1,2-Dichloroethene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Methyl tert-butyl ether	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1-Dichloroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
cis-1,2-Dichloroethene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
2-Butanone	ND		46	23	µg/Kg-dry	0.98	08/18/08 12:36
Chloroform	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1,1-Trichloroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Cyclohexane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Carbon tetrachloride	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Benzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dichloroethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Trichloroethene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Methylcyclohexane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dichloropropane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Bromodichloromethane	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
cis-1,3-Dichloropropene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
4-Methyl-2-pentanone	ND		5.7	2.3	µg/Kg-dry	0.98	08/18/08 12:36
Toluene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
trans-1,3-Dichloropropene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1,2-Trichloroethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Tetrachloroethene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380767 Project Supervisor: Monika Santucci

380

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 14.7	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6923.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.7	2.3	µg/Kg-dry	0.98	08/18/08 12:36
Dibromochloromethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dibromoethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Chlorobenzene	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Ethylbenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Xylenes (total)	ND		5.7	1.7	µg/Kg-dry	0.98	08/18/08 12:36
Styrene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Bromoform	ND		2.9	1.1	µg/Kg-dry	0.98	08/18/08 12:36
Isopropylbenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,1,2,2-Tetrachloroethane	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,3-Dichlorobenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,4-Dichlorobenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dichlorobenzene	ND		2.9	0.57	µg/Kg-dry	0.98	08/18/08 12:36
1,2-Dibromo-3-chloropropane	ND		5.7	1.1	µg/Kg-dry	0.98	08/18/08 12:36
1,2,4-Trichlorobenzene	ND		5.7	0.57	µg/Kg-dry	0.98	08/18/08 12:36
Surr: 1,2-Dichloroethane-d4	104		71-128	0.57	%REC	0.98	08/18/08 12:36
Surr: Toluene-d8	99.3		75-125	0.57	%REC	0.98	08/18/08 12:36
Surr: 4-Bromofluorobenzene	112		58-125	0.57	%REC	0.98	08/18/08 12:36

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380767 Project Supervisor: Monika Santucci

381

Form I TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-North

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6923.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 15 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 2 SW8260B

382

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6923.D Vial: 51
Acq On : 18 Aug 2008 12:36 Operator: MSV
Sample : 0808076-002A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:36 2008 Quant Results File: J530OLMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J530OLMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3477817	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1346302	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	815792	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	914571	51.87 ug/L	0.00
Spiked Amount 50.000			Recovery	= 103.74%	
37) Toluene-d8	13.30	98	3280901	49.63 ug/L	0.00
Spiked Amount 50.000			Recovery	= 99.26%	
49) Bromofluorobenzene	17.97	95	958400	55.96 ug/L	0.00
Spiked Amount 50.000			Recovery	= 111.92%	
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	14473	0.80 ug/L	91
12) Acetone	6.95	43	52474	12.91 ug/L	94

(#) = qualifier out of range (m) = manual integration
J6923.D J530OLMS.M Mon Aug 18 13:37:28 2008 P

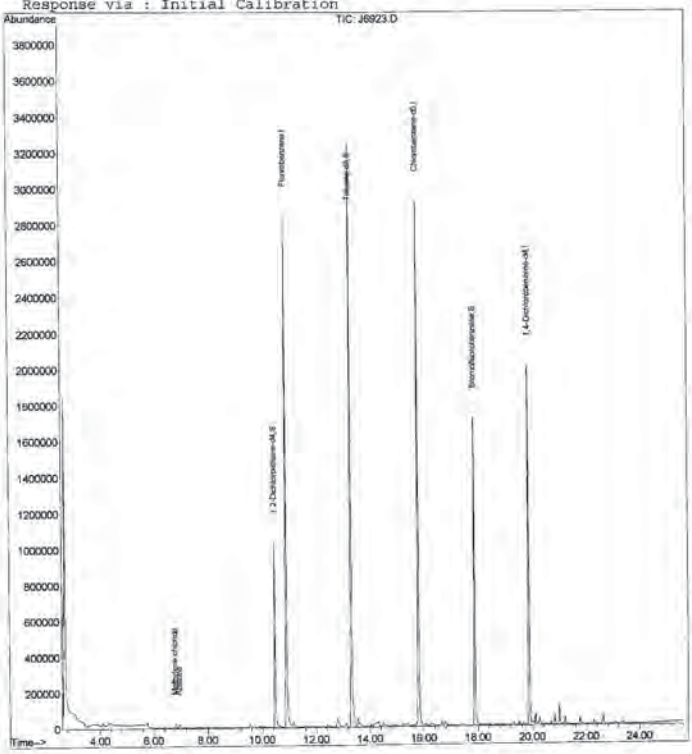
383

Quantitation Report

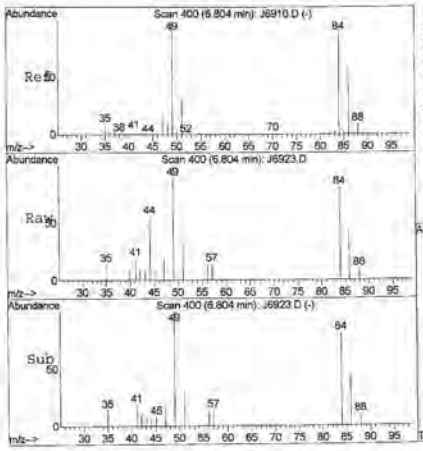
Data File : C:\HPCHEM\1\DATA\J6923.D
Acq On : 18 Aug 2008 12:36
Sample : 0808076-002A
Misc : SAMP,8260S7_OLM42, 5.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:36 2008

Vial: 51
Operator: MSV
Inst : #3MS10
Multiplr: 0.98
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



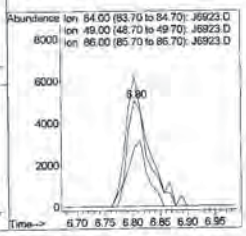
J6923.D J5300LMS.M Mon Aug 18 13:37:29 2008 P: 384

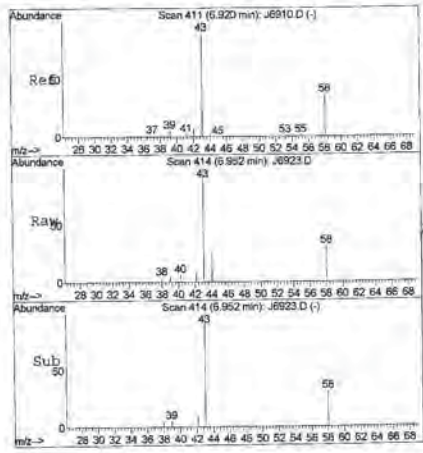


#11
Methylene chloride
Concen: 0.80 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6923.D
Acq: 18 Aug 2008 12:36

Tgt Ion: 84 Resp: 14473

Ion	Ratio	Lower	Upper
84	100		
49	117.3	81.6	141.6
86	52.8	34.5	94.5

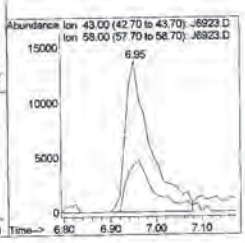




#12
Acetone
Concen: 12.91 ug/L
RT: 6.95 min Scan# 414
Delta R.T. 0.03 min
Lab File: J6923.D
Acq: 18 Aug 2008 12:36

Tgt Ion: 43 Resp: 52474

Ion	Ratio	Lower	Upper
43	100		
58	35.8	2.3	62.3



J6923.D J5300LMS.M Mon Aug 18 13:37:29 2008 P: 385

Tentatively Identified Compound (LSC) summary

Operator ID: MSV Date Acquired: 18 Aug 2008 12:36
Data File: C:\HPCHEM\1\DATA\J6923.D
Name: 0808076-002A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

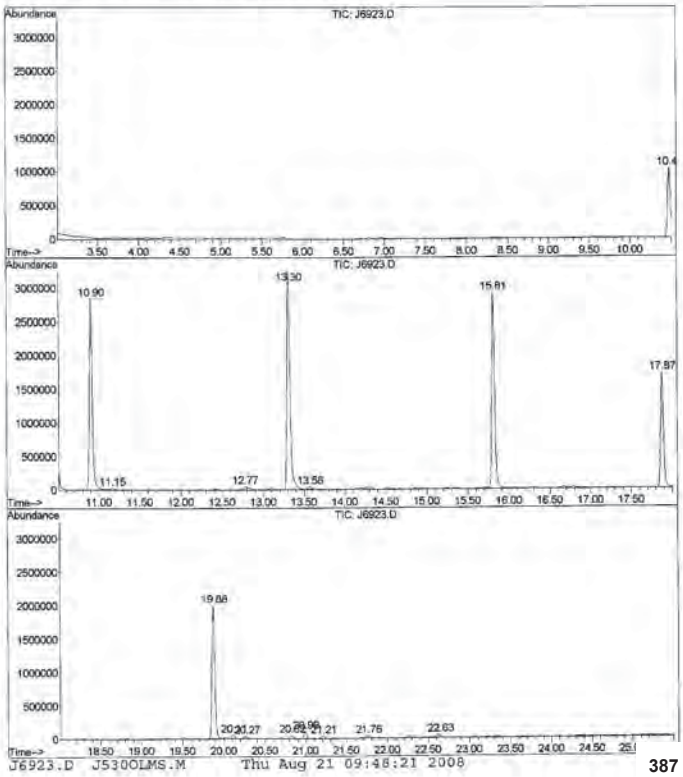
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6923.D J5300LMS.M Thu Aug 21 09:48:22 2008

386

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6923.D
Operator : MSV
Acquired : 18 Aug 2008 12:36 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808076-002A
Misc Info : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 51
Quant File :J5300LMS.RES (RTE Integrator)



J6923.D J5300LMS.M Thu Aug 21 09:48:21 2008

387

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10 Sample Size: 5.3 g	PrepDate:	
ColumnID:	Rtx-VMS %Moisture: 16.7	BatchNo:	R14529
Revision:	08/20/08 8:57 TestCode: 8260S7_OLM42	FileID:	1-SAMP-J6924.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Chloromethane	ND		5.6	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Vinyl chloride	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Bromomethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Chloroethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Trichlorofluoromethane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,1-Dichloroethene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Acetone	ND		45	23	µg/Kg-dry	0.94	08/18/08 13:10
Carbon disulfide	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Methyl acetate	ND		2.8	11	µg/Kg-dry	0.94	08/18/08 13:10
Methylene chloride	0.85	J	5.6	0.56	µg/Kg-dry	0.94	08/18/08 13:10
trans-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Methyl tert-butyl ether	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
cis-1,2-Dichloroethene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
2-Butanone	ND		45	23	µg/Kg-dry	0.94	08/18/08 13:10
Chloroform	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1,1-Trichloroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Cyclohexane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Carbon tetrachloride	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Benzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dichloroethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Trichloroethene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Methylcyclohexane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dichloropropane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Bromodichloromethane	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
cis-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
4-Methyl-2-pentanone	ND		5.6	2.3	µg/Kg-dry	0.94	08/18/08 13:10
Toluene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
trans-1,3-Dichloropropene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1,2-Trichloroethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Tetrachloroethene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380768 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10 Sample Size: 5.3 g	PrepDate:	
ColumnID:	Rtx-VMS %Moisture: 16.7	BatchNo:	R14529
Revision:	08/20/08 8:57 TestCode: 8260S7_OLM42	FileID:	1-SAMP-J6924.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.6	2.3	µg/Kg-dry	0.94	08/18/08 13:10
Dibromochloromethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dibromoethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Chlorobenzene	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Ethylbenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Xylenes (total)	ND		5.6	1.7	µg/Kg-dry	0.94	08/18/08 13:10
Styrene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Bromoform	ND		2.8	1.1	µg/Kg-dry	0.94	08/18/08 13:10
Isopropylbenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,1,2,2-Tetrachloroethane	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,3-Dichlorobenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,4-Dichlorobenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dichlorobenzene	ND		2.8	0.56	µg/Kg-dry	0.94	08/18/08 13:10
1,2-Dibromo-3-chloropropane	ND		5.6	1.1	µg/Kg-dry	0.94	08/18/08 13:10
1,2,4-Trichlorobenzene	ND		5.6	0.56	µg/Kg-dry	0.94	08/18/08 13:10
Surr: 1,2-Dichloroethane-d4	109		71-126	0.56	%REC	0.94	08/18/08 13:10
Surr: Toluene-d8	114		75-125	0.56	%REC	0.94	08/18/08 13:10
Surr: 4-Bromofluorobenzene	132	S	59-125	0.56	%REC	0.94	08/18/08 13:10

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380768 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: 08G-MS SAS No.: _____ SDG No.: 0808080

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6924.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 17 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.94

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 3 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6924.D Vial: 52
Acq On : 18 Aug 2008 13:10 Operator: MSV
Sample : 0808076-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.3 g Multiplr: 0.94
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:38 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.90	96	3253976	50.00	ug/L	0.00
36) Chlorobenzene-d5	15.81	82	986173	50.00	ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	424754 *	50.00	ug/L	0.00
System Monitoring Compounds						
24) 1,2-Dichloroethane-d4	10.47	65	895959	54.31	ug/L	0.00
Spiked Amount 50.000			Recovery	=	108.62%	
37) Toluene-d8	13.31	98	2761083	57.02	ug/L	0.00
Spiked Amount 50.000			Recovery	=	114.04%	
49) Bromofluorobenzene	17.88	95	586291	65.75	ug/L	0.00
Spiked Amount 50.000			Recovery	=	131.50% *	
Target Compounds						Qvalue
11) Methylene chloride	6.81	84	12703	0.75	ug/L	92
12) Acetone	6.94	43	26505m (M)	6.97	ug/L	

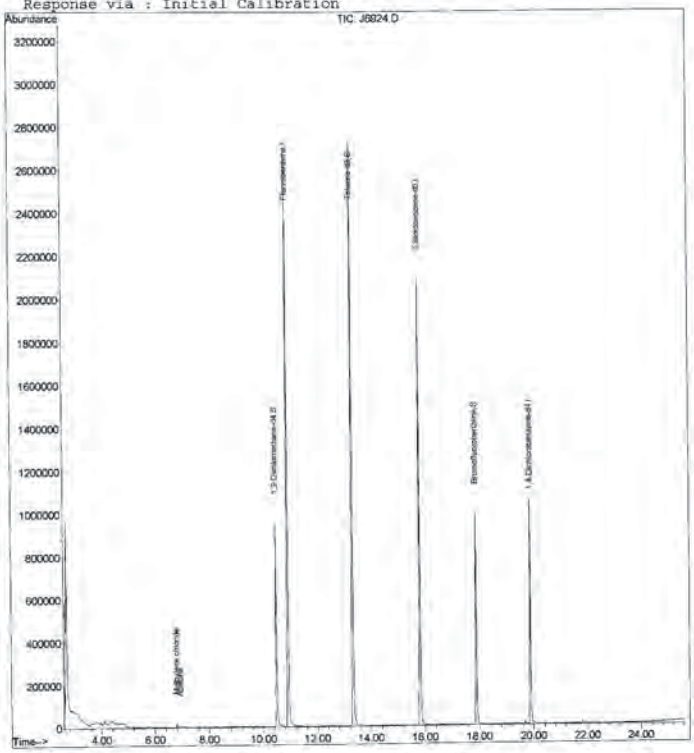
(#) = qualifier out of range (m) = manual integration
J6924.D J5300LMS.M Mon Aug 18 13:38:21 2008 P

Quantitation Report

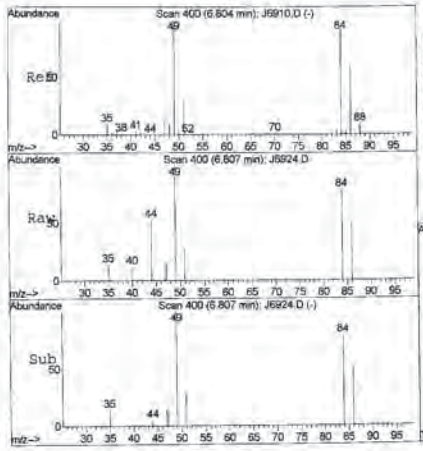
Data File : C:\HPCHEM\1\DATA\J6924.D
Acq On : 18 Aug 2008 13:10
Sample : 0808076-003A
Misc : SAMP,8260S7_OLM42, 5.3 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:38 2008

Vial: 52
Operator: MSV
Inst : #3MS10
Multiplr: 0.94
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



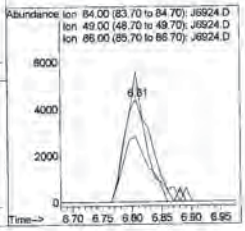
J6924.D J5300LMS.M Mon Aug 18 13:38:22 2008

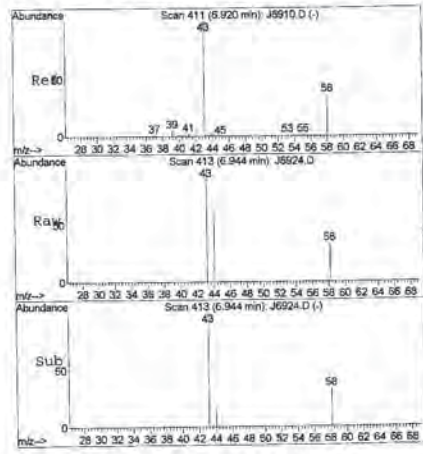


#11
Methylene chloride
Concen: 0.75 ug/L
RT: 6.81 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6924.D
Acq: 18 Aug 2008 13:10

Tgt Ion: 84 Resp: 12703

Ion	Ratio	Lower	Upper
84	100		
49	122.9	81.6	141.6
86	67.0	34.5	94.5

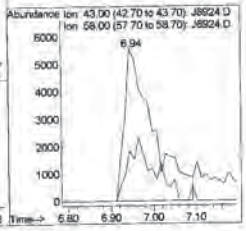




#12
Acetone
Concen: 6.97 ug/L m
RT: 6.94 min Scan# 413
Delta R.T. 0.02 min
Lab File: J6924.D
Acq: 18 Aug 2008 13:10

Tgt Ion: 43 Resp: 26505

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	52.3#



J6924.D J5300LMS.M Mon Aug 18 13:38:22 2008

Tentatively Identified Compound (LSC) summary

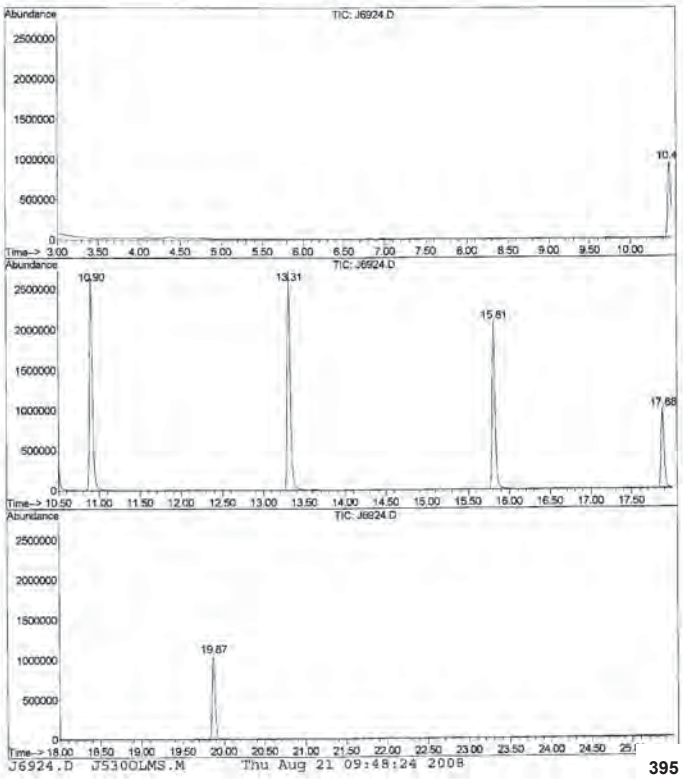
Operator ID: MSV Date Acquired: 18 Aug 2008 13:10
Data File: C:\HPCHEM\1\DATA\J6924.D
Name: 0808076-003A
Misc: SAMP,8260S7_OLM42, 5.3 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6924.D J5300LMS.M Thu Aug 21 09:48:24 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6924.D
Operator : MSV
Acquired : 18 Aug 2008 13:10 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808076-003A
Misc Info : SAMP,8260S7_OLM42, 5.3 g
Vial Number: 52
Quant File :J5300LMS.RES (RTE Integrator)



J6924.D J5300LMS.M Thu Aug 21 09:48:24 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14531
Revision:	08/20/08 9:10	FileID:	1-DL-J6963.D
Col Type:			

Sample Size: 1.1 g %Moisture: 16.7 TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Chloromethane	ND		27	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Vinyl chloride	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Bromomethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Chloroethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Trichlorofluoromethane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,1-Dichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Acetone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:12
Carbon disulfide	2.9	J	14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Methyl acetate	ND		14	55	µg/Kg-dry	4.54	08/19/08 11:12
Methylene chloride	3.9	J	27	2.7	µg/Kg-dry	4.54	08/19/08 11:12
trans-1,2-Dichloroethene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Methyl tert-butyl ether	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
cis-1,2-Dichloroethene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
2-Butanone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:12
Chloroform	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1,1-Trichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Cyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Carbon tetrachloride	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Benzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dichloroethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Trichloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Methylcyclohexane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dichloropropane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Bromodichloromethane	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
cis-1,3-Dichloropropene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
4-Methyl-2-pentanone	ND		27	11	µg/Kg-dry	4.54	08/19/08 11:12
Toluene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
trans-1,3-Dichloropropene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1,2-Trichloroethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Tetrachloroethene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380806 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14531
Revision:	08/20/08 9:10	FileID:	1-DL-J6963.D
Col Type:			

Sample Size: 1.1 g %Moisture: 16.7 TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		27	11	µg/Kg-dry	4.54	08/19/08 11:12
Dibromochloromethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dibromoethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Chlorobenzene	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Ethylbenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Xylenes (total)	ND		27	8.2	µg/Kg-dry	4.54	08/19/08 11:12
Styrene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Bromoform	ND		14	5.5	µg/Kg-dry	4.54	08/19/08 11:12
Isopropylbenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,1,2,2-Tetrachloroethane	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,3-Dichlorobenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,4-Dichlorobenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dichlorobenzene	ND		14	2.7	µg/Kg-dry	4.54	08/19/08 11:12
1,2-Dibromo-3-chloropropane	ND		27	5.5	µg/Kg-dry	4.54	08/19/08 11:12
1,2,4-Trichlorobenzene	ND		27	2.7	µg/Kg-dry	4.54	08/19/08 11:12
Surr: 1,2-Dichloroethane-d4	112		71-128	2.7	%REC	4.54	08/19/08 11:12
Surr: Toluene-d8	104		75-125	2.7	%REC	4.54	08/19/08 11:12
Surr: 4-Bromofluorobenzene	122		59-125	2.7	%REC	4.54	08/19/08 11:12

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380806 Project Supervisor: Monika Santucci


```
                    Quantitation Report      (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6963.D                Vial: 20
Acq On    : 19 Aug 2008  11:12                   Operator: MSV
Sample    : 0808076-003A                            Inst   : #3MS10
Misc      : DL  ,8260S7_OLM42, 1.1 g             Multiplr: 4.54
MS Integration Params: RTEINT.P
 Quant Time: Aug 19 12:50 2008              Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

 Internal Standards                  R.T.  QIon  Response   Conc Units Dev(Min)
 ---------------------------------------------------------------------------
   1) Fluorobenzene                  10.90   96  3121246    50.00 ug/L    0.00
  36) Chlorobenzene-d5               15.81   62  1089879    50.00 ug/L    0.00
  47) 1,4-Dichlorobenzene-d4         19.88  152   560909*   50.00 ug/L    0.01

 System Monitoring Compounds
  24) 1,2-Dichloroethane-d4          10.48   65   863744    55.85 ug/L    0.00
    Spiked Amount      50.000                   Recovery    =  111.70%
  37) Toluene-d8                     13.31   98  2775120    51.86 ug/L    0.00
    Spiked Amount      50.000                   Recovery    =  103.72%
  49) Bromofluorobenzene             17.87   95   716628    60.86 ug/L    0.00
    Spiked Amount      50.000                   Recovery    =  121.72%

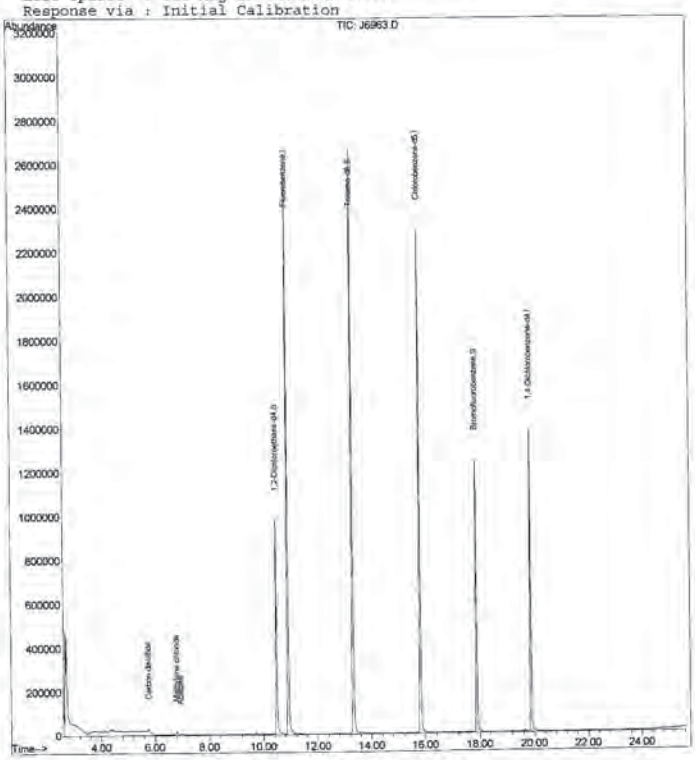
 Target Compounds                                             Qvalue
   9) Carbon disulfide               5.77   76    24814     0.54 ug/L      98
  11) Methylene chloride             6.80   84    11620     0.72 ug/L      94
  12) Acetone                        6.95   43    17392     4.77 ug/L      97

 ---------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J6963.D  J5300LMS.M       Tue Aug 19 13:39:45 2008                          P
```

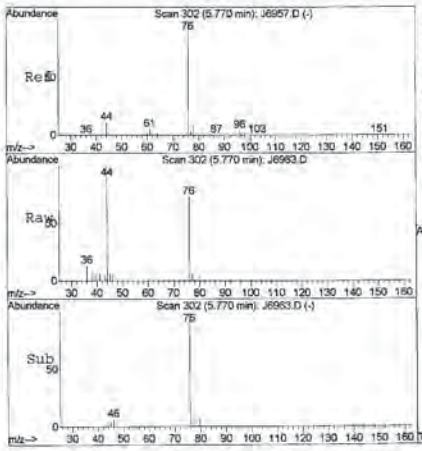

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6963.D Vial: 20
Acq On : 19 Aug 2008 11:12 Operator: MSV
Sample : 0808076-003A Inst : #3MS10
Misc : DL ,8260S7_OLM42, 1.1 g Multiplr: 4.54
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:50 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



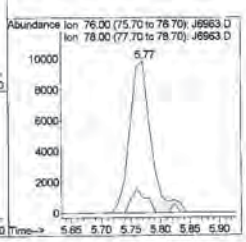
J6963.D J5300LMS.M Tue Aug 19 13:39:45 2008 P

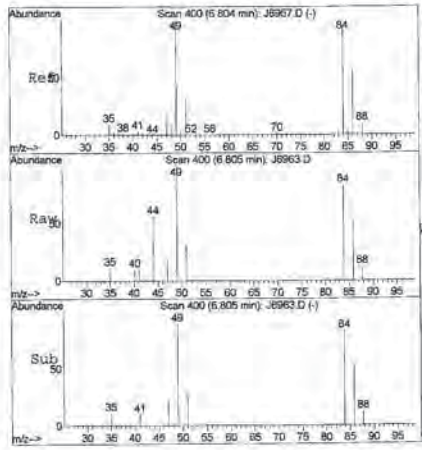


#9
Carbon disulfide
Concen: 0.54 ug/L
RT: 5.77 min Scan# 302
Delta R.T. 0.00 min
Lab File: J6963.D
Acq: 19 Aug 2008 11:12

Tgt Ion: 76 Resp: 24814

Ion	Ratio	Lower	Upper
76	100		
78	10.9	0.0	40.2

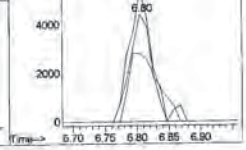




#11
Methylene chloride
Concen: 0.72 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6963.D
Acq: 19 Aug 2008 11:12

Tgt Ion: 84 Resp: 11620

Ion	Ratio	Lower	Upper
84	100		
49	120.0	81.6	141.6
86	66.3	34.5	94.5



J6963.D J530OLMS.M Tue Aug 19 13:39:46 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5 g		
ColumnID:	Rtx-VMS	%Moisture:	15.4
BatchNo:	R14529		
Revision:	08/20/08 8:57	TestCode:	8260S7 OLM42
FileID:	1-SAMP-J6925.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Chloromethane	ND		5.9	0.59	µg/Kg-dry	1	08/18/08 13:44
Vinyl chloride	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Bromomethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Chloroethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
Trichlorofluoromethane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Acetone	ND		47	24	µg/Kg-dry	1	08/18/08 13:44
Carbon disulfide	1.3	J	3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Methyl acetate	ND		3.0	12	µg/Kg-dry	1	08/18/08 13:44
Methylene chloride	1.0	J	5.9	0.59	µg/Kg-dry	1	08/18/08 13:44
trans-1,2-Dichloroethene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Methyl tert-butyl ether	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
cis-1,2-Dichloroethene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
2-Butanone	ND		47	24	µg/Kg-dry	1	08/18/08 13:44
Chloroform	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Benzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
cis-1,3-Dichloropropene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
4-Methyl-2-pentanone	ND		5.9	2.4	µg/Kg-dry	1	08/18/08 13:44
Toluene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
trans-1,3-Dichloropropene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1,2-Trichloroethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380769 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5 g		
ColumnID:	Rtx-VMS	%Moisture:	15.4
BatchNo:	R14529		
Revision:	08/20/08 8:57	TestCode:	8260S7 OLM42
FileID:	1-SAMP-J6925.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.9	2.4	µg/Kg-dry	1	08/18/08 13:44
Dibromochloromethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dibromoethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Ethylbenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Xylenes (total)	ND		5.9	1.8	µg/Kg-dry	1	08/18/08 13:44
Styrene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
Bromoform	ND		3.0	1.2	µg/Kg-dry	1	08/18/08 13:44
Isopropylbenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,1,2,2-Tetrachloroethane	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,3-Dichlorobenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,4-Dichlorobenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dichlorobenzene	ND		3.0	0.59	µg/Kg-dry	1	08/18/08 13:44
1,2-Dibromo-3-chloropropane	ND		5.9	1.2	µg/Kg-dry	1	08/18/08 13:44
1,2,4-Trichlorobenzene	ND		5.9	0.59	µg/Kg-dry	1	08/18/08 13:44
Surr: 1,2-Dichloroethane-d4	107		71-128	0.59	%REC	1	08/18/08 13:44
Surr: Toluene-d8	100		75-125	0.59	%REC	1	08/18/08 13:44
Surr: 4-Bromofluorobenzene	108		59-125	0.59	%REC	1	08/18/08 13:44

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380769 Project Supervisor: Monika Santucci

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-East

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068C

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6925.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 15 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6925.D
Acq On : 18 Aug 2008 13:44
Sample : 0808076-004A
Misc : SAMP,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 5:06 2008

Vial: 53
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3332893	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1234147	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	754774	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	907375	53.70 ug/L	0.00
Spiked Amount 50.000			Recovery = 107.40%		
37) Toluene-d8	13.31	98	3044275	50.24 ug/L	0.01
Spiked Amount 50.000			Recovery = 100.48%		
49) Bromofluorobenzene	17.87	95	857868	54.14 ug/L	0.00
Spiked Amount 50.000			Recovery = 108.28%		
Target Compounds					Qvalue
9) Carbon disulfide	5.77	76	52162	1.07 ug/L	97
11) Methylene chloride	6.80	84	14675	0.85 ug/L	96
12) Acetone	6.95	43	38683	9.93 ug/L	95

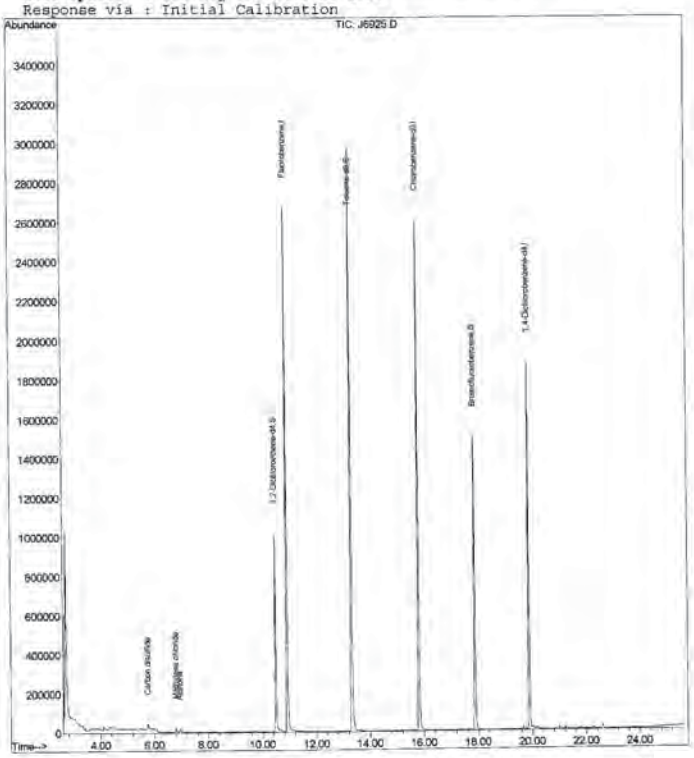
(#) = qualifier out of range (m) = manual integration
J6925.D J5300LMS.M Tue Aug 19 05:06:23 2008

Quantitation Report

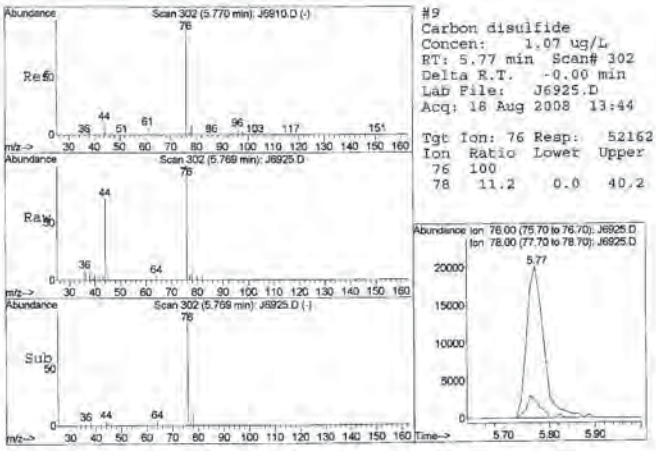
Data File : C:\HPCHEM\1\DATA\J6925.D
Acq On : 18 Aug 2008 13:44
Sample : 0808076-004A
Misc : SAMP,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 5:06 2008

Vial: 53
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 05:05:23 2008
Response via : Initial Calibration



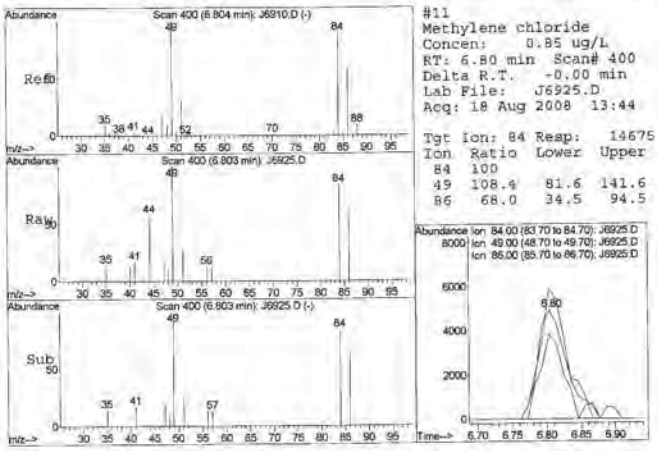
J6925.D J5300LMS.M Tue Aug 19 05:06:24 2008



#9
Carbon disulfide
Concen: 1.07 ug/L
RT: 5.77 min Scan# 302
Delta R.T. -0.00 min
Lab File: J6925.D
Acq: 18 Aug 2008 13:44

Tgt Ion: 76 Resp: 52162

Ion	Ratio	Lower	Upper
76	100		
78	11.2	0.0	40.2



#11
Methylene chloride
Concen: 0.85 ug/L
RT: 6.80 min Scan# 400
Delta R.T. -0.00 min
Lab File: J6925.D
Acq: 18 Aug 2008 13:44

Tgt Ion: 84 Resp: 14675

Ion	Ratio	Lower	Upper
84	100		
49	108.4	81.6	141.6
86	68.0	34.5	94.5

J6925.D J5300LMS.M Tue Aug 19 05:06:24 2008

Tentatively Identified Compound (LSC) summary

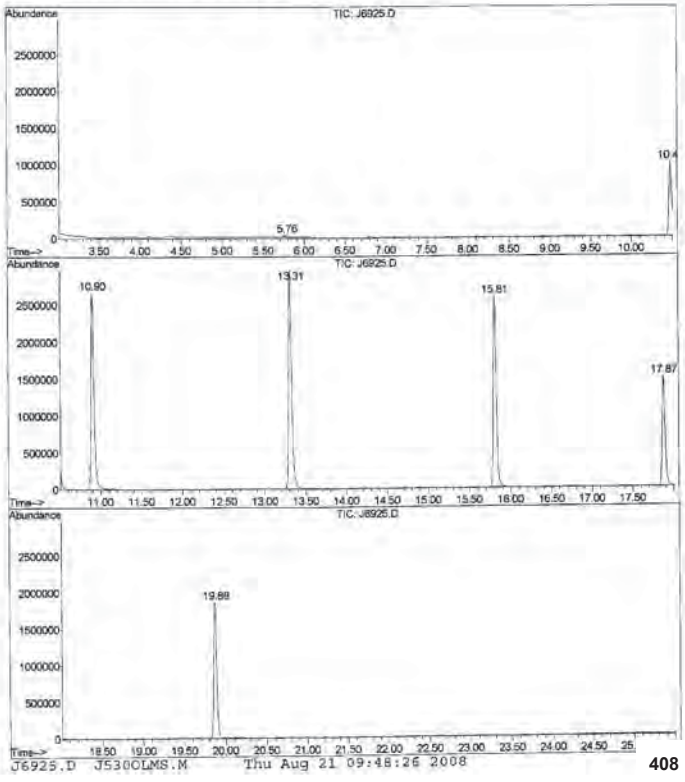
Operator ID: MSV Date Acquired: 18 Aug 2008 13:44
Data File: C:\HPCHEM\1\DATA\J6925.D
Name: 0808076-004A
Misc: SAMP,8260S7_OLM42, 5.0 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6925.D J5300LMS.M Thu Aug 21 09:48:26 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J6925.D
Operator    : MSV
Acquired    : 18 Aug 2008  13:44      using AcqMethod J5300LMS
Instrument  :   #3MS10
Sample Name: 0808076-004A
Misc Info   : SAMP,8260S7_OLM42, 5.0 g
Vial Number: 53
Quant File :J5300LMS.RES (RTE Integrator)
```



408

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6926.D
Col Type:			

Sample Size: 5 g; %Moisture: 24.4; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Chloromethane	ND		6.6	0.66	µg/Kg-dry	1	08/18/08 14:18
Vinyl chloride	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Bromomethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Chloroethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
Trichlorofluoromethane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
1,1-Dichloroethene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Acetone	ND		53	26	µg/Kg-dry	1	08/18/08 14:18
Carbon disulfide	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Methyl acetate	ND		3.3	13	µg/Kg-dry	1	08/18/08 14:18
Methylene chloride	1.2	J	6.6	0.66	µg/Kg-dry	1	08/18/08 14:18
trans-1,2-Dichloroethene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Methyl tert-butyl ether	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
cis-1,2-Dichloroethene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
2-Butanone	ND		53	26	µg/Kg-dry	1	08/18/08 14:18
Chloroform	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1,1-Trichloroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Cyclohexane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Carbon tetrachloride	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Benzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Trichloroethene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Methylcyclohexane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
1,2-Dichloropropane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Bromodichloromethane	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
cis-1,3-Dichloropropene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
4-Methyl-2-pentanone	ND		6.6	2.6	µg/Kg-dry	1	08/18/08 14:18
Toluene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
trans-1,3-Dichloropropene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1,2-Trichloroethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Tetrachloroethene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380770 Project Supervisor: Monika Santucci

409

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6926.D
Col Type:			

Sample Size: 5 g; %Moisture: 24.4; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.6	2.6	µg/Kg-dry	1	08/18/08 14:18
Dibromochloromethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dibromoethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Chlorobenzene	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Ethylbenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Xylenes (total)	ND		6.6	2.0	µg/Kg-dry	1	08/18/08 14:18
Styrene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
Bromoform	ND		3.3	1.3	µg/Kg-dry	1	08/18/08 14:18
Isopropylbenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,1,2,2-Tetrachloroethane	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,3-Dichlorobenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,4-Dichlorobenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dichlorobenzene	ND		3.3	0.66	µg/Kg-dry	1	08/18/08 14:18
1,2-Dibromo-3-chloropropane	ND		6.6	1.3	µg/Kg-dry	1	08/18/08 14:18
1,2,4-Trichlorobenzene	ND		6.6	0.66	µg/Kg-dry	1	08/18/08 14:18
Surr: 1,2-Dichloroethane-d4	104		71-128	0.66	%REC	1	08/18/08 14:18
Surr: Toluene-d8	100		75-125	0.66	%REC	1	08/18/08 14:18
Surr: 4-Bromofluorobenzene	107		59-125	0.66	%REC	1	08/18/08 14:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380770 Project Supervisor: Monika Santucci

410

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

UST-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068G

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6926.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.0G

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 5 SW8260B

411

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6926.D Vial: 54
Acq On : 18 Aug 2008 14:18 Operator: MSV
Sample : 0808076-005A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0 g Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 19 5:06 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

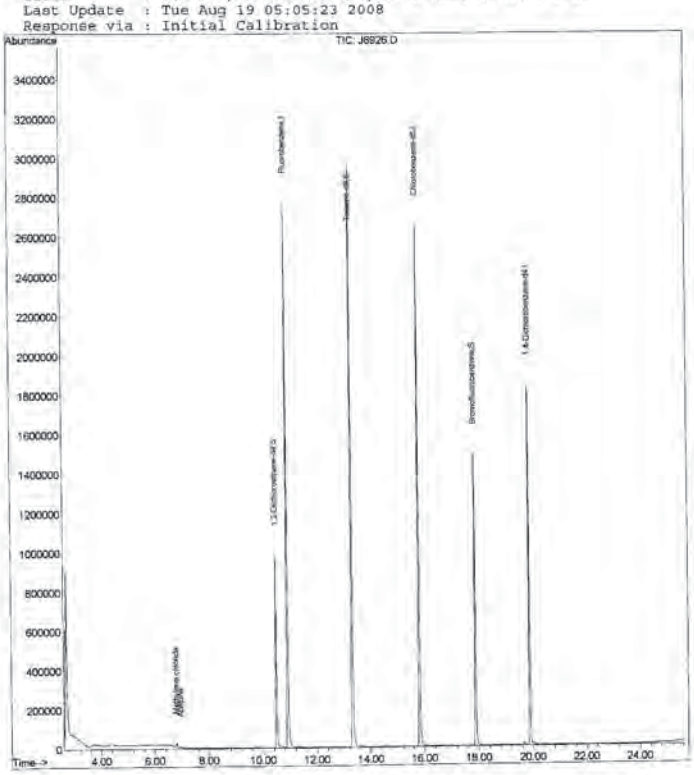
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3325057	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1229237	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	748111	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	880411	52.23 ug/L	0.00
Spiked Amount 50.000			Recovery	= 104.46%	
37) Toluene-d8	13.31	98	3027075	50.15 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.30%	
49) Bromofluorobenzene	17.87	95	840101	53.49 ug/L	0.00
Spiked Amount 50.000			Recovery	= 106.98%	
Target Compounds					Qvalue
11) Methylene chloride	6.79	84	15310	0.89 ug/L	96
12) Acetone	6.95	43	19926	5.13 ug/L	85

(#) = qualifier out of range (m) = manual integration
J6926.D J5300LMS.M Tue Aug 19 05:06:52 2008 P

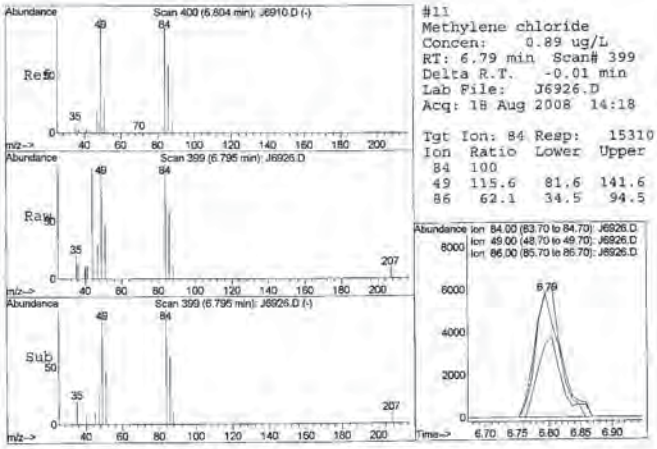
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6926.D Vial: 54
Acq On : 18 Aug 2008 14:18 Operator: MSV
Sample : 0808076-005A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0 g Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 19 5:06 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 05:05:23 2008
Response via : Initial Calibration



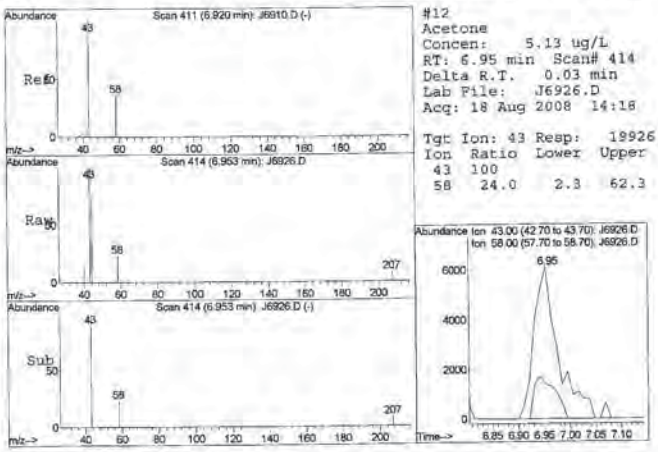
J6926.D J5300LMS.M Tue Aug 19 05:06:53 2008 P



#11
Methylene chloride
Concen: 0.89 ug/L
RT: 6.79 min Scan# 399
Delta R.T. -0.01 min
Lab File: J6926.D
Acq: 18 Aug 2008 14:18

Tgt Ion: 84 Resp: 15310

Ion	Ratio	Lower	Upper
84	100		
49	115.6	81.6	141.6
86	62.1	34.5	94.5



#12
Acetone
Concen: 5.13 ug/L
RT: 6.95 min Scan# 414
Delta R.T. 0.03 min
Lab File: J6926.D
Acq: 18 Aug 2008 14:18

Tgt Ion: 43 Resp: 19926

Ion	Ratio	Lower	Upper
43	100		
58	24.0	2.3	62.3

J6926.D J5300LMS.M Tue Aug 19 05:06:53 2008 P

Tentatively Identified Compound (LSC) summary

Operator ID: MSV Date Acquired: 18 Aug 2008 14:18
Data File: C:\HPCHEM\1\DATA\J6926.D
Name: 0808076-005A
Misc: SAMP,8260S7_OLM42, 5.0 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea ISConc

J6926.D J5300LMS.M Thu Aug 21 09:48:28 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J6926.D
Operator    : MSV
Acquired    : 18 Aug 2008  14:18      using AcqMethod J5300LMS
Instrument  :   #3MS10
Sample Name: 0808076-005A
Misc Info   : SAMP,8260S7_OLM42, 5.0 g
Vial Number: 54
Quant File :J5300LMS.RES (RTE Integrator)
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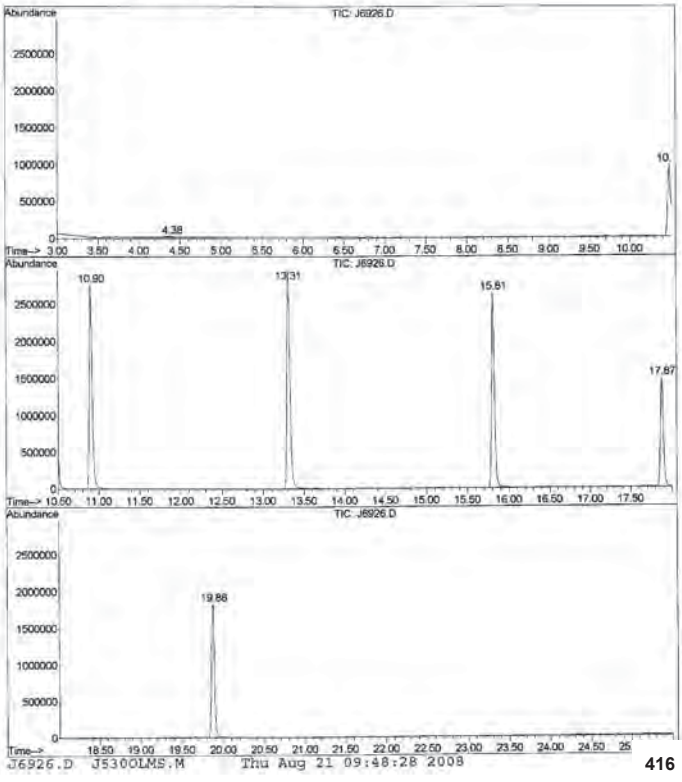


J6926.D J5300LMS.M Thu Aug 21 09:48:28 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 27.8	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6927.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Chloromethane	ND		6.8	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Vinyl chloride	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Bromomethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Chloroethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Trichlorofluoromethane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,1-Dichloroethene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Acetone	ND		54	27	µg/Kg-dry	0.98	08/18/08 14:52
Carbon disulfide	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Methyl acetate	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Methylene chloride	1.7	J	6.8	0.68	µg/Kg-dry	0.98	08/18/08 14:52
trans-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Methyl tert-butyl ether	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
cis-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
2-Butanone	ND		54	27	µg/Kg-dry	0.98	08/18/08 14:52
Chloroform	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1,1-Trichloroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Cyclohexane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Carbon tetrachloride	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Benzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Trichloroethene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Methylcyclohexane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dichloropropane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Bromodichloromethane	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
cis-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
4-Methyl-2-pentanone	ND		6.8	2.7	µg/Kg-dry	0.98	08/18/08 14:52
Toluene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
trans-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1,2-Trichloroethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Tetrachloroethene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380771 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 27.8	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6927.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.8	2.7	µg/Kg-dry	0.98	08/18/08 14:52
Dibromochloromethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dibromoethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Chlorobenzene	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Ethylbenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Xylenes (total)	ND		6.8	2.0	µg/Kg-dry	0.98	08/18/08 14:52
Styrene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Bromoform	ND		3.4	1.4	µg/Kg-dry	0.98	08/18/08 14:52
Isopropylbenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,1,2,2-Tetrachloroethane	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,3-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,4-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	0.98	08/18/08 14:52
1,2-Dibromo-3-chloropropane	ND		6.8	1.4	µg/Kg-dry	0.98	08/18/08 14:52
1,2,4-Trichlorobenzene	ND		6.8	0.68	µg/Kg-dry	0.98	08/18/08 14:52
Surr: 1,2-Dichloroethane-d4	111		71-128	0.68	%REC	0.98	08/18/08 14:52
Surr: Toluene-d8	101		75-125	0.68	%REC	0.98	08/18/08 14:52
Surr: 4-Bromofluorobenzene	107		59-125	0.68	%REC	0.98	08/18/08 14:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380771 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-South

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6927.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 28 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM 1 TIC 6 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6927.D
Acq On : 18 Aug 2008 14:52
Sample : 0808076-006A
Misc : SAMP,8260S7_OLM42, 5.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 5:07 2008

Vial: 55
Operator: MSV
Inst : #3MS10
Multiplr: 0.98
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3249239	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1196374	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	731469	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	912339	55.38 ug/L	0.00
Spiked Amount 50.000				Recovery = 110.76%	
37) Toluene-d8	13.31	98	2968851	50.54 ug/L	0.00
Spiked Amount 50.000				Recovery = 101.08%	
49) Bromofluorobenzene	17.88	95	822583	53.56 ug/L	0.00
Spiked Amount 50.000				Recovery = 107.12%	
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	21377	1.27 ug/L	98
12) Acetone	6.93	43	36044	9.49 ug/L	92

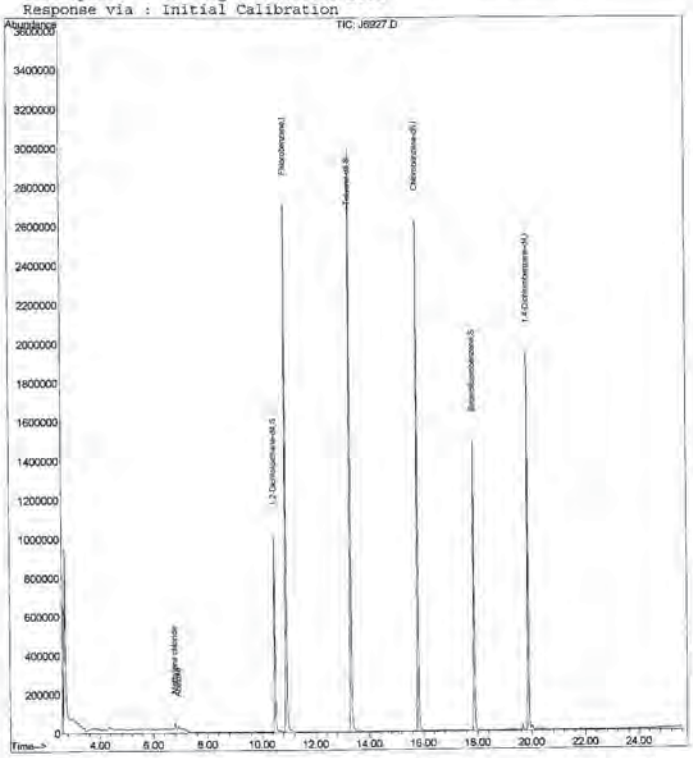
(#) = qualifier out of range (m) = manual integration
J6927.D J5300LMS.M Tue Aug 19 05:07:41 2008

Quantitation Report

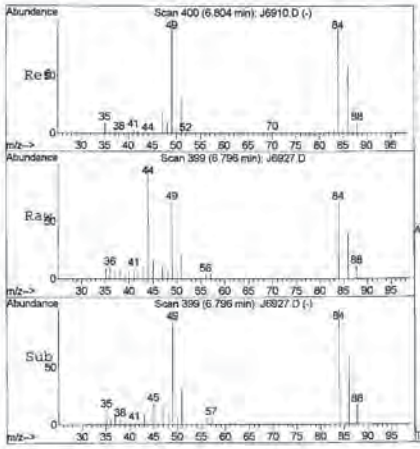
Data File : C:\HPCHEM\1\DATA\J6927.D
Acq On : 18 Aug 2008 14:52
Sample : 0808076-006A
Misc : SAMP,8260S7_OLM42, 5.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 5:07 2008

Vial: 55
Operator: MSV
Inst : #3MS10
Multiplr: 0.98
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 05:05:23 2008
Response via : Initial Calibration



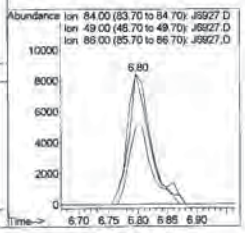
J6927.D J5300LMS.M Tue Aug 19 05:07:42 2008

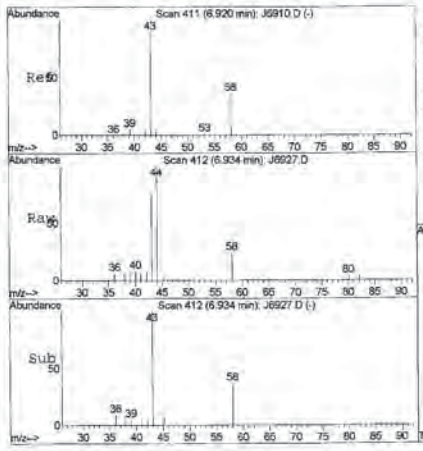


#11
Methylene chloride
Concen: 1.27 ug/L
RT: 6.80 min Scan# 399
Delta R.T. -0.01 min
Lab File: J6927.D
Acq: 18 Aug 2008 14:52

Tgt Ion: 84 Resp: 21377

Ion	Ratio	Lower	Upper
84	100		
49	109.7	81.6	141.6
86	63.5	34.5	94.5

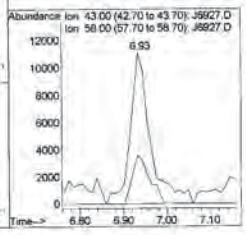




#12
Acetone
Concen: 9.49 ug/L
RT: 6.93 min Scan# 412
Delta R.T. 0.01 min
Lab File: J6927.D
Acq: 18 Aug 2008 14:52

Tgt Ion: 43 Resp: 36044

Ion	Ratio	Lower	Upper
43	100		
58	27.8	2.3	62.3



J6927.D J5300LMS.M Tue Aug 19 05:07:42 2008

Tentatively Identified Compound (LSC) summary

Operator ID: MSV Date Acquired: 18 Aug 2008 14:52
Data File: C:\HPCHEM\1\DATA\J6927.D
Name: 0808076-006A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6927.D J5300LMS.M Thu Aug 21 09:48:30 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J6927.D
Operator    : MSV
Acquired    : 18 Aug 2008  14:52     using AcqMethod J530OLMS
Instrument  :   #3MS10
Sample Name: 0808076-006A
Misc Info   : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 55
Quant File :J530OLMS.RES (RTE Integrator)
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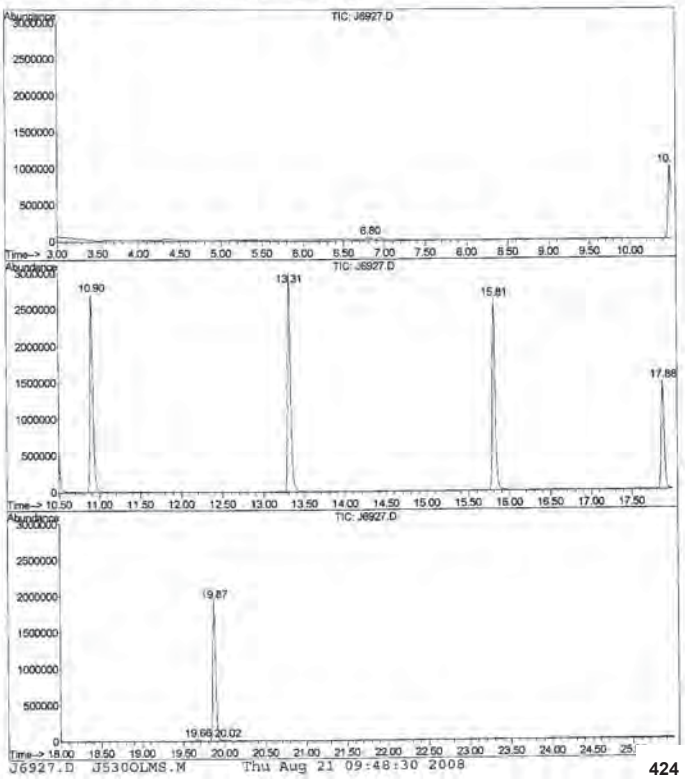


J6927.D J530OLMS.M Thu Aug 21 09:48:30 2008

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 18.3	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6928.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Chloromethane	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Vinyl chloride	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Bromomethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Chloroethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Trichlorofluoromethane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Acetone	ND		48	24	µg/Kg-dry	0.98	08/18/08 15:26
Carbon disulfide	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Methyl acetate	ND		3.0	12	µg/Kg-dry	0.98	08/18/08 15:26
Methylene chloride	1.2	J	6.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
trans-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Methyl tert-butyl ether	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
cis-1,2-Dichloroethene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
2-Butanone	ND		48	24	µg/Kg-dry	0.98	08/18/08 15:26
Chloroform	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Benzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
cis-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
4-Methyl-2-pentanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 15:26
Toluene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
trans-1,3-Dichloropropene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1,2-Trichloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380772 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 18.3	BatchNo: R14529
Revision:	08/20/08 8:57	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J6928.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.0	2.4	µg/Kg-dry	0.98	08/18/08 15:26
Dibromochloromethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dibromoethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Ethylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Xylenes (total)	ND		6.0	1.8	µg/Kg-dry	0.98	08/18/08 15:26
Styrene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Bromoform	ND		3.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
Isopropylbenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,1,2,2-Tetrachloroethane	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,3-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,4-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dichlorobenzene	ND		3.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
1,2-Dibromo-3-chloropropane	ND		6.0	1.2	µg/Kg-dry	0.98	08/18/08 15:26
1,2,4-Trichlorobenzene	ND		6.0	0.60	µg/Kg-dry	0.98	08/18/08 15:26
Surr: 1,2-Dichloroethane-d4	113		71-128	0.60	%REC	0.98	08/18/08 15:26
Surr: Toluene-d8	114		75-125	0.60	%REC	0.98	08/18/08 15:26
Surr: 4-Bromofluorobenzene	130	S	59-125	0.60	%REC	0.98	08/18/08 15:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380772 Project Supervisor: Monika Santucci

Form I TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Field Dup

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-007A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6928.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 7 SW8260B

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6928.D Vial: 56
Acq On : 18 Aug 2008 15:26 Operator: MSV
Sample : 0808076-007A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 19 4:52 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

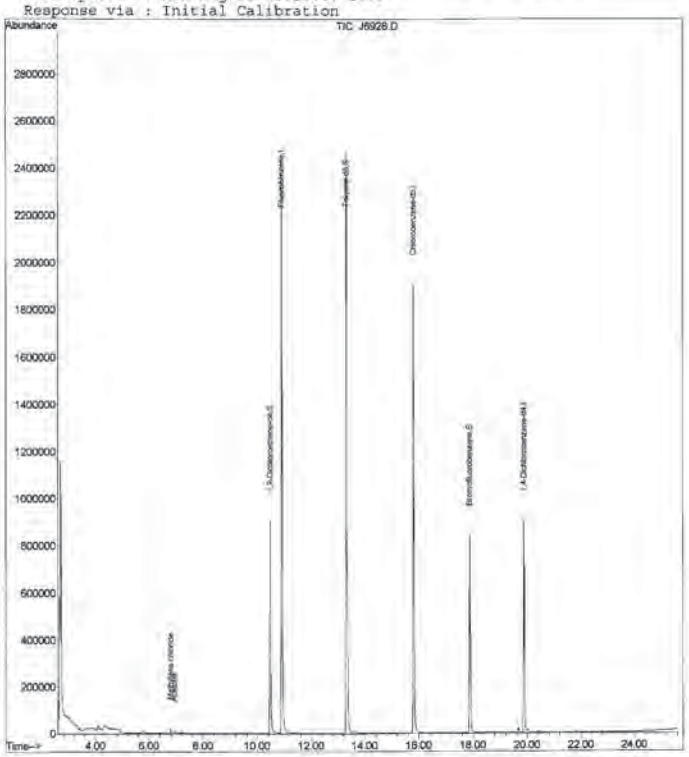
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	2996637	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	905201	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	364534 *	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	858479	56.51 ug/L	0.00
Spiked Amount 50.000			Recovery	= 113.02%	
37) Toluene-d8	13.31	98	2533036	56.99 ug/L	0.00
Spiked Amount 50.000			Recovery	= 113.98%	
49) Bromofluorobenzene	17.88	95	498186	65.10 ug/L	0.00
Spiked Amount 50.000			Recovery	= 130.20%*	
Target Compounds					Qvalue
11) Methylene chloride	6.81	84	15308	0.98 ug/L	96
12) Acetone	6.94	43	29661m (M)	8.47 ug/L	

(#) = qualifier out of range (m) = manual integration
J6928.D J5300LMS.M Tue Aug 19 04:53:08 2008 Pa

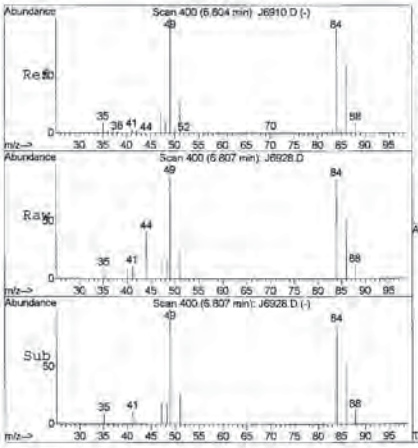
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6928.D Vial: 56
Acq On : 18 Aug 2008 15:26 Operator: MSV
Sample : 0808076-007A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 19 4:52 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



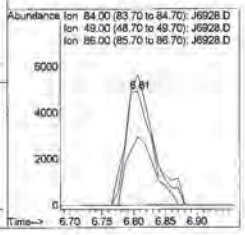
J6928.D J5300LMS.M Tue Aug 19 04:53:09 2008 Pa

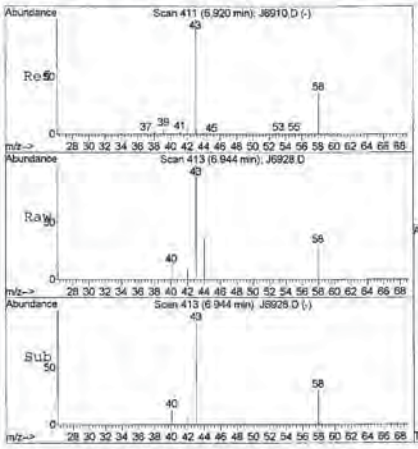


#11
Methylene chloride
Concen: 0.98 ug/L
RT: 6.81 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6928.D
Acq: 18 Aug 2008 15:26

Tgt Ion: 84 Resp: 15308

Ion	Ratio	Lower	Upper
84	100		
49	109.6	81.6	141.6
86	58.6	34.5	94.5

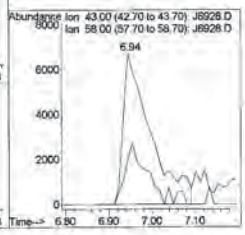




#12
Acetone
Concen: 8.47 ug/L m
RT: 6.94 min Scan# 413
Delta R.T. 0.02 min
Lab File: J6928.D
Acq: 18 Aug 2008 15:26

Tgt Ion: 43 Resp: 29661

Ion	Ratio	Lower	Upper
43	100		
58	30.3	2.3	62.3



J6928.D J5300LMS.M Tue Aug 19 04:53:09 2008 Pa

Tentatively Identified Compound (LSC) summary

Operator ID: MSV Date Acquired: 18 Aug 2008 15:26
Data File: C:\HPCHEM\1\DATA\J6928.D
Name: 0808076-007A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6928.D J5300LMS.M Thu Aug 21 09:48:32 2008

LSC Report - Integrated Chromatogram

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File        : C:\HPCHEM\1\DATA\J6928.D
Operator    : MSV
Acquired    : 18 Aug 2008  15:26      using AcqMethod J5300LMS
Instrument  :   #3MS10
Sample Name: 0808076-007A
Misc Info   : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 56
Quant File :J5300LMS.RES (RTE Integrator)
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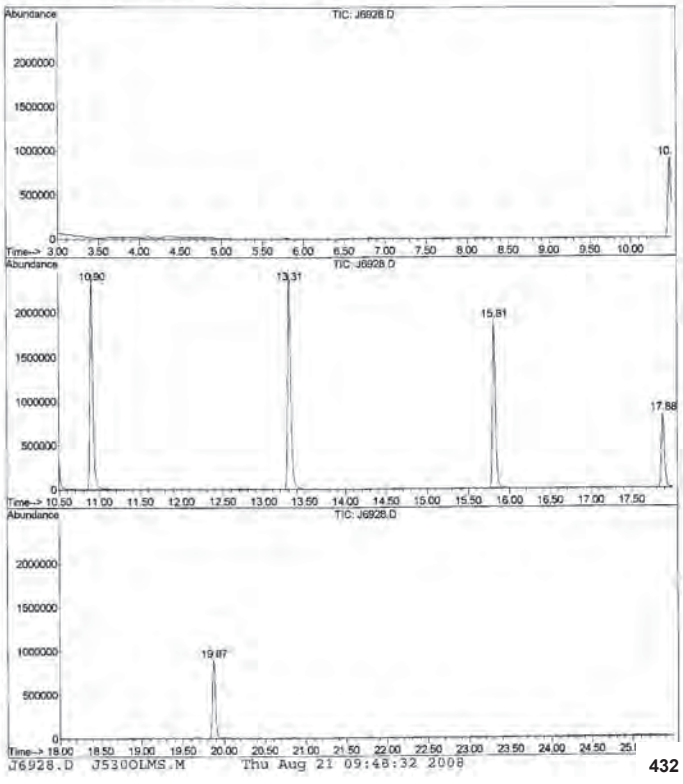


J6928.D J5300LMS.M Thu Aug 21 09:48:32 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	1.1 g		
ColumnID:	Rtx-VMS	%Moisture:	18.3
BatchNo:	R14531		
Revision:	08/20/08 9:10	TestCode:	8260S7 OLM42
FileID:	1-DL-J6964.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Chloromethane	ND		28	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Vinyl chloride	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Bromomethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Chloroethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Trichlorofluoromethane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,1-Dichloroethene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Acetone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:46
Carbon disulfide	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Methyl acetate	ND		14	56	µg/Kg-dry	4.54	08/19/08 11:46
Methylene chloride	4.3	J	28	2.8	µg/Kg-dry	4.54	08/19/08 11:46
trans-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Methyl tert-butyl ether	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1-Dichloroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
cis-1,2-Dichloroethene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
2-Butanone	ND		220	110	µg/Kg-dry	4.54	08/19/08 11:46
Chloroform	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1,1-Trichloroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Cyclohexane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Carbon tetrachloride	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Benzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dichloroethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Trichloroethene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Methylcyclohexane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dichloropropane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Bromodichloromethane	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
cis-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
4-Methyl-2-pentanone	ND		28	11	µg/Kg-dry	4.54	08/19/08 11:46
Toluene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
trans-1,3-Dichloropropene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1,2-Trichloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Tetrachloroethene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380807 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	1.1 g		
ColumnID:	Rtx-VMS	%Moisture:	18.3
BatchNo:	R14531		
Revision:	08/20/08 9:10	TestCode:	8260S7 OLM42
FileID:	1-DL-J6964.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		28	11	µg/Kg-dry	4.54	08/19/08 11:46
Dibromochloromethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dibromoethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Chlorobenzene	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Ethylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Xylenes (total)	ND		28	8.3	µg/Kg-dry	4.54	08/19/08 11:46
Styrene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Bromoform	ND		14	5.6	µg/Kg-dry	4.54	08/19/08 11:46
Isopropylbenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,1,2,2-Tetrachloroethane	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,3-Dichlorobenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,4-Dichlorobenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dichlorobenzene	ND		14	2.8	µg/Kg-dry	4.54	08/19/08 11:46
1,2-Dibromo-3-chloropropane	ND		28	5.6	µg/Kg-dry	4.54	08/19/08 11:46
1,2,4-Trichlorobenzene	ND		28	2.8	µg/Kg-dry	4.54	08/19/08 11:46
Surr: 1,2-Dichloroethane-d4	110		71-126	2.8	%REC	4.54	08/19/08 11:46
Surr: Toluene-d8	105		75-125	2.8	%REC	4.54	08/19/08 11:46
Surr: 4-Bromofluorobenzene	125		59-125	2.8	%REC	4.54	08/19/08 11:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380807 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J6964.D                    Vial: 21
Acq On    : 19 Aug 2008  11:46                        Operator: MSV
Sample    : 0808076-007A                              Inst    : #3MS10
Misc      : DL  ,8260S7_OLM42, 1.1 g                  Multiplr: 4.54
MS Integration Params: RTEINT.P
 Quant Time: Aug 19 12:51 2008                  Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards                    R.T. QIon  Response   Conc Units Dev(Min)
-------------------------------------------------------------------------------
  1) Fluorobenzene                    10.90  96  3021648   50.00 ug/L    0.00
 36) Chlorobenzene-d5                 15.81  82  1031281   50.00 ug/L    0.00
 47) 1,4-Dichlorobenzene-d4           19.88 152   500849   50.00 ug/L    0.00

System Monitoring Compounds
 24) 1,2-Dichloroethane-d4            10.48  65   839497   54.80 ug/L    0.00
  Spiked Amount      50.000                      Recovery    =  109.60%
 37) Toluene-d8                       13.30  98  2660207   52.53 ug/L    0.00
  Spiked Amount      50.000                      Recovery    =  105.06%
 49) Bromofluorobenzene               17.87  95   654770   62.27 ug/L    0.00
  Spiked Amount      50.000                      Recovery    =  124.54%

Target Compounds                                                     Qvalue
 11) Methylene chloride               6.81  84    12075    0.77 ug/L      98
 12) Acetone                          6.95  43    22556    6.39 ug/L      93
```

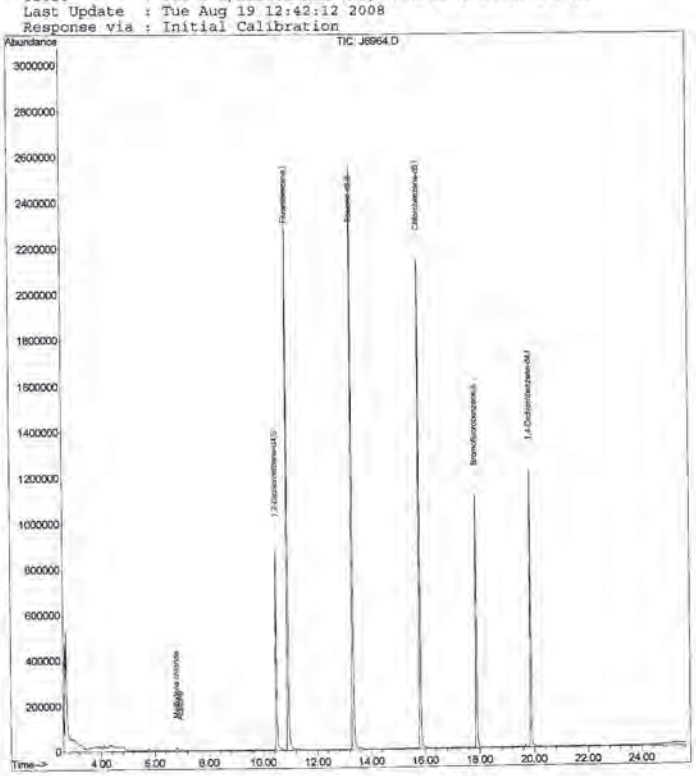
(#) = qualifier out of range (m) = manual integration
J6964.D J5300LMS.M Tue Aug 19 13:40:07 2008 P

Quantitation Report

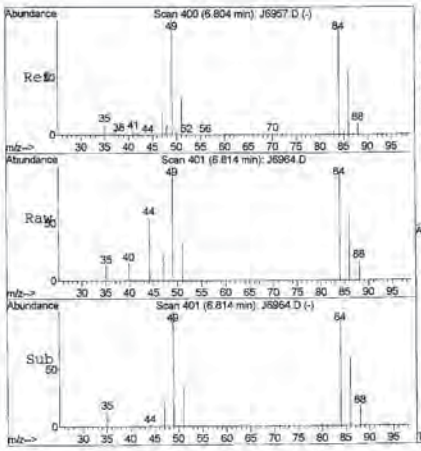
Data File : C:\HPCHEM\1\DATA\J6964.D
Acq On : 19 Aug 2008 11:46
Sample : 0808076-007A
Misc : DL ,8260S7_OLM42, 1.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:51 2008

Vial: 21
Operator: MSV
Inst : #3MS10
Multiplr: 4.54
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



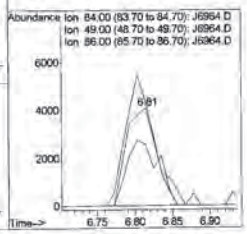
J6964.D J5300LMS.M Tue Aug 19 13:40:07 2008 P

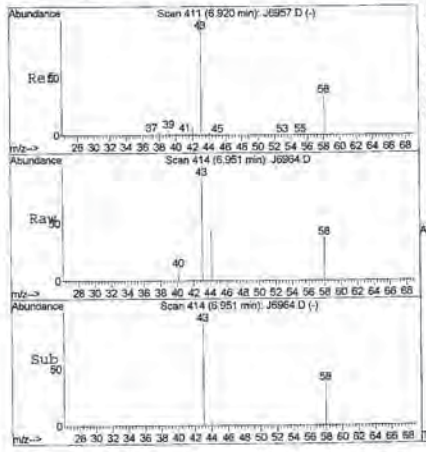


#11
Methylene chloride
Concen: 0.77 ug/L
RT: 6.81 min Scan# 401
Delta R.T. 0.01 min
Lab File: J6964.D
Acq: 19 Aug 2008 11:46

Tgt Ion: 84 Resp: 12075

Ion	Ratio	Lower	Upper
84	100		
49	113.2	81.6	141.6
86	66.8	34.5	94.5

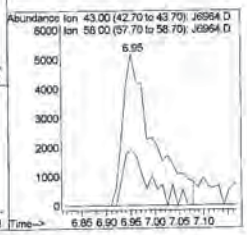




#12
Acetone
Concen: 6.39 ug/L
RT: 6.95 min Scan# 414
Delta R.T. 0.03 min
Lab File: J6964.D
Acq: 19 Aug 2008 11:46

Tgt Ion: 43 Resp: 22556

Ion	Ratio	Lower	Upper
43	100		
58	28.4	2.3	62.3



J6964.D J5300LMS.M Tue Aug 19 13:40:09 2008 P

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6929.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 27.2; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Chloromethane	ND		6.7	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Vinyl chloride	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Bromomethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Chloroethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Trichlorofluoromethane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,1-Dichloroethene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Acetone	50 J		54	27	µg/Kg-dry	0.98	08/18/08 16:00
Carbon disulfide	1.5 J		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Methyl acetate	ND		3.4	13	µg/Kg-dry	0.98	08/18/08 16:00
Methylene chloride	1.0 J		6.7	0.67	µg/Kg-dry	0.98	08/18/08 16:00
trans-1,2-Dichloroethene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Methyl tert-butyl ether	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1-Dichloroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
cis-1,2-Dichloroethene	1.6 J		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
2-Butanone	ND		54	27	µg/Kg-dry	0.98	08/18/08 16:00
Chloroform	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1,1-Trichloroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Cyclohexane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Carbon tetrachloride	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Benzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dichloroethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Trichloroethene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Methylcyclohexane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dichloropropane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Bromodichloromethane	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
cis-1,3-Dichloropropene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
4-Methyl-2-pentanone	ND		6.7	2.7	µg/Kg-dry	0.98	08/18/08 16:00
Toluene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
trans-1,3-Dichloropropene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1,2-Trichloroethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Tetrachloroethene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limits
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380773 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6929.D
Col Type:			

Sample Size: 5.1 g; %Moisture: 27.2; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.7	2.7	µg/Kg-dry	0.98	08/18/08 16:00
Dibromochloromethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dibromoethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Chlorobenzene	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Ethylbenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Xylenes (total)	ND		6.7	2.0	µg/Kg-dry	0.98	08/18/08 16:00
Styrene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Bromoform	ND		3.4	1.3	µg/Kg-dry	0.98	08/18/08 16:00
Isopropylbenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,1,2,2-Tetrachloroethane	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,3-Dichlorobenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,4-Dichlorobenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dichlorobenzene	ND		3.4	0.67	µg/Kg-dry	0.98	08/18/08 16:00
1,2-Dibromo-3-chloropropane	ND		6.7	1.3	µg/Kg-dry	0.98	08/18/08 16:00
1,2,4-Trichlorobenzene	ND		6.7	0.67	µg/Kg-dry	0.98	08/18/08 16:00
Surr: 1,2-Dichloroethane-d4	108		71-128	0.67	%REC	0.98	08/18/08 16:00
Surr: Toluene-d8	102		75-125	0.67	%REC	0.98	08/18/08 16:00
Surr: 4-Bromofluorobenzene	115		59-125	0.67	%REC	0.98	08/18/08 16:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limits
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380773 Project Supervisor: Monika Santucci

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

Trench-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-008A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6929.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 27 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 8 SW8260B

440

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6929.D Vial: 57
Acq On : 18 Aug 2008 16:00 Operator: MSV
Sample : 0808076-008A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 16:26 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3191599	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1165181	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	648193	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	877441	54.23 ug/L	0.00
Spiked Amount 50.000			Recovery = 108.46%		
37) Toluene-d8	13.31	98	2923031	51.09 ug/L	0.00
Spiked Amount 50.000			Recovery = 102.18%		
49) Bromofluorobenzene	17.88	95	780005	57.32 ug/L	0.00
Spiked Amount 50.000			Recovery = 114.64%		
Target Compounds					Qvalue
9) Carbon disulfide	5.77	76	50266	1.08 ug/L	99
11) Methylene chloride	6.80	84	12629	0.76 ug/L	99
12) Acetone	6.94	43	139000	37.25 ug/L	95
17) cis-1,2-Dichloroethene	8.98	96	21477	1.19 ug/L	91
22) 2-Butanone	9.91	43	28653	5.25 ug/L	73

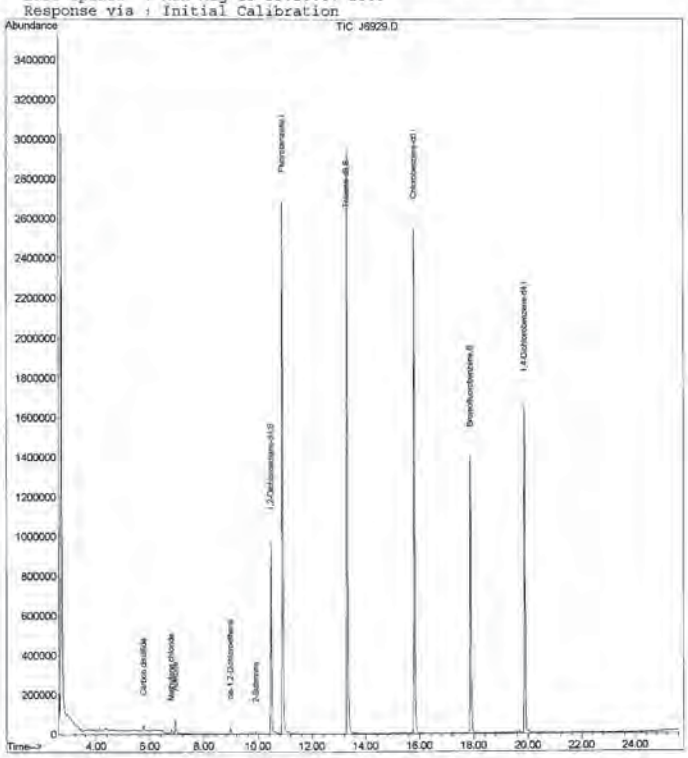
(#) = qualifier out of range (m) = manual integration
J6929.D J5300LMS.M Tue Aug 19 04:55:20 2008 Pa

441

Quantitation Report

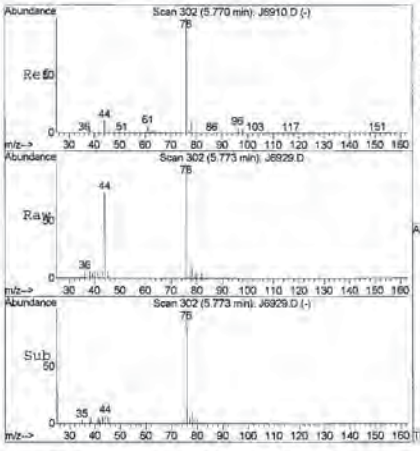
Data File : C:\HPCHEM\1\DATA\J6929.D Vial: 57
Acq On : 18 Aug 2008 16:00 Operator: MSV
Sample : 0808076-008A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1 g Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Aug 18 16:26 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



J6929.D J5300LMS.M Tue Aug 19 04:55:21 2008 Pa

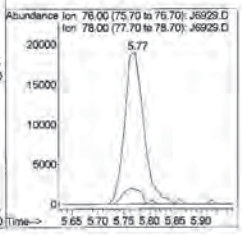
442

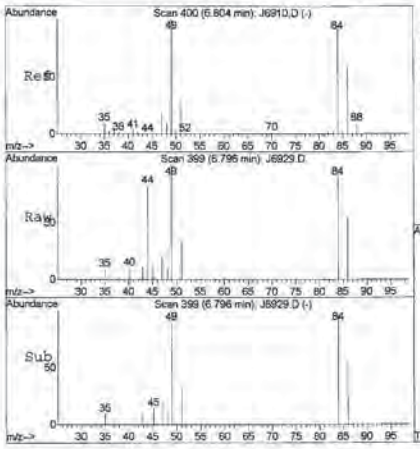


#9
Carbon disulfide
Concen: 1.08 ug/L
RT: 5.77 min Scan# 302
Delta R.T. 0.00 min
Lab File: J6929.D
Acq: 18 Aug 2008 16:00

Tgt Ion: 76 Resp: 50266

Ion	Ratio	Lower	Upper
76	100		
78	10.5	0.0	40.2

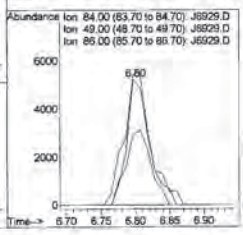




#11
Methylene chloride
Concen: 0.76 ug/L
RT: 6.80 min Scan# 399
Delta R.T. -0.01 min
Lab File: J6929.D
Acq: 18 Aug 2008 16:00

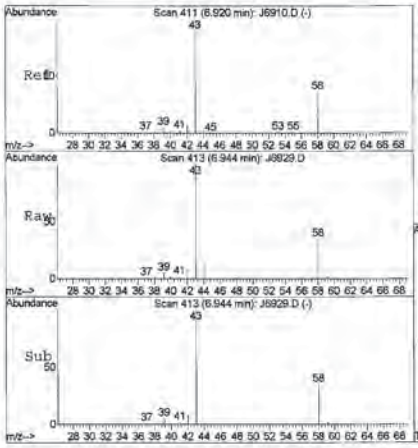
Tgt Ion: 84 Resp: 12629

Ion	Ratio	Lower	Upper
84	100		
49	111.6	81.6	141.6
86	63.4	34.5	94.5



J6929.D J5300LMS.M Tue Aug 19 04:55:21 2008 Pa

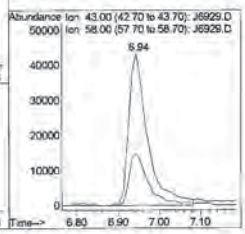
443

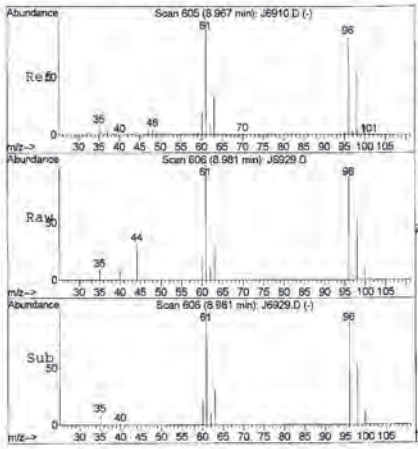


#12
Acetone
Concen: 37.25 ug/L
RT: 6.94 min Scan# 413
Delta R.T. 0.02 min
Lab File: J6929.D
Acq: 18 Aug 2008 16:00

Tgt Ion: 43 Resp: 139000

Ion	Ratio	Lower	Upper
43	100		
58	35.0	2.3	62.3

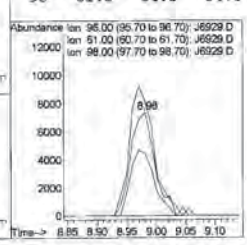




#17
cis-1,2-Dichloroethene
Concen: 1.19 ug/L
RT: 8.98 min Scan# 606
Delta R.T. 0.01 min
Lab File: J6929.D
Acq: 18 Aug 2008 16:00

Tgt Ion: 96 Resp: 21477

Ion	Ratio	Lower	Upper
96	100		
61	126.1	84.0	144.0
98	61.8	34.8	94.8



J6929.D J5300LMS.M Tue Aug 19 04:55:22 2008 Pa

Tentatively Identified Compound (LSC) summary

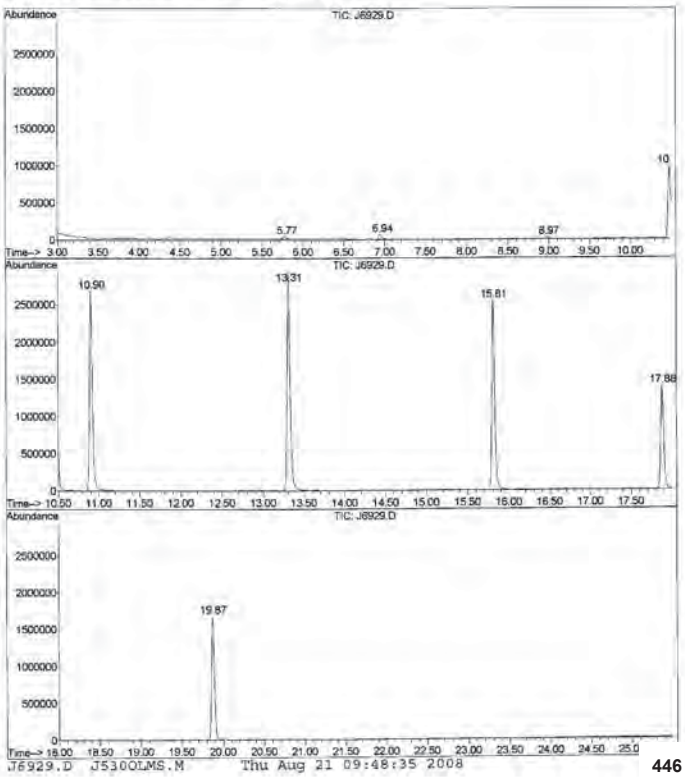
Operator ID: MSV Date Acquired: 18 Aug 2008 16:00
Data File: C:\HPCHEM\1\DATA\J6929.D
Name: 0808076-008A
Misc: SAMP,8260S7_OLM42, 5.1 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6929.D J5300LMS.M Thu Aug 21 09:48:35 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6929.D
Operator : MSV
Acquired : 18 Aug 2008 16:00 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: 0808076-008A
Misc Info : SAMP,8260S7_OLM42, 5.1 g
Vial Number: 57
Quant File :J5300LMS.RES (RTE Integrator)



J6929.D J5300LMS.M Thu Aug 21 09:48:35 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14531
Revision:	08/20/08 9:10	FileID:	1-DL-J6965.D
Col Type:			

Sample Size: 1.1 g; %Moisture: 27.2; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Chloromethane	ND		31	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Vinyl chloride	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Bromomethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Chloroethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Trichlorofluoromethane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,1-Dichloroethene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Acetone	ND		250	120	µg/Kg-dry	4.54	08/19/08 12:20
Carbon disulfide	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Methyl acetate	ND		16	62	µg/Kg-dry	4.54	08/19/08 12:20
Methylene chloride	6.7	J	31	3.1	µg/Kg-dry	4.54	08/19/08 12:20
trans-1,2-Dichloroethene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Methyl tert-butyl ether	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1-Dichloroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
cis-1,2-Dichloroethene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
2-Butanone	ND		250	120	µg/Kg-dry	4.54	08/19/08 12:20
Chloroform	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1,1-Trichloroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Cyclohexane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Carbon tetrachloride	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Benzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dichloroethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Trichloroethene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Methylcyclohexane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dichloropropane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Bromodichloromethane	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
cis-1,3-Dichloropropene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
4-Methyl-2-pentanone	ND		31	12	µg/Kg-dry	4.54	08/19/08 12:20
Toluene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
trans-1,3-Dichloropropene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1,2-Trichloroethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Tetrachloroethene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim/Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380808 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	Sample Size: 1.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 27.2	BatchNo: R14531
Revision:	08/20/08 9:10	TestCode: 8260S7 OLM42	FileID: 1-DL-J6965.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		31	12	µg/Kg-dry	4.54	08/19/08 12:20
Dibromochloromethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dibromoethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Chlorobenzene	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Ethylbenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Xylenes (total)	ND		31	9.4	µg/Kg-dry	4.54	08/19/08 12:20
Styrene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Bromoform	ND		16	6.2	µg/Kg-dry	4.54	08/19/08 12:20
Isopropylbenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,1,2,2-Tetrachloroethane	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,3-Dichlorobenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,4-Dichlorobenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dichlorobenzene	ND		16	3.1	µg/Kg-dry	4.54	08/19/08 12:20
1,2-Dibromo-3-chloropropane	ND		31	6.2	µg/Kg-dry	4.54	08/19/08 12:20
1,2,4-Trichlorobenzene	ND		31	3.1	µg/Kg-dry	4.54	08/19/08 12:20
Surr: 1,2-Dichloroethane-d4	109		71-128	3.1	%REC	4.54	08/19/08 12:20
Surr: Toluene-d8	101		75-125	3.1	%REC	4.54	08/19/08 12:20
Surr: 4-Bromofluorobenzene	106		59-125	3.1	%REC	4.54	08/19/08 12:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380808 **Project Supervisor:** Monika Santucci

448

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6965.D Vial: 22
Acq On : 19 Aug 2008 12:20 Operator: MSV
Sample : 0808076-008A Inst : #3MS10
Misc : DL ,8260S7_OLM42, 1.1 g Multiplr: 4.54
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:52 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3124700	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1153552	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	734258	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	860743	54.33 ug/L	0.00
Spiked Amount 50.000				Recovery = 108.66%	
37) Toluene-d8	13.31	98	2854773	50.40 ug/L	0.00
Spiked Amount 50.000				Recovery = 100.80%	
49) Bromofluorobenzene	17.87	95	818103	53.07 ug/L	0.00
Spiked Amount 50.000				Recovery = 106.14%	
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	17277	1.07 ug/L	98
12) Acetone	6.95	43	38996	10.68 ug/L	97
22) 2-Butanone	9.92	43	6592	1.23 ug/L #	46

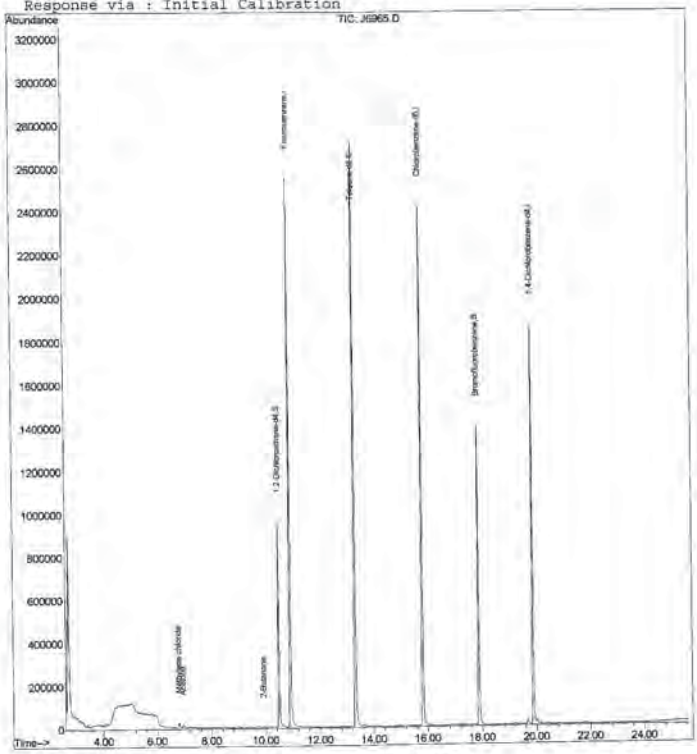
(#) = qualifier out of range (m) = manual integration
J6965.D J5300LMS.M Tue Aug 19 14:27:21 2008 Pa

449

Quantitation Report

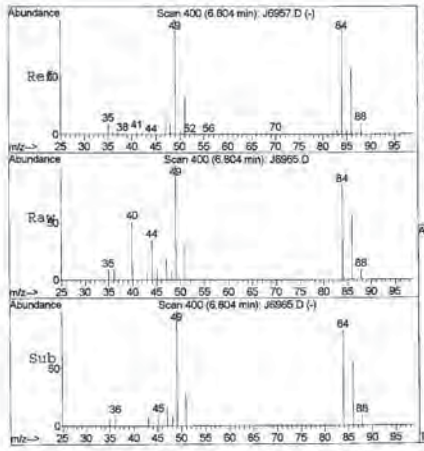
Data File : C:\HPCHEM\1\DATA\J6965.D Vial: 22
Acq On : 19 Aug 2008 12:20 Operator: MSV
Sample : 0808076-008A Inst : #3MS10
Misc : DL ,8260S7_OLM42, 1.1 g Multiplr: 4.54
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:52 2008 Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



J6965.D J5300LMS.M Tue Aug 19 14:27:21 2008 Pa

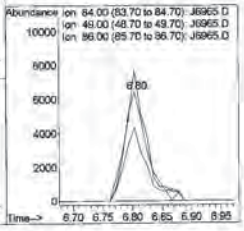
450

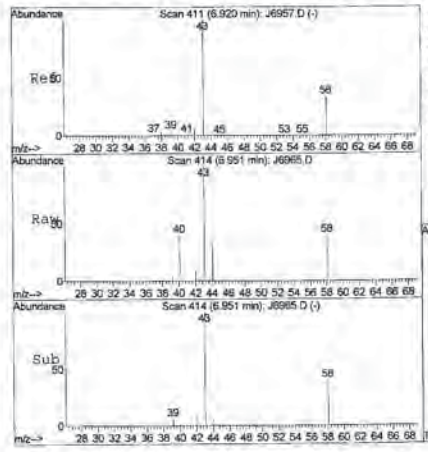


#11
Methylene chloride
Concen: 1.07 ug/L
RT: 6.80 min Scan# 400
Delta R.T. -0.00 min
Lab File: J6965.D
Acq: 19 Aug 2008 12:20

Tgt Ion: 84 Resp: 17277

Ion	Ratio	Lower	Upper
84	100		
49	109.1	81.6	141.6
86	65.0	34.5	94.5

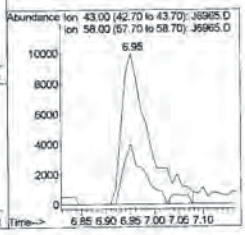




#12
Acetone
Concen: 10.68 ug/L
RT: 6.95 min Scan# 414
Delta R.T. 0.03 min
Lab File: J6965.D
Acq: 19 Aug 2008 12:20

Tgt Ion: 43 Resp: 38996

Ion	Ratio	Lower	Upper
43	100		
58	30.4	2.3	62.3



J6965.D J5300LMS.M Tue Aug 19 14:27:22 2008 Pa

451

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6930.D
Col Type:			

Sample Size: 5.2 g; %Moisture: 24.4; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Chloromethane	ND		6.3	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Vinyl chloride	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Bromomethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Chloroethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Trichlorofluoromethane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,1-Dichloroethene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Acetone	56		51	25	µg/Kg-dry	0.96	08/18/08 16:34
Carbon disulfide	1.7 J		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Methyl acetate	ND		3.2	13	µg/Kg-dry	0.96	08/18/08 16:34
Methylene chloride	1.1 J		6.3	0.63	µg/Kg-dry	0.96	08/18/08 16:34
trans-1,2-Dichloroethene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Methyl tert-butyl ether	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
cis-1,2-Dichloroethene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
2-Butanone	ND		51	25	µg/Kg-dry	0.96	08/18/08 16:34
Chloroform	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1,1-Trichloroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Cyclohexane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Carbon tetrachloride	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Benzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Trichloroethene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Methylcyclohexane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dichloropropane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Bromodichloromethane	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
cis-1,3-Dichloropropene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
4-Methyl-2-pentanone	ND		6.3	2.5	µg/Kg-dry	0.96	08/18/08 16:34
Toluene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
trans-1,3-Dichloropropene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1,2-Trichloroethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Tetrachloroethene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380774 Project Supervisor: Monika Santucci

452

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R14529
Revision:	08/20/08 8:57	FileID:	1-SAMP-J6930.D
Col Type:			

Sample Size: 5.2 g; %Moisture: 24.4; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.3	2.5	µg/Kg-dry	0.96	08/18/08 16:34
Dibromochloromethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dibromoethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Chlorobenzene	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Ethylbenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Xylenes (total)	ND		6.3	1.9	µg/Kg-dry	0.96	08/18/08 16:34
Styrene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Bromoform	ND		3.2	1.3	µg/Kg-dry	0.96	08/18/08 16:34
Isopropylbenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,1,2,2-Tetrachloroethane	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,3-Dichlorobenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,4-Dichlorobenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dichlorobenzene	ND		3.2	0.63	µg/Kg-dry	0.96	08/18/08 16:34
1,2-Dibromo-3-chloropropane	ND		6.3	1.3	µg/Kg-dry	0.96	08/18/08 16:34
1,2,4-Trichlorobenzene	ND		6.3	0.63	µg/Kg-dry	0.96	08/18/08 16:34
Surr: 1,2-Dichloroethane-d4	109		71-128	0.63	%REC	0.96	08/18/08 16:34
Surr: Toluene-d8	102		75-125	0.63	%REC	0.96	08/18/08 16:34
Surr: 4-Bromofluorobenzene	119		59-125	0.63	%REC	0.96	08/18/08 16:34

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380774 Project Supervisor: Monika Santucci

453

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Trench-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808080

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-009A

Sample wt/vol: 5 (g/mL) G Lab File ID: J6930.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.96

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 9 SW8260B

454

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6930.D Vial: 58
Acq On : 18 Aug 2008 16:34 Operator: MSV
Sample : 0808076-009A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.2 g Multiplr: 0.96
MS Integration Params: RTEINT.P
Quant Time: Aug 19 4:55 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3226367	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1163194	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	617675 *	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	888788	54.33 ug/L	0.00
Spiked Amount 50.000			Recovery	= 108.66%	
37) Toluene-d8	13.32	98	2920134	51.13 ug/L	0.01
Spiked Amount 50.000			Recovery	= 102.26%	
49) Bromofluorobenzene	17.87	95	769852	59.37 ug/L	0.00
Spiked Amount 50.000			Recovery	= 118.74%	
Target Compounds					Qvalue
9) Carbon disulfide	5.77	76	61414	1.30 ug/L	99
11) Methylene chloride	6.80	84	14115	0.84 ug/L	93
12) Acetone	6.94	43	173141	45.90 ug/L	94
22) 2-Butanone	9.90	43	42830	7.77 ug/L	73

(#) = qualifier out of range (m) = manual integration
J6930.D J5300LMS.M Tue Aug 19 04:56:46 2008 Pa

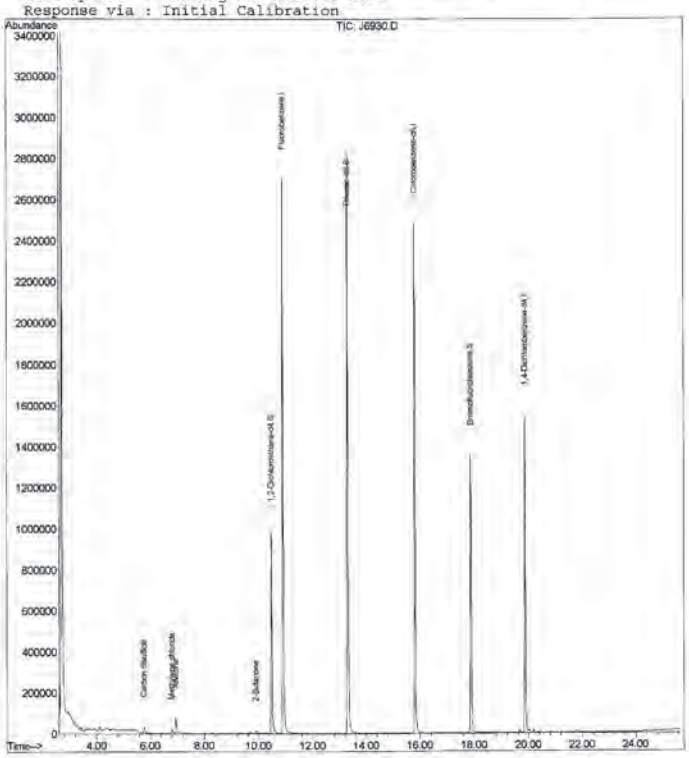
455

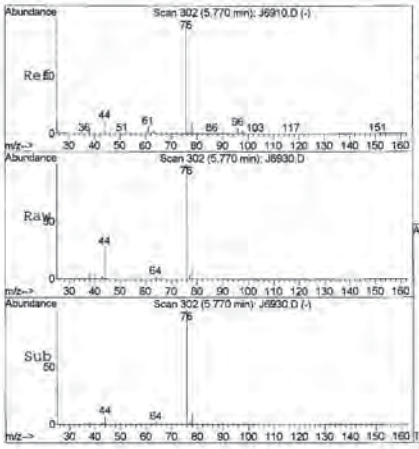
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6930.D
Acq On : 18 Aug 2008 16:34
Sample : 0808076-009A
Misc : SAMP,8260S7_OLM42, 5.2 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 4:55 2008

Vial: 58
Operator: MSV
Inst : #3MS10
Multiplr: 0.96
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration

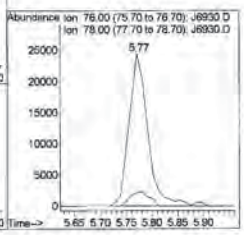


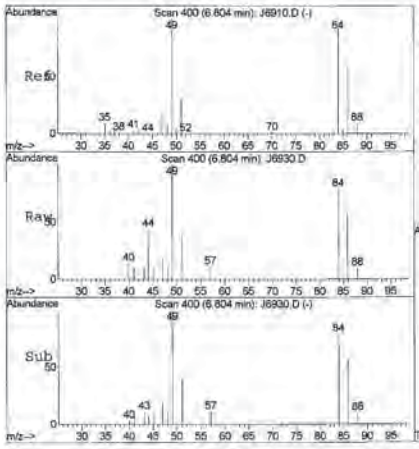


#9
Carbon disulfide
Concen: 1.30 ug/L
RT: 5.77 min Scan# 302
Delta R.T. 0.00 min
Lab File: J6930.D
Acq: 18 Aug 2008 16:34

Tgt Ion: 76 Resp: 61414

Ion	Ratio	Lower	Upper
76	100		
78	9.8	0.0	40.2

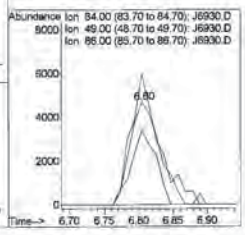


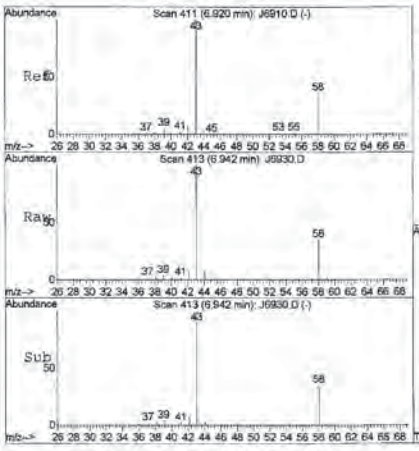


#11
Methylene chloride
Concen: 0.84 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6930.D
Acq: 18 Aug 2008 16:34

Tgt Ion: 84 Resp: 14115

Ion	Ratio	Lower	Upper
84	100		
49	120.1	81.6	141.6
86	60.8	34.5	94.5

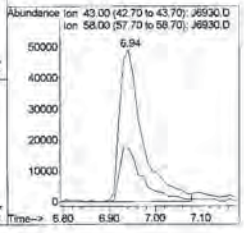


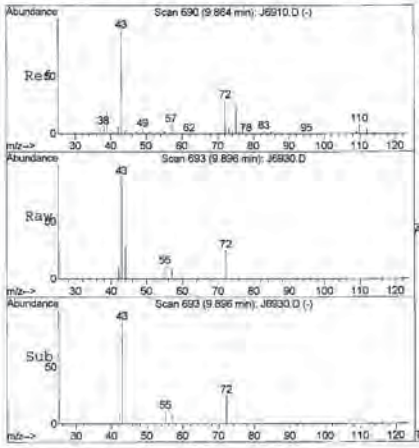


#12
Acetone
Concen: 45.90 ug/L
RT: 6.94 min Scan# 413
Delta R.T. 0.02 min
Lab File: J6930.D
Acq: 18 Aug 2008 16:34

Tgt Ion: 43 Resp: 173141

Ion	Ratio	Lower	Upper
43	100		
58	35.7	2.3	62.3

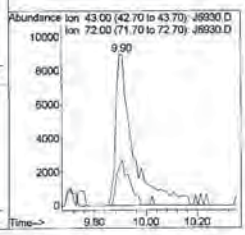




#22
2-Butanone
Concen: 7.77 ug/L
RT: 9.90 min Scan# 693
Delta R.T. 0.03 min
Lab File: J6930.D
Acq: 18 Aug 2008 16:34

Tgt Ion: 43 Resp: 42830

Ion	Ratio	Lower	Upper
43	100		
72	21.5	7.9	67.9



Tentatively Identified Compound (LSC) summary

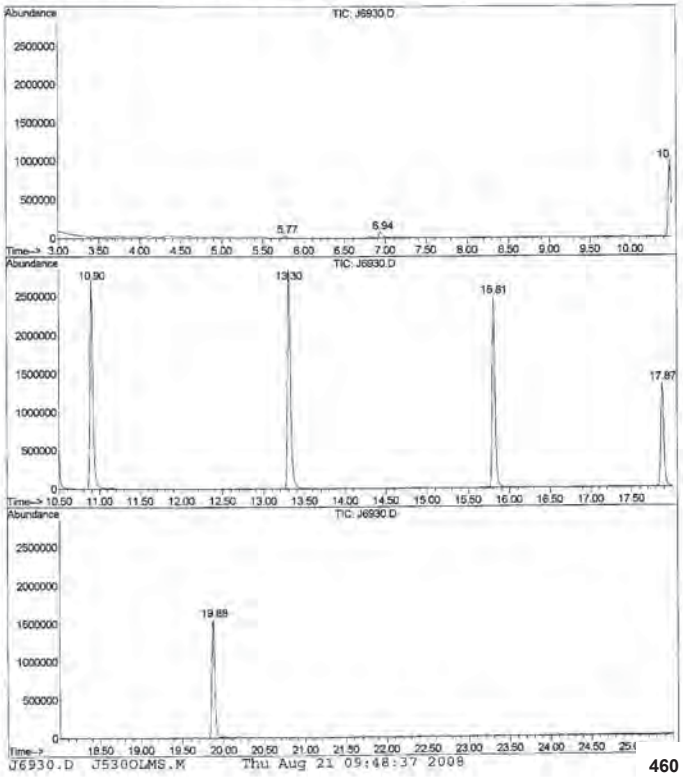
Operator ID: MSV Date Acquired: 18 Aug 2008 16:34
Data File: C:\HPCHEM\1\DATA\J6930.D
Name: 0808076-009A
Misc: SAMP,8260S7_OLM42, 5.2 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6930.D J5300LMS.M Thu Aug 21 09:48:37 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J6930.D
Operator    : MSV
Acquired    : 18 Aug 2008  16:34      using AcqMethod J5300LMS
Instrument  :   #3MS10
Sample Name: 0808076-009A
Misc Info   : SAMP,8260S7_OLM42, 5.2 g
Vial Number: 58
Quant File :J5300LMS.RES (RTE Integrator)
```



J6930.D J5300LMS.M Thu Aug 21 09:48:37 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-009ADL**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***Trench-Bot-2***
W Order:	0808076	**Collection Date:**	08/13/08 15:35
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	MS03 10	**Sample Size:** 1.1 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:** 24.4	**BatchNo:** R14531
Revision:	08/20/08 9:10	**TestCode:** 8260S7_OLM42	**FileID:** 1-DL-J6966.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Chloromethane	ND		30	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Vinyl chloride	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Bromomethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Chloroethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Trichlorofluoromethane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1-Dichloroethene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Acetone	ND		240	120	µg/Kg-dry	4.54	08/19/08 12:54
Carbon disulfide	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Methyl acetate	ND		15	60	µg/Kg-dry	4.54	08/19/08 12:54
Methylene chloride	5.3	J	30	3.0	µg/Kg-dry	4.54	08/19/08 12:54
trans-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Methyl tert-butyl ether	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1-Dichloroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
cis-1,2-Dichloroethene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
2-Butanone	ND		240	120	µg/Kg-dry	4.54	08/19/08 12:54
Chloroform	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,1-Trichloroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Cyclohexane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Carbon tetrachloride	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Benzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dichloroethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Trichloroethene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Methylcyclohexane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dichloropropane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Bromodichloromethane	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
cis-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
4-Methyl-2-pentanone	ND		30	12	µg/Kg-dry	4.54	08/19/08 12:54
Toluene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
trans-1,3-Dichloropropene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,2-Trichloroethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Tetrachloroethene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380809 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-009ADL**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***Trench-Bot-2***
W Order:	0808076	**Collection Date:**	08/13/08 15:35
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	MS03 10	**Sample Size:** 1.1 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:** 24.4	**BatchNo:** R14531
Revision:	08/20/08 9:10	**TestCode:** 8260S7_OLM42	**FileID:** 1-DL-J6966.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		30	12	µg/Kg-dry	4.54	08/19/08 12:54
Dibromochloromethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dibromoethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Chlorobenzene	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Ethylbenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Xylenes (total)	ND		30	9.0	µg/Kg-dry	4.54	08/19/08 12:54
Styrene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Bromoform	ND		15	6.0	µg/Kg-dry	4.54	08/19/08 12:54
Isopropylbenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,1,2,2-Tetrachloroethane	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,3-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,4-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dichlorobenzene	ND		15	3.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2-Dibromo-3-chloropropane	ND		30	6.0	µg/Kg-dry	4.54	08/19/08 12:54
1,2,4-Trichlorobenzene	ND		30	3.0	µg/Kg-dry	4.54	08/19/08 12:54
Surr: 1,2-Dichloroethane-d4	108		71-128	3.0	%REC	4.54	08/19/08 12:54
Surr: Toluene-d8	100		75-125	3.0	%REC	4.54	08/19/08 12:54
Surr: 4-Bromofluorobenzene	109		59-125	3.0	%REC	4.54	08/19/08 12:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/20/08 9:16 380809 **Project Supervisor:** Monika Santucci

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J6966.D                    Vial: 23
Acq On    : 19 Aug 2008  12:54                       Operator: MSV
Sample    : 0808076-009A                                 Inst   : #3MS10
Misc      : DL  ,8260S7_OLM42, 1.1 g                  Multiplr: 4.54
MS Integration Params: RTEINT.P
 Quant Time: Aug 19 13:20 2008                 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards                  R.T. QIon  Response   Conc Units Dev(Min)
-------------------------------------------------------------------------------
  1) Fluorobenzene                  10.90  96  3074610    50.00 ug/L    0.00
 36) Chlorobenzene-d5               15.81  82  1138830    50.00 ug/L    0.00
 47) 1,4-Dichlorobenzene-d4         19.88 152   704702    50.00 ug/L    0.01

System Monitoring Compounds
 24) 1,2-Dichloroethane-d4          10.48  65   843347    54.10 ug/L    0.00
  Spiked Amount      50.000                   Recovery    =  108.20%
 37) Toluene-d8                     13.31  98  2798643    50.05 ug/L    0.01
  Spiked Amount      50.000                   Recovery    =  100.10%
 49) Bromofluorobenzene             17.87  95   804881    54.40 ug/L    0.00
  Spiked Amount      50.000                   Recovery    =  108.80%

Target Compounds                                                  Qvalue
 11) Methylene chloride             6.81  84    13978     0.88 ug/L      98
 12) Acetone                        6.94  43    55416    15.42 ug/L      96
 22) 2-Butanone                     9.91  43    11036     2.10 ug/L #    37
```

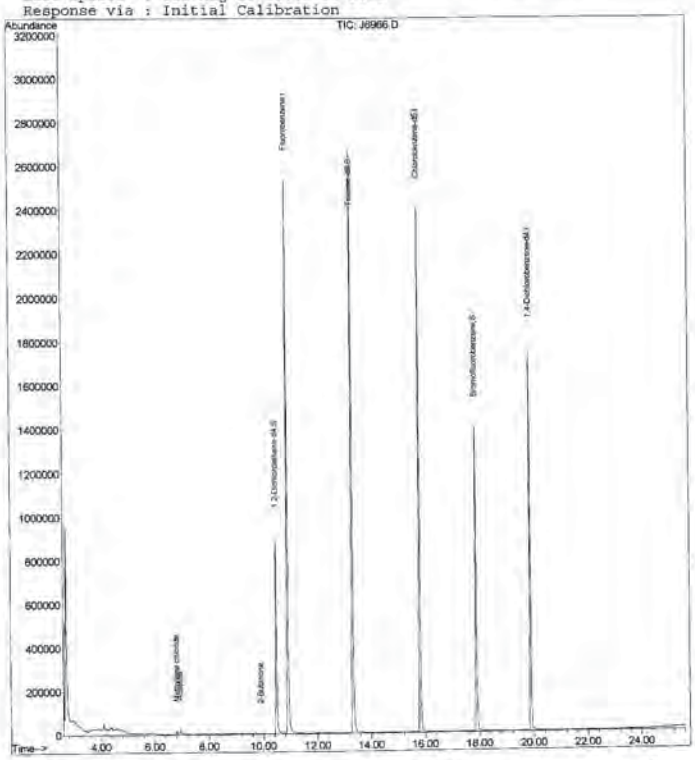
(#) = qualifier out of range (m) = manual integration
J6966.D J5300LMS.M Tue Aug 19 14:27:45 2008

Quantitation Report

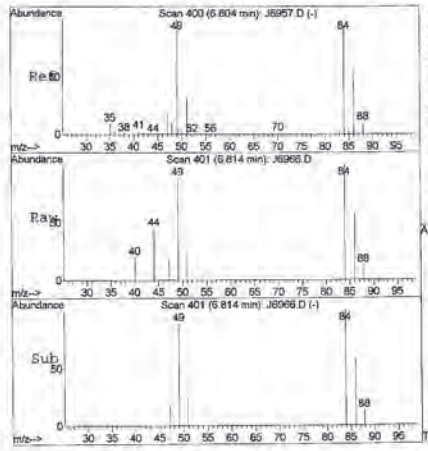
Data File : C:\HPCHEM\1\DATA\J6966.D
Acq On : 19 Aug 2008 12:54
Sample : 0808076-009A
Misc : DL ,8260S7_OLM42, 1.1 g
MS Integration Params: RTEINT.P
Quant Time: Aug 19 13:20 2008

Vial: 23
Operator: MSV
Inst : #3MS10
Multiplr: 4.54
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



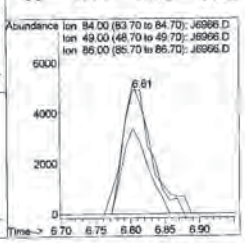
J6966.D J5300LMS.M Tue Aug 19 14:27:45 2008 Pa

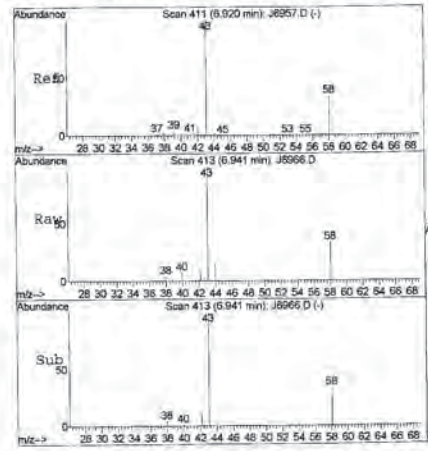


#11
Methylene chloride
Concen: 0.88 ug/L
RT: 6.81 min Scan# 401
Delta R.T. 0.01 min
Lab File: J6966.D
Acq: 19 Aug 2008 12:54

Tgt Ion: 84 Resp: 13978

Ion	Ratio	Lower	Upper
84	100		
49	109.3	81.6	141.6
86	62.5	34.5	94.5

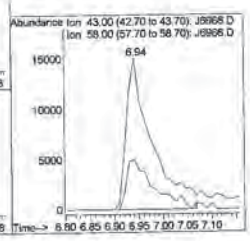




#12
Acetone
Concen: 15.42 ug/L
RT: 6.94 min Scan# 413
Delta R.T. 0.02 min
Lab File: J6966.D
Acq: 19 Aug 2008 12:54

Tgt Ion: 43 Resp: 55416

Ion	Ratio	Lower	Upper
43	100		
58	34.8	2.3	62.3



J6966.D J5300LMS.M Tue Aug 19 14:27:46 2008 Pa

Calibration Data

Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 13:41:43 2008
Response via : Initial Calibration

ICAL # 1275

Calibration Files
2.0 =J6538.D 5.0 =J6539.D 20 =J6540.D
50 =J6541.D 100 =J6542.D 150 =J6543.D

		Compound	2.0	5.0	20	50	100	150	Avg	%RSD
1)	I	Fluorobenzene	ISTD							
2)		Dichlorodifluoromet	0.379	0.341	0.328	0.345	0.342	0.334	0.342	5.18
3)	P	Chloromethane	0.361	0.305	0.291	0.294	0.294	0.281	0.301	9.27
4)	CP	Vinyl chloride	0.314	0.318	0.305	0.330	0.334	0.325	0.323	3.41
5)		Bromomethane	0.309	0.318	0.283	0.283	0.293	0.283	0.293	4.92
6)		Chloroethane	0.225	0.205	0.180	0.185	0.185	0.174	0.189	10.32
7)		Trichlorofluorometh	0.650	0.621	0.592	0.615	0.614	0.585	0.607	4.18
8)	CPM	1,1-Dichloroethene	0.215	0.200	0.211	0.211	0.227	0.220	0.215	4.19
9)		Carbon disulfide	0.775	0.729	0.700	0.738	0.746	0.721	0.732	3.36
10)		1,1,2-Trichloro-1,2	0.273	0.255	0.259	0.262	0.275	0.263	0.264	2.83
11)		Methyl iodide		0.194	0.230	0.250	0.272	0.273	0.248	12.75
12)		Acrolein	0.003	0.010	0.015	0.015	0.016	0.017	0.013	40.31
13)		Methylene chloride		0.304	0.258	0.249	0.256	0.246	0.259	8.67
14)		Acetone	0.070	0.054	0.057	0.054	0.058	0.057	0.058	9.57
15)		trans-1,2-Dichloroe	0.250	0.253	0.240	0.242	0.258	0.250	0.250	2.49
16)		Methyl acetate	0.143	0.144	0.157	0.153	0.166	0.165	0.157	6.74
17)		Methyl tert-Butyl e	0.547	0.518	0.571	0.576	0.630	0.625	0.583	7.27
8)	P	1,1-Dichloroethane	0.443	0.404	0.404	0.409	0.433	0.419	0.419	3.53
19)		Acrylonitrile	0.048	0.053	0.065	0.064	0.071	0.069	0.063	14.59
20)		Vinyl acetate	0.070	0.086	0.124	0.138	0.160	0.166	0.130	30.35
21)		cis-1,2-Dichloroeth	0.282	0.265	0.271	0.274	0.302	0.295	0.283	4.82
22)		2,2-Dichloropropane	0.337	0.333	0.346	0.369	0.405	0.406	0.372	9.36
23)		Bromochloromethane	0.118	0.121	0.123	0.123	0.134	0.131	0.125	4.70
24)		Cyclohexane	0.311	0.311	0.350	0.378	0.412	0.411	0.368	12.28
25)	CP	Chloroform	0.491	0.454	0.438	0.444	0.468	0.458	0.458	3.83
26)		Carbon tetrachlorid	0.287	0.287	0.296	0.311	0.346	0.344	0.317	9.10
27)		1,1,1-Trichloroetha	0.407	0.382	0.400	0.418	0.445	0.436	0.418	5.51
28)		2-Butanone	0.081	0.084	0.088	0.083	0.087	0.086	0.085	3.29
29)		1,1-Dichloropropene	0.292	0.281	0.313	0.332	0.368	0.357	0.329	10.42
30)	M	Benzene	1.061	1.007	1.074	1.093	1.160	1.104	1.080	4.37
31)	S	1,2-Dichloroethane-	0.274	0.256	0.248	0.244	0.261	0.249	0.253	4.45
32)		1,2-Dichloroethane	0.300	0.292	0.300	0.295	0.311	0.301	0.298	2.30
33)		Methylcyclohexane	0.387	0.398	0.428	0.458	0.503	0.494	0.452	10.63
34)	M	Trichloroethene	0.304	0.279	0.277	0.281	0.301	0.289	0.289	3.64
35)		Dibromomethane	0.135	0.133	0.143	0.142	0.150	0.145	0.141	3.99
36)	CP	1,2-Dichloropropane	0.212	0.219	0.227	0.226	0.244	0.238	0.229	4.76
37)		Bromodichloromethan	0.286	0.284	0.300	0.313	0.333	0.329	0.310	6.51
38)		2-Chloroethylvinyl	0.050	0.057	0.076	0.079	0.087	0.084	0.074	19.64
39)		cis-1,3-Dichloropro	0.301	0.304	0.356	0.381	0.418	0.417	0.370	13.77
40)	CPM	Toluene	0.626	0.633	0.706	0.739	0.791	0.757	0.713	8.73
41)		4-Methyl-2-pentanon		0.136	0.158	0.162	0.177	0.181	0.166	10.94
42)		trans-1,3-Dichlorop		0.250	0.300	0.323	0.368	0.369	0.329	14.63
43)		1,1,2-Trichloroetha	0.164	0.165	0.171	0.172	0.186	0.180	0.173	4.47

ok (M) 6-4-08

(#) = Out of Range ### Number of calibration levels exceeded format ###
J530VOCS.M Fri May 30 13:42:05 2008 Pa

5/30/08

Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 13:41:43 2008
Response via : Initial Calibration

Calibration Files
2.0 =J6538.D 5.0 =J6539.D 20 =J6540.D
50 =J6541.D 100 =J6542.D 150 =J6543.D

		Compound	2.0	5.0	20	50	100	150	Avg	%RSD
44)		2-Hexanone	0.066	0.075	0.101	0.109	0.125	0.128	0.105	24.77
45)	I	Chlorobenzene-d5	----------ISTD----------							
46)	S	Toluene-d8	2.572	2.405	2.419	2.454	2.553	2.427	2.455	3.24
47)		Tetrachloroethene	0.717	0.687	0.686	0.730	0.787	0.773	0.737	5.84
48)		Dibromochloromethan	0.492	0.494	0.535	0.572	0.622	0.627	0.567	10.67
49)		1,3-Dichloropropane	0.838	0.864	0.894	0.886	0.922	0.898	0.883	3.03
50)		1,2-Dibromoethane	0.501	0.505	0.511	0.511	0.538	0.528	0.516	2.55
51)		1-Chlorohexane	0.767	0.737	0.810	0.910	1.009	1.012	0.894	13.64
52)	PM	Chlorobenzene	2.140	2.102	2.023	2.066	2.148	2.052	2.077	2.63
53)	CP	Ethylbenzene	3.235	3.230	3.444	3.656	3.742	3.478	3.432	6.15
54)		1,1,1,2-Tetrachloro	0.603	0.563	0.589	0.638	0.671	0.651	0.624	6.31
55)		(m+p)-Xylene	1.149	1.208	1.364	1.471	1.529	1.453	1.369	10.27
56)		o-Xylene	1.079	1.105	1.250	1.377	1.462	1.423	1.301	12.11
57)		Styrene	1.283	1.350	1.688	1.998	2.170	2.113	1.809	20.48
58)	P	Bromoform	0.247	0.249	0.283	0.331	0.375	0.377	0.321	18.91
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
0)		Isopropylbenzene	3.340	3.455	3.805	3.861	4.265	3.980	3.772	8.30
61)	S	Bromofluorobenzene	1.235	0.983	0.984	0.965	1.072	1.061	1.050	8.77
62)		Bromobenzene	0.871	0.939	0.914	0.915	1.014	0.998	0.949	5.59
63)		n-Propylbenzene	3.714	4.023	4.602	4.681	5.103	4.645	4.425	10.60
64)	P	1,1,2,2-Tetrachloro	0.860	0.832	0.873	0.799	0.850	0.821	0.835	3.25
65)		2-Chlorotoluene	2.675	2.848	2.922	2.928	3.227	3.130	2.966	6.17
66)		1,3,5-Trimethylbenz	2.444	2.735	3.113	3.197	3.518	3.380	3.085	12.10
67)		1,2,3-Trichloroprop	0.764	0.756	0.704	0.651	0.692	0.688	0.703	6.06
68)		trans-1,4-Dichloro-	0.090	0.097	0.108	0.115	0.141	0.143	0.121	19.76
69)		4-Chlorotoluene	2.438	2.547	2.607	2.631	2.864	2.755	2.642	5.22
70)		tert-Butylbenzene	2.210	2.419	2.745	2.865	3.213	3.077	2.788	12.95
71)		1,2,4-Trimethylbenz	2.143	2.368	2.688	2.809	3.118	3.032	2.726	13.08
72)		sec-Butylbenzene	3.247	3.594	4.129	4.296	4.675	4.296	4.026	11.90
73)		p-Isopropyltoluene	2.352	2.632	3.084	3.293	3.715	3.529	3.138	15.59
74)		1,3-Dichlorobenzene	1.795	1.859	1.850	1.824	1.945	1.883	1.858	2.54
75)		1,4-Dichlorobenzene	1.984	1.859	1.739	1.729	1.839	1.776	1.810	5.10
76)		n-Butylbenzene	2.093	2.116	2.350	2.533	2.905	2.850	2.518	13.55
77)		1,2-Dichlorobenzene	1.689	1.651	1.672	1.663	1.787	1.736	1.699	2.80
78)		1,2-Dibromo-3-chlor	0.116	0.113	0.115	0.110	0.125	0.124	0.119	6.09
79)		Hexachlorobutadiene	0.475	0.415	0.432	0.430	0.511	0.522	0.475	10.75
80)		1,2,4-Trichlorobenz	0.822	0.769	0.788	0.792	0.898	0.909	0.844	7.83
81)		Naphthalene	1.365	1.405	1.633	1.661	1.906	1.906	1.681	13.83
82)		1,2,3-Trichlorobenz	0.663	0.663	0.679	0.677	0.786	0.814	0.728	9.98

(#) = Out of Range ### Number of calibration levels exceeded format ##"
J530VOCS.M Fri May 30 13:42:07 2008

Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 13:43:20 2008
Response via : Initial Calibration

Calibration Files
200 =J6544.D = =
= = =

		Compound	200	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------		
2)		Dichlorodifluoromet	0.327		
3)	P	Chloromethane	0.281		
4)	CP	Vinyl chloride	0.334		
5)		Bromomethane	0.285		
6)		Chloroethane	0.169		
7)		Trichlorofluorometh	0.576		
8)	CPM	1,1-Dichloroethene	0.223		
9)		Carbon disulfide	0.712		
10)		1,1,2-Trichloro-1,2	0.261		
11)		Methyl iodide	0.271		
12)		Acrolein	0.017		
13)		Methylene chloride	0.244		
14)		Acetone	0.059		
15)		trans-1,2-Dichloroe	0.254		
16)		Methyl acetate	0.169		
17)		Methyl tert-Butyl e	0.616		
18)	P	1,1-Dichloroethane	0.417		
19)		Acrylonitrile	0.072		
20)		Vinyl acetate	0.169		
21)		cis-1,2-Dichloroeth	0.293		
22)		2,2-Dichloropropane	0.412		
23)		Bromochloromethane	0.128		
24)		Cyclohexane	0.406		
25)	CP	Chloroform	0.452		
26)		Carbon tetrachlorid	0.351		
27)		1,1,1-Trichloroetha	0.437		
28)		2-Butanone	0.089		
29)		1,1-Dichloropropene	0.358		
30)	M	Benzene	1.059		
31)	S	1,2-Dichloroethane-	0.243		
32)		1,2-Dichloroethane	0.290		
33)		Methylcyclohexane	0.494		
34)	M	Trichloroethene	0.292		
35)		Dibromomethane	0.142		
36)	CP	1,2-Dichloropropane	0.234		
37)		Bromodichloromethan	0.323		
38)		2-Chloroethylvinyl	0.083		
39)		cis-1,3-Dichloropro	0.411		
40)	CPM	Toluene	0.736		
41)		4-Methyl-2-pentanon	0.184		
42)		trans-1,3-Dichlorop	0.365		
43)		1,1,2-Trichloroetha	0.174		

(#) = Out of Range ### Number of calibration levels exceeded format ##"
J530VOCS.M Fri May 30 13:43:24 2008

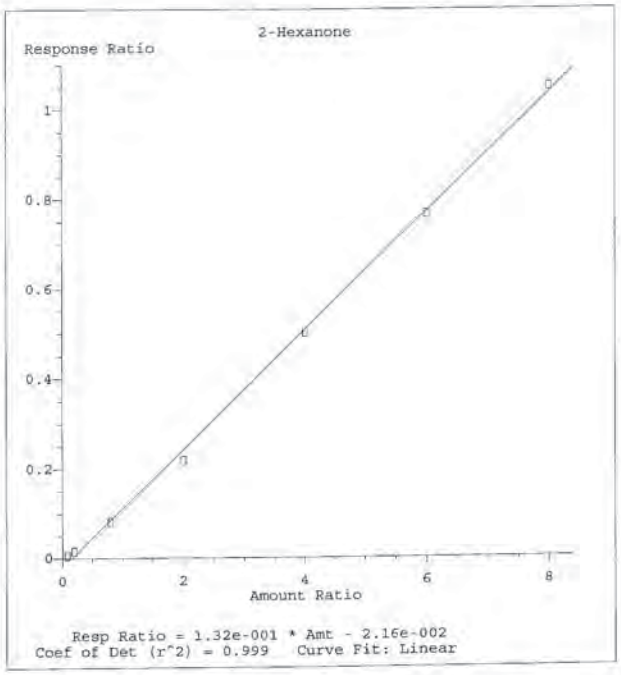
Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 13:43:20 2008
Response via : Initial Calibration

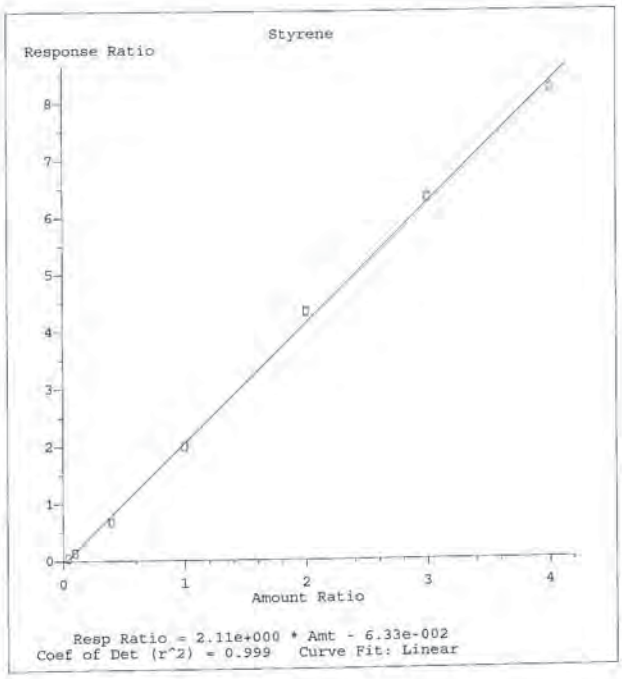
Calibration Files
200 =J6544.D = =
= = =

		Compound	200	Avg	%RSD
44)		2-Hexanone	0.131		
45)	I	Chlorobenzene-d5	----------ISTD----------		
46)	S	Toluene-d8	2.355		
47)		Tetrachloroethene	0.780		
48)		Dibromochloromethan	0.625		
49)		1,3-Dichloropropane	0.883		
50)		1,2-Dibromoethane	0.520		
51)		1-Chlorohexane	1.012		
52)	PM	Chlorobenzene	2.009		
53)	CP	Ethylbenzene	3.236		
54)		1,1,1,2-Tetrachloro	0.652		
55)		(m+p)-Xylene	1.405		
56)		o-Xylene	1.413		
57)		Styrene	2.061		
58)	P	Bromoform	0.383		
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------		
60)		Isopropylbenzene	3.696		
61)	S	Bromofluorobenzene	1.050		
62)		Bromobenzene	0.989		
63)		n-Propylbenzene	4.206		
64)	P	1,1,2,2-Tetrachloro	0.811		
65)		2-Chlorotoluene	3.031		
66)		1,3,5-Trimethylbenz	3.210		
67)		1,2,3-Trichloroprop	0.667		
68)		trans-1,4-Dichloro-	0.149		
69)		4-Chlorotoluene	2.657		
70)		tert-Butylbenzene	2.986		
71)		1,2,4-Trimethylbenz	2.925		
72)		sec-Butylbenzene	3.950		
73)		p-Isopropyltoluene	3.360		
74)		1,3-Dichlorobenzene	1.850		
75)		1,4-Dichlorobenzene	1.740		
76)		n-Butylbenzene	2.776		
77)		1,2-Dichlorobenzene	1.694		
78)		1,2-Dibromo-3-chlor	0.130		
79)		Hexachlorobutadiene	0.544		
80)		1,2,4-Trichlorobenz	0.928		
81)		Naphthalene	1.892		
82)		1,2,3-Trichlorobenz	0.814		

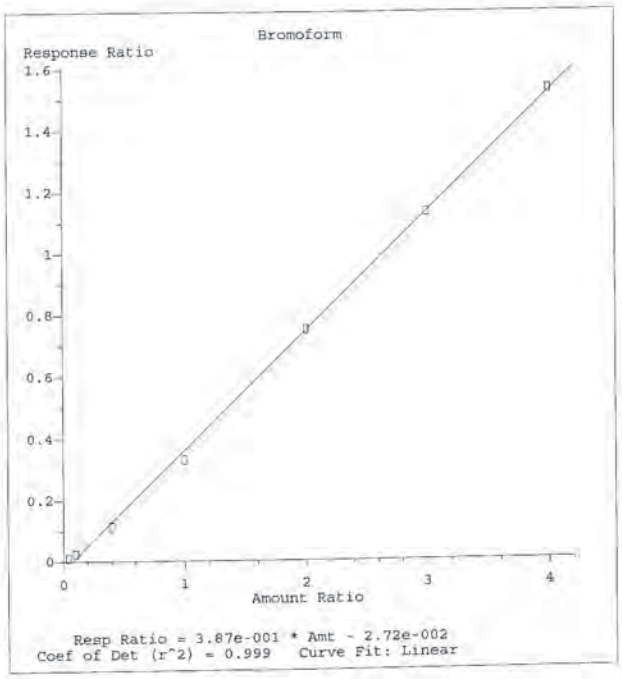
(#) = Out of Range ### Number of calibration levels exceeded format ##"
J530VOCS.M Fri May 30 13:43:26 2008



Method Name: C:\HPCHEM\1\METHODS\J530VOCS.M
Calibration Table Last Updated: Fri May 30 13:36:25 2008



Method Name: C:\HPCHEM\1\METHODS\J530VOCS.M
Calibration Table Last Updated: Fri May 30 13:37:43 2008



Method Name: C:\HPCHEM\1\METHODS\J530VOCS.M
Calibration Table Last Updated: Fri May 30 13:37:04 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6538.D
Acq On : 30 May 2008 7:21
Sample : ICAL 2.0 PPB
Misc : ICAL,8260S_CAL,
"S Integration Params: RTEINT.P
Quant Time: May 30 9:44 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	3070674	50.00 ug/L	0.01
45) Chlorobenzene-d5	15.82	82	1113419	50.00 ug/L	0.01
59) 1,4-Dichlorobenzene-d4	19.88	152	843119	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.49	65	33674	2.25 ug/L	0.01
Spiked Amount 50.000			Recovery	= 4.50%	
46) Toluene-d8	13.32	98	114549	2.10 ug/L	0.00
Spiked Amount 50.000			Recovery	= 4.20%	
61) Bromofluorobenzene	17.89	95	41639	2.56 ug/L	0.01
Spiked Amount 50.000			Recovery	= 5.12%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.99	85	46580	2.20 ug/L	94
3) Chloromethane	3.37	50	44367	2.46 ug/L	97
4) Vinyl chloride	3.53	62	38578	1.91 ug/L	92
5) Bromomethane	4.20	94	37963m	2.19 ug/L	
6) Chloroethane	4.45	64	27593	2.43 ug/L	66
7) Trichlorofluoromethane	4.74	101	79863	2.12 ug/L	94
8) 1,1-Dichloroethene	5.75	96	26450	2.04 ug/L	94
9) Carbon disulfide	5.78	76	95217	2.10 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	33529	2.08 ug/L	97
11) Methyl iodide	6.01	142	22997	1.50 ug/L	93
12) Acrolein	6.45	56	1548	1.71 ug/L #	16
13) Methylene chloride	6.82	84	48740	3.19 ug/L	97
14) Acetone	6.96	43	17246	5.25 ug/L #	42
15) trans-1,2-Dichloroethene	7.10	96	30715	2.06 ug/L	96
16) Methyl acetate	7.19	43	17570	1.88 ug/L	93
17) Methyl tert-Butyl ether	7.31	73	67151	1.90 ug/L	89
18) 1,1-Dichloroethane	8.11	63	54392	2.17 ug/L	96
19) Acrylonitrile	8.24	53	29455	7.49 ug/L	79
20) Vinyl acetate	8.58	43	8538	1.01 ug/L	81
21) cis-1,2-Dichloroethene	8.98	96	34614	2.05 ug/L	96
22) 2,2-Dichloropropane	9.14	77	41376	1.83 ug/L	99
23) Bromochloromethane	9.29	128	14452	1.91 ug/L	88
24) Cyclohexane	9.29	56	38181	1.65 ug/L	93
25) Chloroform	9.39	83	60329	2.21 ug/L	100
26) Carbon tetrachloride	9.61	117	35215	1.84 ug/L	100
27) 1,1,1-Trichloroethane	9.72	97	50029	1.95 ug/L	97
28) 2-Butanone	9.92	43	19966	3.92 ug/L	90
29) 1,1-Dichloropropene	9.91	75	35814	1.76 ug/L	97
30) Benzene	10.28	78	130321	1.94 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6538.D J530VOCS.M Fri May 30 09:45:26 2008

Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6538.D
Acq On : 30 May 2008 7:21
Sample : ICAL 2.0 PPB
Misc : ICAL,8260S_CAL,
"S Integration Params: RTEINT.P
Quant Time: May 30 9:44 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	36831	2.04 ug/L	88
33) Methylcyclohexane	11.16	83	47572	1.69 ug/L	96
34) Trichloroethene	11.17	95	37296	2.16 ug/L	89
35) Dibromomethane	11.82	93	16535	1.90 ug/L	93
36) 1,2-Dichloropropane	11.97	63	26091	1.88 ug/L	99
37) Bromodichloromethane	12.06	83	35092	1.82 ug/L	97
38) 2-Chloroethylvinyl ether	12.92	63	30420	6.30 ug/L	99
39) cis-1,3-Dichloropropene	13.03	75	36957	1.58 ug/L	89
40) Toluene	13.40	92	76873	1.69 ug/L	99
41) 4-Methyl-2-pentanone	13.99	43	28072	2.83 ug/L	90
42) trans-1,3-Dichloropropene	14.05	75	29032	1.46 ug/L	87
43) 1,1,2-Trichloroethane	14.30	83	20139	1.91 ug/L	100
44) 2-Hexanone	15.33	43	16186	2.41 ug/L	86
47) Tetrachloroethene	14.02	166	31954	1.97 ug/L	97
48) Dibromochloromethane	14.60	129	21929	1.72 ug/L	96
49) 1,3-Dichloropropane	14.75	76	37300	1.89 ug/L	97
50) 1,2-Dibromoethane	14.99	107	22317	1.96 ug/L #	95
51) 1-Chlorohexane	15.79	91	34144	1.69 ug/L #	45
52) Chlorobenzene	15.84	112	95313	2.07 ug/L	84
53) Ethylbenzene	15.87	91	144065	1.77 ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.94	131	26860	1.89 ug/L #	57
55) (m+p)-Xylene	16.11	106	102387	3.13 ug/L	99
56) o-Xylene	16.84	106	48072	1.57 ug/L	99
57) Styrene	16.94	104	57156	1.28 ug/L	97
58) Bromoform	16.99	173	11019	1.50 ug/L	88
60) Isopropylbenzene	17.37	105	112645	1.73 ug/L	97
62) Bromobenzene	18.08	156	29362	1.90 ug/L	91
63) n-Propylbenzene	18.10	91	125241	1.59 ug/L	99
64) 1,1,2,2-Tetrachloroethane	18.21	83	29010	2.15 ug/L	97
65) 2-Chlorotoluene	18.39	91	90226	1.83 ug/L	97
66) 1,3,5-Trimethylbenzene	18.44	105	82431	1.53 ug/L	100
67) 1,2,3-Trichloropropane	18.48	75	25759	2.35 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	3048	1.57 ug/L	85
69) 4-Chlorotoluene	18.69	91	82217	1.85 ug/L	99
70) tert-Butylbenzene	19.00	119	74521	1.54 ug/L	99
71) 1,2,4-Trimethylbenzene	19.13	105	72265	1.53 ug/L	99
72) sec-Butylbenzene	19.32	105	109494	1.51 ug/L	98
73) p-Isopropyltoluene	19.59	119	79323	1.43 ug/L	97
74) 1,3-Dichlorobenzene	19.75	146	60542	1.97 ug/L	98
75) 1,4-Dichlorobenzene	19.90	146	66907	2.29 ug/L	89
76) n-Butylbenzene	20.36	91	70575	1.65 ug/L	98

(#) = qualifier out of range (m) = manual integration
J6538.D J530VOCS.M Fri May 30 09:45:27 2008

Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6538.D
Acq On : 30 May 2008 7:21
Sample : ICAL 2.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:44 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	56964	2.03 ug/L	97
78) 1,2-Dibromo-3-chloropropan	22.19	75	3923	2.11 ug/L	91
79) Hexachlorobutadiene	23.31	225	16005	2.21 ug/L	93
80) 1,2,4-Trichlorobenzene	23.37	180	27723	2.08 ug/L	97
81) Naphthalene	23.87	128	46045	1.64 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	22345	1.96 ug/L	96

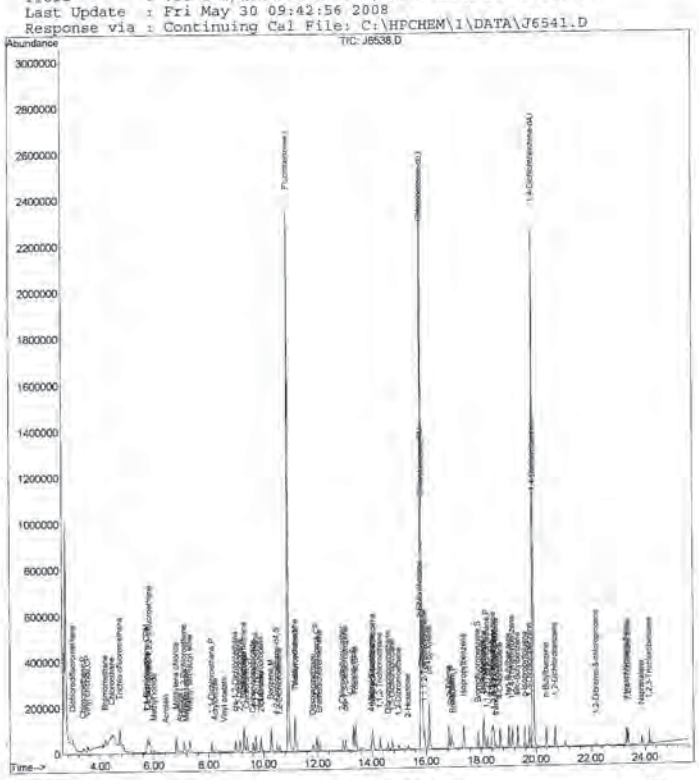
(#) = qualifier out of range (m) = manual integration
J6538.D J530VOCS.M Fri May 30 09:45:27 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6538.D
Acq On : 30 May 2008 7:21
Sample : ICAL 2.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:44 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D



J6538.D J530VOCS.M Fri May 30 09:45:30 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6539.D
Acq On : 30 May 2008 7:56
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	3021736	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.82	82	1109873	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	855083	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.49	65	77463	5.26 ug/L	0.00
Spiked Amount 50.000			Recovery	= 10.52%	
46) Toluene-d8	13.31	98	266910	4.90 ug/L	0.00
Spiked Amount 50.000			Recovery	= 9.80%	
61) Bromofluorobenzene	17.88	95	84084	5.10 ug/L	0.00
Spiked Amount 50.000			Recovery	= 10.20%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.97	85	103103	4.95 ug/L	99
3) Chloromethane	3.36	50	92238	5.20 ug/L	98
4) Vinyl chloride	3.53	62	96181	4.83 ug/L	99
5) Bromomethane	4.20	94	96081	5.63 ug/L	95
6) Chloroethane	4.45	64	61998	5.54 ug/L	88
7) Trichlorofluoromethane	4.74	101	187667	5.05 ug/L	95
8) 1,1-Dichloroethene	5.75	96	60572	4.75 ug/L	99
9) Carbon disulfide	5.78	76	220317	4.94 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	77004	4.86 ug/L	99
11) Methyl iodide	6.00	142	58506	3.88 ug/L	99
12) Acrolein	6.42	56	14833	16.66 ug/L #	46
13) Methylene chloride	6.81	84	91833	6.11 ug/L	100
14) Acetone	6.96	43	32613	10.08 ug/L	91
15) trans-1,2-Dichloroethene	7.10	96	76555	5.23 ug/L	95
16) Methyl acetate	7.16	43	43664	4.74 ug/L #	91
17) Methyl tert-Butyl ether	7.31	73	156622	4.50 ug/L	94
18) 1,1-Dichloroethane	8.11	63	122028	4.94 ug/L	99
19) Acrylonitrile	8.23	53	80476	20.79 ug/L	94
20) Vinyl acetate	8.57	43	25971	3.12 ug/L	88
21) cis-1,2-Dichloroethene	8.98	96	80220	4.84 ug/L	96
22) 2,2-Dichloropropane	9.13	77	100528	4.51 ug/L	99
23) Bromochloromethane	9.28	128	36493	4.90 ug/L	97
24) Cyclohexane	9.28	56	93854	4.11 ug/L	97
25) Chloroform	9.39	83	137100	5.10 ug/L	97
26) Carbon tetrachloride	9.61	117	86754	4.61 ug/L	98
27) 1,1,1-Trichloroethane	9.71	97	115462	4.57 ug/L	98
28) 2-Butanone	9.91	43	50854	10.14 ug/L	85
29) 1,1-Dichloropropene	9.90	75	85012	4.24 ug/L	96
30) Benzene	10.28	78	304338	4.61 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6539.D J530VOCS.M Fri May 30 09:46:03 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6539.D
Acq On : 30 May 2008 7:56
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.59	62	88283	4.96 ug/L	97
33) Methylcyclohexane	11.16	83	120355	4.35 ug/L	99
34) Trichloroethene	11.17	95	84383	4.96 ug/L	93
35) Dibromomethane	11.82	93	40310	4.70 ug/L	99
36) 1,2-Dichloropropane	11.95	63	66325	4.86 ug/L	99
37) Bromodichloromethane	12.06	83	85928	4.54 ug/L	97
38) 2-Chloroethylvinyl ether	12.91	63	86222	18.16 ug/L	94
39) cis-1,3-Dichloropropene	13.02	75	91925	3.99 ug/L	94
40) Toluene	13.40	92	191295	4.28 ug/L	100
41) 4-Methyl-2-pentanone	13.98	43	82134	8.41 ug/L	95
42) trans-1,3-Dichloropropene	14.04	75	75412	3.87 ug/L	93
43) 1,1,2-Trichloroethane	14.30	83	49966	4.81 ug/L	99
44) 2-Hexanone	15.33	43	45511	6.89 ug/L	98
47) Tetrachloroethene	14.02	166	76288	4.71 ug/L	100
48) Dibromochloromethane	14.59	129	54856	4.32 ug/L	99
49) 1,3-Dichloropropane	14.74	76	95870	4.87 ug/L	97
50) 1,2-Dibromoethane	14.99	107	56036	4.94 ug/L	99
51) 1-Chlorohexane	15.78	91	81802	4.05 ug/L	76
52) Chlorobenzene	15.85	112	233337	5.09 ug/L	96
53) Ethylbenzene	15.87	91	358480	4.42 ug/L	98
54) 1,1,1,2-Tetrachloroethane	15.94	131	62504	4.41 ug/L	96
55) (m+p)-Xylene	16.11	106	268080	8.21 ug/L	97
56) o-Xylene	16.84	106	122662	4.01 ug/L	100
57) Styrene	16.93	104	149784	3.38 ug/L	99
58) Bromoform	16.99	173	27640	3.76 ug/L	90
60) Isopropylbenzene	17.37	105	295433	4.47 ug/L	100
62) Bromobenzene	18.07	156	80307	5.13 ug/L	98
63) n-Propylbenzene	18.10	91	344040	4.30 ug/L	100
64) 1,1,2,2-Tetrachloroethane	18.21	83	71105	5.21 ug/L	95
65) 2-Chlorotoluene	18.39	91	243488	4.86 ug/L	97
66) 1,3,5-Trimethylbenzene	18.43	105	233872	4.28 ug/L	96
67) 1,2,3-Trichloropropane	18.46	75	64663	5.81 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	8259	4.18 ug/L	89
69) 4-Chlorotoluene	18.69	91	217752	4.84 ug/L	99
70) tert-Butylbenzene	19.00	119	206850	4.22 ug/L	99
71) 1,2,4-Trimethylbenzene	19.13	105	202483	4.22 ug/L	97
72) sec-Butylbenzene	19.33	105	307319	4.18 ug/L	100
73) p-Isopropyltoluene	19.58	119	225067	4.00 ug/L	99
74) 1,3-Dichlorobenzene	19.75	146	158988	5.10 ug/L	100
75) 1,4-Dichlorobenzene	19.91	146	158995	5.38 ug/L	94
76) n-Butylbenzene	20.36	91	180921	4.18 ug/L	98

(#) = qualifier out of range (m) = manual integration
J6539.D J530VOCS.M Fri May 30 09:46:04 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6539.D
Acq On : 30 May 2008 7:56
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	141136	4.96 ug/L	97
78) 1,2-Dibromo-3-chloropropan	22.18	75	9661	5.13 ug/L	86
79) Hexachlorobutadiene	23.32	225	35516	4.83 ug/L	99
80) 1,2,4-Trichlorobenzene	23.37	180	65746	4.86 ug/L	98
81) Naphthalene	23.87	128	120116	4.23 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	56685	4.90 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6539.D J530VOCS.M Fri May 30 09:46:04 2008

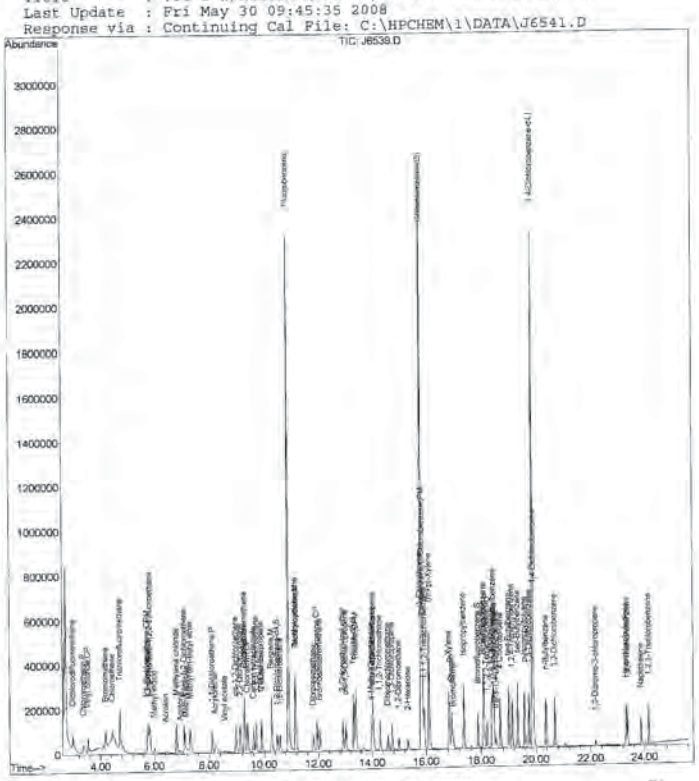
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6539.D
Acq On : 30 May 2008 7:56
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J530VOCS.RES

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:45:35 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D



J6539.D J530VOCS.M Fri May 30 09:46:06 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6540.D
Acq On : 30 May 2008 8:30
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	3098062	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.82	82	1188461	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	978967	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	306712	20.31 ug/L	0.00
Spiked Amount 50.000			Recovery =	40.62%	
46) Toluene-d8	13.32	98	1150001	19.71 ug/L	0.00
Spiked Amount 50.000			Recovery =	39.42%	
61) Bromofluorobenzene	17.87	95	385162	20.39 ug/L	0.00
Spiked Amount 50.000			Recovery =	40.78%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.97	85	406004	19.00 ug/L	99
3) Chloromethane	3.37	50	361052	19.85 ug/L	99
4) Vinyl chloride	3.53	62	377856	18.50 ug/L	99
5) Bromomethane	4.20	94	350321	20.01 ug/L	96
6) Chloroethane	4.45	64	223296	19.48 ug/L	99
7) Trichlorofluoromethane	4.74	101	733312	19.25 ug/L	99
8) 1,1-Dichloroethene	5.75	96	260871	19.97 ug/L	96
9) Carbon disulfide	5.78	76	867812	18.98 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	320434	19.73 ug/L	99
11) Methyl iodide	6.00	142	285524	18.46 ug/L	100
12) Acrolein	6.40	56	91483	100.24 ug/L #	98
13) Methylene chloride	6.61	84	319734	20.73 ug/L	99
14) Acetone	6.93	43	142086	42.85 ug/L	98
15) trans-1,2-Dichloroethene	7.10	96	297995	19.84 ug/L	99
16) Methyl acetate	7.15	43	194180	20.55 ug/L	99
17) Methyl tert-Butyl ether	7.30	73	707132	19.81 ug/L	98
18) 1,1-Dichloroethane	8.11	63	501241	19.78 ug/L	99
19) Acrylonitrile	8.20	53	405299	102.11 ug/L	99
20) Vinyl acetate	8.55	43	154195	18.09 ug/L	100
21) cis-1,2-Dichloroethene	8.98	96	336039	19.76 ug/L	98
22) 2,2-Dichloropropane	9.14	77	428584	18.76 ug/L	99
23) Bromochloromethane	9.28	128	152361	19.98 ug/L	100
24) Cyclohexane	9.28	56	433193	18.50 ug/L	100
25) Chloroform	9.39	83	542451	19.70 ug/L	99
26) Carbon tetrachloride	9.61	117	366723	19.01 ug/L	99
27) 1,1,1-Trichloroethane	9.71	97	495154	19.11 ug/L	99
28) 2-Butanone	9.89	43	219270	42.64 ug/L	95
29) 1,1-Dichloropropene	9.91	75	388014	18.89 ug/L	99
30) Benzene	10.28	78	1330979	19.65 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6540.D J530VOCS.M Fri May 30 09:46:31 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6540.D
Acq On : 30 May 2008 8:30
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	372125	20.39 ug/L	98
33) Methylcyclohexane	11.16	83	530931	18.72 ug/L	99
34) Trichloroethene	11.17	95	342690	19.65 ug/L	97
35) Dibromomethane	11.82	93	177107	20.14 ug/L	98
36) 1,2-Dichloropropane	11.95	63	280875	20.06 ug/L	100
37) Bromodichloromethane	12.05	83	371614	19.15 ug/L	97
38) 2-Chloroethylvinyl ether	12.90	63	473588	97.29 ug/L	99
39) cis-1,3-Dichloropropene	13.02	75	441707	18.70 ug/L	99
40) Toluene	13.40	92	874584	19.10 ug/L	100
41) 4-Methyl-2-pentanone	13.98	43	390713	39.02 ug/L	98
42) trans-1,3-Dichloropropene	14.04	75	371976	18.60 ug/L	99
43) 1,1,2-Trichloroethane	14.30	83	212216	19.92 ug/L	97
44) 2-Hexanone	15.32	43	250148	36.93 ug/L	98
47) Tetrachloroethene	14.02	166	326060	18.80 ug/L	98
48) Dibromochloromethane	14.59	129	254253	18.69 ug/L	99
49) 1,3-Dichloropropane	14.74	76	424798	20.17 ug/L	98
50) 1,2-Dibromoethane	14.99	107	242783	20.00 ug/L	99
51) 1-Chlorohexane	15.78	91	385192	17.81 ug/L	92
52) Chlorobenzene	15.84	112	961502	19.58 ug/L	99
53) Ethylbenzene	15.87	91	1637344	18.84 ug/L	98
54) 1,1,1,2-Tetrachloroethane	15.93	131	279818	18.45 ug/L	99
55) (m+p)-Xylene	16.11	106	1297109	37.10 ug/L	100
56) o-Xylene	16.84	106	594392	18.16 ug/L	98
57) Styrene	16.93	104	802508	16.90 ug/L	98
58) Bromoform	16.99	173	134371	17.08 ug/L	99
60) Isopropylbenzene	17.37	105	1489882	19.71 ug/L	100
62) Bromobenzene	18.07	156	357952	19.98 ug/L	97
63) n-Propylbenzene	18.10	91	1802029	19.66 ug/L	99
64) 1,1,2,2-Tetrachloroethane	18.21	83	341836	21.86 ug/L	99
65) 2-Chlorotoluene	18.39	91	1144048	19.96 ug/L	100
66) 1,3,5-Trimethylbenzene	18.43	105	1219126	19.47 ug/L	100
67) 1,2,3-Trichloropropane	18.46	75	275777	21.64 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	42417	18.77 ug/L	91
69) 4-Chlorotoluene	18.68	91	1020713	19.82 ug/L	99
70) tert-Butylbenzene	19.00	119	1074906	19.16 ug/L	100
71) 1,2,4-Trimethylbenzene	19.13	105	1052555	19.14 ug/L	99
72) sec-Butylbenzene	19.32	105	1616699	19.22 ug/L	100
73) p-Isopropyltoluene	19.57	119	1207698	18.73 ug/L	99
74) 1,3-Dichlorobenzene	19.75	146	724425	20.29 ug/L	99
75) 1,4-Dichlorobenzene	19.91	146	681008	20.11 ug/L	97
76) n-Butylbenzene	20.35	91	920331	18.56 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6540.D J530VOCS.M Fri May 30 09:46:32 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6540.D
Acq On : 30 May 2008 8:30
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	654619	20.10 ug/L	99
78) 1,2-Dibromo-3-chloropropan	22.18	75	44844	20.79 ug/L	99
79) Hexachlorobutadiene	23.32	225	169198	20.11 ug/L	99
80) 1,2,4-Trichlorobenzene	23.36	180	308489	19.90 ug/L	98
81) Naphthalene	23.87	128	639545	19.66 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	265874	20.07 ug/L	98

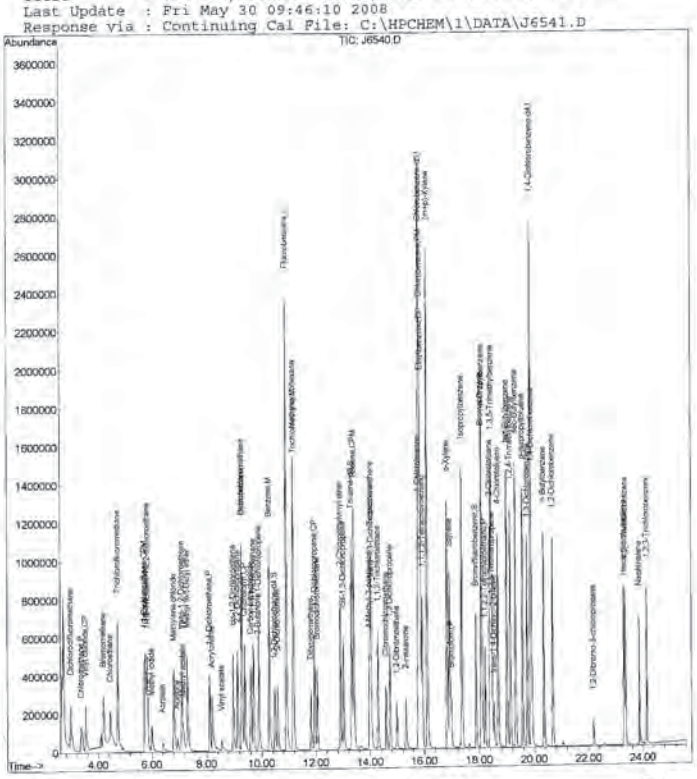
(#) = qualifier out of range (m) = manual integration
J6540.D J530VOCS.M Fri May 30 09:46:32 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6540.D
Acq On : 30 May 2008 8:30
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:43 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:46:10 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D



J6540.D J530VOCS.M Fri May 30 09:46:34 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6541.D
Acq On : 30 May 2008 9:05
Sample : ICAL 50 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:42 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:00 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3285359	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.81	82	1274147	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.68	152	1158412	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	800542	50.00 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.00%	
46) Toluene-d8	13.32	98	3127113	50.00 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.00%	
61) Bromofluorobenzene	17.88	95	1117401	50.00 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.00%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.98	85	1133059	50.00 ug/L	100
3) Chloromethane	3.37	50	964456	50.00 ug/L	100
4) Vinyl chloride	3.53	62	1082821	50.00 ug/L	100
5) Bromomethane	4.20	94	928451	50.00 ug/L	100
6) Chloroethane	4.45	64	607868	50.00 ug/L	100
7) Trichlorofluoromethane	4.74	101	2019532	50.00 ug/L	100
8) 1,1-Dichloroethene	5.74	96	692593	50.00 ug/L	100
9) Carbon disulfide	5.78	76	2424112	50.00 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	861242	50.00 ug/L	100
11) Methyl iodide	6.00	142	820040	50.00 ug/L	100
12) Acrolein	6.39	56	241943	250.00 ug/L #	100
13) Methylene chloride	6.81	84	817631	50.00 ug/L	100
14) Acetone	6.92	43	351598	100.00 ug/L	100
15) trans-1,2-Dichloroethene	7.09	96	796285	50.00 ug/L	100
16) Methyl acetate	7.14	43	501099	50.00 ug/L	100
17) Methyl tert-Butyl ether	7.30	73	1893123	50.00 ug/L	100
18) 1,1-Dichloroethane	8.10	63	1343438	50.00 ug/L	100
19) Acrylonitrile	8.19	53	1052271	250.00 ug/L	100
20) Vinyl acetate	8.53	43	451960	50.00 ug/L	100
21) cis-1,2-Dichloroethene	8.97	96	901793	50.00 ug/L	100
22) 2,2-Dichloropropane	9.13	77	1211593	50.00 ug/L	100
23) Bromochloromethane	9.28	128	404473	50.00 ug/L	100
24) Cyclohexane	9.29	56	1241329	50.00 ug/L	100
25) Chloroform	9.39	83	1460277	50.00 ug/L	100
26) Carbon tetrachloride	9.61	117	1022827	50.00 ug/L	100
27) 1,1,1-Trichloroethane	9.71	97	1373875	50.00 ug/L	100
28) 2-Butanone	9.88	43	545354	100.00 ug/L	100
29) 1,1-Dichloropropene	9.90	75	1089390	50.00 ug/L	100
30) Benzene	10.28	78	3591562	50.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6541.D J530VOCS.M Fri May 30 09:42:22 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6541.D
Acq On : 30 May 2008 9:05
Sample : ICAL 50 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:42 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:00 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	967785	50.00 ug/L	100
33) Methylcyclohexane	11.15	83	1503899	50.00 ug/L	100
34) Trichloroethene	11.16	95	924778	50.00 ug/L	100
35) Dibromomethane	11.81	93	466251	50.00 ug/L	100
36) 1,2-Dichloropropane	11.96	63	742394	50.00 ug/L	100
37) Bromodichloromethane	12.05	83	1028738	50.00 ug/L	100
38) 2-Chloroethylvinyl ether	12.91	63	1290566	250.00 ug/L	100
39) cis-1,3-Dichloropropene	13.02	75	1252139	50.00 ug/L	100
40) Toluene	13.39	92	2428342	50.00 ug/L	100
41) 4-Methyl-2-pentanone	13.97	43	1061930	100.00 ug/L	100
42) trans-1,3-Dichloropropene	14.03	75	1060182	50.00 ug/L	100
43) 1,1,2-Trichloroethane	14.30	83	564951	50.00 ug/L	100
44) 2-Hexanone	15.31	43	718222	100.00 ug/L	100
47) Tetrachloroethene	14.01	166	929821	50.00 ug/L	100
48) Dibromochloromethane	14.59	129	729266	50.00 ug/L	100
49) 1,3-Dichloropropane	14.74	76	1128830	50.00 ug/L	100
50) 1,2-Dibromoethane	14.98	107	650828	50.00 ug/L	100
51) 1-Chlorohexane	15.78	91	1159314	50.00 ug/L	100
52) Chlorobenzene	15.84	112	2632849	50.00 ug/L	100
53) Ethylbenzene	15.87	91	4658346	50.00 ug/L	100
54) 1,1,1,2-Tetrachloroethane	15.93	131	813113	50.00 ug/L	100
55) (m+p)-Xylene	16.10	106	3748609	100.00 ug/L	100
56) o-Xylene	16.84	106	1754406	50.00 ug/L	100
57) Styrene	16.93	104	2545235	50.00 ug/L	100
58) Bromoform	16.99	173	421619	50.00 ug/L	100
60) Isopropylbenzene	17.37	105	4473193	50.00 ug/L	100
62) Bromobenzene	18.07	156	1060091	50.00 ug/L	100
63) n-Propylbenzene	18.09	91	5422360	50.00 ug/L	100
64) 1,1,2,2-Tetrachloroethane	18.21	83	925180	50.00 ug/L	100
65) 2-Chlorotoluene	18.38	91	3391816	50.00 ug/L	100
66) 1,3,5-Trimethylbenzene	18.42	105	3703792	50.00 ug/L	100
67) 1,2,3-Trichloropropane	18.46	75	754090	50.00 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	133724	50.00 ug/L	100
69) 4-Chlorotoluene	18.68	91	3047257	50.00 ug/L	100
70) tert-Butylbenzene	19.00	119	3318492	50.00 ug/L	100
71) 1,2,4-Trimethylbenzene	19.13	105	3253824	50.00 ug/L	100
72) sec-Butylbenzene	19.32	105	4976756	50.00 ug/L	100
73) p-Isopropyltoluene	19.57	119	3814882	50.00 ug/L	100
74) 1,3-Dichlorobenzene	19.74	146	2112608	50.00 ug/L	100
75) 1,4-Dichlorobenzene	19.90	146	2003380	50.00 ug/L	100
76) n-Butylbenzene	20.36	91	2934477	50.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6541.D J530VOCS.M Fri May 30 09:42:23 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6541.D
Acq On : 30 May 2008 9:05
Sample : ICAL 50 PPB
Misc : ICAL,8260S_CAL,
'S Integration Params: RTEINT.P
Quant Time: May 30 9:42 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:00 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	1926788	50.00 ug/L	100
78) 1,2-Dibromo-3-chloropropan	22.18	75	127643	50.00 ug/L	100
79) Hexachlorobutadiene	23.31	225	497740	50.00 ug/L	100
80) 1,2,4-Trichlorobenzene	23.36	180	917193	50.00 ug/L	100
81) Naphthalene	23.87	128	1924551	50.00 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	783968	50.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6541.D J530VOCS.M Fri May 30 09:42:23 2008

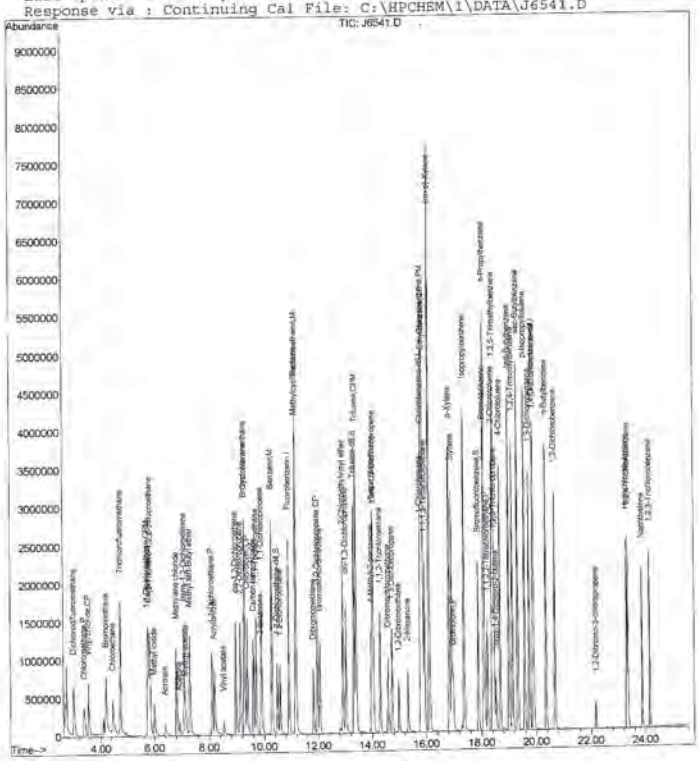
Pa 488

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6541.D
Acq On : 30 May 2008 9:05
Sample : ICAL 50 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 9:42 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:42:00 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D



J6541.D J530VOCS.M Fri May 30 09:42:25 2008

Pa 489

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6542.D
Acq On : 30 May 2008 9:41
Sample : ICAL 100 PPB
Misc : ICAL,8260S_CAL,
'S Integration Params: RTEINT.P
Quant Time: May 30 10:07 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:46:38 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3312102	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.81	82	1325158	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	1142866	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	1730226	107.19 ug/L	0.00
Spiked Amount 50.000			Recovery	= 214.38*	
46) Toluene-d8	13.31	98	6766781	104.03 ug/L	0.00
Spiked Amount 50.000			Recovery	= 208.06*	
61) Bromofluorobenzene	17.88	95	2449176	111.08 ug/L	0.00
Spiked Amount 50.000			Recovery	= 222.16*	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.98	85	2264119	99.11 ug/L	99
3) Chloromethane	3.37	50	1944420	99.99 ug/L	100
4) Vinyl chloride	3.53	62	2215359	101.47 ug/L	99
5) Bromomethane	4.20	94	1938143	103.53 ug/L	99
6) Chloroethane	4.45	64	1228305	100.22 ug/L	97
7) Trichlorofluoromethane	4.74	101	4066951	99.88 ug/L	99
8) 1,1-Dichloroethene	5.74	96	1504918	107.77 ug/L	99
9) Carbon disulfide	5.78	76	4944699	101.17 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	1822783	104.97 ug/L	99
11) Methyl iodide	6.00	142	1801925	108.98 ug/L	99
12) Acrolein	6.38	56	532864	546.16 ug/L #	100
13) Methylene chloride	6.81	84	1697697	102.98 ug/L	99
14) Acetone	6.91	43	769353	217.05 ug/L	98
15) trans-1,2-Dichloroethene	7.09	96	1707162	106.33 ug/L	100
16) Methyl acetate	7.13	43	1102144	109.08 ug/L	100
17) Methyl tert-Butyl ether	7.29	73	4173610	109.34 ug/L	99
18) 1,1-Dichloroethane	8.10	63	2868879	105.91 ug/L	99
19) Acrylonitrile	8.19	53	2359647	556.08 ug/L	99
20) Vinyl acetate	8.53	43	1058673	116.17 ug/L	98
21) cis-1,2-Dichloroethene	8.97	96	1999337	109.96 ug/L	97
22) 2,2-Dichloropropane	9.13	77	2681665	109.77 ug/L	100
23) Bromochloromethane	9.28	128	889253	109.04 ug/L	98
24) Cyclohexane	9.29	56	2731966	109.15 ug/L	99
25) Chloroform	9.39	83	3097092	105.19 ug/L	98
26) Carbon tetrachloride	9.60	117	2292908	111.18 ug/L	99
27) 1,1,1-Trichloroethane	9.71	97	2950528	106.51 ug/L	99
28) 2-Butanone	9.87	43	1149178	209.02 ug/L	100
29) 1,1-Dichloropropene	9.90	75	2434756	110.85 ug/L	99
30) Benzene	10.28	78	7686109	106.14 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6542.D J530VOCS.M Fri May 30 10:17:49 2008

Pa 490

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6542.D
Acq On : 30 May 2008 9:41
Sample : ICAL 100 PPB
Misc : ICAL,8260S_CAL,
'S Integration Params: RTEINT.P
Quant Time: May 30 10:07 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:46:38 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.57	62	2057299	105.43 ug/L	100
33) Methylcyclohexane	11.15	83	3334141	109.95 ug/L	99
34) Trichloroethene	11.16	95	1991132	106.79 ug/L	100
35) Dibromomethane	11.81	93	991264	105.44 ug/L	98
36) 1,2-Dichloropropane	11.96	63	1616742	108.01 ug/L	100
37) Bromodichloromethane	12.05	83	2204942	106.30 ug/L	99
38) 2-Chloroethylvinyl ether	12.91	63	2872028	551.86 ug/L	100
39) cis-1,3-Dichloropropene	13.02	75	2767227	109.61 ug/L	100
40) Toluene	13.39	92	5238043	106.98 ug/L	98
41) 4-Methyl-2-pentanone	13.97	43	2341374	218.70 ug/L	99
42) trans-1,3-Dichloropropene	14.03	75	2438249	114.06 ug/L	100
43) 1,1,2-Trichloroethane	14.30	83	1232441	108.19 ug/L	98
44) 2-Hexanone	15.31	43	1660586	229.34 ug/L	99
47) Tetrachloroethene	14.01	166	2084513	107.78 ug/L	99
48) Dibromochloromethane	14.59	129	1648563	108.68 ug/L	98
49) 1,3-Dichloropropane	14.74	76	2443412	104.06 ug/L	99
50) 1,2-Dibromoethane	14.98	107	1425278	105.28 ug/L	100
51) 1-Chlorohexane	15.78	91	2673924	110.88 ug/L	98
52) Chlorobenzene	15.84	112	5692488	103.94 ug/L	99
53) Ethylbenzene	15.86	91	9918146	102.36 ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.93	131	1777378	105.09 ug/L	98
55) (m+p)-Xylene	16.10	106	8102288	207.82 ug/L	94
56) o-Xylene	16.83	106	3873635	106.15 ug/L	100
57) Styrene	16.93	104	5751685	108.64 ug/L	99
58) Bromoform	16.99	173	994336	113.38 ug/L	100
60) Isopropylbenzene	17.36	105	9747959	110.44 ug/L	99
62) Bromobenzene	18.07	156	2318161	110.83 ug/L	99
63) n-Propylbenzene	18.09	91	11663461	109.01 ug/L	99
64) 1,1,2,2-Tetrachloroethane	18.21	83	1943392	106.46 ug/L	100
65) 2-Chlorotoluene	18.38	91	7376508	110.22 ug/L	100
66) 1,3,5-Trimethylbenzene	18.42	105	8040862	110.03 ug/L	99
67) 1,2,3-Trichloropropane	18.46	75	1581480	106.29 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	321697	121.92 ug/L	95
69) 4-Chlorotoluene	18.68	91	6545585	108.86 ug/L	100
70) tert-Butylbenzene	19.01	119	7343276	112.15 ug/L	100
71) 1,2,4-Trimethylbenzene	19.13	105	7126970	111.01 ug/L	99
72) sec-Butylbenzene	19.32	105	10684870	108.81 ug/L	99
73) p-Isopropyltoluene	19.58	119	8490493	112.79 ug/L	99
74) 1,3-Dichlorobenzene	19.74	146	4445198	106.64 ug/L	100
75) 1,4-Dichlorobenzene	19.90	146	4204500	106.36 ug/L	99
76) n-Butylbenzene	20.36	91	6641148	114.70 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6542.D J530VOCS.M Fri May 30 10:17:49 2008

Pa 491

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6542.D
Acq On : 30 May 2008 9:41
Sample : ICAL 100 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 10:07 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:46:38 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	4083879	107.42 ug/L	100
78) 1,2-Dibromo-3-chloropropan	22.17	75	284683	113.03 ug/L	92
79) Hexachlorobutadiene	23.31	225	1167362	118.86 ug/L	99
80) 1,2,4-Trichlorobenzene	23.36	180	2052123	113.39 ug/L	99
81) Naphthalene	23.87	128	4357146	114.74 ug/L	100
82) 1,2,3-Trichlorobenzene	24.16	180	1795925	116.10 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6542.D J530VOCS.M Fri May 30 10:17:49 2008

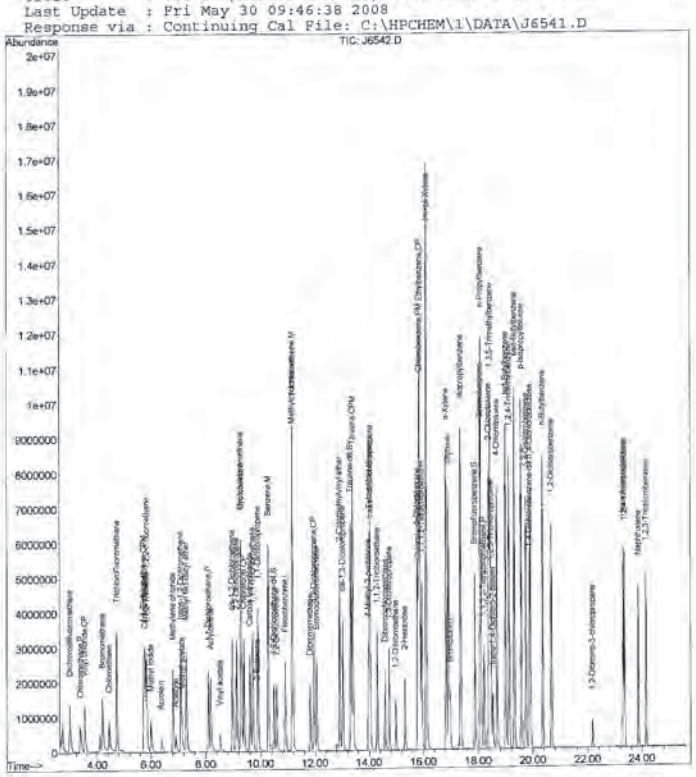
Pa 492

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6542.D
Acq On : 30 May 2008 9:41
Sample : ICAL 100 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 10:07 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 09:46:38 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D



J6542.D J530VOCS.M Fri May 30 10:17:51 2008

Pa 493

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6543.D
Acq On : 30 May 2008 10:17
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 10:42 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 10:17:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3484117	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.81	82	1391918	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	1183268	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	2602120	153.25 ug/L	0.00
Spiked Amount 50.000			Recovery	= 306.50%	
46) Toluene-d8	13.31	98	10134143	148.33 ug/L	0.00
Spiked Amount 50.000			Recovery	= 296.66%	
61) Bromofluorobenzene	17.88	95	3765320	164.95 ug/L	0.00
Spiked Amount 50.000			Recovery	= 329.90%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.98	85	3495179	145.44 ug/L	99
3) Chloromethane	3.37	50	2932317	143.35 ug/L	99
4) Vinyl chloride	3.54	62	3399131	148.00 ug/L	100
5) Bromomethane	4.20	94	2959352	150.28 ug/L	99
6) Chloroethane	4.45	64	1814650	140.75 ug/L	98
7) Trichlorofluoromethane	4.74	101	6110078	142.64 ug/L	99
8) 1,1-Dichloroethene	5.74	96	2300940	156.63 ug/L	98
9) Carbon disulfide	5.77	76	7538774	146.63 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	2749041	150.49 ug/L	98
11) Methyl iodide	6.01	142	2854819	164.14 ug/L	100
12) Acrolein	6.38	56	870058	847.75 ug/L	99
13) Methylene chloride	6.81	84	2572407	148.33 ug/L	99
14) Acetone	6.91	43	1186252	318.14 ug/L	100
15) trans-1,2-Dichloroethene	7.09	96	2615392	154.86 ug/L	99
16) Methyl acetate	7.13	43	1721361	161.96 ug/L	100
17) Methyl tert-Butyl ether	7.29	73	6532450	162.69 ug/L	100
18) 1,1-Dichloroethane	8.11	63	4381837	153.78 ug/L	100
19) Acrylonitrile	8.19	53	3621365	811.29 ug/L	99
20) Vinyl acetate	8.52	43	1738572	181.36 ug/L	97
21) cis-1,2-Dichloroethene	8.97	96	3078499	160.95 ug/L	98
22) 2,2-Dichloropropane	9.13	77	4248032	165.31 ug/L	100
23) Bromochloromethane	9.28	128	1369433	159.63 ug/L	99
24) Cyclohexane	9.29	56	4293794	163.09 ug/L	99
25) Chloroform	9.39	83	4788526	154.61 ug/L	98
26) Carbon tetrachloride	9.60	117	3598065	165.85 ug/L	100
27) 1,1,1-Trichloroethane	9.71	97	4553722	156.27 ug/L	100
28) 2-Butanone	9.87	43	1791787	309.81 ug/L	99
29) 1,1-Dichloropropene	9.90	75	3730577	161.46 ug/L	99
30) Benzene	10.28	78	11543875	151.54 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6543.D J530VOCS.M Fri May 30 11:15:53 2008

Pa 494

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6543.D
Acq On : 30 May 2008 10:17
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 10:42 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 10:17:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.57	62	3149386	153.43 ug/L	100
33) Methylcyclohexane	11.15	83	5163987	161.89 ug/L	99
34) Trichloroethene	11.17	95	3016156	153.77 ug/L	98
35) Dibromomethane	11.81	93	1510467	152.74 ug/L	97
36) 1,2-Dichloropropane	11.96	63	2488152	158.02 ug/L	100
37) Bromodichloromethane	12.05	83	3442429	157.77 ug/L	99
38) 2-Chloroethylvinyl ether	12.91	63	4400297	803.77 ug/L	99
39) cis-1,3-Dichloropropene	13.02	75	4354765	163.97 ug/L	99
40) Toluene	13.39	92	7909163	153.56 ug/L	95
41) 4-Methyl-2-pentanone	13.97	43	3783226	335.94 ug/L	100
42) trans-1,3-Dichloropropene	14.04	75	3852057	171.31 ug/L	99
43) 1,1,2-Trichloroethane	14.30	83	1877014	156.65 ug/L	99
44) 2-Hexanone	15.31	43	2669734	350.51 ug/L	100
47) Tetrachloroethene	14.01	166	3226174	156.81 ug/L	98
48) Dibromochloromethane	14.60	129	2619624	164.41 ug/L	100
49) 1,3-Dichloropropane	14.74	76	3749244	152.02 ug/L	99
50) 1,2-Dibromoethane	14.99	107	2204959	155.06 ug/L	100
51) 1-Chlorohexane	15.78	91	4224620	166.79 ug/L	95
52) Chlorobenzene	15.84	112	8569620	148.97 ug/L	99
53) Ethylbenzene	15.86	91	14521753	142.68 ug/L	96
54) 1,1,1,2-Tetrachloroethane	15.94	131	2719876	153.10 ug/L	99
55) (m+p)-Xylene	16.10	106	12136857	296.38 ug/L	83
56) o-Xylene	16.83	106	5940676	154.98 ug/L	97
57) Styrene	16.93	104	8822229	158.64 ug/L	99
58) Bromoform	16.99	173	1575094	170.99 ug/L	100
60) Isopropylbenzene	17.36	105	14128340	154.60 ug/L	96
62) Bromobenzene	18.07	156	3543021	163.60 ug/L	99
63) n-Propylbenzene	18.09	91	16489211	148.85 ug/L	95
64) 1,1,2,2-Tetrachloroethane	18.21	83	2915225	154.24 ug/L	99
65) 2-Chlorotoluene	18.38	91	11109534	160.33 ug/L	100
66) 1,3,5-Trimethylbenzene	18.43	105	11998766	158.58 ug/L	98
67) 1,2,3-Trichloropropane	18.46	75	2441942	158.51 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	508545	186.15 ug/L	93
69) 4-Chlorotoluene	18.68	91	9778244	157.07 ug/L	100
70) tert-Butylbenzene	19.01	119	10924309	161.14 ug/L	98
71) 1,2,4-Trimethylbenzene	19.13	105	10762055	161.90 ug/L	97
72) sec-Butylbenzene	19.32	105	15248212	149.98 ug/L	96
73) p-Isopropyltoluene	19.58	119	12527205	160.74 ug/L	97
74) 1,3-Dichlorobenzene	19.74	146	6684299	154.88 ug/L	99
75) 1,4-Dichlorobenzene	19.90	146	6304615	154.04 ug/L	99
76) n-Butylbenzene	20.36	91	10118485	168.79 ug/L	97

(#) = qualifier out of range (m) = manual integration
J6543.D J530VOCS.M Fri May 30 11:15:54 2008

Pa 495

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6543.D
Acq On : 30 May 2008 10:17
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 10:42 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 10:17:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	6164025	156.60 ug/L	99
78) 1,2-Dibromo-3-chloropropan	22.17	75	441139	169.17 ug/L	90
79) Hexachlorobutadiene	23.31	225	1851515	182.09 ug/L	96
80) 1,2,4-Trichlorobenzene	23.36	180	3226931	172.22 ug/L	99
81) Naphthalene	23.87	128	6766508	172.10 ug/L	100
82) 1,2,3-Trichlorobenzene	24.16	180	2890083	180.45 ug/L	99

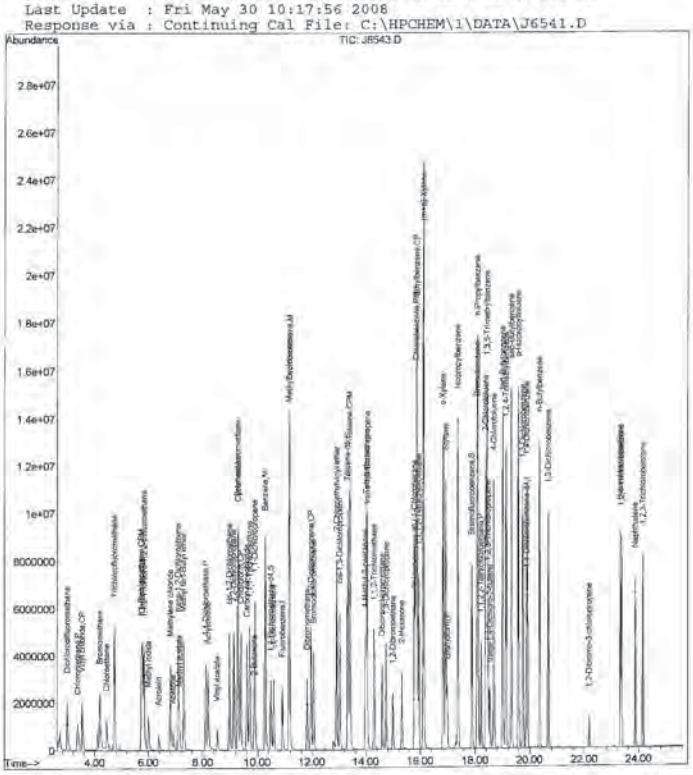
(#) = qualifier out of range (m) = manual integration
J6543.D J530VOCS.M Fri May 30 11:15:54 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6543.D
Acq On : 30 May 2008 10:17
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 10:42 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 10:17:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D



J6543.D J530VOCS.M Fri May 30 11:15:56 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6544.D
Acq On : 30 May 2008 10:53
Sample : ICAL 200 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 11:19 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 11:16:02 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	3527462	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.82	82	1398641	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	1193346	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	3423895	199.17 ug/L	0.00
Spiked Amount 50.000			Recovery	= 398.34%	
46) Toluene-d8	13.31	98	13175947	191.92 ug/L	0.00
Spiked Amount 50.000			Recovery	= 383.84%	
61) Bromofluorobenzene	17.87	95	5010197	217.63 ug/L	0.00
Spiked Amount 50.000			Recovery	= 435.26%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.97	85	4613019	189.59 ug/L	99
3) Chloromethane	3.36	50	3963733	191.39 ug/L	99
4) Vinyl chloride	3.53	62	4711886	202.64 ug/L	99
5) Bromomethane	4.20	94	4026874	201.98 ug/L	100
6) Chloroethane	4.45	64	2381997	182.48 ug/L	98
7) Trichlorofluoromethane	4.73	101	8128844	187.44 ug/L	98
8) 1,1-Dichloroethene	5.75	96	3147948	211.66 ug/L	99
9) Carbon disulfide	5.78	76	10049293	193.05 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	3675980	198.76 ug/L	97
11) Methyl iodide	6.00	142	3825557	217.25 ug/L	99
12) Acrolein	6.38	56	1230524	1184.23 ug/L	99
13) Methylene chloride	6.80	84	3435956	195.70 ug/L	99
14) Acetone	6.91	43	1674514	443.57 ug/L	99
15) trans-1,2-Dichloroethene	7.09	96	3577527	209.22 ug/L	99
16) Methyl acetate	7.13	43	2389687	222.08 ug/L	100
17) Methyl tert-Butyl ether	7.29	73	8698541	213.97 ug/L	100
18) 1,1-Dichloroethane	8.10	63	5886403	204.04 ug/L	100
19) Acrylonitrile	8.19	53	5063593	1120.45 ug/L	99
20) Vinyl acetate	8.52	43	2378646	245.09 ug/L	98
21) cis-1,2-Dichloroethene	8.97	96	4141168	213.85 ug/L	98
22) 2,2-Dichloropropane	9.12	77	5806456	223.17 ug/L	100
23) Bromochloromethane	9.27	128	1804158	207.72 ug/L	98
24) Cyclohexane	9.28	56	5733361	215.09 ug/L	98
25) Chloroform	9.39	83	6374500	203.28 ug/L	98
26) Carbon tetrachloride	9.61	117	4947759	225.27 ug/L	99
27) 1,1,1-Trichloroethane	9.71	97	6170835	209.16 ug/L	99
28) 2-Butanone	9.86	43	2507257	428.19 ug/L	99
29) 1,1-Dichloropropene	9.90	75	5050622	215.90 ug/L	100
30) Benzene	10.28	78	14948689	193.83 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6544.D J530VOCS.M Fri May 30 11:39:25 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6544.D
Acq On : 30 May 2008 10:53
Sample : ICAL 200 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: May 30 11:19 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 11:16:02 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	4095035	197.05 ug/L	100
33) Methylcyclohexane	11.16	83	6973137	215.92 ug/L	99
34) Trichloroethene	11.16	95	4116390	207.29 ug/L	98
35) Dibromomethane	11.81	93	2004451	200.20 ug/L	96
36) 1,2-Dichloropropane	11.95	63	3299479	206.97 ug/L	99
37) Bromodichloromethane	12.05	83	4563854	206.59 ug/L	99
38) 2-Chloroethylvinyl ether	12.90	63	5839775	1053.60 ug/L	100
39) cis-1,3-Dichloropropene	13.02	75	5797972	215.63 ug/L	99
40) Toluene	13.39	92	10391523	199.28 ug/L	91
41) 4-Methyl-2-pentanone	13.97	43	5185934	454.83 ug/L	100
42) trans-1,3-Dichloropropene	14.04	75	5155268	226.44 ug/L	100
43) 1,1,2-Trichloroethane	14.30	83	2455263	202.38 ug/L	99
44) 2-Hexanone	15.31	43	3705177	480.47 ug/L	98
47) Tetrachloroethene	14.02	166	4365942	213.88 ug/L	98
48) Dibromochloromethane	14.59	129	3495756	218.34 ug/L	99
49) 1,3-Dichloropropane	14.74	76	4941261	199.39 ug/L	99
50) 1,2-Dibromoethane	14.98	107	2909785	203.65 ug/L	99
51) 1-Chlorohexane	15.77	91	5664047	222.54 ug/L	95
52) Chlorobenzene	15.84	112	11239716	194.45 ug/L	99
53) Ethylbenzene	15.87	91	18104025	177.02 ug/L	91
54) 1,1,1,2-Tetrachloroethane	15.94	131	3649071	204.42 ug/L	99
55) (m+p)-Xylene	16.11	106	15725799	382.17 ug/L #	73
56) o-Xylene	16.84	106	7905505	205.25 ug/L	92
57) Styrene	16.92	104	11528419	206.31 ug/L	97
58) Bromoform	16.99	173	2141335	231.34 ug/L	100
60) Isopropylbenzene	17.37	105	17644471	191.45 ug/L	92
62) Bromobenzene	18.06	156	4720882	216.15 ug/L	98
63) n-Propylbenzene	18.08	91	20074696	179.69 ug/L	89
64) 1,1,2,2-Tetrachloroethane	18.21	83	3869647	203.01 ug/L	99
65) 2-Chlorotoluene	18.38	91	14468312	207.04 ug/L	98
66) 1,3,5-Trimethylbenzene	18.43	105	15320738	200.77 ug/L	94
67) 1,2,3-Trichloropropane	18.46	75	3183013	204.87 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	712198	258.50 ug/L	93
69) 4-Chlorotoluene	18.68	91	12680564	201.97 ug/L	97
70) tert-Butylbenzene	19.00	119	14254616	208.49 ug/L	96
71) 1,2,4-Trimethylbenzene	19.13	105	13960959	208.25 ug/L	94
72) sec-Butylbenzene	19.32	105	18854239	183.88 ug/L	91
73) p-Isopropyltoluene	19.57	119	16037879	204.05 ug/L	94
74) 1,3-Dichlorobenzene	19.74	146	8829232	202.85 ug/L	99
75) 1,4-Dichlorobenzene	19.91	146	8304233	201.19 ug/L	98
76) n-Butylbenzene	20.35	91	13250384	219.16 ug/L	94

(#) = qualifier out of range (m) = manual integration
J6544.D J530VOCS.M Fri May 30 11:39:26 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6544.D Vial: 8
Acq On : 30 May 2008 10:53 Operator: JK
Sample : ICAL 200 PPB Inst : #3MS10
Misc : ICAL,8260S_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 30 11:19 2008 Quant Results File: J530VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 11:16:02 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D
DataAcq Meth : J530VOCS

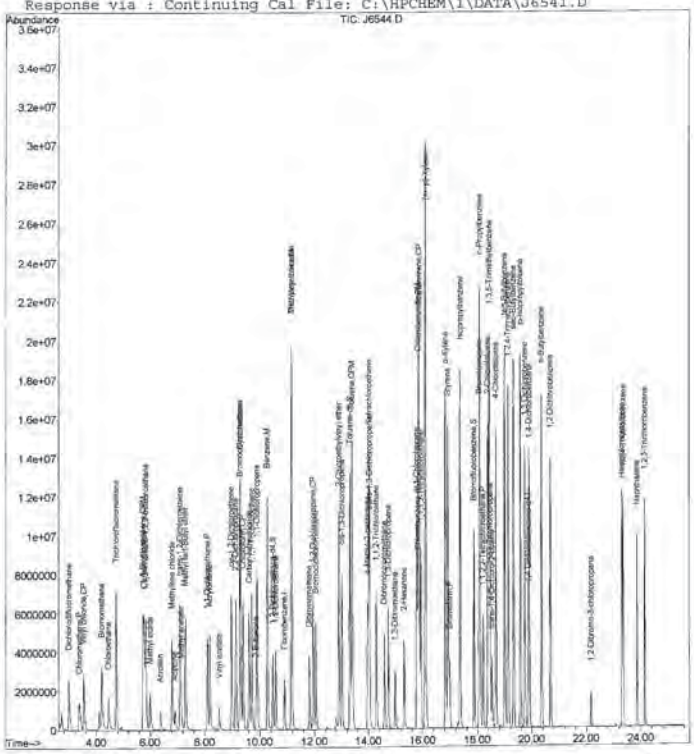
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	1,2-Dichlorobenzene	20.68	146	8084404	203.65 ug/L	98
78)	1,2-Dibromo-3-chloropropan	22.18	75	619307	235.49 ug/L	90
79)	Hexachlorobutadiene	23.32	225	2596963	253.24 ug/L	99
80)	1,2,4-Trichlorobenzene	23.36	180	4429102	234.38 ug/L	99
81)	Naphthalene	23.87	128	9029536	227.72 ug/L	100
82)	1,2,3-Trichlorobenzene	24.15	180	3883621	240.44 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6544.D J530VOCS.M Fri May 30 11:39:26 2008 Pa 500

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6544.D Vial: 8
Acq On : 30 May 2008 10:53 Operator: JK
Sample : ICAL 200 PPB Inst : #3MS10
Misc : ICAL,8260S_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 30 11:19 2008 Quant Results File: J530VOCS.RES

Method : C:\HPCHEM\1\METHODS\J530VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri May 30 11:16:02 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J6541.D



J6544.D J530VOCS.M Fri May 30 11:39:28 2008 Pa 501

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6850.D Vial: 2
Acq On : 14 Aug 2008 10:13 Operator: MSV
Sample : CCV-14526 Inst : #3MS10
Misc : CCV ,8260S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 08:50:29 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	138	0.00
2		Dichlorodifluoromethane	0.342	0.317	7.3	126	0.00
3	P	Chloromethane	0.301	0.351	-16.6	164	0.00
4	CP	Vinyl chloride	0.323	0.331	-2.5	138	0.04
5		Bromomethane	0.293	0.225	23.2#	109	0.00
6		Chloroethane	0.189	0.174	7.9	129	0.00
7		Trichlorofluoromethane	0.607	0.481	20.8#	108	0.00
8	CPM	1,1-Dichloroethene	0.215	0.230	-7.0	150	0.00
9		Carbon disulfide	0.732	0.916	-25.1#	171	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.264	0.285	-8.0	149	0.00
11		Methylene chloride	0.259	0.279	-7.7	154	0.00
12		Acetone	0.058	0.066	-13.8	169	0.00
13		trans-1,2-Dichloroethene	0.250	0.252	-0.8	143	0.00
14		Methyl acetate	0.157	0.155	1.3	139	0.00
15		Methyl tert-Butyl ether	0.583	0.572	1.9	136	0.00
16	P	1,1-Dichloroethane	0.419	0.452	-7.9	152	0.00
17		cis-1,2-Dichloroethene	0.283	0.281	0.7	141	0.00
18		Cyclohexane	0.368	0.472	-28.3#	172	0.00
19	CP	Chloroform	0.458	0.452	1.3	140	0.00
20		Carbon tetrachloride	0.317	0.295	6.9	130	0.00
21		1,1,1-Trichloroethane	0.418	0.395	5.5	130	0.00
22		2-Butanone	0.085	0.096	-12.9	160	0.00
23	M	Benzene	1.080	1.184	-9.6	149	0.00
24	S	1,2-Dichloroethane-d4	0.253	0.255	-0.8	144	0.00
25		1,2-Dichloroethane	0.298	0.293	1.7	137	0.00
26		Methylcyclohexane	0.452	0.519	-14.8	156	0.00
27	M	Trichloroethene	0.289	0.285	1.4	139	0.00
28	CP	1,2-Dichloropropane	0.229	0.256	-11.8	156	0.00
29		Bromodichloromethane	0.310	0.311	-0.3	137	0.00
30		cis-1,3-Dichloropropene	0.370	0.400	-8.1	144	0.00
31	CPM	Toluene	0.713	0.753	-5.6	140	0.00
32		4-Methyl-2-pentanone	0.166	0.182	-9.6	155	0.00
33		trans-1,3-Dichloropropene	0.329	0.333	-1.2	142	0.00
34		1,1,2-Trichloroethane	0.173	0.184	-6.4	147	0.00
35		2-Hexanone	0.105	0.124	-18.1	156	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	148	0.00
37	S	Toluene-d8	2.455	2.310	5.9	140	0.00
38		Tetrachloroethene	0.737	0.607	17.6	124	0.00
39		Dibromochloromethane	0.567	0.482	15.0	125	0.00
40		1,2-Dibromoethane	0.516	0.467	9.5	136	0.00

(#) = Out of Range
J6850.D J530OLMS.M Thu Aug 14 13:29:36 2008 8-14-08 Pa 502

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6850.D Vial: 2
Acq On : 14 Aug 2008 10:13 Operator: MSV
Sample : CCV-14526 Inst : #3MS10
Misc : CCV ,8260S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 08:50:29 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	2.077	1.824	12.2	131	0.00
42	CP	Ethylbenzene	3.432	3.343	2.6	136	0.00
43		(m+p)-Xylene	1.369	1.288	5.9	130	0.00
44		o-Xylene	1.301	1.173	9.8	126	0.00
45		Styrene	1.809	1.786	1.3	133	0.00
46	P	Bromoform	0.321	0.267	16.8	120	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	116	0.00
48		Isopropylbenzene	3.772	4.186	-11.0	126	0.00
49	S	Bromofluorobenzene	1.050	1.103	-5.0	131	0.00
50	P	1,1,2,2-Tetrachloroethane	0.835	0.990	-18.6	144	0.00
51		1,3-Dichlorobenzene	1.858	1.815	2.3	115	0.00
52		1,4-Dichlorobenzene	1.810	1.721	4.9	115	0.00
53		1,2-Dichlorobenzene	1.699	1.666	1.9	116	0.00
54		1,2-Dibromo-3-chloropropane	0.119	0.136	-14.3	143	0.00
55		1,2,4-Trichlorobenzene	0.844	0.802	5.0	117	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6850.D J530OLMS.M Thu Aug 14 13:29:37 2008 P 503

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6850.D Vial: 2
Acq On : 14 Aug 2008 10:13 Operator: MSV
Sample : CCV-14576 Inst : #3MS10
Misc : CCV ,8260S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 08:50:29 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	50.000	50.000	0.0	138	0.00
2		Dichlorodifluoromethane	50.000	46.272	7.5	126	0.00
3	P	Chloromethane	50.000	58.291	-16.6	164	0.00
4	CP	Vinyl chloride	50.000	51.177	-2.4	138	0.04
5		Bromomethane	50.000	38.316	23.4#	109	0.00
6		Chloroethane	50.000	46.080	7.8	129	0.00
7		Trichlorofluoromethane	50.000	39.576	20.8#	108	0.00
8	CPM	1,1-Dichloroethene	50.000	53.304	-6.6	150	0.00
9		Carbon disulfide	50.000	62.585	-25.2#	171	0.00
10		1,1,2-Trichloro-1,2,2-trifl	50.000	53.967	-7.9	149	0.00
11		Methylene chloride	50.000	53.816	-7.6	154	0.00
12		Acetone	100.000	112.254	-12.3	169	0.00
13		trans-1,2-Dichloroethene	50.000	50.476	-1.0	143	0.00
14		Methyl acetate	50.000	49.336	1.3	139	0.00
15		Methyl tert-Butyl ether	50.000	48.986	2.0	136	0.00
16	P	1,1-Dichloroethane	50.000	53.972	-7.9	152	0.00
17		cis-1,2-Dichloroethene	50.000	49.594	0.8	141	0.00
18		Cyclohexane	50.000	64.043	-28.1#	172	0.00
19	CP	Chloroform	50.000	49.333	1.3	140	0.00
20		Carbon tetrachloride	50.000	46.463	7.1	130	0.00
21		1,1,1-Trichloroethane	50.000	47.312	5.4	130	0.00
22		2-Butanone	100.000	112.843	-12.8	160	0.00
23	M	Benzene	50.000	54.838	-9.7	149	0.00
24	S	1,2-Dichloroethane-d4	50.000	50.270	-0.5	144	0.00
25		1,2-Dichloroethane	50.000	49.130	1.7	137	0.00
26		Methylcyclohexane	50.000	57.465	-14.9	156	0.00
27	M	Trichloroethene	50.000	49.266	1.5	139	0.00
28	CP	1,2-Dichloropropane	50.000	55.891	-11.8	156	0.00
29		Bromodichloromethane	50.000	50.226	-0.5	137	0.00
30		cis-1,3-Dichloropropene	50.000	54.064	-8.1	144	0.00
31	CPM	Toluene	50.000	52.821	-5.6	140	0.00
32		4-Methyl-2-pentanone	100.000	109.677	-9.7	155	0.00
33		trans-1,3-Dichloropropene	50.000	50.587	-1.2	142	0.00
34		1,1,2-Trichloroethane	50.000	53.088	-6.2	147	0.00
35		2-Hexanone	100.000	101.926	-1.9	156	0.00
36	I	Chlorobenzene-d5	50.000	50.000	0.0	148	0.00
37	S	Toluene-d8	50.000	47.049	5.9	140	0.00
38		Tetrachloroethene	50.000	41.196	17.6	124	0.00
39		Dibromochloromethane	50.000	42.517	15.0	125	0.00
40		1,2-Dibromoethane	50.000	45.269	9.5	136	0.00

(#) = Out of Range
J6850.D J5300LMS.M Thu Aug 14 13:29:25 2008 8-14-08 P

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6850.D Vial: 2
Acq On : 14 Aug 2008 10:13 Operator: MSV
Sample : CCV-14576 Inst : #3MS10
Misc : CCV ,8260S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 08:50:29 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	50.000	43.908	12.2	131	0.00
42	CP	Ethylbenzene	50.000	48.715	2.6	136	0.00
43		(m+p)-Xylene	100.000	94.114	5.9	130	0.00
44		o-Xylene	50.000	45.056	9.9	126	0.00
45		Styrene	50.000	43.844	12.3	133	0.00
46	P	Bromoform	50.000	37.941	24.1#	120	0.00
47	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	116	0.00
48		Isopropylbenzene	50.000	55.492	-11.0	126	0.00
49	S	Bromofluorobenzene	50.000	52.542	-5.1	133	0.00
50	P	1,1,2,2-Tetrachloroethane	50.000	59.265	-18.5	144	0.00
51		1,3-Dichlorobenzene	50.000	48.832	2.3	115	0.00
52		1,4-Dichlorobenzene	50.000	47.552	4.9	115	0.00
53		1,2-Dichlorobenzene	50.000	49.036	1.9	116	0.00
54		1,2-Dibromo-3-chloropropane	50.000	57.034	-14.1	143	0.00
55		1,2,4-Trichlorobenzene	50.000	47.537	4.9	117	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6850.D J5300LMS.M Thu Aug 14 13:29:25 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6850.D Vial: 2
Acq On : 14 Aug 2008 10:13 Operator: MSV
Sample : CCV-14576 Inst : #3MS10
Misc : CCV ,8260S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 14 10:38 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 08:50:29 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4517420	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1891515	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1342593	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1151353	50.27 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.54%	
37) Toluene-d8	13.30	98	4369686	47.05 ug/L	0.00
Spiked Amount 50.000			Recovery	= 94.10%	
49) Bromofluorobenzene	17.87	95	1480983	52.54 ug/L	0.00
Spiked Amount 50.000			Recovery	= 105.08%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.04	85	1431008	46.27 ug/L	100
3) Chloromethane	3.40	50	1584737	58.29 ug/L	99
4) Vinyl chloride	3.58	62	1493129	51.18 ug/L #	42
5) Bromomethane	4.22	94	1015521	38.32 ug/L	99
6) Chloroethane	4.44	64	786792	46.08 ug/L	97
7) Trichlorofluoromethane	4.73	101	2172093	39.58 ug/L	100
8) 1,1-Dichloroethene	5.74	96	1037168	53.30 ug/L	98
9) Carbon disulfide	5.77	76	4137773	62.59 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.82	101	1286686	53.97 ug/L	96
11) Methylene chloride	6.80	84	1261501	53.82 ug/L	97
12) Acetone	6.92	43	592817	112.25 ug/L	95
13) trans-1,2-Dichloroethene	7.09	96	1138642	50.48 ug/L	94
14) Methyl acetate	7.14	43	698673	49.34 ug/L	97
15) Methyl tert-Butyl ether	7.30	73	2581789	48.99 ug/L	97
16) 1,1-Dichloroethane	8.10	63	2040749	53.97 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1269195	49.59 ug/L	96
18) Cyclohexane	9.28	56	2131313	64.04 ug/L	94
19) Chloroform	9.39	83	2040467	49.33 ug/L	99
20) Carbon tetrachloride	9.60	117	1332592	46.46 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	1786520	47.31 ug/L	98
22) 2-Butanone	9.88	43	871238	112.84 ug/L	97
23) Benzene	10.27	78	5350564	54.84 ug/L	100
25) 1,2-Dichloroethane	10.58	62	1324671	49.13 ug/L	99
26) Methylcyclohexane	11.15	83	2346276	57.47 ug/L	95
27) Trichloroethene	11.16	95	1285614	49.27 ug/L	94
28) 1,2-Dichloropropane	11.95	63	1154556	55.89 ug/L	97
29) Bromodichloromethane	12.05	83	1405904	50.23 ug/L	98
30) cis-1,3-Dichloropropene	13.02	75	1805887	54.06 ug/L	94
31) Toluene	13.39	92	3400431	52.82 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6850.D J5300LMS.M Thu Aug 14 13:29:14 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6850.D Vial: 2
Acq On : 14 Aug 2008 10:13 Operator: MSV
Sample : CCV-14576 Inst : #3MS10
Misc : CCV ,8260S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 14 10:38 2008 Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 08:50:29 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1645967	109.68 ug/L	97
33) trans-1,3-Dichloropropene	14.03	75	1503988	50.59 ug/L	95
34) 1,1,2-Trichloroethane	14.30	83	830575	53.09 ug/L	96
35) 2-Hexanone	15.31	43	1120776	101.93 ug/L	99
38) Tetrachloroethene	14.01	166	1148808	41.20 ug/L	97
39) Dibromochloromethane	14.59	129	911750	42.52 ug/L	98
40) 1,2-Dibromoethane	14.98	107	884021	45.27 ug/L	100
41) Chlorobenzene	15.84	112	3450340	43.91 ug/L	96
42) Ethylbenzene	15.86	91	6324070	48.72 ug/L	98
43) (m+p)-Xylene	16.10	106	4872461	94.11 ug/L	97
44) o-Xylene	16.83	106	2218060	45.06 ug/L	95
45) Styrene	16.92	104	3377507	43.84 ug/L	97
46) Bromoform	16.99	173	504466	37.94 ug/L	100
48) Isopropylbenzene	17.36	105	5620249	55.49 ug/L	98
50) 1,1,2,2-Tetrachloroethane	18.21	83	1328915	59.27 ug/L	100
51) 1,3-Dichlorobenzene	19.74	146	2436220	48.83 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	2310566	47.55 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	2236796	49.04 ug/L	97
54) 1,2-Dibromo-3-chloropropan	22.17	75	182151	57.03 ug/L	93
55) 1,2,4-Trichlorobenzene	23.36	180	1076813	47.54 ug/L	100

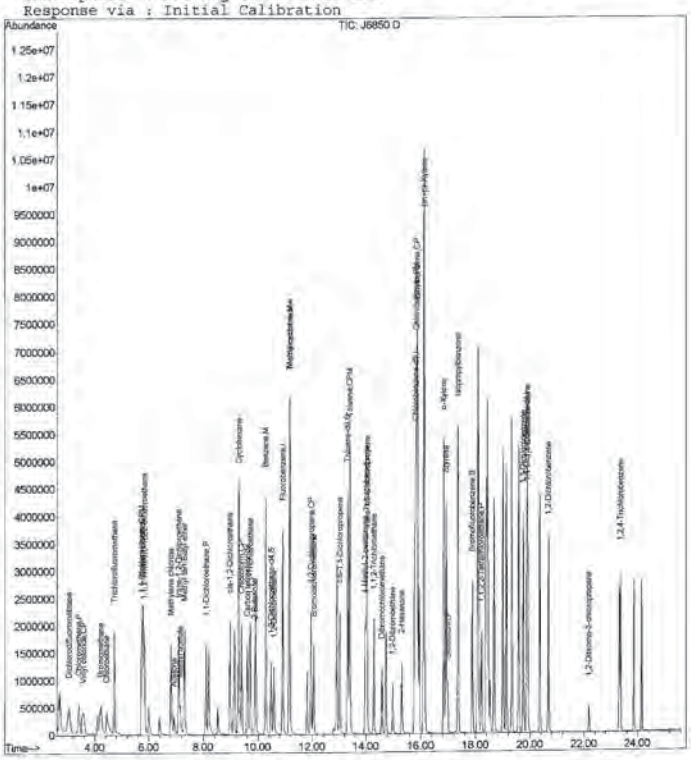
(#) = qualifier out of range (m) = manual integration
J6850.D J5300LMS.M Thu Aug 14 13:29:14 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6850.D
Acq On : 14 Aug 2008 10:13
Sample : CCV-14526
Misc : CCV ,8260S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 10:38 2008

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Resulta File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 08:50:29 2008
Response via : Initial Calibration



J6850.D J5300LMS.M Thu Aug 14 13:29:16 2008 P

508

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV-14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	149	0.00
2		Dichlorodifluoromethane	0.342	0.290	15.2	125	0.00
3	P	Chloromethane	0.301	0.319	-6.0	162	0.00
4	CP	Vinyl chloride	0.323	0.313	3.1	142	-0.04
5		Bromomethane	0.293	0.219	25.3#	116	0.00
6		Chloroethane	0.189	0.169	10.6	137	0.00
7		Trichlorofluoromethane	0.607	0.455	25.0#	111	0.00
8	CPM	1,1-Dichloroethene	0.215	0.222	-3.3	157	0.00
9		Carbon disulfide	0.732	0.869	-18.7	176	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.264	0.266	-0.8	152	0.00
11		Methylene chloride	0.259	0.264	-1.9	159	0.00
12		Acetone	0.058	0.067	-15.5	186	0.00
13		trans-1,2-Dichloroethene	0.250	0.247	1.2	152	0.00
14		Methyl acetate	0.157	0.149	5.1	146	0.00
15		Methyl tert-Butyl ether	0.583	0.592	-1.5	154	0.00
16	P	1,1-Dichloroethane	0.419	0.436	-4.1	159	0.00
17		cis-1,2-Dichloroethene	0.283	0.278	1.8	151	0.00
18		Cyclohexane	0.368	0.452	-22.8#	179	0.00
19	CP	Chloroform	0.458	0.435	5.0	146	0.00
20		Carbon tetrachloride	0.317	0.286	9.8	137	0.00
21		1,1,1-Trichloroethane	0.418	0.385	7.9	138	0.00
22		2-Butanone	0.085	0.094	-10.6	170	0.00
23	M	Benzene	1.080	1.166	-8.0	159	0.00
24	S	1,2-Dichloroethane-d4	0.253	0.252	0.4	154	0.00
25		1,2-Dichloroethane	0.298	0.285	4.4	145	0.00
26		Methylcyclohexane	0.452	0.490	-8.4	160	0.00
27	M	Trichloroethene	0.289	0.277	4.2	147	0.00
28	CP	1,2-Dichloropropane	0.229	0.250	-9.2	165	0.00
29		Bromodichloromethane	0.310	0.308	0.6	147	0.00
30		cis-1,3-Dichloropropene	0.370	0.400	-8.1	157	0.00
31	CPM	Toluene	0.713	0.740	-3.8	150	0.00
32		4-Methyl-2-pentanone	0.166	0.180	-8.4	167	0.00
33		trans-1,3-Dichloropropene	0.329	0.331	-0.6	153	0.00
34		1,1,2-Trichloroethane	0.173	0.179	-3.5	156	0.00
35		2-Hexanone	0.105	0.124	-18.1	170	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	156	0.00
37	S	Toluene-d8	2.455	2.382	3.0	151	0.00
38		Tetrachloroethene	0.737	0.611	17.1	130	0.00
39		Dibromochloromethane	0.567	0.513	9.5	139	0.00
40		1,2-Dibromoethane	0.516	0.489	5.2	149	0.00

(#) = Out of Range
J6863.D J5300LMS.M Mon Aug 18 09:44:07 2008 8-18-08 Pa

509

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV-14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	2.077	1.846	11.1	139	0.00
42	CP	Ethylbenzene	3.432	3.379	1.5	144	0.00
43		(m+p)-Xylene	1.369	1.303	4.8	138	0.00
44		o-Xylene	1.301	1.233	5.2	139	0.00
45		Styrene	1.809	1.842	-1.8	144	0.00
46	P	Bromoform	0.321	0.282	12.1	133	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	126	0.00
48		Isopropylbenzene	3.772	4.139	-9.7	135	0.00
49	S	Bromofluorobenzene	1.050	1.109	-5.6	145	0.00
50	P	1,1,2,2-Tetrachloroethane	0.835	0.967	-15.8	153	0.00
51		1,3-Dichlorobenzene	1.858	1.802	3.0	125	0.00
52		1,4-Dichlorobenzene	1.810	1.700	6.1	124	0.00
53		1,2-Dichlorobenzene	1.699	1.676	1.4	127	0.00
54		1,2-Dibromo-3-chloropropane	0.119	0.142	-19.3	163	0.00
55		1,2,4-Trichlorobenzene	0.844	0.864	-2.4	138	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6863.D J5300LMS.M Mon Aug 18 09:44:07 2008 Pa

510

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV-14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	50.000	50.000	0.0	149	0.00
2		Dichlorodifluoromethane	50.000	42.310	15.4	125	0.00
3	P	Chloromethane	50.000	52.942	-5.9	162	0.00
4	CP	Vinyl chloride	50.000	48.477	3.0	142	-0.04
5		Bromomethane	50.000	37.378	25.2#	116	0.00
6		Chloroethane	50.000	44.778	10.4	137	0.00
7		Trichlorofluoromethane	50.000	37.463	25.1#	111	0.00
8	CPM	1,1-Dichloroethene	50.000	51.588	-3.2	157	0.00
9		Carbon disulfide	50.000	59.390	-18.8	176	0.00
10		1,1,2-Trichloro-1,2,2-trifl	50.000	50.421	-0.8	152	0.00
11		Methylene chloride	50.000	50.905	-1.8	159	0.00
12		Acetone	100.000	114.142	-14.1	186	0.00
13		trans-1,2-Dichloroethene	50.000	49.486	1.0	152	0.00
14		Methyl acetate	50.000	47.596	4.8	146	0.00
15		Methyl tert-Butyl ether	50.000	50.752	-1.5	154	0.00
16	P	1,1-Dichloroethane	50.000	52.050	-4.1	159	0.00
17		cis-1,2-Dichloroethene	50.000	48.987	2.0	151	0.00
18		Cyclohexane	50.000	61.409	-22.8#	179	0.00
19	CP	Chloroform	50.000	47.544	4.9	146	0.00
20		Carbon tetrachloride	50.000	45.125	9.8	137	0.00
21		1,1,1-Trichloroethane	50.000	46.102	7.8	138	0.00
22		2-Butanone	100.000	110.499	-10.5	170	0.00
23	M	Benzene	50.000	53.988	-8.0	159	0.00
24	S	1,2-Dichloroethane-d4	50.000	49.617	0.8	154	0.00
25		1,2-Dichloroethane	50.000	47.827	4.3	145	0.00
26		Methylcyclohexane	50.000	54.243	-8.5	160	0.00
27	M	Trichloroethene	50.000	47.888	4.2	147	0.00
28	CP	1,2-Dichloropropane	50.000	54.650	-9.3	165	0.00
29		Bromodichloromethane	50.000	49.756	0.5	147	0.00
30		cis-1,3-Dichloropropene	50.000	54.121	-8.2	157	0.00
31	CPM	Toluene	50.000	51.917	-3.8	150	0.00
32		4-Methyl-2-pentanone	100.000	108.613	-8.6	167	0.00
33		trans-1,3-Dichloropropene	50.000	50.347	-0.7	153	0.00
34		1,1,2-Trichloroethane	50.000	51.742	-3.5	156	0.00
35		2-Hexanone	100.000	102.122	-2.1	170	0.00
36	I	Chlorobenzene-d5	50.000	50.000	0.0	156	0.00
37	S	Toluene-d8	50.000	48.505	3.0	151	0.00
38		Tetrachloroethene	50.000	41.443	17.1	130	0.00
39		Dibromochloromethane	50.000	45.219	9.6	139	0.00
40		1,2-Dibromoethane	50.000	47.378	5.2	149	0.00

(#) = Out of Range
J6863.D J5300LMS.M Mon Aug 18 09:44:15 2008 8-18-08 Pa

511

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV-14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	50.000	44.438	11.1	139	0.00
42	CP	Ethylbenzene	50.000	49.229	1.5	144	0.00
43		(m+p)-Xylene	100.000	95.232	4.8	138	0.00
44		o-Xylene	50.000	47.378	5.2	139	0.00
45		Styrene	50.000	45.171	9.7	144	0.00
46	P	Bromoform	50.000	39.912	20.2#	133	0.00
47	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	126	0.00
48		Isopropylbenzene	50.000	54.867	-9.7	135	0.00
49	S	Bromofluorobenzene	50.000	52.815	-5.6	145	0.00
50	P	1,1,2,2-Tetrachloroethane	50.000	57.872	-15.7	153	0.00
51		1,3-Dichlorobenzene	50.000	48.497	3.0	125	0.00
52		1,4-Dichlorobenzene	50.000	46.978	6.0	124	0.00
53		1,2-Dichlorobenzene	50.000	49.326	1.3	127	0.00
54		1,2-Dibromo-3-chloropropane	50.000	59.702	-19.4	163	0.00
55		1,2,4-Trichlorobenzene	50.000	51.222	-2.4	138	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6863.D J5300LMS.M Mon Aug 18 09:44:15 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV-14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 15 8:30 2008

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4908672	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.80	82	1983495	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	1463393	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1234803	49.62 ug/L	0.00
Spiked Amount 50.000				Recovery = 99.24%	
37) Toluene-d8	13.30	98	4723978	48.50 ug/L	0.00
Spiked Amount 50.000				Recovery = 97.00%	
49) Bromofluorobenzene	17.87	95	1622633	52.81 ug/L	0.00
Spiked Amount 50.000				Recovery = 105.62%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.04	85	1421810	42.31 ug/L	99
3) Chloromethane	3.39	50	1563973	52.94 ug/L	98
4) Vinyl chloride	3.53	62	1536858	48.48 ug/L	68
5) Bromomethane	4.22	94	1076460	37.38 ug/L	100
6) Chloroethane	4.44	64	830772	44.78 ug/L	99
7) Trichlorofluoromethane	4.72	101	2234228	37.46 ug/L	99
8) 1,1-Dichloroethene	5.74	96	1090729	51.59 ug/L	98
9) Carbon disulfide	5.77	76	4266622	59.39 ug/L	98
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	1306261	50.42 ug/L	96
11) Methylene chloride	6.80	84	1296609	50.91 ug/L	98
12) Acetone	6.92	43	654996	114.14 ug/L	94
13) trans-1,2-Dichloroethene	7.09	96	1212985	49.49 ug/L	95
14) Methyl acetate	7.14	43	732411	47.60 ug/L	97
15) Methyl tert-Butyl ether	7.30	73	2906519	50.75 ug/L	98
16) 1,1-Dichloroethane	8.10	63	2138552	52.05 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1362230	48.99 ug/L	97
18) Cyclohexane	9.28	56	2220638	61.41 ug/L	94
19) Chloroform	9.39	83	2136753	47.54 ug/L	98
20) Carbon tetrachloride	9.60	117	1406302	45.13 ug/L	100
21) 1,1,1-Trichloroethane	9.71	97	1891581	46.10 ug/L	99
22) 2-Butanone	9.87	43	927031	110.50 ug/L	96
23) Benzene	10.26	78	5723917	53.99 ug/L	100
25) 1,2-Dichloroethane	10.58	62	1401215	47.83 ug/L	98
26) Methylcyclohexane	11.15	83	2406528	54.24 ug/L	95
27) Trichloroethene	11.16	95	1357872	47.89 ug/L	93
28) 1,2-Dichloropropane	11.95	63	1226695	54.65 ug/L	98
29) Bromodichloromethane	12.05	83	1513363	49.76 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	1964357	54.12 ug/L	93
31) Toluene	13.39	92	3631676	51.92 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6863.D J5300LMS.M Mon Aug 18 09:43:58 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV-14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 15 8:30 2008

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1771183	108.61 ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	1626512	50.35 ug/L	95
34) 1,1,2-Trichloroethane	14.30	83	879641	51.74 ug/L	97
35) 2-Hexanone	15.31	43	1220392	102.12 ug/L	98
38) Tetrachloroethene	14.01	166	1211892	41.44 ug/L	98
39) Dibromochloromethane	14.59	129	1016863	45.22 ug/L	99
40) 1,2-Dibromoethane	14.98	107	970181	47.38 ug/L	100
41) Chlorobenzene	15.84	112	3661817	44.44 ug/L	96
42) Ethylbenzene	15.86	91	6701475	49.23 ug/L	98
43) (m+p)-Xylene	16.10	106	5170120	95.23 ug/L	97
44) o-Xylene	16.83	106	2445801	47.38 ug/L	96
45) Styrene	16.92	104	3652730	45.17 ug/L	98
46) Bromoform	16.99	173	559271	39.91 ug/L	99
48) Isopropylbenzene	17.37	105	6056868	54.87 ug/L	98
50) 1,1,2,2-Tetrachloroethane	18.21	83	1414437	57.87 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	2637160	48.50 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	2488087	46.98 ug/L	98
53) 1,2-Dichlorobenzene	20.68	146	2452472	49.33 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	207828	59.70 ug/L	92
55) 1,2,4-Trichlorobenzene	23.36	180	1264693	51.22 ug/L	99

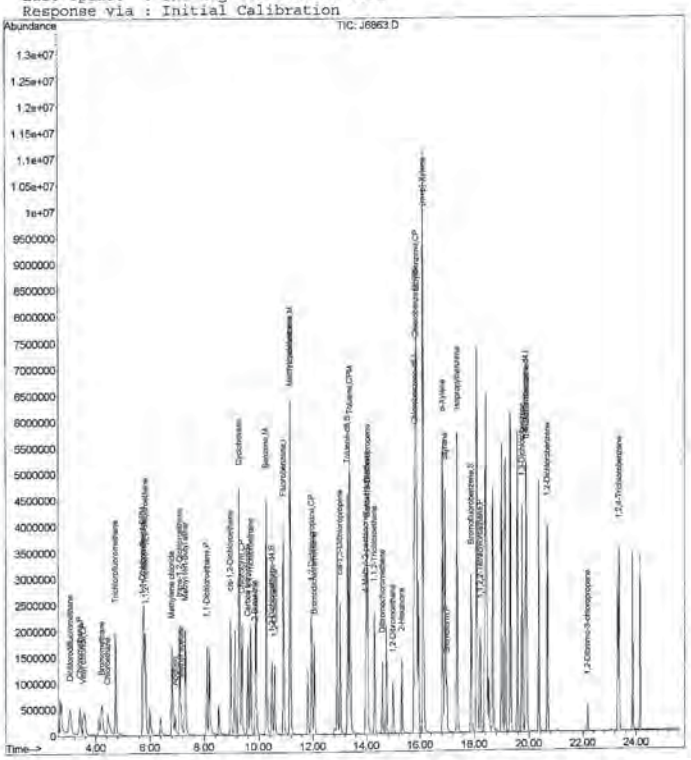
(#) = qualifier out of range (m) = manual integration
J6863.D J5300LMS.M Mon Aug 18 09:43:59 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV-14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 15 8:30 2008

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration



J6863.D J5300LMS.M Mon Aug 18 09:44:00 2008 Pa

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 10:51:07 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	130	0.00
2		Dichlorodifluoromethane	0.342	0.328	4.1	124	0.01
3	P	Chloromethane	0.301	0.367	-21.9#	162	-0.01
4	CP	Vinyl chloride	0.323	0.340	-5.3	134	0.00
5		Bromomethane	0.293	0.216	26.3#	99	0.01
6		Chloroethane	0.189	0.207	-9.5	145	-0.01
7		Trichlorofluoromethane	0.607	0.495	18.5	105	0.00
8	CPM	1,1-Dichloroethene	0.215	0.229	-6.5	141	0.00
9		Carbon disulfide	0.732	0.938	-28.1#	165	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.264	0.298	-12.9	147	0.00
11		Methylene chloride	0.259	0.282	-8.9	147	0.00
12		Acetone	0.058	0.068	-17.2	164	0.00
13		trans-1,2-Dichloroethene	0.250	0.256	-2.4	137	0.00
14		Methyl acetate	0.157	0.149	5.1	127	0.01
15		Methyl tert-Butyl ether	0.583	0.564	3.3	127	0.01
16	P	1,1-Dichloroethane	0.419	0.449	-7.2	143	0.00
17		cis-1,2-Dichloroethene	0.283	0.285	-0.7	135	0.00
18		Cyclohexane	0.368	0.476	-29.3#	163	0.00
19	CP	Chloroform	0.458	0.459	-0.2	134	0.00
20		Carbon tetrachloride	0.317	0.312	1.6	130	0.00
21		1,1,1-Trichloroethane	0.418	0.409	2.2	127	0.00
22		2-Butanone	0.085	0.091	-7.1	142	0.00
23	M	Benzene	1.080	1.204	-11.5	143	0.00
24	S	1,2-Dichloroethane-d4	0.253	0.258	-2.0	137	0.00
25		1,2-Dichloroethane	0.298	0.292	2.0	128	0.01
26		Methylcyclohexane	0.452	0.529	-17.0	150	0.00
27	M	Trichloroethene	0.289	0.294	-1.7	135	0.00
28	CP	1,2-Dichloropropane	0.229	0.252	-10.0	145	0.00
29		Bromodichloromethane	0.310	0.321	-3.5	133	0.00
30		cis-1,3-Dichloropropene	0.370	0.407	-10.0	139	0.00
31	CPM	Toluene	0.713	0.772	-8.3	136	0.00
32		4-Methyl-2-pentanone	0.166	0.173	-4.2	139	0.00
33		trans-1,3-Dichloropropene	0.329	0.338	-2.7	136	0.00
34		1,1,2-Trichloroethane	0.173	0.181	-4.6	136	0.01
35		2-Hexanone	0.105	0.116	-10.5	138	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	138	0.00
37	S	Toluene-d8	2.455	2.437	0.7	137	0.00
38		Tetrachloroethene	0.737	0.672	8.8	127	0.00
39		Dibromochloromethane	0.567	0.527	7.1	127	0.00
40		1,2-Dibromoethane	0.516	0.481	6.8	130	0.00

(#) = Out of Range
J6910.D J5300LMS.M Mon Aug 18 13:19:47 2008 8-18-08 P

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 10:51:07 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	2.077	1.914	7.8	128	0.00
42	CP	Ethylbenzene	3.432	3.489	-1.7	132	0.00
43		(m+p)-Xylene	1.369	1.355	1.0	127	0.00
44		o-Xylene	1.301	1.237	4.9	124	0.00
45		Styrene	1.809	1.883	-4.1	130	0.00
46	P	Bromoform	0.321	0.295	8.1	123	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.01
48		Isopropylbenzene	3.772	4.202	-11.4	123	0.01
49	S	Bromofluorobenzene	1.050	1.085	-3.3	127	0.00
50	P	1,1,2,2-Tetrachloroethane	0.835	0.964	-15.4	137	0.00
51		1,3-Dichlorobenzene	1.858	1.884	-1.4	117	0.00
52		1,4-Dichlorobenzene	1.810	1.787	1.3	117	0.00
53		1,2-Dichlorobenzene	1.699	1.708	-0.5	116	0.01
54		1,2-Dibromo-3-chloropropane	0.119	0.134	-12.6	138	0.00
55		1,2,4-Trichlorobenzene	0.844	0.900	-6.6	129	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6910.D J5300LMS.M Mon Aug 18 13:19:48 2008 P

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 10:51:07 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	50.000	50.000	0.0	130	0.00
2		Dichlorodifluoromethane	50.000	47.965	4.1	124	0.01
3	P	Chloromethane	50.000	61.002	-22.0#	162	-0.01
4	CP	Vinyl chloride	50.000	52.607	-5.2	134	0.00
5		Bromomethane	50.000	36.765	26.5#	99	0.01
6		Chloroethane	50.000	54.659	-9.3	145	-0.01
7		Trichlorofluoromethane	50.000	40.770	18.5	105	0.00
8	CPM	1,1-Dichloroethene	50.000	53.117	-6.2	141	0.00
9		Carbon disulfide	50.000	64.101	-28.2#	165	0.00
10		1,1,2-Trichloro-1,2,2-trifl	50.000	56.371	-12.7	147	0.00
11		Methylene chloride	50.000	54.314	-8.6	147	0.00
12		Acetone	100.000	115.840	-15.8	164	0.00
13		trans-1,2-Dichloroethene	50.000	51.268	-2.5	137	0.00
14		Methyl acetate	50.000	47.461	5.1	127	0.01
15		Methyl tert-Butyl ether	50.000	48.301	3.4	127	0.01
16	P	1,1-Dichloroethane	50.000	53.687	-7.4	143	0.00
17		cis-1,2-Dichloroethene	50.000	50.382	-0.8	135	0.00
18		Cyclohexane	50.000	64.552	-29.1#	163	0.00
19	CP	Chloroform	50.000	50.142	-0.3	134	0.00
20		Carbon tetrachloride	50.000	49.084	1.8	130	0.00
21		1,1,1-Trichloroethane	50.000	48.880	2.2	127	0.00
22		2-Butanone	100.000	106.242	-6.2	142	0.00
23	M	Benzene	50.000	55.755	-11.5	143	0.00
24	S	1,2-Dichloroethane-d4	50.000	50.857	-1.7	137	0.00
25		1,2-Dichloroethane	50.000	48.845	2.3	128	0.01
26		Methylcyclohexane	50.000	58.496	-17.0	150	0.00
27	M	Trichloroethene	50.000	50.863	-1.7	135	0.00
28	CP	1,2-Dichloropropane	50.000	55.040	-10.1	145	0.00
29		Bromodichloromethane	50.000	51.829	-3.7	133	0.00
30		cis-1,3-Dichloropropene	50.000	55.107	-10.2	139	0.00
31	CPM	Toluene	50.000	54.199	-8.4	136	0.00
32		4-Methyl-2-pentanone	100.000	104.052	-4.1	139	0.00
33		trans-1,3-Dichloropropene	50.000	51.300	-2.6	136	0.00
34		1,1,2-Trichloroethane	50.000	52.193	-4.4	136	0.01
35		2-Hexanone	100.000	95.957	4.0	138	0.00
36	I	Chlorobenzene-d5	50.000	50.000	0.0	138	0.00
37	S	Toluene-d8	50.000	49.625	0.8	137	0.00
38		Tetrachloroethene	50.000	45.583	8.8	127	0.00
39		Dibromochloromethane	50.000	46.453	7.1	127	0.00
40		1,2-Dibromoethane	50.000	46.601	6.8	130	0.00

(#) = Out of Range
J6910.D J5300LMS.M Mon Aug 18 13:20:03 2008 8-18 P

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 10:51:07 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	50.000	46.082	7.8	128	0.00
42	CP	Ethylbenzene	50.000	50.843	-1.7	132	0.00
43		(m+p)-Xylene	100.000	98.977	1.0	127	0.00
44		o-Xylene	50.000	47.540	4.9	124	0.00
45		Styrene	50.000	46.158	7.7	130	0.00
46	P	Bromoform	50.000	41.563	16.9	123	0.00
47	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	113	0.01
48		Isopropylbenzene	50.000	55.703	-11.4	123	0.01
49	S	Bromofluorobenzene	50.000	51.665	-3.3	127	0.00
50	P	1,1,2,2-Tetrachloroethane	50.000	57.700	-15.4	137	0.00
51		1,3-Dichlorobenzene	50.000	50.703	-1.4	117	0.00
52		1,4-Dichlorobenzene	50.000	49.383	1.2	117	0.00
53		1,2-Dichlorobenzene	50.000	50.285	-0.6	116	0.01
54		1,2-Dibromo-3-chloropropane	50.000	56.343	-12.7	138	0.00
55		1,2,4-Trichlorobenzene	50.000	53.361	-6.7	129	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6910.D J5300LMS.M Mon Aug 18 13:20:04 2008 Pag

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:18 2008

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 10:51:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4264248	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1758436	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	1312941	50.00 ug/L	0.01
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1099512	50.86 ug/L	0.00
Spiked Amount 50.000			Recovery	= 101.72%	
37) Toluene-d8	13.30	98	4284744	49.63 ug/L	0.00
Spiked Amount 50.000			Recovery	= 99.26%	
49) Bromofluorobenzene	17.87	95	1424118	51.67 ug/L	0.00
Spiked Amount 50.000			Recovery	= 103.34%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.04	85	1400237	47.97 ug/L	100
3) Chloromethane	3.40	50	1565494	61.00 ug/L	99
4) Vinyl chloride	3.52	62	1448813	52.61 ug/L	70
5) Bromomethane	4.23	94	919798	36.76 ug/L	100
6) Chloroethane	4.44	64	680963	54.66 ug/L	98
7) Trichlorofluoromethane	4.74	101	2112262	40.77 ug/L	100
8) 1,1-Dichloroethene	5.74	96	975613	53.12 ug/L	100
9) Carbon disulfide	5.77	76	4000452	64.10 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	1268685	56.37 ug/L	98
11) Methylene chloride	6.80	84	1201817	54.31 ug/L	99
12) Acetone	6.92	43	577471	115.84 ug/L	93
13) trans-1,2-Dichloroethene	7.09	96	1091692	51.27 ug/L	96
14) Methyl acetate	7.14	43	634450	47.46 ug/L	99
15) Methyl tert-Butyl ether	7.30	73	2403011	48.30 ug/L	97
16) 1,1-Dichloroethane	8.10	63	1916213	53.69 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1217090	50.38 ug/L	98
18) Cyclohexane	9.28	56	2027861	64.55 ug/L	93
19) Chloroform	9.39	83	1957679	50.14 ug/L	98
20) Carbon tetrachloride	9.60	117	1328849	49.08 ug/L	100
21) 1,1,1-Trichloroethane	9.71	97	1742281	48.88 ug/L	99
22) 2-Butanone	9.86	43	774304	106.24 ug/L	98
23) Benzene	10.27	78	5135189	55.75 ug/L	100
25) 1,2-Dichloroethane	10.58	62	1243182	48.85 ug/L	98
26) Methylcyclohexane	11.15	83	2254516	58.50 ug/L	96
27) Trichloroethene	11.16	95	1252891	50.86 ug/L	96
28) 1,2-Dichloropropane	11.95	63	1073269	55.04 ug/L	98
29) Bromodichloromethane	12.05	83	1369476	51.83 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	1737543	55.11 ug/L	93
31) Toluene	13.39	92	3293590	54.20 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6910.D J5300LMS.M Mon Aug 18 13:19:28 2008 P

520

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:18 2008

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 10:51:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1474042	104.05 ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	1439726	51.30 ug/L	94
34) 1,1,2-Trichloroethane	14.30	83	770818	52.19 ug/L	98
35) 2-Hexanone	15.31	43	990619	95.96 ug/L	98
38) Tetrachloroethene	14.01	166	1181701	45.58 ug/L	100
39) Dibromochloromethane	14.59	129	926083	46.45 ug/L	99
40) 1,2-Dibromoethane	14.98	107	845995	46.60 ug/L	100
41) Chlorobenzene	15.84	112	3366430	46.08 ug/L	97
42) Ethylbenzene	15.86	91	6135881	50.84 ug/L	98
43) (m+p)-Xylene	16.10	106	4763697	98.98 ug/L	98
44) o-Xylene	16.83	106	2175682	47.54 ug/L	96
45) Styrene	16.92	104	3311446	46.16 ug/L	99
46) Bromoform	16.99	173	518312	41.56 ug/L	99
48) Isopropylbenzene	17.37	105	5516932	55.70 ug/L	98
50) 1,1,2,2-Tetrachloroethane	18.21	83	1265246	57.70 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	2473650	50.70 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	2346541	49.38 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	2243119	50.29 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	175972	56.34 ug/L	97
55) 1,2,4-Trichlorobenzene	23.36	180	1182045	53.36 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6910.D J5300LMS.M Mon Aug 18 13:19:28 2008 P

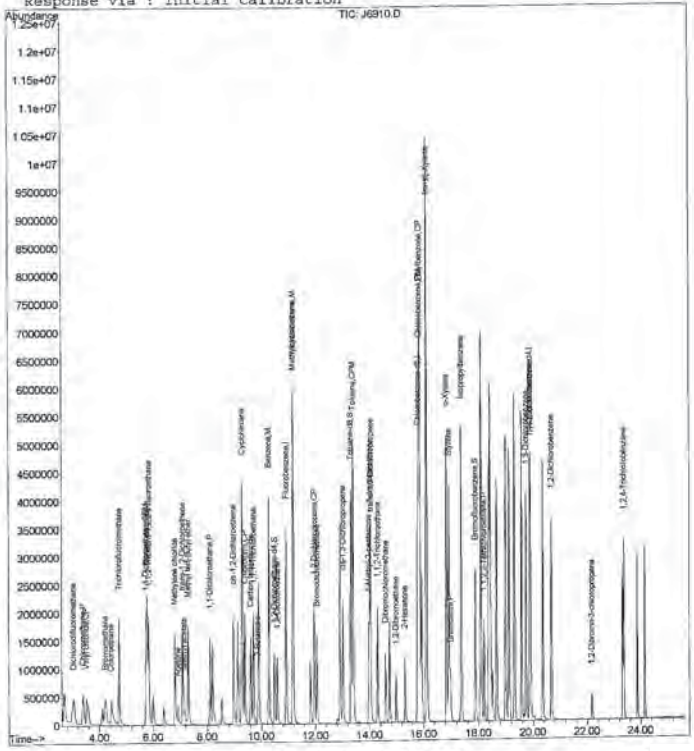
521

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:18 2008

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 10:51:07 2008
Response via : Initial Calibration



J6910.D J5300LMS.M Mon Aug 18 13:19:30 2008 P

522

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-14531
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:33:12 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	112	0.00
2		Dichlorodifluoromethane	0.342	0.298	12.9	96	0.00
3	P	Chloromethane	0.301	0.370	-22.9#	141	-0.01
4	CP	Vinyl chloride	0.323	0.336	-4.0	114	0.00
5		Bromomethane	0.293	0.229	21.8#	91	0.00
6		Chloroethane	0.189	0.215	-13.8	130	-0.01
7		Trichlorofluoromethane	0.607	0.505	16.8	92	0.00
8	CPM	1,1-Dichloroethene	0.215	0.230	-7.0	122	0.00
9		Carbon disulfide	0.732	0.932	-27.3#	141	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.264	0.293	-11.0	125	0.00
11		Methylene chloride	0.259	0.290	-12.0	130	0.00
12		Acetone	0.058	0.063	-8.6	132	0.00
13		trans-1,2-Dichloroethene	0.250	0.264	-5.6	122	0.00
14		Methyl acetate	0.157	0.154	1.9	113	0.00
15		Methyl tert-Butyl ether	0.583	0.587	-0.7	114	0.00
16	P	1,1-Dichloroethane	0.419	0.468	-11.7	128	0.00
17		cis-1,2-Dichloroethene	0.283	0.294	-3.9	119	0.00
18		Cyclohexane	0.368	0.472	-28.3#	139	0.00
19	CP	Chloroform	0.458	0.483	-5.5	121	0.00
20		Carbon tetrachloride	0.317	0.316	0.3	113	0.00
21		1,1,1-Trichloroethane	0.418	0.426	-1.9	114	0.00
22		2-Butanone	0.085	0.094	-10.6	126	0.00
23	M	Benzene	1.080	1.234	-14.3	126	0.00
24	S	1,2-Dichloroethane-d4	0.253	0.274	-8.3	126	0.00
25		1,2-Dichloroethane	0.298	0.318	-6.7	121	0.00
26		Methylcyclohexane	0.452	0.508	-12.4	124	0.00
27	M	Trichloroethene	0.289	0.303	-4.8	120	0.00
28	CP	1,2-Dichloropropane	0.229	0.259	-13.1	128	0.00
29		Bromodichloromethane	0.310	0.323	-4.2	115	0.00
30		cis-1,3-Dichloropropene	0.370	0.419	-13.2	123	0.00
31	CPM	Toluene	0.713	0.786	-10.2	119	0.00
32		4-Methyl-2-pentanone	0.166	0.176	-6.0	122	0.00
33		trans-1,3-Dichloropropene	0.329	0.358	-8.8	124	0.00
34		1,1,2-Trichloroethane	0.173	0.192	-11.0	125	0.00
35		2-Hexanone	0.105	0.117	-11.4	120	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	122	0.00
37	S	Toluene-d8	2.455	2.377	3.2	119	0.00
38		Tetrachloroethene	0.737	0.652	11.5	109	0.00
39		Dibromochloromethane	0.567	0.513	9.5	110	0.00
40		1,2-Dibromoethane	0.516	0.485	6.0	116	0.00

(#) = Out of Range
J6957.D J5300LMS.M Tue Aug 19 12:41:47 2008 8-19-08 P

523

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-1453
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:33:12 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	2.077	1.902	8.4	113	0.00
42	CP	Ethylbenzene	3.432	3.420	0.3	114	0.00
43		(m+p)-Xylene	1.369	1.305	4.7	109	0.00
44		o-Xylene	1.301	1.213	6.8	108	0.00
45		Styrene	1.809	1.847	-2.1	113	0.00
46	P	Bromoform	0.321	0.283	11.8	105	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
48		Isopropylbenzene	3.772	4.117	-9.1	106	0.00
49	S	Bromofluorobenzene	1.050	1.071	-2.0	110	0.00
50	P	1,1,2,2-Tetrachloroethane	0.835	0.959	-14.9	119	0.00
51		1,3-Dichlorobenzene	1.858	1.855	0.2	101	0.00
52		1,4-Dichlorobenzene	1.810	1.752	3.2	100	0.00
53		1,2-Dichlorobenzene	1.699	1.705	-0.4	102	0.01
54		1,2-Dibromo-3-chloropropane	0.119	0.138	-16.0	124	0.00
55		1,2,4-Trichlorobenzene	0.844	0.833	1.3	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6957.D J5300LMS.M Tue Aug 19 12:41:48 2008 P

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-1453
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:33:12 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	50.000	50.000	0.0	112	0.00
2		Dichlorodifluoromethane	50.000	43.480	13.0	96	0.00
3	P	Chloromethane	50.000	61.536	-23.1#	141	-0.01
4	CP	Vinyl chloride	50.000	52.045	-4.1	114	0.00
5		Bromomethane	50.000	39.072	21.9#	91	0.00
6		Chloroethane	50.000	56.987	-14.0	130	-0.01
7		Trichlorofluoromethane	50.000	41.576	16.8	92	0.00
8	CPM	1,1-Dichloroethene	50.000	53.466	-6.9	122	0.00
9		Carbon disulfide	50.000	63.698	-27.4#	141	0.00
10		1,1,2-Trichloro-1,2,2-trifl	50.000	55.556	-11.1	125	0.00
11		Methylene chloride	50.000	55.914	-11.8	130	0.00
12		Acetone	100.000	108.504	-8.5	132	0.00
13		trans-1,2-Dichloroethene	50.000	52.893	-5.8	122	0.00
14		Methyl acetate	50.000	49.081	1.8	113	0.00
15		Methyl tert-Butyl ether	50.000	50.349	-0.7	114	0.00
16	P	1,1-Dichloroethane	50.000	55.930	-11.9	128	0.00
17		cis-1,2-Dichloroethene	50.000	51.847	-3.7	119	0.00
18		Cyclohexane	50.000	64.053	-28.1#	139	0.00
19	CP	Chloroform	50.000	52.723	-5.4	121	0.00
20		Carbon tetrachloride	50.000	49.836	0.3	113	0.00
21		1,1,1-Trichloroethane	50.000	50.976	-2.0	114	0.00
22		2-Butanone	100.000	109.542	-9.5	126	0.00
23	M	Benzene	50.000	57.123	-14.2	126	0.00
24	S	1,2-Dichloroethane-d4	50.000	54.114	-8.2	126	0.00
25		1,2-Dichloroethane	50.000	53.344	-6.7	121	0.00
26		Methylcyclohexane	50.000	56.215	-12.4	124	0.00
27	M	Trichloroethene	50.000	52.527	-5.1	120	0.00
28	CP	1,2-Dichloropropane	50.000	56.558	-13.1	128	0.00
29		Bromodichloromethane	50.000	52.155	-4.3	115	0.00
30		cis-1,3-Dichloropropene	50.000	56.705	-13.4	123	0.00
31	CPM	Toluene	50.000	55.154	-10.3	119	0.00
32		4-Methyl-2-pentanone	100.000	106.025	-6.0	122	0.00
33		trans-1,3-Dichloropropene	50.000	54.450	-8.9	124	0.00
34		1,1,2-Trichloroethane	50.000	55.507	-11.0	125	0.00
35		2-Hexanone	100.000	96.748	3.3	120	0.00
36	I	Chlorobenzene-d5	50.000	50.000	0.0	122	0.00
37	S	Toluene-d8	50.000	48.405	3.2	119	0.00
38		Tetrachloroethene	50.000	44.241	11.5	109	0.00
39		Dibromochloromethane	50.000	45.227	9.5	110	0.00
40		1,2-Dibromoethane	50.000	46.959	6.1	116	0.00

(#) = Out of Range
J6957.D J5300LMS.M Tue Aug 19 12:41:57 2008 P

8-19-08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-1453
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:33:12 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	50.000	45.794	8.4	113	0.00
42	CP	Ethylbenzene	50.000	49.826	0.3	114	0.00
43		(m+p)-Xylene	100.000	95.369	4.6	109	0.00
44		o-Xylene	50.000	46.596	6.8	108	0.00
45		Styrene	50.000	45.293	9.4	113	0.00
46	P	Bromoform	50.000	40.047	19.9	105	0.00
47	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	99	0.00
48		Isopropylbenzene	50.000	54.579	-9.2	106	0.00
49	S	Bromofluorobenzene	50.000	51.013	-2.0	110	0.00
50	P	1,1,2,2-Tetrachloroethane	50.000	57.408	-14.8	119	0.00
51		1,3-Dichlorobenzene	50.000	49.911	0.2	101	0.00
52		1,4-Dichlorobenzene	50.000	48.422	3.2	100	0.00
53		1,2-Dichlorobenzene	50.000	50.188	-0.4	102	0.01
54		1,2-Dibromo-3-chloropropane	50.000	57.914	-15.8	124	0.00
55		1,2,4-Trichlorobenzene	50.000	49.350	1.3	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J6957.D J5300LMS.M Tue Aug 19 12:41:57 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-1453
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:41 2008

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:33:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3668640	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1559594	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1148438	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1006523	54.11 ug/L	0.00
Spiked Amount 50.000				Recovery = 108.22%	
37) Toluene-d8	13.30	98	3706781	48.41 ug/L	0.00
Spiked Amount 50.000				Recovery = 96.82%	
49) Bromofluorobenzene	17.87	95	1229973	51.01 ug/L	0.00
Spiked Amount 50.000				Recovery = 102.02%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.03	85	1092006	43.48 ug/L	99
3) Chloromethane	3.40	50	1358637	61.54 ug/L	99
4) Vinyl chloride	3.52	62	1233145	52.05 ug/L	99
5) Bromomethane	4.22	94	840979	39.07 ug/L	98
6) Chloroethane	4.44	64	790195	56.99 ug/L	98
7) Trichlorofluoromethane	4.74	101	1853144	41.58 ug/L	100
8) 1,1-Dichloroethene	5.74	96	844853	53.47 ug/L	99
9) Carbon disulfide	5.77	76	3420076	63.70 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	1075702	55.56 ug/L	98
11) Methylene chloride	6.80	84	1064410	55.91 ug/L	99
12) Acetone	6.92	43	465350	108.50 ug/L	95
13) trans-1,2-Dichloroethene	7.09	96	968978	52.89 ug/L	95
14) Methyl acetate	7.13	43	564467	49.08 ug/L	100
15) Methyl tert-Butyl ether	7.29	73	2155019	50.35 ug/L	98
16) 1,1-Dichloroethane	8.10	63	1717453	55.93 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1077543	51.85 ug/L	98
18) Cyclohexane	9.28	56	1731116	64.05 ug/L	94
19) Chloroform	9.39	83	1770943	52.72 ug/L	99
20) Carbon tetrachloride	9.60	117	1160774	49.84 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	1563206	50.98 ug/L	100
22) 2-Butanone	9.86	43	686844	109.54 ug/L	96
23) Benzene	10.27	78	4526318	57.12 ug/L	100
25) 1,2-Dichloroethane	10.57	62	1168055	53.34 ug/L	98
26) Methylcyclohexane	11.15	83	1863995	56.22 ug/L	96
27) Trichloroethene	11.16	95	1113172	52.53 ug/L	95
28) 1,2-Dichloropropane	11.95	63	948818	56.56 ug/L	99
29) Bromodichloromethane	12.05	83	1185599	52.15 ug/L	97
30) cis-1,3-Dichloropropene	13.02	75	1538214	56.71 ug/L	95
31) Toluene	13.39	92	2883469	55.15 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6957.D J5300LMS.M Tue Aug 19 12:41:39 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-1453
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:41 2008

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:33:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1292205	106.03 ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	1314680	54.45 ug/L	95
34) 1,1,2-Trichloroethane	14.29	83	705255	55.51 ug/L	97
35) 2-Hexanone	15.31	43	859934	96.75 ug/L	99
38) Tetrachloroethene	14.01	166	1017213	44.24 ug/L	100
39) Dibromochloromethane	14.59	129	799686	45.23 ug/L	99
40) 1,2-Dibromoethane	14.98	107	756100	46.96 ug/L	100
41) Chlorobenzene	15.84	112	2967075	45.79 ug/L	97
42) Ethylbenzene	15.86	91	5333192	49.83 ug/L	98
43) (m+p)-Xylene	16.10	106	4071048	95.37 ug/L	96
44) o-Xylene	16.83	106	1891347	46.60 ug/L	95
45) Styrene	16.92	104	2880093	45.29 ug/L	96
46) Bromoform	16.99	173	441381	40.05 ug/L	100
48) Isopropylbenzene	17.36	105	4728396	54.58 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.21	83	1101126	57.41 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	2129930	49.91 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	2012580	48.42 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	1958288	50.19 ug/L	97
54) 1,2-Dibromo-3-chloropropan	22.17	75	158214	57.91 ug/L	94
55) 1,2,4-Trichlorobenzene	23.36	180	956229	49.35 ug/L	99

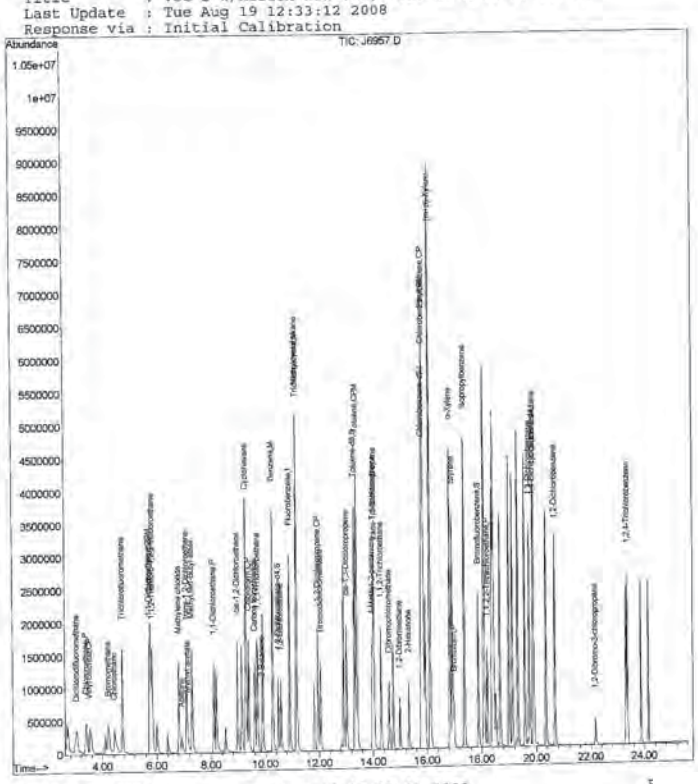
(#) = qualifier out of range (m) = manual integration
J6957.D J5300LMS.M Tue Aug 19 12:41:39 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-1453
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:41 2008

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:33:12 2008
Response via : Initial Calibration



J6957.D J5300LMS.M Tue Aug 19 12:41:41 2008

Internal Standards

A

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No: 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6950.D Date Analyzed: 08/14/2008

Instrument ID: MS03_10 Time Analyzed: 10:13

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	IS1 RT #	IS2 AREA #	IS2 RT #	IS3 AREA #	IS3 RT #
12 HOUR STD	4517420	10.90	1891515	15.81	1342593	19.87
UPPER LIMIT	9034840	11.40	3783030	16.31	2685186	20.37
LOWER LIMIT	2258710	10.40	945758	15.31	671297	19.37
SAMPLE NO.						
01 LCS-14526 (LCS-14526)	4804282	10.90	1959535	15.81	1374402	19.87
02 MB-14526 (MB-14526)	4624885	10.90	1749221	15.81	1218592	19.87
03 SB-2-Bcl-1 (0808068-001A)	4533814	10.90	1466077	15.80	786048	19.86
04 SB-2-South (0808068-002A)	4427945	10.90	1622491	15.81	1094566	19.88
05 SB-2-East (0808068-003A)	4362104	10.90	1656924	15.81	1311421	19.89
06 SB-2-North (0808068-004A)	4385981	10.90	1808926	15.81	1184224	19.87

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

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6883.D Date Analyzed: 08/15/2008

Instrument ID: MS03_10 Time Analyzed: 8:04

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4908672	10.90	1983495	15.80	1463393	19.88
UPPER LIMIT	9817344	11.40	3966990	16.30	2926786	20.38
LOWER LIMIT	2454336	10.40	991748	15.30	731697	19.38
SAMPLE NO.						
01 LCS-14527 (LCS-14527)	5082773	10.90	2049497	15.81	1483160	19.87
02 MB-14527 (MB-14527)	4539855	10.90	1861718	15.81	1080328	19.88
03 SB-2-Bot-2 (0808068-005A)	4364173	10.90	1536709	15.81	873049	19.88
04 SB-2-West (0808068-005A)	3969507	10.90	1458791	15.81	898660	19.88
05 SB-2-EastDL (0808068-003ADL)	4005818	10.90	1503903	15.81	1152378	19.87
06 SB-2-NorthDL (0808068-004ADL)	3938684	10.90	1461909	15.81	971128	19.88
07 Trip Blank (0808068-007A)	3919047	10.90	1452767	15.81	880927	19.88

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

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6910.D Date Analyzed: 08/18/2008

Instrument ID: MS03_10 Time Analyzed: 5:15

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4264248	10.90	1758436	15.81	1312941	19.88
UPPER LIMIT	8528496	11.40	3516872	16.31	2625882	20.38
LOWER LIMIT	2132124	10.40	879218	15.31	656471	19.38
SAMPLE NO.						
01 LCS-14529 (LCS-14529)	4243327	10.90	1711358	15.81	1270838	19.87
02 MSB-14529 (MSB-14529)	4243327	10.90	1711358	15.81	1270838	19.87
03 UST-EastMS (0808076-004AMS)	4057942	10.90	1665472	15.81	1238776	19.87
04 UST-EastMSD (0808076-004AMSD)	4039371	10.90	1626800	15.81	1312793	19.87
05 MB-14529 (MB-14529)	4283969	10.90	1572309	15.81	1042714	19.87
06 UST-Bot-1 (0808076-001A)	3874071	10.90	896660	15.81	373213*	19.88
07 UST-North (0808076-002A)	3477817	10.90	1346302	15.81	815792	19.88
08 UST-Bot-2 (0808076-003A)	3253976	10.90	885173	15.81	424754*	19.88
09 UST-East (0808076-004A)	3332893	10.90	1234147	15.81	754774	19.88
10 UST-West (0808076-005A)	3325057	10.90	1229207	15.81	746111	19.88
11 UST-South (0808076-006A)	3249239	10.90	1196374	15.81	731469	19.87
12 Field Dup (0808076-007A)	2996837	10.90	905201	15.81	384534*	19.87
13 Trench-Bot-1 (0808076-008A)	3191599	10.90	1165181	15.81	648193*	19.87
14 Trench-Bot-2 (0808076-009A)	3226367	10.90	1163194	15.81	617675*	19.88

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

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): J6957.D Date Analyzed: 08/19/2008

Instrument ID: MS03_10 Time Analyzed: 7:49

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	3668640	10.90	1559584	15.81	1148438	19.87
UPPER LIMIT	7337280	11.40	3119188	16.31	2296876	20.37
LOWER LIMIT	1834320	10.40	779797	15.31	574219	19.37
SAMPLE NO.						
01 LCS-14531 (LCS-14531)	3749091	10.90	1565862	15.81	1143954	19.87
02 MB-14531 (MB-14531)	3399779	10.90	1285675	15.81	791466	19.88
03 UST-Bot-1DL (0808075-001ADL)	3108185	10.90	1057930	15.81	511926*	19.88
04 UST-Bot-2DL (0808075-003ADL)	3121248	10.90	1089879	15.81	360909*	19.88
05 Field DupDL (0808075-007ADL)	3021848	10.90	1091291	15.81	500849*	19.88
06 Trench-Bot-1DL (0808075-008ADL)	3134706	10.90	1163352	15.81	734258	19.88
07 Trench-Bot-2DL (0808075-009ADL)	3074810	10.90	1138830	15.81	704702	19.88
08 LCSD-14531 (LCSD-14531)	3310937	10.90	1382697	15.80	696791	19.87

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

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

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

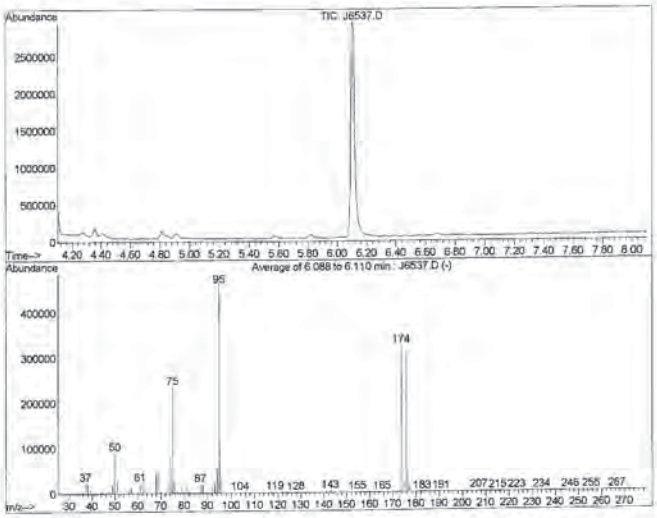
Raw QC Data

Tune Raw Data

BFB

Data File : C:\HPCHEM\1\DATA\J6537.D
Acq On : 30 May 2008 6:52
Sample : TB053008A3
Misc :
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\JBFBS.M (RTE Integrator)
Title : VOC's w/RTX-VMS : 0.18 mm x 40 m, 1.0 df

Vial: 1
Operator: JK
Inst : #3MS10
Multiplr: 1.00



AutoFind: Scans 190, 191, 192; Background Corrected with Scan 185

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	89952	PASS
75	95	30	60	50.6	235166	PASS
95	95	100	100	100.0	464389	PASS
96	95	5	9	7.2	33318	PASS
173	174	0.00	2	0.4	1305	PASS
174	95	50	100	69.8	324109	PASS
175	174	5	9	7.1	23079	PASS
176	174	95	101	95.8	310536	PASS
177	176	5	9	6.6	20435	PASS

J6537.D JBFBS.M Fri May 30 14:53:40 2008

5/30/08

Average of 6.088 to 6.110 min.: J6537.D
TB053008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.05	51	46.00	334	56.10	7059	65.10	1076
35.35	108	47.10	4832	57.05	12485	65.80	38
36.05	3784	48.00	3000	57.85	94	66.15	109
37.10	22500	49.05	18658	58.20	739	66.35	73
38.05	20908	50.05	89952	58.95	46	66.95	368
39.10	7690	51.05	26949	60.05	3776	67.25	620
40.00	136	51.95	266	61.00	21863	68.05	46876
41.55	125	52.10	1577	62.05	21544	69.05	48262
41.90	188	52.95	23	63.05	16652	70.05	3172
44.05	2582	53.95	60	64.10	1943	71.00	47
45.10	3059	55.00	840	64.95	157	72.00	2219

Average of 6.088 to 6.110 min.: J6537.D
TB053008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
73.05	22129	83.05	789	91.00	1801	101.15	51
74.05	80744	83.75	57	92.05	13322	102.95	267
75.05	235166	84.45	53	93.00	19978	103.90	1514
76.05	19820	85.15	58	94.05	56427	104.80	284
77.05	2920	85.35	92	95.05	464389	105.05	534
77.85	936	85.70	81	96.05	33318	105.55	101
78.10	743	85.95	156	96.85	162	105.85	785
78.95	13016	87.00	19770	97.15	907	106.05	918
80.00	3997	87.95	18615	98.15	140	106.95	565
81.00	14641	90.00	191	99.15	52	108.15	111
82.00	2566	90.85	208	99.45	65	108.75	78

Average of 6.088 to 6.110 min.: J6537.D
TB053008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
109.80	182	121.90	209	128.90	854	136.05	185
110.90	451	122.20	143	129.45	70	136.95	311
111.45	79	123.20	152	129.95	1116	137.75	65
111.90	389	123.95	297	131.05	792	138.45	79
112.90	412	124.10	421	132.35	87	139.15	235
114.85	602	124.65	101	133.25	143	139.45	58
115.95	1310	125.05	256	133.75	187	139.75	107
117.00	2246	125.35	82	134.05	230	140.05	120
118.00	1729	126.05	307	134.90	921	140.95	2708
118.95	2365	126.95	59	135.45	53	141.15	269
120.00	8	127.90	1324	135.85	141	141.90	290

Average of 6.088 to 6.110 min.: J6537.D
TB053008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.25	342	148.00	909	154.15	92	161.10	359
142.95	3847	148.75	74	154.80	1037	161.95	86
144.00	90	148.95	359	155.90	407	162.95	25
144.85	486	149.55	54	156.85	477	163.45	109
145.25	78	150.00	290	157.05	492	164.35	60
145.75	92	151.05	138	157.75	73	164.95	63
146.05	503	151.95	199	158.00	345	165.50	112
146.85	86	152.20	143	158.45	64	166.90	141
146.95	256	152.85	165	158.85	169	170.05	126
147.10	206	153.10	296	160.05	105	170.80	177
147.35	112	153.80	446	160.75	314	172.00	1238

Average of 6.088 to 6.110 min.: J6537.D
TB053008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.05	1305	182.85	52	198.65	56	215.25	106
173.90	324109	184.70	126	200.55	62	217.85	71
174.95	23079	187.45	54	201.35	100	219.15	85
175.95	310536	188.80	173	201.75	80	221.45	50
176.95	20435	191.10	502	202.90	148	221.95	81
177.80	454	191.95	149	203.95	87	223.35	85
178.00	96	192.45	72	205.85	56	225.25	54
179.25	79	194.15	70	207.10	1636	226.55	52
179.85	55	194.90	194	210.35	200	227.35	60
180.65	58	197.45	106	212.95	50	228.25	132
181.05	92	198.10	134	214.85	30	228.75	62

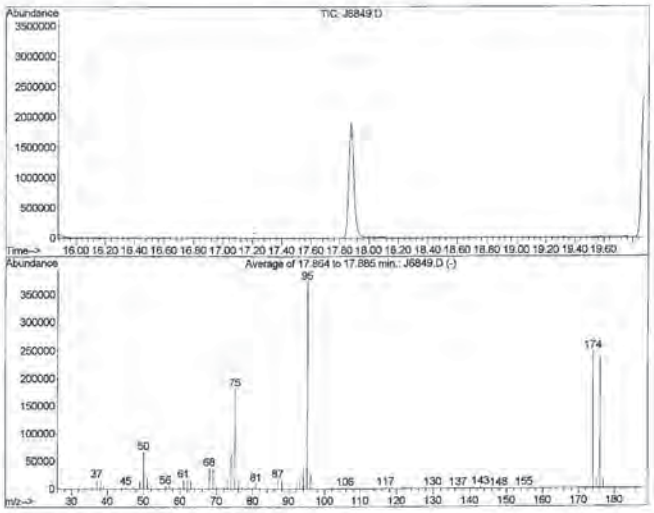
Average of 6.088 to 6.110 min.: J6537.D
TB053008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.25	58	245.15	63	258.85	76		
231.85	58	246.60	118	264.95	142		
233.00	158	247.75	63	265.75	51		
233.85	80	249.35	60	266.85	203		
234.15	163	250.95	57	267.25	143		
235.00	149	252.15	69	269.05	70		
235.30	136	254.05	79	269.75	72		
235.75	53	255.55	77				
236.45	54	255.95	54				
236.95	9	257.15	56				
237.25	75	257.45	62				

BFB

Data File : C:\HPCHEM\1\DATA\J6849.D
Acq On : 14 Aug 2008 9:39
Sample : TB081408A3
Misc : BFB
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df

Vial: 1
Operator: MSV
Inst : #3MS10
Multiplr: 1.00



AutoFind: Scans 1448, 1449, 1450; Background Corrected with Scan 1442

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	66493	PASS
75	95	30	60	48.1	181077	PASS
95	95	100	100	100.0	376277	PASS
96	95	5	9	6.8	25488	PASS
173	174	0.00	2	0.6	1407	PASS
174	95	50	100	66.0	248235	PASS
175	174	5	9	7.1	17685	PASS
176	174	95	101	95.3	236480	PASS
177	176	5	9	6.8	16115	PASS

J6849.D J5300LMS.M Thu Aug 14 13:32:16 2008 8-14-0

Average of 17.864 to 17.885 min.: J6849.D
TB081408A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2993	49.05	13832	62.05	15861	74.05	61016
37.05	15883	50.05	66493	63.05	13358	75.05	181077
38.10	14566	51.05	19693	64.00	1814	76.05	15490
39.00	6291	52.10	987	65.05	1977	77.05	3132
40.05	336	53.25	171	66.15	193	77.95	1598
43.95	1669	55.10	978	67.05	1188	78.90	9055
45.10	2896	56.05	4984	68.05	37104	79.85	602
46.25	191	57.05	9073	69.05	34973	80.05	2189
47.10	3789	58.05	617	70.00	3050	80.95	9303
47.85	1442	60.00	3024	72.00	1962	81.90	1977
48.15	621	61.00	16341	73.00	15229	86.05	499

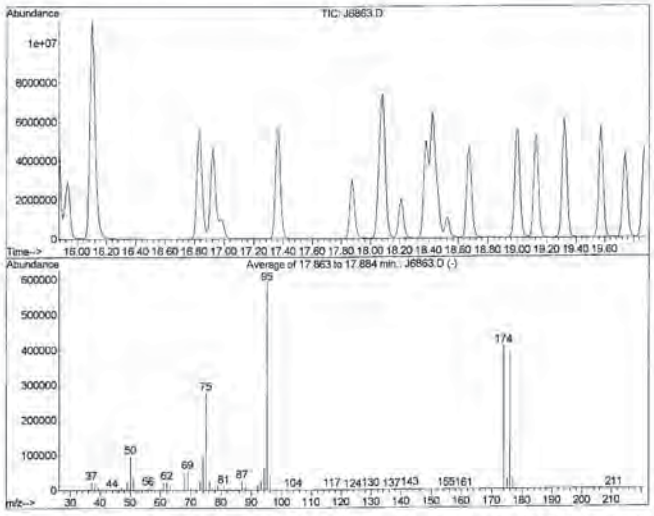
Average of 17.864 to 17.885 min.: J6849.D
TB081408A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.95	16333	104.95	451	134.85	519	157.05	223
88.00	16164	105.90	1376	136.90	642	157.90	374
91.00	1029	106.95	174	140.90	2755	158.85	176
92.05	10052	115.95	1349	142.95	2826	171.75	531
93.00	15717	117.00	2145	144.75	247	172.05	2203
94.05	41736	118.00	1214	145.00	509	173.05	1407
95.05	376277	118.90	1780	145.85	232	173.95	248235
96.00	25488	127.90	1123	147.95	521	175.00	17685
96.95	697	129.05	609	154.95	863	175.95	236480
97.35	190	129.90	1370	155.85	201	176.90	16115
103.90	1352	130.85	521	156.75	194	177.95	172

BFB

Data File : C:\HPCHEM\1\DATA\J6863.D
Acq On : 15 Aug 2008 8:04
Sample : TB081508A3 / CCV- 14527
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df

Vial: 2
Operator: MSV
Inst : #3MS10
Multiplr: 1.00



AutoFind: Scans 1448, 1449, 1450; Background Corrected with Scan 1442

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	97024	PASS
75	95	30	60	46.6	277952	PASS
95	95	100	100	100.0	595989	PASS
96	95	5	9	6.8	40597	PASS
173	174	0.00	2	0.2	762	PASS
174	95	50	100	68.5	408235	PASS
175	174	5	9	7.2	29531	PASS
176	174	95	101	96.0	391979	PASS
177	176	5	9	6.4	25144	PASS

J6863.D J5300LMS.M Fri Aug 15 14:06:30 2008 8-15

Average of 17.863 to 17.884 min.: J6863.D
TB081508A3 / CCV- 14527
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	3514	49.05	20632	63.05	17745	75.05	277952
37.10	23891	50.05	97024	64.05	1869	76.05	24392
38.05	21608	51.05	30835	65.10	1432	77.05	4075
39.15	9039	52.10	1660	67.15	800	77.95	2891
40.05	571	55.10	1635	68.05	53293	78.90	11266
41.05	193	56.00	7776	69.05	54168	79.95	3413
43.15	88	57.10	14576	70.10	4035	80.95	11870
44.00	2392	58.10	284	71.05	235	82.00	2921
45.05	4218	60.05	4552	72.00	2945	83.05	198
47.05	7427	61.05	23459	73.05	24669	85.95	527
48.00	3118	62.05	23813	74.05	91117	86.15	305

Average of 17.863 to 17.884 min.: J6863.D
TB081508A3 / CCV-
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.00	26520	104.90	1064	127.95	1674	146.00	440
87.95	24232	105.95	2071	128.90	1021	147.15	183
90.95	1257	106.65	181	129.95	1968	148.00	962
92.00	15375	107.10	369	130.95	638	150.05	277
93.05	21941	114.85	515	135.00	747	155.00	1015
94.05	65611	115.95	1749	136.90	561	155.85	668
95.05	595989	117.00	2772	140.90	3457	156.90	584
96.05	40597	117.85	577	142.00	381	158.05	207
97.05	1288	118.00	1178	143.00	3775	158.95	466
103.05	178	118.90	2132	144.95	210	160.95	340
104.00	2155	123.95	203	145.75	274	172.00	1472

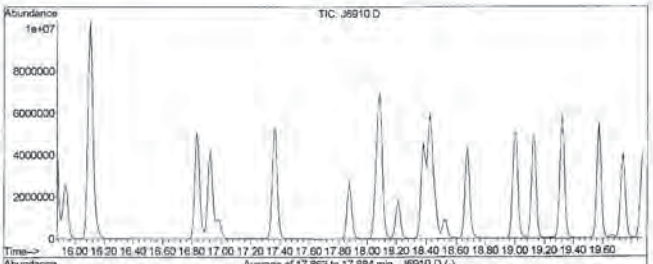
Average of 17.863 to 17.884 min.: J6863.D
TB081508A3 / CCV-
Modified:subtracted

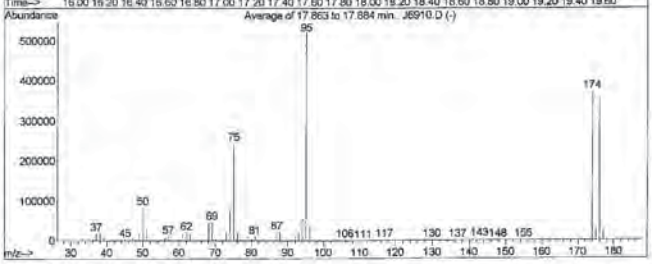
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.05	762						
173.95	408235						
175.00	29531						
175.95	391979						
176.95	25144						
177.90	803						
210.95	212						

BFB

Data File : C:\HPCHEM\1\DATA\J6910.D
Acq On : 18 Aug 2008 5:15
Sample : TB081808A3 / CCV-14529
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00





AutoFind: Scans 1448, 1449, 1450; Background Corrected with Scan 1441

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.0	83547	PASS
75	95	30	60	46.7	244544	PASS
95	95	100	100	100.0	523328	PASS
96	95	5	9	6.7	35125	PASS
173	174	0.00	2	0.1	550	PASS
174	95	50	100	71.1	372139	PASS
175	174	5	9	6.9	25656	PASS
176	174	95	101	95.6	355627	PASS
177	176	5	9	6.6	23451	PASS

J6910.D J5300LMS.M Mon Aug 18 06:32:20 2008 8-18-0

Average of 17.863 to 17.884 min.: J6910.D
TB081808A3 / CCV-14529
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	3426	50.05	83547	63.95	1035	75.05	244544
37.05	18330	51.05	28131	64.15	478	76.05	20731
38.05	16495	52.05	1274	65.00	1885	77.05	4021
39.10	7941	55.05	1660	65.95	171	77.95	1481
40.10	786	56.05	6363	67.10	1290	78.15	981
44.05	2092	57.05	11115	68.05	45736	79.00	10472
45.10	3724	57.85	224	69.05	46437	79.95	3328
46.10	386	60.05	3918	70.05	3855	80.95	10502
47.05	6051	61.05	19755	72.10	2556	81.95	2274
48.00	2746	62.05	20509	73.05	20651	82.85	178
49.05	17199	63.00	15850	74.05	77275	85.85	169

Average of 17.863 to 17.884 min.: J6910.D
TB081808A3 / CCV-
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.10	445	103.15	199	117.95	1749	139.85	173
87.00	22179	103.90	1945	118.85	424	140.95	3152
87.95	22136	104.85	233	118.95	648	141.65	208
91.00	1713	105.05	852	119.10	1183	141.85	201
92.05	13586	106.00	2322	128.00	1461	142.05	194
93.05	20123	106.90	372	128.90	475	142.95	3316
94.05	55501	111.05	198	129.15	182	144.95	481
95.05	523328	114.90	390	129.95	1827	146.05	532
96.05	35125	115.80	761	130.95	182	147.95	921
97.00	1217	116.00	830	135.00	846	149.05	176
102.95	181	117.00	2473	136.90	919	153.85	176

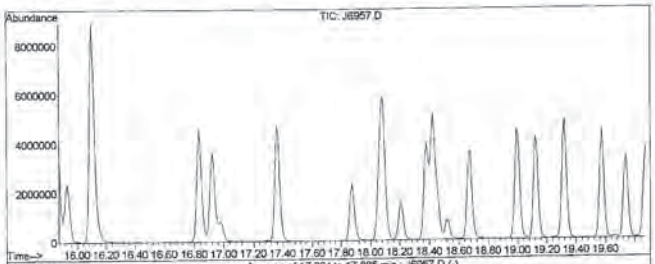
Average of 17.863 to 17.884 min.: J6910.D
TB081808A3 / CCV-
Modified:subtracted

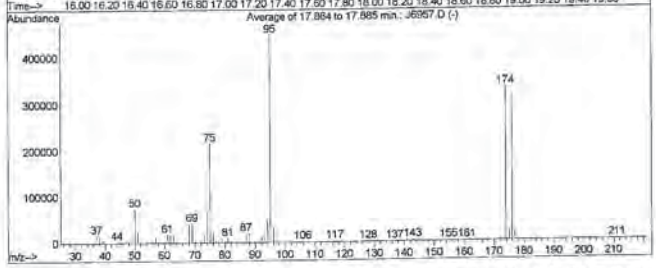
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.05	167	177.95	777				
154.90	1055						
155.95	176						
156.85	469						
157.15	171						
171.95	2239						
172.95	550						
173.95	372139						
174.95	25656						
175.95	355627						
176.95	23451						

BFB

Data File : C:\HPCHEM\1\DATA\J6957.D
Acq On : 19 Aug 2008 7:49
Sample : TB081908A3 / CCV-14531
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df

Vial: 13
Operator: MSV
Inst : #3MS10
Multiplr: 1.00





AutoFind: Scans 1448, 1449, 1450; Background Corrected with Scan 1441

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	73805	PASS
75	95	30	60	47.5	214400	PASS
95	95	100	100	100.0	451413	PASS
96	95	5	9	6.9	31037	PASS
173	174	0.00	2	0.2	818	PASS
174	95	50	100	73.3	330837	PASS
175	174	5	9	6.9	22739	PASS
176	174	95	101	95.7	316672	PASS
177	176	5	9	6.4	20216	PASS

J6957.D J5300LMS.M Tue Aug 19 12:38:22 2008 8-19-09

Average of 17.864 to 17.885 min.: J6957.D
TB081908A3 / CCV-14531
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
34.95	167	49.05	15808	62.05	17414	75.05	214400
36.05	2643	50.05	73805	63.05	13860	76.05	18157
37.05	16192	51.05	23869	64.10	1524	77.00	3033
38.10	15369	52.10	1282	65.15	1783	77.90	2011
39.10	6418	52.95	183	67.10	1087	78.95	8826
40.15	727	54.95	932	68.05	40013	80.00	2852
43.05	167	56.00	5591	69.05	41261	81.00	9366
44.00	2238	57.05	10172	70.00	3720	81.90	2018
45.10	3050	58.10	398	72.10	2465	82.85	180
47.10	5215	60.00	3650	73.05	18014	85.95	625
47.95	2318	61.05	17562	74.05	68936	87.00	19269

Average of 17.864 to 17.885 min.: J6957.D
TB081908A3 / CCV-
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	18909	106.00	1663	134.95	582	154.90	988
90.90	1498	106.80	369	136.95	673	156.05	167
92.05	11563	116.00	1344	141.00	2893	157.00	640
93.00	18887	116.90	2440	141.95	248	158.05	181
94.05	49475	117.85	1478	142.95	3173	158.85	192
95.05	451413	118.90	2101	144.85	266	160.95	371
96.05	31037	127.85	378	145.90	590	171.90	1975
97.00	1143	128.00	1313	146.95	183	173.05	818
104.00	1599	129.00	683	147.75	204	173.95	330837
104.90	961	129.90	1293	148.00	731	174.95	22739
105.15	274	131.00	406	149.95	204	175.95	316672

Average of 17.864 to 17.885 min.: J6957.D
TB081908A3 / CCV-
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.95	20216						
177.90	370						
211.15	190						

Method Blank Data

548

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14526	SampType: MBLK	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:		RunNo: 14526	
Client ID: ZZZZZ	Batch ID: R14526	Method: SW8260B		Analysis Date: 8/14/2008		SeqNo: 380703	
Instrument: MS03_10	ColumnID: Rtx-VM5	Rtx-VM5, 1.0 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	48.1	0.10	50	0	96	71	128				
Surr: Toluene-d8	50.4	0.10	50	0	101	75	125				
Surr: 4-Bromofluorobenzene	54.8	0.10	50	0	110	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

550

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET — Form 1 TIC

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: MB-14526

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808080

Matrix: (soil/water) SOIL Lab Sample ID: MB-14526

Sample wt/vol: 5 (g/ml) G Lab File ID: J6856.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 8/14/2008

GC Column: Rtx-VM5 ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ml) Injection Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 10 SW8260B

551

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14526	SampType: MBLK	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:		RunNo: 14526	
Client ID: ZZZZZ	Batch ID: R14526	Method: SW8260B		Analysis Date: 8/14/2008		SeqNo: 380703	
Instrument: MS03_10	ColumnID: Rtx-VM5	Rtx-VM5, 1.0 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	1.35	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

549

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6856.D
Acq On : 14 Aug 2008 13:39
Sample : MB-14526
Misc : MBLK,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:32 2008

Vial: 8
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4824885	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1749221	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1218592	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.47	65	1175612	48.06 ug/L	0.00
Spiked Amount 50.000			Recovery = 96.12%		
37) Toluene-d8	13.31	98	4329483	50.41 ug/L	0.00
Spiked Amount 50.000			Recovery = 100.82%		
49) Bromofluorobenzene	17.88	95	1402551	54.82 ug/L	0.00
Spiked Amount 50.000			Recovery = 109.64%		
Target Compounds					Qvalue
11) Methylene chloride	6.81	84	33772	1.35 ug/L	95
12) Acetone	6.95	43	17525	3.11 ug/L #	42

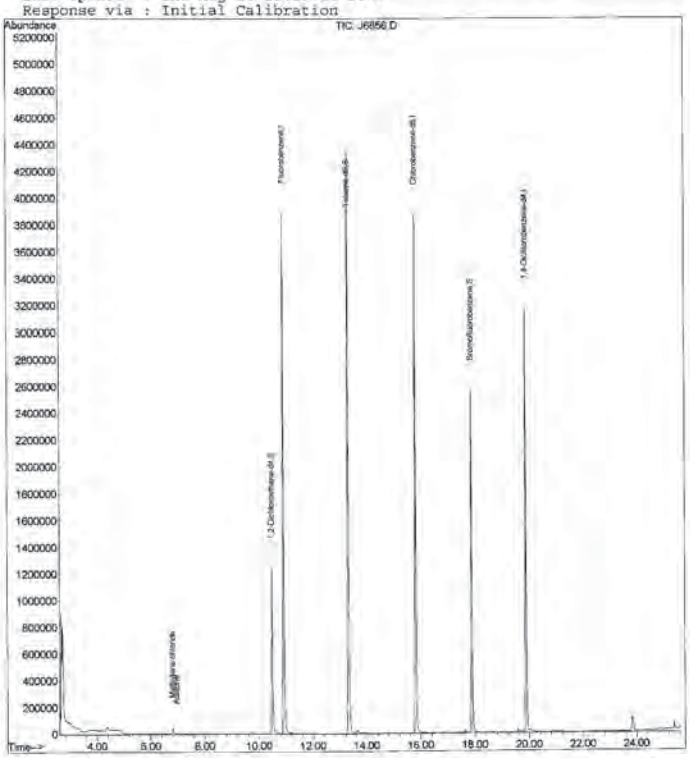
(#) = qualifier out of range (m) = manual integration
J6856.D J5300LMS.M Mon Aug 18 08:33:00 2008

Quantitation Report

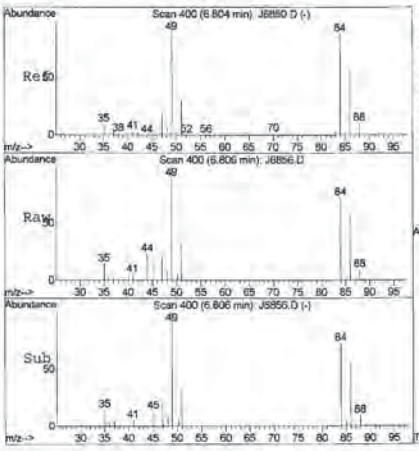
Data File : C:\HPCHEM\1\DATA\J6856.D
Acq On : 14 Aug 2008 13:39
Sample : MB-14526
Misc : MBLK,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 8:32 2008

Vial: 8
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration



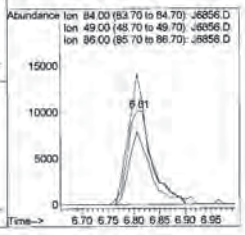
J6856.D J5300LMS.M Mon Aug 18 08:33:01 2008

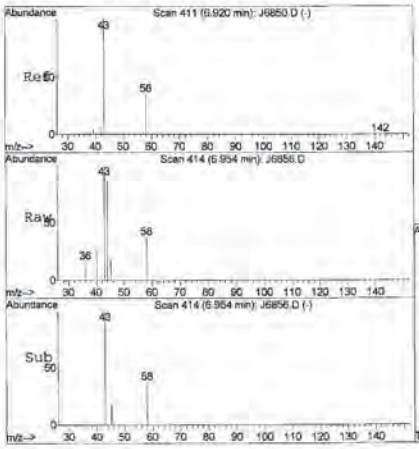


#11
Methylene chloride
Concen: 1.35 ug/L
RT: 6.81 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6856.D
Acq: 14 Aug 2008 13:39

Tgt Ion: 84 Resp: 33772

Ion	Ratio	Lower	Upper
84	100		
49	117.9	81.6	141.6
86	67.5	34.5	94.5

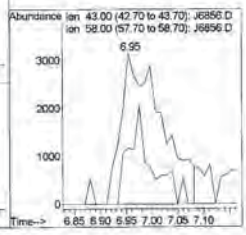




#12
Acetone
Concen: 3.11 ug/L
RT: 6.95 min Scan# 414
Delta R.T. 0.03 min
Lab File: J6856.D
Acq: 14 Aug 2008 13:39

Tgt Ion: 43 Resp: 17525

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	62.3#



J6856.D J5300LMS.M Mon Aug 18 08:33:01 2008

Tentatively Identified Compound (LSC) summary

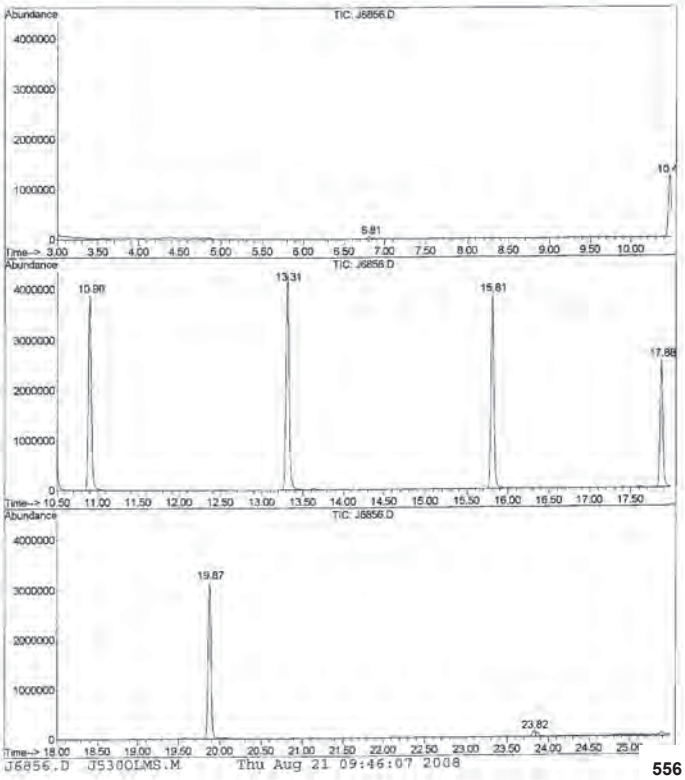
Operator ID: MSV Date Acquired: 14 Aug 2008 13:39
Data File: C:\HPCHEM\1\DATA\J6856.D
Name: MB-14526
Misc: MBLK,8260S7_OLM42,
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6856.D J5300LMS.M Thu Aug 21 09:46:07 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6856.D
Operator : MSV
Acquired : 14 Aug 2008 13:39 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: MB-14526
Misc Info : MBLK,826087_OLM42,
Vial Number: 8
Quant File :J5300LMS.RES (RTE Integrator)



J6856.D J5300LMS.M Thu Aug 21 09:46:07 2008

556

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14527 SampType: MBLK TestCode: 826087_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380715
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2 pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	47.4	0.10	50	0	95	71	128				
Surr: Toluene-d8	50.3	0.10	50	0	101	75	125				
Surr: 4-Bromofluorobenzene	57.8	0.10	50	0	116	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
I Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

558

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14527 SampType: MBLK TestCode: 826087_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380715
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	1.77	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
I Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

557

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Life Science Laboratories, Inc. Contract: _____ MB-14527

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: MB-14527

Sample wt./vol: 5 (g/mL) G Lab File ID: J6868.D

Level: LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 8/15/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

559

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6868.D
Acq On : 15 Aug 2008 10:53
Sample : MB-14527
Misc : MBLK,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 9:52 2008

Vial: 70
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4538958	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1661718	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	1080328	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1090977	47.41 ug/L	0.00
Spiked Amount 50.000			Recovery = 94.82%		
37) Toluene-d8	13.30	98	4103387	50.29 ug/L	0.00
Spiked Amount 50.000			Recovery = 100.58%		
49) Bromofluorobenzene	17.87	95	1311338	57.82 ug/L	0.00
Spiked Amount 50.000			Recovery = 115.64%		
Target Compounds					Qvalue
11) Methylene chloride	6.80	84	41617	1.77 ug/L	97
12) Acetone	6.94	43	38198m	7.20 ug/L	

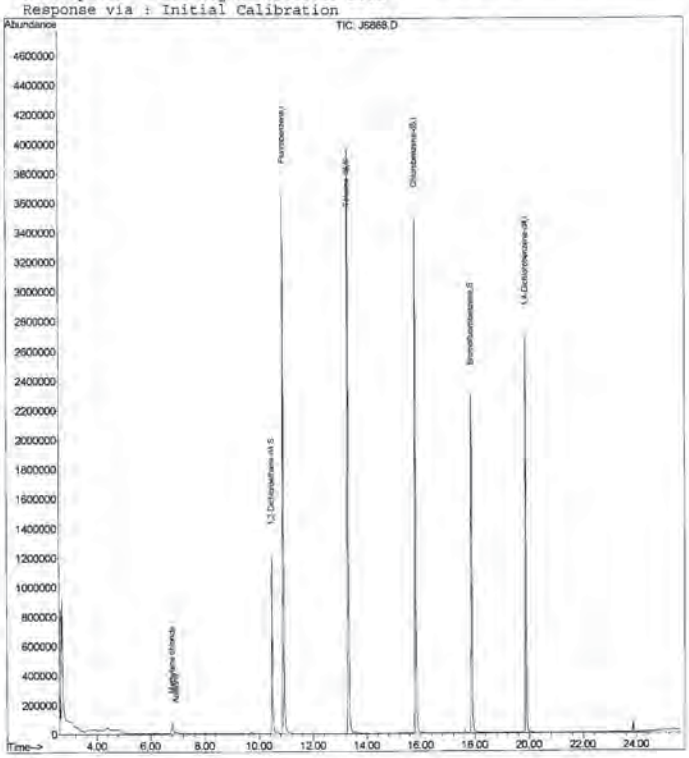
(#) = qualifier out of range (m) = manual integration
J6868.D J5300LMS.M Mon Aug 18 09:52:35 2008

Quantitation Report

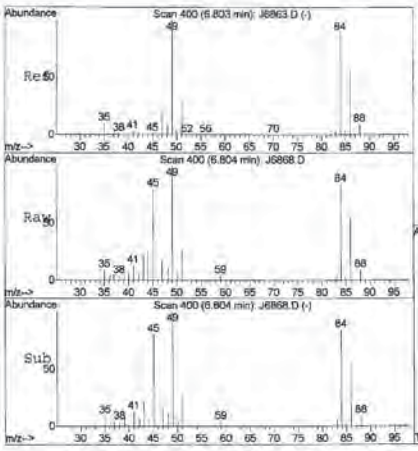
Data File : C:\HPCHEM\1\DATA\J6868.D
Acq On : 15 Aug 2008 10:53
Sample : MB-14527
Misc : MBLK,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 9:52 2008

Vial: 70
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration



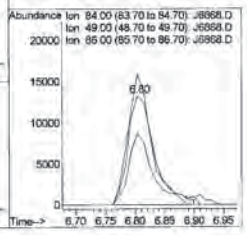
J6868.D J5300LMS.M Mon Aug 18 09:52:35 2008

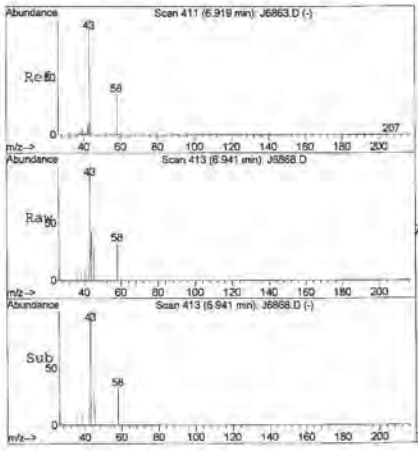


#11
Methylene chloride
Concen: 1.77 ug/L
RT: 6.80 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6868.D
Acq: 15 Aug 2008 10:53

Tgt Ion: 84 Resp: 41617

Ion	Ratio	Lower	Upper
84	100		
49	109.8	81.6	141.6
86	59.4	34.5	94.5

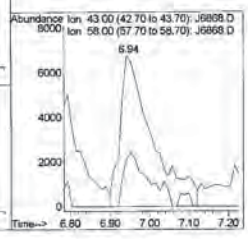




#12
Acetone
Concen: 7.20 ug/L m
RT: 6.94 min Scan# 413
Delta R.T. 0.02 min
Lab File: J6868.D
Acq: 15 Aug 2008 10:53

Tgt Ion: 43 Resp: 38198

Ion	Ratio	Lower	Upper
43	100		
58	28.2	2.3	62.3



J6868.D J5300LMS.M Mon Aug 18 09:52:36 2008

Tentatively Identified Compound (LSC) summary

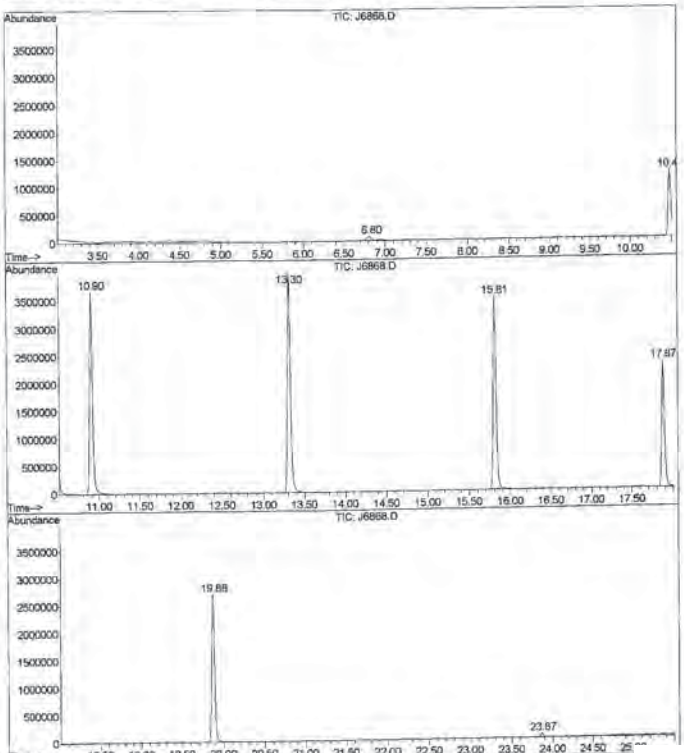
Operator ID: MSV Date Acquired: 15 Aug 2008 10:53
Data File: C:\HPCHEM\1\DATA\J6868.D
Name: MB-14527
Misc: MBLK,8260S7_OLM42, 5.0 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6868.D J5300LMS.M Thu Aug 21 09:46:16 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6868.D
Operator : MSV
Acquired : 15 Aug 2008 10:53 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: MB-14527
Misc Info : MBLK,8260S7_OLM42, 5.0 g
Vial Number: 70
Quant File :J5300LMS.RES (RTE Integrator)



J6868.D J5300LMS.M Thu Aug 21 09:46:16 2008

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14529	SampType: MBLK	TestCode: 826057_OLM	Units: µg/Kg	Prep Date:	RunNo: 14529
Client ID: ZZZZZ	Batch ID: R14529	Method: SW8260B		Analysis Date: 8/18/2008	SeqNo: 380759
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	46.5	0.10	50	0	93	71	126				
Surr: Toluene-d8	50.5	0.10	50	0	101	75	125				
Surr: 4-Bromofluorobenzene	54.9	0.10	50	0	110	69	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14529	SampType: MBLK	TestCode: 826057_OLM	Units: µg/Kg	Prep Date:	RunNo: 14529
Client ID: ZZZZZ	Batch ID: R14529	Method: SW8260B		Analysis Date: 8/18/2008	SeqNo: 380759
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	0.630	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MB-14529

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: MB-14529

Sample wt/vol: 5 (g/mL) G Lab File ID: J6915.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 8/18/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6915.D
Acq On : 18 Aug 2008 8:04
Sample : MB-14529
Misc : MBLK,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:24 2008

Vial: 43
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4283969	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1572309	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1042714	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.47	65	1009098	46.46 ug/L	0.00
Spiked Amount 50.000			Recovery = 92.92%		
37) Toluene-d8	13.31	98	3898906	50.50 ug/L	0.00
Spiked Amount 50.000			Recovery = 101.00%		
49) Bromofluorobenzene	17.88	95	1201267	54.87 ug/L	0.00
Spiked Amount 50.000			Recovery = 109.74%		
Target Compounds					Qvalue
11) Methylene chloride	6.81	84	18486	0.83 ug/L	94
12) Acetone	6.95	43	29241	5.84 ug/L	87

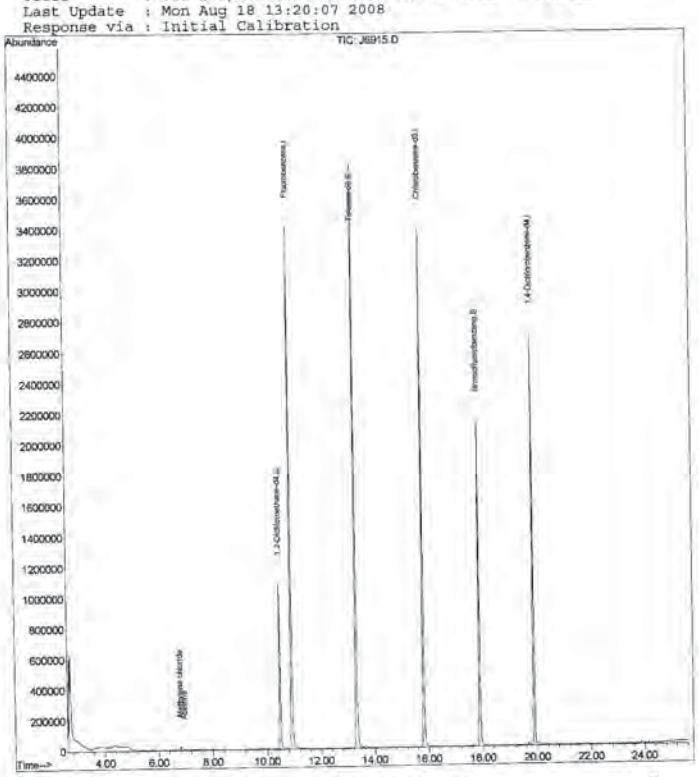
(#) = qualifier out of range (m) = manual integration
J6915.D J5300LMS.M Mon Aug 18 13:24:50 2008

Quantitation Report

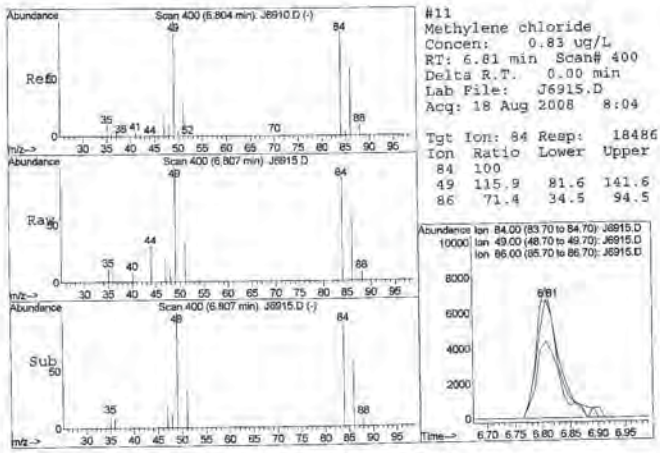
Data File : C:\HPCHEM\1\DATA\J6915.D
Acq On : 18 Aug 2008 8:04
Sample : MB-14529
Misc : MBLK,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:24 2008

Vial: 43
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



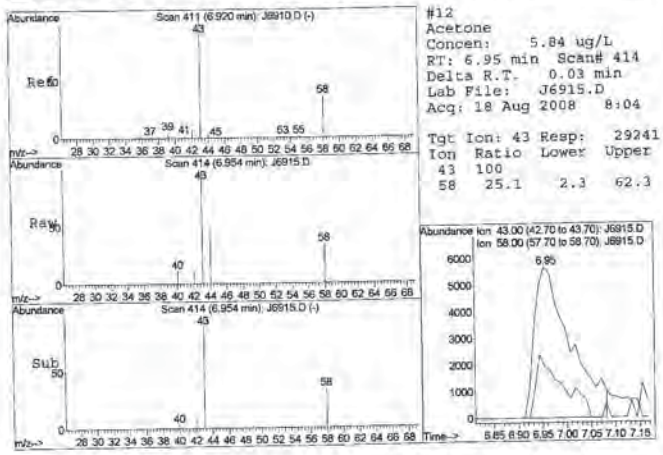
J6915.D J5300LMS.M Mon Aug 18 13:24:51 2008



#11
Methylene chloride
Concen: 0.83 ug/L
RT: 6.81 min Scan# 400
Delta R.T. 0.00 min
Lab File: J6915.D
Acq: 18 Aug 2008 8:04

Tgt Ion: 84 Resp: 18486

Ion	Ratio	Lower	Upper
84	100		
49	115.9	81.6	141.6
86	71.4	34.5	94.5



#12
Acetone
Concen: 5.84 ug/L
RT: 6.95 min Scan# 414
Delta R.T. 0.03 min
Lab File: J6915.D
Acq: 18 Aug 2008 8:04

Tgt Ion: 43 Resp: 29241

Ion	Ratio	Lower	Upper
43	100		
58	25.1	2.3	62.3

J6915.D J5300LMS.M Mon Aug 18 13:24:51 2008

Tentatively Identified Compound (LSC) summary

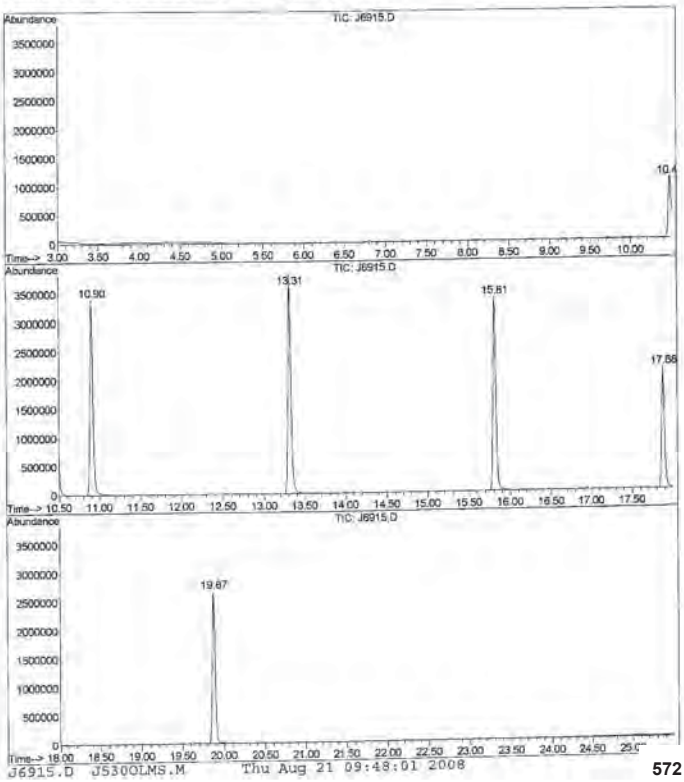
Operator ID: MSV Date Acquired: 18 Aug 2008 8:04
Data File: C:\HPCHEM\1\DATA\J6915.D
Name: MB-14529
Misc: MBLK,8260S7_OLM42, 5.0 g
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6915.D J5300LMS.M Thu Aug 21 09:48:01 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6915.D
Operator : MSV
Acquired : 18 Aug 2008 8:04 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: MB-14529
Misc Info : MBLK,826087_OLM42, 5.0 g
Vial Number: 43
Quant File :J5300LMS.RES (RTE Integrator)



J6915.D J5300LMS.M Thu Aug 21 09:48:01 2008

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14531 SampType: MBLK TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380803
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	50.8	0.10	50	0	102	77	128				
Surr: Toluene-d8	50.3	0.10	50	0	101	79	125				
Surr: 4-Bromofluorobenzene	55.2	0.10	50	0	110	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-14531 SampType: MBLK TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14531
Client ID: ZZZZZ Batch ID: R14531 Method: SW8260B Analysis Date: 8/19/2008 SeqNo: 380803
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	0.930	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MB-14531

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: MB-14531

Sample wt/vol: 5 (g/mL) 5 Lab File ID: J6960.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 8/19/2008

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6960.D
Acq On : 19 Aug 2008 9:31
Sample : MB-14531
Misc : MBLK,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:45 2008

Vial: 16
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3399779	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1265675	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	791466	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	875635	50.80 ug/L	0.00
Spiked Amount 50.000			Recovery	= 101.60%	
37) Toluene-d8	13.30	98	3124342	50.27 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.54%	
49) Bromofluorobenzene	17.87	95	917358	55.21 ug/L	0.00
Spiked Amount 50.000			Recovery	= 110.42%	
Target Compounds					Qvalue
11) Methylene chloride	6.81	84	16466	0.93 ug/L	92
12) Acetone	6.99	43	8375m	2.11 ug/L	

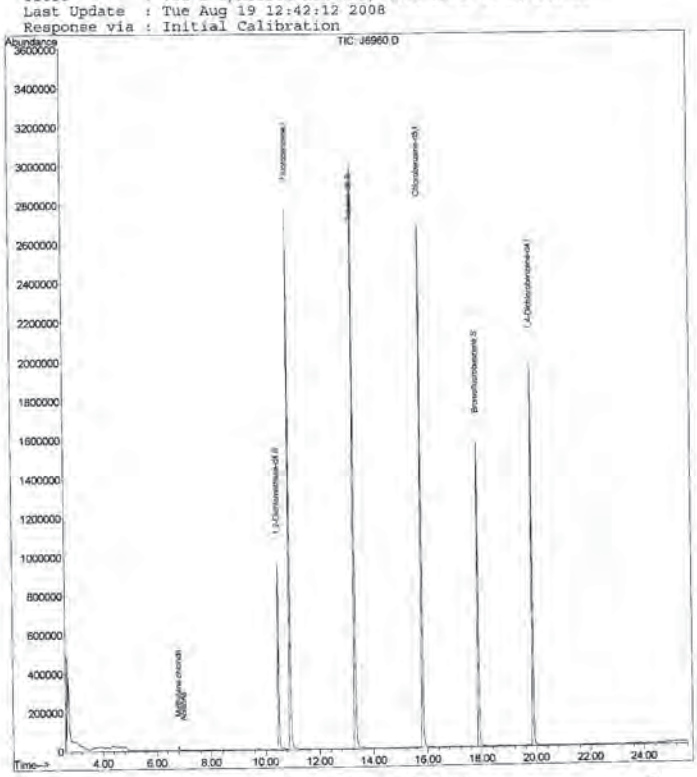
(#) = qualifier out of range (m) = manual integration
J6960.D J5300LMS.M Tue Aug 19 12:45:56 2008

Quantitation Report

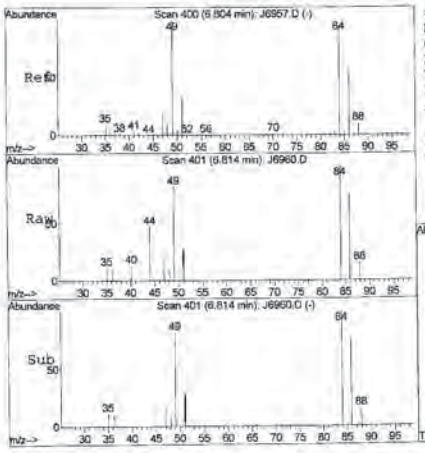
Data File : C:\HPCHEM\1\DATA\J6960.D
Acq On : 19 Aug 2008 9:31
Sample : MB-14531
Misc : MBLK,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:45 2008

Vial: 16
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



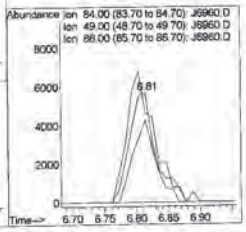
J6960.D J5300LMS.M Tue Aug 19 12:45:57 2008

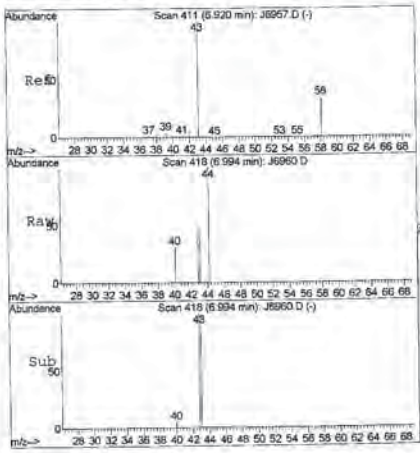


#11
Methylene chloride
Concen: 0.93 ug/L
RT: 6.81 min Scan# 401
Delta R.T. 0.01 min
Lab File: J6960.D
Acq: 19 Aug 2008 9:31

Tgt Ion: 84 Resp: 16466

Ion	Ratio	Lower	Upper
84	100		
49	124.7	81.6	141.6
86	64.8	34.5	94.5

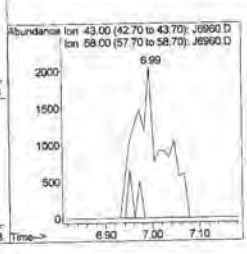




#12
Acetone
Concen: 2.11 ug/L m
RT: 6.99 min Scan# 418
Delta R.T. 0.07 min
Lab File: J6960.D
Acq: 19 Aug 2008 9:31

Tgt Ion: 43 Resp: 8375

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	62.3#



J6960.D J5300LMS.M Tue Aug 19 12:45:58 2008

Tentatively Identified Compound (LSC) Summary

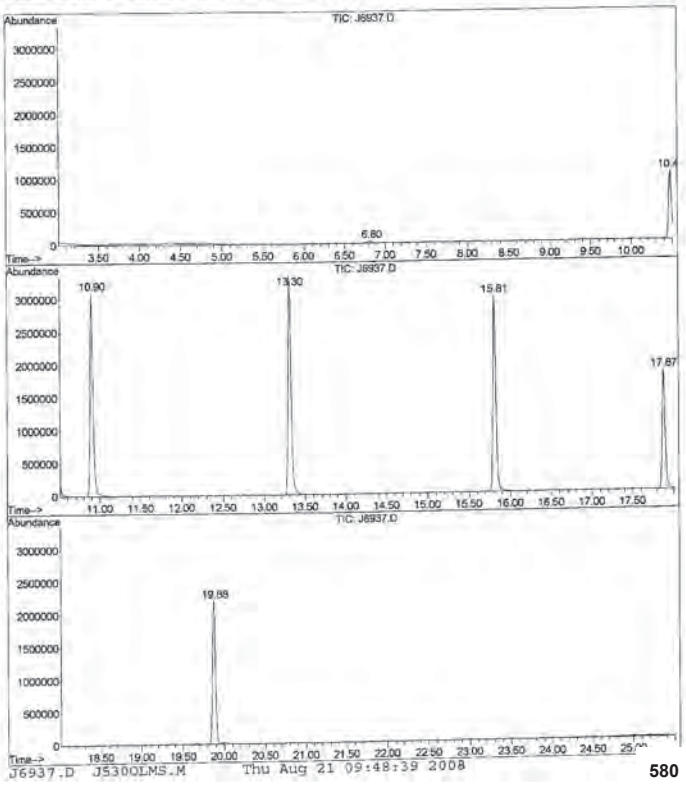
Operator ID: MSV Date Acquired: 18 Aug 2008 20:31
Data File: C:\HPCHEM\1\DATA\J6937.D
Name: MB-14530/14531
Misc: MBLK,8260S7_OLM42,
Method: C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J6937.D J5300LMS.M Thu Aug 21 09:48:39 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J6937.D
Operator : MSV
Acquired : 18 Aug 2008 20:31 using AcqMethod J5300LMS
Instrument : #3MS10
Sample Name: MB-14530 /14531
Misc Info : MBLK,8260S7_OLM42,
Vial Number: 65
Quant File :J5300LMS.RES (RTE Integrator)



Matrix Spike Blank

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: MSB-14529 SampType: MSB TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380756
Instrument: M5503_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	Units	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	52.6	5.0	50	0		105	43	161				
Chloromethane	65.8	5.0	50	0		132	52	151				
Vinyl chloride	58.1	5.0	50	0		116	57	146				
Bromomethane	39.0	5.0	50	0		78	44	145				
Chloroethane	54.9	5.0	50	0		110	49	161				
Trichlorofluoromethane	40.6	5.0	50	0		81	59	156				
1,1-Dichloroethene	69.0	2.5	50	0		138	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	64.3	2.5	50	0		129	70	143				
Acetone	111	40	100	0		111	25	175				
Carbon disulfide	74.2	2.5	50	0		148	46	140				
Methyl acetate	59.0	2.5	50	0		118	70	130				
Methylene chloride	53.4	5.0	50	0		107	68	132				
trans-1,2-Dichloroethene	52.5	2.5	50	0		105	70	130				
Methyl tert-butyl ether	49.2	2.5	50	0		98	70	136				
1,1-Dichloroethane	53.8	2.5	50	0		108	70	133				
cis-1,2-Dichloroethene	49.8	2.5	50	0		100	70	130				
2-Butanone	111	40	100	0		111	30	152				
Chloroform	49.3	2.5	50	0		99	70	130				
1,1,1-Trichloroethane	48.3	2.5	50	0		97	70	142				
Cyclohexane	66.6	2.5	50	0		133	70	130				S
Carbon tetrachloride	48.3	2.5	50	0		97	69	140				
Benzene	55.2	2.5	50	0		110	70	130				
1,2-Dichloroethane	48.5	2.5	50	0		97	68	135				
Trichloroethene	50.5	2.5	50	0		101	70	130				
Methylcyclohexane	59.8	2.5	50	0		120	70	130				
1,2-Dichloropropane	54.6	2.5	50	0		109	70	130				
Bromodichloromethane	50.8	2.5	50	0		102	68	138				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Date: 20-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: MSB-14529 SampType: MSB TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380756
Instrument: M5503_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	Units	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	54.1	2.5	50	0		108	55	139				
4-Methyl-2-pentanone	112	5.0	100	0		112	50	150				
Toluene	53.0	2.5	50	0		106	70	130				
trans-1,3-Dichloropropene	50.8	2.5	50	0		102	53	135				
1,1,2-Trichloroethane	52.7	2.5	50	0		105	70	132				
Tetrachloroethene	45.5	2.5	50	0		91	63	145				
2-Hexanone	103	5.0	100	0		103	38	150				
Dibromochloromethane	46.2	2.5	50	0		92	68	141				
1,2-Dibromoethane	47.9	2.5	50	0		96	70	130				
Chlorobenzene	45.9	2.5	50	0		92	70	130				
Ethylbenzene	51.0	2.5	50	0		102	70	130				
Xylenes (total)	147	5.0	150	0		98	70	130				
Styrene	46.4	2.5	50	0		93	70	130				
Bromoform	42.1	2.5	50	0		84	59	137				
Isopropylbenzene	56.2	2.5	50	0		112	57	168				
1,1,2,2-Tetrachloroethane	58.4	2.5	50	0		117	63	175				
1,3-Dichlorobenzene	51.0	2.5	50	0		102	70	139				
1,4-Dichlorobenzene	49.0	2.5	50	0		98	70	131				
1,2-Dichlorobenzene	50.6	2.5	50	0		101	70	132				
1,2-Dibromo-3-chloropropane	61.9	5.0	50	0		124	70	138				
1,2,4-Trichlorobenzene	53.1	5.0	50	0		106	48	131				
Surr: 1,2-Dichloroethane-d4	47.8	0.10	50	0		96	71	128				
Surr: Toluene-d8	47.1	0.10	50	0		94	75	125				
Surr: 4-Bromofluorobenzene	49.1	0.10	50	0		98	59	125				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Date: 20-Aug-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6911.D
Acq On : 18 Aug 2008 5:49
Sample : LCS-14529/MSB-14529
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:20 2008

Vial: 39
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4243327	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1711358	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1270838	50.00 ug/L	-0.01
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1027444	47.76 ug/L	0.00
Spiked Amount 50.000			Recovery =	95.52%	
37) Toluene-d8	13.30	98	3959900	47.12 ug/L	0.00
Spiked Amount 50.000			Recovery =	94.24%	
49) Bromofluorobenzene	17.87	95	1310757	49.13 ug/L	0.00
Spiked Amount 50.000			Recovery =	98.26%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.03	85	1527842	52.59 ug/L	100
3) Chloromethane	3.40	50	1679522	65.77 ug/L	98
4) Vinyl chloride	3.52	62	1592439	58.11 ug/L	99
5) Bromomethane	4.22	94	987233	39.65 ug/L	99
6) Chloroethane	4.45	64	880702	54.91 ug/L	99
7) Trichlorofluoromethane	4.74	101	2094017	40.62 ug/L	100
8) 1,1-Dichloroethene	5.73	96	1242568	67.98 ug/L	93
9) Carbon disulfide	5.76	76	4610932	74.25 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.82	101	1439542	64.28 ug/L	98
11) Methylene chloride	6.80	84	1175495	53.39 ug/L	99
12) Acetone	6.93	43	548336	110.54 ug/L	94
13) trans-1,2-Dichloroethene	7.09	96	1112909	52.52 ug/L	96
14) Methyl acetate	7.14	43	785135	59.02 ug/L	99
15) Methyl tert-Butyl ether	7.31	73	2435473	49.20 ug/L	98
16) 1,1-Dichloroethane	8.10	63	1909998	53.78 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1197605	49.82 ug/L	98
18) Cyclohexane	9.27	56	2080560	66.56 ug/L	94
19) Chloroform	9.39	83	1916635	49.33 ug/L	99
20) Carbon tetrachloride	9.60	117	1300061	48.26 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	1713739	48.32 ug/L	100
22) 2-Butanone	9.88	43	803158	110.74 ug/L	98
23) Benzene	10.27	78	5056017	55.17 ug/L	100
25) 1,2-Dichloroethane	10.58	62	1228057	48.49 ug/L	98
26) Methylcyclohexane	11.15	83	2292736	59.78 ug/L	96
27) Trichloroethene	11.16	95	1238065	50.51 ug/L	94
28) 1,2-Dichloropropane	11.95	63	1058864	54.57 ug/L	99
29) Bromodichloromethane	12.05	83	1335712	50.80 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	1698294	54.13 ug/L	93
31) Toluene	13.39	92	3203027	52.97 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6911.D J5300LMS.M Mon Aug 18 13:21:00 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6911.D
Acq On : 18 Aug 2008 5:49
Sample : LCS-14529/MSB-14529
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:20 2008

Vial: 39
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1578415	111.97 ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	1419367	50.82 ug/L	93
34) 1,1,2-Trichloroethane	14.30	83	774364	52.69 ug/L	97
35) 2-Hexanone	15.31	43	1064942	103.01 ug/L	98
38) Tetrachloroethene	14.01	166	1148899	45.54 ug/L	100
39) Dibromochloromethane	14.59	129	896479	46.21 ug/L	97
40) 1,2-Dibromoethane	14.98	107	846465	47.91 ug/L	99
41) Chlorobenzene	15.84	112	3264086	45.91 ug/L	97
42) Ethylbenzene	15.86	91	5994317	51.04 ug/L	98
43) (m+p)-Xylene	16.10	106	4631463	98.88 ug/L	98
44) o-Xylene	16.83	106	2124487	47.70 ug/L	96
45) Styrene	16.92	104	3236358	46.35 ug/L	98
46) Bromoform	16.99	173	511490	42.10 ug/L	99
48) Isopropylbenzene	17.36	105	5384777	56.17 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.21	83	1238408	58.35 ug/L	100
51) 1,3-Dichlorobenzene	19.74	146	2409027	51.01 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	2254332	49.01 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	2182824	50.55 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	187031	61.87 ug/L	92
55) 1,2,4-Trichlorobenzene	23.36	180	1139333	53.14 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6911.D J5300LMS.M Mon Aug 18 13:21:00 2008

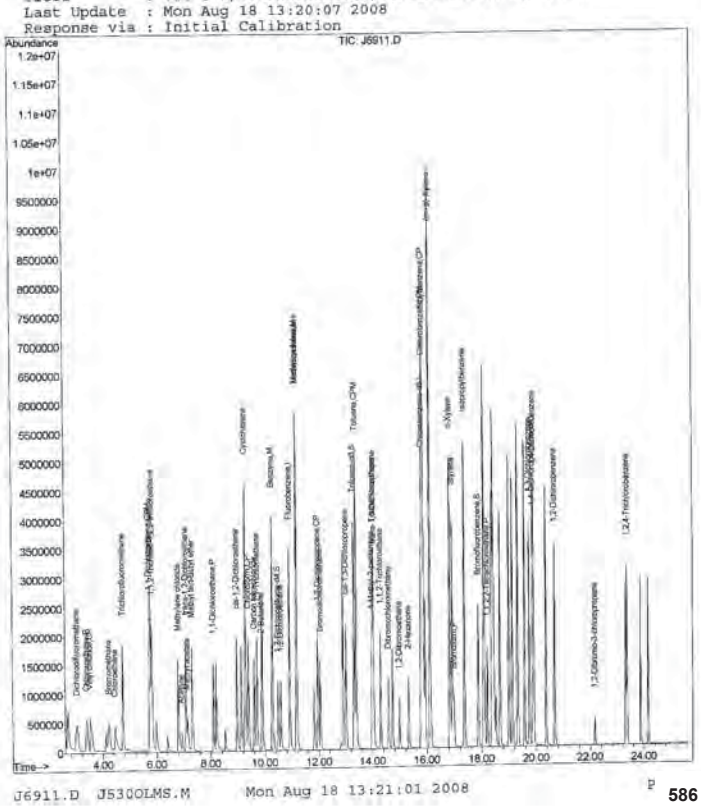
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6911.D
Acq On : 18 Aug 2008 5:49
Sample : LCS-14529/MSB-14529
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:20 2008

Vial: 39
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



J6911.D J5300LMS.M Mon Aug 18 13:21:01 2008

Matrix Spike

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808070
Project:

CLIENT: EA Engineering Science and Technology

DUC - Basic Carbon

Sample ID: 0808076-004AMS | SampType: MS | TestCode: 8260S7_OLM | Units: µg/Kg-dry | Prep Date: | RunNo: 14529
Client ID: ZZZZZ | Batch ID: R14529 | Method: SW8260B | Analysis Date: 8/18/2008 | SeqNo: 380757
Instrument: MSD3_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	56.1	5.9	59.1	0	100	43	161				
Chloromethane	72.8	5.9	59.1	0	123	52	151				
Vinyl chloride	62.9	5.9	59.1	0	106	57	146				
Bromomethane	44.7	5.9	59.1	0	76	44	146				
Chloroethane	61.7	5.9	59.1	0	104	49	161				
Trichlorofluoromethane	44.1	5.9	59.1	0	75	59	156				
1,1-Dichloroethene	60.0	3.0	59.1	0	102	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	63.0	3.0	59.1	0	107	70	143				
Acetone	137	47	118	0	116	25	175				
Carbon disulfide	71.0	3.0	59.1	1.26	119	58	140				
Methyl acetate	69.0	3.0	59.1	0	117	70	130				
Methylene chloride	62.7	5.9	59.1	1	104	68	132				
trans-1,2-Dichloroethene	59.2	3.0	59.1	0	100	70	130				
Methyl tert-butyl ether	61.8	3.0	59.1	0	105	70	135				
1,1-Dichloroethane	61.3	3.0	59.1	0	104	70	133				
cis-1,2-Dichloroethene	59.0	3.0	59.1	0	100	70	130				
2-Butanone	133	47	118	0	112	30	152				
Chloroform	57.3	3.0	59.1	0	97	70	130				
1,1,1-Trichloroethane	53.9	3.0	59.1	0	91	70	142				
Cyclohexane	74.9	3.0	59.1	0	127	70	130				
Carbon tetrachloride	53.9	3.0	59.1	0	91	69	140				
Benzene	63.7	3.0	59.1	0	108	70	130				
1,2-Dichloroethane	58.5	3.0	59.1	0	99	68	135				
Trichloroethene	56.8	3.0	59.1	0	96	70	130				
Methylcyclohexane	69.6	3.0	59.1	0	118	70	130				
1,2-Dichloropropane	65.7	3.0	59.1	0	111	70	130				
Bromodichloromethane	60.7	3.0	59.1	0	103	68	138				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Date: 20-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808070
Project:

CLIENT: EA Engineering Science and Technology

DUC - Basic Carbon

Sample ID: 0808076-004AMS | SampType: MS | TestCode: 8260S7_OLM | Units: µg/Kg-dry | Prep Date: | RunNo: 14529
Client ID: ZZZZZ | Batch ID: R14529 | Method: SW8260B | Analysis Date: 8/18/2008 | SeqNo: 380757
Instrument: MSD3_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	56.7	3.0	59.1	0	111	55	139				
4-Methyl-2-pentanone	136	5.9	118	0	115	50	150				
Toluene	61.7	3.0	59.1	0	104	70	130				
trans-1,3-Dichloropropene	61.4	3.0	59.1	0	104	53	135				
1,1,2-Trichloroethane	62.9	3.0	59.1	0	106	70	132				
Tetrachloroethene	51.6	3.0	59.1	0	88	63	146				
2-Hexanone	129	5.9	118	0	109	38	150				
Dibromochloromethane	55.5	3.0	59.1	0	94	66	141				
1,2-Dibromoethane	57.4	3.0	59.1	0	97	70	130				
Chlorobenzene	53.2	3.0	59.1	0	90	70	130				
Ethylbenzene	57.7	3.0	59.1	0	98	70	130				
Xylenes (total)	169	5.9	177	0	95	70	130				
Styrene	53.8	3.0	59.1	0	91	70	130				
Bromoform	50.3	3.0	59.1	0	85	59	137				
Isopropylbenzene	63.7	3.0	59.1	0	108	57	169				
1,1,2,2-Tetrachloroethane	68.4	3.0	59.1	0	116	63	175				
1,3-Dichlorobenzene	58.8	3.0	59.1	0	100	70	139				
1,4-Dichlorobenzene	57.1	3.0	59.1	0	97	70	131				
1,2-Dichlorobenzene	59.6	3.0	59.1	0	101	70	132				
1,2-Dibromo-3-chloropropane	72.7	5.9	59.1	0	123	70	138				
1,2,4-Trichlorobenzene	61.0	5.9	59.1	0	103	48	131				
Surr: 1,2-Dichloroethane-d4	58.5	0.12	59.1	0	99	71	126				
Surr: Toluene-d8	55.1	0.12	59.1	0	93	75	125				
Surr: 4-Bromofluorobenzene	60.1	0.12	59.1	0	102	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Date: 20-Aug-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6912.D
Acq On : 18 Aug 2008 6:23
Sample : 0808076-004AMS
Misc : MS ,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:21 2008

Vial: 40
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4057942	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1665472	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1236776	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.47	65	1018717	49.52 ug/L	0.00
Spiked Amount 50.000			Recovery =	99.04%	
37) Toluene-d8	13.31	98	3809022	46.58 ug/L	0.00
Spiked Amount 50.000			Recovery =	93.16%	
49) Bromofluorobenzene	17.88	95	1319273	50.81 ug/L	0.00
Spiked Amount 50.000			Recovery =	101.62%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.03	85	1387859	49.96 ug/L	99
3) Chloromethane	3.41	50	1499616	61.41 ug/L	99
4) Vinyl chloride	3.58	62	1394453	53.21 ug/L #	42
5) Bromomethane	4.22	94	900211	37.81 ug/L	99
6) Chloroethane	4.44	64	800434	52.19 ug/L	69
7) Trichlorofluoromethane	4.74	101	1840320	37.33 ug/L	100
8) 1,1-Dichloroethene	5.74	96	887382	50.77 ug/L	99
9) Carbon disulfide	5.77	76	3596166	60.55 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	1142185	53.33 ug/L	98
11) Methylene chloride	6.81	84	1117593	53.08 ug/L	99
12) Acetone	6.92	43	549319	115.80 ug/L	93
13) trans-1,2-Dichloroethene	7.09	96	1014893	50.08 ug/L	97
14) Methyl acetate	7.13	43	743003	58.41 ug/L	99
15) Methyl tert-Butyl ether	7.29	73	2475314	52.28 ug/L	97
16) 1,1-Dichloroethane	8.10	63	1761909	51.87 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1147335	49.91 ug/L	98
18) Cyclohexane	9.28	56	1894486	63.37 ug/L	93
19) Chloroform	9.38	83	1801485	48.49 ug/L	99
20) Carbon tetrachloride	9.60	117	1175279	45.62 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	1546366	45.59 ug/L	100
22) 2-Butanone	9.87	43	779806	112.44 ug/L	96
23) Benzene	10.27	78	4720145	53.85 ug/L	100
25) 1,2-Dichloroethane	10.57	62	1199197	49.51 ug/L	98
26) Methylcyclohexane	11.15	83	2158179	58.84 ug/L	95
27) Trichloroethene	11.17	95	1127341	48.09 ug/L	95
28) 1,2-Dichloropropane	11.95	63	1031175	55.57 ug/L	98
29) Bromodichloromethane	12.05	83	1292034	51.38 ug/L	99
30) cis-1,3-Dichloropropene	13.01	75	1667840	55.59 ug/L	92
31) Toluene	13.39	92	3018697	52.20 ug/L	100

(#) = qualifier out of range (m) = manual integration
J6912.D J5300LMS.M Mon Aug 18 13:21:52 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6912.D
Acq On : 18 Aug 2008 6:23
Sample : 0808076-004AMS
Misc : MS ,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:21 2008

Vial: 40
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1555818	115.41 ug/L	97
33) trans-1,3-Dichloropropene	14.04	75	1387518	51.95 ug/L	95
34) 1,1,2-Trichloroethane	14.29	83	747510	53.19 ug/L	97
35) 2-Hexanone	15.31	43	1087198	109.42 ug/L	98
38) Tetrachloroethene	14.01	166	1078155	43.91 ug/L	100
39) Dibromochloromethane	14.58	129	885977	46.92 ug/L	98
40) 1,2-Dibromoethane	14.99	107	835412	48.59 ug/L	99
41) Chlorobenzene	15.84	112	3114616	45.01 ug/L	97
42) Ethylbenzene	15.86	91	5580347	48.82 ug/L	99
43) (m+p)-Xylene	16.10	106	4382173	96.13 ug/L	98
44) o-Xylene	16.83	106	2039522	47.05 ug/L	95
45) Styrene	16.93	104	3076076	45.30 ug/L	98
46) Bromoform	16.98	173	504042	42.58 ug/L	99
48) Isopropylbenzene	17.36	105	5028787	53.90 ug/L	98
50) 1,1,2,2-Tetrachloroethane	18.20	83	1195623	57.88 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	2286211	49.75 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	2162854	48.32 ug/L	99
53) 1,2-Dichlorobenzene	20.67	146	2120151	50.46 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	181000	61.52 ug/L	94
55) 1,2,4-Trichlorobenzene	23.36	180	1077154	51.62 ug/L	97

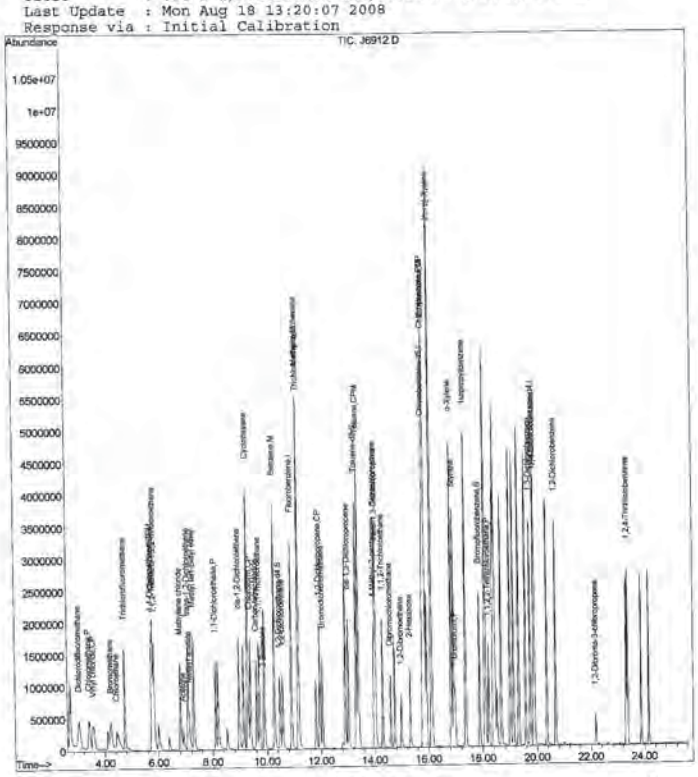
(#) = qualifier out of range (m) = manual integration
J6912.D J5300LMS.M Mon Aug 18 13:21:52 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6912.D
Acq On : 18 Aug 2008 6:23
Sample : 0808076-004AMS
Misc : MS ,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:21 2008

Vial: 40
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



J6912.D J5300LMS.M Mon Aug 18 13:21:54 2008

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	54.4	3.0	59.1	0	109	55	138	55.7	2.0	20	
4-Methyl-2-pentanone	121	5.9	118	0	102	50	150	136	12	50	
Toluene	62.4	3.0	59.1	0	106	70	130	61.7	1.7	20	
trans-1,3-Dichloropropene	58.3	3.0	59.1	0	99	53	135	61.4	5.2	20	
1,1,2-Trichloroethane	60.5	3.0	59.1	0	102	70	132	62.5	3.9	20	
Tetrachloroethene	54.4	3.0	59.1	0	92	63	145	51.9	4.7	21	
2-Hexanone	112	5.9	118	0	95	38	150	125	14	50	
Dibromochloromethane	55.6	3.0	59.1	0	94	68	141	55.5	0.2	20	
1,2-Dibromoethane	55.9	3.0	59.1	0	95	70	130	57.4	2.7	20	
Chlorobenzene	54.6	3.0	59.1	0	93	70	130	53.2	2.9	20	
Ethylbenzene	60.5	3.0	59.1	0	102	70	130	57.7	4.7	20	
Xylenes (total)	177	5.9	177	0	100	70	130	169	4.6	20	
Styrene	55.1	3.0	59.1	0	93	70	130	53.5	2.9	20	
Bromoform	67.8	3.0	59.1	0	81	59	137	50.3	5.1	20	
Isopropylbenzene	70.0	3.0	59.1	0	118	57	166	63.7	9.4	20	
1,1,2,2-Tetrachloroethane	67.1	3.0	59.1	0	113	63	175	68.4	2.0	24	
1,3-Dichlorobenzene	60.4	3.0	59.1	0	102	70	139	58.8	2.7	20	
1,4-Dichlorobenzene	58.0	3.0	59.1	0	98	70	131	57.1	1.6	24	
1,2-Dichlorobenzene	60.6	3.0	59.1	0	102	70	132	59.6	1.5	20	
1,2-Dibromo-3-chloropropane	67.0	5.9	59.1	0	113	70	138	72.7	8.2	24	
1,2,4-Trichlorobenzene	59.9	5.9	59.1	0	101	48	131	61	1.9	24	
Surr: 1,2-Dichloroethane-d4	54.7	0.12	59.1	0	93	71	128	0		0	
Surr: Toluene-d8	56.8	0.12	59.1	0	96	75	125	0		0	
Surr: 4-Bromofluorobenzene	61.4	0.12	59.1	0	104	59	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

dfc: 20-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808070
Project: DEC - Basic Carbon

CLIENT: EA Engineering Science and Technology

Sample ID: 0808076-004AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 14529
Client ID: ZZZZZ Batch ID: R14529 Method: SW8260B Analysis Date: 8/18/2008 SeqNo: 380758
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	59.8	5.9	59.1	0	101	43	161	59.1	1.4	70	
Chloromethane	72.6	5.9	59.1	0	123	52	151	72.6	0	20	
Vinyl chloride	65.4	5.9	59.1	0	111	57	146	62.9	3.8	24	
Bromomethane	44.7	5.9	59.1	0	76	44	145	44.7	0.1	21	
Chloroethane	61.5	5.9	59.1	0	104	49	161	61.7	0.3	20	
Trichlorofluoromethane	45.8	5.9	59.1	0	77	59	156	44.1	3.7	20	
1,1-Dichloroethene	64.0	3.0	59.1	0	108	70	144	60	6.4	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	65.4	3.0	59.1	0	111	70	143	63	3.7	20	
Acetone	123	47	118	0	104	25	175	137	10	59	
Carbon disulfide	73.6	3.0	59.1	1.26	122	58	140	71.6	2.8	20	
Methyl acetate	61.5	3.0	59.1	0	104	70	130	69	11	20	
Methylene chloride	62.5	5.9	59.1	1	104	68	132	62.7	0.4	20	
trans-1,2-Dichloroethene	60.6	3.0	59.1	0	103	70	130	59.2	2.3	20	
Methyl tert-butyl ether	59.6	3.0	59.1	0	101	70	135	61.8	3.6	20	
1,1-Dichloroethane	62.9	3.0	59.1	0	106	70	133	61.3	2.5	20	
cis-1,2-Dichloroethene	58.8	3.0	59.1	0	100	70	130	59	0.3	20	
2-Butanone	118	47	118	0	99	30	162	133	12	59	
Chloroform	57.3	3.0	59.1	0	97	70	139	57.3	0.1	20	
1,1,1-Trichloroethane	56.0	3.0	59.1	0	95	70	142	53.9	3.8	20	
Cyclohexane	78.9	3.0	59.1	0	133	70	130	74.9	5.2	20	S
Carbon tetrachloride	56.0	3.0	59.1	0	95	68	140	50.9	3.6	20	
Benzene	64.6	3.0	59.1	0	109	70	130	63.7	1.5	30	
1,2-Dichloroethane	56.3	3.0	59.1	0	95	68	135	56.5	4.0	20	
Trichloroethene	58.5	3.0	59.1	0	99	70	130	56.8	2.8	20	
Methylcyclohexane	72.3	3.0	59.1	0	122	70	130	69.6	3.9	20	
1,2-Dichloropropane	65.7	3.0	59.1	0	111	70	130	65.7	0	20	
Bromodichloromethane	59.0	3.0	59.1	0	100	68	138	60.7	3.0	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

dfc: 20-Aug-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6913.D
Acq On : 18 Aug 2008 6:56
Sample : 0808076-004AMSD
Misc : MSD ,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:22 2008

Vial: 41
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4639371	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1826800	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1312793	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.47	65	1089249	46.31 ug/L	0.00
Spiked Amount 50.000			Recovery =	92.62%	
37) Toluene-d8	13.31	98	4307336	48.02 ug/L	0.00
Spiked Amount 50.000			Recovery =	96.04%	
49) Bromofluorobenzene	17.88	95	1431924	51.95 ug/L	0.00
Spiked Amount 50.000			Recovery =	103.90%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.04	85	1609058	50.66 ug/L	99
3) Chloromethane	3.41	50	1714988	61.42 ug/L	99
4) Vinyl chloride	3.58	62	1656785	55.29 ug/L	99
5) Bromomethane	4.22	94	1029576	37.83 ug/L	99
6) Chloroethane	4.44	64	912653	52.05 ug/L	70
7) Trichlorofluoromethane	4.74	101	2182340	38.72 ug/L	99
8) 1,1-Dichloroethene	5.74	96	1081266	54.11 ug/L	99
9) Carbon disulfide	5.77	76	4226161	62.24 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	1354681	55.33 ug/L	98
11) Methylene chloride	6.80	84	1272646	52.86 ug/L	100
12) Acetone	6.91	43	565870	104.33 ug/L	94
13) trans-1,2-Dichloroethene	7.08	96	1187815	51.27 ug/L	95
14) Methyl acetate	7.13	43	757129	52.06 ug/L	100
15) Methyl tert-Butyl ether	7.29	73	2728981	50.42 ug/L	97
16) 1,1-Dichloroethane	8.10	63	2066055	53.20 ug/L	99
17) cis-1,2-Dichloroethene	8.96	96	1307511	49.75 ug/L	97
18) Cyclohexane	9.28	56	2280581	66.73 ug/L	93
19) Chloroform	9.38	83	2057436	48.44 ug/L	98
20) Carbon tetrachloride	9.60	117	1395629	47.38 ug/L	99
21) 1,1,1-Trichloroethane	9.70	97	1836871	47.37 ug/L	99
22) 2-Butanone	9.87	43	788349	99.42 ug/L	99
23) Benzene	10.27	78	5478283	54.67 ug/L	100
25) 1,2-Dichloroethane	10.57	62	1317675	47.59 ug/L	98
26) Methylcyclohexane	11.15	83	2566145	61.20 ug/L	96
27) Trichloroethene	11.16	95	1325587	49.46 ug/L	94
28) 1,2-Dichloropropane	11.95	63	1179215	55.58 ug/L	99
29) Bromodichloromethane	12.05	83	1433781	49.88 ug/L	100
30) cis-1,3-Dichloropropene	13.01	75	1868758	54.48 ug/L	92
31) Toluene	13.39	92	3509781	53.09 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6913.D J5300LMS.M Mon Aug 18 13:23:31 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6913.D
Acq On : 18 Aug 2008 6:56
Sample : 0808076-004AMSD
Misc : MSD ,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:22 2008

Vial: 41
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1571636	101.97 ug/L	97
33) trans-1,3-Dichloropropene	14.03	75	1506276	49.33 ug/L	95
34) 1,1,2-Trichloroethane	14.29	83	822236	51.17 ug/L	97
35) 2-Hexanone	15.31	43	1065270	94.94 ug/L	97
38) Tetrachloroethene	14.01	166	1239454	46.02 ug/L	99
39) Dibromochloromethane	14.58	129	973656	47.01 ug/L	99
40) 1,2-Dibromoethane	14.98	107	892230	47.31 ug/L	100
41) Chlorobenzene	15.84	112	3517028	46.34 ug/L	97
42) Ethylbenzene	15.86	91	6416957	51.18 ug/L	99
43) (m+p)-Xylene	16.10	106	5040472	100.81 ug/L	98
44) o-Xylene	16.83	106	2346012	49.34 ug/L	96
45) Styrene	16.92	104	3475820	46.62 ug/L	98
46) Bromoform	16.98	173	522983	40.47 ug/L	99
48) Isopropylbenzene	17.36	105	5863597	59.21 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.21	83	1243986	56.74 ug/L	100
51) 1,3-Dichlorobenzene	19.74	146	2493121	51.11 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	2332060	49.08 ug/L	99
53) 1,2-Dichlorobenzene	20.67	146	2285051	51.23 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	176904	56.65 ug/L	98
55) 1,2,4-Trichlorobenzene	23.36	180	1122225	50.67 ug/L	100

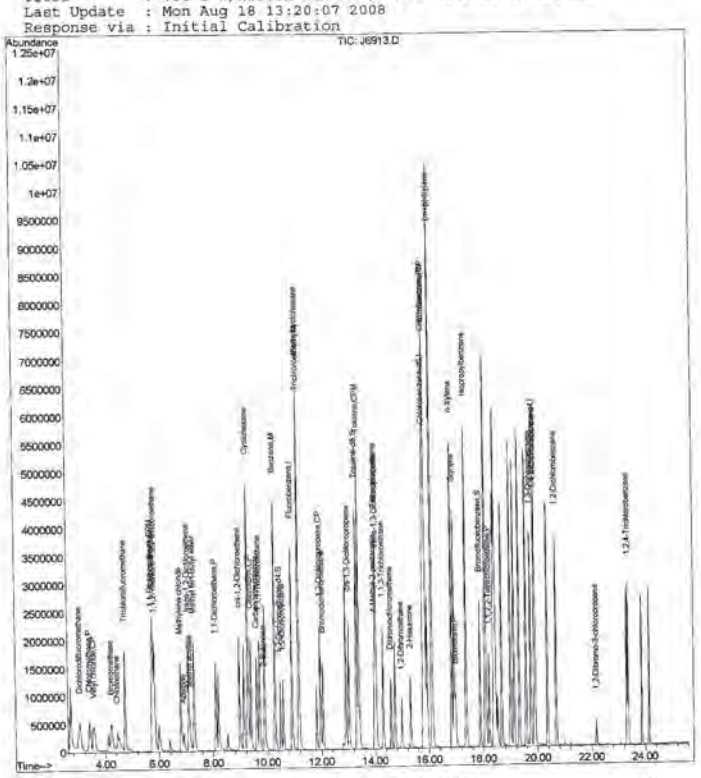
(#) = qualifier out of range (m) = manual integration
J6913.D J5300LMS.M Mon Aug 18 13:23:31 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6913.D
Acq On : 18 Aug 2008 6:56
Sample : 0808076-004AMSD
Misc : MSD ,8260S7_OLM42, 5.0 g
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:22 2008

Vial: 41
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



J6913.D J5300LMS.M Mon Aug 18 13:23:33 2008

Laboratory Control Sample

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14526 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 14526
Client ID: ZZZZZ Batch ID: R14526 Method: SW8260B Analysis Date: 8/14/2008 SeqNo: 380700
Instrument: MSD2_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	Units	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	47.4	5.0	50	0	µg/Kg	95	55	142				
Chloromethane	61.9	5.0	50	0		124	62	141				
Vinyl chloride	52.7	5.0	50	0		105	68	136				
Bromomethane	39.2	5.0	50	0		78	56	147				
Chloroethane	44.3	5.0	50	0		89	63	142				
Trichlorofluoromethane	37.9	5.0	50	0		76	67	130				
1,1-Dichloroethene	53.8	2.5	50	0		108	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	51.6	2.5	50	0		103	80	134				
Acetone	104	40	100	0		104	35	175				
Carbon disulfide	63.2	2.5	50	0		126	73	130				
Methyl acetate	59.1	2.5	50	0		118	67	147				
Methylene chloride	53.3	5.0	50	0		107	75	124				
trans-1,2-Dichloroethene	50.7	2.5	50	0		101	77	123				
Methyl tert-butyl ether	50.6	2.5	50	0		101	76	126				
1,1-Dichloroethane	53.6	2.5	50	0		107	76	124				
cis-1,2-Dichloroethene	49.7	2.5	50	0		99	79	120				
2-Butanone	114	40	100	0		114	42	154				
Chloroform	48.5	2.5	50	0		97	77	121				
1,1,1-Trichloroethane	46.9	2.5	50	0		94	78	132				
Cyclohexane	66.6	2.5	50	0		133	60	128				S
Carbon tetrachloride	45.6	2.5	50	0		91	74	138				
Benzene	54.6	2.5	50	0		109	80	121				
1,2-Dichloroethane	48.8	2.5	50	0		98	73	127				
Trichloroethene	48.4	2.5	50	0		97	66	120				
Methylcyclohexane	56.9	2.5	50	0		114	60	128				
1,2-Dichloropropane	55.3	2.5	50	0		111	60	125				
Bromodichloromethane	49.4	2.5	50	0		99	60	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDL or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Marked Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14526	Samp Type: LCS	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:	RunNo: 14526
Client ID: ZZZZZ	Batch ID: R14526	Method: SW8260B		Analysis Date: 8/14/2008	SeqNo: 350700
Instrument: MSD3_10	Column1D: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	53.7	2.5	50	0	107	80	125				
4-Methyl-2-pentanone	117	5.0	100	0	117	50	150				
Toluene	52.2	2.5	50	0	104	90	121				
trans-1,3-Dichloropropene	50.2	2.5	50	0	100	78	124				
1,1,2-Trichloroethane	52.4	2.5	50	0	105	80	122				
Tetrachloroethene	40.9	2.5	50	0	82	74	125				
2-Hexanone	108	5.0	100	0	108	50	150				
Dibromochloromethane	44.0	2.5	50	0	88	76	135				
1,2-Dibromoethane	46.9	2.5	50	0	94	80	124				
Chlorobenzene	43.9	2.5	50	0	88	80	120				
Ethylbenzene	48.8	2.5	50	0	98	80	121				
Xylenes (total)	140	5.0	150	0	94	78	124				
Styrene	44.1	2.5	50	0	88	78	122				
Bromoform	38.6	2.5	50	0	77	70	138				
Isopropylbenzene	56.8	2.5	50	0	114	76	131				
1,1,2,2-Tetrachloroethane	60.9	2.5	50	0	122	69	138				
1,3-Dichlorobenzene	49.0	2.5	50	0	98	80	120				
1,4-Dichlorobenzene	47.8	2.5	50	0	96	80	120				
1,2-Dichlorobenzene	50.3	2.5	50	0	101	80	120				
1,2-Dibromo-3-chloropropane	61.2	5.0	50	0	122	69	132				
1,2,4-Trichlorobenzene	49.7	5.0	50	0	99	71	127				
Surr: 1,2-Dichloroethane-d4	48.7	0.10	50	0	97	71	126				
Surr: Toluene-d8	48.2	0.10	50	0	92	75	125				
Surr: 4-Bromofluorobenzene	52.3	0.10	50	0	105	59	125				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Page 2 of 20

600

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6851.D
Acq On : 14 Aug 2008 10:46
Sample : LCS-14526/MSB-14526
Misc : LCS ,8260S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 13:29 2008

Vial: 3
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4804282	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1959535	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1374402	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1186449	48.71 ug/L	0.00
Spiked Amount 50.000				Recovery = 97.42%	
37) Toluene-d8	13.30	98	4446927	46.22 ug/L	0.00
Spiked Amount 50.000				Recovery = 92.44%	
49) Bromofluorobenzene	17.87	95	1509447	52.31 ug/L	0.00
Spiked Amount 50.000				Recovery = 104.62%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.03	85	1558395	47.38 ug/L	100
3) Chloromethane	3.40	50	1788362	61.85 ug/L	100
4) Vinyl chloride	3.58	62	1634079	52.66 ug/L #	42
5) Bromomethane	4.23	94	1105203	39.21 ug/L	99
6) Chloroethane	4.44	64	804550	44.31 ug/L	100
7) Trichlorofluoromethane	4.73	101	2214786	37.94 ug/L	99
8) 1,1-Dichloroethene	5.74	96	1113404	53.80 ug/L	97
9) Carbon disulfide	5.77	76	4441619	63.17 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.82	101	1307125	51.55 ug/L	96
11) Methylene chloride	6.80	84	1327799	53.26 ug/L	97
12) Acetone	6.92	43	585319	104.22 ug/L	95
13) trans-1,2-Dichloroethene	7.09	96	1215051	50.65 ug/L	94
14) Methyl acetate	7.14	43	890691	59.14 ug/L	99
15) Methyl tert-Butyl ether	7.30	73	2833963	50.56 ug/L	97
16) 1,1-Dichloroethane	8.10	63	2157056	53.64 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1351861	49.67 ug/L	96
18) Cyclohexane	9.28	56	2355381	66.55 ug/L	92
19) Chloroform	9.39	83	2132699	48.48 ug/L	99
20) Carbon tetrachloride	9.60	117	1391271	45.61 ug/L	100
21) 1,1,1-Trichloroethane	9.71	97	1885209	46.94 ug/L	99
22) 2-Butanone	9.86	43	934069	113.76 ug/L	94
23) Benzene	10.27	78	5664796	54.59 ug/L	100
25) 1,2-Dichloroethane	10.57	62	1399798	48.82 ug/L	98
26) Methylcyclohexane	11.15	83	2471484	56.92 ug/L	95
27) Trichloroethene	11.16	95	1344236	48.44 ug/L	93
28) 1,2-Dichloropropane	11.95	63	1214081	55.26 ug/L	98
29) Bromodichloromethane	12.05	83	1470804	49.41 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	1907954	53.71 ug/L	94
31) Toluene	13.39	92	3572139	52.18 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6851.D J5300LMS.M Mon Aug 18 08:26:59 2008

Pa 601

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6851.D
Acq On : 14 Aug 2008 10:46
Sample : LCS-14526/MSB-14526
Misc : LCS ,8260S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 13:29 2008

Vial: 3
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1874217	117.43 ug/L	97
33) trans-1,3-Dichloropropene	14.03	75	1587509	50.21 ug/L	95
34) 1,1,2-Trichloroethane	14.29	83	871628	52.39 ug/L	96
35) 2-Hexanone	15.31	43	1267702	107.89 ug/L	99
38) Tetrachloroethene	14.01	166	1180773	40.87 ug/L	99
39) Dibromochloromethane	14.59	129	977049	43.98 ug/L	98
40) 1,2-Dibromoethane	14.98	107	948326	46.88 ug/L	99
41) Chlorobenzene	15.84	112	3571543	43.87 ug/L	96
42) Ethylbenzene	15.86	91	6567671	48.84 ug/L	98
43) (m+p)-Xylene	16.10	106	5042364	94.01 ug/L	97
44) o-Xylene	16.83	106	2368824	46.45 ug/L	95
45) Styrene	16.92	104	3516772	44.06 ug/L	97
46) Bromoform	16.98	173	532971	38.62 ug/L	100
48) Isopropylbenzene	17.36	105	5883788	56.75 ug/L	98
50) 1,1,2,2-Tetrachloroethane	18.21	83	1397409	60.88 ug/L	100
51) 1,3-Dichlorobenzene	19.74	146	2501233	48.98 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	2380032	47.85 ug/L	98
53) 1,2-Dichlorobenzene	20.67	146	2348518	50.29 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	200012	61.18 ug/L	94
55) 1,2,4-Trichlorobenzene	23.36	180	1151948	49.68 ug/L	97

(#) = qualifier out of range (m) = manual integration
J6851.D J5300LMS.M Mon Aug 18 08:26:59 2008

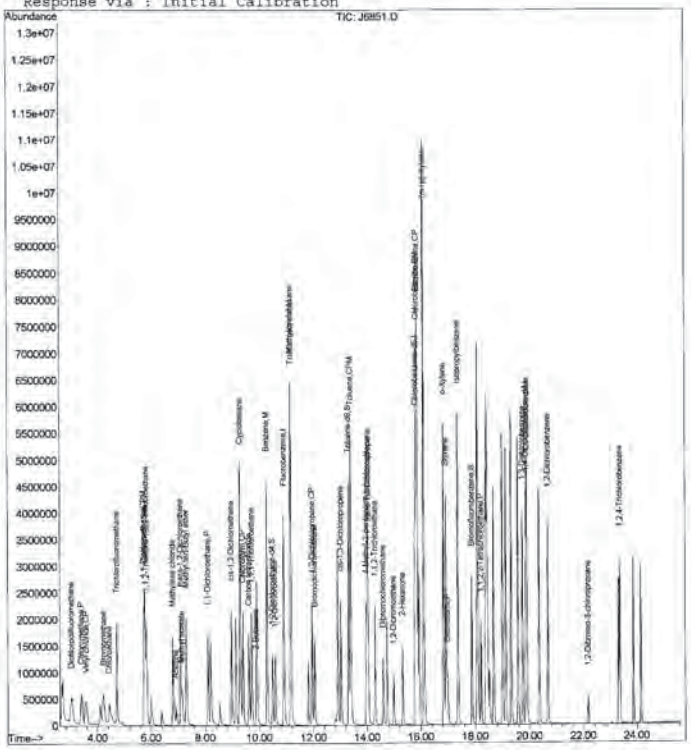
Pa 602

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6851.D
Acq On : 14 Aug 2008 10:46
Sample : LCS-14526/MSB-14526
Misc : LCS ,8260S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 13:29 2008

Vial: 3
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Aug 14 13:29:40 2008
Response via : Initial Calibration



J6851.D J5300LMS.M Mon Aug 18 08:27:01 2008

Pa 603

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

CLIENT: O'Brien & Gere Engineers, Inc.
Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

Sample ID: LCS-14527 SampType: LCS TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380712
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	46.1	5.0	50	0	92	55	142				
Chloromethane	58.9	5.0	50	0	118	62	141				
Vinyl chloride	51.0	5.0	50	0	102	68	135				
Bromomethane	38.7	5.0	50	0	77	56	147				
Chloroethane	44.7	5.0	50	0	89	63	142				
Trichlorofluoromethane	37.2	5.0	50	0	74	67	136				
1,1-Dichloroethene	55.0	2.5	50	0	110	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	52.7	2.5	50	0	105	80	134				
Acetone	99.1	40	100	0	99	25	175				
Carbon disulfide	61.5	2.5	50	0	123	73	130				
Methyl acetate	55.8	2.5	50	0	112	67	147				
Methylene chloride	52.3	5.0	50	0	105	75	124				
trans-1,2-Dichloroethene	52.2	2.5	50	0	104	77	123				
Methyl tert-butyl ether	52.5	2.5	50	0	105	76	126				
1,1-Dichloroethane	54.0	2.5	50	0	108	76	124				
cis-1,2-Dichloroethene	51.0	2.5	50	0	102	79	120				
2-Butanone	105	40	100	0	105	42	154				
Chloroform	48.8	2.5	50	0	98	77	121				
1,1,1-Trichloroethane	47.9	2.5	50	0	96	78	132				
Cyclohexane	69.0	2.5	50	0	138	80	128				S
Carbon tetrachloride	46.9	2.5	50	0	94	74	138				
Benzene	55.4	2.5	50	0	111	80	121				
1,2-Dichloroethane	48.5	2.5	50	0	97	73	127				
Trichloroethene	49.2	2.5	50	0	98	80	120				
Methylcyclohexane	59.6	2.5	50	0	119	80	126				
1,2-Dichloropropane	56.1	2.5	50	0	112	80	125				
Bromodichloromethane	50.4	2.5	50	0	101	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

CLIENT: O'Brien & Gere Engineers, Inc.
Method: SW8260B
Work Order: 0808068
Project: City of Geneva- Market Basket Site

Sample ID: LCS-14527 SampType: LCS TestCode: 826057_OLM Units: µg/Kg Prep Date: RunNo: 14527
Client ID: ZZZZZ Batch ID: R14527 Method: SW8260B Analysis Date: 8/15/2008 SeqNo: 380712
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	55.6	2.5	50	0	111	80	125				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.2	2.5	50	0	106	80	121				
trans-1,3-Dichloropropene	51.7	2.5	50	0	103	78	124				
1,1,2-Trichloroethane	52.3	2.5	50	0	105	80	122				
Tetrachloroethene	42.5	2.5	50	0	85	74	125				
2-Hexanone	102	5.0	100	0	102	50	150				
Dibromochloromethane	46.0	2.5	50	0	92	76	135				
1,2-Dibromoethane	48.3	2.5	50	0	97	80	124				
Chlorobenzene	45.2	2.5	50	0	90	80	120				
Ethylbenzene	50.3	2.5	50	0	101	80	121				
Xylenes (total)	147	5.0	150	0	98	76	124				
Styrene	46.2	2.5	50	0	92	78	122				
Bromoform	40.5	2.5	50	0	81	70	138				
Isopropylbenzene	58.0	2.5	50	0	116	76	131				
1,1,2,2-Tetrachloroethane	58.8	2.5	50	0	118	69	138				
1,3-Dichlorobenzene	50.6	2.5	50	0	101	80	120				
1,4-Dichlorobenzene	48.7	2.5	50	0	97	80	120				
1,2-Dichlorobenzene	51.4	2.5	50	0	103	80	120				
1,2-Dibromo-3-chloropropane	59.0	5.0	50	0	118	69	132				
1,2,4-Trichlorobenzene	52.9	5.0	50	0	106	71	127				
Surr: 1,2-Dichloroethane-d4	47.4	0.10	50	0	95	71	128				
Surr: Toluene-d8	47.0	0.10	50	0	94	75	125				
Surr: 4-Bromofluorobenzene	52.0	0.10	50	0	104	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

Quantitation Report (Not Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J6864.D                    Vial: 66
Acq On    : 15 Aug 2008   8:38                       Operator: MSV
Sample    : LCS-14527/MSB-14527                      Inst    : #3MS10
Misc      : LCS ,826057_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Aug 18  9:46 2008            Quant Results File: J530OLMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J530OLMS

 Internal Standards                R.T. QIon  Response  Conc Units Dev(Min)
-----------------------------------------------------------------------------
  1) Fluorobenzene                10.90   96   5092773    50.00 ug/L    0.00
 36) Chlorobenzene-d5             15.81   82   2049497    50.00 ug/L    0.00
 47) 1,4-Dichlorobenzene-d4       19.87  152   1483160    50.00 ug/L    0.00

System Monitoring Compounds
 24) 1,2-Dichloroethane-d4        10.47   65   1225015    47.44 ug/L    0.00
  Spiked Amount      50.000                   Recovery  =   94.88%
 37) Toluene-d8                   13.31   98   4727904    46.98 ug/L    0.00
  Spiked Amount      50.000                   Recovery  =   93.96%
 49) Bromofluorobenzene           17.88   95   1619483    52.01 ug/L    0.00
  Spiked Amount      50.000                   Recovery  =  104.02%

Target Compounds                                                     Qvalue
  2) Dichlorodifluoromethane       3.02   85   1608454    46.13 ug/L    100
  3) Chloromethane                 3.39   50   1805556    58.91 ug/L     99
  4) Vinyl chloride                3.52   62   1675677    50.95 ug/L     99
  5) Bromomethane                  4.21   94   1157508    38.74 ug/L    100
  6) Chloroethane                  4.44   64    860894    44.72 ug/L    100
  7) Trichlorofluoromethane        4.73  101   2302522    37.21 ug/L    100
  8) 1,1-Dichloroethene            5.74   96   1205908    54.97 ug/L     99
  9) Carbon disulfide              5.77   76   4584818    61.51 ug/L     99
 10) 1,1,2-Trichloro-1,2,2-trif    5.83  101   1415758    52.67 ug/L     97
 11) Methylene chloride            6.80   84   1382684    52.32 ug/L     98
 12) Acetone                       6.92   43    590150    99.12 ug/L     94
 13) trans-1,2-Dichloroethene      7.08   96   1328231    52.23 ug/L     95
 14) Methyl acetate                7.13   43    891225    55.82 ug/L     98
 15) Methyl tert-Butyl ether       7.29   73   3117926    52.48 ug/L     97
 16) 1,1-Dichloroethane            8.10   63   2300489    53.97 ug/L     99
 17) cis-1,2-Dichloroethene        8.96   96   1471881    51.02 ug/L     98
 18) Cyclohexane                   9.28   56   2586893    68.95 ug/L     92
 19) Chloroform                    9.38   83   2275901    48.81 ug/L     98
 20) Carbon tetrachloride          9.60  117   1516568    46.90 ug/L     99
 21) 1,1,1-Trichloroethane         9.70   97   2037877    47.87 ug/L     99
 22) 2-Butanone                    9.87   43    910618   104.62 ug/L     97
 23) Benzene                      10.27   78   6094225    55.40 ug/L    100
 25) 1,2-Dichloroethane           10.57   62   1474112    48.50 ug/L     98
 26) Methylcyclohexane            11.15   83   2745877    59.65 ug/L     96
 27) Trichloroethene              11.16   95   1446312    49.16 ug/L     94
 28) 1,2-Dichloropropane          11.95   63   1305657    56.06 ug/L     98
 29) Bromodichloromethane         12.05   83   1590360    50.40 ug/L     99
 30) cis-1,3-Dichloropropene      13.01   75   2094905    55.63 ug/L     93
 31) Toluene                      13.39   92   3864521    53.25 ug/L    100
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J6864.D  J530OLMS.M      Mon Aug 18 09:46:42 2008                    Pa
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Quantitation Report (Not Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J6864.D                    Vial: 66
Acq On    : 15 Aug 2008   8:38                       Operator: MSV
Sample    : LCS-14527/MSB-14527                      Inst    : #3MS10
Misc      : LCS ,826057_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Aug 18  9:46 2008            Quant Results File: J530OLMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J530OLMS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration
DataAcq Meth : J530OLMS

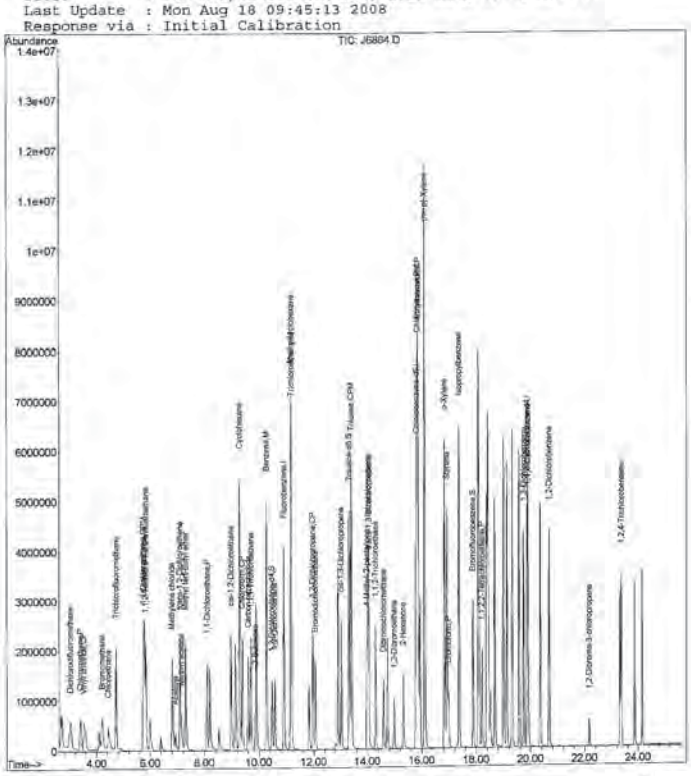
     Compound                      R.T. QIon  Response  Conc Unit   Qvalue
-----------------------------------------------------------------------------
 32) 4-Methyl-2-pentanone         13.97   43   1895325   112.02 ug/L     98
 33) trans-1,3-Dichloropropene    14.04   75   1732406    51.69 ug/L     95
 34) 1,1,2-Trichloroethane        14.29   83    922904    52.32 ug/L     97
 35) 2-Hexanone                   15.31   43   1270079   102.41 ug/L     97
 38) Tetrachloroethene            14.01  166   1283098    42.47 ug/L     98
 39) Dibromochloromethane         14.59  129   1068376    45.98 ug/L     98
 40) 1,2-Dibromoethane            14.98  107   1021304    48.27 ug/L    100
 41) Chlorobenzene                15.84  112   3850976    45.23 ug/L     96
 42) Ethylbenzene                 15.86   91   7078111    50.32 ug/L     98
 43) (m+p)-Xylene                 16.10  106   5482916    97.74 ug/L     97
 44) o-Xylene                     16.83  106   2608218    48.90 ug/L     95
 45) Styrene                      16.92  104   3858956    46.15 ug/L     97
 46) Bromoform                    16.98  173    586822    40.47 ug/L    100
 48) Isopropylbenzene             17.36  105   6483173    57.95 ug/L     98
 50) 1,1,2,2-Tetrachloroethane    18.21   83   1456598    58.80 ug/L     99
 51) 1,3-Dichlorobenzene          19.74  146   2790068    50.62 ug/L     98
 52) 1,4-Dichlorobenzene          19.90  146   2612349    48.67 ug/L     98
 53) 1,2-Dichlorobenzene          20.67  146   2591794    51.43 ug/L     98
 54) 1,2-Dibromo-3-chloropropan   22.17   75    208315    59.04 ug/L     94
 55) 1,2,4-Trichlorobenzene       23.36  180   1323873    52.90 ug/L     97
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J6864.D  J530OLMS.M      Mon Aug 18 09:46:42 2008                    Pa
```

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6864.D
Acq On : 15 Aug 2008 8:38
Sample : LCS-14527/MSB-14527
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 9:46 2008

Vial: 66
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 09:45:13 2008
Response via : Initial Calibration



J6864.D J5300LMS.M Mon Aug 18 09:46:44 2008

608

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Prep Date: / RunNo: 14629
Analysis Date: 8/18/2008 / SeqNo: 380755

Sample ID: LCS-14629	SampType: LCS	TestCode: 8260S7_OLM	Units: µg/Kg
Client ID: ZZZZZ	Batch ID: R14629	Method: SW8260B	
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df	

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	82.6	5.0	50	0	105	55	142				
Chloromethane	65.8	5.0	50	0	132	62	141				
Vinyl chloride	58.1	5.0	50	0	116	68	135				
Bromomethane	39.6	5.0	50	0	79	56	147				
Chloroethane	54.9	5.0	50	0	110	63	142				
Trichlorofluoromethane	40.6	5.0	50	0	81	67	136				
1,1-Dichloroethe	68.0	2.5	50	0	136	78	135				S
1,1,2-Trichloro-1,2,2-trifluoroethane	64.3	2.5	50	0	129	60	134				
Acetone	111	40	100	0	111	26	175				
Carbon disulfide	74.2	2.5	50	0	148	73	130				
Methyl acetate	59.0	2.5	50	0	118	67	147				
Methylene chloride	53.4	5.0	50	0	107	75	124				
trans-1,2-Dichloroethene	52.5	2.5	50	0	105	77	133				
Methyl tert-butyl ether	49.2	2.5	50	0	98	76	126				
1,1-Dichloroethane	53.8	2.5	50	0	108	76	124				
cis-1,2-Dichloroethene	49.8	2.5	50	0	100	79	120				
2-Butanone	111	40	100	0	111	42	154				
Chloroform	49.3	2.5	50	0	98	77	121				
1,1,1-Trichloroethane	48.3	2.5	50	0	97	78	132				
Cyclohexane	66.6	2.5	50	0	133	80	128				S
Carbon tetrachloride	48.3	2.5	50	0	97	74	138				
Benzene	55.2	2.5	50	0	110	80	121				
1,2-Dichloroethane	48.5	2.5	50	0	97	73	127				
Trichloroethene	50.5	2.5	50	0	101	80	120				
Methylcyclohexane	59.8	2.5	50	0	120	80	128				
1,2-Dichloropropane	54.6	2.5	50	0	109	80	125				
Bromodichloromethane	50.8	2.5	50	0	102	80	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Page 1 of 16

609

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Prep Date: / RunNo: 14629
Analysis Date: 8/18/2008 / SeqNo: 380755

Sample ID: LCS-14629	SampType: LCS	TestCode: 8260S7_OLM	Units: µg/Kg
Client ID: ZZZZZ	Batch ID: R14629	Method: SW8260B	
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df	

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	54.1	2.5	50	0	108	50	125				
4-Methyl-2-pentanone	112	5.0	100	0	112	50	150				
Toluene	53.0	2.5	50	0	106	80	121				
trans-1,3-Dichloropropene	50.8	2.5	50	0	102	78	124				
1,1,2-Trichloroethane	52.7	2.5	50	0	105	80	122				
Tetrachloroethene	45.5	2.5	50	0	91	74	125				
2-Hexanone	103	5.0	100	0	103	50	150				
Dibromochloromethane	46.2	2.5	50	0	92	76	135				
1,2-Dibromoethane	47.9	2.5	50	0	96	80	124				
Chlorobenzene	45.9	2.5	50	0	92	80	120				
Ethylbenzene	51.0	2.5	50	0	102	80	121				
Xylenes (total)	147	5.0	150	0	98	76	124				
Styrene	46.4	2.5	50	0	93	78	122				
Bromoform	42.1	2.5	50	0	84	70	133				
isopropylbenzene	56.2	2.5	50	0	112	76	131				
1,1,2,2-Tetrachloroethane	58.4	2.5	50	0	117	69	138				
1,3-Dichlorobenzene	51.0	2.5	50	0	102	80	120				
1,4-Dichlorobenzene	49.0	2.5	50	0	98	80	120				
1,2-Dichlorobenzene	50.6	2.5	50	0	101	80	120				
1,2-Dibromo-3-chloropropane	61.9	5.0	50	0	124	69	132				
1,2,4-Trichlorobenzene	53.1	5.0	50	0	106	71	127				
Sur: 1,2-Dichloroethane-d4	47.8	0.10	50	0	96	71	128				
Sur: Toluene-d8	47.1	0.10	50	0	94	75	125				
Sur: 4-Bromofluorobenzene	49.1	0.10	50	0	98	59	126				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Page 2 of 16

610

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6911.D
Acq On : 18 Aug 2008 5:49
Sample : LCS-14529/MSB-14529
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:20 2008

Vial: 39
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	4243327	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1711358	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1270838	50.00 ug/L	-0.01
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	1027444	47.76 ug/L	0.00
Spiked Amount 50.000			Recovery =	95.52%	
37) Toluene-d8	13.30	98	3959900	47.12 ug/L	0.00
Spiked Amount 50.000			Recovery =	94.24%	
49) Bromofluorobenzene	17.87	95	1310757	49.13 ug/L	0.00
Spiked Amount 50.000			Recovery =	98.26%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.03	85	1527842	52.59 ug/L	100
3) Chloromethane	3.40	50	1679522	65.77 ug/L	98
4) Vinyl chloride	3.52	62	1592439	58.11 ug/L	99
5) Bromomethane	4.22	94	987233	39.65 ug/L	99
6) Chloroethane	4.45	64	880702	54.91 ug/L	99
7) Trichlorofluoromethane	4.74	101	2094017	40.62 ug/L	100
8) 1,1-Dichloroethene	5.73	96	1242568	67.98 ug/L	93
9) Carbon disulfide	5.76	76	4610932	74.25 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.82	101	1439542	64.28 ug/L	98
11) Methylene chloride	6.80	84	1175495	53.39 ug/L	99
12) Acetone	6.93	43	548336	110.54 ug/L	94
13) trans-1,2-Dichloroethene	7.09	96	1112909	52.52 ug/L	96
14) Methyl acetate	7.14	43	785135	59.02 ug/L	99
15) Methyl tert-Butyl ether	7.31	73	2435473	49.20 ug/L	98
16) 1,1-Dichloroethane	8.10	63	1909998	53.78 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1197605	49.82 ug/L	98
18) Cyclohexane	9.27	56	2080560	66.56 ug/L	94
19) Chloroform	9.39	83	1916635	49.33 ug/L	99
20) Carbon tetrachloride	9.60	117	1300061	48.26 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	1713739	48.32 ug/L	100
22) 2-Butanone	9.88	43	803158	110.74 ug/L	98
23) Benzene	10.27	78	5056017	55.17 ug/L	100
25) 1,2-Dichloroethane	10.58	62	1228057	48.49 ug/L	98
26) Methylcyclohexane	11.15	83	2292736	59.78 ug/L	96
27) Trichloroethene	11.16	95	1238065	50.51 ug/L	94
28) 1,2-Dichloropropane	11.95	63	1058864	54.57 ug/L	99
29) Bromodichloromethane	12.05	83	1335712	50.80 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	1698294	54.13 ug/L	93
31) Toluene	13.39	92	3203027	52.97 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6911.D J5300LMS.M Mon Aug 18 13:21:00 2008

611

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6911.D
Acq On : 18 Aug 2008 5:49
Sample : LCS-14529/MSB-14529
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:20 2008

Vial: 39
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1578415	111.97 ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	1419367	50.82 ug/L	93
34) 1,1,2-Trichloroethane	14.30	83	774364	52.69 ug/L	97
35) 2-Hexanone	15.31	43	1064942	103.01 ug/L	98
38) Tetrachloroethene	14.01	166	1148899	45.54 ug/L	100
39) Dibromochloromethane	14.59	129	896479	46.21 ug/L	97
40) 1,2-Dibromoethane	14.98	107	846465	47.91 ug/L	99
41) Chlorobenzene	15.84	112	3264086	45.91 ug/L	97
42) Ethylbenzene	15.86	91	5994317	51.04 ug/L	98
43) (m+p)-Xylene	16.10	106	4631463	98.88 ug/L	98
44) o-Xylene	16.83	106	2124487	47.70 ug/L	96
45) Styrene	16.92	104	3236358	46.35 ug/L	98
46) Bromoform	16.99	173	511490	42.10 ug/L	99
48) Isopropylbenzene	17.36	105	5364777	56.17 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.21	83	1238408	58.35 ug/L	100
51) 1,3-Dichlorobenzene	19.74	146	2409027	51.01 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	2254332	49.01 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	2182824	50.55 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	187031	61.87 ug/L	92
55) 1,2,4-Trichlorobenzene	23.36	180	1139333	53.14 ug/L	99

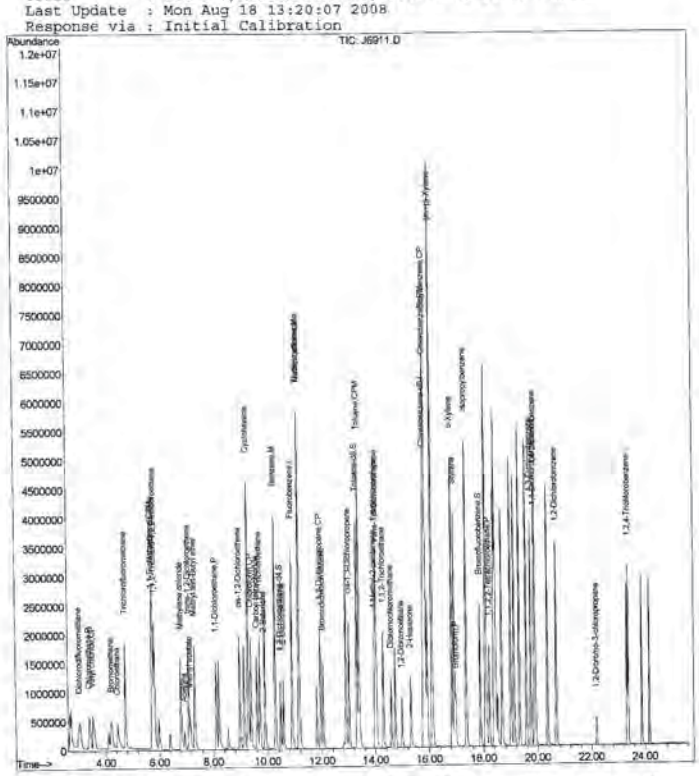
(#) = qualifier out of range (m) = manual integration
J6911.D J5300LMS.M Mon Aug 18 13:21:00 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6911.D
Acq On : 18 Aug 2008 5:49
Sample : LCS-14529/MSB-14529
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 18 13:20 2008

Vial: 39
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Aug 18 13:20:07 2008
Response via : Initial Calibration



J6911.D J5300LMS.M Mon Aug 18 13:21:01 2008

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14531	SampType: LCS	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:		RunNo: 14531			
Client ID: ZZZZZ	Batch ID: R14531	Method: SW8260B		Analysis Date: 8/18/2008		SeqNo: 380802			
Instrument: MSD3_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df							

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	51.0	5.0	50	0	102	55	142				
Chloromethane	65.5	5.0	50	0	131	62	141				
Vinyl chloride	57.6	5.0	50	0	115	68	135				
Bromomethane	40.4	5.0	50	0	81	56	147				
Chloroethane	57.8	5.0	50	0	115	63	142				
Trichlorofluoromethane	40.7	5.0	50	0	81	67	136				
1,1-Dichloroethene	56.2	2.5	50	0	112	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	55.0	2.5	50	0	110	80	134				
Acetone	105	40	100	0	105	25	175				
Carbon disulfide	63.7	2.5	50	0	127	73	130				
Methyl acetate	59.5	2.5	50	0	119	67	147				
Methylene chloride	56.7	5.0	50	0	113	75	124				
trans-1,2-Dichloroethene	52.6	2.5	50	0	105	77	123				
Methyl tert butyl ether	52.2	2.5	50	0	104	76	126				
1,1-Dichloroethane	56.6	2.5	50	0	113	76	124				
cis-1,2-Dichloroethene	51.6	2.5	50	0	103	79	120				
2-Butanone	112	40	100	0	112	42	154				
Chloroform	52.5	2.5	50	0	105	77	121				
1,1,1-Trichloroethane	56.9	2.5	50	0	102	78	132				
Cyclohexane	67.6	2.5	50	0	135	65	128				
Carbon tetrachloride	50.0	2.5	50	0	100	74	138				
Benzene	56.9	2.5	50	0	114	80	121				
1,2-Dichloroethane	52.6	2.5	50	0	105	73	127				
Trichloroethene	51.5	2.5	50	0	103	80	120				
Methylcyclohexane	57.3	2.5	50	0	115	60	128				
1,2-Dichloropropane	57.0	2.5	50	0	114	60	125				
Bromodichloromethane	53.4	2.5	50	0	107	60	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-14531	SampType: LCS	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:		RunNo: 14531			
Client ID: ZZZZZ	Batch ID: R14531	Method: SW8260B		Analysis Date: 8/18/2008		SeqNo: 380802			
Instrument: MSD3_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df							

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	56.5	2.5	50	0	113	50	125				
4-Methyl-2-pentanone	115	5.0	100	0	115	50	150				
Toluene	54.8	2.5	50	0	110	80	121				
trans-1,3-Dichloropropene	54.4	2.5	50	0	109	78	124				
1,1,2-Trichloroethane	55.0	2.5	50	0	110	80	122				
Tetrachloroethene	44.2	2.5	50	0	88	74	125				
2-Hexanone	105	5.0	100	0	105	50	150				
Dibromochloromethane	46.0	2.5	50	0	92	76	135				
1,2-Dibromoethane	48.3	2.5	50	0	97	80	124				
Chlorobenzene	46.1	2.5	50	0	92	80	120				
Ethylbenzene	50.0	2.5	50	0	100	80	121				
Xylenes (total)	145	5.0	150	0	97	76	124				
Styrene	46.1	2.5	50	0	92	78	122				
Bromoform	40.7	2.5	50	0	81	70	138				
Isopropylbenzene	56.1	2.5	50	0	112	76	131				
1,1,2,2-Tetrachloroethane	59.0	2.5	50	0	118	69	138				
1,3-Dichlorobenzene	50.7	2.5	50	0	101	60	120				
1,4-Dichlorobenzene	48.9	2.5	50	0	98	60	120				
1,2-Dichlorobenzene	51.6	2.5	50	0	103	60	120				
1,2-Dibromo-3-chloropropane	61.3	5.0	50	0	123	69	132				
1,2,4-Trichlorobenzene	49.8	5.0	50	0	100	71	127				
Surr: 1,2-Dichloroethane-d4	50.7	0.10	50	0	101	71	128				
Surr: Toluene-d8	48.3	0.10	50	0	83	75	125				
Surr: 4-Bromofluorobenzene	50.1	0.10	50	0	100	56	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6958.D
Acq On : 19 Aug 2008 8:23
Sample : LCS-14531
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:42 2008

Vial: 14
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.90	96	3748091	50.00	ug/L	0.00
36) Chlorobenzene-d5	15.81	82	1563802	50.00	ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	1143954	50.00	ug/L	0.00
System Monitoring Compounds						
24) 1,2-Dichloroethane-d4	10.48	65	963799	50.72	ug/L	0.00
Spiked Amount 50.000			Recovery = 101.44%			
37) Toluene-d8	13.31	98	3552253	46.26	ug/L	0.00
Spiked Amount 50.000			Recovery = 92.52%			
49) Bromofluorobenzene	17.88	95	1202317	50.06	ug/L	0.00
Spiked Amount 50.000			Recovery = 100.12%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.03	85	1308402	50.99	ug/L	100
3) Chloromethane	3.40	50	1477610	65.51	ug/L	99
4) Vinyl chloride	3.52	62	1395267	57.64	ug/L	99
5) Bromomethane	4.22	94	887369	40.35	ug/L	100
6) Chloroethane	4.44	64	815421	57.56	ug/L	98
7) Trichlorofluoromethane	4.74	101	1851537	40.66	ug/L	100
8) 1,1-Dichloroethene	5.73	96	906554	56.15	ug/L	97
9) Carbon disulfide	5.76	76	3493005	63.68	ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.82	101	1088228	55.01	ug/L	98
11) Methylene chloride	6.81	84	1102140	56.67	ug/L	99
12) Acetone	6.93	43	461380	105.30	ug/L	97
13) trans-1,2-Dichloroethene	7.08	96	983815	52.56	ug/L	95
14) Methyl acetate	7.14	43	699426	59.53	ug/L	97
15) Methyl tert-Butyl ether	7.30	73	2282313	52.19	ug/L	99
16) 1,1-Dichloroethane	8.10	63	1774761	56.57	ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	1095277	51.58	ug/L	97
18) Cyclohexane	9.28	56	1865056	67.55	ug/L	92
19) Chloroform	9.39	83	1802922	52.54	ug/L	100
20) Carbon tetrachloride	9.60	117	1189397	49.98	ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	1596077	50.94	ug/L	99
22) 2-Butanone	9.88	43	714496	111.54	ug/L	97
23) Benzene	10.27	78	4606795	56.91	ug/L	100
25) 1,2-Dichloroethane	10.57	62	1176414	52.59	ug/L	99
26) Methylcyclohexane	11.15	83	1942304	57.34	ug/L	95
27) Trichloroethene	11.16	95	1115536	51.52	ug/L	95
28) 1,2-Dichloropropane	11.96	63	977440	57.03	ug/L	98
29) Bromodichloromethane	12.05	83	1240418	53.41	ug/L	99
30) cis-1,3-Dichloropropene	13.01	75	1566960	56.54	ug/L	95
31) Toluene	13.39	92	2927899	54.82	ug/L	100

(#) = qualifier out of range (m) = manual integration
J6958.D J5300LMS.M Tue Aug 19 12:43:14 2008

Pa 616

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6958.D
Acq On : 19 Aug 2008 8:23
Sample : LCS-14531
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:42 2008

Vial: 14
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1427733	114.66	ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	1340669	54.35	ug/L	95
34) 1,1,2-Trichloroethane	14.29	83	714004	55.00	ug/L	97
35) 2-Hexanone	15.31	43	956869	104.64	ug/L	99
38) Tetrachloroethene	14.01	166	1019268	44.21	ug/L	100
39) Dibromochloromethane	14.59	129	814731	45.95	ug/L	99
40) 1,2-Dibromoethane	14.98	107	780272	48.33	ug/L	99
41) Chlorobenzene	15.84	112	2995349	46.11	ug/L	97
42) Ethylbenzene	15.86	91	5371080	50.04	ug/L	98
43) (m+p)-Xylene	16.10	106	4162157	97.24	ug/L	96
44) o-Xylene	16.83	106	1936634	47.58	ug/L	96
45) Styrene	16.93	104	2940478	46.09	ug/L	97
46) Bromoform	16.98	173	450261	40.68	ug/L	99
48) Isopropylbenzene	17.36	105	4842135	56.11	ug/L	98
50) 1,1,2,2-Tetrachloroethane	18.21	83	1126712	58.97	ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	2155376	50.71	ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	2024170	48.89	ug/L	99
53) 1,2-Dichlorobenzene	20.67	146	2004508	51.57	ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	166753	61.28	ug/L	94
55) 1,2,4-Trichlorobenzene	23.36	180	960536	49.77	ug/L	100

(#) = qualifier out of range (m) = manual integration
J6958.D J5300LMS.M Tue Aug 19 12:43:14 2008

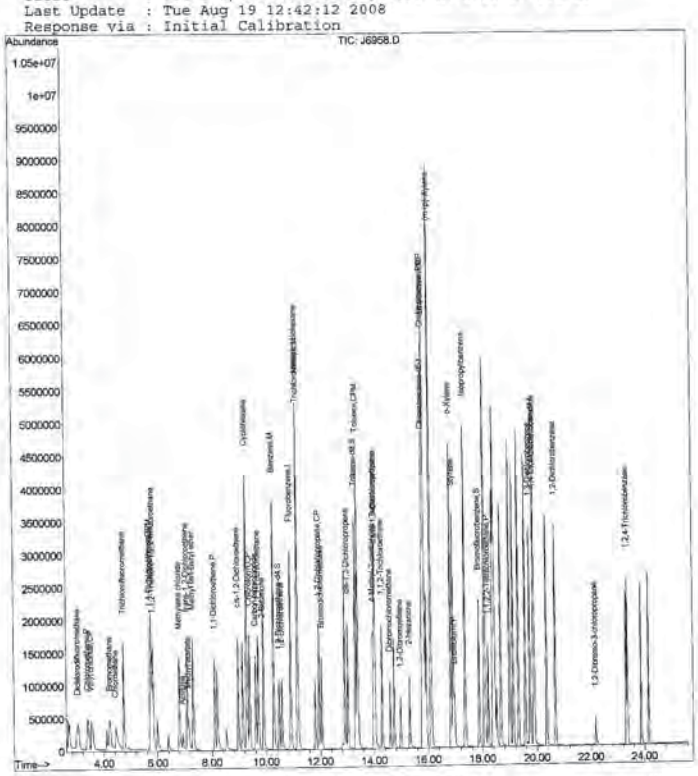
Pa 617

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6958.D
Acq On : 19 Aug 2008 8:23
Sample : LCS-14531
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 12:42 2008

Vial: 14
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



J6958.D J5300LMS.M Tue Aug 19 12:43:15 2008

Pa 618

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808076
Project: City of Geneva: Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-14531	SampType: LCSD	TestCode: 8260S7_OLM	Units: ug/Kg	Prep Date:	RunNo: 14531
Client ID: ZZZZZ	Batch ID: R14531	Method: SW8260B		Analysis Date: 8/19/2008	SeqNo: 380810
Instrument: MS03_10	ColumnID: Rtx-VMS	RTx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	45.4	5.0	50	0	91	55	142	51	12	20	
Chloromethane	66.4	5.0	50	0	133	62	141	65.5	1.3	20	
Vinyl chloride	55.5	5.0	50	0	111	68	135	57.6	3.8	24	
Bromomethane	41.8	5.0	50	0	84	56	147	40.4	3.5	21	
Chloroethane	60.4	5.0	50	0	121	65	142	57.6	4.8	20	
Trichlorofluoromethane	43.2	5.0	50	0	86	67	135	40.7	5.9	20	
1,1-Dichloroethene	55.5	2.5	50	0	111	76	136	56.2	1.1	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	54.3	2.5	50	0	109	69	134	56	1.2	20	
Acetone	100	40	100	0	100	25	175	105	3.8	50	
Carbon disulfide	67.3	2.5	50	0	135	73	130	63.7	5.5	20	S
Methyl acetate	64.0	2.5	50	0	128	67	147	59.5	7.2	20	
Methylene chloride	58.2	5.0	50	0	116	75	124	56.7	2.7	20	
trans-1,2-Dichloroethene	53.0	2.5	50	0	106	77	123	52.6	0.8	20	
Methyl tert-butyl ether	52.0	2.5	50	0	104	76	126	52.2	0.3	20	
1,1-Dichloroethane	58.4	2.5	50	0	117	76	124	56.6	3.2	20	
cis-1,2-Dichloroethene	52.0	2.5	50	0	104	79	120	51.6	0.8	20	
2-Butanone	116	40	100	0	116	42	154	112	4.0	50	
Chloroform	54.8	2.5	50	0	110	77	121	52.5	4.2	20	
1,1,1-Trichloroethane	53.2	2.5	50	0	106	78	132	50.9	4.4	20	S
Cyclohexane	65.9	2.5	50	0	132	80	126	67.8	2.4	20	
Carbon tetrachloride	50.9	2.5	50	0	102	74	138	50	1.8	20	
Benzene	58.6	2.5	50	0	117	80	121	56.9	2.9	20	
1,2-Dichloroethane	54.8	2.5	50	0	110	73	127	52.6	4.3	20	
Trichloroethene	52.4	2.5	50	0	105	80	120	51.5	1.8	20	
Methylcyclohexane	54.1	2.5	50	0	108	80	126	57.3	5.8	20	
1,2-Dichloropropane	58.0	2.5	50	0	116	80	125	57	1.6	20	
Bromodichloromethane	54.4	2.5	50	0	109	80	129	53.4	1.7	20	

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

619

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID:	LCSD-14531	SampType:	LCSD	TestCode:	8260ST_OLM	Units:	µg/Kg			Prep Date:						RunNo:	14531						
Client ID:	ZZZZZ	Batch ID:	R14531	Matrix:	SW8260B					Analysis Date:	8/19/2008					SeqNo:	330810						
Instrument:	MSD3_10	ColumnID:	Rtx-VMS		Rtx-VMS, 1.0 df																		
Analyte			QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene			55.6	2.5	50	0	111	80	125	56.5	1.7	20	
4-Methyl-2-pentanone			117	5.0	100	0	117	50	150	115	2.3	50	
Toluene			55.5	2.5	50	0	111	80	121	54.8	1.3	20	
trans-1,3-Dichloropropene			53.4	2.5	50	0	107	78	124	54.4	1.7	20	
1,1,2-Trichloroethane			57.3	2.5	50	0	115	80	122	55	4.1	20	
Tetrachloroethene			42.5	2.5	50	0	85	74	126	44.2	4.0	21	
2-Hexanone			104	5.0	100	0	104	50	150	105	0.7	50	
Dibromochloromethane			46.7	2.5	50	0	93	76	135	46	1.6	20	
1,2-Dibromoethane			49.4	2.5	50	0	99	80	124	48.3	2.1	20	
Chlorobenzene			46.0	2.5	50	0	92	80	120	46.1	0.3	20	
Ethylbenzene			49.8	2.5	50	0	100	80	121	50	0.8	20	
Xylenes (total)			139	5.0	150	0	93	76	124	145	4.1	20	
Styrene			44.6	2.5	50	0	89	78	122	46.1	3.2	20	
Bromoform			41.9	2.5	50	0	84	70	138	40.7	3.0	20	
Isopropylbenzene			61.1	2.5	50	0	122	78	131	56.1	8.5	20	
1,1,2,2-Tetrachloroethane			70.0	2.5	50	0	140	69	138	59	17	24	S
1,3-Dichlorobenzene			50.7	2.5	50	0	101	80	120	50.7	0.1	20	
1,4-Dichlorobenzene			49.1	2.5	50	0	98	80	120	48.9	0.5	24	
1,2-Dichlorobenzene			54.2	2.5	50	0	108	80	120	51.6	4.9	20	
1,2-Dibromo-3-chloropropane			73.2	5.0	50	0	146	69	132	61.3	18	24	S
1,2,4-Trichlorobenzene			41.0	5.0	50	0	82	71	127	49.8	19	24	
Surr: 1,2-Dichloroethane-d4			54.3	0.10	50	0	109	71	128	0		0	
Surr: Toluene-d8			46.6	0.10	50	0	93	75	125	0		0	
Surr: 4-Bromofluorobenzene			51.0	0.10	50	0	102	59	125	0		0	

Qualifiers:
H Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

20-Aug-08

Page 16 of 16

620

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6967.D
Acq On : 19 Aug 2008 13:28
Sample : LCSD-1451
Misc : LCSD,8260ST_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 13:54 2008

Vial: 24
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	3310937	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.80	82	1383607	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	896791	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	911878	54.32 ug/L	0.00
Spiked Amount 50.000				Recovery = 108.64%	
37) Toluene-d8	13.30	98	3162357	46.55 ug/L	0.00
Spiked Amount 50.000				Recovery = 93.10%	
49) Bromofluorobenzene	17.87	95	959516	50.96 ug/L	0.00
Spiked Amount 50.000				Recovery = 101.92%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.04	85	1028447	45.37 ug/L	99
3) Chloromethane	3.41	50	1323136	66.40 ug/L	99
4) Vinyl chloride	3.57	62	1186185	55.47 ug/L	99
5) Bromomethane	4.23	94	811657	41.78 ug/L	98
6) Chloroethane	4.45	64	755729	60.39 ug/L	97
7) Trichlorofluoromethane	4.74	101	1735797	43.15 ug/L	100
8) 1,1-Dichloroethene	5.74	96	791824	55.52 ug/L	98
9) Carbon disulfide	5.77	76	3259625	67.27 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.82	101	949304	54.33 ug/L	98
11) Methylene chloride	6.80	84	999951	58.20 ug/L	99
12) Acetone	6.93	43	423289	109.36 ug/L	94
13) trans-1,2-Dichloroethene	7.09	96	876264	53.00 ug/L	95
14) Methyl acetate	7.14	43	663835	63.96 ug/L	99
15) Methyl tert-Butyl ether	7.30	73	2010413	52.05 ug/L	98
16) 1,1-Dichloroethane	8.10	63	1618246	58.39 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	975709	52.02 ug/L	97
18) Cyclohexane	9.28	56	1608101	65.93 ug/L	95
19) Chloroform	9.39	83	1660448	54.77 ug/L	99
20) Carbon tetrachloride	9.60	117	1069551	50.88 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	1473132	53.23 ug/L	99
22) 2-Butanone	9.87	43	657208	116.14 ug/L	95
23) Benzene	10.26	78	4191450	58.61 ug/L	100
25) 1,2-Dichloroethane	10.58	62	1085299	54.92 ug/L	99
26) Methylcyclohexane	11.15	83	1619526	54.12 ug/L	95
27) Trichloroethene	11.16	95	1001644	52.37 ug/L	94
28) 1,2-Dichloropropane	11.95	63	877442	57.95 ug/L	99
29) Bromodichloromethane	12.05	83	1115097	54.35 ug/L	98
30) cis-1,3-Dichloropropene	13.02	75	1360484	55.57 ug/L	95
31) Toluene	13.39	92	2619103	55.51 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6967.D J5300LMS.M Tue Aug 19 14:28:42 2008

Pa 621

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J6967.D
Acq On : 19 Aug 2008 13:28
Sample : LCSD-1451
Misc : LCSD,8260ST_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 13:54 2008

Vial: 24
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Quant Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration
DataAcq Meth : J5300LMS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	1290998	117.37 ug/L	99
33) trans-1,3-Dichloropropene	14.03	75	1164717	53.45 ug/L	95
34) 1,1,2-Trichloroethane	14.30	83	657326	57.32 ug/L	96
35) 2-Hexanone	15.31	43	839306	103.96 ug/L	99
38) Tetrachloroethene	14.01	166	866281	42.47 ug/L	99
39) Dibromochloromethane	14.59	129	732390	46.69 ug/L	98
40) 1,2-Dibromoethane	14.98	107	705350	49.38 ug/L	100
41) Chlorobenzene	15.84	112	2643020	45.98 ug/L	97
42) Ethylbenzene	15.86	91	4728574	49.80 ug/L	98
43) (m+p)-Xylene	16.10	106	3525507	93.09 ug/L	95
44) o-Xylene	16.83	106	1655264	45.97 ug/L	95
45) Styrene	16.92	104	2516536	44.63 ug/L	97
46) Bromoform	16.99	173	411498	41.91 ug/L	99
48) Isopropylbenzene	17.36	105	4133947	61.11 ug/L	98
50) 1,1,2,2-Tetrachloroethane	18.21	83	1048163	69.98 ug/L	100
51) 1,3-Dichlorobenzene	19.74	146	1688371	50.67 ug/L	98
52) 1,4-Dichlorobenzene	19.90	146	1594440	49.13 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	1650291	54.16 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	156122	73.18 ug/L	92
55) 1,2,4-Trichlorobenzene	23.36	180	619903	40.97 ug/L	99

(#) = qualifier out of range (m) = manual integration
J6967.D J5300LMS.M Tue Aug 19 14:28:42 2008

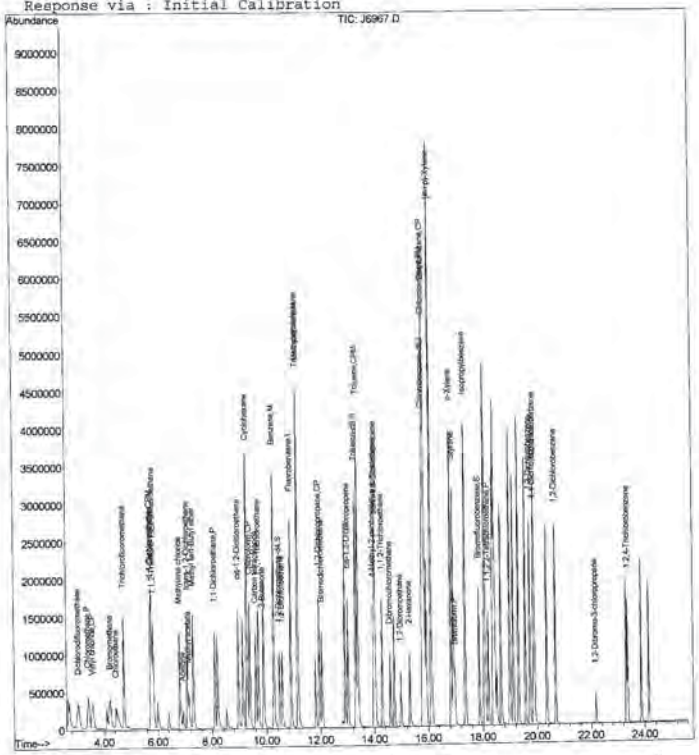
Pa 622

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J6967.D
Acq On : 19 Aug 2008 13:28
Sample : LCSD-1451
Misc : LCSD,8260ST_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 19 13:54 2008

Vial: 24
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J5300LMS.RES

Method : C:\HPCHEM\1\METHODS\J5300LMS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Aug 19 12:42:12 2008
Response via : Initial Calibration



J6967.D J5300LMS.M Tue Aug 19 14:28:44 2008

Pa 623

Laboratory Worksheets

Copy of Calculations

GC/MS SOIL SAMPLE CALCULATIONS

1. Relative Response Factors for GC/MS Volatiles and Semivolatiles

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where:
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specific internal standard
C_{is} = Concentration of the internal standard (µg/Kg)
C_x = Concentration of the compound to be measured (µg/Kg)

2. Relative Standard Deviation

$$\% \text{ RSD} = \frac{SD}{\bar{X}} \times 100$$

Where:
RSD = Relative Standard Deviation
SD = Standard Deviation of initial relative response factors (per compound)
$\bar{X}$ = Mean of initial relative response factors (per compound)

3. %Deviation for Continuing Calibration (for quantitation from RF only)

$$\% \text{ Deviation}_{(\text{RRRR})} = \frac{RRF_c - \overline{RRF_i}}{RRF_i} \times 100$$

$$\% \text{ Deviation}_{(\text{software})} = \frac{\overline{RRFi} - RRF_c}{\overline{RRFi}}$$

Where:
RRF_c = Relative response factor from continuing calibration standard
$\overline{RRFi}$ = Mean relative response factor from most recent initial calibration meeting technical acceptance criteria

4. %Drift for Continuing Calibration (for quantitation from RF or Curve)

$$\% \text{ Drift}_{(\text{RRRR})} = \frac{C_c - C_i}{C_i} \times 100$$

$$\% \text{ Drift}_{(\text{software})} = \frac{C_i - C_c}{C_i}$$

Where:
C_i = Calibration check std concentration (theoretical)
C_c = Measured concentration

GC/MS SOIL SAMPLE CALCULATIONS

5. RRT Deviation

$$\Delta \text{ RRT} = \text{RRT}_t - \text{RRT}_c \text{ , RRT} = \frac{RT_t}{RT_i}$$

Where:
RRT_t = Relative RT of target compound in sample
RRT_c = RRT of target in continuing calibration standard
RT_t = RT of target compound
RT_i = RT of internal standard

6. Final Concentration for GC/MS Volatiles

Low Soil

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})V_o}{(A_{is})(RRF)(W_s)(D)}$$

Where:
V_o = Volume of water purged (5 to 25 mL)
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specified internal standard
I_{is} = Concentration of internal standard added in nanograms/ml
W_s = Weight of sample purged (1-5g)
D = % solids/100
RRF = Response factor for compound to be measured (average or single point) *

* For compounds calculated using a regression equation for initial calibration, the terms of the equation replace the RRF.

Medium Soil

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(V_A)Df}{(A_{is})(RRF)(W_s)(V_A)(D)}$$

Where:
RRF, A_x, A_{is}, I_{is} = Same as above
W_s = Weight of sample extracted (5g)
V_T = Total volume of methanol extract adjusted for sample moisture:

V_T = mL solvent + (%moisture x W_s / 100)

V_A = Volume of methanol extract used for purging
V_o = Volume of water purged
Df = Dilution factor if original extract is diluted

7. Final Concentration for GC/MS Semivolatiles

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(Df)(2.0)}{(A_{is})(RRF)(V_T)(Ws)(D)}$$

Where:
RRF, A_x, A_{is}, I_{is} D, Df= Same as above
W_s = Weight of sample extracted (g)
V_T = Volume of concentrated extract (µL)

GC/MS SOIL SAMPLE CALCULATIONS

V_f = Volume of extract injected (µL)

The factor of 2.0 is used to account for the amount of extract that is not recovered from the GPC. If the GPC is not used, this factor is not used.

8. Matrix Spike Recovery for Volatiles and Semivolatiles

$$\text{Recovery (\%)} = \frac{(SSR) - (SR)}{(SA)} \times 100$$

Where: SSR = Spike sample result
SR = Sample result
SA = Spike added

9. % RPD of Matrix Spike and Matrix Spike Duplicate

$$\%RPD = 100 \times \frac{|S - D|}{((S + D)/2)}$$

Where: S = First Sample Value (Original)
D = Second Sample Value (Duplicate)

10. The Recovery of Reference Sample (LCS) and Surrogate

$$\text{Recovery (\%)} = \frac{SR}{SA} \times 100$$

Where: SR = Sample results
SA = Sample spike added

11. The calculation of Library Search compounds (TICs) is similar to target compounds except a RRF of 1.0 is assumed.

Injection Logs

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: SEE METHOD
Heated Purge: (Y) N

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		ICAL #1275
3		
4		

	ALS No.	Client No.	Sample ID (Work Order - Samp#)	Method /ID File	Inj. Vol *	Method Ref.	Target List	Data File Number	Date	Time	Diln. Factor
1		/	TB0530 0813	JBFBS	5ml			J 6537	5/30/08	6:52	—
2			ICAL - 2.0PPB	J530VOCS		8260	VOC	J 6538		7:21	1X
3			- 5.0					J 6539		7:56	
4			- 20					J 6540		8:30	
5			- 50					J 6541		9:05	
6			- 100					J 6542		9:41	
7			- 150					J 6543		10:17	
8			- 200					J 6544		10:53	
9			BLANK -					J 6545		11:26	
10			25LC - 13742					J 6546		12:01	
11			-					J			
12			-					J			
13			-					J			
14			-					J			
15			-					J			
16			-					J			
17			-					J			
18			-					J			
19			-					J			
20			-					J			
21			-					J			
22			-					J			
23			-					J			
24			-					J			
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP / AP #300
(1) 524.2	EPA-500 Series Bgs (8, Rev. 4.1	10/88	–01
(2) 624	Fed Register, Vol. 49, No. 209	10/26/84	–03
(3) TCLP	62609 w/ 1311 (AP #100-01)	12/98	–07A/100-01
(4) 8260B	USEPA SW846, Upd. III	12/96	–27A
(5) EPA CLP	USEPA CLP SOW OLM04.2	5/00	–09
(6) DEC ASP	USEPA CLP SOW OLM04.3	5/03	–08

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or sa. incl. extract added to 4mL vial)

Supervisor Review:

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

G:\Logbooks 2008\Organics\MSV3p1.XLS Log Page No. 143

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (% of CCV/ICAL Area)

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			Lower Limit

Pre-run maintenance
___ Replace Septa
___ Replace trap, Lot_____
___ Replace Helium
___ See Maint. log
Other:

Internal Standard Area Counts			Matrix							
Int. Std. #1	Int. Std. #2	Int. Std. #3	Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—					V-8220		2ml	1
3070624	1113419	843119		X		R13742	V-8209,10,14,15		5ml, 2ml, 2ml, 2ml, 2ml	2
3021736	1109833	855083		X					5ml, 5ml, 5ml, 5ml, 5ml	3
3098062	1188461	978967		X					20ml, 20ml, 20ml, 20ml, 20ml	4
3285359	1274147	1158412		X					2.5ml, 2.5ml, 2.5ml, 2.5ml	5
3312102	1325158	1142866		X					5ml, 5ml, 5ml, 5ml	6
3984117	1399918	1183268		X					7.5ml, 7.5ml, 7.5ml, 7.5ml	7
3527462	1398641	1193346		X					10ml, 10ml, 10ml, 10ml	8
2500236	667564	331563		X			V-8211		—	9
3369504	1297652	1186855		X			V-8211,16,17,18		2.5ml, 2.5ml, 2.5ml, 2.5ml	10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review:

MSV3p2.XLS Log Page No. 144

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: Soil
Heated Purge: (Y) N

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		[redacted]
3		OBG - Co.Geneva
4		

ALS No.	Client No.	Sample ID (Work Order - Sample#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Data File Date	Time	Diln. Factor
1	1	TB0816108A3	J530BLMS	5g	8260	OLM	J6849	8-14-08	0939	—
2	↓	CCV-14526		↓			J6850		1013	1X
3	↓	LCS-14526/MSB-14526		↓			J6851		1046	↓
4	2	0808070-005AMS		1.0g			J6852		1120	5X
5		-005AMSD		↓			J6853		1153	↓
6	↓	-005AMS		5.0g			J6854		1232	1X
7	1	IBLK-14526		5g			J6855		1305	
8	1	MB-14526		↓			J6856		1339	↓
9	3	0808068-001A		5.1g			J6857		1413	0.98X
10		-002A					J6858		1447	↓
11		-003A		↓			J6859		1520	
12		-004A		5.2g			J6860		1554	0.96X
13		-005A	↓	↓	↓	↓	J6861	↓	1628	↓
14		-006A					J6862			
15	↓	-007A					J6863			
16		-					J			
17		-					J			
18		-					J			
19		-					J			
20		-					J			
21		-					J			
22		-					J			
23		-					J			
24		-					J			
25		-					J			
26		-					J			
27		-					J			
28		-					J			
29		-					J			

Comments: The Sample aliquot used for 0808070-005MS and MSD showed very different levels of TIC late-eluting interference.

Method	Source	Date	SQL = AR x DF
(1) 524.2	EPA-600 Series Supp.B, Rev. 4.1	1995	~01
(2) 624	Fed Register, Vol. 49, No. 209	10/26/84	~03
(3) TCLP	SW846 nr 1311 (AP #100-01)	1996	~27A/100-01
(4) 8260B	USEPA SW846, Upd. III	1996	~27A
(5) EPA CLP	USEPA CLP SOW OLM04.2	9/03	~30
(6) DEC ASP	USEPA CLP SOW OLM04.3	6/03	~30

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or aq. med. extract added to 4mL vial)

Supervisor Review:

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

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Log Page No. 183

632

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (50 % of CCV/ICAL Area)

	945885	671297
	945858	

Upper Limit
Lower Limit

Pre-run maintenance
___ Replace Septa
___ Replace trap, Lot ___
___ Replace Helium
___ See Maint. log
Other:

Int. Std. #1	Int. Std. #2	Int. Std. #3	Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments
—	—	—	—	—	—	14526	V8287		Y
4517420	1871515	1342593		X			V8245,767778		Y 5,2.5,2.5,2.5µl
4804282	1959535	1374402		X			V8281,82,83,84		Y
5197943	2053470	1249665		X					Y RSq?
4971147	1880521	988566		X					Y S3↑ high TIC
4845806	1785869	1254885		X					ok S3↑ I3↓ *
4519717	1362042	567775		X			V8287		ok
4824885	1749221	728592		X					Y
4533914	1466077	786048		X					Y
4424245	1622491	1094566		X					Y
4362104	1656924	1311421		X					Y R1g
4238581	1606926	1184224		X					Y R1g
4198595	1541204	1006558		X					N RSq c/o?
									N Run stopped - Vial gripper error

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review:

MSV3p2.XLS

Log Page No. 184

633

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: Soil
Heated Purge: (Y) N

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		[redacted]
3		OBG Co.Geneva
4		

ALS No.	Client No.	Sample ID (Work Order - Sample#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Data File Date	Time	Diln. Factor
1	1	TB0815108A3	J530BLMS	—	8260	—	J6863	8-15-08	0804	—
2		CCV-14527		5g		OLM	J6863		0804	1X
3	↓	LCS/MSB-14527		↓			J6864		0838	
4	2	0808070-013MS		5.0g			J6865		0912	
5	↓	-013MSD		↓			J6866		0945	
6	1	IBLK-14527		5g			J6867		1019	
7	↓	MB-14527		↓			J6868		1053	↓
8	3	0808068-006A		5.1g			J6869		1127	0.98X
9	2	0808070-001A		5.2g			J6870		1201	0.96X
10		-002A		5.1g			J6871		1235	0.98X
11	↓	-003A		5.2g			J6872		1309	0.96X
12	3	0808068-005A		↓			J6873		1343	↓
13		-003ADL		1.1g			J6874		1417	4.54X
14		-004ADL		1.0g			J6875		1451	5.0X
15	↓	-007A		5mL			J6876		1525	1X
16	2	0808070-004A		5.0g			J6877		1558	↓
17		-006A		5.2g			J6878		1632	0.96X
18		-007A		5.3g			J6879		1706	0.94X
19		-008A		5.0g			J6880		1740	1.0X
20		-009A		5.1g			J6881		1814	0.98X
21		-010A		5.2g			J6882		1848	0.96X
22		-013A		5.0g			J6883		1922	1.0X
23	↓	-005A		1.0g			J6884		1956	5.0X
24	1	IBLK-	↓	5g	↓	↓	J6885	↓	2020	1X
25		-					J			
26		-					J			
27		-					J			
28		-					J			
29		-					J			

Comments:

Method	Source	Date	SQL = AR x DF
(1) 524.2	EPA-600 Series Supp.B, Rev. 4.1	1995	~01
(2) 624	Fed Register, Vol. 49, No. 209	10/26/84	~03
(3) TCLP	SW846 nr 1311 (AP #100-01)	1996	~27A/100-01
(4) 8260B	USEPA SW846, Upd. III	1996	~27A
(5) EPA CLP	USEPA CLP SOW OLM04.2	9/03	~30
(6) DEC ASP	USEPA CLP SOW OLM04.3	6/03	~30

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or aq. med. extract added to 4mL vial)

Supervisor Review:

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

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Log Page No. 185

634

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (50 % of CCV/ICAL Area)

	991748	731697

Upper Limit
Lower Limit

Pre-run maintenance
___ Replace Septa
___ Replace trap, Lot ___
___ Replace Helium
___ See Maint. log
Other:

Int. Std. #1	Int. Std. #2	Int. Std. #3	Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments
—	—	—	—	—	—	8-18-08	V8287		Y
4908672	1983495	1463393		X		14527	V8245,767778		Y 5,2.5,2.5,2.5µl
5097793	2049497	1483160		X			V8281,82,83,84		Y
4132054	1342740	573535		X					C I3↓S3↑
3884798	1040970	383785		X					C " "
4764452	1754896	1121320		X			V8287		ok
4538958	1661718	1080328		X					Y
4384123	1536709	873049		X					Y
4063056	1426001	752412		X					N S3↑ RSq
4113116	1666884	1050417		X					Y
4066715	1377978	696587		X					Y I3↓S3↑ RSq
3969302	1459791	898660		X					Y
4005818	1503603	1152398		X					Y
3936684	1461909	971128		X					Y
3919049	1457467	880827		X				+2	Y
3627468	1327429	737663		X					Y
3811240	1415940	867435		X					Y
3878152	1376001	758795		X					Y S3↑ RSq
3833380	1439770	861512		X					Y
3641126	1261471	628868		X					Y I3↓S3↑ RSq
3984448	1472187	828864		X					Y
3510911	1098292	495611		X					Y I3↓S3↑
3951842	1434986	1029979		X					ok Y @ 8-19-08 S3↑
4056104	1506897	842468		X					ok 12hr

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review:

MSV3p2.XLS

Log Page No. 186

635

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: SOIL
Heated Purge: (Y) N

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		[redacted]
3		OBG C.O. Geneva
4		

	ALS No.	Client No.	Sample ID (Work Order - Samp#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Date	Time	Diln. Factor
1		1	TB0808 08A3	J5308LMS	—	8260	—	J6910	8-18-08	0515	—
2			CCV - 14529		5g		OLM	J6910		0515	1X
3		↓	LCS/MSB-14529		↓			J6911		0549	
4		3	0808076-004AMS		5.0g			J6912		0633	
5		↓	-004AMSD					J6913		0656	
6		1	IBLK - 14529					J6914		0730	
7		↓	MB - 14529		↓			J6915		0804	↓
8		2	0808070 - 029A		5.3g			J6916		0838	0.94X
9			-030A		5.0g			J6917		0912	1.0X
10			-031A		5.3g			J6918		0946	0.94X
11			-032A		5.2g			J6919		1020	0.96X
12			-033A		5.3g			J6920		1054	0.94X
13		↓	-034A		5.1g			J6921		1128	0.98X
14		3	0808076-001A		5.1g			J6922		1202	↓
15			-002A		5.1g			J6923		1236	↓
16			-003A		5.3g			J6924		1310	0.94X
17			-004A		5.0g			J6925		1344	1.0X
18			-005A		5.0g			J6926		1418	↓
19			-006A		5.1g			J6927		1452	0.98X
20			-007A		5.1g			J6928		1526	↓
21			-008A		5.1g			J6929		1600	↓
22		↓	-009A		5.2g			J6930		1634	0.96X
23		2	0808070-016ADL		1.1g			J6931		1708	4.54X
24		1	IBLK -	↓	5g	↓	↓	J6932	↓	1742	1X
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP # AP #000
(1) 524.2	EPA-600 Series Supp III, Rev. 4.1	10/95	-01
(2) 624	Fed Register, Vol. 49, No. 209	10/29/84	-03
(3) TCLP	SW846 #1311 (AP #100-01)	12/96	-27A/100-01
(4) 8260B	USEPA SW846, Upd. III	12/96	-27A
(5) EPA CLP	USEPA CLP SOW OLM04.3	8/00	-35
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/00	-39

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or vol. med. extract added to 4mL vial)

Supervisor Review:

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

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Log Page No. 189

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (50 % of CCV/CAL Area)

	977218	656471
		Upper Limit
		Lower Limit

Pre-run maintenance
___ Replace Septa
___ Replace trap, Lot ___
___ Replace Helium
___ See Maint. log
___ Other:

Internal Standard Area Counts: Int. Std. #1	Int. Std. #2	Int. Std. #3	Matrix: Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—	—	—	—	8-18-08	V8287 ↑	Y	5,2.5,2.5,2.5 µl	1
4264248	1758436	1372941		X		14529	V8275,76,77,78	Y		2
4243327	1711358	1270838		X			V8281,82,83,84	Y		3
4054942	1665492	1236996		X				Y		4
4639371	1826800	1312993		X			↓	Y	↓	5
4389436	1583693	1055562		X			V8287	OK		6
4283369	1572309	1047714		X				Y		7
3962501	1407634	809633		X				Y		8
3761046	1087196	*396661		X				Y	I3↓S3↑ RSg ✓	9
3502602	1001910	*388910		X				Y	I3↓S3↑ RSg ✓	10
3753860	1322947	753934		X				Y		11
3778720	1301414	698931		X				Y	(RS) 3-18-08 ✓	12
3245866	1031559	*449907		X				Y	I3↓S3↑ RSg ✓	13
3074041	898603	*373213		X				Y	I3↓S3↑ RSg ✓	14
3477817	1346302	815792		X				Y		15
3753976	986123	*424454		X				Y	I3↓S3↑ RSg ✓	16
3333893	1234147	754774		X				Y		17
3325057	1229237	748111		X				Y		18
3249739	1196344	731469		X				Y		19
2996637	905201	*364534		X				Y	I3↓S3↑ RSg ✓	20
3191519	1165181	*648893		X				Y	I3↓ RSg ✓	21
3226367	1163194	*647675		X				Y	I3↓ RSg ✓	22
3024573	1114816	943265		X				Y	RD.98 ✓	23
3443748	1287148	816208		X		↓	↓	OK	12 hr	24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review:

MSV3p2.XLS

Log Page No. 190

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: SOIL
Heated Purge: (Y) N

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		[redacted]
3		OBG C.O. Geneva
4		

	ALS No.	Client No.	Sample ID (Work Order - Samp#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Date	Time	Diln. Factor
1		1	TB0819 08A3	J5308LMS	—	8260	—	J6957	8-19-08	0749	—
2			CCV - (1453)		5g		OLM	J6957		0749	1X
3			LCS -					J6958		0823	
4			IBLK -					J6959		0857	
5		↓	MB - ↓		↓			J6960		0931	
6		2	0808070 - 014ARA		5.0g			J6961		1004	↓
7		3	0808076 - 001ADL		1.0g			J6962		1038	5.0X
8			-002ADL		1.1g			J6963		1112	4.94X
9			-003ADL		1.1g			J6964		1146	
10			-004ADL		1.1g			J6965		1220	
11		↓	-005ADL		1.1g			J6966		1254	↓
12		1	LCSD - (1453)	↓	5g	↓	↓	J6967	↓	1328	1X
13			-					J			
14			-					J			
15			-					J			
16			-					J			
17			-					J			
18			-					J			
19			-					J			
20			-					J			
21			-					J			
22			-					J			
23			-					J			
24			-					J			
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP # AP #000
(1) 524.2	EPA-600 Series Supp III, Rev. 4.1	10/95	-01
(2) 624	Fed Register, Vol. 49, No. 209	10/29/84	-03
(3) TCLP	SW846 #1311 (AP #100-01)	12/96	-27A/100-01
(4) 8260B	USEPA SW846, Upd. III	12/96	-27A
(5) EPA CLP	USEPA CLP SOW OLM04.3	8/00	-35
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/00	-39

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or vol. med. extract added to 4mL vial)

Supervisor Review:

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

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Log Page No. 193

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (50 % of CCV/CAL Area)

	777797	574289
		Upper Limit
		Lower Limit

Pre-run maintenance
___ Replace Septa
___ Replace trap, Lot ___
___ Replace Helium
___ See Maint. log
___ Other:

Internal Standard Area Counts: Int. Std. #1	Int. Std. #2	Int. Std. #3	Matrix: Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—	—	—	—	14531	V8275,76,77,78	Y	5,2.5,2.5,2.5 µl	1
3668640	1559594	1148638		X			↓	Y		2
3348091	1563802	1143954		X			V8281,82,83,84	Y	↓	3
—	—	—		X			—	OK	No IS/Surr added	4
3399779	1266675	791466		X			V8287	Y		5
2075503	*483241	*203207		X				C	I3↓S12↑ Not reanalyzed	6
3108195	1059933	*511926		X				YC	I3↓ S3↑	7
3121246	1089879	*560909		X				YC	I3↓	8
3021648	1031281	*500849		X				YC	I3↓	9
3124300	1153552	734758		X				YC		10
3074610	1138830	704702		X			↓	YC		11
3310937	1383607	896791		X		↓	V8281,82,83,84	Y	5,2.5,2.5,2.5 µl	12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review:

MSV3p2.XLS

Log Page No. 194

Standards Logs

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8121	2/28/08	4/28/08	8260 REF - w/o KETONES	—	—	—	—	—	—	—	—
			STOCK 1 - REF	100ml	MEOH CU319	2ml	100	V-8069	2000	5/23/08	JK
			STOCK 2 - REF	100ml				V-8079	2000	5/23/08	
			524/8260 MM - REF	100ml				V-8099	2000	5/24/08	
V-8122	2/28/08	4/28/08	KETONES - REF	200ml	MEOH CU319	2ml	200	V-8100	2000	5/24/08	JK
V-8123	2/28/08	8/28/08	8260 MISC - REF	—	—	—	—	—	—	—	—
			VINYL ACETATE - REF	19.6ml	MEOH CU319	2ml	100	V-8085	10,200	7/23/08	JK
			2-CEVE - REF	18.1ml				V-8086	11,020		
			CS_2 - REF	19.9ml				V-8087	10,070		
			ACRYLONITRILE - REF	92.2ml			500	V-8088	10,840		
			ACROLEIN - REF	92.0ml				V-8089	10,870		
			GASES - REF	200ml			100	V-8101	1000	3/24/08	
V-8124	2/29/08	4/29/08	8260 - IS	50ml	MEOH CU319	2ml	50	V-8090	2000	5/24/08	JK
V-8125	2/29/08	4/29/08	8260 CAL w/o KETONES	—	—	—	—	—	—	—	—
			STOCK 1 - CAL	100ml	MEOH CU319	2ml	100	V-8064	2000	5/23/08	JK
			STOCK 2 - CAL	100ml				V-8074			
			524/8260 MM - CAL	100ml				V-8092			
			8260 - SURR	100ml				V-8091		5/24/08	
V-8126	2/29/08	4/29/08	KETONES - CAL	200ml	MEOH CU319	2ml	200	V-8093	2000	5/24/08	JK
V-8127	2/29/08	3/29/08	8260 - MISC CAL	—	—	—	—	—	—	—	—
			VINYL ACETATE - CAL	19.7ml	MEOH CU319	2ml	100	V-8080	10,160	7/23/08	JK
			2-CEVE - CAL	18.2ml				V-8081	10,980		
			CS_2 - CAL	19.5ml				V-8082	10,240		
			ACRYLONITRILE - CAL	92.2ml			500	V-8083	11,080		
			ACROLEIN - CAL	96.2ml				V-8084	10,390		
			GASES - CAL	200ml			100	V-8094	1000	3/24/08	
V-8128	2/29/08	12/15/10	8260-IS	3x1.2ml	MeOH	1.2ml	2000	ECS Lot: V13806	2000	12/15/10	JK

642 rep.xls

Supervisor review _____

Page No. _____ 92

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8129	2/29/08	12/15/09	8260 KETONES	3x1.2ml	MeOH	1.2ml	2000	ECS Lot: KTM15	2000	12/15/09	JK
V-8130	2/29/08	12/15/09	8260 KETONES (REF)	3x1.2ml	MeOH	1.2ml	2000	ECS Lot: KTM15SS	2000	12/15/09	JK
V-8131	3/3/08	5/24/08	IS/SURR for MS2 (STD#1)	—	—	—	—	—	—	—	—
			IS-8260	580ul	MeOH CU319	20ml	58	V-8090	2000	5/24/08	JK
			SURR-8260	580ul				V-8132		7/3/08	
V-8132	3/3/08	7/3/08	8260-SURR	Cracked	MeOH	1.2ml	2000	V-8057	2000	2/2/10	JK
V-8133	3/3/08	7/3/08	8260-IS	Cracked	MeOH	1.2ml	2000	V-7946	2000	12/28/08	JK
V-8134	3/3/08	7/3/08	~~IS/SURR for MS3 (Std#1)~~		~~MeOH CU319~~						
			~~8260-IS~~	~~688~~ 274ul		20ml					
			~~8260-SURR~~	274ul							
V-8134	3/3/08	7/3/08	IS/SURR for MS3 (Std#1)	—	—	—	—	—	—	—	—
			8260-IS	257.8ul	MeOH CU319	20ml	25.7	V-8133	2000	7/3/08	JK
V-8135	3/3/08	7/3/08	IS/SURR for MS3 (Std#2)	257.4ul				V-8132	2000	7/3/08	
			8260-IS	588ul	MeOH CU319	20ml	58.8	V-8133	2000	7/3/08	JK
			8260-SURR	588ul				V-8132	2000		
V8136M	3-18-08	5-18-08	8260 Internal Std.	50ul	MeOH CU319	2000ul	50 ppm	V8133	2000	7/3/08	MV
			8260 Surrogate Std	50ul			50 ppm	V8132	2000	7/3/08	
V-8137	3/21/08	5/24/08	IS/SURR for MS2 (STD#2)	—	—	—	—	—	—	—	—
			IS-8260	290	MeOH CU319	10ml	58	V-8133	2000	7/3/08	JK
			SURR-8260	290				V-8091	2000	5/24/08	
V-8138	3/24/08	7/24/08	8260-IS	cracked	MeOH	1.2ml	2000	V-8004	2000	12/28/08	JK
V-8139	3/24/08	7/24/08	8260-SURR	cracked	MeOH	1.2ml	2000	V-8057	2000	2/2/10	
V-8140	3/24/08	7/24/08	IS/SURR for MS2 (STD#1)	—	—	—	—	—	—	—	—
			8260-IS	580ul	MeOH CU319	20ml	58	V-8138	2000	7/24/08	JK
			8260-SURR	580ul				V-8139	2000	7/24/08	
								~~JK 3/24/08~~			

643 rep.xls

Supervisor review _____

Page No. _____ 93

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc (ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8115	2/13/08	3/13/08	8260 - MISC CAL	—	—	—	—	—	—	—	—
			VINYL ACETATE - CAL	19.7ml	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	JK
			2-CEVE - CAL	18.2ml				V-8081	10,980		
			CS_2 - CAL	19.5ml				V-8082	10,240		
			ACRYLONITRILE - CAL	92.2ml			500	V-8083	11,080		
			ACROLEIN - CAL	96.2ml				V-8084	10,390		
			GASES - CAL	200ml			100	V-8094	1000	3/24/08	
V-8116	2/13/08	4/13/08	8260 - IS/SURR	—	—	—	—	—	—	—	—
			8260-IS	50	MeOH CU319	2ml	50	V-8090	2000	5/24/08	JK
			8260-SURR	50				V-8091	2000		
V-8117	2/13/08	4/13/08	8260 REF w/o KETONES	—	—	—	—	—	—	—	—
			STOCK 1 - REF	100	MeOH CU319	2ml	100	V-8069	2000	5/23/08	JK
			STOCK 2 - REF	100				V-8079	2000	5/23/08	
			524/8260 MM - REF	100				V-8099	2000	5/24/08	
V-8118	2/13/08	4/13/08	KETONES - REF	200	MeOH CU319	2ml	200	V-8100	2000	5/24/08	JK
V-8119	2/13/08	3/13/08	8260 MISC - REF	—	—	—	—	—	—	—	—
			VINYL ACETATE - REF	19.6ml	MeOH CU319	2ml	100	V-8085	10,200	7/23/08	JK
			2-CEVE - REF	18.1ml				V-8086	11,020		
			CS_2 - REF	19.9ml				V-8087	10,070		
			ACRYLONITRILE - REF	92.2ml			500	V-8088	10,840		
			ACROLEIN - REF	92.0ml				V-8089	10,870		
			GASES - REF	200ml			100	V-8101	1000	3/24/08	
V-8120	2/28/08	4/28/08	8260 - IS/SURR	—	—	—	—	—	—	—	—
			8260-IS	50ul	MeOH CU319	2ml	50	V-8090	2000	5/24/08	JK
			8260-SURR	50ul				V-8091	2000	5/24/08	
			~~JK 2/28/08~~								

641 rep.xls

Supervisor review _____

Page No. _____ 91

640

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8159	4/7/08	5/7/08	8260 - MSSC REF	—	—	—	—	—	—		—
			VINYL ACETATE - REF	19.6ml	MeOH CU319	2.0ml	100	V-8085	10,200	7/23/08	JK
			2-CEVE - REF	92.5ml			500	V-8086	11,020		
			CS2 - REF	19.9ml			100	V-8087	10,070		
			ACRYLONITRILE - REF	92.2ml			500	V-8088	10,840		
			ACROLEIN - REF	92.0ml				V-8089	10,870		
			GASES - REF	200ml			100	V-8142	1000	5/24/08	
V-8160	4/10/08	6/10/08	8260-IS	50µl	MeOH CU319	2 ml	50	V-8154	2000	7/28/08	
V-8161	4/11/08	6/11/08	8260 - IS/SURR	—	—						
			8260 - IS	50ml	MeOH CU319	2ml	50	V-8154	2000	7/28/08	JK
			8260 - SURR	50ml			50	V-8155	2000	7/28/08	
V-8162	4/14/08	6/14/08	8260 - IS/SURR	—							
			8260 - IS	50ml	MeOH CU319	2ml	50	V-8154	2000	7/28/08	JK
			8260 - SURR	50ml			50	V-8139	2000	7/24/08	
V-8163	4/16/08	6/16/08	8260 - IS	50ml	MeOH CU319	2ml	50	V-8154	2000	7/28/08	JK
V-8164	4/16/08	5/23/08	8260 CAL W/O KETONES	—							
			STOCK 1 - CAL	100ml	MeOH CU319	2ml	100	V-8064	2000	5/23/08	JK
			STOCK 2 - CAL	100ml				V-8074	2000	5/23/08	
			8260 MM - CAL	100ml				V-8092	2000	5/24/08	
			SURR	100ml				V-8139	2000	7/24/08	
V-8165	4/16/08	5/24/08	8260 CAL KETONES	200ml	MeOH CU319	2ml	200	V-8093	2000	5/24/08	JK

646 rep.xls Supervisor review _____ Page No. ____ 00

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8141	3/24/08	5/24/08	GASES - CAL	Cracked	MeOH	1.2ml	1000	V-8003	1000	8/08	
V-8142	3/24/08	5/24/08	GASES - REF	Cracked	MeOH	1.2ml	1000	V-7995	1000	8/18/08	
V-8143	3/24/08	5/24/08	8260-IS	50ml	MeOH CU319	2ml	50	V-8133	2000	7/3/08	
V-8144	3/24/08	5/23/08	8260 CAL W/O KETONES	—	—	—	—				
			STOCK 1 - CAL	100ml	MeOH CU319	2ml	100	V-8064	2000	5/23/08	
			STOCK 2 - CAL	100ml				V-8074			
			524/8260 MM - CAL	100ml							
			8260 - SURR	100ml				V-8092		5/24/08	
V-8145	3/24/08	5/24/08	KETONES - CAL	200ml	MeOH CU319	2ml	200	V-8093	2000	5/24/08	
V-8146	3/24/08	5/24/08	8260 - MISC CAL	—	MeOH CU319	2ml	—				
			VINYL ACETATE - CAL	19.7ml			100	V-8080	10,160	7/23/08	
			2-CEVE - CAL	91.0ml			500	V-8081	10,950		
			CS2 - CAL	19.5ml			100	V-8082	10,240		
			ACRYLONITRILE - CAL	90.2ml			500	V-8083	11,080		
			ACROLEIN - CAL	96.2ml			500	V-8084	10,390		
			GASES - CAL	200ml			100	V-8141	1000	5/24/08	
V-8147	3/24/08	5/24/08	8260-IS/SURR	—							
			8260-IS	50ml	MeOH CU319	2ml	50	V-8153	2000	7/28/08	
			8260-SURR	50ml				V-8139	2000	7/24/08	
V-8148	3/24/08	5/23/08	8260 REF W/O KETONES	—							
			STOCK 1 - REF	100ml	MeOH CU319	2ml	100	V-8064	2000	5/23/08	
			STOCK 2 - REF	100ml				V-8074	2000	5/23/08	
			524/8260 MM - REF	100ml				V-8092	2000	5/24/08	
V-8149	3/24/08	5/24/08	KETONES - REF	200ml	MeOH CU319	2ml	200	V-8160	2000	5/24/08	
					3/24/08						

644 rep.xls Supervisor review _____ Page No. _____ 94

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8166	4/18/08	5/18/08	8260 - MSSC CAL	—	—	—	—	—	—		—
			VINYL ACETATE - CAL	19.7ml	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	JK
			2-CEVE - CAL	91.0ml			500	V-8081	10,980		
			CS2 - CAL	19.5ml			100	V-8082	10,240		
			ACRYLONITRILE - CAL	90.2ml			500	V-8083	11,080		
			ACROLEIN - CAL	96.2ml				V-8084	10,390		
			GASES - CAL	200ml			100	V-8141	1000	5/24/08	
V-8167	4/18/08	6/18/08	GASES CAL	CRACKED	MeOH	1.2ml	1000	V-8110	1000	9/10	JK
V-8168	4/18/08	5/18/08	8260 - MSSC CAL	—	—	—	—				
			VINYL ACETATE - CAL	19.7ml	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	JK
			2-CEVE - CAL	91.0ml			500	V-8081	10,980		
			CS2 - CAL	19.5ml			100	V-8082	10,240		
			ACRYLONITRILE - CAL	92.2ml			500	V-8083	11,080		
			ACROLEIN - CAL	96.2ml				V-8084	10,390		
			GASES - CAL	200ml			100	V-8167	1000	6/18/08	
V-8169	4/18/08	8/18/08	8260 - SURR	CRACKED	MeOH	1.2ml	2000	V-8057	2000	2/2/10	JK
V-8170	4/18/08	6/18/08	8260 - IS/SURR	—	—	—	—				
4,5,6			8260 - IS	50ml	MeOH CU319	2ml	50	V-8154	2000	7/28/08	JK
			8260 - SURR	50ml			50	V-8169	2000	8/18/08	
V-8171	4/18/08	5/23/08	8260 REF W/O KETONES	—							
			STOCK 1 - REF	100ml	MeOH CU319	2ml	100	V-8064	2000	5/23/08	JK
			STOCK 2 - REF	100ml				V-8074			
			524/8260 MM - REF	100ml				V-8092		5/24/08	
V-8172	4/18/08	5/24/08	8260 - KETONES REF	200ml	MeOH CU319	2ml	200	V-8100	2000	5/24/08	JK

647 rep.xls Supervisor review _____ Page No. _____ 97

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8150	3/24/08	4/24/08	8260 MISC - REF	—	—	—	—				
			VINYL ACETATE - REF	19.6ml	MeOH CU319	2ml	100	V-8085	10,200	7/23/08	
			2-CEVE - REF	90.5ml			500	V-8086	11,020		
			CS2 - REF	19.9ml			100	V-8087	10,070		
			ACRYLONITRILE - REF	92.3ml			500	V-8088	10,840		
			ACROLEIN - REF	92.0ml				V-8089	10,870		
			GASES - REF	200ml			100	V-8142	1000	5/24/08	
V-8151	3/26/08	5/21/08	BFB SOL'N	150ml	MeOH CU319	2ml	150	V-8058	2000	5/21/08	
V-8152	3/27/08	9/25/08	TCLP Extraction Sol'n	—							
			1N NaOH	140ml	DI H2O	2L	pH 4.96	V-7998	1N	9/25/08	
		7/24/08	Acetic Acid, glacial	11.4ml				V-8109		2/6/11	
V-8153	3/28/08	5/28/08	IS/SURR for SMS2 (5000)	—							
			8260-IS	580ml	MeOH CU319	20ml	58	V-8154	2000	7/28/08	
			8260-SURR	580ml				V-8155	2000	7/28/08	
V-8154	3/28/08	7/28/08	8260 IS	cracked	MeOH	1.2ml	2000	V-8128	2000	12/15/10	
V-8155	3/28/08	7/28/08	8260-SURR	cracked	MeOH	1.2ml	2000	V-8057	2000	2/2/10	
V8156	4-3-08	5-3-08	8260 Internal Std	50ml	MeOH CU319	2.0ml	50	V8154	2000	7-28-08	MV
			8260 Surrogate Std	50ml				V8155	2000	7-28-08	
V-8157	4/4/08	4/10	GASES - CAL	4x1.2ml	MeOH	4x1.2ml	1000	NSI Lot # C-303-31		9/10	JK
V-8158	4/7/08	5/7/08	8260-MISC CAL	—							
			VINYL ACETATE - CAL	19.7ml	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	
			2-CEVE - CAL	91.0ml			500	V-8081	10,980		
			CS2 - CAL	19.5ml			100	V-8082	10,240		
			ACRYLONITRILE - CAL	90.2ml			500	V-8083	11,080		
			ACROLEIN - CAL	96.2ml			500	V-8084	10,390		
			GASES - CAL	200ml			100	V-8141	1000	5/24/08	

645 rep.xls Supervisor review _____ Page No. _____ 95

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8192	4/28/08	7/23/08	Stock 2-Ref	—	—	—	—				—
			Methyl Cyclohexane-Ref	347.6ml	MeOH CU319	2ml	2000	V-8085	~~11,760~~ 10,200	7/23/08	JK
			Methyl Acetate-Ref	400.0ml				V-8086	~~10,770~~ 11,020		
			Cyclohexane-Ref	388.7ml				V-8087	~~11,690~~ 10,070		
			1,1,2-TCTFE-Ref	366.7ml				V-8088	10,920		
V-8193	4/28/08	6/28/08	Gases-Ref	Cracked	MeOH	1.2ml	1000	V-7945	1000	8/18/08	JK
V-8194	4/28/08	6/28/08	8260-IS/Surr								
A,B,C			8260-IS	50ml	MeOH CU319	2ml	50	V-8188	2000 ppm	8/25/08	
			8260-Surr	50ml				V-8169	2000	8/18/08	
~~V-8195~~	~~4/28/08~~	~~6/28/08~~	~~8260 Ref w/o Ketones~~								
			Stock 1-Ref								
			Stock 2-Ref								
V-8196	4/28/08	6/28/08	8260 Ketones-Ref								
V-8198	4/28/08	5/28/08	8260 Misc-Ref								
V-8198	4/29/08	9/25/08	TCLP Extraction Sol'n	—	—	—	—				
			1N NaOH	140ml	DI H_2O	2x2L	pH 4.98	V-7938	1N	9/25/08	
			Acetic Acid, glacial	11.4ml				V-8109		7/6/11	
V-8199	5/8/08	9/8/08	8260-IS/Surr MS3 Soln	—	—	—	—				
			8260-IS	588ul	MeOH CU319	2.0ml	58.8	V-8178	2000	8/25/08	JK
			8260-Surr	588ul			58.8	V-8169	2000	8/18/08	
V-8200	5/9/08										

JK 5/9/08.

650 prep.xls Supervisor review _____ Page No. _____ 100

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8173	4/18/08	5/18/08	8260 Misc Ref	—	—	—	—				—
			Vinyl Acetate-Ref	19.6ml	MeOH CU319	2ml	100	V-8085	10,200	2/23/08	JK
			2-Clve-Ref	90.5ml			500	V-8086	11,020		
			CS2-Ref	19.9ml			100	V-8087	10,070		
			Acrylonitrile-Ref	92.2ml			500	V-8088	10,840		
			Acrolein-Ref	92.0ml				V-8089	10,870		
			Gases-Ref	200ml			100	V-8142	1000	5/29/08	
V-8174	4/22/08	10/22/08	1,4-Dioxane-Cal	51.3393 - 51.8326	MeOH CU319	10ml	10,160	SEMS VOL 1686	99.5%	8/10	JK
~~V-8175~~	~~4/22/08~~	~~10/22/08~~	~~1,4-Dioxane-R~~	0.1016							
V-8175	4/22/08	10/22/08	1,4-Dioxane	51.3474 - 51.4476	MeOH CU319	10ml	10,020	SEMS VOL 1686	99.5%	8/10	JK
				0.1002							
V-8176	4/22/08	6/22/08	1,4-Dioxane-Cal	~~0.1019~~ 1.97ml	MeOH CU319	2ml	1000	V-8174	10,160	10/22/08	JK
V-8177	4/22/08	8/22/08	1,4-Dioxane-Ref	200ml	MeOH CU319	2ml	1000	V-8175	10,020	10/22/08	JK
V-8178	4/25/08	8/25/08	8260-IS	Cracked	MeOH	1.2ml	2000	V-8128	2000	12/15/10	JK
V-8179	4/25/08	6/25/08	8260-IS/Surr	—	—	—	—				—
			8260-IS	50ml	MeOH CU319	2ml	50	V-8178	2000	8/25/08	JK
			8260-Surr	50ml				V-8169	2000	8/18/08	
V-8180	4/28/08	8/28/08	524/8260 MM-Cal	Cracked	MeOH	1.2ml	2000	V-7947	2000	5/22/08	JK
V-8182	4/28/08	7/23/08	Stock 1-Cal	—	—	—	—				—
			Methyl Iodide-Cal	343.9ml	MeOH CU319	2ml	2000	V-8060	11,630	7/23/08	JK
			t-1,4-DC-2B-Cal	375.9ml				V-8061	10,640		
			MTBE-Cal	399.8ml				V-8062	10,005		
			1-Chlorohexane-Cal	396.0ml				V-8063	10,100		

648 rep.xls Supervisor review _____ Page No. _____ 98

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8195	4/28/08	6/28/08	8260 Ref w/o Ketones	—	—	—	—				—
			Stock 1-Ref	100ml	MeOH CU319	2ml	100	V-8191	2000	7/23/08	JK
			Stock 2-Ref					V-8192	2000		
			524/8260 MM-Ref					V-8189	2000	8/28/08	
V-8196	4/28/08	6/28/08	8260 Ketones-Ref	200ml	MeOH CU319	2ml	200	V-8190	2000	7/28/08	JK
V-8197	4/28/08	5/28/08	8260 Misc-Ref	—	—	—	—				—
			Vinyl Acetate-Ref	19.6ml	MeOH CU319	2ml	100	V-8085	10,200	7/23/08	JK
			2-Clve-Ref	90.5ml			500	V-8086	11,020		
			CS2-Ref	19.9ml			100	V-8087	10,070		
			Acrylonitrile-Ref	92.2ml			500	V-8088	10,840		
			Acrolein-Ref	92.0ml				V-8089	10,870		
			Gases-Ref	200ml			100	V-8193	1000	6/28/08	
V-8198	4/29/08	9/23/08	TCLP Extraction Sol'n	—	—	—	—				—
			1N NaOH	2x140ml	DI H_2O	2x2L	pH = 4.98	V-7938	1N	9/25/08	GS
			Acetic Acid, Glacial	2x11.4ml				V-8109		2/6/11	
V-8199	5/8/08	9/8/08	8260-IS/Surr MS3 Soln	—	—	—	—				—
			8260-IS	588ul	MeOH CU319	20ml	58.8	V-8178	2000	8/25/08	JK
			8260-Surr	588ul			58.8	V-8169	2000	8/18/08	
V-8200	5/9/08	7/9/08	8260-Ketones Ref	200ul	MeOH CU319	2ml	200	V-8190	2000	7/28/08	JK
V-8201	5/13/08	7/13/08	8260 Ketones-Cal	200ul	MeOH CU319	2ml	200	V-8184	2000	7/28/08	JK
V-8202	5/13/08	8/13/08	8260 Ketones-Cal	Cracked	MeOH	1.2ml	2000	V-7916	2000	2/2/09	JK
V-8203	5/13/08	7/13/08	8260 Ketones-Cal	200ul	MeOH CU319	2ml	200	V-8202	2000	8/13/08	JK

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMS/SV/Standard Prep

651

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc.(ppm)	Parent/Source ID No.	Conc.(ppm)	Exp.Date	Prep'd By
V-8183	4/28/08	7/23/08	Stock 2-Cal	—	—	—	—				—
			Methyl Cyclohexane-Cal	397.2ml	MeOH CU319	2ml	2000	V-8070	10,020	7/23/08	JK
			Methyl Acetate-Cal	396.0ml				V-8071	10,180		
			Cyclohexane-Cal	388.3ml				V-8072	10,300		
			1,1,2-TCTFE-Cal	353.4ml				V-8073	11,320		
V-8184	4/28/08	7/28/08	Ketones-Cal	Cracked	MeOH	1.2ml	2000	V-7856	2000	2/2/09	JK
V-8185	4/28/08	6/28/08	8260-IS	50ml	MeOH CU319	2ml	50	V-8128	2000	8/25/08	JK
V-8186	4/28/08	6/28/08	8260 Cal w/o Ketones	—	—	—	—				—
			Stock 1-Cal	100ml	MeOH CU319	2ml	100	V-8182	2000	7/23/08	JK
			Stock 2-Cal					V-8183			
			524/8260 MM-Cal					V-8180		8/28/08	
			Surr					V-8169		8/18/08	
V-8187	4/28/08	6/28/08	8260 Ketones-Cal	200ml	MeOH CU319	2ml	200	V-8184	2000	7/28/08	JK
V-8188	4/28/08	5/28/08	8260 Misc Cal	—	—	—	—				—
			Vinyl Acetate-Cal	19.7ml	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	JK
			2-Clve-Cal	91.0ml			500	V-8081	10,980		
			CS2-Cal	19.5ml			100	V-8082	10,240		
			Acrylonitrile-Cal	90.2ml			500	V-8083	11,080		
			Acrolein-Cal	96.2ml				V-8084	10,390		
			Gases-Cal	200ml			100	V-8167	2000	6/28/08	
V-8189	4/28/08	8/28/08	524/8260 MM-Ref	Cracked	MeOH	1.2ml	2000	V-7857	2000	5/22/08	JK
V-8190	4/28/08	7/28/08	Ketones-Ref	Cracked	MeOH	1.2ml	2000	V-7948	2000	2/2/09	JK
V-8191	4/28/08	7/23/08	Stock 1-Ref	—	—	—	—				—
			Methyl Iodide-Ref	340.4ml	MeOH CU319	2ml	2000	V-8065	11,750	7/23/08	JK
			t-1,4-DC-2B-Ref	389.5ml				V-8066	10,270		
			MTBE-Ref	342.2ml				V-8067	11,690		
			1-Chlorohexane-Ref	391.4ml				V-8068	10,220		

649 rep.xls Supervisor review _____ Page No. _____ 99

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V8221	5-30-08	9-30-08	8260 Surrogate Std.	Cracked	MeOH	1.2mL	2000	V8057	2000	2/2/10	MV
V8222	5-30-08	9-30-08	8260 Internal Std.	250µl	MeOH	10mL	50ppm	V8178	2000	8/25/08	MV
↓	↓	↓	8260 Surrogate Std.	250µl	lot-CU319	↓	50ppm	V8221	↓	9/30/08	↓
V8223	6/3/08	6/19/09	TCLP Extraction Sol'n	—	—	—	—				—
↓	↓	↓	IN NaOH	140ml	DI H2O	2L	pH 5.01	V-8213	IN	5/19/09	HD
			Acetic Acid, glacial	11.4ml	↓	↓	↓	V-8109		2/6/11	↓
V-8224	6/4/08	11/11/10	524/8260 MM-Cal	3x1.2ml	MeOH	3x1.2ml	2000	ECS Lot #524MMIB		11/11/10	JK
V-8225	6/4/08	3/09	Acrolein	1g	Neat	1g	Neat	Cole Source Lot #391-42A		2/11	JK
V-8226	6/12/08	10/12/08	8260-IS	Cracked	MeOH	1.2ml	2000	V-8128	2000	12/15/10	JK
V-8227	6/12/08	8/12/08	Gases-Cal	Cracked	MeOH	1.2ml	1000	V-8110	1000	9/10	JK
V-8228	6/12/08	8/12/08	8260-IS	50µl	MeOH/CU319	2ml	50	V-8226	2000	10/12/08	JK
V-8229	6/12/08	7/23/08	8260 Cal w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1-Cal	100ml	MeOH/CU319	2ml	100	V-8182	2000	7/23/08	JK
			Stock 2-Cal	↓	↓	↓	↓	V-8183	2000	↓	↓
			524/8260 MM-Cal					V-8180	2000	8/28/08	
↓	↓	↓	Surr	↓	↓	↓	↓	V-8221	2000	9/30/08	↓
V-8230	6/12/08	8/12/08	8260 Cal Ketones	200ml	MeOH/CU319	2ml	200	V-8202	2000	8/13/08	JK

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSV/Standard Prep

654

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8204	5/13/08	8/18/08	8260-Ketones Ref	Cracked	MeOH	1.2ml	2000	V-8130	2000	12/15/09	JK
V-8205	5/13/08	7/13/08	8260 Ketones-Ref	200ul	MeOH CU319	2ml	200	V-8204	2000	8/13/08	JK
V-8206	5/15/08	12/15/10	8260-IS	3x1.2ml	MeOH	3x1.2ml	2000	ECS Lot #VSSB6C	2000	12/15/10	JK
V-8207	5/15/08	2/2/10	8260-Surr	3x1.2ml	MeOH	3x1.2ml	2000	ECS Lot # VOSB6B	2000	2/2/10	JK
V-8208	5/15/08	9/30/10	8260-Gases-Ref	3x1.2ml	MeOH	3x1.2ml	1000	ECS Lot # VGMB19	1000	9/30/10	JK
V-8209	5/19/08	7/19/08	8260-IS	50µl	MeOH CU319	2ml	50	V-8178	2000	8/25/08	HD
V-8210	5/19/08	6/18/08	MISC-CAL	—	—	—	—				—
↓	↓	↓	Vinyl Acetate-Cal	19.7µl	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	HD
			2-CEVE-Cal	91.0µl	↓	↓	500	V-8081	10,950	↓	↓
			CS2-Cal	19.5µl			100	V-8082	10,240		
			Acrylonitrile-Cal	90.2µl			500	V-8083	11,080		
			Acrolein-Cal	96.2µl			↓	V-8084	10,390	↓	
↓	↓	↓	Gases-Cal	200µl	↓	↓	100	V-8167	1000	6/18/08	↓
V8211	5-19-08	7/19-08 5/19-08	8260 Internal Std	50µl	MeOH CU319	2.0mL	50ppm	V8138	2000	7/29/08	(1W)
↓	↓	5-19-08 ↓	8260 Surrogate Std	50µl	↓	↓	50ppm	V8169	2000	8/18/08	
V-8212	5/19/08	9/25/08	TCLP Extn Sol'n	—	—	—	—				—
↓	↓	↓	IN NaOH	2x140ml	DI H2O	2x2L	pH 4.94	V-7958	IN	9/25/08	HD
			Acetic Acid, glacial	2x11.4ml	↓	↓	↓	V-8109		2/6/11	↓
V-8213	5/19/08	5/19/09	IN NaOH	80g	DI H2O	2L	IN	Mallinckrodt	7708x26557		HD
V-8214	5/20/08	7/20/08	Ketones-Cal	200µl	MeOH CU319	2ml	200	V-8202	2000	8/13/08	HD
								HD 5/20/08			

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSV/Standard Prep

652

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8215	5/20/08	7/20/08	8260 Cal w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1-Cal	100µl	MeOH CU319	2ml	100	V-8182	2000	7/23/08	HD
			Stock 2-Cal					V-8183		↓	
			524/8260 MM-Cal					V-8180		8/28/08	
↓	↓	↓	Surr	↓	↓	↓	↓	V-8169	↓	8/18/08	↓
V-8216	5/20/08	6/20/08	Misc-Ref	—	—	—	—				—
↓	↓	↓	Vinyl Acetate-Ref	19.6µl	MeOH CU319	2ml	100	V-8085	10,200	7/23/08	HD
			2-CEVE-Ref	90.5µl	↓	↓	500	V-8086	11,020	↓	↓
			CS2-Ref	19.9µl			100	V-8087	10,070		
			Acrylonitrile-Ref	92.2µl			500	V-8088	10,840		
			Acrolein-Ref	92.0µl			↓	V-8089	10,870	↓	
↓	↓	↓	Gases-Ref	200µl	↓	↓	100	V-8193	1000	6/28/08	↓
V-8217	5/20/08	7/20/08	Ketones-Ref	200µl	MeOH CU319	2ml	200	V-8204	2000	8/13/08	HD
			Stock 1-Ref								
			Stock 2-Ref		HD 5/20/08						
			524/8260 MM-Ref								
V-8218	5/20/08	7/20/08	8260 Ref w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1-Ref	100µl	MeOH CU319	2ml	100	V-8191	2000	7/23/08	HD
			Stock 2-Ref					V-8192		↓	
			524/8260 MM-Ref	↓	↓	↓	↓	V-8189	↓	8/28/08	↓
V-8219	5/21/08	9/21/08	BFB Sol'n	Cracked	MeOH	1.2ml	2000	V-7854	2000	5/21/10	JK
V-8220	5/21/08	7/21/08	BFB	150ml	MeOH CU319	2ml	150	V-8219	2000	9/21/08	JK

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSV/Standard Prep

653

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8231	6/12/08	7/12/08	8260 MISC-Cal	—	—	—	—				—
↓	↓	↓	Vinyl Acetate	19.7ml	MeOH/CU319	2ml	100	V-8080	10,160	7/23/08	JK
			2-CEVE-Cal	91.0ml	↓	↓	500	V-8081	10,980	↓	↓
			CS2-Cal	19.5ml			100	V-8082	10,240		
			Acrylonitrile-Cal	90.2ml			500	V-8083	11,080		
			Acrolein-Cal	96.2ml			↓	V-8084	10,390	↓	
↓	↓	↓	Gases-Cal	200ml	↓	↓	100	V-8227	1000	8/12/08	↓
V-8232	6/12/08	8/12/08	Gases-Ref	Cracked	MeOH	1.2ml	1000	V-8208	1000	9/30/10	JK
V-8233	6/12/08	8/12/08	8260-IS/Surr	—	—	—	—				—
A,B,C,D			8260-IS	50ml	MeOH/CU319	2ml	50	V-8226	2000	10/12/08	JK
↓	↓	↓	8260-Surr	↓	↓	↓	↓	V-8221	2000	9/30/08	↓
V-8234	6/12/08	7/23/08	8260 Ref w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1-Ref	100ml	MeOH/CU319	2ml	100	V-8191	2000	7/23/08	JK
			Stock 2-Ref	↓				V-8192			
↓	↓	↓	524/8260 MM-Ref		↓	↓	↓	V-8189	↓	↓	↓
V-8235	6/12/08	8/12/08	8260 Ketones-Ref	200ml	MeOH/CU319	2ml	200	V-8204	2000	8/28/08	JK

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSV/Standard Prep

655

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8256	7/14/08	1/14/09	MTBE - REF	53.2220 - 53.6778	MeOH/CV200	10ml	10,020	V-8055	99.5%	7/10	JK
				0.1002							
V-8253	7/14/08	1/14/09	1-Chlorohexane - REF	51.6942 - 51.3796	MeOH/CV200	10ml	11,460	V-7231	98%	9/11	JK
				0.1146							
V-8254	7/14/08	11/14/08	Stock 1 - REF	—	—	—	—				—
			Methyl Iodide	407.7ul	MeOH/CV200	2ml	2000	V-8250	9,810	1/14/09	JK
			t-1,4-DC-28	389.9ul				V-8251	10,260		
			MTBE	399.2ul				V-8252	10,020		
			1-Chlorohexane	349.0ul				V-8253	11,460		
V-8255	7/14/08	1/14/09	Methyl Cyclohexane - REF	51.3782 - 51.8262	MeOH/CV200	10ml	10,200	V-7500	99.5%	2/10	JK
				0.1020							
V-8256	7/14/08	1/14/09	Methyl Acetate - REF	51.9459 - 51.9468	MeOH/CV200	10ml	9,910	V-7747	99.5%	7/11	JK
				0.0991							
V-8257	7/14/08	1/14/09	Cyclohexane - REF	50.3582 - 50.1514	MeOH/CV200	10ml	10,730	V-7563	99.5%	4/12	JK
				0.1073							
V-8258	7/14/08	1/14/09	1,1,2-TCTFE - REF	53.1472 - 53.6405	MeOH/CV200	10ml	10,710	V-7744	99.5%	11/21	JK
V-8259	7/14/08	11/14/08	Stock 2 - REF	0.1071	—	—	—				—
			Methyl Cyclohexane	392.2ul	MeOH/CV200	2ml	2000	V-8255	10,200	1/14/09	JK
			Methyl Acetate	403.6ul				V-8256	9,910		
			Cyclohexane	372.8ul				V-8257	10,730		
			1,1,2-TCTFE	373.5ul				V-8258	10,710		

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G:/Logbooks 2008/Organics/GCMSSVStandard Prep

8

658

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8236	6/12/08	7/12/08	8260 MISC - REF	—	—	—	—				—
			Vinyl Acetate - REF	19.6ul	MeOH/CV319	2ml	100	V-8085	19,200	7/13/08	JK
			2-CEVE - REF	90.5ul			500	V-8086	11,020		
			CS_2 - REF	19.9ul			100	V-8087	10,070		
			Acrylonitrile - REF	92.2ul			500	V-8088	19,840		
			Acrolein - REF	92.0ul				V-8089	19,870		
			Gases - REF	200ul			100	V-8232	1000	8/13/08	
V8237	6-13-08	~~10-13-08~~ 9-30-08	8260 Internal Std) MSI	570ul	MeOH/	25mL	45.5	V8226	2000	10-12-08	MV
			8260 Surrogate Std.) AgTech	570ul	CV319		45.5	V8221	2000	9-30-08	
V-8238	7/8/08	10/13/08	IS/SURR For MS2 (STD#1)	—	—	—	—				HD
			8260-IS	580ul	MeOH CV200	20ml	58	V-8226	2000	10/13/08	
			8260-SURR	580ul				V-8238	2000	11/8/08	
V-8239	7/8/08	11/8/08	8260 Surrogate	cracked	MeOH	1.2ml	2000	V-8207	2000	2/2/2010	HD
V-8240	7/14/08	1/14/09	Methyl Iodide - CAL	49.9015 - 49.7128	MeOH CV200	10ml	18,370	V-8056	99.5%	7/10	JK
				0.1837							
V-8241	7/14/08	1/14/09	t-1,4-DC-28 - CAL	48.5564 - 48.9558	MeOH CV200	10ml	10,060	V-7679	99.1%	5/09	JK
				0.1006							
V-8242	7/14/08	1/14/09	MTBE - CAL	51.1549 - 51.0516	MeOH CV200	10ml	10,330	V-8055	99.5%	7/10	JK
				0.1033							
V-8243	7/14/08	1/14/09	1-Chlorohexane - CAL	49.9215 - 49.8152	MeOH CV200	10ml	10,730	V-7231	98%	9/11	JK
				0.1073							

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G:/Logbooks 2008/Organics/GCMSSVStanders Prep

9

656

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8260	7/14/08	1/14/09	Vinyl Acetate - CAL	51.7326 - 51.6323	MeOH/CV200	10ml	11,030	V-6564	99.5%	9/08	JK
				0.1103							
V-8261	7/14/08	1/14/09	2-CEVE - CAL	51.8635 - 51.4551	MeOH/CV200	10ml	10,840	V-7858	98.2%	9/10	JK
				0.1084							
V-8262	7/14/08	1/14/09	CS_2 - CAL	51.1350 - 51.0128	MeOH/CV200	10ml	12,220	V-7299	99.5%	10/08	JK
				0.1222							
V-8263	7/14/08	1/14/09	Acrylonitrile - CAL	52.3229 - 52.2264	MeOH/CV200	10ml	~~10,030~~ 10,030	V-7746	99.5%	10/10	JK
				0.1003							
V-8264	7/14/08	1/14/09	Acrolein - CAL	51.8872 - 51.3881	MeOH/CV200	10ml	9,910	V-8225	96.1%	3/09	JK
				0.0991							
V-8265	7/14/08	1/14/09	Vinyl Acetate - REF	50.7453 - 50.6694	MeOH/CV200	10ml	9,890	V-6564	99.5%	9/08	JK
				0.0989							
V-8266	7/14/08	1/14/09	2-CEVE - REF	51.9496 - 51.3419	MeOH/CV200	10ml	10,270	V-7858	98.2%	9/10	JK
				0.1027							
V-8267	7/14/08	1/14/09	CS_2 - REF	51.5040 - 51.7865	MeOH/CV200	10ml	11,750	V-7299	99.5%	10/08	JK
				0.1175							
V-8268	7/14/08	1/14/09	Acrylonitrile - REF	51.9620 - 51.9627	MeOH/CV200	10ml	10,330	V-7746	99.5%	10/10	JK
				0.1033							
V-8269	7/14/08	1/14/09	Acrolein - REF	51.7319 - 51.6232	MeOH/CV200	10ml	10,860	V-8225	96.1%	3/09	JK
				0.1086							
V-8270	7/14/08	11/14/08	8260-IS	Cracked	MeOH	1.2ml	2000	V-8206	2000	12/13/10	JK
V-8271	7/14/08	11/14/08	8260-SURR	Cracked	MeOH	1.2ml	2000	V-8207	2000	2/2/10	JK

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G:/Logbooks 2008/Organics/GCMSSVStandard Prep

10

659

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8244	7/14/08	11/14/08	Stock 1 - CAL	—	—	—	—				—
			Methyl Iodide	217.7ul	MeOH/CV200	2ml	2000	V-8240	18,370	1/14/09	JK
			t-1,4-DC-28	397.6ul				V-8241	10,060		
			MTBE	387.2ul				V-8242	10,330		
			1-Chlorohexane	372.8ul				V-8243	10,730		
V-8245	7/14/08	1/14/09	Methyl Cyclohexane - CAL	50.3611 - 50.3586	MeOH/CV200	10ml	10,150	V-7300	99.5%	2/10	JK
				0.1015							
V-8246	7/14/08	1/14/09	Methyl Acetate - CAL	50.6380 - 50.5334	MeOH/CV200	10ml	10,460	V-7747	99.5%	7/11	JK
				0.1046							
V-8247	7/14/08	1/14/09	Cyclohexane - CAL	49.6384 - 49.5244	MeOH/CV200	10ml	10,400	V-7563	99.5%	4/12	JK
				0.1040							
V-8248	7/14/08	1/14/09	1,1,2-TCTFE - CAL	51.3326 - 51.1814	MeOH/CV200	10ml	11,120	V-7744	99.5%	11/12	JK
				0.1112							
V-8249	7/14/08	11/14/08	Stock 2 - CAL	—	—	—	—				—
			Methyl Cyclohexane	394.1ul	MeOH/CV200	2ml	2000	V-8245	10,150	1/14/09	JK
			Methyl Acetate	382.4ul				V-8246	10,460		
			Cyclohexane	384.6ul				V-8247	10,400		
			1,1,2-TCTFE	359.7ul				V-8248	11,120		
V-8250	7/14/08	1/14/09	Methyl Iodide - REF	50.7530 - 50.6449	MeOH/CV200	10ml	9,810	V-8056	99.5%	7/10	JK
				0.0981							
V-8251	7/14/08	1/14/09	t-1,4-DC-28 - REF	51.6831 - 51.5805	MeOH/CV200	10ml	10,260	V-7679	99.1%	5/09	JK
				0.1026							

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G:/Logbooks 2008/Organics/GCMSSVStandard Prep

7

657

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V8287	8-13-08	12-13-08	8260 IS/Surr Solatek MS3	—	—	—	—	—	—	—	(illegible)
↓	↓	↓	8260 Internal Std.	435 µl	MeOH	25 mL	58.8 ppm	V8270	2000 ppm	11-14-08	
			8260 Surrogate Std.	435 µl	/CV200	↓	58.8 ppm	V8271	2000 ppm	11-14-08	↓
V-8288	8/18/08	10/18/08	8260 - IS	50 ul	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
V-8289	8/18/08	10/18/08	8260 Cal w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1 - Cal	100 ul	MeOH/CV200	2 ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal	↓	↓	↓	↓	V-8249	↓	↓	↓
			524/8260 MM - Cal					V-8272			
			8260 Surr					V-8271			
V-8290	8/18/08	10/14/08	Ketones - Cal	200 ul	MeOH/CV200	2 ml	200	V-8273	2000	10/14/08	JK
V-8291	8/18/08	9/14/08	8260 MSSC - Cal	—	—	—	—				—
↓	↓	↓	Vinyl Acetate - Cal	18.1 ul	MeOH/CV200	2 ml	100	V-8260	11,030	1/14/09	JK
			2-CEVE - Cal	92.2 ul	↓	↓	500	V-8261	10,840	↓	↓
			CS2 - Cal	16.4 ul			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7 ul			500	V-8263	10,030		
			Acrolein - Cal	100.9 ul			↓	V-8264	9,910	↓	
↓	↓	↓	Gases - Cal	200 ul	↓	↓	100	V-8274	1000	9/14/08	↓
V-8292 A,B,C	8/18/08	10/18/08	8260 - IS/Surr	—	—	—	—				—
↓	↓	↓	8260 - IS	50 ul	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
			8260 - Surr	50 ul	↓	↓	↓	V-8271	2000	↓	↓
											JK
											8/14/09

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8272	7/14/08	11/14/08	524/8260 MM - Cal	Checked	MeOH	1.2 ml	2000	V-7947	2000	5/22/09	JK
V-8273	7/14/08	10/14/08	Ketones - Cal	Checked	MeOH	1.2 ml	2000	V-7916	2000	2/6/09	JK
V-8274	7/14/08	9/14/08	Gases - Cal	Checked	MeOH	1.2 ml	1000	V-8157	1000	9/10	JK
V-8275	7/14/08	9/14/08	8260 - IS	50 ul	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
V-8276	7/14/08	9/14/08	8260 Cal w/o Ketones	—	—	—	—				—
			Stock 1 - Cal	100 ul	MeOH/CV200	2 ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal					V-8249			
			524/8260 MM - Cal					V-8272			
↓	↓	↓	Surr - Cal	↓	↓	↓	↓	V-8271	↓	↓	↓
V-8277	7/14/08	9/14/08	Ketones - Cal	200 ul	MeOH/CV200	2 ml	200	V-8273	2000	10/14/08	JK
V-8278	7/14/08	8/14/08	8260 MSSC - Cal	—	—	—	—				—
			Vinyl Acetate - Cal	18.1 ul	MeOH/CV200	2 ml	100	V-8260	11,030	1/14/09	JK
			2-CEVE - Cal	92.2 ul			500	V-8261	10,840		
			CS2 - Cal	16.4 ul			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7 ul			500	V-8263	10,030		
			Acrolein - Cal	100.9 ul			↓	V-8264	9,910	↓	
↓	↓	↓	Gases - Cal	200 ul	↓	↓	100	V-8274	1000	9/14/08	↓
V-8279	7/15/08	11/15/08	524/8260 MM - Ref	Checked	MeOH	1.2 ml	2000	V-8005	2000	5/22/09	JK
V-8280	7/15/08	10/15/08	Ketones - Ref	Checked	MeOH	1.2 ml	2000	V-8130	2000	12/15/09	JK
V-8281	7/15/08	9/15/08	Gases - Ref	Checked	MeOH	1.2 ml	1000	V-8208	1000	9/30/10	JK

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8293	8/18/08	10/18/08	8260 Ref w/o Ketones	—	—	—	—	—	—	—	—
↓	↓	↓	Stock 1 - Ref	100 ul	MeOH/CV200	2 ml	100 mg/L	V-8254	2000	11/14/08	JK
			Stock 2 - Ref	↓	↓	↓	↓	V-8259	↓	↓	↓
↓	↓	↓	524/8260 MM - Ref					V-8279		11/15/08	
V-8294	8/18/08	10/15/08	8260 Ketones - Ref	200 ul	MeOH/CV200	2 ml	200	V-8280	2000	10/15/08	JK
V-8295	8/18/08	9/15/08	8260 MSSC Ref	—	—	—	—				—
↓	↓	↓	Vinyl Acetate - Ref	20.2 ul	MeOH/CV200	2 ml	100	V-8265	9,890	1/14/09	JK
			2-CEVE - Ref	97.4 ul			500	V-8266	10,270		
			CS2 - Ref	17.2 ul			100	V-8267	11,750		
			Acrylonitrile - Ref	96.8 ul			500	V-8268	10,330		
			Acrolein - Ref	92.1 ul			↓	V-8269	10,860	↓	
↓	↓	↓	Gases - Ref	200 ul	↓	↓	100	V-8281	1000	9/15/08	↓

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8281 A,B,C,D	7/15/08	9/15/08	8260 - IS/Surr	—	—	—	—	—	—	—	—
↓	↓	↓	8260 - IS	50 ul	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
			8260 - Surr	50 ul	↓	↓	↓	V-8271	2000	↓	↓
V-8282	7/15/08	9/15/08	8260 Ref w/o Ketones	—	—	—	—				—
			Stock 1 - Ref	100 ul	MeOH/CV200	2 ml	100	V-8254	2000	11/14/08	JK
			Stock 2 - Ref					V-8259		↓	
↓	↓	↓	524/8260 MM - Ref	↓	↓	↓	↓	V-8279	↓	11/15/08	↓
V-8283	7/15/08	9/15/08	8260 Ketones - Ref	200 ul	MeOH/CV200	2 ml	200	V-8280	2000	10/15/08	JK
V-8284	7/15/08	8/15/08	8260 MSSC - Ref	—	—	—	—				—
			Vinyl Acetate - Ref	20.2 ul	MeOH/CV200	2 ml	100	V-8265	9,890	1/14/09	JK
			2-CEVE - Ref	97.4 ul			500	V-8266	10,270		
			CS2 - Ref	17.2 ul			100	V-8267	11,750		
			Acrylonitrile - Ref	96.8 ul			500	V-8268	10,330		
			Acrolein - Ref	92.1 ul			↓	V-8269	10,860	↓	
↓	↓	↓	Gases - Ref	200 ul	↓	↓	100	V-8281	1000	9/15/08	↓
V-8285	7/15/08	5/14/09	TCLP Extraction Sol'n	—	—	—	—				JJ
			1N NaOH	140 ml	DI H_2O	2 L	pH 4.96	V-8213	1N	5/19/09	
↓	↓	↓	Acetic Acid, Glacial	11.4 ml	↓	↓	↓	V-8109		2/6/11	↓
V-8286	8/4/08	5/14/09	TCLP Extraction Sol'n	—	—	—	—				JJ
			1N NaOH	140 ml	DI H_2O	2 L	pH 4.99	V-8213	1N	5/19/09	
			Acetic Acid, Glacial	11.4 ml	↓	↓	↓	V-8109		2/6/11	↓

5-14-08

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GC/MS Semivolatile Organics Data

664

GC/MS Semivolatile Combined MDL Study Summary

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/mL)	MDL (ug/Kg)	VER (ug/Kg)
8270C	3550B	SOIL	Hexachlorobutadiene	02/20/06	0.22	0.22	0.21	0.20	0.26	0.22	0.28	0.50	0.029	0.09	3.02	
8270C	3550B	SOIL	4-Chloro-3-methylphenol	02/24/06	0.56	0.63	0.57	0.58	0.58	0.55	0.59	0.80	0.026	0.08	2.71	
8270C	3550B	SOIL	2-Methylnaphthalene	02/25/06	0.45	0.46	0.49	0.46	0.47	0.45	0.47	0.50	0.015	0.05	1.60	
8270C	3550B	SOIL	Hexachlorocyclopentadiene	02/20/06	2.50	2.29	2.28	1.88	1.73	2.72	2.04	3.00	0.347	1.09	36.38	166.70
8270C	3550B	SOIL	2,4,6-Trichlorophenol	02/24/06	0.50	0.53	0.51	0.51	0.44	0.54	0.62	0.80	0.054	0.17	5.66	
8270C	3550B	SOIL	2,4,5-Trichlorophenol	02/25/06	4.14	4.10	4.29	4.40	4.12	4.22	4.86	7.80	0.200	0.63	20.95	
8270C	3550B	SOIL	2-Fluorobiphenyl	02/25/06	0.66	0.61	0.66	0.67	0.66	0.64	0.63	0.80	0.021	0.07	2.24	
8270C	3550B	SOIL	2-Chloronaphthalene	02/20/06	0.31	0.33	0.34	0.32	0.31	0.41	0.32	0.50	0.036	0.11	3.67	
8270C	3550B	SOIL	2-Nitroaniline	02/25/06	0.52	0.52	0.55	0.53	0.66	0.48	0.54	1.10	0.058	0.18	5.89	
8270C	3550B	SOIL	Dimethyl phthalate	02/20/06	0.32	0.30	0.31	0.31	0.29	0.38	0.28	0.50	0.033	0.10	3.41	
8270C	3550B	SOIL	2,6-Dinitrotoluene	02/20/06	0.19	0.16	0.05	0.12	0.11	0.21	0.15	0.50	0.054	0.17	5.62	
8270C	3550B	SOIL	Acenaphthylene	02/20/06	0.13	0.15	0.10	0.12	0.10	0.08	0.06	0.50	0.038	0.12	4.00	
8270C	3550B	SOIL	3-Nitroaniline	02/20/06	0.75	0.71	0.61	0.53	0.51	0.50	0.52	1.50	0.106	0.33	11.15	40.00
8270C	3550B	SOIL	Acenaphthene	02/25/06	0.58	0.60	0.61	0.66	0.61	0.56	0.62	0.80	0.032	0.10	3.31	
8270C	3550B	SOIL	2,4-Dinitrophenol	02/20/06	2.51	2.70	2.60	2.85	2.48	2.28	2.08	9.00	0.257	0.81	26.98	333.00
8270C	3550B	SOIL	4-Nitrophenol	02/20/06	0.41	0.38	0.37	0.31	0.42	0.66	0.26	1.40	0.128	0.40	13.41	66.60
8270C	3550B	SOIL	2,4-Dinitrotoluene	02/20/06	0.23	0.18	0.20	0.13	0.10	0.21	0.18	0.50	0.046	0.14	4.83	
8270C	3550B	SOIL	Dibenzofuran	02/20/06	0.33	0.34	0.33	0.31	0.28	0.42	0.36	0.50	0.044	0.14	4.58	
8270C	3550B	SOIL	Diethyl phthalate	02/20/06	0.34	0.34	0.36	0.31	0.27	0.35	0.29	0.50	0.034	0.11	3.51	
8270C	3550B	SOIL	4-Chlorophenyl phenyl ether	02/20/06	0.31	0.29	0.30	0.27	0.26	0.38	0.30	0.50	0.039	0.12	4.09	
8270C	3550B	SOIL	Fluorene	02/20/06	0.31	0.27	0.30	0.27	0.23	0.33	0.26	0.50	0.033	0.10	3.41	
8270C	3550B	SOIL	4-Nitroaniline	02/25/06	0.38	0.38	0.41	0.44	0.40	0.40	0.37	1.10	0.024	0.07	2.47	40.00
8270C	3550B	SOIL	1,2-Diphenylhydrazine	02/25/06	0.40	0.44	0.46	0.47	0.49	0.49	0.50	0.80	0.035	0.11	3.67	
8270C	3550B	SOIL	2,4,6-Tribromophenol	02/25/06	0.08	0.29	0.24	0.00	0.08	0.18	0.12	0.80	0.101	0.32	10.59	
8270C	3550B	SOIL	4,6-Dinitro-2-methylphenol	02/20/06	1.16	1.23	1.23	1.08	1.12	1.40	1.08	5.00	0.113	0.35	11.83	167.00
8270C	3550B	SOIL	n-Nitrosodiphenylamine	02/24/06	0.63	0.68	0.68	0.68	0.70	0.67	0.67	0.80	0.021	0.07	2.24	
8270C	3550B	SOIL	4-Bromophenyl phenyl ether	02/25/06	0.57	0.52	0.61	0.52	0.64	0.51	0.56	0.80	0.049	0.16	5.18	
8270C	3550B	SOIL	Hexachlorobenzene	02/25/06	0.57	0.50	0.56	0.62	0.52	0.49	0.57	0.80	0.051	0.16	5.39	
8270C	3550B	SOIL	Pentachlorophenol	02/24/06	2.90	2.83	2.65	2.81	2.48	2.46	1.63	6.00	0.921	2.90	96.51	333.00
8270C	3550B	SOIL	Phenanthrene	02/20/06	0.49	0.50	0.51	0.50	0.50	0.49	0.53	0.50	0.014	0.04	1.45	
8270C	3550B	SOIL	Anthracene	02/24/06	0.68	0.68	0.69	0.70	0.73	0.72	0.73	0.80	0.022	0.07	2.33	
8270C	3550B	SOIL	Carbazole	02/25/06	0.54	0.58	0.56	0.58	0.60	0.55	0.58	0.80	0.021	0.06	2.16	
8270C	3550B	SOIL	Di-n-butyl phthalate	02/24/06	2.66	2.34	0.73	1.63	0.65	0.75	2.05	0.80	0.807	2.54	84.59	

GC/MS Semivolatile Combined MDL Study Summary

Instrument ID(s): MS5,MS6 Column ID(s): DB-5MS, 0.25 mm x 30m, 0.5 df MDL Sample Size = 30 g (EV = 1 mL)

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/mL)	MDL (ug/Kg)	MDL VER (ug/Kg)
8270C	3550B	SOIL	1,4-Dioxane	02/20/06	1.61	1.76	1.77	1.73	1.68	1.86	1.77	2.00	0.063	0.20	6.55	26.70
8270C	3550B	SOIL	N-nitrosodimethylamine	02/24/06	0.25	0.25	0.16	0.34	0.33	0.29	0.34	0.80	0.066	0.21	6.90	40.00
8270C	3550B	SOIL	Pyridine	02/25/06	0.64	0.45	0.44	0.38	0.42	0.40	0.40	0.80	0.085	0.28	9.27	40.00
8270C	3550B	SOIL	2-Fluorophenol	02/25/06	0.58	0.60	0.64	0.69	0.60	0.64	0.67	0.80	0.040	0.13	4.21	
8270C	3550B	SOIL	Phenol-d5	02/25/06	0.57	0.55	0.62	0.61	0.63	0.61	0.65	0.80	0.035	0.11	3.62	
8270C	3550B	SOIL	Phenol	02/20/06	0.32	0.31	0.36	0.27	0.31	0.30	0.28	0.50	0.029	0.09	3.07	
8270C	3550B	SOIL	Aniline	02/24/06	0.42	0.39	0.34	0.27	0.30	0.35	0.31	0.80	0.052	0.16	5.48	40.00
8270C	3550B	SOIL	bis(2-Chloroethyl)ether	02/25/06	0.65	0.59	0.66	0.66	0.62	0.73	0.59	0.80	0.049	0.15	5.12	
8270C	3550B	SOIL	2-Chlorophenol-d4	02/25/06	0.53	0.53	0.59	0.58	0.60	0.58	0.60	0.80	0.031	0.10	3.20	
8270C	3550B	SOIL	2-Chlorophenol	02/25/06	0.50	0.51	0.59	0.51	0.62	0.59	0.58	0.80	0.049	0.15	5.12	
8270C	3550B	SOIL	1,3-Dichlorobenzene	02/25/06	0.60	0.57	0.63	0.59	0.66	0.64	0.65	0.80	0.034	0.11	3.53	
8270C	3550B	SOIL	1,4-Dichlorobenzene	02/25/06	0.62	0.62	0.57	0.72	0.65	0.66	0.62	0.80	0.046	0.15	4.87	
8270C	3550B	SOIL	Benzyl alcohol	02/24/06	0.31	0.37	0.37	0.42	0.41	0.44	0.46	0.80	0.051	0.16	5.33	
8270C	3550B	SOIL	1,2-Dichlorobenzene-d4	02/25/06	0.62	0.63	0.63	0.62	0.64	0.61	0.62	0.80	0.010	0.03	1.02	
8270C	3550B	SOIL	1,2-Dichlorobenzene	02/24/06	0.68	0.72	0.68	0.71	0.71	0.71	0.76	0.80	0.027	0.09	2.84	
8270C	3550B	SOIL	2-Methylphenol	02/20/06	0.51	0.46	0.45	0.43	0.46	0.42	0.40	0.50	0.035	0.11	3.71	
8270C	3550B	SOIL	2,2'-oxybis(1-chloropropane)	02/25/06	0.65	0.60	0.69	0.80	0.72	0.77	0.77	0.80	0.054	0.17	5.70	
8270C	3550B	SOIL	bis(2-Chloroisopropyl)ether	02/25/06	0.65	0.69	0.69	0.80	0.72	0.77	0.77	0.80	0.054	0.17	5.70	
8270C	3550B	SOIL	4-Methylphenol	02/24/06	0.64	0.58	0.63	0.62	0.64	0.59	0.58	0.80	0.027	0.09	2.86	
8270C	3550B	SOIL	(3+4)-Methylphenol	02/24/06	0.64	0.58	0.63	0.62	0.64	0.59	0.58	0.80	0.027	0.09	2.86	
8270C	3550B	SOIL	N-Nitroso-di-n-propylamine	02/25/06	0.47	0.50	0.55	0.55	0.54	0.54	0.58	0.80	0.036	0.11	3.81	
8270C	3550B	SOIL	Hexachloroethane	02/25/06	0.46	0.52	0.56	0.57	0.54	0.58	0.57	0.80	0.049	0.15	5.16	40.00
8270C	3550B	SOIL	Nitrobenzene-d5	02/25/06	0.56	0.62	0.54	0.57	0.55	0.56	0.60	0.80	0.029	0.09	2.99	
8270C	3550B	SOIL	Nitrobenzene	02/25/06	0.53	0.53	0.61	0.59	0.54	0.54	0.59	0.80	0.034	0.11	3.55	
8270C	3550B	SOIL	Isophorone	02/25/06	0.45	0.45	0.50	0.48	0.48	0.52	0.47	0.80	0.026	0.08	2.76	
8270C	3550B	SOIL	2-Nitrophenol	02/25/06	0.35	0.32	0.40	0.38	0.33	0.41	0.38	0.80	0.035	0.11	3.61	
8270C	3550B	SOIL	2,4-Dimethylphenol	02/20/06	0.43	0.39	0.37	0.29	0.32	0.24	0.22	0.50	0.078	0.25	8.20	66.70
8270C	3550B	SOIL	Benzoic acid	02/20/06	30.05	30.00	21.93	25.47	25.40	23.45	21.21	15.00	3.563	11.20	373.30	
8270C	3550B	SOIL	bis(2-Chloroethoxy)methane	02/25/06	0.58	0.56	0.62	0.59	0.56	0.63	0.58	0.80	0.029	0.09	3.08	
8270C	3550B	SOIL	2,4-Dichlorophenol	02/25/06	0.41	0.38	0.48	0.42	0.41	0.42	0.49	0.80	0.036	0.11	3.81	
8270C	3550B	SOIL	1,2,4-Trichlorobenzene	02/20/06	0.45	0.48	0.47	0.51	0.49	0.48	0.46	0.50	0.020	0.06	2.07	
8270C	3550B	SOIL	Naphthalene	02/25/06	0.61	0.63	0.63	0.64	0.68	0.62	0.66	0.80	0.024	0.08	2.53	
8270C	3550B	SOIL	4-Chloroaniline	02/25/06	0.29	0.33	0.42	0.36	0.42	0.43	0.43	0.80	0.056	0.18	5.82	40.00

GC/MS Semivolatile Combined MDL Study Summary

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/mL)	MDL (ug/Kg)	VER (ug/Kg)
8270C	3550B	SOIL	Fluoranthene	02/24/06	0.67	0.67	0.70	0.72	0.70	0.71	0.70	0.80	0.019	0.06	1.99	
8270C	3550B	SOIL	Benzidine	02/24/06	61.45	67.83	53.29	51.09	46.97	40.40	50.79	50.00	13.971	43.91	1463.70	
8270C	3550B	SOIL	Pyrene	02/20/06	0.25	0.29	0.27	0.28	0.31	0.25	0.28	0.50	0.021	0.07	2.25	
8270C	3550B	SOIL	Terphenyl-d14	02/25/06	0.66	0.66	0.63	0.71	0.66	0.65	0.67	0.80	0.024	0.08	2.55	
8270C	3550B	SOIL	Butyl benzyl phthalate	02/20/06	0.12	0.12	0.11	0.13	0.14	0.09	0.10	0.50	0.017	0.05	1.80	
8270C	3550B	SOIL	3,3'-Dichlorobenzidine	02/24/06	0.60	0.39	0.30	0.23	0.26	0.33	0.32	2.00	0.154	0.48	16.16	40.00
8270C	3550B	SOIL	Benzo[a]anthracene	02/24/06	0.75	0.75	0.79	0.80	0.81	0.84	0.81	0.80	0.033	0.10	3.46	
8270C	3550B	SOIL	bis(2-Ethylhexyl)phthalate	02/20/06	0.34	0.52	0.27	0.32	0.19	0.23	0.56	0.50	0.142	0.45	14.84	
8270C	3550B	SOIL	Chrysene	02/20/06	0.27	0.33	0.34	0.30	0.34	0.34	0.31	0.50	0.027	0.08	2.80	
8270C	3550B	SOIL	Di-n-octyl phthalate	02/20/06	0.41	0.36	0.38	0.37	0.36	0.36	0.36	0.50	0.019	0.06	1.95	
8270C	3550B	SOIL	Indeno[1,2,3-cd]pyrene	02/25/06	0.43	0.42	0.46	0.49	0.42	0.43	0.44	0.80	0.025	0.08	2.67	
8270C	3550B	SOIL	Benzo[b]fluoranthene	02/20/06	0.39	0.37	0.44	0.32	0.27	0.60	0.31	0.50	0.110	0.35	11.52	
8270C	3550B	SOIL	Benzo[k]fluoranthene	02/20/06	0.34	0.38	0.45	0.31	0.26	0.58	0.34	0.50	0.106	0.33	11.13	
8270C	3550B	SOIL	Benzo[a]pyrene	02/25/06	0.47	0.47	0.52	0.47	0.46	0.47	0.47	0.80	0.020	0.06	2.08	
8270C	3550B	SOIL	Dibenz[a,h]anthracene	02/24/06	0.50	0.55	0.57	0.56	0.57	0.57	0.55	0.80	0.025	0.08	2.62	
8270C	3550B	SOIL	Benzo[g,h,i]perylene	02/24/06	0.56	0.56	0.57	0.62	0.61	0.62	0.58	0.80	0.038	0.12	3.97	
8270C	3550B	SOIL	Benzaldehyde	02/25/06	0.83	0.92	0.93	0.80	-0.96	0.87	0.96	1.40	0.048	0.15	4.99	
8270C	3550B	SOIL	Acetophenone	02/25/06	0.99	1.02	1.05	1.10	1.18	1.09	1.08	1.40	0.062	0.19	6.45	40.00
8270C	3550B	SOIL	N-Nitrosopyrrolidine	02/24/06	0.86	0.64	0.70	0.74	0.77	0.79	0.78	1.40	0.069	0.22	7.27	*
8270C	3550B	SOIL	Caprolactam	02/25/06	0.78	0.86	0.94	0.95	0.93	1.09	1.16	1.40	0.133	0.42	13.93	40.00
8270C	3550B	SOIL	1,1'-Biphenyl	02/25/06	1.06	1.07	1.14	1.16	1.16	1.13	1.10	1.40	0.041	0.13	4.31	
8270C	3550B	SOIL	1,2,4,5-Tetrachlorobenzene	02/25/06	1.18	1.05	1.19	1.19	1.19	1.23	1.20	1.40	0.058	0.18	6.04	*
8270C	3550B	SOIL	2-Naphthylamine	02/24/06	0.89	0.63	0.55	0.57	0.51	0.58	0.57	1.40	0.127	0.40	13.28	*
8270C	3550B	SOIL	Atrazine	02/24/06	0.97	1.14	1.04	0.96	1.08	1.06	1.07	1.40	0.057	0.18	5.99	40.00

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984.

MDL=(S Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

The GC/MS instrument minimum threshold quantitation level is set to 0.5 (or 1.0 ug/mL) ug/mL of extract (dependant on the initial calibration low standard concentration).

MDL verified (MS5/MS6): 2-24-08 (*not verified)

4-8-08

QC Summary

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMS	SampType: MS	TestCode: 8270S_OLM4	Units: µg/Kg-dry	Prep Date: 8/15/2008	RunNo: 14571		
Client ID: UST-East	Batch ID: 7957	Method: SW8270C	(SW3550B)	Analysis Date: 8/21/2008	SeqNo: 381967		
Instrument: MS06_40	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1990	390	1970	0	101	30	130				
2,4,5-Trichlorophenol	1830	2000	1970	0	93	34	130				J
2,4,6-Trichlorophenol	1790	390	1970	0	91	33	130				
2,4-Dichlorophenol	1890	390	1970	0	96	39	130				
2,4-Dimethylphenol	1880	390	1970	0	95	22	130				
2,4-Dinitrophenol	619	2000	1970	0	31	16	130				J
2,4-Dinitrotoluene	1930	390	1970	0	98	40	130				
2,6-Dinitrotoluene	1890	390	1970	0	96	36	130				
2-Chloronaphthalene	1860	390	1970	0	94	46	130				
2-Chlorophenol	1770	390	1970	0	90	39	130				
2-Methylnaphthalene	1890	390	1970	0	96	43	130				
2-Methylphenol	1840	390	1970	0	93	43	130				
2-Nitroaniline	1930	2000	1970	0	98	42	130				J
2-Nitrophenol	1840	390	1970	0	93	34	130				
3,3'-Dichlorobenzidine	2100	780	1970	0	106	10	130				
3-Nitroaniline	1540	2000	1970	0	78	11	130				J
4,6-Dinitro-2-methylphenol	1160	2000	1970	0	59	13	130				J
4-Bromophenyl phenyl ether	1910	390	1970	0	97	43	130				
4-Chloro-3-methylphenol	1900	390	1970	0	96	38	130				
4-Chloroaniline	1120	390	1970	0	57	10	130				
4-Chlorophenyl phenyl ether	1890	390	1970	0	96	45	130				
4-Methylphenol	1830	390	1970	0	93	42	130				
4-Nitroaniline	1970	2000	1970	0	100	23	130				J
4-Nitrophenol	1800	2000	1970	0	92	10	144				J
Acenaphthene	2150	390	1970	0	109	43	130				
Acenaphthylene	2100	390	1970	0	106	46	130				
Acetophenone	1650	390	1970	0	84	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMS	SampType: MS	TestCode: 8270S_OLM4	Units: µg/Kg-dry	Prep Date: 8/15/2008	RunNo: 14571		
Client ID: UST-East	Batch ID: 7957	Method: SW8270C	(SW3550B)	Analysis Date: 8/21/2008	SeqNo: 381967		
Instrument: MS06_40	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2270	390	1970	0	115	37	130				
Atrazine	1770	390	1970	0	90	30	130				
Benzaldehyde	1730	390	1970	0	88	30	130				
Benzo[a]anthracene	2240	390	1970	0	114	40	130				
Benzo[a]pyrene	2170	390	1970	0	110	44	130				
Benzo[b]fluoranthene	2190	390	1970	0	111	29	154				
Benzo[g,h,i]perylene	2200	390	1970	0	112	10	130				
Benzo[k]fluoranthene	2280	390	1970	0	116	35	143				
bis(2-Chloroethoxy)methane	1990	390	1970	0	101	43	130				
bis(2-chloroethyl)ether	1830	390	1970	0	93	41	130				
bis(2-chloroisopropyl)ether	1840	390	1970	0	93	34	130				
bis(2-Ethylhexyl)phthalate	2190	390	1970	0	111	42	154				
Butyl benzyl phthalate	2140	390	1970	0	109	34	160				
Caprolactam	2340	390	1970	0	119	30	130				
Carbazole	2110	390	1970	0	107	42	130				
Chrysene	2280	390	1970	0	115	43	130				
Di-n-butyl phthalate	2180	390	1970	0	111	50	133				
Di-n-octyl phthalate	2170	390	1970	0	110	48	146				
Dibenz[a,h]anthracene	2320	390	1970	0	118	16	135				
Dibenzofuran	1880	390	1970	0	95	45	130				
Diethyl phthalate	1990	390	1970	0	101	48	130				
Dimethyl phthalate	1920	390	1970	0	97	46	130				
Fluoranthene	2280	390	1970	0	116	45	130				
Fluorene	2190	390	1970	0	111	45	130				
Hexachlorobenzene	2010	390	1970	0	102	50	130				
Hexachlorobutadiene	1710	390	1970	0	87	37	130				
Hexachlorocyclopentadiene	1270	390	1970	0	64	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

7D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____
Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0808MSD
Level: (low/med) LOW

EPA SAMPLE NO.	LSL ID	S1 (2FP) 1 #	S2 (NBZ) 1 #	S3 (FBP) 1 #	S4 (PHL) 1 #	S5 (TBP) 1 #	S6 (TPH) 1 #	TOT OUT
01SB-2-East	0808068-003B	82	80	87	83	93	95	0
02UST-Bot-1	0808076-001B	89	86	93	92	98	103	0
03UST-West	0808076-002B	94	82	89	89	91	94	0
04MB-7957	MB-7957	89	87	95	94	82	107	0
05LCS-7957	LCS-7957	93	90	98	96	106	109	0
06MSB-7957	MSB-7957	91	89	95	94	107	110	0
07SB-2-Bot-1	0808068-001B	79	81	82	83	104	104	0
08SB-2-South	0808068-002B	82	80	85	86	91	94	0
09SB-2-North	0808068-004B	85	82	89	89	90	101	0
10SB-2-West	0808068-005B	83	81	87	86	90	103	0
11SB-2-Bot-2	0808068-006B	92	80	86	86	93	99	0
12UST-North	0808076-002B	88	86	91	92	93	105	0
13UST-Bot-2	0808076-003B	84	84	88	88	86	103	0
14UST-East	0808076-004B	88	85	94	92	93	106	0
15UST-EastMS	0808076-004BMS	84	83	87	87	96	102	0
16UST-EastMSD	C808076-004BMSD	85	84	87	87	99	102	0
17UST-South	0808076-005B	84	84	89	92	92	102	0
18Field Blnk	0808076-007B	91	87	92	93	95	105	0
19Trench-Bot-1	0808076-008B	92	88	92	96	100	108	0
20Trench-Bot-2	0808076-009B	85	82	88	88	93	100	0

S1 (2FP) 1 = 2-Fluorophenol
S2 (FBP) 1 = 2-Fluorobiphenyl
S3 (NBZ) 1 = Nitrobenzene-d5
S4 (PHL) 1 = Phenol-d5
S5 (TBP) 1 = 2,4,6-Tribromophenol
S6 (TPH) 1 = Terphenyl-d14

QC Limits
22-130
46-130
39-130
33-130
20-143
36-146

Column to be used to flag recovery values
* Values outside of contract required QC limits

Page 1 of 1 FORM II SV-2 SW8270C

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2290	390	1970	0	116	37	130	2270	0.9	30	
Atrazine	1860	390	1970	0	94	30	130	1770	4.7	60	
Benzaldehyde	1750	390	1970	0	89	30	130	1730	1.4	60	
Benzo[a]anthracene	2220	390	1970	0	113	40	130	2240	1	30	
Benzo[a]pyrene	2160	390	1970	0	109	44	130	2170	0.8	30	
Benzo[b]fluoranthene	2130	390	1970	0	108	29	154	2190	2.9	32	
Benzo[g,h,i]perylene	2150	390	1970	0	109	10	130	2200	2.6	30	
Benzo[k]fluoranthene	2280	390	1970	0	116	35	143	2280	0.2	30	
bis(2-Chloroethoxy)methane	1940	390	1970	0	98	43	130	1990	2.6	40	
bis(2-chloroethyl)ether	1800	390	1970	0	92	41	130	1830	1.4	30	
bis(2-chloroisopropyl)ether	1820	390	1970	0	92	34	130	1840	1.3	30	
bis(2-Ethylhexyl)phthalate	2160	390	1970	0	110	42	154	2190	1.1	36	
Butyl benzyl phthalate	2140	390	1970	0	109	34	160	2140	0.1	37	
Caprolactam	2410	390	1970	0	122	30	130	2340	3.1	60	
Carbazole	2110	390	1970	0	107	42	130	2110	0.3	36	
Chrysene	2240	390	1970	0	114	43	130	2280	1.5	30	
Di-n-butyl phthalate	2150	390	1970	0	109	50	133	2180	1.4	39	
Di-n-octyl phthalate	2150	390	1970	0	109	48	146	2170	1.2	31	
Dibenz[a,h]anthracene	2270	390	1970	0	115	18	135	2320	2.1	30	
Dibenzofuran	1900	390	1970	0	96	45	130	1880	1.1	30	
Diethyl phthalate	2010	390	1970	0	102	48	130	1990	1.1	30	
Dimethyl phthalate	1950	390	1970	0	99	46	130	1920	1.7	39	
Fluoranthene	2260	390	1970	0	115	45	130	2260	0.1	30	
Fluorene	2230	390	1970	0	113	45	130	2190	1.6	30	
Hexachlorobenzene	2010	390	1970	0	102	50	130	2010	0	31	
Hexachlorobutadiene	1690	390	1970	0	86	37	130	1710	1.3	41	
Hexachlorocyclopentadiene	1260	390	1970	0	64	10	130	1270	0.2	58	

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

674 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381967
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1670	390	1970	0	85	23	130				
Indeno[1,2,3-cd]pyrene	2230	390	1970	0	113	10	134				
Isophorone	1920	390	1970	0	98	43	130				
N-Nitroso-di-n-propylamine	1820	390	1970	0	92	35	130				
N-Nitrosodiphenylamine	2050	390	1970	0	104	44	130				
Naphthalene	2040	390	1970	0	103	40	130				
Nitrobenzene	1920	390	1970	0	97	45	130				
Pentachlorophenol	1630	2000	1970	0	83	10	130				
Phenanthrene	2250	390	1970	0	114	45	130				
Phenol	1850	390	1970	0	94	33	130				
Pyrene	2320	390	1970	0	118	18	164				
Surr: 2,4,6-Tribromophenol	5680	0	5910	0	96	20	143				
Surr: 2-Fluorobiphenyl	3270	0	3940	0	83	46	130				
Surr: 2-Fluorophenol	4960	0	5910	0	84	22	130				
Surr: Nitrobenzene-d5	3430	0	3940	0	87	39	130				
Surr: Phenol-d5	5160	0	5910	0	87	33	130				
Surr: Terphenyl-d14	4030	0	3940	0	102	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

672 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1670	390	1970	0	85	23	130	1670	0	37	
Indeno[1,2,3-cd]pyrene	2200	390	1970	0	112	10	134	2230	1.6	30	
Isophorone	1870	390	1970	0	95	43	130	1920	3.0	40	
N-Nitroso-di-n-propylamine	1770	390	1970	0	90	35	130	1820	2.6	30	
N-Nitrosodiphenylamine	2070	390	1970	0	105	44	130	2050	1.2	52	
Naphthalene	1980	390	1970	0	101	40	130	2040	2.7	33	
Nitrobenzene	1870	390	1970	0	95	45	130	1920	2.7	51	
Pentachlorophenol	1670	2000	1970	0	85	10	130	1630	2.5	53	J
Phenanthrene	2250	390	1970	0	114	45	130	2250	0.1	30	
Phenol	1810	390	1970	0	92	33	130	1850	2.3	34	
Pyrene	2290	390	1970	0	116	18	164	2320	1.5	30	
Surr: 2,4,6-Tribromophenol	5860	0	5910	0	99	20	143	0		0	
Surr: 2-Fluorobiphenyl	3310	0	3940	0	84	46	130	0		0	
Surr: 2-Fluorophenol	5030	0	5910	0	85	22	130	0		0	
Surr: Nitrobenzene-d5	3430	0	3940	0	87	39	130	0		0	
Surr: Phenol-d5	5150	0	5910	0	87	33	130	0		0	
Surr: Terphenyl-d14	4040	0	3940	0	102	36	146	0		0	

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

675 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	2040	390	1970	0	104	30	130	1990	2.7	60	
2,4,5-Trichlorophenol	1890	2000	1970	0	96	34	130	1830	3.3	44	J
2,4,6-Trichlorophenol	1840	390	1970	0	93	33	130	1790	2.7	45	
2,4-Dichlorophenol	1870	390	1970	0	95	39	130	1890	1.1	53	
2,4-Dimethylphenol	1830	390	1970	0	93	22	130	1880	2.2	52	
2,4-Dinitrophenol	643	2000	1970	0	32	10	130	619	3.8	60	J
2,4-Dinitrotoluene	1950	390	1970	0	99	40	130	1930	0.7	32	
2,6-Dinitrotoluene	1950	390	1970	0	99	38	130	1890	3.0	43	
2-Chloronaphthalene	1850	390	1970	0	94	46	130	1880	0.5	30	
2-Chlorophenol	1750	390	1970	0	89	39	130	1770	1.1	38	
2-Methylnaphthalene	1860	390	1970	0	94	43	130	1890	1.6	35	
2-Methylphenol	1810	390	1970	0	92	43	130	1840	1.4	60	
2-Nitroaniline	1930	2000	1970	0	98	42	130	1930	0.1	34	J
2-Nitrophenol	1820	390	1970	0	92	34	130	1840	1.3	46	
3,3'-Dichlorobenzidine	2020	780	1970	0	103	10	130	2100	3.7	60	
3-Nitroaniline	1510	2000	1970	0	77	11	130	1540	1.9	40	J
4,6-Dinitro-2-methylphenol	1170	2000	1970	0	59	13	130	1150	1.2	60	J
4-Bromophenyl phenyl ether	1950	390	1970	0	99	43	130	1910	1.9	37	
4-Chloro-3-methylphenol	1920	390	1970	0	97	38	130	1900	1.1	30	
4-Chloroaniline	1060	390	1970	0	54	10	130	1120	5.7	48	
4-Chlorophenyl phenyl ether	1940	390	1970	0	98	45	130	1890	2.5	32	
4-Methylphenol	1830	390	1970	0	93	42	130	1830	0	53	
4-Nitroaniline	1950	2000	1970	0	99	23	130	1970	1.0	37	J
4-Nitrophenol	1840	2000	1970	0	93	10	144	1800	2.1	30	J
Acenaphthene	2160	390	1970	0	110	43	130	2150	0.6	30	
Acenaphthylene	2100	390	1970	0	106	46	130	2100	0.1	30	
Acetophenone	1700	390	1970	0	86	30	130	1650	2.8	60	

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

673 : 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957 | SampType: MSB | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381958
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1610	330	1670	0	96	23	130				
Indeno[1,2,3-cd]pyrene	2210	330	1670	0	132	10	134				
Isophorone	1780	330	1670	0	107	43	130				
N-Nitroso-di-n-propylamine	1670	330	1670	0	100	35	130				
N-Nitrosodiphenylamine	1920	330	1670	0	115	44	130				
Naphthalene	1890	330	1670	0	113	40	130				
Nitrobenzene	1780	330	1670	0	107	45	130				
Pentachlorophenol	1710	1700	1670	0	103	10	130				
Phenanthrene	2100	330	1670	0	126	45	130				
Phenol	1670	330	1670	0	100	33	130				
Pyrene	2120	330	1670	0	127	16	164				
Surr: 2,4,6-Tribromophenol	5350	0	5000	0	107	20	143				
Surr: 2-Fluorobiphenyl	2950	0	3330	0	89	48	130				
Surr: 2-Fluorophenol	4560	0	5000	0	91	22	130				
Surr: Nitrobenzene-d5	3170	0	3330	0	95	39	130				
Surr: Phenol-d5	4690	0	5000	0	94	33	130				
Surr: Terphenyl-d14	3660	0	3330	0	110	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

678 e: 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957 | SampType: MSB | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381958
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1840	330	1670	0	111	30	130				
2,4,5-Trichlorophenol	1790	1700	1670	0	108	34	130				
2,4,6-Trichlorophenol	1730	330	1670	0	104	33	130				
2,4-Dichlorophenol	1740	330	1670	0	104	39	130				
2,4-Dimethylphenol	1700	330	1670	0	102	22	130				
2,4-Dinitrophenol	916	1700	1670	0	55	10	130				J
2,4-Dinitrotoluene	1840	330	1670	0	110	40	130				
2,6-Dinitrotoluene	1840	330	1670	0	110	36	130				
2-Chloronaphthalene	1740	330	1670	0	105	46	130				
2-Chlorophenol	1650	330	1670	0	99	39	130				
2-Methylnaphthalene	1750	330	1670	0	105	43	130				
2-Methylphenol	1710	330	1670	0	102	43	130				
2-Nitroaniline	1860	1700	1670	0	111	42	130				
2-Nitrophenol	1720	330	1670	0	103	34	130				
3,3'-Dichlorobenzidine	2000	660	1670	0	120	10	130				
3-Nitroaniline	1540	1700	1670	0	92	11	130				J
4,6-Dinitro-2-methylphenol	1380	1700	1670	0	83	13	130				J
4-Bromophenyl phenyl ether	1850	330	1670	0	111	43	130				
4-Chloro-3-methylphenol	1780	330	1670	0	107	38	130				
4-Chloroaniline	1320	330	1670	0	79	10	130				
4-Chlorophenyl phenyl ether	1800	330	1670	0	108	45	130				
4-Methylphenol	1710	330	1670	0	103	42	130				
4-Nitroaniline	1850	1700	1670	0	111	23	130				
4-Nitrophenol	1720	1700	1670	0	103	10	144				
Acenaphthene	1990	330	1670	0	119	43	130				
Acenaphthylene	1980	330	1670	0	118	45	130				
Acetophenone	1550	330	1670	0	93	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

676 e: 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-7957 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381957
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1860	330	1670	0	111	30	130				
2,4,5-Trichlorophenol	1760	1700	1670	0	106	43	131				
2,4,6-Trichlorophenol	1700	330	1670	0	102	44	125				
2,4-Dichlorophenol	1760	330	1670	0	105	41	125				
2,4-Dimethylphenol	1700	330	1670	0	102	25	126				
2,4-Dinitrophenol	632	1700	1670	0	38	25	125				J
2,4-Dinitrotoluene	1800	330	1670	0	108	54	136				
2,6-Dinitrotoluene	1780	330	1670	0	107	48	136				
2-Chloronaphthalene	1740	330	1670	0	105	48	126				
2-Chlorophenol	1640	330	1670	0	99	41	125				
2-Methylnaphthalene	1780	330	1670	0	107	44	125				
2-Methylphenol	1720	330	1670	0	103	40	125				
2-Nitroaniline	1810	1700	1670	0	109	50	129				
2-Nitrophenol	1740	330	1670	0	104	44	125				
3,3'-Dichlorobenzidine	1850	660	1670	0	111	25	125				
3-Nitroaniline	1340	1700	1670	0	80	26	125				J
4,6-Dinitro-2-methylphenol	1050	1700	1670	0	63	33	125				J
4-Bromophenyl phenyl ether	1780	330	1670	0	107	44	137				
4-Chloro-3-methylphenol	1750	330	1670	0	105	44	126				
4-Chloroaniline	1030	330	1670	0	62	25	125				
4-Chlorophenyl phenyl ether	1770	330	1670	0	106	46	132				
4-Methylphenol	1730	330	1670	0	104	40	125				
4-Nitroaniline	1820	1700	1670	0	109	47	132				
4-Nitrophenol	1670	1700	1670	0	100	37	140				J
Acenaphthene	2000	330	1670	0	120	49	125				
Acenaphthylene	1980	330	1670	0	117	47	125				
Acetophenone	1560	330	1670	0	93	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

679 e: 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957 | SampType: MSB | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381958
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2120	330	1670	0	127	37	130				
Atrazine	1630	330	1670	0	98	30	130				
Benzaldehyde	1590	330	1670	0	96	30	130				
Benzo[a]anthracene	2080	330	1670	0	125	40	130				
Benzo[a]pyrene	2040	330	1670	0	122	44	130				
Benzo[b]fluoranthene	2010	330	1670	0	121	29	154				
Benzo[g,h,i]perylene	2140	330	1670	0	129	10	130				
Benzo[k]fluoranthene	2120	330	1670	0	127	35	143				
bis(2-Chloroethoxy)methane	1830	330	1670	0	110	43	130				
bis(2-chloroethyl)ether	1730	330	1670	0	104	41	130				
bis(2-chloroisopropyl)ether	1720	330	1670	0	103	34	130				
bis(2-Ethylhexyl)phthalate	1980	330	1670	0	119	42	154				
Butyl benzyl phthalate	1990	330	1670	0	119	34	160				
Caprolactam	2210	330	1670	0	133	30	130				S
Carbazole	1970	330	1670	0	118	42	130				
Chrysene	2100	330	1670	0	126	43	130				
Di-n-butyl phthalate	1970	330	1670	0	118	50	133				
Di-n-octyl phthalate	2010	330	1670	0	121	48	146				
Dibenz[a,h]anthracene	2220	330	1670	0	133	16	135				
Dibenzofuran	1790	330	1670	0	107	45	130				
Diethyl phthalate	1890	330	1670	0	113	48	130				
Dimethyl phthalate	1830	330	1670	0	110	46	130				
Fluoranthene	2090	330	1670	0	125	45	130				
Fluorene	2050	330	1670	0	123	45	130				
Hexachlorobenzene	1890	330	1670	0	113	60	130				
Hexachlorobutadiene	1630	330	1670	0	98	37	130				
Hexachlorocyclopentadiene	1410	330	1670	0	85	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

677 e: 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-7957 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381957
Instrument: MS06_40 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2070	330	1670	0	124	60	125				
Atrazine	1580	330	1670	0	95	30	130				
Benzaldehyde	1640	330	1670	0	98	30	130				
Benzo[a]anthracene	2050	330	1670	0	123	60	125				
Benzo[a]pyrene	1970	330	1670	0	118	53	129				
Benzo[b]fluoranthene	2000	330	1670	0	120	55	126				
Benzo[g,h,i]perylene	2090	330	1670	0	126	51	134				
Benzo[k]fluoranthene	2020	330	1670	0	121	49	132				
bis(2-Chloroethoxy)methane	1870	330	1670	0	112	49	125				
bis(2-chloroethyl)ether	1740	330	1670	0	105	44	125				
bis(2-chloroisopropyl)ether	1740	330	1670	0	105	39	125				
bis(2-Ethylhexyl)phthalate	1970	330	1670	0	118	51	145				
Butyl benzyl phthalate	1960	330	1670	0	118	50	144				
Caprolactam	2120	330	1670	0	127	30	130				
Carbazole	1950	330	1670	0	117	51	131				
Chrysene	2090	330	1670	0	125	55	127				
Di-n-butyl phthalate	1940	330	1670	0	116	56	140				
Di-n-octyl phthalate	1990	330	1670	0	119	46	150				
Dibenz[a,h]anthracene	2170	330	1670	0	130	47	142				
Dibenzofuran	1760	330	1670	0	105	46	125				
Diethyl phthalate	1850	330	1670	0	111	52	137				
Dimethyl phthalate	1800	330	1670	0	108	51	134				
Fluoranthene	2050	330	1670	0	123	54	131				
Fluorene	2020	330	1670	0	121	50	126				
Hexachlorobenzene	1850	330	1670	0	111	43	139				
Hexachlorobutadiene	1640	330	1670	0	98	39	132				
Hexachlorocyclopentadiene	1430	330	1670	0	86	25	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Lab Name: Life Science Laboratories Contract: Life Science EPA SAMPLE NO.
Lab Code: LSLB Case No.: 0808-068 SAS No.: SDG No.: 08080680 MSB-7957
Lab File ID: RA137.D Lab Sample ID: MSB-7957
Instrument ID: MS06.40 Date Extracted: 8/15/2008
Matrix: (soil/water) SOIL Date Analyzed: 8/21/2008
Level: (low/med) Time Analyzed: 16:28

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-2-East	08080684-003B	K4731 D	13:31
02	UST-Bot-1	08080678-001B	K4732 D	13:39
03	UST-West	08080678-006B	K4733 D	14:18
04	LCS-7957	LCS-7957	K4738 D	17:06
05	MSB-7957	MSB-7957	K4739 D	17:44
06	SB-2-Bot-1	08080684-001B	K4740 D	18:23
07	SB-2-South	08080684-002B	K4741 D	19:01
08	SB-2-North	08080684-004B	K4742 D	19:40
09	SB-2-West	08080684-005B	K4743 D	20:18
10	SB-2-Bot-2	08080684-006B	K4744 D	20:57
11	UST-North	08080678-002B	K4745 D	21:35
12	UST-Bot-2	08080678-003B	K4746 D	22:13
13	UST-East	08080678-004B	K4747 D	22:52
14	UST-EastMSD	08080678-004BMSD	K4748 D	23:30
15	UST-EastMSD	08080678-004BMSD	K4749 D	0:09
16	UST-South	08080678-005B	K4750 D	0:47
17	Field Dup	08080678-007B	K4751 D	1:25
18	Trench-Bot-1	08080678-008B	K4752 D	2:03
19	Trench-Bot-2	08080678-009B	K4753 D	2:42

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-7957 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381957
Instrument: MS06_40 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1620	330	1670	0	97	41	125				
Indeno[1,2,3-cd]pyrene	2180	330	1670	0	131	48	138				
Isophorone	1820	330	1670	0	109	48	125				
N-Nitroso-di-n-propylamine	1690	330	1670	0	101	40	128				
N-Nitrosodiphenylamine	1880	330	1670	0	113	48	135				
Naphthalene	1920	330	1670	0	115	48	125				
Nitrobenzene	1820	330	1670	0	109	47	125				
Pentachlorophenol	1610	1700	1670	0	96	25	129				
Phenanthrene	2060	330	1670	0	124	58	125				
Phenol	1680	330	1670	0	101	41	125				
Pyrene	2110	330	1670	0	126	56	127				
Surr: 2,4,6-Tribromophenol	5280	0	5000	0	106	20	143				
Surr: 2-Fluorobiphenyl	3010	0	3330	0	90	46	130				
Surr: 2-Fluorophenol	4640	0	5000	0	93	22	130				
Surr: Nitrobenzene-d5	3270	0	3330	0	98	39	130				
Surr: Phenol-d5	4780	0	5000	0	96	33	130				
Surr: Terphenyl-d14	3630	0	3330	0	109	38	148				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Lab Name: Life Science Laboratories Contract:
Lab Code: LSLB Case No.: 0808-068 SAS No.: SDG No.: 08080680
Lab File ID: RAV8595.D
Instrument ID: MS06.40 Date Injection Time:

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 of mass 198	52.3
68	Less than 2.0% of mass 69	0.0 (0.0%)
69	Mass 69 relative abundance	
70	Less than 2.0% of mass 69	58.2
127	25.0 - 75.0% of mass 198	0.2 (0.4%)
197	Less than 1.0% of mass 198	47.9
198	Base peak, 100% relative abundance	0.0
199	5.0 - 9.0% of mass 198	100.0
275	10.0 - 30.0% of mass 198	6.8
365	Greater than 0.75% of mass 198	38.7
441	Present, but less than mass 443	2.6
442	40.0 - 110.0% of mass 198	8.5
443	15.0 - 24.0% of mass 442	52.3
2-Value is % mass 69		10.7 (19.2%)
1-Value is % mass 442		140

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160PPM	SSTD160PPM OLM	K4596 D	08/13/08	8:38
02	SSTD120PPM	SSTD120PPM OLM	K4597 D	08/13/08	8:17
03	SSTD80PPM	SSTD080PPM OLM	K4598 D	08/13/08	9:55
04	SSTD50PPM	SSTD050PPM OLM	K4599 D	08/13/08	10:34
05	SSTD20PPM	SSTD020PPM OLM	K4600 D	08/13/08	11:12
06	SSTD40PPM	SSTD040PPM OLM	K4601 D	08/13/08	11:51
07	SSTD20PPM	SSTD020PPM OLM	K4602 D	08/13/08	12:29
08	SSTD10PPM	SSTD010PPM OLM	K4603 D	08/13/08	13:07
09	SSTD05PPM	SSTD005PPM OLM	K4604 D	08/13/08	13:45
10	SSTD01PPM	SSTD001PPM OLM	K4605 D	08/13/08	14:24
11	25RC-081208	25RC-081208	K4606 D	08/13/08	15:02
12	SSTD160PPM	SSTD160PPM OLM	K4607 D	08/13/08	15:40
13	SSTD120PPM	SSTD120PPM OLM	K4608 D	08/13/08	16:19
14	SSTD80PPM	SSTD080PPM OLM	K4609 D	08/13/08	16:57
15	SSTD50PPM	SSTD050PPM OLM	K4610 D	08/13/08	17:35
16	SSTD40PPM	SSTD040PPM OLM	K4611 D	08/13/08	18:13
17	SSTD20PPM	SSTD020PPM OLM	K4612 D	08/13/08	18:52
18	SSTD10PPM	SSTD010PPM OLM	K4613 D	08/13/08	19:30
19	SSTD05PPM	SSTD005PPM OLM	K4614 D	08/13/08	20:09

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Lab File ID: TA\K4724.D DFTPP Injection Date: 8/21/2008

Instrument ID: MS06 40 DFTPP Injection Time: 8:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	56.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.6
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	25.0 - 75.0% of mass 198	49.3
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	19.6
365	Greater than 0.75% of mass 198	2.7
441	Present, but less than mass 443	9.8
442	40.0 - 110.0% of mass 198	62.5
443	15.0 - 24.0% of mass 442	11.8 (18.9)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC082108A6	CC082108A6	K4725.D	08/21/08	9:11
02	CC082108B6 OLM	CC082108B6 OLM	K4726.D	08/21/08	9:49
03	SB-2-East	0808068-003B	K4731.D	08/21/08	13:01
04	UST-Bot-1	0808076-001B	K4732.D	08/21/08	13:39
05	UST-West	0808076-005B	K4733.D	08/21/08	14:18

page 3 of 5

FORM V SV SW8270C

684

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Lab File ID: TA\K4734.D DFTPP Injection Date: 8/21/2008

Instrument ID: MS06 40 DFTPP Injection Time: 14:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.2
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	25.0 - 75.0% of mass 198	50.1
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	19.2
365	Greater than 0.75% of mass 198	2.8
441	Present, but less than mass 443	8.0
442	40.0 - 110.0% of mass 198	58.0
443	15.0 - 24.0% of mass 442	11.5 (19.8)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC082108C6	CC082108C6	K4735.D	08/21/08	15:12
02	CC082108D6 OLM	CC082108D6 OLM	K4736.D	08/21/08	15:50
03	MB-7957	MB-7957	K4737.D	08/21/08	16:28
04	LCS-7957	LCS-7957	K4738.D	08/21/08	17:06
05	MSB-7957	MSB-7957	K4739.D	08/21/08	17:44
06	SB-2-Bot-1	0808068-001B	K4740.D	08/21/08	18:23
07	SB-2-South	0808068-002B	K4741.D	08/21/08	19:01
08	SB-2-North	0808068-004B	K4742.D	08/21/08	19:40
09	SB-2-West	0808068-005B	K4743.D	08/21/08	20:18
10	SB-2-Bot-2	0808068-006B	K4744.D	08/21/08	20:57
11	UST-North	0808076-002B	K4745.D	08/21/08	21:35
12	UST-Bot-2	0808076-003B	K4746.D	08/21/08	22:13
13	UST-East	0808076-004B	K4747.D	08/21/08	22:52
14	UST-EastMS	0808076-004BMS	K4748.D	08/21/08	23:30
15	UST-EastMSD	0808076-004BMSD	K4749.D	08/22/08	0:09
16	UST-South	0808076-006B	K4750.D	08/22/08	0:47
17	Field Dup	0808076-007B	K4751.D	08/22/08	1:25
18	Trench-Bot-1	0808076-008B	K4752.D	08/22/08	2:03
19	Trench-Bot-2	0808076-009B	K4753.D	08/22/08	2:42

page 4 of 5

FORM V SV SW8270C

685

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4725.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 9:11

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	266914	9.95	995096	12.32	530726	15.66	966144	18.52
UPPER LIMIT	533828	10.45	1990192	12.82	1061452	16.16	1932288	19.02
LOWER LIMIT	133457	9.45	497548	11.82	265363	15.16	483072	18.02
SAMPLE NO								
01 CC082108B6 OLM (CC082108B6 OLM)	217968	9.95	818434	12.31	442545	15.65	786579	18.51
02 SB-2-East (0808068-003B)	210152	9.96	792404	12.31	430204	15.65	791283	18.50
03 UST-Bot-1 (0808076-001B)	212701	9.95	809457	12.31	433837	15.66	795215	18.51
04 UST-West (0808076-005B)	211062	9.95	807781	12.31	434938	15.65	791624	18.51

IS1 (DCB) = 1,4-Dichlorobenzene-d4 IS3 (ANT) = Acenaphthene-d10

IS2 (NPT) = Naphthalene-d8 IS4 (PHN) = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

FORM VIII Page 1 of 4 SW8270C

686

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4725.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 9:11

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	763418	23.58	743587	26.62				
UPPER LIMIT	1526836	24.08	1487174	27.12				
LOWER LIMIT	381709	23.08	371794	26.12				
SAMPLE NO.								
01 CC082108B6 OLM (CC082108B6 OLM)	660294	23.56	621736	26.60				
02 SB-2-East (0808068-003B)	660369	23.56	625109	26.60				
03 UST-Bot-1 (0808076-001B)	651025	23.57	610954	26.60				
04 UST-West (0808076-005B)	651672	23.56	607739	26.60				

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

FORM VIII Page 2 of 4 SW8270C

687

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068Q

Lab Code: LSLB

Lab File ID (Standard): K4735.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 15:12

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	265252	9.96	1013278	12.32	539141	15.68	991247	18.52
UPPER LIMIT	530504	10.46	2026556	12.82	1078282	16.16	1982494	19.02
LOWER LIMIT	132626	9.46	506639	11.82	269571	15.16	495624	18.02
SAMPLE NO.								
01 CC082108D6 OLM (CC082108D6 OLM)	238243	9.96	907973	12.31	459557	15.66	587131	18.51
02 MB-7957 (MB-7957)	201993	9.95	767521	12.33	417692	15.65	761849	18.51
03 LCS-7957 (LCS-7957)	202222	9.96	770119	12.32	417628	15.66	784851	18.51
04 MSB-7957 (MSB-7957)	195213	9.95	752650	12.32	406162	15.66	742262	18.52
05 SB-2-Bot-1 (0808068-001B)	178447	9.95	674432	12.31	365518	15.68	656398	18.51
06 SB-2-South (0808068-002B)	191758	9.95	730944	12.31	395609	15.68	721625	18.51
07 SB-2-North (0808068-004B)	199819	9.95	759123	12.31	409934	15.68	746059	18.51
08 SB-2-West (0808068-005B)	190334	9.96	722335	12.31	392374	15.66	711573	18.51
09 SB-2-Bot-2 (0808068-006B)	198300	9.95	752166	12.31	408200	15.65	738135	18.51
10 UST-North (0808076-002B)	188678	9.96	752020	12.32	404328	15.65	733129	18.51
11 UST-Bot-2 (0808076-003B)	190443	9.96	725084	12.31	388432	15.65	726425	18.51
12 UST-East (0808076-004B)	194839	9.96	743546	12.31	394318	15.65	734231	18.51
13 UST-EastMS (0808076-004BMS)	197336	9.96	752052	12.32	419754	15.66	748740	18.51
14 UST-EastMSD (0808076-004BMSD)	195133	9.96	747616	12.31	402788	15.66	737519	18.51
15 UST-South (0808076-005B)	201441	9.96	775426	12.31	418997	15.66	770616	18.50
16 Field Dup (0808076-007B)	189305	9.96	731770	12.31	394686	15.65	715159	18.51
17 Trench-Bot-1 (0808076-006B)	192572	9.96	741380	12.31	400729	15.65	743737	18.51
18 Trench-Bot-2 (0808076-008B)	201849	9.96	768860	12.31	420748	15.66	773464	18.50

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068Q

Lab Code: LSLB

Lab File ID (Standard): K4735.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 15:12

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	790954	23.58	758622	26.62
UPPER LIMIT	1581908	24.08	1517244	27.12
LOWER LIMIT	395482	23.08	379311	26.12
SAMPLE NO.				
01 CC082108D6 OLM (CC082108D6 OLM)	745070	23.57	695663	26.61
02 MB-7957 (MB-7957)	622014	23.57	572831	26.61
03 LCS-7957 (LCS-7957)	605031	23.58	586344	26.62
04 MSB-7957 (MSB-7957)	591714	23.58	567131	26.61
05 SB-2-Bot-1 (0808068-001B)	534471	23.56	492431	26.60
06 SB-2-South (0808068-002B)	562193	23.57	547130	26.60
07 SB-2-North (0808068-004B)	587226	23.57	553117	26.60
08 SB-2-West (0808068-005B)	574369	23.56	522824	26.60
09 SB-2-Bot-2 (0808068-006B)	583012	23.56	544316	26.60
10 UST-North (0808076-002B)	583122	23.56	535533	26.60
11 UST-Bot-2 (0808076-003B)	576964	23.56	521055	26.60
12 UST-East (0808076-004B)	599003	23.56	542283	26.60
13 UST-EastMS (0808076-004BMS)	594744	23.58	553880	26.61
14 UST-EastMSD (0808076-004BMSD)	594729	23.58	554776	26.61
15 UST-South (0808076-005B)	628862	23.58	560960	26.60
16 Field Dup (0808076-007B)	572674	23.56	532542	26.60
17 Trench-Bot-1 (0808076-006B)	605408	23.56	546029	26.60
18 Trench-Bot-2 (0808076-008B)	632735	23.56	570921	26.60

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

Sample Data

Life Science Laboratories, Inc. **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-1*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06_40 Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS %Moisture: 18.4	BatchNo:	7957/R14571
Revision:	08/22/08 11:06 TestCode: 8270S OLM42	FileID:	1-SAMP-K4740.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.3	µg/Kg-dry	1	08/21/08 18:23
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 18:23
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/21/08 18:23
2,4-Dichlorophenol	ND		400	4.7	µg/Kg-dry	1	08/21/08 18:23
2,4-Dimethylphenol	ND		400	82	µg/Kg-dry	1	08/21/08 18:23
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 18:23
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/21/08 18:23
2,6-Dinitrotoluene	ND		400	6.9	µg/Kg-dry	1	08/21/08 18:23
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 18:23
2-Chlorophenol	ND		400	5.3	µg/Kg-dry	1	08/21/08 18:23
2-Methylnaphthalene	ND		400	2.0	µg/Kg-dry	1	08/21/08 18:23
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 18:23
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 18:23
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 18:23
3,3'-Dichlorobenzidine	ND		810	49	µg/Kg-dry	1	08/21/08 18:23
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 18:23
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 18:23
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 18:23
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 18:23
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/21/08 18:23
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 18:23
4-Nitrophenol	ND		2000	62	µg/Kg-dry	1	08/21/08 18:23
Acenaphthene	ND		400	4.1	µg/Kg-dry	1	08/21/08 18:23
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 18:23
Acetophenone	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
Anthracene	ND		400	2.9	µg/Kg-dry	1	08/21/08 18:23
Atrazine	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
Benzaldehyde	ND		400	5.1	µg/Kg-dry	1	08/21/08 18:23
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 18:23
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 18:23
Benzo[g,h,i]perylene	ND		400	16	µg/Kg-dry	1	08/21/08 18:23

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381959 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-1*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4740.D
Col Type:			

Sample Size: 30 g; %Moisture: 18.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 18:23
bis(2-Chloroethoxy)methane	ND		400	3.8	µg/Kg-dry	1	08/21/08 18:23
bis(2-chloroethyl)ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 18:23
bis(2-chloroisopropyl)ether	ND		400	7.0	µg/Kg-dry	1	08/21/08 18:23
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 18:23
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 18:23
Caprolactam	ND		400	49	µg/Kg-dry	1	08/21/08 18:23
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 18:23
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 18:23
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 18:23
Dibenz[a,h]anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 18:23
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 18:23
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 18:23
Dimethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/21/08 18:23
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 18:23
Fluorene	ND		400	4.2	µg/Kg-dry	1	08/21/08 18:23
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/21/08 18:23
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/21/08 18:23
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 18:23
Hexachloroethane	ND		400	45	µg/Kg-dry	1	08/21/08 18:23
Indeno[1,2,3-cd]pyrene	ND		400	15	µg/Kg-dry	1	08/21/08 18:23
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 18:23
N-Nitroso-di-n-propylamine	ND		400	4.7	µg/Kg-dry	1	08/21/08 18:23
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 18:23
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 18:23
Nitrobenzene	ND		400	4.4	µg/Kg-dry	1	08/21/08 18:23
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 18:23
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 18:23
Phenol	ND		400	3.8	µg/Kg-dry	1	08/21/08 18:23
Pyrene	ND		400	2.8	µg/Kg-dry	1	08/21/08 18:23
Surr: 2,4,6-Tribromophenol	94.2		20-143	0	%REC	1	08/21/08 18:23
Surr: 2-Fluorobiphenyl	80.7		46-130	0	%REC	1	08/21/08 18:23
Surr: 2-Fluorophenol	78.8		22-130	0	%REC	1	08/21/08 18:23

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381959 Project Supervisor: Monika Santucci

692

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-1*
W Order:	0808068	Collection Date:	08/12/08 11:15
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4740.D
Col Type:			

Sample Size: 30 g; %Moisture: 18.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	82.3		39-130	0	%REC	1	08/21/08 18:23
Surr: Phenol-d5	83.0		33-130	0	%REC	1	08/21/08 18:23
Surr: Terphenyl-d14	104		35-146	0	%REC	1	08/21/08 18:23

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381959 Project Supervisor: Monika Santucci

693

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-001B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4740.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.67	960	BJ
2.	aldol	7.19	30000	BJA

FORM I TIC 1 SW8270C

694

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4740.D Vial: 7
Acq On : 21 Aug 2008 18:23 Operator: MEG
Sample : 0808068-001B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008 Quant Results File: K8130L42.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	178447	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	674432	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	365518	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.51	188	656398	40.00 ug/mL	0.00
58) Chrysene-d12	23.56	240	534471	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	492431	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.64	112	672678	118.13 ug/mL	0.02
Spiked Amount 150.000			Recovery = 78.75%		
3) Phenol-d5	9.22	99	935702	124.49 ug/mL	0.00
Spiked Amount 150.000			Recovery = 82.99%		
14) Nitrobenzene-d5	10.96	82	573331	82.29 ug/mL	0.00
Spiked Amount 100.000			Recovery = 82.29%		
30) 2-Fluorobiphenyl	14.34	172	814322	80.65 ug/mL	0.00
Spiked Amount 100.000			Recovery = 80.65%		
46) 2,4,6-Tribromophenol	17.16	330	209947	141.30 ug/mL	0.00
Spiked Amount 150.000			Recovery = 94.20%		
60) Terphenyl-d14	21.54	244	896299	103.85 ug/mL	0.00
Spiked Amount 100.000			Recovery = 103.85%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K4740.D K8130L42.M Fri Aug 22 10:20:02 2008 Pag

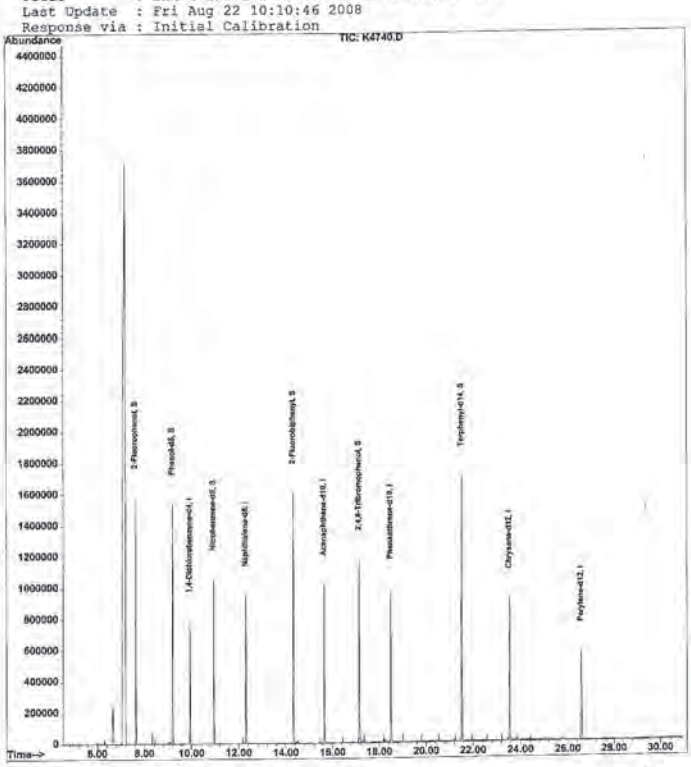
695

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4740.D
Acq On : 21 Aug 2008 18:23
Sample : 0808068-001B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008

Vial: 7
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4740.D K813OL42.M Fri Aug 22 10:20:03 2008 Pa

696

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4740.D
Acq On : 21 Aug 2008 18:23
Sample : 0808068-001B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 7
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	178447	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	674108	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.86	164	365518	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	656398	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	534471	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	492524	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K4740.D K813OLM.M Fri Aug 22 10:33:19 2008 Pag

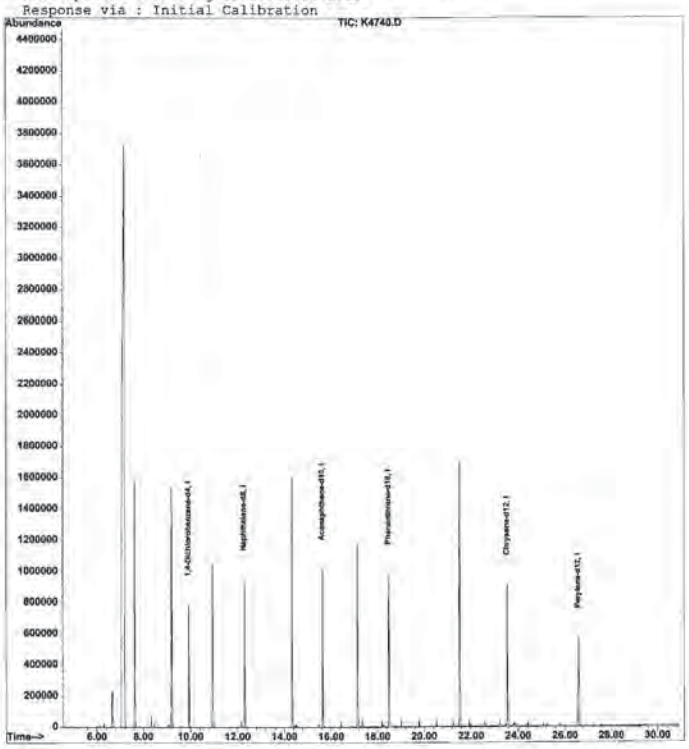
697

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4740.D
Acq On : 21 Aug 2008 18:23
Sample : 0808068-001B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 7
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4740.D K813OLM.M Fri Aug 22 10:33:19 2008 Pag

698

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Aug 2008 18:23
Data File: C:\HPCHEM\1\DATA\K4740.D
Name: 0808068-001B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

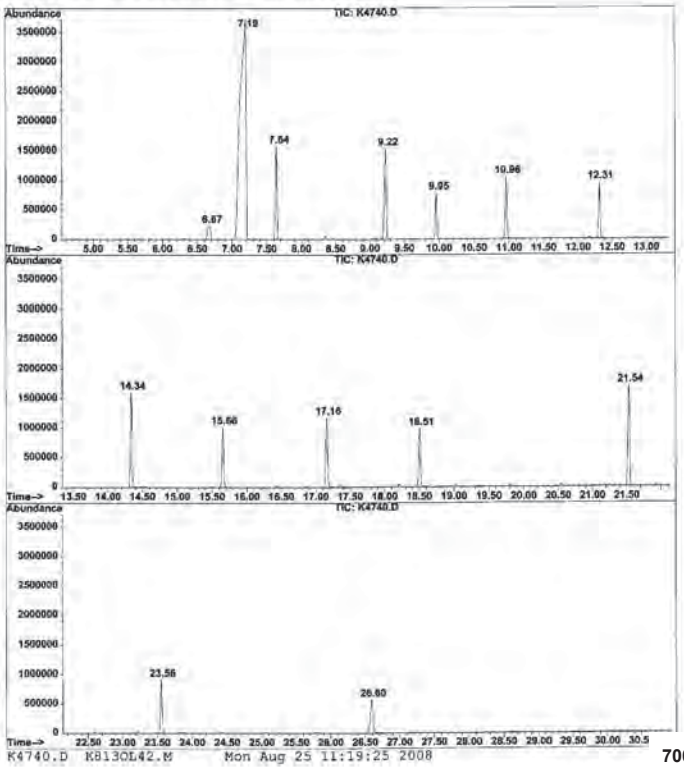
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Oxirane, 2,3-dimethy	6.87	23.4	ug/mL	713137	ISTD01	9.95	1217060	40.0
2-Pentanone, 4-hydro	7.19	723.0	ug/mL	21998900	ISTD01	9.95	1217060	40.0

K4740.D K813OL42.M Mon Aug 25 11:19:35 2008

699

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4740.D
Operator : MEG
Acquired : 21 Aug 2008 18:23 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808068-001B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 7
Quant File :K8130L42.RES (RTE Integrator)



K4740.D K8130L42.M Mon Aug 25 11:19:25 2008

700

Library Search Compound Report

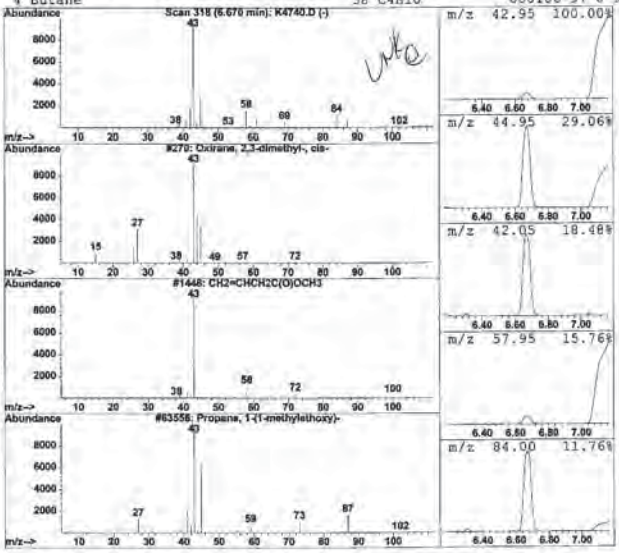
Data File : C:\HPCHEM\1\DATA\K4740.D Vial: 7
Acq On : 21 Aug 2008 18:23 Operator: MEG
Sample : 0808068-001B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Oxirane, 2,3-dimethyl-, cis- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.67	23.44 ug/mL	713137	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
2	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
3	Propane, 1-(1-methylethoxy)-	102	C6H14O	000627-08-7	9
4	Butane	58	C4H10	000106-97-8	9



K4740.D K8130L42.M Mon Aug 25 11:19:32 2008 Pag

701

Library Search Compound Report

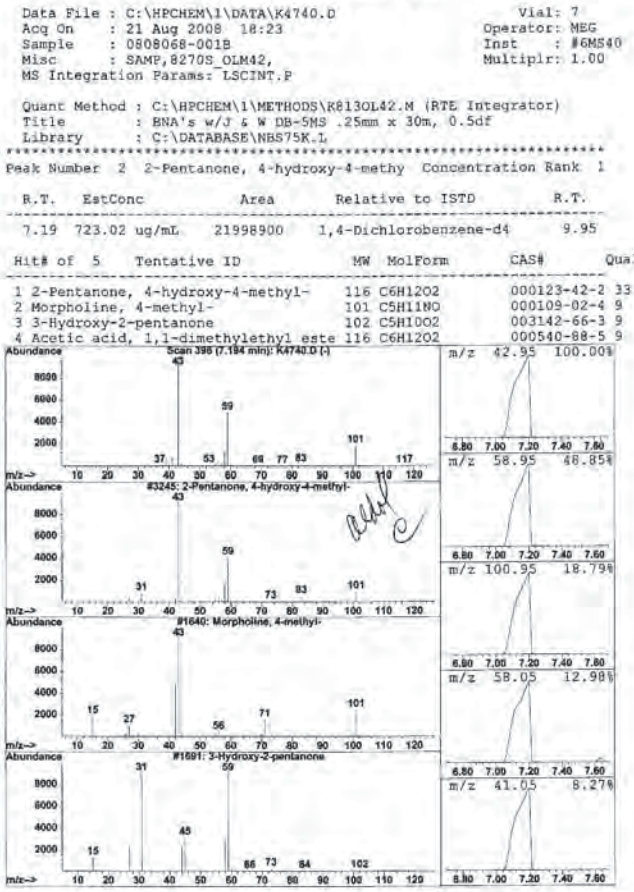
Data File : C:\HPCHEM\1\DATA\K4740.D Vial: 7
Acq On : 21 Aug 2008 18:23 Operator: MEG
Sample : 0808068-001B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.19	723.02 ug/mL	21998900	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	33
2	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
3	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
4	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9



K4740.D K8130L42.M Mon Aug 25 11:19:35 2008 Pag

702

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.7	BatchNo: 7957/R1457I
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4741.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1-Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 19:01
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 19:01
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/21/08 19:01
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 19:01
2,4-Dimethylphenol	ND		400	81	µg/Kg-dry	1	08/21/08 19:01
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 19:01
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/21/08 19:01
2,6-Dinitrotoluene	ND		400	6.8	µg/Kg-dry	1	08/21/08 19:01
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 19:01
2-Chlorophenol	ND		400	6.2	µg/Kg-dry	1	08/21/08 19:01
2-Methylnaphthalene	ND		400	1.9	µg/Kg-dry	1	08/21/08 19:01
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 19:01
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 19:01
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
3,3'-Dichlorobenzidine	ND		800	49	µg/Kg-dry	1	08/21/08 19:01
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 19:01
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 19:01
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 19:01
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 19:01
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/21/08 19:01
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 19:01
4-Nitrophenol	ND		2000	81	µg/Kg-dry	1	08/21/08 19:01
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 19:01
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 19:01
Acetophenone	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Anthracene	ND		400	2.8	µg/Kg-dry	1	08/21/08 19:01
Atrazine	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/21/08 19:01
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 19:01
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 19:01
Benzo[g,h,i]perylene	ND		400	16	µg/Kg-dry	1	08/21/08 19:01

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381960 Project Supervisor: Monika Santucci

703

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	I-SAMP-K4741.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.7; TestCode: 8270S_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 19:01
bis(2-Chloroethoxy)methane	ND		400	5.7	µg/Kg-dry	1	08/21/08 19:01
bis(2-chloroethyl)ether	ND		400	6.2	µg/Kg-dry	1	08/21/08 19:01
bis(2-chloroisopropyl)ether	ND		400	6.9	µg/Kg-dry	1	08/21/08 19:01
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 19:01
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
Caprolactam	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 19:01
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 19:01
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 19:01
Dibenz[a,h]anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 19:01
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 19:01
Dimethyl phthalate	ND		400	4.1	µg/Kg-dry	1	08/21/08 19:01
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 19:01
Fluorene	ND		400	4.1	µg/Kg-dry	1	08/21/08 19:01
Hexachlorobenzene	ND		400	6.5	µg/Kg-dry	1	08/21/08 19:01
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/21/08 19:01
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 19:01
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/21/08 19:01
Indeno[1,2,3-cd]pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 19:01
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 19:01
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 19:01
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 19:01
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 19:01
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 19:01
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 19:01
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 19:01
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 19:01
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 19:01
Surr: 2,4,6-Tribromophenol	90.8		20-143	0	%REC	1	08/21/08 19:01
Surr: 2-Fluorobiphenyl	80.5		46-130	0	%REC	1	08/21/08 19:01
Surr: 2-Fluorophenol	81.9		22-130	0	%REC	1	08/21/08 19:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381960 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-South*
W Order:	0808068	Collection Date:	08/12/08 11:45
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	I-SAMP-K4741.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.7; TestCode: 8270S_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	85.0		39-130	0	%REC	1	08/21/08 19:01
Surr: Phenol-d5	85.5		33-130	0	%REC	1	08/21/08 19:01
Surr: Terphenyl-d14	94.2		36-146	0	%REC	1	08/21/08 19:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381960 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYZIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-South

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-002B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4741.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.68	980	BJ
2.	aldol	7.21	30000	BJA

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K4741.D                    Vial: 8
Acq On    : 21 Aug 2008  19:01                     Operator: MBG
Sample    : 0808068-002B                              Inst   : #6MS40
Misc      : SAMP,8270S_OLM42,                         Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008                 Quant Results File: K8130L42.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards                  R.T. QIon  Response  Conc Units Dev(Min)
-------------------------------------------------------------------------------
 1) 1,4-Dichlorobenzene-d4          9.95  152   191758    40.00 ug/mL   0.00
13) Naphthalene-d8                 12.31  136   730944    40.00 ug/mL   0.00
26) Acenaphthene-d10               15.66  164   395609    40.00 ug/mL   0.00
47) Phenanthrene-d10               18.51  188   721625    40.00 ug/mL   0.00
58) Chrysene-d12                   23.57  240   592193    40.00 ug/mL  -0.02
68) Perylene-d12                   26.60  264   547130    40.00 ug/mL  -0.02

System Monitoring Compounds
 2) 2-Fluorophenol                  7.64  112   751444   122.80 ug/mL   0.03
  Spiked Amount    150.000                        Recovery   =   81.87%
 3) Phenol-d5                       9.22   99  1036026   128.27 ug/mL   0.00
  Spiked Amount    150.000                        Recovery   =   85.51%
14) Nitrobenzene-d5                10.96   82   641841    85.01 ug/mL   0.00
  Spiked Amount    100.000                        Recovery   =   85.01%
30) 2-Fluorobiphenyl               14.34  172   879661    80.49 ug/mL   0.00
  Spiked Amount    100.000                        Recovery   =   80.49%
46) 2,4,6-Tribromophenol           17.16  330   219013   136.19 ug/mL   0.00
  Spiked Amount    150.000                        Recovery   =   90.79%
60) Terphenyl-d14                  21.54  244   900926    94.21 ug/mL   0.00
  Spiked Amount    100.000                        Recovery   =   94.21%

Target Compounds                                                    Qvalue
```

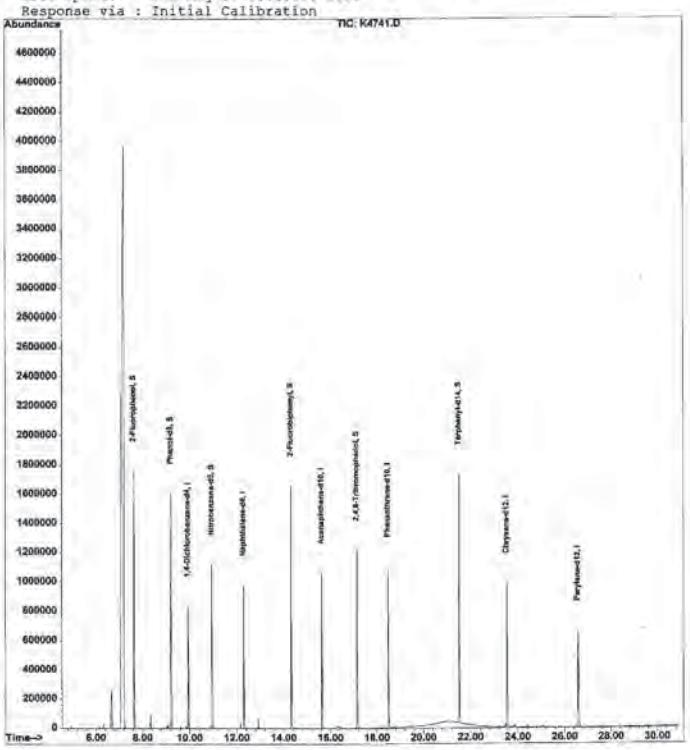
(#) = qualifier out of range (m) = manual integration
K4741.D K8130L42.M Fri Aug 22 10:21:04 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4741.D
Acq On : 21 Aug 2008 19:01
Sample : 0808068-002B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008

Vial: 8
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4741.D K8130L42.M Fri Aug 22 10:21:27 2008 Pag 708

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4741.D
Acq On : 21 Aug 2008 19:01
Sample : 0808068-002B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 8
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	191758	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	730601	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	395609	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	721625	40.00 ug/mL	0.00
14) Chrysene-d12	23.57	240	592193	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	547130	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

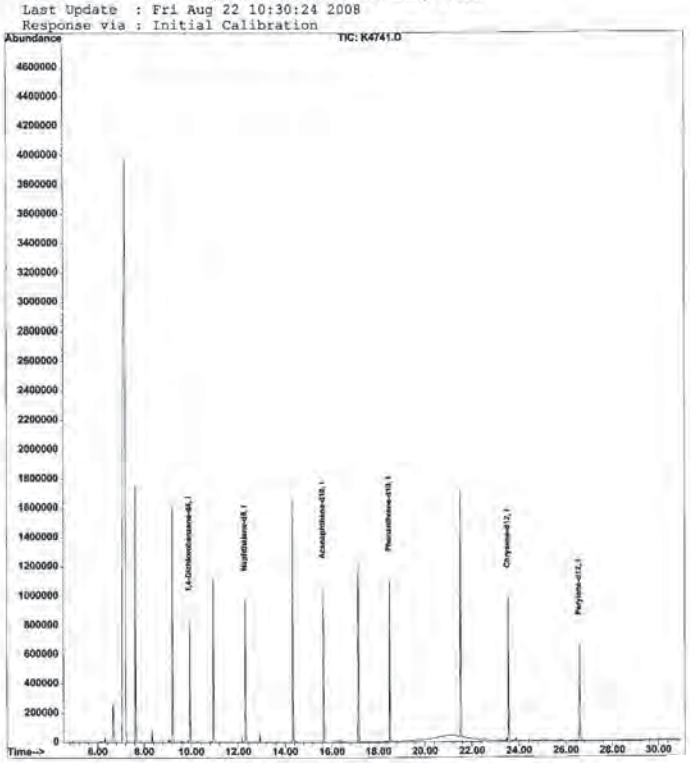
(#) = qualifier out of range (m) = manual integration
K4741.D K8130LM.M Fri Aug 22 10:33:24 2008 Pag 709

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4741.D
Acq On : 21 Aug 2008 19:01
Sample : 0808068-002B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 8
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4741.D K8130LM.M Fri Aug 22 10:33:24 2008 Pag 710

Tentatively Identified Compound (LSC) summary

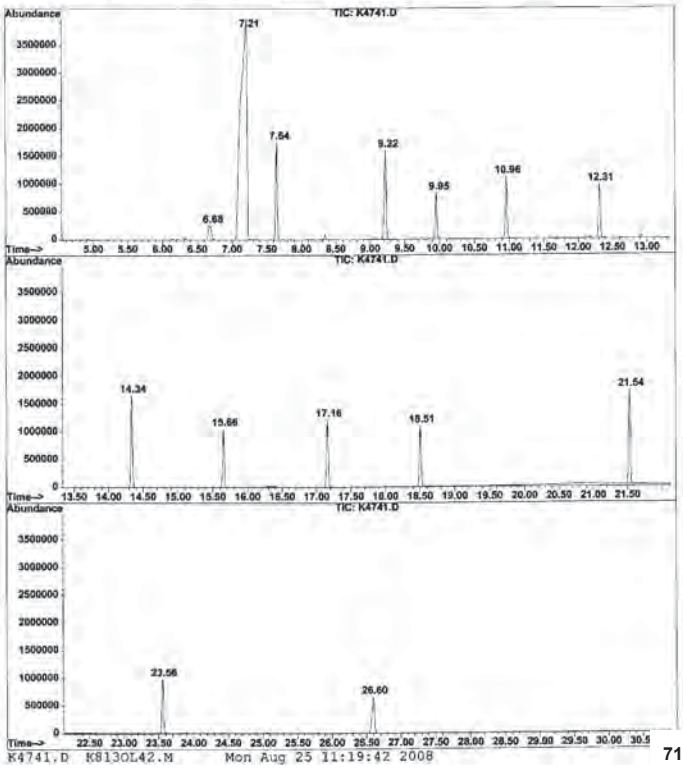
Operator ID: MEG Date Acquired: 21 Aug 2008 19:01
Data File: C:\HPCHEM\1\DATA\K4741.D
Name: 0808068-002B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.68	24.3	ug/mL	810829	ISTD01	9.95	1335640	40.0
2-Pentanone, 4-hydro	7.21	734.3	ug/mL	24517500	ISTD01	9.95	1335640	40.0

K4741.D K8130L42.M Mon Aug 25 11:19:51 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4741.D
Operator : MEG
Acquired : 21 Aug 2008 19:01 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808068-002B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 8
Quant File :K813OL42.RES (RTE Integrator)



K4741.D K813OL42.M Mon Aug 25 11:19:42 2008

712

Library Search Compound Report

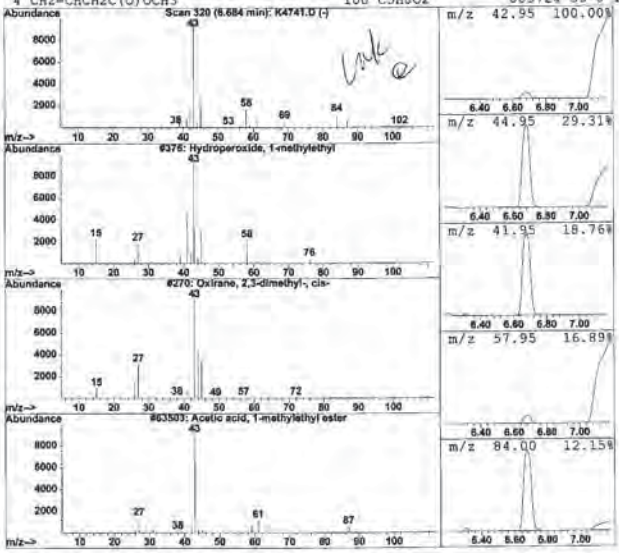
Data File : C:\HPCHEM\1\DATA\K4741.D Vial: 8
Acq On : 21 Aug 2008 19:01 Operator: MEG
Sample : 0808068-002B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.68	24.28 ug/mL	810829	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	42
2	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
3	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10



K4741.D K813OL42.M Mon Aug 25 11:19:50 2008 Pag

713

Library Search Compound Report

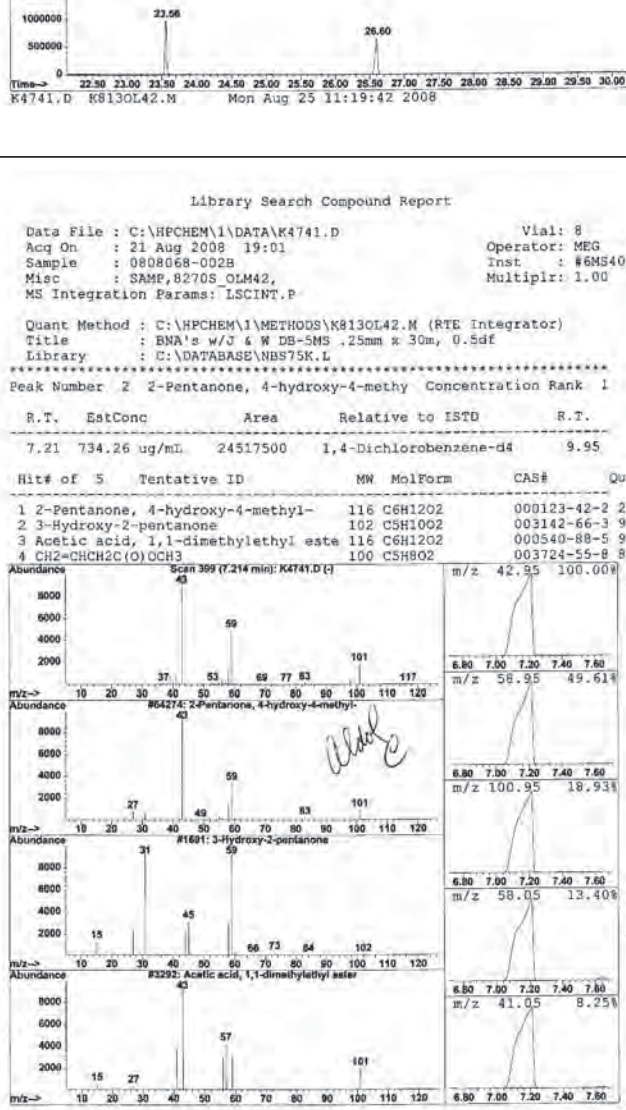
Data File : C:\HPCHEM\1\DATA\K4741.D Vial: 8
Acq On : 21 Aug 2008 19:01 Operator: MEG
Sample : 0808068-002B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.21	734.26 ug/mL	24517500	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4741.D K813OL42.M Mon Aug 25 11:19:51 2008 Pag

714

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.8	BatchNo: 7957/R14569
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4731.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 13:01
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 13:01
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/21/08 13:01
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:01
2,4-Dimethylphenol	ND		400	81	µg/Kg-dry	1	08/21/08 13:01
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:01
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/21/08 13:01
2,6-Dinitrotoluene	ND		400	6.8	µg/Kg-dry	1	08/21/08 13:01
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:01
2-Chlorophenol	ND		400	6.2	µg/Kg-dry	1	08/21/08 13:01
2-Methylnaphthalene	ND		400	1.9	µg/Kg-dry	1	08/21/08 13:01
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:01
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 13:01
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 13:01
3,3'-Dichlorobenzidine	ND		800	49	µg/Kg-dry	1	08/21/08 13:01
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:01
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 13:01
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/21/08 13:01
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 13:01
4-Methylphenol	ND		400	3.6	µg/Kg-dry	1	08/21/08 13:01
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:01
4-Nitrophenol	ND		2000	81	µg/Kg-dry	1	08/21/08 13:01
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 13:01
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 13:01
Acetophenone	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Anthracene	ND		400	2.8	µg/Kg-dry	1	08/21/08 13:01
Atrazine	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Benzaldehyde	ND		400	8.1	µg/Kg-dry	1	08/21/08 13:01
Benzo(a)anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:01
Benzo(a)pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
Benzo(b)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:01
Benzo(g,h,i)perylene	ND		400	16	µg/Kg-dry	1	08/21/08 13:01

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381914 Project Supervisor: Monika Santucci

715

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40 Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS %Moisture: 17.8	BatchNo:	7957/R14569
Revision:	08/22/08 11:06 TestCode: 8270S OLM42	FileID:	1-SAMP-K4731.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:01
bis(2-Chloroethoxy)methane	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:01
bis(2-chloroethyl)ether	ND		400	6.2	µg/Kg-dry	1	08/21/08 13:01
bis(2-chloroisopropyl)ether	ND		400	6.9	µg/Kg-dry	1	08/21/08 13:01
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 13:01
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 13:01
Caprolactam	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:01
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 13:01
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 13:01
Dibenz(a,h)anthracene	ND		400	18	µg/Kg-dry	1	08/21/08 13:01
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 13:01
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:01
Dimethyl phthalate	ND		400	4.1	µg/Kg-dry	1	08/21/08 13:01
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 13:01
Fluorene	ND		400	4.1	µg/Kg-dry	1	08/21/08 13:01
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/21/08 13:01
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:01
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 13:01
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/21/08 13:01
Indeno(1,2,3-cd)pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 13:01
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:01
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:01
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:01
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 13:01
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:01
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:01
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 13:01
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:01
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:01
Surr: 2,4,6-Tribromophenol	92.7		28-143	0	%REC	1	08/21/08 13:01
Surr: 2-Fluorobiphenyl	80.4		48-130	0	%REC	1	08/21/08 13:01
Surr: 2-Fluorophenol	81.7		22-130	0	%REC	1	08/21/08 13:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim/Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381914 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-East*
W Order:	0808068	Collection Date:	08/12/08 12:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40 Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS %Moisture: 17.8	BatchNo:	7957/R14569
Revision:	08/22/08 11:06 TestCode: 8270S OLM42	FileID:	1-SAMP-K4731.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	87.2		39-130	0	%REC	1	08/21/08 13:01
Surr: Phenol-d5	85.3		33-130	0	%REC	1	08/21/08 13:01
Surr: Terphenyl-d14	94.8		36-146	0	%REC	1	08/21/08 13:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim/Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381914 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-East

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068G

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-003B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4731.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.68	960	BJ
2.	aldol	7.22	28000	BJA

FORM I TIC 1 SW8270C

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K4731.D                    Vial: 8
Acq On    : 21 Aug 2008  13:01                          Operator: MEG
Sample    : 0808068-003B                                Inst    : #6MS40
Misc      : SAMP,8270S_OLM42,                           Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22  9:57 2008                   Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 09:56:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL
```

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	210152	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	792404	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.65	164	430204	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.50	188	791283	40.00 ug/mL	-0.01
58) Chrysene-d12	23.56	240	660366	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	625109	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	821864	122.56 ug/mL	0.04
Spiked Amount 150.000			Recovery =	81.71%	
3) Phenol-d5	9.22	99	1132382	127.92 ug/mL	0.00
Spiked Amount 150.000			Recovery =	85.28%	
14) Nitrobenzene-d5	10.96	82	713888	87.21 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	87.21%	
30) 2-Fluorobiphenyl	14.33	172	955916	80.44 ug/mL	0.00
Spiked Amount 100.000			Recovery =	80.44%	
46) 2,4,6-Tribromophenol	17.16	330	243093	139.01 ug/mL	0.00
Spiked Amount 150.000			Recovery =	92.67%	
60) Terphenyl-d14	21.53	244	1010461	94.75 ug/mL	0.00
Spiked Amount 100.000			Recovery =	94.75%	

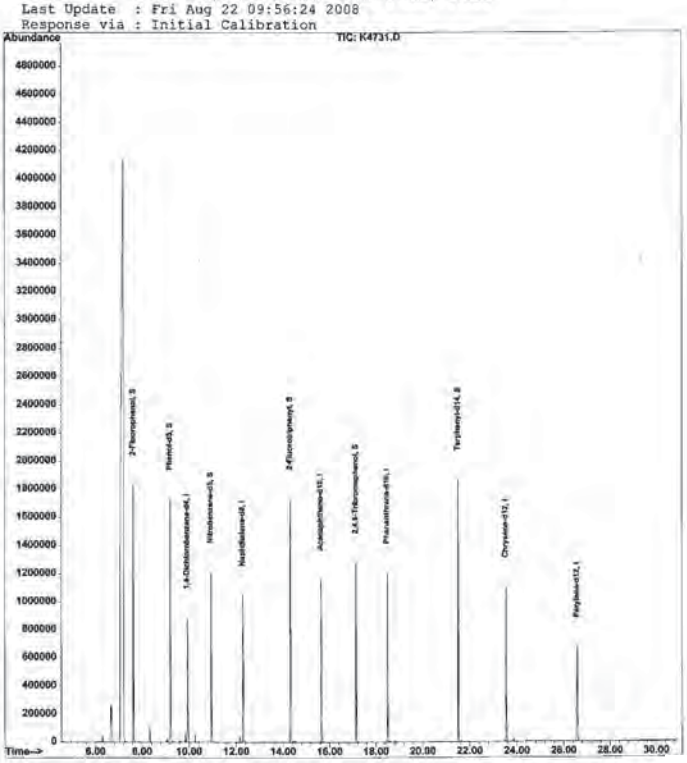
Target Compounds — Qvalue

(#) = qualifier out of range (m) = manual integration
K4731.D K813OL42.M Fri Aug 22 09:58:32 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4731.D Vial: 8
Acq On : 21 Aug 2008 13:01 Operator: MEG
Sample : 0808068-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:57 2008 Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:24 2008
Response via : Initial Calibration



K4731.D K8130L42.M Fri Aug 22 09:58:33 2008 Pag 720

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4731.D Vial: 8
Acq On : 21 Aug 2008 13:01 Operator: MEG
Sample : 0808068-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:04 2008 Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:10 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	210152	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	792404	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	430204	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.50	188	791283	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	660359	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	625109	40.00 ug/mL	0.00

System Monitoring Compounds

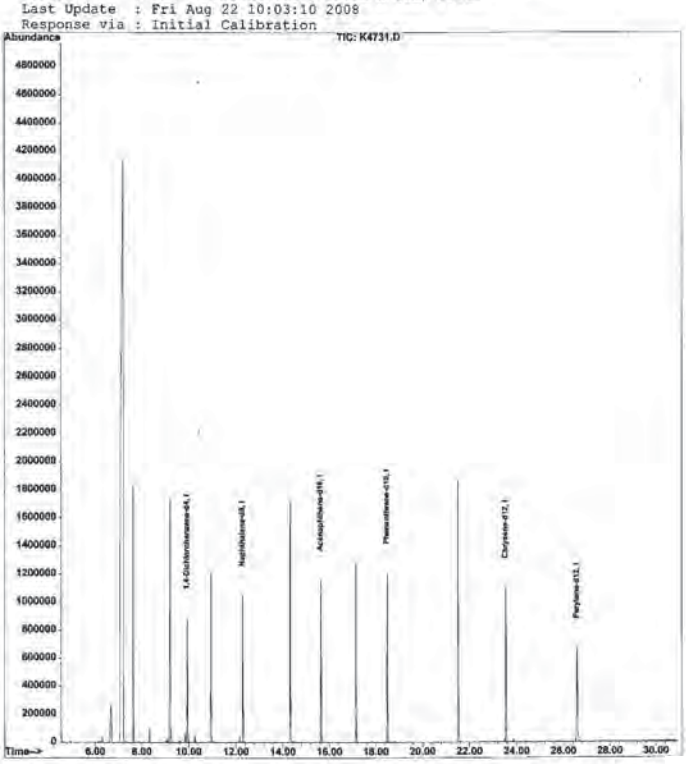
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K4731.D K8130LM.M Fri Aug 22 10:05:45 2008 Pag 721

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4731.D Vial: 8
Acq On : 21 Aug 2008 13:01 Operator: MEG
Sample : 0808068-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:04 2008 Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:10 2008
Response via : Initial Calibration



K4731.D K8130LM.M Fri Aug 22 10:05:45 2008 Pag 722

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Aug 2008 13:01
Data File: C:\HPCHEM\1\DATA\K4731.D
Name: 0808068-003B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

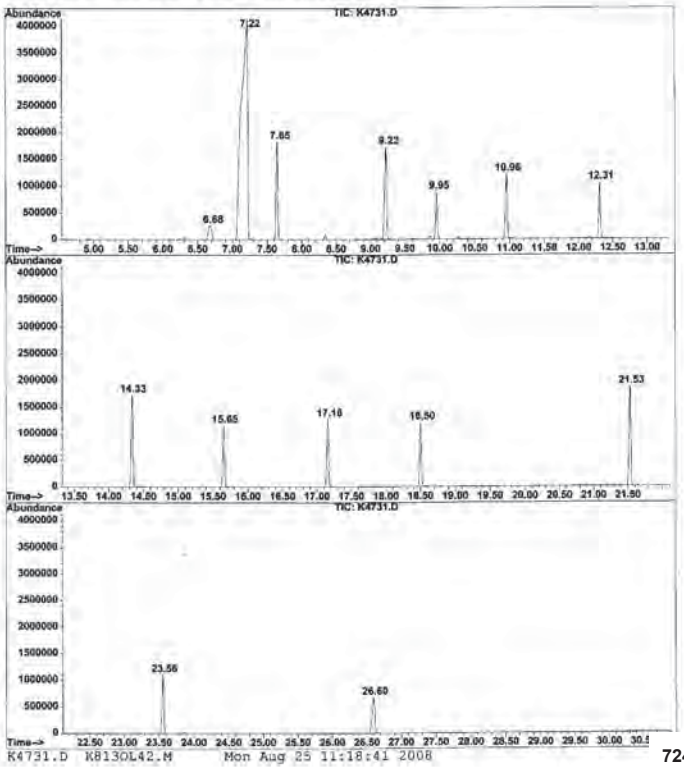
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.68	23.6	ug/mL	890625	ISTD01	9.96	1507260	40.0
2-Pentanone, 4-hydro	7.22	692.0	ug/mL	26076800	ISTD01	9.96	1507260	40.0

K4731.D K8130L42.M Mon Aug 25 11:18:45 2008

723

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4731.D
Operator : MEG
Acquired : 21 Aug 2008 13:01 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808068-003B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 8
Quant File :K813OL42.RES (RTE Integrator)



K4731.D K813OL42.M Mon Aug 25 11:18:41 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K4731.D Vial: 8
Acq On : 21 Aug 2008 13:01 Operator: MEG
Sample : 0808068-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

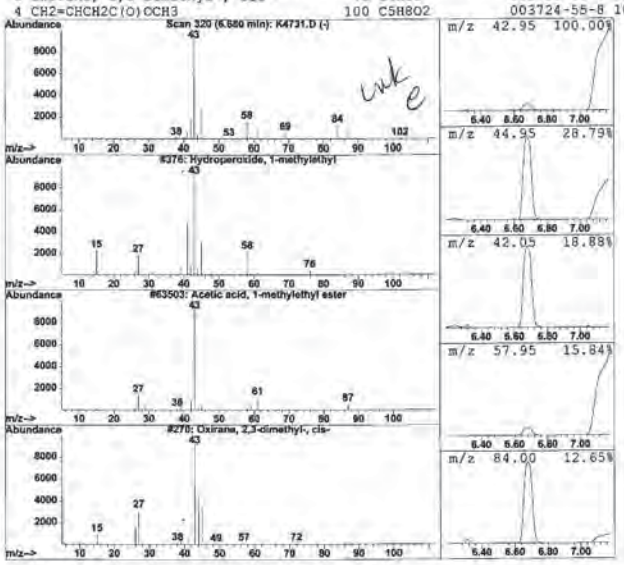
Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.68	23.64 ug/mL	890625	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	42
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
3	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10



K4731.D K813OL42.M Mon Aug 25 11:18:45 2008 Pag

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K4731.D Vial: 8
Acq On : 21 Aug 2008 13:01 Operator: MEG
Sample : 0808068-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

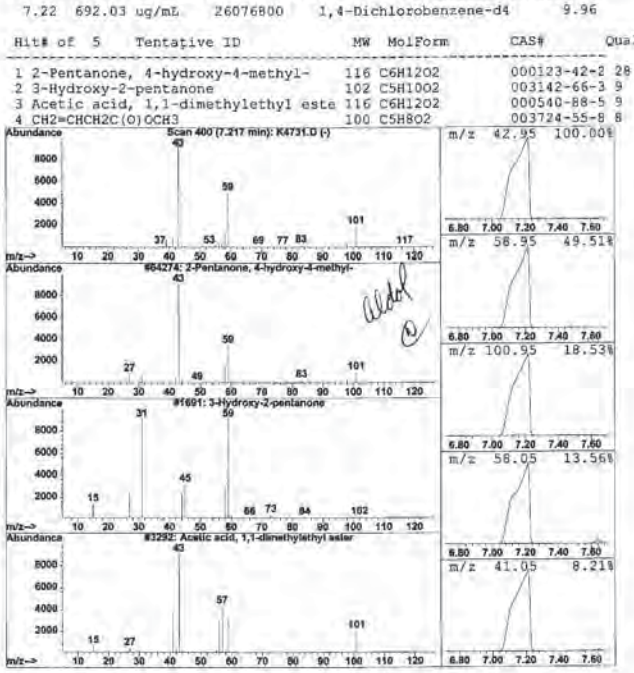
Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	692.03 ug/mL	26076800	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4731.D K813OL42.M Mon Aug 25 11:18:45 2008 Pag

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11/06	FileID:	1-SAMP-K4742.D
Col Type:			

Sample Size: 30 g
%Moisture: 15.0
TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 19:40
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 19:40
2,4,6-Trichlorophenol	ND		390	6.7	µg/Kg-dry	1	08/21/08 19:40
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 19:40
2,4-Dimethylphenol	ND		390	78	µg/Kg-dry	1	08/21/08 19:40
2,4-Dinitrophenol	ND		2000	380	µg/Kg-dry	1	08/21/08 19:40
2,4-Dinitrotoluene	ND		390	5.7	µg/Kg-dry	1	08/21/08 19:40
2,6-Dinitrotoluene	ND		390	6.6	µg/Kg-dry	1	08/21/08 19:40
2-Chloronaphthalene	ND		390	4.3	µg/Kg-dry	1	08/21/08 19:40
2-Chlorophenol	ND		390	6.0	µg/Kg-dry	1	08/21/08 19:40
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 19:40
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 19:40
2-Nitroaniline	ND		2000	6.9	µg/Kg-dry	1	08/21/08 19:40
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 19:40
3,3'-Dichlorobenzidine	ND		780	47	µg/Kg-dry	1	08/21/08 19:40
3-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 19:40
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 19:40
4-Bromophenyl phenyl ether	ND		390	5.1	µg/Kg-dry	1	08/21/08 19:40
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
4-Chloroaniline	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
4-Chlorophenyl phenyl ether	ND		390	4.8	µg/Kg-dry	1	08/21/08 19:40
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 19:40
4-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 19:40
4-Nitrophenol	ND		2000	78	µg/Kg-dry	1	08/21/08 19:40
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 19:40
Acenaphthylene	ND		390	4.7	µg/Kg-dry	1	08/21/08 19:40
Acetophenone	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Anthracene	ND		390	2.7	µg/Kg-dry	1	08/21/08 19:40
Atrazine	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Benzaldehyde	ND		390	5.9	µg/Kg-dry	1	08/21/08 19:40
Benzo(a)anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 19:40
Benzo(a)pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
Benzo(b)fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 19:40
Benzo(g,h,i)perylene	ND		390	16	µg/Kg-dry	1	08/21/08 19:40

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381961 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4742.D
Col Type:			

Sample Size: 30 g; %Moisture: 15.0; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 19:40
bis(2-Chloroethoxy)methane	ND		390	3.6	µg/Kg-dry	1	08/21/08 19:40
bis(2-chloroethyl)ether	ND		390	5.0	µg/Kg-dry	1	08/21/08 19:40
bis(2-chloroisopropyl)ether	ND		390	6.7	µg/Kg-dry	1	08/21/08 19:40
bis(2-Ethylhexyl)phthalate	ND		390	17	µg/Kg-dry	1	08/21/08 19:40
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 19:40
Caprolactam	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 19:40
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 19:40
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 19:40
Dibenz[a,h]anthracene	ND		390	18	µg/Kg-dry	1	08/21/08 19:40
Dibenzofuran	ND		390	5.4	µg/Kg-dry	1	08/21/08 19:40
Diethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 19:40
Dimethyl phthalate	ND		390	4.0	µg/Kg-dry	1	08/21/08 19:40
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 19:40
Fluorene	ND		390	4.0	µg/Kg-dry	1	08/21/08 19:40
Hexachlorobenzene	ND		390	6.3	µg/Kg-dry	1	08/21/08 19:40
Hexachlorobutadiene	ND		390	3.6	µg/Kg-dry	1	08/21/08 19:40
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 19:40
Hexachloroethane	ND		390	47	µg/Kg-dry	1	08/21/08 19:40
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 19:40
Isophorone	ND		390	3.2	µg/Kg-dry	1	08/21/08 19:40
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 19:40
N-Nitrosodiphenylamine	ND		390	2.6	µg/Kg-dry	1	08/21/08 19:40
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 19:40
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 19:40
Pentachlorophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 19:40
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 19:40
Phenol	ND		390	3.6	µg/Kg-dry	1	08/21/08 19:40
Pyrene	ND		390	2.6	µg/Kg-dry	1	08/21/08 19:40
Surr: 2,4,6-Tribromophenol	90.3		29-143	0	%REC	1	08/21/08 19:40
Surr: 2-Fluorobiphenyl	82.2		48-130	0	%REC	1	08/21/08 19:40
Surr: 2-Fluorophenol	85.3		22-130	0	%REC	1	08/21/08 19:40

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381961 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-North*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4742.D
Col Type:			

Sample Size: 30 g; %Moisture: 15.0; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	88.7		39-130	0	%REC	1	08/21/08 19:40
Surr: Phenol-d5	89.4		33-130	0	%REC	1	08/21/08 19:40
Surr: Terphenyl-d14	101		38-146	0	%REC	1	08/21/08 19:40

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381961 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-North

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-004B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4742.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 15 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.67	960	BJ
2.	aldol	7.21	28000	BJA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4742.D Vial: 9
Acq On : 21 Aug 2008 19:40 Operator: MEG
Sample : 0808068-004B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	199619	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	759123	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	409934	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.51	188	746059	40.00 ug/mL	0.00
58) Chrysene-d12	23.57	240	597226	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	553117	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.64	112	814964	127.94 ug/mL	0.03
Spiked Amount 150.000			Recovery =	85.29%	
3) Phenol-d5	9.23	99	1127231	134.06 ug/mL	0.00
Spiked Amount 150.000			Recovery =	89.37%	
14) Nitrobenzene-d5	10.96	82	695284	88.67 ug/mL	0.00
Spiked Amount 100.000			Recovery =	88.67%	
30) 2-Fluorobiphenyl	14.34	172	930404	82.16 ug/mL	0.00
Spiked Amount 100.000			Recovery =	82.16%	
46) 2,4,6-Tribromophenol	17.16	330	225673	135.43 ug/mL	0.00
Spiked Amount 150.000			Recovery =	90.29%	
60) Terphenyl-d14	21.54	244	973859	100.98 ug/mL	0.00
Spiked Amount 100.000			Recovery =	100.98%	

Target Compounds Qvalue

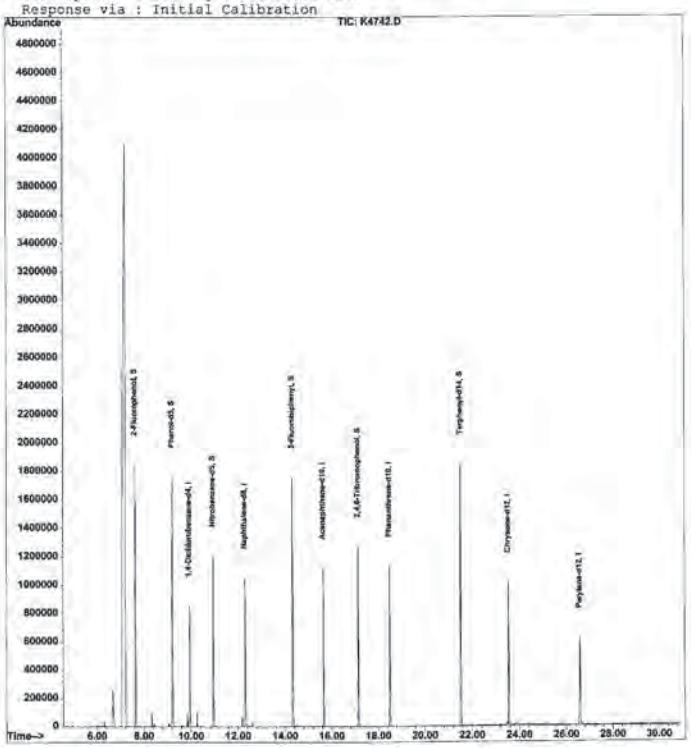
(#) = qualifier out of range (m) = manual integration
K4742.D K813OL42.M Fri Aug 22 10:22:03 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4742.D
Acq On : 21 Aug 2008 19:40
Sample : 0808068-004B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008

Vial: 9
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4742.D K8130L42.M Fri Aug 22 10:22:04 2008 Pag 732

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4742.D
Acq On : 21 Aug 2008 19:40
Sample : 0808068-004B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 9
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	199619	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	758769	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	409934	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	746059	40.00 ug/mL	0.00
14) Chrysene-d12	23.57	240	596995	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	553117	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

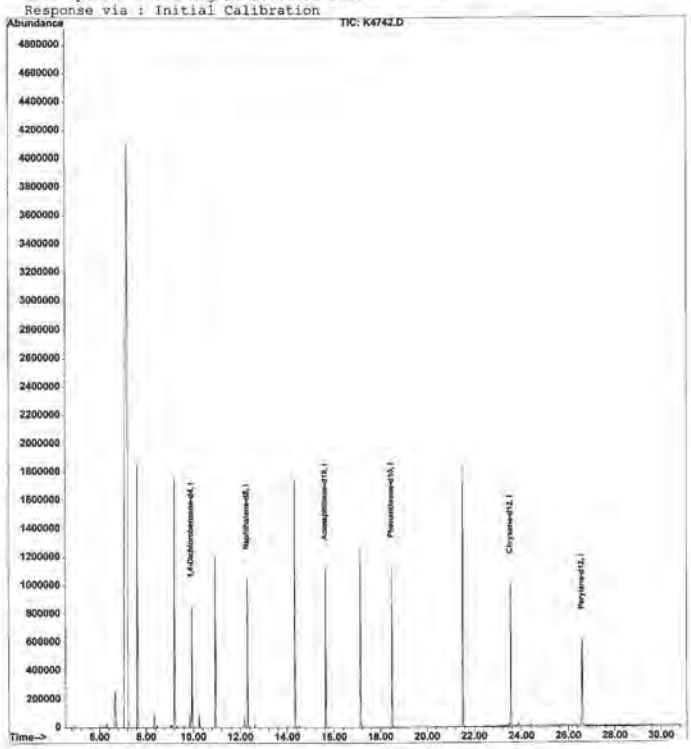
(#) = qualifier out of range (m) = manual integration
K4742.D K8130LM.M Fri Aug 22 10:33:28 2008 Pag 733

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4742.D
Acq On : 21 Aug 2008 19:40
Sample : 0808068-004B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 9
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4742.D K8130LM.M Fri Aug 22 10:33:29 2008 Pag 734

Tentatively Identified Compound (LSC) summary

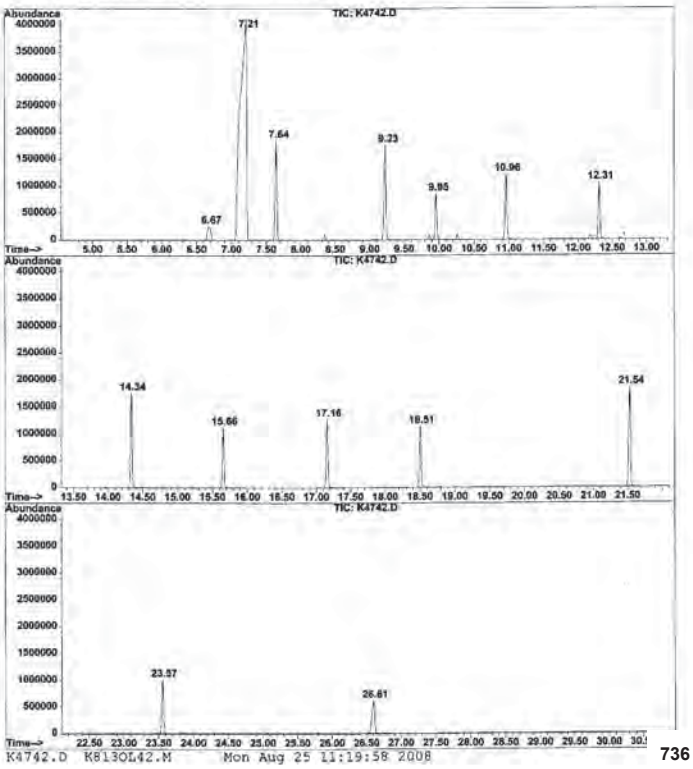
Operator ID: MEG Date Acquired: 21 Aug 2008 19:40
Data File: C:\HPCHEM\1\DATA\K4742.D
Name: 0808068-004B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Butane	6.67	24.5	ug/mL	878423	ISTD01	9.95	1434020	40.0
2-Pentanone, 4-hydro	7.21	722.6	ug/mL	25906500	ISTD01	9.95	1434020	40.0

K4742.D K8130L42.M Mon Aug 25 11:20:05 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4742.D
Operator : MEG
Acquired : 21 Aug 2008 19:40 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808068-004B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 9
Quant File :K813OL42.RES (RTE Integrator)



K4742.D K813OL42.M Mon Aug 25 11:19:58 2008

Library Search Compound Report

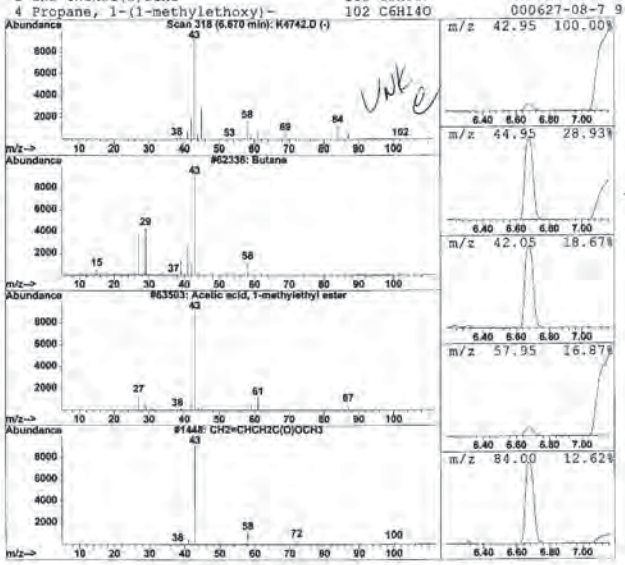
Data File : C:\HPCHEM\1\DATA\K4742.D Vial: 9
Acq On : 21 Aug 2008 19:40 Operator: MEG
Sample : 0808068-004B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.67	24.50 ug/mL	878423	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	25
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
3	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
4	Propane, 1-(1-methylethoxy)-	102	C6H14O	000627-08-7	9



K4742.D K813OL42.M Mon Aug 25 11:20:05 2008 Pag

Library Search Compound Report

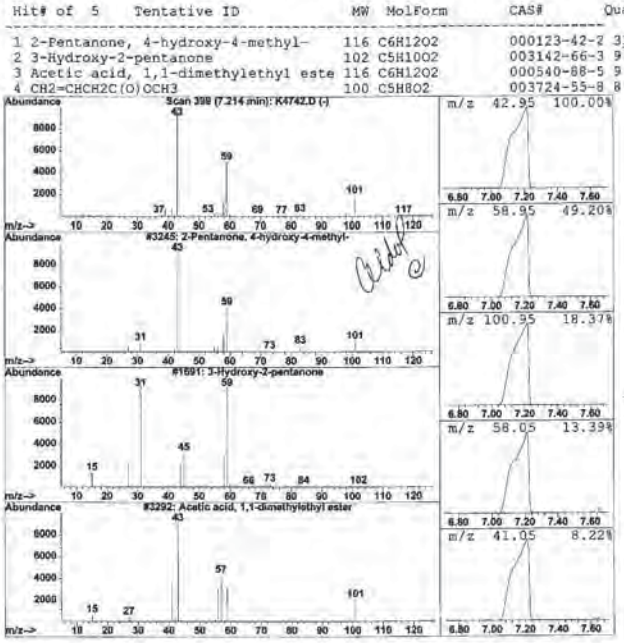
Data File : C:\HPCHEM\1\DATA\K4742.D Vial: 9
Acq On : 21 Aug 2008 19:40 Operator: MEG
Sample : 0808068-004B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.21	722.63 ug/mL	25906500	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	33
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4742.D K813OL42.M Mon Aug 25 11:20:05 2008 Pag

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4743.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 20:18
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 20:18
2,4,6-Trichlorophenol	ND		390	6.8	µg/Kg-dry	1	08/21/08 20:18
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 20:18
2,4-Dimethylphenol	ND		390	80	µg/Kg-dry	1	08/21/08 20:18
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:18
2,4-Dinitrotoluene	ND		390	5.8	µg/Kg-dry	1	08/21/08 20:18
2,6-Dinitrotoluene	ND		390	5.7	µg/Kg-dry	1	08/21/08 20:18
2-Chloronaphthalene	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:18
2-Chlorophenol	ND		390	8.1	µg/Kg-dry	1	08/21/08 20:18
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 20:18
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:18
2-Nitroaniline	ND		2000	7.0	µg/Kg-dry	1	08/21/08 20:18
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
3,3'-Dichlorobenzidine	ND		790	48	µg/Kg-dry	1	08/21/08 20:18
3-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:18
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 20:18
4-Bromophenyl phenyl ether	ND		390	6.2	µg/Kg-dry	1	08/21/08 20:18
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
4-Chloroaniline	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
4-Chlorophenyl phenyl ether	ND		390	4.9	µg/Kg-dry	1	08/21/08 20:18
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 20:18
4-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:18
4-Nitrophenol	ND		2000	80	µg/Kg-dry	1	08/21/08 20:18
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 20:18
Acenaphthylene	ND		390	4.6	µg/Kg-dry	1	08/21/08 20:18
Acetophenone	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
Anthracene	ND		390	2.8	µg/Kg-dry	1	08/21/08 20:18
Atrazine	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
Benzaldehyde	ND		390	6.0	µg/Kg-dry	1	08/21/08 20:18
Benzo[a]anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:18
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 20:18
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 20:18

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P From /Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381962 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4743.D
Col Type:			

Sample Size: 30 g; %Moisture: 16.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 20:18
bis(2-Chloroethoxy)methane	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:18
bis(2-chloroethyl)ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 20:18
bis(2-chloroisopropyl)ether	ND		390	6.8	µg/Kg-dry	1	08/21/08 20:18
bis(2-Ethylhexyl)phthalate	ND		390	18	µg/Kg-dry	1	08/21/08 20:18
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
Caprolactam	ND		390	46	µg/Kg-dry	1	08/21/08 20:18
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:18
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 20:18
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 20:18
Dibenz[a,h]anthracene	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
Dibenzofuran	ND		390	5.5	µg/Kg-dry	1	08/21/08 20:18
Diethyl phthalate	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:18
Dimethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:18
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 20:18
Fluorene	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:18
Hexachlorobenzene	ND		390	6.4	µg/Kg-dry	1	08/21/08 20:18
Hexachlorobutadiene	ND		390	3.6	µg/Kg-dry	1	08/21/08 20:18
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 20:18
Hexachloroethane	ND		390	48	µg/Kg-dry	1	08/21/08 20:18
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 20:18
Isophorone	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:18
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 20:18
N-Nitrosodiphenylamine	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:18
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 20:18
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:18
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:18
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 20:18
Phenol	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:18
Pyrene	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:18
Surr: 2,4,6-Tribromophenol	90.3		20-143	0	%REC	1	08/21/08 20:18
Surr: 2-Fluorobiphenyl	81.1		46-130	0	%REC	1	08/21/08 20:18
Surr: 2-Fluorophenol	83.2		22-130	0	%REC	1	08/21/08 20:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381962 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-West*
W Order:	0808068	Collection Date:	08/12/08 14:05
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4743.D
Col Type:			

Sample Size: 30 g; %Moisture: 16.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	86.8		39-130	0	%REC	1	08/21/08 20:18
Surr: Phenol-d5	86.4		33-130	0	%REC	1	08/21/08 20:18
Surr: Terphenyl-d14	103		36-146	0	%REC	1	08/21/08 20:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381962 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-005B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4743.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.68	980	BJ
2.	aldol	7.21	30000	BJA

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K4743.D                    Vial: 10
Acq On    : 21 Aug 2008  20:18                     Operator: MEG
Sample    : 0808068-005B                              Inst    : #6MS40
Misc      : SAMP,8270S_OLM42,                         Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008                 Quant Results File: K8130L42.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards                  R.T.  QIon  Response   Conc Units Dev(Min)
-------------------------------------------------------------------------------
 1) 1,4-Dichlorobenzene-d4          9.96  152   190334    40.00 ug/mL   0.00
13) Naphthalene-d8                 12.31  136   722335    40.00 ug/mL   0.00
26) Acenaphthene-d10               15.66  164   392374    40.00 ug/mL   0.00
47) Phenanthrene-d10               18.51  188   711373    40.00 ug/mL   0.00
58) Chrysene-d12                   23.56  240   574369    40.00 ug/mL  -0.02
68) Perylene-d12                   26.60  264   522824    40.00 ug/mL  -0.02

System Monitoring Compounds
 2) 2-Fluorophenol                  7.65  112   757954   124.79 ug/mL   0.03
  Spiked Amount    150.000                        Recovery    =  83.19%
 3) Phenol-d5                       9.22   99  1038989   129.60 ug/mL   0.00
  Spiked Amount    150.000                        Recovery    =  86.40%
14) Nitrobenzene-d5                10.96   82   647847    86.82 ug/mL   0.00
  Spiked Amount    100.000                        Recovery    =  86.82%
30) 2-Fluorobiphenyl               14.34  172   878960    81.09 ug/mL   0.00
  Spiked Amount    100.000                        Recovery    =  81.09%
46) 2,4,6-Tribromophenol           17.16  330   216088   135.48 ug/mL   0.00
  Spiked Amount    150.000                        Recovery    =  90.32%
60) Terphenyl-d14                  21.54  244   958785   103.37 ug/mL   0.00
  Spiked Amount    100.000                        Recovery    = 103.37%

Target Compounds                                                    Qvalue
```

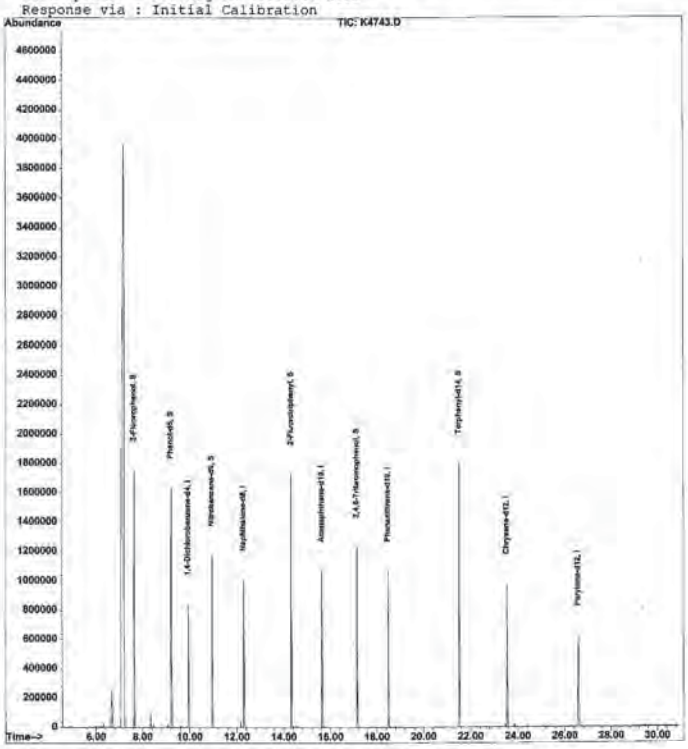
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4743.D
Acq On : 21 Aug 2008 20:18
Sample : 0808068-005B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4743.D K8130L42.M Fri Aug 22 10:22:12 2008 Pag 744

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4743.D
Acq On : 21 Aug 2008 20:18
Sample : 0808068-005B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	190334	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	722038	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	392374	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	711373	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	574369	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	522824	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

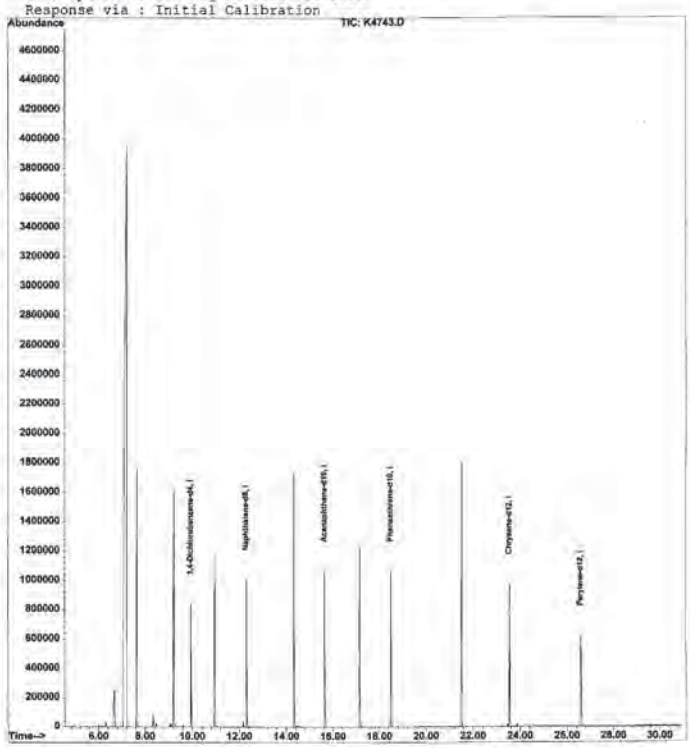
(#) = qualifier out of range (m) = manual integration
K4743.D K8130LM.M Fri Aug 22 10:33:33 2008 Pag 745

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4743.D
Acq On : 21 Aug 2008 20:18
Sample : 0808068-005B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4743.D K8130LM.M Fri Aug 22 10:33:33 2008 Pag 746

Tentatively Identified Compound (LSC) summary

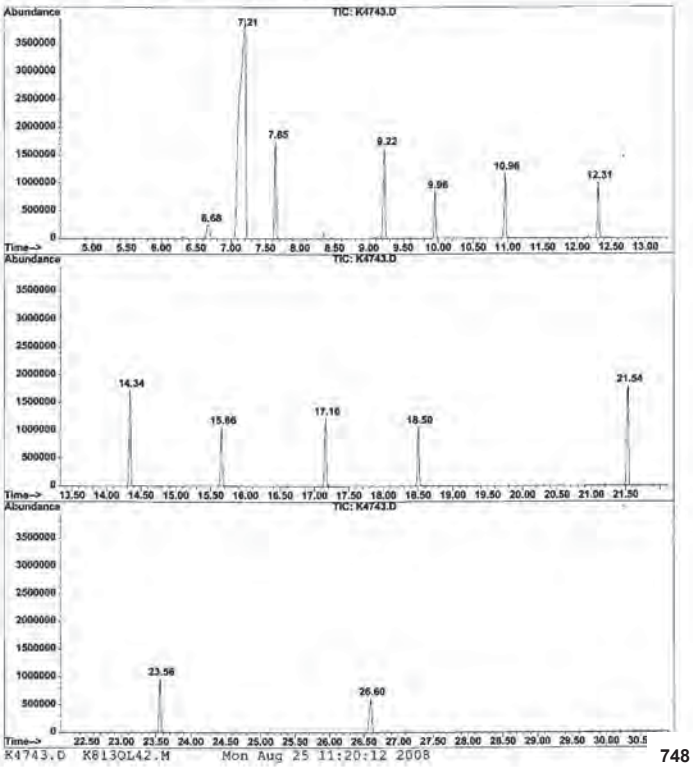
Operator ID: MEG Date Acquired: 21 Aug 2008 20:18
Data File: C:\HPCHEM\1\DATA\K4743.D
Name: 0808068-005B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Oxirane, 2,3-dimethy	6.68	24.7	ug/mL	811407	ISTD01	9.96	1313110	40.0
2-Pentanone, 4-hydro	7.21	745.5	ug/mL	24472300	ISTD01	9.96	1313110	40.0

K4743.D K8130L42.M Mon Aug 25 11:20:20 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4743.D
Operator : MEG
Acquired : 21 Aug 2008 20:18 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808068-005B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 10
Quant File :K813OL42.RES (RTE Integrator)



K4743.D K813OL42.M Mon Aug 25 11:20:12 2008

748

Library Search Compound Report

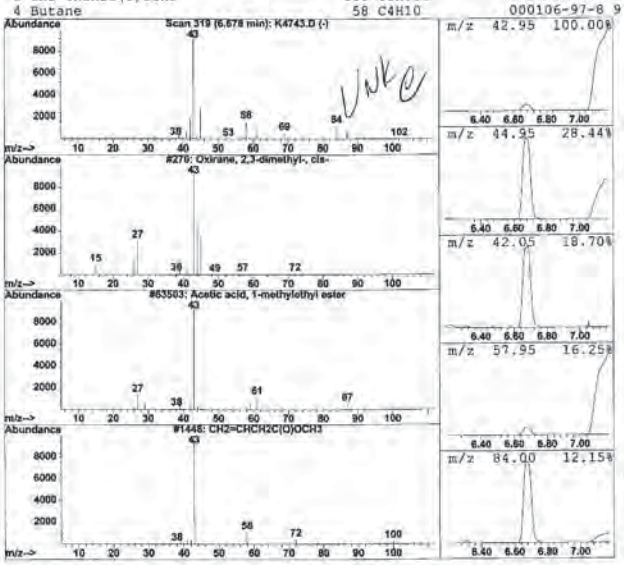
Data File : C:\HPCHEM\1\DATA\K4743.D Vial: 10
Acq On : 21 Aug 2008 20:18 Operator: MEG
Sample : 0808068-005B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Oxirane, 2,3-dimethyl-, cis- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.68	24.72 ug/mL	811407	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
3	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
4	Butane	58	C4H10	000106-97-8	9



K4743.D K813OL42.M Mon Aug 25 11:20:19 2008 Pag

749

Library Search Compound Report

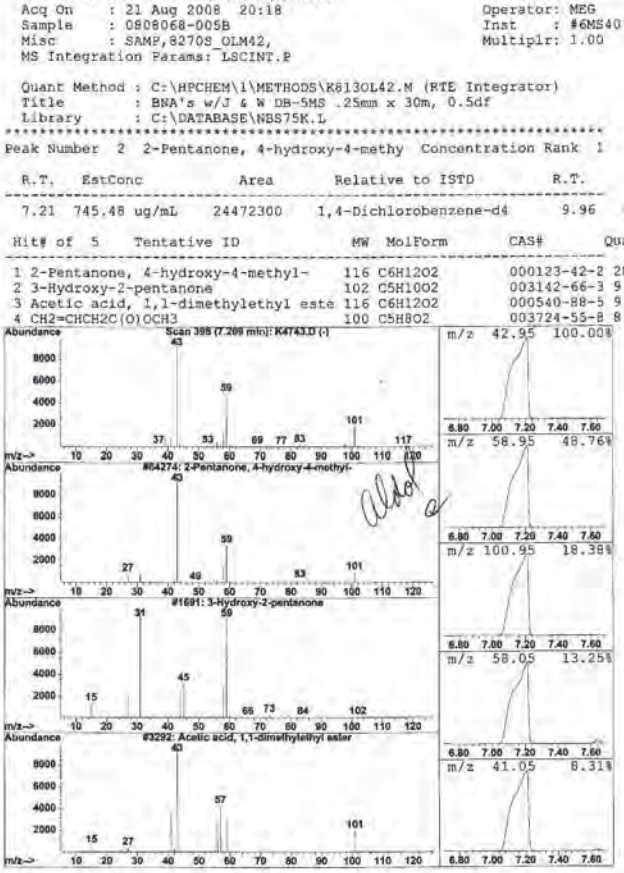
Data File : C:\HPCHEM\1\DATA\K4743.D Vial: 10
Acq On : 21 Aug 2008 20:18 Operator: MEG
Sample : 0808068-005B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.21	745.48 ug/mL	24472300	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4743.D K813OL42.M Mon Aug 25 11:20:20 2008 Pag

750

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4744.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.2	µg/Kg-dry	1	08/21/08 20:57
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 20:57
2,4,6-Trichlorophenol	ND		390	5.8	µg/Kg-dry	1	08/21/08 20:57
2,4-Dichlorophenol	ND		390	4.6	µg/Kg-dry	1	08/21/08 20:57
2,4-Dimethylphenol	ND		390	80	µg/Kg-dry	1	08/21/08 20:57
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:57
2,4-Dinitrotoluene	ND		390	5.8	µg/Kg-dry	1	08/21/08 20:57
2,6-Dinitrotoluene	ND		390	6.7	µg/Kg-dry	1	08/21/08 20:57
2-Chloronaphthalene	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:57
2-Chlorophenol	ND		390	5.1	µg/Kg-dry	1	08/21/08 20:57
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 20:57
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 20:57
2-Nitroaniline	ND		2000	7.0	µg/Kg-dry	1	08/21/08 20:57
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 20:57
3,3'-Dichlorobenzidine	ND		790	49	µg/Kg-dry	1	08/21/08 20:57
3-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:57
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 20:57
4-Bromophenyl phenyl ether	ND		390	5.2	µg/Kg-dry	1	08/21/08 20:57
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
4-Chloroaniline	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
4-Chlorophenyl phenyl ether	ND		390	4.9	µg/Kg-dry	1	08/21/08 20:57
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 20:57
4-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 20:57
4-Nitrophenol	ND		2000	60	µg/Kg-dry	1	08/21/08 20:57
Acenaphthene	ND		390	4.0	µg/Kg-dry	1	08/21/08 20:57
Acenaphthylene	ND		390	4.8	µg/Kg-dry	1	08/21/08 20:57
Acetophenone	ND		390	46	µg/Kg-dry	1	08/21/08 20:57
Anthracene	ND		390	2.8	µg/Kg-dry	1	08/21/08 20:57
Atrazine	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
Benzaldehyde	ND		390	6.0	µg/Kg-dry	1	08/21/08 20:57
Benzo[a]anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:57
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 20:57
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 20:57

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381963 Project Supervisor: Monika Santucci

751

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40 — Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS — %Moisture: 16.4	BatchNo:	7957/R14571
Revision:	08/22/08 11:06 — TestCode: 8270S OLM42	FileID:	1-SAMP-K4744.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 20:57
bis(2-Chloroethoxy)methane	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:57
bis(2-chloroethyl)ether	ND		390	8.1	µg/Kg-dry	1	08/21/08 20:57
bis(2-chloroisopropyl)ether	ND		390	6.8	µg/Kg-dry	1	08/21/08 20:57
bis(2-Ethylhexyl)phthalate	ND		390	18	µg/Kg-dry	1	08/21/08 20:57
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 20:57
Caprolactam	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:57
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 20:57
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 20:57
Dibenz[a,h]anthracene	ND		390	18	µg/Kg-dry	1	08/21/08 20:57
Dibenzofuran	ND		390	5.6	µg/Kg-dry	1	08/21/08 20:57
Diethyl phthalate	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:57
Dimethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:57
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 20:57
Fluorene	ND		390	4.1	µg/Kg-dry	1	08/21/08 20:57
Hexachlorobenzene	ND		390	6.4	µg/Kg-dry	1	08/21/08 20:57
Hexachlorobutadiene	ND		390	3.6	µg/Kg-dry	1	08/21/08 20:57
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 20:57
Hexachloroethane	ND		390	48	µg/Kg-dry	1	08/21/08 20:57
Indeno[1,2,3-cd]pyrene	ND		390	18	µg/Kg-dry	1	08/21/08 20:57
Isophorone	ND		390	3.3	µg/Kg-dry	1	08/21/08 20:57
N-Nitroso-di-n-propylamine	ND		390	4.6	µg/Kg-dry	1	08/21/08 20:57
N-Nitrosodiphenylamine	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:57
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 20:57
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 20:57
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 20:57
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 20:57
Phenol	ND		390	3.7	µg/Kg-dry	1	08/21/08 20:57
Pyrene	ND		390	2.7	µg/Kg-dry	1	08/21/08 20:57
Surr: 2,4,6-Tribromophenol	83.1		20-143	0	%REC	1	08/21/08 20:57
Surr: 2-Fluorobiphenyl	80.2		46-130	0	%REC	1	08/21/08 20:57
Surr: 2-Fluorophenol	82.0		22-130	0	%REC	1	08/21/08 20:57

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381963 Project Supervisor: Monika Santucci

752

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808068-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*SB-2-Bot-2*
W Order:	0808068	Collection Date:	08/12/08 15:10
Matrix:	SOIL	Date Received:	08/12/08 17:52
Inst. ID:	MS06 40 — Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS — %Moisture: 16.4	BatchNo:	7957/R14571
Revision:	08/22/08 11:06 — TestCode: 8270S OLM42	FileID:	1-SAMP-K4744.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	88.0		39-130	0	%REC	1	08/21/08 20:57
Surr: Phenol-d5	85.5		33-130	0	%REC	1	08/21/08 20:57
Surr: Terphenyl-d14	98.7		36-146	0	%REC	1	08/21/08 20:57

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:07 381963 Project Supervisor: Monika Santucci

753

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-2-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808068-006B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4744.D

Level: LOW Date Received: 8/12/2008

% Moisture: not dec. 16 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	990	BJ
2.	aldol	7.21	30000	BJA

FORM I TIC 6 SW8270C

754

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4744.D Vial: 11
Acq On : 21 Aug 2008 20:57 Operator: MEG
Sample : 0808068-006B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	198300	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	752166	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.65	164	406260	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.51	188	738135	40.00 ug/mL	-0.01
58) Chrysene-d12	23.56	240	593012	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	544319	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.64	112	778395	123.01 ug/mL	0.03
Spiked Amount 150.000			Recovery =	82.01%	
3) Phenol-d5	9.22	99	1071538	128.29 ug/mL	0.00
Spiked Amount 150.000			Recovery =	85.53%	
14) Nitrobenzene-d5	10.96	82	667797	85.95 ug/mL	0.00
Spiked Amount 100.000			Recovery =	85.95%	
30) 2-Fluorobiphenyl	14.34	172	900253	80.22 ug/mL	0.00
Spiked Amount 100.000			Recovery =	80.22%	
46) 2,4,6-Tribromophenol	17.16	330	205753	124.59 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	83.06%	
60) Terphenyl-d14	21.54	244	945433	98.73 ug/mL	0.00
Spiked Amount 100.000			Recovery =	98.73%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K4744.D K813OL42.M Fri Aug 22 10:22:19 2008 Pag

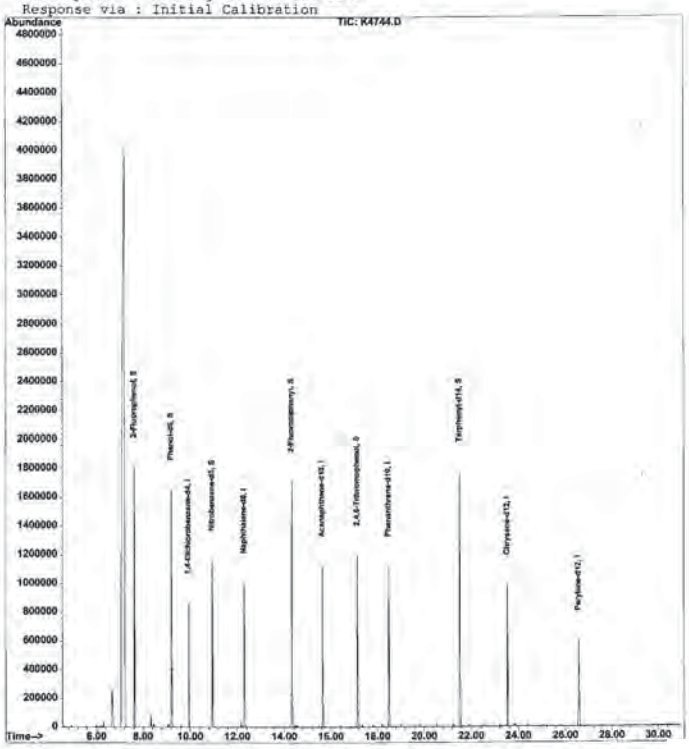
755

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4744.D
Acq On : 21 Aug 2008 20:57
Sample : 0808068-006B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008

Vial: 11
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4744.D K8130L42.M Fri Aug 22 10:22:20 2008 Pag 756

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4744.D
Acq On : 21 Aug 2008 20:57
Sample : 0808068-006B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 11
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	198300	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	752166	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	406260	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	738135	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	592905	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	544389	40.00 ug/mL	-0.01

System Monitoring Compounds

Target Compounds Qvalue

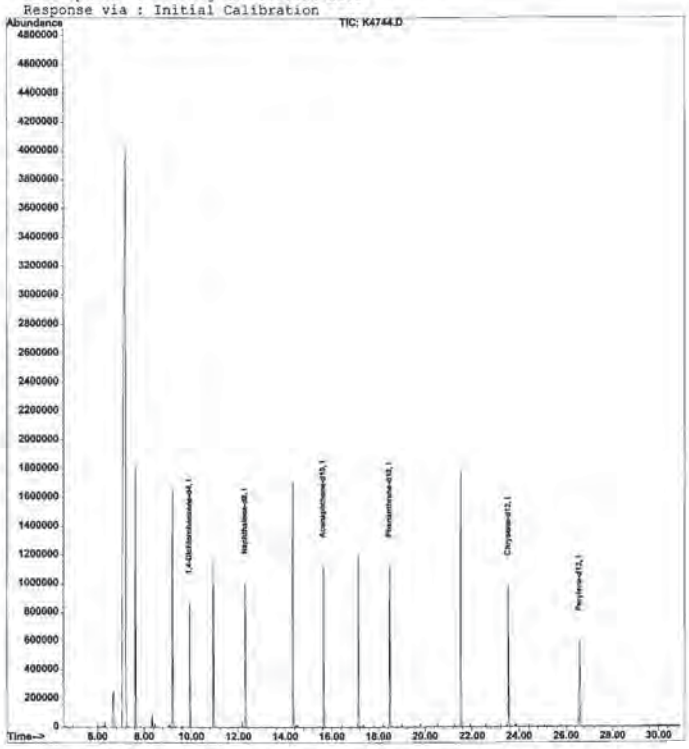
(#) = qualifier out of range (m) = manual integration
K4744.D K8130LM.M Fri Aug 22 10:33:37 2008 Pag 757

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4744.D
Acq On : 21 Aug 2008 20:57
Sample : 0808068-006B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 11
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4744.D K8130LM.M Fri Aug 22 10:33:37 2008 Pag 758

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Aug 2008 20:57
Data File: C:\HPCHEM\1\DATA\K4744.D
Name: 0808068-006B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

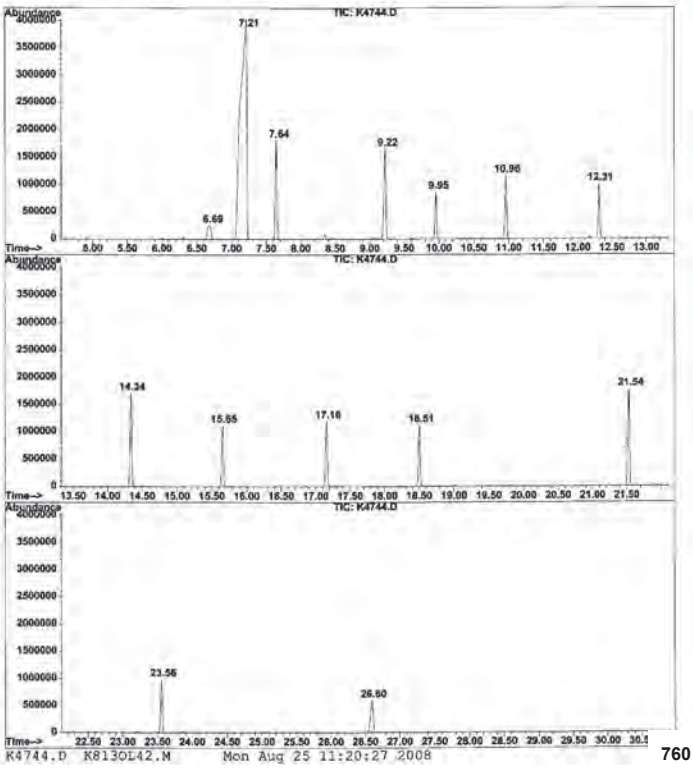
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Acetic acid, 1-methy	6.69	24.7	ug/mL	846034	ISTD01	9.95	1367560	40.0
2-Pentanone, 4-hydro	7.21	741.7	ug/mL	25359200	ISTD01	9.95	1367560	40.0

K4744.D K8130L42.M Mon Aug 25 11:20:35 2008

759

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4744.D
Operator : MEG
Acquired : 21 Aug 2008 20:57 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808068-006B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 11
Quant File :K813OL42.RES (RTE Integrator)



K4744.D K813OL42.M Mon Aug 25 11:20:27 2008

760

Library Search Compound Report

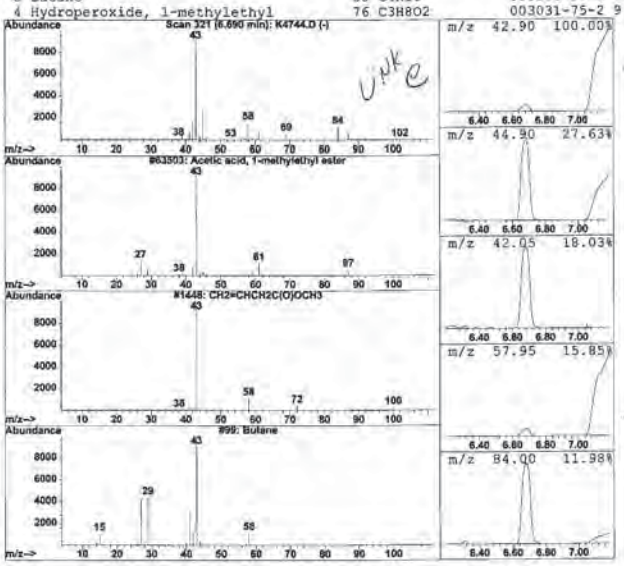
Data File : C:\HPCHEM\1\DATA\K4744.D Vial: 11
Acq On : 21 Aug 2008 20:57 Operator: MEG
Sample : 0808068-006B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Acetic acid, 1-methylethyl est Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	24.75 ug/mL	846034	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
2	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
3	Butane	58	C4H10	000106-97-8	9
4	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	9



K4744.D K813OL42.M Mon Aug 25 11:20:35 2008 Pag

761

Library Search Compound Report

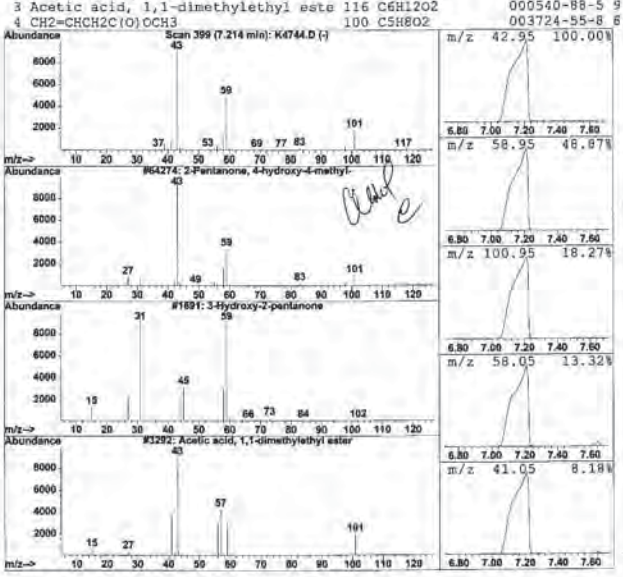
Data File : C:\HPCHEM\1\DATA\K4744.D Vial: 11
Acq On : 21 Aug 2008 20:57 Operator: MEG
Sample : 0808068-006B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.21	741.74 ug/mL	25359200	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	6



K4744.D K813OL42.M Mon Aug 25 11:20:35 2008 Pag

762

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 17.9	BatchNo: 7957/R14569
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4732.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1-Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 13:39
2,4,5-Trichlorophenol	ND		2000	26	µg/Kg-dry	1	08/21/08 13:39
2,4,6-Trichlorophenol	ND		400	5.9	µg/Kg-dry	1	08/21/08 13:39
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:39
2,4-Dimethylphenol	ND		400	61	µg/Kg-dry	1	08/21/08 13:39
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:39
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/21/08 13:39
2,6-Dinitrotoluene	ND		400	6.8	µg/Kg-dry	1	08/21/08 13:39
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:39
2-Chlorophenol	ND		400	5.2	µg/Kg-dry	1	08/21/08 13:39
2-Methylnaphthalene	ND		400	1.8	µg/Kg-dry	1	08/21/08 13:39
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/21/08 13:39
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/21/08 13:39
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
3,3'-Dichlorobenzidine	ND		800	49	µg/Kg-dry	1	08/21/08 13:39
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:39
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 13:39
4-Bromophenyl phenyl ether	ND		400	5.3	µg/Kg-dry	1	08/21/08 13:39
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 13:39
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/21/08 13:39
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/21/08 13:39
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/21/08 13:39
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/21/08 13:39
4-Nitrophenol	ND		2000	81	µg/Kg-dry	1	08/21/08 13:39
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 13:39
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/21/08 13:39
Acetophenone	ND		400	46	µg/Kg-dry	1	08/21/08 13:39
Anthracene	ND		400	2.8	µg/Kg-dry	1	08/21/08 13:39
Atrazine	ND		400	46	µg/Kg-dry	1	08/21/08 13:39
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/21/08 13:39
Benzo(a)anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:39
Benzo(a)pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 13:39
Benzo(b)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:39
Benzo(g,h,i)perylene	ND		400	16	µg/Kg-dry	1	08/21/08 13:39

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column ND or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381915 Project Supervisor: Monika Santucci

763

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS %Moisture: 17.9	BatchNo:	7957/R14569
Revision:	08/22/08 11:06 TestCode: 8270S OLM42	FileID:	1-SAMP-K4732.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 13:39
bis(2-Chloroethoxy)methane	ND		400	3.8	µg/Kg-dry	1	08/21/08 13:39
bis(2-chloroethyl)ether	ND		400	6.2	µg/Kg-dry	1	08/21/08 13:39
bis(2-chloroisopropyl)ether	ND		400	6.9	µg/Kg-dry	1	08/21/08 13:39
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 13:39
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
Caprolactam	ND		400	48	µg/Kg-dry	1	08/21/08 13:39
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 13:39
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:39
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 13:39
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/21/08 13:39
Dibenz[a,h]anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
Dibenzofuran	ND		400	5.6	µg/Kg-dry	1	08/21/08 13:39
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:39
Dimethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:39
Fluoranthene	ND		400	17	µg/Kg-dry	1	08/21/08 13:39
Fluorene	ND		400	4.2	µg/Kg-dry	1	08/21/08 13:39
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/21/08 13:39
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:39
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 13:39
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/21/08 13:39
Indeno[1,2,3-cd]pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 13:39
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/21/08 13:39
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 13:39
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:39
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/21/08 13:39
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 13:39
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/21/08 13:39
Phenanthrene	ND		400	1.8	µg/Kg-dry	1	08/21/08 13:39
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 13:39
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 13:39
Surr: 2,4,6-Tribromophenol	97.6		20-143	0	%REC	1	08/21/08 13:39
Surr: 2-Fluorobiphenyl	86.0		48-130	0	%REC	1	08/21/08 13:39
Surr: 2-Fluorophenol	88.1		22-130	0	%REC	1	08/21/08 13:39

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381915 Project Supervisor: Monika Santucci

764

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS %Moisture: 17.9	BatchNo:	7957/R14569
Revision:	08/22/08 11:06 TestCode: 8270S OLM42	FileID:	1-SAMP-K4732.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	92.8		39-130	0	%REC	1	08/21/08 13:39
Surr: Phenol-d5	92.2		33-130	0	%REC	1	08/21/08 13:39
Surr: Terphenyl-d14	103		36-146	0	%REC	1	08/21/08 13:39

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- F Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381915 Project Supervisor: Monika Santucci

765

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: CHG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-001B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4732.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.68	1000	BJ
2.	aldol	7.22	30000	BJA

FORM I TIC 7 SW8270C

766

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K4732.D                    Vial: 9
Acq On    : 21 Aug 2008  13:39                          Operator: MEG
Sample    : 0808076-001B                                Inst    : #6MS40
Misc      : SAMP,8270S_OLM42,                           Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22  9:58 2008                   Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS ,25mm x 30m, 0.5df
Last Update  : Fri Aug 22 09:56:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL
```

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	212701	40.00	ug/mL	0.00
13) Naphthalene-d8	12.31	136	809457	40.00	ug/mL	0.00
26) Acenaphthene-d10	15.66	164	433837	40.00	ug/mL	0.00
47) Phenanthrene-d10	18.51	188	795215	40.00	ug/mL	0.00
58) Chrysene-d12	23.57	240	651025	40.00	ug/mL	-0.01
68) Perylene-d12	26.60	264	610954	40.00	ug/mL	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	7.64	112	896783	132.13	ug/mL	0.03
Spiked Amount 150.000			Recovery = 88.09%			
3) Phenol-d5	9.23	99	1238610	138.25	ug/mL	0.00
Spiked Amount 150.000			Recovery = 92.17%			
14) Nitrobenzene-d5	10.96	82	775634	92.76	ug/mL	0.00
Spiked Amount 100.000			Recovery = 92.76%			
30) 2-Fluorobiphenyl	14.34	172	1030449	85.98	ug/mL	0.00
Spiked Amount 100.000			Recovery = 85.98%			
46) 2,4,6-Tribromophenol	17.16	330	258282	146.45	ug/mL	0.00
Spiked Amount 150.000			Recovery = 97.63%			
60) Terphenyl-d14	21.54	244	1081950	102.91	ug/mL	0.00
Spiked Amount 100.000			Recovery = 102.91%			

Target Compounds Qvalue

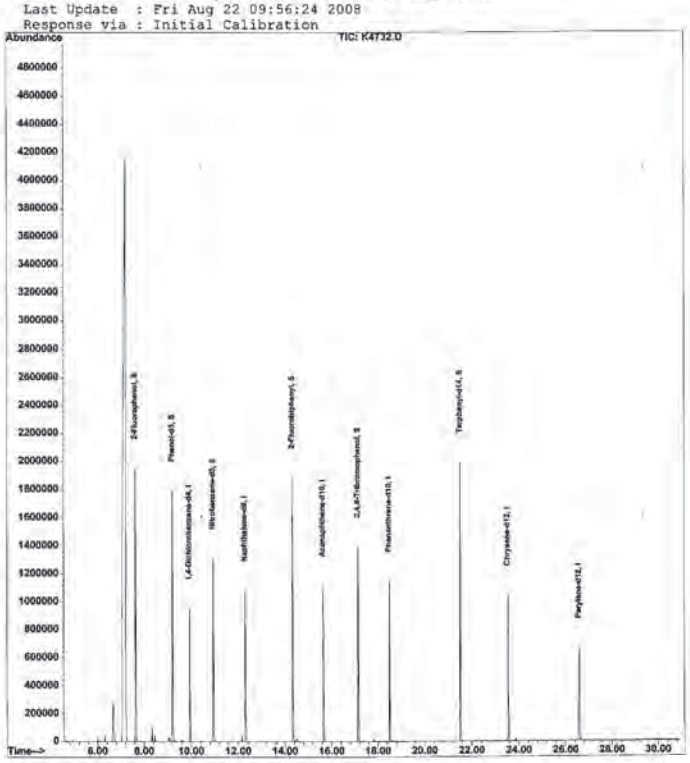
(#) = qualifier out of range (m) = manual integration
K4732.D K813OL42.M Fri Aug 22 09:58:40 2008 Pag 767

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4732.D
Acq On : 21 Aug 2008 13:39
Sample : 0808076-001B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:58 2008

Vial: 9
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:24 2008
Response via : Initial Calibration



K4732.D K8130L42.M Fri Aug 22 09:58:41 2008 Pag 768

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4732.D
Acq On : 21 Aug 2008 13:39
Sample : 0808076-001B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:04 2008

Vial: 9
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:10 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	212701	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	809107	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	433837	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	795215	40.00 ug/mL	0.00
14) Chrysene-d12	23.57	240	650933	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	610954	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

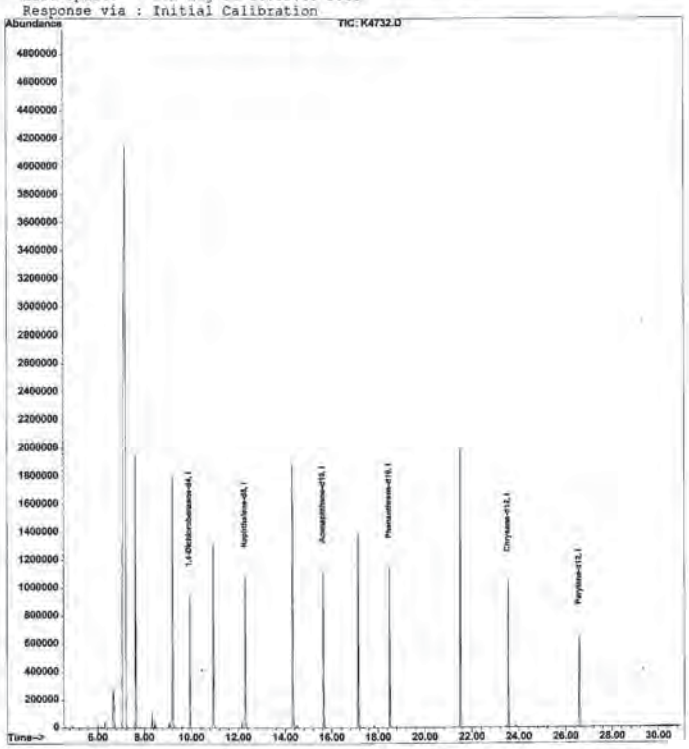
(#) = qualifier out of range (m) = manual integration
K4732.D K8130LM.M Fri Aug 22 10:05:49 2008 Pag 769

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4732.D
Acq On : 21 Aug 2008 13:39
Sample : 0808076-001B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:04 2008

Vial: 9
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:10 2008
Response via : Initial Calibration



K4732.D K8130LM.M Fri Aug 22 10:05:50 2008 Pag 770

Tentatively Identified Compound (LSC) summary

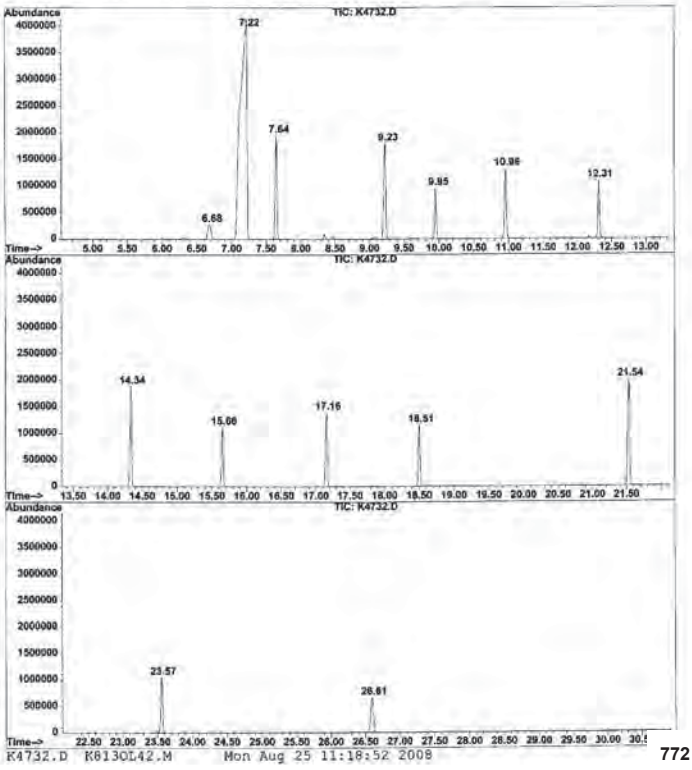
Operator ID: MEG Date Acquired: 21 Aug 2008 13:39
Data File: C:\HPCHEM\1\DATA\K4732.D
Name: 0808076-001B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.68	25.1	ug/mL	919674	ISTD01	9.95	1467290	40.0
2-Pentanone, 4-hydro	7.22	736.4	ug/mL	27014400	ISTD01	9.95	1467290	40.0

K4732.D K8130L42.M Mon Aug 25 11:18:56 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4732.D
Operator : MEG
Acquired : 21 Aug 2008 13:39 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-001B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 9
Quant File :K813OL42.RES (RTE Integrator)



K4732.D K813OL42.M Mon Aug 25 11:18:52 2008

Library Search Compound Report

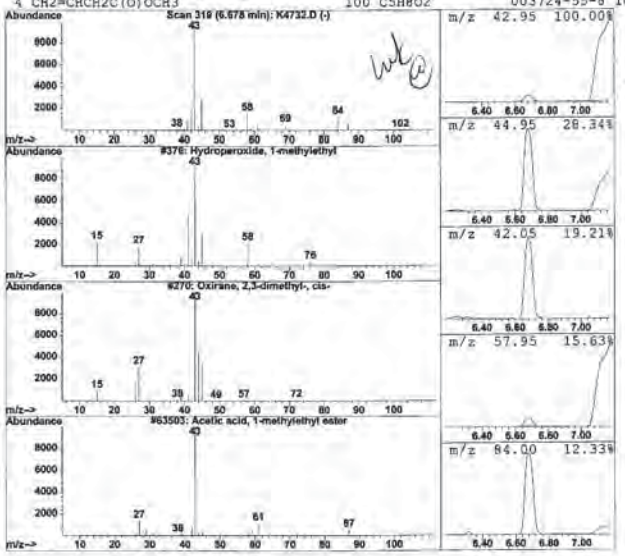
Data File : C:\HPCHEM\1\DATA\K4732.D Vial: 9
Acq On : 21 Aug 2008 13:39 Operator: MEG
Sample : 0808076-001B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.68	25.07 ug/mL	919674	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	38
2	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	12
3	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	12
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10



K4732.D K813OL42.M Mon Aug 25 11:18:55 2008 Pag

Library Search Compound Report

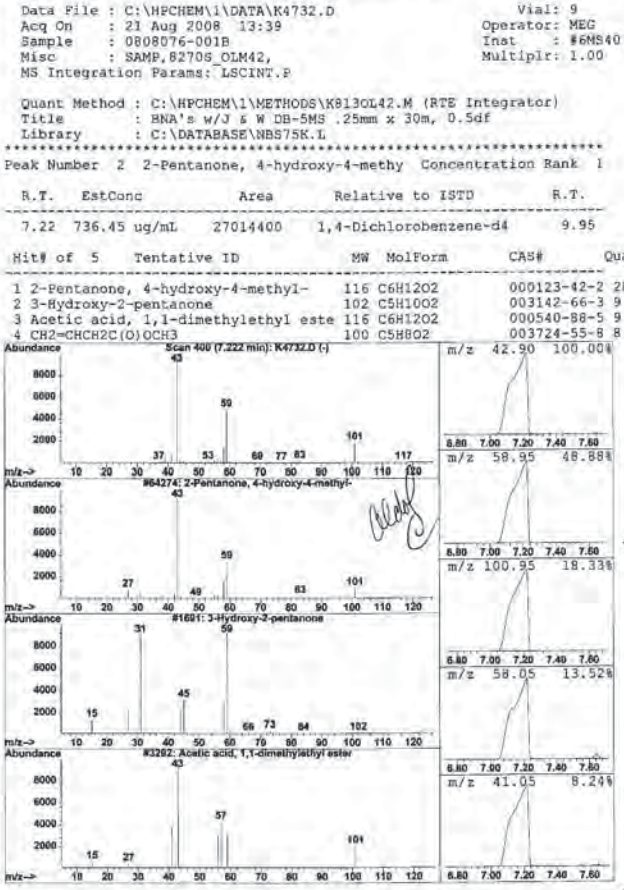
Data File : C:\HPCHEM\1\DATA\K4732.D Vial: 9
Acq On : 21 Aug 2008 13:39 Operator: MEG
Sample : 0808076-001B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	736.45 ug/mL	27014400	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4732.D K813OL42.M Mon Aug 25 11:18:56 2008 Pag

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4745.D
Col Type:			

Sample Size: 30 g
%Moisture: 14.7
TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 21:35
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 21:35
2,4,6-Trichlorophenol	ND		390	6.6	µg/Kg-dry	1	08/21/08 21:35
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 21:35
2,4-Dimethylphenol	ND		390	78	µg/Kg-dry	1	08/21/08 21:35
2,4-Dinitrophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 21:35
2,4-Dinitrotoluene	ND		390	5.7	µg/Kg-dry	1	08/21/08 21:35
2,6-Dinitrotoluene	ND		390	6.6	µg/Kg-dry	1	08/21/08 21:35
2-Chloronaphthalene	ND		390	4.3	µg/Kg-dry	1	08/21/08 21:35
2-Chlorophenol	ND		390	6.0	µg/Kg-dry	1	08/21/08 21:35
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 21:35
2-Methylphenol	ND		390	4.3	µg/Kg-dry	1	08/21/08 21:35
2-Nitroaniline	ND		2000	6.9	µg/Kg-dry	1	08/21/08 21:35
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 21:35
3,3'-Dichlorobenzidine	ND		770	47	µg/Kg-dry	1	08/21/08 21:35
3-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 21:35
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 21:35
4-Bromophenyl phenyl ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 21:35
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
4-Chloroaniline	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
4-Chlorophenyl phenyl ether	ND		390	4.8	µg/Kg-dry	1	08/21/08 21:35
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 21:35
4-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 21:35
4-Nitrophenol	ND		2000	78	µg/Kg-dry	1	08/21/08 21:35
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 21:35
Acenaphthylene	ND		390	4.7	µg/Kg-dry	1	08/21/08 21:35
Acetophenone	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Anthracene	ND		390	2.7	µg/Kg-dry	1	08/21/08 21:35
Atrazine	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Benzaldehyde	ND		390	5.8	µg/Kg-dry	1	08/21/08 21:35
Benzo[a]anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 21:35
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 21:35
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 21:35

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381964 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	I-SAMP-K4745.D
Col Type:			

Sample Size: 30 g; %Moisture: 14.7; TestCode: 8270S_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 21:35
bis(2-Chloroethoxy)methane	ND		390	3.8	µg/Kg-dry	1	08/21/08 21:35
bis(2-chloroethyl)ether	ND		390	6.0	µg/Kg-dry	1	08/21/08 21:35
bis(2-chloroisopropyl)ether	ND		390	6.7	µg/Kg-dry	1	08/21/08 21:35
bis(2-Ethylhexyl)phthalate	ND		390	17	µg/Kg-dry	1	08/21/08 21:35
Butyl benzyl phthalate	ND		390	16	µg/Kg-dry	1	08/21/08 21:35
Caprolactam	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 21:35
Di-n-butyl phthalate	ND		390	99	µg/Kg-dry	1	08/21/08 21:35
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 21:35
Dibenz[a,h]anthracene	ND		390	18	µg/Kg-dry	1	08/21/08 21:35
Dibenzofuran	ND		390	5.4	µg/Kg-dry	1	08/21/08 21:35
Diethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 21:35
Dimethyl phthalate	ND		390	4.0	µg/Kg-dry	1	08/21/08 21:35
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 21:35
Fluorene	ND		390	4.0	µg/Kg-dry	1	08/21/08 21:35
Hexachlorobenzene	ND		390	6.3	µg/Kg-dry	1	08/21/08 21:35
Hexachlorobutadiene	ND		390	3.5	µg/Kg-dry	1	08/21/08 21:35
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 21:35
Hexachloroethane	ND		390	47	µg/Kg-dry	1	08/21/08 21:35
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 21:35
Isophorone	ND		390	3.2	µg/Kg-dry	1	08/21/08 21:35
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 21:35
N-Nitrosodiphenylamine	ND		390	2.6	µg/Kg-dry	1	08/21/08 21:35
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 21:35
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 21:35
Pentachlorophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 21:35
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 21:35
Phenol	ND		390	3.5	µg/Kg-dry	1	08/21/08 21:35
Pyrene	ND		390	2.6	µg/Kg-dry	1	08/21/08 21:35
Surr: 2,4,6-Tribromophenol	93.4		20-143	0	%REC	1	08/21/08 21:35
Surr: 2-Fluorobiphenyl	85.9		46-130	0	%REC	1	08/21/08 21:35
Surr: 2-Fluorophenol	88.1		22-130	0	%REC	1	08/21/08 21:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381964 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	I-SAMP-K4745.D
Col Type:			

Sample Size: 30 g; %Moisture: 14.7; TestCode: 8270S_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	91.1		38-130	0	%REC	1	08/21/08 21:35
Surr: Phenol-d5	92.1		33-130	0	%REC	1	08/21/08 21:35
Surr: Terphenyl-d14	105		36-148	0	%REC	1	08/21/08 21:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381964 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

UST-North

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: D8080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-002B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4745.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 15 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	1000	BJ
2.	aldol	7.22	31000	BJA

FORM I TIC 8 SW8270C

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K4745.D                    Vial: 12
Acq On    : 21 Aug 2008  21:35                          Operator: MEG
Sample    : 0808076-002B                                Inst    : #6MS40
Misc      : SAMP,8270S_OLM42,                           Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008                   Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards                R.T.  QIon  Response   Conc Units Dev(Min)
-------------------------------------------------------------------------------
 1) 1,4-Dichlorobenzene-d4        9.96  152   196876    40.00 ug/mL   0.00
13) Naphthalene-d8               12.32  136   752020    40.00 ug/mL   0.00
26) Acenaphthene-d10             15.65  164   404828    40.00 ug/mL  -0.01
47) Phenanthrene-d10             18.51  188   733129    40.00 ug/mL  -0.01
58) Chrysene-d12                 23.56  240   593122    40.00 ug/mL  -0.02
68) Perylene-d12                 26.60  264   535533    40.00 ug/mL  -0.03

System Monitoring Compounds
 2) 2-Fluorophenol               7.65  112   830631   132.22 ug/mL   0.03
  Spiked Amount    150.000                     Recovery   =  88.15%
 3) Phenol-d5                    9.23   99  1145793   138.17 ug/mL   0.00
  Spiked Amount    150.000                     Recovery   =  92.11%
14) Nitrobenzene-d5             10.97   82   707755    91.11 ug/mL   0.00
  Spiked Amount    100.000                     Recovery   =  91.11%
30) 2-Fluorobiphenyl            14.34  172   960826    85.92 ug/mL   0.00
  Spiked Amount    100.000                     Recovery   =  85.92%
46) 2,4,6-Tribromophenol        17.16  330   230561   140.10 ug/mL   0.00
  Spiked Amount    150.000                     Recovery   =  93.40%
60) Terphenyl-d14               21.53  244  1008803   105.32 ug/mL   0.00
  Spiked Amount    100.000                     Recovery   = 105.32%

Target Compounds                                                     Qvalue
```

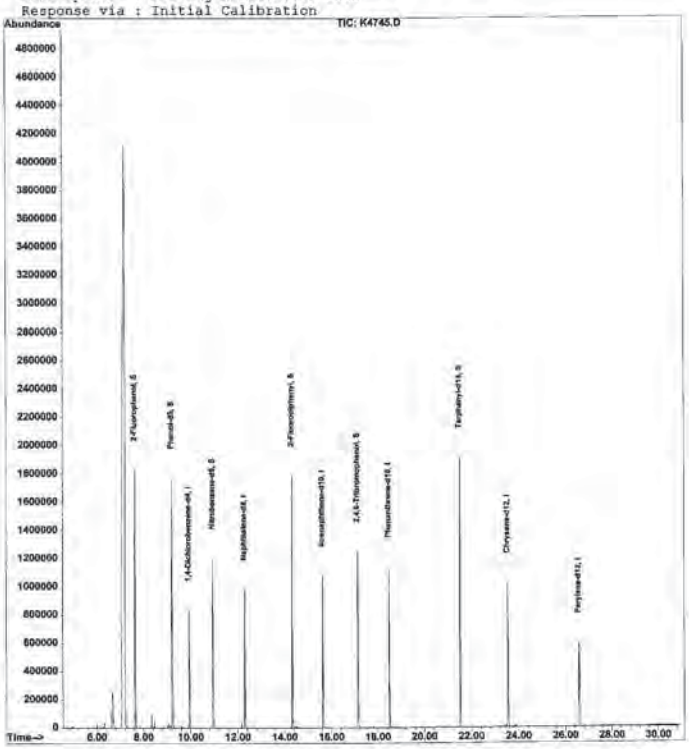
(#) = qualifier out of range (m) = manual integration
K4745.D K813OL42.M Fri Aug 22 10:22:27 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4745.D
Acq On : 21 Aug 2008 21:35
Sample : 0808076-002B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008

Vial: 12
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4745.D K8130L42.M Fri Aug 22 10:22:28 2008 Pag 780

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4745.D
Acq On : 21 Aug 2008 21:35
Sample : 0808076-002B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 12
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	196876	40.00 ug/mL	0.00
5) Naphthalene-d8	12.32	136	751710	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	404828	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	733129	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	593118	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	535533	40.00 ug/mL	-0.01

System Monitoring Compounds

Target Compounds Qvalue

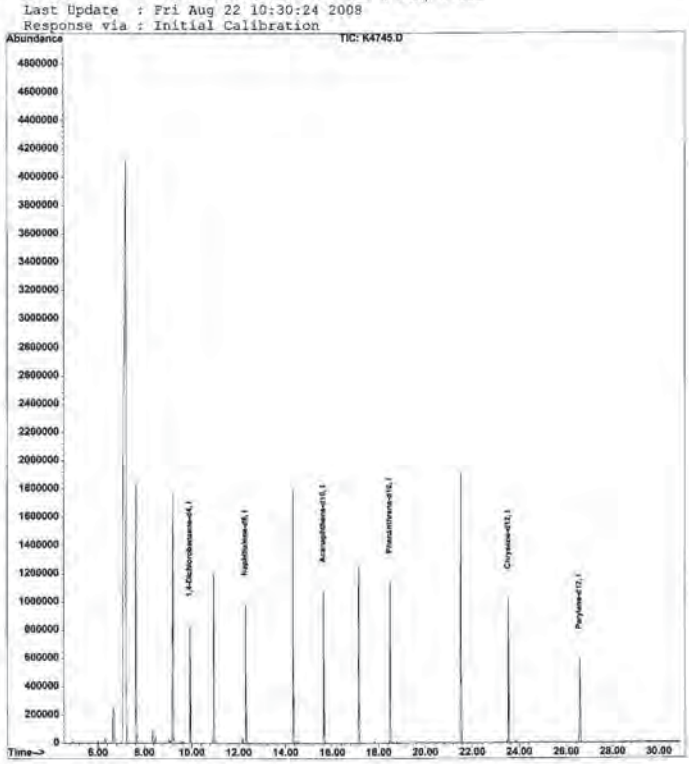
(#) = qualifier out of range (m) = manual integration
K4745.D K8130LM.M Fri Aug 22 10:33:42 2008 Pag 781

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4745.D
Acq On : 21 Aug 2008 21:35
Sample : 0808076-002B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 12
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4745.D K8130LM.M Fri Aug 22 10:33:42 2008 Pag 782

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Aug 2008 21:35
Data File: C:\HPCHEM\1\DATA\K4745.D
Name: 0808076-002B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

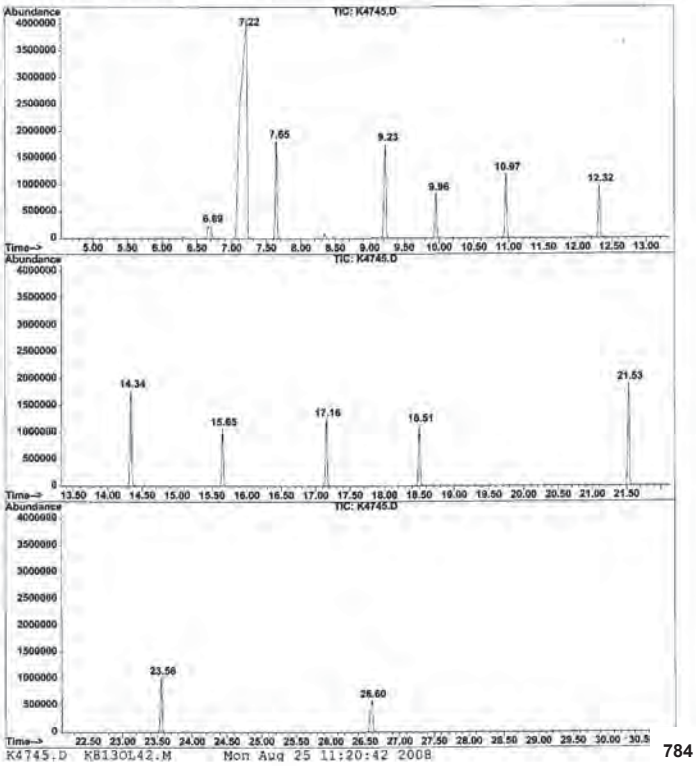
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.69	26.5	ug/mL	890971	ISTD01	9.96	1344790	40.0
2-Pentanone, 4-hydro	7.22	785.0	ug/mL	26389900	ISTD01	9.96	1344790	40.0

K4745.D K8130L42.M Mon Aug 25 11:20:50 2008

783

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4745.D
Operator : MEG
Acquired : 21 Aug 2008 21:35 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-002B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 12
Quant File :K813OL42.RES (RTE Integrator)



K4745.D K813OL42.M Mon Aug 25 11:20:42 2008

784

Library Search Compound Report

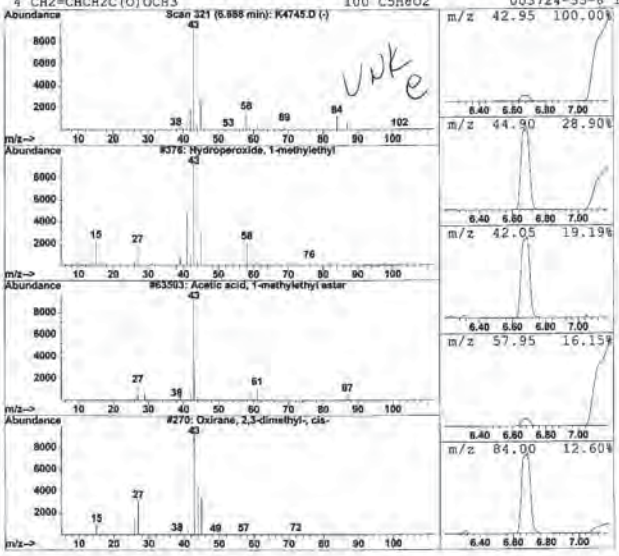
Data File : C:\HPCHEM\1\DATA\K4745.D Vial: 12
Acq On : 21 Aug 2008 21:35 Operator: MEG
Sample : 0808076-002B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	26.50 ug/mL	890971	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	38
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	12
3	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	12
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10



K4745.D K813OL42.M Mon Aug 25 11:20:50 2008 Pag

785

Library Search Compound Report

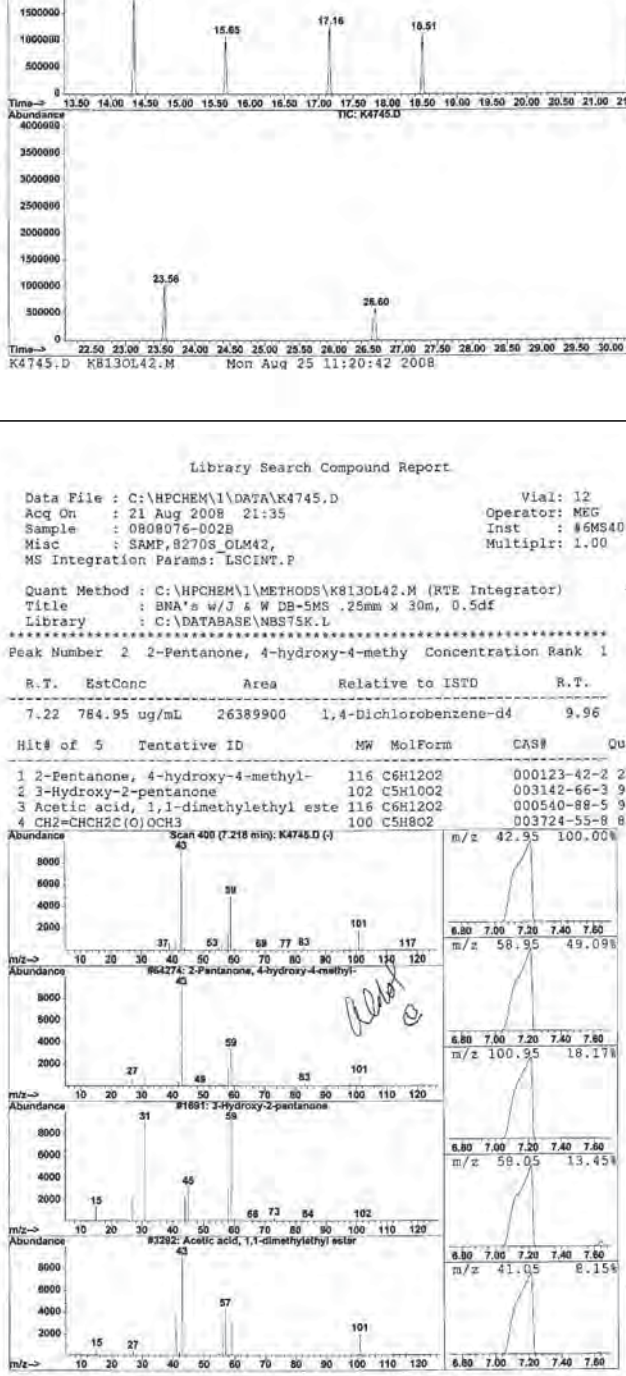
Data File : C:\HPCHEM\1\DATA\K4745.D Vial: 12
Acq On : 21 Aug 2008 21:35 Operator: MEG
Sample : 0808076-002B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	784.95 ug/mL	26389900	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4745.D K813OL42.M Mon Aug 25 11:20:50 2008 Pag

786

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 16.7	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4746.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						SW8270C	(SW3550B)
1,1'-Biphenyl	ND		400	5.2	µg/Kg-dry	1	08/21/08 22:13
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 22:13
2,4,6-Trichlorophenol	ND		400	5.8	µg/Kg-dry	1	08/21/08 22:13
2,4-Dichlorophenol	ND		400	4.6	µg/Kg-dry	1	08/21/08 22:13
2,4-Dimethylphenol	ND		400	80	µg/Kg-dry	1	08/21/08 22:13
2,4-Dinitrophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 22:13
2,4-Dinitrotoluene	ND		400	5.8	µg/Kg-dry	1	08/21/08 22:13
2,6-Dinitrotoluene	ND		400	6.7	µg/Kg-dry	1	08/21/08 22:13
2-Chloronaphthalene	ND		400	4.4	µg/Kg-dry	1	08/21/08 22:13
2-Chlorophenol	ND		400	6.1	µg/Kg-dry	1	08/21/08 22:13
2-Methylnaphthalene	ND		400	1.9	µg/Kg-dry	1	08/21/08 22:13
2-Methylphenol	ND		400	4.3	µg/Kg-dry	1	08/21/08 22:13
2-Nitroaniline	ND		2000	7.1	µg/Kg-dry	1	08/21/08 22:13
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
3,3'-Dichlorobenzidine	ND		790	48	µg/Kg-dry	1	08/21/08 22:13
3-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 22:13
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/21/08 22:13
4-Bromophenyl phenyl ether	ND		400	8.2	µg/Kg-dry	1	08/21/08 22:13
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
4-Chloroaniline	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
4-Chlorophenyl phenyl ether	ND		400	4.9	µg/Kg-dry	1	08/21/08 22:13
4-Methylphenol	ND		400	3.4	µg/Kg-dry	1	08/21/08 22:13
4-Nitroaniline	ND		2000	48	µg/Kg-dry	1	08/21/08 22:13
4-Nitrophenol	ND		2000	80	µg/Kg-dry	1	08/21/08 22:13
Acenaphthene	ND		400	4.0	µg/Kg-dry	1	08/21/08 22:13
Acenaphthylene	ND		400	4.8	µg/Kg-dry	1	08/21/08 22:13
Acetophenone	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
Anthracene	ND		400	2.8	µg/Kg-dry	1	08/21/08 22:13
Atrazine	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
Benzaldehyde	ND		400	8.0	µg/Kg-dry	1	08/21/08 22:13
Benzo(a)anthracene	ND		400	4.2	µg/Kg-dry	1	08/21/08 22:13
Benzo(a)pyrene	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
Benzo(b)fluoranthene	ND		400	14	µg/Kg-dry	1	08/21/08 22:13
Benzo(g,h,i)perylene	ND		400	16	µg/Kg-dry	1	08/21/08 22:13

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381965 Project Supervisor: Monika Santucci

787

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4746.D
Col Type:			

Sample Size: 30 g; %Moisture: 16.7; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		400	13	µg/Kg-dry	1	08/21/08 22:13
bis(2-Chloroethoxy)methane	ND		400	3.7	µg/Kg-dry	1	08/21/08 22:13
bis(2-chloroethyl)ether	ND		400	6.1	µg/Kg-dry	1	08/21/08 22:13
bis(2-chloroisopropyl)ether	ND		400	6.8	µg/Kg-dry	1	08/21/08 22:13
bis(2-Ethylhexyl)phthalate	ND		400	18	µg/Kg-dry	1	08/21/08 22:13
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
Caprolactam	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
Carbazole	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/21/08 22:13
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/21/08 22:13
Di-n-octyl phthalate	ND		400	2.3	µg/Kg-dry	1	08/21/08 22:13
Dibenz[a,h]anthracene	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
Dibenzofuran	ND		400	5.5	µg/Kg-dry	1	08/21/08 22:13
Diethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/21/08 22:13
Dimethyl phthalate	ND		400	4.1	µg/Kg-dry	1	08/21/08 22:13
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/21/08 22:13
Fluorene	ND		400	4.1	µg/Kg-dry	1	08/21/08 22:13
Hexachlorobenzene	ND		400	6.5	µg/Kg-dry	1	08/21/08 22:13
Hexachlorobutadiene	ND		400	3.6	µg/Kg-dry	1	08/21/08 22:13
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/21/08 22:13
Hexachloroethane	ND		400	48	µg/Kg-dry	1	08/21/08 22:13
Indeno[1,2,3-cd]pyrene	ND		400	16	µg/Kg-dry	1	08/21/08 22:13
Isophorone	ND		400	3.3	µg/Kg-dry	1	08/21/08 22:13
N-Nitroso-di-n-propylamine	ND		400	4.6	µg/Kg-dry	1	08/21/08 22:13
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/21/08 22:13
Naphthalene	ND		400	3.0	µg/Kg-dry	1	08/21/08 22:13
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/21/08 22:13
Pentachlorophenol	ND		2000	400	µg/Kg-dry	1	08/21/08 22:13
Phenanthrene	ND		400	1.7	µg/Kg-dry	1	08/21/08 22:13
Phenol	ND		400	3.7	µg/Kg-dry	1	08/21/08 22:13
Pyrene	ND		400	2.7	µg/Kg-dry	1	08/21/08 22:13
Surr: 2,4,6-Tribromophenol	85.9		20-143	0	%REC	1	08/21/08 22:13
Surr: 2-Fluorobiphenyl	83.8		48-120	0	%REC	1	08/21/08 22:13
Surr: 2-Fluorophenol	84.1		22-120	0	%REC	1	08/21/08 22:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381965 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4746.D
Col Type:			

Sample Size: 30 g; %Moisture: 16.7; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	88.5		39-130	0	%REC	1	08/21/08 22:13
Surr: Phenol-d5	88.0		33-130	0	%REC	1	08/21/08 22:13
Surr: Terphenyl-d14	103		36-146	0	%REC	1	08/21/08 22:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
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Print Date: 08/22/08 11:08 381965 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

UST-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLH Case No.: OSG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-003B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4746.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 17 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	1000	BJ
2.	aldol	7.21	31000	BJA

FORM I TIC 9 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4746.D Vial: 13
Acq On : 21 Aug 2008 22:13 Operator: MEG
Sample : 0808076-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	190443	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	725064	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.65	164	388452	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.51	188	706426	40.00 ug/mL	-0.01
58) Chrysene-d12	23.56	240	576964	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	521055	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.64	112	766994	126.19 ug/mL	0.03
Spiked Amount 150.000			Recovery =	84.13%	
3) Phenol-d5	9.23	99	1058759	131.99 ug/mL	0.00
Spiked Amount 150.000			Recovery =	87.99%	
14) Nitrobenzene-d5	10.96	82	662588	88.46 ug/mL	0.00
Spiked Amount 100.000			Recovery =	88.46%	
30) 2-Fluorobiphenyl	14.34	172	898654	83.75 ug/mL	0.00
Spiked Amount 100.000			Recovery =	83.75%	
46) 2,4,6-Tribromophenol	17.16	330	203481	128.86 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	85.91%	
60) Terphenyl-d14	21.54	244	958069	102.83 ug/mL	0.00
Spiked Amount 100.000			Recovery =	102.83%	

Target Compounds Qvalue

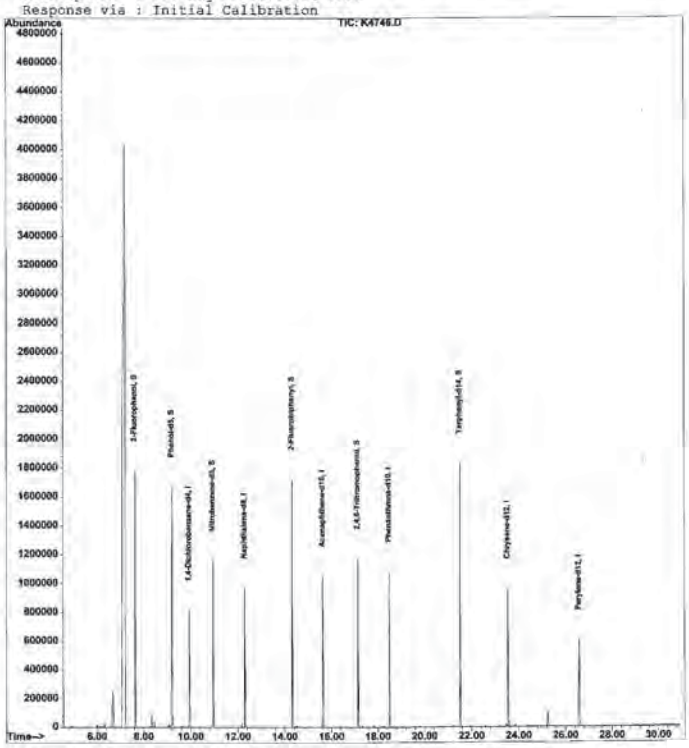
(#) = qualifier out of range (m) = manual integration
K4746.D K813OL42.M Fri Aug 22 10:22:35 2008 Pag

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4746.D
Acq On : 21 Aug 2008 22:13
Sample : 0808076-003B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:16 2008

Vial: 13
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4746.D K8130L42.M Fri Aug 22 10:22:36 2008 Pag 792

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4746.D
Acq On : 21 Aug 2008 22:13
Sample : 0808076-003B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 13
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	190443	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	725064	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	388452	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	706426	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	577011	40.00 ug/mL	-0.01
15) Perylene-d12	26.60	264	521055	40.00 ug/mL	-0.01

System Monitoring Compounds

Target Compounds Qvalue

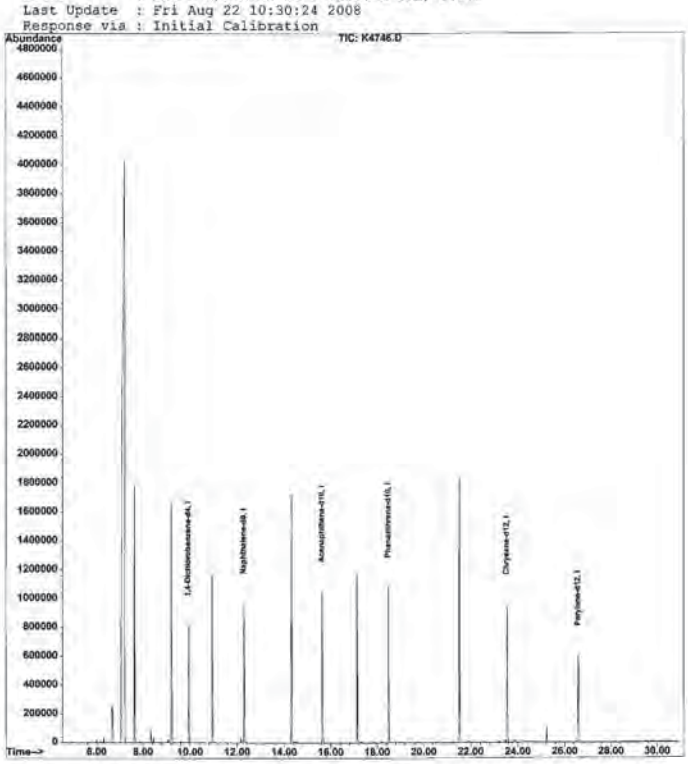
(#) = qualifier out of range (m) = manual integration
K4746.D K8130LM.M Fri Aug 22 10:33:46 2008 Pag 793

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4746.D
Acq On : 21 Aug 2008 22:13
Sample : 0808076-003B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 13
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4746.D K8130LM.M Fri Aug 22 10:33:46 2008 Pag 794

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Aug 2008 22:13
Data File: C:\HPCHEM\1\DATA\K4746.D
Name: 0808076-003B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

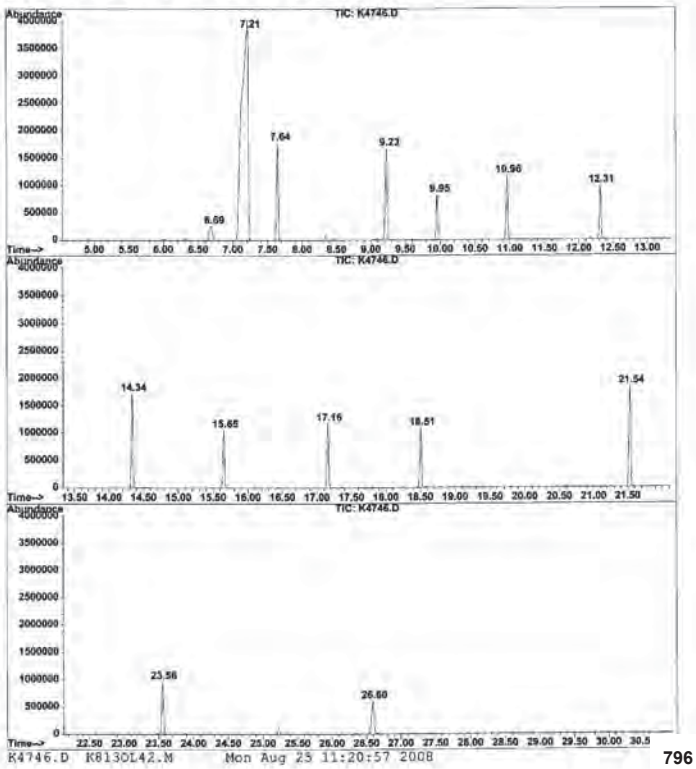
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Acetic acid, 1-methy	6.69	25.6	ug/mL	837528	ISTD01	9.96	1310320	40.0
2-Pentanone, 4-hydro	7.21	772.4	ug/mL	25303800	ISTD01	9.96	1310320	40.0

K4746.D K8130L42.M Mon Aug 25 11:21:05 2008

795

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4746.D
Operator : MEG
Acquired : 21 Aug 2008 22:13 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-003B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 13
Quant File :K813OL42.RES (RTE Integrator)



K4746.D K813OL42.M Mon Aug 25 11:20:57 2008

796

Library Search Compound Report

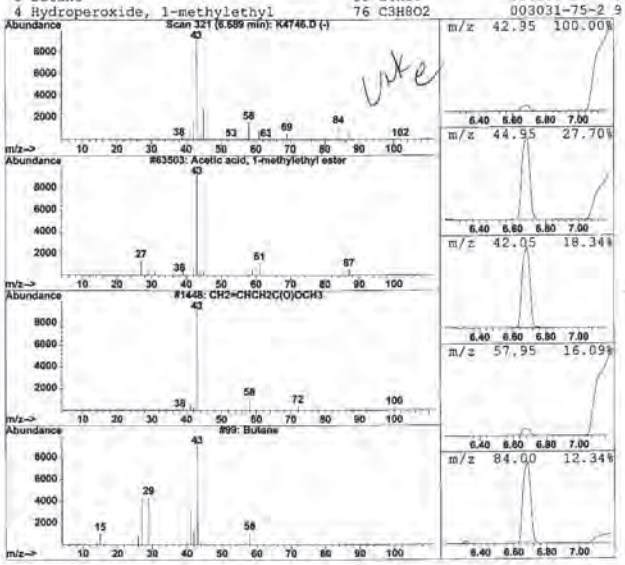
Data File : C:\HPCHEM\1\DATA\K4746.D Vial: 13
Acq On : 21 Aug 2008 22:13 Operator: MEG
Sample : 0808076-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Acetic acid, 1-methylethyl est Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	25.57 ug/mL	837528	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
2	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
3	Butane	58	C4H10	000106-97-8	9
4	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	9



K4746.D K813OL42.M Mon Aug 25 11:21:05 2008 Pag

797

Library Search Compound Report

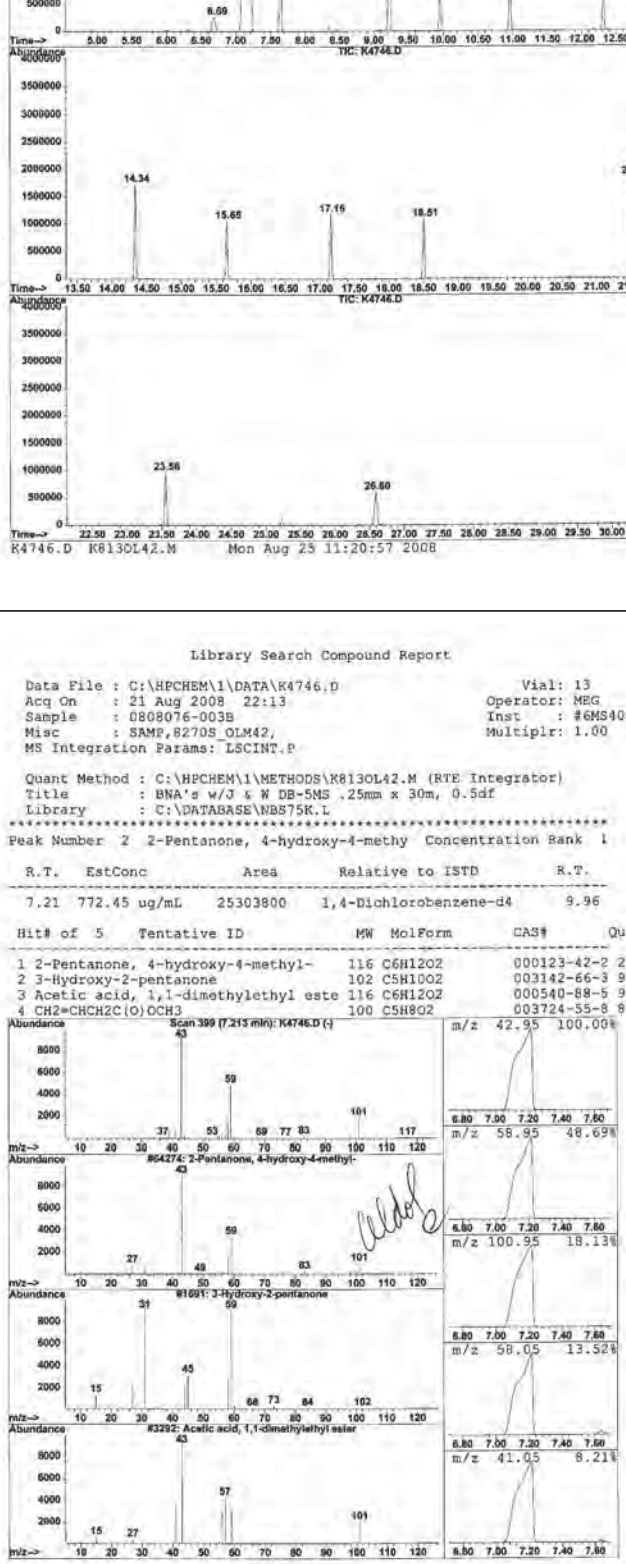
Data File : C:\HPCHEM\1\DATA\K4746.D Vial: 13
Acq On : 21 Aug 2008 22:13 Operator: MEG
Sample : 0808076-003B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.21	772.45 ug/mL	25303800	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4746.D K813OL42.M Mon Aug 25 11:21:05 2008 Pag

798

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CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
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W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 15.4	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4747.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		390	5.1	µg/Kg-dry	1	08/21/08 22:52
2,4,5-Trichlorophenol	ND		2000	25	µg/Kg-dry	1	08/21/08 22:52
2,4,6-Trichlorophenol	ND		390	6.7	µg/Kg-dry	1	08/21/08 22:52
2,4-Dichlorophenol	ND		390	4.5	µg/Kg-dry	1	08/21/08 22:52
2,4-Dimethylphenol	ND		390	79	µg/Kg-dry	1	08/21/08 22:52
2,4-Dinitrophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 22:52
2,4-Dinitrotoluene	ND		390	5.7	µg/Kg-dry	1	08/21/08 22:52
2,6-Dinitrotoluene	ND		390	5.6	µg/Kg-dry	1	08/21/08 22:52
2-Chloronaphthalene	ND		390	4.2	µg/Kg-dry	1	08/21/08 22:52
2-Chlorophenol	ND		390	5.1	µg/Kg-dry	1	08/21/08 22:52
2-Methylnaphthalene	ND		390	1.9	µg/Kg-dry	1	08/21/08 22:52
2-Methylphenol	ND		390	4.4	µg/Kg-dry	1	08/21/08 22:52
2-Nitroaniline	ND		2000	7.0	µg/Kg-dry	1	08/21/08 22:52
2-Nitrophenol	ND		390	16	µg/Kg-dry	1	08/21/08 22:52
3,3'-Dichlorobenzidine	ND		780	47	µg/Kg-dry	1	08/21/08 22:52
3-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 22:52
4,6-Dinitro-2-methylphenol	ND		2000	290	µg/Kg-dry	1	08/21/08 22:52
4-Bromophenyl phenyl ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 22:52
4-Chloro-3-methylphenol	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
4-Chloroaniline	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
4-Chlorophenyl phenyl ether	ND		390	4.8	µg/Kg-dry	1	08/21/08 22:52
4-Methylphenol	ND		390	3.4	µg/Kg-dry	1	08/21/08 22:52
4-Nitroaniline	ND		2000	47	µg/Kg-dry	1	08/21/08 22:52
4-Nitrophenol	ND		2000	79	µg/Kg-dry	1	08/21/08 22:52
Acenaphthene	ND		390	3.9	µg/Kg-dry	1	08/21/08 22:52
Acenaphthylene	ND		390	4.7	µg/Kg-dry	1	08/21/08 22:52
Acetophenone	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Anthracene	ND		390	2.8	µg/Kg-dry	1	08/21/08 22:52
Atrazine	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Benzaldehyde	ND		390	5.9	µg/Kg-dry	1	08/21/08 22:52
Benzo[a]anthracene	ND		390	4.1	µg/Kg-dry	1	08/21/08 22:52
Benzo[a]pyrene	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
Benzo[b]fluoranthene	ND		390	14	µg/Kg-dry	1	08/21/08 22:52
Benzo[g,h,i]perylene	ND		390	16	µg/Kg-dry	1	08/21/08 22:52

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
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Print Date: 08/22/08 11:08 381966 Project Supervisor: Monika Santucci

799

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CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
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Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 — Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS — %Moisture: 15.4	BatchNo:	7957/R14571
Revision:	08/22/08 11:06 — TestCode: 8270S OLM42	FileID:	1-SAMP-K4747.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		390	13	µg/Kg-dry	1	08/21/08 22:52
bis(2-Chloroethoxy)methane	ND		390	3.6	µg/Kg-dry	1	08/21/08 22:52
bis(2-chloroethyl)ether	ND		390	6.1	µg/Kg-dry	1	08/21/08 22:52
bis(2-chloroisopropyl)ether	ND		390	6.7	µg/Kg-dry	1	08/21/08 22:52
bis(2-Ethylhexyl)phthalate	ND		390	18	µg/Kg-dry	1	08/21/08 22:52
Butyl benzyl phthalate	ND		390	18	µg/Kg-dry	1	08/21/08 22:52
Caprolactam	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Carbazole	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
Chrysene	ND		390	3.3	µg/Kg-dry	1	08/21/08 22:52
Di-n-butyl phthalate	ND		390	100	µg/Kg-dry	1	08/21/08 22:52
Di-n-octyl phthalate	ND		390	2.3	µg/Kg-dry	1	08/21/08 22:52
Dibenz[a,h]anthracene	ND		390	16	µg/Kg-dry	1	08/21/08 22:52
Dibenzofuran	ND		390	5.4	µg/Kg-dry	1	08/21/08 22:52
Diethyl phthalate	ND		390	4.1	µg/Kg-dry	1	08/21/08 22:52
Dimethyl phthalate	ND		390	4.0	µg/Kg-dry	1	08/21/08 22:52
Fluoranthene	ND		390	12	µg/Kg-dry	1	08/21/08 22:52
Fluorene	ND		390	4.0	µg/Kg-dry	1	08/21/08 22:52
Hexachlorobenzene	ND		390	6.4	µg/Kg-dry	1	08/21/08 22:52
Hexachlorobutadiene	ND		390	3.6	µg/Kg-dry	1	08/21/08 22:52
Hexachlorocyclopentadiene	ND		390	200	µg/Kg-dry	1	08/21/08 22:52
Hexachloroethane	ND		390	47	µg/Kg-dry	1	08/21/08 22:52
Indeno[1,2,3-cd]pyrene	ND		390	16	µg/Kg-dry	1	08/21/08 22:52
Isophorone	ND		390	3.3	µg/Kg-dry	1	08/21/08 22:52
N-Nitroso-di-n-propylamine	ND		390	4.5	µg/Kg-dry	1	08/21/08 22:52
N-Nitrosodiphenylamine	ND		390	2.6	µg/Kg-dry	1	08/21/08 22:52
Naphthalene	ND		390	3.0	µg/Kg-dry	1	08/21/08 22:52
Nitrobenzene	ND		390	4.2	µg/Kg-dry	1	08/21/08 22:52
Pentachlorophenol	ND		2000	390	µg/Kg-dry	1	08/21/08 22:52
Phenanthrene	ND		390	1.7	µg/Kg-dry	1	08/21/08 22:52
Phenol	ND		390	3.6	µg/Kg-dry	1	08/21/08 22:52
Pyrene	ND		390	2.7	µg/Kg-dry	1	08/21/08 22:52
Surr: 2,4,6-Tribromophenol	93.4		20-143	0	%REC	1	08/21/08 22:52
Surr: 2-Fluorobiphenyl	85.3		46-130	0	%REC	1	08/21/08 22:52
Surr: 2-Fluorophenol	88.1		22-130	0	%REC	1	08/21/08 22:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381966 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 — Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS — %Moisture: 15.4	BatchNo:	7957/R14571
Revision:	08/22/08 11:06 — TestCode: 8270S OLM42	FileID:	1-SAMP-K4747.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	91.0		39-130	0	%REC	1	08/21/08 22:52
Surr: Phenol-d5	92.4		33-130	0	%REC	1	08/21/08 22:52
Surr: Terphenyl-d14	108		39-146	0	%REC	1	08/21/08 22:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381966 Project Supervisor: Monika Santucci

Form I TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

UST-East

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL — Lab Sample ID: 0808076-004B

Sample wt/vol: 30 (g/mL) g — Lab File ID: K4747.D

Level: LOW — Date Received: 8/13/2008

% Moisture: not dec. 15 — Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) — Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.68	1000	BJ
2.	aldol	7.22	31000	BJA

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K4747.D                    Vial: 14
Acq On    : 21 Aug 2008  22:52                      Operator: MEG
Sample    : 0808076-004B                            Inst    : #6MS40
Misc      : SAMP,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008                 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards                  R.T.  QIon  Response  Conc Units Dev(Min)
-------------------------------------------------------------------------------
 1) 1,4-Dichlorobenzene-d4          9.96  152   194839    40.00 ug/mL   0.00
13) Naphthalene-d8                 12.31  136   743548    40.00 ug/mL   0.00
26) Acenaphthene-d10               15.65  164   404318    40.00 ug/mL  -0.01
47) Phenanthrene-d10               18.51  188   734231    40.00 ug/mL  -0.01
58) Chrysene-d12                   23.56  240   599003    40.00 ug/mL  -0.02
68) Perylene-d12                   26.60  264   542283    40.00 ug/mL  -0.03

System Monitoring Compounds
 2) 2-Fluorophenol                  7.65  112   821284   132.09 ug/mL   0.03
  Spiked Amount    150.000                      Recovery   =   88.06%
 3) Phenol-d5                       9.23   99  1137440   138.59 ug/mL   0.00
  Spiked Amount    150.000                      Recovery   =   92.39%
14) Nitrobenzene-d5                10.96   82   699180    91.03 ug/mL   0.00
  Spiked Amount    100.000                      Recovery   =   91.03%
30) 2-Fluorobiphenyl               14.34  172   953196    85.34 ug/mL   0.00
  Spiked Amount    100.000                      Recovery   =   85.34%
46) 2,4,6-Tribromophenol           17.16  330   230283   140.11 ug/mL   0.00
  Spiked Amount    150.000                      Recovery   =   93.41%
60) Terphenyl-d14                  21.53  244  1020880   105.54 ug/mL   0.00
  Spiked Amount    100.000                      Recovery   =  105.54%

Target Compounds                                                    Qvalue
```

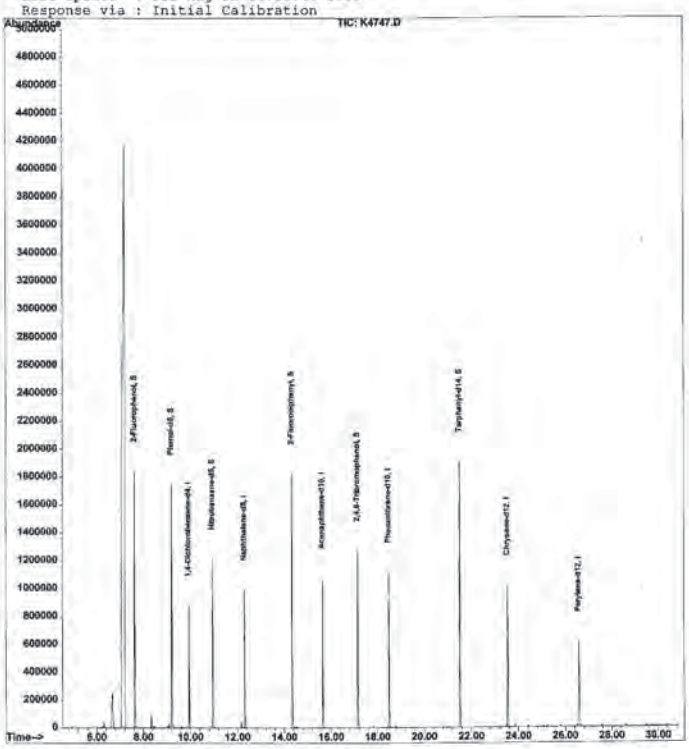
(#) = qualifier out of range (m) = manual integration
K4747.D K813OL42.M Fri Aug 22 10:22:44 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4747.D
Acq On : 21 Aug 2008 22:52
Sample : 0808076-004B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008

Vial: 14
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4747.D K8130L42.M Fri Aug 22 10:22:45 2008 Pag 804

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4747.D
Acq On : 21 Aug 2008 22:52
Sample : 0808076-004B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 14
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	194839	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	742893	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	404318	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	734231	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	598914	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	542287	40.00 ug/mL	-0.01

System Monitoring Compounds

Target Compounds Qvalue

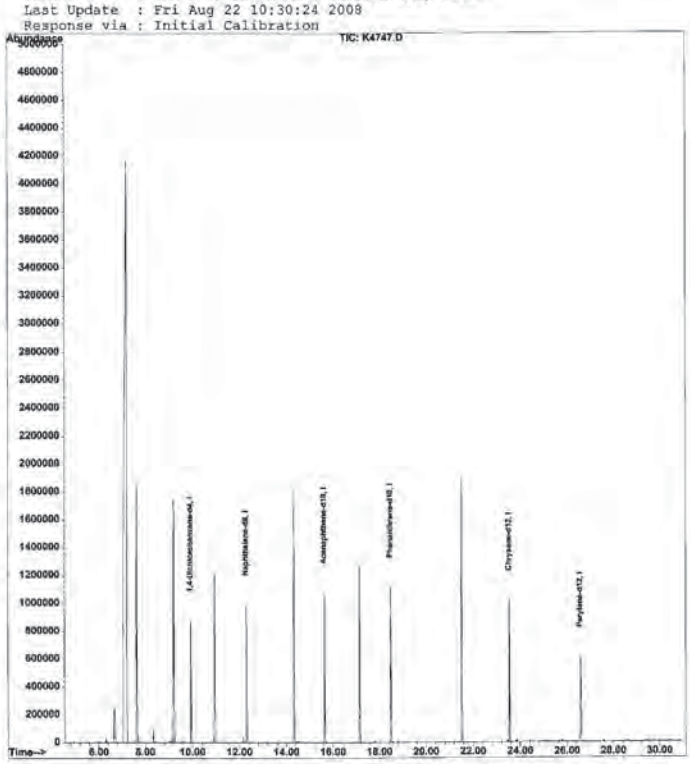
(#) = qualifier out of range (m) = manual integration
K4747.D K8130LM.M Fri Aug 22 10:33:51 2008 Pag 805

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4747.D
Acq On : 21 Aug 2008 22:52
Sample : 0808076-004B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 14
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4747.D K8130LM.M Fri Aug 22 10:33:51 2008 Pag 806

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Aug 2008 22:52
Data File: C:\HPCHEM\1\DATA\K4747.D
Name: 0808076-004B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

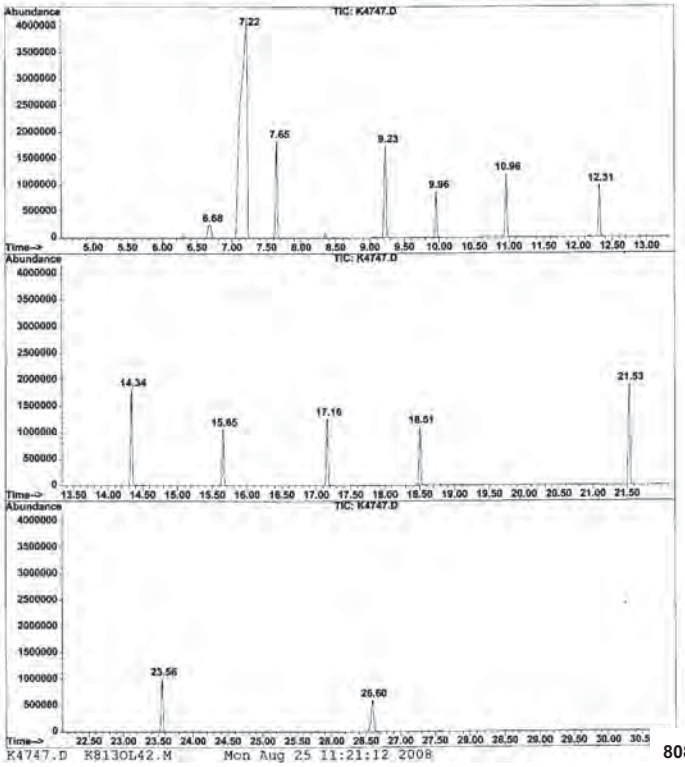
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.68	26.4	ug/mL	883446	ISTD01	9.96	1339860	40.0
2-Pentanone, 4-hydro	7.22	794.1	ug/mL	26600300	ISTD01	9.96	1339860	40.0

K4747.D K8130L42.M Mon Aug 25 11:21:20 2008

807

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4747.D
Operator : MEG
Acquired : 21 Aug 2008 22:52 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-004B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 14
Quant File :K813OL42.RES (RTE Integrator)



K4747.D K813OL42.M Mon Aug 25 11:21:12 2008

808

Library Search Compound Report

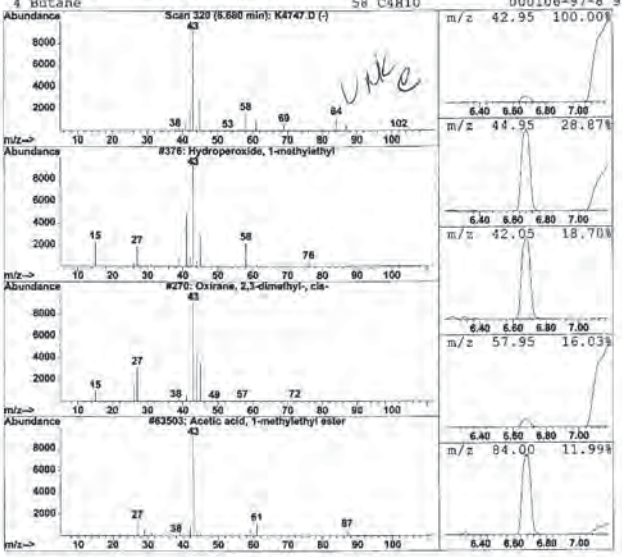
Data File : C:\HPCHEM\1\DATA\K4747.D Vial: 14
Acq On : 21 Aug 2008 22:52 Operator: MEG
Sample : 0808076-004B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.68	26.37 ug/mL	883446	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	42
2	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
3	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
4	Butane	58	C4H10	000106-97-8	9



K4747.D K813OL42.M Mon Aug 25 11:21:20 2008 Pag

809

Library Search Compound Report

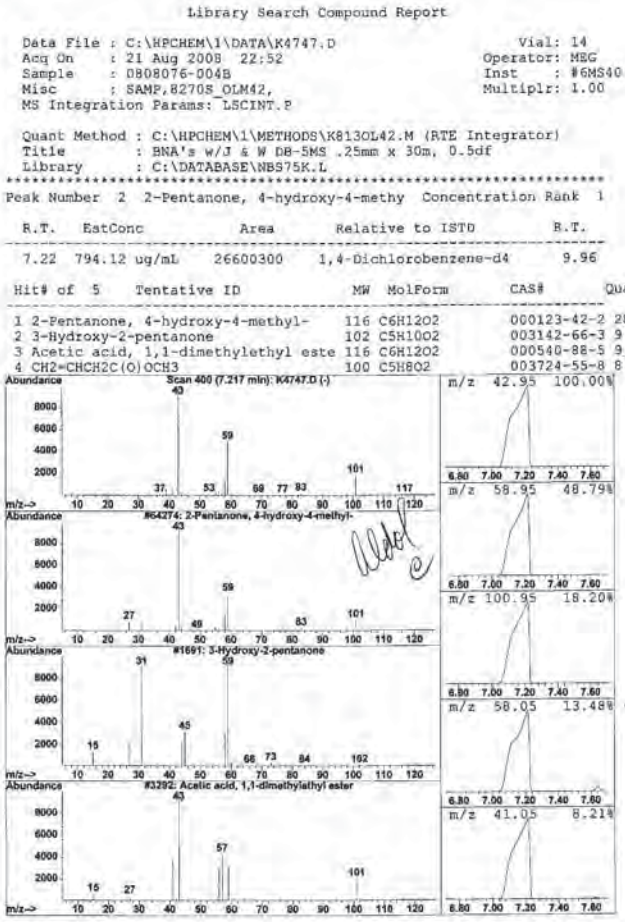
Data File : C:\HPCHEM\1\DATA\K4747.D Vial: 14
Acq On : 21 Aug 2008 22:52 Operator: MEG
Sample : 0808076-004B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	794.12 ug/mL	26600300	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4747.D K813OL42.M Mon Aug 25 11:21:20 2008 Pag

810

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 24.4	BatchNo: 7957/R14569
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4733.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		440	5.7	µg/Kg-dry	1	08/21/08 14:18
2,4,5-Trichlorophenol	ND		2200	28	µg/Kg-dry	1	08/21/08 14:18
2,4,6-Trichlorophenol	ND		440	7.5	µg/Kg-dry	1	08/21/08 14:18
2,4-Dichlorophenol	ND		440	5.0	µg/Kg-dry	1	08/21/08 14:18
2,4-Dimethylphenol	ND		440	88	µg/Kg-dry	1	08/21/08 14:18
2,4-Dinitrophenol	ND		2200	440	µg/Kg-dry	1	08/21/08 14:18
2,4-Dinitrotoluene	ND		440	6.4	µg/Kg-dry	1	08/21/08 14:18
2,6-Dinitrotoluene	ND		440	7.4	µg/Kg-dry	1	08/21/08 14:18
2-Chloronaphthalene	ND		440	4.9	µg/Kg-dry	1	08/21/08 14:18
2-Chlorophenol	ND		440	6.8	µg/Kg-dry	1	08/21/08 14:18
2-Methylnaphthalene	ND		440	2.1	µg/Kg-dry	1	08/21/08 14:18
2-Methylphenol	ND		440	4.9	µg/Kg-dry	1	08/21/08 14:18
2-Nitroaniline	ND		2200	7.8	µg/Kg-dry	1	08/21/08 14:18
2-Nitrophenol	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
3,3'-Dichlorobenzidine	ND		870	53	µg/Kg-dry	1	08/21/08 14:18
3-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/21/08 14:18
4,6-Dinitro-2-methylphenol	ND		2200	220	µg/Kg-dry	1	08/21/08 14:18
4-Bromophenyl phenyl ether	ND		440	6.9	µg/Kg-dry	1	08/21/08 14:18
4-Chloro-3-methylphenol	ND		440	13	µg/Kg-dry	1	08/21/08 14:18
4-Chloroaniline	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
4-Chlorophenyl phenyl ether	ND		440	5.4	µg/Kg-dry	1	08/21/08 14:18
4-Methylphenol	ND		440	3.8	µg/Kg-dry	1	08/21/08 14:18
4-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/21/08 14:18
4-Nitrophenol	ND		2200	88	µg/Kg-dry	1	08/21/08 14:18
Acenaphthene	ND		440	4.4	µg/Kg-dry	1	08/21/08 14:18
Acenaphthylene	ND		440	5.3	µg/Kg-dry	1	08/21/08 14:18
Acetophenone	ND		440	55	µg/Kg-dry	1	08/21/08 14:18
Anthracene	ND		440	3.1	µg/Kg-dry	1	08/21/08 14:18
Atrazine	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
Benzaldehyde	ND		440	6.6	µg/Kg-dry	1	08/21/08 14:18
Benzo[a]anthracene	ND		440	4.6	µg/Kg-dry	1	08/21/08 14:18
Benzo[a]pyrene	ND		440	13	µg/Kg-dry	1	08/21/08 14:18
Benzo[b]fluoranthene	ND		440	15	µg/Kg-dry	1	08/21/08 14:18
Benzo[g,h,i]perylene	ND		440	18	µg/Kg-dry	1	08/21/08 14:18

Qualifiers: * Value exceeds Maximum Contaminant Level; B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; H Holding times for preparation or analysis exceeded; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); P Prim./Conf. column %D or RPD exceeds limit; S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381916 Project Supervisor: Monika Santucci

811

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 — Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS — %Moisture: 24.4	BatchNo:	7957/R14569
Revision:	08/22/08 11:06 — TestCode: 8270S OLM42	FileID:	1-SAMP-K4733.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		440	15	µg/Kg-dry	1	08/21/08 14:18
bis(2-Chloroethoxy)methane	ND		440	4.1	µg/Kg-dry	1	08/21/08 14:18
bis(2-chloroethyl)ether	ND		440	6.6	µg/Kg-dry	1	08/21/08 14:18
bis(2-chloroisopropyl)ether	ND		440	7.5	µg/Kg-dry	1	08/21/08 14:18
bis(2-Ethylhexyl)phthalate	ND		440	20	µg/Kg-dry	1	08/21/08 14:18
Butyl benzyl phthalate	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
Caprolactam	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
Carbazole	ND		440	12	µg/Kg-dry	1	08/21/08 14:18
Chrysene	ND		440	3.7	µg/Kg-dry	1	08/21/08 14:18
Di-n-butyl phthalate	ND		440	110	µg/Kg-dry	1	08/21/08 14:18
Di-n-octyl phthalate	ND		440	2.6	µg/Kg-dry	1	08/21/08 14:18
Dibenz[a,h]anthracene	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
Dibenzofuran	ND		440	6.1	µg/Kg-dry	1	08/21/08 14:18
Diethyl phthalate	ND		440	4.6	µg/Kg-dry	1	08/21/08 14:18
Dimethyl phthalate	ND		440	4.5	µg/Kg-dry	1	08/21/08 14:18
Fluoranthene	ND		440	13	µg/Kg-dry	1	08/21/08 14:18
Fluorene	ND		440	4.5	µg/Kg-dry	1	08/21/08 14:18
Hexachlorobenzene	ND		440	7.1	µg/Kg-dry	1	08/21/08 14:18
Hexachlorobutadiene	ND		440	4.0	µg/Kg-dry	1	08/21/08 14:18
Hexachlorocyclopentadiene	ND		440	220	µg/Kg-dry	1	08/21/08 14:18
Hexachloroethane	ND		440	53	µg/Kg-dry	1	08/21/08 14:18
Indeno[1,2,3-cd]pyrene	ND		440	18	µg/Kg-dry	1	08/21/08 14:18
Isophorone	ND		440	3.7	µg/Kg-dry	1	08/21/08 14:18
N-Nitroso-di-n-propylamine	ND		440	6.0	µg/Kg-dry	1	08/21/08 14:18
N-Nitrosodiphenylamine	ND		440	3.0	µg/Kg-dry	1	08/21/08 14:18
Naphthalene	ND		440	3.3	µg/Kg-dry	1	08/21/08 14:18
Nitrobenzene	ND		440	4.7	µg/Kg-dry	1	08/21/08 14:18
Pentachlorophenol	ND		2200	440	µg/Kg-dry	1	08/21/08 14:18
Phenanthrene	ND		440	1.9	µg/Kg-dry	1	08/21/08 14:18
Phenol	ND		440	4.1	µg/Kg-dry	1	08/21/08 14:18
Pyrene	ND		440	3.0	µg/Kg-dry	1	08/21/08 14:18
Surr: 2,4,6-Tribromophenol	91.1		20-143	0	%REC	1	08/21/08 14:18
Surr: 2-Fluorobiphenyl	82.0		48-130	0	%REC	1	08/21/08 14:18
Surr: 2-Fluorophenol	84.3		22-130	0	%REC	1	08/21/08 14:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381916 Project Supervisor: Monika Santucci

812

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 — Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS — %Moisture: 24.4	BatchNo:	7957/R14569
Revision:	08/22/08 11:06 — TestCode: 8270S OLM42	FileID:	1-SAMP-K4733.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	88.3		39-130	0	%REC	1	08/21/08 14:18
Surr: Phenol-d5	88.6		33-130	0	%REC	1	08/21/08 14:18
Surr: Terphenyl-d14	98.8		36-146	0	%REC	1	08/21/08 14:18

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381916 Project Supervisor: Monika Santucci

813

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-West

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-005B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4733.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.67	600	BJ
2.	aldol	7.22	33000	BJA

FORM 1 TIC 13 SW8270C

814

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4733.D Vial: 10
Acq On : 21 Aug 2008 14:18 Operator: MEG
Sample : 0808076-005B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:58 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	211062	40.00	ug/mL	0.00
13) Naphthalene-d8	12.31	136	807781	40.00	ug/mL	0.00
26) Acenaphthene-d10	15.65	164	434938	40.00	ug/mL	-0.01
47) Phenanthrene-d10	18.51	188	791634	40.00	ug/mL	-0.01
58) Chrysene-d12	23.56	240	651672	40.00	ug/mL	-0.02
68) Perylene-d12	26.60	264	607739	40.00	ug/mL	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	7.65	112	851805	126.47	ug/mL	0.04
Spiked Amount 150.000			Recovery = 84.31%			
3) Phenol-d5	9.23	99	1181078	132.85	ug/mL	0.00
Spiked Amount 150.000			Recovery = 88.57%			
14) Nitrobenzene-d5	10.96	82	736572	88.27	ug/mL	0.00
Spiked Amount 100.000			Recovery = 88.27%			
30) 2-Fluorobiphenyl	14.34	172	985085	81.99	ug/mL	0.00
Spiked Amount 100.000			Recovery = 81.99%			
46) 2,4,6-Tribromophenol	17.16	330	241646	136.67	ug/mL	0.00
Spiked Amount 150.000			Recovery = 91.11%			
60) Terphenyl-d14	21.53	244	1039745	98.80	ug/mL	0.00
Spiked Amount 100.000			Recovery = 98.80%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K4733.D K813OL42.M Fri Aug 22 09:58:48 2008 Pag

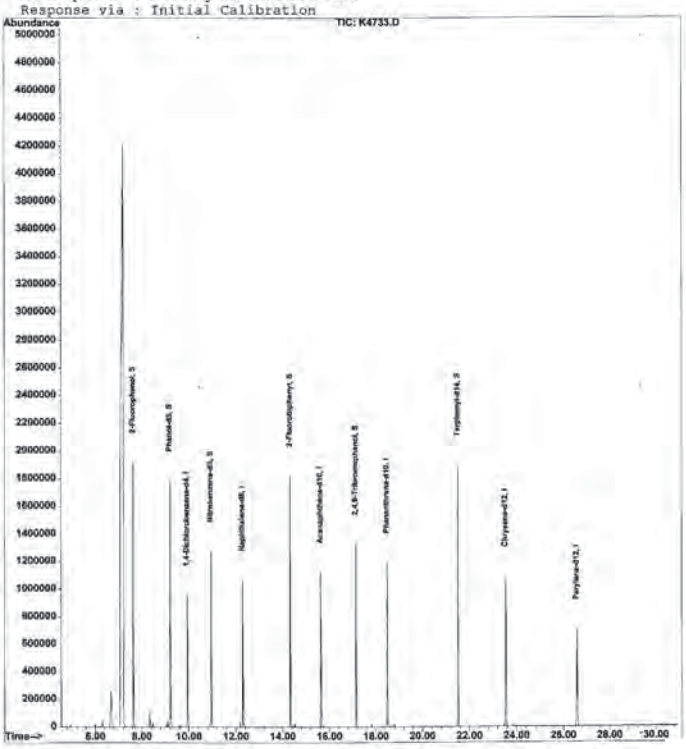
815

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4733.D
Acq On : 21 Aug 2008 14:18
Sample : 0808076-005B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:58 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130L42.RES

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:24 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4733.D
Acq On : 21 Aug 2008 14:18
Sample : 0808076-005B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:04 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:10 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	211062	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	807781	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	434938	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	791634	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	651672	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	607739	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

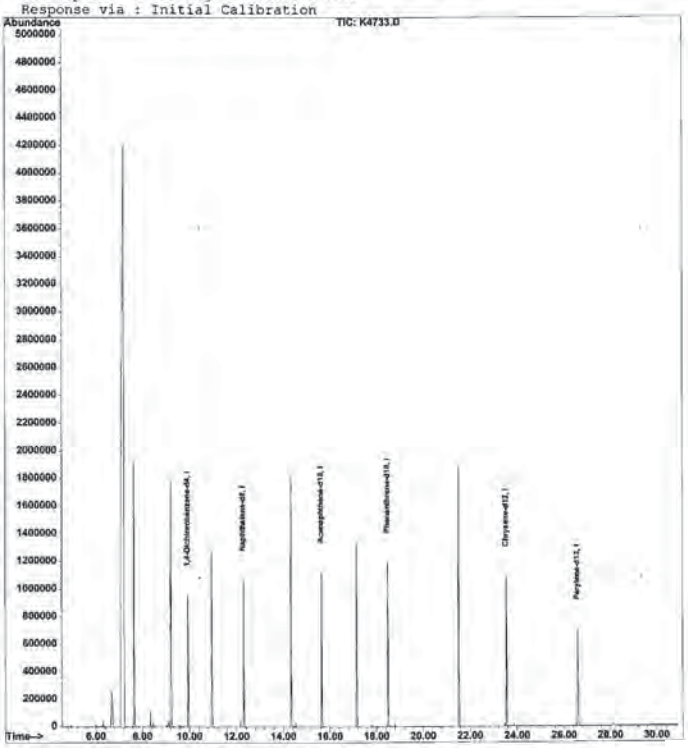
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4733.D
Acq On : 21 Aug 2008 14:18
Sample : 0808076-005B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:04 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:10 2008
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

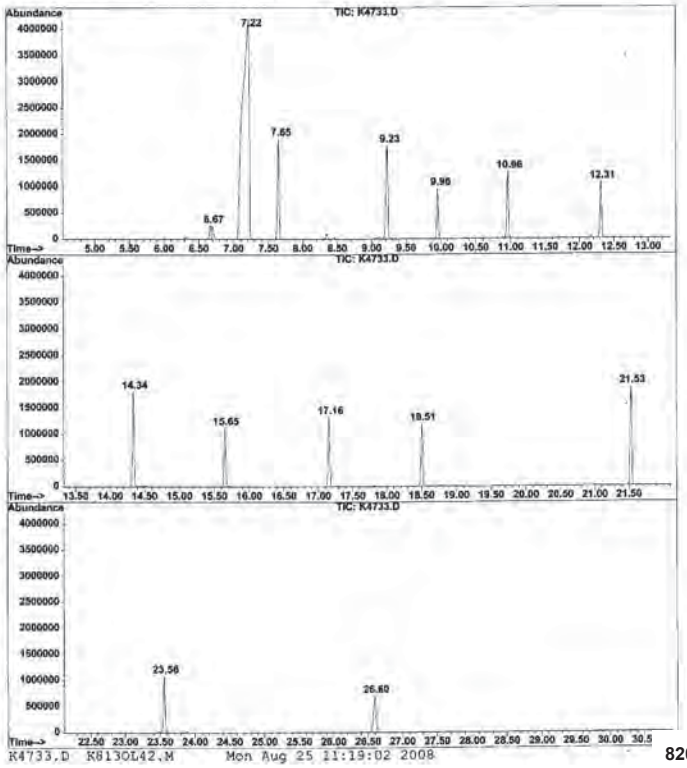
Operator ID: MEG Date Acquired: 21 Aug 2008 14:18
Data File: C:\HPCHEM\1\DATA\K4733.D
Name: 0808076-005B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.67	13.7	ug/mL	497408	ISTD01	9.96	1454340	40.0
2-Pentanone, 4-hydro	7.22	757.7	ug/mL	27548000	ISTD01	9.96	1454340	40.0

K4733.D K8130L42.M Mon Aug 25 11:19:06 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4733.D
Operator : MEG
Acquired : 21 Aug 2008 14:18 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-005B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 10
Quant File :K813OL42.RES (RTE Integrator)



K4733.D K813OL42.M Mon Aug 25 11:19:02 2008

820

Library Search Compound Report

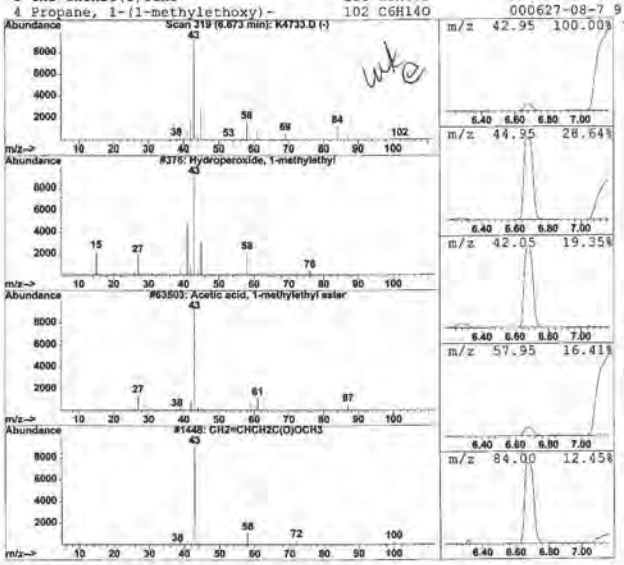
Data File : C:\HPCHEM\1\DATA\K4733.D Vial: 10
Acq On : 21 Aug 2008 14:18 Operator: MEG
Sample : 0808076-005B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.67	13.68 ug/mL	497408	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	38
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	12
3	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
4	Propane, 1-(1-methylethoxy)-	102	C6H14O	000627-08-7	9



K4733.D K813OL42.M Mon Aug 25 11:19:06 2008

821

Library Search Compound Report

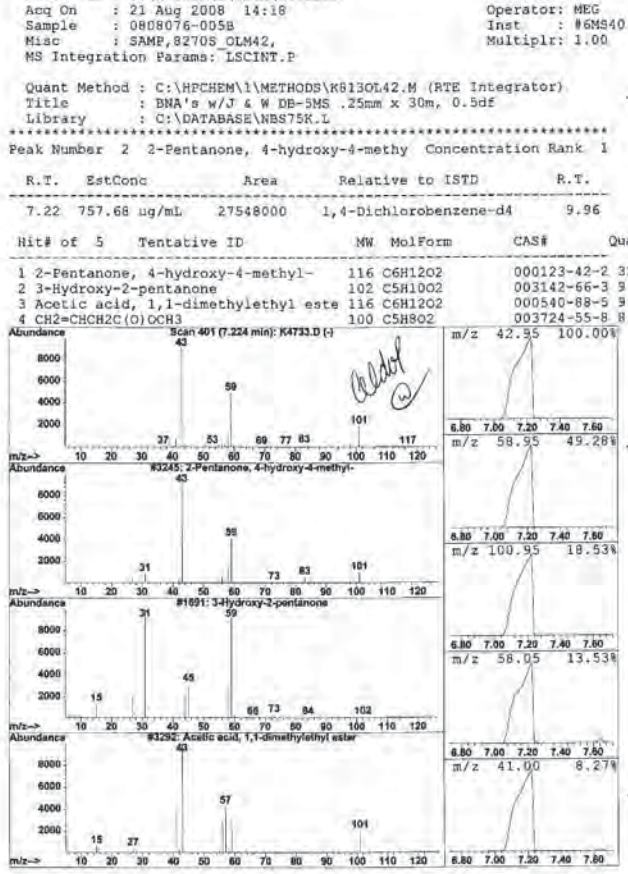
Data File : C:\HPCHEM\1\DATA\K4733.D Vial: 10
Acq On : 21 Aug 2008 14:18 Operator: MEG
Sample : 0808076-005B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	757.68 ug/mL	27548000	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	33
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4733.D K813OL42.M Mon Aug 25 11:19:06 2008

822

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4750.D
Col Type:			

Sample Size: 30 g
%Moisture: 27.8
TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		460	6.0	µg/Kg-dry	1	08/22/08 0:47
2,4,5-Trichlorophenol	ND		2300	29	µg/Kg-dry	1	08/22/08 0:47
2,4,6-Trichlorophenol	ND		460	7.8	µg/Kg-dry	1	08/22/08 0:47
2,4-Dichlorophenol	ND		460	5.3	µg/Kg-dry	1	08/22/08 0:47
2,4-Dimethylphenol	ND		460	92	µg/Kg-dry	1	08/22/08 0:47
2,4-Dinitrophenol	ND		2300	460	µg/Kg-dry	1	08/22/08 0:47
2,4-Dinitrotoluene	ND		460	6.7	µg/Kg-dry	1	08/22/08 0:47
2,6-Dinitrotoluene	ND		460	7.8	µg/Kg-dry	1	08/22/08 0:47
2-Chloronaphthalene	ND		460	5.1	µg/Kg-dry	1	08/22/08 0:47
2-Chlorophenol	ND		460	7.1	µg/Kg-dry	1	08/22/08 0:47
2-Methylnaphthalene	ND		460	2.2	µg/Kg-dry	1	08/22/08 0:47
2-Methylphenol	ND		460	5.1	µg/Kg-dry	1	08/22/08 0:47
2-Nitroaniline	ND		2300	8.2	µg/Kg-dry	1	08/22/08 0:47
2-Nitrophenol	ND		460	18	µg/Kg-dry	1	08/22/08 0:47
3,3'-Dichlorobenzidine	ND		910	55	µg/Kg-dry	1	08/22/08 0:47
3-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 0:47
4,6-Dinitro-2-methylphenol	ND		2300	230	µg/Kg-dry	1	08/22/08 0:47
4-Bromophenyl phenyl ether	ND		460	7.2	µg/Kg-dry	1	08/22/08 0:47
4-Chloro-3-methylphenol	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
4-Chloroaniline	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
4-Chlorophenyl phenyl ether	ND		460	5.7	µg/Kg-dry	1	08/22/08 0:47
4-Methylphenol	ND		460	4.0	µg/Kg-dry	1	08/22/08 0:47
4-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 0:47
4-Nitrophenol	ND		2300	92	µg/Kg-dry	1	08/22/08 0:47
Acenaphthene	ND		460	4.6	µg/Kg-dry	1	08/22/08 0:47
Acenaphthylene	ND		460	5.5	µg/Kg-dry	1	08/22/08 0:47
Acetophenone	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Anthracene	ND		460	3.2	µg/Kg-dry	1	08/22/08 0:47
Atrazine	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Benzaldehyde	ND		460	5.9	µg/Kg-dry	1	08/22/08 0:47
Benzo[a]anthracene	ND		460	4.8	µg/Kg-dry	1	08/22/08 0:47
Benzo[a]pyrene	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
Benzo[b]fluoranthene	ND		460	16	µg/Kg-dry	1	08/22/08 0:47
Benzo[g,h,i]perylene	ND		460	18	µg/Kg-dry	1	08/22/08 0:47

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim /Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381969 Project Supervisor: Monika Santucci

823

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS %Moisture: 27.8	BatchNo:	7957/R14571
Revision:	08/22/08 11:06 TestCode: 8270S OLM42	FileID:	1-SAMP-K4750.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		460	15	µg/Kg-dry	1	08/22/08 0:47
bis(2-Chloroethoxy)methane	ND		460	4.3	µg/Kg-dry	1	08/22/08 0:47
bis(2-chloroethyl)ether	ND		460	7.1	µg/Kg-dry	1	08/22/08 0:47
bis(2-chloroisopropyl)ether	ND		460	7.9	µg/Kg-dry	1	08/22/08 0:47
bis(2-Ethylhexyl)phthalate	ND		460	21	µg/Kg-dry	1	08/22/08 0:47
Butyl benzyl phthalate	ND		460	18	µg/Kg-dry	1	08/22/08 0:47
Caprolactam	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Carbazole	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
Chrysene	ND		460	3.9	µg/Kg-dry	1	08/22/08 0:47
Di-n-butyl phthalate	ND		460	120	µg/Kg-dry	1	08/22/08 0:47
Di-n-octyl phthalate	ND		460	2.7	µg/Kg-dry	1	08/22/08 0:47
Dibenz(a,h)anthracene	ND		460	18	µg/Kg-dry	1	08/22/08 0:47
Dibenzofuran	ND		460	6.3	µg/Kg-dry	1	08/22/08 0:47
Diethyl phthalate	ND		460	4.9	µg/Kg-dry	1	08/22/08 0:47
Dimethyl phthalate	ND		460	4.7	µg/Kg-dry	1	08/22/08 0:47
Fluoranthene	ND		460	14	µg/Kg-dry	1	08/22/08 0:47
Fluorene	ND		460	4.7	µg/Kg-dry	1	08/22/08 0:47
Hexachlorobenzene	ND		460	7.5	µg/Kg-dry	1	08/22/08 0:47
Hexachlorobutadiene	ND		460	4.2	µg/Kg-dry	1	08/22/08 0:47
Hexachlorocyclopentadiene	ND		460	230	µg/Kg-dry	1	08/22/08 0:47
Hexachloroethane	ND		460	55	µg/Kg-dry	1	08/22/08 0:47
Indeno(1,2,3-cd)pyrene	ND		460	18	µg/Kg-dry	1	08/22/08 0:47
Isophorone	ND		460	3.8	µg/Kg-dry	1	08/22/08 0:47
N-Nitroso-di-n-propylamine	ND		460	5.3	µg/Kg-dry	1	08/22/08 0:47
N-Nitrosodiphenylamine	ND		460	3.1	µg/Kg-dry	1	08/22/08 0:47
Naphthalene	ND		460	3.5	µg/Kg-dry	1	08/22/08 0:47
Nitrobenzene	ND		460	4.9	µg/Kg-dry	1	08/22/08 0:47
Pentachlorophenol	ND		2300	480	µg/Kg-dry	1	08/22/08 0:47
Phenanthrene	ND		460	2.0	µg/Kg-dry	1	08/22/08 0:47
Phenol	ND		460	4.3	µg/Kg-dry	1	08/22/08 0:47
Pyrene	ND		460	3.1	µg/Kg-dry	1	08/22/08 0:47
Surr: 2,4,6-Tribromophenol	92.0		20-143	0	%REC	1	08/22/08 0:47
Surr: 2-Fluorobiphenyl	83.9		46-130	0	%REC	1	08/22/08 0:47
Surr: 2-Fluorophenol	88.6		22-130	0	%REC	1	08/22/08 0:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381969 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40 Sample Size: 30 g	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS %Moisture: 27.8	BatchNo:	7957/R14571
Revision:	08/22/08 11:06 TestCode: 8270S OLM42	FileID:	1-SAMP-K4750.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	89.4		30-130	0	%REC	1	08/22/08 0:47
Surr: Phenol-d5	91.6		33-130	0	%REC	1	08/22/08 0:47
Surr: Terphenyl-d14	102		36-146	0	%REC	1	08/22/08 0:47

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381969 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

UST-South

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068O

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-006B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4750.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 28 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.70	1300	BJ
2.	aldol	7.22	37000	BJA

FORM I TIC 14 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4750.D Vial: 17
Acq On : 22 Aug 2008 00:47 Operator: MEG
Sample : 0808076-006B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	Qion	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	201441	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	775426	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	418997	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.50	188	770616	40.00 ug/mL	-0.02
58) Chrysene-d12	23.56	240	628862	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	560980	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	856503	133.24 ug/mL	0.04
Spiked Amount 150.000			Recovery = 88.83%		
3) Phenol-d5	9.22	99	1165667	137.38 ug/mL	0.00
Spiked Amount 150.000			Recovery = 91.59%		
14) Nitrobenzene-d5	10.96	82	715716	89.35 ug/mL	0.00
Spiked Amount 100.000			Recovery = 89.35%		
30) 2-Fluorobiphenyl	14.34	172	971541	83.94 ug/mL	0.00
Spiked Amount 100.000			Recovery = 83.94%		
46) 2,4,6-Tribromophenol	17.16	330	235120	138.04 ug/mL	0.00
Spiked Amount 150.000			Recovery = 92.03%		
60) Terphenyl-d14	21.53	244	1038838	102.30 ug/mL	0.00
Spiked Amount 100.000			Recovery = 102.30%		

Target Compounds Qvalue

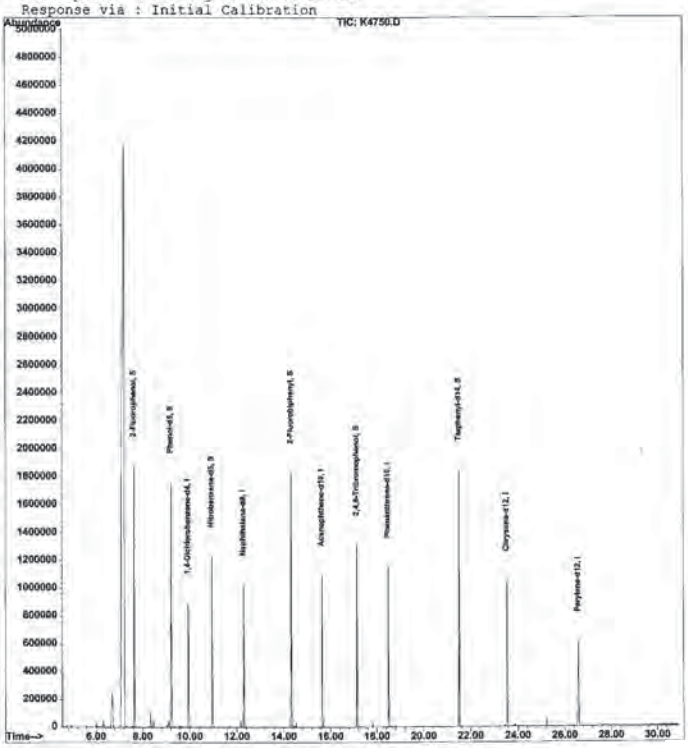
(#) = qualifier out of range (m) = manual integration
K4750.D K813OL42.M Fri Aug 22 10:22:52 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4750.D
Acq On : 22 Aug 2008 00:47
Sample : 0808076-006B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008

Vial: 17
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4750.D K813OL42.M Fri Aug 22 10:22:53 2008 Pag 828

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4750.D
Acq On : 22 Aug 2008 00:47
Sample : 0808076-006B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008

Vial: 17
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	201441	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	775101	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	418997	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.50	188	770616	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	628862	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	560980	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

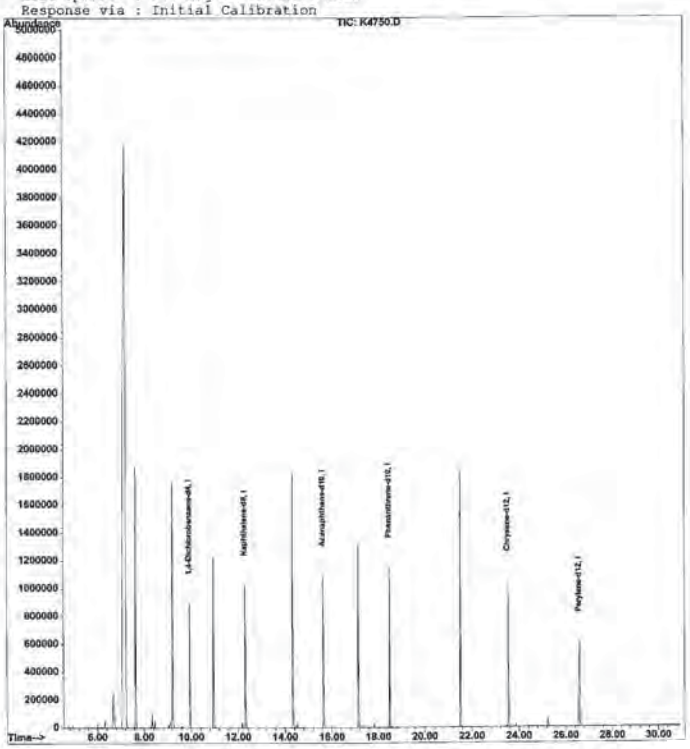
(#) = qualifier out of range (m) = manual integration
K4750.D K813OLM.M Fri Aug 22 10:34:09 2008 Pag 829

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4750.D
Acq On : 22 Aug 2008 00:47
Sample : 0808076-006B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008

Vial: 17
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4750.D K813OLM.M Fri Aug 22 10:34:10 2008 Pag 830

Tentatively Identified Compound (LSC) summary

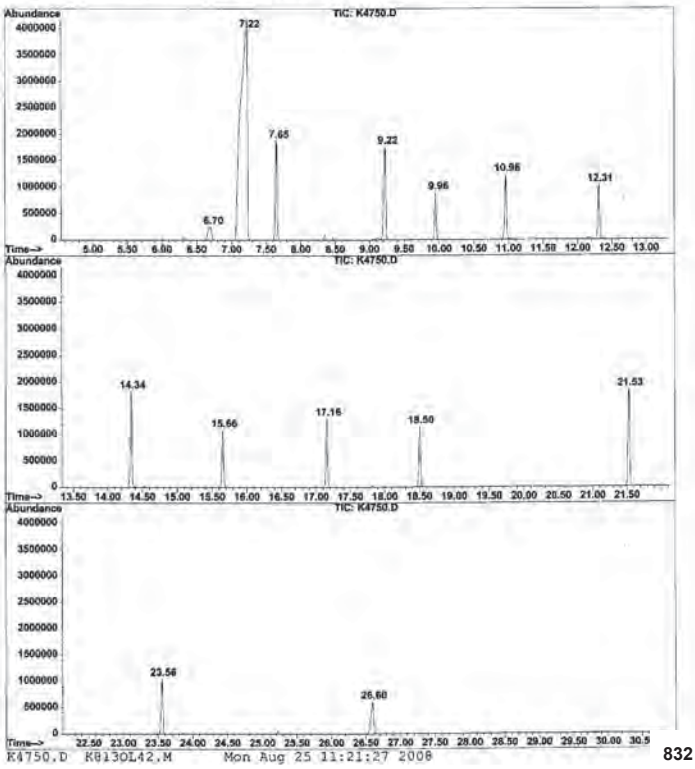
Operator ID: MEG Date Acquired: 22 Aug 2008 00:47
Data File: C:\HPCHEM\1\DATA\K4750.D
Name: 0808076-006B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.70	27.3	ug/mL	950407	ISTD01	9.96	1390870	40.0
2-Pentanone, 4-hydro	7.22	797.7	ug/mL	27738600	ISTD01	9.96	1390870	40.0

K4750.D K813OL42.M Mon Aug 25 11:21:35 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4750.D
Operator : MEG
Acquired : 22 Aug 2008 00:47 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-006B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 17
Quant File :K813OL42.RES (RTE Integrator)



K4750.D K813OL42.M Mon Aug 25 11:21:27 2008

832

Library Search Compound Report

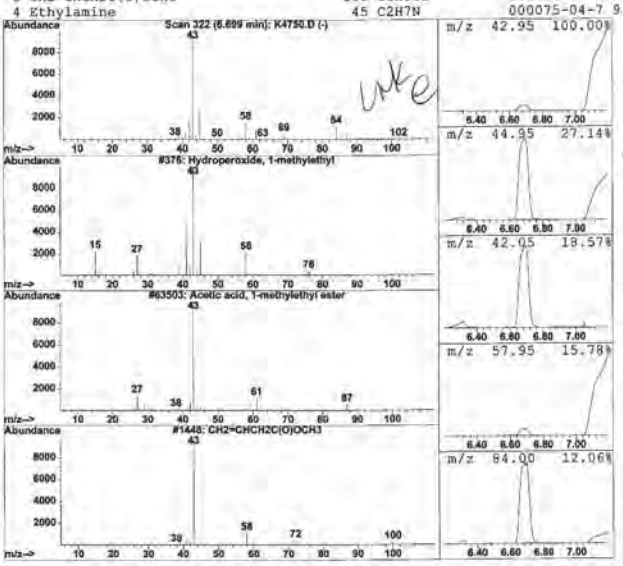
Data File : C:\HPCHEM\1\DATA\K4750.D Vial: 17
Acq On : 22 Aug 2008 00:47 Operator: MEG
Sample : 0808076-006B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.70	27.33 ug/mL	950407	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	42
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
3	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
4	Ethylamine	45	C2H7N	000075-04-7	9



K4750.D K813OL42.M Mon Aug 25 11:21:34 2008

833

Library Search Compound Report

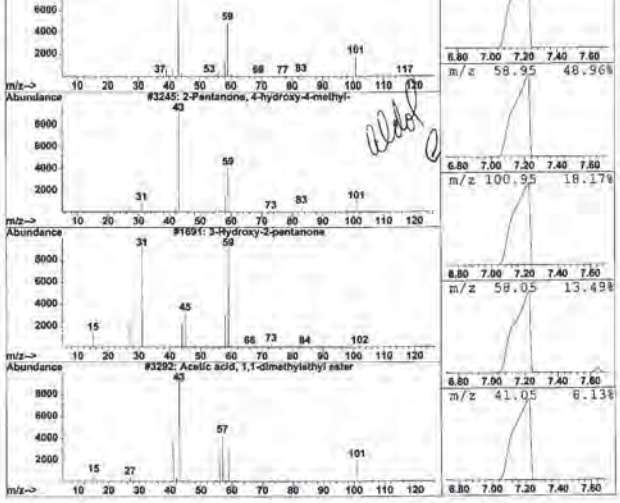
Data File : C:\HPCHEM\1\DATA\K4750.D Vial: 17
Acq On : 22 Aug 2008 00:47 Operator: MEG
Sample : 0808076-006B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	797.73 ug/mL	27738600	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	33
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4750.D K813OL42.M Mon Aug 25 11:21:35 2008

834

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 18.3	BatchNo: 7957/RI4571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4751.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW6270C		(SW3550B)
1,1'-Biphenyl	ND		400	5.3	µg/Kg-dry	1	08/22/08 1:25
2,4,5-Trichlorophenol	ND		2000	26	µg/Kg-dry	1	08/22/08 1:25
2,4,6-Trichlorophenol	ND		400	6.9	µg/Kg-dry	1	08/22/08 1:25
2,4-Dichlorophenol	ND		400	4.7	µg/Kg-dry	1	08/22/08 1:25
2,4-Dimethylphenol	ND		400	82	µg/Kg-dry	1	08/22/08 1:25
2,4-Dinitrophenol	ND		2000	410	µg/Kg-dry	1	08/22/08 1:25
2,4-Dinitrotoluene	ND		400	5.9	µg/Kg-dry	1	08/22/08 1:25
2,6-Dinitrotoluene	ND		400	6.9	µg/Kg-dry	1	08/22/08 1:25
2-Chloronaphthalene	ND		400	4.5	µg/Kg-dry	1	08/22/08 1:25
2-Chlorophenol	ND		400	6.3	µg/Kg-dry	1	08/22/08 1:25
2-Methylnaphthalene	ND		400	2.0	µg/Kg-dry	1	08/22/08 1:25
2-Methylphenol	ND		400	4.5	µg/Kg-dry	1	08/22/08 1:25
2-Nitroaniline	ND		2000	7.2	µg/Kg-dry	1	08/22/08 1:25
2-Nitrophenol	ND		400	16	µg/Kg-dry	1	08/22/08 1:25
3,3'-Dichlorobenzidine	ND		810	49	µg/Kg-dry	1	08/22/08 1:25
3-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/22/08 1:25
4,6-Dinitro-2-methylphenol	ND		2000	200	µg/Kg-dry	1	08/22/08 1:25
4-Bromophenyl phenyl ether	ND		400	6.3	µg/Kg-dry	1	08/22/08 1:25
4-Chloro-3-methylphenol	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
4-Chloroaniline	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
4-Chlorophenyl phenyl ether	ND		400	5.0	µg/Kg-dry	1	08/22/08 1:25
4-Methylphenol	ND		400	3.5	µg/Kg-dry	1	08/22/08 1:25
4-Nitroaniline	ND		2000	49	µg/Kg-dry	1	08/22/08 1:25
4-Nitrophenol	ND		2000	82	µg/Kg-dry	1	08/22/08 1:25
Acenaphthene	ND		400	4.1	µg/Kg-dry	1	08/22/08 1:25
Acenaphthylene	ND		400	4.9	µg/Kg-dry	1	08/22/08 1:25
Acetophenone	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Anthracene	ND		400	2.9	µg/Kg-dry	1	08/22/08 1:25
Atrazine	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Benzaldehyde	ND		400	6.1	µg/Kg-dry	1	08/22/08 1:25
Benzo[a]anthracene	ND		400	4.2	µg/Kg-dry	1	08/22/08 1:25
Benzo[a]pyrene	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
Benzo[b]fluoranthene	ND		400	14	µg/Kg-dry	1	08/22/08 1:25
Benzo[g,h,i]perylene	ND		400	16	µg/Kg-dry	1	08/22/08 1:25

Qualifiers:
* Value exceeds Maximum Contaminant Level
B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range
H Holding times for preparation or analysis exceeded
J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL)
P Prim/Conf. column %D or RPD exceeds limit
S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381970 Project Supervisor: Monika Santucci

835

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 18.3	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4751.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	ND		400	14	µg/Kg-dry	1	08/22/08 1:25
bis(2-Chloroethoxy)methane	ND		400	3.8	µg/Kg-dry	1	08/22/08 1:25
bis(2-chloroethyl)ether	ND		400	6.3	µg/Kg-dry	1	08/22/08 1:25
bis(2-chloroisopropyl)ether	ND		400	7.0	µg/Kg-dry	1	08/22/08 1:25
bis(2-Ethylhexyl)phthalate	600		400	18	µg/Kg-dry	1	08/22/08 1:25
Butyl benzyl phthalate	ND		400	16	µg/Kg-dry	1	08/22/08 1:25
Caprolactam	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Carbazole	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
Chrysene	ND		400	3.4	µg/Kg-dry	1	08/22/08 1:25
Di-n-butyl phthalate	ND		400	100	µg/Kg-dry	1	08/22/08 1:25
Di-n-octyl phthalate	ND		400	2.4	µg/Kg-dry	1	08/22/08 1:25
Dibenz(a,h)anthracene	ND		400	16	µg/Kg-dry	1	08/22/08 1:25
Dibenzofuran	ND		400	5.8	µg/Kg-dry	1	08/22/08 1:25
Diethyl phthalate	ND		400	4.3	µg/Kg-dry	1	08/22/08 1:25
Dimethyl phthalate	ND		400	4.2	µg/Kg-dry	1	08/22/08 1:25
Fluoranthene	ND		400	12	µg/Kg-dry	1	08/22/08 1:25
Fluorene	ND		400	4.2	µg/Kg-dry	1	08/22/08 1:25
Hexachlorobenzene	ND		400	6.6	µg/Kg-dry	1	08/22/08 1:25
Hexachlorobutadiene	ND		400	3.7	µg/Kg-dry	1	08/22/08 1:25
Hexachlorocyclopentadiene	ND		400	200	µg/Kg-dry	1	08/22/08 1:25
Hexachloroethane	ND		400	49	µg/Kg-dry	1	08/22/08 1:25
Indeno(1,2,3-cd)pyrene	ND		400	16	µg/Kg-dry	1	08/22/08 1:25
Isophorone	ND		400	3.4	µg/Kg-dry	1	08/22/08 1:25
N-Nitroso-di-n-propylamine	ND		400	4.7	µg/Kg-dry	1	08/22/08 1:25
N-Nitrosodiphenylamine	ND		400	2.7	µg/Kg-dry	1	08/22/08 1:25
Naphthalene	ND		400	3.1	µg/Kg-dry	1	08/22/08 1:25
Nitrobenzene	ND		400	4.3	µg/Kg-dry	1	08/22/08 1:25
Pentachlorophenol	ND		2000	410	µg/Kg-dry	1	08/22/08 1:25
Phenanthrene	ND		400	1.6	µg/Kg-dry	1	08/22/08 1:25
Phenol	ND		400	3.8	µg/Kg-dry	1	08/22/08 1:25
Pyrene	ND		400	2.8	µg/Kg-dry	1	08/22/08 1:25
Surr: 2,4,6-Tribromophenol	95.0		20-143	0	%REC	1	08/22/08 1:25
Surr: 2-Fluorobiphenyl	86.8		46-130	0	%REC	1	08/22/08 1:25
Surr: 2-Fluorophenol	91.0		22-130	0	%REC	1	08/22/08 1:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381970 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	Sample Size: 30 g	PrepDate: 08/15/08 18:31
ColumnID:	DB-5MS	%Moisture: 18.3	BatchNo: 7957/R14571
Revision:	08/22/08 11:06	TestCode: 8270S OLM42	FileID: 1-SAMP-K4751.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	92.2		36-130	0	%REC	1	08/22/08 1:25
Surr: Phenol-d5	93.4		33-130	0	%REC	1	08/22/08 1:25
Surr: Terphenyl-d14	105		36-146	0	%REC	1	08/22/08 1:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381970 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Field Dup

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-007B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4751.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 18 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	1100	BJ
2.	aldol	7.22	34000	BJA

FORM I TIC 15 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4751.D Vial: 18
Acq On : 22 Aug 2008 1:25 Operator: MEG
Sample : 0808076-007B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	189305	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	731770	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.65	164	394686	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.51	188	715159	40.00 ug/mL	-0.01
58) Chrysene-d12	23.56	240	577674	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	532542	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	824699	136.52 ug/mL	0.03
Spiked Amount 150.000			Recovery =	91.01%	
3) Phenol-d5	9.23	99	1117420	140.14 ug/mL	0.00
Spiked Amount 150.000			Recovery =	93.43%	
14) Nitrobenzene-d5	10.96	82	696738	92.17 ug/mL	0.00
Spiked Amount 100.000			Recovery =	92.17%	
30) 2-Fluorobiphenyl	14.34	172	946753	86.84 ug/mL	0.00
Spiked Amount 100.000			Recovery =	86.84%	
46) 2,4,6-Tribromophenol	17.16	330	228671	142.53 ug/mL	0.00
Spiked Amount 150.000			Recovery =	95.02%	
60) Terphenyl-d14	21.53	244	977634	104.80 ug/mL	0.00
Spiked Amount 100.000			Recovery =	104.80%	
Target Compounds					Qvalue
64) bis(2-Ethylhexyl)phthalate	23.48	149	226386	14.73 ug/mL	97

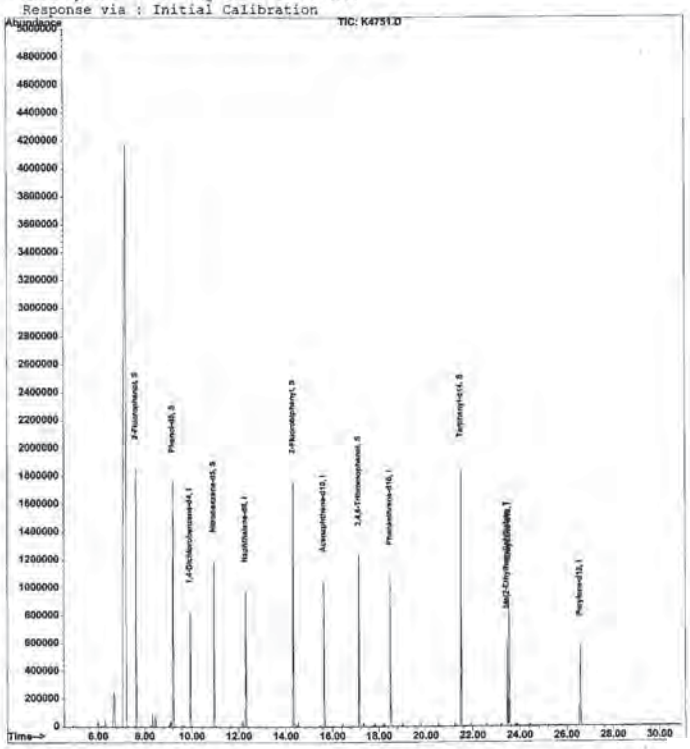
(#) = qualifier out of range (m) = manual integration
K4751.D K813OL42.M Fri Aug 22 10:23:00 2008 Pag

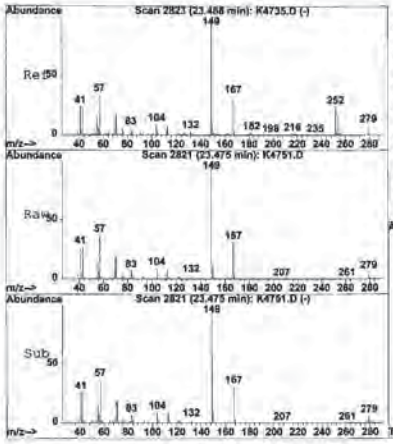
Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4751.D
Acq On : 22 Aug 2008 1:25
Sample : 0808076-007B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 18
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration

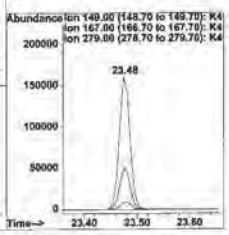




#64
bis(2-Ethylhexyl)phthalate
Concen: 14.73 ug/mL
RT: 23.48 min Scan# 2821
Delta R.T. -0.01 min
Lab File: K4751.D
Acq: 22 Aug 2008 1:25

Tgt Ion:149 Resp: 226386

Ion	Ratio	Lower	Upper
149	100		
167	30.9	2.6	62.6
279	5.7	0.0	37.0



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4751.D
Acq On : 22 Aug 2008 1:25
Sample : 0808076-007B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008

Vial: 18
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	189305	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	731560	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	394686	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	715159	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	577670	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	532632	40.00 ug/mL	-0.01

System Monitoring Compounds

Target Compounds Qvalue

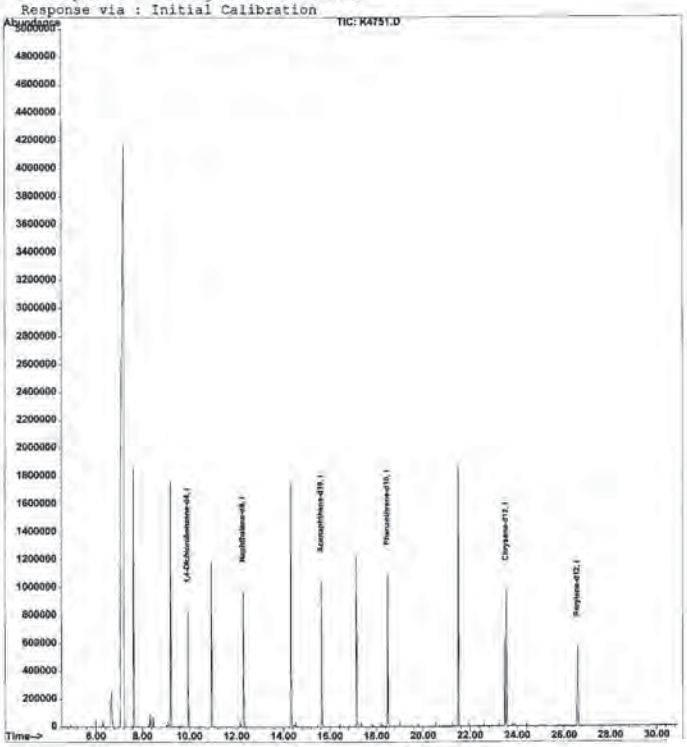
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4751.D
Acq On : 22 Aug 2008 1:25
Sample : 0808076-007B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008

Vial: 18
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 22 Aug 2008 1:25
Data File: C:\HPCHEM\1\DATA\K4751.D
Name: 0808076-007B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

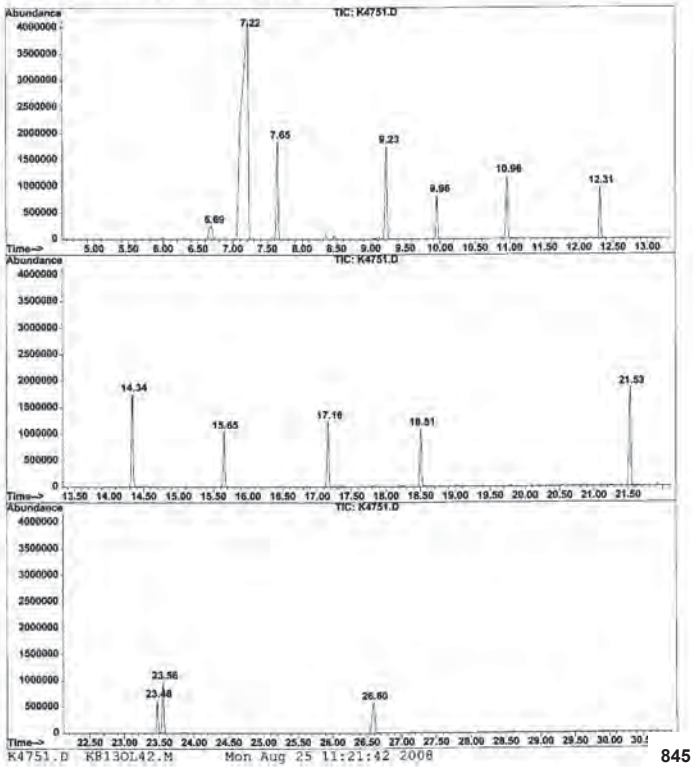
TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea	ISConc
Butane	6.69	28.0 ug/mL	920836	ISTD01	9.96	1313910	40.0
2-Pentanone, 4-hydro	7.22	823.1 ug/mL	27036400	ISTD01	9.96	1313910	40.0

K4751.D K813OL42.M Mon Aug 25 11:21:50 2008

844

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4751.D
Operator : MEG
Acquired : 22 Aug 2008 1:25 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-007B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 18
Quant File :K813OL42.RES (RTE Integrator)



K4751.D K813OL42.M Mon Aug 25 11:21:42 2008

845

Library Search Compound Report

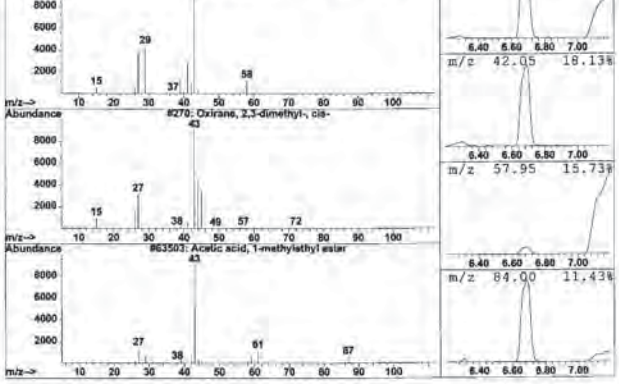
Data File : C:\HPCHEM\1\DATA\K4751.D Vial: 18
Acq On : 22 Aug 2008 1:25 Operator: MEG
Sample : 0808076-007B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	28.03 ug/mL	920836	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	25
2	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
3	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10



K4751.D K813OL42.M Mon Aug 25 11:21:49 2008 Pag

846

Library Search Compound Report

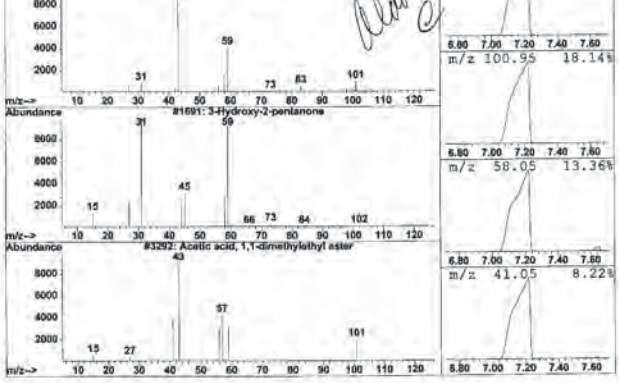
Data File : C:\HPCHEM\1\DATA\K4751.D Vial: 18
Acq On : 22 Aug 2008 1:25 Operator: MEG
Sample : 0808076-007B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	823.08 ug/mL	27036400	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4751.D K813OL42.M Mon Aug 25 11:21:50 2008 Pag

847

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4752.D
Col Type:			

Sample Size: 30 g; %Moisture: 27.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		450	5.9	µg/Kg-dry	1	08/22/08 2:03
2,4,5-Trichlorophenol	ND		2300	29	µg/Kg-dry	1	08/22/08 2:03
2,4,6-Trichlorophenol	ND		450	7.8	µg/Kg-dry	1	08/22/08 2:03
2,4-Dichlorophenol	ND		450	5.2	µg/Kg-dry	1	08/22/08 2:03
2,4-Dimethylphenol	ND		450	92	µg/Kg-dry	1	08/22/08 2:03
2,4-Dinitrophenol	ND		2300	460	µg/Kg-dry	1	08/22/08 2:03
2,4-Dinitrotoluene	ND		450	8.6	µg/Kg-dry	1	08/22/08 2:03
2,6-Dinitrotoluene	ND		450	7.7	µg/Kg-dry	1	08/22/08 2:03
2-Chloronaphthalene	ND		450	6.0	µg/Kg-dry	1	08/22/08 2:03
2-Chlorophenol	ND		450	7.0	µg/Kg-dry	1	08/22/08 2:03
2-Methylnaphthalene	ND		450	2.2	µg/Kg-dry	1	08/22/08 2:03
2-Methylphenol	ND		450	5.1	µg/Kg-dry	1	08/22/08 2:03
2-Nitroaniline	ND		2300	8.1	µg/Kg-dry	1	08/22/08 2:03
2-Nitrophenol	ND		450	18	µg/Kg-dry	1	08/22/08 2:03
3,3'-Dichlorobenzidine	ND		910	55	µg/Kg-dry	1	08/22/08 2:03
3-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 2:03
4,6-Dinitro-2-methylphenol	ND		2300	200	µg/Kg-dry	1	08/22/08 2:03
4-Bromophenyl phenyl ether	ND		450	7.1	µg/Kg-dry	1	08/22/08 2:03
4-Chloro-3-methylphenol	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
4-Chloroaniline	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
4-Chlorophenyl phenyl ether	ND		450	5.6	µg/Kg-dry	1	08/22/08 2:03
4-Methylphenol	ND		450	3.8	µg/Kg-dry	1	08/22/08 2:03
4-Nitroaniline	ND		2300	55	µg/Kg-dry	1	08/22/08 2:03
4-Nitrophenol	ND		2300	92	µg/Kg-dry	1	08/22/08 2:03
Acenaphthene	ND		450	4.5	µg/Kg-dry	1	08/22/08 2:03
Acenaphthylene	ND		450	5.5	µg/Kg-dry	1	08/22/08 2:03
Acetophenone	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Anthracene	ND		450	3.2	µg/Kg-dry	1	08/22/08 2:03
Atrazine	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Benzaldehyde	ND		450	6.0	µg/Kg-dry	1	08/22/08 2:03
Benzo[a]anthracene	ND		450	4.8	µg/Kg-dry	1	08/22/08 2:03
Benzo[a]pyrene	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
Benzo[b]fluoranthene	ND		450	16	µg/Kg-dry	1	08/22/08 2:03
Benzo[g,h,i]perylene	ND		450	18	µg/Kg-dry	1	08/22/08 2:03

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381971 Project Supervisor: Monika Santucci

848

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4752.D
Col Type:			

Sample Size: 30 g; %Moisture: 27.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		450	16	µg/Kg-dry	1	08/22/08 2:03
bis(2-Chloroethoxy)methane	ND		450	4.2	µg/Kg-dry	1	08/22/08 2:03
bis(2-chloroethyl)ether	ND		450	7.0	µg/Kg-dry	1	08/22/08 2:03
bis(2-chloroisopropyl)ether	ND		450	7.8	µg/Kg-dry	1	08/22/08 2:03
bis(2-Ethylhexyl)phthalate	ND		450	20	µg/Kg-dry	1	08/22/08 2:03
Butyl benzyl phthalate	ND		450	16	µg/Kg-dry	1	08/22/08 2:03
Caprolactam	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Carbazole	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
Chrysene	ND		450	3.8	µg/Kg-dry	1	08/22/08 2:03
Di-n-butyl phthalate	ND		450	120	µg/Kg-dry	1	08/22/08 2:03
Di-n-octyl phthalate	ND		450	2.7	µg/Kg-dry	1	08/22/08 2:03
Dibenz[a,h]anthracene	ND		450	18	µg/Kg-dry	1	08/22/08 2:03
Dibenzofuran	ND		450	6.3	µg/Kg-dry	1	08/22/08 2:03
Diethyl phthalate	ND		450	4.8	µg/Kg-dry	1	08/22/08 2:03
Dimethyl phthalate	ND		450	4.7	µg/Kg-dry	1	08/22/08 2:03
Fluoranthene	ND		450	14	µg/Kg-dry	1	08/22/08 2:03
Fluorene	ND		450	4.7	µg/Kg-dry	1	08/22/08 2:03
Hexachlorobenzene	ND		450	7.4	µg/Kg-dry	1	08/22/08 2:03
Hexachlorobutadiene	ND		450	4.1	µg/Kg-dry	1	08/22/08 2:03
Hexachlorocyclopentadiene	ND		450	230	µg/Kg-dry	1	08/22/08 2:03
Hexachloroethane	ND		450	55	µg/Kg-dry	1	08/22/08 2:03
Indeno[1,2,3-cd]pyrene	ND		450	18	µg/Kg-dry	1	08/22/08 2:03
Isophorone	ND		450	3.8	µg/Kg-dry	1	08/22/08 2:03
N-Nitroso-di-n-propylamine	ND		450	5.2	µg/Kg-dry	1	08/22/08 2:03
N-Nitrosodiphenylamine	ND		450	3.1	µg/Kg-dry	1	08/22/08 2:03
Naphthalene	ND		450	3.5	µg/Kg-dry	1	08/22/08 2:03
Nitrobenzene	ND		450	4.9	µg/Kg-dry	1	08/22/08 2:03
Pentachlorophenol	ND		2300	460	µg/Kg-dry	1	08/22/08 2:03
Phenanthrene	ND		450	2.0	µg/Kg-dry	1	08/22/08 2:03
Phenol	ND		450	4.2	µg/Kg-dry	1	08/22/08 2:03
Pyrene	ND		450	3.1	µg/Kg-dry	1	08/22/08 2:03
Surr: 2,4,6-Tribromophenol	100		20-143	0	%REC	1	08/22/08 2:03
Surr: 2-Fluorobiphenyl	85.2		46-130	0	%REC	1	08/22/08 2:03
Surr: 2-Fluorophenol	91.8		22-130	0	%REC	1	08/22/08 2:03

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381971 Project Supervisor: Monika Santucci

849

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4752.D
Col Type:			

Sample Size: 30 g; %Moisture: 27.2; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	92.4		39-130	0	%REC	1	08/22/08 2:03
Surr: Phenol-d5	95.5		33-130	0	%REC	1	08/22/08 2:03
Surr: Terphenyl-d14	108		26-146	0	%REC	1	08/22/08 2:03

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381971 Project Supervisor: Monika Santucci

850

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Trench-Bot-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-008B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4752.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 27 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		unknown	6.69	1300	BJ
2.		aldol	7.22	38000	BJA

851

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4752.D Vial: 19
Acq On : 22 Aug 2008 2:03 Operator: MEG
Sample : 0808076-008B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	192572	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	741380	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.65	164	400728	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.51	188	743737	40.00 ug/mL	-0.01
58) Chrysene-d12	23.56	240	605408	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	546029	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	846167	137.70 ug/mL	0.03
Spiked Amount 150.000			Recovery =	91.80%	
3) Phenol-d5	9.23	99	1161978	143.25 ug/mL	0.00
Spiked Amount 150.000			Recovery =	95.50%	
14) Nitrobenzene-d5	10.96	82	707276	92.35 ug/mL	0.00
Spiked Amount 100.000			Recovery =	92.35%	
30) 2-Fluorobiphenyl	14.34	172	975995	88.17 ug/mL	0.00
Spiked Amount 100.000			Recovery =	88.17%	
46) 2,4,6-Tribromophenol	17.16	330	244400	150.03 ug/mL	0.00
Spiked Amount 150.000			Recovery =	100.02%	
60) Terphenyl-d14	21.53	244	1053978	107.81 ug/mL	0.00
Spiked Amount 100.000			Recovery =	107.81%	

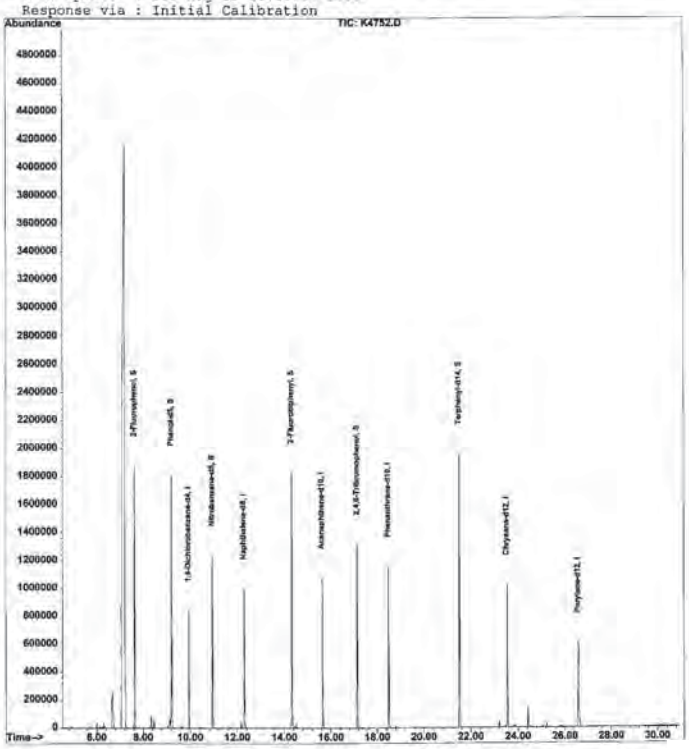
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K4752.D K813OL42.M Fri Aug 22 10:23:08 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4752.D Vial: 19
Acq On : 22 Aug 2008 2:03 Operator: MEG
Sample : 0808076-008B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008 Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4752.D K813OL42.M Fri Aug 22 10:23:09 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4752.D Vial: 19
Acq On : 22 Aug 2008 2:03 Operator: MEG
Sample : 0808076-008B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008 Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	192572	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	741049	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	400728	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	743737	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	605303	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	546029	40.00 ug/mL	-0.01

System Monitoring Compounds

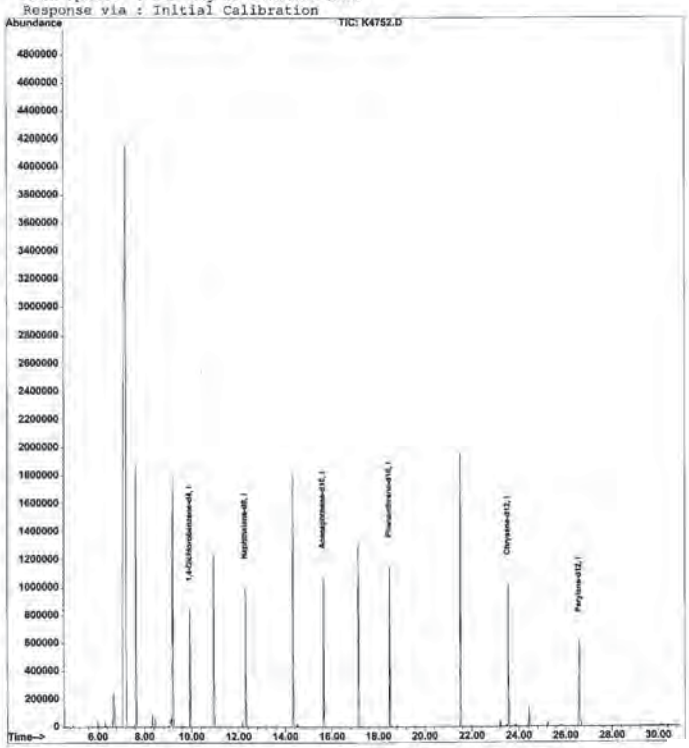
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K4752.D K813OLM.M Fri Aug 22 10:34:21 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4752.D Vial: 19
Acq On : 22 Aug 2008 2:03 Operator: MEG
Sample : 0808076-008B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008 Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4752.D K813OLM.M Fri Aug 22 10:34:22 2008

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 22 Aug 2008 2:03
Data File: C:\HPCHEM\1\DATA\K4752.D
Name: 0808076-008B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

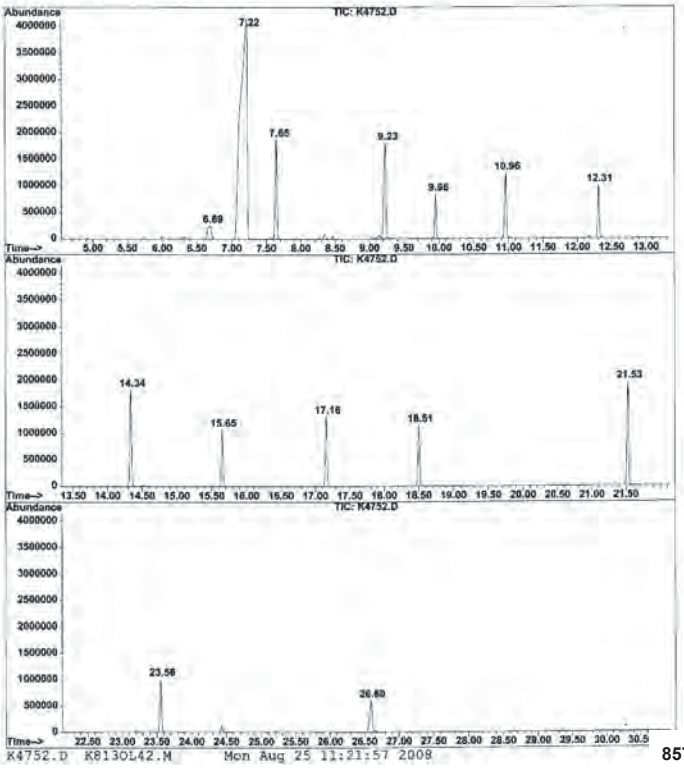
TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea	ISConc
Acetic acid, 1-methy	6.69	28.2 ug/mL	928846	ISTD01	9.96	1317030	40.0
2-Pentanone, 4-hydro	7.22	826.0 ug/mL	27197000	ISTD01	9.96	1317030	40.0

K4752.D K8130L42.M Mon Aug 25 11:22:05 2008

856

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4752.D
Operator : MEG
Acquired : 22 Aug 2008 2:03 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-008B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 19
Quant File :K8130L42.RES (RTE Integrator)



K4752.D K8130L42.M Mon Aug 25 11:21:57 2008

857

Library Search Compound Report

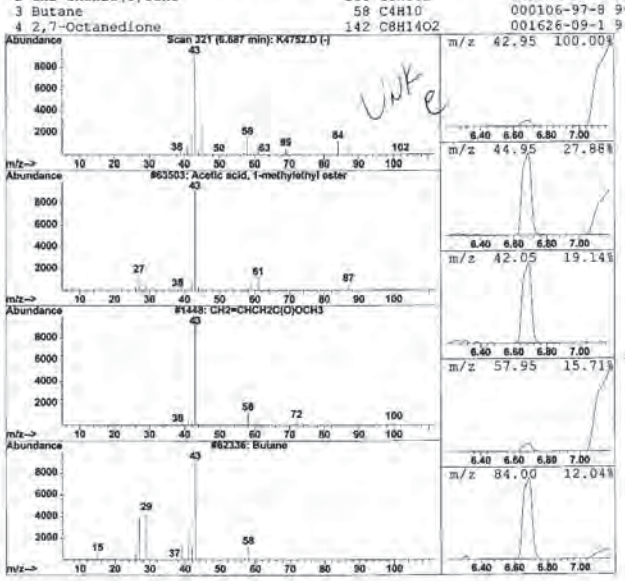
Data File : C:\HPCHEM\1\DATA\K4752.D Vial: 19
Acq On : 22 Aug 2008 2:03 Operator: MEG
Sample : 0808076-008B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Acetic acid, 1-methylethyl est Concentration Bank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	28.21 ug/mL	928846	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	12
2	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
3	Butane	58	C4H10	000106-97-8	9
4	2,7-Octanedione	142	C8H14O2	001626-09-1	9



K4752.D K8130L42.M Mon Aug 25 11:22:05 2008 Pag

858

Library Search Compound Report

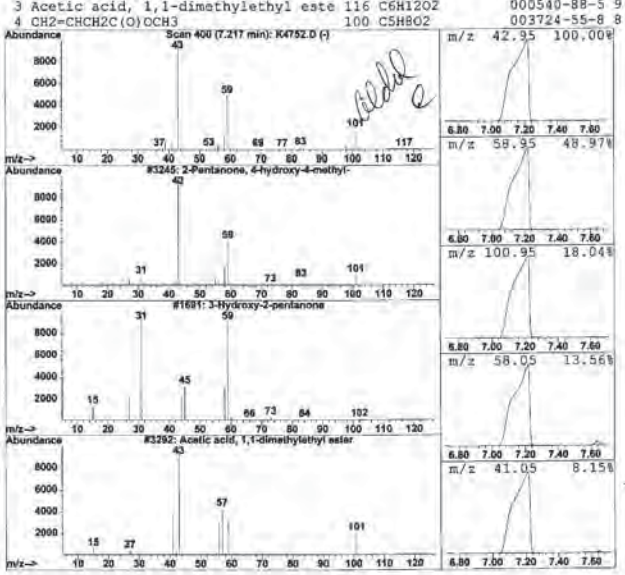
Data File : C:\HPCHEM\1\DATA\K4752.D Vial: 19
Acq On : 22 Aug 2008 2:03 Operator: MEG
Sample : 0808076-008B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Bank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	826.01 ug/mL	27197000	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4752.D K8130L42.M Mon Aug 25 11:22:05 2008 Pag

859

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4753.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		440	5.7	µg/Kg-dry	1	08/22/08 2:42
2,4,5-Trichlorophenol	ND		2200	28	µg/Kg-dry	1	08/22/08 2:42
2,4,6-Trichlorophenol	ND		440	7.5	µg/Kg-dry	1	08/22/08 2:42
2,4-Dichlorophenol	ND		440	5.0	µg/Kg-dry	1	08/22/08 2:42
2,4-Dimethylphenol	ND		440	88	µg/Kg-dry	1	08/22/08 2:42
2,4-Dinitrophenol	ND		2200	440	µg/Kg-dry	1	08/22/08 2:42
2,4-Dinitrotoluene	ND		440	6.4	µg/Kg-dry	1	08/22/08 2:42
2,6-Dinitrotoluene	ND		440	7.4	µg/Kg-dry	1	08/22/08 2:42
2-Chloronaphthalene	ND		440	4.9	µg/Kg-dry	1	08/22/08 2:42
2-Chlorophenol	ND		440	6.8	µg/Kg-dry	1	08/22/08 2:42
2-Methylnaphthalene	ND		440	2.1	µg/Kg-dry	1	08/22/08 2:42
2-Methylphenol	ND		440	4.9	µg/Kg-dry	1	08/22/08 2:42
2-Nitroaniline	ND		2200	7.8	µg/Kg-dry	1	08/22/08 2:42
2-Nitrophenol	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
3,3'-Dichlorobenzidine	ND		870	53	µg/Kg-dry	1	08/22/08 2:42
3-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/22/08 2:42
4,6-Dinitro-2-methylphenol	ND		2200	220	µg/Kg-dry	1	08/22/08 2:42
4-Bromophenyl phenyl ether	ND		440	6.8	µg/Kg-dry	1	08/22/08 2:42
4-Chloro-3-methylphenol	ND		440	13	µg/Kg-dry	1	08/22/08 2:42
4-Chloroaniline	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
4-Chlorophenyl phenyl ether	ND		440	5.4	µg/Kg-dry	1	08/22/08 2:42
4-Methylphenol	ND		440	3.8	µg/Kg-dry	1	08/22/08 2:42
4-Nitroaniline	ND		2200	53	µg/Kg-dry	1	08/22/08 2:42
4-Nitrophenol	ND		2200	88	µg/Kg-dry	1	08/22/08 2:42
Acenaphthene	ND		440	4.4	µg/Kg-dry	1	08/22/08 2:42
Acenaphthylene	ND		440	5.3	µg/Kg-dry	1	08/22/08 2:42
Acetophenone	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Anthracene	ND		440	3.1	µg/Kg-dry	1	08/22/08 2:42
Atrazine	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Benzaldehyde	ND		440	6.6	µg/Kg-dry	1	08/22/08 2:42
Benzo[a]anthracene	ND		440	4.6	µg/Kg-dry	1	08/22/08 2:42
Benzo[a]pyrene	ND		440	13	µg/Kg-dry	1	08/22/08 2:42
Benzo[b]fluoranthene	ND		440	15	µg/Kg-dry	1	08/22/08 2:42
Benzo[g,h,i]perylene	ND		440	18	µg/Kg-dry	1	08/22/08 2:42

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381972 Project Supervisor: Monika Santucci

860

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4753.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		440	15	µg/Kg-dry	1	08/22/08 2:42
bis(2-Chloroethoxy)methane	ND		440	4.1	µg/Kg-dry	1	08/22/08 2:42
bis(2-chloroethyl)ether	ND		440	6.8	µg/Kg-dry	1	08/22/08 2:42
bis(2-chloroisopropyl)ether	ND		440	7.5	µg/Kg-dry	1	08/22/08 2:42
bis(2-Ethylhexyl)phthalate	ND		440	20	µg/Kg-dry	1	08/22/08 2:42
Butyl benzyl phthalate	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
Caprolactam	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Carbazole	ND		440	13	µg/Kg-dry	1	08/22/08 2:42
Chrysene	ND		440	3.7	µg/Kg-dry	1	08/22/08 2:42
Di-n-butyl phthalate	ND		440	110	µg/Kg-dry	1	08/22/08 2:42
Di-n-octyl phthalate	ND		440	2.6	µg/Kg-dry	1	08/22/08 2:42
Dibenz[a,h]anthracene	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
Dibenzofuran	ND		440	5.1	µg/Kg-dry	1	08/22/08 2:42
Diethyl phthalate	ND		440	4.6	µg/Kg-dry	1	08/22/08 2:42
Dimethyl phthalate	ND		440	4.5	µg/Kg-dry	1	08/22/08 2:42
Fluoranthene	ND		440	13	µg/Kg-dry	1	08/22/08 2:42
Fluorene	ND		440	4.5	µg/Kg-dry	1	08/22/08 2:42
Hexachlorobenzene	ND		440	7.1	µg/Kg-dry	1	08/22/08 2:42
Hexachlorobutadiene	ND		440	4.0	µg/Kg-dry	1	08/22/08 2:42
Hexachlorocyclopentadiene	ND		440	220	µg/Kg-dry	1	08/22/08 2:42
Hexachloroethane	ND		440	53	µg/Kg-dry	1	08/22/08 2:42
Indeno[1,2,3-cd]pyrene	ND		440	18	µg/Kg-dry	1	08/22/08 2:42
Isophorone	ND		440	3.7	µg/Kg-dry	1	08/22/08 2:42
N-Nitroso-di-n-propylamine	ND		440	5.0	µg/Kg-dry	1	08/22/08 2:42
N-Nitrosodiphenylamine	ND		440	3.0	µg/Kg-dry	1	08/22/08 2:42
Naphthalene	ND		440	3.3	µg/Kg-dry	1	08/22/08 2:42
Nitrobenzene	ND		440	4.7	µg/Kg-dry	1	08/22/08 2:42
Pentachlorophenol	ND		2200	440	µg/Kg-dry	1	08/22/08 2:42
Phenanthrene	ND		440	1.9	µg/Kg-dry	1	08/22/08 2:42
Phenol	ND		440	4.1	µg/Kg-dry	1	08/22/08 2:42
Pyrene	ND		440	3.0	µg/Kg-dry	1	08/22/08 2:42
Surr: 2,4,6-Tribromophenol	93.1		20-143	0	%REC	1	08/22/08 2:42
Surr: 2-Fluorobiphenyl	62.2		46-130	0	%REC	1	08/22/08 2:42
Surr: 2-Fluorophenol	85.2		22-130	0	%REC	1	08/22/08 2:42

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381972 Project Supervisor: Monika Santucci

861

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	MS06 40	PrepDate:	08/15/08 18:31
ColumnID:	DB-5MS	BatchNo:	7957/R14571
Revision:	08/22/08 11:06	FileID:	1-SAMP-K4753.D
Col Type:			

Sample Size: 30 g; %Moisture: 24.4; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	87.8		39-130	0	%REC	1	08/22/08 2:42
Surr: Phenol-d5	88.2		33-130	0	%REC	1	08/22/08 2:42
Surr: Terphenyl-d14	100		36-146	0	%REC	1	08/22/08 2:42

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/22/08 11:08 381972 Project Supervisor: Monika Santucci

862

Form I TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Trench-Bot-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0808068Q

Matrix: (soil/water) SOIL Lab Sample ID: 0808076-009B

Sample wt/vol: 30 (g/mL) g Lab File ID: K4753.D

Level: LOW Date Received: 8/13/2008

% Moisture: not dec. 24 Date Analyzed: 8/22/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.69	1200	BJ
2.	aldol	7.22	35000	BJA

FORM I TIC 17 SW8270C

863

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4753.D
Acq On : 22 Aug 2008 2:42
Sample : 0808076-009B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008

Vial: 20
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	201849	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	768660	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	420748	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.50	188	773464	40.00 ug/mL	-0.02
58) Chrysene-d12	23.56	240	632735	40.00 ug/mL	-0.02
68) Perylene-d12	26.60	264	570931	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	823596	127.87 ug/mL	0.03
Spiked Amount 150.000			Recovery = 85.25%		
3) Phenol-d5	9.22	99	1124838	132.30 ug/mL	0.00
Spiked Amount 150.000			Recovery = 88.20%		
14) Nitrobenzene-d5	10.96	82	697269	87.82 ug/mL	0.00
Spiked Amount 100.000			Recovery = 87.82%		
30) 2-Fluorobiphenyl	14.34	172	955361	82.20 ug/mL	0.00
Spiked Amount 100.000			Recovery = 82.20%		
46) 2,4,6-Tribromophenol	17.16	330	238759	139.60 ug/mL	0.00
Spiked Amount 150.000			Recovery = 93.07%		
60) Terphenyl-d14	21.53	244	1021679	99.99 ug/mL	0.00
Spiked Amount 100.000			Recovery = 99.99%		

Target Compounds Qvalue

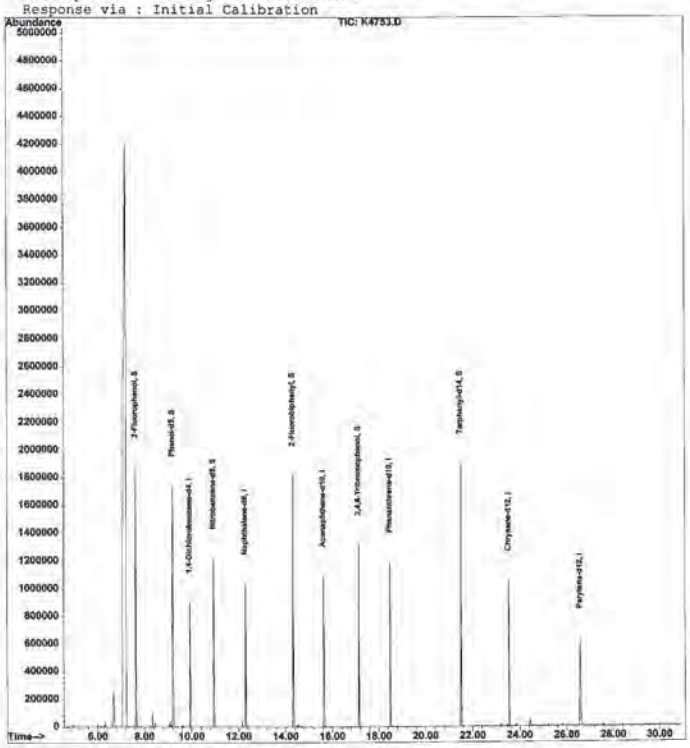
(#) = qualifier out of range (m) = manual integration
K4753.D K813OL42.M Fri Aug 22 10:23:16 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4753.D
Acq On : 22 Aug 2008 2:42
Sample : 0808076-009B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:17 2008

Vial: 20
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4753.D K813OL42.M Fri Aug 22 10:23:17 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4753.D
Acq On : 22 Aug 2008 2:42
Sample : 0808076-009B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008

Vial: 20
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	201849	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	768347	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	420748	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.50	188	773464	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	632735	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	570998	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

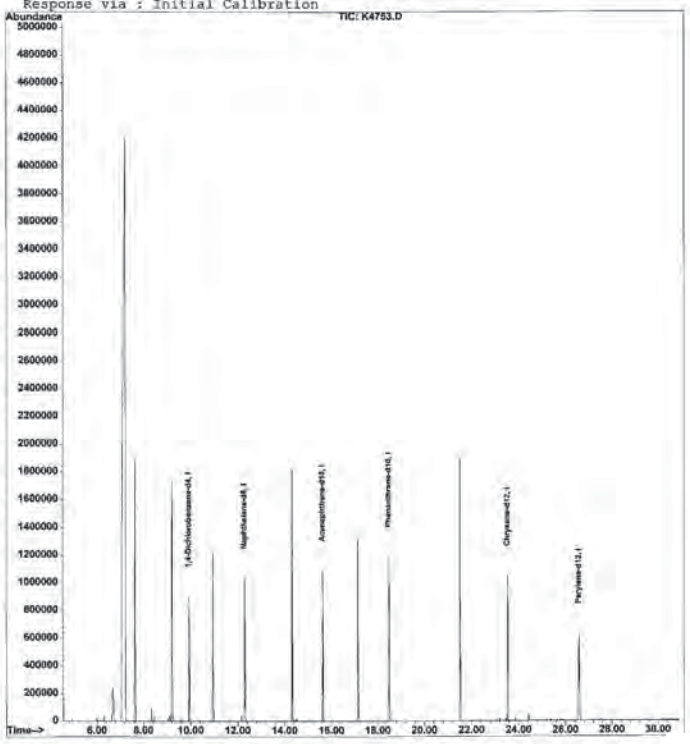
(#) = qualifier out of range (m) = manual integration
K4753.D K813OLM.M Fri Aug 22 10:34:27 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4753.D
Acq On : 22 Aug 2008 2:42
Sample : 0808076-009B
Misc : SAMP,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008

Vial: 20
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4753.D K813OLM.M Fri Aug 22 10:34:27 2008

Tentatively Identified Compound (LSC) summary

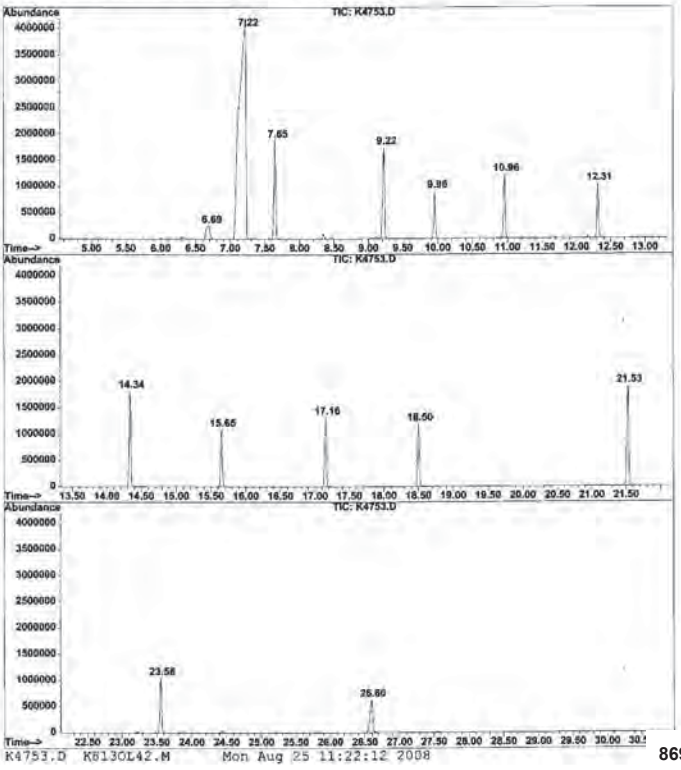
Operator ID: MEG Date Acquired: 22 Aug 2008 2:42
Data File: C:\HPCHEM\1\DATA\K4753.D
Name: 0808076-009B
Misc: SAMP,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Hydroperoxide, 1-met	6.69	26.7	ug/mL	929028	ISTD01	9.96	1391130	40.0
2-Pentanone, 4-hydro	7.22	793.3	ug/mL	27588900	ISTD01	9.96	1391130	40.0

K4753.D K813OL42.M Mon Aug 25 11:22:20 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4753.D
Operator : MEG
Acquired : 22 Aug 2008 2:42 using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: 0808076-009B
Misc Info : SAMP,8270S_OLM42,
Vial Number: 20
Quant File :K813OL42.RES (RTE Integrator)



K4753.D K813OL42.M Mon Aug 25 11:22:12 2008

Library Search Compound Report

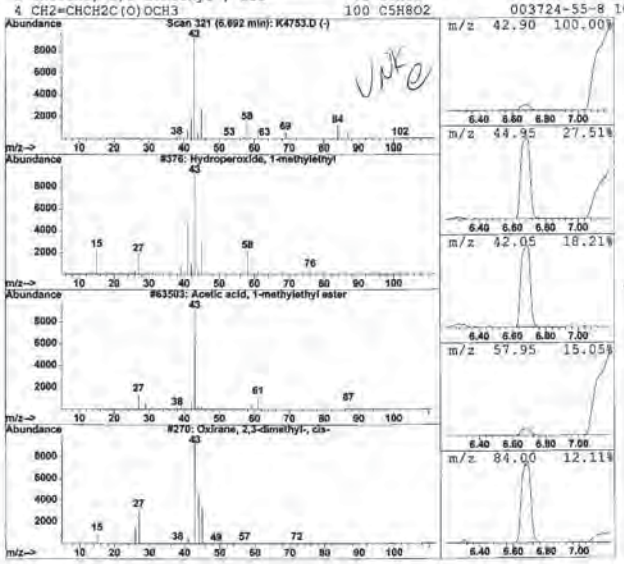
Data File : C:\HPCHEM\1\DATA\K4753.D Vial: 20
Acq On : 22 Aug 2008 2:42 Operator: MEG
Sample : 0808076-009B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Hydroperoxide, 1-methylethyl Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	26.71 ug/mL	929028	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	42
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
3	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10



K4753.D K813OL42.M Mon Aug 25 11:22:19 2008 Pag

Library Search Compound Report

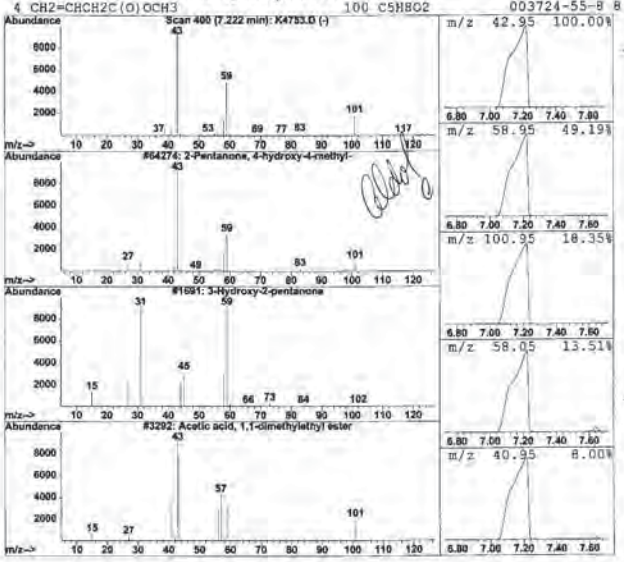
Data File : C:\HPCHEM\1\DATA\K4753.D Vial: 20
Acq On : 22 Aug 2008 2:42 Operator: MEG
Sample : 0808076-009B Inst : #6MS40
Misc : SAMP,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.22	793.28 ug/mL	27588900	1,4-Dichlorobenzene-d4	9.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4753.D K813OL42.M Mon Aug 25 11:22:20 2008 Pag

Standards Data

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator) /1334
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Initial Calibration

Calibration Files
160 =K4596.D 120 =K4597.D 80 =K4598.D
60 =K4599.D 50 =K4600.D 40 =K4601.D

		Compound	160	120	80	60	50	40	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	1,4-Dioxane	0.654	0.608	0.541	0.616	0.633	0.634	0.625	5.77
3)	T	N-nitrosodimethylam	1.005	0.967	0.953	0.963	0.987	0.983	0.985	2.06
4)	T	Pyridine	1.655	1.637	1.608	1.656	1.686	1.686	1.681	3.05
5)	S	2-Fluorophenol	1.193	1.253	1.257	1.286	1.309	1.291	1.276	2.91
6)	S	Phenol-d5	1.510	1.591	1.631	1.695	1.737	1.719	1.685	5.27
7)	MC	Phenol	1.728	1.855	1.958	2.057	2.110	2.150	2.072	9.31
8)	T	Aniline	2.067	2.099	2.113	2.189	2.231	2.239	2.218	4.92
9)	T	bis(2-Chloroethyl)e	1.273	1.377	1.446	1.512	1.530	1.554	1.517	8.87
10)	S	2-Chlorophenol-d4							0.000#	-1.00
11)	M	2-Chlorophenol	1.292	1.372	1.411	1.445	1.471	1.473	1.433	4.60
12)	T	1,3-Dichlorobenzene	1.158	1.261	1.336	1.406	1.434	1.453	1.397	8.86
13)	MC	1,4-Dichlorobenzene	1.121	1.231	1.309	1.392	1.425	1.450	1.384	10.02
14)	T	Benzyl alcohol	0.913	0.940	0.940	0.972	0.981	0.971	0.953	2.60
15)	S	1,2-Dichlorobenzene							0.000#	-1.00
16)	T	1,2-Dichlorobenzene	1.095	1.201	1.270	1.347	1.380	1.396	1.329	8.82
')	T	2-Methylphenol	1.119	1.203	1.254	1.304	1.325	1.325	1.285	6.21
.8)	T	2,2'-oxybis(1-chlor	2.696	2.880	3.075	3.226	3.306	3.346	3.231	9.20
19)	T	bis(2-Chloroisoprop	2.696	2.880	3.075	3.226	3.306	3.346	3.231	9.20
20)	T	(3+4)-Methylphenol	1.310	1.334	1.337	1.386	1.408	1.398	1.373	2.85
21)	T	4-Methylphenol	1.310	1.334	1.337	1.386	1.408	1.398	1.373	2.85
22)	MP	N-Nitroso-di-n-prop	1.061	1.139	1.184	1.230	1.243	1.264	1.217	6.22
23)	T	Hexachloroethane	0.549	0.603	0.631	0.658	0.664	0.673	0.641	6.45
24)	I	Naphthalene-d8	----------ISTD----------							
25)	S	Nitrobenzene-d5	0.382	0.400	0.411	0.414	0.426	0.419	0.413	3.51
26)	T	Nitrobenzene	0.372	0.402	0.426	0.439	0.452	0.446	0.437	7.25
27)	T	Isophorone	0.707	0.767	0.786	0.795	0.816	0.802	0.794	4.89
28)	TC	2-Nitrophenol	0.192	0.207	0.223	0.230	0.236	0.234	0.223	6.73
29)	T	2,4-Dimethylphenol	0.351	0.371	0.389	0.399	0.408	0.406	0.399	6.29
30)	T	Benzoic acid	0.320	0.328	0.300	0.292	0.300	0.278	0.295	9.06
31)	T	bis(2-Chloroethoxy)	0.378	0.409	0.435	0.451	0.469	0.479	0.460	10.01
32)	TC	2,4-Dichlorophenol	0.263	0.281	0.294	0.304	0.312	0.304	0.297	5.43
33)	M	1,2,4-Trichlorobenz	0.255	0.278	0.297	0.307	0.316	0.312	0.302	7.24
34)	T	Naphthalene	0.702	0.763	0.819	0.863	0.894	0.891	0.858	9.54
35)	T	4-Chloroaniline	0.356	0.381	0.405	0.417	0.428	0.420	0.409	6.07
36)	TC	Hexachlorobutadiene	0.153	0.166	0.173	0.177	0.177	0.174	0.171	4.56
37)	MC	4-Chloro-3-methylph	0.333	0.357	0.379	0.387	0.398	0.388	0.376	5.56
38)	T	2-Methylnaphthalene	0.453	0.490	0.529	0.560	0.577	0.577	0.554	9.62
39)	I	Acenaphthene-d10	----------ISTD----------							
'0)	T	1,2,4,5-Tetrachloro							0.000#	-1.00
.)	TP	Hexachlorocyclopent	0.352	0.378	0.381	0.383	0.383	0.371	0.368	5.02

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813FULL.M Thu Aug 14 07:15:39 2008 Pag

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Initial Calibration

Calibration Files
160 =K4596.D 120 =K4597.D 80 =K4598.D
60 =K4599.D 50 =K4600.D 40 =K4601.D

		Compound	160	120	80	60	50	40	Avg	%RSD
42)	TC	2,4,6-Trichlorophen	0.386	0.397	0.405	0.418	0.425	0.417	0.406	4.10
43)	T	2,4,5-Trichlorophen	0.347	0.372	0.384	0.394	0.400	0.402	0.386	4.99
44)	S	2-Fluorobiphenyl	0.919	0.992	1.061	1.117	1.141	1.157	1.105	8.68
45)	T	2-Chloronaphthalene	0.870	0.934	0.992	1.048	1.069	1.086	1.037	8.45
46)	T	2-Nitroaniline	0.435	0.456	0.465	0.473	0.483	0.473	0.463	3.41
47)	T	Dimethyl phthalate	1.213	1.290	1.324	1.366	1.382	1.401	1.352	4.93
48)	T	2,6-Dinitrotoluene	0.318	0.337	0.351	0.358	0.360	0.359	0.343	5.29
49)	T	Acenaphthylene	1.309	1.405	1.494	1.570	1.606	1.634	1.561	8.56
50)	T	3-Nitroaniline	0.341	0.360	0.365	0.370	0.374	0.370	0.361	3.23
51)	TCM	Acenaphthene	0.704	0.757	0.819	0.868	0.889	0.931	0.881	11.89
52)	TP	2,4-Dinitrophenol	0.277	0.290	0.283	0.283	0.284	0.270	0.275	6.36
53)	MP	4-Nitrophenol	0.256	0.266	0.261	0.262	0.264	0.256	0.259	2.26
54)	M	2,4-Dinitrotoluene	0.402	0.431	0.443	0.450	0.457	0.454	0.434	4.80
55)	T	Dibenzofuran	1.160	1.253	1.320	1.390	1.415	1.434	1.380	8.27
56)	T	Diethyl phthalate	1.112	1.202	1.287	1.344	1.357	1.366	1.315	7.51
57)	T	4-Chlorophenyl phen	0.452	0.508	0.542	0.571	0.575	0.584	0.557	8.77
58)	T	Fluorene	0.810	0.883	0.941	1.008	1.028	1.058	1.015	11.57
')	T	4-Nitroaniline	0.328	0.351	0.359	0.363	0.372	0.364	0.358	3.92
o0)	T	1,2-Diphenylhydrazi	1.189	1.317	1.421	1.509	1.568	1.613	1.530	12.46
61)	S	2,4,6-Tribromopheno	0.163	0.171	0.170	0.170	0.169	0.166	0.163	6.41
62)	I	Phenanthrene-d10	----------ISTD----------							
63)	T	4,6-Dinitro-2-methy	0.176	0.181	0.180	0.184	0.185	0.175	0.173	8.38
64)	TC	n-Nitrosodiphenylam	0.372	0.399	0.421	0.441	0.449	0.453	0.439	7.96
65)	T	4-Bromophenyl pheny	0.157	0.162	0.164	0.169	0.168	0.168	0.166	2.55
66)	T	Hexachlorobenzene	0.168	0.173	0.176	0.180	0.183	0.181	0.179	3.11
67)	MC	Pentachlorophenol	0.140	0.144	0.145	0.146	0.148	0.142	0.143	2.27
68)	T	Phenanthrene	0.681	0.729	0.776	0.818	0.831	0.854	0.812	8.61
69)	T	Anthracene	0.678	0.729	0.784	0.827	0.847	0.862	0.823	9.44
70)	T	Carbazole	0.708	0.751	0.790	0.828	0.853	0.851	0.828	7.92
71)	T	Di-n-butyl phthalat	0.984	1.052	1.130	1.197	1.223	1.259	1.193	9.67
72)	TC	Fluoranthene	0.762	0.804	0.846	0.878	0.891	0.906	0.874	6.77
73)	I	Chrysene-d12	----------ISTD----------							
74)	T	Benzidine	0.475	0.489	0.529	0.554	0.580	0.572	0.540	7.96
75)	M	Pyrene	1.031	1.065	1.093	1.124	1.138	1.161	1.128	4.91
76)	S	Terphenyl-d14	0.592	0.610	0.632	0.654	0.663	0.666	0.646	4.38
77)	T	Butyl benzyl phthal	0.625	0.648	0.678	0.712	0.723	0.747	0.704	6.48
78)	T	3,3'-Dichlorobenzid	0.309	0.344	0.382	0.397	0.403	0.392	0.373	8.04
79)	T	Benzo[a]anthracene	0.937	0.951	0.964	0.988	0.996	0.999	0.986	2.91
80)	T	bis(2-Ethylhexyl)ph	0.623	0.715	0.826	0.903	0.939	1.008	0.901	16.86
81)	T	Chrysene	0.828	0.865	0.878	0.912	0.918	0.923	0.903	4.16
~2)	TC	Di-n-octyl phthalat	1.514	1.555	1.631	1.734	1.764	1.821	1.693	7.12
.)	T	Indeno[1,2,3-cd]pyr	0.834	0.870	0.932	0.964	0.966	0.945	0.900	6.58

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813FULL.M Thu Aug 14 07:15:43 2008 Pag

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Initial Calibration

Calibration Files
160 =K4596.D 120 =K4597.D 80 =K4598.D
60 =K4599.D 50 =K4600.D 40 =K4601.D

		Compound	160	120	80	60	50	40	Avg	%RSD
84)	I	Perylene-d12	----------ISTD----------							
85)	T	Benzo[b]fluoranthen	1.144	1.136	1.014	1.013	1.018	1.007	1.027	6.74
86)	T	Benzo[k]fluoranthen	0.792	0.844	0.959	0.978	0.986	0.975	0.941	7.59
87)	TC	Benzo[a]pyrene	0.942	0.961	0.953	0.962	0.961	0.947	0.938	3.33
88)	T	Dibenz[a,h]anthrace	0.739	0.781	0.826	0.838	0.849	0.833	0.798	5.85
89)	T	Benzo[g,h,i]perylen	0.718	0.765	0.831	0.848	0.849	0.844	0.804	5.88

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813FULL.M Thu Aug 14 07:15:43 2008 Pag

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:17:54 2008
Response via : Initial Calibration

Calibration Files
20 =K4602.D 10 =K4603.D 5.0 =K4604.D
1.0 =K4605.D = =

		Compound	20	10	5.0	1.0	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------					
2)	T	1,4-Dioxane	0.635	0.664	0.642			
3)	T	N-nitrosodimethylam	0.993	1.004	1.011			
4)	T	Pyridine	1.694	1.733	1.779			
5)	S	2-Fluorophenol	1.294	1.311	1.293			
6)	S	Phenol-d5	1.765	1.765	1.749			
7)	MC	Phenol	2.227	2.269	2.293			
8)	T	Aniline	2.317	2.355	2.350			
9)	T	bis(2-Chloroethyl)e	1.609	1.667	1.684			
10)	S	2-Chlorophenol-d4						
11)	M	2-Chlorophenol	1.487	1.499	1.446			
12)	T	1,3-Dichlorobenzene	1.486	1.509	1.531			
13)	MC	1,4-Dichlorobenzene	1.486	1.513	1.534			
14)	T	Benzyl alcohol	0.980	0.956	0.926			
15)	S	1,2-Dichlorobenzene						
16)	T	1,2-Dichlorobenzene	1.398	1.435	1.437			
)	T	2-Methylphenol	1.356	1.363	1.319			
)	T	2,2'-oxybis(1-chlor	3.453	3.529	3.570			
19)	T	bis(2-Chloroisoprop	3.453	3.529	3.570			
20)	T	(3+4)-Methylphenol	1.414	1.411	1.354			
21)	T	4-Methylphenol	1.414	1.411	1.354			
22)	MF	N-Nitroso-di-n-prop	1.283	1.282	1.269			
23)	T	Hexachloroethane	0.673	0.662	0.660			
24)	I	Naphthalene-d8	----------ISTD----------					
25)	S	Nitrobenzene-d5	0.430	0.421	0.416			
26)	T	Nitrobenzene	0.465	0.464	0.462			
27)	T	Isophorone	0.834	0.822	0.822			
28)	TC	2-Nitrophenol	0.238	0.226	0.217			
29)	T	2,4-Dimethylphenol	0.425	0.423	0.420			
30)	T	Benzoic acid	0.248					
31)	T	bis(2-Chloroethoxy)	0.502	0.501	0.514			
32)	TC	2,4-Dichlorophenol	0.313	0.307	0.298			
33)	M	1,2,4-Trichlorobenz	0.319	0.319	0.313			
34)	T	Naphthalene	0.926	0.924	0.944			
35)	T	4-Chloroaniline	0.431	0.420	0.422			
36)	TC	Hexachlorobutadiene	0.177	0.175	0.171			
37)	MC	4-Chloro-3-methylph	0.398	0.378	0.367			
38)	T	2-Methylnaphthalene	0.609	0.600	0.593			
39)	I	Acenaphthene-d10	----------ISTD----------					
^0)	T	1,2,4,5-Tetrachloro						
)	TP	Hexachlorocyclopent	0.362	0.331				

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813FULL.M Thu Aug 14 07:22:40 2008 Page 876

Mark Sanders 8/14/08

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:17:54 2008
Response via : Initial Calibration

Calibration Files
20 =K4602.D 10 =K4603.D 5.0 =K4604.D
1.0 =K4605.D = =

		Compound	20	10	5.0	1.0	Avg	%RSD
42)	TC	2,4,6-Trichlorophen	0.424	0.402	0.378			
43)	T	2,4,5-Trichlorophen	0.404	0.381				
44)	S	2-Fluorobiphenyl	1.207	1.184	1.166			
45)	T	2-Chloronaphthalene	1.125	1.109	1.103			
46)	T	2-Nitroaniline	0.479	0.458	0.446			
47)	T	Dimethyl phthalate	1.429	1.397	1.367			
48)	T	2,6-Dinitrotoluene	0.354	0.335	0.312			
49)	T	Acenaphthylene	1.702	1.682	1.651			
50)	T	3-Nitroaniline	0.367	0.358	0.344			
51)	TCM	Acenaphthene	0.985	0.999	0.980			
52)	TP	2,4-Dinitrophenol	0.238					
53)	MP	4-Nitrophenol	0.249					
54)	M	2,4-Dinitrotoluene	0.444	0.422	0.404			
55)	T	Dibenzofuran	1.486	1.494	1.469			
56)	T	Diethyl phthalate	1.412	1.401	1.353			
57)	T	4-Chlorophenyl phen	0.600	0.596	0.587			
58)	T	Fluorene	1.120	1.146	1.139			
)	T	4-Nitroaniline	0.372	0.365	0.347			
60)	T	1,2-Diphenylhydrazi	1.690	1.739	1.729			
61)	S	2,4,6-Tribromopheno	0.163	0.152	0.140			
62)	I	Phenanthrene-d10	----------ISTD----------					
63)	T	4,6-Dinitro-2-methy	0.165	0.141				
64)	TC	n-Nitrosodiphenylam	0.469	0.472	0.473			
65)	T	4-Bromophenyl pheny	0.170	0.170	0.167			
66)	T	Hexachlorobenzene	0.185	0.182	0.183			
67)	MC	Pentachlorophenol	0.139					
68)	T	Phenanthrene	0.870	0.879	0.875			
69)	T	Anthracene	0.894	0.899	0.886			
70)	T	Carbazole	0.885	0.900	0.884			
71)	T	Di-n-butyl phthalat	1.300	1.317	1.277			
72)	TC	Fluoranthene	0.928	0.933	0.920			
73)	I	Chrysene-d12	----------ISTD----------					
74)	T	Benzidine	0.577					
75)	M	Pyrene	1.193	1.188	1.158			
76)	S	Terphenyl-d14	0.671	0.668	0.657			
77)	T	Butyl benzyl phthal	0.761	0.738	0.703			
78)	T	3,3'-Dichlorobenzid	0.383	0.386	0.366			
79)	T	Benzo[a]anthracene	1.017	1.009	1.012			
80)	T	bis(2-Ethylhexyl)ph	1.056	1.046	0.997			
81)	T	Chrysene	0.939	0.927	0.934			
^^)	TC	Di-n-octyl phthalat	1.855	1.760	1.606			
)	T	Indeno[1,2,3-cd]pyr	0.926	0.856	0.806			

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813FULL.M Thu Aug 14 07:22:45 2008 Page 877

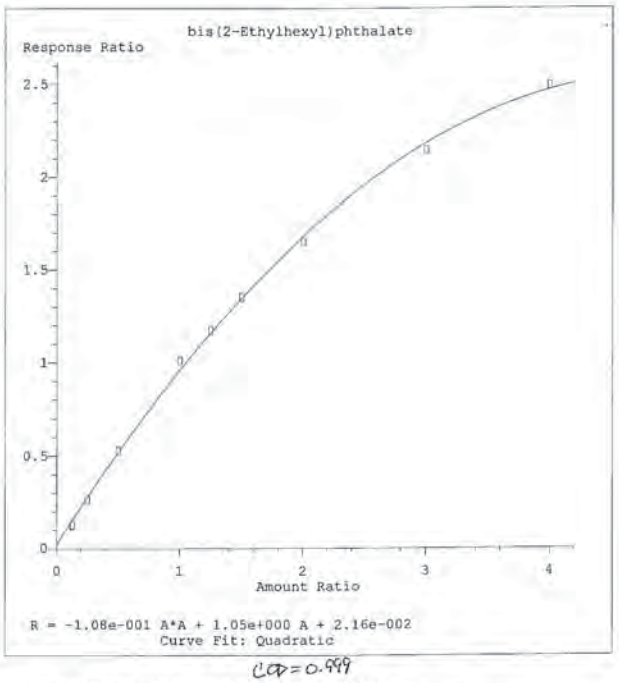
Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:17:54 2008
Response via : Initial Calibration

Calibration Files
20 =K4602.D 10 =K4603.D 5.0 =K4604.D
1.0 =K4605.D = =

		Compound	20	10	5.0	1.0	Avg	%RSD
84)	I	Perylene-d12	----------ISTD----------					
85)	T	Benzo[b]fluoranthen	1.008	0.957	0.945			
86)	T	Benzo[k]fluoranthen	0.981	0.989	0.961			
87)	TC	Benzo[a]pyrene	0.937	0.916	0.865			
88)	T	Dibenz[a,h]anthrace	0.822	0.772	0.719			
89)	T	Benzo[g,h,i]perylen	0.827	0.797	0.758			

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813FULL.M Thu Aug 14 07:22:45 2008 Page 878



CD = 0.999

Method Name: C:\HPCHEM\1\METHODS\K813FULL.M
Calibration Table Last Updated: Thu Aug 14 07:17:54 2008

879

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4596.D
Acq On : 13 Aug 2008 8:38
Sample : SSTD160PPM
Misc : TUNE,DFTPP,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:58 2008

Vial: 2
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	228092	40.00 ug/mL	0.00
24) Naphthalene-d8	12.39	136	871579	40.00 ug/mL	0.01
39) Acenaphthene-d10	15.73	164	454959	40.00 ug/mL	0.01
62) Phenanthrene-d10	18.58	188	856501	40.00 ug/mL	0.01
73) Chrysene-d12	23.66	240	651742	40.00 ug/mL	0.02
84) Perylene-d12	26.72	264	617043	40.00 ug/mL	0.02
System Monitoring Compounds					
5) 2-Fluorophenol	7.68	112	1088468	145.79 ug/mL	0.02
Spiked Amount 150.000			Recovery = 97.19%		
6) Phenol-d5	9.31	99	1377779	139.09 ug/mL	0.04
Spiked Amount 150.000			Recovery = 92.73%		
10) 2-Chlorophenol-d4	9.64	132	1652	184.59 ul/mL	0.01
Spiked Amount 150.000			Recovery = 123.06%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.04	82	1332694	143.44 ug/mL	0.02
Spiked Amount 100.000			Recovery = 143.44%		
44) 2-Fluorobiphenyl	14.41	172	1673293	128.90 ug/mL	0.01
Spiked Amount 100.000			Recovery = 128.90%		
61) 2,4,6-Tribromophenol	17.25	330	297386	154.38 ug/mL	0.03
Spiked Amount 150.000			Recovery = 102.92%		
76) Terphenyl-d14	21.61	244	1544349	143.03 ug/mL	0.02
Spiked Amount 100.000			Recovery = 143.03%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.72	88	238572	66.05 ug/mL	99
3) N-nitrosodimethylamine	5.33	74	916507	162.82 ug/mL	98
4) Pyridine	5.38	79	1510036	157.08 ug/mL	99
7) Phenol	9.34	94	1576448	131.04 ug/mL	97
8) Aniline	9.44	93	1886296	148.28 ug/mL	99
9) bis(2-Chloroethyl)ether	9.53	93	1161620	133.17 ug/mL	100
11) 2-Chlorophenol	9.65	128	1178473	140.47 ug/mL	99
12) 1,3-Dichlorobenzene	9.93	146	1056278	129.15 ug/mL	99
13) 1,4-Dichlorobenzene	10.06	146	1022639	125.87 ug/mL	99
14) Benzyl alcohol	10.27	108	832830	148.93 ug/mL	99
16) 1,2-Dichlorobenzene	10.34	146	998944	126.95 ug/mL	99
17) 2-Methylphenol	10.42	108	1021252	135.19 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.49	45	2459374	130.45 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.49	45	2459374	130.45 ug/mL	99
20) (3+4)-Methylphenol	10.72	108	1195374	148.87 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4596.D K813FULL.M Thu Aug 14 07:19:22 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4596.D
Acq On : 13 Aug 2008 8:38
Sample : SSTD160PPM
Misc : TUNE,DFTPP,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:58 2008

Vial: 2
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.72	108	1195374	148.87 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.79	70	967883	136.60 ug/mL	99
23) Hexachloroethane	10.96	117	501105	132.37 ug/mL	96
26) Nitrobenzene	11.09	77	1297894	131.89 ug/mL	98
27) Isophorone	11.55	82	2463731	138.55 ug/mL	99
28) 2-Nitrophenol	11.66	139	671111	130.44 ug/mL	99
29) 2,4-Dimethylphenol	11.71	107	1222330	137.36 ug/mL	99
30) Benzoic acid	12.02	105	1114091m	170.55 ug/mL	
31) bis(2-Chloroethoxy)methane	11.90	93	1316145	128.88 ug/mL	98
32) 2,4-Dichlorophenol	12.11	162	916370	134.94 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.27	180	890248	129.46 ug/mL	100
34) Naphthalene	12.44	128	2446529	125.63 ug/mL	100
35) 4-Chloroaniline	12.51	127	1242426	133.19 ug/mL	100
36) Hexachlorobutadiene	12.63	225	533549	137.97 ug/mL	100
37) 4-Chloro-3-methylphenol	13.37	107	1162637	134.02 ug/mL	98
38) 2-Methylnaphthalene	13.73	142	1577937	125.51 ug/mL	99
41) Hexachlorocyclopentadiene	14.02	237	640862	147.13 ug/mL	99
42) 2,4,6-Trichlorophenol	14.25	196	703159	145.57 ug/mL	100
43) 2,4,5-Trichlorophenol	14.31	196	632025	138.76 ug/mL	99
45) 2-Chloronaphthalene	14.68	162	1582562	130.21 ug/mL	98
46) 2-Nitroaniline	14.85	65	792423	144.31 ug/mL	98
47) Dimethyl phthalate	15.18	163	2207340	140.43 ug/mL	99
48) 2,6-Dinitrotoluene	15.32	165	578829	141.45 ug/mL	99
49) Acenaphthylene	15.47	152	2381327	130.35 ug/mL	100
50) 3-Nitroaniline	15.65	138	619704	145.74 ug/mL	98
51) Acenaphthene	15.80	153	1281306	126.70 ug/mL	95
52) 2,4-Dinitrophenol	15.84	184	504249	155.89 ug/mL#	81
53) 4-Nitrophenol	15.92	109	465345	155.06 ug/mL	94
54) 2,4-Dinitrotoluene	16.09	165	731713	140.68 ug/mL	97
55) Dibenzofuran	16.14	168	2110803	131.17 ug/mL	97
56) Diethyl phthalate	16.54	149	2024104	131.15 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.76	204	822994	125.73 ug/mL	99
58) Fluorene	16.79	166	1474624	126.11 ug/mL	99
59) 4-Nitroaniline	16.87	138	597190	140.98 ug/mL	98
60) 1,2-Diphenylhydrazine	17.08	77	2164140	121.32 ug/mL	96
63) 4,6-Dinitro-2-methylphenol	16.90	198	603349	152.54 ug/mL	97
64) n-Nitrosodiphenylamine	17.01	169	1276138	132.60 ug/mL	97
65) 4-Bromophenyl phenyl ether	17.71	248	538489	149.73 ug/mL	98
66) Hexachlorobenzene	17.84	284	575126	147.10 ug/mL	96
67) Pentachlorophenol	18.19	266	479185	151.48 ug/mL	99
68) Phenanthrene	18.64	178	2334309	131.17 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4596.D K813FULL.M Thu Aug 14 07:19:23 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4596.D
Acq On : 13 Aug 2008 8:38
Sample : SSTD160PPM
Misc : TUNE,DFTPP,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:58 2008

Vial: 2
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:56 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.74	178	2321687	128.01 ug/mL	100
70) Carbazole	19.03	167	2426456	132.90 ug/mL	99
71) Di-n-butyl phthalate	19.63	149	3370683	128.74 ug/mL	100
72) Fluoranthene	20.92	202	2609906	136.73 ug/mL	94
74) Benzidine	21.14	184	1239230	131.06 ug/mL	96
75) Pyrene	21.36	202	2687945	144.96 ug/mL	93
77) Butyl benzyl phthalate	22.51	149	1630030	138.34 ug/mL	95
78) 3,3'-Dichlorobenzidine	23.57	252	804437	122.47 ug/mL	99
79) Benzo[a]anthracene	23.63	228	2442661	150.51 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.57	149	1623929	106.13 ug/mL	97
81) Chrysene	23.72	228	2158090	144.26 ug/mL	99
82) Di-n-octyl phthalate	24.79	149	3946166	137.28 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.58	276	2173867	138.17 ug/mL	92
85) Benzo[b]fluoranthene	25.82	252	2823256	179.72 ug/mL	98
86) Benzo[k]fluoranthene	25.88	252	1955506m	128.52 ug/mL	
87) Benzo[a]pyrene	26.61	252	2325563	156.85 ug/mL	97
88) Dibenz[a,h]anthracene	29.60	278	1824524	139.28 ug/mL	98
89) Benzo[g,h,i]perylene	30.23	276	1771368	135.33 ug/mL	96

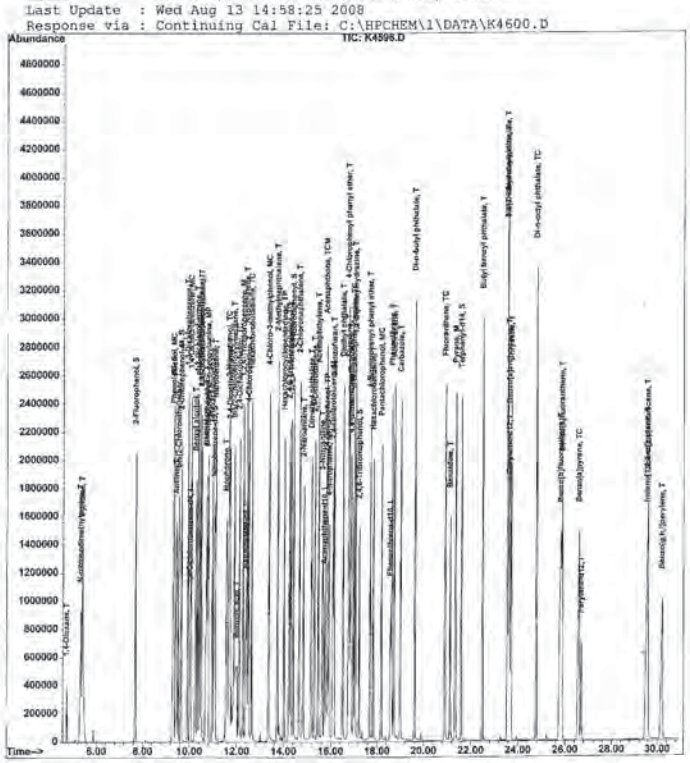
(#) = qualifier out of range (m) = manual integration
K4596.D K813FULL.M Thu Aug 14 07:19:23 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4596.D
Acq On : 13 Aug 2008 8:38
Sample : SSTD160PPM
Misc : TUNE,DFTPP,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:58 2008

Vial: 2
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4596.D K813FULL.M Thu Aug 14 07:19:26 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4597.D
Acq On : 13 Aug 2008 9:17
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:59 2008

Vial: 3
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	213135	40.00 ug/mL	0.00
24) Naphthalene-d8	12.38	136	816800	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.73	164	430710	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.57	188	827914	40.00 ug/mL	0.00
73) Chrysene-d12	23.65	240	650121	40.00 ug/mL	0.01
84) Perylene-d12	26.70	264	608597	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.67	112	801257	114.85 ug/mL	0.00
Spiked Amount 150.000			Recovery = 76.57%		
6) Phenol-d5	9.29	99	1017530	109.93 ug/mL	0.02
Spiked Amount 150.000			Recovery = 73.29%		
10) 2-Chlorophenol-d4	9.63	132	1348	161.19 ul/mL	0.00
Spiked Amount 150.000			Recovery = 107.46%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.04	82	979569	112.50 ug/mL	0.02
Spiked Amount 100.000			Recovery = 112.50%		
44) 2-Fluorobiphenyl	14.41	172	1281759	104.30 ug/mL	0.00
Spiked Amount 100.000			Recovery = 104.30%		
61) 2,4,6-Tribromophenol	17.24	330	220416	120.86 ug/mL	0.02
Spiked Amount 150.000			Recovery = 80.57%		
76) Terphenyl-d14	21.59	244	1189028	110.40 ug/mL	0.01
Spiked Amount 100.000			Recovery = 110.40%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.72	88	155467	46.06 ug/mL	100
3) N-nitrosodimethylamine	5.32	74	617994	117.49 ug/mL	99
4) Pyridine	5.38	79	1046722	126.52 ug/mL	99
7) Phenol	9.33	94	1186163	105.52 ug/mL	98
8) Aniline	9.43	93	1341982	112.90 ug/mL	100
9) bis(2-Chloroethyl)ether	9.52	93	880270	108.00 ug/mL	100
11) 2-Chlorophenol	9.64	128	877512	111.94 ug/mL	99
12) 1,3-Dichlorobenzene	9.92	146	806230	105.50 ug/mL	99
13) 1,4-Dichlorobenzene	10.05	146	787011	103.67 ug/mL	99
14) Benzyl alcohol	10.25	108	601122	115.04 ug/mL	98
16) 1,2-Dichlorobenzene	10.33	146	768160	104.47 ug/mL	99
17) 2-Methylphenol	10.41	108	769239	108.98 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.48	45	1841309	104.52 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.48	45	1841309	104.52 ug/mL	99
20) (3+4)-Methylphenol	10.70	108	853191	113.71 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4597.D K813FULL.M Thu Aug 14 07:19:35 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4597.D
Acq On : 13 Aug 2008 9:17
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:59 2008

Vial: 3
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.70	108	853191	113.71 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.76	70	728318	110.00 ug/mL	99
23) Hexachloroethane	10.96	117	385335	108.93 ug/mL	98
26) Nitrobenzene	11.08	77	984314	106.73 ug/mL	98
27) Isophorone	11.54	82	1879069	112.76 ug/mL	100
28) 2-Nitrophenol	11.66	139	508175	105.40 ug/mL	98
29) 2,4-Dimethylphenol	11.69	107	910190	109.14 ug/mL	99
30) Benzoic acid	11.97	105	804580m	131.43 ug/mL	
31) bis(2-Chloroethoxy)methane	11.88	93	1001978	104.70 ug/mL	98
32) 2,4-Dichlorophenol	12.10	162	689029	108.27 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.27	180	680732	105.63 ug/mL	100
34) Naphthalene	12.43	128	1869393	102.43 ug/mL	100
35) 4-Chloroaniline	12.50	127	933207	106.75 ug/mL	100
36) Hexachlorobutadiene	12.63	225	406282	112.11 ug/mL	99
37) 4-Chloro-3-methylphenol	13.36	107	873871	107.49 ug/mL	98
38) 2-Methylnaphthalene	13.73	142	1201024	101.94 ug/mL	99
40) 1,2,4,5-Tetrachlorobenzene	14.03	216	464	300.31 ug/mL#	45
41) Hexachlorocyclopentadiene	14.01	237	488162	116.39 ug/mL	100
42) 2,4,6-Trichlorophenol	14.24	196	513510	112.29 ug/mL	100
43) 2,4,5-Trichlorophenol	14.31	196	480164	111.36 ug/mL	99
45) 2-Chloronaphthalene	14.66	162	1206952	104.90 ug/mL	99
46) 2-Nitroaniline	14.84	65	589258	113.35 ug/mL	99
47) Dimethyl phthalate	15.17	163	1667205	112.04 ug/mL	99
48) 2,6-Dinitrotoluene	15.30	165	435915	112.52 ug/mL	100
49) Acenaphthylene	15.46	152	1814928	104.94 ug/mL	100
50) 3-Nitroaniline	15.64	138	464857	115.48 ug/mL	97
51) Acenaphthene	15.80	153	978348	102.19 ug/mL	96
52) 2,4-Dinitrophenol	15.82	184	374736	122.37 ug/mL#	83
53) 4-Nitrophenol	15.90	109	343630	120.95 ug/mL	95
54) 2,4-Dinitrotoluene	16.07	165	556300	112.98 ug/mL	99
55) Dibenzofuran	16.13	168	1619504	106.30 ug/mL	98
56) Diethyl phthalate	16.52	149	1553567	106.33 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.75	204	656873	106.00 ug/mL	100
58) Fluorene	16.78	166	1141594	103.13 ug/mL	99
59) 4-Nitroaniline	16.85	138	453539	113.09 ug/mL	98
60) 1,2-Diphenylhydrazine	17.07	77	1701479	100.76 ug/mL	97
63) 4,6-Dinitro-2-methylphenol	16.87	198	449657	117.61 ug/mL	96
64) n-Nitrosodiphenylamine	16.99	169	990728	106.50 ug/mL	98
65) 4-Bromophenyl phenyl ether	17.70	248	402704	115.84 ug/mL	98
66) Hexachlorobenzene	17.83	284	430094	113.80 ug/mL	96
67) Pentachlorophenol	18.18	266	358293	117.17 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4597.D K813FULL.M Thu Aug 14 07:19:36 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4597.D
Acq On : 13 Aug 2008 9:17
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:59 2008

Vial: 3
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) Phenanthrene	18.63	178	1810296	105.24 ug/mL	100
69) Anthracene	18.73	178	1809531	103.22 ug/mL	100
70) Carbazole	19.02	167	1864292	105.64 ug/mL	99
71) Di-n-butyl phthalate	19.62	149	2613388	103.26 ug/mL	100
72) Fluoranthene	20.91	202	1998093	108.29 ug/mL	95
74) Benzidine	21.12	184	954424	101.19 ug/mL	97
75) Pyrene	21.35	202	2077814	112.34 ug/mL	94
77) Butyl benzyl phthalate	22.50	149	1264650	107.59 ug/mL	96
78) 3,3'-Dichlorobenzidine	23.55	252	671366	102.46 ug/mL	99
79) Benzo[a]anthracene	23.62	228	1855250	114.60 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	23.56	149	1393820	91.32 ug/mL	98
81) Chrysene	23.71	228	1686619	113.02 ug/mL	99
82) Di-n-octyl phthalate	24.78	149	3032934	105.77 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.55	276	1697518	108.16 ug/mL	93
85) Benzo[b]fluoranthene	25.80	252	2074502	133.89 ug/mL	96
86) Benzo[k]fluoranthene	25.87	252	1540499m	102.65 ug/mL	
87) Benzo[a]pyrene	26.59	252	1753983	119.94 ug/mL	98
88) Dibenz[a,h]anthracene	29.58	278	1425611	110.34 ug/mL	97
89) Benzo[g,h,i]perylene	30.21	276	1397442	108.24 ug/mL	97

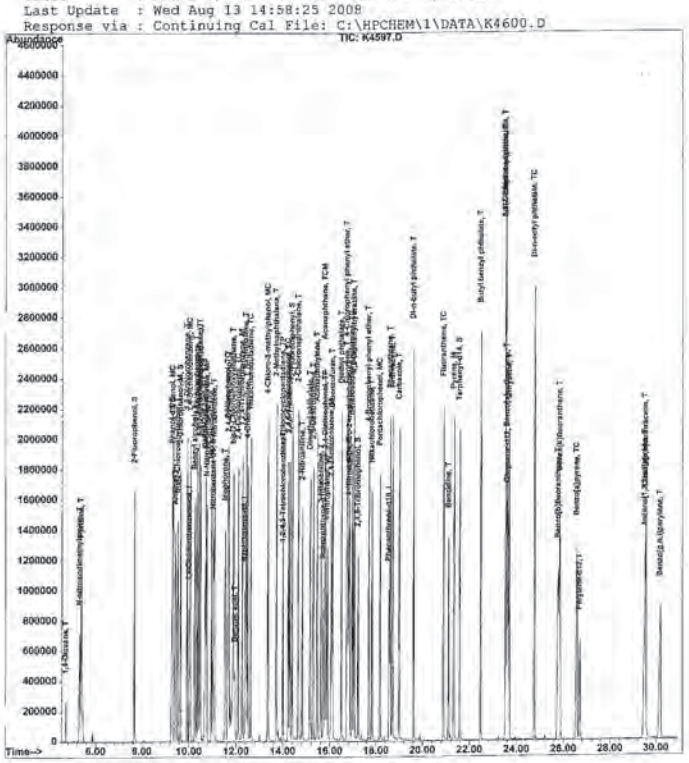
(#) = qualifier out of range (m) = manual integration
K4597.D K813FULL.M Thu Aug 14 07:19:36 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4597.D
Acq On : 13 Aug 2008 9:17
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:59 2008

Vial: 3
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4597.D K813FULL.M Thu Aug 14 07:19:39 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4598.D
Acq On : 13 Aug 2008 9:55
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 4
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	215505	40.00 ug/mL	0.00
24) Naphthalene-d8	12.38	136	818911	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.72	164	439371	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.57	188	843241	40.00 ug/mL	0.00
73) Chrysene-d12	23.64	240	678342	40.00 ug/mL	0.00
84) Perylene-d12	26.70	264	641835	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.67	112	541859	76.81 ug/mL	0.00
Spiked Amount 150.000			Recovery = 51.21%		
6) Phenol-d5	9.28	99	703085	75.12 ug/mL	0.00
Spiked Amount 150.000			Recovery = 50.08%		
10) 2-Chlorophenol-d4	9.64	132	772	91.30 ul/mL	0.00
Spiked Amount 150.000			Recovery = 60.87%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.03	82	672553	77.04 ug/mL	0.00
Spiked Amount 100.000			Recovery = 77.04%		
44) 2-Fluorobiphenyl	14.40	172	932329	74.37 ug/mL	0.00
Spiked Amount 100.000			Recovery = 74.37%		
61) 2,4,6-Tribromophenol	17.23	330	149003	80.09 ug/mL	0.01
Spiked Amount 150.000			Recovery = 53.39%		
76) Terphenyl-d14	21.59	244	857332	76.29 ug/mL	0.00
Spiked Amount 100.000			Recovery = 76.29%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.71	88	104861	30.73 ug/mL	99
3) N-nitrosodimethylamine	5.30	74	410734	77.23 ug/mL	100
4) Pyridine	5.36	79	692919	76.29 ug/mL	99
7) Phenol	9.31	94	843926	74.25 ug/mL	99
8) Aniline	9.42	93	910750	75.78 ug/mL	100
9) bis(2-Chloroethyl)ether	9.51	93	623063	75.60 ug/mL	100
11) 2-Chlorophenol	9.64	128	608137	76.72 ug/mL	99
12) 1,3-Dichlorobenzene	9.92	146	575745	74.51 ug/mL	100
13) 1,4-Dichlorobenzene	10.05	146	564095	73.49 ug/mL	99
14) Benzyl alcohol	10.24	108	404997	76.65 ug/mL	100
16) 1,2-Dichlorobenzene	10.33	146	547414	73.63 ug/mL	100
17) 2-Methylphenol	10.40	108	540541	75.74 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.47	45	1325189	74.39 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.47	45	1325189	74.39 ug/mL	100
20) (3+4)-Methylphenol	10.69	108	576173	75.94 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4598.D K813FULL.M Thu Aug 14 07:19:48 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4598.D
Acq On : 13 Aug 2008 9:55
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 4
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.69	108	576173	75.94 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.74	70	510178	76.21 ug/mL	99
23) Hexachloroethane	10.95	117	271886	76.01 ug/mL	100
26) Nitrobenzene	11.07	77	698308	75.52 ug/mL	99
27) Isophorone	11.52	82	1288036	77.09 ug/mL	100
28) 2-Nitrophenol	11.65	139	364418	75.39 ug/mL	99
29) 2,4-Dimethylphenol	11.68	107	636752	76.16 ug/mL	99
30) Benzoic acid	11.91	105	490948	79.99 ug/mL	100
31) bis(2-Chloroethoxy)methane	11.87	93	712078	74.22 ug/mL	99
32) 2,4-Dichlorophenol	12.09	162	481922	75.53 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.26	180	486757	75.34 ug/mL	100
34) Naphthalene	12.42	128	1341964	73.34 ug/mL	100
35) 4-Chloroaniline	12.49	127	664031	75.76 ug/mL	100
36) Hexachlorobutadiene	12.62	225	283400	78.00 ug/mL	100
37) 4-Chloro-3-methylphenol	13.36	107	620414	76.11 ug/mL	99
38) 2-Methylnaphthalene	13.72	142	867115	73.41 ug/mL	100
40) 1,2,4,5-Tetrachlorobenzene	14.02	216	104	65.99 ug/mL#	1
41) Hexachlorocyclopentadiene	14.01	237	335173	79.68 ug/mL	100
42) 2,4,6-Trichlorophenol	14.24	196	356264	76.37 ug/mL	99
43) 2,4,5-Trichlorophenol	14.30	196	337826	76.80 ug/mL	99
45) 2-Chloronaphthalene	14.66	162	872087	74.30 ug/mL	99
46) 2-Nitroaniline	14.83	65	408566	77.05 ug/mL	99
47) Dimethyl phthalate	15.16	163	1163126	76.62 ug/mL	100
48) 2,6-Dinitrotoluene	15.29	165	308071	77.96 ug/mL	99
49) Acenaphthylene	15.46	152	1312575	74.40 ug/mL	100
50) 3-Nitroaniline	15.62	138	320508	78.05 ug/mL	98
51) Acenaphthene	15.79	153	719595	73.68 ug/mL	100
52) 2,4-Dinitrophenol	15.81	184	248894	79.67 ug/mL	90
53) 4-Nitrophenol	15.88	109	229323	79.13 ug/mL	98
54) 2,4-Dinitrotoluene	16.06	165	389691	77.58 ug/mL	100
55) Dibenzofuran	16.12	168	1160368	74.67 ug/mL	99
56) Diethyl phthalate	16.51	149	1130685	75.86 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.75	204	476679	75.41 ug/mL	100
58) Fluorene	16.77	166	826696	73.21 ug/mL	99
59) 4-Nitroaniline	16.81	138	315138	77.03 ug/mL	91
60) 1,2-Diphenylhydrazine	17.06	77	1248799	72.49 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.85	198	304199	78.12 ug/mL	97
64) n-Nitrosodiphenylamine	16.98	169	710739	75.01 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.69	248	276684	78.14 ug/mL	99
66) Hexachlorobenzene	17.82	284	297341	77.25 ug/mL	99
67) Pentachlorophenol	18.18	266	245030	78.68 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4598.D K813FULL.M Thu Aug 14 07:19:49 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4598.D
Acq On : 13 Aug 2008 9:55
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 4
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) Phenanthrene	18.63	178	1308442	74.68 ug/mL	100
69) Anthracene	18.73	178	1323041	74.09 ug/mL	100
70) Carbazole	19.01	167	1332732	74.14 ug/mL	100
71) Di-n-butyl phthalate	19.61	149	1906209	73.95 ug/mL	100
72) Fluoranthene	20.90	202	1427142	75.94 ug/mL	97
74) Benzidine	21.11	184	717423	72.90 ug/mL	98
75) Pyrene	21.35	202	1482898	76.84 ug/mL	97
77) Butyl benzyl phthalate	22.49	149	919919	75.01 ug/mL	98
78) 3,3'-Dichlorobenzidine	23.54	252	517970	75.76 ug/mL	99
79) Benzo[a]anthracene	23.61	228	1307787	77.42 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.56	149	1120151	70.33 ug/mL	99
81) Chrysene	23.70	228	1191170	76.50 ug/mL	100
82) Di-n-octyl phthalate	24.77	149	2212641	73.95 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.51	276	1264632	77.23 ug/mL	96
85) Benzo[b]fluoranthene	25.77	252	1302052	79.68 ug/mL	99
86) Benzo[k]fluoranthene	25.85	252	1230564	77.75 ug/mL	99
87) Benzo[a]pyrene	26.58	252	1222989	79.30 ug/mL	99
88) Dibenz[a,h]anthracene	29.56	278	1059806	77.78 ug/mL	98
89) Benzo[g,h,i]perylene	30.19	276	1066311	78.32 ug/mL	98

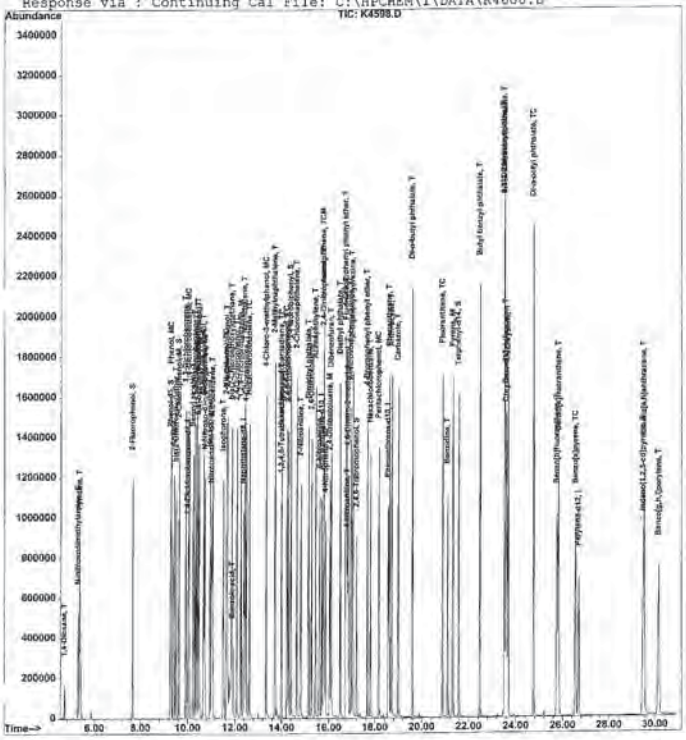
(#) = qualifier out of range (m) = manual integration
K4598.D K813FULL.M Thu Aug 14 07:19:50 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4598.D
Acq On : 13 Aug 2008 9:55
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 4
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4598.D K813FULL.M Thu Aug 14 07:19:52 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4599.D
Acq On : 13 Aug 2008 10:34
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 5
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	214675	40.00 ug/mL	0.00
24) Naphthalene-d8	12.38	136	830114	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.72	164	442736	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.57	188	846639	40.00 ug/mL	0.00
73) Chrysene-d12	23.63	240	684026	40.00 ug/mL	0.00
84) Perylene-d12	26.70	264	658315	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.66	112	414028	58.92 ug/mL	0.00
Spiked Amount 150.000			Recovery = 39.28%		
6) Phenol-d5	9.28	99	545857	59.55 ug/mL	0.00
Spiked Amount 150.000			Recovery = 39.03%		
10) 2-Chlorophenol-d4	9.63	132	521	61.85 ul/mL	0.00
Spiked Amount 150.000			Recovery = 41.23%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.02	82	515621	58.27 ug/mL	0.00
Spiked Amount 100.000			Recovery = 58.27%		
44) 2-Fluorobiphenyl	14.40	172	741893	58.73 ug/mL	0.00
Spiked Amount 100.000			Recovery = 58.73%		
61) 2,4,6-Tribromophenol	17.22	330	112989	60.27 ug/mL	0.00
Spiked Amount 150.000			Recovery = 40.18%		
76) Terphenyl-d14	21.58	244	670983	59.21 ug/mL	0.00
Spiked Amount 100.000			Recovery = 59.21%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.72	88	79305	23.33 ug/mL	100
3) N-nitrosodimethylamine	5.29	74	310094	58.53 ug/mL	99
4) Pyridine	5.36	79	533199	58.93 ug/mL	99
7) Phenol	9.30	94	662523	58.51 ug/mL	100
8) Aniline	9.42	93	705011	58.88 ug/mL	99
9) bis(2-Chloroethyl)ether	9.51	93	486812	59.30 ug/mL	100
11) 2-Chlorophenol	9.63	128	465397	58.94 ug/mL	100
12) 1,3-Dichlorobenzene	9.91	146	452604	58.80 ug/mL	99
13) 1,4-Dichlorobenzene	10.05	146	448101	58.60 ug/mL	100
14) Benzyl alcohol	10.23	108	313078	59.49 ug/mL	99
16) 1,2-Dichlorobenzene	10.32	146	433626	58.55 ug/mL	100
17) 2-Methylphenol	10.40	108	419760	59.04 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.47	45	1038859	58.55 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.47	45	1038859	58.55 ug/mL	100
20) (3+4)-Methylphenol	10.68	108	446296	59.05 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4599.D K813FULL.M Thu Aug 14 07:20:01 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4599.D
Acq On : 13 Aug 2008 10:34
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 5
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.68	108	446296	59.05 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.73	70	395961	59.37 ug/mL	99
23) Hexachloroethane	10.95	117	211774	59.44 ug/mL	100
26) Nitrobenzene	11.06	77	546834	58.34 ug/mL	99
27) Isophorone	11.51	82	989482	58.42 ug/mL	100
28) 2-Nitrophenol	11.65	139	286495	58.47 ug/mL	100
29) 2,4-Dimethylphenol	11.67	107	497246	58.67 ug/mL	100
30) Benzoic acid	11.88	105	364127	58.53 ug/mL#	67
31) bis(2-Chloroethoxy)methane	11.87	93	562019	57.78 ug/mL	99
32) 2,4-Dichlorophenol	12.08	162	378030	58.45 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.26	180	382401	58.39 ug/mL	100
34) Naphthalene	12.42	128	1074332	57.92 ug/mL	100
35) 4-Chloroaniline	12.49	127	519716	58.50 ug/mL	99
36) Hexachlorobutadiene	12.63	225	219938	59.72 ug/mL	100
37) 4-Chloro-3-methylphenol	13.35	107	481357	58.26 ug/mL	100
38) 2-Methylnaphthalene	13.72	142	697373	58.24 ug/mL	100
41) Hexachlorocyclopentadiene	14.00	237	254546	60.05 ug/mL	100
42) 2,4,6-Trichlorophenol	14.23	196	277492	59.03 ug/mL	100
43) 2,4,5-Trichlorophenol	14.29	196	261635	59.03 ug/mL	99
45) 2-Chloronaphthalene	14.65	162	695910	58.84 ug/mL	100
46) 2-Nitroaniline	14.82	65	313936	58.75 ug/mL	99
47) Dimethyl phthalate	15.16	163	907276	59.32 ug/mL	100
48) 2,6-Dinitrotoluene	15.29	165	238019	59.77 ug/mL	99
49) Acenaphthylene	15.45	152	1042645	58.65 ug/mL	100
50) 3-Nitroaniline	15.62	138	245831	59.41 ug/mL	98
51) Acenaphthene	15.78	153	576463	58.58 ug/mL	100
52) 2,4-Dinitrophenol	15.80	184	188216	59.79 ug/mL	97
53) 4-Nitrophenol	15.87	109	173764	59.50 ug/mL	98
54) 2,4-Dinitrotoluene	16.05	165	298706	59.02 ug/mL	100
55) Dibenzofuran	16.11	168	923214	58.95 ug/mL	100
56) Diethyl phthalate	16.50	149	892277	59.41 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.74	204	379229	59.54 ug/mL	99
58) Fluorene	16.77	166	669661	58.85 ug/mL	99
59) 4-Nitroaniline	16.80	138	241353	58.55 ug/mL	98
60) 1,2-Diphenylhydrazine	17.05	77	1001908	57.72 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.84	198	233168	59.64 ug/mL	99
64) n-Nitrosodiphenylamine	16.97	169	560193	58.89 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.68	248	214337	60.29 ug/mL	100
66) Hexachlorobenzene	17.82	284	228859	59.22 ug/mL	99
67) Pentachlorophenol	18.17	266	185727	59.40 ug/mL	99
68) Phenanthrene	18.62	178	1038680	59.04 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4599.D K813FULL.M Thu Aug 14 07:20:02 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4599.D
Acq On : 13 Aug 2008 10:34
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 5
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.72	178	1050847	58.61 ug/mL	100
70) Carbazole	19.00	167	1052110	58.30 ug/mL	100
71) Di-n-butyl phthalate	19.61	149	1520371	58.74 ug/mL	100
72) Fluoranthene	20.89	202	1114949	59.09 ug/mL	99
74) Benzidine	21.11	184	568749	57.31 ug/mL	99
75) Pyrene	21.34	202	1152968	59.24 ug/mL	98
77) Butyl benzyl phthalate	22.48	149	730198	59.04 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.53	252	407543	59.12 ug/mL	100
79) Benzo[a]anthracene	23.61	228	1014024	59.53 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.55	149	926186	57.67 ug/mL	100
81) Chrysene	23.69	228	935697	59.60 ug/mL	100
82) Di-n-octyl phthalate	24.77	149	1778666	58.96 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.50	276	989005	59.89 ug/mL	98
85) Benzo[b]fluoranthene	25.76	252	1000367	59.69 ug/mL	100
86) Benzo[k]fluoranthene	25.84	252	966135	59.51 ug/mL	100
87) Benzo[a]pyrene	26.56	252	950390	60.08 ug/mL	100
88) Dibenz[a,h]anthracene	29.54	278	827581	59.21 ug/mL	99
89) Benzo[g,h,i]perylene	30.17	276	837173	59.95 ug/mL	99

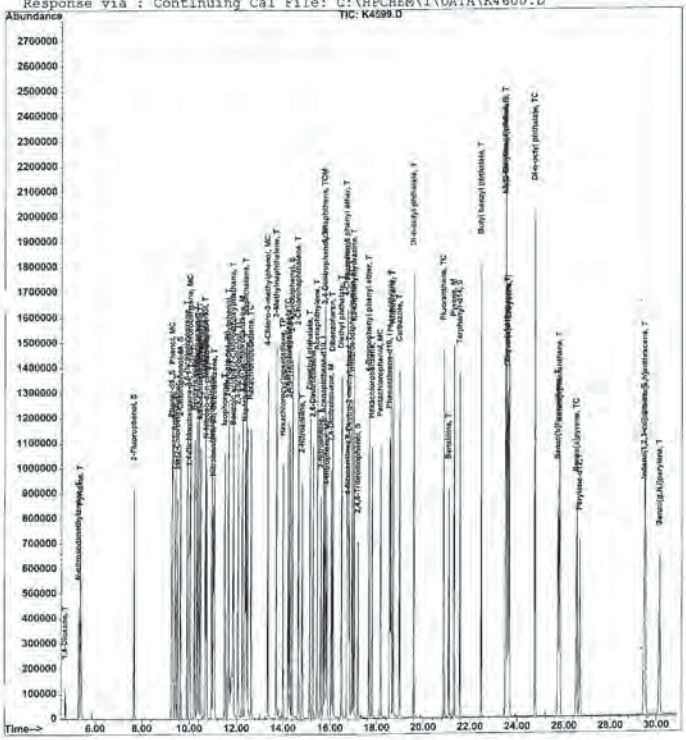
(#) = qualifier out of range (m) = manual integration
K4599.D K813FULL.M Thu Aug 14 07:20:03 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4599.D
Acq On : 13 Aug 2008 10:34
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 5
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4599.D K813FULL.M Thu Aug 14 07:20:06 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4600.D
Acq On : 13 Aug 2008 11:12
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:27 2008

Vial: 6
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:27:08 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	223259	40.00 ug/mL	0.00
24) Naphthalene-d8	12.37	136	857979	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.72	164	462756	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.57	188	883913	40.00 ug/mL	0.00
73) Chrysene-d12	23.64	240	713498	40.00 ug/mL	0.00
84) Perylene-d12	26.70	264	684460	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.67	112	365399	50.00 ug/mL	0.00
Spiked Amount 150.000			Recovery = 33.33%		
6) Phenol-d5	9.27	99	484793	50.00 ug/mL	0.00
Spiked Amount 150.000			Recovery = 33.33%		
10) 2-Chlorophenol-d4	9.63	132	438	50.00 ul/mL	0.00
Spiked Amount 150.000			Recovery = 33.33%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.02	82	457296	50.00 ug/mL	0.00
Spiked Amount 100.000			Recovery = 50.00%		
44) 2-Fluorobiphenyl	14.40	172	660183	50.00 ug/mL	0.00
Spiked Amount 100.000			Recovery = 50.00%		
61) 2,4,6-Tribromophenol	17.22	330	97970	50.00 ug/mL	0.00
Spiked Amount 150.000			Recovery = 33.33%		
76) Terphenyl-d14	21.58	244	591005	50.00 ug/mL	0.00
Spiked Amount 100.000			Recovery = 50.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.71	88	70713	20.00 ug/mL	100
3) N-nitrosodimethylamine	5.29	74	275484	50.00 ug/mL	100
4) Pyridine	5.36	79	470487	50.00 ug/mL	100
7) Phenol	9.30	94	588753	50.00 ug/mL	100
8) Aniline	9.41	93	622574	50.00 ug/mL	100
9) bis(2-Chloroethyl)ether	9.51	93	426897	50.00 ug/mL	100
11) 2-Chlorophenol	9.63	128	410582	50.00 ug/mL	100
12) 1,3-Dichlorobenzene	9.92	146	400258	50.00 ug/mL	100
13) 1,4-Dichlorobenzene	10.04	146	397606	50.00 ug/mL	100
14) Benzyl alcohol	10.23	108	273676	50.00 ug/mL	100
16) 1,2-Dichlorobenzene	10.33	146	385113	50.00 ug/mL	100
17) 2-Methylphenol	10.39	108	369699	50.00 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.47	45	922691	50.00 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.47	45	922691	50.00 ug/mL	100
20) (3+4)-Methylphenol	10.68	108	392986	50.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4600.D K813FULL.M Thu Aug 14 07:20:15 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4600.D
Acq On : 13 Aug 2008 11:12
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:27 2008

Vial: 6
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:27:08 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.68	108	392986	50.00 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.73	70	346782	50.00 ug/mL	100
23) Hexachloroethane	10.95	117	185273	50.00 ug/mL	100
26) Nitrobenzene	11.06	77	484375	50.00 ug/mL	100
27) Isophorone	11.50	82	875238	50.00 ug/mL	100
28) 2-Nitrophenol	11.64	139	253231	50.00 ug/mL	100
29) 2,4-Dimethylphenol	11.67	107	438000	50.00 ug/mL	100
30) Benzoic acid	11.87	105	321517	50.00 ug/mL	100
31) bis(2-Chloroethoxy)methane	11.86	93	502626	50.00 ug/mL	100
32) 2,4-Dichlorophenol	12.08	162	334256	50.00 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.25	180	338474	50.00 ug/mL	100
34) Naphthalene	12.42	128	958493	50.00 ug/mL	100
35) 4-Chloroaniline	12.48	127	459134	50.00 ug/mL	100
36) Hexachlorobutadiene	12.62	225	190336	50.00 ug/mL	100
37) 4-Chloro-3-methylphenol	13.35	107	426997	50.00 ug/mL	100
38) 2-Methylnaphthalene	13.72	142	618797	50.00 ug/mL	100
40) 1,2,4,5-Tetrachlorobenzene	14.02	216	83	50.00 ug/mL#	1
41) Hexachlorocyclopentadiene	14.01	237	221514	50.00 ug/mL	100
42) 2,4,6-Trichlorophenol	14.23	196	245662	50.00 ug/mL	100
43) 2,4,5-Trichlorophenol	14.29	196	231640	50.00 ug/mL	100
45) 2-Chloronaphthalene	14.65	162	618115	50.00 ug/mL	100
46) 2-Nitroaniline	14.83	65	279256	50.00 ug/mL	100
47) Dimethyl phthalate	15.15	163	799371	50.00 ug/mL	100
48) 2,6-Dinitrotoluene	15.28	165	208109	50.00 ug/mL	100
49) Acenaphthylene	15.45	152	929071	50.00 ug/mL	100
50) 3-Nitroaniline	15.61	138	216243	50.00 ug/mL	100
51) Acenaphthene	15.79	153	514299	50.00 ug/mL	100
52) 2,4-Dinitrophenol	15.80	184	164507	50.00 ug/mL	100
53) 4-Nitrophenol	15.87	109	152622	50.00 ug/mL	100
54) 2,4-Dinitrotoluene	16.05	165	264520	50.00 ug/mL	100
55) Dibenzofuran	16.11	168	818400	50.00 ug/mL	100
56) Diethyl phthalate	16.50	149	784899	50.00 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.74	204	332888	50.00 ug/mL	100
58) Fluorene	16.77	166	594672	50.00 ug/mL	100
59) 4-Nitroaniline	16.79	138	215435	50.00 ug/mL	100
60) 1,2-Diphenylhydrazine	17.05	77	907167	50.00 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.83	198	204092	50.00 ug/mL	100
64) n-Nitrosodiphenylamine	16.97	169	496592	50.00 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.69	248	185573	50.00 ug/mL	100
66) Hexachlorobenzene	17.81	284	201747	50.00 ug/mL	100
67) Pentachlorophenol	18.17	266	163232	50.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4600.D K813FULL.M Thu Aug 14 07:20:16 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4600.D
Acq On : 13 Aug 2008 11:12
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:27 2008

Vial: 6
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:27:08 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) Phenanthrene	18.62	178	918298	50.00 ug/mL	100
69) Anthracene	18.71	178	935866	50.00 ug/mL	100
70) Carbazole	19.00	167	942093	50.00 ug/mL	100
71) Di-n-butyl phthalate	19.61	149	1351048	50.00 ug/mL	100
72) Fluoranthene	20.89	202	984961	50.00 ug/mL	100
74) Benzidine	21.10	184	517585	50.00 ug/mL	100
75) Pyrene	21.34	202	1014980	50.00 ug/mL	100
77) Butyl benzyl phthalate	22.49	149	644985	50.00 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.52	252	359545	50.00 ug/mL	100
79) Benzo[a]anthracene	23.60	228	888329	50.00 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.55	149	837578	50.00 ug/mL	100
81) Chrysene	23.68	228	818866	50.00 ug/mL	100
82) Di-n-octyl phthalate	24.76	149	1573483	50.00 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.50	276	861223	50.00 ug/mL	100
85) Benzo[b]fluoranthene	25.76	252	871265	50.00 ug/mL	100
86) Benzo[k]fluoranthene	25.82	252	843916	50.00 ug/mL	100
87) Benzo[a]pyrene	26.56	252	822314	50.00 ug/mL	100
88) Dibenz[a,h]anthracene	29.53	278	726558	50.00 ug/mL	100
89) Benzo[g,h,i]perylene	30.17	276	725975	50.00 ug/mL	100

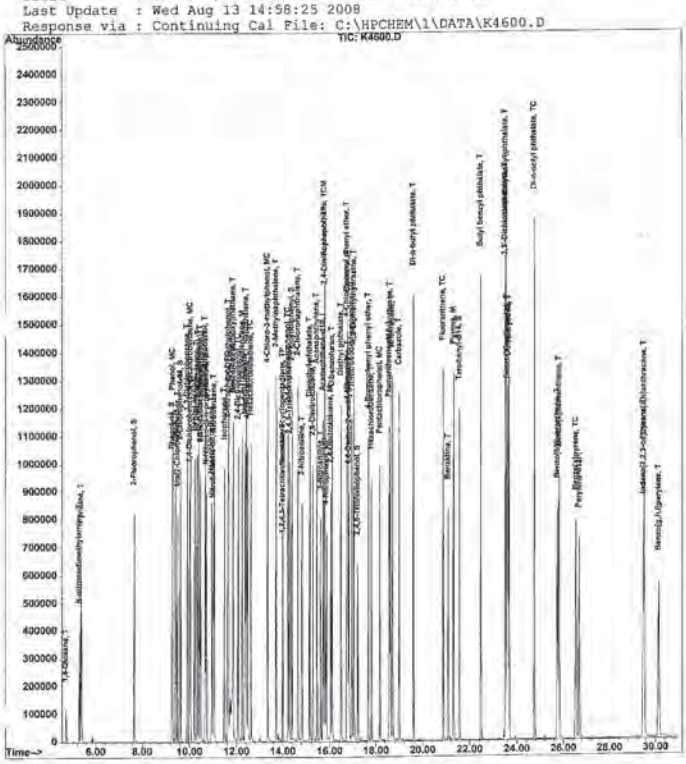
(#) = qualifier out of range (m) = manual integration
K4600.D K813FULL.M Thu Aug 14 07:20:16 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4600.D
Acq On : 13 Aug 2008 11:12
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:27 2008

Vial: 6
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4600.D K813FULL.M Thu Aug 14 07:20:19 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4601.D
Acq On : 13 Aug 2008 11:51
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 7
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	200085	40.00 ug/mL	0.00
24) Naphthalene-d8	12.37	136	781959	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.72	164	414205	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.57	188	791562	40.00 ug/mL	0.00
73) Chrysene-d12	23.63	240	635172	40.00 ug/mL	0.00
84) Perylene-d12	26.69	264	606137	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.66	112	258328	39.44 ug/mL	0.00
Spiked Amount 150.000			Recovery = 26.29%		
6) Phenol-d5	9.27	99	344046	39.59 ug/mL	0.00
Spiked Amount 150.000			Recovery = 26.39%		
10) 2-Chlorophenol-d4	9.62	132	210	26.75 ul/mL	0.00
Spiked Amount 150.000			Recovery = 17.83%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.02	82	327774	39.32 ug/mL	0.00
Spiked Amount 100.000			Recovery = 39.32%		
44) 2-Fluorobiphenyl	14.40	172	479319	40.56 ug/mL	0.00
Spiked Amount 100.000			Recovery = 40.56%		
61) 2,4,6-Tribromophenol	17.22	330	68891	39.28 ug/mL	0.00
Spiked Amount 150.000			Recovery = 26.19%		
76) Terphenyl-d14	21.58	244	423286	40.23 ug/mL	0.00
Spiked Amount 100.000			Recovery = 40.23%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.71	88	50749	16.02 ug/mL	99
3) N-nitrosodimethylamine	5.28	74	196741	39.84 ug/mL	99
4) Pyridine	5.36	79	337288	40.00 ug/mL	99
7) Phenol	9.29	94	430202	40.77 ug/mL	99
8) Aniline	9.41	93	447941	40.14 ug/mL	99
9) bis(2-Chloroethyl)ether	9.50	93	310967	40.64 ug/mL	100
11) 2-Chlorophenol	9.62	128	294754	40.05 ug/mL	99
12) 1,3-Dichlorobenzene	9.91	146	290762	40.53 ug/mL	100
13) 1,4-Dichlorobenzene	10.04	146	290146	40.71 ug/mL	100
14) Benzyl alcohol	10.22	108	194328	39.62 ug/mL	98
16) 1,2-Dichlorobenzene	10.32	146	279357	40.47 ug/mL	100
17) 2-Methylphenol	10.39	108	265083	40.00 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.47	45	669445	40.48 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.47	45	669445	40.48 ug/mL	100
20) (3+4)-Methylphenol	10.67	108	279726	39.71 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4601.D K813FULL.M Thu Aug 14 07:20:28 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4601.D
Acq On : 13 Aug 2008 11:51
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 7
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.67	108	279726	39.71 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.72	70	252825	40.68 ug/mL	99
23) Hexachloroethane	10.95	117	134716	40.57 ug/mL	99
26) Nitrobenzene	11.05	77	348979	39.53 ug/mL	100
27) Isophorone	11.49	82	627468	39.33 ug/mL	99
28) 2-Nitrophenol	11.64	139	183232	39.70 ug/mL	99
29) 2,4-Dimethylphenol	11.66	107	317405	39.76 ug/mL	100
30) Benzoic acid	11.83	105	217744	37.15 ug/mL	99
31) bis(2-Chloroethoxy)methane	11.86	93	374839	40.91 ug/mL	99
32) 2,4-Dichlorophenol	12.07	162	237917	39.05 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.25	180	243842	39.52 ug/mL	100
34) Naphthalene	12.41	128	696548	39.87 ug/mL	99
35) 4-Chloroaniline	12.48	127	328510	39.25 ug/mL	100
36) Hexachlorobutadiene	12.62	225	136204	39.26 ug/mL	100
37) 4-Chloro-3-methylphenol	13.35	107	303515	39.00 ug/mL	100
38) 2-Methylnaphthalene	13.72	142	451217	40.00 ug/mL	99
41) Hexachlorocyclopentadiene	14.01	237	153845	38.80 ug/mL	100
42) 2,4,6-Trichlorophenol	14.23	196	172688	39.27 ug/mL	99
43) 2,4,5-Trichlorophenol	14.29	196	166594	40.17 ug/mL	98
45) 2-Chloronaphthalene	14.65	162	449687	40.64 ug/mL	99
46) 2-Nitroaniline	14.82	65	195972	39.20 ug/mL	100
47) Dimethyl phthalate	15.15	163	580130	40.54 ug/mL	100
48) 2,6-Dinitrotoluene	15.28	165	148556	39.88 ug/mL	100
49) Acenaphthylene	15.45	152	676890	40.70 ug/mL	100
50) 3-Nitroaniline	15.60	138	153092	39.55 ug/mL	100
51) Acenaphthene	15.78	153	385501	41.87 ug/mL	99
52) 2,4-Dinitrophenol	15.79	184	111762	37.95 ug/mL	88
53) 4-Nitrophenol	15.86	109	106202	38.87 ug/mL	99
54) 2,4-Dinitrotoluene	16.04	165	187857	39.67 ug/mL	99
55) Dibenzofuran	16.11	168	594040	40.55 ug/mL	99
56) Diethyl phthalate	16.49	149	565747	40.26 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.74	204	242067	40.62 ug/mL	100
58) Fluorene	16.77	166	438261	41.17 ug/mL	99
59) 4-Nitroaniline	16.77	138	150842	39.11 ug/mL	98
60) 1,2-Diphenylhydrazine	17.05	77	668097	41.14 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.83	198	138736	37.95 ug/mL	98
64) n-Nitrosodiphenylamine	16.96	169	358825	40.34 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.68	248	133163	40.06 ug/mL	99
66) Hexachlorobenzene	17.81	284	142929	39.56 ug/mL	98
67) Pentachlorophenol	18.17	266	112187	38.37 ug/mL	99
68) Phenanthrene	18.61	178	675769	41.09 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4601.D K813FULL.M Thu Aug 14 07:20:29 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4601.D
Acq On : 13 Aug 2008 11:51
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 7
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 08:16:26 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.71	178	682083	40.69 ug/mL	100
70) Carbazole	19.00	167	673412	39.91 ug/mL	100
71) Di-n-butyl phthalate	19.61	149	996535	41.18 ug/mL	100
72) Fluoranthene	20.89	202	717057	40.65 ug/mL	99
74) Benzidine	21.10	184	363072	39.40 ug/mL	100
75) Pyrene	21.33	202	737565	40.81 ug/mL	98
77) Butyl benzyl phthalate	22.48	149	474589	41.33 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.52	252	248778	38.86 ug/mL	99
79) Benzo[a]anthracene	23.60	228	634693	40.13 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.54	149	640241	42.93 ug/mL	99
81) Chrysene	23.68	228	586400	40.22 ug/mL	99
82) Di-n-octyl phthalate	24.76	149	1156412	41.28 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.49	276	600108	39.14 ug/mL	97
85) Benzo[b]fluoranthene	25.75	252	610306	39.55 ug/mL	99
86) Benzo[k]fluoranthene	25.82	252	591271	39.56 ug/mL	99
87) Benzo[a]pyrene	26.54	252	574120	39.42 ug/mL	99
88) Dibenz[a,h]anthracene	29.52	278	504699	39.22 ug/mL	99
89) Benzo[g,h,i]perylene	30.15	276	511814	39.81 ug/mL	99

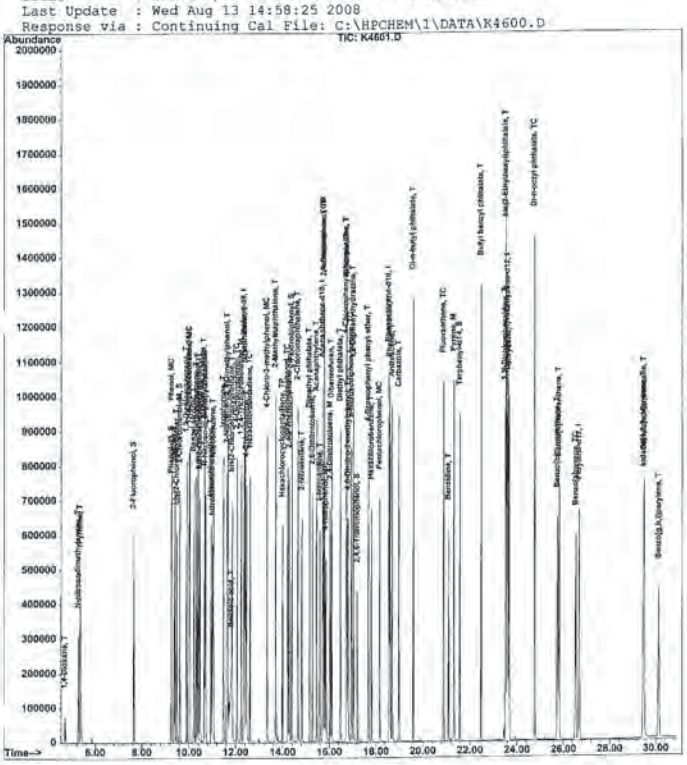
(#) = qualifier out of range (m) = manual integration
K4601.D K813FULL.M Thu Aug 14 07:20:29 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4601.D
Acq On : 13 Aug 2008 11:51
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 12:29 2008

Vial: 7
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4601.D K813FULL.M Thu Aug 14 07:20:32 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4602.D
Acq On : 13 Aug 2008 12:29
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:07 2008

Vial: 8
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	229971	40.00 ug/mL	0.00
24) Naphthalene-d8	12.37	136	989228	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.72	164	475458	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.57	188	904917	40.00 ug/mL	0.00
73) Chrysene-d12	23.62	240	739272	40.00 ug/mL	-0.01
84) Perylene-d12	26.69	264	704801	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.66	112	148755	19.76 ug/mL	0.00
Spiked Amount 150.000			Recovery = 13.17%		
6) Phenol-d5	9.26	99	202910	20.32 ug/mL	-0.01
Spiked Amount 150.000			Recovery = 13.55%		
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery = 0.00%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.01	82	190995	20.15 ug/mL	0.00
Spiked Amount 100.000			Recovery = 20.15%		
44) 2-Fluorobiphenyl	14.39	172	286891	21.15 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 21.15%		
61) 2,4,6-Tribromophenol	17.21	330	38657	19.20 ug/mL	0.00
Spiked Amount 150.000			Recovery = 12.80%		
76) Terphenyl-d14	21.57	244	248015	20.25 ug/mL	0.00
Spiked Amount 100.000			Recovery = 20.25%		
Target Compounds					Qvalue
2) 1,4-Dioxane	4.71	88	29206	8.02 ug/mL	99
3) N-nitrosodimethylamine	5.28	74	114145	20.11 ug/mL	98
4) Pyridine	5.36	79	194771	20.09 ug/mL	99
7) Phenol	9.29	94	256049	21.11 ug/mL	99
8) Aniline	9.41	93	266398	20.77 ug/mL	99
9) bis(2-Chloroethyl)ether	9.49	93	185007	21.04 ug/mL	99
11) 2-Chlorophenol	9.62	128	170943	20.21 ug/mL	99
12) 1,3-Dichlorobenzene	9.91	146	170844	20.72 ug/mL	99
13) 1,4-Dichlorobenzene	10.04	146	170887	20.86 ug/mL	98
14) Benzyl alcohol	10.22	108	112709	19.99 ug/mL	98
16) 1,2-Dichlorobenzene	10.32	146	160784	20.27 ug/mL	99
17) 2-Methylphenol	10.39	108	155909	20.47 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.47	45	397036	20.89 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.47	45	397036	20.89 ug/mL	100
20) (3+4)-Methylphenol	10.66	108	162646	20.09 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4602.D K813FULL.M Thu Aug 14 07:20:41 2008

Pa 904

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4602.D
Acq On : 13 Aug 2008 12:29
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:07 2008

Vial: 8
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.66	108	162646	20.09 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.71	70	147576	20.66 ug/mL	99
23) Hexachloroethane	10.95	117	77425	20.28 ug/mL	99
26) Nitrobenzene	11.05	77	206721	20.59 ug/mL	98
27) Isophorone	11.48	82	370597	20.43 ug/mL	99
28) 2-Nitrophenol	11.64	139	105774	20.15 ug/mL	99
29) 2,4-Dimethylphenol	11.66	107	189026	20.82 ug/mL	99
30) Benzoic acid	11.79	105	110093	16.52 ug/mL	97
31) bis(2-Chloroethoxy)methane	11.86	93	223028	21.41 ug/mL	96
32) 2,4-Dichlorophenol	12.07	162	139142	20.08 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.25	180	141999	20.24 ug/mL	99
34) Naphthalene	12.41	128	411535	20.71 ug/mL	99
35) 4-Chloroaniline	12.48	127	191822	20.16 ug/mL	99
36) Hexachlorobutadiene	12.62	225	78608	19.92 ug/mL	100
37) 4-Chloro-3-methylphenol	13.34	107	176823	19.98 ug/mL	99
38) 2-Methylnaphthalene	13.71	142	270743	21.11 ug/mL	100
41) Hexachlorocyclopentadiene	14.00	237	86078	18.91 ug/mL	99
42) 2,4,6-Trichlorophenol	14.22	196	100805	19.97 ug/mL	100
43) 2,4,5-Trichlorophenol	14.29	196	96018	20.17 ug/mL	99
45) 2-Chloronaphthalene	14.64	162	267503	21.06 ug/mL	99
46) 2-Nitroaniline	14.81	65	113889	19.85 ug/mL	99
47) Dimethyl phthalate	15.14	163	339648	20.68 ug/mL	100
48) 2,6-Dinitrotoluene	15.27	165	84077	19.66 ug/mL	99
49) Acenaphthylene	15.44	152	404730	21.20 ug/mL	99
50) 3-Nitroaniline	15.59	138	87226	19.63 ug/mL	98
51) Acenaphthene	15.78	153	234125	22.15 ug/mL	96
52) 2,4-Dinitrophenol	15.79	184	56622	16.75 ug/mL#	65
53) 4-Nitrophenol	15.85	109	59138	18.86 ug/mL	99
54) 2,4-Dinitrotoluene	16.03	165	105630	19.43 ug/mL	98
55) Dibenzofuran	16.10	168	353204	21.00 ug/mL	99
56) Diethyl phthalate	16.48	149	335594	20.81 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.73	204	142615	20.85 ug/mL	100
58) Fluorene	16.76	166	266302	21.79 ug/mL	99
59) 4-Nitroaniline	16.76	138	88485	19.99 ug/mL	98
60) 1,2-Diphenylhydrazine	17.04	77	401673	21.55 ug/mL	98
63) 4,6-Dinitro-2-methylphenol	16.81	198	74799	17.90 ug/mL	99
64) n-Nitrosodiphenylamine	16.95	169	212317	20.88 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.67	248	76900	20.24 ug/mL	98
66) Hexachlorobenzene	17.81	284	83900	20.31 ug/mL	99
67) Pentachlorophenol	18.16	266	62993	18.85 ug/mL	100
68) Phenanthrene	18.61	178	393755	20.94 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4602.D K813FULL.M Thu Aug 14 07:20:42 2008

Pa 905

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4602.D
Acq On : 13 Aug 2008 12:29
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:07 2008

Vial: 8
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.71	178	404401	21.10 ug/mL	100
70) Carbazole	18.99	167	400372	20.76 ug/mL	99
71) Di-n-butyl phthalate	19.61	149	588288	21.27 ug/mL	100
72) Fluoranthene	20.88	202	419737	20.81 ug/mL	97
74) Benzidine	21.10	184	213298	19.89 ug/mL	99
75) Pyrene	21.33	202	441109	20.97 ug/mL	97
77) Butyl benzyl phthalate	22.48	149	281139	21.03 ug/mL	98
78) 3,3'-Dichlorobenzidine	23.51	252	141494	18.99 ug/mL	99
79) Benzo[a]anthracene	23.60	228	375962	20.42 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.54	149	390331	22.49 ug/mL	99
81) Chrysene	23.67	228	346995	20.45 ug/mL	99
82) Di-n-octyl phthalate	24.76	149	685538	21.02 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.47	276	342297	19.18 ug/mL	94
85) Benzo[b]fluoranthene	25.74	252	355232	19.80 ug/mL	99
86) Benzo[k]fluoranthene	25.80	252	345537	19.88 ug/mL	97
87) Benzo[a]pyrene	26.53	252	330206	19.50 ug/mL	98
88) Dibenz[a,h]anthracene	29.50	278	289620	19.36 ug/mL	98
89) Benzo[g,h,i]perylene	30.13	276	291419	19.49 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K4602.D K813FULL.M Thu Aug 14 07:20:42 2008

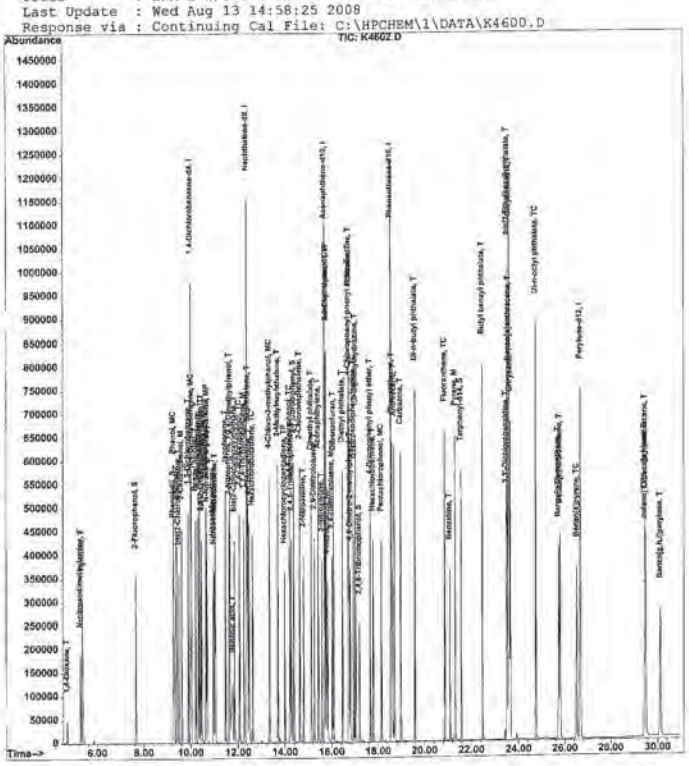
Pa 906

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4602.D
Acq On : 13 Aug 2008 12:29
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:07 2008

Vial: 8
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4602.D K813FULL.M Thu Aug 14 07:20:45 2008

Pa 907

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4603.D
Acq On : 13 Aug 2008 13:07
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:39 2008

Vial: 9
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	203605	40.00 ug/mL	0.00
24) Naphthalene-d8	12.37	136	791115	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.71	164	419625	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.57	188	783245	40.00 ug/mL	0.00
73) Chrysene-d12	23.62	240	648301	40.00 ug/mL	0.00
84) Perylene-d12	26.68	264	605611	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.66	112	66755	10.02 ug/mL	0.00
Spiked Amount 150.000			Recovery =	6.68%	
6) Phenol-d5	9.25	99	89864	10.16 ug/mL	0.00
Spiked Amount 150.000			Recovery =	6.77%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery =	0.00%	
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery =	0.00%	
25) Nitrobenzene-d5	11.01	82	83173	9.86 ug/mL	0.00
Spiked Amount 100.000			Recovery =	9.86%	
44) 2-Fluorobiphenyl	14.39	172	124235	10.38 ug/mL	0.00
Spiked Amount 100.000			Recovery =	10.38%	
61) 2,4,6-Tribromophenol	17.21	330	15898	8.95 ug/mL	0.00
Spiked Amount 150.000			Recovery =	5.97%	
76) Terphenyl-d14	21.57	244	108309	10.08 ug/mL	0.00
Spiked Amount 100.000			Recovery =	10.08%	

Target Compounds					Qvalue
2) 1,4-Dioxane	4.71	88	13529	4.20 ug/mL	98
3) N-nitrosodimethylamine	5.27	74	51089	10.17 ug/mL	98
4) Pyridine	5.36	79	88191	10.28 ug/mL	98
7) Phenol	9.28	94	115472	10.75 ug/mL	98
8) Aniline	9.40	93	119857	10.56 ug/mL	99
9) bis(2-Chloroethyl)ether	9.49	93	84871	10.90 ug/mL	100
11) 2-Chlorophenol	9.62	128	76321	10.19 ug/mL	97
12) 1,3-Dichlorobenzene	9.91	146	76806	10.52 ug/mL	99
13) 1,4-Dichlorobenzene	10.04	146	77000	10.62 ug/mL	98
14) Benzyl alcohol	10.21	108	48684	9.75 ug/mL	95
16) 1,2-Dichlorobenzene	10.32	146	73039	10.40 ug/mL	99
17) 2-Methylphenol	10.38	108	69373	10.28 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.46	45	179637	10.67 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.46	45	179637	10.67 ug/mL	99
20) (3+4)-Methylphenol	10.65	108	71803	10.02 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4603.D K813FULL.M Thu Aug 14 07:20:54 2008

Pa 908

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4603.D
Acq On : 13 Aug 2008 13:07
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:39 2008

Vial: 9
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.65	108	71803	10.02 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.70	70	65274	10.32 ug/mL	99
23) Hexachloroethane	10.95	117	33689	9.97 ug/mL	97
26) Nitrobenzene	11.04	77	91842	10.28 ug/mL	97
27) Isophorone	11.47	82	162485	10.07 ug/mL	99
28) 2-Nitrophenol	11.64	139	44708	9.57 ug/mL	97
29) 2,4-Dimethylphenol	11.66	107	83636	10.35 ug/mL	100
30) Benzoic acid	11.74	105	38139	6.43 ug/mL	95
31) bis(2-Chloroethoxy)methane	11.85	93	99126	10.69 ug/mL	96
32) 2,4-Dichlorophenol	12.07	162	60671	9.84 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.25	180	63159	10.12 ug/mL	99
34) Naphthalene	12.41	128	182660	10.33 ug/mL	99
35) 4-Chloroaniline	12.47	127	83121	9.82 ug/mL	98
36) Hexachlorobutadiene	12.62	225	34687	9.88 ug/mL	100
37) 4-Chloro-3-methylphenol	13.33	107	74772	9.50 ug/mL	99
38) 2-Methylnaphthalene	13.71	142	118698	10.40 ug/mL	99
41) Hexachlorocyclopentadiene	14.00	237	34748	8.65 ug/mL	99
42) 2,4,6-Trichlorophenol	14.22	196	42128	9.46 ug/mL	100
43) 2,4,5-Trichlorophenol	14.28	196	39949	9.51 ug/mL	100
45) 2-Chloronaphthalene	14.64	162	116378	10.38 ug/mL	99
46) 2-Nitroaniline	14.81	65	48037	9.48 ug/mL	99
47) Dimethyl phthalate	15.13	163	146590	10.11 ug/mL	100
48) 2,6-Dinitrotoluene	15.26	165	35114	9.30 ug/mL	96
49) Acenaphthylene	15.44	152	176429	10.47 ug/mL	99
50) 3-Nitroaniline	15.58	138	37591	9.59 ug/mL	98
51) Acenaphthene	15.77	153	104825	11.24 ug/mL	95
52) 2,4-Dinitrophenol	15.78	184	18459	6.19 ug/mL#	6
53) 4-Nitrophenol	15.84	109	24006	8.67 ug/mL	96
54) 2,4-Dinitrotoluene	16.03	165	44232	9.22 ug/mL	95
55) Dibenzofuran	16.10	168	156705	10.56 ug/mL	99
56) Diethyl phthalate	16.48	149	147012	10.33 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.73	204	62524	10.36 ug/mL	100
58) Fluorene	16.75	166	120183	11.14 ug/mL	100
59) 4-Nitroaniline	16.75	138	38269	9.79 ug/mL	96
60) 1,2-Diphenylhydrazine	17.03	77	182437	11.09 ug/mL	96
63) 4,6-Dinitro-2-methylphenol	16.81	198	27575	7.62 ug/mL	96
64) n-Nitrosodiphenylamine	16.95	169	92345	10.49 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.67	248	33227	10.10 ug/mL	98
66) Hexachlorobenzene	17.81	284	35561	9.95 ug/mL	97
67) Pentachlorophenol	18.16	266	24725	8.55 ug/mL	100
68) Phenanthrene	18.61	178	172024	10.57 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4603.D K813FULL.M Thu Aug 14 07:20:55 2008

Pa 909

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4603.D
Acq On : 13 Aug 2008 13:07
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:39 2008

Vial: 9
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.70	178	175975	10.61 ug/mL	100
70) Carbazole	18.98	167	176233	10.56 ug/mL	99
71) Di-n-butyl phthalate	19.60	149	257790	10.77 ug/mL	100
72) Fluoranthene	20.88	202	182741	10.47 ug/mL	96
74) Benzidine	21.09	184	101490	10.79 ug/mL	99
75) Pyrene	21.32	202	192540	10.44 ug/mL	96
77) Butyl benzyl phthalate	22.47	149	119668	10.21 ug/mL	97
78) 3,3'-Dichlorobenzidine	23.50	252	62556	9.57 ug/mL	98
79) Benzo[a]anthracene	23.59	228	163597	10.13 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.53	149	169510	11.14 ug/mL	97
81) Chrysene	23.66	228	150305	10.10 ug/mL	100
82) Di-n-octyl phthalate	24.75	149	285182	9.97 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.46	276	138701	8.86 ug/mL	92
85) Benzo[b]fluoranthene	25.73	252	144932	9.40 ug/mL	98
86) Benzo[k]fluoranthene	25.79	252	149698	10.02 ug/mL	97
87) Benzo[a]pyrene	26.52	252	138616	9.53 ug/mL	98
88) Dibenz[a,h]anthracene	29.48	278	116930	9.09 ug/mL	97
89) Benzo[g,h,i]perylene	30.11	276	120649	9.39 ug/mL	97

(#) = qualifier out of range (m) = manual integration
K4603.D K813FULL.M Thu Aug 14 07:20:56 2008

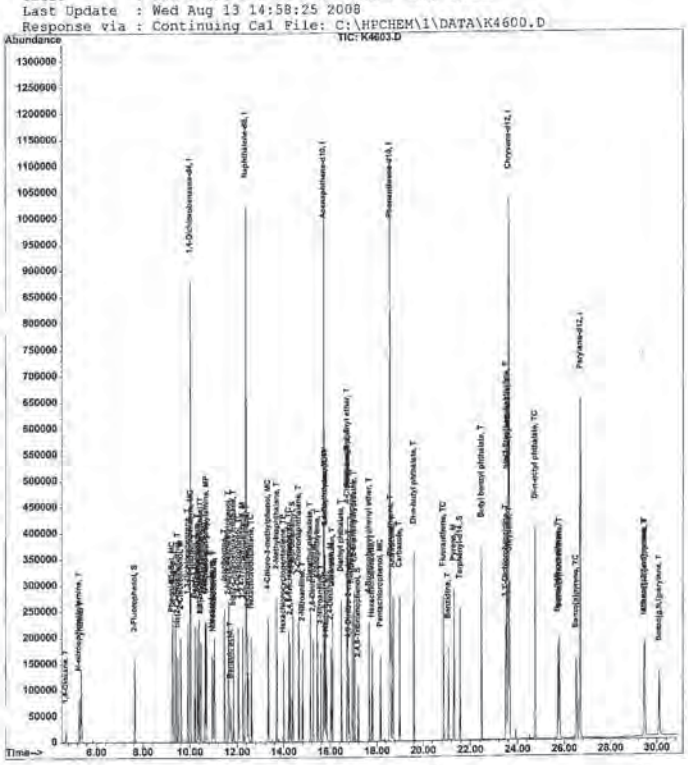
Pa 910

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4603.D
Acq On : 13 Aug 2008 13:07
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 13:39 2008

Vial: 9
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4603.D K813FULL.M Thu Aug 14 07:20:58 2008

Pa 911

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4604.D
Acq On : 13 Aug 2008 13:45
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 14:57 2008

Vial: 10
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	205350	40.00 ug/mL	0.00
24) Naphthalene-d8	12.37	136	789887	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.72	164	423186	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.56	188	782582	40.00 ug/mL	0.00
73) Chrysene-d12	23.62	240	653061	40.00 ug/mL	0.00
84) Perylene-d12	26.68	264	603444	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.66	112	33192	4.94 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 3.29%	
6) Phenol-d5	9.25	99	44899	5.03 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 3.35%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery	= 0.00%	
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	11.00	82	41107	4.88 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 4.88%	
44) 2-Fluorobiphenyl	14.39	172	61655	5.11 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 5.11%	
61) 2,4,6-Tribromophenol	17.21	330	7399	4.13 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 2.75%	
76) Terphenyl-d14	21.57	244	53658	4.96 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 4.96%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.71	88	6589	2.03 ug/mL	95
3) N-nitrosodimethylamine	5.27	74	25941	5.12 ug/mL	94
4) Pyridine	5.35	79	45662	5.28 ug/mL	99
7) Phenol	9.27	94	58852	5.43 ug/mL	97
8) Aniline	9.40	93	60320	5.27 ug/mL	99
9) bis(2-Chloroethyl)ether	9.49	93	43227	5.50 ug/mL	98
11) 2-Chlorophenol	9.62	128	37108	4.91 ug/mL	98
12) 1,3-Dichlorobenzene	9.91	146	39301	5.34 ug/mL	99
13) 1,4-Dichlorobenzene	10.04	146	39379	5.38 ug/mL	98
14) Benzyl alcohol	10.21	108	23771	4.72 ug/mL	94
16) 1,2-Dichlorobenzene	10.32	146	36898	5.21 ug/mL	100
17) 2-Methylphenol	10.38	108	33868	4.98 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.46	45	91634	5.40 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.46	45	91634	5.40 ug/mL	100
20) (3+4)-Methylphenol	10.65	108	34767	4.81 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4604.D K813FULL.M Thu Aug 14 07:21:07 2008

Pa 912

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4604.D
Acq On : 13 Aug 2008 13:45
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 14:57 2008

Vial: 10
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.65	108	34767	4.81 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.69	70	32564	5.10 ug/mL	99
23) Hexachloroethane	10.95	117	16938	4.97 ug/mL	96
26) Nitrobenzene	11.04	77	45620	5.12 ug/mL	97
27) Isophorone	11.47	82	81151	5.04 ug/mL	98
28) 2-Nitrophenol	11.63	139	21377	4.58 ug/mL	95
29) 2,4-Dimethylphenol	11.65	107	41479	5.14 ug/mL	99
30) Benzoic acid	11.71	105	12783	2.16 ug/mL	95
31) bis(2-Chloroethoxy)methane	11.85	93	50763	5.49 ug/mL	95
32) 2,4-Dichlorophenol	12.06	162	29378	4.77 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.24	180	30929	4.96 ug/mL	99
34) Naphthalene	12.41	128	93247	5.28 ug/mL	100
35) 4-Chloroaniline	12.47	127	41695	4.93 ug/mL	99
36) Hexachlorobutadiene	12.62	225	16846	4.81 ug/mL	100
37) 4-Chloro-3-methylphenol	13.34	107	36258	4.61 ug/mL	98
38) 2-Methylnaphthalene	13.71	142	58569	5.14 ug/mL	100
41) Hexachlorocyclopentadiene	14.00	237	15544	3.84 ug/mL	99
42) 2,4,6-Trichlorophenol	14.22	196	19974	4.45 ug/mL	99
43) 2,4,5-Trichlorophenol	14.28	196	19799	4.67 ug/mL	98
45) 2-Chloronaphthalene	14.64	162	58329	5.16 ug/mL	99
46) 2-Nitroaniline	14.80	65	23568	4.61 ug/mL	96
47) Dimethyl phthalate	15.13	163	72298	4.95 ug/mL	100
48) 2,6-Dinitrotoluene	15.26	165	16493	4.33 ug/mL	97
49) Acenaphthylene	15.44	152	87356	5.14 ug/mL	99
50) 3-Nitroaniline	15.58	138	18197	4.60 ug/mL	95
51) Acenaphthene	15.77	153	51858	5.51 ug/mL	94
52) 2,4-Dinitrophenol	15.78	184	5990	1.99 ug/mL#	1
53) 4-Nitrophenol	15.84	109	10436	3.74 ug/mL	93
54) 2,4-Dinitrotoluene	16.02	165	21349	4.41 ug/mL	96
55) Dibenzofuran	16.10	168	77694	5.19 ug/mL	99
56) Diethyl phthalate	16.47	149	71568	4.99 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.73	204	31070	5.10 ug/mL	99
58) Fluorene	16.75	166	60276	5.54 ug/mL	99
59) 4-Nitroaniline	16.74	138	18369	4.66 ug/mL	93
60) 1,2-Diphenylhydrazine	17.03	77	91439	5.51 ug/mL	97
63) 4,6-Dinitro-2-methylphenol	16.80	198	10625	2.94 ug/mL	91
64) n-Nitrosodiphenylamine	16.94	169	46227	5.26 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.67	248	16330	4.97 ug/mL	98
66) Hexachlorobenzene	17.80	284	17917	5.02 ug/mL	98
67) Pentachlorophenol	18.16	266	10826	3.75 ug/mL	97
68) Phenanthrene	18.60	178	85567	5.26 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4604.D K813FULL.M Thu Aug 14 07:21:08 2008

Pa 913

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4604.D
Acq On : 13 Aug 2008 13:45
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 14:57 2008

Vial: 10
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 12:28:58 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D
DataAcq Meth : K728FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.70	178	86660	5.23 ug/mL	100
70) Carbazole	18.98	167	86456	5.18 ug/mL	99
71) Di-n-butyl phthalate	19.60	149	124904	5.22 ug/mL	100
72) Fluoranthene	20.88	202	89955	5.16 ug/mL	96
74) Benzidine	21.09	184	50589	5.34 ug/mL	99
75) Pyrene	21.32	202	94538	5.09 ug/mL	95
77) Butyl benzyl phthalate	22.47	149	57387	4.86 ug/mL	96
78) 3,3'-Dichlorobenzidine	23.51	252	29848	4.53 ug/mL	98
79) Benzo[a]anthracene	23.59	228	82620	5.08 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	23.53	149	81367	5.31 ug/mL	97
81) Chrysene	23.66	228	76250	5.09 ug/mL	99
82) Di-n-octyl phthalate	24.75	149	131088	4.55 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.45	276	65827	4.18 ug/mL	92
85) Benzo[b]fluoranthene	25.72	252	71317	4.64 ug/mL	99
86) Benzo[k]fluoranthene	25.79	252	72479	4.87 ug/mL	96
87) Benzo[a]pyrene	26.51	252	65243	4.50 ug/mL	98
88) Dibenz[a,h]anthracene	29.48	278	54225	4.23 ug/mL	96
89) Benzo[g,h,i]perylene	30.10	276	57186	4.47 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K4604.D K813FULL.M Thu Aug 14 07:21:09 2008

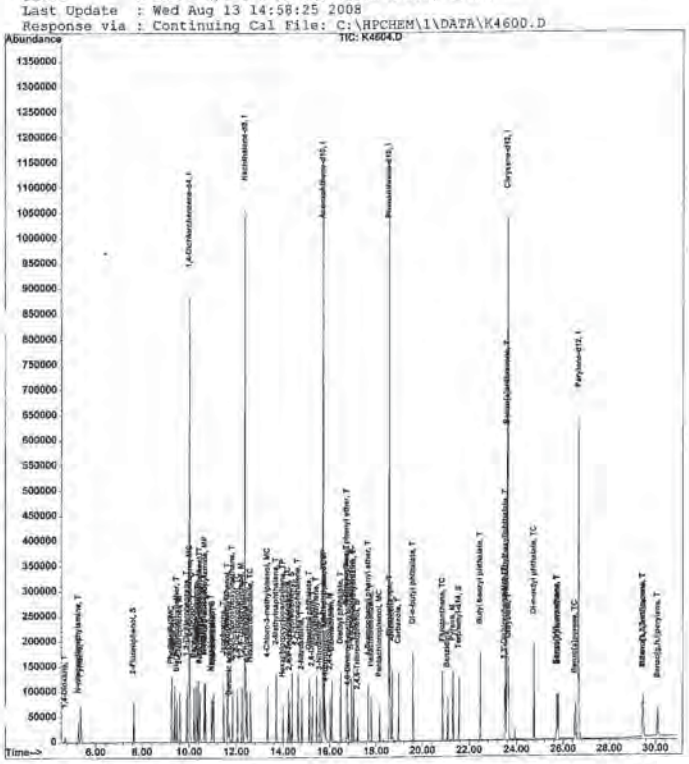
Pa 914

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4604.D
Acq On : 13 Aug 2008 13:45
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 13 14:57 2008

Vial: 10
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813FULL.RES

Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Wed Aug 13 14:58:25 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4600.D



K4604.D K813FULL.M Thu Aug 14 07:21:11 2008

Pa 915

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Calibration

Calibration Files
160 =K4607.D 120 =K4608.D 80 =K4609.D
50 =K4610.D 40 =K4611.D 20 =K4612.D

	Compound	160	120	80	50	40	20	Avg	%RSD
1) I	1,4-Dichlorobenzene-d	ISTD							
2) T	Benzaldehyde	1.075	1.136	1.206	1.250	1.269	1.292	1.226	6.67
3) T	2-Octanol							0.000#	-1.00
4) T	Acetophenone	1.767	1.848	1.930	1.976	1.976	1.986	1.924	4.16
5) I	Naphthalene-d8	ISTD							
6) T	Caprolactam	0.185	0.191	0.191	0.191	0.185	0.184	0.182	7.36
7) I	Acenaphthene-d10	ISTD							
8) T	1,1'-Biphenyl	0.944	1.023	1.096	1.162	1.191	1.233	1.134	9.20
9)	1-Phenyl-1-[4-methy	0.592	0.644	0.670	0.697	0.701	0.705	0.672	5.76
10)	1-Phenyl-1-[2,4-dim	0.684	0.750	0.801	0.841	0.855	0.879	0.812	8.14
11) I	Phenanthrene-d10	ISTD							
12) T	Atrazine	0.168	0.173	0.175	0.177	0.175	0.172	0.170	4.88
13) T	2-Ethylanthraquinon							0.000#	-1.00
14) I	Chrysene-d12	ISTD							
15) I	Perylene-d12	ISTD							

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813OLM.M Thu Aug 14 07:43:05 2008

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:34:56 2008
Response via : Continuing Calibration

Calibration Files
10 =K4613.D 5. =K4614.D =
= = =

	Compound	10	5.	Avg	%RSD
1) I	1,4-Dichlorobenzene-d	ISTD			
2) T	Benzaldehyde	1.308	1.271		
3) T	2-Octanol				
4) T	Acetophenone	1.994	1.917		
5) I	Naphthalene-d8	ISTD			
6) T	Caprolactam	0.175	0.151		
7) I	Acenaphthene-d10	ISTD			
8) T	1,1'-Biphenyl	1.228	1.197		
9)	1-Phenyl-1-[4-methy	0.698	0.670		
10)	1-Phenyl-1-[2,4-dim	0.868	0.822		
11) I	Phenanthrene-d10	ISTD			
12) T	Atrazine	0.169	0.151		
13) T	2-Ethylanthraquinon				
14) I	Chrysene-d12	ISTD			
15) I	Perylene-d12	ISTD			

(#) = Out of Range ### Number of calibration levels exceeded format ###
K813OLM.M Thu Aug 14 07:43:50 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4607.D Vial: 13
Acq On : 13 Aug 2008 15:40 Operator:
Sample : SSTD160PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008 Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:34:55 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	199102	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	770597	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	413602	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.57	188	755872	40.00 ug/mL	0.00
14) Chrysene-d12	23.62	240	635675	40.00 ug/mL	0.00
15) Perylene-d12	26.68	264	575575	40.00 ug/mL	0.00

System Monitoring Compounds

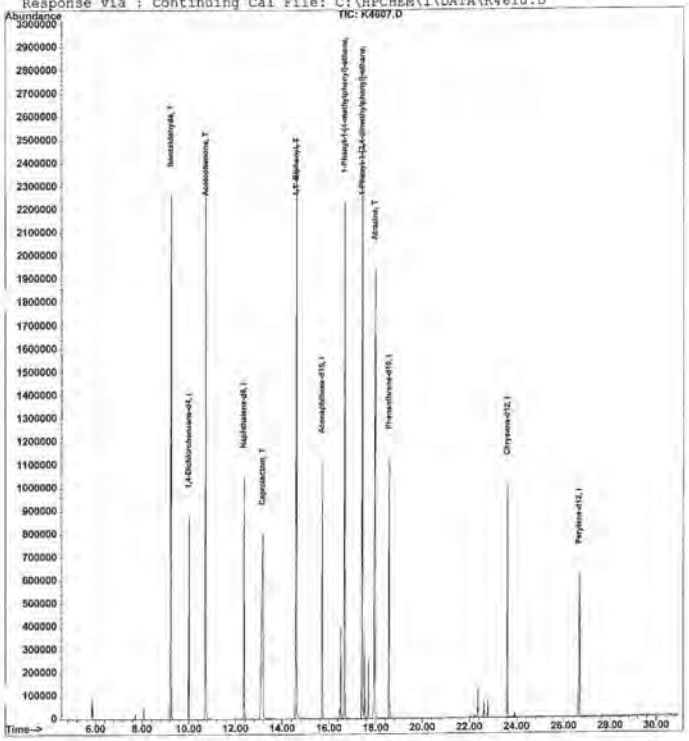
Target Compounds					Qvalue
2) Benzaldehyde	9.25	77	856054	137.56 ug/mL	95
4) Acetophenone	10.74	105	1407235	143.08 ug/mL	97
6) Caprolactam	13.16	55	570859	154.90 ug/mL	98
8) 1,1'-Biphenyl	14.60	154	1562732	130.00 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.69	181	979198	135.86 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.44	195	1132354	130.19 ug/mL	98
12) Atrazine	17.98	200	507583	151.43 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4607.D K813OLM.M Thu Aug 14 07:57:18 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4607.D Vial: 13
Acq On : 13 Aug 2008 15:40 Operator:
Sample : SSTD160PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008 Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4607.D K813OLM.M Thu Aug 14 07:57:19 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4608.D
Acq On : 13 Aug 2008 16:18
Sample : SSTD120PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 14
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:27:24 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	207302	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	791171	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	422858	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.57	188	777586	40.00 ug/mL	0.00
14) Chrysene-d12	23.62	240	648317	40.00 ug/mL	0.00
15) Perylene-d12	26.68	264	586340	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.24	77	706441	109.03 ug/mL	97
4) Acetophenone	10.73	105	1149021	112.20 ug/mL	98
6) Caprolactam	13.15	55	452363	119.56 ug/mL	99
8) 1,1'-Biphenyl	14.60	154	1297684	105.61 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.68	181	816597	110.84 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.43	195	951025	106.97 ug/mL	99
12) Atrazine	17.97	200	403319	116.96 ug/mL	99

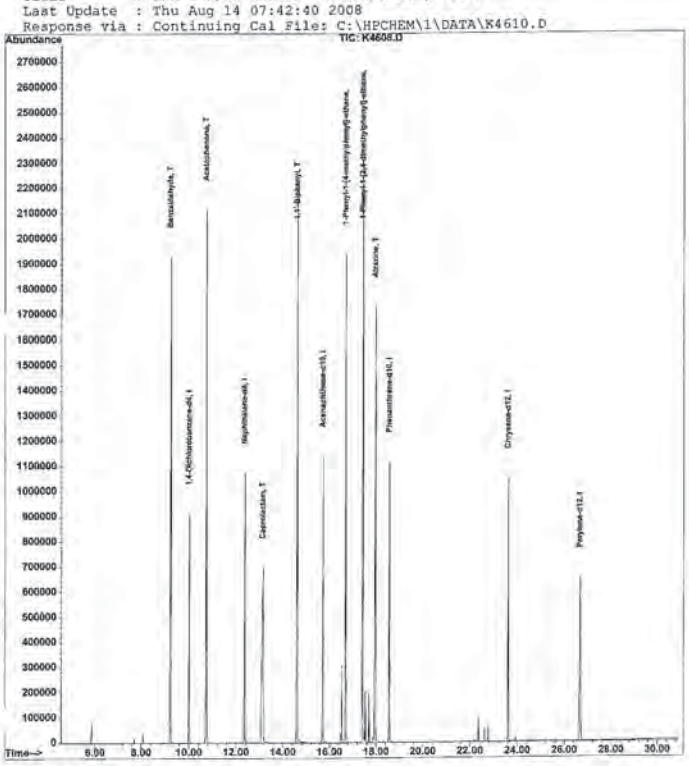
(#) = qualifier out of range (m) = manual integration
K4608.D K8130LM.M Thu Aug 14 07:57:23 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4608.D
Acq On : 13 Aug 2008 16:18
Sample : SSTD120PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 14
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4608.D K8130LM.M Thu Aug 14 07:57:23 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4609.D
Acq On : 13 Aug 2008 16:57
Sample : SSTD080PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 15
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:27:24 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	196439	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	757531	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	413527	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.56	188	751274	40.00 ug/mL	0.00
14) Chrysene-d12	23.61	240	628288	40.00 ug/mL	0.00
15) Perylene-d12	26.68	264	566416	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.24	77	473764	77.16 ug/mL	98
4) Acetophenone	10.73	105	758416	78.16 ug/mL	99
6) Caprolactam	13.12	55	289293	79.85 ug/mL	100
8) 1,1'-Biphenyl	14.59	154	906845	75.47 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.68	181	554235	76.93 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.43	195	662776	78.23 ug/mL	99
12) Atrazine	17.96	200	263134	78.98 ug/mL	100

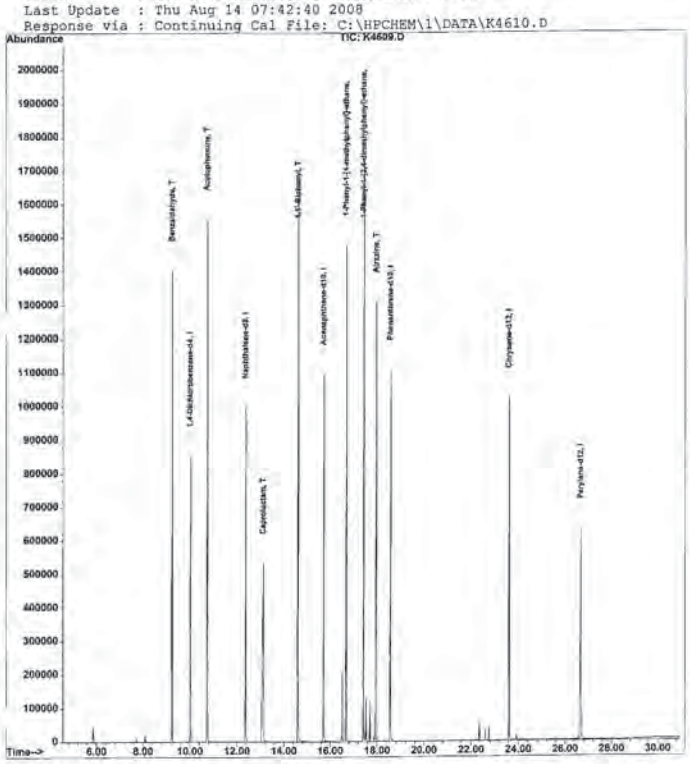
(#) = qualifier out of range (m) = manual integration
K4609.D K8130LM.M Thu Aug 14 07:57:27 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4609.D
Acq On : 13 Aug 2008 16:57
Sample : SSTD080PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 15
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4609.D K8130LM.M Thu Aug 14 07:57:28 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4610.D
Acq On : 13 Aug 2008 17:35
Sample : SSTD050PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:32 2008

Vial: 16
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:32:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	222785	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	852833	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	462683	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.56	188	838909	40.00 ug/mL	0.00
14) Chrysene-d12	23.62	240	698335	40.00 ug/mL	0.00
15) Perylene-d12	26.68	264	637419	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.23	77	348159	50.00 ug/mL	100
4) Acetophenone	10.72	105	550264	50.00 ug/mL	100
6) Caprolactam	13.11	55	203930	50.00 ug/mL	100
8) 1,1'-Biphenyl	14.59	154	672254	50.00 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.67	181	403061	50.00 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.42	195	486400	50.00 ug/mL	100
12) Atrazine	17.95	200	186007	50.00 ug/mL	100

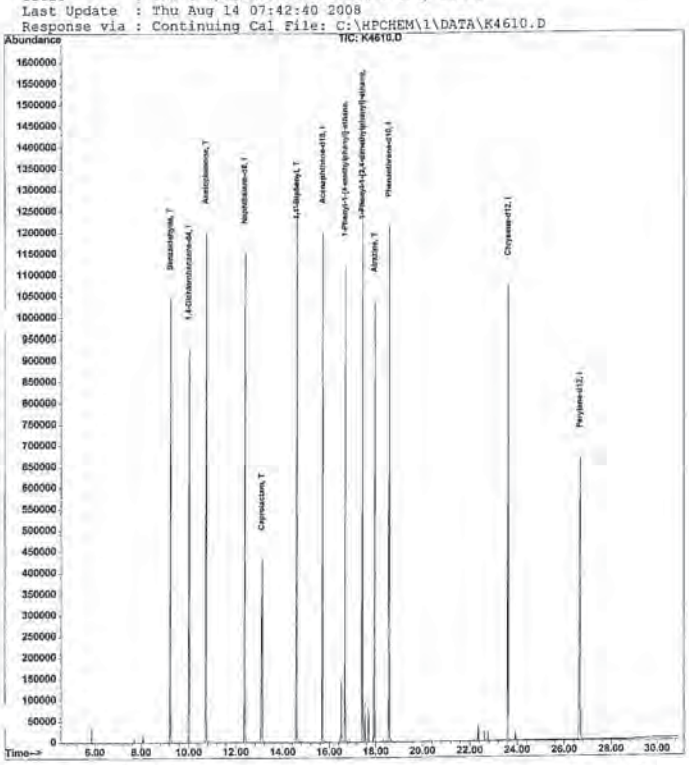
(#) = qualifier out of range (m) = manual integration
K4610.D K8130LM.M Thu Aug 14 07:57:32 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4610.D
Acq On : 13 Aug 2008 17:35
Sample : SSTD050PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:32 2008

Vial: 16
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4610.D K8130LM.M Thu Aug 14 07:57:33 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4611.D
Acq On : 13 Aug 2008 18:13
Sample : SSTD040PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 17
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:27:24 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	203214	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	777151	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	416142	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.56	188	756634	40.00 ug/mL	0.00
14) Chrysene-d12	23.61	240	630602	40.00 ug/mL	0.00
15) Perylene-d12	26.67	264	561884	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.23	77	257980	40.62 ug/mL	99
4) Acetophenone	10.72	105	401529	40.00 ug/mL	100
6) Caprolactam	13.10	55	143784	38.69 ug/mL	100
8) 1,1'-Biphenyl	14.59	154	495809	41.00 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.67	181	291726	40.24 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.42	195	355671	40.65 ug/mL	100
12) Atrazine	17.95	200	132400	39.46 ug/mL	100

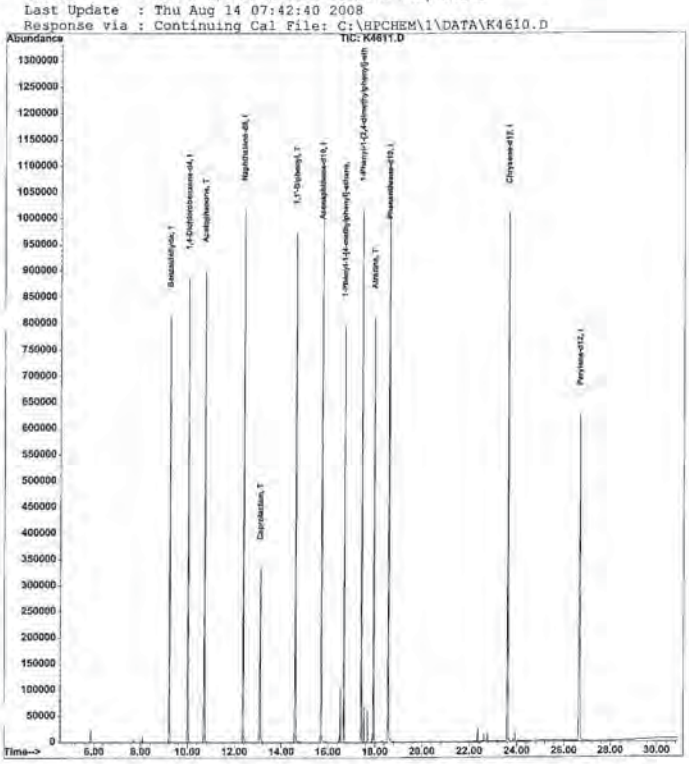
(#) = qualifier out of range (m) = manual integration
K4611.D K8130LM.M Thu Aug 14 07:57:37 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4611.D
Acq On : 13 Aug 2008 18:13
Sample : SSTD040PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 17
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4611.D K8130LM.M Thu Aug 14 07:57:37 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4612.D
Acq On : 13 Aug 2008 18:52
Sample : SSTD020PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 18
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:27:24 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	242389	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	925565	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	494627	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.56	188	903303	40.00 ug/mL	0.00
14) Chrysene-d12	23.62	240	748782	40.00 ug/mL	0.00
15) Perylene-d12	26.68	264	686519	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.23	77	156565	20.67 ug/mL	99
4) Acetophenone	10.72	105	240716	20.10 ug/mL	97
6) Caprolactam	13.08	55	85218	19.25 ug/mL	99
8) 1,1'-Biphenyl	14.59	154	304888	21.21 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.67	181	174410	20.24 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.42	195	217363	20.90 ug/mL	99
12) Atrazine	17.94	200	77907	19.45 ug/mL	99

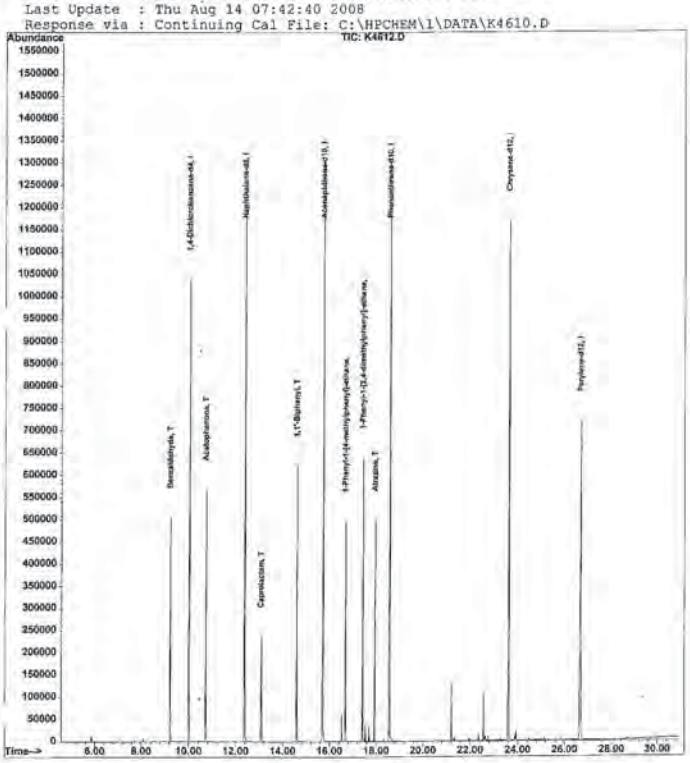
(#) = qualifier out of range (m) = manual integration
K4612.D K813OLM.M Thu Aug 14 07:57:42 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4612.D
Acq On : 13 Aug 2008 18:52
Sample : SSTD020PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 18
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4612.D K813OLM.M Thu Aug 14 07:57:42 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4613.D
Acq On : 13 Aug 2008 19:30
Sample : SSTD010PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 19
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:27:24 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	237009	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	909646	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	493345	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.56	188	905782	40.00 ug/mL	0.00
14) Chrysene-d12	23.61	240	749281	40.00 ug/mL	0.00
15) Perylene-d12	26.68	264	677016	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.22	77	77488	10.46 ug/mL	96
4) Acetophenone	10.71	105	118153	10.09 ug/mL	96
6) Caprolactam	13.07	55	39838	9.16 ug/mL	98
8) 1,1'-Biphenyl	14.59	154	151417	10.56 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.67	181	86108	10.02 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.42	195	107016	10.32 ug/mL	99
12) Atrazine	17.93	200	38311	9.54 ug/mL	99

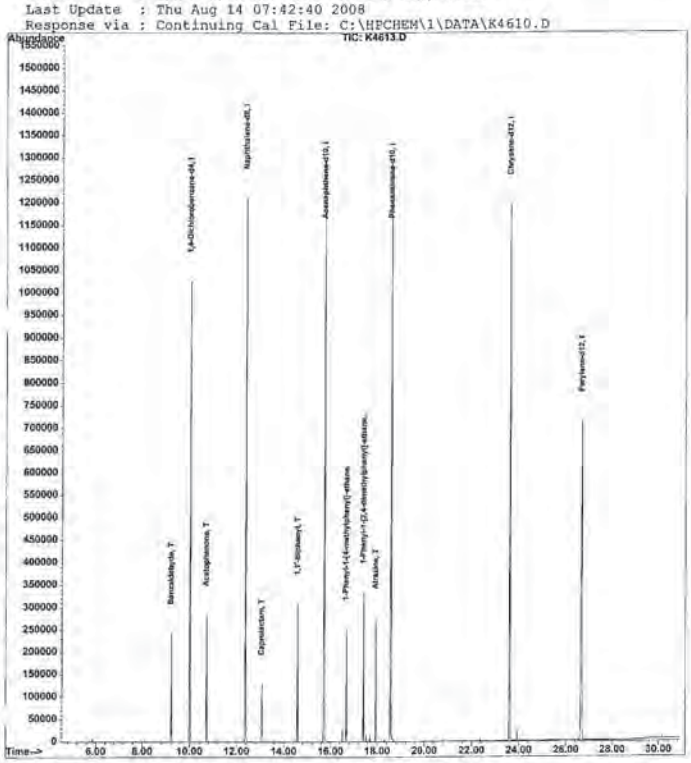
(#) = qualifier out of range (m) = manual integration
K4613.D K813OLM.M Thu Aug 14 07:57:46 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4613.D
Acq On : 13 Aug 2008 19:30
Sample : SSTD010PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008

Vial: 19
Operator:
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4613.D K813OLM.M Thu Aug 14 07:57:47 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4614.D Vial: 20
Acq On : 13 Aug 2008 20:09 Operator:
Sample : SSTD005PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008 Quant Results File: K8130LM.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:27:24 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D
DataAcq Meth : K728FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.01	152	200626	40.00 ug/mL	0.00
5) Naphthalene-d8	12.37	136	770432	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.71	164	415952	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.56	188	756073	40.00 ug/mL	0.00
14) Chrysene-d12	23.61	240	619762	40.00 ug/mL	0.00
15) Perylene-d12	26.67	264	549538	40.00 ug/mL	0.00

System Monitoring Compounds

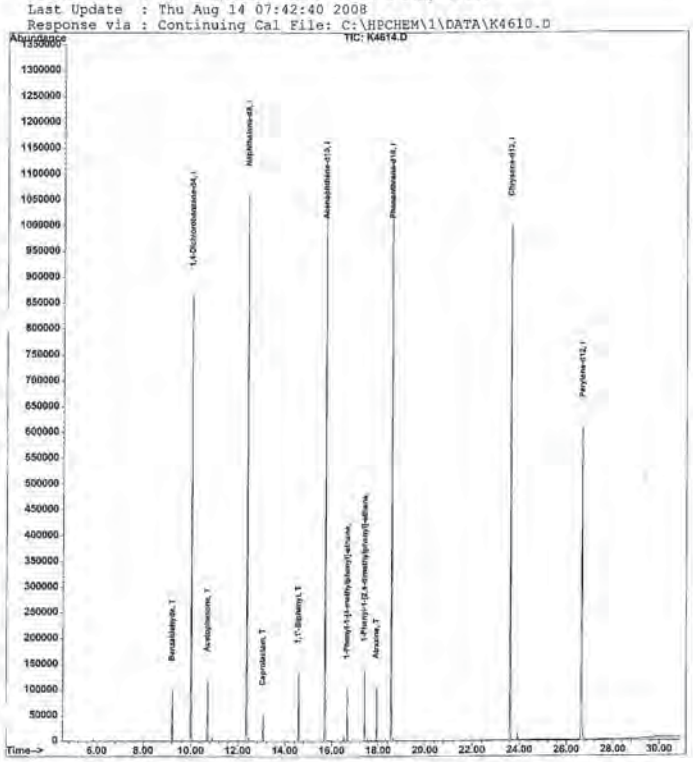
Target Compounds					Qvalue
2) Benzaldehyde	9.22	77	31863	5.08 ug/mL	97
4) Acetophenone	10.71	105	48072	4.85 ug/mL	95
6) Caprolactam	13.06	55	14573	3.96 ug/mL	97
8) 1,1'-Biphenyl	14.58	154	62237	5.15 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.67	181	34830	4.81 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.41	195	42739	4.89 ug/mL	99
12) Atrazine	17.93	200	14280	4.26 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4614.D K8130LM.M Thu Aug 14 07:57:51 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4614.D Vial: 20
Acq On : 13 Aug 2008 20:09 Operator:
Sample : SSTD005PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 14 7:35 2008 Quant Results File: K8130LM.RES

Method : C:\HPCHEM\1\METHODS\K8130LM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 14 07:42:40 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K4610.D



K4614.D K8130LM.M Thu Aug 14 07:57:52 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K4725.D Vial: 2
Acq On : 21 Aug 2008 9:11 Operator: MEG
Sample : CC082108A6 Inst : #6MS40
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	0.00
2	S	2-Fluorophenol	1.276	1.298	-1.7	119	0.00
3	S	Phenol-d5	1.685	1.772	-5.2	122	0.00
4	MC	Phenol	2.072	2.214	-6.9	125	0.00
5	T	bis(2-Chloroethyl)ether	1.517	1.604	-5.7	125	0.00
6	M	2-Chlorophenol	1.433	1.418	1.0	115	0.00
7	T	2-Methylphenol	1.285	1.263	1.7	114	0.00
8	T	2,2'-oxybis(1-chloropropane	3.231	3.368	-4.2	122	0.00
9	T	bis(2-Chloroisopropyl)ether	3.231	3.368	-4.2	122	0.00
10	T	4-Methylphenol	1.373	1.342	2.3	114	0.00
11	MP	N-Nitroso-di-n-propylamine	1.217	1.288	-5.8	124	0.00
12	T	Hexachloroethane	0.641	0.634	1.1	114	0.00
	I	Naphthalene-d8	1.000	1.000	0.0	116	0.00
14	S	Nitrobenzene-d5	0.413	0.446	-8.0	121	0.00
15	T	Nitrobenzene	0.437	0.477	-9.2	122	0.00
16	T	Isophorone	0.794	0.888	-11.8	126	0.00
17	TC	2-Nitrophenol	0.223	0.236	-5.8	116	0.00
18	T	2,4-Dimethylphenol	0.399	0.366	8.3	104	0.00
19	T	bis(2-Chloroethoxy)methane	0.460	0.497	-8.0	123	0.00
20	TC	2,4-Dichlorophenol	0.297	0.310	-4.4	115	0.00
21	T	Naphthalene	0.858	0.877	-2.2	114	0.00
22	T	4-Chloroaniline	0.409	0.414	-1.2	112	0.00
23	TC	Hexachlorobutadiene	0.171	0.167	2.3	109	0.00
24	MC	4-Chloro-3-methylphenol	0.376	0.384	-2.1	112	0.00
25	T	2-Methylnaphthalene	0.554	0.572	-3.2	115	0.00
26	I	Acenaphthene-d10	1.000	1.000	0.0	115	0.00
27	TP	Hexachlorocyclopentadiene	0.368	0.347	5.7	104	-0.01
28	TC	2,4,6-Trichlorophenol	0.406	0.412	-1.5	111	0.00
29	T	2,4,5-Trichlorophenol	0.386	0.388	-0.5	111	0.00
30	S	2-Fluorobiphenyl	1.105	1.141	-3.3	115	0.00
31	T	2-Chloronaphthalene	1.037	1.075	-3.7	115	0.00
32	T	2-Nitroaniline	0.463	0.481	-3.9	114	0.00
33	T	Dimethyl phthalate	1.352	1.384	-2.4	115	0.00
34	T	2,6-Dinitrotoluene	0.343	0.352	-2.6	112	0.00
35	T	Acenaphthylene	1.561	1.617	-3.6	115	0.00
36	T	3-Nitroaniline	0.361	0.368	-1.9	113	0.00
37	TCM	Acenaphthene	0.881	0.885	-0.5	114	0.00
	TP	2,4-Dinitrophenol	0.275	0.268	2.5	108	0.00
39	MP	4-Nitrophenol	0.259	0.232	10.4	101	0.00

(#) = Out of Range
K4725.D K8130L42.M Fri Aug 22 09:55:14 2008

5/22/2009

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K4725.D Vial: 2
Acq On : 21 Aug 2008 9:11 Operator: MEG
Sample : CC082108A6 Inst : #6MS40
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	0.434	0.434	0.0	109	0.00
41	T	Dibenzofuran	1.380	1.381	-0.1	112	0.00
42	T	Diethyl phthalate	1.315	1.320	-0.4	112	0.00
43	T	4-Chlorophenyl phenyl ether	0.557	0.547	1.8	109	0.00
44	T	Fluorene	1.015	1.010	0.5	113	0.00
45	T	4-Nitroaniline	0.358	0.366	-2.2	113	0.00
46	S	2,4,6-Tribromophenol	0.163	0.173	-6.1	117	0.00
47	I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00
48	T	4,6-Dinitro-2-methylphenol	0.173	0.178	-2.9	105	0.00
49	TC	n-Nitrosodiphenylamine	0.439	0.455	-3.6	111	0.00
50	T	4-Bromophenyl phenyl ether	0.166	0.167	-0.6	109	0.00
51	T	Hexachlorobenzene	0.179	0.185	-3.4	111	0.00
	MC	Pentachlorophenol	0.143	0.145	-1.4	107	0.00
53	T	Phenanthrene	0.812	0.837	-3.1	110	0.00
54	T	Anthracene	0.823	0.850	-3.3	110	0.00
55	T	Carbazole	0.828	0.878	-6.0	113	0.00
56	T	Di-n-butyl phthalate	1.193	1.236	-3.6	110	0.00
57	TC	Fluoranthene	0.874	0.888	-1.6	109	0.00
58	I	Chrysene-d12	1.000	1.000	0.0	107	0.00
59	M	Pyrene	1.128	1.166	-3.4	110	0.00
60	S	Terphenyl-d14	0.646	0.663	-2.6	107	0.00
61	T	Butyl benzyl phthalate	0.704	0.744	-5.7	110	0.00
62	T	3,3'-Dichlorobenzidine	0.373	0.366	1.9	97	0.00
63	T	Benzo[a]anthracene	0.986	0.991	-0.5	106	0.00
64	T	bis(2-Ethylhexyl)phthalate	0.901	0.914	-1.4	104	0.00
65	T	Chrysene	0.903	0.912	-1.0	106	0.00
66	TC	Di-n-octyl phthalate	1.693	1.797	-6.1	109	0.00
67	T	Indeno[1,2,3-cd]pyrene	0.900	0.997	-10.8	111	0.00
68	I	Perylene-d12	1.000	1.000	0.0	109	0.00
69	T	Benzo[b]fluoranthene	1.027	1.007	1.9	107	0.00
70	T	Benzo[k]fluoranthene	0.941	0.965	-2.6	106	0.00
71	TC	Benzo[a]pyrene	0.938	0.945	-0.7	107	0.00
72	T	Dibenz[a,h]anthracene	0.798	0.862	-8.0	110	0.00
73	T	Benzo[g,h,i]perylene	0.804	0.860	-7.0	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K4725.D K8130L42.M Fri Aug 22 09:55:17 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K4725.D — Vial: 2
Acq On : 21 Aug 2008 9:11 — Operator: MEG
Sample : CC082108A6 — Inst : #6MS40
Misc : CCV ,8270S_OLM42, — Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	120	0.00
2	S	2-Fluorophenol	50.000	50.855	-1.7	119	0.00
3	S	Phenol-d5	50.000	52.600	-5.2	122	0.00
4	MC	Phenol	50.000	53.439	-6.9	125	0.00
5	T	bis(2-Chloroethyl)ether	50.000	52.882	-5.8	125	0.00
6	M	2-Chlorophenol	50.000	49.489	1.0	115	0.00
7	T	2-Methylphenol	50.000	49.121	1.8	114	0.00
8	T	2,2'-oxybis(1-chloropropane	50.000	52.123	-4.2	122	0.00
9	T	bis(2-Chloroisopropyl)ether	50.000	52.123	-4.2	122	0.00
10	T	4-Methylphenol	50.000	48.883	2.2	114	0.00
11	MP	N-Nitroso-di-n-propylamine	50.000	52.911	-5.8	124	0.00
12	T	Hexachloroethane	50.000	49.454	1.1	114	0.00
	I	Naphthalene-d8	40.000	40.000	0.0	116	0.00
14	S	Nitrobenzene-d5	50.000	53.997	-8.0	121	0.00
15	T	Nitrobenzene	50.000	54.603	-9.2	122	0.00
16	T	Isophorone	50.000	55.881	-11.8	126	0.00
17	TC	2-Nitrophenol	50.000	53.064	-6.1	116	0.00
18	T	2,4-Dimethylphenol	50.000	45.855	8.3	104	0.00
19	T	bis(2-Chloroethoxy)methane	50.000	54.017	-8.0	123	0.00
20	TC	2,4-Dichlorophenol	50.000	52.178	-4.4	115	0.00
21	T	Naphthalene	50.000	51.070	-2.1	114	0.00
22	T	4-Chloroaniline	50.000	50.629	-1.3	112	0.00
23	TC	Hexachlorobutadiene	50.000	48.577	2.8	109	0.00
24	MC	4-Chloro-3-methylphenol	50.000	51.106	-2.2	112	0.00
25	T	2-Methylnaphthalene	50.000	51.566	-3.1	115	0.00
26	I	Acenaphthene-d10	40.000	40.000	0.0	115	0.00
27	TP	Hexachlorocyclopentadiene	50.000	47.211	5.6	104	-0.01
28	TC	2,4,6-Trichlorophenol	50.000	50.720	-1.4	111	0.00
29	T	2,4,5-Trichlorophenol	50.000	50.340	-0.7	111	0.00
30	S	2-Fluorobiphenyl	50.000	51.619	-3.2	115	0.00
31	T	2-Chloronaphthalene	50.000	51.832	-3.7	115	0.00
32	T	2-Nitroaniline	50.000	51.974	-3.9	114	0.00
33	T	Dimethyl phthalate	50.000	51.183	-2.4	115	0.00
34	T	2,6-Dinitrotoluene	50.000	51.348	-2.7	112	0.00
35	T	Acenaphthylene	50.000	51.779	-3.6	115	0.00
36	T	3-Nitroaniline	50.000	50.950	-1.9	113	0.00
37	TCM	Acenaphthene	50.000	50.222	-0.4	114	0.00
	TP	2,4-Dinitrophenol	50.000	48.646	2.7	108	0.00
39	MP	4-Nitrophenol	50.000	44.820	10.4	101	0.00

(#) = Out of Range
K4725.D K813OL42.M Fri Aug 22 09:55:26 2008 Pa 936

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K4725.D — Vial: 2
Acq On : 21 Aug 2008 9:11 — Operator: MEG
Sample : CC082108A6 — Inst : #6MS40
Misc : CCV ,8270S_OLM42, — Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	50.000	50.035	-0.1	109	0.00
41	T	Dibenzofuran	50.000	50.019	-0.0	112	0.00
42	T	Diethyl phthalate	50.000	50.185	-0.4	112	0.00
43	T	4-Chlorophenyl phenyl ether	50.000	49.050	1.9	109	0.00
44	T	Fluorene	50.000	49.778	0.4	113	0.00
45	T	4-Nitroaniline	50.000	51.088	-2.2	113	0.00
46	S	2,4,6-Tribromophenol	50.000	53.087	-6.2	117	0.00
47	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00
48	T	4,6-Dinitro-2-methylphenol	50.000	51.338	-2.7	105	0.00
49	TC	n-Nitrosodiphenylamine	50.000	51.810	-3.6	111	0.00
50	T	4-Bromophenyl phenyl ether	50.000	50.346	-0.7	109	0.00
51	T	Hexachlorobenzene	50.000	51.607	-3.2	111	0.00
	MC	Pentachlorophenol	50.000	50.458	-0.9	107	0.00
53	T	Phenanthrene	50.000	51.534	-3.1	110	0.00
54	T	Anthracene	50.000	51.622	-3.2	110	0.00
55	T	Carbazole	50.000	53.032	-6.1	113	0.00
56	T	Di-n-butyl phthalate	50.000	51.780	-3.6	110	0.00
57	TC	Fluoranthene	50.000	50.793	-1.6	109	0.00
58	I	Chrysene-d12	40.000	40.000	0.0	107	0.00
59	M	Pyrene	50.000	51.699	-3.4	110	0.00
60	S	Terphenyl-d14	50.000	51.295	-2.6	107	0.00
61	T	Butyl benzyl phthalate	50.000	52.848	-5.7	110	0.00
62	T	3,3'-Dichlorobenzidine	50.000	48.985	2.0	97	0.00
63	T	Benzo[a]anthracene	50.000	50.245	-0.5	106	0.00
64	T	bis(2-Ethylhexyl)phthalate	50.000	49.158	1.7	104	0.00
65	T	Chrysene	50.000	50.529	-1.1	106	0.00
66	TC	Di-n-octyl phthalate	50.000	53.073	-6.1	109	0.00
67	T	Indeno[1,2,3-cd]pyrene	50.000	55.423	-10.8	111	0.00
68	I	Perylene-d12	40.000	40.000	0.0	109	0.00
69	T	Benzo[b]fluoranthene	50.000	49.024	2.0	107	0.00
70	T	Benzo[k]fluoranthene	50.000	51.282	-2.6	106	0.00
71	TC	Benzo[a]pyrene	50.000	50.364	-0.7	107	0.00
72	T	Dibenz[a,h]anthracene	50.000	54.045	-8.1	110	0.00
73	T	Benzo[g,h,i]perylene	50.000	53.474	-6.9	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K4725.D K813OL42.M Fri Aug 22 09:55:27 2008 Pa 937

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4725.D — Vial: 2
Acq On : 21 Aug 2008 9:11 — Operator: MEG
Sample : CC082108A6 — Inst : #6MS40
Misc : CCV ,8270S_OLM42, — Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:54 2008 — Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:57 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	266914	40.00 ug/mL	0.00
13) Naphthalene-d8	12.32	136	995096	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	530726	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.52	188	966144	40.00 ug/mL	0.00
58) Chrysene-d12	23.58	240	763418	40.00 ug/mL	0.00
68) Perylene-d12	26.62	264	743587	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.61	112	433145	50.85 ug/mL	0.00
Spiked Amount 150.000			Recovery =	33.90%	
3) Phenol-d5	9.22	99	591371	52.60 ug/mL	0.00
Spiked Amount 150.000			Recovery =	35.07%	
14) Nitrobenzene-d5	10.97	82	555053	54.00 ug/mL	0.00
Spiked Amount 100.000			Recovery =	54.00%	
30) 2-Fluorobiphenyl	14.34	172	756780	51.62 ug/mL	0.00
Spiked Amount 100.000			Recovery =	51.62%	
46) 2,4,6-Tribromophenol	17.17	330	114531	53.09 ug/mL	0.00
Spiked Amount 150.000			Recovery =	35.39%	
60) Terphenyl-d14	21.53	244	632374	51.29 ug/mL	0.00
Spiked Amount 100.000			Recovery =	51.29%	
Target Compounds					Qvalue
4) Phenol	9.25	94	738792	53.44 ug/mL	96
5) bis(2-Chloroethyl)ether	9.45	93	535246	52.88 ug/mL	98
6) 2-Chlorophenol	9.57	128	473195	49.49 ug/mL	98
7) 2-Methylphenol	10.34	108	421301	49.12 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	10.42	45	1123813	52.12 ug/mL	99
9) bis(2-Chloroisopropyl)ethe	10.42	45	1123813	52.12 ug/mL	99
10) 4-Methylphenol	10.63	108	447719	48.88 ug/mL	98
11) N-Nitroso-di-n-propylamine	10.67	70	429715	52.91 ug/mL	96
12) Hexachloroethane	10.89	117	211662	49.45 ug/mL	98
15) Nitrobenzene	11.00	77	592974	54.60 ug/mL	95
16) Isophorone	11.44	82	1104436	55.88 ug/mL	97
17) 2-Nitrophenol	11.59	139	293848	53.06 ug/mL	97
18) 2,4-Dimethylphenol	11.62	107	455361	45.85 ug/mL	100
19) bis(2-Chloroethoxy)methane	11.81	93	617773	54.02 ug/mL	98
20) 2,4-Dichlorophenol	12.03	162	385816	52.18 ug/mL	100
21) Naphthalene	12.36	128	1090482	51.07 ug/mL	100
22) 4-Chloroaniline	12.43	127	515316	50.63 ug/mL	99
23) Hexachlorobutadiene	12.57	225	207183	48.58 ug/mL	100
24) 4-Chloro-3-methylphenol	13.30	107	478144	51.11 ug/mL	97

(#) = qualifier out of range (m) = manual integration
K4725.D K813OL42.M Fri Aug 22 09:55:35 2008 Pa 938

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4725.D — Vial: 2
Acq On : 21 Aug 2008 9:11 — Operator: MEG
Sample : CC082108A6 — Inst : #6MS40
Misc : CCV ,8270S_OLM42, — Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:54 2008 — Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:57 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.66	142	711046	51.57 ug/mL	100
27) Hexachlorocyclopentadiene	13.94	237	230389	47.21 ug/mL	100
28) 2,4,6-Trichlorophenol	14.17	196	273063	50.72 ug/mL	99
29) 2,4,5-Trichlorophenol	14.24	196	257537	50.34 ug/mL	100
31) 2-Chloronaphthalene	14.59	162	713357	51.83 ug/mL	99
32) 2-Nitroaniline	14.77	65	319327	51.97 ug/mL	98
33) Dimethyl phthalate	15.10	163	918164	51.18 ug/mL	100
34) 2,6-Dinitrotoluene	15.23	165	233381	51.35 ug/mL	98
35) Acenaphthylene	15.39	152	1072717	51.78 ug/mL	100
36) 3-Nitroaniline	15.55	138	243957	50.95 ug/mL	97
37) Acenaphthene	15.73	153	587310	50.22 ug/mL	99
38) 2,4-Dinitrophenol	15.75	184	177602	48.65 ug/mL	93
39) 4-Nitrophenol	15.82	109	154044	44.82 ug/mL	91
40) 2,4-Dinitrotoluene	16.00	165	288140	50.04 ug/mL	97
41) Dibenzofuran	16.05	168	915930	50.02 ug/mL	98
42) Diethyl phthalate	16.44	149	875511	50.19 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.68	204	362804	49.05 ug/mL	99
44) Fluorene	16.71	166	670327	49.78 ug/mL	99
45) 4-Nitroaniline	16.74	138	242672	51.09 ug/mL	97
48) 4,6-Dinitro-2-methylphenol	16.79	198	215023	51.34 ug/mL	99
49) n-Nitrosodiphenylamine	16.91	169	549242	51.81 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.63	248	201985	50.35 ug/mL	100
51) Hexachlorobenzene	17.76	284	223109	51.61 ug/mL	99
52) Pentachlorophenol	18.12	266	174864	50.46 ug/mL	100
53) Phenanthrene	18.56	178	1011305	51.53 ug/mL	99
54) Anthracene	18.66	178	1025927	51.62 ug/mL	100
55) Carbazole	18.95	167	1060256	53.03 ug/mL	100
56) Di-n-butyl phthalate	19.56	149	1492310	51.78 ug/mL	100
57) Fluoranthene	20.84	202	1072558	50.79 ug/mL	98
59) Pyrene	21.28	202	1112983	51.70 ug/mL	98
61) Butyl benzyl phthalate	22.43	149	710035	52.85 ug/mL	97
62) 3,3'-Dichlorobenzidine	23.47	252	349133	48.99 ug/mL	100
63) Benzo[a]anthracene	23.55	228	945551	50.24 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.49	149	872203	49.16 ug/mL	99
65) Chrysene	23.63	228	870518	50.53 ug/mL	99
66) Di-n-octyl phthalate	24.70	149	1715005	53.07 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.42	276	951862	55.42 ug/mL	99
69) Benzo[b]fluoranthene	25.69	252	935991	49.02 ug/mL	99
70) Benzo[k]fluoranthene	25.76	252	896656	51.28 ug/mL	99
71) Benzo[a]pyrene	26.48	252	878404	50.36 ug/mL	100
72) Dibenz[a,h]anthracene	29.45	278	801360	54.05 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4725.D K813OL42.M Fri Aug 22 09:55:36 2008 Pa 939

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4725.D
Acq On : 21 Aug 2008 9:11
Sample : CC082108A6
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:54 2008

Vial: 2
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:57 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.09	276	799277	53.47 ug/mL	100

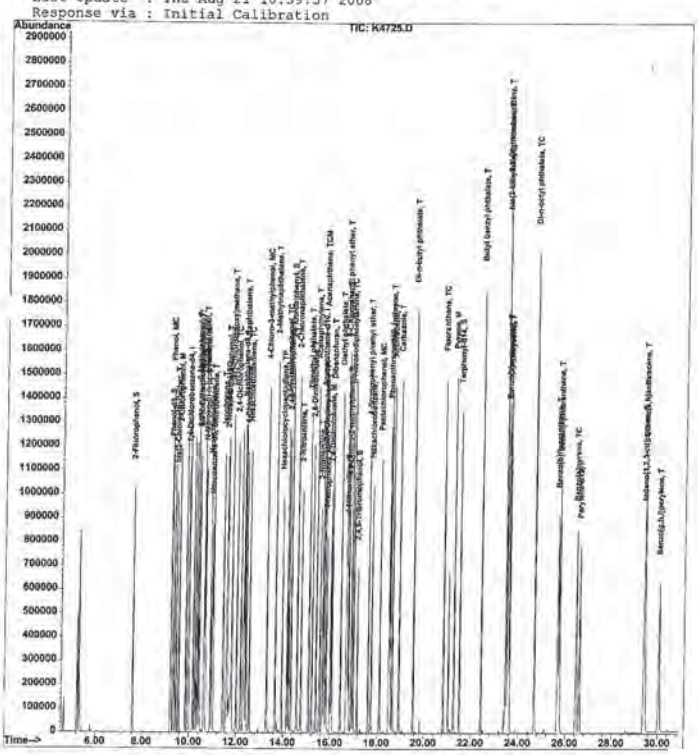
(#) = qualifier out of range (m) = manual integration
K4725.D K813OL42.M Fri Aug 22 09:55:36 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4725.D
Acq On : 21 Aug 2008 9:11
Sample : CC082108A6
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 9:54 2008

Vial: 2
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's W/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Aug 21 10:39:57 2008
Response via : Initial Calibration



K4725.D K813OL42.M Fri Aug 22 09:55:38 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K4726.D
Acq On : 21 Aug 2008 9:49
Sample : CC082108B6 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P

Vial: 3
Operator: MEG
Inst : #6MS40
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 21 13:51:45 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
2	T	Benzaldehyde	1.226	1.302	-6.2	102	0.00
3	T	2-Octanol	0.000	0.000#	0.0	0#	-9.99#
4	T	Acetophenone	1.924	1.942	-0.9	96	0.00
5	I	Naphthalene-d8	1.000	1.000	0.0	96	0.00
6	T	Caprolactam	0.182	0.196	-7.7	98	0.00
7	I	Acenaphthene-d10	1.000	1.000	0.0	96	0.00
8	T	1,1'-Biphenyl	1.134	1.169	-3.1	96	0.00
9		1-Phenyl-1-[4-methylphenyl]	0.672	0.680	-1.2	93	0.00
10		1-Phenyl-1-[2,4-dimethylphe	0.812	0.820	-1.0	93	0.00
	I	Phenanthrene-d10	1.000	1.000	0.0	94	0.00
14	T	Atrazine	0.170	0.173	-1.8	92	-0.01
13	T	2-Ethylanthraquinone	0.000	0.000#	0.0	0#	-22.46#
14	I	Chrysene-d12	1.000	1.000	0.0	95	0.00
15	I	Perylene-d12	1.000	1.000	0.0	98	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K4726.D K813OLM.M Fri Aug 22 10:02:56 2008

Mark Shelton 8/27

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4726.D
Acq On : 21 Aug 2008 9:49
Sample : CC082108B6 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:02 2008

Vial: 3
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Thu Aug 21 13:51:45 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	217998	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	818434	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	442545	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	788579	40.00 ug/mL	0.00
14) Chrysene-d12	23.56	240	660294	40.00 ug/mL	0.00
15) Perylene-d12	26.60	264	621736	40.00 ug/mL	-0.01

System Monitoring Compounds

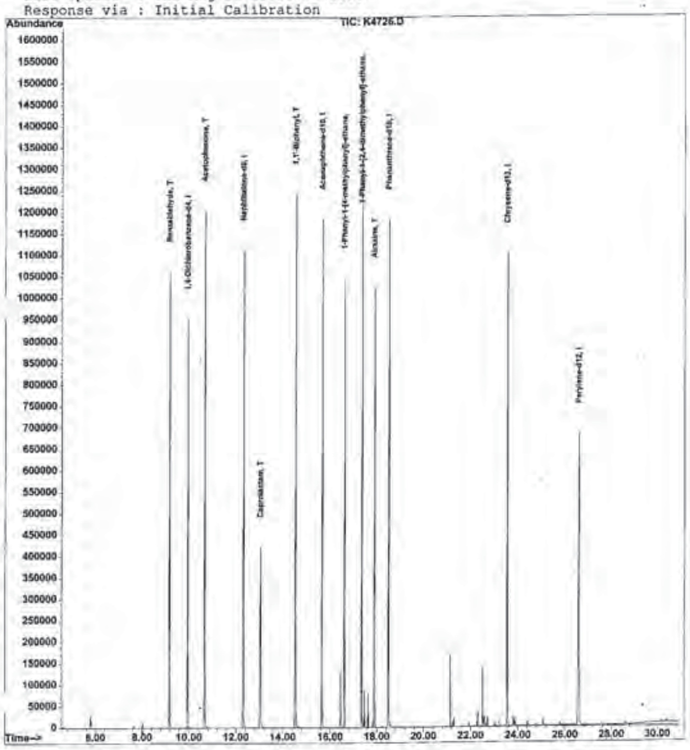
Target Compounds					Qvalue
2) Benzaldehyde	9.17	77	354895	53.12 ug/mL	95
4) Acetophenone	10.66	105	529207	50.46 ug/mL	97
6) Caprolactam	13.05	55	200525	53.93 ug/mL	97
8) 1,1'-Biphenyl	14.54	154	646437	51.51 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.62	181	376129	50.58 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.36	195	453470	50.45 ug/mL	99
12) Atrazine	17.90	200	170621	50.87 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4726.D K813OLM.M Fri Aug 22 10:03:01 2008

Quantitation Report

```
Data File : C:\HPCHEM\1\DATA\K4726.D                    Vial: 3
Acq On    : 21 Aug 2008   9:49                      Operator: MEG
Sample    : CC082108B6 OLM                          Inst    : #6MS40
Misc      : CCV ,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:02 2008              Quant Results File: K813OLM.RES

Method       : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title        : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update  : Thu Aug 21 13:51:45 2008
Response via : Initial Calibration
```



K4726.D K813OLM.M Fri Aug 22 10:03:02 2008 Pa

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\K4735.D                    Vial: 2
Acq On    : 21 Aug 2008  15:12                      Operator: MEG
Sample    : CC082108C6                              Inst    : #6MS40
Misc      : CCV ,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 09:56:24 2008
Response via : Multiple Level Calibration

Min. RRF     :  0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%    Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	119	0.00
2	S	2-Fluorophenol	1.276	1.281	-0.4	116	0.00
3	S	Phenol-d5	1.685	1.789	-6.2	122	0.00
4	MC	Phenol	2.072	2.209	-6.6	124	0.00
5	T	bis(2-Chloroethyl)ether	1.517	1.576	-3.9	122	0.00
6	M	2-Chlorophenol	1.433	1.422	0.8	115	0.00
7	T	2-Methylphenol	1.285	1.285	0.0	115	0.00
8	T	2,2'-oxybis(1-chloropropane	3.231	3.420	-5.8	123	0.00
9	T	bis(2-Chloroisopropyl)ether	3.231	3.420	-5.8	123	0.00
10	T	4-Methylphenol	1.373	1.371	0.1	116	0.00
11	MP	N-Nitroso-di-n-propylamine	1.217	1.310	-7.6	125	0.00
12	T	Hexachloroethane	0.641	0.649	-1.2	116	0.00
	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00
1.	S	Nitrobenzene-d5	0.413	0.446	-8.0	123	0.00
15	T	Nitrobenzene	0.437	0.474	-8.5	124	0.00
16	T	Isophorone	0.794	0.871	-9.7	126	0.00
17	TC	2-Nitrophenol	0.223	0.236	-5.8	118	0.00
18	T	2,4-Dimethylphenol	0.399	0.366	8.3	106	0.00
19	T	bis(2-Chloroethoxy)methane	0.460	0.493	-7.2	124	0.00
20	TC	2,4-Dichlorophenol	0.297	0.310	-4.4	118	0.00
21	T	Naphthalene	0.858	0.875	-2.0	116	0.00
22	T	4-Chloroaniline	0.409	0.414	-1.2	114	0.00
23	TC	Hexachlorobutadiene	0.171	0.168	1.8	112	0.00
24	MC	4-Chloro-3-methylphenol	0.376	0.388	-3.2	115	0.00
25	T	2-Methylnaphthalene	0.554	0.574	-3.6	117	0.00
26	I	Acenaphthene-d10	1.000	1.000	0.0	117	0.00
27	TP	Hexachlorocyclopentadiene	0.368	0.352	4.3	107	0.00
28	TC	2,4,6-Trichlorophenol	0.406	0.420	-3.4	115	0.00
29	T	2,4,5-Trichlorophenol	0.386	0.400	-3.6	116	0.00
30	S	2-Fluorobiphenyl	1.105	1.150	-4.1	117	0.00
31	T	2-Chloronaphthalene	1.037	1.086	-4.7	118	0.00
32	T	2-Nitroaniline	0.463	0.493	-6.5	119	0.00
33	T	Dimethyl phthalate	1.352	1.403	-3.8	118	0.00
34	T	2,6-Dinitrotoluene	0.343	0.353	-2.9	114	0.00
35	T	Acenaphthylene	1.561	1.626	-4.2	118	0.00
36	T	3-Nitroaniline	0.361	0.369	-2.2	115	0.00
37	TCM	Acenaphthene	0.881	0.886	-0.6	116	0.00
	TP	2,4-Dinitrophenol	0.275	0.277	-0.7	114	0.00
39	MP	4-Nitrophenol	0.259	0.243	6.2	107	0.00

(#) = Out of Range

K4735.D K813OL42.M Fri Aug 22 10:10:23 2008 Pa

Mark [signature] 8/22/08

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\K4735.D                    Vial: 2
Acq On    : 21 Aug 2008  15:12                      Operator: MEG
Sample    : CC082108C6                              Inst    : #6MS40
Misc      : CCV ,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 09:56:24 2008
Response via : Multiple Level Calibration

Min. RRF     :  0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%    Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	0.434	0.434	0.0	111	0.00
41	T	Dibenzofuran	1.380	1.380	0.0	114	0.00
42	T	Diethyl phthalate	1.315	1.318	-0.2	113	0.00
43	T	4-Chlorophenyl phenyl ether	0.557	0.554	0.5	112	0.00
44	T	Fluorene	1.015	1.019	-0.4	115	0.00
45	T	4-Nitroaniline	0.358	0.366	-2.2	114	0.00
46	S	2,4,6-Tribromophenol	0.163	0.171	-4.9	118	0.00
47	I	Phenanthrene-d10	1.000	1.000	0.0	112	0.00
48	T	4,6-Dinitro-2-methylphenol	0.173	0.178	-2.9	108	0.00
49	TC	n-Nitrosodiphenylamine	0.439	0.449	-2.3	112	0.00
50	T	4-Bromophenyl phenyl ether	0.166	0.165	0.6	110	0.00
51	T	Hexachlorobenzene	0.179	0.183	-2.2	112	0.00
	MC	Pentachlorophenol	0.143	0.145	-1.4	110	0.00
53	T	Phenanthrene	0.812	0.835	-2.8	113	0.00
54	T	Anthracene	0.823	0.854	-3.8	113	0.00
55	T	Carbazole	0.828	0.874	-5.6	115	0.00
56	T	Di-n-butyl phthalate	1.193	1.223	-2.5	112	0.00
57	TC	Fluoranthene	0.874	0.886	-1.4	111	0.00
58	I	Chrysene-d12	1.000	1.000	0.0	111	0.00
59	M	Pyrene	1.128	1.143	-1.3	111	0.00
60	S	Terphenyl-d14	0.646	0.656	-1.5	110	0.00
61	T	Butyl benzyl phthalate	0.704	0.733	-4.1	112	0.00
62	T	3,3'-Dichlorobenzidine	0.373	0.417	-11.8	115	0.00
63	T	Benzo[a]anthracene	0.986	1.001	-1.5	111	0.00
64	T	bis(2-Ethylhexyl)phthalate	0.901	0.878	2.6	104	0.00
65	T	Chrysene	0.903	0.910	-0.8	110	0.00
66	TC	Di-n-octyl phthalate	1.693	1.784	-5.4	112	0.00
67	T	Indeno[1,2,3-cd]pyrene	0.900	0.975	-8.3	112	0.00
68	I	Perylene-d12	1.000	1.000	0.0	111	0.00
69	T	Benzo[b]fluoranthene	1.027	1.022	0.5	111	0.00
70	T	Benzo[k]fluoranthene	0.941	0.976	-3.7	110	0.00
71	TC	Benzo[a]pyrene	0.938	0.949	-1.2	109	0.00
72	T	Dibenz[a,h]anthracene	0.798	0.860	-7.8	112	0.00
73	T	Benzo[g,h,i]perylene	0.804	0.848	-5.5	111	0.00

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

K4735.D K813OL42.M Fri Aug 22 10:10:27 2008 Pa

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\K4735.D                    Vial: 2
Acq On    : 21 Aug 2008  15:12                      Operator: MEG
Sample    : CC082108C6                              Inst    : #6MS40
Misc      : CCV ,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 09:56:24 2008
Response via : Multiple Level Calibration

Min. RRF     :  0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%    Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	119	0.00
2	S	2-Fluorophenol	50.000	50.179	-0.4	116	0.00
3	S	Phenol-d5	50.000	53.083	-6.2	122	0.00
4	MC	Phenol	50.000	53.319	-6.6	124	0.00
5	T	bis(2-Chloroethyl)ether	50.000	51.953	-3.9	122	0.00
6	M	2-Chlorophenol	50.000	49.628	0.7	115	0.00
7	T	2-Methylphenol	50.000	50.005	-0.0	115	0.00
8	T	2,2'-oxybis(1-chloropropane	50.000	52.920	-5.8	123	0.00
9	T	bis(2-Chloroisopropyl)ether	50.000	52.920	-5.8	123	0.00
10	T	4-Methylphenol	50.000	49.925	0.2	116	0.00
11	MP	N-Nitroso-di-n-propylamine	50.000	53.813	-7.6	125	0.00
12	T	Hexachloroethane	50.000	50.585	-1.2	116	0.00
	I	Naphthalene-d8	40.000	40.000	0.0	118	0.00
1.	S	Nitrobenzene-d5	50.000	53.931	-7.9	123	0.00
15	T	Nitrobenzene	50.000	54.240	-8.5	124	0.00
16	T	Isophorone	50.000	54.814	-9.6	126	0.00
17	TC	2-Nitrophenol	50.000	52.922	-5.8	118	0.00
18	T	2,4-Dimethylphenol	50.000	45.899	8.2	106	0.00
19	T	bis(2-Chloroethoxy)methane	50.000	53.625	-7.2	124	0.00
20	TC	2,4-Dichlorophenol	50.000	52.200	-4.4	118	0.00
21	T	Naphthalene	50.000	50.963	-1.9	116	0.00
22	T	4-Chloroaniline	50.000	50.602	-1.2	114	0.00
23	TC	Hexachlorobutadiene	50.000	49.004	2.0	112	0.00
24	MC	4-Chloro-3-methylphenol	50.000	51.598	-3.2	115	0.00
25	T	2-Methylnaphthalene	50.000	51.762	-3.5	117	0.00
26	I	Acenaphthene-d10	40.000	40.000	0.0	117	0.00
27	TP	Hexachlorocyclopentadiene	50.000	47.804	4.4	107	0.00
28	TC	2,4,6-Trichlorophenol	50.000	51.733	-3.5	115	0.00
29	T	2,4,5-Trichlorophenol	50.000	51.834	-3.7	116	0.00
30	S	2-Fluorobiphenyl	50.000	52.018	-4.0	117	0.00
31	T	2-Chloronaphthalene	50.000	52.354	-4.7	118	0.00
32	T	2-Nitroaniline	50.000	53.243	-6.5	119	0.00
33	T	Dimethyl phthalate	50.000	51.891	-3.8	118	0.00
34	T	2,6-Dinitrotoluene	50.000	51.533	-3.1	114	0.00
35	T	Acenaphthylene	50.000	52.053	-4.1	118	0.00
36	T	3-Nitroaniline	50.000	51.114	-2.2	115	0.00
37	TCM	Acenaphthene	50.000	50.235	-0.5	116	0.00
	TP	2,4-Dinitrophenol	50.000	50.347	-0.7	114	0.00
39	MP	4-Nitrophenol	50.000	46.945	6.1	107	0.00

(#) = Out of Range

K4735.D K813OL42.M Fri Aug 22 10:10:10 2008

Mark [signature] 8/22/08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K4735.D Vial: 2
Acq On : 21 Aug 2008 15:12 Operator: MEG
Sample : CC082108C6 Inst : #6MS40
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:24 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	50.000	50.003	-0.0	111	0.00
41	T	Dibenzofuran	50.000	49.993	0.0	114	0.00
42	T	Diethyl phthalate	50.000	50.126	-0.3	113	0.00
43	T	4-Chlorophenyl phenyl ether	50.000	49.691	0.6	112	0.00
44	T	Fluorene	50.000	50.178	-0.4	115	0.00
45	T	4-Nitroaniline	50.000	51.088	-2.2	114	0.00
46	S	2,4,6-Tribromophenol	50.000	52.722	-5.4	118	0.00
47	I	Phenanthrene-d10	40.000	40.000	0.0	112	0.00
48	T	4,6-Dinitro-2-methylphenol	50.000	51.422	-2.8	108	0.00
49	TC	n-Nitrosodiphenylamine	50.000	51.202	-2.4	112	0.00
50	T	4-Bromophenyl phenyl ether	50.000	49.796	0.4	110	0.00
51	T	Hexachlorobenzene	50.000	51.023	-2.0	112	0.00
	MC	Pentachlorophenol	50.000	50.463	-0.9	110	0.00
53	T	Phenanthrene	50.000	51.397	-2.8	113	0.00
54	T	Anthracene	50.000	51.890	-3.8	113	0.00
55	T	Carbazole	50.000	52.802	-5.6	115	0.00
56	T	Di-n-butyl phthalate	50.000	51.262	-2.5	112	0.00
57	TC	Fluoranthene	50.000	50.644	-1.3	111	0.00
58	I	Chrysene-d12	40.000	40.000	0.0	111	0.00
59	M	Pyrene	50.000	50.674	-1.3	111	0.00
60	S	Terphenyl-d14	50.000	50.762	-1.5	110	0.00
61	T	Butyl benzyl phthalate	50.000	52.051	-4.1	112	0.00
62	T	3,3'-Dichlorobenzidine	50.000	55.878	-11.8	115	0.00
63	T	Benzo[a]anthracene	50.000	50.741	-1.5	111	0.00
64	T	bis(2-Ethylhexyl)phthalate	50.000	46.853	6.3	104	0.00
65	T	Chrysene	50.000	50.392	-0.8	110	0.00
66	TC	Di-n-octyl phthalate	50.000	52.674	-5.3	112	0.00
67	T	Indeno[1,2,3-cd]pyrene	50.000	54.163	-8.3	112	0.00
68	I	Perylene-d12	40.000	40.000	0.0	111	0.00
69	T	Benzo[b]fluoranthene	50.000	49.744	0.5	111	0.00
70	T	Benzo[k]fluoranthene	50.000	51.888	-3.8	110	0.00
71	TC	Benzo[a]pyrene	50.000	50.598	-1.2	109	0.00
72	T	Dibenz[a,h]anthracene	50.000	53.879	-7.8	112	0.00
73	T	Benzo[g,h,i]perylene	50.000	52.741	-5.5	111	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K4735.D K813OL42.M Fri Aug 22 10:10:11 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4735.D Vial: 2
Acq On : 21 Aug 2008 15:12 Operator: MEG
Sample : CC082108C6 Inst : #6MS40
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:09 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:26 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	265252	40.00 ug/mL	0.00
13) Naphthalene-d8	12.32	136	1013278	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	539141	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.52	188	991247	40.00 ug/mL	0.00
58) Chrysene-d12	23.58	240	790964	40.00 ug/mL	0.00
68) Perylene-d12	26.62	264	758622	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.61	112	424733	50.18 ug/mL	0.00
Spiked Amount 150.000				Recovery = 33.45%	
3) Phenol-d5	9.23	99	593091	53.08 ug/mL	0.00
Spiked Amount 150.000				Recovery = 35.39%	
14) Nitrobenzene-d5	10.96	82	564499	53.93 ug/mL	0.00
Spiked Amount 100.000				Recovery = 53.93%	
30) 2-Fluorobiphenyl	14.34	172	774712	52.02 ug/mL	0.00
Spiked Amount 100.000				Recovery = 52.02%	
46) 2,4,6-Tribromophenol	17.17	330	115546	52.72 ug/mL	0.00
Spiked Amount 150.000				Recovery = 35.15%	
60) Terphenyl-d14	21.53	244	648388	50.76 ug/mL	0.00
Spiked Amount 100.000				Recovery = 50.76%	

Target Compounds					Qvalue
4) Phenol	9.25	94	732539	53.32 ug/mL	97
5) bis(2-Chloroethyl)ether	9.45	93	522571	51.95 ug/mL	100
6) 2-Chlorophenol	9.57	128	471575	49.63 ug/mL	98
7) 2-Methylphenol	10.35	108	426213	50.01 ug/mL	99
8) 2,2'-oxybis(1-chloropropan	10.42	45	1133898	52.92 ug/mL	99
9) bis(2-Chloroisopropyl)ethe	10.42	45	1133898	52.92 ug/mL	99
10) 4-Methylphenol	10.63	108	454411	49.92 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.68	70	434321	53.81 ug/mL	97
12) Hexachloroethane	10.90	117	215154	50.59 ug/mL	98
15) Nitrobenzene	11.00	77	599801	54.24 ug/mL	95
16) Isophorone	11.45	82	1103145	54.81 ug/mL	97
17) 2-Nitrophenol	11.59	139	298415	52.92 ug/mL	99
18) 2,4-Dimethylphenol	11.62	107	464128	45.90 ug/mL	100
19) bis(2-Chloroethoxy)methane	11.81	93	624502	53.63 ug/mL	97
20) 2,4-Dichlorophenol	12.03	162	393032	52.20 ug/mL	100
21) Naphthalene	12.36	128	1108079	50.96 ug/mL	100
22) 4-Chloroaniline	12.43	127	524457	50.60 ug/mL	99
23) Hexachlorobutadiene	12.57	225	212828	49.00 ug/mL	100
24) 4-Chloro-3-methylphenol	13.30	107	491570	51.60 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K4735.D K813OL42.M Fri Aug 22 10:10:34 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4735.D Vial: 2
Acq On : 21 Aug 2008 15:12 Operator: MEG
Sample : CC082108C6 Inst : #6MS40
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:09 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:26 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.66	142	726791	51.76 ug/mL	100
27) Hexachlorocyclopentadiene	13.95	237	236981	47.80 ug/mL	100
28) 2,4,6-Trichlorophenol	14.17	196	282936	51.73 ug/mL	100
29) 2,4,5-Trichlorophenol	14.24	196	269389	51.83 ug/mL	99
31) 2-Chloronaphthalene	14.60	162	731967	52.35 ug/mL	99
32) 2-Nitroaniline	14.77	65	332311	53.24 ug/mL	98
33) Dimethyl phthalate	15.10	163	945631	51.89 ug/mL	100
34) 2,6-Dinitrotoluene	15.23	165	237937	51.53 ug/mL	97
35) Acenaphthylene	15.40	152	1095504	52.05 ug/mL	100
36) 3-Nitroaniline	15.56	138	248621	51.11 ug/mL	96
37) Acenaphthene	15.73	153	596777	50.24 ug/mL	99
38) 2,4-Dinitrophenol	15.75	184	186728	50.35 ug/mL	95
39) 4-Nitrophenol	15.83	109	163907	46.94 ug/mL	94
40) 2,4-Dinitrotoluene	16.00	165	292522	50.00 ug/mL	96
41) Dibenzofuran	16.05	168	929970	49.99 ug/mL	99
42) Diethyl phthalate	16.44	149	888345	50.13 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.69	204	373372	49.69 ug/mL	100
44) Fluorene	16.71	166	686426	50.18 ug/mL	99
45) 4-Nitroaniline	16.74	138	246520	51.09 ug/mL	96
48) 4,6-Dinitro-2-methylphenol	16.79	198	220972	51.42 ug/mL	99
49) n-Nitrosodiphenylamine	16.91	169	556899	51.20 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.63	248	204972	49.80 ug/mL	100
51) Hexachlorobenzene	17.77	284	226316	51.02 ug/mL	99
52) Pentachlorophenol	18.12	266	179423	50.46 ug/mL	100
53) Phenanthrene	18.57	178	1034832	51.40 ug/mL	100
54) Anthracene	18.67	178	1058042	51.89 ug/mL	100
55) Carbazole	18.95	167	1083087	52.80 ug/mL	100
56) Di-n-butyl phthalate	19.55	149	1515753	51.26 ug/mL	100
57) Fluoranthene	20.84	202	1097201	50.64 ug/mL	98
59) Pyrene	21.29	202	1130273	50.67 ug/mL	98
61) Butyl benzyl phthalate	22.43	149	724563	52.05 ug/mL	97
62) 3,3'-Dichlorobenzidine	23.47	252	412632	55.88 ug/mL	99
63) Benzo[a]anthracene	23.56	228	989347	50.74 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.49	149	867882	46.85 ug/mL	100
65) Chrysene	23.64	228	899474	50.39 ug/mL	100
66) Di-n-octyl phthalate	24.70	149	1763537	52.67 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.43	276	963789	54.16 ug/mL	99
69) Benzo[b]fluoranthene	25.70	252	968949	49.74 ug/mL	100
70) Benzo[k]fluoranthene	25.76	252	925592	51.89 ug/mL	99
71) Benzo[a]pyrene	26.49	252	900314	50.60 ug/mL	100
72) Dibenz[a,h]anthracene	29.46	278	815052	53.88 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4735.D K813OL42.M Fri Aug 22 10:10:35 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4735.D Vial: 2
Acq On : 21 Aug 2008 15:12 Operator: MEG
Sample : CC082108C6 Inst : #6MS40
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:09 2008 Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:26 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.09	276	804250	52.74 ug/mL	100

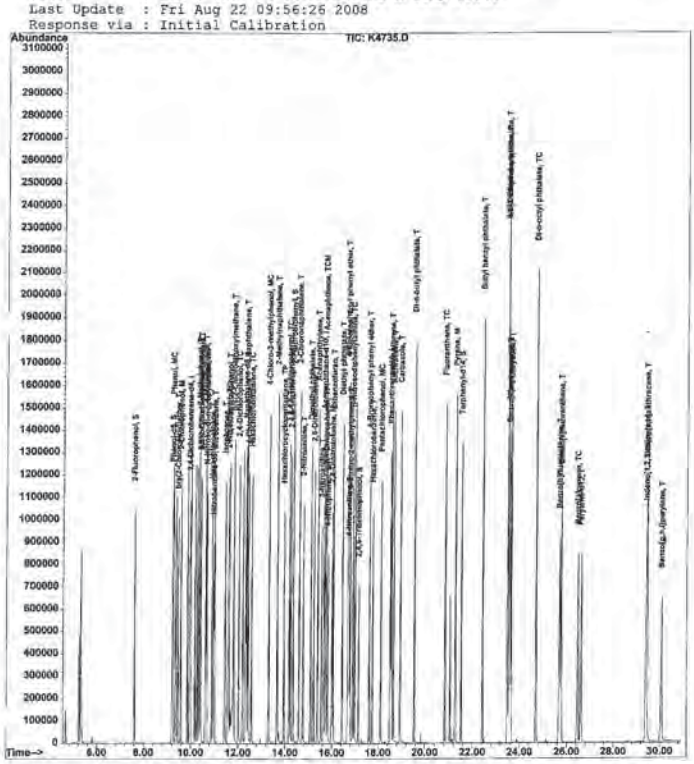
(#) = qualifier out of range (m) = manual integration
K4735.D K813OL42.M Fri Aug 22 10:10:35 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4735.D
Acq On : 21 Aug 2008 15:12
Sample : CC082108C6
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:09 2008

Vial: 2
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 09:56:26 2008
Response via : Initial Calibration



K4735.D K813OL42.M Fri Aug 22 10:10:37 2008 Pa 952

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K4736.D
Acq On : 21 Aug 2008 15:50
Sample : CC082108D6 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P

Vial: 3
Operator: MEG
Inst : #6MS40
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:10 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
2	T	Benzaldehyde	1.226	1.299	-6.0	111	0.00
3	T	2-Octanol	0.000	0.000#	0.0	0#	-9.99#
4	T	Acetophenone	1.924	1.971	-2.4	107	0.00
5	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00
6	T	Caprolactam	0.182	0.197	-8.2	110	0.00
7	I	Acenaphthene-d10	1.000	1.000	0.0	107	0.00
8	T	1,1'-Biphenyl	1.134	1.170	-3.2	107	0.00
9		1-Phenyl-1-[4-methylphenyl]	0.672	0.694	-3.3	106	0.00
10		1-Phenyl-1-[2,4-dimethylphe	0.812	0.831	-2.3	105	0.00
	I	Phenanthrene-d10	1.000	1.000	0.0	106	0.00
12	T	Atrazine	0.170	0.175	-2.9	104	0.00
13	T	2-Ethylanthraquinone	0.000	0.000#	0.0	0#	-22.46#
14	I	Chrysene-d12	1.000	1.000	0.0	107	0.00
15	I	Perylene-d12	1.000	1.000	0.0	109	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K4736.D K813OLM.M Fri Aug 22 10:30:10 2008

Mark 8/26/08 953

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4736.D
Acq On : 21 Aug 2008 15:50
Sample : CC082108D6 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:29 2008

Vial: 3
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:11 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	238743	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	907973	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	493567	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	887131	40.00 ug/mL	0.00
14) Chrysene-d12	23.57	240	745070	40.00 ug/mL	0.00
15) Perylene-d12	26.61	264	695663	40.00 ug/mL	0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.18	77	387737	53.00 ug/mL	96
4) Acetophenone	10.67	105	588279	51.22 ug/mL	97
6) Caprolactam	13.06	55	223917	54.29 ug/mL	98
8) 1,1'-Biphenyl	14.54	154	721560	51.55 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.62	181	427926	51.60 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.37	195	512492	51.12 ug/mL	99
12) Atrazine	17.90	200	193663	51.33 ug/mL	100

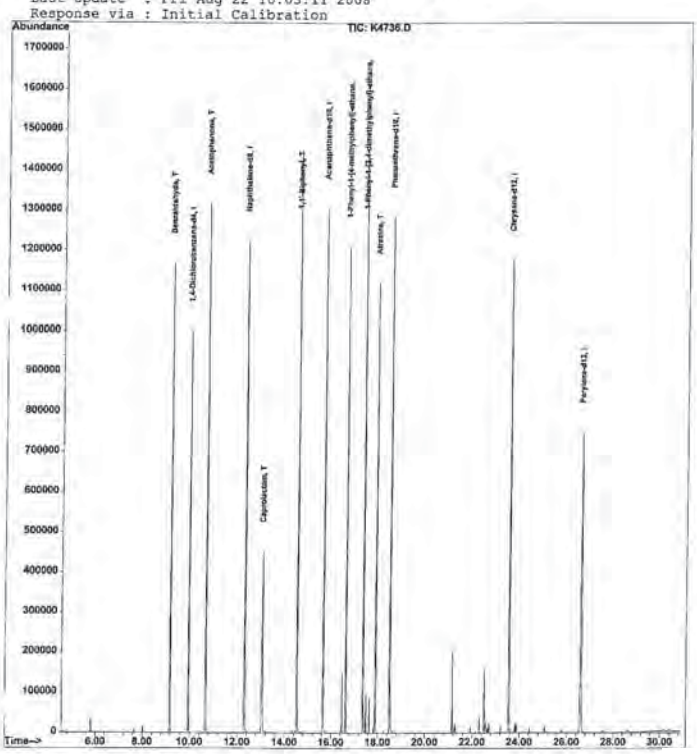
(#) = qualifier out of range (m) = manual integration
K4736.D K813OLM.M Fri Aug 22 10:30:20 2008 Pa 954

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4736.D
Acq On : 21 Aug 2008 15:50
Sample : CC082108D6 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:29 2008

Vial: 3
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:03:11 2008
Response via : Initial Calibration



K4736.D K813OLM.M Fri Aug 22 10:30:21 2008 Pa 955

Internal Standards

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4725.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 9:11

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	266914	9.95	995096	12.32	530726	15.66	968144	18.52
UPPER LIMIT	533828	10.45	1990192	12.82	1061452	16.16	1932288	19.02
LOWER LIMIT	133457	9.45	497548	11.82	265363	15.16	483072	18.02
SAMPLE NO.								
01 CC082108B6 OLM (CC082108B6 OLM)	217998	9.95	818434	12.31	442545	15.65	786576	18.51
02 SB-2-East (0808068-003B)	210152	9.96	792464	12.31	430204	15.65	791283	18.50
03 UST-Bot-1 (0808076-001B)	212701	9.95	809457	12.31	433837	15.66	795215	18.51
04 UST-West (0808076-005B)	211002	9.96	807791	12.31	434938	15.65	791534	18.51

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4725.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 9:11

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	763418	23.58	743587	28.62				
UPPER LIMIT	1526836	24.08	1487174	27.12				
LOWER LIMIT	381709	23.08	371794	28.12				
SAMPLE NO.								
01 CC082108B6 OLM (CC082108B6 OLM)	660294	23.56	621736	28.60				
02 SB-2-East (0808068-003B)	660066	23.56	625109	28.60				
03 UST-Bot-1 (0808076-001B)	651025	23.57	610954	28.60				
04 UST-West (0808076-005B)	651672	23.56	607739	28.60				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808065O

Lab Code: LSLB

Lab File ID (Standard): K4735.D Date Analyzed: 08/21/2008

Instrument ID: MS06_40 Time Analyzed: 15:12

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	265252	9.96	1013278	12.32	539141	15.66	991247	18.52
UPPER LIMIT	530504	10.46	2026556	12.82	1078282	16.16	1982494	19.02
LOWER LIMIT	132626	9.46	506839	11.82	269571	15.16	495624	18.02
SAMPLE NO.								
01 CC082108D6 OLM (CC082108D6 OLM)	238743	9.96	907973	12.31	493567	15.66	887131	18.51
02 MB-7957 (MB-7957)	201893	9.95	767521	12.31	417882	15.65	781849	18.51
03 LCS-7957 (LCS-7957)	202272	9.96	770119	12.32	417628	15.66	784851	18.51
04 MSB-7957 (MSB-7957)	196213	9.95	752550	12.32	406162	15.66	742262	18.52
05 SB-2-Bot-1 (0808068-001B)	178447	9.95	674432	12.31	365518	15.66	656398	18.51
06 SB-2-South (0808068-002B)	191758	9.95	730944	12.31	395809	15.66	721625	18.51
07 SB-2-North (0808068-004B)	199618	9.95	759123	12.31	409934	15.66	746099	18.51
08 SB-2-West (0808068-005B)	190334	9.95	722335	12.31	392374	15.66	711373	18.51
09 SB-2-Bot-2 (0808068-006B)	190300	9.95	752166	12.31	406260	15.65	738135	18.51
10 UST-North (0808076-002B)	190876	9.96	752020	12.32	404628	15.65	733125	18.51
11 UST-Bot-2 (0808076-003B)	190443	9.96	725064	12.31	388452	15.65	708426	18.51
12 UST-East (0808076-004B)	194830	9.96	743548	12.31	404316	15.65	734231	18.51
13 UST-EastMS (0808076-004BMS)	197336	9.96	752062	12.32	410754	15.66	746740	18.51
14 UST-EastMSD (0808076-004BMSD)	193133	9.96	747816	12.31	402786	15.66	737518	18.51
15 UST-South (0808076-006B)	201441	9.96	775428	12.31	418997	15.66	770818	18.50
16 Field Dup (0808076-007B)	199305	9.96	751770	12.31	394686	15.65	715159	18.51
17 Trench-Bot-1 (0808076-008B)	192672	9.96	741590	12.31	400728	15.65	743737	18.51
18 Trench-Bot-2 (0808076-009B)	201849	9.96	759960	12.31	420748	15.66	773464	18.50

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0808068O

Lab Code: LSLB

Lab File ID (Standard): K4735.D Date Analyzed: 08/21/2008

Instrument ID: MS06 40 Time Analyzed: 15:12

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	790964	23.58	758622	26.62				
UPPER LIMIT	1581928	24.08	1517244	27.12				
LOWER LIMIT	395482	23.08	379311	26.12				
SAMPLE NO.								
01 CC08210BD6 OLM (CC08210BD6 OLM)	745070	23.57	693863	26.61				
02 MB-7957 (MB-7957)	622914	23.57	572831	26.61				
03 LCS-7957 (LCS-7957)	605001	23.58	586344	26.62				
04 MSB-7957 (MSB-7957)	591714	23.58	567131	26.61				
05 SB-2-Bot-1 (0808064-001B)	534471	23.58	492431	26.60				
06 SB-2-South (0808068-002B)	592193	23.57	547130	26.60				
07 SB-2-North (0808068-004B)	597226	23.57	555117	26.60				
08 SB-2-West (0808068-005B)	574369	23.56	522624	26.60				
09 SB-2-Bot-2 (0808068-006B)	593012	23.56	544319	26.60				
10 UST-North (0808076-002B)	590122	23.56	535533	26.60				
11 UST-Bot-2 (0808076-003B)	578664	23.56	521055	26.60				
12 UST-East (0808076-004B)	599003	23.56	542263	26.60				
13 UST-EastMS (0808076-004BMS)	594744	23.58	553880	26.61				
14 UST-EastMSD (0808076-004BMSD)	594729	23.58	554776	26.61				
15 UST-South (0808076-006B)	628862	23.56	560980	26.60				
16 Field Dup (0808076-007B)	577674	23.56	532542	26.60				
17 Trench-Bot-1 (0808076-008B)	605408	23.56	546029	26.60				
18 Trench-Bot-2 (0808076-009B)	593735	23.56	537931	26.60				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

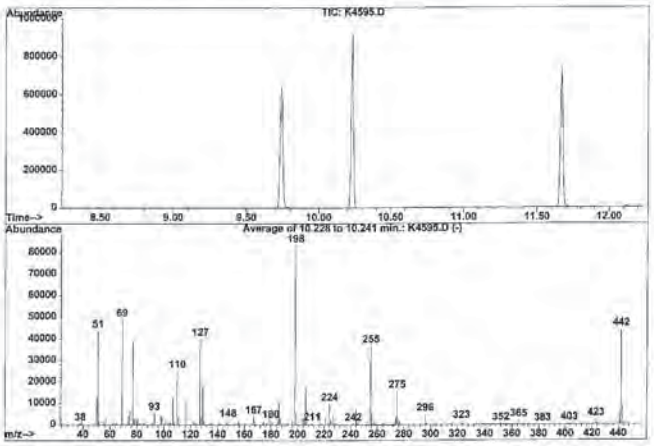
Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Raw QC Data

Tune Raw Data

DFTPP

Data File : C:\HPCHEM\1\DATA\K4595.D Vial: 1
Acq On : 13 Aug 2008 8:18 Operator:
Sample : TD081308A6 Inst : #6MS40
Misc : TUNE,DFTPP, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\K813FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df



Spectrum Information: Average of 10.228 to 10.241 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	52.3	43984	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.2	48973	PASS
70	69	0.00	2	0.4	195	PASS
127	198	40	60	47.9	40283	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	84091	PASS
199	198	5	9	6.8	5720	PASS
275	198	10	30	18.7	15739	PASS
365	198	1	100	2.6	2169	PASS
441	443	0.01	100	84.3	7134	PASS
442	198	40	100	52.3	43989	PASS
443	442	17	23	19.2	8460	PASS

K4595.D K813FULL.M Thu Aug 14 14:03:31 2008

8/14/08

Average of 10.228 to 10.241 min.: K4595.D
TD081308A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	279	60.95	563	77.95	2534	91.90	898
37.95	716	61.95	645	78.95	3182	92.95	5542
38.90	3814	62.95	1570	79.95	2330	93.95	412
39.90	234	63.90	166	80.95	3045	95.95	187
40.95	75	64.95	783	81.90	718	97.95	4333
50.00	12376	68.90	48973	82.90	677	98.85	3094
51.00	43984	69.95	195	84.95	647	99.95	204
51.95	2070	72.95	459	85.90	947	100.85	1731
54.90	325	73.90	4066	86.90	402	102.90	646
55.90	1447	74.90	6415	87.90	84	103.90	1234
56.90	3110	76.95	38611	90.90	847	104.90	1116

Average of 10.228 to 10.241 min.: K4595.D
TD081308A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
106.90	12522	124.90	574	140.90	2216	154.95	1145
107.90	1874	126.90	40283	141.90	655	155.95	1554
109.90	25201	127.95	3312	142.85	499	156.95	253
110.95	3798	128.95	18011	145.90	413	157.85	376
111.90	426	129.90	1542	146.95	1058	158.80	226
116.90	11278	130.90	306	147.85	2483	159.85	638
117.85	855	133.90	529	148.95	469	160.90	922
120.00	173	134.85	1329	150.95	224	161.85	218
121.90	927	135.85	514	151.75	87	164.85	829
122.90	1400	136.95	601	152.85	732	165.95	685
123.90	676	139.90	102	153.85	457	166.95	3976

Average of 10.228 to 10.241 min.: K4595.D
TD081308A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
167.90	1816	180.90	1037	192.90	1074	206.95	2586
168.85	389	181.95	78	193.80	95	207.90	793
170.75	90	183.90	261	195.90	2251	208.90	290
171.90	389	185.00	1595	197.85	84091	210.00	378
172.90	455	185.90	10350	198.85	5720	210.90	829
174.00	770	186.90	2919	199.95	436	214.85	196
174.90	1485	187.90	316	201.40	366	216.85	5488
175.95	474	188.85	799	202.95	644	217.85	723
176.90	803	189.90	68	203.95	2849	220.95	3516
178.85	3111	190.90	379	204.95	4821	222.95	674
179.90	2025	191.90	1012	205.95	18480	223.90	9853

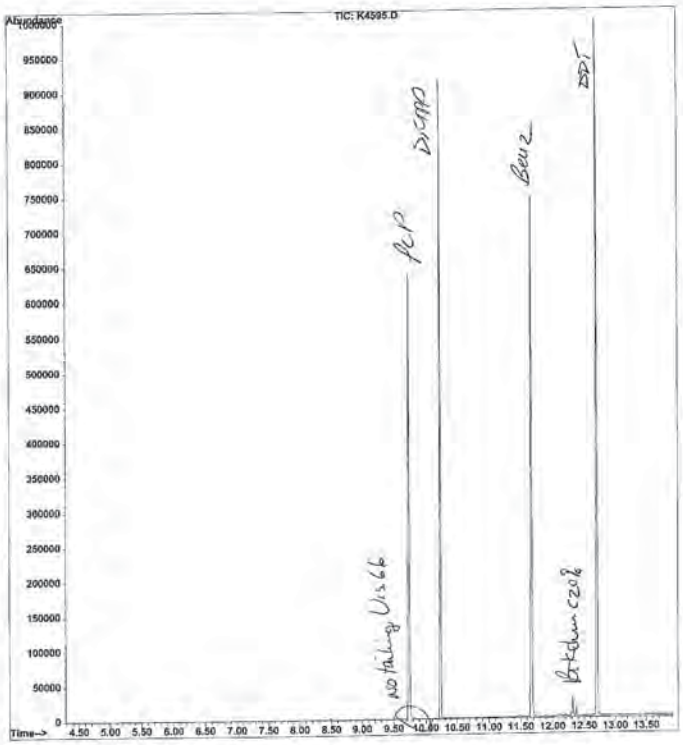
Average of 10.228 to 10.241 min.: K4595.D
TD081308A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
224.95	2351	241.90	541	258.85	431	284.90	201
226.90	4879	243.90	7294	264.90	983	292.85	325
227.90	653	244.95	1040	265.80	72	295.90	4876
228.90	932	245.90	1671	272.95	1100	296.90	705
230.90	366	246.85	361	273.95	3090	302.90	540
233.85	307	248.80	253	274.90	15739	303.85	69
234.90	382	252.95	82	275.90	2114	313.95	175
235.95	103	254.95	36925	276.90	1479	314.90	541
236.90	324	255.90	5368	277.90	205	315.90	291
238.85	93	256.95	511	282.90	98	322.95	1568
240.80	264	257.85	2285	283.90	72	323.95	300

Average of 10.228 to 10.241 min.: K4595.D
TD081308A6
Modified:subtracted

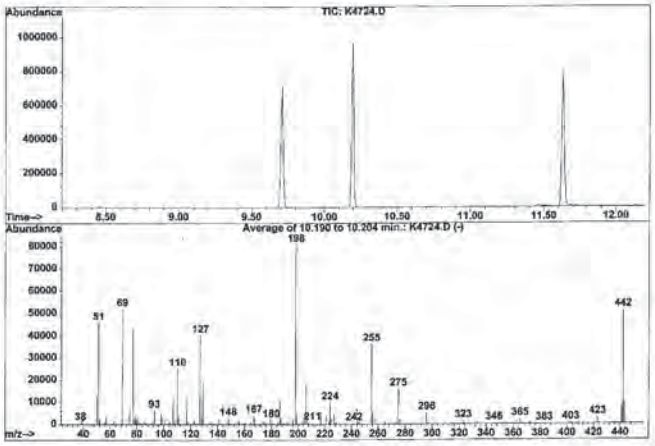
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.85	268	365.90	323	441.05	7134		
327.85	70	371.90	750	441.95	43989		
332.90	89	372.90	86	442.90	8460		
333.90	889	382.90	110	443.95	772		
334.95	257	401.90	310				
340.95	77	402.95	458				
345.90	340	403.90	70				
351.95	464	420.90	402				
352.90	248	422.00	127				
353.90	440	422.95	2464				
364.90	2169	423.90	512				

File : C:\HPCHEM\1\DATA\K4595.D
Operator :
Acquired : 13 Aug 2008 8:18 using AcqMethod DFTPP1UL
Instrument : #6MS40
Sample Name: TD081308A6
Misc Info : TUNE,DFTPP,
Vial Number: 1



DFTPP

Data File : C:\HPCHEM\1\DATA\K4724.D Vial: 1
Acq On : 21 Aug 2008 8:51 Operator: MEG
Sample : TD082108A6 Inst : #6MS40
Misc : TUNE,DFTPP, Multiplr: 5.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df



AutoFind: Scans 880, 881, 882; Background Corrected with Scan 875

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	56.2	45883	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	63.6	51944	PASS
70	69	0.00	2	0.4	211	PASS
127	198	40	60	49.3	40272	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	81640	PASS
199	198	5	9	6.9	5606	PASS
275	198	10	30	19.6	16000	PASS
365	198	1	100	2.7	2234	PASS
441	443	0.01	100	82.6	7971	PASS
442	198	40	100	62.5	51008	PASS
443	442	17	23	18.9	9654	PASS

K4724.D K8130L42.M Thu Aug 21 09:07:41 2008

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Average of 10.190 to 10.204 min.: K4724.D
TD082108A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	247	57.85	81	76.95	42819	90.85	826
37.90	738	60.90	609	77.95	2992	91.95	912
38.90	4151	61.95	681	78.95	3358	92.95	6296
39.90	187	62.95	1693	79.90	2435	93.90	413
40.85	75	63.95	196	80.85	3272	95.95	199
50.00	13103	64.95	817	81.85	877	97.95	4623
51.00	45863	68.90	51944	82.90	734	98.85	3203
51.90	2359	69.90	211	84.90	833	99.85	242
54.95	352	72.85	269	85.90	1137	100.85	1747
55.90	1402	73.90	4528	86.90	463	102.90	612
56.90	3186	74.90	6864	87.80	73	103.90	1246

Average of 10.190 to 10.204 min.: K4724.D
TD082108A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
104.90	1162	121.90	932	135.85	533	151.00	217
106.90	12736	122.90	1458	137.00	683	151.85	69
107.90	1945	123.90	696	137.90	73	152.85	703
109.90	25174	124.90	586	139.90	113	153.85	525
110.95	3717	126.90	40272	140.90	2437	154.95	1158
111.90	543	127.95	3236	141.90	706	155.90	1652
112.85	72	128.95	18913	142.85	555	156.95	377
116.85	12639	129.95	1604	145.95	396	157.85	427
117.90	879	130.85	294	146.95	1110	158.85	314
118.90	68	133.85	556	147.85	2821	159.90	660
119.90	98	134.85	1411	148.90	557	160.90	968

Average of 10.190 to 10.204 min.: K4724.D
TD082108A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.85	220	175.90	468	188.85	764	203.95	2968
164.90	916	176.85	795	190.95	335	204.95	4601
165.95	122	178.85	3266	191.90	1067	205.95	18076
166.90	4066	179.90	2023	192.90	1066	207.00	2382
167.90	2040	180.90	954	193.85	183	207.90	733
168.85	391	181.95	70	195.90	2212	208.90	103
170.75	87	184.00	219	197.85	81640	210.05	403
171.85	410	184.95	1173	198.85	5606	210.90	790
172.90	559	185.95	10619	199.85	443	211.80	71
173.90	922	186.90	3012	201.35	447	214.85	209
174.90	1531	187.90	259	202.95	639	215.95	211

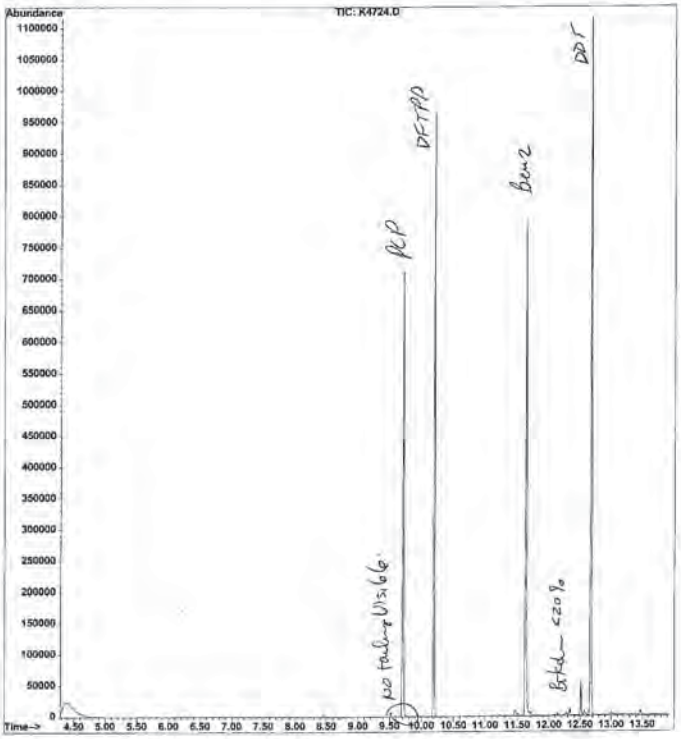
Average of 10.190 to 10.204 min.: K4724.D
TD082108A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
216.85	5594	234.90	372	248.90	179	274.85	16000
217.90	641	235.85	96	252.95	76	275.90	2101
220.90	3670	236.90	361	254.90	36333	276.90	1553
222.95	1173	238.85	96	255.90	5286	277.90	263
223.85	9904	239.85	73	256.90	457	282.90	93
224.90	2413	240.80	292	257.85	2447	284.90	206
226.90	4696	241.90	529	258.85	382	292.80	359
227.90	724	243.90	7362	264.90	956	295.90	5164
228.90	929	244.90	1056	265.80	74	296.90	719
230.90	360	245.90	1735	272.90	1182	302.95	586
233.90	304	246.80	358	273.95	3088	313.90	196

Average of 10.190 to 10.204 min.: K4724.D
TD082108A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
314.90	567	351.95	372	420.90	418		
315.95	334	352.90	311	421.95	316		
322.95	1542	353.95	499	422.90	2780		
323.95	292	364.90	2234	423.90	622		
326.85	360	365.90	356	441.05	7971		
327.85	77	371.90	855	441.95	51008		
333.90	989	372.90	78	442.90	9684		
334.90	185	382.90	188	443.95	917		
340.90	158	401.90	261				
345.85	391	402.90	446				
351.80	114	403.90	82				

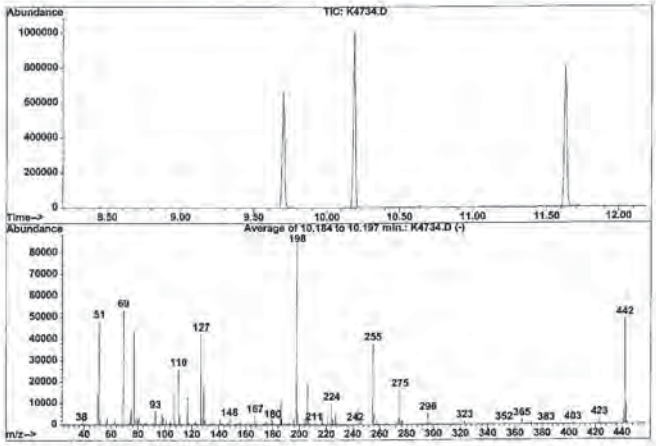
File : C:\HPCHEM\1\DATA\K4724.D
Operator : MEG
Acquired : 21 Aug 2008 8:51 using AcqMethod DFTPP10L
Instrument : #6MS40
Sample Name: TD082108A6
Misc Info : TUNE,DFTPP,
Vial Number: 1



DFTPP

Data File : C:\HPCHEM\1\DATA\K4734.D
Acq On : 21 Aug 2008 14:52
Sample : TD082108B6
Misc : TUNE,DFTPP,
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df

Vial: 1
Operator: MEG
Inst : #6MS40
Multiplr: 1.00



Spectrum Information: Average of 10.184 to 10.197 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.1	48277	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	63.2	53421	PASS
70	69	0.00	2	0.2	116	PASS
127	198	40	60	50.1	42352	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	84539	PASS
199	198	5	9	6.9	5801	PASS
275	198	10	30	19.2	16252	PASS
365	198	1	100	2.8	2394	PASS
441	443	0.01	100	69.5	6743	PASS
442	198	40	100	58.0	48995	PASS
443	442	17	23	19.8	9706	PASS

K4734.D K8130L42.M Fri Aug 22 10:28:31 2008

Average of 10.184 to 10.197 min.: K4734.D
TD082108B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	267	60.95	604	77.95	2963	92.95	6519
37.95	761	61.95	711	78.95	3400	93.95	421
38.90	4286	62.95	1849	79.90	2495	96.00	297
39.85	325	63.95	225	80.90	3372	97.95	4759
40.95	67	64.95	754	81.90	848	98.85	3353
50.00	13988	68.90	53421	82.90	739	99.85	269
51.00	48277	69.90	116	84.90	1014	100.85	1896
51.95	2386	72.95	415	85.90	1148	102.90	667
54.85	279	73.90	4502	86.95	474	103.90	1281
55.90	1474	74.90	7295	90.90	802	104.90	1189
56.90	3308	76.95	43224	91.95	924	106.90	13491

Average of 10.184 to 10.197 min.: K4734.D
TD082108B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
107.90	2051	123.90	689	137.00	722	150.85	97
109.90	26171	124.90	569	137.80	68	151.00	206
110.95	4010	126.90	42352	139.90	104	152.85	738
111.90	486	127.95	3432	140.90	2281	153.90	556
112.85	76	128.95	19586	141.90	846	154.90	1181
115.95	232	129.90	1829	142.90	527	155.90	1649
116.85	13135	130.95	312	145.95	412	156.95	301
117.85	967	132.05	85	146.95	1177	157.90	423
119.90	86	133.90	545	147.85	2834	158.90	360
121.90	1027	134.90	1411	148.90	558	159.90	724
122.90	1437	135.85	623	149.85	74	160.85	992

Average of 10.184 to 10.197 min.: K4734.D
TD082108B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.85	304	173.85	835	185.95	10990	198.85	5801
163.95	68	174.90	1620	186.85	3037	199.85	473
164.85	898	175.90	507	187.90	347	201.40	371
165.95	525	176.85	836	188.85	874	202.90	689
166.90	4484	177.90	99	189.90	70	203.95	2874
167.85	1952	178.85	3393	191.00	371	204.95	4903
168.90	363	179.90	2045	191.90	1017	205.95	18624
169.85	94	180.95	1022	192.90	1063	206.95	2507
170.75	92	181.85	75	193.90	166	207.90	711
171.85	392	183.90	302	195.90	2333	208.90	253
172.90	517	184.95	854	197.85	84539	210.00	95

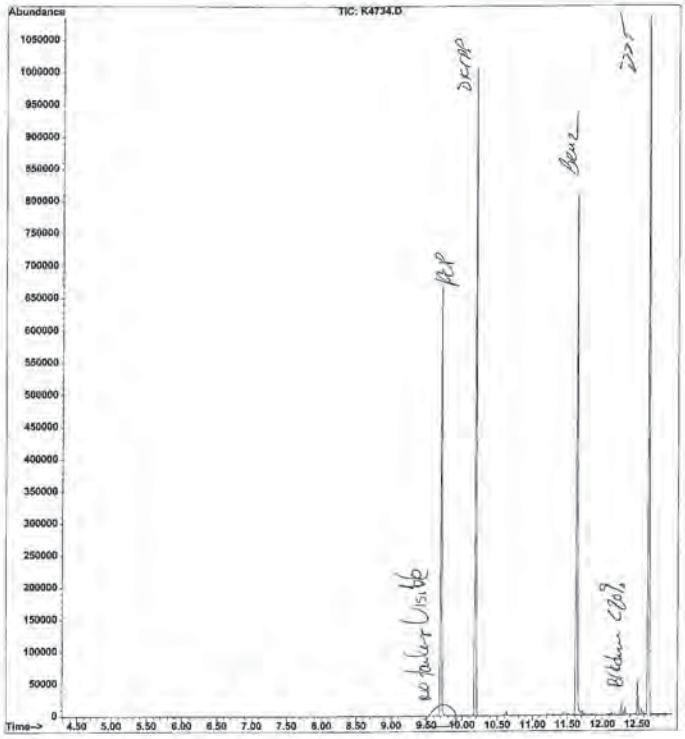
Average of 10.184 to 10.197 min.: K4734.D
TD082108B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
210.95	838	230.90	411	244.95	1040	265.80	80
214.85	261	233.85	314	245.90	1682	272.90	1237
216.85	5759	234.90	356	246.90	336	273.95	3167
217.85	690	235.85	194	248.85	207	274.90	16252
220.90	3457	236.90	312	252.85	80	275.90	2185
222.95	1261	238.85	101	254.90	37987	276.90	1499
223.90	10122	239.85	76	255.90	5444	277.90	221
224.95	2464	240.85	270	256.95	490	282.90	76
226.90	4960	241.95	617	257.85	2523	284.90	284
227.90	770	242.90	149	258.85	384	292.90	335
228.90	916	243.90	7726	264.90	1000	295.90	5275

Average of 10.184 to 10.197 min.: K4734.D
TD082108B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.90	739	333.90	1001	382.90	158	443.95	925
302.95	594	334.90	188	401.90	254		
303.95	81	340.95	156	402.90	419		
313.95	202	345.85	293	403.90	69		
314.90	627	351.90	478	420.90	421		
315.90	248	352.90	350	422.00	150		
320.95	76	353.90	478	422.90	2754		
322.95	1587	364.90	2394	423.90	605		
323.95	250	365.90	281	441.10	6743		
326.85	294	371.85	841	441.95	48995		
332.90	70	372.90	93	442.90	9706		

File : C:\HPCHEM\1\DATA\K4734.D
Operator : MEG
Acquired : 21 Aug 2008 14:52 using AcqMethod DFTPP1UL
Instrument : #6MS40
Sample Name: TD082108B6
Misc Info : TUNE,DFTPP,
Vial Number: 1



Preparation Blanks

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-7957 | SampType: MBLK | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381956
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	330									
Indeno[1,2,3-cd]pyrene	ND	330									
Isophorone	ND	330									
N-Nitroso-di-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1700									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 2,4,6-Tribromophenol	4080	0	5000	0	82	20	143				
Surr: 2-Fluorobiphenyl	2900	0	3330	0	87	46	130				
Surr: 2-Fluorophenol	4470	0	5000	0	89	22	130				
Surr: Nitrobenzene-d5	3150	0	3330	0	95	39	130				
Surr: Phenol-d5	4690	0	5000	0	94	33	130				
Surr: Terphenyl-d14	3570	0	3330	0	107	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

e: 22-Aug-08

978

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-7957 | SampType: MBLK | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381956
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	330									
2,4,5-Trichlorophenol	ND	1700									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	330									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1700									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1700									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	680									
3-Nitroaniline	ND	1700									
4,6-Dinitro-2-methylphenol	ND	1700									
4-Bromophenyl phenyl ether	ND	330									
4-Chloro-3-methylphenol	ND	330									
4-Chloroaniline	ND	330									
4-Chlorophenyl phenyl ether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1700									
4-Nitrophenol	ND	1700									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Acetophenone	ND	330									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

e: 22-Aug-08

976

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-7957 | SampType: MBLK | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381956
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	330									
Atrazine	ND	330									
Benzaldehyde	ND	330									
Benzo[a]anthracene	ND	330									
Benzo[a]pyrene	ND	330									
Benzo[b]fluoranthene	ND	330									
Benzo[g,h,i]perylene	ND	330									
Benzo[k]fluoranthene	ND	330									
bis(2-Chloroethoxy)methane	ND	330									
bis(2-chloroethyl)ether	ND	330									
bis(2-chloroisopropyl)ether	ND	330									
bis(2-Ethylhexyl)phthalate	ND	330									
Butyl benzyl phthalate	ND	330									
Caprolactam	ND	330									
Carbazole	ND	330									
Chrysene	ND	330									
Di-n-butyl phthalate	ND	330									
Di-n-octyl phthalate	ND	330									
Dibenz[a,h]anthracene	ND	330									
Dibenzofuran	ND	330									
Diethyl phthalate	ND	330									
Dimethyl phthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	330									
Hexachlorocyclopentadiene	ND	330									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

e: 22-Aug-08

977

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Form 1 TIC

CLIENT SAMPLE NO.

Lab Name: Life Science Laboratories, Inc. Contract:

MB-7957

Lab Code: LSLB Case No.: DRS-SMS SAS No.: SDG No.: 08080680

Matrix: (soil/water) SOIL Lab Sample ID: MB-7957

Sample wt/vol: 30 (g/ml) g Lab File ID: M4737.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 8/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ml)

Number TICs found: 3 CONCENTRATION UNITS: (ug/kg)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		unknown	6.69	970	J
2.		alcol	7.23	28000	JA
3.		unknown (18.80)	18.80	340	J

FORM I TIC

SW8270C

979

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4737.D
Acq On : 21 Aug 2008 16:28
Sample : MB-7957
Misc : MBLK,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008

Vial: 4
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	201893	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	767521	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.65	164	417692	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.51	188	761849	40.00 ug/mL	-0.01
58) Chrysene-d12	23.57	240	622014	40.00 ug/mL	-0.02
68) Perylene-d12	26.61	264	572831	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	863635	134.05 ug/mL	0.04
Spiked Amount 150.000			Recovery = 89.37%		
3) Phenol-d5	9.23	99	1195518	140.58 ug/mL	0.00
Spiked Amount 150.000			Recovery = 93.72%		
14) Nitrobenzene-d5	10.96	82	750212	94.62 ug/mL	0.00
Spiked Amount 100.000			Recovery = 94.62%		
30) 2-Fluorobiphenyl	14.35	172	1004585	87.06 ug/mL	0.00
Spiked Amount 100.000			Recovery = 87.06%		
46) 2,4,6-Tribromophenol	17.16	330	207569	122.25 ug/mL	-0.01
Spiked Amount 150.000			Recovery = 81.50%		
60) Terphenyl-d14	21.54	244	1077142	107.23 ug/mL	0.00
Spiked Amount 100.000			Recovery = 107.23%		

Target Compounds Qvalue

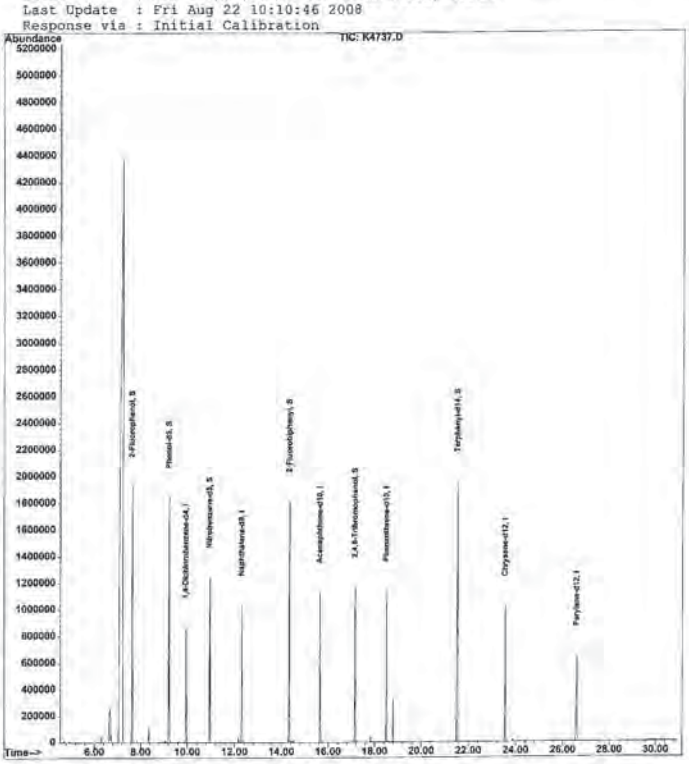
(#) = qualifier out of range (m) = manual integration
K4737.D K813OL42.M Fri Aug 22 10:54:22 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4737.D
Acq On : 21 Aug 2008 16:28
Sample : MB-7957
Misc : MBLK,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:15 2008

Vial: 4
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4737.D K813OL42.M Fri Aug 22 10:54:23 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4737.D
Acq On : 21 Aug 2008 16:28
Sample : MB-7957
Misc : MBLK,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 4
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.95	152	201893	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	767202	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.65	164	417692	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	761849	40.00 ug/mL	0.00
14) Chrysene-d12	23.57	240	622014	40.00 ug/mL	0.00
15) Perylene-d12	26.61	264	572831	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

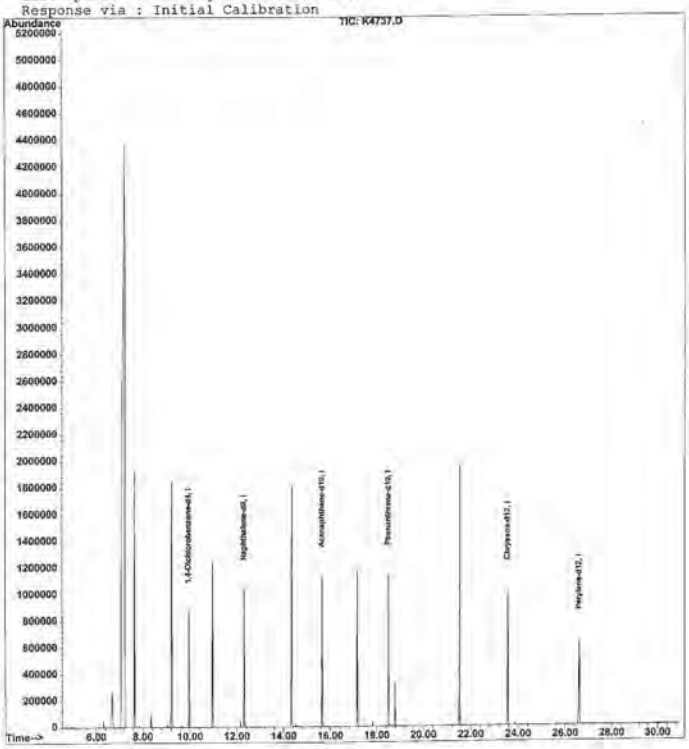
(#) = qualifier out of range (m) = manual integration
K4737.D K813OLM.M Fri Aug 22 10:53:49 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4737.D
Acq On : 21 Aug 2008 16:28
Sample : MB-7957
Misc : MBLK,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 4
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4737.D K813OLM.M Fri Aug 22 10:53:50 2008

Tentatively Identified Compound (LSC) summary

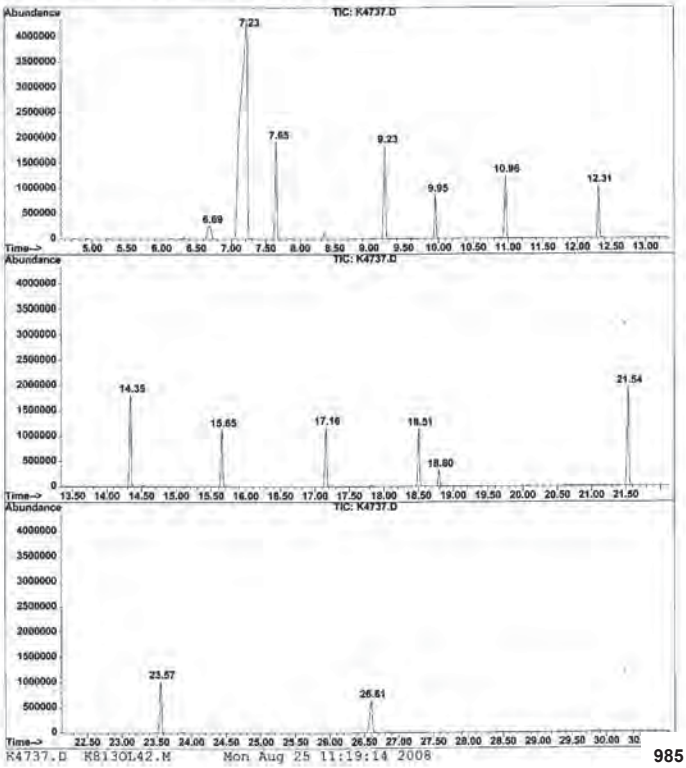
Operator ID: MEG Date Acquired: 21 Aug 2008 16:28
Data File: C:\HPCHEM\1\DATA\K4737.D
Name: MB-7957
Misc: MBLK,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea	ISConc
Acetic acid, 1-methy	6.69	29.1 ug/mL	1006610	ISTD01	9.95	1383850	40.0
2-Pentanone, 4-hydro	7.23	843.6 ug/mL	29185000	ISTD01	9.95	1383850	40.0
.beta.-Chlordene	18.80	10.1 ug/mL	490468	ISTD04	18.51	1946970	40.0

K4737.D K813OL42.M Mon Aug 25 11:19:18 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K4737.D
Operator : MEG
Acquired : 21 Aug 2008 16:28 Using AcqMethod K813FULL
Instrument : #6MS40
Sample Name: MB-7957
Misc Info : MBLK,8270S_OLM42,
Vial Number: 4
Quant File :K813OL42.RES (RTE Integrator)



K4737.D K813OL42.M Mon Aug 25 11:19:14 2008

Library Search Compound Report

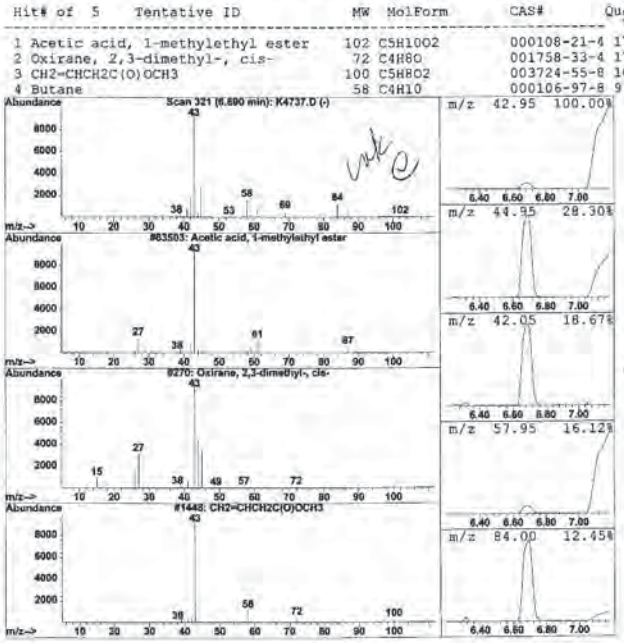
Data File : C:\HPCHEM\1\DATA\K4737.D Vial: 4
Acq On : 21 Aug 2008 16:28 Operator: MEG
Sample : MB-7957 Inst : #6MS40
Misc : MBLK,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Acetic acid, 1-methylethyl est Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	29.10 ug/mL	1006610	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17
2	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	17
3	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	10
4	Butane	58	C4H10	000106-97-8	9



K4737.D K813OL42.M Mon Aug 25 11:19:18 2008 Pa

Library Search Compound Report

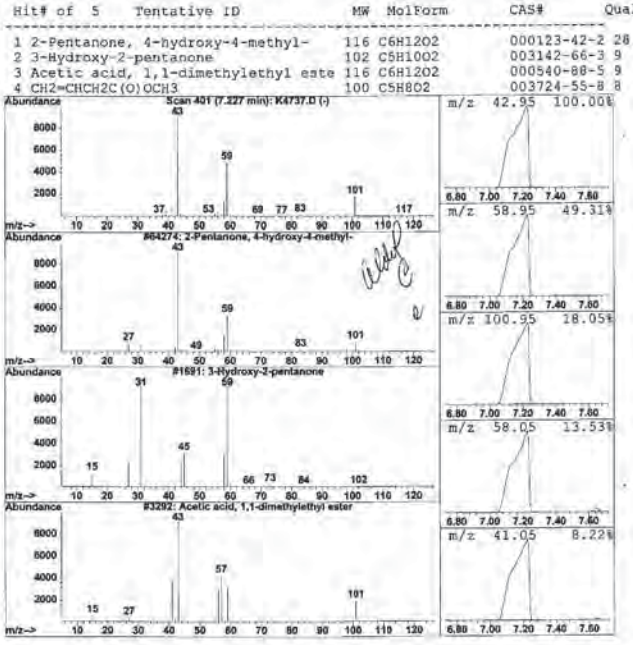
Data File : C:\HPCHEM\1\DATA\K4737.D Vial: 4
Acq On : 21 Aug 2008 16:28 Operator: MEG
Sample : MB-7957 Inst : #6MS40
Misc : MBLK,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.23	843.59 ug/mL	29185000	1,4-Dichlorobenzene-d4	9.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Acetic acid, 1,1-dimethylethyl este	116	C6H12O2	000540-88-5	9
4	CH2=CHCH2C(O)OCH3	100	C5H8O2	003724-55-8	8



K4737.D K813OL42.M Mon Aug 25 11:19:18 2008 Pa

Library Search Compound Report

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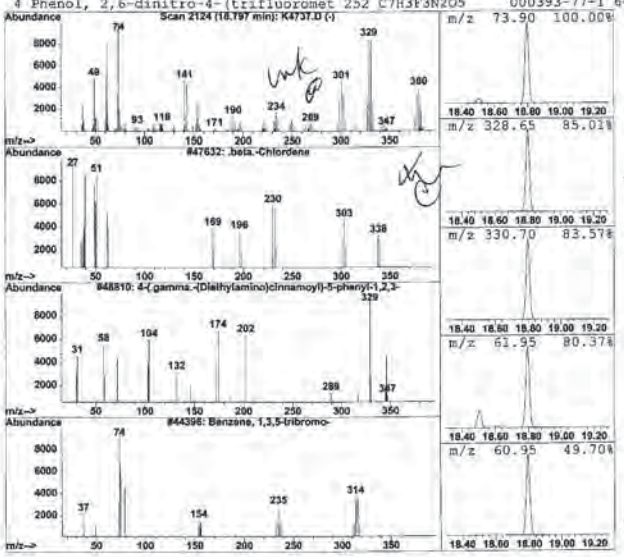
Data File : C:\HPCHEM\1\DATA\K4737.D                    Vial: 4
Acq On    : 21 Aug 2008  16:28                          Operator: MEG
Sample    : MB-7957                                     Inst    : #6MS40
Misc      : MBLK,8270S_OLM42,                           Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library      : C:\DATABASE\NBS75K.L
*************************************************************
Peak Number  3  .beta.-Chlordene                 Concentration Rank  3
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.80	10.08 ug/mL	490468	Phenanthrene-d10	18.51

Hits of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-Chlordene	336	C10H6C16	056534-03-3	90
2	4-(.gamma.-(Diethylamino)cinnamoyl)	346	C21H22N4O	000000-00-0	83
3	Benzene, 1,3,5-tribromo-	312	C6H3Br3	000626-39-1	74
4	Phenol, 2,6-dinitro-4-(trifluoromet	252	C7H3F3N2O5	000393-77-1	64



K4737.D K813OL42.M Mon Aug 25 11:19:18 2008 Pa

Matrix Spike Blanks

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 8/15/2008	RunNo: 14571
Client ID: ZZZZZ	Batch ID: 7957	Method: SW8270C	(SW3550B)	Analysis Date: 8/21/2008	SeqNo: 381958
Instrument: MS06_40	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Biphenyl	1840	330	1670	0	111	30	130				
2,4,5-Trichlorophenol	1790	1700	1670	0	108	34	130				
2,4,6-Trichlorophenol	1730	330	1670	0	104	33	130				
2,4-Dichlorophenol	1740	330	1670	0	104	39	130				
2,4-Dimethylphenol	1700	330	1670	0	102	22	130				
2,4-Dinitrophenol	918	1700	1670	0	55	10	130				
2,4-Dinitrotoluene	1840	330	1670	0	110	40	130				
2,6-Dinitrotoluene	1840	330	1670	0	110	38	130				
2-Chloronaphthalene	1740	330	1670	0	105	45	130				
2-Chlorophenol	1650	330	1670	0	99	39	130				
2-Methylnaphthalene	1750	330	1670	0	105	43	130				
2-Methylphenol	1710	330	1670	0	102	43	130				
2-Nitroaniline	1860	1700	1670	0	111	42	130				
2-Nitrophenol	1720	330	1670	0	103	34	130				
3,3'-Dichlorobenzidine	2000	660	1670	0	120	10	130				
3-Nitroaniline	1540	1700	1670	0	92	11	130				
4,6-Dinitro-2-methylphenol	1360	1700	1670	0	83	13	130				
4-Bromophenyl phenyl ether	1850	330	1670	0	111	43	130				
4-Chloro-3-methylphenol	1780	330	1670	0	107	38	130				
4-Chloroaniline	1320	330	1670	0	79	10	130				
4-Chlorophenyl phenyl ether	1800	330	1670	0	108	45	130				
4-Methylphenol	1710	330	1670	0	102	42	130				
4-Nitroaniline	1850	1700	1670	0	111	23	130				
4-Nitrophenol	1720	1700	1670	0	103	10	144				
Acenaphthene	1990	330	1670	0	119	43	130				
Acenaphthylene	1960	330	1670	0	118	46	130				
Acetophenone	1560	330	1670	0	93	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike recovery outside accepted recovery limits

22-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 8/15/2008	RunNo: 14571
Client ID: ZZZZZ	Batch ID: 7957	Method: SW8270C	(SW3550B)	Analysis Date: 8/21/2008	SeqNo: 381958
Instrument: MS06_40	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2120	330	1670	0	127	37	130				
Atrazine	1630	330	1670	0	98	30	130				
Benzaldehyde	1590	330	1670	0	96	30	130				
Benzo(a)anthracene	2280	330	1670	0	125	40	130				
Benzo(a)pyrene	2040	330	1670	0	122	44	130				
Benzo(b)fluoranthene	2010	330	1670	0	121	29	154				
Benzo(g,h,i)perylene	2140	330	1670	0	129	10	130				
Benzo(k)fluoranthene	2120	330	1670	0	127	38	143				
bis(2-Chloroethoxy)methane	1833	330	1670	0	110	43	130				
bis(2-chloroethyl)ether	1730	330	1670	0	104	41	130				
bis(2-chloroisopropyl)ether	1725	330	1670	0	103	34	130				
bis(2-Ethylhexyl)phthalate	1980	330	1670	0	119	42	154				
Butyl benzyl phthalate	1980	330	1670	0	119	34	160				
Caprolactam	2210	330	1670	0	133	30	130				
Carbazole	1970	330	1670	0	118	42	130				
Chrysene	2100	330	1670	0	126	43	130				
Di-n-butyl phthalate	1970	330	1670	0	118	50	133				
Di-n-octyl phthalate	2010	330	1670	0	121	48	146				
Dibenz(a,h)anthracene	2220	330	1670	0	133	16	138				
Dibenzofuran	1790	330	1670	0	107	45	130				
Diethyl phthalate	1890	330	1670	0	113	48	130				
Dimethyl phthalate	1830	330	1670	0	110	46	130				
Fluoranthene	2080	330	1670	0	125	45	130				
Fluorene	2050	330	1670	0	123	45	130				
Hexachlorobenzene	1690	330	1670	0	113	50	130				
Hexachlorobutadiene	1630	330	1670	0	98	37	130				
Hexachlorocyclopentadiene	1410	330	1670	0	85	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike recovery outside accepted recovery limits

22-Aug-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-7957 | SampType: MSB | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381958
Instrument: MS04_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1910	330	1670	0	96	23	130				
Indeno(1,2,3-cd)pyrene	2210	330	1670	0	132	10	154				
Isophorone	1760	330	1670	0	107	43	130				
N-Nitroso-di-n-propylamine	1670	330	1670	0	100	35	130				
N-Nitrosodiphenylamine	1920	330	1670	0	115	44	130				
Naphthalene	1890	330	1670	0	113	40	130				
Nitrobenzene	1780	330	1670	0	107	45	130				
Pentachlorophenol	1710	1700	1670	0	103	10	130				
Phenanthrene	2160	330	1670	0	129	45	130				
Phenol	1670	330	1670	0	100	33	130				
Pyrene	2120	330	1670	0	127	18	154				
Surr: 2,4,6-Tribromophenol	5360	0	5000	0	107	20	143				
Surr: 2-Fluorobiphenyl	2950	0	3330	0	89	46	130				
Surr: 2-Fluorophenol	4560	0	5000	0	91	22	130				
Surr: Nitrobenzene-d5	3170	0	3330	0	95	39	130				
Surr: Phenol-d5	4690	0	5000	0	94	33	130				
Surr: Terphenyl-d14	3660	0	3330	0	110	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

22-Aug-08

992

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4739.D
Acq On : 21 Aug 2008 17:44
Sample : MSB-7957
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	195213	40.00 ug/mL	0.00
13) Naphthalene-d8	12.32	136	752550	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	406162	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.52	188	742262	40.00 ug/mL	0.00
58) Chrysene-d12	23.58	240	591714	40.00 ug/mL	0.00
68) Perylene-d12	26.61	264	567131	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	852225	136.81 ug/mL	0.04
Spiked Amount 150.000			Recovery =	91.21%	
3) Phenol-d5	9.24	99	1157188	140.73 ug/mL	0.02
Spiked Amount 150.000			Recovery =	93.82%	
14) Nitrobenzene-d5	10.97	82	738656	95.02 ug/mL	0.01
Spiked Amount 100.000			Recovery =	95.02%	
30) 2-Fluorobiphenyl	14.35	172	993825	88.58 ug/mL	0.00
Spiked Amount 100.000			Recovery =	88.58%	
46) 2,4,6-Tribromophenol	17.17	330	265372	160.73 ug/mL	0.00
Spiked Amount 150.000			Recovery =	107.15%	
60) Terphenyl-d14	21.54	244	1048629	109.74 ug/mL	0.00
Spiked Amount 100.000			Recovery =	109.74%	
Target Compounds					Qvalue
4) Phenol	9.26	94	505795	50.02 ug/mL	93
5) bis(2-Chloroethyl)ether	9.46	93	384167	51.90 ug/mL	99
6) 2-Chlorophenol	9.58	128	347131	49.64 ug/mL	99
7) 2-Methylphenol	10.35	108	321253	51.21 ug/mL	99
8) 2,2'-oxybis(1-chloropropan	10.42	45	813886	51.61 ug/mL	99
9) bis(2-Chloroisopropyl)ethe	10.42	45	813886	51.61 ug/mL	99
10) 4-Methylphenol	10.63	108	344184	51.38 ug/mL	98
11) N-Nitroso-di-n-propylamine	10.67	70	297946	50.16 ug/mL	97
12) Hexachloroethane	10.89	117	150979	48.23 ug/mL	98
15) Nitrobenzene	11.01	77	438402	53.38 ug/mL	95
16) Isophorone	11.44	82	799672	53.50 ug/mL	98
17) 2-Nitrophenol	11.59	139	216552	51.71 ug/mL	98
18) 2,4-Dimethylphenol	11.62	107	381923	50.85 ug/mL	100
19) bis(2-Chloroethoxy)methane	11.81	93	474625	54.88 ug/mL	96
20) 2,4-Dichlorophenol	12.03	162	291591	52.14 ug/mL	100
21) Naphthalene	12.36	128	915301	56.68 ug/mL	100
22) 4-Chloroaniline	12.43	127	305564	39.70 ug/mL	99
23) Hexachlorobutadiene	12.57	225	157479	48.82 ug/mL	100
24) 4-Chloro-3-methylphenol	13.32	107	377463	53.35 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4739.D K813OL42.M Fri Aug 22 10:54:40 2008

993

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4739.D
Acq On : 21 Aug 2008 17:44
Sample : MSB-7957
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.66	142	547797	52.53 ug/mL	100
27) Hexachlorocyclopentadiene	13.95	237	158276	42.38 ug/mL	100
28) 2,4,6-Trichlorophenol	14.18	196	213560	51.83 ug/mL	99
29) 2,4,5-Trichlorophenol	14.25	196	210753	53.83 ug/mL	99
31) 2-Chloronaphthalene	14.60	162	550937	52.31 ug/mL	98
32) 2-Nitroaniline	14.77	65	261960	55.71 ug/mL	98
33) Dimethyl phthalate	15.10	163	755077	55.00 ug/mL	100
34) 2,6-Dinitrotoluene	15.23	165	191580	55.08 ug/mL	97
35) Acenaphthylene	15.39	152	934540	58.94 ug/mL	100
36) 3-Nitroaniline	15.55	138	169142	46.16 ug/mL	97
37) Acenaphthene	15.73	153	534125	59.68 ug/mL	94
38) 2,4-Dinitrophenol	15.74	184	76815	27.49 ug/mL#	1
39) 4-Nitrophenol	15.82	109	135723	51.60 ug/mL	97
40) 2,4-Dinitrotoluene	16.00	165	242622	55.05 ug/mL	97
41) Dibenzofuran	16.05	168	752385	53.69 ug/mL	98
42) Diethyl phthalate	16.44	149	756275	56.65 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.68	204	305873	54.04 ug/mL	100
44) Fluorene	16.71	166	634640	61.58 ug/mL	99
45) 4-Nitroaniline	16.74	138	201296	55.37 ug/mL	98
48) 4,6-Dinitro-2-methylphenol	16.78	198	133303	41.43 ug/mL	98
49) n-Nitrosodiphenylamine	16.91	169	468515	57.53 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.63	248	170752	55.40 ug/mL	99
51) Hexachlorobenzene	17.76	284	188515	56.76 ug/mL	98
52) Pentachlorophenol	18.12	266	136592	51.30 ug/mL	99
53) Phenanthrene	18.56	178	949922	63.01 ug/mL	100
54) Anthracene	18.66	178	971914	63.66 ug/mL	100
55) Carbazole	18.95	167	906819	59.04 ug/mL	100
56) Di-n-butyl phthalate	19.56	149	1307417	59.05 ug/mL	100
57) Fluoranthene	20.84	202	1017224	62.70 ug/mL	98
59) Pyrene	21.28	202	1063561	63.74 ug/mL	98
61) Butyl benzyl phthalate	22.43	149	620628	59.60 ug/mL	97
62) 3,3'-Dichlorobenzidine	23.47	252	331711	60.05 ug/mL	100
63) Benzo[a]anthracene	23.55	228	909859	62.38 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.49	149	790507	59.46 ug/mL	100
65) Chrysene	23.63	228	843279	63.15 ug/mL	100
66) Di-n-octyl phthalate	24.70	149	1512973	60.41 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.43	276	880894	66.17 ug/mL	98
69) Benzo[b]fluoranthene	25.69	252	878526	60.33 ug/mL	99
70) Benzo[k]fluoranthene	25.76	252	849426	63.70 ug/mL	99
71) Benzo[a]pyrene	26.48	252	812444	61.08 ug/mL	100
72) Dibenz[a,h]anthracene	29.45	278	753997	66.67 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4739.D K813OL42.M Fri Aug 22 10:54:41 2008

994

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4739.D
Acq On : 21 Aug 2008 17:44
Sample : MSB-7957
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.09	276	732688	64.27 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K4739.D K813OL42.M Fri Aug 22 10:54:41 2008

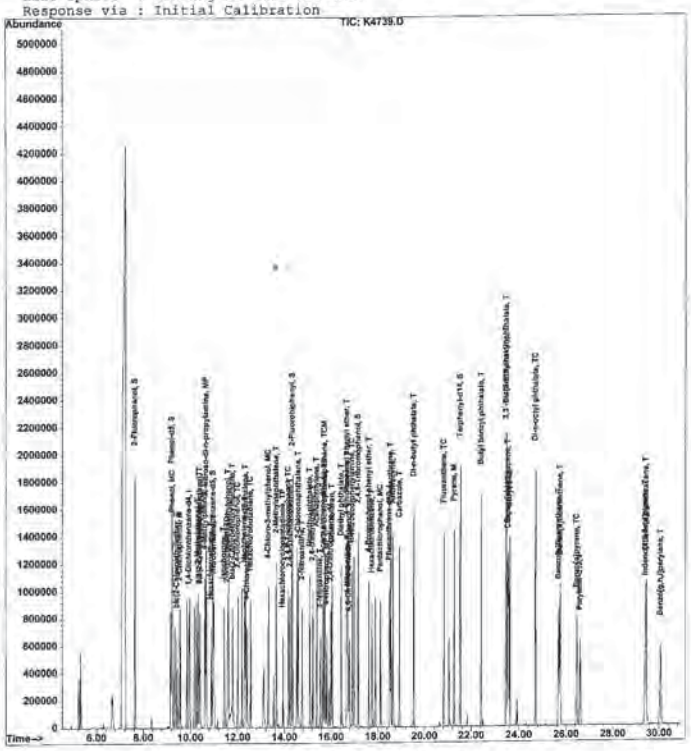
995

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4739.D
Acq On : 21 Aug 2008 17:44
Sample : MSB-7957
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4739.D K813OL42.M Fri Aug 22 10:54:43 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4739.D
Acq On : 21 Aug 2008 17:44
Sample : MSB-7957
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	195213	40.00 ug/mL	0.00
5) Naphthalene-d8	12.32	136	752550	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	406162	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.52	188	742262	40.00 ug/mL	0.00
14) Chrysene-d12	23.58	240	591708	40.00 ug/mL	0.01
15) Perylene-d12	26.61	264	567131	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.18	77	285871	47.79 ug/mL	96
4) Acetophenone	10.68	105	435538	46.38 ug/mL	100
6) Caprolactam	13.12	55	226941	66.38 ug/mL	97
8) 1,1'-Biphenyl	14.54	154	637379	55.33 ug/mL	99
12) Atrazine	17.90	200	154382	48.90 ug/mL	100

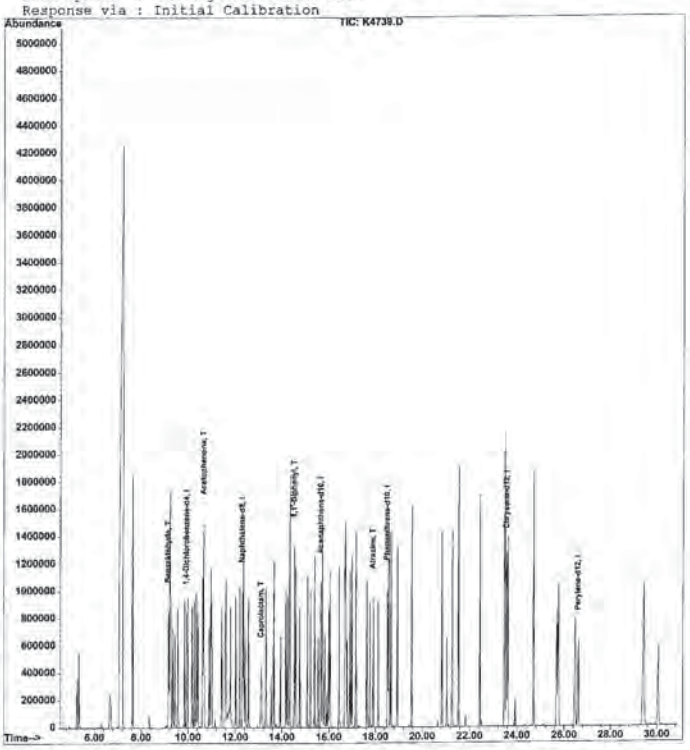
(#) = qualifier out of range (m) = manual integration
K4739.D K813OLM.M Fri Aug 22 10:53:59 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4739.D
Acq On : 21 Aug 2008 17:44
Sample : MSB-7957
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4739.D K813OLM.M Fri Aug 22 10:53:59 2008 Pa

Matrix Spikes

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site

Sample ID: 0808076-004BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381967
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1990	390	1970	0	101	30	130				
2,4,5-Trichlorophenol	1830	2000	1970	0	93	34	130				J
2,4,6-Trichlorophenol	1790	390	1970	0	91	33	130				
2,4-Dichlorophenol	1890	390	1970	0	96	39	130				
2,4-Dimethylphenol	1880	390	1970	0	95	22	130				
2,4-Dinitrophenol	619	2000	1970	0	31	10	130				J
2,4-Dinitrotoluene	1930	390	1970	0	98	40	130				
2,6-Dinitrotoluene	1890	390	1970	0	96	36	130				
2-Chloronaphthalene	1860	390	1970	0	94	46	130				
2-Chlorophenol	1770	390	1970	0	90	39	130				
2-Methylnaphthalene	1890	390	1970	0	96	43	130				
2-Methylphenol	1840	390	1970	0	93	43	130				
2-Nitroaniline	1930	2000	1970	0	98	42	130				J
2-Nitrophenol	1840	390	1970	0	93	34	130				
3,3'-Dichlorobenzidine	2100	780	1970	0	106	10	130				
3-Nitroaniline	1540	2000	1970	0	78	11	130				J
4,6-Dinitro-2-methylphenol	1160	2000	1970	0	59	13	130				J
4-Bromophenyl phenyl ether	1910	390	1970	0	97	43	130				
4-Chloro-3-methylphenol	1900	390	1970	0	96	38	130				
4-Chloroaniline	1120	390	1970	0	57	10	130				
4-Chlorophenyl phenyl ether	1890	390	1970	0	96	45	130				
4-Methylphenol	1830	390	1970	0	93	42	130				
4-Nitroaniline	1970	2000	1970	0	100	23	130				J
4-Nitrophenol	1800	2000	1970	0	92	10	144				J
Acenaphthene	2150	390	1970	0	109	43	130				
Acenaphthylene	2100	390	1970	0	106	46	130				
Acetophenone	1650	390	1970	0	84	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

22-Aug-08

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site

Sample ID: 0808076-004BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381967
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2270	390	1970	0	115	37	130				
Atrazine	1770	390	1970	0	90	30	130				
Benzaldehyde	1730	390	1970	0	88	30	130				
Benzo[a]anthracene	2240	390	1970	0	114	40	130				
Benzo[a]pyrene	2170	390	1970	0	110	44	130				
Benzo[b]fluoranthene	2190	390	1970	0	111	29	154				
Benzo[g,h,i]perylene	2200	390	1970	0	112	10	130				
Benzo[k]fluoranthene	2280	390	1970	0	116	35	143				
bis(2-Chloroethoxy)methane	1990	390	1970	0	101	43	130				
bis(2-chloroethyl)ether	1830	390	1970	0	93	41	120				
bis(2-chloroisopropyl)ether	1840	390	1970	0	93	34	130				
bis(2-Ethylhexyl)phthalate	2190	390	1970	0	111	42	154				
Butyl benzyl phthalate	2140	390	1970	0	109	34	160				
Caprolactam	2340	390	1970	0	119	30	130				
Carbazole	2110	390	1970	0	107	42	130				
Chrysene	2280	390	1970	0	115	43	130				
Di-n-butyl phthalate	2180	390	1970	0	111	50	123				
Di-n-octyl phthalate	2170	390	1970	0	110	48	146				
Dibenz[a,h]anthracene	2320	390	1970	0	118	16	135				
Dibenzofuran	1880	390	1970	0	95	45	130				
Diethyl phthalate	1990	390	1970	0	101	48	130				
Dimethyl phthalate	1920	390	1970	0	97	48	130				
Fluoranthene	2260	390	1970	0	115	45	130				
Fluorene	2190	390	1970	0	111	45	130				
Hexachlorobenzene	2010	390	1970	0	102	50	130				
Hexachlorobutadiene	1710	390	1970	0	87	37	130				
Hexachlorocyclopentadiene	1270	390	1970	0	64	10	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

22-Aug-08

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site

Sample ID: 0808076-004BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/21/2008 SeqNo: 381967
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1670	390	1970	0	85	23	130				
Indeno[1,2,3-cd]pyrene	2230	390	1970	0	113	10	134				
Isophorone	1920	390	1970	0	98	43	130				
N-Nitroso-di-n-propylamine	1820	390	1970	0	92	35	130				
N-Nitrosodiphenylamine	2050	390	1970	0	104	44	130				
Naphthalene	2040	390	1970	0	103	40	130				
Nitrobenzene	1920	390	1970	0	97	45	130				
Pentachlorophenol	1630	2000	1970	0	83	10	130				J
Phenanthrene	2250	390	1970	0	114	45	130				
Phenol	1860	390	1970	0	94	33	130				
Pyrene	2320	390	1970	0	118	18	154				
Surr: 2,4,6-Tribromophenol	5660	0	5910	0	96	20	143				
Surr: 2-Fluorobiphenyl	3270	0	3940	0	83	46	130				
Surr: 2-Fluorophenol	4960	0	5910	0	84	22	130				
Surr: Nitrobenzene-d5	3430	0	3940	0	87	39	130				
Surr: Phenol-d5	5160	0	5910	0	87	33	130				
Surr: Terphenyl-d14	4030	0	3940	0	102	38	146				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

22-Aug-08

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K4748.D                 Vial: 15
Acq On    : 21 Aug 2008  23:30                    Operator: MEG
Sample    : 0808076-004BMS                        Inst    : #6MS40
Misc      : MS  ,8270S_OLM42,                     Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008            Quant Results File: K8130L42.RES

Quant Method : C:\HPCHEM\1\METHODS\K8130L42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards                 R.T. QIon  Response  Conc Units Dev(Min)
-----------------------------------------------------------------------------
  1) 1,4-Dichlorobenzene-d4       9.96   152   197336    40.00 ug/mL    0.00
 13) Naphthalene-d8              12.32   136   752062    40.00 ug/mL    0.00
 26) Acenaphthene-d10            15.66   164   410754    40.00 ug/mL    0.00
 47) Phenanthrene-d10            18.51   188   748740    40.00 ug/mL    0.00
 58) Chrysene-d12                23.58   240   594744    40.00 ug/mL    0.00
 68) Perylene-d12                26.61   264   553880    40.00 ug/mL   -0.01

System Monitoring Compounds
  2) 2-Fluorophenol               7.65   112   792123   125.79 ug/mL    0.03
  Spiked Amount   150.000                  Recovery   =    83.86%
  3) Phenol-d5                    9.24    99  1088404   130.94 ug/mL    0.01
  Spiked Amount   150.000                  Recovery   =    87.29%
 14) Nitrobenzene-d5             10.97    82   676791    87.12 ug/mL    0.00
  Spiked Amount   100.000                  Recovery   =    87.12%
 30) 2-Fluorobiphenyl            14.34   172   941967    83.02 ug/mL    0.00
  Spiked Amount   100.000                  Recovery   =    83.02%
 46) 2,4,6-Tribromophenol        17.17   330   239856   143.65 ug/mL    0.00
  Spiked Amount   150.000                  Recovery   =    95.77%
 60) Terphenyl-d14               21.53   244   983348   102.39 ug/mL    0.00
  Spiked Amount   100.000                  Recovery   =   102.39%

Target Compounds                                                   Qvalue
  4) Phenol                       9.26    94   480678    47.03 ug/mL      94
  5) bis(2-Chloroethyl)ether      9.45    93   347611    46.45 ug/mL      99
  6) 2-Chlorophenol               9.57   128   318145    45.00 ug/mL      98
  7) 2-Methylphenol              10.35   108   295398    46.59 ug/mL     100
  8) 2,2'-oxybis(1-chloropropan  10.41    45   744306    46.69 ug/mL      99
  9) bis(2-Chloroisopropyl)ethe  10.41    45   744306    46.69 ug/mL      99
 10) 4-Methylphenol              10.62   108   314791    46.49 ug/mL      97
 11) N-Nitroso-di-n-propylamine  10.66    70   276776    46.10 ug/mL      97
 12) Hexachloroethane            10.90   117   134069    42.37 ug/mL      97
 15) Nitrobenzene                11.00    77   400057    48.74 ug/mL      94
 16) Isophorone                  11.43    82   729524    48.84 ug/mL      97
 17) 2-Nitrophenol               11.58   139   195406    46.69 ug/mL      97
 18) 2,4-Dimethylphenol          11.62   107   357135    47.59 ug/mL      99
 19) bis(2-Chloroethoxy)methane  11.80    93   435829    50.42 ug/mL      95
 20) 2,4-Dichlorophenol          12.03   162   268345    48.02 ug/mL     100
 21) Naphthalene                 12.36   128   833437    51.65 ug/mL     100
 22) 4-Chloroaniline             12.42   127   218884    28.45 ug/mL      98
 23) Hexachlorobutadiene         12.56   225   139783    43.37 ug/mL     100
 24) 4-Chloro-3-methylphenol     13.31   107   340669    48.18 ug/mL      97
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
K4748.D  K8130L42.M       Fri Aug 22 10:18:40 2008                        Pa
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4748.D
Acq On : 21 Aug 2008 23:30
Sample : 0808076-004BMS
Misc : MS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 15
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.66	142	500360	48.01 ug/mL	99
27) Hexachlorocyclopentadiene	13.95	237	121397	32.14 ug/mL	99
28) 2,4,6-Trichlorophenol	14.17	196	189117	45.39 ug/mL	100
29) 2,4,5-Trichlorophenol	14.25	196	183799	46.42 ug/mL	99
31) 2-Chloronaphthalene	14.60	162	503186	47.24 ug/mL	98
32) 2-Nitroaniline	14.77	65	233217	49.05 ug/mL	97
33) Dimethyl phthalate	15.09	163	676818	48.75 ug/mL	100
34) 2,6-Dinitrotoluene	15.22	165	168907	48.02 ug/mL	97
35) Acenaphthylene	15.40	152	853059	53.20 ug/mL	100
36) 3-Nitroaniline	15.55	138	144998	39.13 ug/mL	95
37) Acenaphthene	15.73	153	492866	54.46 ug/mL	92
38) 2,4-Dinitrophenol	15.74	184	44356	15.70 ug/mL#	1
39) 4-Nitrophenol	15.82	109	121737	45.77 ug/mL	96
40) 2,4-Dinitrotoluene	15.99	165	216554	49.04 ug/mL	95
41) Dibenzofuran	16.05	168	675502	47.66 ug/mL	98
42) Diethyl phthalate	16.44	149	682012	50.51 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.69	204	274440	47.94 ug/mL	99
44) Fluorene	16.71	166	579849	55.64 ug/mL	100
45) 4-Nitroaniline	16.73	138	183383	49.88 ug/mL	97
48) 4,6-Dinitro-2-methylphenol	16.78	198	95316	29.36 ug/mL	98
49) n-Nitrosodiphenylamine	16.91	169	426786	51.95 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.63	248	150784	48.50 ug/mL	98
51) Hexachlorobenzene	17.76	284	171143	51.08 ug/mL	98
52) Pentachlorophenol	18.12	266	111006	41.33 ug/mL	100
53) Phenanthrene	18.56	178	867377	57.03 ug/mL	100
54) Anthracene	18.66	178	887855	57.65 ug/mL	100
55) Carbazole	18.94	167	828181	53.45 ug/mL	100
56) Di-n-butyl phthalate	19.55	149	1238204	55.44 ug/mL	100
57) Fluoranthene	20.84	202	940585	57.48 ug/mL	97
59) Pyrene	21.28	202	987785	58.90 ug/mL	97
61) Butyl benzyl phthalate	22.43	149	569235	54.38 ug/mL	96
62) 3,3'-Dichlorobenzidine	23.47	252	295637	53.24 ug/mL	99
63) Benzo[a]anthracene	23.55	228	834812	56.94 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.49	149	751887	55.55 ug/mL	99
65) Chrysene	23.63	228	775010	57.74 ug/mL	100
66) Di-n-octyl phthalate	24.70	149	1388707	55.16 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.42	276	758799	56.71 ug/mL	97
69) Benzo[b]fluoranthene	25.69	252	789289	55.50 ug/mL	99
70) Benzo[k]fluoranthene	25.76	252	755126	57.98 ug/mL	99
71) Benzo[a]pyrene	26.48	252	717175	55.20 ug/mL	99
72) Dibenz[a,h]anthracene	29.44	278	650200	58.87 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K4748.D K813OL42.M Fri Aug 22 10:18:41 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4748.D
Acq On : 21 Aug 2008 23:30
Sample : 0808076-004BMS
Misc : MS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 15
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.08	276	622851	55.94 ug/mL	100

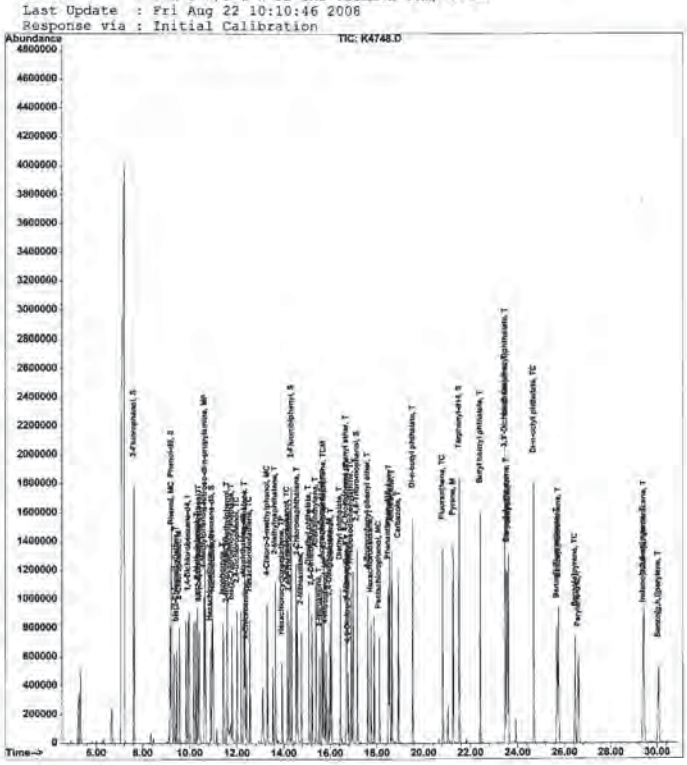
(#) = qualifier out of range (m) = manual integration
K4748.D K813OL42.M Fri Aug 22 10:18:41 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4748.D
Acq On : 21 Aug 2008 23:30
Sample : 0808076-004BMS
Misc : MS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 15
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4748.D K813OL42.M Fri Aug 22 10:18:43 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4748.D
Acq On : 21 Aug 2008 23:30
Sample : 0808076-004BMS
Misc : MS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008

Vial: 15
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

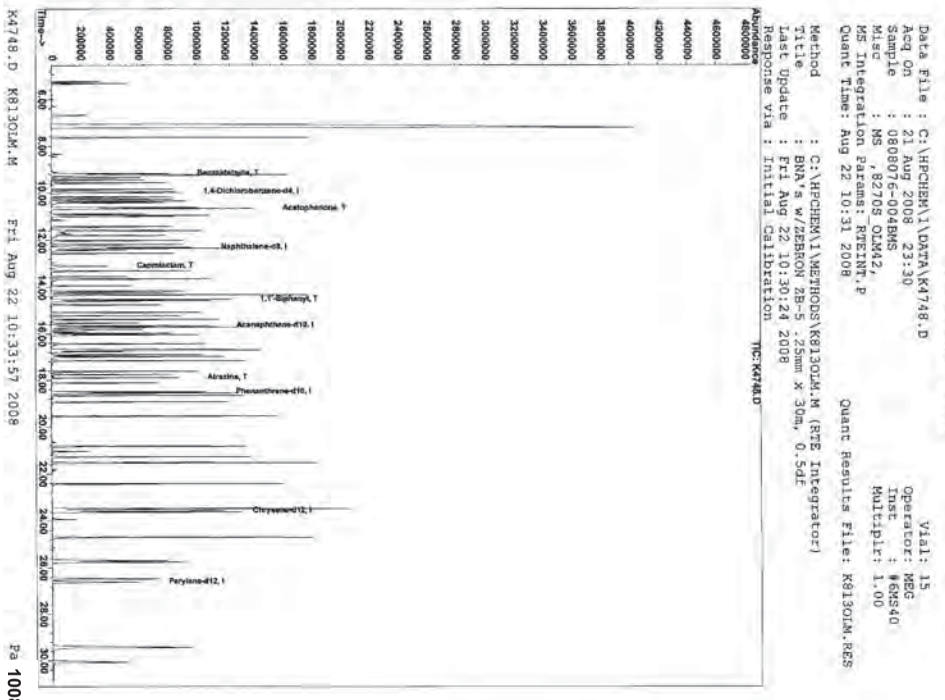
Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	197336	40.00 ug/mL	0.00
5) Naphthalene-d8	12.32	136	752062	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	410754	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	748740	40.00 ug/mL	0.00
14) Chrysene-d12	23.58	240	594744	40.00 ug/mL	0.00
15) Perylene-d12	26.61	264	553880	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.18	77	265459	43.90 ug/mL	95
4) Acetophenone	10.68	105	398389	41.97 ug/mL	98
6) Caprolactam	13.11	55	202649	59.32 ug/mL	97
8) 1,1'-Biphenyl	14.54	154	588006	50.48 ug/mL	100
12) Atrazine	17.91	200	143032	44.91 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4748.D K813OLM.M Fri Aug 22 10:33:57 2008



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	2040	390	1970	0	104	30	130	1990	2.7	60	
2,4,5-Trichlorophenol	1890	2000	1970	0	96	34	130	1830	3.3	44	J
2,4,6-Trichlorophenol	1840	390	1970	0	93	33	130	1790	2.7	45	
2,4-Dichlorophenol	1870	390	1970	0	95	39	130	1890	1.1	53	
2,4-Dimethylphenol	1830	390	1970	0	93	22	130	1880	2.2	52	
2,4-Dinitrophenol	643	2000	1970	0	33	10	130	619	3.8	60	J
2,4-Dinitrotoluene	1950	390	1970	0	99	40	130	1930	0.7	32	
2,6-Dinitrotoluene	1950	390	1970	0	99	36	130	1890	3.0	43	
2-Chloronaphthalene	1850	390	1970	0	94	46	130	1860	0.5	30	
2-Chlorophenol	1760	390	1970	0	89	39	130	1770	1.1	38	
2-Methylnaphthalene	1860	390	1970	0	94	43	130	1890	1.6	35	
2-Methylphenol	1810	390	1970	0	92	43	130	1840	1.4	60	
2-Nitroaniline	1930	2000	1970	0	98	42	130	1930	0.1	34	J
2-Nitrophenol	1820	390	1970	0	92	34	130	1840	1.3	48	
3,3'-Dichlorobenzidine	2020	780	1970	0	103	10	130	2100	3.7	60	
3-Nitroaniline	1510	2000	1970	0	77	11	130	1540	1.9	40	J
4,6-Dinitro-2-methylphenol	1170	2000	1970	0	59	13	130	1180	1.2	60	J
4-Bromophenyl phenyl ether	1950	390	1970	0	99	43	130	1910	1.9	37	
4-Chloro-3-methylphenol	1920	390	1970	0	97	38	130	1900	1.1	30	
4-Chloroaniline	1060	390	1970	0	54	10	130	1120	5.7	48	
4-Chlorophenyl phenyl ether	1940	390	1970	0	98	45	130	1890	2.5	32	
4-Methylphenol	1830	390	1970	0	93	42	130	1830	0	53	
4-Nitroaniline	1950	2000	1970	0	99	23	130	1970	1.0	37	J
4-Nitrophenol	1840	2000	1970	0	93	10	144	1800	2.1	30	J
Acenaphthene	2160	390	1970	0	110	43	130	2150	0.6	30	
Acenaphthylene	2100	390	1970	0	106	46	130	2100	0.1	30	
Acetophenone	1700	390	1970	0	86	30	130	1650	2.6	60	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1670	390	1970	0	85	23	130	1670	0	37	
Indeno[1,2,3-cd]pyrene	2200	390	1970	0	112	10	134	2230	1.6	30	
Isophorone	1870	390	1970	0	95	43	130	1920	3.0	40	
N-Nitroso-di-n-propylamine	1770	390	1970	0	90	35	130	1820	2.8	30	
N-Nitrosodiphenylamine	2070	390	1970	0	105	44	130	2050	1.2	52	
Naphthalene	1980	390	1970	0	101	40	130	2040	2.7	33	
Nitrobenzene	1870	390	1970	0	95	45	130	1920	2.7	51	
Pentachlorophenol	1670	2000	1970	0	85	10	130	1850	2.5	53	J
Phenanthrene	2250	390	1970	0	114	45	130	2250	0.1	30	
Phenol	1810	390	1970	0	92	33	130	1850	2.3	34	
Pyrene	2290	390	1970	0	116	18	164	2320	1.5	30	
Surr: 2,4,6-Tribromophenol	5860	0	5910	0	99	20	143	0		0	
Surr: 2-Fluorobiphenyl	3310	0	3940	0	84	46	130	0		0	
Surr: 2-Fluorophenol	5030	0	5910	0	85	22	130	0		0	
Surr: Nitrobenzene-d5	3430	0	3940	0	87	39	130	0		0	
Surr: Phenol-d5	5150	0	5910	0	87	33	130	0		0	
Surr: Terphenyl-d14	4040	0	3940	0	102	36	148	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004DMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 8/15/2008 RunNo: 14571
Client ID: UST-East Batch ID: 7957 Method: SW8270C (SW3550B) Analysis Date: 8/22/2008 SeqNo: 381968
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1670	390	1970	0	85	23	130	1670	0	37	
Indeno[1,2,3-cd]pyrene	2200	390	1970	0	112	10	134	2230	1.6	30	
Isophorone	1870	390	1970	0	95	43	130	1920	3.0	40	
N-Nitroso-di-n-propylamine	1770	390	1970	0	90	35	130	1820	2.8	30	
N-Nitrosodiphenylamine	2070	390	1970	0	105	44	130	2050	1.2	52	
Naphthalene	1980	390	1970	0	101	40	130	2040	2.7	33	
Nitrobenzene	1870	390	1970	0	95	45	130	1920	2.7	51	
Pentachlorophenol	1670	2000	1970	0	85	10	130	1850	2.5	53	J
Phenanthrene	2250	390	1970	0	114	45	130	2250	0.1	30	
Phenol	1810	390	1970	0	92	33	130	1850	2.3	34	
Pyrene	2290	390	1970	0	116	18	164	2320	1.5	30	
Surr: 2,4,6-Tribromophenol	5860	0	5910	0	99	20	143	0		0	
Surr: 2-Fluorobiphenyl	3310	0	3940	0	84	46	130	0		0	
Surr: 2-Fluorophenol	5030	0	5910	0	85	22	130	0		0	
Surr: Nitrobenzene-d5	3430	0	3940	0	87	39	130	0		0	
Surr: Phenol-d5	5150	0	5910	0	87	33	130	0		0	
Surr: Terphenyl-d14	4040	0	3940	0	102	36	148	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

22-Aug-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4749.D
Acq On : 22 Aug 2008 00:09
Sample : 0808076-004BMSD
Misc : MSD ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 16
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	193133	40.00 ug/mL	0.00
13) Naphthalene-d8	12.31	136	747816	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	402786	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.51	188	737518	40.00 ug/mL	0.00
58) Chrysene-d12	23.58	240	594729	40.00 ug/mL	0.00
68) Perylene-d12	26.61	264	554776	40.00 ug/mL	-0.01
System Monitoring Compounds					
2) 2-Fluorophenol	7.64	112	787056	127.71 ug/mL	0.03
Spiked Amount 150.000			Recovery = 85.14%		
3) Phenol-d5	9.23	99	1062433	130.60 ug/mL	0.00
Spiked Amount 150.000			Recovery = 87.07%		
14) Nitrobenzene-d5	10.97	82	672152	87.01 ug/mL	0.00
Spiked Amount 100.000			Recovery = 87.01%		
30) 2-Fluorobiphenyl	14.34	172	935535	84.08 ug/mL	0.00
Spiked Amount 100.000			Recovery = 84.08%		
46) 2,4,6-Tribromophenol	17.17	330	243338	148.62 ug/mL	0.00
Spiked Amount 150.000			Recovery = 99.08%		
60) Terphenyl-d14	21.53	244	983822	102.44 ug/mL	0.00
Spiked Amount 100.000			Recovery = 102.44%		

Target Compounds					Qvalue
4) Phenol	9.26	94	459713	45.96 ug/mL	93
5) bis(2-Chloroethyl)ether	9.45	93	335334	45.79 ug/mL	100
6) 2-Chlorophenol	9.57	128	307846	44.50 ug/mL	98
7) 2-Methylphenol	10.35	108	285154	45.95 ug/mL	99
8) 2,2'-oxybis(1-chloropropan	10.41	45	719214	46.10 ug/mL	99
9) bis(2-Chloroisopropyl)ethe	10.41	45	719214	46.10 ug/mL	99
10) 4-Methylphenol	10.62	108	308084	46.49 ug/mL	98
11) N-Nitroso-di-n-propylamine	10.66	70	263918	44.91 ug/mL	97
12) Hexachloroethane	10.89	117	131234	42.38 ug/mL	98
15) Nitrobenzene	11.01	77	387153	47.44 ug/mL	95
16) Isophorone	11.44	82	703920	47.39 ug/mL	98
17) 2-Nitrophenol	11.58	139	191850	46.10 ug/mL	97
18) 2,4-Dimethylphenol	11.62	107	347505	46.56 ug/mL	99
19) bis(2-Chloroethoxy)methane	11.80	93	422296	49.13 ug/mL	95
20) 2,4-Dichlorophenol	12.03	162	263914	47.49 ug/mL	100
21) Naphthalene	12.36	128	806857	50.28 ug/mL	100
22) 4-Chloroaniline	12.42	127	205480	26.86 ug/mL	98
23) Hexachlorobutadiene	12.56	225	137218	42.81 ug/mL	99
24) 4-Chloro-3-methylphenol	13.32	107	342396	48.70 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4749.D K813OL42.M Fri Aug 22 10:18:51 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4749.D
Acq On : 22 Aug 2008 00:09
Sample : 0808076-004BMSD
Misc : MSD ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 16
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.66	142	489444	47.23 ug/mL	100
27) Hexachlorocyclopentadiene	13.95	237	118829	32.09 ug/mL	100
28) 2,4,6-Trichlorophenol	14.17	196	190438	46.61 ug/mL	100
29) 2,4,5-Trichlorophenol	14.25	196	186260	47.97 ug/mL	99
31) 2-Chloronaphthalene	14.60	162	491049	47.01 ug/mL	98
32) 2-Nitroaniline	14.77	65	228964	49.10 ug/mL	97
33) Dimethyl phthalate	15.09	163	675127	49.59 ug/mL	100
34) 2,6-Dinitrotoluene	15.22	165	170642	49.47 ug/mL	97
35) Acenaphthylene	15.39	152	836859	53.23 ug/mL	100
36) 3-Nitroaniline	15.55	138	139589	38.41 ug/mL	96
37) Acenaphthene	15.73	153	486456	54.81 ug/mL	93
38) 2,4-Dinitrophenol	15.74	184	45178	16.31 ug/mL#	1
39) 4-Nitrophenol	15.82	109	121862	46.72 ug/mL	98
40) 2,4-Dinitrotoluene	15.99	165	215872	49.39 ug/mL	96
41) Dibenzofuran	16.05	168	669556	48.18 ug/mL	98
42) Diethyl phthalate	16.44	149	675917	51.05 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.68	204	275864	49.14 ug/mL	100
44) Fluorene	16.71	166	577975	56.55 ug/mL	100
45) 4-Nitroaniline	16.73	138	178013	49.38 ug/mL	97
48) 4,6-Dinitro-2-methylphenol	16.78	198	95026	29.72 ug/mL	99
49) n-Nitrosodiphenylamine	16.91	169	425667	52.60 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.63	248	151328	49.41 ug/mL	99
51) Hexachlorobenzene	17.76	284	168498	51.06 ug/mL	98
52) Pentachlorophenol	18.12	266	112148	42.39 ug/mL	100
53) Phenanthrene	18.56	178	854941	57.07 ug/mL	100
54) Anthracene	18.66	178	882788	58.19 ug/mL	100
55) Carbazole	18.94	167	818041	53.60 ug/mL	100
56) Di-n-butyl phthalate	19.55	149	1202636	54.66 ug/mL	100
57) Fluoranthene	20.84	202	925627	57.42 ug/mL	97
59) Pyrene	21.28	202	972845	58.01 ug/mL	98
61) Butyl benzyl phthalate	22.43	149	568706	54.33 ug/mL	97
62) 3,3'-Dichlorobenzidine	23.47	252	284903	51.31 ug/mL	99
63) Benzo[a]anthracene	23.55	228	826860	56.40 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.48	149	745047	54.94 ug/mL	99
65) Chrysene	23.62	228	763512	56.89 ug/mL	99
66) Di-n-octyl phthalate	24.70	149	1371511	54.48 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.42	276	746386	55.79 ug/mL	97
69) Benzo[b]fluoranthene	25.68	252	768328	53.94 ug/mL	99
70) Benzo[k]fluoranthene	25.75	252	754940	57.87 ug/mL	99
71) Benzo[a]pyrene	26.48	252	712550	54.76 ug/mL	99
72) Dibenz[a,h]anthracene	29.45	278	637865	57.66 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K4749.D K813OL42.M Fri Aug 22 10:18:52 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4749.D
Acq On : 22 Aug 2008 00:09
Sample : 0808076-004BMSD
Misc : MSD ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 16
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.07	276	607962	54.52 ug/mL	100

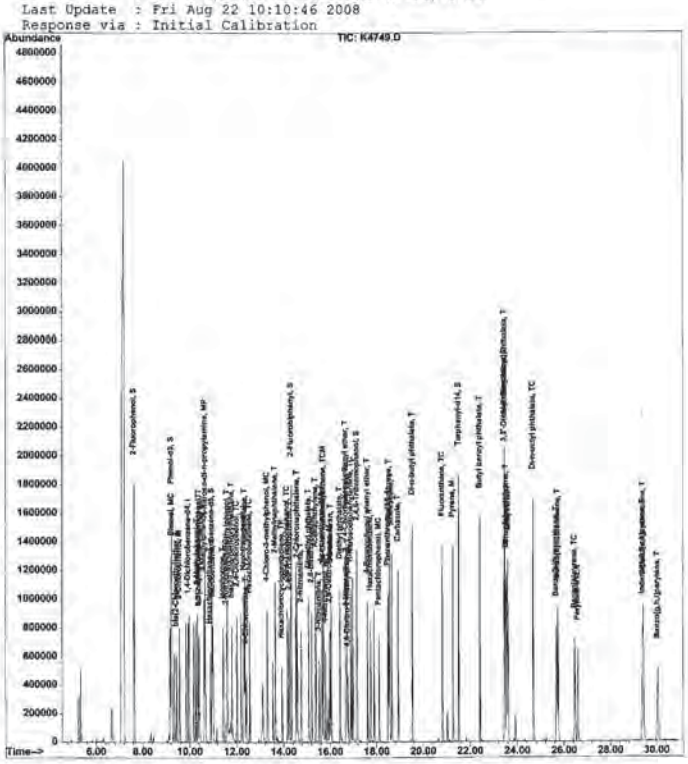
(#) = qualifier out of range (m) = manual integration
K4749.D K813OL42.M Fri Aug 22 10:18:53 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4749.D
Acq On : 22 Aug 2008 00:09
Sample : 0808076-004BMSD
Misc : MSD ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:12 2008

Vial: 16
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4749.D K813OL42.M Fri Aug 22 10:18:55 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4749.D Vial: 16
Acq On : 22 Aug 2008 00:09 Operator: MEG
Sample : 0808076-004BMSD Inst : #6MS40
Misc : MSD ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008 Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	193133	40.00 ug/mL	0.00
5) Naphthalene-d8	12.31	136	747816	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	402786	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	737518	40.00 ug/mL	0.00
14) Chrysene-d12	23.58	240	594628	40.00 ug/mL	0.00
15) Perylene-d12	26.61	264	554776	40.00 ug/mL	0.00

System Monitoring Compounds

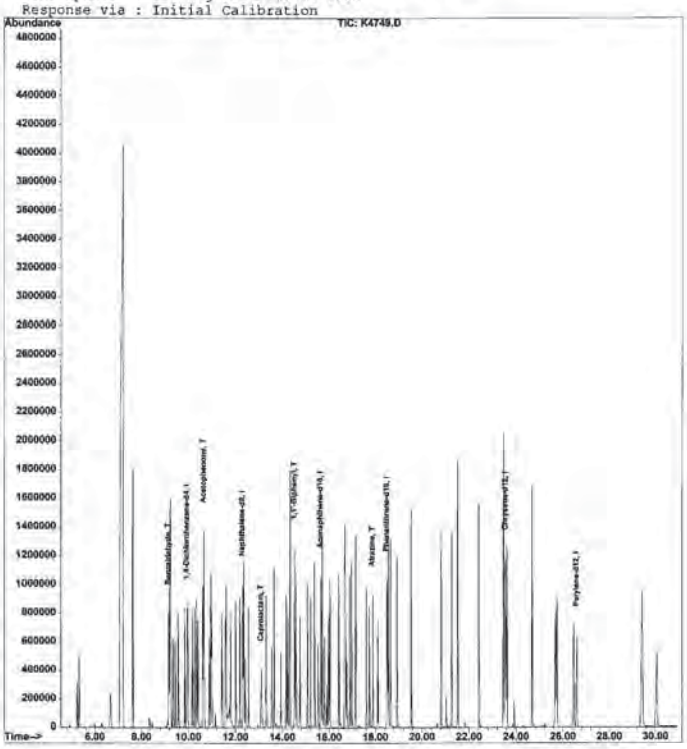
Target Compounds					Qvalue
2) Benzaldehyde	9.18	77	263365	44.50 ug/mL	96
4) Acetophenone	10.68	105	400362	43.09 ug/mL	99
6) Caprolactam	13.11	55	207870	61.19 ug/mL	97
8) 1,1'-Biphenyl	14.54	154	592606	51.88 ug/mL	100
12) Atrazine	17.90	200	147669	47.08 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4749.D K813OLM.M Fri Aug 22 10:34:03 2008 Pa 1016

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4749.D Vial: 16
Acq On : 22 Aug 2008 00:09 Operator: MEG
Sample : 0808076-004BMSD Inst : #6MS40
Misc : MSD ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:31 2008 Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4749.D K813OLM.M Fri Aug 22 10:34:04 2008 Pa 1017

Laboratory Control Sample

1018

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0808068
Project: City of Geneva-Market Basket Site
CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-7957 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381957
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1860	330	1670	0	111	30	130				
2,4,5-Trichlorophenol	1760	1700	1670	0	106	43	131				
2,4,6-Trichlorophenol	1700	330	1670	0	102	44	125				
2,4-Dichlorophenol	1760	330	1670	0	105	41	125				
2,4-Dimethylphenol	1700	330	1670	0	102	25	128				
2,4-Dinitrophenol	932	1700	1670	0	56	25	125				J
2,4-Dinitrotoluene	1800	330	1670	0	108	54	136				
2,6-Dinitrotoluene	1780	330	1670	0	107	48	136				
2-Chlorophthalene	1740	330	1670	0	105	49	126				
2-Chlorophenol	1640	330	1670	0	99	41	125				
2-Methylnaphthalene	1790	330	1670	0	107	44	125				
2-Methylphenol	1720	330	1670	0	103	40	125				
2-Nitroaniline	1810	1700	1670	0	108	50	125				
2-Nitrophenol	1740	330	1670	0	104	44	125				
3,3'-Dichlorobenzidine	1850	660	1670	0	111	25	125				
3-Nitroaniline	1340	1700	1670	0	80	26	125				J
4,6-Dinitro-2-methylphenol	1050	1700	1670	0	63	33	128				J
4-Bromophenyl phenyl ether	1780	330	1670	0	107	44	137				
4-Chloro-3-methylphenol	1750	330	1670	0	105	44	126				
4-Chloroaniline	1030	330	1670	0	62	25	125				
4-Chlorophenyl phenyl ether	1770	330	1670	0	106	46	132				
4-Methylphenol	1730	330	1670	0	104	40	125				
4-Nitroaniline	1820	1700	1670	0	109	47	132				
4-Nitrophenol	1670	1700	1670	0	100	27	140				J
Acenaphthene	2000	330	1670	0	120	49	125				
Acenaphthylene	1960	330	1670	0	117	47	125				
Acetophenone	1500	330	1670	0	93	30	130				

Qualifiers: B: Analyte detected in the associated Method Blank; E: Value exceeds the instrument calibration range; J: Analyte detected below the PQL; ND: Not Detected at the Practical Quantitation Limit (PQL); R: RPD exceeds accepted precision limit; S: Spike Recovery outside accepted recovery limits; U: Not Detected at the MDC or RL

22-Aug-08

Page 4 of 15

1019

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

Sample ID: LCS-7957 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381957
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2070	330	1670	0	124	60	125				
Atrazine	1580	330	1670	0	95	30	130				
Benzaldehyde	1640	330	1670	0	99	30	130				
Benzo[a]anthracene	2050	330	1670	0	123	60	125				
Benzo[a]pyrene	1970	330	1670	0	118	53	129				
Benzo[b]fluoranthene	2000	330	1670	0	120	55	126				
Benzo[g,h,i]perylene	2090	330	1670	0	126	51	134				
Benzo[k]fluoranthene	2020	330	1670	0	121	49	132				
bis(2-Chloroethoxy)methane	1870	330	1670	0	112	49	125				
bis(2-chloroethyl)ether	1740	330	1670	0	105	44	125				
bis(2-chloroisopropyl)ether	1740	330	1670	0	105	39	125				
bis(2-Ethylhexyl)phthalate	1970	330	1670	0	116	51	145				
Butyl benzyl phthalate	1960	330	1670	0	118	50	144				
Caprolactam	2120	330	1670	0	127	30	130				
Carbazole	1950	330	1670	0	117	51	131				
Chrysene	2090	330	1670	0	125	55	127				
Di-n-butyl phthalate	1940	330	1670	0	116	56	140				
Di-n-octyl phthalate	1990	330	1670	0	119	46	150				
Dibenz[a,h]anthracene	2170	330	1670	0	130	47	142				
Dibenzofuran	1760	330	1670	0	106	48	125				
Diethyl phthalate	1850	330	1670	0	111	52	137				
Dimethyl phthalate	1800	330	1670	0	108	51	134				
Fluoranthene	2050	330	1670	0	123	54	131				
Fluorene	2020	330	1670	0	121	50	126				
Hexachlorobenzene	1850	330	1670	0	111	43	139				
Hexachlorobutadiene	1640	330	1670	0	98	39	132				
Hexachlorocyclopentadiene	1430	330	1670	0	86	25	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

e: 22-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0808068
Project: City of Geneva- Market Basket Site

Sample ID: LCS-7957 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 8/15/2008 | RunNo: 14571
Client ID: ZZZZZ | Batch ID: 7957 | Method: SW8270C (SW3550B) | Analysis Date: 8/21/2008 | SeqNo: 381957
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1620	330	1670	0	97	41	125				
Indeno[1,2,3-cd]pyrene	2180	330	1670	0	131	48	138				
Isophorone	1820	330	1670	0	109	48	125				
N-Nitroso-di-n-propylamine	1690	330	1670	0	101	40	128				
N-Nitrosodiphenylamine	1880	330	1670	0	113	48	135				
Naphthalene	1920	330	1670	0	115	45	125				
Nitrobenzene	1820	330	1670	0	109	47	125				
Pentachlorophenol	1610	1700	1670	0	96	25	129				J
Phenanthrene	2060	330	1670	0	124	58	125				
Phenol	1680	330	1670	0	101	41	125				
Pyrene	2110	330	1670	0	126	58	127				
Surr: 2,4,6-Tribromophenol	5260	0	5000	0	105	20	143				
Surr: 2-Fluorobiphenyl	3010	0	3330	0	90	48	130				
Surr: 2-Fluorophenol	4640	0	5000	0	93	22	130				
Surr: Nitrobenzene-d5	3270	0	3330	0	98	39	130				
Surr: Phenol-d5	4780	0	5000	0	96	33	130				
Surr: Terphenyl-d14	3630	0	3330	0	109	38	148				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

e: 22-Aug-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4738.D
Acq On : 21 Aug 2008 17:06
Sample : LCS-7957
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00

Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	202222	40.00 ug/mL	0.00
13) Naphthalene-d8	12.32	136	770119	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.66	164	417628	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.51	188	764851	40.00 ug/mL	0.00
58) Chrysene-d12	23.58	240	605001	40.00 ug/mL	0.00
68) Perylene-d12	26.62	264	586344	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.65	112	898032	139.17 ug/mL	0.04
Spiked Amount 150.000			Recovery =	92.78%	
3) Phenol-d5	9.24	99	1222591	143.53 ug/mL	0.01
Spiked Amount 150.000			Recovery =	95.69%	
14) Nitrobenzene-d5	10.97	82	779722	98.01 ug/mL	0.00
Spiked Amount 100.000			Recovery =	98.01%	
30) 2-Fluorobiphenyl	14.35	172	1041498	90.28 ug/mL	0.00
Spiked Amount 100.000			Recovery =	90.28%	
46) 2,4,6-Tribromophenol	17.18	330	269057	158.49 ug/mL	0.00
Spiked Amount 150.000			Recovery =	105.66%	
60) Terphenyl-d14	21.54	244	1064659	108.97 ug/mL	0.00
Spiked Amount 100.000			Recovery =	108.97%	

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
4) Phenol	9.27	94	528861	50.49 ug/mL	93
5) bis(2-Chloroethyl)ether	9.45	93	401183	52.32 ug/mL	99
6) 2-Chlorophenol	9.58	128	357085	49.29 ug/mL	97
7) 2-Methylphenol	10.35	108	334370	51.46 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	10.41	45	854217	52.29 ug/mL	99
9) bis(2-Chloroisopropyl)ethe	10.41	45	854217	52.29 ug/mL	99
10) 4-Methylphenol	10.63	108	360321	51.93 ug/mL	98
11) N-Nitroso-di-n-propylamine	10.67	70	312013	50.71 ug/mL	97
12) Hexachloroethane	10.90	117	157334	48.52 ug/mL	98
15) Nitrobenzene	11.00	77	458450	54.55 ug/mL	95
16) Isophorone	11.43	82	833201	54.47 ug/mL	97
17) 2-Nitrophenol	11.59	139	223284	52.10 ug/mL	98
18) 2,4-Dimethylphenol	11.62	107	393025	51.14 ug/mL	100
19) bis(2-Chloroethoxy)methane	11.81	93	497542	56.21 ug/mL	96
20) 2,4-Dichlorophenol	12.03	162	301656	52.71 ug/mL	99
21) Naphthalene	12.36	128	954042	57.73 ug/mL	99
22) 4-Chloroaniline	12.43	127	243665	30.93 ug/mL	98
23) Hexachlorobutadiene	12.56	225	162306	49.17 ug/mL	100
24) 4-Chloro-3-methylphenol	13.31	107	380780	52.59 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K4738.D K813OL42.M Fri Aug 22 10:54:28 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4738.D
Acq On : 21 Aug 2008 17:06
Sample : LCS-7957
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00

Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.66	142	569398	53.36 ug/mL	100
27) Hexachlorocyclopentadiene	13.95	237	164213	42.76 ug/mL	99
28) 2,4,6-Trichlorophenol	14.18	196	216269	51.05 ug/mL	98
29) 2,4,5-Trichlorophenol	14.25	196	212610	52.81 ug/mL	100
31) 2-Chloronaphthalene	14.60	162	566779	52.33 ug/mL	98
32) 2-Nitroaniline	14.77	65	262391	54.27 ug/mL	97
33) Dimethyl phthalate	15.09	163	762610	54.02 ug/mL	100
34) 2,6-Dinitrotoluene	15.23	165	191074	53.42 ug/mL	98
35) Acenaphthylene	15.40	152	957132	58.71 ug/mL	100
36) 3-Nitroaniline	15.55	138	151183	40.13 ug/mL	95
37) Acenaphthene	15.73	153	551361	59.92 ug/mL	93
38) 2,4-Dinitrophenol	15.74	184	54456	18.96 ug/mL#	1
39) 4-Nitrophenol	15.83	109	135203	49.99 ug/mL	96
40) 2,4-Dinitrotoluene	16.00	165	244233	53.90 ug/mL	96
41) Dibenzofuran	16.05	168	762140	52.89 ug/mL	99
42) Diethyl phthalate	16.44	149	761587	55.48 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.69	204	309105	53.11 ug/mL	100
44) Fluorene	16.71	166	640735	60.47 ug/mL	100
45) 4-Nitroaniline	16.74	138	203603	54.47 ug/mL	97
48) 4,6-Dinitro-2-methylphenol	16.78	198	104624	31.55 ug/mL	98
49) n-Nitrosodiphenylamine	16.91	169	473124	56.38 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.63	248	169545	53.38 ug/mL	98
51) Hexachlorobenzene	17.76	284	189598	55.40 ug/mL	98
52) Pentachlorophenol	18.12	266	132209	48.19 ug/mL	100
53) Phenanthrene	18.57	178	960986	61.86 ug/mL	100
54) Anthracene	18.66	178	977497	62.13 ug/mL	100
55) Carbazole	18.95	167	924310	58.40 ug/mL	100
56) Di-n-butyl phthalate	19.55	149	1325033	58.08 ug/mL	100
57) Fluoranthene	20.84	202	1027636	61.47 ug/mL	98
59) Pyrene	21.29	202	1077470	63.16 ug/mL	98
61) Butyl benzyl phthalate	22.43	149	626012	58.79 ug/mL	96
62) 3,3'-Dichlorobenzidine	23.47	252	314020	55.60 ug/mL	99
63) Benzo[a]anthracene	23.55	228	916094	61.43 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.49	149	803506	59.03 ug/mL	100
65) Chrysene	23.63	228	854910	62.62 ug/mL	100
66) Di-n-octyl phthalate	24.70	149	1526551	59.61 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.42	276	889669	65.37 ug/mL	98
69) Benzo[b]fluoranthene	25.69	252	903638	60.02 ug/mL	99
70) Benzo[K]fluoranthene	25.76	252	834424	60.52 ug/mL	97
71) Benzo[a]pyrene	26.48	252	811162	58.98 ug/mL	99
72) Dibenz[a,h]anthracene	29.46	278	760170	65.02 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K4738.D K813OL42.M Fri Aug 22 10:54:29 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4738.D
Acq On : 21 Aug 2008 17:06
Sample : LCS-7957
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.08	276	740289	62.81 ug/mL	100

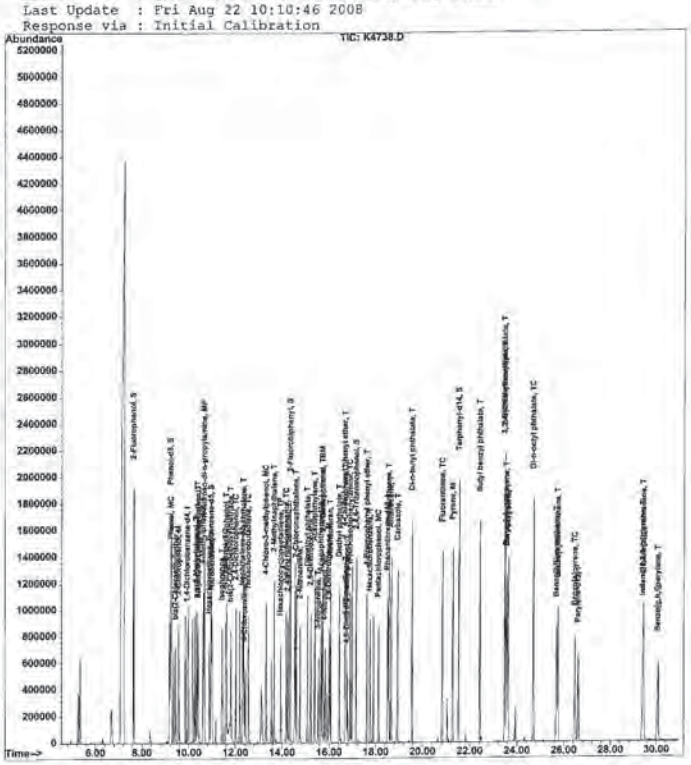
(#) = qualifier out of range (m) = manual integration
K4738.D K813OL42.M Fri Aug 22 10:54:29 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4738.D
Acq On : 21 Aug 2008 17:06
Sample : LCS-7957
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:11 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OL42.RES

Method : C:\HPCHEM\1\METHODS\K813OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:10:46 2008
Response via : Initial Calibration



K4738.D K813OL42.M Fri Aug 22 10:54:31 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K4738.D
Acq On : 21 Aug 2008 17:06
Sample : LCS-7957
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration
DataAcq Meth : K813FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.96	152	202222	40.00 ug/mL	0.00
5) Naphthalene-d8	12.32	136	770119	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.66	164	418102	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.51	188	764851	40.00 ug/mL	0.00
14) Chrysene-d12	23.58	240	605001	40.00 ug/mL	0.01
15) Perylene-d12	26.62	264	586344	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.18	77	305788	49.34 ug/mL	95
4) Acetophenone	10.68	105	454367	46.71 ug/mL	99
6) Caprolactam	13.12	55	222248	63.53 ug/mL	96
8) 1,1'-Biphenyl	14.54	154	659855	55.65 ug/mL	100
12) Atrazine	17.91	200	154340	47.44 ug/mL	99

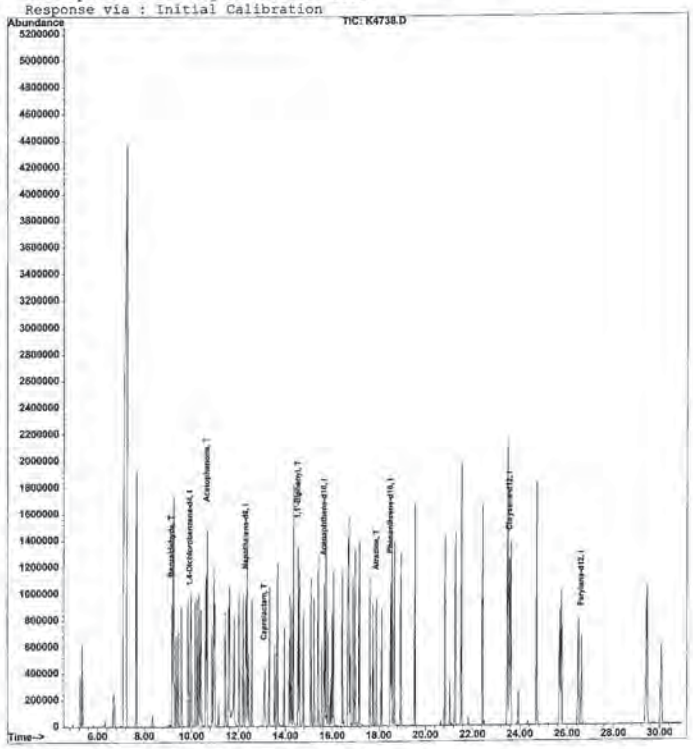
(#) = qualifier out of range (m) = manual integration
K4738.D K813OLM.M Fri Aug 22 10:53:54 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K4738.D
Acq On : 21 Aug 2008 17:06
Sample : LCS-7957
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Aug 22 10:30 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: K813OLM.RES

Method : C:\HPCHEM\1\METHODS\K813OLM.M (RTE Integrator)
Title : BNA's w/ZEBRON ZB-5 .25mm x 30m, 0.5df
Last Update : Fri Aug 22 10:30:24 2008
Response via : Initial Calibration



K4738.D K813OLM.M Fri Aug 22 10:53:54 2008

Laboratory Worksheets

Copy of Calculations

GC/MS SOIL SAMPLE CALCULATIONS

1. Relative Response Factors for GC/MS Volatiles and Semivolatiles

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where:
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specific internal standard
C_{is} = Concentration of the internal standard (µg/Kg)
C_x = Concentration of the compound to be measured (µg/Kg)

2. Relative Standard Deviation

$$\% \text{ RSD} = \frac{SD}{\overline{X}} \times 100$$

Where:
RSD = Relative Standard Deviation
SD = Standard Deviation of initial relative response factors (per compound)
$\overline{X}$ = Mean of initial relative response factors (per compound)

3. %Deviation for Continuing Calibration (for quantitation from RF only)

$$\% \text{ Deviation}_{(\text{excel})} = \frac{RRF_c - \overline{RRF_i}}{\overline{RRF_i}} \times 100$$

$$\% \text{ Deviation}_{(\text{software})} = \frac{\overline{RRF_i} - RRF_c}{\overline{RRF_i}} \times 100$$

Where:
RRF_c = Relative response factor from continuing calibration standard
$\overline{RRF_i}$ = Mean relative response factor from most recent initial calibration meeting technical acceptance criteria

4. %Drift for Continuing Calibration (for quantitation from RF or Curve)

$$\% \text{ Drift}_{(\text{excel})} = \frac{C_c - C_t}{C_t} \times 100$$

$$\% \text{ Drift}_{(\text{software})} = \frac{C_t - C_c}{C_t} \times 100$$

Where:
C_t = Calibration check std concentration (theoretical)
C_c = Measured concentration

GC/MS SOIL SAMPLE CALCULATIONS

5. RRT Deviation

$$\Delta \text{ RRT} = \text{RRT}_x - \text{RRT}_c \text{ , RRT} = \frac{RT_t}{RT_i}$$

Where:
RRT_x = Relative RT of target compound in sample
RRT_c = RRT of target in continuing calibration standard
RT_t = RT of target compound
RT_i = RT of internal standard

6. Final Concentration for GC/MS Volatiles
Low Soil

$$\text{Concentration } (\mu g/kg) = \frac{A_x)(I_{is})V_p}{(A_{is})(RRF)(W_s)(D)}$$

Where:
V_o = Volume of water purged (5 to 25 mL)
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specified internal standard
I_{is} = Concentration of internal standard added in nanograms/ml
W_s = Weight of sample purged (1-5g)
D = % solids/100
RRF = Response factor for compound to be measured (average or single point) *

* For compounds calculated using a regression equation for initial calibration, the terms of the equation replace the RRF.

Medium Soil

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(V_a)Df}{(A_{is})(RRF)(W_s)(V_A)(D)}$$

Where:
RRF, A_{is}, A_{ss}, I_{is} = Same as above
W_s = Weight of sample extracted (5g)
V_T = Total volume of methanol extract adjusted for sample moisture.

V_T = mL solvent + (%moisture x W_s/100)

V_A = Volume of methanol extract used for purging
V_a = Volume of water purged
Df = Dilution factor if original extract is diluted

7. Final Concentration for GC/MS Semivolatiles

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(Df)(2.0)}{(A_{is})(RRF)(V_i)(W_s)(D)}$$

Where:
RRF, A_{is}, A_{ss}, I_{is}, D, Df = Same as above
W_s = Weight of sample extracted (g)
V_T = Volume of concentrated extract (µL)

GC/MS SOIL SAMPLE CALCULATIONS

V_i = Volume of extract injected (µL)

The factor of 2.0 is used to account for the amount of extract that is not recovered from the GPC. If the GPC is not used, this factor is not used.

8. Matrix Spike Recovery for Volatiles and Semivolatiles

$$\text{Recovery (\%)} = \frac{(SSR) - (SR)}{(SA)} \times 100$$

Where: SSR = Spike sample result
SR = Sample result
SA = Spike added

9. % RPD of Matrix Spike and Matrix Spike Duplicate

$$\%RPD = 100 \times \frac{|S - D|}{(S + D)}$$

Where: S = First Sample Value (Original)
D = Second Sample Value (Duplicate)

10. The Recovery of Reference Sample (LCS) and Surrogate

$$\text{Recovery (\%)} = \frac{SR}{SA} \times 100$$

Where: SR = Sample results
SA = Sample spike added

11. The calculation of Library Search compounds (TICs) is similar to target compounds except a RRF of 1.0 is assumed.

Extraction Logs

PREP BATCH REPORT

Page 1 of 1

Life Science Laboratories, Inc.

Prep Start Date: 8/15/2008 6:31:53 P
Prep End Date: 8/15/2008 8:00:00 P
Prep Batch 7957 Prep Code: 3550S_8270S Technician: Edward F. Mason Prep Factor Units: mL / g

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0808068-001B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808068-002B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808068-003B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808068-004B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808068-005B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808068-006B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-001B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-002B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-003B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-004B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-004BMS	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-004BMSD	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-005B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-006B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-007B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-008B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
0808076-009B	Soil		30	0	0	1	0.033	8/15/2008	8/15/2008
LCS-7957	Solid		30	0	0	1	0.033	8/15/2008	8/15/2008
MB-7957	Solid		30	0	0	1	0.033	8/15/2008	8/15/2008
MSB-7957	Solid		30	0	0	1	0.033	8/15/2008	8/15/2008

GC/MS Semivolatile Sample Extraction Log - Soil by Sonication Method SW3550

Date Extracted: 8/15/08 QC Batch #: 7957

Client Name/Project	Sample ID	Test Code	QC Level	Initial pH	Sample Size (g)	Target E.V. mL	Initial Ext Vol (mL)	ml Used prior GPC	Post GPC Vol (ml)	Final EV ml	Comments
	MB-7957	8270	-	7	30.0	1.0	400	3.0	1.0	1.0	38
	L -										27
	D -										27
OBC - MS	0808068-001B		6								
	0028										
	0038										
	0048										
	0058										
	0068										
OBC - MS	0808076-001B	8270	6		30.0	1.0				1.0	
	0028										
	0038										
	0048										
	0048MS										27
	0048MSD										27
	0058										
	0068										
	0078										
	0088										
	0098										
	0098										

Log Review By/Date: 8/21/08

*Only 5ml goes through GPC

Extracted By/Date: 8/15/08 Extracts in Fridge # 6A By/Date: 8/18/08

Concentrated By/Date: 8/18/08 Supervisor Review/Date: 8-26-08

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SOP # 300-18A

QC Batch # 7957

Reagents Used	
Baked $NaSO_4$	080808A
10N NaOH	E40617

Solvent	Lot/ID #
DCM	617961
AT/DCM 1:1	0808080A 08/08/08

Comments:

1) Surrogate: 1000 uL of 100/15 ug/mL of 17/NA surrogate standard # 1965

2) Spike: 100 ul of 100 ug/ml
500 ul of 100 ug/ml

Surrogate/Spike by: LCS SJL 1813
OLM 1852
witnessed by NA

3) Cleanups:

4)

5)

6)

Log Review By/Date: 8/21/08

Supervisor Review/Date: 8-26-08

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44

1036

Injection Logs

1037

Semi-Volatile GC/MS Injection Log

(Page 1 of 2)

Instrument: MS6/ HP5972 (40)
GC Column: ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 8/13/08
+ Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2		
3		
4		
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj Vol.	Method	List	Data File Number	Date	Time	Dil. Factor	I.S. No.
1		TD081308A6	DFTPPLL	1ul	8270	-	K4595	8/13/08	0818	—	
2		SSTD160 ppm	K813FULL			FULL	K4596		0838		1983
3		160					K4597		0912		
4		080					K4598		0955		
5		060					K4599		1034		
6		050					K4600		1112		
7		040					K4601		1151		
8		020					K4602		1229		
9		010					K4603		1307		
10		005					K4604		1345		
11		001					K4605		1424		
12		25IC 081208					K4606		1502		
13		SSTD160 ppm					K4607		1540		
14		120					K4608		1618		
15		080					K4609		1657		
16		050					K4610		1735		
17		040					K4611		1813		
18		020					K4612		1852		
19		010					K4613		1830		
20		005					K4614		2009		
21		-					K				
22		-					K				
23		-					K				
24		-					K				
25		-					K				
26		-					K				
27		-					K				
28		-					K				

Comments:

Method	Source	Date	SOP: AP #300
(1) 625	Fed Register, Vol 49, No 209	10/26/84	-33
(2) TCLP	8270C w/ (3) (AP #4 85-01)	12/96	-12A/4/5-06
(4) 8270C	USEPA SW846 Upd III	12/96	-12A
(5) EPA CLP	USEPA CLP SOW OLM04.2	5/03	-41
(6) CEC ASP	USEPA CLP SOW OLM04.2	5/03	-41

Samples Set By:

8-26-08
Supervisor Review

Life Science Laboratories, Inc.

1038

Semi-Volatile GC/MS Injection Log

(Page 2 of 2)

Pre-run maintenance
- Replace septa
- Replace insert, seal
- Prune column
- Replace Helium
- See Maint. log
- Other:

Internal Std Limits (% of CCV / ICAL area)

						Upper Limit
						Lower Limit

Internal Standard Area Counts

	Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments	
	—	—	—	—	—	—			—	Y (84E) 1941	1
	228092	871579	454958	856501	651742	617043				Y 1942	2
	213225	816800	430770	827914	650121	658557				Y 1943	3
	215505	818911	439371	873241	678342	641825				Y 1944	4
	214675	830114	442736	846639	684026	658315				Y 1945	5
	223259	857979	462756	883913	713498	684460				Y 1946	6
	200085	781959	414265	791562	635172	606137				Y 1947	7
	229971	889228	475458	904917	737272	704801				Y 1948	8
	203605	791115	419125	783205	648701	605611				Y 1949	9
	205350	788887	423186	782583	653261	603444				Y 1950	10
	220678	840607	456601	844868	712259	652167				Y 1951	11
	197906	767146	409364	770310	612073	581406				Y 1952	12
	199102	770597	413682	755892	635675	575575				Y 1953	13
	202302	791171	422858	777586	648317	586390				Y 1954	14
	196439	757531	413529	751274	628288	576646				Y 1955	15
	222765	852833	462683	838889	668335	637149				Y 1956	16
	203214	777151	416142	756634	5[illegible]02	5[illegible]1884				Y 1957	17
	241388	925385	494627	943303	748782	686679				Y 1958	18
	237008	909646	493345	905782	749281	677016				Y 1959	19
	200626	776432	415952	756023	618762	549538			✓	Y 1960	20
											21
											22
											23
											24
											25
											26
											27
											28
											29

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

*[illegible] 8/13/08

Data Processed by:

8-26-08
Supervisor Review

Life Science Laboratories, Inc.
MSSV2 n2 0008

1039

Semi-Volatile GC/MS Injection Log (Page 1 of 2)

Instrument: MS6/ HP6972 (40)
GC Column: ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 8-13-08
+ Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2	[redacted]	[redacted]
3	General	EBE
4		
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol.	Method	List	Data File Number	Data File Date	Data File Time	Dil. Factor	I.S. No.
1	1)	TD08210846	DATPOLL	1.0	8270	-	K4724	8/21/08	0851	-	-
2	✓	CC082108A6	K813 FULL			FULL	K4725		0911	-	1888
3		CC082108B6	OLM K813OLM			OLM	K4726		0949	-	↓
4	2)	LCS-7962	K813FULL			FULL	K4727		1028	1X	1894
5		LCSD-					K4728		1106		
6		MB-7962					K4729		1145		
7	✓	0808080-001A	✓			↓	K4730		1223		
8	3)	0808068-003B	K813OLM			4.2	K4731		1301		
9		0808076-001B	✓				K4732		1339		
10	✓	↓ - 005B	✓			↓	K4733		1418	✓	✓
11	1)	TD08210886	-			-	K4734		1457	-	
12		CC082108C6	K813OLM			4.2	K4735		1512	-	1893
13	✓	CC082108D6 OLM	K813OLM				K4736		1550	-	↓
14	3)	MB-7947	7957* ✓				K4737		1628	1X	1894
15		LCS-7947					K4738		1706		
16		MSD-7947	↓				K4739		1744		
17		0808068-001B					K4740		1823		
18		- 002B					K4741		1901		
19		- 004B					K4742		1940		
20		- 005B					K4743		2018		
21	✓	- 006B					K4744		2057		
22		0808076-002B					K4745		2135		
23		- 003B					K4746		2213		
24		- 004B					K4747		2252		
25		- 004BMS					K4748		2330		
26		- 004BMSD					K4749	8/22/08	0009		
27		- 006B					K4750		0047		
28	✓	- 007B					K4751		0125		
29	✓	- 008B	↓			↓	K4752		0203	✓	✓

Comments: * OLM 8/22/08

Method	Source	Date	SOP # AP #000
(1) 625	Fed Register, Vol. 49, No. 209	10/25/84	-33
(2) TCLP	8270C w/ 1311 (AP #400-33)	12/96	-12A/400-33
(4) 8270C	USEPA SW846, Upd. III	12/96	-12A
(5) EPA CLP	USEPA CLP SOW 88.3/90.3	8/02	-41
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/02	-41

Samples Set By: Mark Le

Supervisor Review: 8-26-08

Life Science Laboratories, Inc.

Semi-Volatile GC/MS Injection Log (Page 2 of 2)

Pre-run maintenance
- Replace septa
- Replace insert, seal
- ✓ Prune column
- Replace Helium
- See Maint. log
- Other:

Internal Std Limits (% of CCV / ICAL area)

						Upper Limit
						Lower Limit

Internal Standard Area Counts

	Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments
1	—	—	—	—	—	—				
2	266914	995096	520048	986144	763108	743673				Y (81K) 1941
3	217998	818022	494049	785574	660239	621736				Y 1946
4	217528	832708	498854	804264	658425	634126	/		7962	Y 1956
5	216636	835119	497453	827649	657898	642562	/		↓	Y
6	218318	836410	458902	838007	656478	646205	/			Y
7	220758	856543	458378	838727	628955	627105	/		↓	Y
8	210152	791203	429326	791283	660133	625108		/	7957	Y
9	212701	808314	433361	795215	658898	610954		/		Y
10	211062	807089	434938	791631	651585	607833		/	↓	Y
11	—	—	—	—	—	—			—	Y (84K) 1941
12	265252	1013278	538091	991247	790622	758622			—	Y 1946
13	238793	907031	492635	887131	744568	685663			—	Y 1956
14	201893	766464	417692	761849	621794	572831		/	7957	Y
15	202222	770119	417432	764851	605201	586314		/		Y
16	195213	752550	405914	942262	591618	567131		/		Y
17	178447	672891	365444	656398	534471	492524		/		Y
18	141758	729793	395359	721625	592105	597130		/		Y
19	189619	757992	409337	746059	586995	553117		/		Y
20	190384	721574	391899	711373	574286	520824		/		Y
21	198300	720985	405458	738135	592790	544359		/		Y
22	196876	751059	404320	733129	593027	535539		/		Y
23	190443	724391	388214	706426	576921	521055		/		Y
24	184839	742556	403858	734234	588808	542287		/		Y
25	197336	752062	410292	748790	594627	553883		/		Y
26	193133	747816	401943	737558	594628	534776		/		Y
27	201141	724385	418466	720616	628821	560980		/		Y
28	188205	730333	394122	715159	574551	532682		/		Y
29	192572	740315	400469	743737	605196	546029		/		Y

↳ Sequence Continued on next page →

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

Data Processed by: Mark Le

Supervisor Review: 8-26-08

Life Science Laboratories, Inc.
MSSV2.p2.2006

Semi-Volatile GC/MS Injection Log (Page 1 of 2)

Instrument: MS6/ HP6972 (40)
GC Column: ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 8-13-08
+ Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2	General	QBE
3	[redacted]	[redacted]
4		[redacted]
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol.	Method	List	Data File Number	Data File Date	Data File Time	Dil. Factor	I.S. No.
1	2)	0808076-009B	K813OLM	1.0	8270	4.2	K4753	8/22/08	0242	1X	1894
2	3)	MB-7972	K813FULL		625	1005	K4754		0320		
3		LCS-7972					K4755		0359		
4		LCSD-7972					K4756		0437	↓	
5		0808099-001B (R)					K4757		0515	50X	
6	✓	↓ - 001B					K4758		0700	1X	
7	4)	0808077-001D					K4759		0738	10X	✓
8		0808098-001K					K4760		0817	10X	
9	✓	0808074-001D					K4761		0855	1X	
10		MB-7961					K4762		0933		
11		LCS-7961					K4763		1011		
12	✓	LCSD-7961	↓			↓	K4764		1050	↓	↓
13		-					K				
14		-					K				
15		-					K				
16		-					K				
17		-					K				
18		-					K				
19		-					K				
20		-					K				
21		-					K				
22		-					K				
23		-					K				
24		-					K				
25		-					K				
26		-					K				
27		-					K				
28		-					K				
29		-					K				

Comments:

Method	Source	Date	SOP # AP #000
(1) 625	Fed Register, Vol. 49, No. 209	10/25/84	-33
(2) TCLP	8270C w/ 1311 (AP #400-33)	12/96	-12A/400-33
(4) 8270C	USEPA SW846, Upd. III	12/96	-12A
(5) EPA CLP	USEPA CLP SOW 88.3/90.3	8/02	-41
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/02	-41

Samples Set By: Mark Le

Supervisor Review: 8-26-08

Life Science Laboratories, Inc.

Semi-Volatile GC/MS Injection Log (Page 2 of 2)

Pre-run maintenance
- ✓ Replace septa
- Replace insert, seal
- Prune column
- Replace Helium
- ✓ See Maint. log
- Other:

Internal Std Limits (% of CCV / ICAL area)

						Upper Limit
						Lower Limit

Internal Standard Area Counts

	Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments
1	201849	767492	420512	773164	632728	590998				Y
2	203808	785237	428589	786114	652138	584651	/		7972	Y
3	176167	626639	365982	669998	549835	458332	/			Y
4	204168	790639	426566	783367	644684	589476	/			Y
5	205576	788144	432500	787628	650252	592088	/			Y R1X
6	190605	740952	394174	730838	597760	512383	/		↓	Y
7	209425	810287	434691	785922	624171	578323	/		7961	N R1X
8	217376	810769	450683	815919	645181	493063	/		7972	Y R1X
9	166484	692745	332007	590685	319023	128417	/		7961	Y
10	196304	760415	418441	768765	579322	380823	/		7961	Y
11	172897	680035	372596	679687	511184	356790	/			Y
12	197207	758028	415628	774140	587245	497305	/		↓	Y

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

Data Processed by: Mark Le

Supervisor Review: 8-26-08

Life Science Laboratories, Inc.
MSSV2.p2.2006

Standards Log

1044

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1814	4-2-08	4-2-09	p-Terphenyl d14	2.903	DCM: E40400	10 mL	5800 ppm	1632 / neat /		5-11	[illegible]
				2.845							
				.058g							
1815	4/4/08	8/27/08	Sim Cal STD								
			PAH solns	400 µl	DCM E40400	5 mL	160 ppm	1726	2000 ppm	12-16-09	MG
			2-Methylnaphthalene	101 µl				1521	7,900 ppm	8-27-09	
			2-chloronaphthalene	53 µl				1523	15,800 ppm		
			Dibenzofuran	78 µl				1522	10,300 ppm		
			Terphenyl-d14	137 µl				1814	5800 ppm	4-2-09	
			Decafluorobiphenyl	51 µl				1520	15,600 ppm	8-27-09	
1816	4/4/08	5/4/08	SSTD 080 ppm SIM	500.0	DCM E40400	1 mL	80 ppm	1815	160 ppm	3/27/08	MG
1817			060	375.0			60 ppm				
1818			040	500.0			40 ppm	1816	80 ppm	5/4/08	
1819			020				20 ppm	1818	40 ppm		
1820			010				10 ppm	1819	20 ppm		
1821			001	100.0			1.0 ppm	1820	10 ppm		
1822			0002	200.0			0.2 ppm	1821	1 ppm		
1823			0001	500.0			0.1 ppm	1822	0.2 ppm		
1824			00005				0.05 ppm	1823	0.1 ppm		

Tech 4-4-08

Supervisor Review: _____

1046

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1825	4-4-07	5-4-07	ICV - 040408 SIM		DCM E40400	1 mL	10 ppm				MG
			PAH Solns	5 µl				1631	2000 ppm	12-16-09	
			2-Methylnaphthalene	1.0 µl				1559	10,000 ppm	9-17-08	
			2-chloronaphthalene	0.94 µl				1558	10,500 ppm	9-17-08	
			Dibenzofuran	1.06 µl				1520	9400 ppm	9-17-08	
1826	4-7-08	5-7-08	ICV 040708		DCM E40400	1 mL	50 ppm				MG
			Phenols	25 µl				1627	2000 ppm	12-16-09	
			Benzidines					1628			
			625's					1629			
			8270's					1630			
			PAHs					1631			
1827	4-14-08	5-14-09	IS/TS STD	bracketed	SE0021	1 mL	4000 ppm	1642	4000 ppm	x 6	MG
1828											
1829											
1830	4-21-08	10-21-08	BNA Surr.	—	MeOH:	200 mL					
			2-Fluorobiphenyl	1665 µl			100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene	2296 µl				1644	8710 ppm	11-30-08	
			Terphenyl-d14	3448 µl				1814	5800 ppm	4-2-09	
			Phenol-d6	2077 µl			150 ppm	1648	14,100 ppm	12-3-08	
			2-Fluorophenol	2402 µl				1656	12,490 ppm	12-11-08	
			2,4,6-Tribromophenol	3584 µl				1645	8270 ppm	11-30-08	

4-21-08

Supervisor Review: _____

1047

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1804	3-27-08	4-27-08	SSTD 160 ppm OLM	1000.0	DCM E40400	1 mL	160 ppm	1803	160 ppm	5-22-08	MG
1805			120 ppm	750.0			120				
1806			80 ppm	500.0			80	1804		4-27-08	
1807			50	32 µl			50	1803		5-22-08	
1808			40	500.0			40	1806	80 ppm	4-27-08	
1809			20				20	1808	40 ppm		
1810			10				10	1809	20 ppm		
1811			5				5	1810	10 ppm		
1812	3-31-08	4-25-08	OLM 4.2	—	MeOH: C3E001	50 mL					
			Acetophenone	500 µl			100 ppm	1739	10000 ppm	4-25-08	
			Atrazine	610 µl				1732	2200 ppm	1-27-09	
			Benzaldehyde	427 µl				1338	11700 ppm	4-25-08	
			Biphenyl	641 µl				1534	7800 ppm	9-4-08	
			Caprolactam	526 µl				1650	9500 ppm	12-3-08	
1813	4-3-08	10-3-08	LCS Sol'n	—	MeOH: C3E001	50 mL					
			Phenols Mix	2500 µl			100 ppm	1627	2000 ppm	12-16-09	
			Benzidine Mix	2500 µl				1628	2000 ppm	12-16-09	
			625 Base/Neutral Mix	2500 µl				1629	2000 ppm	12-16-09	
			8270 BNA Add-ons	2500 µl				1630	2000 ppm	12-16-09	
			PAHs	2500 µl				1631	2000 ppm	12-16-09	

4-2-08

Supervisor Review: _____

1045 B

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1849	5/5/08	11/5/08	OLM CAL STD		DCM E8040	5mL	160ppm				MG
			1,1'-Biphenyl	75 ul				1845	10,700ppm	5/15/09	
			Caprolactam	70 ul				1844	11,400 ppm		
			Acetophenone	87 ul				1846	9,200ppm		
			Benzaldehyde	102 ul				1727	7,800ppm	10/31/08	
			Atrazine	78 ul				1663	10,200 ppm	12/31/08	
			PTE	68 ul				1046	11,700ppm	11/16/08	
			DXE	72 ul				1043	11,100ppm	11/16/08	
1850	5/19/08	5/19/09	Acetophenone	43.248 g	DCM: E42400	10 mL	12300 ppm	1332	neat	10-10	
				43.125							
				.123 g							
1851	5/19/08	10/19/08 *5/19/09	Benzaldehyde	43.214 g	DCM: E42400	10 mL	8600 ppm	1283	neat	10-28	
				43.128							
				.086 g							
1852	5-19-08	*9-4-08 ~~10-9-08~~	OLM 4.2	—	MeOH: C38E01	50 mL					
			Acetophenone	407 µl			100 ppm	1850	12300 ppm	5-19-09	
			Atrazine	610 µl				1732	8200 ppm	1-23-09	
			Benzaldehyde	581 µl				1851	8600 ppm	10-31-08	
			Biphenyl	641 µl				1534	7800 ppm	9-4-08	
			Caprolactam	526 µl				1650	9500 ppm	12-3-08	

Supervisor Review: _____

1050

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1831	4/22/08	5/22/08	DFTPP/UL	50 ul	DCM E4040	1 mL	50ppm	1454	1000ppm	6-25-08	MG
1832	4/30/08	5/30/08	50 ppm STD	312 ul	DCM E4040	1 mL	50ppm	1364	160ppm	6/12/08	MG
1833	4/30/08	5/30/08	50 ppm OLM STD	312 ul	DCM E4040	1 mL	50ppm	1833	160ppm	5/22/08	MG
1834	4/30/08	4/30/09	DFTPP STOCK SOLN	CONTEST	—	1x1mL	1000ppm	1431	1000 ppm	7/09	MG
1835	4/30/08	5/30/08	DFTPP/UL	50 ul	DCM E4040	1 mL	50 ml	1834	1,000ppm	4/30/09	MG
1836	4/30/08	5/22/08	Misc 625 STD								MG
			Octadecane	167 ul	DCM E4040	5 mL	160ppm	1381	4,800ppm	5/22/08	
			N-Decane	89 ul				1382	9,000ppm	5/22/08	
1837	4/30/08	5/22/08	160 ppm STD 625 misc	1000 ul	DCM E4040	1 mL	160ppm	1836	160 ppm	5/22/08	MG
1838			50 ppm	312 ul			50ppm				MG
1839			10 ppm	100 ul		500 ul	10ppm	1838	50 ppm	5/22/08	MG
1840	5/6/08	5/6/09	1,4-Dioxane	52.284	DCM E4040	10 mL	10,200 ppm	1636	neat	8/10	
1841	5/6/08	11/6/08	1,4-Dioxane (Prep)	52.132							
				.102 g							
				98 ul	MeOH: S8E01	10 mL	100 ppm	1840	10,200 ppm	5/6/09	MG
1842	5/9/08	5/9/09	Int Standard	Revised	SAE022	1x5mL	4000ppm	ECS	4000ppm	12/2010	MG
1843	5/15/08	5/15/09	phenol-d6	23.863 g	DCM E4040	10 mL	19,300ppm	Chems 1875	neat	4/10	MG
				3.056							
				.193 g							
1844	5/15/08	5/15/09	Caprolactam (CAL)	43.242	DCM E4040	10 mL	11,400ppm	1341	neat	1/12	MG
				43.128							
				.114 g							

Supervisor Review: _____

1048

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1853	5/20/08	6/20/08	SSTD 160 ppm	1000 ul	DCM E4040	1.0 mL	160ppm	1848	160ppm	11/15/08	MG
1854			120	750 ul			120	1848			
1855			080	500 ul			80	1853	160 ppm	6/20/08	
1856			060				60	1854	120 ppm		
1857			050	312 ul			50	1848	160ppm	11/15/08	
1858			040	500 ul			40	1855	80ppm	6/20/08	
1859			020				20	1858	40ppm		
1860			010				10	1859	20ppm		
1861			005				5	1860	10ppm		
1862			001	100 ul		500 ul	1	1861	5ppm		
1863	5/20/08	6/20/08	ICV-2SRC								
			PAH's	25 ul	DCM E4040	1.0 mL	50ppm	1631	2000ppm	12/2009	MG
			Phenols					1627			
			Benzidines					1628			
			1025's					1629			
			8270's					1630			

Supervisor Review: _____

1051

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1845	5/15/08	5/15/09	1,1'-Biphenyl	43.236	DCM E4040	10 mL	10,700ppm	1343	neat	10/11	MG
				43.129							
				.107 g							
1846	5/15/08	5/15/09	Acetophenone	48.728	DCM E4040	10 mL	9,200ppm	1332	neat	10/10	MG
				48.636							
				.092 g							
1847	5/15/08	11/15/08	BNA cal surrogate		DCM E4040						
			Nitrobenzene	415 ul		5 mL	800ppm	1644	8710 ppm	11/30/08	MG
			2-Fluorobiphenyl	333 ul				1643	12,000 ppm		
			Terphenyl-d14	690 ul				1814	5,800ppm	4/2/09	
			2-Fluorophenol	320 ul				1656	12,490ppm	12/11/08	
			2,4,6-Tribromophenol	478 ul				1645	8,370 ppm	11/30/08	
			phenol-d6	207 ul				1343	19,300ppm	5/15/09	
1848	5/15/08	11/15/08	BNA CAL STD								
			cal surr	1000 ul	DCM E4040	5 mL	160ppm	1847	800 ppm	11/15/08	MG
			Phenols	400 ul				1722	2000 ppm	12/16/08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH					1726			
			1,4-Dioxane	30.1 ul			64ppm	1752	10,600 ppm	8/10	

Supervisor Review: _____

1049

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1880	6/13/08	7/6/08	SSTD 080 ppm SIM	500 µl	DCM E42400	1mL	80ppm	1815	160ppm	8/27/08	MG
1881	↓	↓	060	375 µl	↓	↓	60ppm	↓			↓
1882			040	500 µl			40	1880	80ppm	7/6/08	
1883			020	↓			20	1882	40ppm		
1884			010				10	1883	20ppm		
1885			001	100 µl			1.0	1884	10ppm		
1886			0002	500 µl			0.2	1885	1.0ppm		
1887			0001				0.1	1886	0.2		
1888			00005	↓			0.005	1887	0.1	↓	↓
1889	6/16/08	7/06/08	SIMS ICV								
			~~phenols~~					~~1700~~	~~2000ppm~~	~~11-16-09~~	6/16/08
			~~Benzidines~~					~~1701~~			
			~~625's~~					~~1702~~			
			~~8270's~~					~~1703~~			
			PAH's	5 µl				1704		↓	
			2-chloronaphthalene	0.54 µl				1558	18,500ppm	9/17/08	
			2-methylnaphthalene	1.0 µl				1559	10,000ppm		
			Dibenzofuran	1.06 µl				1520	9,400ppm	↓	
1890	6/23/08	7/23/08	50ppm STD	312 µl	DCM E42400	1mL	50ppm	1848	160ppm	11/15/08	MG
1891	6/23/08	7/23/08	50ppm STD OLM	312 µl	↓	↓	↓	1849	160ppm	11/15/08	MG

MG 6/23/08

Supervisor Review: ______________

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

1054

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1864	5/2/08	6/2/08	SSTD 160ppm OLM	1000 µl	DCM E42400	1.0mL	160ppm	1849	160ppm	11/15/08	MG
1865	↓	↓	120	750 µl	↓	↓	120	↓			↓
1866			080	500 µl			80	1864	160ppm	6/2/08	
1867			050	312 µl			50	1849	↓	11/15/08	
1868			040	500 µl			40	1866	80ppm	6/2/08	
1869			020				20	1868	40ppm		
1870			010				10	1869	20ppm		
1871			005	↓			5	1870	10ppm	↓	
1872	5/22/08	11/22/08	BNA Surrogate (Prep)		MeoH	100mL					MG
			Nitrobenzene-d5	1,148 µl			100ppm	1644	8710ppm	11/30/08	
			2-Fluorobiphenyl	832 µl				1643	12010ppm	11/30/08	
			terphenyl-d14	1,724 µl			↓	1814	5800ppm	4-2-09	
			2-Fluorophenol	1,201 µl			150ppm	1656	12,490ppm	12-11-08	
			Phenol-d6	777 µl				1843	19,300ppm	5-15-09	
			2,4,6-Tribromophenol	1,792 µl			↓	1645	8370ppm	11-30-08	
1873	5/28/08	4/2011	Phenol-d6	received	-	-	Neat	chems	neat	381-32B	MG
1874	6/2/08	7/2/08	DFTPP 1uL	50 µl	DCM E42400	1mL	50ppm	1834	1000ppm	4/30/08	MG

MG 6/2/08

Supervisor Review: ______________

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

1052

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1892	6/23/08	6/23/09	IS A	—	—	1mL	4000ppm	1842	4000ppm	12/2010	MG
1893	↓	↓	IS B	—	—						
1894			IS C	—	—	↓	↓	↓			↓
1895	6/24/08	7/24/08	DFTPP 1uL	50 µl	DCM E42400	1mL	50ppm	1834	1000ppm	4/30/08	MG
1896	6/24/08	11/16/08	PIE/DXE LCS soln			10mL					MG
↓	↓	↓	PIE	105 µl	MeOH		100ppm	1199	9,500ppm	11-16-08	↓
			PYE	94 µl	C38E01	↓	↓	1241	10,600ppm	↓	
1897	6/26/08	6/26/09	p-~~Terphenyl~~ Terphenyl d14	2.989g	DCM E4240	10mL	5300ppm	1632	neat	5-11	Km
				2.936							
↓	↓	↓	↓	0.053	↓	↓	↓	↓	↓	↓	↓
1898	6/27/08	6/25/2011	OBG PAH ISTD SPK Mix	1x5mL	-	5mL	2000ppm	ECS	2000ppm	6-25-2011	MG
1899	6/27/08	12/16/09	Phenols Mix	1x5mL	-	5mL	2000ppm	ECS	2000ppm	12-16-09	
1900	6/27/08	↓	Benzidines								
1901	6/27/08		625's								
1902	6/27/08		8270's								
1903	6/27/08	↓	PAHS	↓	↓	↓	↓	↓			↓
1904	6/30/08	11-30-08	BNA Surrogate Soln		MeOH	100mL					
			2-Fluorophenol	1,201 µl	C38E01		150ppm	1656	12,490ppm	12-11-08	MG
			2,4,6-Tribromophenol	1,792 µl				1645	8,370ppm	11-30-08	
			Phenol-d6	777 µl			↓	1843	19,300ppm	5-15-09	
			Nitrobenzene-d5	1,148 µl			100ppm	1644	8,710ppm	11-30-08	
			2-Fluorobiphenyl	833 µl				1643	12,010ppm	↓	
			Terphenyl-d14	1,887 µl			↓	1897	5,300ppm	6-26-09	

Supervisor Review: ______________

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

1055

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1875	6/2/08	12/2/08	BNA LCS Soln		MeoH C38E01						MG
			Phenols	2500 µl		50mL	100ppm	1627	2000ppm	12-16-09	
			Benzidines					1628			
			625's					1629			
			8270's					1630			
			PAH's	↓		↓	↓	1631		↓	↓
1876	6/2/08	11/09	Benzaldehyde	Received	-	5g	neat	chemservice	neat	11/09	MG
1877	6/4/08	3/27/09	Sim Surrogate		MeoH C38E01	10mL					MG
			Decafluorobiphenyl	64 µl			100ppm	1520	15,600ppm	8/27/08	
			Terphenyl-d14	172 µl		↓	↓	1814	5,800ppm	4/2/09	
1878	6/10/08	11/30/08	BNA Surrogate (Prep)		MeoH C38E01						
			Nitrobenzene-d5	1,148 µl		100mL	100ppm	1644	8710ppm	11-30-08	MG
			2-Fluorobiphenyl	832 µl			↓	1643	12,010ppm	↓	
			Terphenyl-d14	1,724 µl				1814	5800ppm	4-2-09	
			2-Fluorophenol	1,201 µl			150ppm	1656	12,490ppm	12-11-08	
			Phenol-d6	777 µl				1843	19,300ppm	5-15-09	
			2,4,6-Tribromophenol	1,792 µl			↓	1645	8370ppm	11-30-08	
1879	6/11/08	4/2011	Phenol-d6	received	-	-	neat	chems	neat	381-32B	MG

MG 6/18/08

Supervisor Review: ______________

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1053

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1928	7/30/08	7/30/09	IS SIM	Cracked	—	1mL	2000ppm	1898	2000ppm	6/25/11	MG
1931											
1932											
1933	8/8/08	9/8/08	50ppm STD	312µl	DCM E42400	1ml	50 ppm	1848	160ppm	11/15/08	
1934	8/10/08	2/10/09	LCS Soln								
			Phenols Mix	2500uL	MeOH	50mL	100 ppm	1700	2000 ppm	12/16/09	GM
			Benzidine Mix					1701			
			625 Base/Neutral Mix					1702			
			8270 BNA Additions					1703			
			PAH					1704			
1935	8/10/08	11/30/08	BNA Surr Soln								
			2-Fluorophenol	400	MeOH	50mL	100 ppm	1656	12,990 ppm	12/11/08	
			2,4,6-Tribromophenol	597				1645	8370 ppm	11/30/08	
			phenol-d6	259				1893	19300 ppm	5/15/09	
			2-Fluorobiphenyl	624			150 ppm	1643	12010 ppm	11/30/08	
			Nitrobenzene	661				1644	8710 ppm	11/30/08	
			Terphenyl	1415				1897	5300 ppm	6/26/09	
1936	8/11/08	8/11/09	Benzaldehyde (CAL)	51.011	DCM E42400	10mL	12,300ppm	1876	Neat	11-31-09	MG
				50.888							
				.123g							
			8/11/08								

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

1058

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1905	7/7/08	8/7/08	SSTD 160 ppm	1000 µl	DCM E42400	1mL	160ppm	1848	160ppm	11/15/08	MG
1906			120	750 µl			120				
1907			080	500 µl			80	1905		8/7/08	
1908			060				60	1906	120ppm		
1909			050	312 µl			50	1848	160ppm	11/15/08	
1910			040	500 µl			40	1907	80ppm	8/7/08	
1911			020				20	1906	40ppm		
1912			010				10	1911	20ppm		
1913			005				5	1912	10ppm		
1914			001	100 µl			1	1913	5ppm		
1915	7/7/08	8/7/08	ICV 25ec 070708								MG
			Phenols	25 µl	DCM E42400	1mL	50ppm	1700	2000ppm	12/16/09	
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAH's					1704			
			SSTD 160ppm OLM								
			120								
			080								
			050								
			040								
			020								

7/7/08

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

1056

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1937	8/11/08	8/11/09	n-Decane	52.350	DCM E42400	10mL	7,700	6077	Neat	—	
				52.273							
				.077							
1938	8/11/08	8/11/09	Octadecane	43.270	DCM	10mL	13,000	6076	Neat	—	
				43.140	E42400						
				.130							
1939	8/11/08	11/15/08	BNA CAL STD		DCM E42400	5mL					
			Cal SUPR	1000 µl			160ppm	1844	1847 / 8000ppm	11-15-08	MG
			Phenols	400 µl				1722	2000ppm	12/16/08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH's					1726			
			1,4-Dioxane	30.1 µl			64ppm	1752	10,000ppm	8/10/09	
1940	8/11/08	12/31/08	OLM CAL STD		E42400	5mL					
			1,1'-Biphenyl	75 µl			160ppm	1845	10,700	5/15/09	
			Caprolactam	70 µl				1844	11,400		
			Acetophenone	87 µl				1846	9,200		
			Benzaldehyde	~~107 µl~~ 65 µl				1936	12,300	8/11/09	
			Atrazine	78 µl				1663	10,200ppm	12/13/08	
			PTE	68 µl				1646	11,700	11/16/08	
			PXE	72 µl				1643	11,100ppm		

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

1059

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1916	8/7/08	8/7/08	SSTD 160ppm OLM	1000 µl	DCM E42400	1mL	160ppm	1848	160ppm	11/15/08	MG
1917			120ppm	750 µl			120				
1918			080	500 µl			80	1916		8/7/08	
1919			050	312 µl			50	1848		11/15/08	
1920			040	500 µl			40	1918	80ppm	8/7/08	
1921			020				20	1920	40ppm		
1922			010				10	1922	20ppm		
1923			005				5	1922	10ppm		
1924	7/7/08	12/2010	Int STD	Received	—	5mL	400ppm	ECS	2V10022	12/2010	MG
1925	7/11/08	11/11/08	PTE/PXE LCS' Soln		MeOH	10mL	100ppm				MG
			PTE	105 µl	C38E01			1199	9,500	11-16-08	
			PXE	94 µl				1241	10,600		
1926	7/11/08	~~11/11/08~~ 11/11/09	BNA Surrogate			100mL					MG
			2-Fluorobiphenyl	832	MeOH		100ppm	1643	12,010ppm	11-30-08	
			Nitrobenzene-d5	1,148 µl	C38E01			1644	8710ppm	11-30-08	
			P-Terphenyl-d14	1,887				1897	5300	6-26-09	
			2-Fluorophenol	1,201 µl			150ppm	1656	12,990ppm	12-11-08	
			2,4,6-Tribromophenol	1,992				1645	8370ppm	11-30-08	
			Phenol-d6	774 µl				1893	19,300ppm	5/15/09	
1927	7/16/08	11/2/09	2,4 dimethylphenol	243 uL	MeOH C38E01	25mL	100ppm	1664	10300 ppm	11/2/09	MR
1928	7/28/08	8/28/08	DPTPP 10L	50 µl	DCM E42400	1mL	50ppm	1834	1000ppm	x 4/30/09	MG
1929	7/31/08	8/27/08	SSTD 010 ppm SIM	62.5 µl	DCM E42400	1mL	10ppm	1815	160ppm	x 8/27/08	MG

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

1057

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1941	8/12/08	9/12/08	BFTP 1WL	50.0	DCM EH2400	1mL	50 ppm	1834	1000 ppm	4/30/09	MG
1942	8/12/08	9/12/08	SSTD 160 ppm	1000.0			160 ppm	1939	160 ppm	11/15/08	MG
1943			120	750.0			120				
1944			080	500.0			80	1942		9/12/08	
1945			060				60	1943	120 ppm		
1946			050	312.0			50	1939	160 ppm	11/15/08	
1947			040	500.0			40	1944	80 ppm	9/12/08	
1948			020				20	1947	40 ppm		
1949			010				10	1948	20 ppm		
1950			005				5	1949	10 ppm		
1951			001	100.0			1	1950	5 ppm		
1952	8/12/08	9/12/08	2 SRC-081208		DCM EH2400	1mL	50 ppm				
			Phenols	25.0				1700	2000 ppm	10/6/09	MG
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAH's					1704			
					9/12	8/12/08					

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

1060

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1953	8/13/08	9/13/08	SSTD 160 ppm 625	1000.0	DCM EH2400	1mL	160 ppm	1940	160 ppm	12-13-08	MG
1954			120	750.0			120				
1955			080	500.0			80	1953		9-13-08	
1956			~~060~~ 050	312.0			50	1940	160 ppm	12-13-08	
1957			040	500.0			40	1953	80 ppm	9-13-08	
1958			020				20	1957	40 ppm		
1959			010				10	1958	20 ppm		
1960			005				5	1959	10 ppm		
1961	8/13/08	9/13/08	625 MISC CAL SOLN		DCM EH2400						
			n-Decane	~~200 uL~~ 1000.0		~~5 mL~~ 10 mL	160 ppm	1937	7,700 ppm	8/11/09	MG
			Octadecane	123.0				1938	12,000 ppm	8/11/09	
1962	8/14/08	9/14/08	SSTD 160 ppm 625 MI	1000.0	DCM EH2400	1mL	160 ppm	1961	160 ppm	12/13/08	
1963			50 ppm 625 MS	312.0			50 ppm				
1964			10 ppm 625 MS	100.0		5 mL	10 ppm	1963	50 ppm	9/14/08	
1965	8/15/08	9/15/09	BNA Surr Soln		Hexane EH2401						MG
			Nitrobenzene d5	~~537.0~~ 1148.0		~~100 mL~~ 100 mL	100 ppm	1644	8710 ppm	11/30/08	
			2-Fluorobiphenyl	~~416.0~~ 816.0				1643	12010 ppm		
			Terphenyl-d14	~~943.0~~ 1887.0				1897	5300 ppm	6/26/09	
			Phenol-d6	~~388.0~~ 777.0			150 ppm	1843	19,300 ppm	8/15/08	
			2-Fluorophenol	~~600.0~~ 1200.0				1656	12,500 ppm	12/1/08	
			2,4,6-Tribromophenol	~~896.0~~ 1792.0				1045	8370 ppm	11/30/08	

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

1061

Trace Metals Data

1062

Analytical Results

1063

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 9:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 17.9	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51265
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	7.3		1.2	0.17	mg/Kg-dry	1	08/27/08 12:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383218 Project Supervisor: Monika Santucci

1064

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-North*
W Order:	0808076	Collection Date:	08/13/08 10:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 14.7	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51266
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	4.7		1.2	0.17	mg/Kg-dry	1	08/27/08 12:31

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383219 Project Supervisor: Monika Santucci

1065

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 10:55
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 16.7	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51267
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	6.6		1.2	0.17	mg/Kg-dry	1	08/27/08 12:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383220 Project Supervisor: Monika Santucci

1066

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-East*
W Order:	0808076	Collection Date:	08/13/08 11:05
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 15.4	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51268
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	3.0		1.2	0.17	mg/Kg-dry	1	08/27/08 12:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383221 Project Supervisor: Monika Santucci

1067

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-West*
W Order:	0808076	Collection Date:	08/13/08 11:50
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 24.4	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51273
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	3.1		1.3	0.19	mg/Kg-dry	1	08/27/08 12:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383226 Project Supervisor: Monika Santucci

1068

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*UST-South*
W Order:	0808076	Collection Date:	08/13/08 12:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 27.8	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51277
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	3.2		1.4	0.20	mg/Kg-dry	1	08/27/08 13:10

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383230 Project Supervisor: Monika Santucci

1069

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Field Dup*
W Order:	0808076	Collection Date:	08/13/08 0:00
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 18.3	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51278
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Lead	6.7		1.2	0.17	mg/Kg-dry	1	08/27/08 13:14

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383231 Project Supervisor: Monika Santucci

1070

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 08/26/08 0:00
ColumnID:		%Moisture: 27.2	BatchNo: 8003/R14620
Revision:	08/27/08 15:02	TestCode: 6010S	FileID: 1-SAMP-51279
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.50 J		1.4	0.0078	mg/Kg-dry	1	08/27/08 13:17
Chromium	10		1.4	0.19	mg/Kg-dry	1	08/27/08 13:17
Copper	6.1		1.4	0.55	mg/Kg-dry	1	08/27/08 13:17
Iron	12000		6.9	0.64	mg/Kg-dry	1	08/27/08 13:17
Nickel	11		6.9	0.27	mg/Kg-dry	1	08/27/08 13:17
Zinc	34		2.7	1.1	mg/Kg-dry	1	08/27/08 13:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383232 Project Supervisor: Monika Santucci

1071

Life Science Laboratories, Inc. **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0808076-009B**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***Trench-Bot-2***
W Order:	0808076	**Collection Date:**	08/13/08 15:35
Matrix:	SOIL	**Date Received:**	08/13/08 17:10
Inst. ID:	ICAP 61E **Sample Size:** 0.5 g	**PrepDate:**	08/26/08 0:00
ColumnID:	**%Moisture:** 24.4	**BatchNo:**	8003/R14620
Revision:	08/27/08 15:02 **TestCode:** 6010S	**FileID:**	i-SAMP-51280
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					**SW6010B**		**(SW3050B)**
Beryllium	0.52 J		1.3	0.0075	mg/Kg-dry	1	08/27/08 13:21
Chromium	12		1.3	0.19	mg/Kg-dry	1	08/27/08 13:21
Copper	6.9		1.3	0.53	mg/Kg-dry	1	08/27/08 13:21
Iron	12000		6.6	0.62	mg/Kg-dry	1	08/27/08 13:21
Nickel	13		6.6	0.26	mg/Kg-dry	1	08/27/08 13:21
Zinc	39		2.6	1.1	mg/Kg-dry	1	08/27/08 13:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Print./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 08/29/08 11:59 383233 **Project Supervisor:** Monika Santucci

1072

QC Summary

1073

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT
Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICVH	SampType: ICVH	TestCode: 6010W05	Units: mg/L	Prep Date:	RunNo: 14620
Client ID: ZZZZZ	Batch ID: R14620	Method: SW6010B		Analysis Date: 8/27/08	SeqNo: 383200
Instrument:	ColumnID:				

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	50.5	1.0	50	0	101	80	110				
Chromium	5.21	0.010	5	0	104	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.6	0.050	10	0	106	90	110				
Lead	10.1	0.010	10	0	101	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.060									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	48.8	1.0	50	0	97	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
- B Analyte detected in the associated Method Blank
- ND Not Detected at the Practical Quantitation Limit (PQL)
- U Not Detected at the MDC or RL
- E Value exceeds the instrument calibration range
- R RPD exceeds accepted precision limit
- J Analyte detected below the PQL
- S Spike Recovery outside accepted recovery limits

29-Aug-08

1074

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT
Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICV	SampType: ICV	TestCode: 6010W05	Units: mg/L	Prep Date:	RunNo: 14620
Client ID: ZZZZZ	Batch ID: R14620	Method: SW6010B		Analysis Date: 8/27/08	SeqNo: 383201
Instrument	ColumnID:				

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1.03	0.10	1	0	103	90	110				
Antimony	0.212	0.060	0.2	0	106	80	110				
Arsenic	0.208	0.010	0.2	0	104	80	110				
Barium	0.195	0.10	0.2	0	97	80	110				
Beryllium	0.207	0.010	0.2	0	104	80	110				
Boron	0.515	0.050	0.5	0	103	80	110				
Cadmium	0.204	0.010	0.2	0	102	80	110				
Calcium	10.3	1.0	10	0	103	80	110				
Chromium	0.205	0.010	0.2	0	103	80	110				
Cobalt	0.201	0.050	0.2	0	101	80	110				
Copper	0.204	0.010	0.2	0	102	80	110				
Iron	1.05	0.050	1	0	105	80	110				
Lead	0.210	0.010	0.2	0	105	80	110				
Magnesium	10.4	1.0	10	0	104	80	110				
Manganese	0.205	0.050	0.2	0	103	80	110				
Molybdenum	0.200	0.050	0.2	0	100	80	110				
Nickel	0.206	0.060	0.2	0	103	80	110				
Potassium	10.5	5.0	10	0	105	80	110				
Selenium	0.204	0.010	0.2	0	102	80	110				
Silver	0.0505	0.010	0.05	0	101	80	110				
Sodium	10.0	1.0	10	0	100	80	110				
Strontium	0.201	0.050	0.2	0	101	80	110				
Thallium	0.204	0.020	0.2	0	102	80	110				
Tin	0.203	0.050	0.2	0	102	80	110				
Titanium	0.205	0.050	0.2	0	102	80	110				
Vanadium	0.207	0.050	0.2	0	103	80	110				
Zinc	0.207	0.020	0.2	0	104	80	110				

Qualifiers:
- B Analyte detected in the associated Method Blank
- ND Not Detected at the Practical Quantitation Limit (PQL)
- U Not Detected at the MDC or RL
- E Value exceeds the instrument calibration range
- R RPD exceeds accepted precision limit
- J Analyte detected below the PQL
- S Spike Recovery outside accepted recovery limits

29-Aug-08

1075

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVI1 | SampType: CCVI | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383214
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	49.6	1.0	50	0	99	90	110				
Chromium	5.17	0.010	5	0	103	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.3	0.050	10	0	103	90	110				
Lead	9.92	0.010	10	0	99	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	47.6	1.0	50	0	95	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1078

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV/IPC | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383202
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.98	0.10	5	0	100	90	110				
Antimony	0.505	0.060	0.5	0	101	90	110				
Arsenic	0.503	0.010	0.5	0	101	90	110				
Barium	0.500	0.10	0.5	0	100	90	110				
Beryllium	0.504	0.010	0.5	0	101	90	110				
Boron	0.503	0.050	0.5	0	101	90	110				
Cadmium	0.507	0.010	0.5	0	101	90	110				
Calcium	10.1	1.0	10	0	101	90	110				
Chromium	0.494	0.010	0.5	0	99	90	110				
Cobalt	0.503	0.050	0.5	0	101	90	110				
Copper	0.489	0.010	0.5	0	98	90	110				
Iron	0.987	0.050	1	0	99	90	110				
Lead	0.507	0.010	0.5	0	101	90	110				
Magnesium	10.1	1.0	10	0	101	90	110				
Manganese	0.497	0.050	0.5	0	99	90	110				
Molybdenum	0.504	0.050	0.5	0	101	90	110				
Nickel	0.499	0.050	0.5	0	100	90	110				
Potassium	10.4	5.0	10	0	104	90	110				
Selenium	0.496	0.010	0.5	0	99	90	110				
Silver	0.247	0.010	0.25	0	99	90	110				
Sodium	9.72	1.0	10	0	97	90	110				
Strontium	0.500	0.050	0.5	0	100	90	110				
Thallium	0.495	0.020	0.5	0	99	90	110				
Tin	0.497	0.050	0.5	0	99	90	110				
Titanium	0.499	0.050	0.5	0	100	90	110				
Vanadium	0.492	0.050	0.5	0	98	90	110				
Zinc	0.503	0.020	0.5	0	101	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1076

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV1 | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383215
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.07	0.10	5	0	101	90	110				
Antimony	0.509	0.060	0.5	0	102	90	110				
Arsenic	0.514	0.010	0.5	0	103	90	110				
Barium	0.511	0.10	0.5	0	102	90	110				
Beryllium	0.516	0.010	0.5	0	103	90	110				
Boron	0.519	0.050	0.5	0	104	90	110				
Cadmium	0.519	0.010	0.5	0	104	90	110				
Calcium	10.2	1.0	10	0	102	90	110				
Chromium	0.504	0.010	0.5	0	101	90	110				
Cobalt	0.514	0.050	0.5	0	103	90	110				
Copper	0.499	0.010	0.5	0	100	90	110				
Iron	1.00	0.050	1	0	100	90	110				
Lead	0.515	0.010	0.5	0	103	90	110				
Magnesium	10.3	1.0	10	0	103	90	110				
Manganese	0.505	0.050	0.5	0	101	90	110				
Molybdenum	0.513	0.050	0.5	0	103	90	110				
Nickel	0.510	0.050	0.5	0	102	90	110				
Potassium	10.6	5.0	10	0	106	90	110				
Selenium	0.504	0.010	0.5	0	101	90	110				
Silver	0.251	0.010	0.25	0	100	90	110				
Sodium	9.89	1.0	10	0	99	90	110				
Strontium	0.508	0.050	0.5	0	102	90	110				
Thallium	0.504	0.020	0.5	0	101	90	110				
Tin	0.508	0.050	0.5	0	102	90	110				
Titanium	0.510	0.050	0.5	0	102	90	110				
Vanadium	0.501	0.050	0.5	0	100	90	110				
Zinc	0.515	0.020	0.5	0	103	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1079

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICB | SampType: ICB | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383203
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1077

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV2 | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383228
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.09	0.10	5	0	102	90	110				
Antimony	0.511	0.060	0.5	0	102	90	110				
Arsenic	0.517	0.010	0.5	0	103	90	110				
Barium	0.514	0.10	0.5	0	103	90	110				
Beryllium	0.517	0.010	0.5	0	103	90	110				
Boron	0.519	0.050	0.5	0	104	90	110				
Cadmium	0.524	0.010	0.5	0	105	90	110				
Calcium	10.4	1.0	10	0	104	90	110				
Chromium	0.507	0.010	0.5	0	101	90	110				
Cobalt	0.517	0.050	0.5	0	103	90	110				
Copper	0.500	0.010	0.5	0	100	90	110				
Iron	1.01	0.050	1	0	101	90	110				
Lead	0.522	0.010	0.5	0	104	90	110				
Magnesium	10.3	1.0	10	0	103	90	110				
Manganese	0.503	0.050	0.5	0	101	90	110				
Molybdenum	0.518	0.050	0.5	0	104	90	110				
Nickel	0.516	0.050	0.5	0	103	90	110				
Potassium	10.7	5.0	10	0	107	90	110				
Selenium	0.510	0.010	0.5	0	102	90	110				
Silver	0.251	0.010	0.25	0	100	90	110				
Sodium	9.94	1.0	10	0	99	90	110				
Strontium	0.509	0.050	0.5	0	102	90	110				
Thallium	0.511	0.020	0.5	0	102	90	110				
Tin	0.512	0.050	0.5	0	102	90	110				
Titanium	0.511	0.050	0.5	0	102	90	110				
Vanadium	0.504	0.050	0.5	0	101	90	110				
Zinc	0.520	0.020	0.5	0	104	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1082

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB1 | SampType: CCB | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383216
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1080

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB2 | SampType: CCB | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383229
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1083

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVH2 | SampType: CCVH | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383227
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	50.1	1.0	50	0	100	90	110				
Chromium	5.21	0.010	5	0	104	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.4	0.050	10	0	104	90	110				
Lead	10.1	0.010	10	0	101	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	48.0	1.0	50	0	96	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1081

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB3 | SampType: CCB | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383239
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1086

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVH3 | SampType: CCVH | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383237
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.124	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	49.7	1.0	50	0	99	90	110				
Chromium	5.12	0.010	5	0	102	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.4	0.050	10	0	104	90	110				
Lead	10.1	0.010	10	0	101	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	48.0	1.0	50	0	96	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1084

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: Life Science Laboratories, Inc Contract:
Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076
AA CRDL Standard Source:
ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP Initial True	Found	%R	Final True	Found	%R
Aluminum				100.00	93.88	93.9			
Antimony				60.00	60.67	101.1			
Arsenic				10.00	10.05	100.5			
Barium				100.00	96.65	96.6			
Beryllium				10.00	10.09	100.9			
Boron				50.00	39.98	80.0			
Cadmium				10.00	8.33	83.3			
Calcium				1000.00	1043.62	104.4			
Chromium				10.00	8.31	83.1			
Cobalt				50.00	48.64	97.3			
Copper				10.00	10.75	107.5			
Iron				50.00	51.05	102.1			
Lead				10.00	10.11	101.1			
Magnesium				1000.00	1045.61	104.6			
Manganese				50.00	50.77	101.5			
Molybdenum				50.00	50.00	100.0			
Nickel				50.00	50.88	101.8			
Potassium				5000.00	3986.42	79.7			
Selenium				10.00	10.45	104.5			
Silver				10.00	9.80	98.0			
Sodium				1000.00	863.12	86.3			
Strontium				50.00	49.65	99.3			
Thallium				20.00	14.18	70.9			
Tin				50.00	46.14	92.3			
Titanium				50.00	50.12	100.2			
Vanadium				50.00	49.38	98.8			
Zinc				20.00	20.59	103.0			

FORM II (Part 2) - IN

IIM04.1

1087

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV3 | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 14620
Client ID: ZZZZZ | Batch ID: R14620 | Method: SW6010B | Analysis Date: 8/27/08 | SeqNo: 383238
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.04	0.10	5	0	101	90	110				
Antimony	0.500	0.060	0.5	0	100	90	110				
Arsenic	0.512	0.010	0.5	0	102	90	110				
Barium	0.508	0.10	0.5	0	102	90	110				
Beryllium	0.508	0.010	0.5	0	102	90	110				
Boron	0.514	0.050	0.5	0	103	90	110				
Cadmium	0.517	0.010	0.5	0	103	90	110				
Calcium	10.3	1.0	10	0	103	90	110				
Chromium	0.504	0.010	0.5	0	101	90	110				
Cobalt	0.508	0.050	0.5	0	102	90	110				
Copper	0.494	0.010	0.5	0	99	90	110				
Iron	1.01	0.050	1	0	101	90	110				
Lead	0.518	0.010	0.5	0	104	90	110				
Magnesium	10.1	1.0	10	0	101	90	110				
Manganese	0.494	0.050	0.5	0	99	90	110				
Molybdenum	0.511	0.050	0.5	0	102	90	110				
Nickel	0.512	0.050	0.5	0	102	90	110				
Potassium	10.6	5.0	10	0	106	90	110				
Selenium	0.500	0.010	0.5	0	100	90	110				
Silver	0.247	0.010	0.25	0	99	90	110				
Sodium	9.87	1.0	10	0	99	90	110				
Strontium	0.504	0.050	0.5	0	101	90	110				
Thallium	0.499	0.020	0.5	0	100	90	110				
Tin	0.500	0.050	0.5	0	100	90	110				
Titanium	0.502	0.050	0.5	0	100	90	110				
Vanadium	0.499	0.050	0.5	0	100	90	110				
Zinc	0.510	0.020	0.5	0	102	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1085

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMS | SampType: MS | TestCode: 6010S | Units: mg/Kg-dry | Prep Date: 8/26/08 | RunNo: 14620
Client ID: UST-East | Batch ID: 8003 | Method: SW6010B | (SW3050B) | Analysis Date: 8/27/08 | SeqNo: 383222
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	48.7	1.2	47.3	3.01	97	60	140				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1090

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8003 | SampType: MBLK | TestCode: 6010S | Units: mg/Kg | Prep Date: 8/26/2008 | RunNo: 14620
Client ID: ZZZZZ | Batch ID: 8003 | Method: SW6010B | (SW3050B) | Analysis Date: 8/27/2008 | SeqNo: 383207
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	10									
Antimony	ND	5.0									
Arsenic	ND	1.0									
Barium	ND	10									
Beryllium	ND	1.0									
Boron	ND	5.0									
Cadmium	ND	1.0									
Calcium	3.41	100									J
Chromium	ND	1.0									
Cobalt	ND	5.0									
Copper	ND	1.0									
Iron	1.16	5.0									J
Lead	0.180	1.0									J
Magnesium	ND	100									
Manganese	ND	5.0									
Molybdenum	ND	5.0									
Nickel	ND	5.0									
Potassium	ND	500									
Selenium	ND	1.0									
Silver	ND	1.0									
Sodium	ND	100									
Strontium	ND	5.0									
Thallium	ND	2.0									
Tin	ND	5.0									
Titanium	ND	5.0									
Vanadium	ND	5.0									
Zinc	ND	2.0									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

03-Sep-08

1088

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BMSD | SampType: MSD | TestCode: 6010S | Units: mg/Kg-dry | Prep Date: 8/26/08 | RunNo: 14620
Client ID: UST-East | Batch ID: 8003 | Method: SW6010B | (SW3050B) | Analysis Date: 8/27/08 | SeqNo: 383223
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	50.5	1.2	47.3	3.01	100	60	140	48.7	4	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1091

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Life Science Laboratories, Inc Contract:
Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076
ICP ID Number: ICAP 6IE ICS Source:

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R
Aluminum	500000	500000	475423	465262.0	93.1	482831	466441.1	93.3
Antimony	0	0	1	104.2	102.4	-1	103.2	103.2
Arsenic	0	0	1	105.2	100.3	1	100.3	100.3
Barium	500	500	-2	465.3	93.5	-1	466.3	93.3
Beryllium	500	500	0	475.5	95.3	0	476.5	95.3
Boron	0	0	1	98.2	98.2	-2	98.2	98.2
Cadmium	1000	1000	-1	987.0	98.7	0	986.3	98.6
Calcium	500000	500000	490700	488284.2	97.7	494040	480146.9	96.0
Chromium	0	0	-1	450.5	90.1	-1	455.2	91.1
Cobalt	500	500	-4	496.4	99.2	-4	506.4	101.3
Copper	0	0	1	502.0	100.4	1	510.0	102.0
Iron	200000	200000	186332	183646.0	91.8	189222	183348.9	91.7
Lead	0	0	2	46.4	92.8	2	46.1	92.2
Magnesium	500000	500000	489938	479482.9	95.9	495171	478850.8	95.7
Manganese	0	0	-1	455.8	91.2	-1	450.8	90.2
Molybdenum	500	500	0	455.3	91.1	1	452.8	90.6
Nickel	1000	1000	-27	886.2	88.6	-254	906.4	90.6
Potassium	0	0	-2	718.1	64.1	-1	792.0	30.5
Selenium	50	50	0	47.0	94.1	1	45.2	90.4
Silver	200	200	2	200.7	100.3	2	200.5	100.2
Sodium	0	0	2	123.5	61.8	-22	122.4	61.2
Strontium	500	500	0	455.5	91.1	0	457.2	91.4
Thallium	0	0	-1	96.5	96.5	3	97.0	97.0
Tin	500	500	-1	457.6	91.5	-2	463.2	92.6
Titanium	0	0	1	467.4	93.5	1	469.2	93.8
Vanadium	500	500	0	464.6	92.9	0	469.2	93.8
Zinc	0	0	-1	477.4	95.7	-1	481.1	96.1

FORM IV - IN

TIM04

1089

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004B | SampType: PDS | TestCode: 6010S | Units: mg/Kg-dry | Prep Date: 8/26/08 | RunNo: 14620
Client ID: UST-East | Batch ID: 8003 | Method: SW6010B | (SW3050B) | Analysis Date: 8/27/08 | SeqNo: 383225
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	49.6	1.2	47.3	3.01	98	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Aug-08

1094

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8003 | SampType: LCS | TestCode: 6010S | Units: mg/Kg | Prep Date: 8/26/2008 | RunNo: 14620
Client ID: ZZZZZ | Batch ID: 8003 | Method: SW6010B | (SW3050B) | Analysis Date: 8/27/2008 | SeqNo: 383208
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	98.7	10	100	0	99	85	115				
Antimony	20.0	6.0	20	0	100	85	115				
Arsenic	19.9	1.0	20	0	99	85	115				
Barium	18.9	10	20	0	95	85	115				
Beryllium	20.0	1.0	20	0	100	85	115				
Boron	47.6	5.0	50	0	95	85	115				
Cadmium	19.6	1.0	20	0	98	85	115				
Calcium	993	100	1000	0	99	85	115				
Chromium	19.8	1.0	20	0	99	85	115				
Cobalt	19.6	5.0	20	0	98	85	115				
Copper	19.7	1.0	20	0	99	85	115				
Iron	102	5.0	100	0	102	85	115				
Lead	20.1	1.0	20	0	100	85	115				
Magnesium	995	100	1000	0	99	85	115				
Manganese	19.7	5.0	20	0	99	85	115				
Molybdenum	19.0	5.0	20	0	95	85	115				
Nickel	20.1	5.0	20	0	100	85	115				
Potassium	1000	500	1000	0	100	85	115				
Selenium	19.4	1.0	20	0	97	85	115				
Silver	4.78	1.0	5	0	96	85	115				
Sodium	939	100	1000	0	94	85	115				
Strontium	19.4	5.0	20	0	97	85	115				
Thallium	19.5	2.0	20	0	97	85	115				
Tin	20.5	5.0	20	0	103	85	115				
Titanium	19.6	5.0	20	0	99	85	115				
Vanadium	19.7	5.0	20	0	98	85	115				
Zinc	20.3	2.0	20	0	101	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

03-Sep-08

1092

METALS MDL Verification Summary (NELAC)

Instrument ID(s): TJA ICAP-61E | Verification Dates: 8/23/2007 & 9/20/2007 & 10/2/2007 | Units = mg/L

Analytical Method	Prep Method	Matrix	Analyte	Initial MDL	MDL to be Verified	MDL Ver Conc #1	MDL Ver Result	MDL Ver %Rec	Rec Met 85-115%	MDL Ver Conc #2	MDL Ver Result	MDL Ver %Rec	Rec Met 85-115%	Verified MDL	RL
6010B	3050B	Solid	Aluminum	1.7549	4.0	4.0	4.835	121%	yes	n/a	n/a			4.00	10.0
6010B	3050B	Solid	Antimony	0.1629	0.1629	0.30	0.167	56%	no	0.450	0.461	102%	yes	0.450	6.0
6010B	3050B	Solid	Arsenic	0.1594	0.40	0.40	0.466	117%	yes	n/a	n/a			0.40	1.0
6010B	3050B	Solid	Barium	0.0377	0.0377	0.20	0.198	99%	yes	n/a	n/a			0.0377	10.0
6010B	3050B	Solid	Beryllium	0.0057	0.0057	0.020	0.02	100%	yes	n/a	n/a			0.00574	1.0
6010B	3050B	Solid	Boron	0.1525	0.50	0.50	0.491	98%	yes	n/a	n/a			0.50	5.0
6010B	3050B	Solid	Cadmium	0.0306	0.0306	0.10	0.098	98%	yes	n/a	n/a			0.0306	1.0
6010B	3050B	Solid	Calcium	1.704	1.704	4.0	3.888	97%	yes	n/a	n/a			1.704	100.0
6010B	3050B	Solid	Chromium	0.1406	0.1406	0.40	0.409	102%	yes	n/a	n/a			0.1406	1.0
6010B	3050B	Solid	Cobalt	0.1471	0.1471	0.40	0.393	98%	yes	n/a	n/a			0.1471	5.0
6010B	3050B	Solid	Copper	0.0867	0.40	0.40	0.439	110%	yes	n/a	n/a			0.40	1.0
6010B	3050B	Solid	Iron	0.4695	0.4695	1.0	1.303	130%	yes	n/a	n/a			0.4695	5.0
6010B	3050B	Solid	Lead	0.1410	0.1410	0.40	0.491	123%	yes	n/a	n/a			0.1410	1.0
6010B	3050B	Solid	Magnesium	0.9350	4.0	4.0	3.775	94%	yes	n/a	n/a			4.00	100.0
6010B	3050B	Solid	Manganese	0.0233	0.0233	0.10	0.098	98%	yes	n/a	n/a			0.0233	5.0
6010B	3050B	Solid	Molybdenum	0.2305	0.2305	0.50	0.544	109%	yes	n/a	n/a			0.2305	5.0
6010B	3050B	Solid	Nickel	0.0693	0.20	0.20	0.223	112%	yes	n/a	n/a			0.20	5.0
6010B	3050B	Solid	Potassium	8.5431	20.0	20.0	19.207	96%	yes	n/a	n/a			20.0	500.0
6010B	3050B	Solid	Selenium	0.1920	0.1920	0.50	0.566	113%	yes	n/a	n/a			0.1920	1.0
6010B	3050B	Solid	Silver	0.0974	0.0974	0.20	0.191	96%	yes	n/a	n/a			0.0974	1.0
6010B	3050B	Solid	Sodium	0.5808	4.0	4.0	7.905	198%	no	8.0	10.278	128%	yes	8.00	100.0
6010B	3050B	Solid	Strontium	0.0165	0.0165	0.050	0.034	68%	yes	n/a	n/a			0.0165	5.0
6010B	3050B	Solid	Thallium	0.5211	0.5211	1.0	0.899	90%	yes	n/a	n/a			0.5211	2.0
6010B	3050B	Solid	Tin	0.4129	1.0	1.0	1.853	185%	no	3.0	3.746	125%	yes	3.00	5.0
6010B	3050B	Solid	Titanium	0.0768	0.0768	0.20	0.198	99%	yes	n/a	n/a			0.0768	5.0
6010B	3050B	Solid	Vanadium	0.0829	0.0829	0.20	0.176	88%	yes	n/a	n/a			0.0829	5.0
6010B	3050B	Solid	Zinc	0.2550	0.2550	0.40	0.703	176%	no	0.80	1.090	136%	yes	0.80	2.0

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984

MDL=(S Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero

1095

ICP SERIAL DILUTIONS

Lab Name: Life Science Laboratories, Inc Contract: UST-East
Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076
Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Lead	25.50		25.99	J	1.9		P

FORM IX - IN

ILM04.1

1093

METALS MDL Verification Summary (NELAC)

Instrument ID(s): TJA ICAP-61E — Verification Dates: 4/30/2008 — Units = mg/L

Analytical Method	Prep Method	Matrix	Analyte	Initial MDL	MDL to be Verified	MDL Ver Conc. #1	MDL Ver Result	MDL Ver %Rec	Rec Met 65-140%	MDL Ver Conc. #2	MDL Ver Result	MDL Ver %Rec	Rec Met 65-140%	Verified MDL	RL
6010B	3005A	Water	Aluminum	0.01245	0.040	0.04	0.03812	95%	yes	n/a	n/a			0.040	0.100
6010B	3005A	Water	Antimony	0.00152	0.00152	0.003	0.00369	123%	yes	n/a	n/a			0.00152	0.060
6010B	3005A	Water	Arsenic	0.00120	0.0040	0.004	0.00430	109%	yes	n/a	n/a			0.0040	0.010
6010B	3005A	Water	Barium	0.00054	0.00054	0.002	0.00165	83%	yes	n/a	n/a			0.00054	0.100
6010B	3005A	Water	Beryllium	0.00010	0.00010	0.0002	0.00023	115%	yes	n/a	n/a			0.00010	0.010
6010B	3005A	Water	Boron	0.00300	0.00300	0.005	0.00553	111%	yes	n/a	n/a			0.0030	0.050
6010B	3005A	Water	Cadmium	0.00042	0.00042	0.001	0.00127	127%	yes	n/a	n/a			0.00042	0.010
6010B	3005A	Water	Calcium	0.00688	0.040	0.04	0.04852	121%	yes	n/a	n/a			0.040	1.000
6010B	3005A	Water	Chromium	0.00144	0.00144	0.004	0.00468	117%	yes	n/a	n/a			0.00144	0.010
6010B	3005A	Water	Cobalt	0.00192	0.0060	0.006	0.00523	87%	yes	n/a	n/a			0.0060	0.050
6010B	3005A	Water	Copper	0.00188	0.00188	0.004	0.00409	102%	yes	n/a	n/a			0.00188	0.010
6010B	3005A	Water	Iron	0.00600	0.00600	0.01	0.0104	104%	yes	n/a	n/a			0.0050	0.050
6010B	3005A	Water	Lead	0.00084	0.0040	0.004	0.00423	105%	yes	n/a	n/a			0.0040	0.010
6010B	3005A	Water	Magnesium	0.01266	0.040	0.04	0.04746	119%	yes	n/a	n/a			0.040	1.000
6010B	3005A	Water	Manganese	0.00026	0.0015	0.0015	0.00111	74%	yes	n/a	n/a			0.0015	0.050
6010B	3005A	Water	Molybdenum	0.00292	0.00292	0.005	0.00602	120%	yes	n/a	n/a			0.00292	0.050
6010B	3005A	Water	Nickel	0.00112	0.00112	0.002	0.00207	104%	yes	n/a	n/a			0.00112	0.050
6010B	3005A	Water	Potassium	0.06756	0.06756	0.2	0.15858	79%	yes	n/a	n/a			0.06756	5.000
6010B	3005A	Water	Selenium	0.00264	0.00264	0.005	0.00443	89%	yes	n/a	n/a			0.00264	0.010
6010B	3005A	Water	Silver	0.00090	0.00090	0.002	0.00212	106%	yes	n/a	n/a			0.00090	0.010
6010B	3005A	Water	Sodium	0.00846	0.040	0.04	0.03526	88%	yes	n/a	n/a			0.040	1.000
6010B	3005A	Water	Strontium	0.00016	0.0005	0.0005	0.0005	100%	yes	n/a	n/a			0.0005	0.050
6010B	3005A	Water	Thallium	0.00587	0.00587	0.01	0.01284	128%	yes	n/a	n/a			0.00587	0.020
6010B	3005A	Water	Tin	0.00647	0.00647	0.01	0.01285	127%	yes	n/a	n/a			0.00647	0.050
6010B	3005A	Water	Titanium	0.00076	0.00076	0.002	0.0021	105%	yes	n/a	n/a			0.00076	0.050
6010B	3005A	Water	Vanadium	0.00066	0.00066	0.002	0.0019	95%	yes	n/a	n/a			0.00066	0.050
6010B	3005A	Water	Zinc	0.00135	0.0040	0.004	0.00554	139%	yes	n/a	n/a			0.0040	0.020

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984

MDL=(S Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

ICP ID Number: ICAP-61E Date: 1/2/08

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	308.22			0.0002328		0.0003869
Antimony	206.83			0.0000540		0.0056575
Arsenic	196.70			-0.0000088		-0.0028173
Barium	493.41	0.0000169				
Beryllium	313.04					
Cadmium	228.80	0.0000358		0.0000504		
Calcium	317.93					
Chromium	267.72	0.0000112		0.0000252	0.0000335	
Cobalt	228.62			0.0000222		0.0000852
Copper	324.75			-0.0000420		-0.0001146
Iron	259.94	0.0000654				0.0000632
Lead	220.35	0.0005899	-0.000003	0.0000666		0.0000749
Magnesium	279.08			0.0000364		0.0006914
Manganese	257.61	0.0000065		0.0000141	0.0000063	
Molybdenum	202.03			-0.0000080		0.0000628
Nickel	231.60					
Potassium	766.49		-0.000209		-0.0003263	0.0013548
Selenium	196.03			0.0000097		-0.0000263
Silver	328.07					
Sodium	589.00					
Thallium	190.86	0.0004934		0.0000926		0.0002990
Vanadium	292.40			0.0000196		0.0000254
Zinc	213.86			0.0000672		

Comments:

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

ICP ID Number: ICAP-61E Date: 1/2/08

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Mo	Ni	Co	Mn
Aluminum	308.22	0.0264364	0.0097866			
Antimony	206.83	-0.0062988		-0.0017197		
Arsenic	196.70		-0.0010716			
Barium	493.41					
Beryllium	313.04	0.0002798				
Cadmium	228.80			0.0001133		
Calcium	317.93					
Chromium	267.72	0.0002748				
Cobalt	228.62			0.0003386		
Copper	324.75		0.0003037			
Iron	259.94					
Lead	220.35		-0.0003878	0.0002857		
Magnesium	279.08					
Manganese	257.61					
Molybdenum	202.03					
Nickel	231.60				-0.0011731	
Potassium	766.49					
Selenium	196.03				0.000443	0.0003626
Silver	328.07		-0.0005618			
Sodium	589.00					
Thallium	190.86	0.0020255			0.003453	0.001534
Vanadium	292.40		-0.0014470			
Zinc	213.86			0.0043830		

Comments:

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

ICP ID Number: ICAP-61E Date: 1/2/08

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ti	Pb	___	___	___
Aluminum	308.22					
Antimony	206.83					
Arsenic	196.70					
Barium	493.41					
Beryllium	313.04					
Cadmium	228.80					
Calcium	317.93					
Chromium	267.72					
Cobalt	228.62					
Copper	324.75					
Iron	259.94					
Lead	220.35					
Magnesium	279.08					
Manganese	257.61					
Molybdenum	202.03					
Nickel	231.60					
Potassium	766.49					
Selenium	196.03					
Silver	328.07					
Sodium	589.00					
Thallium	190.86	0.001853	0.0003639			
Vanadium	292.40					
Zinc	213.86					

Comments:

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

ICP ID Number: ICAP 61E Date: 05/05/2008

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum		600000	P
Antimony		10000	P
Arsenic		10000	P
Barium		10000	P
Beryllium		5000	P
Boron		50000	P
Cadmium		5000	P
Calcium		2000000	P
Chromium		200000	P
Cobalt		30000	P
Copper		20000	P
Iron		500000	P
Lead		200000	P
Magnesium		500000	P
Manganese		50000	P
Molybdenum		20000	P
Nickel		50000	P
Potassium		100000	P
Selenium		10000	P
Silver		5000	P
Sodium		2000000	P
Strontium		5000	P
Thallium		20000	P
Vanadium		20000	P
Zinc		5000	P

Comments:

FORM XII - IN ILM04.1

13
PREPARATION LOG

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
Field Dup	08/26/2008	0.50	50
LCS-8003	08/26/2008	0.50	50
MB-8003	08/26/2008	0.50	50
Trench-Bot-1	08/26/2008	0.50	50
Trench-Bot-2	08/26/2008	0.50	50
UST-Bot-1	08/26/2008	0.50	50
UST-Bot-2	08/26/2008	0.50	50
UST-East	08/26/2008	0.50	50
UST-EastS	08/26/2008	0.50	50
UST-EastSD	08/26/2008	0.50	50
UST-North	08/26/2008	0.50	50
UST-South	08/26/2008	0.50	50
UST-West	08/26/2008	0.50	50

FORM XIII - IN ILM04.1

14
ANALYSIS RUN LOG

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

Instrument ID Number: ICAP 61E Method: P

Start Date: 08/27/2008 End Date: 08/27/2008

EPA Sample No.	D/F	Time	% R	Analytes																					
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0 ET 8/28/08	1.00	1042		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
S3	1.00	1051		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
S2	1.00	1055		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
S1	1.00	1057		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
ICVH	1.00	1101		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
ICV	1.00	1105		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
CCV/IPC	1.00	1115		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
ICB	1.00	1122		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
CRI	1.00	1126				X	X	X	X			X	X	X	X			X		X	X					X	
ICSA	1.00	1130		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
ICSAB	1.00	1134		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
MB-8003	1.00	1149				X	X	X	X			X	X	X	X			X		X	X					X	
LCS-8003	1.00	1153				X	X	X	X			X	X	X	X			X		X	X					X	
ZZZZZZ	10.00	1156				X	X		X			X			X					X	X						
ZZZZZZ	10.00	1200				X	X		X			X			X					X	X						
ZZZZZZ	10.00	1203				X	X		X			X			X					X	X						
ZZZZZZ	10.00	1207				X	X		X			X			X					X	X						
ZZZZZZ	10.00	1210				X	X		X			X			X					X	X						
CCVH1	1.00	1214		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
CCV1	1.00	1217		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
CCB1	1.00	1221		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
ZZZZZZ	10.00	1224				X	X		X			X			X					X	X						
UST-Bot-1	1.00	1228													X												
UST-North	1.00	1231													X												
UST-Bot-2	1.00	1235													X												
UST-East	1.00	1238													X												
UST-EastS	1.00	1242													X												
UST-EastSD	1.00	1246													X												
UST-EastL	5.00	1249													X												
UST-EastA	1.00	1253													X												
UST-West	1.00	1256													X												
CCVH2	1.00	1300		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
CCV2	1.00	1303		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
CCB2	1.00	1307		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
UST-South	1.00	1310													X												

FORM XIV - IN ILM04.1

14
ANALYSIS RUN LOG

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

Instrument ID Number: ICAP 61E Method: P

Start Date: 08/27/2008 End Date: 08/27/2008

EPA Sample No.	D/F	Time	% R	Analytes																					
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Field Dup	1.00	1314													X												
ench-Bot-1	1.00	1317						X				X	X	X					X							X	
ench-Bot-2	1.00	1321						X				X	X	X					X							X	
ZZZZZZ	1.00	1324													X												
ICSA	1.00	1427		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1431		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCVH3	1.00	1435		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV3	1.00	1438		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB3	1.00	1442		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

FORM XIV - IN ILM04.1

Raw Data

Life Science Laboratories, Inc. - Brittonfield

ICAP-61E Analysis Run Log

Analysis Date: 08/27/08 Lab Method: KICAP

Standard #	Sample ID	Batch ID	DF	Method	Comment
	Profile	1.0 mg/L As			Vernier set: 494 Time: 9:00 AM
7152-5	BLANK		1	6010B	
7152-5	STD3		1		
7154-5	STD2		1		
7155-5	STD1		1		
7088-5	ICVH		1		
7558-5	ICV		1		
7157-5	CCV/IPC		1		
7152-5	ICB		1		
7159-5	CRI(PQL)		1		
7325-5	ICSA-INITIAL		1		
7574-5	ICSAB-INITIAL		1		
	MB-8003	8003	1		
	LCS-8003		1		
	0808110-001A		10		
	0808110-002A		10		
	0808110-003A		10		
	0808110-004A		10		
	0808110-005A		10		
7156-5	CCVH1		1		
7157-5	CCV1		1		
7152-5	CCB1		1		
	0808110-006A	8003	10		
	0808076-001B		1		
	0808076-002B		1		
	0808076-003B		1		
	0808076-004B		1		
	0808076-004BMS		1		
	0808076-004BMSD		1		
	0808076-004BSD		5		
	0808076-004BPDS		1		
	0808076-005B		1		
	CCVH2		1		
	CCV2		1		
	CCB2		1		
	0808076-006B	8003	1		
	0808076-007B		1		
	0808076-008B		1		
	0808076-009B		1		
	0808104-001A		1		
	ICSA-FINAL		1		

N/A = Not Applicable, >LR = Greater than Linear Range, D/RA = Dilute and Reanalyze, RA = Reanalyze

Life Science Laboratories, Inc. - Brittonfield

ICAP-61E Analysis Run Log

Analysis Date: 08/27/08 Lab Method: KICAP

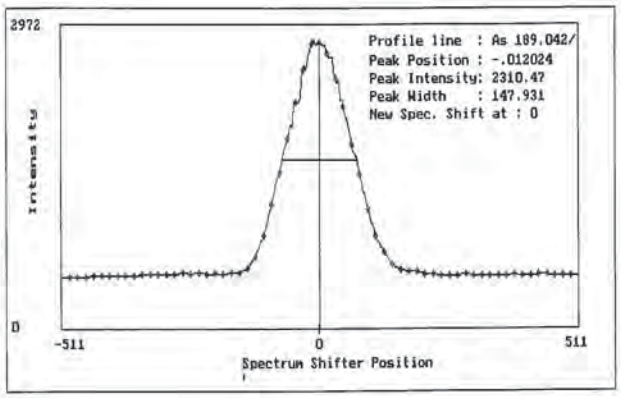
Standard #	Sample ID	Batch ID	DF	Method	Comment
	ICSAB-FINAL		1	6010B	
	CCVH3		1		
	CCV3		1		
	CCB3		1		

Analyst: Cang Tran Date: 8/28/08

Reviewer: N Tinlan Date: 9/28/08

Print Date: 8/28/08

N/A = Not Applicable, >LR = Greater than Linear Range, D/RA = Dilute and Reanalyze, RA = Reanalyze



CT
8/28/08

Standardization Rpt. 08/27/08 10:46:08 AM page 1

Method: KICAP Standard: BLANK
Run Time: 08/27/08 10:42:53

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Ca
Avge	.01133	.9962	3.0675	.22322	.45977	1.141	1.434
SDev	.01473	.0031	.0020	.00115	.00200	.005	.013
%RSD	130.08	.3065	.06517	.51703	.43478	.4013	.8828
#1	.00000	.9935	3.0655	.22189	.45777	1.136	1.419
#2	.00600	.9955	3.0675	.22389	.45977	1.142	1.438
#3	.02799	.9995	3.0695	.22389	.46177	1.145	1.443

Elem	Cd2265	Co2286	Cr	Cr	Cu3247	Fe	Fe
Avge	29.782	3.0095	6.0600	6.4591	.04265	1.2440	8.8852
SDev	.088	.0115	.0211	.0040	.00058	.0025	.0261
%RSD	.29495	.38302	.34754	.06254	1.3532	.20219	.29427
#1	29.683	2.9965	6.0380	6.4548	.04198	1.2414	8.8576
#2	29.814	3.0135	6.0620	6.4628	.04298	1.2464	8.8886
#3	29.850	3.0185	6.0800	6.4598	.04298	1.2444	8.9095

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na	Na	Ni2316
Avge	18.24	.8599	1.1524	.01233	3.636	10.73	-.00966
SDev	.05	.0023	.0026	.00351	.008	.06	.00058
%RSD	.2596	.2684	.22947	28.475	.2305	.5184	5.9726
#1	18.19	.8586	1.1514	.00900	3.626	10.67	-.01000
#2	18.27	.8586	1.1554	.01599	3.641	10.76	-.01000
#3	18.27	.8626	1.1504	.01199	3.640	10.77	-.00900

Elem	Sn1899	Sr4215	Ti3349	V_2924	Zn2138	As1890	Tl1908
Avge	3.4879	.76895	.53573	.00000	.01466	-.02482	9.0791
SDev	.0159	.00208	.00000	.00360	.00568	.02815	.0486
%RSD	.45520	.27058	.00000	.00000	38.770	113.40	.53507
#1	3.4783	.76662	.53573	-.00300	.02099	-.04398	9.1174
#2	3.4793	.77061	.53573	.00400	.01000	.00750	9.0245
#3	3.5062	.76962	.53573	-.00100	.01299	-.03798	9.0955

Elem	2203/1	2203/2	Pb	1960/1	1960/2	2068/1	2068/2
Avge	.80593	-.07163	9.7165	.00366	.06563	-.25254	.17758
SDev	.14337	.14229	.0488	.08152	.08484	.12545	.16930
%RSD	17.790	198.64	.50250	2224.4	129.27	49.673	95.335
#1	.91554	.04298	9.6602	-.07596	.16292	-.27086	.02699
#2	.64368	-.02699	9.7421	.00000	.00700	-.36782	.36082
#3	.85857	-.23088	9.7471	.08696	.02699	-.11894	.14493

CT
8/28/08

Standardization Rpt. 08/27/08 10:54:55 AM page 1

Method: KICAP Standard: STD3
Run Time: 08/27/08 10:51:40

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Avge	24.205	13.95	36.924	12.650	139.41	224.4	1706.3
SDev	.326	.15	.438	.164	1.83	2.8	21.3
%RSD	1.3458	1.068	1.1858	1.2967	1.3134	1.232	1.2460
#1	24.540	14.11	37.390	12.824	141.38	227.4	1729.1
#2	23.889	13.82	36.522	12.498	137.76	222.0	1687.0
#3	24.186	13.92	36.860	12.628	139.09	223.9	1702.8

Elem	Co2286	Cr	Cu3247	Fe	Mg2790	Mn2576	Mo2020
Avge	39.083	94.332	17.062	303.90	30.66	101.69	10.046
SDev	.468	1.107	.245	3.84	.35	1.30	.158
%RSD	1.1980	1.1735	1.4344	1.2629	1.125	1.2812	1.5696
#1	39.585	95.526	17.328	308.05	31.03	103.09	10.214
#2	38.659	93.340	16.847	300.47	30.35	100.52	9.9010
#3	39.005	94.129	17.012	303.17	30.61	101.45	10.023

Elem	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924	Zn2138
Avge	820.3	8.0503	19.252	113.88	15.061	21.959	22.656
SDev	3.9	.1110	.164	1.49	.186	.281	.309
%RSD	.4778	1.3783	.85344	1.3090	1.2337	1.2811	1.3648
#1	824.1	8.1669	19.441	115.49	15.260	22.264	22.985
#2	816.3	7.9460	19.150	112.55	14.893	21.709	22.371
#3	820.6	8.0380	19.163	113.61	15.030	21.905	22.612

Elem	As1890	Tl1908	2203/1	2203/2	1960/1	1960/2	2068/1
Avge	64.183	38.871	291.21	268.11	29.399	33.783	46.398
SDev	.943	.456	1.82	1.33	.248	.133	.302
%RSD	1.4692	1.1743	.62528	.49769	.84509	.39458	.65183
#1	65.174	39.375	293.12	268.75	29.644	33.904	46.525
#2	63.297	38.487	291.01	266.58	29.406	33.640	46.053
#3	64.078	38.750	289.49	269.01	29.147	33.805	46.617

Elem	2068/2
Avge	62.314
SDev	.509
%RSD	.81732
#1	62.890
#2	62.130
#3	61.922

Standardization Rpt. 08/27/08 10:57:03 AM page 1

Method: KICAP Standard: STD2
Run Time: 08/27/08 10:55:23

Elem	Ca	Cr	Fe	Na	Pb
Avge	131.8	29.018	17.239	19.14	75.180
SDev	.5	.054	.056	.03	.264
%RSD	.3430	.18563	.32336	.1515	.35094
#1	132.3	29.036	17.286	19.17	75.466
#2	131.4	28.958	17.177	19.11	74.947
#3	131.7	29.060	17.252	19.14	75.127

Standardization Rpt. 08/27/08 10:58:57 AM page 1

Method: KICAP Standard: STD1
Run Time: 08/27/08 10:57:16

Elem	K_7664
Avge	58.38
SDev	.19
%RSD	.3327
#1	58.17
#2	58.41
#3	58.55

Standardization Report 08/27/08 10:59:03 AM page 1

Method: KICAP Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	STD3	BLANK	.020643	-.000234	08/27/08 10:57:16
Al3082	308.215	STD3	BLANK	1.72130	.592812	08/27/08 10:57:16
B_2496	249.678	STD3	BLANK	.029587	-.090756	08/27/08 10:57:16
Ba4934	493.409	STD3	BLANK	.080474	-.017964	08/27/08 10:57:16
Be3130	313.042	STD3	BLANK	.007199	-.003310	08/27/08 10:57:16
Ca	317.933	STD3	BLANK	.089693	-.128585	08/27/08 10:57:16
Ca	370.603	STD2	BLANK	1.60410	.095405	08/27/08 10:57:16
Cd2265	226.502	STD3	BLANK	.000597	-.017774	08/27/08 10:57:16
Co2286	228.616	STD3	BLANK	.027736	-.083470	08/27/08 10:57:16
Cr	267.716	STD3	BLANK	.011388	-.073553	08/27/08 10:57:16
Cr	298.919	STD2	BLANK	.529176	2.19651	08/27/08 10:57:16
Cu3247	324.753	STD3	BLANK	.058761	-.002506	08/27/08 10:57:16
Fe	271.441	STD2	BLANK	1.88471	-.531233	08/27/08 10:57:16
Fe	259.940	STD3	BLANK	.006782	-.060258	08/27/08 10:57:16
K_7664	766.491	STD1	BLANK	3.24631	-33.2729	08/27/08 10:57:16
Mg2790	279.078	STD3	BLANK	1.95910	-.352968	08/27/08 10:57:16
Mn2576	257.610	STD3	BLANK	.009951	-.011468	08/27/08 10:57:16
Mo2020	202.030	STD3	BLANK	.099670	-.001229	08/27/08 10:57:16
Na	588.995	STD3	BLANK	.949085	-5.64620	08/27/08 10:57:16
Na	330.232	STD2	BLANK	1.46730	3.45040	08/27/08 10:57:16
Ni2316	231.604	STD3	BLANK	.123932	.001197	08/27/08 10:57:16
Sn1899	189.989	STD3	BLANK	.063633	-.221947	08/27/08 10:57:16
Sr4215	421.552	STD3	BLANK	.008843	-.006800	08/27/08 10:57:16
Ti3349	334.941	STD3	BLANK	.068915	-.036920	08/27/08 10:57:16
V_2924	292.402	STD3	BLANK	.045476	.000000	08/27/08 10:57:16
Zn2138	213.856	STD3	BLANK	.044369	-.000650	08/27/08 10:57:16
As1890	189.042	STD3	BLANK	.015514	.000385	08/27/08 10:57:16
Tl1908	190.864	STD3	BLANK	.034052	-.309160	08/27/08 10:57:16
Pb	220.353	NONE	NONE	1.00000	.000000	*08/27/08 10:57:16
Se1960	196.026	NONE	NONE	1.00000	.000000	*08/27/08 10:57:16
Sb2068	206.838	NONE	NONE	1.00000	.000000	*08/27/08 10:57:16
2203/1	220.351	STD3	BLANK	.003469	-.002796	08/27/08 10:57:16
2203/2	220.352	STD3	BLANK	.003712	.000266	08/27/08 10:57:16
Pb	405.782	STD2	BLANK	1.37749	1.17769	08/27/08 10:57:16
1960/1	196.021	STD3	BLANK	.034046	-.000125	08/27/08 10:57:16
1960/2	196.022	STD3	BLANK	.029650	-.001946	08/27/08 10:57:16
2068/1	206.831	STD3	BLANK	.021388	.005401	08/27/08 10:57:16
2068/2	206.832	STD3	BLANK	.016072	-.002854	08/27/08 10:57:16

Analysis Report QC Standard 08/27/08 11:05:07 AM page 1

Method: KICAP Sample Name: ICVH Operator: CT
Run Time: 08/27/08 11:01:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00058	-.0012	.00013	-.00043	-.00000	50.46	-.00039
SDev	.00035	.0016	.00042	.00000	.00001	.13	.00006
%RSD	60.132	134.6	322.27	.00037	15098.	.2513	16.433
#1	.00080	-.0007	.00043	-.00043	.00001	50.35	-.00032
#2	.00019	.0001	.00031	-.00043	-.00000	50.44	-.00041
#3	.00078	-.0030	-.00035	-.00043	-.00001	50.60	-.00045
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value						50.00	
Range						10.00	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00162	5.2142	-.00028	10.634	-.1011	-.0087	-.00022
SDev	.00023	.0114	.00015	.020	.0147	.0029	.00006
%RSD	12.862	.21933	53.020	.18341	14.59	33.15	29.455
#1	-.00167	5.2010	-.00012	10.617	-.0883	-.0064	-.00018
#2	-.00170	5.2201	-.00041	10.630	-.0977	-.0078	-.00018
#3	-.00209	5.2214	-.00029	10.655	-.1172	-.0119	-.00029
Errors	NOCHECK	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value		5.0000		10.000			
Range		10.000		10.000			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	48.56	.00070	-.00206	.00006	.00044	.00034
SDev	.00040	.06	.00012	.00096	.00002	.00016	.00037
%RSD	113.85	.1148	17.732	46.713	33.907	37.371	107.28
#1	-.00029	48.50	.00070	-.00106	.00008	.00064	.00074
#2	.00001	48.60	.00082	-.00295	.00006	.00053	.00001
#3	-.00079	48.59	.00058	-.00219	.00004	.00025	.00028
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value		50.00					
Range		10.00					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00004	-.00162	-.00258	10.115	-.00036	.00596	10.429
SDev	.00008	.00085	.00274	.022	.00161	.00221	.035
%RSD	218.34	52.673	106.42	.21333	449.43	37.101	.33912
#1	.00001	-.00259	-.00045	10.106	-.00071	.00798	10.447
#2	.00001	-.00123	-.00161	10.100	.00140	.00630	10.388
#3	-.00013	-.00102	-.00567	10.140	-.00176	.00360	10.452
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report QC Standard 08/27/08 11:05:07 AM page 2

Value				10.000	
Range				10.000	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.247	-.00398	.00145	.00958	.00415
SDev	.013	.00287	.00168	.00205	.00306
%RSD	.13027	72.124	115.67	21.367	73.748
#1	10.263	-.00222	.00004	.00726	.00759
#2	10.238	-.00243	.00331	.01112	.00315
#3	10.242	-.00729	.00100	.01037	.00172
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report QC Standard 08/27/08 11:09:02 AM page 1

Method: KICAP Sample Name: ICV Operator: CT
Run Time: 08/27/08 11:05:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05046	1.031	.51488	.19478	.20741	10.26	.20357
SDev	.00020	.006	.00427	.00142	.00166	.08	.00147
%RSD	.39016	.5930	.82910	.73056	.80110	.7748	.72264
#1	.05026	1.031	.51397	.19502	.20777	10.28	.20374
#2	.05066	1.037	.51952	.19607	.20887	10.34	.20495
#3	.05047	1.025	.51113	.19326	.20560	10.18	.20202
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	1.000	.50000	.20000	.20000	10.00	.20000
Range	10.000	10.00	10.000	10.000	10.000	10.00	10.000

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20143	.20514	.20379	1.0455	10.49	10.36	.20542
SDev	.00144	.00137	.00143	.0080	.04	.07	.00158
%RSD	.71676	.66795	.70159	.76659	.3389	.6646	.76773
#1	.20132	.20529	.20406	1.0478	10.46	10.37	.20575
#2	.20293	.20643	.20508	1.0522	10.53	10.43	.20680
#3	.20005	.20370	.20224	1.0366	10.50	10.29	.20370
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.20000	.20000	.20000	1.0000		10.00	.20000
Range	10.000	10.000	10.000	10.000		10.00	10.000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19970	10.01	.20627	.20310	.20103	.20484	.20656
SDev	.00139	.03	.00153	.00235	.00165	.00151	.00142
%RSD	.69838	.3162	.74196	1.1566	.82025	.73823	.68542
#1	.19830	9.987	.20669	.20452	.20151	.20484	.20671
#2	.20109	10.05	.20755	.20440	.20238	.20635	.20789
#3	.19970	10.00	.20457	.20039	.19919	.20333	.20507
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	10.00	.20000	.20000	.20000	.20000	.20000
Range	10.000	10.00	10.000	10.000	10.000	10.000	10.000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20745	.20843	.20386	.20953	.20408	.21231	.21063
SDev	.00165	.00280	.00365	.00097	.00066	.00116	.00230
%RSD	.79346	1.3411	1.7896	.46341	.32267	.54432	1.0929
#1	.20768	.20795	.20091	.21028	.20332	.21110	.21245
#2	.20897	.21143	.20794	.20843	.20441	.21242	.20804
#3	.20570	.20590	.20273	.20987	.20451	.21340	.21139
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 08/27/08 11:09:02 AM page 2

Value	.20000	.20000	.20000	.20000	.20000	.20000
Range	10.000	10.000	10.000	10.000	10.000	10.000
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.20896	.20575	.20325	.21158	.21242	
SDev	.00031	.00184	.00189	.00458	.00107	
%RSD	.14716	.89430	.92775	2.1633	.50556	
#1	.20919	.20782	.20108	.20723	.21303	
#2	.20862	.20432	.20445	.21115	.21305	
#3	.20911	.20510	.20421	.21636	.21118	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value						
Range						

Analysis Report QC Standard 08/27/08 11:19:10 AM page 1

Method: KICAP Sample Name: CCV/IPC Operator: CT
Run Time: 08/27/08 11:15:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24669	4.980	.50298	.49957	.50444	10.09	.50725
SDev	.00119	.021	.00268	.00225	.00228	.04	.00184
%RSD	.48366	.4205	.53276	.45091	.45144	.3934	.36349
#1	.24562	4.961	.49988	.49729	.50213	10.07	.50577
#2	.24798	5.002	.50440	.50180	.50669	10.14	.50931
#3	.24647	4.976	.50464	.49962	.50450	10.06	.50667
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	5.000	.50000	.50000	.50000	10.00	.50000
Range	5.0000	5.000	5.0000	5.0000	5.0000	5.000	5.0000
Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50324	.49447	.48855	.98746	10.42	10.10	.49707
SDev	.00245	.00205	.00239	.00445	.03	.04	.00229
%RSD	.48756	.41507	.48952	.45070	.2434	.4315	.46053
#1	.50065	.49259	.48603	.98335	10.40	10.06	.49490
#2	.50553	.49666	.49079	.99219	10.45	10.14	.49946
#3	.50356	.49417	.48885	.98684	10.40	10.10	.49686
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.50000	.50000	.50000	1.0000		10.00	.50000
Range	5.0000	5.0000	5.0000	5.0000		5.000	5.0000
Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50422	9.722	.49889	.49665	.49975	.49876	.49212
SDev	.00345	.029	.00200	.00599	.00205	.00258	.00225
%RSD	.68354	.2943	.40193	1.2066	.41089	.51685	.45707
#1	.50033	9.694	.49674	.49222	.49776	.49598	.49031
#2	.50691	9.751	.50071	.50347	.50186	.50108	.49464
#3	.50541	9.719	.49922	.49425	.49961	.49922	.49141
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	10.00	.50000	.50000	.50000	.50000	.50000
Range	5.0000	5.000	5.0000	5.0000	5.0000	5.0000	5.0000
Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50308	.50344	.49526	.50744	.49627	.50451	.51011
SDev	.00211	.00285	.00352	.00447	.00679	.00466	.00332
%RSD	.41855	.56633	.71018	.88118	1.3676	.92378	.65118
#1	.50080	.50018	.49473	.50406	.49066	.50036	.51035
#2	.50495	.50551	.49902	.51251	.50381	.50955	.51331
#3	.50349	.50461	.49204	.50574	.49434	.50361	.50668
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 08/27/08 11:19:10 AM page 2

Value	.50000	.50000	.50000	.50000	.50000	.50000
Range	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.50610	.49929	.49476	.50346	.50528	
SDev	.00564	.00571	.00759	.00842	.00453	
%RSD	1.1142	1.1444	1.5341	1.6714	.89702	
#1	.50092	.49657	.48771	.49375	.50442	
#2	.51211	.50586	.50279	.50830	.51018	
#3	.50527	.49545	.49378	.50835	.50124	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value						
Range						

Analysis Report Blank Sample 08/27/08 11:26:18 AM page 1

Method: KICAP Sample Name: ICB Operator: CT
Run Time: 08/27/08 11:22:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	-.0113	-.00084	-.00043	-.00009	.0079	-.00050
SDev	.00016	.0031	.00012	.00000	.00001	.0056	.00010
%RSD	255.57	27.56	14.507	.00072	14.522	70.41	20.975
#1	-.00005	-.0131	-.00088	-.00043	-.00009	.0109	-.00060
#2	-.00001	-.0131	-.00094	-.00043	-.00007	.0114	-.00050
#3	.00024	-.0077	-.00071	-.00043	-.00009	.0015	-.00039
Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00217	-.00241	.00067	-.00196	-.1438	-.0166	-.00041
SDev	.00046	.00036	.00027	.00021	.0239	.0017	.00003
%RSD	21.072	14.799	40.444	10.664	16.64	10.43	7.3015
#1	-.00230	-.00255	.00061	-.00189	-.1490	-.0182	-.00044
#2	-.00255	-.00268	.00043	-.00219	-.1648	-.0168	-.00041
#3	-.00166	-.00201	.00096	-.00179	-.1177	-.0148	-.00038
Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00149	-.0110	.00041	-.00483	-.00018	-.00096	-.00008
SDev	.00041	.0006	.00044	.00091	.00001	.00014	.00030
%RSD	27.759	5.732	105.90	18.742	5.6237	14.301	380.62
#1	-.00103	-.0111	.00082	-.00525	-.00019	-.00110	.00023
#2	-.00163	-.0115	.00045	-.00379	-.00019	-.00096	-.00037
#3	-.00183	-.0103	-.00004	-.00545	-.00017	-.00083	-.00009
Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00043	.00079	-.00731	-.00011	-.00077	.00016	-.00050
SDev	.00000	.00085	.00137	.00060	.00270	.00082	.00204
%RSD	.43975	106.66	18.733	554.25	348.97	512.72	408.23
#1	-.00043	-.00010	-.00889	.00034	-.00269	.00107	-.00156
#2	-.00043	.00089	-.00664	-.00078	.00232	-.00053	-.00179
#3	-.00043	.00159	-.00641	.00012	-.00195	-.00005	.00186
Elem	2203/2	1960/1	1960/2	2068/1	2068/2		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	.00009	-.00046	-.00093	.00393	-.00197		
SDev	.00107	.00399	.00281	.00375	.00169		
%RSD	1208.0	859.81	302.23	95.409	86.039		
#1	.00130	-.00496	-.00156	.00805	-.00167		
#2	-.00028	.00267	.00214	.00300	-.00379		
#3	-.00075	.00090	-.00337	.00073	-.00045		

Analysis Report 08/27/08 11:30:12 AM page 1

Method: KICAP Sample Name: CRI(PQL) Operator: CT
Run Time: 08/27/08 11:26:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00980	.0939	.03998	.09665	.01009	1.044	.00833
SDev	.00038	.0016	.00024	.00105	.00010	.011	.00005
%RSD	3.8451	1.729	.59795	1.0818	1.0300	1.038	.54212
#1	.00962	.0944	.03971	.09609	.01002	1.040	.00830
#2	.00955	.0952	.04012	.09601	.01004	1.035	.00832
#3	.01023	.0921	.04012	.09786	.01021	1.056	.00838

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04865	.00832	.01076	.05106	3.986	1.046	.05078
SDev	.00011	.00035	.00036	.00022	.033	.006	.00057
%RSD	.22994	4.1828	3.3207	.42431	.8237	.5309	1.1287
#1	.04863	.00862	.01117	.05089	3.991	1.042	.05041
#2	.04855	.00840	.01052	.05097	4.016	1.043	.05049
#3	.04877	.00794	.01058	.05130	3.951	1.052	.05144

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05001	.8631	.05088	.04614	.04966	.05013	.04939
SDev	.00090	.0012	.00056	.00035	.00054	.00047	.00063
%RSD	1.8075	.1390	1.0980	.75808	1.0891	.93475	1.2662
#1	.05037	.8622	.05093	.04617	.04934	.04997	.04884
#2	.04898	.8627	.05031	.04648	.04936	.04976	.04925
#3	.05067	.8645	.05142	.04578	.05028	.05066	.05007

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02060	.01006	.01419	.01011	.01046	.06068	.00960
SDev	.00026	.00079	.00174	.00006	.00121	.00066	.00186
%RSD	1.2506	7.8474	12.265	.55181	11.562	1.0897	19.392
#1	.02049	.00999	.01320	.01005	.01120	.06020	.01056
#2	.02041	.00930	.01620	.01015	.01110	.06040	.01079
#3	.02089	.01087	.01316	.01014	.00906	.06143	.00746

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.01037	.01059	.01039	.06418	.05943
SDev	.00097	.00349	.00066	.00597	.00112
%RSD	9.3096	32.931	6.3298	9.3081	1.8795
#1	.00979	.01137	.01112	.05959	.05975
#2	.00983	.01362	.00985	.06201	.06035
#3	.01148	.00678	.01020	.07094	.05819

Analysis Report QC Standard 08/27/08 11:34:07 AM page 1

Method: KICAP Sample Name: ICSA-INITIAL Operator: CT
Run Time: 08/27/08 11:30:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00032	475.4	-.00086	-.00107	-.00004	490.7	.00051
SDev	.00012	4.7	.00034	.00016	.00001	4.9	.00003
%RSD	38.906	.9823	39.811	15.472	24.088	.9981	5.1960
#1	.00020	472.9	-.00053	-.00090	-.00004	488.1	.00048
#2	.00030	480.8	-.00121	-.00123	-.00003	496.3	.00053
#3	.00045	472.5	-.00084	-.00106	-.00006	487.6	.00051
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.0				500.0	
Range		20.00				20.00	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00407	-.00055	-.00144	186.33	-.2273	488.9	-.00086
SDev	.00019	.00024	.00012	1.86	.0210	4.9	.00004
%RSD	4.5497	43.611	8.3093	1.0004	9.261	.9989	4.7127
#1	-.00390	-.00029	-.00131	185.27	-.2087	487.1	-.00084
#2	-.00427	-.00077	-.00147	188.48	-.2501	494.5	-.00091
#3	-.00404	-.00060	-.00155	185.24	-.2230	485.2	-.00085
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	QC Pass	NOCHECK
Value				200.00		500.0	
Range				20.000		20.00	

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	.0209	.00197	-.00294	-.00028	.00142	.00004
SDev	.00249	.0150	.00016	.00133	.00001	.00017	.00022
%RSD	590.04	71.70	8.2732	45.377	4.6214	12.038	540.08
#1	.00156	.0378	.00182	-.00413	-.00028	.00151	-.00002
#2	.00039	.0156	.00215	-.00150	-.00030	.00123	-.00014
#3	-.00322	.0093	.00195	-.00318	-.00027	.00153	.00029
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00116	.00060	-.00749	.00329	-.00182	.00027	-.01572
SDev	.00010	.00255	.00262	.00439	.00443	.00326	.01278
%RSD	8.4966	427.80	34.948	133.16	242.90	1217.6	81.292
#1	-.00127	.00143	-.00837	-.00165	-.00657	-.00017	-.00099
#2	-.00113	.00263	-.00956	.00481	.00219	-.00275	-.02240
#3	-.00108	-.00227	-.00455	.00673	-.00108	.00373	-.02378
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Analysis Report QC Standard 08/27/08 11:34:07 AM page 2

Value					
Range					
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.01279	.00265	-.00405	-.00311	.00195
SDev	.01291	.01259	.01183	.02473	.01099
%RSD	100.97	475.34	291.75	795.69	562.62
#1	-.00198	.01574	-.01771	-.03081	.01438
#2	.01839	.00159	.00249	.00474	-.00649
#3	.02196	-.00938	.00306	.01674	-.00202
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report QC Standard 08/27/08 11:38:44 AM page 1

Method: KICAP Sample Name: ICSAB-INITIAL Operator: CT
Run Time: 08/27/08 11:34:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20066	465.3	.48340	.46586	.47646	483.7	.88702
SDev	.00114	1.6	.00387	.00210	.00213	2.2	.00427
%RSD	.57055	.3524	.80098	.45121	.44668	.4568	.48147
#1	.19981	463.8	.47975	.46442	.47492	482.1	.88414
#2	.20020	464.9	.48300	.46490	.47559	482.8	.88499
#3	.20196	467.0	.48746	.46828	.47889	486.2	.89193
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	500.0	.50000	.50000	.50000	500.0	1.0000
Range	20.000	20.00	20.000	20.000	20.000	20.00	20.000

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.44645	.45047	.50296	183.65	7.418	479.3	.45578
SDev	.00244	.00172	.00220	.89	.061	2.4	.00191
%RSD	.54656	.38268	.43684	.48578	.8238	.4962	.41998
#1	.44484	.44976	.50190	182.96	7.358	477.5	.45455
#2	.44524	.44922	.50150	183.32	7.417	478.5	.45480
#3	.44926	.45244	.50549	184.66	7.480	482.0	.45798
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00		500.0	.50000
Range	20.000	20.000	20.000	20.000		20.00	20.000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45529	1.237	.88823	.45764	.45546	.46736	.46456
SDev	.00414	.010	.00414	.00515	.00206	.00207	.00236
%RSD	.90953	.8221	.46627	1.1261	.45182	.44359	.50871
#1	.45120	1.228	.88584	.45708	.45405	.46570	.46247
#2	.45519	1.237	.88584	.45279	.45450	.46671	.46410
#3	.45948	1.248	.89302	.46305	.45782	.46969	.46712
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000		1.0000	.50000	.50000	.50000	.50000
Range	20.000		20.000	20.000	20.000	20.000	20.000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97744	.10029	.09654	.04643	.04703	.61422	.03293
SDev	.00360	.00283	.00259	.00134	.00304	.01292	.00269
%RSD	.36874	2.8233	2.6847	2.8885	6.4672	2.1029	8.1738
#1	.97491	.10339	.09380	.04489	.04475	.60017	.03440
#2	.97585	.09785	.09688	.04734	.05049	.61693	.02982
#3	.98157	.09962	.09895	.04705	.04586	.62557	.03456
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 08/27/08 11:38:44 AM page 2

Value	1.0000	.10000	.10000	.05000	.05000	.60000
Range	20.000	20.000	20.000	20.000	20.000	20.000

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.05317	.05923	.04094	.59668	.62373
SDev	.00298	.00586	.00403	.02043	.01139
%RSD	5.6130	9.9005	9.8391	3.4237	1.8259
#1	.05012	.05258	.04084	.57312	.61367
#2	.05609	.06143	.04503	.60943	.62142
#3	.05329	.06368	.03697	.60749	.63609
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report 08/27/08 11:53:00 AM page 1

Method: KICAP Sample Name: MB-8003 Operator: CT
Run Time: 08/27/08 11:49:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.0087	-.00169	-.00059	-.00011	.0341	-.00070
SDev	.00086	.0192	.00055	.00016	.00003	.0194	.00015
%RSD	11976.	221.0	32.447	27.270	28.336	56.98	20.711
#1	.00057	-.0046	-.00162	-.00059	-.00012	.0188	-.00070
#2	-.00100	-.0000	-.00227	-.00075	-.00013	.0276	-.00085
#3	.00041	.0308	-.00118	-.00043	-.00007	.0560	-.00056

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00327	-.00144	.00018	.01160	-.2251	-.0100	-.00037
SDev	.00056	.00046	.00049	.00683	.0528	.0202	.00008
%RSD	17.189	31.994	278.86	58.881	23.48	202.1	20.097
#1	-.00338	-.00110	.00049	.00634	-.2106	-.0223	-.00036
#2	-.00377	-.00196	-.00039	.00913	-.2836	-.0210	-.00046
#3	-.00266	-.00126	.00043	.01931	-.1810	.0133	-.00031

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00056	-.0068	.00024	.00801	-.00026	-.00129	-.00014
SDev	.00100	.0023	.00056	.00151	.00005	.00021	.00020
%RSD	176.83	34.42	229.14	18.831	20.349	16.316	144.35
#1	-.00153	-.0065	.00082	.00638	-.00026	-.00124	-.00005
#2	-.00063	-.0092	-.00029	.00829	-.00031	-.00152	-.00036
#3	.00047	-.0046	.00020	.00936	-.00021	-.00110	.00000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00287	.00003	-.00984	.00180	-.00149	-.00070	.00042
SDev	.00019	.00062	.00052	.00074	.00037	.00106	.00230
%RSD	6.5247	1810.6	5.2505	40.921	25.067	151.55	550.19
#1	.00272	-.00002	-.00984	.00266	-.00192	-.00171	.00048
#2	.00308	-.00056	-.01035	.00136	-.00128	-.00079	.00269
#3	.00281	.00068	-.00932	.00140	-.00127	.00040	-.00191

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00250	-.00468	.00010	.00266	-.00238
SDev	.00160	.00235	.00147	.00127	.00071
%RSD	63.874	50.182	1459.3	47.808	30.013
#1	.00374	-.00366	-.00106	.00120	-.00317
#2	.00070	-.00737	.00176	.00351	-.00218
#3	.00305	-.00302	-.00040	.00327	-.00178

Analysis Report 08/27/08 11:56:32 AM page 1

Method: KICAP Sample Name: LCS-8003 Operator: CT
Run Time: 08/27/08 11:53:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04784	.9869	.47616	.18921	.19989	9.928	.19603
SDev	.00044	.0164	.00860	.00358	.00391	.167	.00368
%RSD	.92194	1.660	1.8070	1.8903	1.9582	1.682	1.8774
#1	.04832	1.006	.48609	.19334	.20441	10.12	.20028
#2	.04745	.9791	.47084	.18706	.19776	9.837	.19404
#3	.04776	.9760	.47155	.18722	.19750	9.826	.19377

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19626	.19786	.19701	1.0165	10.00	9.950	.19734
SDev	.00364	.00329	.00361	.0184	.06	.171	.00369
%RSD	1.8571	1.6630	1.9363	1.8054	.6241	1.716	1.8676
#1	.20046	.20164	.20142	1.0377	10.07	10.15	.20159
#2	.19437	.19626	.19478	1.0059	9.981	9.858	.19539
#3	.19195	.19568	.19484	1.0058	9.952	9.844	.19504

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.18990	9.390	.20093	.20543	.19404	.19810	.19662
SDev	.00374	.078	.00347	.00418	.00367	.00370	.00365
%RSD	1.9693	.8282	1.7286	2.0359	1.8903	1.8664	1.8590
#1	.19422	9.480	.20494	.21026	.19827	.20237	.20084
#2	.18784	9.347	.19899	.20289	.19201	.19618	.19465
#3	.18765	9.344	.19887	.20314	.19183	.19577	.19439

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20261	.19893	.19451	.20080	.19399	.20014	.20119
SDev	.00406	.00658	.00385	.00058	.00055	.00199	.00243
%RSD	2.0037	3.3096	1.9813	.28823	.28341	.99364	1.2065
#1	.20729	.20651	.19791	.20144	.19371	.20217	.20393
#2	.20050	.19565	.19032	.20064	.19364	.19820	.19930
#3	.20005	.19464	.19530	.20032	.19463	.20004	.20034

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.20061	.19052	.19573	.20099	.20021
SDev	.00061	.00356	.00204	.00207	.00270
%RSD	.30518	1.8676	1.0445	1.0306	1.3489
#1	.20020	.19438	.19337	.19864	.20319
#2	.20131	.18738	.19677	.20177	.19792
#3	.20031	.18979	.19704	.20256	.19953

Analysis Report 08/27/08 12:17:41 PM page 1

Method: KICAP Sample Name: CCVH1 Operator: CT
Run Time: 08/27/08 12:14:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	.0549	.01710	-.00003	-.00004	49.60	-.00050
SDev	.00007	.0159	.00620	.00008	.00001	.14	.00003
%RSD	24.680	28.98	36.264	299.35	20.179	.2842	6.8230
#1	.00028	.0695	.02391	-.00003	-.00004	49.72	-.00049
#2	.00024	.0379	.01561	-.00011	-.00004	49.63	-.00054
#3	.00039	.0572	.01178	.00005	-.00003	49.44	-.00047
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00220	5.1710	-.00002	10.282	-.0774	-.0123	-.00027
SDev	.00005	.0234	.00069	.030	.0022	.0004	.00002
%RSD	2.4945	.45272	3245.0	.28941	2.794	3.100	5.6594
#1	-.00215	5.1975	-.00078	10.300	-.0799	-.0119	-.00028
#2	-.00218	5.1623	.00015	10.299	-.0761	-.0125	-.00028
#3	-.00226	5.1532	.00056	10.248	-.0762	-.0125	-.00025
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	47.65	.00082	-.00492	.00002	.00030	.00023
SDev	.00047	.19	.00033	.00099	.00002	.00001	.00030
%RSD	112.37	.3884	39.814	20.060	84.495	3.9945	130.91
#1	-.00079	47.78	.00107	-.00436	.00000	.00029	.00056
#2	-.00059	47.73	.00045	-.00606	.00001	.00030	.00015
#3	.00011	47.44	.00095	-.00435	.00003	.00031	-.00003
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00175	-.00188	-.00463	9.9227	-.00007	.00599	10.269
SDev	.00014	.00101	.00189	.0343	.00153	.00353	.121
%RSD	8.1191	53.815	40.938	.34549	2072.6	59.016	1.1752
#1	.00185	-.00188	-.00499	9.9556	.00115	.00193	10.406
#2	.00158	-.00289	-.00257	9.9253	.00042	.00841	10.222
#3	.00181	-.00087	-.00631	9.8871	-.00179	.00762	10.179
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.157	.00045	-.00034	.01006	.00446
SDev	.235	.00546	.00329	.00168	.00387
%RSD	2.3165	1214.9	982.20	16.718	86.776
#1	9.8873	-.00341	.00342	.00847	.00017
#2	10.320	.00670	-.00271	.00988	.00768
#3	10.264	-.00194	-.00172	.01182	.00552
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Method: KICAP Sample Name: CCV1 Operator: CT
Run Time: 08/27/08 12:17:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.25080	5.072	.51936	.51131	.51561	10.24	.51902
SDev	.00089	.034	.00278	.00162	.00225	.05	.00220
%RSD	.35326	.6681	.53608	.31787	.43638	.4623	.42396
#1	.25023	5.034	.51758	.50984	.51401	10.20	.51760
#2	.25035	5.080	.51793	.51105	.51464	10.22	.51790
#3	.25182	5.100	.52257	.51306	.51818	10.29	.52155
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51366	.50385	.49903	1.0029	10.57	10.28	.50455
SDev	.00260	.00212	.00186	.0050	.04	.05	.00229
%RSD	.50559	.42027	.37243	.49890	.3867	.5308	.45323
#1	.51184	.50215	.49707	.99808	10.54	10.24	.50287
#2	.51251	.50317	.49924	1.0026	10.55	10.26	.50363
#3	.51664	.50622	.50077	1.0081	10.62	10.34	.50715
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51302	9.893	.51034	.50790	.50780	.51046	.50116
SDev	.00435	.025	.00231	.00638	.00169	.00204	.00201
%RSD	.84782	.2526	.45162	1.2570	.33205	.39991	.40123
#1	.50890	9.872	.50877	.50117	.50637	.50892	.49946
#2	.51259	9.867	.50926	.50866	.50736	.50968	.50065
#3	.51757	9.921	.51298	.51387	.50966	.51278	.50338
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51482	.51405	.50431	.51538	.50409	.50889	.51723
SDev	.00268	.00277	.00377	.00555	.00425	.00467	.00245
%RSD	.52054	.53937	.74747	1.0764	.84255	.91838	.47289
#1	.51249	.51208	.50130	.50899	.49948	.50353	.51446
#2	.51422	.51286	.50310	.51890	.50785	.51209	.51911
#3	.51775	.51722	.50854	.51825	.50493	.51106	.51812
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.51446	.51099	.50064	.50566	.51041	
SDev	.00711	.00322	.00478	.00891	.00325	
%RSD	1.3822	.62990	.95437	1.7622	.63606	
#1	.50625	.50769	.49538	.49563	.50747	
#2	.51880	.51412	.50472	.50998	.51389	
#3	.51832	.51116	.50182	.51197	.50985	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
High						
Low						

Method: KICAP Sample Name: CCBI Operator: CT
Run Time: 08/27/08 12:21:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00059	.0017	.00496	-.00003	.00004	.0011	-.00014
SDev	.00030	.0055	.00150	.00008	.00004	.0026	.00004
%RSD	50.447	314.3	30.291	299.96	88.401	245.8	31.747
#1	.00066	-.0032	.00636	-.00011	.00001	-.0016	-.00012
#2	.00026	.0077	.00515	.00005	.00009	.0037	-.00010
#3	.00084	.0007	.00337	-.00003	.00003	.0010	-.00018

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00103	-.00132	.00047	-.00047	-.0463	-.0081	-.00019
SDev	.00035	.00024	.00021	.00091	.0145	.0026	.00007
%RSD	34.489	18.078	43.825	194.08	31.24	32.09	35.564
#1	-.00141	-.00151	.00066	-.00121	-.0544	-.0093	-.00023
#2	-.00072	-.00105	.00025	.00054	-.0296	-.0051	-.00011
#3	-.00094	-.00140	.00049	-.00074	-.0548	-.0100	-.00022

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00159	-.0086	.00111	-.00267	-.00001	-.00032	.00040
SDev	.00207	.0016	.00019	.00119	.00005	.00021	.00023
%RSD	129.95	18.93	17.010	44.365	340.62	65.521	57.210
#1	.00395	-.0096	.00095	-.00157	-.00006	-.00027	.00019
#2	.00007	-.0067	.00107	-.00392	.00004	-.00014	.00036
#3	.00076	-.0094	.00132	-.00252	-.00003	-.00055	.00064

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00138	-.00370	-.00035	-.00097	.00033	-.00286
SDev	.00009	.00055	.00258	.00046	.00165	.00080	.00021
%RSD	42.178	39.910	69.719	130.93	170.63	243.71	7.2554
#1	.00014	.00197	-.00247	-.00059	-.00261	-.00018	-.00273
#2	.00019	.00128	-.00196	.00018	-.00099	.00125	-.00310
#3	.00032	.00089	-.00666	-.00064	.00069	-.00008	-.00275

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00091	-.00197	-.00046	.00417	-.00159
SDev	.00079	.00070	.00214	.00162	.00020
%RSD	87.055	35.392	459.74	38.973	12.314
#1	.00048	-.00274	-.00254	.00424	-.00164
#2	.00182	-.00179	-.00058	.00575	-.00175
#3	.00042	-.00138	.00173	.00251	-.00137

Analysis Report 08/27/08 12:31:48 PM page 1

Method: KICAP Sample Name: 0808076-001B Operator: CT
Run Time: 08/27/08 12:28:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00125	67.17	.08654	.44573	.00356	672.5	-.00024
SDev	.00054	.95	.00691	.00700	.00005	9.1	.00001
%RSD	43.521	1.417	7.9841	1.5698	1.3577	1.357	2.1867
#1	-.00161	68.26	.09424	.45371	.00362	683.0	-.00025
#2	-.00062	66.73	.08448	.44278	.00353	668.6	-.00024
#3	-.00151	66.52	.08089	.44069	.00353	666.1	-.00024

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04942	.11588	.11623	134.72	26.15	225.6	3.4937
SDev	.00059	.00118	.00186	1.87	.23	3.2	.0503
%RSD	1.1941	1.0164	1.6041	1.3916	.8697	1.413	1.4402
#1	.05009	.11724	.11835	136.86	26.41	229.2	3.5512
#2	.04898	.11526	.11547	133.93	26.06	224.2	3.4720
#3	.04920	.11515	.11486	133.37	25.99	223.3	3.4579

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00289	1.771	.12600	.00680	.75683	1.9139	.15279
SDev	.00081	.019	.00222	.00244	.01137	.0282	.00214
%RSD	27.884	1.068	1.7583	35.886	1.5024	1.4723	1.4024
#1	.00371	1.792	.12856	.00839	.76983	1.9461	.15517
#2	.00209	1.764	.12460	.00399	.75189	1.9016	.15218
#3	.00289	1.756	.12485	.00802	.74876	1.8940	.15101

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.33312	.02232	-.00357	.05978	-.00072	.00143	.05570
SDev	.00536	.00047	.00064	.00012	.00224	.00132	.00161
%RSD	1.6099	2.1150	17.932	.20280	312.89	92.558	2.9003
#1	.33930	.02260	-.00283	.05964	.00174	.00012	.05394
#2	.33032	.02177	-.00397	.05981	-.00265	.00140	.05712
#3	.32974	.02257	-.00391	.05988	-.00124	.00275	.05603

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.06182	-.00345	.00065	.00392	-.00007
SDev	.00067	.00236	.00350	.00163	.00157
%RSD	1.0769	68.481	538.80	41.653	2296.7
#1	.06249	-.00247	.00384	.00541	-.00178
#2	.06116	-.00174	-.00310	.00217	.00027
#3	.06180	-.00615	.00121	.00416	.00130

Analysis Report 08/27/08 12:35:20 PM page 1

Method: KICAP Sample Name: 0808076-002B Operator: CT
Run Time: 08/27/08 12:31:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00078	38.65	.04599	.27655	.00204	512.7	-.00046
SDev	.00052	.10	.00071	.00101	.00001	2.1	.00011
%RSD	67.238	.2515	1.5344	.36324	.69462	.4126	24.708
#1	-.00058	38.63	.04667	.27687	.00203	512.6	-.00046
#2	-.00137	38.57	.04526	.27542	.00204	510.6	-.00057
#3	-.00038	38.76	.04604	.27735	.00206	514.8	-.00034

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03053	.07185	.07985	100.53	11.54	177.4	2.9566
SDev	.00073	.00071	.00049	.39	.02	.9	.0103
%RSD	2.4074	.98327	.61856	.39121	.1917	.5066	.34844
#1	.03008	.07152	.07996	100.34	11.52	177.1	2.9539
#2	.03014	.07137	.07931	100.26	11.54	176.6	2.9479
#3	.03138	.07266	.08028	100.98	11.57	178.3	2.9679

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00093	1.125	.07693	.00926	.50470	1.1682	.11595
SDev	.00015	.006	.00069	.00128	.00056	.0062	.00047
%RSD	16.051	.4951	.89660	13.766	.11121	.53332	.40117
#1	.00096	1.127	.07706	.01008	.50421	1.1693	.11557
#2	.00106	1.119	.07619	.00991	.50458	1.1615	.11580
#3	.00077	1.129	.07755	.00779	.50532	1.1738	.11647

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.27574	.02161	-.00381	.04001	-.00100	.00120	.03737
SDev	.00082	.00122	.00176	.00055	.00127	.00075	.00096
%RSD	.29866	5.6446	46.141	1.3779	126.38	62.015	2.5571
#1	.27558	.02133	-.00406	.03995	.00025	.00207	.03627
#2	.27502	.02056	-.00543	.03950	-.00228	.00074	.03787
#3	.27664	.02295	-.00194	.04060	-.00098	.00081	.03798

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.04133	.00247	-.00274	.00074	.00044
SDev	.00089	.00203	.00291	.00288	.00129
%RSD	2.1409	82.079	106.41	387.98	295.52
#1	.04178	.00049	.00014	.00326	.00072
#2	.04031	.00454	-.00569	-.00240	.00156
#3	.04190	.00238	-.00266	.00137	-.00097

Analysis Report 08/27/08 12:38:52 PM page 1

Method: KICAP Sample Name: 0808076-003B Operator: CT
Run Time: 08/27/08 12:35:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00105	55.11	.06565	.33868	.00291	638.6	-.00019
SDev	.00031	.65	.00087	.00389	.00004	7.0	.00010
%RSD	29.505	1.178	1.3255	1.1490	1.2681	1.103	52.234
#1	-.00075	55.56	.06643	.34168	.00294	644.2	-.00016
#2	-.00104	55.40	.06582	.34007	.00293	640.9	-.00029
#3	-.00137	54.36	.06471	.33428	.00287	630.7	-.00011

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04205	.09769	.10916	120.54	20.45	234.6	3.2844
SDev	.00068	.00095	.00163	1.25	.27	2.4	.0349
%RSD	1.6124	.97130	1.4911	1.0381	1.310	1.041	1.0640
#1	.04253	.09848	.11014	121.44	20.63	236.5	3.3106
#2	.04235	.09795	.11007	121.07	20.58	235.4	3.2980
#3	.04128	.09664	.10728	119.11	20.14	231.8	3.2447

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00157	1.563	.10798	.00948	.64231	1.4579	.13419
SDev	.00095	.019	.00058	.00134	.00788	.0160	.00165
%RSD	60.822	1.235	.53926	14.153	1.2271	1.0977	1.2299
#1	.00161	1.579	.10843	.01076	.64773	1.4710	.13540
#2	.00250	1.569	.10819	.00961	.64593	1.4627	.13486
#3	.00060	1.542	.10732	.00808	.63327	1.4401	.13231

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.29814	.02110	.00199	.05421	.00071	.00056	.05035
SDev	.00352	.00166	.00073	.00099	.00255	.00105	.00244
%RSD	1.1795	7.8534	36.644	1.8186	359.03	187.09	4.8487
#1	.30092	.02269	.00264	.05412	.00237	.00128	.05284
#2	.29931	.01938	.00214	.05524	.00198	-.00064	.05024
#3	.29418	.02124	.00120	.05327	-.00222	.00103	.04796

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.05614	-.00292	.00252	.00437	-.00134
SDev	.00150	.00765	.00027	.00364	.00086
%RSD	2.6774	261.61	10.561	83.313	64.270
#1	.05475	.00256	.00228	.00499	-.00057
#2	.05774	.00033	.00281	.00046	-.00119
#3	.05592	-.01166	.00249	.00765	-.00227

Analysis Report 08/27/08 12:42:25 PM page 1

Method: KICAP Sample Name: 0808076-004B Operator: CT
Run Time: 08/27/08 12:38:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00043	18.88	.02172	.10334	.00102	351.4	-.00068
SDev	.00029	.11	.00025	.00057	.00000	2.2	.00005
%RSD	66.985	.5746	1.1664	.55211	.43190	.6306	7.5713
#1	-.00013	18.83	.02197	.10323	.00102	349.9	-.00063
#2	-.00046	19.00	.02173	.10396	.00101	353.9	-.00073
#3	-.00071	18.80	.02147	.10283	.00102	350.2	-.00068

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01584	.04362	.04955	61.356	4.551	130.9	2.1422
SDev	.00009	.00011	.00022	.388	.015	.8	.0148
%RSD	.54499	.25555	.44494	.63265	.3340	.6001	.68866
#1	.01592	.04367	.04952	61.115	4.569	130.3	2.1321
#2	.01575	.04370	.04978	61.803	4.542	131.8	2.1591
#3	.01586	.04349	.04934	61.149	4.543	130.5	2.1354

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00049	.7081	.04103	.00639	.32114	.68341	.07642
SDev	.00046	.0025	.00036	.00054	.00226	.00397	.00045
%RSD	92.443	.3517	.87049	8.5015	.70465	.58111	.58490
#1	.00099	.7061	.04124	.00667	.31972	.68041	.07608
#2	.00040	.7109	.04124	.00576	.32375	.68791	.07693
#3	.00009	.7072	.04062	.00674	.31996	.68191	.07626

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16420	.01481	-.00445	.02550	.00081	-.00068	.02313
SDev	.00095	.00016	.00120	.00113	.00141	.00132	.00029
%RSD	.58040	1.1132	27.008	4.4254	173.78	194.79	1.2659
#1	.16330	.01494	-.00372	.02439	.00191	-.00209	.02330
#2	.16519	.01486	-.00583	.02664	.00130	.00052	.02279
#3	.16409	.01463	-.00379	.02548	-.00078	-.00047	.02330

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.02669	-.00023	.00133	.00271	-.00212
SDev	.00182	.00153	.00164	.00306	.00048
%RSD	6.8237	661.52	123.40	112.68	22.745
#1	.02493	.00153	.00210	.00025	-.00250
#2	.02856	-.00101	.00245	.00613	-.00228
#3	.02656	-.00122	-.00056	.00176	-.00158

Analysis Report 08/27/08 12:45:57 PM page 1

Method: KICAP Sample Name: 0808076-004BMS Operator: CT
Run Time: 08/27/08 12:42:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09860	23.94	.99709	.48261	.39840	368.3	.37366
SDev	.00053	.21	.01058	.00423	.00341	3.0	.00336
%RSD	.54136	.8777	1.0611	.87703	.85550	.8079	.89947
#1	.09875	24.08	1.0012	.48481	.40017	370.0	.37590
#2	.09801	23.70	.98508	.47773	.39447	364.9	.36979
#3	.09904	24.04	1.0050	.48529	.40055	370.1	.37528

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.39455	.42378	.45380	63.072	38.28	148.0	2.5080
SDev	.00350	.00330	.00472	.506	.25	1.2	.0211
%RSD	.88787	.77743	1.0399	.80203	.6437	.7972	.84190
#1	.39688	.42624	.45637	63.387	38.42	148.6	2.5213
#2	.39052	.42004	.44835	62.488	38.00	146.6	2.4836
#3	.39625	.42506	.45666	63.341	38.43	148.7	2.5191

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.38070	20.15	.41987	.38692	.70775	1.2489	.46890
SDev	.00302	.06	.00437	.00374	.00700	.0097	.00414
%RSD	.79343	.3154	1.0401	.96636	.98916	.77839	.88312
#1	.38282	20.21	.42342	.39036	.71285	1.2543	.47138
#2	.37724	20.08	.41499	.38294	.69977	1.2377	.46412
#3	.38203	20.17	.42119	.38745	.71062	1.2548	.47120

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.56455	.41537	.38141	.41214	.39081	.29329	.41131
SDev	.00491	.00479	.00581	.00190	.00233	.00163	.00112
%RSD	.86958	1.1543	1.5238	.46056	.59725	.55516	.27318
#1	.56733	.41758	.37784	.41025	.38812	.29207	.41117
#2	.55888	.40987	.37827	.41405	.39206	.29514	.41250
#3	.56743	.41667	.38811	.41212	.39226	.29267	.41027

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.41256	.38920	.39162	.29412	.29288
SDev	.00255	.00207	.00258	.00299	.00197
%RSD	.61799	.53229	.65756	1.0166	.67348
#1	.40980	.38695	.38870	.29200	.29060
#2	.41482	.39103	.39257	.29754	.29394
#3	.41305	.38961	.39358	.29282	.29409

1136

Analysis Report 08/27/08 12:49:30 PM page 1

Method: KICAP Sample Name: 0808076-004BMSD Operator: CT
Run Time: 08/27/08 12:46:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10178	25.33	1.0481	.50537	.41369	383.2	.38701
SDev	.00064	.19	.0082	.00492	.00336	2.5	.00273
%RSD	.62707	.7653	.77975	.97296	.81216	.9078	.70500
#1	.10206	25.54	1.0565	.51046	.41715	386.9	.38988
#2	.10223	25.30	1.0475	.50499	.41349	382.8	.38670
#3	.10105	25.15	1.0402	.50065	.41044	380.0	.38445

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.40949	.43855	.47251	65.854	40.07	154.0	2.6075
SDev	.00252	.00227	.00481	.461	.19	1.0	.0205
%RSD	.61540	.51820	1.0174	.70045	.4784	.6620	.78631
#1	.41210	.44087	.47740	66.321	40.27	155.0	2.6284
#2	.40930	.43846	.47233	65.842	40.05	153.9	2.6066
#3	.40707	.43633	.46779	65.399	39.89	153.0	2.5875

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.39582	20.76	.43561	.40317	.73656	1.2967	.48659
SDev	.00334	.04	.00361	.00295	.00658	.0095	.00353
%RSD	.84393	.1924	.82767	.73186	.89338	.73018	.72559
#1	.39918	20.80	.43904	.40489	.74341	1.3065	.48993
#2	.39579	20.72	.43594	.40465	.73599	1.2961	.48694
#3	.39250	20.77	.43185	.39976	.73028	1.2876	.48290

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.59031	.43212	.39619	.42697	.40782	.30483	.42748
SDev	.00540	.00134	.00538	.00213	.00124	.00257	.00451
%RSD	.91532	.30921	1.3572	.49941	.30378	.84408	1.0538
#1	.59568	.43356	.39803	.42574	.40641	.30283	.42538
#2	.59037	.43188	.40040	.42943	.40870	.30773	.43265
#3	.58488	.43092	.39013	.42574	.40837	.30392	.42440

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.42671	.40999	.40674	.30266	.30641
SDev	.00099	.00155	.00123	.00312	.00291
%RSD	.23242	.37728	.30153	1.0298	.94936
#1	.42591	.40853	.40535	.29913	.30543
#2	.42782	.41161	.40724	.30383	.30968
#3	.42640	.40982	.40764	.30503	.30412

1137

Analysis Report 08/27/08 12:53:02 PM page 1

Method: KICAP Sample Name: 0808076-004BSD Operator: CT
Run Time: 08/27/08 12:49:33
Comment:
Mode: CONC Corr. Factor: 5

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00076	18.94	.05611	.10307	.00113	339.8	-.00211
SDev	.00082	.15	.01389	.00084	.00018	2.9	.00027
%RSD	108.61	.7791	24.760	.81213	15.935	.8477	13.046
#1	-.00003	19.05	.07115	.10401	.00133	342.2	-.00179
#2	.00069	19.00	.05343	.10280	.00111	340.6	-.00228
#3	.00162	18.78	.04375	.10240	.00097	336.6	-.00225

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00966	.05310	.04869	65.289	2.814	133.2	2.2132
SDev	.00083	.00083	.00238	.549	.056	1.1	.0180
%RSD	8.5534	1.5638	4.8890	.84119	1.980	.8053	.81171
#1	.01061	.05406	.05125	65.706	2.838	134.1	2.2274
#2	.00923	.05266	.04654	65.495	2.750	133.5	2.2191
#3	.00913	.05259	.04827	64.667	2.853	132.0	2.1930

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00610	.5327	.04325	-.00614	.32585	.70204	.07712
SDev	.00381	.0107	.00156	.00213	.00275	.00636	.00052
%RSD	62.432	2.002	3.6021	34.684	.84386	.90660	.67753
#1	.01025	.5450	.04181	-.00831	.32826	.70402	.07772
#2	.00527	.5277	.04490	-.00606	.32642	.70718	.07681
#3	.00277	.5255	.04305	-.00405	.32285	.69492	.07682

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16196	.01417	-.01117	.02600	-.00316	.00380	.01932
SDev	.00088	.00216	.01620	.00149	.00214	.00349	.01781
%RSD	.54456	15.243	145.07	5.7460	67.788	91.975	92.206
#1	.16267	.01466	-.00051	.02538	-.00099	.00465	.03925
#2	.16223	.01604	-.00318	.02770	-.00527	-.00004	.00495
#3	.16097	.01181	-.02981	.02491	-.00323	.00678	.01376

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.02934	-.01769	.00409	.02677	-.00892
SDev	.01035	.02282	.01040	.02625	.01172
%RSD	35.283	128.96	254.46	98.060	131.40
#1	.01846	.00368	-.00331	-.00205	.00425
#2	.03906	-.01503	-.00040	.03303	-.01281
#3	.03049	-.04172	.01599	.04932	-.01820

1138

Analysis Report 08/27/08 12:56:34 PM page 1

Method: KICAP Sample Name: 0808076-004BPDS Operator: CT
Run Time: 08/27/08 12:53:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10101	20.39	1.0588	.48551	.40529	358.4	.38255
SDev	.00070	.14	.0089	.00339	.00275	2.2	.00273
%RSD	.69153	.7026	.84115	.69900	.67732	.6254	.71283
#1	.10069	20.34	1.0529	.48441	.40477	357.9	.38186
#2	.10182	20.55	1.0690	.48931	.40826	360.9	.38556
#3	.10053	20.27	1.0545	.48280	.40285	356.5	.38024

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.40290	.42720	.45491	61.261	38.44	146.0	2.4459
SDev	.00293	.00328	.00346	.408	.20	.9	.0161
%RSD	.72599	.76677	.75980	.66596	.5256	.6270	.65937
#1	.40239	.42617	.45364	61.173	38.43	145.8	2.4421
#2	.40605	.43086	.45882	61.706	38.65	146.9	2.4635
#3	.40026	.42456	.45227	60.905	38.24	145.1	2.4319

Elem	Mo2020	Na	Ni2316	Sn1699	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.39373	21.04	.42671	.40604	.69496	1.0631	.47176
SDev	.00565	.10	.00438	.00370	.00502	.0078	.00353
%RSD	1.4354	.4663	1.0266	.91226	.72275	.73478	.74770
#1	.38839	21.14	.42456	.40631	.69336	1.0610	.47080
#2	.39965	21.04	.43175	.40960	.70059	1.0717	.47567
#3	.39317	20.95	.42382	.40221	.69093	1.0565	.46881

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.57033	.43125	.39494	.41944	.41339	.42607	.41778
SDev	.00410	.00482	.00425	.00168	.00171	.00642	.00379
%RSD	.71880	1.1170	1.0770	.40153	.41365	1.5066	.90806
#1	.56962	.42922	.39441	.41761	.41142	.42449	.41833
#2	.57473	.43675	.39943	.41981	.41456	.43313	.42128
#3	.56663	.42778	.39097	.42092	.41418	.42059	.41375

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.42027	.41448	.41284	.42273	.42799
SDev	.00377	.00849	.00484	.00516	.00776
%RSD	.89710	2.0487	1.1719	1.2205	1.8126
#1	.41725	.41506	.40961	.41715	.42740
#2	.41907	.42266	.41051	.42734	.43603
#3	.42450	.40571	.41841	.42368	.42055

1139

Analysis Report 08/27/08 01:00:06 PM page 1

Method: KICAP Sample Name: 0808076-005B Operator: CT
Run Time: 08/27/08 12:56:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00071	18.26	.02849	.08299	.00094	316.0	-.00079
SDev	.00007	.08	.00251	.00037	.00003	1.3	.00004
%RSD	10.014	.4555	8.8271	.44756	2.8695	.4162	5.6429
#1	-.00075	18.30	.03125	.08320	.00097	316.4	-.00083
#2	-.00075	18.31	.02792	.08320	.00093	317.0	-.00080
#3	-.00063	18.16	.02631	.08256	.00092	314.5	-.00074

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01376	.03929	.04847	58.605	4.536	117.0	1.8245
SDev	.00032	.00025	.00028	.233	.014	.5	.0072
%RSD	2.3101	.64345	.56646	.39812	.3042	.4014	.39700
#1	.01367	.03930	.04877	58.692	4.532	117.2	1.8274
#2	.01411	.03954	.04842	58.782	4.551	117.3	1.8297
#3	.01349	.03904	.04823	58.340	4.525	116.4	1.8162

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00213	.7058	.03740	.00752	.29314	.69939	.07092
SDev	.00194	.0035	.00033	.00053	.00138	.00250	.00039
%RSD	91.053	.4960	.87584	7.1105	.47008	.35754	.55005
#1	.00436	.7071	.03752	.00780	.29377	.70114	.07127
#2	.00127	.7085	.03765	.00691	.29409	.70050	.07099
#3	.00077	.7018	.03703	.00786	.29156	.69653	.07050

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17734	.01231	-.00712	.02356	-.00018	.00086	.01909
SDev	.00045	.00099	.00328	.00038	.00197	.00161	.00154
%RSD	.25371	8.0182	46.096	1.6348	1117.1	186.93	8.0531
#1	.17751	.01339	-.00347	.02337	-.00093	.00129	.01859
#2	.17766	.01145	-.00982	.02331	-.00166	-.00092	.01786
#3	.17683	.01210	-.00807	.02401	.00206	.00222	.02081

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.02579	-.00294	.00120	.00670	-.00155
SDev	.00022	.00129	.00245	.00545	.00168
%RSD	.85506	43.949	203.79	81.334	108.24
#1	.02575	-.00413	.00067	.01289	-.00301
#2	.02603	-.00311	-.00094	.00262	-.00194
#3	.02560	-.00157	.00387	.00459	.00029

Analysis Report 08/27/08 01:03:37 PM page 1

Method: KICAP Sample Name: CCVH2 Operator: CT
Run Time: 08/27/08 13:00:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	-.0070	.00225	-.00048	-.00004	50.05	-.00059
SDev	.00029	.0009	.00052	.00009	.00001	.35	.00002
%RSD	107.89	12.61	23.219	19.245	33.281	.6921	2.7570
#1	.00028	-.0075	.00283	-.00043	-.00004	49.72	-.00058
#2	.00055	-.0076	.00182	-.00059	-.00006	50.41	-.00061
#3	-.00003	-.0060	.00210	-.00043	-.00003	50.02	-.00057
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00264	5.2093	.00014	10.405	-.1253	-.0073	-.00024
SDev	.00029	.0317	.00032	.084	.0197	.0022	.00003
%RSD	10.819	.60909	220.96	.80700	15.71	30.73	10.844
#1	-.00237	5.1775	.00045	10.315	-.1086	-.0056	-.00021
#2	-.00294	5.2410	.00017	10.481	-.1470	-.0098	-.00027
#3	-.00260	5.2093	-.00019	10.418	-.1203	-.0064	-.00025
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00039	48.01	.00091	-.00372	-.00003	.00014	.00026
SDev	.00026	.27	.00047	.00076	.00002	.00009	.00011
%RSD	67.561	.5624	51.769	20.477	85.011	66.616	41.645
#1	-.00069	47.72	.00070	-.00338	-.00000	.00023	.00038
#2	-.00019	48.25	.00144	-.00460	-.00005	.00005	.00019
#3	-.00029	48.07	.00058	-.00319	-.00003	.00014	.00020
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	-.00306	-.00767	10.060	-.00249	.00691	10.435
SDev	.00005	.00095	.00146	.073	.00096	.00171	.115
%RSD	3.5876	31.150	19.051	.72783	38.448	24.760	1.0991
#1	.00123	-.00413	-.00929	9.9907	-.00340	.00823	10.346
#2	.00130	-.00270	-.00644	10.137	-.00149	.00498	10.565
#3	.00122	-.00233	-.00728	10.054	-.00258	.00753	10.395
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 08/27/08 01:03:37 PM page 2

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.329	-.00526	-.00111	.00793	.00565
SDev	.012	.00260	.00095	.00084	.00183
%RSD	.12082	49.373	85.333	10.641	32.293
#1	10.328	-.00824	-.00099	.00802	.00758
#2	10.317	-.00402	-.00023	.00704	.00395
#3	10.342	-.00351	-.00212	.00871	.00543
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 08/27/08 01:07:09 PM page 1

Method: KICAP Sample Name: CCV2 Operator: CT
Run Time: 08/27/08 13:03:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.25115	5.092	.51911	.51351	.51725	10.35	.52353
SDev	.00113	.024	.00430	.00164	.00201	.05	.00206
%RSD	.45004	.4701	.82823	.31960	.38781	.4447	.39331
#1	.25064	5.073	.51462	.51209	.51559	10.32	.52197
#2	.25036	5.083	.51952	.51314	.51669	10.33	.52275
#3	.25244	5.119	.52319	.51531	.51948	10.40	.52586
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51672	.50744	.49979	1.0094	10.68	10.31	.50334
SDev	.00206	.00195	.00204	.0061	.04	.04	.00202
%RSD	.39823	.38395	.40876	.60600	.3351	.4256	.40241
#1	.51514	.50587	.49830	1.0040	10.69	10.27	.50173
#2	.51597	.50684	.49895	1.0083	10.64	10.29	.50268
#3	.51905	.50962	.50212	1.0160	10.70	10.36	.50561
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51803	9.935	.51616	.51188	.50861	.51098	.50375
SDev	.00312	.021	.00279	.00175	.00207	.00174	.00204
%RSD	.60271	.2116	.54045	.34270	.40678	.33978	.40606
#1	.51468	9.940	.51397	.50987	.50680	.50954	.50188
#2	.51856	9.913	.51521	.51311	.50816	.51050	.50343
#3	.52085	9.954	.51930	.51265	.51087	.51291	.50593
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52024	.51688	.51051	.52208	.51040	.51115	.52468
SDev	.00159	.00330	.00065	.00060	.00239	.00303	.00354
%RSD	.30634	.63744	.12839	.11510	.46892	.59195	.67480
#1	.51886	.51332	.50990	.52267	.50775	.50766	.52545
#2	.51987	.51751	.51043	.52211	.51104	.51312	.52081
#3	.52198	.51982	.51120	.52147	.51240	.51266	.52776
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.52079	.51829	.50645	.50775	.51309
SDev	.00225	.00093	.00342	.00588	.00247
%RSD	.43224	.17898	.67496	1.1585	.48083
#1	.52129	.51814	.50256	.50192	.51203
#2	.52275	.51745	.50784	.51368	.51134
#3	.51833	.51929	.50896	.50764	.51591
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Method: KICAP Sample Name: CCB2 Operator: CT
Run Time: 08/27/08 13:07:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	-.0026	.00299	-.00032	-.00003	-.0030	-.00029
SDev	.00068	.0023	.00190	.00012	.00004	.0028	.00011
%RSD	369.16	89.48	63.502	38.188	132.11	91.33	38.206
#1	.00047	-.0001	.00503	-.00019	.00001	-.0049	-.00016
#2	-.00089	-.0031	.00266	-.00035	-.00004	-.0043	-.00032
#3	-.00013	-.0046	.00127	-.00043	-.00006	.0001	-.00037

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00157	-.00200	.00035	-.00101	-.0902	-.0136	-.00033
SDev	.00038	.00031	.00032	.00016	.0266	.0014	.00004
%RSD	23.960	15.611	91.843	16.325	29.43	10.51	12.106
#1	-.00114	-.00164	.00072	-.00116	-.0604	-.0120	-.00029
#2	-.00177	-.00213	.00020	-.00083	-.0989	-.0141	-.00034
#3	-.00180	-.00222	.00014	-.00103	-.1113	-.0148	-.00037

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00123	-.0123	.00016	-.00371	-.00015	-.00064	-.00001
SDev	.00160	.0015	.00019	.00178	.00004	.00028	.00024
%RSD	129.80	12.38	115.89	48.047	30.228	43.350	1770.2
#1	.00286	-.0106	.00021	-.00379	-.00010	-.00034	.00019
#2	.00116	-.0129	-.00004	-.00189	-.00015	-.00069	.00005
#3	-.00033	-.0134	.00033	-.00545	-.00019	-.00089	-.00027

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00016	-.00023	-.00388	-.00024	-.00123	.00074	-.00137
SDev	.00008	.00106	.00083	.00015	.00212	.00181	.00072
%RSD	46.976	450.30	21.354	62.145	172.47	245.61	52.081
#1	-.00007	-.00051	-.00298	-.00031	-.00117	.00126	-.00212
#2	-.00021	.00093	-.00461	-.00007	-.00339	-.00128	-.00131
#3	-.00021	-.00113	-.00406	-.00034	.00086	.00223	-.00069

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00033	-.00409	.00020	.00404	-.00066
SDev	.00043	.00046	.00296	.00125	.00246
%RSD	132.04	11.315	1505.1	31.039	372.00
#1	.00059	-.00394	.00022	.00471	-.00046
#2	.00055	-.00462	-.00278	.00259	-.00321
#3	-.00017	-.00373	.00315	.00481	.00169

Method: KICAP Sample Name: 0808076-006B Operator: CT
Run Time: 08/27/08 13:10:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00072	18.19	.02118	.07725	.00094	318.4	-.00077
SDev	.00023	.18	.00020	.00085	.00001	3.1	.00004
%RSD	31.615	.9960	.93097	1.1017	1.1623	.9783	4.6686
#1	-.00046	18.31	.02133	.07790	.00093	320.6	-.00081
#2	-.00089	17.98	.02095	.07629	.00094	314.8	-.00077
#3	-.00079	18.28	.02125	.07757	.00096	319.8	-.00074

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01361	.03948	.04561	59.400	4.217	117.6	1.6498
SDev	.00012	.00014	.00069	.545	.010	1.1	.0163
%RSD	.90355	.34944	1.5225	.91818	.2300	.9209	.98957
#1	.01365	.03933	.04564	59.765	4.218	118.4	1.6618
#2	.01347	.03960	.04490	58.773	4.207	116.4	1.6312
#3	.01371	.03951	.04628	59.662	4.226	118.0	1.6563

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	.7642	.03996	.00741	.29706	.65157	.06952
SDev	.00049	.0055	.00105	.00116	.00324	.00670	.00058
%RSD	176.34	.7203	2.6342	15.700	1.0899	1.0282	.83753
#1	-.00022	.7679	.04037	.00719	.29944	.65657	.06992
#2	.00077	.7579	.03876	.00637	.29337	.64396	.06885
#3	.00028	.7669	.04074	.00866	.29836	.65419	.06979

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.18404	.01554	-.00539	.02346	-.00090	.00043	.02064
SDev	.00224	.00121	.00171	.00067	.00067	.00156	.00065
%RSD	1.2142	7.8167	31.788	2.8407	74.574	362.30	3.1292
#1	.18567	.01694	-.00476	.02381	-.00084	-.00078	.02016
#2	.18149	.01474	-.00733	.02388	-.00026	.00219	.02138
#3	.18497	.01495	-.00408	.02269	-.00161	-.00012	.02040

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.02487	.00037	-.00154	.00039	-.00030
SDev	.00093	.00056	.00075	.00306	.00145
%RSD	3.7215	152.53	48.533	785.59	485.53
#1	.02563	.00061	-.00157	.00007	-.00195
#2	.02514	.00077	-.00078	.00359	.00074
#3	.02384	-.00027	-.00227	-.00249	.00032

Method: KICAP Sample Name: 0808076-007B Operator: CT
Run Time: 08/27/08 13:14:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00047	55.45	.06885	.34490	.00298	645.3	-.00032
SDev	.00070	.27	.00029	.00183	.00003	3.1	.00002
%RSD	148.40	.4928	.42160	.52967	.83849	.4810	6.4197
#1	.00032	55.14	.06855	.34281	.00295	641.8	-.00029
#2	-.00075	55.62	.06913	.34619	.00300	647.5	-.00033
#3	-.00100	55.60	.06888	.34570	.00298	646.6	-.00032

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04096	.10000	.10211	111.79	22.17	247.0	2.9321
SDev	.00020	.00058	.00023	.53	.10	1.1	.0134
%RSD	.48923	.58003	.22540	.47657	.4732	.4601	.45739
#1	.04078	.09936	.10191	111.18	22.05	245.7	2.9168
#2	.04117	.10050	.10236	112.17	22.25	247.8	2.9419
#3	.04093	.10014	.10206	112.00	22.20	247.4	2.9375

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00290	1.565	.10880	.01068	.63862	1.5885	.13141
SDev	.00029	.008	.00126	.00064	.00129	.0079	.00018
%RSD	9.9575	.4956	1.1542	6.0065	.51578	.49565	.13560
#1	.00273	1.556	.10744	.01139	.63486	1.5795	.13121
#2	.00274	1.571	.10992	.01051	.64101	1.5943	.13155
#3	.00323	1.569	.10905	.01014	.63999	1.5917	.13146

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.28599	.01899	-.00352	.05442	.00007	.00039	.04892
SDev	.00134	.00174	.00052	.00118	.00136	.00082	.00103
%RSD	.46773	9.1515	14.865	2.1759	1906.1	207.32	2.0966
#1	.28444	.01710	-.00408	.05342	.00140	.00019	.04901
#2	.28671	.01937	-.00343	.05573	.00013	.00129	.04990
#3	.28681	.02051	-.00305	.05412	-.00132	-.00030	.04785

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.05717	-.00257	.00139	.00450	-.00140
SDev	.00151	.00203	.00106	.00203	.00033
%RSD	2.6428	78.805	76.066	45.230	23.449
#1	.05562	-.00082	.00251	.00404	-.00173
#2	.05864	-.00210	.00125	.00672	-.00142
#3	.05724	-.00479	.00041	.00273	-.00107

Analysis Report 08/27/08 01:21:17 PM page 1

Method: KICAP Sample Name: 0808076-008B Operator: CT
Run Time: 08/27/08 13:17:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00014	85.80	.02699	.32581	.00363	14.73	.00032
SDev	.00039	.30	.00012	.00121	.00002	.04	.00001
%RSD	270.24	.3505	.42603	.37269	.48906	.2543	3.3937
#1	-.00034	85.62	.02706	.32565	.00361	14.75	.00031
#2	-.00040	86.15	.02705	.32709	.00365	14.75	.00033
#3	.00030	85.64	.02686	.32468	.00363	14.69	.00032

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02941	.07520	.04427	85.861	3.423	12.64	1.1183
SDev	.00036	.00040	.00061	.314	.010	.04	.0042
%RSD	1.2075	.53563	1.3679	.36533	.2928	.3123	.37957
#1	.02902	.07484	.04477	85.680	3.417	12.63	1.1161
#2	.02971	.07563	.04444	86.223	3.434	12.68	1.1231
#3	.02949	.07513	.04360	85.679	3.417	12.60	1.1155

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00146	.4470	.08037	.01321	.11244	.93078	.10918
SDev	.00104	.0018	.00077	.00129	.00037	.00282	.00031
%RSD	71.193	.4024	.96147	9.7365	.32894	.30336	.28591
#1	.00265	.4463	.07950	.01333	.11233	.92922	.10888
#2	.00096	.4490	.08098	.01443	.11285	.93404	.10950
#3	.00076	.4456	.08061	.01186	.11213	.92908	.10915

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24603	.02473	-.00051	.04142	.00149	-.00061	.03884
SDev	.00099	.00135	.00108	.00116	.00262	.00117	.00297
%RSD	.40247	5.4455	210.13	2.7964	175.86	192.20	7.6504
#1	.24553	.02618	-.00045	.04013	-.00148	-.00187	.04164
#2	.24717	.02449	.00054	.04236	.00349	.00045	.03915
#3	.24540	.02352	-.00162	.04178	.00246	-.00041	.03573

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.04271	.00060	.00194	.00012	-.00047
SDev	.00292	.00551	.00614	.00575	.00233
%RSD	6.8436	916.64	316.99	4880.7	491.40
#1	.03937	.00574	-.00508	-.00644	.00191
#2	.04397	.00127	.00460	.00249	-.00057
#3	.04480	-.00521	.00630	.00430	-.00276

Analysis Report 08/27/08 01:24:49 PM page 1

Method: KICAP Sample Name: 0808076-009B Operator: CT
Run Time: 08/27/08 13:21:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00034	77.86	.02367	.42719	.00393	15.55	.00073
SDev	.00055	.18	.00055	.00117	.00003	.04	.00004
%RSD	159.14	.2274	2.3281	.27433	.62775	.2536	5.9879
#1	-.00095	77.89	.02429	.42756	.00395	15.58	.00072
#2	-.00017	77.67	.02325	.42587	.00390	15.50	.00078
#3	.00010	78.02	.02345	.42813	.00395	15.56	.00069

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04749	.09145	.05181	89.277	3.691	14.44	.80365
SDev	.00017	.00026	.00020	.213	.021	.03	.00210
%RSD	.36634	.28310	.39468	.23822	.5607	.2360	.26090
#1	.04770	.09175	.05203	89.336	3.712	14.46	.80448
#2	.04740	.09126	.05178	89.042	3.690	14.40	.80127
#3	.04739	.09136	.05162	89.455	3.671	14.46	.80521

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00105	.8036	.09712	.01164	.06955	1.0549	.12401
SDev	.00102	.0013	.00019	.00045	.00020	.0023	.00031
%RSD	97.364	.1642	.19377	3.8892	.28800	.21861	.24656
#1	.00218	.8048	.09716	.01187	.06964	1.0572	.12412
#2	.00019	.8037	.09691	.01194	.06932	1.0526	.12367
#3	.00079	.8022	.09728	.01112	.06969	1.0549	.12425

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.29360	.02670	-.00297	.05253	.00164	-.00038	.04854
SDev	.00099	.00047	.00110	.00027	.00127	.00095	.00144
%RSD	.33836	1.7591	37.131	.51080	77.534	251.91	2.9630
#1	.29389	.02700	-.00177	.05226	.00309	.00072	.05020
#2	.29250	.02616	-.00393	.05279	.00073	-.00086	.04771
#3	.29442	.02694	-.00320	.05255	.00109	-.00099	.04771

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.05453	-.00488	.00489	.00305	-.00159
SDev	.00109	.00630	.00124	.00076	.00092
%RSD	2.0043	129.12	25.318	25.019	58.170
#1	.05328	.00235	.00347	.00368	-.00076
#2	.05533	-.00922	.00570	.00327	-.00143
#3	.05497	-.00776	.00551	.00220	-.00259

Analysis Report QC Standard 08/27/08 02:31:23 PM page 3

Method: KICAP Sample Name: ICSA-FINAL Operator: CT
Run Time: 08/27/08 14:27:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00050	482.9	-.00152	-.00115	-.00002	494.1	.00015
SDev	.00043	3.3	.00041	.00008	.00001	2.9	.00005
%RSD	86.445	.6805	27.110	7.0508	29.524	.5884	31.310
#1	.00014	481.9	-.00155	-.00123	-.00002	493.5	.00013
#2	.00098	486.6	-.00191	-.00116	-.00001	497.2	.00020
#3	.00039	480.3	-.00109	-.00107	-.00002	491.4	.00011
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.0				500.0	
Range		20.00				20.00	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00401	-.00090	-.00144	189.22	-.2536	495.2	-.00111
SDev	.00034	.00042	.00024	1.12	.0164	2.9	.00007
%RSD	8.4208	45.926	16.848	.59348	6.479	.5910	6.6294
#1	-.00437	-.00097	-.00116	188.91	-.2555	495.0	-.00112
#2	-.00394	-.00128	-.00157	190.47	-.2690	498.2	-.00118
#3	-.00371	-.00046	-.00160	188.29	-.2363	492.3	-.00103
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	QC Pass	NOCHECK
Value				200.00		500.0	
Range				20.000		20.00	

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00089	-.0116	.00127	-.00247	-.00023	.00121	-.00000
SDev	.00139	.0014	.00035	.00151	.00001	.00017	.00009
%RSD	156.11	11.69	27.251	61.003	3.1405	14.408	3273.5
#1	.00248	-.0100	.00152	-.00229	-.00024	.00105	-.00001
#2	.00030	-.0124	.00087	-.00107	-.00023	.00120	-.00009
#3	-.00011	-.0124	.00141	-.00407	-.00023	.00140	.00009
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00128	.00100	.00348	.00186	-.00138	-.00113	-.01690
SDev	.00015	.00154	.00253	.00230	.00018	.00235	.00675
%RSD	11.964	153.45	72.664	123.77	13.301	206.93	39.973
#1	-.00115	.00275	.00064	-.00033	-.00117	-.00364	-.00910
#2	-.00145	-.00015	.00548	.00165	-.00148	-.00076	-.02095
#3	-.00123	.00041	.00432	.00426	-.00150	.00100	-.02064
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Analysis Report QC Standard 08/27/08 02:31:23 PM page 2

Value
Range

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.01123	.00725	-.00569	-.00850	.00329
SDev	.00649	.00862	.00404	.02129	.00786
%RSD	57.853	118.99	71.037	250.42	238.71
#1	.00405	.01662	-.01005	-.03220	.01211
#2	.01294	.00547	-.00495	-.00231	.00077
#3	.01669	-.00035	-.00207	.00901	-.00300
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report QC Standard 08/27/08 02:34:57 PM page 1

Method: KICAP Sample Name: ICSAB-FINAL Operator: CT
Run Time: 08/27/08 14:31:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20047	466.4	.49127	.47066	.47657	480.1	.89633
SDev	.00113	4.0	.00476	.00414	.00397	3.9	.00726
%RSD	.56635	.8603	.97263	.87994	.83239	.8098	.81057
#1	.20070	467.0	.49011	.47085	.47705	481.0	.89759
#2	.20147	470.2	.49652	.47471	.48028	483.5	.90288
#3	.19923	462.2	.48717	.46643	.47239	475.9	.88851
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	500.0	.50000	.50000	.50000	500.0	1.0000
Range	20.000	20.00	20.000	20.000	20.000	20.00	20.000

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.44806	.45549	.50644	183.94	7.503	478.7	.45093
SDev	.00382	.00319	.00488	1.54	.033	4.0	.00383
%RSD	.85179	.70087	.96451	.83599	.4400	.8304	.84943
#1	.44830	.45613	.50677	184.32	7.475	479.7	.45149
#2	.45174	.45832	.51115	185.26	7.540	482.0	.45446
#3	.44412	.45203	.50140	182.25	7.494	474.3	.44686
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00		500.0	.50000
Range	20.000	20.000	20.000	20.000		20.00	20.000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.46084	1.221	.90644	.46718	.45912	.46576	.46920
SDev	.00542	.007	.00711	.00490	.00392	.00383	.00366
%RSD	1.1762	.6083	.78481	1.0489	.85298	.82170	.78049
#1	.46018	1.218	.90689	.46919	.45951	.46567	.46941
#2	.46656	1.230	.91331	.47075	.46282	.46964	.47276
#3	.45578	1.216	.89911	.46159	.45502	.46199	.46544
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000		1.0000	.50000	.50000	.50000	.50000
Range	20.000		20.000	20.000	20.000	20.000	20.000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98119	.10030	.09703	.04813	.04528	.61925	.03063
SDev	.00862	.00329	.00245	.00115	.00316	.00392	.01146
%RSD	.87816	3.2794	2.5260	2.3870	6.9757	.63245	37.434
#1	.98230	.10021	.09763	.04698	.04611	.62258	.04359
#2	.98920	.10363	.09913	.04927	.04794	.62025	.02183
#3	.97207	.09705	.09434	.04814	.04179	.61494	.02646
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 08/27/08 02:34:57 PM page 2

Value	1.0000	.10000	.10000	.05000	.05000	.60000
Range	20.000	20.000	20.000	20.000	20.000	20.000

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.05687	.05545	.04020	.59246	.63263
SDev	.00738	.01465	.00559	.02226	.01473
%RSD	12.982	26.421	13.908	3.7577	2.3275
#1	.04866	.07053	.03392	.56702	.64957
#2	.06297	.05455	.04463	.60835	.62544
#3	.05897	.04127	.04204	.60202	.62288
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report 08/27/08 02:38:29 PM page 1

Method: KICAP Sample Name: CCVH3 Operator: CT
Run Time: 08/27/08 14:35:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00026	.1244	.00175	-.00051	.00010	49.68	-.00049
SDev	.00053	.2058	.00074	.00014	.00022	.11	.00038
%RSD	206.49	165.5	42.129	27.301	225.28	.2240	78.024
#1	.00043	.3620	.00235	-.00035	.00034	49.80	-.00005
#2	-.00034	.0087	.00199	-.00059	-.00003	49.66	-.00069
#3	.00067	.0025	.00093	-.00059	-.00003	49.58	-.00074
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00328	5.1242	-.00057	10.379	-.1663	.0996	-.00038
SDev	.00013	.0240	.00053	.059	.0233	.2007	.00017
%RSD	4.0268	.46899	92.441	.56932	14.01	201.6	43.921
#1	-.00323	5.0967	-.00002	10.443	-.1926	.3313	-.00019
#2	-.00343	5.1410	-.00108	10.368	-.1578	-.0146	-.00050
#3	-.00317	5.1349	-.00061	10.326	-.1484	-.0180	-.00045
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00154	47.98	.00095	-.00590	.00003	.00004	.00016
SDev	.00187	.03	.00012	.00146	.00018	.00014	.00033
%RSD	121.31	.0684	13.007	24.686	577.17	358.27	211.10
#1	.00370	48.01	.00107	-.00756	.00024	.00018	.00043
#2	.00051	47.95	.00082	-.00485	-.00006	-.00010	-.00021
#3	.00041	47.97	.00095	-.00529	-.00009	.00004	.00025
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00196	-.00250	-.00773	10.083	.00017	.00572	10.470
SDev	.00045	.00068	.00092	.009	.00141	.00059	.104
%RSD	22.978	27.188	11.903	.09118	819.60	10.247	.99656
#1	.00246	-.00324	-.00843	10.080	-.00024	.00539	10.547
#2	.00158	-.00190	-.00806	10.094	.00174	.00640	10.351
#3	.00185	-.00236	-.00669	10.076	-.00100	.00538	10.511
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 08/27/08 02:38:29 PM page 2

High				11.090	
Low				8.9900	

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.162	-.00182	.00116	.00543	.00537
SDev	.062	.00268	.00170	.00230	.00131
%RSD	.60914	146.87	146.83	42.316	24.332
#1	10.091	.00013	-.00042	.00394	.00686
#2	10.189	-.00072	.00297	.00808	.00481
#3	10.205	-.00487	.00094	.00427	.00443
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 08/27/08 02:42:01 PM page 1

Method: KICAP Sample Name: CCV3 Operator: CT
Run Time: 08/27/08 14:38:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24687	5.044	.51359	.50820	.50824	10.32	.51695
SDev	.00175	.035	.00384	.00411	.00397	.05	.00396
%RSD	.70723	.6957	.74757	.80770	.78119	.4631	.76678
#1	.24866	5.029	.51578	.51161	.51147	10.34	.52059
#2	.24517	5.064	.50916	.50365	.50381	10.35	.51272
#3	.24677	5.020	.51584	.50936	.50945	10.26	.51753
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50842	.50403	.49408	1.0131	10.60	10.13	.49376
SDev	.00431	.00130	.00352	.0259	.04	.02	.00378
%RSD	.84693	.25798	.71186	2.5536	.3987	.1565	.76636
#1	.51148	.50478	.49672	1.0012	10.65	10.15	.49685
#2	.50350	.50478	.49008	1.0428	10.57	10.12	.48954
#3	.51029	.50253	.49542	.99526	10.58	10.12	.49489
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51136	9.869	.51211	.50015	.50378	.50166	.49860
SDev	.00281	.021	.00605	.00371	.00419	.00437	.00379
%RSD	.54974	.2125	1.1818	.74144	.83102	.87124	.76103
#1	.51009	9.884	.51719	.50250	.50743	.50472	.50214
#2	.50940	9.877	.50541	.49587	.49921	.49666	.49460
#3	.51458	9.845	.51372	.50206	.50470	.50362	.49906
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50962	.51206	.49919	.51845	.50043	.50039	.51357
SDev	.00398	.00499	.00367	.01250	.00735	.00318	.00412
%RSD	.78032	.97481	.73455	2.4113	1.4680	.63477	.80266
#1	.51308	.51534	.50338	.51515	.49946	.49969	.51817
#2	.50528	.50632	.49657	.53227	.50822	.50386	.51233
#3	.51052	.51452	.49762	.50793	.49362	.49763	.51021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

Analysis Report 08/27/08 02:42:01 PM page 2

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.52088	.50342	.49894	.49174	.50447
SDev	.01879	.00562	.01119	.01088	.00219
%RSD	3.6081	1.1162	2.2423	2.2117	.43505
#1	.51364	.50980	.49429	.48368	.50693
#2	.54222	.50123	.51170	.50411	.50374
#3	.50679	.49922	.49082	.48743	.50272
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 08/27/08 02:45:34 PM page 1

Method: KICAP Sample Name: CCB3 Operator: CT
Run Time: 08/27/08 14:42:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00058	-.0065	.00116	-.00048	-.00004	.0020	-.00051
SDev	.00040	.0012	.00116	.00009	.00002	.0013	.00005
%RSD	69.323	18.49	100.06	19.245	57.132	64.66	9.1703
#1	.00092	-.0078	.00246	-.00059	-.00001	.0005	-.00056
#2	.00014	-.0062	.00077	-.00043	-.00004	.0026	-.00051
#3	.00067	-.0054	.00024	-.00043	-.00006	.0028	-.00046

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00253	-.00291	.00055	-.00214	-.1361	-.0219	-.00048
SDev	.00024	.00034	.00006	.00005	.0292	.0017	.00001
%RSD	9.4408	11.750	10.621	2.5370	21.41	7.914	2.3835
#1	-.00274	-.00325	.00061	-.00215	-.1695	-.0237	-.00048
#2	-.00258	-.00291	.00055	-.00219	-.1233	-.0217	-.00048
#3	-.00227	-.00256	.00049	-.00208	-.1156	-.0203	-.00050

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00239	-.0161	.00058	-.00704	-.00022	-.00110	.00029
SDev	.00202	.0010	.00012	.00230	.00002	.00000	.00029
%RSD	84.398	6.526	21.491	32.633	9.3644	.01388	99.321
#1	.00465	-.0172	.00070	-.00443	-.00021	-.00110	.00046
#2	.00176	-.0158	.00058	-.00875	-.00024	-.00110	-.00004
#3	.00076	-.0151	.00045	-.00793	-.00021	-.00110	.00046

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00007	-.00003	-.00754	.00032	-.00106	.00076	-.00144
SDev	.00003	.00050	.00091	.00073	.00230	.00155	.00164
%RSD	39.096	1468.5	12.078	226.27	217.06	205.64	113.43
#1	.00010	.00011	-.00852	.00107	-.00114	.00241	-.00131
#2	.00006	.00038	-.00671	-.00040	-.00333	-.00067	.00013
#3	.00006	-.00059	-.00740	.00030	.00128	.00052	-.00314

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00121	-.00316	-.00001	.00521	-.00172
SDev	.00162	.00324	.00423	.00365	.00178
%RSD	134.01	102.34	38101.	70.136	103.83
#1	.00226	-.00669	.00164	.00865	.00005
#2	-.00065	-.00033	-.00482	.00138	-.00169
#3	.00201	-.00247	.00315	.00559	-.00351

Laboratory Worksheets

LIFE SCIENCE LABORATORIES, INC.

TRACE METALS SOIL DIGESTION LOGBOOK Method # 3050B QC Batch # 8063 Date: 8/26/08

Sample ID	Client ID	Initial Weight (g)	Final Volume (ml)	Comments
MB-8063	—	0.50	50	Teflon Cups (2577-A)
LCS-8063				(A)+(B)
0808076-001B	CITY OF GENEVA			
-002B				
-003B				
-004B				
-004BMS				(C)
-004BMSD				(C)
-005B				
-006B				
-007B				
-008B				
-009B				
0808104-001A	[redacted]			
0808110-001A	[redacted]			
-002A				
-003A				
-004A				
-005A				
-006A				
				CT 8/26/08

Reagents:
1:1 HNO_3# 2864-R conc. HNO_3# Baker 607057
conc. HCl # Baker 605079 H_2O_2 # Baker E44A07
(A) 0.5 ml of ICP Spike# 7556-5
(B) 0.5 ml of ICP Spike# 7557-5
(C) 1.0 ml of ICP Spike# 7556-5, 7557-5

Prepared by: CangTran
Date: 8/26/08
Reviewed By: [signature]
Date: 8-29-08
Digestion Temperature 94 °C

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1160

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6394-S	3/8/07	10/31/10	Al-10,000 ppm	Stock, Received 100 mL	100 mL	10,000 ppm	AccuTD	B5105043	CT
6330-S		9/30/10	Sb-1000 ppm			1,000 ppm		B3305031	
6331-S		2/28/11	As-1000 ppm					B5111036	
6329-S		9/30/10	Ba-1000 ppm					B5202041	
6328-S		7/31/11	Be-1000 ppm					B5115083	
6339-S		8/31/11	B-1000 ppm					B5085025	
6340-S		11/30/11	Cd-1000 ppm					B6115069	
6341-S		8/31/2011	Ca-10,000 ppm			10,000 ppm		B6065137	
6342-S		6/30/11	Cr-1000 ppm			1,000 ppm		B6065124	
6343-S		12/31/11	Co-1000 ppm					B6125064	
6344-S		9/30/11	Fe-1000 ppm					B6035049	
6345-S		8/31/11	Pb-1000 ppm					B6035046	
6346-S		9/30/10	Mg-10,000 ppm			10,000 ppm		B5015118	
6349-S		6/30/11	Mn-1000 ppm			1,000 ppm		B6065026	
6348-S		7/31/11	Mo-1000 ppm					B6065081	
6349-S		6/30/11	Ni-1000 ppm					B4065040	
6350-S		9/30/10	K-10,000 ppm			10,000 ppm		B3075123	
6351-S		6/30/11	Se-1000 ppm			1,000 ppm		B6065025	
6352-S		12/31/11	Ag-1000 ppm					B6125064	
6353-S		3/31/11	Na-10,000 ppm			10,000 ppm		B6025012	
6354-S		9/30/10	Sr-1000 ppm			1,000 ppm		B5035051	
6355-S		5/31/11	Tl-1000 ppm					B6055026	
6356-S		1/31/11	Sn-1000 ppm					B6015089	
6357-S		9/30/10	Ti-1000 ppm					B7085013	
6358-S		2/28/12	V-1000 ppm					B7025121	
6359-S		2/28/11	Zn-1000 ppm					B6015140	

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111

1161

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6360-S	3/8/07	9/30/10	Cu-1000 ppm	Stock, Received 100 mL	100 mL	1,000 ppm	AccuTD	B6495036	CT
6361-S		2/28/11	As-10,000 ppm			10,000 ppm		B6025040	
6362-S		5/31/11	Ba-10,000 ppm					B6025064	
6363-S		6/30/11	Cr-10,000 ppm					B6065134	
6364-S		8/31/11	Fe-10,000 ppm					B6085027	
6365-S		12/31/11	Pb-10,000 ppm					B6125078	
6366-S		6/30/11	Ni-1000 ppm			1,000 ppm		B6065096	
6367-S	3/12/07	3/12/07	Hg Cal Curve (5ppb)	0.0 mL (6368-S)	50 mL w/ DI	0.0 ppb	AccuSTD	6368-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6368-S	3/12/07	3/12/07	Hg - 50 ppb (Coating STD)	0.5 mL (6037-S) + 2 mL conc. HNO_3	100 mL w/ DI	50.0 ppb	AccuSTD	6037-S	DP
6369-S	3/12/07	3/12/07	Hg - 50 ppb	0.5 mL (6038-S) + 2.0 mL conc. HNO_3		50.0 ppb	Baker ULTRA	C38065 6038-S	DP
6370-S	3/12/07	3/12/07	CREF STD	0.5 mL conc. HNO_3		—	Baker	C38065	DP
6371-S	3/12/07	3/12/07	ICB/CCB	4.0 mL ~~(6369-S)~~	50 mL w/ DI	4.0 ppb	ULTRA	6369-S	DP
6372-S	3/12/07	3/12/07	ICV (Hg)	0.2 mL (6368-S)		0.2 ppb	AccuSTD	6368-S	DP
6373-S	3/12/07	3/12/07	CRA (Hg)	2.0 mL (6368-S)		2.0 ppb			DP
6373-S	3/12/07	3/12/07	CCV (Hg)	0.0 mL (6368-S)	50 mL w/ DI	0.0 ppb	AccuSTD	6368-S	DP
6374-S	3/12/07	3/12/07	Hg Cal Curve (Water)	0.2		0.2 ppb			

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112

Reviewed

1162

AccuStandard, Inc.

ISO 9001:2000 — ISO/IEC 17025

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6394-S)

Received - 3/8/07
Opened - 3/8/07
Expire - 10/31/10

Item Number: ICP-01N-10X-1

Density: 1.059 g/mL
Lot Number: B5105043
Expiration Date: Oct / 2010

Element: Aluminum
Concentration: 9919 µg/mL
Matrix: $Al(NO_3)_3 \cdot 9H_2O$ in 2% HNO_3

Elements in µg/mL

Ag	nd<0.02	Cr	0.06	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	*	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	N/A	K	0.6	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	0.13	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	0.44	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	N/A
Bi	N/A	Ga	N/A	Mg	0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	0.10	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.37	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3101a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

125 Market Street New Haven, CT 06513 USA Tel (203)786-5290 Fax (203)786-5287 Web AccuStandard.com

1163

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO 9001:2000 — ISO/IEC 17025

6335-5

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-02N-1

Element: Antimony
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.013g/mL
Lot Number: B5095031
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	N/A
Al	N/A	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	*	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	N/A
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using bromate which was standardized against NIST SRM #83d (arsenic trioxide).

The concentration of the final solution was verified by ICP against NIST SRM# 3102a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO 9001:2000 — ISO/IEC 17025

6336-5

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 2/28/11

Item Number: ICP-03N-1

Element: Arsenic
Concentration: 1000 µg/mL
Matrix: As in 2% HNO3

Density: 1.012 g/mL
Lot Number: B5115036
Expiration Date: Feb / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	N/A	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	*	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3103a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO 9001:2000 — ISO/IEC 17025

6337-5

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-04N-1

Element: Barium
Concentration: 1000 µg/mL
Matrix: Ba(NO3)2 in 2% HNO3

Lot Number: B5025074
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	N/A	Sb	N/A	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	N/A	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	N/A	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	*	Eu	nd<0.02	Li	N/A	Pd	N/A	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	N/A	Ge	N/A	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	N/A	Na	N/A	Rh	N/A	Te	N/A		
Co	N/A	Hg	N/A	Nb	N/A	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3104a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO 9001:2000 — ISO/IEC 17025

6338-5

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 7/31/11

Item Number: ICP-05N-1

Element: Beryllium
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.016g/mL
Lot Number: B5115083
Expiration Date: Jul / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	*	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3105a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6339-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 8/31/11

Item Number: ICP-07W-1

Density: 1.002g/mL

Element: Boron
Concentration: 1000 µg/mL
Matrix: H3BO3 in H2O w. NH4OH

Lot Number: B6085025
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	N/A	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	*	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed by acid/base titration using NaOH which was standardized against NIST SRM #84f (potassium hydrogen pthalate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3107

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6340-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 11/30/11

Item Number: ICP-08N-1

Density: 1.012 g/mL

Element: Cadmium
Concentration: 1000 µg/mL
Matrix: Cd in 2% HNO3

Lot Number: B6115069
Expiration Date: Nov / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	**0.10**	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	N/A	Tl	nd<0.2
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	N/A	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	**0.02**	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	*	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3108

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6341-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 8/31/11

Item Number: ICP-09N-10X-1

Density: 1.042g/mL

Element: Calcium
Concentration: 10000 µg/mL
Matrix: CaCO3 in 2% HNO3

Lot Number: B6065137
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	**0.03**	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	nd<0.2	Er	nd<0.02	La	**0.26**	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	**0.03**	Yb	nd<0.02
Ca	*	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	**0.1**	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	**0.1**	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3109a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6342-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-13N-1

Density: 1.013 g/mL

Element: Chromium
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Lot Number: B6065124
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	*	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	N/A	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3112a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: ICP-14N-1

(6743-5)
Received - 3/8/07
Opened - 3/8/07
Expire - 12/31/11

Element: Cobalt
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.014 g/mL
Lot Number: B6125064
Expiration Date: Dec / 2011

Elements in µg/mL

Ag	N/A	Cr	N/A	Ho	N/A	Nd	N/A	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	N/A	Sb	N/A	Tl	N/A
As	N/A	Cu	N/A	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	N/A	Pd	N/A	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	N/A	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	0.08	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	N/A
Cd	nd<0.02	Ge	N/A	Mo	N/A	Re	N/A	Tb	N/A	Zr	nd<0.02
Ce	nd<0.2	Hf	0.05	Na	N/A	Rh	N/A	Te	N/A		
Co	*	Hg	N/A	Nb	N/A	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3113

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: ICP-15N-1

(6760-5)
Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/11

Element: Copper
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.013g/mL
Lot Number: B6095096
Expiration Date: Sep / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	*	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	N/A	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	N/A	Th	N/A		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3114

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: ICP-27N-1

(6744-5)
Received - 3/8/07
Opened - 3/8/07
Expire - 10/31/11

Element: Iron
Concentration: 1000 µg/mL
Matrix: Fe in 5% HNO3

Density: 1.032 g/mL
Lot Number: B6035048
Expiration Date: Oct / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	*	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	N/A	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	N/A	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3126a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: ICP-29N-1

(6745-5)
Received - 3/8/07
Opened - 3/8/07
Expire - 8/31/11

Element: Lead
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.011g/mL
Lot Number: B6075090
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	*	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3128

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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ISO 9001:2000

AccuStandard, Inc.

ISO/IEC 17025

CERTIFICATE OF ANALYSIS

(6346-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-32N-10X-1

Element: Magnesium
Concentration: 10000 µg/mL
Matrix: 2% HNO3

Density: 1.055g/mL
Lot Number: B5015118
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	0.05	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	*	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.45	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	0.06	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	N/A	Na	0.13	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3131a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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Lydia Snyder
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ISO 9001:2000

AccuStandard, Inc.

ISO/IEC 17025

CERTIFICATE OF ANALYSIS

(6347-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-33N-1

Element: Manganese
Concentration: 1000 µg/mL
Matrix: Mn(C2H3O2)2 in 2% HNO3

Density: 1.012g/mL
Lot Number: B6065026
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	N/A	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	N/A	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	*	Rb	N/A	Ta	N/A	Zn	N/A
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	N/A		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3132

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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CERTIFICATE OF ANALYSIS

(6348-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 7/31/~~07~~ 11
CT 3/8/07

Item Number: ICP-35W-1

Element: Molybdenum
Concentration: 1000 µg/mL
Matrix: Water, tr NH_4OH

Density: 1.000g/mL
Lot Number: B6065081
Expiration Date: Jul / 2011

Elements in µg/mL

Ag	N/A	Cr	nd<0.02	Ho	N/A	Nd	N/A	S	N/A	Tl	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	N/A	Sb	N/A	Tl	N/A
As	N/A	Cu	N/A	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	N/A
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	N/A	Er	N/A	La	nd<0.02	Pb	N/A	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	N/A	Li	nd<0.02	Pd	N/A	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	*	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	N/A	Na	N/A	Rh	N/A	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3134

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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ISO 9001:2000

AccuStandard, Inc.

ISO/IEC 17025

CERTIFICATE OF ANALYSIS

(6349-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-37N-1

Element: Nickel
Concentration: 1000 µg/mL
Matrix: Ni in 2% HNO3

Density: 1.014g/mL
Lot Number: B4065040
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	*	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	0.11	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3136

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Received - 7/8/07
Opened - 7/8/07
Expire - 9/20/10

(6350-S)

Item Number: ICP-43N-10X-1

Density: 1.028g/mL
Element: Potassium
Lot Number: B5075123
Concentration: 9999 µg/mL
Expiration Date: Sep / 2010
Matrix: KNO3 in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	*	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	0.38	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3141a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Received - 7/8/07
Opened - 7/8/07
Expire - 6/20/11

(6351-S)

Item Number: ICP-51N-1

Density: 1.012g/mL
Element: Selenium
Lot Number: B6065129
Concentration: 1000 µg/mL
Expiration Date: Jun / 2011
Matrix: Se in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	N/A	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	*	U	N/A
B	nd<0.2	Er	N/A	La	nd<0.02	Pb	N/A	Si	N/A	V	N/A
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	N/A
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	N/A
Ca	nd<0.02	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	N/A
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	N/A	Hf	N/A	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	N/A	Hg	nd<0.2	Nb	nd<0.2	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3149

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Received - 7/8/07
Opened - 7/8/07
Expire - 12/21/11

(6352-S)

Item Number: ICP-53N-1

Density: 1.012 g/mL
Element: Silver
Lot Number: B6125004
Concentration: 1000 µg/mL
Expiration Date: Dec / 2011
Matrix: AgNO3 in 2% HNO3

Elements in µg/mL

Ag	*	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	0.03	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Se	N/A	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	0.04	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	N/A
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	N/A	Hf	nd<0.02	Na	0.04	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using a Volhlhard titration calibrated against 99.999% silver shot.

The concentration of the final solution was verified by ICP against NIST SRM# 3151

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Received - 7/8/07
Opened - 7/8/07
Expire - 3/21/11

(6353-S)

Item Number: ICP-54N-10X-1

Density: 1.036 g/mL
Element: Sodium
Lot Number: B6025117
Concentration: 10000 µg/mL
Expiration Date: Mar / 2011
Matrix: NaNO3 in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Se	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	N/A	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	*	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3152a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6354-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-55N-1

Element: Strontium
Concentration: 1000 µg/mL
Matrix: Sr(NO3)2 in 2% HNO3

Lot Number: B5035151
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	N/A	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	*	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	N/A
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3153a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6355-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 3/31/11

Item Number: ICP-60N-1

Density: 1.011 g/mL

Element: Thallium
Concentration: 1000 µg/mL
Matrix: Tl in 2% HNO3

Lot Number: B6055036
Expiration Date: May / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	*
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3158

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6356-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 1/31/11

Item Number: ICP-63N-1

Density: 1.012 g/mL

Element: Tin
Concentration: 1000 µg/mL
Matrix: Sn in 2.5% HNO3 tr. HF

Lot Number: B6015089
Expiration Date: Jan / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	*	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3161

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6357-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-64W-1

Density: 1.000g/mL

Element: Titanium
Concentration: 1000 µg/mL
Matrix: (NH4)2TiF6 in H2O tr HF

Lot Number: B5085113
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	N/A	Cr	nd<0.02	Ho	nd<0.02	Nd	N/A	S	N/A	Ti	*
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	N/A	Cu	N/A	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	N/A
B	0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	N/A	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	N/A	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.104	Rh	N/A	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3162a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6358-5

Received - 7/8/07
Opened - 7/8/07
Expire - 2/28/12

Item Number: ICP-67N-1

Element: Vanadium
Concentration: 1000 µg/mL
Matrix: V_2O_5 in 2% HNO_3

Density: 1.014 g/mL
Lot Number: B7025121
Expiration Date: Feb / 2012

Elements in µg/mL

Ag	nd<0.02	Cr	N/A	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	*
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	0.02	Lu	N/A	Pr	N/A	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	N/A	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.03	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	N/A	Ru	nd<0.02	Th	N/A		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3165

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6359-5

Received - 7/8/07
Opened - 7/8/07
Expire - 2/28/11

Item Number: ICP-70N-1

Element: Zinc
Concentration: 1000 µg/mL
Matrix: Zn in 2% HNO3

Density: 1.013g/mL
Lot Number: B6015140
Expiration Date: Feb / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	N/A	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	*
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3168a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6361-5

Received - 3/8/07
Opened - 3/8/07
Expire - 2/28/11

Item Number: ICP-03N-10X-1

Element: Arsenic
Concentration: 10000 µg/mL
Matrix: As in 2% HNO3

Density: 1.011g/mL
Lot Number: B6025008
Expiration Date: Feb / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	*	Cu	0.03	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	0.09
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.04	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.09	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3103a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6362-5

Received - 3/8/07
Opened - 3/8/07
Expire - 5/31/11

Item Number: ICP-04N-10X-1

Element: Barium
Concentration: 10000 µg/mL
Matrix: Ba(NO3)2 in 2% HNO3

Lot Number: B6055004
Expiration Date: May / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	N/A	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	0.3	V	nd<0.02
Ba	*	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3104a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6363-5

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-13N-10X-1

Element: Chromium
Concentration: 10000 µg/mL
Matrix: 2-5% HNO3

Density: 1.044 g/mL
Lot Number: B6065134
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	*	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	0.3	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	N/A	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.38	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3112a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6364-5

Received - 3/8/07
Opened - 3/8/07
Expire - 8/31/11

Item Number: ICP-27N-10X-1

Element: Iron
Concentration: 10000 µg/mL
Matrix: Fe in 5% HNO3

Density: 1.084 g/mL
Lot Number: B6085027
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	*	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	N/A
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	0.32
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	N/A	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	N/A	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3126a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6365-5

Received - 3/8/07
Opened - 3/8/07
Expire - 12/31/11

Item Number: ICP-29N-10X-1

Element: Lead
Concentration: 10000 µg/mL
Matrix: 2% HNO3

Lot Number: B6125078
Expiration Date: Dec / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	N/A	Tl	N/A
As	nd<0.2	Cu	N/A	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	*	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	N/A	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.05	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3128

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6366-5

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-36N-1

Element: Neodymium
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Lot Number: B6065096
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	N/A	Nd	*	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	N/A	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	nd<0.2	Er	N/A	La	N/A	Pb	N/A	Si	nd<0.2	V	N/A
Ba	nd<0.02	Eu	N/A	Li	0.07	Pd	N/A	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	N/A	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	N/A	Hf	nd<0.02	Na	0.22	Rh	N/A	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3135a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
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125 Market Street New Haven, CT 06513 USA Tel (203)786-5290 Fax (203)786-5287 Web AccuStandard.com

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6432-S	3/20/07	3/20/08	Low Level Cal STD-W (100X)	See prep sheet in Certificate Book			AccuSTD	–	CT
6434-S	3/20/07	3/20/08	Low Level Cal STD-S (100X)	See prep sheet in Certificate Book			AccuSTD	–	CT
6435-S	3/20/07	3/20/08	Low Level Cal STD-W (1X)	1.0 mL (6432-S) + 5 mL conc HCl	↗ 100 mL w/ DI	See # 6432-S	AccuSTD	6432-S	CT
6436-S	3/20/07	3/20/08	Low Level Cal STD-S (1X)	+ 3 mL conc HNO3	↓		Baker	C26642 C38065	↓
6437-S	3/20/07	3/20/08	CRI (ONEIDA)	1.0 mL (6432-S) + 5 mL conc. HCl + 3 mL conc. HNO3	↗ 100 mL w/ DI	See # 6432-S	AccuSTD	6432-S	CT
			1000X	0.1 mL (6440-S) Cd; 0.5 mL (6342-S) Cr; 0.5 mL (6366-S) Cu; 1.0 mL (6349-S) Ni; 0.5 mL (6326-S) As; 0.5 mL (6345-S) Pb; 0.5 mL (6371-S) Se; + 5 mL conc HNO3	↗ 100 mL w/ DI	Cd - 1 ppm; Cr - 5; Cu - 5; Ni - 10; As - 5; Pb - 5; Se - 5	AccuSTD	6342-S	
								6366-S	
								6349-S	
								6326-S	
								6345-S	
								6371-S	
6438-S	3/20/07	3/20/08	CRI (ONEIDA)	0.1 mL (6437-S) + 5 mL conc HCl + 3 mL conc. HNO3	↗ 100 mL w/ DI	See # 6437-S	AccuSTD	6437-S	CT
6441-S	3/22/07	3/22/07	Hg - 50 ppb (Working STD)	0.5 mL (6437-S) + 2.0 mL conc. HNO3	↑ 200 mL w/ DI	50.0 ppb	AccuSTD	6037-S	DP
6440-S	3/22/07	3/22/07	Hg - 50 ppb (REF STD)	0.5 mL (6038-S) + 2.0 mL conc. HNO3	↓	↓	ULTRA Baker	C38065 6038-S C38065	↓

Reviewed: _____

118

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1196

Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - W (100X) Standard Number: 6433-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	0.50	5
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.30	3
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.50	5
Beryllium	AccuSTD	B5115083	6447-S	100	100	0.40	0.4
Boron	AccuSTD	B6085025	6339-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.10	110
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.60	6
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.10	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	2.00	20
Lead	AccuSTD	B6075090	6449-S	100	100	2.50	2.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6450-S	100	100	1.50	1.5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	1.00	100
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.80	8
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	C38065	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 3/20/07 Date Expires: 3/20/08

Prepared By: Cang Tran Reviewed By: [signature]

1197

Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - S (100X) Standard Number: 6434-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	1.00	10
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.50	5
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.10	1
Beryllium	AccuSTD	B5115083	6338-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.00	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.10	1
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.20	2
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.30	3
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.30	3
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.30	3
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	2.00	200
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.60	6
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	C38065	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 3/20/07 Date Expires: 3/20/08

Prepared By: Cang Tran Reviewed By: [signature]

1198

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6441-S	3/22/07	3/22/07	IC6/CCB	0.5 mL conc. HNO3 (6439-S)	↑ 200 mL w/DI	0.0 ppb	Baker	C38065	DP
6442-S	3/22/07	3/22/07	Hg Cal Curve (Water)	0.0 mL; 0.2 mL; 0.5 mL; 1.0 mL; 2.0 mL; 5.0 mL (6439-S)	↑ 50 mL w/DI	0.0 ppb; 0.2; 0.5; 1.0; 2.0; 5.0	AccuSTD	6439-S	DP
6443-S	3/22/07	3/22/07	ICV (Hg)	10.0 mL; 4.0 mL (6440-S)	↑ 50 mL w/DI	10.0; 4.0 ppb	ULTRA	6440-S	DP
6444-S	3/22/07	3/22/07	CRA (Hg)	0.2 mL (6439-S)	↑ 50 mL w/DI	0.2 ppb	AccuSTD	6439-S	DP
6445-S	3/22/07	3/22/07	CCV (Hg)	2.0 mL (6439-S)		2.0 ppb	AccuSTD	6437-S	DP
6446-S	3/19/07	3/19/08	Ag - 500 ppm	10 mL (6372-S) Ag + 1 mL HNO3 CT 3/20/07	↗ 20 mL w/ DI	Ag - 500 ppm	AccuSTD Baker	6372-S C38065	CT
6447-S	3/20/07	3/20/08	Be - 100 ppm	1 mL (6372-S)	↗ 10 mL w/ DI	Be - 100 ppm	AccuSTD	6372-S	CT
6448-S			Cd - 100 ppm; Pb - 100 ppm; Mo - 100 ppm	1 mL (6340-S); 1 mL (6345-S); 1 mL (6348-S)		Cd - 100 ppm; Pb - 100 ppm; Mo - 100 ppm		6340-S; 6345-S; 6348-S	
6450-S	3/27/07	3/27/07	Hg - 50 ppb (Working STD)	0.5 mL (6037-S) + 2.0 mL conc. HNO3	↑ 200 mL w/DI	50.0 ppb	AccuSTD Baker	6037-S C38065	DP
6452-S	3/27/07	3/27/07	Hg - 50 ppb (REF STD)	0.5 mL (6038-S) + 2.0 mL conc. HNO3	↓	↓	ULTRA Baker	6038-S C38065	DP

Reviewed: _____

119

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1199

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
	4/5/07	4/5/07	Hg Cal Curve (Water)	1.0 ml (6471-S)	↑ 50 ml w/DI	1.0 ppb	AccuSTD	6471-S	DP
	↓	↓		2.0		2.0	↓	↓	
				5.0		5.0			
				10.0	↓	10.0			
6475-S	4/5/07	4/5/07	ICV (Hg)	4.0 ml (6472-S)	↑ 50 ml w/DI	4.0 ppb	ULTRA	6472-S	DP
6476-S	4/5/07	4/5/07	CRA (Hg)	0.2 ml (6471-S)		0.2 ppb	AccuSTD	6471-S	DP
6477-S	4/5/07	4/5/07	CCV (Hg)	2.0 ml (6471-S)	↓	2.0 ppb	↓	↓	DP
6478-S	4/5/07	4/5/07	Hg Cal Curve (Soil)	0.0 ml (6471-S)	↑ 50 ml w/DI	0.0 ppb	AccuSTD	6471-S	DP
	↓	↓		0.2		0.2	↓	↓	↓
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		50			
	↓	↓		10.0	↓	10.0	↓	↓	↓
6479-S	4/9/07	4/2/08	ICSA	Stock, Received 250ml	250 ml	See # 6479-S	High Purity	626224	CT
6480-S	4/10/07	5/10/07	Hg TCLP	25 ml # 6037-S +	↑ 50 ml w/DI	1 mg/L	Accutrace	6037-S	DR
6481-S	4/12/07	4/12/08	SPK SOLN 3005A MDL	5 ml conc. HNO_3			BAKER	C38065	
			Verification (100X)	See prep sheet in	Certificate	Book	AccuSTD	—	CT
6482-S	4/12/07	4/12/08	3010A MDL Verification (100X)	↓	↓		↓	—	↓

Reviewed _____

1202

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6461-S	3/29/07	3/29/07	Hg Cal Curve (Soil)	10.0 ml (6458-S)	↑ 50 ml w/DI	10.0 ppb	AccuSTD	6458-S	DP
6462-S	3/29/07	3/29/07	ICV (Hg)	4.0 ml (6459-S)	↑ 50 ml w/DI	4.0 ppb	ULTRA	6452-S	DP
6463-S	3/29/07	3/29/07	CRA (Hg)	0.2 ml (6458-S)		0.2 ppb	AccuSTD	6458-S	DP
6464-S	3/29/07	3/29/07	CCV (Hg)	2.0 ml (6458-S)	↓	2.0 ppb	↓	↓	DP
6465-S	4/4/07	4/4/08	CRI (H.W.LCP) 100X	See prep sheet in Certificate Book			AccuSTD	—	CT
6466-S	4/4/07	4/4/08	CRI (H.W.LCP) 1X	1 ml (6465-S)	↑ 100 ml w/DI	See # 6465-S	AccuSTD	6465-S	CT
				+ 10 ml (1:1) HCl			Baker	2287-R	↓
				+ 3 ml conc HNO_3			↓	C38065	
6467-S	4/4/07	4/4/08	Sb-100 ppm	1 ml (6735-S)	↑ 10 ml w/DI	Sb-100 ppm	AccuSTD	6735-S	CT
6468-S	↓	↓	Be-100 ppm	1 ml (6738-S)		Be-100	↓	6738-S	↓
6469-S			Cd-100 ppm	1 ml (6740-S)		Cd-100		6740-S	
6470-S			Mn-100 ppm	1 ml (6747-S)	↓	Mn-100	↓	6747-S	↓
6471-S	4/5/07	4/5/07	Hg-50 ppb (Working STD)	0.5 ml (6037-S) + 2.0 ml conc. HNO_3	↑ 200 ml w/DI	50.0 ppb	AccuSTD Baker	6037-S C38065	DP
6472-S	4/5/07	4/5/07	Hg-50 ppb (Ref STD)	0.5 ml (6038-S) + 2.0 ml conc. HNO_3	↓	↓	ULTRA Baker	6038-S C38065	DP
6473-S	4/5/07	4/5/07	ICB/CCB	0.5 ml conc. HNO_3		—	↓	↓	
6474-S	4/5/07	4/5/07	Hg Cal Curve (Water)	0.0 ml (6471-S)	↑ 50 ml w/DI	0.0 ppb	AccuSTD	6471-S	DP
	↓	↓		0.2	↓	0.2	↓	↓	
				0.5		0.5			

Reviewed _____

1200

HIGH-PURITY STANDARDS
P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

(6479-S)
Received - 4/9/07
Opened - 4/9/07
Expire - 4/2/08

CAT. NO. CLP-INF-1

Certificate of Analysis

CLP Interference Check Standard 1

Lot # 626224

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.98+%	HNO_3, 5%	µg/mL ± 0.5%
			Aluminum 5000
			Calcium 5000
			Iron 2000
			Magnesium 5000

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: APR 0 2 2008
MSDS ATTACHED

1201

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6483-S	4/13/07	4/13/08	MDL Ver1	0.5 ml (6481-S)	↑ 50 ml w/DI	See # 6481-S	AccuSTD	6481-S	CT
6484-S	↓	↓	MDL Ver2	0.7 ml		↓	↓	↓	↓
6485-S			MDL Ver3	1.0 ml					
6486-S			MDL-Ver4	1.2 ml					
6487-S			MDL-Ver5	1.5 ml					
6488-S			MDL-Ver6	1.7 ml					
6489-S			MDL-Ver7	2.0 ml					
6490-S			MDL-Ver8	2.2 ml					
6491-S	↓	↓	MDL-Ver9	2.5 ml	↓	↓	↓	↓	↓
6492-S	4/12/07	4/12/08	MDL-Ver1	0.5 ml (6482-S)	↑ 50 ml w/DI	See # 6482-S	AccuSTD	6482-S	CT
6493-S	↓	↓	MDL-Ver2	0.7 ml	↓	↓	↓	↓	↓
6494-S			MDL-Ver3	1.0 ml					
6495-S			MDL-Ver4	1.2 ml					
6496-S			MDL-Ver5	1.5 ml					
6497-S			MDL-Ver6	1.7 ml					
6498-S			MDL-Ver7	2.0 ml					
6499-S			MDL-Ver8	2.2 ml					
6500-S	↓	↓	MDL-Ver9	2.5 ml	↓	↓	↓	↓	↓
6501-S	4/12/07	4/12/08	Ba-100 ppm	1 ml (6737-S)	↑ 10 ml w/DI	Ba-100 ppm	AccuSTD	6737-S	CT
6502-S	4/12/07	4/12/08	Sr-100 ppm	1 ml (6754-S)		Sr-100 ppm	↓	6754-S	CT
6503-S	4/16/07	4/16/08	3050B MDL Verification (100X)	See prep sheet in	Certificate	Book	AccuSTD	—	CT
6504-S	4/16/07	4/16/08	MDL-Ver1	0.5 ml (6503-S) + 0.5 ml	↑ 50 ml w/DI	See # 6503-S	AccuSTD	6503-S	CT
6505-S	↓	↓	MDL Ver2	0.7 ml Teflon chips		↓	↓	↓	↓
6506-S			MDL Ver3	1.0 ml (2379-R)	↓				

Reviewed _____

1203

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
PG6512-S	5/21/07	5/21/07	Hg Cal Curve (Soil)	0.0 mL (6589-S) 0.2 0.5 1.0 2.0 5.0 10.0	50 mL w/DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	AccuSTD	(6589-S)	DP
6593-S	5/21/07	5/21/07	ICV (Hg)	4.0 mL (6590-S)	50 mL w/DI	4.0 ppb	ULTRA	(6590-S)	DP
6594-S	5/21/07	5/21/07	CRA (Hg)	0.2 mL (6589-S)		0.2 ppb	AccuSTD	(6589-S)	DP
6595-S	5/21/07	5/21/07	CCV (Hg)	2.0 mL (6589-S)		2.0 ppb			DP
6596-S	5/21/07	5/21/07	As-100 ppm	1 mL (6336-S)	10 mL w/DI	As-100 ppm	AccuSTD	6336-S	CT
6597-S			Co-100 ppm	1 mL (6343-S)		Co-100		6343-S	
6598-S			Pb-100 ppm	1 mL (6345-S)		Pb-100		6345-S	
6599-S			Se-100 ppm	1 mL (6351-S)		Se-100		6351-S	
6600-S	5/21/07	5/21/07	CRI (FRONTIER) 100X	See prep sheet in Certificate Book		See Certificate Book	AccuSTD	—	CT
6601-S	5/21/07	5/21/07	CRI (FRONTIER) 1X	1 ml (6600-S) + 3 mL Conc. HCl + 3 mL Conc. HNO3	100 mL w/DI	See # 6600-S	AccuSTD Baker	6600-S C38065	CT
6602-S	5/22/07	5/22/07	Hg-50 ppb (Working STD)	0.5 mL (6637-S) + 2.0 mL conc. HNO3	200 mL w/DI	50 ppb	AccuSTD Baker	6637-S C38065	DP
6603-S	5/22/07	5/22/07	Hg-50 ppb (CRA STD)	0.5 mL (6638-S) + 2.0 mL conc. HNO3		50 ppb	ULTRA Baker	6638-S C38065	DP
6604-S	5/22/07	5/22/07	ICB/CCB	0.5 mL conc. HNO3		—			DP

Reviewed By: _____ Date: _____

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7

1204

Multielement Standard Preparation

Name of Standard: CRI (FRONTIER) 100X Standard Number: 6600-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.10	10.0
Antimony	AccuSTD	B5095031	6467-S	100	100	0.50	0.50
Arsenic	AccuSTD	B5115036	6596-S	100	100	0.50	0.50
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.20	2.00
Beryllium	AccuSTD	B5115083	6468-S	100	100	0.30	0.30
Cadmium	AccuSTD	B6115069	6469-S	100	100	0.10	0.10
Calcium	AccuSTD	B6065137	6341-S	10,000	100	0.10	10.0
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1.00
Cobalt	AccuSTD	B6125064	6597-S	100	100	2.50	2.50
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.10	1.00
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.50	5.00
Lead	AccuSTD	B6075090	6598-S	100	100	0.50	0.50
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	0.30	30.0
Manganese	AccuSTD	B6065026	6470-S	1,000	100	0.10	1.00
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.50	5.00
Potassium	AccuSTD	B5075123	6350-S	10,000	100	5.00	500.0
Selenium	AccuSTD	B6065129	6599-S	100	100	0.50	0.50
Silver	AccuSTD	B6125004	6446-S	1000	100	0.10	1.00
Sodium	AccuSTD	B6025117	6353-S	10,000	100	0.30	30.0
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.50	5.00
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.10	1.00
HNO3	J T Baker	C38065	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 5/21/07 Date Expires: 5/21/08

Prepared By: Cang Tran Reviewed By: _____

1205

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6616-S	5/29/07	5/29/08	CRI (PARSONS) 100X	See prep sheet in Certificate Book			AccuSTD	—	CT
6617-S	5/29/07	5/29/08	CRI (PARSONS) 1X	1 mL (6616-S) + 3 mL conc. HCl + 3 mL conc HNO3	100 mL w/DI	See # 6616-S	AccuSTD Baker	6616-S C38032 E09043	CT
6618-S	6/1/07	6/1/07	Hg-50 ppb (Working STD)	0.5 mL (6637-S) + 2.0 mL conc. HNO3	200 mL w/DI	50 ppb	AccuSTD Baker	6637-S C38065	DP
6619-S	6/1/07	6/1/07	Hg-50 ppb (CRA STD)	0.5 mL (6638-S) + 2.0 mL conc. HNO3		50 ppb	ULTRA Baker	6638-S C38065	DP
6620-S	6/1/07	6/1/07	ICB/CCB	0.5 mL conc. HNO3		—			DP
6621-S	6/1/07	6/1/07	Hg Cal Curve (Water)	0.0 mL (6618-S) 0.2 0.5 1.0 2.0 5.0 10.0	50 mL w/DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	AccuSTD	(6618-S)	DP
6622-S	6/1/07	6/1/07	ICV (Hg)	4.0 mL (6619-S)		4.0 ppb	ULTRA	(6619-S)	DP
6623-S	6/1/07	6/1/07	CRA (Hg)	0.2 mL (6618-S)		0.2	AccuSTD	(6618-S)	DP
6624-S	6/1/07	6/1/07	CCV (Hg)	2.0 mL (6618-S)		2.0			DP
6625-S	6/4/07	6/4/07	Hg-100 ppb (Working STD)	1.0 mL (6637-S) + 2.0 mL conc. HNO3	200 mL w/DI	100 ppb	AccuSTD Baker	6637-S C38065	DP
6626-S	6/4/07	6/4/07	Hg-100 ppb (CRA STD)	1.0 mL (6638-S) + 2.0 mL conc. HNO3		100 ppb	ULTRA Baker	6638-S C38065	DP
6627-S	6/4/07	6/4/07	ICB/CCB	0.5 mL conc. HNO3		—			DP

Reviewed By: _____ Date: _____

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9

1206

Multielement Standard Preparation

Name of Standard: CRI(PARSONS) 100X Standard Number: 6616-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.2	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	1.0	10
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.5	5
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.1	1
Beryllium	AccuSTD	B5115083	6468-S	100	100	0.5	0.5
Cadmium	AccuSTD	B6115069	6469-S	100	100	0.5	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.0	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.1	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.1	1
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.2	2
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.3	3
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.3	3
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.0	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.1	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.3	3
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.2	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	2.0	200
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.3	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.2	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.0	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.6	6
Tin	AccuSTD	B6015089	6356-S	1,000	100	0.5	5
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.1	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.2	2
HNO3	J T Baker	E09043	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 5/29/07 Date Expires: 5/29/08

Prepared By: Cang Tran Reviewed By: [illegible]

1207

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6711-S	7/2/07	7/2/07	ICB/CCB	0.5 ml conc. HNO_3	↑200 ml w/DI	—	Baker	C38065	DP
6712-S	7/2/07	7/2/07	Hg Cal Curve (Soil)	0.0 ml (6709-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	6709-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6713-S	7/2/07	7/2/07	ICV (Hg)	4.0 ml (6710-S)		4.0 ppb	Absolute	6710-S	DP
6714-S	7/2/07	7/2/07	CRA (Hg)	0.2 ml (6709-S)		0.2 ppb	AccuSTD	6709-S	DP
6715-S	7/2/07	7/2/07	CCV (Hg)	2.0 ml (6709-S)		2.0 ppb	↓	↓	DP
6716-S	7/2/07	7/2/08	Li-10,000 ppm	12.5 g (6544-S)	↑200 ml	10,000 ppm	High Purity	6544-S	CT
				+ 10 ml Conc. HNO_3	w/DI		Baker	E09043	
6717-S	7/2/07	11/24/07	ICVH (ICAP)	1 ml (5557-S) Ca	↑200 ml	Ca-50 ppm	High Purity	5557-S	CT
				1 ml (5558-S) Cr	w/DI	Cr-5		5558-S	
				2 ml (5559-S) Fe		Fe-10		5559-S	
				1 ml (5560-S) Na		Na-50		5560-S	
				2 ml (5561-S) Pb		Pb-10		5561-S	
				+ 10 ml Conc. HCl			Baker	C09074	
				+ 6 ml Conc. HNO_3			↓	E09043	
DP 7/26/07 6718-S	Hg Calibration								
6718-S	7/2/07	7/2/07	ICV (Hg)	4.0 ml (6710-S)	↑50 ml DI	4.0 ppb	Absolute	6710-S	DP
6719-S	7/2/07	7/2/07	CRA (Hg)	0.2 ml (6709-S)		0.2 ppb	AccuSTD	6709-S	DP
6720-S	7/2/07	7/2/07	CCV (Hg)	2.0 ml (6709-S)	↓	2.0 ppb	↓	↓	DP

Reviewed By: _____

Date: _____

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18

1210

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6691-S	6/27/07	6/27/07	ICV (Hg)	4.0 ml (6688-S)	↑50 ml w/DI	4.0 ppb	Absolute	6688-S	DP
6692-S	6/27/07	6/27/07	CRA (Hg)	0.2 ml (6687-S)		0.2 ppb	AccuSTD	6687-S	DP
6693-S	6/27/07	6/27/07	CCV (Hg)	2.0 ml (6687-S)	↓	2.0 ppb	↓	↓	DP
6694-S	6/27/07	6/27/07	Hg Cal Curve (Water)	0.0 ml (6687-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	6687-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6695-S	6/27/07	6/27/07	ICV (Hg)	4.0 ml (6688-S)	↑50 ml w/DI	4.0 ppb	Absolute	6688-S	DP
6696-S	6/27/07	6/27/07	CRA (Hg)	0.2 ml (6687-S)		0.2 ppb	AccuSTD	6687-S	DP
6697-S	6/27/07	6/27/07	CCV (Hg)	2.0 ml (6687-S)	↓	2.0 ppb	↓	↓	DP
6698-S	6/27/07	6/27/08	Sn-50 ppm	0.5 ml (6356-S)	↑10 ml	Sn-50 ppm	AccuSTD	6356-S	CT
				+ 0.5 ml conc. HNO_3	w/DI		Baker	E09043	
6699-S	6/27/07	3/20/08	Low Level Cal	1 ml (6433-S)	↑100 ml	See #	AccuSTD	6433-S	
			STD-W	0.1 ml (6698-S)	w/DI	6433-S	↓	6698-S	
				+ 5 ml Conc. HCl			Baker	C09074	
				+ 3 ml Conc HNO_3			↓	E09043	
6700-S	6/27/07	4/2/08	ICSA	20 ml (6479-S)	↑200 ml	See #	High Purity	6479-S	CT
				+ 10 ml Conc. HCl	w/DI	6479-S	Baker	C09074	
				+ 6 ml Conc. HNO_3			↓	E09043	

Reviewed By: _____

Date: _____

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16

1208

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6721-S	7/2/07	7/2/07	Hg Cal Curve (Water)	0.0 ml (6709-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	6709-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6722-S	7/3/07	7/3/08	Sb-100 ppm	1 ml (6375-S)	↑10 ml	Sb-100 ppm	AccuSTD	6375-S	CT
6723-S			As-100 ppm	1 ml (6376-S)	w/DI	As-100		6376-S	
6724-S			Be-100 ppm	1 ml (6378-S)		Be-100		6378-S	
6725-S			Cd-100 ppm	1 ml (6340-S)		Cd-100		6340-S	
6726-S			Pb-100 ppm	1 ml (6345-S)		Pb-100		6345-S	
6727-S	7/3/07	7/3/08	CRI (Edison) 100X	See prep sheet in Certificate Book			AccuSTD	—	CT
6728-S	7/3/07	7/3/08	CRI (Edison)	1 ml (6727-S)	↑100 ml	See #	AccuSTD	6727-S	CT
				+ 5 ml Conc. HCl	w/DI	6727-S	Baker	C09074	
				+ 3 ml Conc. HNO_3			↓	E09043	

Reviewed By: _____

Date: _____

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19

1211

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6701-S	6/27/07	7/28/07	ICSAB	20 ml (6479-S)	↑200 ml	See #	High Purity	6479-S	CT
				2 ml (5712-S)	w/DI	6479-S	↓	5712-S	
				2 ml (6431-S)		5712-S	AccuSTD	6431-S	
				+ 10 ml Conc. HCl		6431-S	Baker	C09074	
				+ 6 ml Conc. HNO_3			↓	E09043	
6702-S	6/29/07	6/29/07	Hg-50 ppb (Working STD)	0.5 ml (6037-S)	↑200 ml	50 ppb	AccuSTD	6037-S	DP
				+ 2.0 ml conc. HNO_3	w/DI		Baker	C38065	
6703-S	6/29/07	6/29/07	Hg-50 ppb (Ref STD)	0.5 ml (5487-S)		50 ppb	Absolute	5487-S	DP
				+4.0 ml conc. HNO_3			Baker	C38065	
6704-S	6/29/07	6/29/07	ICB/CCB	0.5 ml conc. HNO_3		—			DP
6705-S	6/29/07	6/29/07	Hg Cal Curve (Water)	0.0 ml ~~conc~~ (6702-S)	↑50 ml w/DI	0.0 ppb ~~AccuSTD~~	AccuSTD	6702-S	DP
				0.2 DP 7/29/07		0.2 ppb			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6706-S	6/29/07	6/29/07	ICV (Hg)	4.0 ml (6703-S)	↑50 ml w/DI	4.0 ppb	Absolute	6703-S	DP
6707-S	6/29/07	6/29/07	CRA (Hg)	0.2 ml (6702-S)		0.2 ppb	AccuSTD	6702-S	DP
6708-S	6/29/07	6/29/07	CCV (Hg)	2.0 ml (6702-S)	↓	2.0 ppb	↓	↓	DP
6709-S	7/2/07	7/2/07	Hg-50 ppb (Working STD)	0.5 ml (6037-S)	↑200 ml w/DI	50 ppb	AccuSTD	6037-S	DP
				+ 2.0 ml conc. HNO_3			Baker	C38065	
6710-S	7/2/07	7/2/07	Hg-50 ppb (REF STD)	0.5 ml (5487-S)		50 ppb	Absolute	5487-S	DP
				+4.0 ml conc. HNO_3			Baker	C38065	

Reviewed By: _____

Date: _____

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17

1209

Multielement Standard Preparation

Name of Standard: CRI (EDISON) 100X Standard Number: 6727-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.100	10
Antimony	AccuSTD	B5095031	6722-S	100	100	0.600	0.6
Arsenic	AccuSTD	B5115036	6723-S	100	100	0.500	0.5
Barium	AccuSTD	B5025074	6337-S	1,000	100	1.000	10
Beryllium	AccuSTD	B5115083	6724-S	100	100	0.100	0.1
Cadmium	AccuSTD	B6115069	6725-S	100	100	0.400	0.4
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.000	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.100	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.500	5
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.100	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.500	5
Lead	AccuSTD	B6075090	6726-S	100	100	0.500	0.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.000	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.500	5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.500	5
Potassium	AccuSTD	B5075123	6350-S	10,000	100	5.000	500
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.100	1
Silver	AccuSTD	B6125004	6446-S	1,000	100	0.100	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.000	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.200	2
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.500	5
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.200	2
HNO3	J T Baker	E09043	-	Conc.	100	6.0	6%

Comment:

Date Prepared: 7/3/07 Date Expires: 7/3/08

Prepared By: Cangtran Reviewed By: [illegible]

1212

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6761-S	7/16/07	7/16/07	Hg Cal Curve (Acker)	0.0 mL (6761-S)	50 mL w/DI	0.0 ppb	AccuSTD	6761-S	CT
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				3.0		2.0			
				5.0		5.0			
				10.0		10.0			
6765-S	7/16/07	7/16/07	ICV (Hg)	4.0 mL (6762-S)	50 mL w/DI	4.0 ppb	Absolute	6762-S	CT
6766-S	7/16/07	7/16/07	CRA (Hg)	0.2 mL (6761-S)		0.2 ppb	AccuSTD	6761-S	CT
6767-S	7/16/07	7/16/07	CCV (Hg)	2.0 mL (6761-S)		2.0 ppb	AccuSTD	6761-S	CT
6968-S	7/17/07	7/10/08	ICSB (ICAP)	Stock, Received	100 mL	See # 6768-S	High Purity	625441	CT
6969-S	7/18/07	7/18/07	STD0 GFAA	10 mL (6714-S) + 10 mL DI	20 mL	TL-10 ppb	AccuSTD	6714-S	CT
6970-S			STD25	5 mL (6969-S) + 5 mL DI	10	25		6969-S	
6971-S			STD10	2 mL (6969-S) + 8 mL DI	10	10		6969-S	
6972-S			STD2	2 mL (6971-S) + 8 mL DI	10	2		6971-S	
6973-S	7/18/07	4/2/08	ICAB	2.0 mL (6979-S)	200 mL	See #	High Purity	6979-S	CT
				2 mL (6968-S)		6479-S		6768-S	
				2 mL (6971-S)		6968-S		6431-S	
				+ 10 mL Conc. HCl		6421-S	Baker	C09974	
				+ 6 mL Conc. HNO3				E01042	

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Reviewed By: ____ Date: ____

23

1213

6768-S
Received - 7/17/07
Opened - 7/17/07
Expire - 7/10/08 CT 7/17/07

HIGH-PURITY STANDARDS

P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

CAT. NO. ANALCS-R

Certificate of Analysis

CLP Analyte Standard-Revised

Lot # 625441

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.994%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Exp Date: JUL 10 2008

MSDS ATTACHED

Theodore C. Rains, Ph.D.
President

1214

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6796-S	7/27/07	7/24/08	QC Spike Solution A	Stock, Received	50 mL	See # 6796-S	High Purity	07205 12	CT
6797-S	7/27/07	7/24/08	QC Spike Solution B			6797-S		07205 13	

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Reviewed By: ____ Date: ____

26

1215

6796-5
Received - 7/27/07
Opened - 7/27/07
Expire - 7/24/08

HIGH-PURITY STANDARDS
P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

Certificate of Analysis

SM-108-001 (SPIKE)
Solution A
Lot # 0720512

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.98+%	HNO_3, 2%	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: JUL 2 4 2008
MSDS ATTACHED

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SM-108-001 (SPIKE)
Solution A
Element List
(µg/mL)

Aluminum	100
Arsenic	20
Barium	20
Beryllium	20
Boron	50
Cadmium	20
Calcium	1000
Chromium	20
Cobalt	20
Copper	20
Iron	100
Lead	20
Magnesium	1000
Manganese	20
Nickel	20
Potassium	1000
Selenium	20
Sodium	1000
Strontium	20
Thallium	20
Vanadium	20
Zinc	20

6797-5
Received - 7/27/07
Opened - 7/27/07
Expire - 7/24/08

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FAX: (843) 767-7906

Certificate of Analysis

SM-108-001 (SPIKE)
Solution B
Lot # 0720513

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals Salts or Oxides	99.99+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5%

Antimony	20
Molybdenum	20
Silver	5
Tin	20
Titanium	20

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: JUL 2 4 2008
MSDS ATTACHED

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46

Life Science Laboratories, Inc. Trace Metals Section Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7014-S	11/8/07	11/8/09	TL - 1 ppm	0.1 mL (6355-S) + 3 mL conc HNO3	100 mL w/ DI	TL - 1 ppm	AccuSTD	6355-S	CT
7015-S	11/8/07	11/8/08	MOL Verif (Tl)	0.1 mL (7014-S)	50 mL w/ DI	2 ppb	AccuSTD	7014-S	CT
7016-S	11/8/07	11/8/08	TCLP Spike	1 mL (6362-S) Ag	100 mL w/ DI	Ag - 10 ppm	AccuSTD	6312-S	CT
7016-S	11/8/07	11/8/08	(ICAP)	1 mL (6262-S) Ba		Ba - 100		6262-S	
				2 mL (6740-S) Cd		Cd - 20		6740-S	
				1 mL (6352-S) Cr		Cr - 100		6352-S	
				1 mL (6361-S) As		As - 100		6361-S	
				1 mL (6265-S) Pb		Pb - 100		6265-S	
				2 mL (6351-S) Se		Se - 20		6351-S	
				1 mL (6355-S) Sb		Sb - 10		6355-S	
				2 mL (6359-S) Zn		Zn - 20		6359-S	
				+ 10 mL conc HNO3			Baker	E22071	
				+ 10 mL conc. HCl				E21053	
7017-S	11/8/07	11/8/08	ICSA	Stock, Received 250 mL	250 mL	Soz #	High Purity	0727808	CT
7018-S	11/8/07	N/A	Li_2CO_3	Stock, Received 50 g	50 g	7017-S		0720207	CT
						—			

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Reviewed By: _____
Date: _____

7018-S
Received - 11/8/07
Opened - 11/8/07
Expire - N/A

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HIGH-PURITY STANDARDS

CAT. NO. LI CO-S

Certificate of Analysis

Lithium Carbonate

99.999%

Lot # 0730507

All concentrations are quoted in parts per million by weight, and the analysis technique employed was ICP, unless otherwise noted below. Unless otherwise stated, the specification (total metallic impurities) relates to impurities as detected.

Iron	<1 ppm	Copper	<0.5 ppm
Sodium	<1 ppm	Potassium	<0.5 ppm
Aluminum	<0.5 ppm	Lead	<0.5 ppm
Calcium	<0.5 ppm	Silicon	<0.5 ppm
Chromium	<0.5 ppm	Magnesium	<0.5 ppm

Theodore C. Rains, Ph.D.
President

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1220

7017-S
Received - 11/8/07
Opened - 11/8/07
Expire - 11/2/08

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HIGH-PURITY STANDARDS

CAT. NO. CLP-INF-1

Certificate of Analysis

CLP Interference Check Standard 1

Lot # 0727808

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.98+%	HNO_3, 5%	µg/mL ± 0.5% Aluminum 5000 Calcium 5000 Iron 2000 Magnesium 5000

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: NOV 0 2 2008
MSDS ATTACHED

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1221

ENVIRONMENTAL EXPRESS

CAT. NO. HP10M9-1

Certificate of Analysis

Calcium

Lot # 0728836

Source	Source Purity	Matrix	Density g/mL @ 20.7°C	Standard Concentration
Calcium Carbonate	99.999%	HNO_3, 4%	1.034	10.00 ± 0.03 mg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Calcium solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<5	Mg	<0.5	Al	<0.1	Si	<1	K	<1
Ca	M	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<0.1	Mn	<0.1	Fe	<1	Co	<0.05
Ni	<0.02	Cu	<0.1	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02
Sr	<10	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02
Ag	<0.02	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.02	Te	<0.02	Cs	<0.02	Ba	<0.02
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.03
Bi	<0.02	Th	<0.02	U	<0.1										

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3109a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
Laboratory Director

Exp. Date JUL 2008
MSDS ATTACHED

7083-S
Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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ENVIRONMENTAL EXPRESS

CAT. NO. HP100012-1

Certificate of Analysis

Chromium

Lot # 0733812

Source	Source Purity	Matrix	Density g/mL @ 22.9°C	Standard Concentration
Chromium Metal	99.999%	HNO_3, 2%	1.007	1000 ± 3 µg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Chromium solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<1	Mg	<0.5	Al	<0.1	Si	<1	K	<1
Ca	<0.1	Sc	<0.02	Ti	<1	V	<0.05	Cr	M	Mn	<0.1	Fe	<1	Co	<0.05
Ni	<0.02	Cu	<0.1	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02
Sr	<0.02	Y	<0.02	Zr	<0.2	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02
Ag	<5	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.3	Te	<0.02	Cs	<0.02	Ba	<0.02
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.5
Bi	<0.02	Th	<0.02	U	<0.1										

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3112a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
Laboratory Director

Exp. Date JUL 2009
MSDS ATTACHED

7084-S
Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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ENVIRONMENTAL EXPRESS

CAT. NO. HP100026-1

Certificate of Analysis

Iron

Lot # 0730428

Source	Source Purity	Matrix	Density g/mL @ 22.4°C	Standard Concentration
Iron Metal	99.995+%	HNO_3, 2%	1.010	1000 ± 3 µg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Iron solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<1	Mg	<0.5	Al	<0.1	Si	<1	K	<1
Ca	<5	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<10	Mn	<20	Fe	M	Co	<20
Ni	<10	Cu	<3	Zn	<10	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02
Sr	<0.02	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02
Ag	<0.02	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.02	Te	<0.02	Cs	<0.02	Ba	<0.02
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.05
Bi	<0.02	Th	<0.02	U	<0.1										

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3126a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

JUL 2009

Exp. Date

MSDS ATTACHED

Theodore C. Rains, Ph.D.
Laboratory Director

7085-5

Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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ENVIRONMENTAL EXPRESS

CAT. NO. HP10M52-1

Certificate of Analysis

Sodium

Lot # 0732458

Source	Source Purity	Matrix	Density g/mL @ 21.3°C	Standard Concentration
Sodium Carbonate	99.995%	HNO_3, 1%	1.024	10.00 ± 0.03 mg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Sodium solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	M	Mg	<30	Al	<0.1	Si	<1	K	<20
Ca	<70	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<0.1	Mn	<0.1	Fe	<1	Co	<0.05
Ni	<0.02	Cu	<0.1	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02
Sr	<0.02	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02
Ag	<0.02	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.02	Te	<0.02	Cs	<0.02	Ba	<0.02
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.05
Bi	<0.02	Th	<0.02	U	<0.1										

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3152a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

JUL 2009

Exp. Date

MSDS ATTACHED

Theodore C. Rains, Ph.D.
Laboratory Director

7086-5

Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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1225

ENVIRONMENTAL EXPRESS

CAT. NO. HP100028-1

Certificate of Analysis

Lead

Lot # 0728504

Source	Source Purity	Matrix	Density g/mL @ 21.1°C	Standard Concentration
Lead Metal	99.999+%	HNO_3, 2%	1.011	1000 ± 3 µg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Lead solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<1	Mg	<0.5	Al	<0.3	Si	<1	K	<1
Ca	<0.1	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<0.1	Mn	<0.1	Fe	<1	Co	<0.05
Ni	<0.02	Cu	<0.1	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02
Sr	<0.02	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02
Ag	<0.3	Cd	<0.5	In	<0.02	Sn	<1	Sb	<0.5	Te	<0.02	Cs	<0.02	Ba	<0.02
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<2	Pb	M
Bi	<1	Th	<0.02	U	<0.1										

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3128.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

JUL 2009

Exp. Date

MSDS ATTACHED

Theodore C. Rains, Ph.D.
Laboratory Director

7087-5

Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7082-5	12/12/07	12/12/07	Hg Cal Curve (WATER)	0.0 mL (7087-5)	50 mL w/ DI	0.0 ppb	Acu-Trace	7087-5	CT
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7083-5	12/14/07	7/31/09	Ca - 10,000 ppm	Stock, received 100 mL	100 mL	10,000 ppm	Environmental Express	0728726	CT
7084-5			Cr - 1000 ppm			1000 ppm		0733812	
7085-5			Fe - 1000 ppm			1000 ppm		0730428	
7086-5			Na - 10,000 ppm			10,000 ppm		0732458	
7087-5			Pb - 1000 ppm			1000 ppm		0728504	
7089-5	12/17/07	12/17/08	ICP (ICAP)	1 mL (7083-5) - Ca	200 mL w/ DI	Ca - 50 ppm	E. Express	7083-5	CT
				1 mL (7084-5) - Cr				7084-5	
				2 mL (7085-5) - Fe		Cr - 5 ppm		7085-5	
				1 mL (7086-5) - Na		Fe - 10		7086-5	
				2 mL (7087-5) - Pb		Na - 50		7087-5	
				+ 6 mL conc HNO3		Pb - 10		E26035	
				+ 20 mL DI H2O			Baker	2630-R	

Reviewed By: _____

Date: _____

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1227

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7159-S	1/10/08	1/10/09	CRI (PQL) (ICAP)	2 ml (7158-S) + 6 ml Conc. HNO3 + 20 ml (1:1) HCl	↗ 200 ml w/ DI	See # 7158-S	AccuSTD Baker ↓	7158-S E26035 2630-R	CT ↓
7160-S	1/15/08	2/15/08	TCLP Hg SPK SOLN	2.5 ml (5487-S) + 5 ml conc HNO3	↗ 50 ml w/ DI	1 ppm	ABSOLUTE	5487-S	PR
7161-S	1/16/08	1/16/08	Hg - 50 ppb (working STD)	0.5 ml (6037-S) + 4 ml Conc. HNO3	↗ 200 ml w/ DI	50 ppb	AccuSTD Baker	6037-S E26035	CT
7162-S	1/16/08	1/16/08	Hg - 50 ppb (REF STD)	0.5 ml (5487-S) + 4 ml Conc. HNO3	↓	50 ppb	Absolute Baker	5487-S E26035	↓
7163-S	1/16/08	1/16/08	ICB / CCB	0.5 ml Conc. HNO3	↓	—	Baker	E26035	↓
7164-S	1/16/08	1/16/08	Hg Cal Curve (WATER)	0.0 ml (7161-S) 0.2 0.5 1.0 2.0 5.0 10.0	↗ 50 ml w/ DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	AccuSTD	7161-S	CT
7165-S	1/16/08	1/16/08	ICV (Hg)	4.0 ml (7162-S)	↗ 50 ml w/ DI	4.0 ppb	Absolute	7162-S	CT
7166-S	↓	↓	CRA (Hg)	0.2 ml (7161-S)	↓	0.2 ppb	AccuSTD	7161-S	↓
7167-S			CCV (Hg)	2.0 ml (7161-S)		2.0 ppb	↓	↓	

Reviewed By: _____

Date: _____

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7145-S	1/3/08	1/30/08	CCV Hg ↓ (SOIL)	2.0 ml (7139-S)	↗ 50 ml w/ DI	2.0 ppb	ACCUSTD	7139-S	DR
7146-S	1/3/08	1/3/08	Hg cal std'c (WATER)	0.0 ml (7139-S) 0.2 0.5 1.0 2.0 5.0 10.0	↗ 50 ml w/ DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	ACCUSTD	7139-S	DR
7147-S	1/3/08	1/3/08	CCV Hg (WATER)	4.0 ml (7140-S)	↗ 50 ml w/ DI	4.0 ppb	ABSOLUTE	7140-S	DR
7148-S	1/3/08	1/3/08	CRA Hg (WATER)	0.2 ml (7139-S)	↗ 50 ml w/ DI	0.2 ppb	ACCUSTD	7139-S	DR
7149-S 7150-S	1/3/08 ↓	1/3/08 ↓	CCV Hg	2.0 ml (7139-S) ↓ ↓ ↓	↗ 50 ml w/ DI	2.0 ppb ↓	ACCUSTD ↓	7139-S ↓	DR ↓
7151-S	1/3/08	7/3/08	ICV (ICAP)	2.0 ml (6796-S) 2.0 ml (6797-S) + 6 ml Conc. HNO3 + 20 ml (1:1) HCl	↗ 200 ml w/ DI	See # 6796-S 6797-S	High Purity Baker ↓	6796-S 6797-S E26035 2630-R	CT ↓
7152-S	1/3/08	1/3/09	BLANK/ICB/CCB (ICAP)	100 ml Conc HCl + 60 ml Conc HNO3	↗ 2 L w/ DI	5% 3%	Baker ↓	C40043 E27027	CT

Reviewed By: _____

Date: _____

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7153-S	1/3/08	1/3/09	STD3 (ICAP)	See prep sheet in metals	certificate	book	AccuSTD	—	CT
7154-S	1/3/08	1/3/09	STD2 (ICAP)	0.4 ml (6364-S) Fe 0.4 ml (6365-S) Pb 2 ml (6342-S) Cr 2 ml (6341-S) Ca 2 ml (6353-S) Na + 6 ml Conc. HNO3 + 20 ml (1:1) HCl	↗ 200 ml w/ DI	Fe - 20 ppm Pb - 20 Cr - 10 Ca - 100 Na - 100	AccuSTD Baker ↓	6364-S 6365-S 6342-S 6341-S 6353-S E26035 2630-R	CT ↓
7155-S	1/3/08	1/3/09	STD1 (ICAP)	1 ml (6350-S) K + 15 ml Conc. HNO3 + 50 ml (1:1) HCl	↗ 500 ml w/ DI	K - 20 ppm	AccuSTD Baker ↓	6350-S E26035 2630-R	CT ↓
7156-S	1/3/08	1/3/09	CCVH (ICAP)	5 ml (6341-S) Ca 5 ml (6342-S) Cr 1 ml (6364-S) Fe 5 ml (6353-S) Na 1 ml (6365-S) Pb + 30 ml Conc. HNO3 + 100 ml (1:1) HCl	↗ 1000 ml w/ DI	Ca - 50 ppm Cr - 5 Fe - 10 Na - 50 Pb - 10	AccuSTD Baker ↓	6341-S 6342-S 6364-S 6353-S 6365-S E26035 2630-R	CT ↓
7157-S	1/10/08	1/10/09	CCV (ICAP)	See prep sheet in metals	certificate	book	AccuSTD	—	CT
7158-S	1/10/08	1/10/09	CRI (PQL) 100X (ICAP)	See prep sheet in metals	certificate	book	AccuSTD	—	CT

Reviewed By: _____

Date: _____

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Multielement Standard Preparation

Name of Standard: STD3 Standard Number: 7153-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	500	0.5	10
Antimony	AccuSTD	B5095031	6335-S	1,000	500	0.5	1
Arsenic	AccuSTD	B5115036	6336-S	1,000	500	0.5	1
Barium	AccuSTD	B5025074	6337-S	1,000	500	0.5	1
Beryllium	AccuSTD	B5115083	6338-S	1,000	500	0.5	1
Boron	AccuSTD	B6085025	6339-S	1,000	500	0.5	1
Cadmium	AccuSTD	B6115069	6340-S	1,000	500	0.5	1
Calcium	AccuSTD	B6065137	6341-S	10,000	500	1.0	20
Chromium	AccuSTD	B6065124	6342-S	1,000	500	0.5	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	500	0.5	1
Copper	AccuSTD	B6095096	6360-S	1,000	500	0.5	1
Iron	AccuSTD	B6035048	6344-S	1,000	500	1.0	2
Lead	AccuSTD	B6075090	6345-S	1,000	500	0.5	1
Magnesium	AccuSTD	B5015118	6346-S	10,000	500	1.0	20
Manganese	AccuSTD	B6065026	6347-S	1,000	500	0.5	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	500	0.5	1
Nickel	AccuSTD	B4065040	6349-S	1,000	500	0.5	1
Selenium	AccuSTD	B6065129	6351-S	1,000	500	0.5	1
Silver	AccuSTD	B6125004	6446-S	500	500	0.5	0.5
Sodium	AccuSTD	B6025117	6353-S	10,000	500	1.0	20
Strontium	AccuSTD	B5035151	6354-S	1,000	500	0.5	1
Thallium	AccuSTD	B6025036	6355-S	1,000	500	0.5	1
Tin	AccuSTD	B6015089	6356-S	1,000	500	0.5	1
Titanium	AccuSTD	B5085113	6357-S	1,000	500	0.5	1
Vanadium	AccuSTD	B7025121	6358-S	1,000	500	0.5	1
Zinc	AccuSTD	B6015140	6359-S	1,000	500	0.5	1
HNO3	J T Baker	E26035	-	Conc.	500	15.0	3%
HCl	J T Baker	2630-R	-	1+1	500	50.0	5%

Comment: _____

Date Prepared: 1/3/08 Date Expires: 1/3/09

Prepared By: [signature] Reviewed By: [signature]

Multielement Standard Preparation

Name of Standard: CCV Standard Number: 7157-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	1,000	0.5	5
Antimony	AccuSTD	B5095031	6335-S	1,000	1,000	0.5	0.5
Arsenic	AccuSTD	B5115036	6336-S	1,000	1,000	0.5	0.5
Barium	AccuSTD	B5025074	6337-S	1,000	1,000	0.5	0.5
Beryllium	AccuSTD	B5115083	6338-S	1,000	1,000	0.5	0.5
Boron	AccuSTD	B6085025	6339-S	1,000	1,000	0.5	0.5
Cadmium	AccuSTD	B6115069	6340-S	1,000	1,000	0.5	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	1,000	1.0	10
Chromium	AccuSTD	B6065124	6342-S	1,000	1,000	0.5	0.5
Cobalt	AccuSTD	B6125064	6343-S	1,000	1,000	0.5	0.5
Copper	AccuSTD	B6095096	6360-S	1,000	1,000	0.5	0.5
Iron	AccuSTD	B6035048	6344-S	1,000	1,000	1.0	1
Lead	AccuSTD	B6075090	6345-S	1,000	1,000	0.5	0.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	1,000	1.0	10
Manganese	AccuSTD	B6065026	6347-S	1,000	1,000	0.5	0.5
Molybdenum	AccuSTD	B6065081	6348-S	1,000	1,000	0.5	0.5
Nickel	AccuSTD	B4065040	6349-S	1,000	1,000	0.5	0.5
Potassium	AccuSTD	B5075123	6350-S	10,000	1,000	1.0	10
Selenium	AccuSTD	B6065129	6351-S	1,000	1,000	0.5	0.5
Silver	AccuSTD	B6125004	6446-S	500	1,000	0.5	0.25
Sodium	AccuSTD	B6025117	6353-S	10,000	1,000	1.0	10
Strontium	AccuSTD	B5035151	6354-S	1,000	1,000	0.5	0.5
Thallium	AccuSTD	B6055036	6355-S	1,000	1,000	0.5	0.5
Tin	AccuSTD	B6015089	6356-S	1,000	1,000	0.5	0.5
Titanium	AccuSTD	B5085113	6357-S	1,000	1,000	0.5	0.5
Vanadium	AccuSTD	B7025121	6358-S	1,000	1,000	0.5	0.5
Zinc	AccuSTD	B6015140	6359-S	1,000	1,000	0.5	0.5
HNO3	J T Baker	E26035	-	Conc.	1,000	30.0	3%
HCl	J T Baker	2630-R	-	1+1	1,000	100.0	5%

Comment:

Date Prepared: 1/10/08 Date Expires: 1/10/09

Prepared By: Cang Tran Reviewed By: [illegible]

Multielement Standard Preparation

Name of Standard: CRI(PQL) 100X Standard Number: 7158-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.1	10
Antimony	AccuSTD	B5095031	6335-S	1,000	100	0.6	6
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.1	1
Barium	AccuSTD	B5025074	6337-S	1,000	100	1.0	10
Beryllium	AccuSTD	B5115083	6338-S	1,000	100	0.1	1
Boron	AccuSTD	B6085025	6339-S	1,000	100	0.5	5
Cadmium	AccuSTD	B6115069	6340-S	1,000	100	0.1	1
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.0	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.1	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.5	5
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.1	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.5	5
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.1	1
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.0	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.5	5
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.5	5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.5	5
Potassium	AccuSTD	B5075123	6350-S	10,000	100	5.0	500
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.1	1
Silver	AccuSTD	B6125004	6446-S	500	100	0.2	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.0	100
Strontium	AccuSTD	B5035151	6354-S	1,000	100	0.5	5
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.2	2
Tin	AccuSTD	B6015089	6356-S	1,000	100	0.5	5
Titanium	AccuSTD	B5085113	6357-S	1,000	100	0.5	5
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.5	5
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.2	2
HNO3	J T Baker	E26035	-	Conc.	100	6.0	6%

Comment:

Date Prepared: 1/10/08 Date Expires: 1/10/09

Prepared By: Cang Tran Reviewed By: [illegible]

HIGH-PURITY STANDARDS

P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

7186-S
Received - 1/28/08
Opened - 1/28/08
Expire - 1/2/09

CAT.NO. ICP-SSWS-M

Certificate of Analysis

Multi-Element Spiking Solution 1 for Water and Soil Samples-Modified

Lot # 0731305

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.994%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: JAN 0 2 2009
MSDS ATTACHED

www.highpuritystandards.com

Multi-Element Spiking Solution 1 for Water and Soil Samples-Modified

Element List

(µg/mL)

Aluminum	200
Antimony	50
Arsenic	4
Barium	200
Beryllium	5
Cadmium	5
Chromium	20
Cobalt	50
Copper	25
Iron	100
Lead	2
Manganese	50
Nickel	50
Selenium	1
Silver	5
Thallium	5
Vanadium	50
Zinc	50

HIGH-PURITY STANDARDS

7187-S
Received - 1/28/08
Opened - 1/28/08
Expire - 1/2/09

P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

CAT. NO. CRDL

Certificate of Analysis

CRDL Detection Limit Standard

Lot # 0701208

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.99+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains

Theodore C. Rains, Ph.D.
President

Exp Date: JAN 0 2 2009
MSDS ATTACHED

www.highpuritystandards.com

CRDL Detection Limit Standard

Element List

(µg/mL)

Antimony	120
Arsenic	20
Beryllium	10
Cadmium	10
Chromium	20
Cobalt	100
Copper	50
Lead	6
Manganese	30
Nickel	80
Selenium	10
Silver	20
Thallium	20
Vanadium	100
Zinc	40

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook — 63

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7177-S	1/24/08	1/24/08	Hg - 50 ppb (REF STD)	0.5 mL (5487-S) + 4 mL Conc. HNO3	200 mL w/ DI	50 ppb	Absolute	5487-S	CT
7180-S	1/24/08	1/24/08	ICB/CCB	0.5 mL Conc. HNO3		—	Baker	E26035	
7181-S	1/24/08	1/24/08	Hg Cal Curve (WATER)	0.0 mL (7178-S)	50 mL w/ DI	0.0 ppb	AccuSTD	7178-S	CT
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7182-S	1/24/08	1/24/08	ICV (Hg)	4.0 mL (7179-S)	50 mL w/ DI	4.0 ppb	Absolute	7179-S	CT
7183-S			CRA (Hg)	0.2 mL (7178-S)		0.2 ppb	AccuSTD	7178-S	
7184-S			CCV (Hg)	2.0 mL (7178-S)		2.0 ppb			
7185-S			CCV (Hg)	2.0 mL (7178-S)		2.0 ppb			
7186-S	1/28/08	1/2/09	CLP Spike	Stock, Received 100 mL	100 mL	See # 7186-S	High Purity	0731205	CT
7187-S	1/28/08	1/2/09	CRDL			7187-S		0701208	

Reviewed By: _____
Date: _____

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook — 75

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7308-S	3/24/08	3/24/08	Hg - 50 ppb (working STD)	0.5 mL (7221-S) + 4 mL Conc HNO3	200 mL w/ DI	50 ppb	AccuSTD	7221-S	CT
7309-S			Hg - 50 ppb (REF STD)	0.5 mL (7222-S) + 4 mL Conc HNO3		50 ppb	Baker	E27027	
7310-S			ICB/CCB	0.5 mL Conc. HNO3		—	Absolute	7222-S	CT
							Baker	E27027	
7311-S	3/24/08	3/24/08	Hg Cal Curve (WATER)	0.0 mL (7208-S)	50 mL w/ DI	0.0 ppb	AccuSTD	7208-S	CT
				0.2 mL		0.2			
				0.5 mL		0.5			
				1.0 mL		1.0			
				2.0 mL		2.0			
				5.0 mL		5.0			
				10.0 mL		10.0			
7312-S	3/24/08	3/24/08	ICV (Hg)	4.0 mL (7209-S)	50 mL w/ DI	4.0 ppb	Absolute	7209-S	CT
7313-S			CRA (Hg)	0.2 mL (7208-S)		0.2	AccuSTD	7208-S	
7314-S			CCV (Hg)	2.0 mL		2.0			
7315-S	3/25/08	3/25/09	Low Level Cal Std	See prep sheet in metals certificate book			AccuSTD	—	CT
7316-S	3/25/08	3/25/09	ICB/CCB					—	CT
7317-S	3/25/08	3/25/09	Low Level Cal Std (Hg)	1 mL (7315-S)	100 mL w/ DI	See # 7315-S	AccuSTD	7315-S	CT
							Baker	E29027	
			(IX)	+ 3 mL Conc. HNO3 + 10 mL (1:1) HCl				2620-R	

Reviewed By: _____
Date: _____

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Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - S (100X) Standard Number: 7315-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	1.00	10
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.50	5
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.10	1
Beryllium	AccuSTD	B5115083	6338-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.00	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.10	1
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.20	2
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.30	3
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.30	3
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.30	3
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	2.00	200
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.60	6
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	E27027	-	Conc.	100	6.0	6%

Comment:

Date Prepared: 3/25/08 Date Expires: 3/25/09

Prepared By: Cang Tran Reviewed By: M Tachowski

1240

Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - W (100X) Standard Number: 7316-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	0.50	5
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.30	3
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.50	5
Beryllium	AccuSTD	B5115083	6447-S	100	100	0.40	0.4
Boron	AccuSTD	B6085025	6339-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.10	110
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.60	6
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.10	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	2.00	20
Lead	AccuSTD	B6075090	6449-S	100	100	2.50	2.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6450-S	100	100	1.50	1.5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	1.00	100
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.80	8
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	E27027	-	Conc.	100	6.0	6%

Comment:

Date Prepared: 3/25/08 Date Expires: 3/25/09

Prepared By: Cang Tran Reviewed By: M Tachowski

1241

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7318-S	3/25/08	3/25/09	Low Level Cal Std (1X)	1 mL (7316-S) + 3 mL Conc HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	See # 7316-S	AccuSTD	7316-S E27027	CT
7319-S	3/25/08	3/25/09	CRI (ONE DA) 1000X	0.1 mL (6340-S) Cd, 0.5 mL (6342-S) Cr, 0.5 mL (6360-S) Cu, 1.0 mL (6349-S) Ni, 0.5 mL (6336-S) As, 0.5 mL (6345-S) Pb, 0.5 mL (6351-S) Se, 1.0 mL (6359-S) Zn, + 3 mL Conc HNO3	100 mL w/ DI	Cd-1 ppm, Cr-5, Cu-5, Ni-10, As-5, Pb-5, Se-5, Zn-10	AccuSTD	6340-S, 6342-S, 6360-S, 6349-S, 6336-S, 6345-S, 6351-S, 6359-S E27027	CT
7320-S	3/25/08	3/25/09	CRI (ONE DA) 1X	0.1 mL (7319-S) + 3 mL Conc HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	See # 7319-S	AccuSTD Baker	7319-S E27027	CT
7321-S	3/25/08	1/25/09	CRI (ICAP)	0.1 mL (7319-S) + 3 mL Conc HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	See # 7319-S	High Purity Baker	7319-S 2630-R E27027	CT
7322-S	3/25/08	3/25/08	Hg 50 ppb (LCS STD)	0.5 mL (7282-S) + 4 mL HNO3	200 mL w/ DI	50 ppb	Absolute Baker	7282-S E27027	
7323-S	3/25/08	3/10/08	ICSAB	20 mL (7017-S) + 2 mL (7324-S) + 20 mL (1:1) HCl + 6 mL Conc HNO3	200 mL w/ DI	See # 7017-S 7324-S	High Purity AccuSTD Baker	7017-S 7324-S 2630-R E27027	CT

Reviewed By: Date:

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76

1242

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7324-S	3/25/08	3/25/09	ICSA-2 (ICAP)	5.0 mL (6339-S) B, 5.0 mL (6340-S) K, 5.0 mL (6348-S) Mo, 5.0 mL (6343-S) Na, 5.0 mL (6344-S) Sn, 5.0 mL (6347-S) Sr, 5.0 mL (6337-S) Ti, + 3 mL Conc HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	Accu STD Baker	B-50 ppm, K-100, Mo-50, Na-100, Sn-50, Sr-50, Ti-50	6339-S 6340-S 6348-S 6343-S 6344-S 6347-S 6337-S E27027	CT
7325-S	3/25/08	11/2/08	ICSA (ICAP)	20 mL (7017-S) + 20 mL (1:1) HCl + 6 mL Conc HNO3	200 mL w/ DI	See # 7017-S	High Purity Baker	7017-S 2630-R E27027	CT
7326-S	3/27/08	3/27/08	50 ppb Hg (LCS STD)	0.5 mL (7282-S) + 4 mL conc HNO3	200 mL w/ DI	50 ppb	Accu STD Baker	7282-S E27027	DR
7327-S	3/27/08	3/27/08	50 ppb Hg (LCS STD)	0.5 mL (7282-S) + 4 mL conc HNO3	200 mL w/ DI	50 ppb	Absolute Baker	7282-S E27027	DR
7328-S	3/27/08	3/27/08	ICB/CCB	0.5 mL conc HNO3	200 mL w/ DI	—	Baker	E27027	DR
7329-S 20-S 9-S	3/27/08	3/27/08	ICSA/Hg Soln CCA CCV (SMCL)	10 mL (7322-S) 0.5 mL (7326-S) 2.0 mL	50 mL w/ DI	40 ppb 0.2 2.0	Absolute Accu STD	(7322-S) (7326-S)	DR

Reviewed By: Date:

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77

1243

P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

HIGH-PURITY STANDARDS

Certificate of Analysis

SM-108-001 (Spike)
Solution A
Lot # 0819603

(7556-S)
Received - 7/15/08
Opened - 7/15/08
Expire - 7/14/09

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.95+%	HNO_3, 2%	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains
Theodore C. Rains, Ph.D.
President

Exp Date: JUL 1 4 2009
MSDS ATTACHED

www.highpuritystandards.com

(7556-S)
Received - 7/15/08
Opened - 7/15/08
Expire - 7/14/09

SM-108-001 (SPIKE)
Solution A
Element List
(µg/mL)

Aluminum	100
Arsenic	20
Barium	20
Beryllium	20
Boron	50
Cadmium	20
Calcium	1000
Chromium	20
Cobalt	20
Copper	20
Iron	100
Lead	20
Magnesium	1000
Manganese	20
Nickel	20
Potassium	1000
Selenium	20
Sodium	1000
Strontium	20
Thallium	20
Vanadium	20
Zinc	20

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HIGH-PURITY STANDARDS

Certificate of Analysis

SM-108-001 (SPIKE)
Solution B
Lot # 0819604

(7557-S)
Received - 7/15/08
Opened - 7/15/08
Expire - 7/14/09

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals Salts or Oxides	99.996+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5%
			Antimony 20
			Molybdenum 20
			Silver 5
			Tin 20
			Titanium 20

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains
Theodore C. Rains, Ph.D.
President

Exp Date: JUL 1 4 2009
MSDS ATTACHED

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7549-S 7549-S	7-8-08	7-8-08	200 Hg	40 mL (7538-S)	50 mL w/DI	40 ppb	ABSOLUTE	(7538-S)	DR
7549-S	7/9/08	7/24/08	ICV (ICMT)	2 mL (6796-S)	200 mL w/DI	Std # 6796-S	High Purity	6796-S	CT
				2 mL (6797-S) 6 mL Conc HNO3		6797-S	Baker	6797-S E27027	
				20 mL (1:1) HCl				2670-R	
7549-S 7549-S	7/15/08	7/15/08	Hg CAL 50 ppb (Nitric St)	0.5 mL (7281-S) + 4 mL Conc HNO3	200 mL w/DI	50 ppb	Accustd Baker	(7281-S) E27027	DR
7549-S	7/15/08	7/15/08	Hg Ref 50 ppb (Ref Std)	0.5 mL (7281-S) + 4 mL Conc HNO3	200 mL w/DI	50 ppb	Absolute Baker	(7281-S) E27027	DR
7549-S	7/15/08	7/15/08	ICB/CCB	0.5 mL (7281-S) + 4 mL Conc HNO3	200 mL w/DI	-	Baker	E27027	DR
7549-S	7/15/08	7/15/08	Hg - 50 ppb (Working STD)	0.5 mL (7281-S) + 4 mL Conc. HNO3	200 mL w/DI	50 ppb	Accustd	7281-S	CT
7552-S	7/15/08	7/15/08	Hg - 50 ppb REF STD	0.5 mL (7282-S) + 4 mL Conc. HNO3		50 ppb	Baker Absolute Baker	E27027 7282-S E27027	
7552-S	7/15/08	7/15/08	ICB/CCB	0.5 mL Conc. HNO3		-	Baker	E27027	
7552-S	7/15/08	7/15/08	ICV (Hg)	40 mL (7550-S)	50 mL w/DI	4 ppb	Absolute	7550-S	CT
7552-S	7/15/08	7/15/08	CRA (Hg)	0.2 mL (7549-S)		0.2 ppb	Accustd	7549-S	
7552-S	7/15/08	7/15/08	CCV (Hg)	2 mL (7549-S)		2 ppb			

Reviewed By: _____ Date: _____

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7557-5	7/15/08	7/15/08	Hg Cal Curve (Fresh)	0.0 mL (7549-5)	↗ 50mL w/ DI	0.0 ppb	AccuSTD	7549-5	CT
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7556-5	7/15/08	7/14/09	QC spike Solution A	Stock, Received 500mL	500 mL	See # 7556-5	High Purity	0819607	CT
7558-5	7/15/08	7/14/09	QC spike Solution B			7557-5		0819604	
7556-5	7/15/08	7/14/09	ICV (ICAP)	2mL (7556-5)	↗ 200mL w/ DI	See # 7557-5	High Purity	7556-5	CT
				2mL (7557-5)		7556-5	Baker	7557-5	
				6mL Conc. HNO3				E27027	
				20mL (1:1) HCl				2670-R	

07/15/08

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Reviewed By: _____ Date: _____

1248

P.O.Box 41727
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FAX: (843) 767-7906

7573-5
Received - 7/23/08
Opened - 7/23/08
Expire - 7/18/09

HIGH-PURITY STANDARDS

CAT. NO. ANALCS-R

Certificate of Analysis

CLP Analyte Standard-Revised

Lot # 0728327

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.99+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Exp Date: JUL 1 8 2009

MSDS ATTACHED

Theodore C. Rains, Ph.D.
President

www.highpuritystandards.com

1249

CLP Analyte Standard-Revised

Element List

(µg/mL)

Antimony	60
Arsenic	10
Barium	50
Beryllium	50
Cadmium	100
Chromium	50
Copper	50
Cobalt	50
Lead	5
Manganese	50
Nickel	100
Selenium	5
Silver	20
Thallium	10
Vanadium	50
Zinc	100

7573-5
Received - 7/23/08
Opened - 7/23/08
Expire - 7/18/09

1250

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7579-5	7/21/08	7/21/08	ICV (Hg)	4.0 mL (7557-5)	↗ 50mL (w/ DI)	4.0 ppb	Absolute	7557-5	CT
7571-5			CRA (Hg)	0.2 mL (7566-5)		0.2 ppb	AccuSTD	7566-5	
7572-5			CCV (Hg)	2.0 mL (7566-5)		2.0 ppb			
7573-5	7/23/08	7/18/09	ICSB 1	Stock, Received 100 mL	100 mL	See # 7573-5	High Purity	0728327	CT
7574-5	7/23/08	11/2/08	ICSAB (ICAP)	20mL (7017-5)	↗ 200mL w/ DI	See # 7017-5	High Purity	7017-5	CT
				2mL (7324-5)		7017-5	AccuSTD	7324-5	
				2mL (7573-5)		7324-5	High Purity	7573-5	
				+ 20mL (1:1) HCl		7573-5	Baker	2630-R	
				+ 6mL Conc. HNO3				E27027	

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Reviewed By: _____ Date: _____

1251

Mercury Data

Analytical Results

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-1*
W Order:	0808076	Collection Date:	08/13/08 15:10
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 08/27/08 10:00
ColumnID:		%Moisture: 27.2	BatchNo: 8011/R14621
Revision:	08/27/08 16:16	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.047	J	0.14	0.0046	mg/Kg-dry	1	08/27/08 14:36

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf columns %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 09/02/08 9:13 383266 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0808076-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trench-Bot-2*
W Order:	0808076	Collection Date:	08/13/08 15:35
Matrix:	SOIL	Date Received:	08/13/08 17:10
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 08/27/08 10:00
ColumnID:		%Moisture: 24.4	BatchNo: 8011/R14621
Revision:	08/27/08 16:16	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.053	J	0.13	0.0045	mg/Kg-dry	1	08/27/08 14:43

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 09/02/08 9:13 383269 Project Supervisor: Monika Santucci

QC Summary

1256

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICV | SampType: ICV | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 14621
Client ID: ZZZZZ | Batch ID: R14621 | Method: SW7470A | Analysis Date: 8/27/08 | SeqNo: 383255
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00395	0.00020	0.004	0	99	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

02-Sep-08

1257

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICB | SampType: ICB | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 14621
Client ID: ZZZZZ | Batch ID: R14621 | Method: SW7470A | Analysis Date: 8/27/08 | SeqNo: 383256
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

02-Sep-08

1258

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV1 | SampType: CCV | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 14621
Client ID: ZZZZZ | Batch ID: R14621 | Method: SW7470A | Analysis Date: 8/27/08 | SeqNo: 383267
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00210	0.00020	0.002	0	105	90	120				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

02-Sep-08

1259

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB2 | SampType: CCB | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 14621
Client ID: ZZZZZ | Batch ID: R14621 | Method: SW7470A | Analysis Date: 8/27/08 | SeqNo: 383275
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

02-Sep-08

1262

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB1 | SampType: CCB | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 14621
Client ID: ZZZZZ | Batch ID: R14621 | Method: SW7470A | Analysis Date: 8/27/08 | SeqNo: 383268
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

02-Sep-08

1260

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV2 | SampType: CCV | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 14621
Client ID: ZZZZZ | Batch ID: R14621 | Method: SW7470A | Analysis Date: 8/27/08 | SeqNo: 383274
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00211	0.00020	0.002	0	106	80	120				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

02-Sep-08

1261

CRDL STANDARD FOR AA AND ICP

3B

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLab Case No. SAS No.: SDG No.: 0808076

AA CRDL Standard Source:

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA				CRDL Standard for ICP			
	True	Found	%R		Initial True	Initial Found	%R	Final Found	%R
Mercury	0.2	0.00	97.6						

FORM II (Part 2) - IN

ILM04.1

1263

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-009BMSD SampType: MSD TestCode: HG7471S Units: mg/Kg-dry Prep Date: 8/27/2008 RunNo: 14621
Client ID: Trench-Bot-2 Batch ID: 8011 Method: SW7471A (SW7471A) Analysis Date: 8/27/2008 SeqNo: 383271
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.486	0.13	0.442	0.0531	98	27	153	0.488	0.1	15	

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

1266

27-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8011 SampType: MBLK TestCode: HG7471S Units: mg/Kg Prep Date: 8/27/2008 RunNo: 14621
Client ID: ZZZZZ Batch ID: 8011 Method: SW7471A (SW7471A) Analysis Date: 8/27/2008 SeqNo: 383258
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

1264

27-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8011 SampType: LCS TestCode: HG7471S Units: mg/Kg Prep Date: 8/27/2008 RunNo: 14621
Client ID: ZZZZZ Batch ID: 8011 Method: SW7471A (SW7471A) Analysis Date: 8/27/2008 SeqNo: 383259
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.808	0.10	0.835	0	97	85	115				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

1267

27-Aug-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-009BMS SampType: MS TestCode: HG7471S Units: mg/Kg-dry Prep Date: 8/27/2008 RunNo: 14621
Client ID: Trench-Bot-2 Batch ID: 8011 Method: SW7471A (SW7471A) Analysis Date: 8/27/2008 SeqNo: 383270
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.486	0.13	0.442	0.0531	98	27	153				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

1265

27-Aug-08

METALS MDL Verification Summary

Instrument ID(s): FIMS-100 — Verification Date: 4/24/2008

Analytical Method	Matrix	Analyte	Date of Init MDL	Init MDL (mg/Kg)	RL (mg/Kg)	MDL Ver Conc. #1	MDL Ver Result#1	MDL Ver %Rec	Is Rec 80-140%	Is MDLV 1-3xMDL?	Does MDL Verify?	If 'no' use MDLV#1?	MDL Ver Conc. #2	MDL Ver Result#2	New MDLV %Rec	New MDL mg/Kg	Is New MDL < .5*RL?
7471A	Soil	Mercury	01/03/06	0.00337	0.100	**0.00835**	0.00866	104%	yes	yes	yes					**0.00337**	yes
245.5	Soil	Mercury	01/03/06	0.00337	0.100	**0.00835**	0.00866	104%	yes	yes	yes					**0.00337**	yes

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984

MDL=(S.Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

1270 i_mdv2.Soil_04_2008.xls Life Science Laboratories, Inc Page 1 of 1 7/31/2008 REV 0

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-009B SampType: SD TestCode: HG7471S Units: mg/Kg-dry Prep Date: 8/27/2008 RunNo: 14621
Client ID: Trench-Bot-2 Batch ID: 8011 Method: SW7471A (SW7471A) Analysis Date: 8/27/2008 SeqNo: 383272
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%D	RPDLimit	Qual
Mercury	0.0560	0.66						0.0531	10		J

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

27-Aug-08

1268 Page 5 of 6

METALS MDL Verification Summary

Instrument ID(s): FIMS-100 — Verification Date: 4/29/2008

Analytical Method	Matrix	Analyte	Date of Init MDL	Init MDL (ug/L)	RL (ug/L)	MDL Ver Conc. #1	MDL Ver Result#1	MDL Ver %Rec	Is Rec 70-130%	Is MDLV 1-3xMDL?	Does MDL Verify?	If 'no' use MDLV#1?	MDL Ver Conc. #2	MDL Ver Result#2	New MDLV %Rec	New MDL ug/L	Is New MDL < .5*RL?
7470A	Water	Mercury	09/13/05	0.0260	0.200	**0.050**	0.0407	81%	yes	yes	yes					**0.02600**	yes
245.1	Water	Mercury	09/13/05	0.0260	0.200	**0.050**	0.0407	81%	yes	yes	yes					**0.02600**	yes

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984

MDL=(S.Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

1271 i_mdv2.Water_04_2008.xls Life Science Laboratories, Inc Page 1 of 1 7/31/2008 REV 0

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-009B SampType: PDS TestCode: HG7471S Units: mg/Kg-dry Prep Date: 8/27/2008 RunNo: 14621
Client ID: Trench-Bot-2 Batch ID: 8011 Method: SW7471A (SW7471A) Analysis Date: 8/27/2008 SeqNo: 383273
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.486	0.13	0.442	0.0531	98	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

27-Aug-08

1269 Page 6 of 6

13
PREPARATION LOG

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

Method: AV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCS-8011	08/27/2008	0.30	50
MB-8011	08/27/2008	0.30	50
Trench-Bot-1	08/27/2008	0.30	50
Trench-Bot-2	08/27/2008	0.30	50
Trench-Bot-2S	08/27/2008	0.30	50
Trench-Bot-2SD	08/27/2008	0.30	50

FORM XIII - IN ILM04.1

14
ANALYSIS RUN LOG

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0808076

Instrument ID Number: FIMS 100 Method: AV

Start Date: 08/27/2008 End Date: 08/27/2008

EPA Sample No.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1224																X								
S0.2	1.00	1226																X								
S0.5	1.00	1228																X								
S1.0	1.00	1230																X								
S2.0	1.00	1232																X								
S5.0	1.00	1235																X								
S10.0	1.00	1237																X								
ICV	1.00	1412																X								
ZZZZZZ	1.00	1415																X								
CRA	1.00	1417																X								
MB-8011	1.00	1419																X								
LCS-8011	1.00	1421																X								
ZZZZZZ	1.00	1423																X								
ZZZZZZ	1.00	1425																X								
ZZZZZZ	1.00	1428																X								
ZZZZZZ	1.00	1430																X								
ZZZZZZ	1.00	1432																X								
ZZZZZZ	1.00	1434																X								
anch-Bot-1	1.00	1436																X								
CCV1	1.00	1438																X								
CCB1	1.00	1441																X								
anch-Bot-2	1.00	1443																X								
nch-Bot-2S	1.00	1445																X								
ch-Bot-2SD	1.00	1447																X								
nch-Bot-2L	5.00	1520																X								
nch-Bot-2A	1.00	1522																X								
CCV2	1.00	1524																X								
CCB2	1.00	1526																X								

FORM XIV - IN ILM04.1

Raw Data

Life Science Laboratories, Inc. Mercury Run Log

Method: 245.1 / 245.5 / 7470A / 7471A / CLP

Lab ID	SampType		Date	Time	Conc.	Units	Dilution	RawConc.	Comments
Blank	ICAL	Hg	08/27/2008	12:24:10	0	µg/L	1	0	
0.2 ppb	ICAL	Hg	08/27/2008	12:26:19	0	µg/L	1	0	
0.5 ppb	ICAL	Hg	08/27/2008	12:28:29	0	µg/L	1	0	
1.0 ppb	ICAL	Hg	08/27/2008	12:30:39	0	µg/L	1	0	
2.0 ppb	ICAL	Hg	08/27/2008	12:32:52	0	µg/L	1	0	
5.0 ppb	ICAL	Hg	08/27/2008	12:35:04	0	µg/L	1	0	
10.0 ppb	ICAL	Hg	08/27/2008	12:37:18	0	µg/L	1	0	
ICV	ICV	Hg	08/27/2008	14:12:53	3.951155	µg/L	1	3.951155	
ICB	CIB	Hg	08/27/2008	14:15:02	0.001624	µg/L	1	0.001624	
CRA	CRA	Hg	08/27/2008	14:17:11	0.195207	µg/L	1	0.195207	
MB-8011	MBLK	Hg	08/27/2008	14:19:21	0.003728	µg/L	1	0.003728	
LCS-8011	LCS	Hg	08/27/2008	14:21:32	4.846923	µg/L	1	4.846923	
0808110-001A		Hg	08/27/2008	14:23:44	0.146374	µg/L	1	0.146374	
0808110-002A		Hg	08/27/2008	14:25:58	4.413173	µg/L	1	4.413173	
0808110-003A		Hg	08/27/2008	14:28:11	0.080113	µg/L	1	0.080113	
0808110-004A		Hg	08/27/2008	14:30:22	5.391078	µg/L	1	5.391078	
0808110-005A		Hg	08/27/2008	14:32:29	-0.0101	µg/L	1	-0.0101	
0808110-006A		Hg	08/27/2008	14:34:37	-0.01016	µg/L	1	-0.01016	
0808076-008B		Hg	08/27/2008	14:36:46	0.203809	µg/L	1	0.203809	
CCV1	CCV	Hg	08/27/2008	14:38:55	2.099061	µg/L	1	2.099061	
CCB1	CCB	Hg	08/27/2008	14:41:04	0.003915	µg/L	1	0.003915	
0808076-009B		Hg	08/27/2008	14:43:13	0.240777	µg/L	1	0.240777	
0808076-009BMS	MS	Hg	08/27/2008	14:45:24	2.203213	µg/L	1	2.203213	
0808076-009BMSD	MSD	Hg	08/27/2008	14:47:35	2.205072	µg/L	1	2.205072	
0808076-009B	SD	Hg	08/27/2008	15:20:11	0.253879	µg/L	5	0.050776	Dilution Test
0808076-009B	PDS	Hg	08/27/2008	15:22:23	2.204703	µg/L	1	2.204703	Recovery Test
CCV2	CCV	Hg	08/27/2008	15:24:34	2.114602	µg/L	1	2.114602	(std = 2 µg/L)
CCB2	CCB	Hg	08/27/2008	15:26:47	0.002948	µg/L	1	0.002948	

Analyst: Cang Tran

Date: 8/27/08

Reviewer: M Vadlamudi

Date: 9-2-08

Method Name: Hg10
Method Description: Hg with SnCl
Element: Hg

Date: 08/27/2008
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: SAMPLE-W.SIF Results Data Set Name: HG082708

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 08/27/2008
Sample ID: Blank,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0003	0.0021	0.0003	12:23:31	No
2			0.0003	0.0020	0.0003	12:24:10	No
Mean:			0.0003				
SD :			0.0000				
%RSD:			0.7201				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 08/27/2008
Sample ID: 0.2 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0042	0.0293	0.0045	12:25:41	No
2			0.0042	0.0286	0.0045	12:26:19	No
Mean:			0.0042				
SD :			0.0000				
%RSD:			0.2826				

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.02096

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 08/27/2008
Sample ID: 0.5 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0112	0.0752	0.0115	12:27:51	No
2			0.0114	0.0733	0.0117	12:28:29	No
Mean:			0.0113				
SD :			0.0001				
%RSD:			1.3190				

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99783 Slope: 0.02242

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 08/27/2008
Sample ID: 1.0 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0224	0.1477	0.0227	12:30:01	No
2			0.0225	0.1457	0.0228	12:30:39	No
Mean:			0.0224				
SD :			0.0001				
%RSD:			0.3379				

[Hg] Standard number 3 applied. [1.000]
Correlation Coefficient: 0.99970 Slope: 0.02244

CT 8/27/08

1276

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 08/27/2008
Sample ID: 2.0 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0449	0.2954	0.0452	12:32:14	No
2			0.0453	0.2878	0.0456	12:32:52	No
Mean:			0.0451				
SD :			0.0003				
%RSD:			0.7396				

[Hg] Standard number 4 applied. [2.000]
Correlation Coefficient: 0.99994 Slope: 0.02252

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 08/27/2008
Sample ID: 5.0 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1117	0.7356	0.1121	12:34:26	No
2			0.1132	0.7185	0.1135	12:35:04	No
Mean:			0.1125				
SD :			0.0010				
%RSD:			0.9171				

[Hg] Standard number 5 applied. [5.000]
Correlation Coefficient: 0.99999 Slope: 0.02250

Element: Hg Seq. No.: 7 AS Loc.: 7 Date: 08/27/2008
Sample ID: 10.0 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.2161	1.4290	0.2164	12:36:40	No
2			0.2202	1.3999	0.2205	12:37:18	No
Mean:			0.2181				
SD :			0.0029				
%RSD:			1.3368				

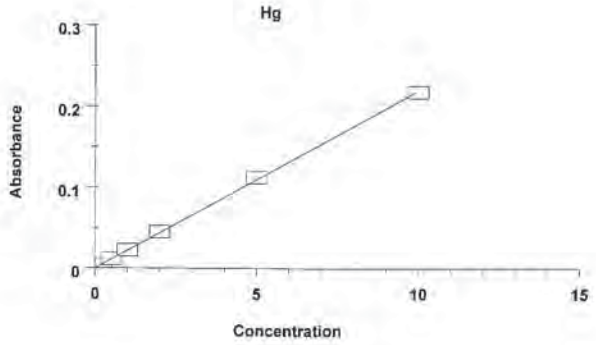
[Hg] Standard number 6 applied. [10.00]
Correlation Coefficient: 0.99984 Slope: 0.02198

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Blank,	0.0003	---	----	----	----
0.2 ppb,	0.0042	0.200	0.191	0.0000	0.3
0.5 ppb,	0.0113	0.500	0.515	0.0001	1.3
1.0 ppb,	0.0224	1.000	1.021	0.0001	0.3
2.0 ppb,	0.0451	2.000	2.052	0.0003	0.7
5.0 ppb,	0.1125	5.000	5.118	0.0010	0.9
10.0 ppb,	0.2181	10.000	9.926	0.0029	1.3

Correlation Coefficient: 0.99984 Slope: 0.02198 ---

1277



1278

Element: Hg Seq. No.: 8 AS Loc.: 9 Date: 08/27/2008
Sample ID: ICV,ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.955	3.955	0.0869	0.5687	0.0872	02:12:15	No
2	3.948	3.948	0.0867	0.5676	0.0871	02:12:53	No
Mean:	3.951	3.951	0.0868				
SD :	0.0051	0.0051	0.0001				
%RSD:	0.1	0.1	0.1279				

Element: Hg Seq. No.: 9 AS Loc.: 10 Date: 08/27/2008
Sample ID: ICB,CIB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0024	0.0003	02:14:23	No
2	0.002	0.002	0.0000	0.0025	0.0004	02:15:02	No
Mean:	0.002	0.002	0.0000				
SD :	0.0006	0.0006	0.0000				
%RSD:	36.4	36.4	36.3907				

Element: Hg Seq. No.: 10 AS Loc.: 11 Date: 08/27/2008
Sample ID: CRA,CRA

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.195	0.195	0.0043	0.0303	0.0046	02:16:32	No
2	0.195	0.195	0.0043	0.0295	0.0046	02:17:11	No
Mean:	0.195	0.195	0.0043				
SD :	0.0001	0.0001	0.0000				
%RSD:							

Element: Hg Seq. No.: 11 AS Loc.: 12 Date: 08/27/2008
Sample ID: MB-8011,MBLK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0030	0.0004	02:18:43	No
2	0.003	0.003	0.0001	0.0027	0.0004	02:19:21	No
Mean:	0.004	0.004	0.0001				
SD :	0.0006	0.0006	0.0000				
%RSD:	16.3	16.3	16.3035				

Element: Hg Seq. No.: 12 AS Loc.: 13 Date: 08/27/2008
Sample ID: LCS-8011,LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.819	4.819	0.1059	0.6985	0.1062	02:20:54	No
2	4.875	4.875	0.1071	0.6836	0.1074	02:21:32	No
Mean:	4.847	4.847	0.1065				
SD :	0.0390	0.0390	0.0009				
%RSD:	0.8	0.8	0.8051				

Element: Hg Seq. No.: 13 AS Loc.: 14 Date: 08/27/2008
Sample ID: 0808110-001A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.147	0.147	0.0032	0.0230	0.0035	02:23:06	No
2	0.146	0.146	0.0032	0.0225	0.0035	02:23:44	No
Mean:	0.146	0.146	0.0032				

1279

SD :	0.0008	0.0008	0.0000
%RSD:	0.5	0.5	0.5216

Element: Hg Seq. No.: 14 AS Loc.: 15 Date: 08/27/2008
Sample ID: 0808110-002A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.408	4.408	0.0969	0.6342	0.0972	02:25:20	No
2	4.418	4.418	0.0971	0.6351	0.0974	02:25:58	No
Mean:	4.413	4.413	0.0970				
SD :	0.0072	0.0072	0.0002				
%RSD:	0.2	0.2	0.1634				

Element: Hg Seq. No.: 15 AS Loc.: 16 Date: 08/27/2008
Sample ID: 0808110-003A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.082	0.082	0.0018	0.0141	0.0021	02:27:33	No
2	0.078	0.078	0.0017	0.0133	0.0020	02:28:11	No
Mean:	0.080	0.080	0.0018				
SD :	0.0024	0.0024	0.0001				
%RSD:	3.0	3.0	3.0048				

Element: Hg Seq. No.: 16 AS Loc.: 17 Date: 08/27/2008
Sample ID: 0808110-004A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.407	5.407	0.1188	0.7748	0.1191	02:29:43	No
2	5.375	5.375	0.1181	0.7757	0.1184	02:30:22	No
Mean:	5.391	5.391	0.1185				
SD :	0.0224	0.0224	0.0005				
%RSD:	0.4	0.4	0.4159				

Element: Hg Seq. No.: 17 AS Loc.: 18 Date: 08/27/2008
Sample ID: 0808110-005A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0002	0.0005	0.0001	02:31:51	No
2	-0.010	-0.010	-0.0002	0.0010	0.0001	02:32:29	No
Mean:	-0.010	-0.010	-0.0002				
SD :	0.0004	0.0004	0.0000				
%RSD:	4.4	4.4	4.4062				

Element: Hg Seq. No.: 18 AS Loc.: 19 Date: 08/27/2008
Sample ID: 0808110-006A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0002	0.0008	0.0001	02:33:59	No
2	-0.011	-0.011	-0.0002	0.0005	0.0001	02:34:37	No
Mean:	-0.010	-0.010	-0.0002				
SD :	0.0008	0.0008	0.0000				
%RSD:	7.4	7.4	7.4008				

Element: Hg Seq. No.: 19 AS Loc.: 20 Date: 08/27/2008
Sample ID: 0808076-008B,

1280

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.203	0.203	0.0045	0.0312	0.0048	02:36:08	No
2	0.204	0.204	0.0045	0.0311	0.0048	02:36:46	No
Mean:	0.204	0.204	0.0045				
SD :	0.0005	0.0005	0.0000				
%RSD:	0.3	0.3	0.2681				

Element: Hg Seq. No.: 20 AS Loc.: 21 Date: 08/27/2008
Sample ID: CCV1,CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.098	2.098	0.0461	0.2937	0.0464	02:38:17	No
2	2.100	2.100	0.0461	0.2958	0.0465	02:38:55	No
Mean:	2.099	2.099	0.0461				
SD :	0.0010	0.0010	0.0000				
%RSD:							

Element: Hg Seq. No.: 21 AS Loc.: 22 Date: 08/27/2008
Sample ID: CCB1,CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0024	0.0004	02:40:26	No
2	0.003	0.003	0.0001	0.0022	0.0004	02:41:04	No
Mean:	0.004	0.004	0.0001				
SD :	0.0013	0.0013	0.0000				
%RSD:	32.8	32.8	32.7927				

Element: Hg Seq. No.: 22 AS Loc.: 23 Date: 08/27/2008
Sample ID: 0808076-009B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.238	0.238	0.0052	0.0359	0.0055	02:42:35	No
2	0.244	0.244	0.0054	0.0368	0.0057	02:43:13	No
Mean:	0.241	0.241	0.0053				
SD :	0.0045	0.0045	0.0001				
%RSD:	1.9	1.9	1.8888				

Element: Hg Seq. No.: 23 AS Loc.: 24 Date: 08/27/2008
Sample ID: 0808076-009BMS,MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.193	2.193	0.0482	0.3125	0.0485	02:44:46	No
2	2.213	2.213	0.0486	0.3012	0.0490	02:45:24	No
Mean:	2.203	2.203	0.0484				
SD :	0.0144	0.0144	0.0003				
%RSD:	0.7	0.7	0.6547				

Element: Hg Seq. No.: 24 AS Loc.: 25 Date: 08/27/2008
Sample ID: 0808076-009BMSD,MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.212	2.212	0.0486	0.3089	0.0489	02:46:57	No
2	2.198	2.198	0.0483	0.3075	0.0486	02:47:35	No
Mean:	2.205	2.205	0.0485				
SD :	0.0101	0.0101	0.0002				
%RSD:	0.5	0.5	0.4578				

1281

1282

Element: Hg Seq. No.: 25 AS Loc.: 26 Date: 08/27/2008
Sample ID: 0808076-009B,SD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.247	0.049	0.0011	0.0085	0.0014	03:19:33	No
2	0.261	0.052	0.0011	0.0088	0.0015	03:20:11	No
Mean:	0.254	0.051	0.0011				
SD :	0.0101	0.0020	0.0000				
%RSD:	4.0	4.0	3.9588				

Element: Hg Seq. No.: 26 AS Loc.: 27 Date: 08/27/2008
Sample ID: 0808076-009B,PDS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.208	2.208	0.0485	0.3086	0.0488	03:21:45	No
2	2.202	2.202	0.0484	0.3073	0.0487	03:22:23	No
Mean:	2.205	2.205	0.0484				
SD :	0.0045	0.0045	0.0001				
%RSD:	0.2	0.2	0.2032				

Element: Hg Seq. No.: 27 AS Loc.: 28 Date: 08/27/2008
Sample ID: CCV2,CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.108	2.108	0.0463	0.2984	0.0466	03:23:56	No
2	2.121	2.121	0.0466	0.2917	0.0469	03:24:34	No
Mean:	2.115	2.115	0.0465				
SD :	0.0091	0.0091	0.0002				
%RSD:	0.4	0.4	0.4291				

Element: Hg Seq. No.: 28 AS Loc.: 29 Date: 08/27/2008
Sample ID: CCB2,CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0021	0.0004	03:26:09	No
2	0.004	0.004	0.0001	0.0031	0.0004	03:26:47	No
Mean:	0.003	0.003	0.0001				
SD :	0.0019	0.0019	0.0000				
%RSD:	63.7	63.7	63.6993				

1283

Laboratory Worksheets

Life Science Laboratories, Inc.
MERCURY DIGESTION LOGBOOK — QC BATCH # — Date: 8-27-08

Sample ID	Client ID	Initial Sample Size	Final Volume (mL)	Method	Comments
0.0 ppb std	—	0.0 mL	50	7471A	7620-S
0.2		0.2			
0.5		0.5			
1.0		1.0			
2.0		2.0			
5.0		5.0			
10.0		10.0			
ICV		4.0			7621-S
ICB		10			7619-S
CCB					
CCV		2.0			7622-S
CRA		0.4			7624-S

MT 8-29-08

Reagents/stds #:
(A) 50 ppb working std soln # 7617-S
(B) 50 ppb reference std soln # 7618-S
(C) — mL of spike soln # —

HNO_3 # —
H_2SO_4 # —
$K_2S_2O_8$ # —
Aqua Regia # 7867-R
$KMnO_4$ # 7851-R
$NaCl(NH_2OH)$ # 7852-R
Carrier # 2868-R
$SnCl_2$ # 2869-R

Digestion start: 10:00 finish: 10:30 Temperature: 95 °C

Prepared By: Daniel D Rock
Date: 8-27-08
Reviewed By: M Tschuck
Date: 8-29-08

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Life Science Laboratories, Inc.
MERCURY DIGESTION LOGBOOK — QC BATCH # 8011 — Date: 8-27-08

Sample ID	Client ID	Initial Sample Size	Final Volume (mL)	Method	Comments
MB - 8011	—	0.20 g	50	7471A	TEFLON CHIPS 2877-R
LCS - 8011					5 mL (B)
0808116-001A	[redacted]				
002A					
003A					
004A					
005A					
006A					
0808076-008B	City of Geneva				
-009B					
-009BMS					2 mL (B)
009BMSD					

MT 8-29-08

Reagents/stds #:
(A) 50 ppb working std soln # 7617-S
(B) 50 ppb reference std soln # 7617-S
(C) — mL of spike soln # —

HNO_3 # —
H_2SO_4 # —
$K_2S_2O_8$ # —
Aqua Regia # 2867-R
$KMnO_4$ # 7851-R
$NaCl(NH_2OH)$ # 7853-R
Carrier # 2868-R
$SnCl_2$ # 2869-R

Digestion start: 10:00 finish: 10:30 Temperature: 95 °C

Prepared By: Daniel D Rock
Date: 8-27-08
Reviewed By: M Tschuck
Date: 8-29-08

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125 Market Street
New Haven, CT 06513, USA

AccuStandard, Inc.

Tel (203)786-5290 Fax (203)786-5287
Web: AccuStandard.com

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: TCLP-02-1

Element: TCLP Standard #2 - Mercury
Matrix: 5% HNO3
Lot Number: B8025003
Expiration Date: Feb / 2010

7281-S
Received - 3/12/08
Opened -
Expire - 2/28/10

Actual Lot Analysis

TCLP Standard #2 - Mercury 20 µg/mL

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

The concentration of the final solution was verified by ICP against NIST SRM# 3133

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

AccuStandard is accredited to ISO/IEC 17025:2005

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7274-S	3/10/08	3/10/08	Hg - 50 ppb (Working STD)	0.5mL (6027-S) + 4mL Conc HNO3	↗ 200 mL w/ DI	50 ppb	AccuSTD	6027-S	CT
7275-S	3/10/08	3/10/08	Hg - 50 ppb (REF STD)	0.5mL (5487-S) + 4mL Conc. HNO3		50 ppb	Absolute	5487-S	CT
7276-S	3/10/08	3/10/08	ICB / CCB (Hg)	0.5mL Conc. HNO3		—	Baker	E27027	CT
7277-S	3/10/08	3/10/08	Hg Cal Curve (WATER)	0.0 mL (7274-S)	↗ 50mL w/ DI	0.0 ppb	AccuSTD	7274-S	CT
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7278-S	3/10/08	3/10/08	CRA (Hg)	0.2 mL (7274-S)	↗ 50mL w/ DI	0.2 ppb	AccuSTD	7274-S	CT
7279-S			CCV (Hg)	2.0 mL (7274-S)		2.0 ppb			CT
7280-S			ICV (Hg)	4.0 mL (7275-S)		4.0 ppb	Absolute	7275-S	CT
7281-S	3/12/08	2/28/2010	Hg STD - 20ppm	Stock, received 100mL	100mL	20 ppm	AccuSTD	B8025003	CT
7282-S	3/14/08	6/1/10	Hg STD - 20ppm	Stock, received 100mL	100mL	20 ppm	Absolute	060107	CT
7287-S	3/17/08	3/17/08	STD 50 GFAA	10mL (6514-S) + 10mL DI	20 mL	50 ppb	AccuSTD	6514-S	CT
7284-S			STD 25	5mL (7287-S) + 5mL DI	10	25		7287-S	
7285-S			STD 10	2mL (7287-S) + 8mL DI	10	10		7287-S	
7286-S			STD 2	2mL (7285-S) + 8mL DI	10	2		7285-S	

Reviewed By: _____

Date: _____

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72

1290

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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent(s):
Part Number:	52009	P676766	Nitric Acid
Lot Number:	060107		
Description:	Mercury (Hg) (TCLP) Cold Vapor Standard	2.0%	10.0 (mL) Nitric Acid
Expiration Date:	060110		

Nominal Concentration (µg/mL): 20

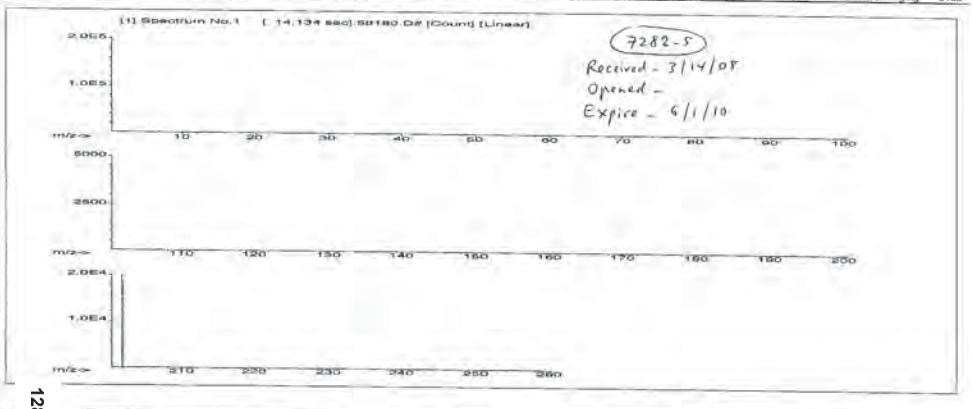
Weight(s) shown below were combined and diluted to (mL): 500.04 — 5E-05 Balance Uncertainty; 0.025 Flask Uncertainty

Formulated By: Justin Dippoid 060107

Reviewed By: Pedro L. Rentas 060107

Compound	Part Number	Lot Number	Dilution Factor	Initial Volume	Uncertainty Pipette	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty (+/-)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Mercury Nitrate (Hg)	57080	011807	0.0200	10.0	0.006	1000.2	20.0	0.00235	07783-34-8	N/A	orl-rat 51 mg/kg	3133

MSDS Information (Solvent Safety Info. On Attached pg.)



Lot # 060107 — 1 of 2 — Printed: 3/12/2008, 2:14:12 PM

1288

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7607-S	8-19-08	8-19-08	ICB/CCB/Hg	0.5 mL conc HNO3	↗ 200 mL w/DI	—	BAKER	E27027	AR
7608-S	8-19-08	8-19-08	Hg CAL STDs	0.0 mL 7606-S	↗ 50 mL w/DI	0.0 ppb	ACCUSTD	7606-S	AR
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7609-S	8/19/08	8/19/08	ICV Hg	4.0 mL 7605-S	↗ 50 mL w/DI	4.0 ppb	ABSOLUTE	7605-S	AR
7610-S	8/19/08	8/19/08	CCV Hg	2.0 mL 7606-S	↗ 50 mL w/DI	2.0 ppb	ACCUSTD	7606-S	AR
7611-S			CCV						
7612-S			CRA	0.2		0.2			
7613-S	8/22/08	8/22/08	STD 50 GFAA	10mL (7798-S) + 10mL DI	20 mL	50 ppb	AccuSTD	7798-S	CT
7614-S			STD 25	5mL (7613-S) + 5mL DI	10	25		7613-S	
7615-S			STD 10	2mL (7613-S) + 8mL DI	10	10		7613-S	
7616-S			STD 2	2mL (7615-S) + 8mL DI	10	2		7615-S	
7617-S	8/27/08	8/27/08	50 ppb Hg (CAL STD Hg)	0.5 mL (7281-S) + 4mL conc HNO3	↗ 200 mL w/DI	50 ppb	ACCUSTD BAKER	(7281-S) E27027	AR
7618-S	8/27/08	8/27/08	50 ppb Hg (REF STD)	0.5 mL (7282-S) + 4mL conc HNO3	↗ 200 ml w/DI	50 ppb	ABSOLUTE BAKER	(7282-S) E27027	AR

Reviewed By: _____

Date: _____

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106

1291

Absolute Standards, Inc.
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ISO 9001 QS Registered
ISO 25 Accredited

AbsoluteGrade™ Solution

Mercury (Hg)

	(µg/mL)	(+/-)
Certified Concentration (µg/mL)	20.0	0.047

The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise specified.

7282-S
Received - 3/12/08
Opened -
Expire - 6/1/10

Part# 52009
Lot# 060107

TRACEABILITY DOCUMENTATION:

A) Classical Chemical Analysis:

Method	Traceability	Concentration (µg/mL)
EDTA Titration	NIST SRM 928 Lead Nitrate	N/A
Gravimetric Analysis	NIST Weights	N/A

B) Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Nb	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	La	<0.02	Nd	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Cs	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Ce	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Ru	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	*	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	As	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(*) = Target Element

C) Physical Characterization:

Analyzed Density of Solution (g/mL): 1.011
Temperature (°C): 21.0
Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

We use purified acids, 18 megohm double deionized water, calibrated Class A glassware and the highest purity raw materials available, (typically 99.999%). We meticulously clean our bottles by acid leaching and then triple rinsing with ASTM Type I water prior to use. Our standards are made gravimetrically using balances that are calibrated with weights traceable to NIST. (NIST Test #: 732/245790). We certify that all our standards are (+/-) 0.5% of the stated value unless otherwise stated, assuming that the bottle is kept tightly capped and stored under normal laboratory conditions.

Reference: Taylor, B.N. and Kuyatt, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. government Printing Office, Washington DC, (1994).

Part# 52009 Lot # 060107 — 2 of 2 — Printed: 3/12/2008, 2:14:12 PM

1289

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7619-S	8/27/08	8/27/08	ICB/CCB	0.5 mL conc HNO3	200 mL w/DI	—	BARGER	E27027	DR
7620-S	8/27/08	8/27/08	Hg CAL STDS (SOIL)	0.0 mL (7617-S)	50 mL w/DI	0.0 ppb	Accustd	(7617-S)	DR
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7621-S	8/27/08	8/27/08	ICV Hg (SOIL)	4.0 mL ~~7618-S~~ 7618-S (DR 8-27-08)	50 mL w/DI	4.0 ppb	ABSOLUTE	7618-S	DR
7622-S	8/27/08	8/27/08	CCV (Hg Soil)	2.0 mL 7617-S	50 mL w/DI	2.0 ppb	Accustd	7617-S	DR
7623-S			CCV	2.0					
7624-S			CRA	0.2		0.2			
7625-S	8/27/08	8/27/08	Hg CAL STDS (WATER	0.0 mL 7617-S	50 mL w/DI	0.0 ppb	ACCUSTD	7617-S	DR
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7626-S	8/27/08	8/27/08	ICV Hg (WATER)	4.0 mL 7618-S	50 mL w/DI	4.0 ppb	ABSOLUTE	7618-S	DR

Reviewed By: _____

Date: _____

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1292

107

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7627-S	8/27/08	8/27/08	CCV (Hg WATER)	2.0 mL (7617-S)	50 mL w/DI	2.0 ppb	Accustd	7617-S	DR
7628-S									
7629-S			CRA	0.2		0.2			

Reviewed By: _____

Date: _____

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1293

108

Wet Chemistry Data

1294

Life Science Laboratories, Inc.

Date: 19-Aug-08

CLIENT: O'Brien & Gere Engineers, Inc.
Lab Order: 0808068
Project: City of Geneva- Market Basket Site

Sample ID	Lab ID	Units	Date Collected	Date Received	Date Analyzed	Batch ID	Percent Moisture
SB-2-Bot-1	0808068-001B	wt%	8/12/2008	8/12/2008	8/14/2008	R14483	18.4
SB-2-South	0808068-002B	wt%	8/12/2008	8/12/2008	8/14/2008	R14483	17.7
SB-2-East	0808068-003B	wt%	8/12/2008	8/12/2008	8/14/2008	R14483	17.8
SB-2-North	0808068-004B	wt%	8/12/2008	8/12/2008	8/14/2008	R14483	15.0
SB-2-West	0808068-005B	wt%	8/12/2008	8/12/2008	8/14/2008	R14483	16.2
SB-2-Bot-2	0808068-006B	wt%	8/12/2008	8/12/2008	8/14/2008	R14483	16.4

1 of 1

1295

Life Science Laboratories : Brittonfield

Percent Moisture DataSheet SM 2540 G

Analysis Date:	August 14, 2008
Batch ID:	R14483
LOQ/RL/PQL	1

Instrument ID:	Denver APX-200

#	LSL ID	Client ID	Sample Type		Dish Wt (g)	Dish Wt + Wet Samp (g)	Dish Wt +Dried Samp (g)		% Moisture	Dish Wt +Ashed Samp @ 550°C (g)		% Volatile Solids	Comments
1	CONTROL				1.2888		1.2886						
2	0808043-001A	[redacted]	SAMP		1.2907	7.8285	6.2183		22.25				
3	0808061-001A	[redacted]	RA		1.2886	8.8912	7.3240		20.61				
4	0808061-001ADUP	[redacted]	DUP		1.2835	9.1215	7.4666		21.14				
5	0808068-001B	OBG-MS	SAMP		1.2901	10.8471	9.0905		18.38				
6	0808068-002B	OBG-MS	SAMP		1.2927	8.1752	6.9584		17.68				
7	0808068-003B	OBG-MS	SAMP		1.2928	8.6578	6.1772		17.80				
8	0808068-004B	OBG-MS	SAMP		1.2936	7.4089	6.4916		13.00				
9	0808068-005B	OBG-MS	SAMP		1.2924	9.6466	8.2903		16.23				
10	0808068-006B	OBG-MS	SAMP		1.2936	7.6782	6.6287		18.44				
11	0808076-001B	OBG-MS	SAMP		1.2941	9.2396	7.8139		17.94				
12	0808076-002B	OBG-MS	SAMP		1.2935	8.0988	7.1009		14.68				
13	0808076-003B	OBG-MS	SAMP		1.2936	8.2382	7.0791		16.71				
14	0808076-004B	OBG-MS	SAMP		1.2934	8.5931	7.4882		15.41				
15	0808076-004BDUP	OBG-MS	DUP		1.2891	8.5533	7.3916		15.59				
16	0808076-005B	OBG-MS	SAMP		1.2909	13.0955	10.2150		24.40				
17	0808076-006B	OBG-MS	SAMP		1.2865	7.5542	5.8131		27.78				
18	0808076-007B	OBG-MS	SAMP		1.2915	9.4931	7.9890		18.34				
19	0808076-008B	OBG-MS	SAMP		1.2882	8.1586	6.2932		27.15				
20	0808076-009B	OBG-MS	SAMP		1.2933	10.0956	7.9453		24.43				
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

	Weight
Time on:	12:30
Oven Temp on:	103.0°C
Time Off:	7:00
Oven Temp off:	103.0°C
Oven Date Off:	08/15/08

Prep Start Date:	08/14/08
Prep Start Time:	12:00:00
Prep End Time:	12:30:00
Analyte:	PMOIST

8/15/08

Comments:

Analyst: Charles Berry

Date: 8/15/08

Reviewed by: [illegible]

Date: 8-19-08

1298

ent Moisture080814

Life Science Laboratories, Inc.

Date: 19-Aug-08

CLIENT: O'Brien & Gere Engineers, Inc.
Lab Order: 0808076
Project: City of Geneva- Market Basket Site

Sample ID	Lab ID	Units	Date Collected	Date Received	Date Analyzed	Batch ID	Percent Moisture
UST-Bot-1	0808076-001B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	17.9
UST-North	0808076-002B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	14.7
UST-Bot-2	0808076-003B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	16.7
UST-East	0808076-004B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	15.4
UST-West	0808076-005B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	24.4
UST-South	0808076-006B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	27.8
Field Dup	0808076-007B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	18.3
Trench-Bot-1	0808076-008B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	27.2
Trench-Bot-2	0808076-009B	wt%	8/13/2008	8/13/2008	8/14/2008	R14483	24.4

1 of 1

1296

QA Auth | Calc SEQ | Rslts

VAL	SeqNo	SampID	SampType	Analyte	RawVal	CalcVal	Qual	Tare Wt
✓	379640	0808043-001A	SAMP	Percent Moisture	22.3	22.3		0
✓	379641	0808061-001A	RA	Percent Moisture	20.6	20.6		0
✓	379642	0808061-001ADUP	DUP	Percent Moisture	21.1	21.1		0
✓	379643	0808068-001B	SAMP	Percent Moisture	18.4	18.4		0
✓	379644	0808068-002B	SAMP	Percent Moisture	17.7	17.7		0
✓	379645	0808068-003B	SAMP	Percent Moisture	17.8	17.8		0
✓	379646	0808068-004B	SAMP	Percent Moisture	15	15		0
✓	379647	0808068-005B	SAMP	Percent Moisture	16.2	16.2		0
✓	379648	0808068-006B	SAMP	Percent Moisture	16.4	16.4		0
✓	379649	0808076-001B	SAMP	Percent Moisture	17.9	17.9		0
✓	379650	0808076-002B	SAMP	Percent Moisture	14.7	14.7		0
✓	379651	0808076-003B	SAMP	Percent Moisture	16.7	16.7		0
✓	379652	0808076-004B	SAMP	Percent Moisture	15.4	15.4		0
✓	379653	0808076-004BDUP	DUP	Percent Moisture	16	16		0
✓	379654	0808076-005B	SAMP	Percent Moisture	24.4	24.4		0
✓	379655	0808076-006B	SAMP	Percent Moisture	27.8	27.8		0
✓	379656	0808076-007B	SAMP	Percent Moisture	18.3	18.3		0
✓	379657	0808076-008B	SAMP	Percent Moisture	27.2	27.2		0
✓	379658	0808076-009B	SAMP	Percent Moisture	24.4	24.4		0

8/15/08

1299

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SM 2540 G
Work Order: 0808076
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0808076-004BDUP SampType: DUP TestCode: PMOIST Units: wt% Prep Date: RunNo: 14483
Client ID: UST-East Batch ID: R14483 Method: SM 2540 G Analysis Date: 8/14/2008 SeqNo: 379653
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	16.0	1.00						15.4	3.8	10	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

19-Aug-08

Page 2 of 2

1297

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Thursday, November 06, 2008

Dave Miexell
O'Brien & Gere Engineers, Inc.
5000 Brittonfield Parkway
PO Box 4873
Syracuse, NY 13221-4873

TEL:

Project: CITY OF GENEVA- MARKET BASKET SITE
RE: Analytical Result Order No.: 0810083

Dear Dave Miexell:

Life Science Laboratories, Inc. received 6 sample(s) on 10/10/2008 for the analyses presented in the following report.

Very truly yours,
Life Science Laboratories, Inc.

Pamela J. Fikes for M.S.

Monika Sartucci
Project Manager

Sample Data Summary Package

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I
SAMPLE IDENTIFICATION AND ANALYTICAL SUMMARY

NYS DEC SAMPLE ID	LABORATORY SAMPLE ID	Type	Analytical Requirements					
			VOA GC/MS Method #	BNA GC/MS Method #	VOA GC Method #	MISC GC Method #	METALS Method #	OTHER Method #
MBSS-1	0810083-001	MS	SW8260B	SW8270C			SW6010B SW7471A	
MBSS-1	0810083-001	MSD	SW8260B	SW8270C			SW6010B SW7471A	
MBSS-1	0810083-001	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-2	0810083-002	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-3	0810083-003	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-4	0810083-004	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-FD	0810083-005	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
Trip Blank	0810083-006	SAMP	SW8260B					

SW8260B
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-IIb
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0810083-001ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-001A	Soil	10/10/08	10/10/08		10/10/08
0810083-001AMS	Soil	10/10/08	10/10/08		10/13/08
0810083-001AMSD	Soil	10/10/08	10/10/08		10/13/08
0810083-002ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-002A	Soil	10/10/08	10/10/08		10/10/08
0810083-003ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-003A	Soil	10/10/08	10/10/08		10/10/08
0810083-004ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-004A	Soil	10/10/08	10/10/08		10/10/08
0810083-005ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-005A	Soil	10/10/08	10/10/08		10/10/08
0810083-006A	Water Q	10/10/08	10/10/08		10/10/08

SW8260B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY

VOLATILE ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0810083-001A	Soil	SW8260B	NONE	NONE	1X
0810083-001AMS	Soil	SW8260B	NONE	NONE	1X
0810083-001AMSD	Soil	SW8260B	NONE	NONE	1X
0810083-001ARA	Soil	SW8260B	NONE	NONE	1X
0810083-002A	Soil	SW8260B	NONE	NONE	1.02X
0810083-002ARA	Soil	SW8260B	NONE	NONE	1X
0810083-003A	Soil	SW8260B	NONE	NONE	1X
0810083-003ARA	Soil	SW8260B	NONE	NONE	1X
0810083-004A	Soil	SW8260B	NONE	NONE	0.98X
0810083-004ARA	Soil	SW8260B	NONE	NONE	1X
0810083-005A	Soil	SW8260B	NONE	NONE	1X
0810083-005ARA	Soil	SW8260B	NONE	NONE	1X
0810083-006A	Water Q	SW8260B	NONE	NONE	1X

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIa

SAMPLE PREPARATION AND ANALYSIS SUMMARY

SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0810083-001B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-001BMS	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-001BMSD	Soil	10/10/08	10/10/08	10/21/08	10/23/08
0810083-002B	Soil	10/10/08	10/10/08	10/21/08	10/23/08
0810083-002BDL	Soil	10/10/08	10/10/08	10/21/08	10/23/08
0810083-003B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-003BDL	Soil	10/10/08	10/10/08	10/15/08	10/20/08
0810083-004B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-004BDL	Soil	10/10/08	10/10/08	10/15/08	10/20/08
0810083-005B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-005BDL	Soil	10/10/08	10/10/08	10/15/08	10/20/08

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY

SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0810083-001B	Soil	SW8270C	SW3550B	GPC	10X
0810083-001BMS	Soil	SW8270C	SW3550B	GPC	10X
0810083-001BMSD	Soil	SW8270C	SW3550B	GPC	10X
0810083-002B	Soil	SW8270C	SW3550B	GPC	10X
0810083-002BDL	Soil	SW8270C	SW3550B	GPC	25X
0810083-003B	Soil	SW8270C	SW3550B	GPC	2X
0810083-003BDL	Soil	SW8270C	SW3550B	GPC	25X
0810083-004B	Soil	SW8270C	SW3550B	GPC	2X
0810083-004BDL	Soil	SW8270C	SW3550B	GPC	25X
0810083-005B	Soil	SW8270C	SW3550B	GPC	2X
0810083-005BDL	Soil	SW8270C	SW3550B	GPC	25X

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

LABORATORY SAMPLE ID	MATRIX	METALS REQUESTED	DATE REC'D AT LAB	DATE DIGESTED	DATE ANALYZED
0810083-001B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-001BMS	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-001BMSD	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-002B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-003B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-003BDL	Soil	Zn	10/10/2008	10/20/2008	10/21/2008
0810083-004B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-004BDL	Soil	Zn	10/10/2008	10/20/2008	10/21/2008
0810083-005B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-005BDL	Soil	Zn	10/10/2008	10/20/2008	10/21/2008

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

LABORATORY SAMPLE ID	MATRIX	METALS REQUESTED	DATE REC'D AT LAB	DATE DIGESTED	DATE ANALYZED
0810083-001B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-001BMS	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-001BMSD	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-002B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-003B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-004B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-005B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008

NARRATIVE

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from O'Brien & Gere Engineers, Inc. for the City of Geneva – Market Basket project. Immediately following the narratives are the Work Order Sample Summary and Dates Report.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The coolers were received intact. When the coolers were received by the laboratory, the sample custodian(s) opened and inspected the shipments for damage, custody inconsistencies and proper preservation. The chain of custody forms documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

Discrepancies noted upon receipt are listed on the sample receipt checklist located in the chain of custody section of the report. The temperature of the iced cooler was 9.0°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1
Semivolatile Organics	SW8270C	1
ICP Metals	SW6010B	1
Mercury	SW7471A	1
Percent Moisture	SM 2540G	2

1) New York State Department of Environmental Conservation Analytical Services Protocol, June 2000.

2) Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992

QUALITY CONTROL

QA/QC results are summarized in the Laboratory Report Package and are also included in the raw data.

RAW DATA

The raw data is organized in the New York State Department of Environmental Conservation Analytical Services Protocol Category B order of data requirements.

GC/MS Volatile Organics Case Narrative

Client: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0810083
Methodology: 8260B

Analyzed/Reviewed by (Initials/Date): GS 10/27/08
Supervisor/Reviewed by (Initials/Date): (TA) 10-27-08
QA/QC Review (Initials/Date): 10/31/08

File Name: G:\Narratives\MSVoa\0810083msvnar.doc

GC/MS Volatile Organics
The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 40 m x 0.18 mm ID capillary column (MS01 & MS03), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), and Restek Rtx-VMS, 60 m x 0.25mm ID capillary column (MS04), and a Vocarb 3000 adsorbent trap.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Samples were unpreserved.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MBSS-1	0810083-001AMS/MSD	Methyl acetate	X	X	1

1 The associated LCS and MSB met acceptance limits.

Surrogate Standards
Surrogate recoveries exceeded the upper control limit for toluene-d8 and/or 4-bromofluorobenzene in all soil samples. Matrix effects are suspected. Recoveries may have been biased due to low response of the associated internal standard(s). Associated target analytes results may also be biased high. All samples were reanalyzed at the same sample weight and both results are reported.

Internal Standards
Internal standard recoveries exceeded the lower control limit for chlorobenzene-d5 and/or 1,4-dichlorobenzene-d4 in all soil samples. Matrix effects are suspected. Samples were reanalyzed at the same sample weight and both results were reported.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

GC/MS Volatile Organics Case Narrative - Page 2

Client: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0810083
Methodology: 8260B

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

GC/MS Semi-Volatile Organics Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva-Market Basket Site
Work Order #: 0810083
Methodology: 8270C

Analyzed/Reviewed by (Initials/Date): MA 11/7/08
Supervisor/Reviewed by (Initials/Date): (MA) 11-7-08
QA/QC Review (Initials/Date): gs for SR 11/7/08
File Name: G:\Narratives\MSSemi\0810083svnar.doc

GC/MS Semi-Volatile Organics
The GC/MS Semi-volatile instruments used a J & W DB-5MS, 30 m x 0.25 mm ID capillary column.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Due to suspected contamination during initial sample preparation, samples MBSS-1 MSD [0810083-001BMSD] and MBSS-2 [0810083-002B] were re-extracted within method holding time, but outside ASP holding time. Limited sample prevented re-extraction of the parent sample and matrix spike for MBSS-1 [0810083-001B].

Laboratory Control Sample
The following compound(s) did not meet laboratory control sample recovery criteria:

LCS No.	Compound	Corrective Action
LCS-8270	4-Chloroaniline	1

1 The recovery for this compound in the associated MSB was within acceptance limits. No corrective action was taken.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MBSS-2	0810083-002B	several	X	X	1

1 Concentrations of several analytes in the sample were much greater than the concentration of the analyte spiked, which may bias recoveries. The sample extract was diluted, which also may bias recoveries. The recovery for all compounds in the associated MSB was within acceptance limits. No corrective action was taken.

GC/MS Semi-Volatile Organics Case Narrative - Page 2

Client ID: OBG-MS
Project/Order: City of Geneva-Market Basket Site
Work Order#: 0810083
Methodology: 8270C

Surrogate Standards
The following sample(s) did not meet surrogate recovery criteria:

Sample Description	Sample #	Surrogate	Corrective Action
MBSS-4	0810083-004B	Terphenyl-d14	1
MBSS-FD	0810083-005B	Terphenyl-d14	1

1 The recovery met acceptance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

Internal Standards
The internal standard area for the following sample(s) did not meet abundance criteria:

Sample Description	Sample #	Internal Standard	Corrective Action
MBSS-2	0810083-002B	Perylene-d12	1
MBSS-3	0810083-003B	Perylene-d12	1
MBSS-4	0810083-004B	Chrysene-d12	1
		Perylene-d12	1
MBSS-FD	0810083-005B	Chrysene-d12	1
		Perylene-d12	1

1 The recovery met acceptance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order: 0810083
Methodology: ICP metals – SW6010B

Analyzed/Reviewed by (Date/Initials): 10-29-08 MT
Supervisor/Reviewed by (Date/Initials): 10-29-08 MT
QA/QC Review (Date/Initials): 10/30/08 SL

Trace Metals

Holding Times
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD AND MS/MSD RPD
The following analytes did not meet matrix spike/matrix spike duplicate percent recovery criteria:

Sample Description	Sample #	Analyte	% REC	RPD	Corrective Action
MBSS-1	0810083-001B	Fe, Zn	X		1

1. The concentration of the analyte in the sample was much greater than the concentration of the spike added. A post-digestion spike was performed as required. No further corrective action was taken.

ICP Serial Dilution
All percent differences met method and/or project specific QC criteria.

Calibrations
All calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order: 0810083
Methodology: Mercury – SW7471A

Analyzed/Reviewed by (Date/Initials): 10-30-08 MT
Supervisor/Reviewed by (Date/Initials): 10-30-08 MT
QA/QC Review (Date/Initials): 10/30/08 SL

Trace Metals
There were no excursions to note. All QC results were within established control limits.

Life Science Laboratories, Inc.

Date: *06-Nov-08*

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab Order: 0810083

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0810083-001A	MBSS-1		10/10/2008	10/10/2008
0810083-001B	MBSS-1		10/10/2008	10/10/2008
0810083-002A	MBSS-2		10/10/2008	10/10/2008
0810083-002B	MBSS-2		10/10/2008	10/10/2008
0810083-003A	MBSS-3		10/10/2008	10/10/2008
0810083-003B	MBSS-3		10/10/2008	10/10/2008
0810083-004A	MBSS-4		10/10/2008	10/10/2008
0810083-004B	MBSS-4		10/10/2008	10/10/2008
0810083-005A	MBSS-FD		10/10/2008	10/10/2008
0810083-005B	MBSS-FD		10/10/2008	10/10/2008
0810083-006A	Trip Blank		10/10/2008	10/10/2008

Life Science Laboratories, Inc.

06-Nov-08

Lab Order: 0810083
Client: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Sit

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0810083-004B	MBSS-4	10/10/2008 10:00:00 AM	Soil	Total Metals by ICP		10/20/2008	10/21/2008
				Total Metals by ICP		10/20/2008	10/21/2008
				Total Metals by ICP		10/20/2008	10/21/2008
0810083-005A	MBSS-FD	10/10/2008 10:05:00 AM		Volatile Organic Compounds by GC/MS			10/13/2008
				Volatile Organic Compounds by GC/MS			10/10/2008
0810083-005B				Mercury		10/16/2008	10/17/2008
				Mercury		10/16/2008	10/17/2008
				Percent Moisture			10/13/2008
				Semivolatile Organic Compounds by GC/MS		10/15/2008	10/20/2008
				Semivolatile Organic Compounds by GC/MS		10/15/2008	10/21/2008
				Total Metals by ICP		10/20/2008	10/21/2008
				Total Metals by ICP		10/20/2008	10/21/2008
0810083-006A	Trip Blank	10/10/2008 9:20:00 AM	Water Q	Volatile Organic Compounds by GC/MS			10/10/2008

Life Science Laboratories, Inc.

06-Nov-08

Lab Order: 0810083
Client: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Sit

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0810083-001A	MBSS-1	10/10/2008 9:20:00 AM	Soil	Volatile Organic Compounds by GC/MS			10/13/2008
				Volatile Organic Compounds by GC/MS			10/10/2008
0810083-001B				Mercury		10/16/2008	10/17/2008
				Percent Moisture			10/13/2008
				Semivolatile Organic Compounds by GC/MS		10/15/2008	10/21/2008
0810083-002A	MBSS-2	10/10/2009 9:30:00 AM		Total Metals by ICP		10/20/2008	10/21/2008
				Volatile Organic Compounds by GC/MS			10/10/2008
0810083-002B				Volatile Organic Compounds by GC/MS			10/13/2008
				Mercury		10/16/2008	10/17/2008
				Percent Moisture			10/13/2008
				Semivolatile Organic Compounds by GC/MS		10/21/2008	10/23/2008
				Semivolatile Organic Compounds by GC/MS		10/23/2008	10/23/2008
				Total Metals by ICP		10/30/2008	10/31/2008
0810083-003A	MBSS-3	10/10/2008 9:45:00 AM		Volatile Organic Compounds by GC/MS			10/10/2008
				Volatile Organic Compounds by GC/MS			10/13/2008
0810083-003B				Mercury		10/16/2008	10/17/2008
				Percent Moisture			10/13/2008
				Semivolatile Organic Compounds by GC/MS		10/15/2008	10/21/2008
				Total Metals by ICP		10/20/2008	10/21/2008
				Total Metals by ICP		10/20/2008	10/21/2008
0810083-004A	MBSS-4	10/10/2008 10:00:00 AM		Volatile Organic Compounds by GC/MS			10/10/2008
				Volatile Organic Compounds by GC/MS			10/13/2008
0810083-004B				Mercury		10/16/2008	10/17/2008
				Percent Moisture		10/16/2008	10/17/2008
				Semivolatile Organic Compounds by GC/MS		10/15/2008	10/21/2008
				Semivolatile Organic Compounds by GC/MS		10/15/2008	10/20/2008

Analytical Results

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 14.4	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7363.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Chloromethane	ND		5.8	0.58	µg/Kg-dry	1	10/10/08 20:27
Vinyl chloride	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Bromomethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Chloroethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Trichlorofluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
1,1-Dichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Acetone	ND		47	23	µg/Kg-dry	1	10/10/08 20:27
Carbon disulfide	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Methyl acetate	ND		2.9	12	µg/Kg-dry	1	10/10/08 20:27
Methylene chloride	ND		5.8	0.58	µg/Kg-dry	1	10/10/08 20:27
trans-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Methyl tert-butyl ether	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
cis-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
2-Butanone	ND		47	23	µg/Kg-dry	1	10/10/08 20:27
Chloroform	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1,1-Trichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Cyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Carbon tetrachloride	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Benzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Trichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Methylcyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
1,2-Dichloropropane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Bromodichloromethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
cis-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
4-Methyl-2-pentanone	ND		5.8	2.3	µg/Kg-dry	1	10/10/08 20:27
Toluene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
trans-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1,2-Trichloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Tetrachloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396297 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 14.4	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7363.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.8	2.3	µg/Kg-dry	1	10/10/08 20:27
Dibromochloromethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dibromoethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Chlorobenzene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Ethylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Xylenes (total)	ND		5.8	1.8	µg/Kg-dry	1	10/10/08 20:27
Styrene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Bromoform	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Isopropylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1,2,2-Tetrachloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,3-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,4-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dibromo-3-chloropropane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
1,2,4-Trichlorobenzene	ND		5.8	0.58	µg/Kg-dry	1	10/10/08 20:27
Surr: 1,2-Dichloroethane-d4	102		71-128	0.58	%REC	1	10/10/08 20:27
Surr: Toluene-d8	118		75-125	0.58	%REC	1	10/10/08 20:27
Surr: 4-Bromofluorobenzene	129 S		59-125	0.58	%REC	1	10/10/08 20:27

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396297 Project Supervisor: Monika Santucci

Form I TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7363.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 14 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 1 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 14.4	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7376.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Chloromethane	ND		5.8	0.58	µg/Kg-dry	1	10/13/08 14:11
Vinyl chloride	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Bromomethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Chloroethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Trichlorofluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
1,1-Dichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Acetone	ND		47	23	µg/Kg-dry	1	10/13/08 14:11
Carbon disulfide	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Methyl acetate	ND		2.9	12	µg/Kg-dry	1	10/13/08 14:11
Methylene chloride	ND		5.8	0.58	µg/Kg-dry	1	10/13/08 14:11
trans-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Methyl tert-butyl ether	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
cis-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
2-Butanone	ND		47	23	µg/Kg-dry	1	10/13/08 14:11
Chloroform	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1,1-Trichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Cyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Carbon tetrachloride	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Benzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Trichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Methylcyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
1,2-Dichloropropane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Bromodichloromethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
cis-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
4-Methyl-2-pentanone	ND		5.8	2.3	µg/Kg-dry	1	10/13/08 14:11
Toluene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
trans-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1,2-Trichloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Tetrachloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396439 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 14.4	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7376.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.8	2.3	µg/Kg-dry	1	10/13/08 14:11
Dibromochloromethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dibromoethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Chlorobenzene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Ethylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Xylenes (total)	ND		5.8	1.8	µg/Kg-dry	1	10/13/08 14:11
Styrene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Bromoform	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Isopropylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1,2,2-Tetrachloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,3-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,4-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dibromo-3-chloropropane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
1,2,4-Trichlorobenzene	ND		5.8	0.58	µg/Kg-dry	1	10/13/08 14:11
Surr: 1,2-Dichloroethane-d4	97.9		71-128	0.58	%REC	1	10/13/08 14:11
Surr: Toluene-d8	115		75-125	0.58	%REC	1	10/13/08 14:11
Surr: 4-Bromofluorobenzene	130 S		59-125	0.58	%REC	1	10/13/08 14:11

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396439 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 4.9 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 25.1	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7364.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Chloromethane	ND		6.8	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Vinyl chloride	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Bromomethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Chloroethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Trichlorofluoromethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,1-Dichloroethene	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Acetone	ND		54	27	µg/Kg-dry	1.02	10/10/08 21:01
Carbon disulfide	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Methyl acetate	ND		3.4	14	µg/Kg-dry	1.02	10/10/08 21:01
Methylene chloride	ND		6.8	0.68	µg/Kg-dry	1.02	10/10/08 21:01
trans-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Methyl tert-butyl ether	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
cis-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
2-Butanone	ND		54	27	µg/Kg-dry	1.02	10/10/08 21:01
Chloroform	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1,1-Trichloroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Cyclohexane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Carbon tetrachloride	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Benzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Trichloroethene	2.2	J	3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Methylcyclohexane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dichloropropane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Bromodichloromethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
cis-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
4-Methyl-2-pentanone	ND		6.8	2.7	µg/Kg-dry	1.02	10/10/08 21:01
Toluene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
trans-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1,2-Trichloroethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Tetrachloroethene	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396298 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 4.9 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 25.1	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7364.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.8	2.7	µg/Kg-dry	1.02	10/10/08 21:01
Dibromochloromethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dibromoethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Chlorobenzene	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Ethylbenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Xylenes (total)	ND		6.8	2.0	µg/Kg-dry	1.02	10/10/08 21:01
Styrene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Bromoform	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Isopropylbenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1,2,2-Tetrachloroethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,3-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,4-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dibromo-3-chloropropane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,2,4-Trichlorobenzene	ND		6.8	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Surr: 1,2-Dichloroethane-d4	97.7		71-128	0.68	%REC	1.02	10/10/08 21:01
Surr: Toluene-d8	129 S		75-125	0.68	%REC	1.02	10/10/08 21:01
Surr: 4-Bromofluorobenzene	141 S		59-125	0.68	%REC	1.02	10/10/08 21:01

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396298 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7364.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 25 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.02

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 5 SW8260B

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 25.1	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7377.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Chloromethane	ND		6.7	0.67	µg/Kg-dry	1	10/13/08 14:45
Vinyl chloride	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Bromomethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Chloroethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Trichlorofluoromethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
1,1-Dichloroethene	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Acetone	ND		53	27	µg/Kg-dry	1	10/13/08 14:45
Carbon disulfide	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Methyl acetate	ND		3.3	13	µg/Kg-dry	1	10/13/08 14:45
Methylene chloride	ND		6.7	0.67	µg/Kg-dry	1	10/13/08 14:45
trans-1,2-Dichloroethene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Methyl tert-butyl ether	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
cis-1,2-Dichloroethene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
2-Butanone	ND		53	27	µg/Kg-dry	1	10/13/08 14:45
Chloroform	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1,1-Trichloroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Cyclohexane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Carbon tetrachloride	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Benzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Trichloroethene	1.4	J	3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Methylcyclohexane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
1,2-Dichloropropane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Bromodichloromethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
cis-1,3-Dichloropropene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
4-Methyl-2-pentanone	ND		6.7	2.7	µg/Kg-dry	1	10/13/08 14:45
Toluene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
trans-1,3-Dichloropropene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1,2-Trichloroethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Tetrachloroethene	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396440 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 25.1	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7377.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.7	2.7	µg/Kg-dry	1	10/13/08 14:45
Dibromochloromethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dibromoethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Chlorobenzene	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Ethylbenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Xylenes (total)	ND		6.7	2.0	µg/Kg-dry	1	10/13/08 14:45
Styrene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Bromoform	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Isopropylbenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1,2,2-Tetrachloroethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,3-Dichlorobenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,4-Dichlorobenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dichlorobenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dibromo-3-chloropropane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
1,2,4-Trichlorobenzene	ND		6.7	0.67	µg/Kg-dry	1	10/13/08 14:45
Surr: 1,2-Dichloroethane-d4	100		71-128	0.67	%REC	1	10/13/08 14:45
Surr: Toluene-d8	130	S	75-125	0.67	%REC	1	10/13/08 14:45
Surr: 4-Bromofluorobenzene	138	S	59-125	0.67	%REC	1	10/13/08 14:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396440 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 20.4	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7365.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Chloromethane	ND		6.3	0.63	µg/Kg-dry	1	10/10/08 21:35
Vinyl chloride	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Bromomethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Chloroethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Trichlorofluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
1,1-Dichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Acetone	ND		50	25	µg/Kg-dry	1	10/10/08 21:35
Carbon disulfide	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Methyl acetate	ND		3.1	13	µg/Kg-dry	1	10/10/08 21:35
Methylene chloride	ND		6.3	0.63	µg/Kg-dry	1	10/10/08 21:35
trans-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Methyl tert-butyl ether	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
cis-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
2-Butanone	ND		50	25	µg/Kg-dry	1	10/10/08 21:35
Chloroform	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1,1-Trichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Cyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Carbon tetrachloride	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Benzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Trichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Methylcyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
1,2-Dichloropropane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Bromodichloromethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
cis-1,3-Dichloropropene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
4-Methyl-2-pentanone	ND		6.3	2.5	µg/Kg-dry	1	10/10/08 21:35
Toluene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
trans-1,3-Dichloropropene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1,2-Trichloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Tetrachloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396299 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 20.4	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7365.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.3	2.5	µg/Kg-dry	1	10/10/08 21:35
Dibromochloromethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dibromoethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Chlorobenzene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Ethylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Xylenes (total)	ND		6.3	1.9	µg/Kg-dry	1	10/10/08 21:35
Styrene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Bromoform	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Isopropylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1,2,2-Tetrachloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,3-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,4-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dibromo-3-chloropropane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
1,2,4-Trichlorobenzene	ND		6.3	0.63	µg/Kg-dry	1	10/10/08 21:35
Surr: 1,2-Dichloroethane-d4	105		71-128	0.63	%REC	1	10/10/08 21:35
Surr: Toluene-d8	129	S	75-125	0.63	%REC	1	10/10/08 21:35
Surr: 4-Bromofluorobenzene	141	S	59-125	0.63	%REC	1	10/10/08 21:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396299 Project Supervisor: Monika Santucci

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-3

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: GBG-M3 SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7365.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 20 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 3 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000080-56-8	.alpha.-Pinene	17.03	8.8	JN
2. 003387-41-5	Bicyclo[3.1.0]hexane, 4-methyl	18.21	14	JN
3. 005989-54-8	Cyclohexene, 1-methyl-4-(1-met	19.27	8.1	JN

FORM I TIC 1 SW8260B

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 20.4	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7378.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.3	2.5	µg/Kg-dry	1	10/13/08 15:19
Dibromochloromethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dibromoethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Chlorobenzene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Ethylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Xylenes (total)	ND		6.3	1.9	µg/Kg-dry	1	10/13/08 15:19
Styrene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Bromoform	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Isopropylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1,2,2-Tetrachloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,3-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,4-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dibromo-3-chloropropane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
1,2,4-Trichlorobenzene	ND		6.3	0.63	µg/Kg-dry	1	10/13/08 15:19
Surr: 1,2-Dichloroethane-d4	102		71-128	0.63	%REC	1	10/13/08 15:19
Surr: Toluene-d8	128	S	75-125	0.63	%REC	1	10/13/08 15:19
Surr: 4-Bromofluorobenzene	138	S	59-125	0.63	%REC	1	10/13/08 15:19

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396441 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 20.4	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7378.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Chloromethane	ND		6.3	0.63	µg/Kg-dry	1	10/13/08 15:19
Vinyl chloride	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Bromomethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Chloroethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Trichlorofluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
1,1-Dichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Acetone	ND		50	25	µg/Kg-dry	1	10/13/08 15:19
Carbon disulfide	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Methyl acetate	ND		3.1	13	µg/Kg-dry	1	10/13/08 15:19
Methylene chloride	ND		6.3	0.63	µg/Kg-dry	1	10/13/08 15:19
trans-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Methyl tert-butyl ether	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
cis-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
2-Butanone	ND		50	25	µg/Kg-dry	1	10/13/08 15:19
Chloroform	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1,1-Trichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Cyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Carbon tetrachloride	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Benzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Trichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Methylcyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
1,2-Dichloropropane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Bromodichloromethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
cis-1,3-Dichloropropene	ND		3.1	0.83	µg/Kg-dry	1	10/13/08 15:19
4-Methyl-2-pentanone	ND		6.3	2.5	µg/Kg-dry	1	10/13/08 15:19
Toluene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
trans-1,3-Dichloropropene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1,2-Trichloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Tetrachloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396441 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 23.0	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Chloromethane	ND		6.4	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Vinyl chloride	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Bromomethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Chloroethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Trichlorofluoromethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,1-Dichloroethene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Acetone	ND		51	25	µg/Kg-dry	0.98	10/10/08 22:08
Carbon disulfide	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Methyl acetate	ND		3.2	13	µg/Kg-dry	0.98	10/10/08 22:08
Methylene chloride	ND		6.4	0.64	µg/Kg-dry	0.98	10/10/08 22:08
trans-1,2-Dichloroethene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Methyl tert-butyl ether	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
cis-1,2-Dichloroethene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
2-Butanone	ND		51	25	µg/Kg-dry	0.98	10/10/08 22:08
Chloroform	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1,1-Trichloroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Cyclohexane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Carbon tetrachloride	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Benzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Trichloroethene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Methylcyclohexane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dichloropropane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Bromodichloromethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
cis-1,3-Dichloropropene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
4-Methyl-2-pentanone	ND		6.4	2.5	µg/Kg-dry	0.98	10/10/08 22:08
Toluene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
trans-1,3-Dichloropropene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1,2-Trichloroethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Tetrachloroethene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396300 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5.1 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 23.0	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: I-SAMP-J7366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.4	2.5	µg/Kg-dry	0.98	10/10/08 22:08
Dibromochloromethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dibromoethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Chlorobenzene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Ethylbenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Xylenes (total)	ND		6.4	1.9	µg/Kg-dry	0.98	10/10/08 22:08
Styrene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Bromoform	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Isopropylbenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1,2,2-Tetrachloroethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,3-Dichlorobenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,4-Dichlorobenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dichlorobenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dibromo-3-chloropropane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,2,4-Trichlorobenzene	ND		6.4	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Surr: 1,2-Dichloroethane-d4	101		71-129	0.64	%REC	0.98	10/10/08 22:08
Surr: Toluene-d8	132	S	75-125	0.64	%REC	0.98	10/10/08 22:08
Surr: 4-Bromofluorobenzene	143	S	59-125	0.64	%REC	0.98	10/10/08 22:08

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396300 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-4

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OSG-M3 SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7366.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 23 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 9 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 23.0	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: I-RA-J7379.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Chloromethane	ND		6.5	0.65	µg/Kg-dry	1	10/13/08 15:52
Vinyl chloride	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Bromomethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Chloroethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Trichlorofluoromethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
1,1-Dichloroethene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Acetone	ND		52	26	µg/Kg-dry	1	10/13/08 15:52
Carbon disulfide	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Methyl acetate	ND		3.2	13	µg/Kg-dry	1	10/13/08 15:52
Methylene chloride	ND		6.5	0.65	µg/Kg-dry	1	10/13/08 15:52
trans-1,2-Dichloroethene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Methyl tert-butyl ether	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
cis-1,2-Dichloroethene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
2-Butanone	ND		52	26	µg/Kg-dry	1	10/13/08 15:52
Chloroform	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1,1-Trichloroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Cyclohexane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Carbon tetrachloride	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Benzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Trichloroethene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Methylcyclohexane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
1,2-Dichloropropane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Bromodichloromethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
cis-1,3-Dichloropropene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
4-Methyl-2-pentanone	ND		6.5	2.6	µg/Kg-dry	1	10/13/08 15:52
Toluene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
trans-1,3-Dichloropropene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1,2-Trichloroethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Tetrachloroethene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396442 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 23.0	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: I-RA-J7379.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.5	2.6	µg/Kg-dry	1	10/13/08 15:52
Dibromochloromethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dibromoethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Chlorobenzene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Ethylbenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Xylenes (total)	ND		6.5	1.9	µg/Kg-dry	1	10/13/08 15:52
Styrene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Bromoform	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Isopropylbenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1,2,2-Tetrachloroethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,3-Dichlorobenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,4-Dichlorobenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dichlorobenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dibromo-3-chloropropane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
1,2,4-Trichlorobenzene	ND		6.5	0.65	µg/Kg-dry	1	10/13/08 15:52
Surr: 1,2-Dichloroethane-d4	100		71-129	0.65	%REC	1	10/13/08 15:52
Surr: Toluene-d8	130	S	75-125	0.65	%REC	1	10/13/08 15:52
Surr: 4-Bromofluorobenzene	141	S	59-125	0.65	%REC	1	10/13/08 15:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396442 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7367.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Chloromethane	ND		6.1	0.61	µg/Kg-dry	1	10/10/08 22:42
Vinyl chloride	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Bromomethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Chloroethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Trichlorofluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Acetone	ND		48	24	µg/Kg-dry	1	10/10/08 22:42
Carbon disulfide	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Methyl acetate	ND		3.0	12	µg/Kg-dry	1	10/10/08 22:42
Methylene chloride	ND		6.1	0.61	µg/Kg-dry	1	10/10/08 22:42
trans-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Methyl tert-butyl ether	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
cis-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
2-Butanone	ND		48	24	µg/Kg-dry	1	10/10/08 22:42
Chloroform	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Benzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
cis-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
4-Methyl-2-pentanone	ND		6.1	2.4	µg/Kg-dry	1	10/10/08 22:42
Toluene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
trans-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1,2-Trichloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396301 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R15131
Revision:	10/28/08 13:07	TestCode: 8260S7 OLM42	FileID: 1-SAMP-J7367.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.1	2.4	µg/Kg-dry	1	10/10/08 22:42
Dibromochloromethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dibromoethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Ethylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Xylenes (total)	ND		6.1	1.8	µg/Kg-dry	1	10/10/08 22:42
Styrene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Bromoform	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Isopropylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1,2,2-Tetrachloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,3-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,4-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dibromo-3-chloropropane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
1,2,4-Trichlorobenzene	ND		6.1	0.61	µg/Kg-dry	1	10/10/08 22:42
Surr: 1,2-Dichloroethane-d4	98.8		71-128	0.61	%REC	1	10/10/08 22:42
Surr: Toluene-d8	129	S	75-125	0.61	%REC	1	10/10/08 22:42
Surr: 4-Bromofluorobenzene	152	S	58-125	0.61	%REC	1	10/10/08 22:42

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396301 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-FD

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7367.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 18 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 11 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	Sample Size: 5 g	PrepDate:
ColumnID:	Rtx-VMS	%Moisture: 17.8	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7380.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Chloromethane	ND		6.1	0.61	µg/Kg-dry	1	10/13/08 16:26
Vinyl chloride	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Bromomethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Chloroethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Trichlorofluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Acetone	ND		48	24	µg/Kg-dry	1	10/13/08 16:26
Carbon disulfide	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Methyl acetate	ND		3.0	12	µg/Kg-dry	1	10/13/08 16:26
Methylene chloride	ND		6.1	0.61	µg/Kg-dry	1	10/13/08 16:26
trans-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Methyl tert-butyl ether	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
cis-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
2-Butanone	ND		48	24	µg/Kg-dry	1	10/13/08 16:26
Chloroform	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Benzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
cis-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
4-Methyl-2-pentanone	ND		6.1	2.4	µg/Kg-dry	1	10/13/08 16:26
Toluene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
trans-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1,2-Trichloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396443 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15143
Revision:	10/28/08 13:17	FileID:	1-RA-J7380.D
Col Type:			

Sample Size: 5 g; %Moisture: 17.8; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.1	2.4	µg/Kg-dry	1	10/13/08 16:26
Dibromochloromethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dibromoethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Ethylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Xylenes (total)	ND		6.1	1.8	µg/Kg-dry	1	10/13/08 16:26
Styrene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Bromoform	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Isopropylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1,2,2-Tetrachloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,3-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,4-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dibromo-3-chloropropane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
1,2,4-Trichlorobenzene	ND		6.1	0.61	µg/Kg-dry	1	10/13/08 16:26
Surr: 1,2-Dichloroethane-d4	105		71-128	0.61	%REC	1	10/13/08 16:26
Surr: Toluene-d8	129	S	75-125	0.61	%REC	1	10/13/08 16:26
Surr: 4-Bromofluorobenzene	144	S	59-125	0.61	%REC	1	10/13/08 16:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Pran./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396443 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	WATER Q	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15131
Revision:	10/28/08 13:07	FileID:	1-SAMP-J7357.D
Col Type:			

Sample Size: 5 mL; %Moisture: ; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Chloromethane	ND		5.0	0.50	µg/L	1	10/10/08 17:06
Vinyl chloride	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Bromomethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Chloroethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Trichlorofluoromethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
1,1-Dichloroethene	ND		2.5	1.0	µg/L	1	10/10/08 17:06
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Acetone	ND		40	20	µg/L	1	10/10/08 17:06
Carbon disulfide	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Methyl acetate	ND		2.5	10	µg/L	1	10/10/08 17:06
Methylene chloride	ND		5.0	0.50	µg/L	1	10/10/08 17:06
trans-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Methyl tert-butyl ether	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1-Dichloroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
cis-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
2-Butanone	ND		40	20	µg/L	1	10/10/08 17:06
Chloroform	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1,1-Trichloroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Cyclohexane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Carbon tetrachloride	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Benzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dichloroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Trichloroethene	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Methylcyclohexane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
1,2-Dichloropropane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Bromodichloromethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
cis-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
4-Methyl-2-pentanone	ND		5.0	2.0	µg/L	1	10/10/08 17:06
Toluene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
trans-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1,2-Trichloroethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Tetrachloroethene	ND		2.5	1.0	µg/L	1	10/10/08 17:06

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Pran./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396296 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	WATER Q	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15131
Revision:	10/28/08 13:07	FileID:	1-SAMP-J7357.D
Col Type:			

Sample Size: 5 mL; %Moisture: ; TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.0	2.0	µg/L	1	10/10/08 17:06
Dibromochloromethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dibromoethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Chlorobenzene	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Ethylbenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Xylenes (total)	ND		5.0	1.5	µg/L	1	10/10/08 17:06
Styrene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Bromoform	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Isopropylbenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,3-Dichlorobenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,4-Dichlorobenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dichlorobenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dibromo-3-chloropropane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
1,2,4-Trichlorobenzene	ND		5.0	0.50	µg/L	1	10/10/08 17:06
Surr: 1,2-Dichloroethane-d4	96.9		71-128	0.50	%REC	1	10/10/08 17:06
Surr: Toluene-d8	103		75-125	0.50	%REC	1	10/10/08 17:06
Surr: 4-Bromofluorobenzene	111		59-125	0.50	%REC	1	10/10/08 17:06

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Pran./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396296 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Trip Blank

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-006A

Sample wt/vol: 5 (g/mL) g mL Lab File ID: J7357.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: ug/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 13 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 14.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0064.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						SW8270C	(SW3550B)
1,1'-Biphenyl	ND		3900	50	µg/Kg-dry	10	10/21/08 12:15
2,4,5-Trichlorophenol	ND		20000	240	µg/Kg-dry	10	10/21/08 12:15
2,4,6-Trichlorophenol	ND		3900	66	µg/Kg-dry	10	10/21/08 12:15
2,4-Dichlorophenol	ND		3900	45	µg/Kg-dry	10	10/21/08 12:15
2,4-Dimethylphenol	ND		3900	780	µg/Kg-dry	10	10/21/08 12:15
2,4-Dinitrophenol	ND		20000	2900	µg/Kg-dry	10	10/21/08 12:15
2,4-Dinitrotoluene	ND		3900	58	µg/Kg-dry	10	10/21/08 12:15
2,6-Dinitrotoluene	ND		3900	66	µg/Kg-dry	10	10/21/08 12:15
2-Chloronaphthalene	ND		3900	43	µg/Kg-dry	10	10/21/08 12:15
2-Chlorophenol	ND		3900	60	µg/Kg-dry	10	10/21/08 12:15
2-Methylnaphthalene	ND		3900	49	µg/Kg-dry	10	10/21/08 12:15
2-Methylphenol	ND		3900	43	µg/Kg-dry	10	10/21/08 12:15
2-Nitroaniline	ND		20000	69	µg/Kg-dry	10	10/21/08 12:15
2-Nitrophenol	ND		3900	160	µg/Kg-dry	10	10/21/08 12:15
3,3'-Dichlorobenzidine	ND		7700	470	µg/Kg-dry	10	10/21/08 12:15
3-Nitroaniline	ND		20000	470	µg/Kg-dry	10	10/21/08 12:15
4,6-Dinitro-2-methylphenol	ND		20000	2000	µg/Kg-dry	10	10/21/08 12:15
4-Bromophenyl phenyl ether	ND		3900	61	µg/Kg-dry	10	10/21/08 12:15
4-Chloro-3-methylphenol	ND		3900	120	µg/Kg-dry	10	10/21/08 12:15
4-Chloroaniline	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
4-Chlorophenyl phenyl ether	ND		3900	48	µg/Kg-dry	10	10/21/08 12:15
4-Methylphenol	ND		3900	33	µg/Kg-dry	10	10/21/08 12:15
4-Nitroaniline	ND		20000	470	µg/Kg-dry	10	10/21/08 12:15
4-Nitrophenol	ND		20000	780	µg/Kg-dry	10	10/21/08 12:15
Acenaphthene	1400	J	3900	39	µg/Kg-dry	10	10/21/08 12:15
Acenaphthylene	ND		3900	47	µg/Kg-dry	10	10/21/08 12:15
Acetophenone	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Anthracene	1700	J	3900	27	µg/Kg-dry	10	10/21/08 12:15
Atrazine	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Benzaldehyde	ND		3900	58	µg/Kg-dry	10	10/21/08 12:15
Benzo[a]anthracene	9600		3900	40	µg/Kg-dry	10	10/21/08 12:15
Benzo[a]pyrene	10000		3900	120	µg/Kg-dry	10	10/21/08 12:15
Benzo[b]fluoranthene	17000		3900	130	µg/Kg-dry	10	10/21/08 12:15
Benzo[g,h,i]perylene	3200	J	3900	160	µg/Kg-dry	10	10/21/08 12:15

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399156 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 14.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0064.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						SW8270C	(SW3550B)
Benzo[k]fluoranthene	6200		3900	130	µg/Kg-dry	10	10/21/08 12:15
bis(2-Chloroethoxy)methane	ND		3900	36	µg/Kg-dry	10	10/21/08 12:15
bis(2-chloroethyl)ether	ND		3900	60	µg/Kg-dry	10	10/21/08 12:15
bis(2-chloroisopropyl)ether	ND		3900	67	µg/Kg-dry	10	10/21/08 12:15
bis(2-Ethylhexyl)phthalate	670	J	3900	170	µg/Kg-dry	10	10/21/08 12:15
Butyl benzyl phthalate	ND		3900	160	µg/Kg-dry	10	10/21/08 12:15
Caprolactam	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Carbazole	1500	J	3900	120	µg/Kg-dry	10	10/21/08 12:15
Chrysene	10000		3900	33	µg/Kg-dry	10	10/21/08 12:15
Di-n-butyl phthalate	ND		3900	990	µg/Kg-dry	10	10/21/08 12:15
Di-n-octyl phthalate	ND		3900	23	µg/Kg-dry	10	10/21/08 12:15
Dibenz[a,h]anthracene	990	J	3900	160	µg/Kg-dry	10	10/21/08 12:15
Dibenzofuran	ND		3900	54	µg/Kg-dry	10	10/21/08 12:15
Diethyl phthalate	ND		3900	41	µg/Kg-dry	10	10/21/08 12:15
Dimethyl phthalate	ND		3900	40	µg/Kg-dry	10	10/21/08 12:15
Fluoranthene	21000		3900	120	µg/Kg-dry	10	10/21/08 12:15
Fluorene	710	J	3900	40	µg/Kg-dry	10	10/21/08 12:15
Hexachlorobenzene	ND		3900	63	µg/Kg-dry	10	10/21/08 12:15
Hexachlorobutadiene	ND		3900	35	µg/Kg-dry	10	10/21/08 12:15
Hexachlorocyclopentadiene	ND		3900	1900	µg/Kg-dry	10	10/21/08 12:15
Hexachloroethane	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Indeno[1,2,3-cd]pyrene	2000	J	3900	160	µg/Kg-dry	10	10/21/08 12:15
Isophorone	ND		3900	32	µg/Kg-dry	10	10/21/08 12:15
N-Nitroso-di-n-propylamine	ND		3900	45	µg/Kg-dry	10	10/21/08 12:15
N-Nitrosodiphenylamine	ND		3900	26	µg/Kg-dry	10	10/21/08 12:15
Naphthalene	ND		3900	30	µg/Kg-dry	10	10/21/08 12:15
Nitrobenzene	ND		3900	41	µg/Kg-dry	10	10/21/08 12:15
Pentachlorophenol	ND		20000	3900	µg/Kg-dry	10	10/21/08 12:15
Phenanthrene	11000		3900	17	µg/Kg-dry	10	10/21/08 12:15
Phenol	ND		3900	36	µg/Kg-dry	10	10/21/08 12:15
Pyrene	18000		3900	26	µg/Kg-dry	10	10/21/08 12:15
Surr: 2,4,6-Tribromophenol	77.5		20-143	0	%REC	10	10/21/08 12:15
Surr: 2-Fluorobiphenyl	77.1		46-130	0	%REC	10	10/21/08 12:15
Surr: 2-Fluorophenol	75.2		22-130	0	%REC	10	10/21/08 12:15

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399156 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 14.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0064.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						SW8270C	(SW3550B)
Surr: Nitrobenzene-d5	74.2		39-130	0	%REC	10	10/21/08 12:15
Surr: Phenol-d5	75.5		33-130	0	%REC	10	10/21/08 12:15
Surr: Terphenyl-d14	94.9		36-146	0	%REC	10	10/21/08 12:15

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399156 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBO-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-001B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0064.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 14 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 10.00

Extract Volume: 1000 (µl)

Number TICs found: 6 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	aldol	6.71	78000	JBA
2.	unknown (19.19)	19.19	2200	J
3. 000084-65-1	9,10-Anthracenedione	19.58	1600	JN
4.	unknown PAH (25.22)	25.22	1900	J
5.	unknown PAH (25.59)	25.59	8800	J
6.	unknown (26.7)	26.70	2600	J

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/21/08 14:09
ColumnID:	DB-5MS	BatchNo:	8309/R15276
Revision:	10/27/08 14:18	FileID:	1-SAMP-N0087.D
Col Type:			

Sample Size: 30 g; %Moisture: 25.1; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		4400	58	µg/Kg-dry	10	10/23/08 19:21
2,4,5-Trichlorophenol	ND		22000	280	µg/Kg-dry	10	10/23/08 19:21
2,4,6-Trichlorophenol	ND		4400	76	µg/Kg-dry	10	10/23/08 19:21
2,4-Dichlorophenol	ND		4400	51	µg/Kg-dry	10	10/23/08 19:21
2,4-Dimethylphenol	ND		4400	690	µg/Kg-dry	10	10/23/08 19:21
2,4-Dinitrophenol	ND		22000	4400	µg/Kg-dry	10	10/23/08 19:21
2,4-Dinitrotoluene	ND		4400	64	µg/Kg-dry	10	10/23/08 19:21
2,6-Dinitrotoluene	ND		4400	75	µg/Kg-dry	10	10/23/08 19:21
2-Chloronaphthalene	ND		4400	49	µg/Kg-dry	10	10/23/08 19:21
2-Chlorophenol	ND		4400	68	µg/Kg-dry	10	10/23/08 19:21
2-Methylnaphthalene	ND		4400	21	µg/Kg-dry	10	10/23/08 19:21
2-Methylphenol	ND		4400	50	µg/Kg-dry	10	10/23/08 19:21
2-Nitroaniline	ND		22000	79	µg/Kg-dry	10	10/23/08 19:21
2-Nitrophenol	ND		4400	180	µg/Kg-dry	10	10/23/08 19:21
3,3'-Dichlorobenzidine	ND		8800	530	µg/Kg-dry	10	10/23/08 19:21
3-Nitroaniline	ND		22000	530	µg/Kg-dry	10	10/23/08 19:21
4,6-Dinitro-2-methylphenol	ND		22000	2200	µg/Kg-dry	10	10/23/08 19:21
4-Bromophenyl phenyl ether	ND		4400	69	µg/Kg-dry	10	10/23/08 19:21
4-Chloro-3-methylphenol	ND		4400	130	µg/Kg-dry	10	10/23/08 19:21
4-Chloroaniline	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
4-Chlorophenyl phenyl ether	ND		4400	54	µg/Kg-dry	10	10/23/08 19:21
4-Methylphenol	ND		4400	38	µg/Kg-dry	10	10/23/08 19:21
4-Nitroaniline	ND		22000	530	µg/Kg-dry	10	10/23/08 19:21
4-Nitrophenol	ND		22000	890	µg/Kg-dry	10	10/23/08 19:21
Acenaphthene	500 J		4400	44	µg/Kg-dry	10	10/23/08 19:21
Acenaphthylene	ND		4400	53	µg/Kg-dry	10	10/23/08 19:21
Acetophenone	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Anthracene	1100 J		4400	31	µg/Kg-dry	10	10/23/08 19:21
Atrazine	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Benzaldehyde	ND		4400	67	µg/Kg-dry	10	10/23/08 19:21
Benzo[a]anthracene	5400		4400	46	µg/Kg-dry	10	10/23/08 19:21
Benzo[a]pyrene	5100		4400	130	µg/Kg-dry	10	10/23/08 19:21
Benzo[b]fluoranthene	9300		4400	150	µg/Kg-dry	10	10/23/08 19:21
Benzo[g,h,i]perylene	1700 J		4400	180	µg/Kg-dry	10	10/23/08 19:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399188 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/21/08 14:09
ColumnID:	DB-5MS	BatchNo:	8309/R15276
Revision:	10/27/08 14:18	FileID:	1-SAMP-N0087.D
Col Type:			

Sample Size: 30 g; %Moisture: 25.1; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	3200 J		4400	150	µg/Kg-dry	10	10/23/08 19:21
bis(2-Chloroethoxy)methane	ND		4400	41	µg/Kg-dry	10	10/23/08 19:21
bis(2-chloroethyl)ether	ND		4400	68	µg/Kg-dry	10	10/23/08 19:21
bis(2-chloroisopropyl)ether	ND		4400	78	µg/Kg-dry	10	10/23/08 19:21
bis(2-Ethylhexyl)phthalate	ND		4400	200	µg/Kg-dry	10	10/23/08 19:21
Butyl benzyl phthalate	ND		4400	180	µg/Kg-dry	10	10/23/08 19:21
Caprolactam	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Carbazole	710 J		4400	130	µg/Kg-dry	10	10/23/08 19:21
Chrysene	5500		4400	37	µg/Kg-dry	10	10/23/08 19:21
Di-n-butyl phthalate	ND		4400	1100	µg/Kg-dry	10	10/23/08 19:21
Di-n-octyl phthalate	ND		4400	26	µg/Kg-dry	10	10/23/08 19:21
Dibenz[a,h]anthracene	620 J		4400	180	µg/Kg-dry	10	10/23/08 19:21
Dibenzofuran	ND		4400	61	µg/Kg-dry	10	10/23/08 19:21
Diethyl phthalate	ND		4400	47	µg/Kg-dry	10	10/23/08 19:21
Dimethyl phthalate	ND		4400	46	µg/Kg-dry	10	10/23/08 19:21
Fluoranthene	11000		4400	130	µg/Kg-dry	10	10/23/08 19:21
Fluorene	470 J		4400	46	µg/Kg-dry	10	10/23/08 19:21
Hexachlorobenzene	ND		4400	72	µg/Kg-dry	10	10/23/08 19:21
Hexachlorobutadiene	ND		4400	40	µg/Kg-dry	10	10/23/08 19:21
Hexachlorocyclopentadiene	ND		4400	2200	µg/Kg-dry	10	10/23/08 19:21
Hexachloroethane	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Indeno[1,2,3-cd]pyrene	960 J		4400	180	µg/Kg-dry	10	10/23/08 19:21
Isophorone	ND		4400	37	µg/Kg-dry	10	10/23/08 19:21
N-Nitroso-di-n-propylamine	ND		4400	51	µg/Kg-dry	10	10/23/08 19:21
N-Nitrosodiphenylamine	ND		4400	30	µg/Kg-dry	10	10/23/08 19:21
Naphthalene	ND		4400	34	µg/Kg-dry	10	10/23/08 19:21
Nitrobenzene	ND		4400	47	µg/Kg-dry	10	10/23/08 19:21
Pentachlorophenol	ND		22000	4400	µg/Kg-dry	10	10/23/08 19:21
Phenanthrene	5800		4400	19	µg/Kg-dry	10	10/23/08 19:21
Phenol	ND		4400	41	µg/Kg-dry	10	10/23/08 19:21
Pyrene	11000		4400	30	µg/Kg-dry	10	10/23/08 19:21
Surr: 2,4,6-Tribromophenol	68.3		20-143	0	%REC	10	10/23/08 19:21
Surr: 2-Fluorobiphenyl	68.8		45-130	0	%REC	10	10/23/08 19:21
Surr: 2-Fluorophenol	71.6		22-130	0	%REC	10	10/23/08 19:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399188 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/21/08 14:09
ColumnID:	DB-5MS	BatchNo:	8309/R15276
Revision:	10/27/08 14:18	FileID:	1-SAMP-N0087.D
Col Type:			

Sample Size: 30 g; %Moisture: 25.1; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	66.4		39-130	0	%REC	10	10/23/08 19:21
Surr: Phenol-d5	69.3		32-130	0	%REC	10	10/23/08 19:21
Surr: Terphenyl-d14	86.1		36-146	0	%REC	10	10/23/08 19:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399188 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLM Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-002B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0087.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 25 Date Analyzed: 10/23/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 10.00

Extract Volume: 1000 (µl)

Number TICs found: 4 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	aldol	6.64	78000	JBA
2.	unknown hydrocarbon (25.09)	25.09	2400	J
3. 000192-97-2	Benzo[e]pyrene	25.51	5100	JN
4.	unknown hydrocarbon (26.61)	26.61	4100	J

FORM I TIC 5 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/21/08 14:09
ColumnID:	DB-5MS	%Moisture: 25.1	BatchNo: 8309/R15276
Revision:	10/27/08 14:18	TestCode: 8270S OLM42	FileID: 1-DL-N0085.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		11000	140	µg/Kg-dry	25	10/23/08 18:05
2,4,5-Trichlorophenol	ND		56000	700	µg/Kg-dry	25	10/23/08 18:05
2,4,6-Trichlorophenol	ND		11000	190	µg/Kg-dry	25	10/23/08 18:05
2,4-Dichlorophenol	ND		11000	130	µg/Kg-dry	25	10/23/08 18:05
2,4-Dimethylphenol	ND		11000	2200	µg/Kg-dry	25	10/23/08 18:05
2,4-Dinitrophenol	ND		56000	11000	µg/Kg-dry	25	10/23/08 18:05
2,4-Dinitrotoluene	ND		11000	160	µg/Kg-dry	25	10/23/08 18:05
2,6-Dinitrotoluene	ND		11000	190	µg/Kg-dry	25	10/23/08 18:05
2-Chloronaphthalene	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
2-Chlorophenol	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
2-Methylnaphthalene	ND		11000	53	µg/Kg-dry	25	10/23/08 18:05
2-Methylphenol	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
2-Nitroaniline	ND		56000	200	µg/Kg-dry	25	10/23/08 18:05
2-Nitrophenol	ND		11000	440	µg/Kg-dry	25	10/23/08 18:05
3,3'-Dichlorobenzidine	ND		22000	1300	µg/Kg-dry	25	10/23/08 18:05
3-Nitroaniline	ND		56000	1300	µg/Kg-dry	25	10/23/08 18:05
4,6-Dinitro-2-methylphenol	ND		56000	5600	µg/Kg-dry	25	10/23/08 18:05
4-Bromophenyl phenyl ether	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
4-Chloro-3-methylphenol	ND		11000	330	µg/Kg-dry	25	10/23/08 18:05
4-Chloroaniline	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
4-Chlorophenyl phenyl ether	ND		11000	140	µg/Kg-dry	25	10/23/08 18:05
4-Methylphenol	ND		11000	95	µg/Kg-dry	25	10/23/08 18:05
4-Nitroaniline	ND		56000	1300	µg/Kg-dry	25	10/23/08 18:05
4-Nitrophenol	ND		56000	2200	µg/Kg-dry	25	10/23/08 18:05
Acenaphthene	ND		11000	110	µg/Kg-dry	25	10/23/08 18:05
Acenaphthylene	ND		11000	130	µg/Kg-dry	25	10/23/08 18:05
Acetophenone	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Anthracene	ND		11000	78	µg/Kg-dry	25	10/23/08 18:05
Atrazine	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Benzaldehyde	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
Benzo[a]anthracene	5600 J		11000	120	µg/Kg-dry	25	10/23/08 18:05
Benzo[a]pyrene	4800 J		11000	330	µg/Kg-dry	25	10/23/08 18:05
Benzo[b]fluoranthene	7500 J		11000	380	µg/Kg-dry	25	10/23/08 18:05
Benzo[g,h,i]perylene	2100 J		11000	440	µg/Kg-dry	25	10/23/08 18:05

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399186 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/21/08 14:09
ColumnID:	DB-5MS	%Moisture: 25.1	BatchNo: 8309/R15276
Revision:	10/27/08 14:18	TestCode: 8270S OLM42	FileID: 1-DL-N0085.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	3200 J		11000	370	µg/Kg-dry	25	10/23/08 18:05
bis(2-Chloroethoxy)methane	ND		11000	100	µg/Kg-dry	25	10/23/08 18:05
bis(2-chloroethyl)ether	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
bis(2-chloroisopropyl)ether	ND		11000	190	µg/Kg-dry	25	10/23/08 18:05
bis(2-Ethylhexyl)phthalate	ND		11000	500	µg/Kg-dry	25	10/23/08 18:05
Butyl benzyl phthalate	ND		11000	440	µg/Kg-dry	25	10/23/08 18:05
Caprolactam	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Carbazole	ND		11000	330	µg/Kg-dry	25	10/23/08 18:05
Chrysene	5600 J		11000	93	µg/Kg-dry	25	10/23/08 18:05
Di-n-butyl phthalate	ND		11000	2900	µg/Kg-dry	25	10/23/08 18:05
Di-n-octyl phthalate	ND		11000	65	µg/Kg-dry	25	10/23/08 18:05
Dibenz[a,h]anthracene	ND		11000	440	µg/Kg-dry	25	10/23/08 18:05
Dibenzofuran	ND		11000	150	µg/Kg-dry	25	10/23/08 18:05
Diethyl phthalate	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
Dimethyl phthalate	ND		11000	110	µg/Kg-dry	25	10/23/08 18:05
Fluoranthene	11000 J		11000	330	µg/Kg-dry	25	10/23/08 18:05
Fluorene	ND		11000	110	µg/Kg-dry	25	10/23/08 18:05
Hexachlorobenzene	ND		11000	160	µg/Kg-dry	25	10/23/08 18:05
Hexachlorobutadiene	ND		11000	190	µg/Kg-dry	25	10/23/08 18:05
Hexachlorocyclopentadiene	ND		11000	5600	µg/Kg-dry	25	10/23/08 18:05
Hexachloroethane	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Indeno[1,2,3-cd]pyrene	1900 J		11000	440	µg/Kg-dry	25	10/23/08 18:05
Isophorone	ND		11000	92	µg/Kg-dry	25	10/23/08 18:05
N-Nitroso-di-n-propylamine	ND		11000	130	µg/Kg-dry	25	10/23/08 18:05
N-Nitrosodiphenylamine	ND		11000	75	µg/Kg-dry	25	10/23/08 18:05
Naphthalene	ND		11000	84	µg/Kg-dry	25	10/23/08 18:05
Nitrobenzene	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
Pentachlorophenol	ND		56000	11000	µg/Kg-dry	25	10/23/08 18:05
Phenanthrene	5800 J		11000	48	µg/Kg-dry	25	10/23/08 18:05
Phenol	ND		11000	100	µg/Kg-dry	25	10/23/08 18:05
Pyrene	9400 J		11000	75	µg/Kg-dry	25	10/23/08 18:05
Surr: 2,4,6-Tribromophenol	56.2		20-143	0	%REC	25	10/23/08 18:05
Surr: 2-Fluorobiphenyl	68.5		46-130	0	%REC	25	10/23/08 18:05
Surr: 2-Fluorophenol	65.8		22-130	0	%REC	25	10/23/08 18:05

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399186 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/21/08 14:09
ColumnID:	DB-5MS	%Moisture: 25.1	BatchNo: 8309/R15276
Revision:	10/27/08 14:18	TestCode: 8270S OLM42	FileID: 1-DL-N0085.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	61.0		39-130	0	%REC	25	10/23/08 18:05
Surr: Phenol-d5	68.2		33-130	0	%REC	25	10/23/08 18:05
Surr: Terphenyl-d14	78.0		35-146	0	%REC	25	10/23/08 18:05

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399186 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0068.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		830	11	µg/Kg-dry	2	10/21/08 14:48
2,4,5-Trichlorophenol	ND		4200	53	µg/Kg-dry	2	10/21/08 14:48
2,4,6-Trichlorophenol	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
2,4-Dichlorophenol	ND		830	9.6	µg/Kg-dry	2	10/21/08 14:48
2,4-Dimethylphenol	ND		830	170	µg/Kg-dry	2	10/21/08 14:48
2,4-Dinitrophenol	ND		4200	840	µg/Kg-dry	2	10/21/08 14:48
2,4-Dinitrotoluene	ND		830	12	µg/Kg-dry	2	10/21/08 14:48
2,6-Dinitrotoluene	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
2-Chloronaphthalene	ND		830	9.2	µg/Kg-dry	2	10/21/08 14:48
2-Chlorophenol	ND		830	13	µg/Kg-dry	2	10/21/08 14:48
2-Methylnaphthalene	150 J		830	4.0	µg/Kg-dry	2	10/21/08 14:48
2-Methylphenol	ND		830	9.3	µg/Kg-dry	2	10/21/08 14:48
2-Nitroaniline	ND		4200	15	µg/Kg-dry	2	10/21/08 14:48
2-Nitrophenol	ND		830	33	µg/Kg-dry	2	10/21/08 14:48
3,3'-Dichlorobenzidine	ND		1700	100	µg/Kg-dry	2	10/21/08 14:48
3-Nitroaniline	ND		4200	100	µg/Kg-dry	2	10/21/08 14:48
4,6-Dinitro-2-methylphenol	ND		4200	420	µg/Kg-dry	2	10/21/08 14:48
4-Bromophenyl phenyl ether	ND		830	13	µg/Kg-dry	2	10/21/08 14:48
4-Chloro-3-methylphenol	ND		830	25	µg/Kg-dry	2	10/21/08 14:48
4-Chloroaniline	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
4-Chlorophenyl phenyl ether	ND		830	10	µg/Kg-dry	2	10/21/08 14:48
4-Methylphenol	ND		830	7.2	µg/Kg-dry	2	10/21/08 14:48
4-Nitroaniline	ND		4200	100	µg/Kg-dry	2	10/21/08 14:48
4-Nitrophenol	ND		4200	170	µg/Kg-dry	2	10/21/08 14:48
Acenaphthene	190 J		830	8.3	µg/Kg-dry	2	10/21/08 14:48
Acenaphthylene	230 J		830	10	µg/Kg-dry	2	10/21/08 14:48
Acetophenone	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Anthracene	260 J		830	5.9	µg/Kg-dry	2	10/21/08 14:48
Atrazine	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Benzaldehyde	150 J		830	13	µg/Kg-dry	2	10/21/08 14:48
Benzo[a]anthracene	1800		830	8.7	µg/Kg-dry	2	10/21/08 14:48
Benzo[a]pyrene	1800		830	25	µg/Kg-dry	2	10/21/08 14:48
Benzo[b]fluoranthene	3900		830	29	µg/Kg-dry	2	10/21/08 14:48
Benzo[g,h,i]perylene	870		830	33	µg/Kg-dry	2	10/21/08 14:48

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399158 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0068.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1200		830	28	µg/Kg-dry	2	10/21/08 14:48
bis(2-Chloroethoxy)methane	ND		830	7.7	µg/Kg-dry	2	10/21/08 14:48
bis(2-chloroethyl)ether	ND		830	13	µg/Kg-dry	2	10/21/08 14:48
bis(2-chloroisopropyl)ether	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
bis(2-Ethylhexyl)phthalate	1600		830	37	µg/Kg-dry	2	10/21/08 14:48
Butyl benzyl phthalate	ND		830	33	µg/Kg-dry	2	10/21/08 14:48
Caprolactam	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Carbazole	190	J	830	25	µg/Kg-dry	2	10/21/08 14:48
Chrysene	1900		830	7.0	µg/Kg-dry	2	10/21/08 14:48
Di-n-butyl phthalate	ND		830	210	µg/Kg-dry	2	10/21/08 14:48
Di-n-octyl phthalate	ND		830	4.9	µg/Kg-dry	2	10/21/08 14:48
Dibenz[a,h]anthracene	280	J	830	33	µg/Kg-dry	2	10/21/08 14:48
Dibenzofuran	120	J	830	12	µg/Kg-dry	2	10/21/08 14:48
Diethyl phthalate	ND		830	8.6	µg/Kg-dry	2	10/21/08 14:48
Dimethyl phthalate	ND		830	8.8	µg/Kg-dry	2	10/21/08 14:48
Fluoranthene	3100		830	25	µg/Kg-dry	2	10/21/08 14:48
Fluorene	110	J	830	8.8	µg/Kg-dry	2	10/21/08 14:48
Hexachlorobenzene	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
Hexachlorobutadiene	ND		830	7.6	µg/Kg-dry	2	10/21/08 14:48
Hexachlorocyclopentadiene	ND		830	420	µg/Kg-dry	2	10/21/08 14:48
Hexachloroethane	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Indeno[1,2,3-cd]pyrene	300	J	830	33	µg/Kg-dry	2	10/21/08 14:48
Isophorone	ND		830	6.9	µg/Kg-dry	2	10/21/08 14:48
N-Nitroso-di-n-propylamine	ND		830	9.6	µg/Kg-dry	2	10/21/08 14:48
N-Nitrosodiphenylamine	ND		830	5.6	µg/Kg-dry	2	10/21/08 14:48
Naphthalene	270	J	830	6.4	µg/Kg-dry	2	10/21/08 14:48
Nitrobenzene	ND		830	6.9	µg/Kg-dry	2	10/21/08 14:48
Pentachlorophenol	ND		4200	840	µg/Kg-dry	2	10/21/08 14:48
Phenanthrene	1500		830	3.6	µg/Kg-dry	2	10/21/08 14:48
Phenol	ND		830	7.7	µg/Kg-dry	2	10/21/08 14:48
Pyrene	4500		830	5.7	µg/Kg-dry	2	10/21/08 14:48
Surr: 2,4,6-Tribromophenol	82.1		20-143	0	%REC	2	10/21/08 14:48
Surr: 2-Fluorobiphenyl	71.2		46-130	0	%REC	2	10/21/08 14:48
Surr: 2-Fluorophenol	67.5		22-130	0	%REC	2	10/21/08 14:48

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399158 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0068.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	86.5		35-130	0	%REC	2	10/21/08 14:48
Surr: Phenol-d5	87.4		33-130	0	%REC	2	10/21/08 14:48
Surr: Terphenyl-d14	129		36-146	0	%REC	2	10/21/08 14:48

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399158 Project Supervisor: Monika Santucci

Form I TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-3

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: GRG-MS SAS No.: SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-003B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0068.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 20 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 2.00

Extract Volume: 1000 (µl)

Number TICs found: 14 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.27)	6.27	1200	J
2.	aldol	6.80	80000	JBA
3.	unknown (14.8)	14.80	970	JB
4.	unknown (15.14)	15.14	1100	J
5.	unknown biphenyl (20.14)	20.14	740	J
6.	unknown biphenyl (20.17)	20.17	770	J
7.	unknown biphenyl (20.51)	20.51	920	J
8.	unknown biphenyl (21.46)	21.46	1300	J
9.	unknown biphenyl (22.16)	22.16	850	J
10.	unknown hydrocarbon (23.94)	23.94	800	J
11. 056554-86-0	17-Octadecenal	24.79	7800	JN
12.	unknown hydrocarbon (25.16)	25.16	5600	J
13.	unknown (25.2)	25.20	3400	J
14.	unknown hydrocarbon (26.7)	26.70	4800	J

FORM I TIC SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15271
Revision:	10/24/08 9:48	TestCode: 8270S OLM42	FileID: 1-DIL-N0054.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		10000	140	µg/Kg-dry	25	10/20/08 18:37
2,4,5-Trichlorophenol	ND		52000	660	µg/Kg-dry	25	10/20/08 18:37
2,4,6-Trichlorophenol	ND		10000	180	µg/Kg-dry	25	10/20/08 18:37
2,4-Dichlorophenol	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
2,4-Dimethylphenol	ND		10000	2100	µg/Kg-dry	25	10/20/08 18:37
2,4-Dinitrophenol	ND		52000	10000	µg/Kg-dry	25	10/20/08 18:37
2,4-Dinitrotoluene	ND		10000	150	µg/Kg-dry	25	10/20/08 18:37
2,6-Dinitrotoluene	ND		10000	180	µg/Kg-dry	25	10/20/08 18:37
2-Chloronaphthalene	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
2-Chlorophenol	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
2-Methylnaphthalene	ND		10000	50	µg/Kg-dry	25	10/20/08 18:37
2-Methylphenol	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
2-Nitroaniline	ND		52000	180	µg/Kg-dry	25	10/20/08 18:37
2-Nitrophenol	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
3,3'-Dichlorobenzidine	ND		21000	1300	µg/Kg-dry	25	10/20/08 18:37
3-Nitroaniline	ND		52000	1300	µg/Kg-dry	25	10/20/08 18:37
4,6-Dinitro-2-methylphenol	ND		52000	5200	µg/Kg-dry	25	10/20/08 18:37
4-Bromophenyl phenyl ether	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
4-Chloro-3-methylphenol	ND		10000	310	µg/Kg-dry	25	10/20/08 18:37
4-Chloroaniline	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
4-Chlorophenyl phenyl ether	ND		10000	130	µg/Kg-dry	25	10/20/08 18:37
4-Methylphenol	ND		10000	90	µg/Kg-dry	25	10/20/08 18:37
4-Nitroaniline	ND		52000	1300	µg/Kg-dry	25	10/20/08 18:37
4-Nitrophenol	ND		52000	2100	µg/Kg-dry	25	10/20/08 18:37
Acenaphthene	ND		10000	100	µg/Kg-dry	25	10/20/08 18:37
Acenaphthylene	ND		10000	130	µg/Kg-dry	25	10/20/08 18:37
Acetophenone	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Anthracene	ND		10000	73	µg/Kg-dry	25	10/20/08 18:37
Atrazine	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Benzaldehyde	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
Benzo[a]anthracene	1700	J	10000	110	µg/Kg-dry	25	10/20/08 18:37
Benzo[a]pyrene	1900	J	10000	310	µg/Kg-dry	25	10/20/08 18:37
Benzo[b]fluoranthene	3400	J	10000	360	µg/Kg-dry	25	10/20/08 18:37
Benzo[g,h,i]perylene	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399137 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15271
Revision:	10/24/08 9:48	TestCode: 8270S OLM42	FileID: 1-DL-N0054.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	ND		10000	350	µg/Kg-dry	25	10/20/08 18:37
bis(2-Chloroethoxy)methane	ND		10000	97	µg/Kg-dry	25	10/20/08 18:37
bis(2-chloroethyl)ether	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
bis(2-chloroisopropyl)ether	ND		10000	180	µg/Kg-dry	25	10/20/08 18:37
bis(2-Ethylhexyl)phthalate	1400 J		10000	470	µg/Kg-dry	25	10/20/08 18:37
Butyl benzyl phthalate	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
Caprolactam	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Carbazole	ND		10000	310	µg/Kg-dry	25	10/20/08 18:37
Chrysene	2000 J		10000	88	µg/Kg-dry	25	10/20/08 18:37
Di-n-butyl phthalate	ND		10000	2700	µg/Kg-dry	25	10/20/08 18:37
Di-n-octyl phthalate	ND		10000	61	µg/Kg-dry	25	10/20/08 18:37
Dibenz[a,h]anthracene	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
Dibenzofuran	ND		10000	140	µg/Kg-dry	25	10/20/08 18:37
Diethyl phthalate	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Dimethyl phthalate	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Fluoranthene	3300 J		10000	310	µg/Kg-dry	25	10/20/08 18:37
Fluorene	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Hexachlorobenzene	ND		10000	170	µg/Kg-dry	25	10/20/08 18:37
Hexachlorobutadiene	ND		10000	95	µg/Kg-dry	25	10/20/08 18:37
Hexachlorocyclopentadiene	ND		10000	5200	µg/Kg-dry	25	10/20/08 18:37
Hexachloroethane	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Indeno[1,2,3-cd]pyrene	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
Isophorone	ND		10000	87	µg/Kg-dry	25	10/20/08 18:37
N-Nitroso-di-n-propylamine	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
N-Nitrosodiphenylamine	ND		10000	70	µg/Kg-dry	25	10/20/08 18:37
Naphthalene	ND		10000	79	µg/Kg-dry	25	10/20/08 18:37
Nitrobenzene	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Pentachlorophenol	ND		52000	10000	µg/Kg-dry	25	10/20/08 18:37
Phenanthrene	1400 J		10000	46	µg/Kg-dry	25	10/20/08 18:37
Phenol	ND		10000	98	µg/Kg-dry	25	10/20/08 18:37
Pyrene	3000 J		10000	71	µg/Kg-dry	25	10/20/08 18:37
Surr: 2,4,6-Tribromophenol	62.7		20-143	0	%REC	25	10/20/08 18:37
Surr: 2-Fluorobiphenyl	65.8		46-130	0	%REC	25	10/20/08 18:37
Surr: 2-Fluorophenol	60.5		22-130	0	%REC	25	10/20/08 18:37

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399137 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15271
Revision:	10/24/08 9:48	TestCode: 8270S OLM42	FileID: 1-DL-N0054.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	58.5		39-130	0	%REC	25	10/20/08 18:37
Surr: Phenol-d5	58.3		33-130	0	%REC	25	10/20/08 18:37
Surr: Terphenyl-d14	78.3		36-146	0	%REC	25	10/20/08 18:37

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399137 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0069.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1 -Biphenyl	150 J		860	11	µg/Kg-dry	2	10/21/08 15:26
2,4,5-Trichlorophenol	ND		4300	54	µg/Kg-dry	2	10/21/08 15:26
2,4,6-Trichlorophenol	ND		860	15	µg/Kg-dry	2	10/21/08 15:26
2,4-Dichlorophenol	ND		860	9.9	µg/Kg-dry	2	10/21/08 15:26
2,4-Dimethylphenol	ND		860	170	µg/Kg-dry	2	10/21/08 15:26
2,4-Dinitrophenol	ND		4300	860	µg/Kg-dry	2	10/21/08 15:26
2,4-Dinitrotoluene	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
2,6-Dinitrotoluene	ND		860	15	µg/Kg-dry	2	10/21/08 15:26
2-Chloronaphthalene	ND		860	9.5	µg/Kg-dry	2	10/21/08 15:26
2-Chlorophenol	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
2-Methylnaphthalene	1100		860	4.2	µg/Kg-dry	2	10/21/08 15:26
2-Methylphenol	ND		860	9.6	µg/Kg-dry	2	10/21/08 15:26
2-Nitroaniline	ND		4300	15	µg/Kg-dry	2	10/21/08 15:26
2-Nitrophenol	ND		860	35	µg/Kg-dry	2	10/21/08 15:26
3,3'-Dichlorobenzidine	ND		1700	100	µg/Kg-dry	2	10/21/08 15:26
3-Nitroaniline	ND		4300	100	µg/Kg-dry	2	10/21/08 15:26
4,6-Dinitro-2-methylphenol	ND		4300	430	µg/Kg-dry	2	10/21/08 15:26
4-Bromophenyl phenyl ether	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
4-Chloro-3-methylphenol	ND		860	26	µg/Kg-dry	2	10/21/08 15:26
4-Chloroaniline	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
4-Chlorophenyl phenyl ether	ND		860	11	µg/Kg-dry	2	10/21/08 15:26
4-Methylphenol	310 J		860	7.4	µg/Kg-dry	2	10/21/08 15:26
4-Nitroaniline	ND		4300	100	µg/Kg-dry	2	10/21/08 15:26
4-Nitrophenol	ND		4300	170	µg/Kg-dry	2	10/21/08 15:26
Acenaphthene	190 J		860	8.6	µg/Kg-dry	2	10/21/08 15:26
Acenaphthylene	320 J		860	10	µg/Kg-dry	2	10/21/08 15:26
Acetophenone	140 J		860	100	µg/Kg-dry	2	10/21/08 15:26
Anthracene	520 J		860	8.1	µg/Kg-dry	2	10/21/08 15:26
Atrazine	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
Benzaldehyde	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
Benzo[a]anthracene	1900		860	9.0	µg/Kg-dry	2	10/21/08 15:26
Benzo[a]pyrene	2200		860	26	µg/Kg-dry	2	10/21/08 15:26
Benzo[b]fluoranthene	4300		860	30	µg/Kg-dry	2	10/21/08 15:26
Benzo[g,h,i]perylene	1700		860	35	µg/Kg-dry	2	10/21/08 15:26

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399159 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0069.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1400		860	29	µg/Kg-dry	2	10/21/08 15:26
bis(2-Chloroethoxy)methane	ND		860	8.0	µg/Kg-dry	2	10/21/08 15:26
bis(2-chloroethyl)ether	87 J		860	13	µg/Kg-dry	2	10/21/08 15:26
bis(2-chloroisopropyl)ether	ND		860	15	µg/Kg-dry	2	10/21/08 15:26
bis(2-Ethylhexyl)phthalate	290 J		860	39	µg/Kg-dry	2	10/21/08 15:26
Butyl benzyl phthalate	ND		860	35	µg/Kg-dry	2	10/21/08 15:26
Caprolactam	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
Carbazole	350 J		860	26	µg/Kg-dry	2	10/21/08 15:26
Chrysene	2500		860	7.3	µg/Kg-dry	2	10/21/08 15:26
Di-n-butyl phthalate	ND		860	220	µg/Kg-dry	2	10/21/08 15:26
Di-n-octyl phthalate	ND		860	5.1	µg/Kg-dry	2	10/21/08 15:26
Dibenz[a,h]anthracene	400 J		860	35	µg/Kg-dry	2	10/21/08 15:26
Dibenzofuran	260 J		860	12	µg/Kg-dry	2	10/21/08 15:26
Diethyl phthalate	ND		860	9.1	µg/Kg-dry	2	10/21/08 15:26
Dimethyl phthalate	ND		860	8.9	µg/Kg-dry	2	10/21/08 15:26
Fluoranthene	3200		860	26	µg/Kg-dry	2	10/21/08 15:26
Fluorene	200 J		860	9.9	µg/Kg-dry	2	10/21/08 15:26
Hexachlorobenzene	ND		860	14	µg/Kg-dry	2	10/21/08 15:26
Hexachlorobutadiene	ND		860	7.8	µg/Kg-dry	2	10/21/08 15:26
Hexachlorocyclopentadiene	ND		860	430	µg/Kg-dry	2	10/21/08 15:26
Hexachloroethane	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
Indeno[1,2,3-cd]pyrene	520 J		860	35	µg/Kg-dry	2	10/21/08 15:26
Isophorone	ND		860	7.3	µg/Kg-dry	2	10/21/08 15:26
N-Nitroso-di-n-propylamine	ND		860	9.9	µg/Kg-dry	2	10/21/08 15:26
N-Nitrosodiphenylamine	ND		860	5.8	µg/Kg-dry	2	10/21/08 15:26
Naphthalene	740 J		860	6.6	µg/Kg-dry	2	10/21/08 15:26
Nitrobenzene	ND		860	9.2	µg/Kg-dry	2	10/21/08 15:26
Pentachlorophenol	ND		4300	860	µg/Kg-dry	2	10/21/08 15:26
Phenanthrene	2500		860	3.8	µg/Kg-dry	2	10/21/08 15:26
Phenol	94 J		860	8.0	µg/Kg-dry	2	10/21/08 15:26
Pyrene	8200		860	5.8	µg/Kg-dry	2	10/21/08 15:26
Surr: 2,4,6-Tribromophenol	81.9		20-143	0	%REC	2	10/21/08 15:26
Surr: 2-Fluorobiphenyl	74.2		46-130	0	%REC	2	10/21/08 15:26
Surr: 2-Fluorophenol	71.1		22-130	0	%REC	2	10/21/08 15:26

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399159 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0069.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	71.6		39-130	0	%REC	2	10/21/08 15:26
Surr: Phenol-d5	71.3		33-130	0	%REC	2	10/21/08 15:26
Surr: Terphenyl-d14	181	S	36-146	0	%REC	2	10/21/08 15:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399159 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-4

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: CSE-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-004B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0069.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 23 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 2.00

Extract Volume: 1000 (µl)

Number TICs found: 5 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.26)	6.26	1300	J
2.	aldol	6.81	86000	JBA
3. 000581-42-0	Naphthalene, 2,6-dimethyl-	14.39	850	JN
4.	unknown (14.8)	14.80	1000	JB
5.	unknown hydrocarbon	16.93	1800	J

FORM I TIC 9 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15271
Revision:	10/24/08 9:48	TestCode: 8270S OLM42	FileID: 1-DL-N0055.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		11000	140	µg/Kg-dry	25	10/20/08 19:16
2,4,5-Trichlorophenol	ND		54000	690	µg/Kg-dry	25	10/20/08 19:16
2,4,6-Trichlorophenol	ND		11000	180	µg/Kg-dry	25	10/20/08 19:16
2,4-Dichlorophenol	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
2,4-Dimethylphenol	ND		11000	2200	µg/Kg-dry	25	10/20/08 19:16
2,4-Dinitrophenol	ND		54000	11000	µg/Kg-dry	25	10/20/08 19:16
2,4-Dinitrotoluene	ND		11000	160	µg/Kg-dry	25	10/20/08 19:16
2,6-Dinitrotoluene	ND		11000	180	µg/Kg-dry	25	10/20/08 19:16
2-Chloronaphthalene	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
2-Chlorophenol	ND		11000	170	µg/Kg-dry	25	10/20/08 19:16
2-Methylnaphthalene	1100	J	11000	52	µg/Kg-dry	25	10/20/08 19:16
2-Methylphenol	ND		11000	130	µg/Kg-dry	25	10/20/08 19:16
2-Nitroaniline	ND		54000	190	µg/Kg-dry	25	10/20/08 19:16
2-Nitrophenol	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
3,3'-Dichlorobenzidine	ND		21000	1300	µg/Kg-dry	25	10/20/08 19:16
3-Nitroaniline	ND		54000	1300	µg/Kg-dry	25	10/20/08 19:16
4,6-Dinitro-2-methylphenol	ND		54000	5400	µg/Kg-dry	25	10/20/08 19:16
4-Bromophenyl phenyl ether	ND		11000	170	µg/Kg-dry	25	10/20/08 19:16
4-Chloro-3-methylphenol	ND		11000	320	µg/Kg-dry	25	10/20/08 19:16
4-Chloroaniline	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
4-Chlorophenyl phenyl ether	ND		11000	130	µg/Kg-dry	25	10/20/08 19:16
4-Methylphenol	ND		11000	93	µg/Kg-dry	25	10/20/08 19:16
4-Nitroaniline	ND		54000	1300	µg/Kg-dry	25	10/20/08 19:16
4-Nitrophenol	ND		54000	2200	µg/Kg-dry	25	10/20/08 19:16
Acenaphthene	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Acenaphthylene	ND		11000	130	µg/Kg-dry	25	10/20/08 19:16
Acetophenone	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Anthracene	ND		11000	76	µg/Kg-dry	25	10/20/08 19:16
Atrazine	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Benzaldehyde	ND		11000	160	µg/Kg-dry	25	10/20/08 19:16
Benzo[a]anthracene	2100	J	11000	110	µg/Kg-dry	25	10/20/08 19:16
Benzo[a]pyrene	2100	J	11000	320	µg/Kg-dry	25	10/20/08 19:16
Benzo[b]fluoranthene	4200	J	11000	370	µg/Kg-dry	25	10/20/08 19:16
Benzo[g,h,i]perylene	1200	J	11000	430	µg/Kg-dry	25	10/20/08 19:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399138 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15271
Revision:	10/24/08 9:48	TestCode: 8270S OLM42	FileID: 1-DL-N0055.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1400	J	11000	360	µg/Kg-dry	25	10/20/08 19:16
bis(2-Chloroethoxy)methane	ND		11000	100	µg/Kg-dry	25	10/20/08 19:16
bis(2-chloroethyl)ether	ND		11000	170	µg/Kg-dry	25	10/20/08 19:16
bis(2-chloroisopropyl)ether	ND		11000	190	µg/Kg-dry	25	10/20/08 19:16
bis(2-Ethylhexyl)phthalate	ND		11000	480	µg/Kg-dry	25	10/20/08 19:16
Butyl benzyl phthalate	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
Caprolactam	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Carbazole	ND		11000	320	µg/Kg-dry	25	10/20/08 19:16
Chrysene	2400	J	11000	91	µg/Kg-dry	25	10/20/08 19:16
Di-n-butyl phthalate	ND		11000	2700	µg/Kg-dry	25	10/20/08 19:16
Di-n-octyl phthalate	ND		11000	63	µg/Kg-dry	25	10/20/08 19:16
Dibenz[a,h]anthracene	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
Dibenzofuran	ND		11000	150	µg/Kg-dry	25	10/20/08 19:16
Diethyl phthalate	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Dimethyl phthalate	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Fluoranthene	4300	J	11000	320	µg/Kg-dry	25	10/20/08 19:16
Fluorene	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Hexachlorobenzene	ND		11000	180	µg/Kg-dry	25	10/20/08 19:16
Hexachlorobutadiene	ND		11000	98	µg/Kg-dry	25	10/20/08 19:16
Hexachlorocyclopentadiene	ND		11000	5400	µg/Kg-dry	25	10/20/08 19:16
Hexachloroethane	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Indeno[1,2,3-cd]pyrene	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
Isophorone	ND		11000	90	µg/Kg-dry	25	10/20/08 19:16
N-Nitroso-di-n-propylamine	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
N-Nitrosodiphenylamine	ND		11000	73	µg/Kg-dry	25	10/20/08 19:16
Naphthalene	ND		11000	82	µg/Kg-dry	25	10/20/08 19:16
Nitrobenzene	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
Pentachlorophenol	ND		54000	11000	µg/Kg-dry	25	10/20/08 19:16
Phenanthrene	2700	J	11000	47	µg/Kg-dry	25	10/20/08 19:16
Phenol	ND		11000	100	µg/Kg-dry	25	10/20/08 19:16
Pyrene	4200	J	11000	73	µg/Kg-dry	25	10/20/08 19:16
Surr: 2,4,6-Tribromophenol	73.2		20-143	0	%REC	25	10/20/08 19:16
Surr: 2-Fluorobiphenyl	71.0		46-130	0	%REC	25	10/20/08 19:16
Surr: 2-Fluorophenol	71.3		22-130	0	%REC	25	10/20/08 19:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399138 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0055.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	61.8		39-130	0	%REC	25	10/20/08 19:16
Surr: Phenol-d5	67.8		33-130	0	%REC	25	10/20/08 19:16
Surr: Terphenyl-d14	93.8		36-146	0	%REC	25	10/20/08 19:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399138 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15275
Revision:	10/24/08 9:53	FileID:	1-SAMP-N0070.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1-Biphenyl	150 J		800	10	µg/Kg-dry	2	10/21/08 16:04
2,4,5-Trichlorophenol	ND		4100	51	µg/Kg-dry	2	10/21/08 16:04
2,4,6-Trichlorophenol	ND		800	14	µg/Kg-dry	2	10/21/08 16:04
2,4-Dichlorophenol	ND		800	9.3	µg/Kg-dry	2	10/21/08 16:04
2,4-Dimethylphenol	ND		800	160	µg/Kg-dry	2	10/21/08 16:04
2,4-Dinitrophenol	ND		4100	810	µg/Kg-dry	2	10/21/08 16:04
2,4-Dinitrotoluene	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
2,6-Dinitrotoluene	ND		800	14	µg/Kg-dry	2	10/21/08 16:04
2-Chloronaphthalene	ND		800	8.9	µg/Kg-dry	2	10/21/08 16:04
2-Chlorophenol	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
2-Methylnaphthalene	1200		800	3.9	µg/Kg-dry	2	10/21/08 16:04
2-Methylphenol	ND		800	9.0	µg/Kg-dry	2	10/21/08 16:04
2-Nitroaniline	ND		4100	14	µg/Kg-dry	2	10/21/08 16:04
2-Nitrophenol	ND		800	32	µg/Kg-dry	2	10/21/08 16:04
3,3'-Dichlorobenzidine	ND		1800	97	µg/Kg-dry	2	10/21/08 16:04
3-Nitroaniline	ND		4100	97	µg/Kg-dry	2	10/21/08 16:04
4,6-Dinitro-2-methylphenol	ND		4100	410	µg/Kg-dry	2	10/21/08 16:04
4-Bromophenyl phenyl ether	ND		800	13	µg/Kg-dry	2	10/21/08 16:04
4-Chloro-3-methylphenol	ND		800	24	µg/Kg-dry	2	10/21/08 16:04
4-Chloroaniline	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
4-Chlorophenyl phenyl ether	ND		800	9.9	µg/Kg-dry	2	10/21/08 16:04
4-Methylphenol	210 J		800	7.0	µg/Kg-dry	2	10/21/08 16:04
4-Nitroaniline	ND		4100	97	µg/Kg-dry	2	10/21/08 16:04
4-Nitrophenol	ND		4100	160	µg/Kg-dry	2	10/21/08 16:04
Acenaphthene	120 J		800	8.1	µg/Kg-dry	2	10/21/08 16:04
Acenaphthylene	310 J		800	9.7	µg/Kg-dry	2	10/21/08 16:04
Acetophenone	130 J		800	97	µg/Kg-dry	2	10/21/08 16:04
Anthracene	370 J		800	5.7	µg/Kg-dry	2	10/21/08 16:04
Atrazine	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
Benzaldehyde	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
Benzo[a]anthracene	1400		800	8.4	µg/Kg-dry	2	10/21/08 16:04
Benzo[a]pyrene	1600		800	24	µg/Kg-dry	2	10/21/08 16:04
Benzo[b]fluoranthene	3400		800	28	µg/Kg-dry	2	10/21/08 16:04
Benzo[g,h,i]perylene	1400		800	32	µg/Kg-dry	2	10/21/08 16:04

Qualifiers:
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- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399160 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15275
Revision:	10/24/08 9:53	FileID:	1-SAMP-N0070.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1000		800	27	µg/Kg-dry	2	10/21/08 16:04
bis(2-Chloroethoxy)methane	ND		800	7.5	µg/Kg-dry	2	10/21/08 16:04
bis(2-chloroethyl)ether	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
bis(2-chloroisopropyl)ether	ND		800	14	µg/Kg-dry	2	10/21/08 16:04
bis(2-Ethylhexyl)phthalate	180 J		800	36	µg/Kg-dry	2	10/21/08 16:04
Butyl benzyl phthalate	ND		800	32	µg/Kg-dry	2	10/21/08 16:04
Caprolactam	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
Carbazole	240 J		800	24	µg/Kg-dry	2	10/21/08 16:04
Chrysene	1900		800	6.8	µg/Kg-dry	2	10/21/08 16:04
Di-n-butyl phthalate	ND		800	210	µg/Kg-dry	2	10/21/08 16:04
Di-n-octyl phthalate	ND		800	4.7	µg/Kg-dry	2	10/21/08 16:04
Dibenz[a,h]anthracene	380 J		800	32	µg/Kg-dry	2	10/21/08 16:04
Dibenzofuran	260 J		800	11	µg/Kg-dry	2	10/21/08 16:04
Diethyl phthalate	ND		800	8.5	µg/Kg-dry	2	10/21/08 16:04
Dimethyl phthalate	ND		800	8.3	µg/Kg-dry	2	10/21/08 16:04
Fluoranthene	2600		800	24	µg/Kg-dry	2	10/21/08 16:04
Fluorene	120 J		800	8.3	µg/Kg-dry	2	10/21/08 16:04
Hexachlorobenzene	ND		800	13	µg/Kg-dry	2	10/21/08 16:04
Hexachlorobutadiene	ND		800	7.3	µg/Kg-dry	2	10/21/08 16:04
Hexachlorocyclopentadiene	ND		800	410	µg/Kg-dry	2	10/21/08 16:04
Hexachloroethane	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
Indeno[1,2,3-cd]pyrene	390 J		800	32	µg/Kg-dry	2	10/21/08 16:04
Isophorone	ND		800	6.7	µg/Kg-dry	2	10/21/08 16:04
N-Nitroso-di-n-propylamine	ND		800	9.3	µg/Kg-dry	2	10/21/08 16:04
N-Nitrosodiphenylamine	ND		800	5.5	µg/Kg-dry	2	10/21/08 16:04
Naphthalene	870 J		800	8.2	µg/Kg-dry	2	10/21/08 16:04
Nitrobenzene	ND		800	8.6	µg/Kg-dry	2	10/21/08 16:04
Pentachlorophenol	ND		4100	810	µg/Kg-dry	2	10/21/08 16:04
Phenanthrene	1800		800	3.5	µg/Kg-dry	2	10/21/08 16:04
Phenol	110 J		800	7.5	µg/Kg-dry	2	10/21/08 16:04
Pyrene	5900		800	5.6	µg/Kg-dry	2	10/21/08 16:04
Surr: 2,4,6-Tribromophenol	66.1		20-143	0	%REC	2	10/21/08 16:04
Surr: 2-Fluorobiphenyl	77.6		46-130	0	%REC	2	10/21/08 16:04
Surr: 2-Fluorophenol	71.4		22-130	0	%REC	2	10/21/08 16:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399160 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15275
Revision:	10/24/08 9:53	FileID:	1-SAMP-N0070.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	72.0		39-130	0	%REC	2	10/21/08 16:04
Surr: Phenol-d5	72.9		33-130	0	%REC	2	10/21/08 16:04
Surr: Terphenyl-d14	187 S		36-146	0	%REC	2	10/21/08 16:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399160 Project Supervisor: Monika Santucci

Form 1 TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-FD

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-005B

Sample Wt/vol: 30 (g/mL) g Lab File ID: N0070.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 18 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 2.00

Extract Volume: 1000 (ul)

Number TICs found: 7 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.27)	6.27	1200	J
2.	aldol	6.81	82000	JEBA
3. 000990-12-0	Naphthalene, 1-methyl-	13.39	710	JN
4. 000581-42-0	Naphthalene, 2,6-dimethyl-	14.39	880	JN
5. 000581-40-8	Naphthalene, 2,3-dimethyl-	14.53	610	JN
6.	unknown (14.6)	14.80	1000	JB
7.	unknown hydrocarbon	16.93	1600	J

FORM I TIC 11 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0056.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.8; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		10000	130	µg/Kg-dry	25	10/20/08 19:54
2,4,5-Trichlorophenol	ND		51000	640	µg/Kg-dry	25	10/20/08 19:54
2,4,6-Trichlorophenol	ND		10000	170	µg/Kg-dry	25	10/20/08 19:54
2,4-Dichlorophenol	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
2,4-Dimethylphenol	ND		10000	2000	µg/Kg-dry	25	10/20/08 19:54
2,4-Dinitrophenol	ND		51000	10000	µg/Kg-dry	25	10/20/08 19:54
2,4-Dinitrotoluene	ND		10000	150	µg/Kg-dry	25	10/20/08 19:54
2,6-Dinitrotoluene	ND		10000	170	µg/Kg-dry	25	10/20/08 19:54
2-Chloronaphthalene	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
2-Chlorophenol	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
2-Methylnaphthalene	1000	J	10000	49	µg/Kg-dry	25	10/20/08 19:54
2-Methylphenol	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
2-Nitroaniline	ND		51000	180	µg/Kg-dry	25	10/20/08 19:54
2-Nitrophenol	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
3,3'-Dichlorobenzidine	ND		20000	1200	µg/Kg-dry	25	10/20/08 19:54
3-Nitroaniline	ND		51000	1200	µg/Kg-dry	25	10/20/08 19:54
4,6-Dinitro-2-methylphenol	ND		51000	6100	µg/Kg-dry	25	10/20/08 19:54
4-Bromophenyl phenyl ether	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
4-Chloro-3-methylphenol	ND		10000	300	µg/Kg-dry	25	10/20/08 19:54
4-Chloroaniline	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
4-Chlorophenyl phenyl ether	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
4-Methylphenol	ND		10000	67	µg/Kg-dry	25	10/20/08 19:54
4-Nitroaniline	ND		51000	1200	µg/Kg-dry	25	10/20/08 19:54
4-Nitrophenol	ND		51000	2000	µg/Kg-dry	25	10/20/08 19:54
Acenaphthene	ND		10000	100	µg/Kg-dry	25	10/20/08 19:54
Acenaphthylene	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
Acetophenone	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Anthracene	ND		10000	71	µg/Kg-dry	25	10/20/08 19:54
Atrazine	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Benzaldehyde	ND		10000	150	µg/Kg-dry	25	10/20/08 19:54
Benzo[a]anthracene	1600	J	10000	110	µg/Kg-dry	25	10/20/08 19:54
Benzo[a]pyrene	1600	J	10000	300	µg/Kg-dry	25	10/20/08 19:54
Benzo[b]fluoranthene	2600	J	10000	350	µg/Kg-dry	25	10/20/08 19:54
Benzo[g,h,i]perylene	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399139 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0056.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.8; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1400	J	10000	340	µg/Kg-dry	25	10/20/08 19:54
bis(2-Chloroethoxy)methane	ND		10000	94	µg/Kg-dry	25	10/20/08 19:54
bis(2-chloroethyl)ether	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
bis(2-chloroisopropyl)ether	ND		10000	170	µg/Kg-dry	25	10/20/08 19:54
bis(2-Ethylhexyl)phthalate	ND		10000	450	µg/Kg-dry	25	10/20/08 19:54
Butyl benzyl phthalate	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
Caprolactam	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Carbazole	ND		10000	300	µg/Kg-dry	25	10/20/08 19:54
Chrysene	2000	J	10000	85	µg/Kg-dry	25	10/20/08 19:54
Di-n-butyl phthalate	ND		10000	2600	µg/Kg-dry	25	10/20/08 19:54
Di-n-octyl phthalate	ND		10000	59	µg/Kg-dry	25	10/20/08 19:54
Dibenz[a,h]anthracene	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
Dibenzofuran	ND		10000	140	µg/Kg-dry	25	10/20/08 19:54
Diethyl phthalate	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
Dimethyl phthalate	ND		10000	100	µg/Kg-dry	25	10/20/08 19:54
Fluoranthene	3200	J	10000	300	µg/Kg-dry	25	10/20/08 19:54
Fluorene	ND		10000	100	µg/Kg-dry	25	10/20/08 19:54
Hexachlorobenzene	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
Hexachlorobutadiene	ND		10000	92	µg/Kg-dry	25	10/20/08 19:54
Hexachlorocyclopentadiene	ND		10000	5100	µg/Kg-dry	25	10/20/08 19:54
Hexachloroethane	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Indeno[1,2,3-cd]pyrene	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
Isophorone	ND		10000	84	µg/Kg-dry	25	10/20/08 19:54
N-Nitroso-di-n-propylamine	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
N-Nitrosodiphenylamine	ND		10000	68	µg/Kg-dry	25	10/20/08 19:54
Naphthalene	ND		10000	77	µg/Kg-dry	25	10/20/08 19:54
Nitrobenzene	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
Pentachlorophenol	ND		51000	10000	µg/Kg-dry	25	10/20/08 19:54
Phenanthrene	1900	J	10000	44	µg/Kg-dry	25	10/20/08 19:54
Phenol	ND		10000	93	µg/Kg-dry	25	10/20/08 19:54
Pyrene	3100	J	10000	68	µg/Kg-dry	25	10/20/08 19:54
Surr: 2,4,6-Tribromophenol	72.0		20-143	0	%REC	25	10/20/08 19:54
Surr: 2-Fluorobiphenyl	75.0		46-120	0	%REC	25	10/20/08 19:54
Surr: 2-Fluorophenol	68.5		22-130	0	%REC	25	10/20/08 19:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399139 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0056.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.8; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	61.8		39-120	0	%REC	25	10/20/08 19:54
Surr: Phenol-d5	65.3		33-130	0	%REC	25	10/20/08 19:54
Surr: Terphenyl-d14	90.3		36-146	0	%REC	25	10/20/08 19:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399139 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 14.4	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93053
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.32	J	1.2	0.0067	mg/Kg-dry	1	10/21/08 16:16
Chromium	29		1.2	0.16	mg/Kg-dry	1	10/21/08 16:16
Copper	91		1.2	0.47	mg/Kg-dry	1	10/21/08 16:16
Iron	16000		5.8	0.55	mg/Kg-dry	1	10/21/08 16:16
Nickel	23		5.8	0.23	mg/Kg-dry	1	10/21/08 16:16
Zinc	260		2.3	0.93	mg/Kg-dry	1	10/21/08 16:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398362 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 25.1	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93061
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.39	J	1.3	0.0076	mg/Kg-dry	1	10/21/08 16:55
Chromium	97		1.3	0.19	mg/Kg-dry	1	10/21/08 16:55
Copper	460		1.3	0.53	mg/Kg-dry	1	10/21/08 16:55
Iron	24000		6.7	0.63	mg/Kg-dry	1	10/21/08 16:55
Nickel	46		6.7	0.27	mg/Kg-dry	1	10/21/08 16:55
Zinc	530		2.7	1.1	mg/Kg-dry	1	10/21/08 16:55

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398370 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 20.4	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93062
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.65	J	1.3	0.0072	mg/Kg-dry	1	10/21/08 16:59
Chromium	65		1.3	0.18	mg/Kg-dry	1	10/21/08 16:59
Copper	220		1.3	0.50	mg/Kg-dry	1	10/21/08 16:59
Iron	31000		6.3	0.59	mg/Kg-dry	1	10/21/08 16:59
Nickel	38		6.3	0.25	mg/Kg-dry	1	10/21/08 16:59
Zinc	870	E	2.5	1.0	mg/Kg-dry	1	10/21/08 16:59

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398371 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 20.4	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-DL-93070
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Zinc	990		13	5.0	mg/Kg-dry	5	10/21/08 17:05

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398379 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 23.0	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93074
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.29 J		6.5	0.037	mg/Kg-dry	5	10/21/08 17:53
Chromium	430		6.5	0.81	mg/Kg-dry	5	10/21/08 17:53
Copper	2000		6.5	2.8	mg/Kg-dry	5	10/21/08 17:53
Iron	120000		32	3.0	mg/Kg-dry	5	10/21/08 17:53
Nickel	170		32	1.3	mg/Kg-dry	5	10/21/08 17:53
Zinc	5100 E		13	5.2	mg/Kg-dry	5	10/21/08 17:53

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398383 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 23.0	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-DL-93075
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Zinc	5200		25	10	mg/Kg-dry	10	10/21/08 17:57

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398384 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 17.8	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93064
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.32 J		1.2	0.0069	mg/Kg-dry	1	10/21/08 17:06
Chromium	550		1.2	0.17	mg/Kg-dry	1	10/21/08 17:06
Copper	1700		1.2	0.48	mg/Kg-dry	1	10/21/08 17:06
Iron	61000		6.1	0.57	mg/Kg-dry	1	10/21/08 17:06
Nickel	150		6.1	0.24	mg/Kg-dry	1	10/21/08 17:06
Zinc	2100 E		2.4	0.97	mg/Kg-dry	1	10/21/08 17:06

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398373 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 17.8	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-DL-93076
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Zinc	2900		24	9.7	mg/Kg-dry	10	10/21/08 18:02

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398385 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100 Sample Size: 0.3 g	PrepDate:	10/16/08 0:00
ColumnID:	%Moisture: 14.4	BatchNo:	8277/R15221
Revision:	10/21/08 8:39 TestCode: HG7471S	FileID:	1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.083	J	0.12	0.0039	mg/Kg-dry	1	10/17/08 10:14

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397774 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100 Sample Size: 0.3 g	PrepDate:	10/16/08 0:00
ColumnID:	%Moisture: 25.1	BatchNo:	8277/R15221
Revision:	10/21/08 8:39 TestCode: HG7471S	FileID:	1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.19		0.13	0.0045	mg/Kg-dry	1	10/17/08 10:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397777 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100 Sample Size: 0.3 g	PrepDate:	10/16/08 0:00
ColumnID:	%Moisture: 20.4	BatchNo:	8277/R15221
Revision:	10/21/08 8:39 TestCode: HG7471S	FileID:	1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.30		0.13	0.0042	mg/Kg-dry	1	10/17/08 10:23

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397778 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100 Sample Size: 0.3 g	PrepDate:	10/16/08 0:00
ColumnID:	%Moisture: 25.0	BatchNo:	8277/R15221
Revision:	10/21/08 8:39 TestCode: HG7471S	FileID:	1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	3.8		1.3	0.044	mg/Kg-dry	10	10/17/08 10:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397783 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100 Sample Size: 0.3 g	PrepDate:	10/16/08 0:00
ColumnID:	%Moisture: 17.8	BatchNo:	8277/R15221
Revision:	10/21/08 8:39 TestCode: HG7471S	FileID:	1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	4.0		1.2	0.041	mg/Kg-dry	10	10/17/08 10:58

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397784 Project Supervisor: Monika Santucci

Quality Control Results

GC/MS Volatile Organics Data

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No. _____ SDG No.: 0810083

Level: (low/med) LOW

	EPA SAMPLE NO.	LSL ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #			TOT OUT
01	LCS-15131	LCS-15131	92	98	101			0
02	MB-15131	MB-15131	96	104	110			0
03	Trip Blank	0810083-006A	99	103	111			0
04	MBSS-1	0810083-001A	102	118	129 *			1
05	MBSS-2	0810083-002A	98	129 *	141 *			2
06	MBSS-3	0810083-003A	105	129 *	141 *			2
07	MBS3-4	0810083-004A	101	132 *	143 *			2
08	MBSS-FD	0810083-005A	99	129 *	152 *			2
09	LCS-15143	LCS-15143	95	99	102			0
10	MSB-15143	MSB-15143	95	98	102			0
11	MBSS-1MS	0810083-001AMS	97	115	139 *			1
12	MBSS-1MSD	0810083-001AMSD	96	115	133 *			1
13	MB-15143	MB-15143	94	106	120			0
14	MBSS-1RA	0810083-001ARA	98	115	130 *			1
15	MBSS-2RA	0810083-002ARA	100	130 *	138 *			2
16	MBSS-3RA	0810083-003ARA	102	128 *	138 *			2
17	MBSS-4RA	0810083-004ARA	100	130 *	141 *			2
18	MBSS-FDRA	0810083-005ARA	105	129 *	144 *			2

		QC Limit
SMC1 (DCE) 1	= 1,2-Dichloroethane-d4	71-128
SMC2 (TOL) 1	= Toluene-d8	75-125
SMC3 (BFB) 1	= 4-Bromofluorobenzene	59-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 1 of 1 FORM II VOA-2 SW8260B

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396437
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	67.3	5.8	58.4	0	115	43	161	75	11	20	
Chloromethane	64.6	5.8	58.4	0	111	52	151	69.6	7.4	20	
Vinyl chloride	51.8	5.8	58.4	0	89	57	146	59.6	14	24	
Bromomethane	68.6	5.8	58.4	0	117	44	145	70.5	2.6	21	
Chloroethane	51.7	5.8	58.4	0	89	49	161	58.3	12	20	
Trichlorofluoromethane	64.8	5.8	58.4	0	111	59	156	73.4	13	20	
1,1-Dichloroethene	61.4	2.9	58.4	0	105	70	144	59.5	3.3	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	61.4	2.9	58.4	0	105	70	143	61.9	0.8	20	
Acetone	90.8	47	117	0	78	25	175	115	23	50	
Carbon disulfide	54.2	2.9	58.4	0	93	58	140	54.4	0.2	20	
Methyl acetate	118	2.9	58.4	0	202	70	130	91.9	25	20	RS
Methylene chloride	58.9	5.8	58.4	0	101	68	132	61.4	4.3	20	
trans-1,2-Dichloroethene	55.7	2.9	58.4	0	95	70	130	55	1.3	20	
Methyl tert-butyl ether	72.9	2.9	58.4	0	125	70	135	73.6	0.9	20	
1,1-Dichloroethane	61.6	2.9	58.4	0	105	70	133	62.1	0.9	20	
cis-1,2-Dichloroethene	57.3	2.9	58.4	0	98	70	130	56.5	1.5	20	
2-Butanone	97.8	47	117	0	84	30	162	122	22	50	
Chloroform	59.6	2.9	58.4	0	102	70	130	59.3	0.4	20	
1,1,1-Trichloroethane	58.8	2.9	58.4	0	101	70	142	59	0.3	20	
Cyclohexane	57.3	2.9	58.4	0	98	70	130	53.8	6.4	20	
Carbon tetrachloride	49.5	2.9	58.4	0	85	69	140	48.7	1.8	20	
Benzene	58.2	2.9	58.4	0	100	70	130	57.4	1.4	20	
1,2-Dichloroethane	59.4	2.9	58.4	0	102	68	135	59.2	0.3	20	
Trichloroethene	52.3	2.9	58.4	0.97	88	70	130	49.6	5.3	20	
Methylcyclohexane	46.5	2.9	58.4	0	80	70	130	43.2	7.3	20	
1,2-Dichloropropane	60.5	2.9	58.4	0	104	70	130	61.5	1.6	20	
Bromodichloromethane	56.6	2.9	58.4	0	97	66	138	57.2	1.1	20	

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; I Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMS SampType: MS TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396436
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	75.0	5.8	58.4	0	128	43	161				
Chloromethane	69.6	5.8	58.4	0	119	52	151				
Vinyl chloride	59.6	5.8	58.4	0	102	57	146				
Bromomethane	70.5	5.8	58.4	0	121	44	145				
Chloroethane	58.3	5.8	58.4	0	100	49	161				
Trichlorofluoromethane	73.4	5.8	58.4	0	126	59	156				
1,1-Dichloroethene	59.5	2.9	58.4	0	102	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	61.9	2.9	58.4	0	106	70	143				
Acetone	115	47	117	0	98	25	175				
Carbon disulfide	54.4	2.9	58.4	0	93	58	140				
Methyl acetate	91.9	2.9	58.4	0	157	70	130				S
Methylene chloride	61.4	5.8	58.4	0	105	68	132				
trans-1,2-Dichloroethene	55.0	2.9	58.4	0	94	70	130				
Methyl tert-butyl ether	73.6	2.9	58.4	0	126	70	135				
1,1-Dichloroethane	62.1	2.9	58.4	0	106	70	133				
cis-1,2-Dichloroethene	56.5	2.9	58.4	0	97	70	130				
2-Butanone	122	47	117	0	104	30	162				
Chloroform	59.3	2.9	58.4	0	102	70	130				
1,1,1-Trichloroethane	59.0	2.9	58.4	0	101	70	142				
Cyclohexane	53.8	2.9	58.4	0	92	70	130				
Carbon tetrachloride	48.7	2.9	58.4	0	83	69	140				
Benzene	57.4	2.9	58.4	0	98	70	130				
1,2-Dichloroethane	59.2	2.9	58.4	0	101	68	135				
Trichloroethene	49.6	2.9	58.4	0.97	83	70	130				
Methylcyclohexane	43.2	2.9	58.4	0	74	70	130				
1,2-Dichloropropane	61.5	2.9	58.4	0	105	70	130				
Bromodichloromethane	57.2	2.9	58.4	0	98	68	138				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; I Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396437
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	53.0	2.9	58.4	0	91	55	139	50.3	5.2	20	
4-Methyl-2-pentanone	62.9	5.8	117	0	80	50	150	114	20	50	
Toluene	52.6	2.9	58.4	0	90	70	130	52.6	0.1	20	
trans-1,3-Dichloropropene	48.2	2.9	58.4	0	83	53	135	46.2	4.2	20	
1,1,2-Trichloroethane	54.8	2.9	58.4	0	94	70	132	55.3	0.8	20	
Tetrachloroethene	58.7	2.9	58.4	0	100	63	145	56.8	3.3	21	
2-Hexanone	87.9	5.8	117	0	75	38	150	104	17	50	
Dibromochloromethane	55.2	2.9	58.4	0	94	68	141	55.9	1.4	20	
1,2-Dibromoethane	64.6	2.9	58.4	0	111	70	130	65	0.6	20	
Chlorobenzene	59.4	2.9	58.4	0	102	70	130	55.7	6.5	20	
Ethylbenzene	60.0	2.9	58.4	0	103	70	130	57.5	4.3	20	
Xylenes (total)	165	5.8	175	0	94	70	130	158	4.4	20	
Styrene	51.3	2.9	58.4	0	88	70	130	47.6	7.5	20	
Bromoform	51.4	2.9	58.4	0	88	59	137	51.6	0.4	20	
Isopropylbenzene	87.4	2.9	58.4	0	150	57	168	87.1	0.3	20	
1,1,2,2-Tetrachloroethane	84.8	2.9	58.4	0	145	63	175	91	7.1	24	
1,3-Dichlorobenzene	61.1	2.9	58.4	0	105	70	139	58.2	4.9	20	
1,4-Dichlorobenzene	57.0	2.9	58.4	0	98	70	131	56.3	1.3	24	
1,2-Dichlorobenzene	60.2	2.9	58.4	0	103	70	132	57.9	3.9	20	
1,2-Dibromo-3-chloropropane	66.0	5.8	58.4	0	113	70	138	70.5	6.6	24	
1,2,4-Trichlorobenzene	36.1	5.8	58.4	0	62	48	131	36.7	1.6	24	
Surr: 1,2-Dichloroethane-d4	56.1	0.12	58.4	0	96	71	128	0		0	
Surr: Toluene-d8	67.4	0.12	58.4	0	115	75	125	0		0	
Surr: 4-Bromofluorobenzene	77.5	0.12	58.4	0	133	59	125	0		0	S

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; I Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMS SampType: MS TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396436
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	50.3	2.9	58.4	0	86	55	139				
4-Methyl-2-pentanone	114	5.8	117	0	98	50	150				
Toluene	52.6	2.9	58.4	0	90	70	130				
trans-1,3-Dichloropropene	46.2	2.9	58.4	0	79	53	135				
1,1,2-Trichloroethane	55.3	2.9	58.4	0	95	70	132				
Tetrachloroethene	56.8	2.9	58.4	0	97	63	145				
2-Hexanone	104	5.8	117	0	89	38	150				
Dibromochloromethane	55.9	2.9	58.4	0	96	68	141				
1,2-Dibromoethane	65.0	2.9	58.4	0	111	70	130				
Chlorobenzene	55.7	2.9	58.4	0	95	70	130				
Ethylbenzene	57.5	2.9	58.4	0	98	70	130				
Xylenes (total)	158	5.8	175	0	90	70	130				
Styrene	47.6	2.9	58.4	0	82	70	130				
Bromoform	51.6	2.9	58.4	0	88	59	137				
Isopropylbenzene	87.1	2.9	58.4	0	149	57	168				
1,1,2,2-Tetrachloroethane	91.0	2.9	58.4	0	156	63	175				
1,3-Dichlorobenzene	58.2	2.9	58.4	0	100	70	139				
1,4-Dichlorobenzene	56.3	2.9	58.4	0	96	70	131				
1,2-Dichlorobenzene	57.9	2.9	58.4	0	99	70	132				
1,2-Dibromo-3-chloropropane	70.5	5.8	58.4	0	121	70	138				
1,2,4-Trichlorobenzene	36.7	5.8	58.4	0	63	48	131				
Surr: 1,2-Dichloroethane-d4	56.8	0.12	58.4	0	97	71	128				
Surr: Toluene-d8	67.1	0.12	58.4	0	115	75	125				
Surr: 4-Bromofluorobenzene	80.9	0.12	58.4	0	139	59	125				S

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; I Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15131 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15131
Client ID: ZZZZZ Batch ID: R15131 Method: SW8260B Analysis Date: 10/10/08 SeqNo: 396294
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	58.2	5.0	50	0	116	55	142				
Chloromethane	53.3	5.0	50	0	107	62	141				
Vinyl chloride	52.6	5.0	50	0	105	68	135				
Bromomethane	48.7	5.0	50	0	97	56	147				
Chloroethane	48.3	5.0	50	0	97	63	142				
Trichlorofluoromethane	51.5	5.0	50	0	103	67	136				
1,1-Dichloroethene	48.6	2.5	50	0	97	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	52.0	2.5	50	0	104	80	134				
Acetone	78.4	40	100	0	78	25	175				
Carbon disulfide	49.4	2.5	50	0	99	73	130				
Methyl acetate	46.9	2.5	50	0	94	67	147				
Methylene chloride	45.5	5.0	50	0	91	75	124				
trans-1,2-Dichloroethene	47.3	2.5	50	0	95	77	123				
Methyl tert-butyl ether	51.6	2.5	50	0	103	76	126				
1,1-Dichloroethane	48.1	2.5	50	0	96	76	124				
cis-1,2-Dichloroethene	47.3	2.5	50	0	95	79	120				
2-Butanone	88.0	40	100	0	88	42	154				
Chloroform	47.5	2.5	50	0	95	77	121				
1,1,1-Trichloroethane	48.0	2.5	50	0	96	78	132				
Cyclohexane	54.0	2.5	50	0	108	80	128				
Carbon tetrachloride	45.8	2.5	50	0	92	74	138				
Benzene	47.4	2.5	50	0	95	80	121				
1,2-Dichloroethane	47.5	2.5	50	0	95	73	127				
Trichloroethene	47.3	2.5	50	0	95	80	120				
Methylcyclohexane	53.0	2.5	50	0	106	80	128				
1,2-Dichloropropane	48.5	2.5	50	0	97	80	125				
Bromodichloromethane	49.9	2.5	50	0	100	80	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

102 *13-Oct-08* *Page 1 of 2*

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15143 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15143
Client ID: ZZZZZ Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396453
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	54.3	5.0	50	0	109	43	161				
Chloromethane	51.8	5.0	50	0	104	52	151				
Vinyl chloride	51.7	5.0	50	0	103	57	146				
Bromomethane	48.5	5.0	50	0	97	44	145				
Chloroethane	48.0	5.0	50	0	96	49	161				
Trichlorofluoromethane	48.6	5.0	50	0	97	69	156				
1,1-Dichloroethene	42.2	2.5	50	0	84	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	45.7	2.5	50	0	91	70	143				
Acetone	81.4	40	100	0	81	25	175				
Carbon disulfide	48.6	2.5	50	0	97	58	140				
Methyl acetate	45.4	2.5	50	0	91	70	130				
Methylene chloride	42.1	5.0	50	0	84	68	132				
trans-1,2-Dichloroethene	41.6	2.5	50	0	83	70	130				
Methyl tert-butyl ether	48.7	2.5	50	0	97	70	135				
1,1-Dichloroethane	43.6	2.5	50	0	87	70	133				
cis-1,2-Dichloroethene	43.6	2.5	50	0	87	70	130				
2-Butanone	97.5	40	100	0	98	30	162				
Chloroform	43.6	2.5	50	0	87	70	130				
1,1,1-Trichloroethane	43.2	2.5	50	0	86	70	142				
Cyclohexane	47.9	2.5	50	0	96	70	130				
Carbon tetrachloride	39.5	2.5	50	0	79	69	140				
Benzene	42.6	2.5	50	0	85	70	130				
1,2-Dichloroethane	44.4	2.5	50	0	89	68	135				
Trichloroethene	41.8	2.5	50	0	84	70	130				
Methylcyclohexane	46.9	2.5	50	0	94	70	130				
1,2-Dichloropropane	45.4	2.5	50	0	91	70	130				
Bromodichloromethane	45.7	2.5	50	0	91	68	138				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

100 *14-Oct-08* *Page 13 of 14*

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15131 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15131
Client ID: ZZZZZ Batch ID: R15131 Method: SW8260B Analysis Date: 10/10/08 SeqNo: 396294
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	48.0	2.5	50	0	96	80	125				
4-Methyl-2-pentanone	87.4	5.0	100	0	87	50	150				
Toluene	47.2	2.5	50	0	94	80	121				
trans-1,3-Dichloropropene	48.2	2.5	50	0	96	78	124				
1,1,2-Trichloroethane	46.6	2.5	50	0	93	80	122				
Tetrachloroethene	50.3	2.5	50	0	101	74	125				
2-Hexanone	89.7	5.0	100	0	90	50	150				
Dibromochloromethane	45.3	2.5	50	0	91	76	135				
1,2-Dibromoethane	50.1	2.5	50	0	100	80	124				
Chlorobenzene	48.5	2.5	50	0	97	80	120				
Ethylbenzene	49.7	2.5	50	0	99	80	121				
Xylenes (total)	138	5.0	150	0	92	76	124				
Styrene	46.6	2.5	50	0	93	78	122				
Bromoform	48.4	2.5	50	0	97	70	138				
Isopropylbenzene	52.5	2.5	50	0	105	78	131				
1,1,2,2-Tetrachloroethane	46.3	2.5	50	0	93	69	138				
1,3-Dichlorobenzene	49.9	2.5	50	0	100	80	120				
1,4-Dichlorobenzene	49.3	2.5	50	0	99	80	120				
1,2-Dichlorobenzene	49.3	2.5	50	0	99	80	120				
1,2-Dibromo-3-chloropropane	44.4	5.0	50	0	89	69	132				
1,2,4-Trichlorobenzene	52.4	5.0	50	0	105	71	127				
Surr: 1,2-Dichloroethane-d4	46.0	0.10	50	0	92	71	128				
Surr: Toluene-d8	49.2	0.10	50	0	98	75	125				
Surr: 4-Bromofluorobenzene	50.5	0.10	50	0	101	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

103 *13-Oct-08* *Page 2 of 2*

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15143 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15143
Client ID: ZZZZZ Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396453
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	45.4	2.5	50	0	91	55	139				
4-Methyl-2-pentanone	95.7	5.0	100	0	96	50	150				
Toluene	43.6	2.5	50	0	87	70	130				
trans-1,3-Dichloropropene	45.3	2.5	50	0	91	53	135				
1,1,2-Trichloroethane	45.6	2.5	50	0	91	70	132				
Tetrachloroethene	43.5	2.5	50	0	87	63	145				
2-Hexanone	97.1	5.0	100	0	97	38	150				
Dibromochloromethane	41.6	2.5	50	0	83	68	141				
1,2-Dibromoethane	47.6	2.5	50	0	96	70	130				
Chlorobenzene	44.6	2.5	50	0	89	70	130				
Ethylbenzene	44.2	2.5	50	0	88	70	130				
Xylenes (total)	125	5.0	150	0	83	70	130				
Styrene	42.9	2.5	50	0	86	70	130				
Bromoform	46.1	2.5	50	0	92	59	137				
Isopropylbenzene	47.2	2.5	50	0	94	57	168				
1,1,2,2-Tetrachloroethane	46.9	2.5	50	0	94	53	175				
1,3-Dichlorobenzene	44.6	2.5	50	0	89	70	139				
1,4-Dichlorobenzene	44.4	2.5	50	0	89	70	131				
1,2-Dichlorobenzene	45.6	2.5	50	0	91	70	132				
1,2-Dibromo-3-chloropropane	45.7	5.0	50	0	91	70	138				
1,2,4-Trichlorobenzene	44.5	5.0	50	0	89	46	131				
Surr: 1,2-Dichloroethane-d4	47.6	0.10	50	0	95	71	128				
Surr: Toluene-d8	49.6	0.10	50	0	99	75	125				
Surr: 4-Bromofluorobenzene	50.9	0.10	50	0	102	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

101 *14-Oct-08* *Page 14 of 14*

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15143 | SampType: LCS | TestCode: 8260S7_OLM | Units: µg/Kg | Prep Date: | RunNo: 15143
Client ID: ZZZZZ | Batch ID: R15143 | Method: SW8260B | Analysis Date: 10/13/08 | SeqNo: 396435
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	54.3	5.0	50	0	109	55	142				
Chloromethane	51.8	5.0	50	0	104	62	141				
Vinyl chloride	51.7	5.0	50	0	103	68	135				
Bromomethane	48.6	5.0	50	0	97	56	147				
Chloroethane	48.0	5.0	50	0	96	63	142				
Trichlorofluoromethane	48.6	5.0	50	0	97	67	136				
1,1-Dichloroethene	42.2	2.5	50	0	84	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	45.7	2.5	50	0	91	60	134				
Acetone	81.4	40	100	0	81	25	175				
Carbon disulfide	48.6	2.5	50	0	97	73	130				
Methyl acetate	45.4	2.5	50	0	91	67	147				
Methylene chloride	42.1	5.0	50	0	84	75	124				
trans-1,2-Dichloroethene	41.6	2.5	50	0	83	77	123				
Methyl tert-butyl ether	48.7	2.5	50	0	97	76	126				
1,1-Dichloroethane	43.6	2.5	50	0	87	78	124				
cis-1,2-Dichloroethene	43.6	2.5	50	0	87	79	120				
2-Butanone	97.5	40	100	0	98	42	154				
Chloroform	43.6	2.5	50	0	87	77	121				
1,1,1-Trichloroethane	43.2	2.5	50	0	86	78	132				
Cyclohexane	47.9	2.5	50	0	96	60	128				
Carbon tetrachloride	39.5	2.5	50	0	79	74	138				
Benzene	42.6	2.5	50	0	85	80	121				
1,2-Dichloroethane	44.4	2.5	50	0	89	73	127				
Trichloroethene	41.8	2.5	50	0	84	80	120				
Methylcyclohexane	46.9	2.5	50	0	94	80	128				
1,2-Dichloropropane	45.4	2.5	50	0	91	80	125				
Bromodichloromethane	45.7	2.5	50	0	91	80	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

104

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15143 | SampType: LCS | TestCode: 8260S7_OLM | Units: µg/Kg | Prep Date: | RunNo: 15143
Client ID: ZZZZZ | Batch ID: R15143 | Method: SW8260B | Analysis Date: 10/13/08 | SeqNo: 396435
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	45.4	2.5	50	0	91	80	125				
4-Methyl-2-pentanone	95.7	5.0	100	0	96	50	150				
Toluene	43.6	2.5	50	0	87	80	121				
trans-1,3-Dichloropropene	45.3	2.5	50	0	91	78	124				
1,1,2-Trichloroethane	45.6	2.5	50	0	91	80	122				
Tetrachloroethene	43.5	2.5	50	0	87	74	129				
2-Hexanone	97.1	5.0	100	0	97	50	150				
Dibromochloromethane	41.6	2.5	50	0	83	76	135				
1,2-Dibromoethane	47.6	2.5	50	0	95	80	124				
Chlorobenzene	44.6	2.5	50	0	89	80	120				
Ethylbenzene	44.2	2.5	50	0	88	80	121				
Xylenes (total)	125	5.0	150	0	83	76	124				
Styrene	42.9	2.5	50	0	86	78	122				
Bromoform	46.1	2.5	50	0	92	70	138				
Isopropylbenzene	47.2	2.5	50	0	94	76	131				
1,1,2,2-Tetrachloroethane	46.9	2.5	50	0	94	69	138				
1,3-Dichlorobenzene	44.6	2.5	50	0	89	80	120				
1,4-Dichlorobenzene	44.4	2.5	50	0	89	80	120				
1,2-Dichlorobenzene	45.6	2.5	50	0	91	80	120				
1,2-Dibromo-3-chloropropane	45.7	5.0	50	0	91	69	132				
1,2,4-Trichlorobenzene	44.5	5.0	50	0	89	71	127				
Surr: 1,2-Dichloroethane-d4	47.6	0.10	50	0	95	71	128				
Surr: Toluene-d8	49.6	0.10	50	0	99	75	125				
Surr: 4-Bromofluorobenzene	50.9	0.10	50	0	102	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

105

VOLATILE METHOD BLANK SUMMARY

Lab Name: Life Science Laboratory Contract: _____ SAS No.: _____ SDG No.: 0810083

Lab Code: LSLB Case No.: ORGC-MS

Lab File ID: J7356.D Lab Sample ID: MB-15131

Date Analyzed: 10/10/08 Time Analyzed: 18:32

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-15131	LCS-15131	J7352.D	13:53
02	Trip Blank	0810083-006A	J7357.D	17:06
03	MBSS-1	0810083-001A	J7363.D	20:27
04	MBSS-2	0810083-002A	J7364.D	21:01
05	MBSS-3	0810083-003A	J7365.D	21:35
06	MBSS-4	0810083-004A	J7366.D	22:08
07	MBSS-FD	0810083-005A	J7367.D	22:42

COMMENTS:

FORM IV 8260S7_OLM43

106

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15131 | SampType: MBLK | TestCode: 8260S7_OLM | Units: µg/Kg | Prep Date: | RunNo: 15131
Client ID: ZZZZZ | Batch ID: R15131 | Method: SW8260B | Analysis Date: 10/10/08 | SeqNo: 396305
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	ND	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

13-Oct-08

107

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15131	SampType: MBLK	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:		RunNo: 15131	
Client ID: ZZZZZ	Batch ID: R15131	Method: SW8260B		Analysis Date: 10/10/08		SeqNo: 396305	
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	48.2	0.10	50	0	96	71	128				
Surr: Toluene-d8	52.1	0.10	50	0	104	75	125				
Surr: 4-Bromofluorobenzene	54.8	0.10	50	0	110	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

13-Oct-08

Form I TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MB-15131

Lab Name: Life Science Laboratories, Inc. Contract: _____
Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0810083
Matrix (soil/water): SOIL Lab Sample ID: MB-15131
Sample wt/vol: 5 (g/mL) G Lab File ID: J7356.D
Level: LOW Date Received:
% Moisture: not dec. Date Analyzed: 10/10/08
GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00
Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 15 SW8260B

VOLATILE METHOD BLANK SUMMARY

4A

Lab Name: Life Science Laboratories Contract: _____
Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0810083
Lab File ID: J7374.D Lab Sample ID: MB-15143
Date Analyzed: 10/13/08 Time Analyzed: 12:04
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N
Instrument ID: MS03_10

SAMPLE NO.
MB-15143

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MBS-15143	MBS-15143	J7370.D	10:48
02	LCS-15143	LCS-15143	J7370.D	10:49
03	MBSS-1MS	0810083-001AMS	J7371.D	11:23
04	MBSS-1MSD	0810083-001AMSD	J7372.D	11:57
05	MBSS-1RA	0810083-001ARA	J7376.D	14:11
06	MBSS-2RA	0810083-002ARA	J7377.D	14:45
07	MBSS-3RA	0810083-003ARA	J7378.D	15:19
08	MBSS-4RA	0810083-004ARA	J7379.D	15:52
09	MBSS-FDRA	0810083-005ARA	J7380.D	16:26

COMMENTS:

Page 2 of 2

FORM 4A

8260S7_OLM40

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15143	SampType: MBLK	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:		RunNo: 15143	
Client ID: ZZZZZ	Batch ID: R15143	Method: SW8260B		Analysis Date: 10/13/08		SeqNo: 396438	
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	ND	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Marked Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15143 | SampType: MBLK | TestCode: 826057_OLM | Units: µg/Kg | Prep Date: | Run No: 15143
Client ID: ZZZZZ | Batch ID: R15143 | Method: SW8260B | Analysis Date: 10/13/09 | Seq No: 396438
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	46.6	0.10	50	0	94	71	128				
Surr: Toluene-d8	53.0	0.10	50	0	106	75	125				
Surr: 4-Bromofluorobenzene	59.9	0.10	50	0	120	58	125				

Qualifiers:
B: Analyte detected in the associated Method Blank
ND: Not Detected at the Practical Quantitation Limit (PQL)
E: Not Detected at the MDC or RL
E: Value exceeds the instrument calibration range
R: RPD exceeds accepted precision limit
J: Analyte detected below the PQL
S: Spike Recovery outside accepted recovery limits

14-Oct-08

B
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083
Lab Code: LSLB
Lab File ID (Standard): J7361.D Date Analyzed: 10/10/2009
Instrument ID: MS03_10 Time Analyzed: 13:03
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	2092531	10.91	857823	15.80	564081	19.85
UPPER LIMIT	4185062	11.41	1715646	16.30	1128162	20.35
LOWER LIMIT	1046266	10.41	428912	15.30	282041	19.35
SAMPLE NO.						
01 LCS-15131 (LCS-15131)	2177974	10.90	867673	15.81	555442	19.87
02 MB-15131 (MB-15131)	2089617	10.91	792510	15.81	446667	19.88
03 Trip Blank (0810083-006A)	2022842	10.91	784826	15.81	440575	19.88
04 MBSS-1 (0810083-001A)	1693472	10.90	509130	15.81	196411*	19.88
05 MBSS-2 (0810083-002A)	1691945	10.90	462706	15.82	147931*	19.88
06 MBSS-3 (0810083-003A)	1625453	10.90	440466	15.81	146318*	19.87
07 MBSS-4 (0810083-004A)	1693173	10.91	437916	15.82	139384*	19.88
08 MBSS-FD (0810083-005A)	1709488	10.91	462535	15.82	140370*	19.88

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

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

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

B
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083
Lab Code: LSLB
Lab File ID (Standard): J7359.D Date Analyzed: 10/13/2009
Instrument ID: MS03_10 Time Analyzed: 10:15
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	2171012	10.90	809102	15.81	611077	19.88
UPPER LIMIT	4342024	11.40	1618204	16.31	1222154	20.38
LOWER LIMIT	1085506	10.40	404551	15.31	305539	19.38
SAMPLE NO.						
01 LCS-15143 (LCS-15143)	2078657	10.90	832385	15.81	531237	19.88
02 MSB-15143 (MSB-15143)	2078657	10.90	832385	15.81	531237	19.88
03 MBSS-1MS (0810083-001AMS)	1848412	10.90	591550	15.81	232899*	19.88
04 MBSS-1MSD (0810083-001AMSD)	2163845	10.90	694536	15.81	294615*	19.88
05 MB-15143 (MB-15143)	2243483	10.91	832192	15.81	415392	19.88
06 MBSS-1RA (0810083-001ARA)	2022213	10.91	672948	15.82	277978*	19.88
07 MBSS-2RA (0810083-002ARA)	1757404	10.91	479157	15.82	152342*	19.88
08 MBSS-3RA (0810083-003ARA)	1772823	10.91	489944	15.82	167130*	19.88
09 MBSS-4RA (0810083-004ARA)	1756301	10.90	467627	15.81	151092*	19.88
10 MBSS-FDRA (0810083-005ARA)	1697739	10.91	456750	15.82	147328*	19.88

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

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

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

GC/MS Semivolatile Organics Data

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLIB Case No.: ONC-MS SAS No. _____ SDG No.: 0810083

Level:(low/med) LOW

SOIL SEMIVOLATILE SURROGATE RECOVERY

EPA SAMPLE NO.	LCS ID	S1 (2FP) 1 #	S2 (FBP) 2 #	S3 (NBZ) 1 #	S4 (PHL) 1 #	S5 (TBP) 1 #	S6 (TPH) 1 #	TOT OUT
01LCS-8270	LCS-8270	70	75	69	69	91	84	0
02MSB-8270	MSB-8270	73	78	74	72	95	89	0
03MB-8270	MB-8270	77	83	80	78	80	106	0
04MSSS-3DL	0810083-003BDL	61	66	59	58	63	78	0
05MSSS-4DL	0810083-004BDL	71	74	62	69	73	94	0
06MSSS-FDDL	0810083-005BDL	69	75	62	65	72	90	0
07MSSS-1	0810083-001A	75	77	74	75	77	95	0
08MSSS-1MS	0810083-001AMS	66	69	65	67	72	80	0
09MSSS-3	0810083-003A	68	71	67	67	82	128	0
10MSSS-4	0810083-004A	71	74	72	71	82	191 *	1
11MSSS-FD	0810083-005A	71	78	72	73	86	187 *	1
12MB-8309	MB-8309	76	83	79	75	92	93	0
13LCS-8309	LCS-8309	85	88	84	83	106	100	0
14MSB-8309	MSB-8309	69	73	71	67	88	82	0
15MSSS-2DL	0810083-002BDL	66	69	61	66	56	78	0
16MSSS-1MSD	0810083-001AMSD	72	72	69	69	70	81	0
17MSSS-2	0810083-002A	72	69	66	69	68	86	0

		QC Limit
S1 (2FP) =	2-Fluorophenol	22-130
S2 (FBP) =	2-Fluorobiphenyl	46-130
S3 (NBZ) =	Nitrobenzene-d5	39-130
S4 (PHL) =	Phenol-d5	33-130
S5 (TBP) =	2,4,6-Tribromophenol	20-143
S6 (TPH) =	Terphenyl-d14	36-146

Column to be used to flag recovery values

* Values outside of contract required QC limits

Form II SV-2 SW8270C

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2620	3900	1950	1730	46	37	130				J
Atrazine	1360	3900	1950	0	70	30	130				J
Benzaldehyde	1290	3900	1950	0	66	30	130				J
Benzo[a]anthracene	8900	3900	1950	9580	0	40	130				S
Benzo[a]pyrene	9650	3900	1950	10200	0	44	130				S
Benzo[b]fluoranthene	14600	3900	1950	17500	0	29	154				S
Benzo[g,h,i]perylene	3360	3900	1950	2230	7	10	130				JS
Benzo[k]fluoranthene	7130	3900	1950	6190	48	35	143				
bis(2-Chloroethoxy)methane	1260	3900	1950	0	55	43	130				J
bis(2-chloroethyl)ether	1270	3900	1950	0	65	41	130				J
bis(2-chloroisopropyl)ether	1460	3900	1950	0	75	34	130				J
bis(2-Ethylhexyl)phthalate	3800	3900	1950	670	161	42	154				JS
Butyl benzyl phthalate	1630	3900	1950	0	84	34	160				J
Caprolactam	1700	3900	1950	0	87	30	130				J
Carbazole	2650	3900	1950	1540	58	42	130				J
Chrysene	9590	3900	1950	10200	0	43	130				S
Di-n-butyl phthalate	1520	3900	1950	0	83	50	133				J
Di-n-octyl phthalate	1510	3900	1950	0	83	48	146				J
Dibenz[a,h]anthracene	1510	3900	1950	889	32	16	135				J
Dibenzofuran	1420	3900	1950	0	73	45	130				J
Diethyl phthalate	1480	3900	1950	0	76	48	130				J
Dimethyl phthalate	1440	3900	1950	0	74	46	130				J
Fluoranthene	16800	3900	1950	20800	0	45	130				S
Fluorene	1860	3900	1950	709	59	45	130				J
Hexachlorobenzene	1400	3900	1950	0	72	50	130				J
Hexachlorobutadiene	1230	3900	1950	0	63	37	130				J
Hexachlorocyclopentadiene	ND	3900	1950	0	0	10	130				S

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1300	3900	1950	0	67	23	130				J
Indeno[1,2,3-cd]pyrene	2120	3900	1950	2030	5	10	134				JS
Isophorone	1290	3900	1950	0	66	43	130				J
N-Nitroso-di-n-propylamine	1400	3900	1950	0	72	35	130				J
N-Nitrosodiphenylamine	1510	3900	1950	0	77	44	130				J
Naphthalene	1530	3900	1950	0	78	40	130				J
Nitrobenzene	1330	3900	1950	0	68	45	130				J
Pentachlorophenol	ND	20000	1950	0	0	10	130				S
Phenanthrene	9400	3900	1950	10600	0	45	130				S
Phenol	1210	3900	1950	0	62	33	130				J
Pyrene	15500	3900	1950	18200	0	18	164				S
Surr: 2,4,6-Tribromophenol	4190	0	5840	0	72	20	143				
Surr: 2-Fluorobiphenyl	2680	0	3890	0	69	46	130				
Surr: 2-Fluorophenol	3840	0	5840	0	66	22	130				
Surr: Nitrobenzene-d5	2540	0	3890	0	65	39	130				
Surr: Phenol-d5	3910	0	5840	0	67	33	130				
Surr: Terphenyl-d14	3130	0	3890	0	80	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Biphenyl	1500	3900	1950	0	77	30	130				J
2,4,5-Trichlorophenol	1000	20000	1950	0	51	34	130				J
2,4,6-Trichlorophenol	1130	3900	1950	0	58	33	130				J
2,4-Dichlorophenol	1230	3900	1950	0	63	39	130				J
2,4-Dimethylphenol	1320	3900	1950	0	68	22	130				J
2,4-Dinitrophenol	ND	20000	1950	0	0	10	130				S
2,4-Dinitrotoluene	1300	3900	1950	0	67	40	130				J
2,6-Dinitrotoluene	1350	3900	1950	0	69	36	130				J
2-Chloronaphthalene	1360	3900	1950	0	70	46	130				J
2-Chlorophenol	1340	3900	1950	0	69	39	130				J
2-Methylnaphthalene	1260	3900	1950	0	65	43	130				J
2-Methylphenol	1130	3900	1950	0	58	43	130				J
2-Nitroaniline	1120	20000	1950	0	57	42	130				J
2-Nitrophenol	1100	3900	1950	0	57	34	130				J
3,3'-Dichlorobenzidine	576	7700	1950	0	30	10	130				J
3-Nitroaniline	872	20000	1950	0	45	11	130				J
4,6-Dinitro-2-methylphenol	ND	20000	1950	0	0	13	130				S
4-Bromophenyl phenyl ether	1310	3900	1950	0	67	43	130				J
4-Chloro-3-methylphenol	1250	3900	1950	0	64	38	130				J
4-Chloroaniline	526	3900	1950	0	27	10	130				J
4-Chlorophenyl phenyl ether	1270	3900	1950	0	65	45	130				J
4-Methylphenol	1140	3900	1950	0	59	42	130				J
4-Nitroaniline	1050	20000	1950	0	54	23	130				J
4-Nitrophenol	1140	20000	1950	0	59	10	144				J
Acenaphthene	2480	3900	1950	1430	54	43	130				J
Acenaphthylene	1500	3900	1950	0	77	46	130				J
Acetophenone	1260	3900	1950	0	65	30	130				J

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1460	3900	1950	0	77	23	130	1300	14	37	J
Indeno[1,2,3-cd]pyrene	3060	3900	1950	2030	53	10	134	2120	36	30	J
Isophorone	1420	3900	1950	0	73	43	130	1296	9.8	40	J
N-Nitroso-di-n-propylamine	1560	3900	1950	0	80	35	130	1400	11	30	J
N-Nitrosodiphenylamine	1650	3900	1950	0	85	44	130	1510	9.9	52	J
Naphthalene	1800	3900	1950	0	92	40	130	1530	16	33	J
Nitrobenzene	1440	3900	1950	0	74	46	130	1330	8.2	51	J
Pentachlorophenol	ND	20000	1950	0	0	10	130	0		53	S
Phenanthrene	13500	3900	1950	10600	153	45	130	8400	36	30	RS
Phenol	1320	3900	1950	0	68	33	130	1210	8.3	34	J
Pyrene	21800	3900	1950	18200	182	18	164	15500	34	30	RS
Surr: 2,4,6-Tribromophenol	4110	0	5840	0	70	20	143	0		0	
Surr: 2-Fluorobiphenyl	2760	0	3890	0	72	46	130	0		0	
Surr: 2-Fluorophenol	4190	0	5840	0	72	22	130	0		0	
Surr: Nitrobenzene-d5	2690	0	3890	0	69	39	130	0		0	
Surr: Phenol-d5	4040	0	5840	0	69	33	130	0		0	
Surr: Terphenyl-d14	3140	0	3890	0	81	36	146	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

122

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1650	3900	1950	0	85	39	130	1500	9.7	60	J
2,4,5-Trichlorophenol	1080	20000	1950	0	55	34	130	1000	7.5	44	J
2,4,6-Trichlorophenol	1180	3900	1950	0	61	33	130	1130	4.0	45	J
2,4-Dichlorophenol	1250	3900	1950	0	64	38	130	1230	1.9	53	J
2,4-Dimethylphenol	1350	3900	1950	0	69	22	130	1320	2.2	52	J
2,4-Dinitrophenol	4150	20000	1950	0	213	10	130	0		60	JS
2,4-Dinitrotoluene	1320	3900	1950	0	68	40	130	1300	1.5	32	J
2,6-Dinitrotoluene	1340	3900	1950	0	69	36	130	1350	0.8	43	J
2-Chloronaphthalene	1430	3900	1950	0	73	46	130	1350	4.7	30	J
2-Chlorophenol	1410	3900	1950	0	72	39	130	1340	4.8	38	J
2-Methylnaphthalene	1370	3900	1950	0	71	43	130	1260	8.6	35	J
2-Methylphenol	1140	3900	1950	0	59	43	130	1130	0.7	60	J
2-Nitroaniline	1210	20000	1950	0	62	42	130	1120	8.3	34	J
2-Nitrophenol	1180	3900	1950	0	61	34	130	1100	6.8	48	J
3,3'-Dichlorobenzidine	662	7700	1950	0	34	10	130	576	14	60	J
3-Nitroaniline	958	20000	1950	0	49	11	130	872	9.4	40	J
4,6-Dinitro-2-methylphenol	ND	20000	1950	0	0	13	130	0		60	S
4-Bromophenyl phenyl ether	1390	3900	1950	0	72	43	130	1310	6.3	37	J
4-Chloro-3-methylphenol	1270	3900	1950	0	65	38	130	1250	1.2	30	J
4-Chloroaniline	701	3900	1950	0	36	10	130	526	29	48	J
4-Chlorophenyl phenyl ether	1360	3900	1950	0	70	45	130	1270	6.8	32	J
4-Methylphenol	1200	3900	1950	0	61	42	130	1140	4.7	53	J
4-Nitroaniline	1100	20000	1950	0	56	23	130	1050	4.3	37	J
4-Nitrophenol	1200	20000	1950	0	62	10	144	1140	5.0	30	J
Acenaphthene	3090	3900	1950	1430	85	43	130	2480	22	30	J
Acenaphthylene	1600	3900	1950	0	82	46	130	1500	8.3	30	J
Acetophenone	1380	3900	1950	0	71	30	130	1260	9.2	60	J

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

120

28-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399135
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1450	330	1670	0	87	30	130				
2,4,5-Trichlorophenol	1110	1700	1670	0	67	34	130				J
2,4,6-Trichlorophenol	1280	330	1670	0	77	33	130				
2,4-Dichlorophenol	1260	330	1670	0	76	39	130				
2,4-Dimethylphenol	993	330	1670	0	60	22	130				
2,4-Dinitrophenol	759	1700	1670	0	46	10	130				J
2,4-Dinitrotoluene	1410	330	1670	0	84	40	130				
2,6-Dinitrotoluene	1400	330	1670	0	84	36	130				
2-Chloronaphthalene	1350	330	1670	0	81	46	130				
2-Chlorophenol	1320	330	1670	0	79	39	130				
2-Methylnaphthalene	1120	330	1670	0	67	43	130				
2-Methylphenol	1080	330	1670	0	65	43	130				
2-Nitroaniline	1140	1700	1670	0	68	42	130				J
2-Nitrophenol	1180	330	1670	0	71	34	130				
3,3'-Dichlorobenzidine	677	660	1670	0	41	10	130				
3-Nitroaniline	666	1700	1670	0	40	11	130				J
4,6-Dinitro-2-methylphenol	952	1700	1670	0	58	13	130				J
4-Bromophenyl phenyl ether	1370	330	1670	0	82	43	130				
4-Chloro-3-methylphenol	1210	330	1670	0	73	38	130				
4-Chloroaniline	287	330	1670	0	17	10	130				J
4-Chlorophenyl phenyl ether	1340	330	1670	0	81	45	130				
4-Methylphenol	1070	330	1670	0	64	42	130				
4-Nitroaniline	1180	1700	1670	0	71	23	130				J
4-Nitrophenol	1510	1700	1670	0	90	10	144				J
Acenaphthene	1330	330	1670	0	80	43	130				
Acenaphthylene	1310	330	1670	0	79	46	130				
Acetophenone	1240	330	1670	0	74	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

123

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	3260	3900	1950	1730	79	37	130	2620	22	30	J
Atrazine	1410	3900	1950	0	73	30	130	1360	3.6	60	J
Benzaldehyde	1450	3900	1950	0	74	30	130	1290	12	60	J
Benzo[a]anthracene	12300	3900	1950	9560	141	40	130	8900	32	30	RS
Benzo[a]pyrene	12900	3900	1950	10200	140	44	130	9650	29	30	S
Benzo[b]fluoranthene	19300	3900	1950	17500	97	29	154	14600	28	32	
Benzo[g,h,i]perylene	4610	3900	1950	3230	71	10	130	3360	31	30	
Benzo[k]fluoranthene	9120	3900	1950	6190	150	35	143	7130	25	30	S
bis(2-Chloroethoxy)methane	1410	3900	1950	0	72	43	130	1260	11	40	J
bis(2-chloroethyl)ether	1350	3900	1950	0	69	41	130	1270	6.2	30	J
bis(2-chloroisopropyl)ether	1640	3900	1950	0	84	34	130	1460	12	30	J
bis(2-Ethylhexyl)phthalate	2950	3900	1950	670	117	42	154	3800	25	36	J
Butyl benzyl phthalate	1700	3900	1950	0	87	34	160	1630	4.2	37	J
Caprolactam	1850	3900	1950	0	95	30	130	1700	8.4	60	J
Carbazole	3130	3900	1950	1540	82	42	130	2660	16	36	J
Chrysene	12800	3900	1950	10200	132	43	130	9690	29	30	S
Di-n-butyl phthalate	1700	3900	1950	0	87	50	133	1620	4.5	39	J
Di-n-octyl phthalate	1710	3900	1950	0	88	48	146	1610	5.9	31	J
Dibenz[a,h]anthracene	1990	3900	1950	989	51	16	135	1610	21	30	J
Dibenzofuran	1570	3900	1950	0	80	45	130	1420	9.9	30	J
Diethyl phthalate	1520	3900	1950	0	78	48	130	1460	2.9	30	J
Dimethyl phthalate	1480	3900	1950	0	76	48	130	1440	2.1	39	J
Fluoranthene	24100	3900	1950	20800	159	45	130	16800	36	30	RS
Fluorene	2190	3900	1950	709	76	45	130	1660	16	30	J
Hexachlorobenzene	1460	3900	1950	0	76	50	130	1400	5.9	31	J
Hexachlorobutadiene	1270	3900	1950	0	65	37	130	1230	3.4	41	J
Hexachlorocyclopentadiene	ND	3900	1950	0	0	10	130	0		58	S

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

121

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8309	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/21/2008	RunNo: 15276		
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW3550B)		Analysis Date: 10/23/2008	SeqNo: 399185		
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1350	330	1670	0	81	30	130				
2,4,5-Trichlorophenol	1020	1700	1670	0	61	34	120				J
2,4,6-Trichlorophenol	1170	330	1670	0	70	33	130				
2,4-Dichlorophenol	1210	330	1670	0	72	39	130				
2,4-Dimethylphenol	1030	330	1670	0	62	22	130				
2,4-Dinitrophenol	912	1700	1670	0	55	10	130				J
2,4-Dinitrotoluene	1330	330	1670	0	80	40	130				
2,6-Dinitrotoluene	1330	330	1670	0	80	36	130				
2-Chloronaphthalene	1280	330	1670	0	77	46	130				
2-Chlorophenol	1230	330	1670	0	74	36	130				
2-Methylnaphthalene	1040	330	1670	0	63	43	130				
2-Methylphenol	991	330	1670	0	59	43	130				
2-Nitroaniline	1160	1700	1670	0	70	42	130				J
2-Nitrophenol	1170	330	1670	0	70	34	130				
3,3'-Dichlorobenzidine	931	660	1670	0	56	10	130				
3-Nitroaniline	847	1700	1670	0	51	11	130				J
4,6-Dinitro-2-methylphenol	1140	1700	1670	0	68	13	130				J
4-Bromophenyl phenyl ether	1290	330	1670	0	77	43	130				
4-Chloro-3-methylphenol	1150	330	1670	0	69	38	130				
4-Chloroaniline	531	330	1670	0	32	10	130				
4-Chlorophenyl phenyl ether	1240	330	1670	0	74	45	130				
4-Methylphenol	1000	330	1670	0	60	42	130				
4-Nitroaniline	1160	1700	1670	0	69	23	130				J
4-Nitrophenol	1560	1700	1670	0	93	10	144				J
Acenaphthene	1230	330	1670	0	74	43	130				
Acenaphthylene	1250	330	1670	0	75	46	130				
Acetophenone	1140	330	1670	0	69	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

126

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008	RunNo: 15271		
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C (SW3550B)		Analysis Date: 10/20/2008	SeqNo: 399135		
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1330	330	1670	0	80	37	130				
Atrazine	1390	330	1670	0	83	30	130				
Benzaldehyde	1260	330	1670	0	76	30	130				
Benzo[a]anthracene	1330	330	1670	0	80	40	130				
Benzo[a]pyrene	1340	330	1670	0	80	44	130				
Benzo[b]fluoranthene	1310	330	1670	0	79	29	154				
Benzo[g,h,i]perylene	1430	330	1670	0	86	10	130				
Benzo[k]fluoranthene	1340	330	1670	0	81	35	143				
bis(2-Chloroethoxy)methane	1220	330	1670	0	73	43	130				
bis(2-chloroethyl)ether	1200	330	1670	0	72	41	130				
bis(2-chloroisopropyl)ether	1270	330	1670	0	76	34	130				
bis(2-Ethylhexyl)phthalate	1530	330	1670	0	92	42	154				
Butyl benzyl phthalate	1470	330	1670	0	88	34	160				
Caprolactam	1580	330	1670	0	95	30	130				
Carbazole	1460	330	1670	0	88	42	130				
Chrysene	1430	330	1670	0	86	43	130				
Di-n-butyl phthalate	1580	330	1670	0	95	50	133				
Di-n-octyl phthalate	1520	330	1670	0	91	48	146				
Dibenz[a,h]anthracene	1430	330	1670	0	86	16	135				
Dibenzofuran	1110	330	1670	0	67	45	130				
Diethyl phthalate	1480	330	1670	0	89	48	130				
Dimethyl phthalate	1440	330	1670	0	86	46	130				
Fluoranthene	1340	330	1670	0	81	45	130				
Fluorene	1320	330	1670	0	79	45	130				
Hexachlorobenzene	1410	330	1670	0	85	50	130				
Hexachlorobutadiene	1260	330	1670	0	76	37	130				
Hexachlorocyclopentadiene	904	330	1670	0	54	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

124

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8309	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/21/2008	RunNo: 15276		
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW3550B)		Analysis Date: 10/23/2008	SeqNo: 399185		
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1240	330	1670	0	74	37	130				
Atrazine	1250	330	1670	0	75	30	130				
Benzaldehyde	1210	330	1670	0	73	30	130				
Benzo[a]anthracene	1230	330	1670	0	74	40	130				
Benzo[a]pyrene	1260	330	1670	0	76	44	130				
Benzo[b]fluoranthene	1210	330	1670	0	73	29	154				
Benzo[g,h,i]perylene	1350	330	1670	0	81	10	130				
Benzo[k]fluoranthene	1270	330	1670	0	76	35	143				
bis(2-Chloroethoxy)methane	1140	330	1670	0	68	43	130				
bis(2-chloroethyl)ether	1120	330	1670	0	67	41	130				
bis(2-chloroisopropyl)ether	1270	330	1670	0	76	34	130				
bis(2-Ethylhexyl)phthalate	1440	330	1670	0	86	42	154				
Butyl benzyl phthalate	1380	330	1670	0	82	34	160				
Caprolactam	1620	330	1670	0	97	30	130				
Carbazole	1380	330	1670	0	83	42	130				
Chrysene	1300	330	1670	0	78	43	130				
Di-n-butyl phthalate	1490	330	1670	0	89	50	133				
Di-n-octyl phthalate	1380	330	1670	0	83	48	146				
Dibenz[a,h]anthracene	1390	330	1670	0	83	16	135				
Dibenzofuran	1040	330	1670	0	63	45	130				
Diethyl phthalate	1390	330	1670	0	84	48	130				
Dimethyl phthalate	1340	330	1670	0	81	46	130				
Fluoranthene	1270	330	1670	0	76	45	130				
Fluorene	1230	330	1670	0	74	45	130				
Hexachlorobenzene	1310	330	1670	0	79	50	130				
Hexachlorobutadiene	1180	330	1670	0	71	37	130				
Hexachlorocyclopentadiene	994	330	1670	0	60	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

127

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008	RunNo: 15271		
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C (SW3550B)		Analysis Date: 10/20/2008	SeqNo: 399135		
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1310	330	1670	0	79	23	120				
Indeno[1,2,3-cd]pyrene	1450	330	1670	0	87	10	134				
Isophorone	1250	330	1670	0	75	43	130				
N-Nitroso-di-n-propylamine	1310	330	1670	0	79	35	130				
N-Nitrosodiphenylamine	1370	330	1670	0	82	44	130				
Naphthalene	1220	330	1670	0	73	40	130				
Nitrobenzene	1280	330	1670	0	77	45	130				
Pentachlorophenol	694	1700	1670	0	42	10	130				J
Phenanthrene	1320	330	1670	0	79	45	130				
Phenol	1160	330	1670	0	70	33	130				
Pyrene	1250	330	1670	0	75	18	164				
Surr: 2,4,6-Tribromophenol	4770	0	5000	0	95	20	143				
Surr: 2-Fluorobiphenyl	2600	0	3330	0	78	46	130				
Surr: 2-Fluorophenol	3670	0	5000	0	73	22	130				
Surr: Nitrobenzene-d5	2450	0	3330	0	74	39	130				
Surr: Phenol-d5	3620	0	5000	0	72	33	130				
Surr: Terphenyl-d14	2960	0	3330	0	89	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

125

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399134
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antiracene	1230	330	1670	0	74	60	125				
Atrazine	1300	330	1670	0	78	30	130				
Benzaldehyde	1180	330	1670	0	71	30	130				
Benzo[a]anthracene	1240	330	1670	0	74	60	125				
Benzo[a]pyrene	1250	330	1670	0	75	53	129				
Benzo[b]fluoranthene	1210	330	1670	0	72	55	126				
Benzo[g,h,i]perylene	1360	330	1670	0	82	51	134				
Benzo[k]fluoranthene	1280	330	1670	0	77	49	132				
bis(2-Chloroethoxy)methane	1140	330	1670	0	68	49	125				
bis(2-chloroethyl)ether	1150	330	1670	0	69	44	125				
bis(2-chloroisopropyl)ether	1190	330	1670	0	71	39	125				
bis(2-Ethylhexyl)phthalate	1420	330	1670	0	85	51	145				
Butyl benzyl phthalate	1390	330	1670	0	83	50	144				
Caprolactam	1470	330	1670	0	88	30	130				
Carbazole	1390	330	1670	0	84	51	131				
Chrysene	1320	330	1670	0	79	55	127				
Di-n-butyl phthalate	1490	330	1670	0	89	56	140				
Di-n-octyl phthalate	1410	330	1670	0	84	46	150				
Dibenz[a,h]antiracene	1380	330	1670	0	83	47	142				
Dibenzofuran	1050	330	1670	0	63	46	125				
Diethyl phthalate	1410	330	1670	0	85	52	137				
Dimethyl phthalate	1310	330	1670	0	79	51	134				
Fluoranthene	1280	330	1670	0	77	54	131				
Fluorene	1220	330	1670	0	73	50	126				
Hexachlorobenzene	1340	330	1670	0	80	43	139				
Hexachlorobutadiene	1210	330	1670	0	73	39	132				
Hexachlorocyclopentadiene	835	330	1670	0	50	25	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

130

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8309 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399185
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1230	330	1670	0	74	23	130				
Indeno[1,2,3-cd]pyrene	1360	330	1670	0	82	10	134				
Isophorone	1200	330	1670	0	72	43	130				
N-Nitroso-di-n-propylamine	1240	330	1670	0	75	35	130				
N-Nitrosodiphenylamine	1330	330	1670	0	80	44	130				
Naphthalene	1160	330	1670	0	70	40	130				
Nitrobenzene	1250	330	1670	0	75	45	130				
Pentachlorophenol	874	1700	1670	0	52	10	130				
Phenanthrene	1270	330	1670	0	76	45	130				
Phenol	1100	330	1670	0	66	33	130				
Pyrene	1170	330	1670	0	70	18	164				
Surr: 2,4,6-Tribromophenol	4390	0	5000	0	88	26	143				
Surr: 2-Fluorobiphenyl	2440	0	3330	0	73	46	130				
Surr: 2-Fluorophenol	3450	0	5000	0	69	22	130				
Surr: Nitrobenzene-d5	2360	0	3330	0	71	39	130				
Surr: Phenol-d5	3350	0	5000	0	67	33	130				
Surr: Terphenyl-d14	2720	0	3330	0	82	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

128

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399134
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1230	330	1670	0	74	41	125				
Indeno[1,2,3-cd]pyrene	1360	330	1670	0	82	48	138				
Isophorone	1170	330	1670	0	70	48	125				
N-Nitroso-di-n-propylamine	1240	330	1670	0	74	40	128				
N-Nitrosodiphenylamine	1300	330	1670	0	78	48	135				
Naphthalene	1160	330	1670	0	70	46	125				
Nitrobenzene	1200	330	1670	0	72	47	125				
Pentachlorophenol	623	1700	1670	0	37	25	129				J
Phenanthrene	1240	330	1670	0	75	58	125				
Phenol	1110	330	1670	0	66	41	125				
Pyrene	1200	330	1670	0	72	55	127				
Surr: 2,4,6-Tribromophenol	4670	0	5000	0	91	20	143				
Surr: 2-Fluorobiphenyl	2480	0	3330	0	75	46	130				
Surr: 2-Fluorophenol	3480	0	5000	0	70	22	130				
Surr: Nitrobenzene-d5	2300	0	3330	0	69	39	130				
Surr: Phenol-d5	3440	0	5000	0	69	33	130				
Surr: Terphenyl-d14	2810	0	3330	0	84	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

131

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399134
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 -Biphenyl	1350	330	1670	0	81	30	130				
2,4,5-Trichlorophenol	1020	1700	1670	0	61	43	131				J
2,4,6-Trichlorophenol	1200	330	1670	0	72	44	125				
2,4-Dichlorophenol	1170	330	1670	0	70	41	125				
2,4-Dimethylphenol	966	330	1670	0	58	25	128				
2,4-Dinitrophenol	734	1700	1670	0	44	25	125				J
2,4-Dinitrotoluene	1330	330	1670	0	80	54	136				
2,6-Dinitrotoluene	1320	330	1670	0	79	48	136				
2-Chloronaphthalene	1250	330	1670	0	75	49	126				
2-Chlorophenol	1240	330	1670	0	75	41	125				
2-Methylnaphthalene	1050	330	1670	0	63	44	125				
2-Methylphenol	999	330	1670	0	60	40	125				
2-Nitroaniline	1090	1700	1670	0	65	50	129				J
2-Nitrophenol	1120	330	1670	0	67	44	125				
3,3'-Dichlorobenzidine	563	660	1670	0	34	25	125				J
3-Nitroaniline	581	1700	1670	0	34	26	125				J
4,6-Dinitro-2-methylphenol	848	1700	1670	0	51	33	126				J
4-Bromophenyl phenyl ether	1300	330	1670	0	78	44	137				
4-Chloro-3-methylphenol	1140	330	1670	0	68	44	126				
4-Chloroaniline	232	330	1670	0	14	25	125				JS
4-Chlorophenyl phenyl ether	1260	330	1670	0	76	46	132				
4-Methylphenol	1040	330	1670	0	62	40	125				
4-Nitroaniline	1090	1700	1670	0	65	47	132				J
4-Nitrophenol	1410	1700	1670	0	85	37	140				J
Acenaphthene	1230	330	1670	0	74	49	125				
Acenaphthylene	1230	330	1670	0	74	47	125				
Acetophenone	1190	330	1670	0	71	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

129

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399184
Instrument: MS05_26 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1510	330	1670	0	91	41	125				
Indeno[1,2,3-cd]pyrene	1680	330	1670	0	101	48	138				
Isophorone	1440	330	1670	0	86	48	125				
N-Nitroso-di-n-propylamine	1540	330	1670	0	92	40	128				
N-Nitrosodiphenylamine	1610	330	1670	0	97	48	135				
Naphthalene	1390	330	1670	0	84	46	125				
Nitrobenzene	1480	330	1670	0	89	47	125				
Pentachlorophenol	1090	1700	1670	0	65	25	129				J
Phenanthrene	1550	330	1670	0	93	58	125				
Phenol	1330	330	1670	0	80	41	125				
Pyrene	1430	330	1670	0	86	55	127				
Surr: 2,4,6-Tribromophenol	5300	0	5000	0	106	20	143				
Surr: 2-Fluorobiphenyl	2920	0	3330	0	88	46	136				
Surr: 2-Fluorophenol	4270	0	5000	0	85	22	139				
Surr: Nitrobenzene-d5	2790	0	3330	0	84	39	136				
Surr: Phenol-d5	4170	0	5000	0	83	33	130				
Surr: Terphenyl-d14	3320	0	3330	0	100	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

134

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 | SampType: LCS | TestCode: 8270S_OLM4 | Units: ug/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399184
Instrument: MS05_26 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1640	330	1670	0	99	30	130				
2,4,5-Trichlorophenol	1250	1700	1670	0	75	43	131				J
2,4,6-Trichlorophenol	1410	330	1670	0	85	44	125				
2,4-Dichlorophenol	1410	330	1670	0	85	41	125				
2,4-Dimethylphenol	1260	330	1670	0	76	25	128				
2,4-Dinitrophenol	1010	1700	1670	0	61	25	125				J
2,4-Dinitrotoluene	1610	330	1670	0	97	54	136				
2,6-Dinitrotoluene	1600	330	1670	0	96	48	136				
2-Chloronaphthalene	1530	330	1670	0	92	49	126				
2-Chlorophenol	1510	330	1670	0	91	41	125				
2-Methylnaphthalene	1240	330	1670	0	74	44	125				
2-Methylphenol	1240	330	1670	0	74	40	125				
2-Nitroaniline	1400	1700	1670	0	84	50	129				J
2-Nitrophenol	1360	330	1670	0	82	44	125				
3,3'-Dichlorobenzidine	1210	660	1670	0	73	25	125				
3-Nitroaniline	1040	1700	1670	0	63	26	125				J
4,6-Dinitro-2-methylphenol	1410	1700	1670	0	85	33	126				J
4-Bromophenyl phenyl ether	1570	330	1670	0	94	44	137				
4-Chloro-3-methylphenol	1370	330	1670	0	82	44	126				
4-Chloroaniline	707	330	1670	0	42	25	125				
4-Chlorophenyl phenyl ether	1490	330	1670	0	90	46	132				
4-Methylphenol	1250	330	1670	0	75	40	125				
4-Nitroaniline	1370	1700	1670	0	82	47	132				J
4-Nitrophenol	1840	1700	1670	0	110	37	140				
Acenaphthene	1490	330	1670	0	89	49	125				
Acenaphthylene	1470	330	1670	0	88	47	125				
Acetophenone	1460	330	1670	0	87	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

132

Lab Name: Life Science Laboratories Contract: Life Science
Lab Code: LSLB Case No.: ORGC-MBS SAS No.: SDG No.: 0810083
Lab File ID: M0044.D Lab Sample ID: MB-8270
Instrument ID: MS05_26 Date Extracted: 10/15/2008
Matrix: (soil/water) SOIL Date Analyzed: 10/20/2008
Level: (low/med) Time Analyzed: 1216

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-8270	LCS-8270	M0040.D	9:43
02	MSB-8270	MSB-8270	M0041.D	10:22
03	MBSS-3DL	0810083-003BDL	M0054.D	18:37
04	MBSS-4DL	0810083-004BDL	M0055.D	19:16
05	MBSS-FTDL	0810083-005BDL	M0056.D	19:54
06	MBSS-1	0810083-001B	M0094.D	12:15
07	MBSS-1MS	0810083-001BMS	M0095.D	12:53
08	MBSS-3	0810083-003B	M0098.D	14:48
09	MBSS-4	0810083-004B	M0099.D	15:26
10	MBSS-FD	0810083-005B	M0070.D	16:04

COMMENTS:

page 1 of 2

PRIN TX

0810083_OLM4.

135

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399184
Instrument: MS05_26 | ColumnID: DB-5MS | ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1510	330	1670	0	90	60	125				
Atrazine	1530	330	1670	0	92	30	130				
Benzaldehyde	1500	330	1670	0	90	30	130				
Benzo[a]anthracene	1520	330	1670	0	91	60	125				
Benzo[a]pyrene	1570	330	1670	0	94	53	129				
Benzo[b]fluoranthene	1480	330	1670	0	89	55	126				
Benzo[g,h,i]perylene	1670	330	1670	0	100	51	134				
Benzo[k]fluoranthene	1560	330	1670	0	93	49	132				
bis(2-Chloroethoxy)methane	1400	330	1670	0	84	49	125				
bis(2-chloroethyl)ether	1370	330	1670	0	82	44	125				
bis(2-chloroisopropyl)ether	1550	330	1670	0	93	39	125				
bis(2-Ethylhexyl)phthalate	1660	330	1670	0	101	51	145				
Butyl benzyl phthalate	1680	330	1670	0	101	50	144				
Caprolactam	1900	330	1670	0	114	30	130				
Carbazole	1680	330	1670	0	101	51	131				
Chrysene	1600	330	1670	0	96	55	127				
Di-n-butyl phthalate	1810	330	1670	0	109	56	140				
Di-n-octyl phthalate	1670	330	1670	0	100	46	150				
Dibenz[a,h]anthracene	1730	330	1670	0	104	47	142				
Dibenzofuran	1240	330	1670	0	74	48	125				
Diethyl phthalate	1660	330	1670	0	99	52	137				
Dimethyl phthalate	1580	330	1670	0	95	51	134				
Fluoranthene	1520	330	1670	0	91	54	131				
Fluorene	1470	330	1670	0	88	50	126				
Hexachlorobenzene	1560	330	1670	0	95	43	139				
Hexachlorobutadiene	1440	330	1670	0	86	39	132				
Hexachlorocyclopentadiene	1240	330	1670	0	74	25	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

133

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8270	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008		RunNo: 15271	
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C	(SW3550B)	Analysis Date: 10/20/2008		SeqNo: 399136	
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Isophorone	ND	330									
N-Nitroso-di-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1700									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 2,4,6-Tribromophenol	4410	0	5000	0	88	20	143				
Surr: 2-Fluorobiphenyl	2750	0	3330	0	83	46	130				
Surr: 2-Fluorophenol	3850	0	5000	0	77	22	130				
Surr: Nitrobenzene-d5	2660	0	3330	0	80	39	130				
Surr: Phenol-d5	3890	0	5000	0	78	33	130				
Surr: Terphenyl-d14	3530	0	3330	0	106	36	148				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

138

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8270	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008		RunNo: 15271	
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C	(SW3550B)	Analysis Date: 10/20/2008		SeqNo: 399136	
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	330									
2,4,5-Trichlorophenol	ND	1700									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	330									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1700									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1700									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									
3-Nitroaniline	ND	1700									
4,6-Dinitro-2-methylphenol	ND	1700									
4-Bromophenyl phenyl ether	ND	330									
4-Chloro-3-methylphenol	ND	330									
4-Chloroaniline	ND	330									
4-Chlorophenyl phenyl ether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1700									
4-Nitrophenol	ND	1700									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Acetophenone	ND	330									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

136

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-8270

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLS Case No.: OBG-NS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: MB-8270

Sample wt/vol: 30 (g/ml) G Lab File ID: M0044.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		aldol	6.87	78000	JBA
2.		unknown	14.80	800	J

FORM I TIC 14 SW8270C

139

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8270	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008		RunNo: 15271	
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C	(SW3550B)	Analysis Date: 10/20/2008		SeqNo: 399136	
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df					

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	330									
Atrazine	ND	330									
Benzaldehyde	ND	330									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
bis(2-Chloroethoxy)methane	ND	330									
bis(2-chloroethyl)ether	ND	330									
bis(2-chloroisopropyl)ether	ND	330									
bis(2-Ethylhexyl)phthalate	127	330									
Butyl benzyl phthalate	ND	330									
Caprolactam	ND	330									
Carbazole	ND	330									
Chrysene	ND	330									
Di-n-butyl phthalate	ND	330									
Di-n-octyl phthalate	ND	330									
Dibenz(a,h)anthracene	ND	330									
Dibenzofuran	ND	330									
Diethyl phthalate	ND	330									
Dimethyl phthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	330									
Hexachlorocyclopentadiene	ND	330									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

137

Lab Name: Life Science Laboratorie Contract: Life Science EPA SAMPLE NO.

Lab Code: ESLA Case No.: OBG-MS SAS No.: SDG No.: 0810083 MB-8309

Lab File ID: N0014.D Lab Sample ID: MB-8309

Instrument ID: MS05_26 Date Extracted: 10/21/2008

Matrix: (soil/water) SOIL Date Analyzed: 10/23/2008

Level: (low/med) Time Analyzed: 1107

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-8309	LCS-8309	N0075.D	11:45
02	MSB-8309	MSB-8309	N0076.D	12:23
03	MBSS-2DL	0810083-002BDL	N0085.D	18:05
04	MBSS-1MSD	0810083-001BMSD	N0086.D	18:43
05	MBSS-2	0810083-002B	N0087.D	19:21

COMMENTS:

Page 2 of 2 FORM IV 8270B_SDG842

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8309 SampType: MBLK TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399183
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	330									
Atrazine	ND	330									
Benzaldehyde	ND	330									
Benzo[a]anthracene	ND	330									
Benzo[a]pyrene	ND	330									
Benzo[b]fluoranthene	ND	330									
Benzo[g,h,i]perylene	ND	330									
Benzo[k]fluoranthene	ND	330									
bis(2-Chloroethoxy)methane	ND	330									
bis(2-chloroethyl)ether	ND	330									
bis(2-chloroisopropyl)ether	ND	330									
bis(2-Ethylhexyl)phthalate	38.3	330									
Butyl benzyl phthalate	ND	330									
Caprolactam	ND	330									
Carbazole	ND	330									
Chrysene	ND	330									
Di-n-butyl phthalate	ND	330									
Di-n-octyl phthalate	ND	330									
Dibenz[a,h]anthracene	ND	330									
Dibenzofuran	ND	330									
Diethyl phthalate	ND	330									
Dimethyl phthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	330									
Hexachlorocyclopentadiene	ND	330									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrumental calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

24-Oct-08 Page 14 of 21

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8309 SampType: MBLK TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399183
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	330									
Indeno[1,2,3-cd]pyrene	ND	330									
Isophorone	ND	330									
N-Nitroso-di-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1700									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 2,4,6-Tribromophenol	4620	0	5000	0	92	20	143				
Surr: 2-Fluorobiphenyl	2770	0	3330	0	83	46	130				
Surr: 2-Fluorophenol	3810	0	5000	0	76	22	130				
Surr: Nitrobenzene-d5	2640	0	3330	0	79	39	130				
Surr: Phenol-d5	3750	0	5000	0	75	33	130				
Surr: Terphenyl-d14	3110	0	3330	0	93	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

24-Oct-08 Page 15 of 21

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8309 SampType: MBLK TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399183
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	330									
2,4,5-Trichlorophenol	ND	1700									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	330									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1700									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1700									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									
3-Nitroaniline	ND	1700									
4,6-Dinitro-2-methylphenol	ND	1700									
4-Bromophenyl phenyl ether	ND	330									
4-Chloro-3-methylphenol	ND	330									
4-Chloroaniline	ND	330									
4-Chlorophenyl phenyl ether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1700									
4-Nitrophenol	ND	1700									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Acetophenone	ND	330									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

24-Oct-08 Page 13 of 21

Form 1 TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MB-8309

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: MB-8309

Sample wt/vol: 30 (g/mL) g Lab File ID: N0074.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/23/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	aldol	6.80	71000	JEA
2.	unknown	14.75	750	J

FORM 1 TIC 15 SW8270C

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0038.D Date Analyzed: 10/20/2008

Instrument ID: MS05_26 Time Analyzed: 8:27

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	160273	9.52	541103	11.87	321129	15.19	560508	18.02
UPPER LIMIT	320546	10.02	1082206	12.37	642258	15.69	1121216	18.52
LOWER LIMIT	80137	9.02	270552	11.37	160565	14.69	280304	17.52
SAMPLE NO.								
01 CC102008B5 OLM (CC102008B5 OLM)	159837	9.52	539895	11.86	319329	15.18	559978	18.01
02 LCS-8270 (LCS-8270)	150760	9.53	540426	11.87	312109	15.19	563179	18.02
03 MSB-8270 (MSB-8270)	147565	9.52	524695	11.87	298440	15.19	542867	18.02
04 MB-8270 (MB-8270)	160049	9.53	550694	11.87	307583	15.19	563572	18.02
05 MBSS-3OL (0810083-003BDL)	164996	9.53	582018	11.87	337599	15.19	585372	18.02
06 MBSS-4OL (0810083-004BDL)	169666	9.53	606714	11.87	352876	15.20	602302	18.03
07 MBSS-FDOL (0810083-005BDL)	169143	9.53	590566	11.87	348097	15.20	583716	18.03

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

10/27/08 14:55 FORM VIII Page 1 of 8 SW8270C

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0038.D Date Analyzed: 10/20/2008

Instrument ID: MS05_26 Time Analyzed: 8:27

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	526781	23.06	537878	25.83				
UPPER LIMIT	1053562	23.56	1075756	26.33				
LOWER LIMIT	263391	22.56	268939	25.33				
SAMPLE NO.								
01 CC102008B5 OLM (CC102008B5 OLM)	487777	23.04	505323	25.82				
02 LCS-8270 (LCS-8270)	521105	23.05	544897	25.83				
03 MSB-8270 (MSB-8270)	495881	23.05	532488	25.83				
04 MB-8270 (MB-8270)	561341	23.05	577931	25.83				
05 MBSS-3OL (0810083-003BDL)	464082	23.05	332335	25.83				
06 MBSS-4OL (0810083-004BDL)	474889	23.05	311221	25.84				
07 MBSS-FDOL (0810083-005BDL)	487522	23.06	313056	25.83				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

10/27/08 14:55 FORM VIII Page 2 of 8 SW8270C

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0062.D Date Analyzed: 10/21/2008

Instrument ID: MS05_26 Time Analyzed: 10:59

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	216188	9.53	724451	11.86	429804	15.20	751661	18.03
UPPER LIMIT	432376	10.03	1448902	12.36	859608	15.70	1503322	18.53
LOWER LIMIT	108094	9.03	362226	11.36	214902	14.70	375831	17.53
SAMPLE NO.								
01 CC102108B5 OLM (CC102108B5 OLM)	220775	9.53	741111	11.87	436210	15.19	747739	18.02
02 MBSS-1 (0810083-001B)	229023	9.53	736507	11.87	460851	15.19	787991	18.03
03 MBSS-1MS (0810083-001BMS)	202996	9.53	706302	11.87	414950	15.19	733017	18.02
04 MBSS-3 (0810083-003B)	227826	9.53	808250	11.87	455739	15.19	764647	18.02
05 MBSS-4 (0810083-004B)	231281	9.53	819158	11.87	458125	15.20	686037	18.03
06 MBSS-FD (0810083-005B)	217186	9.54	769125	11.87	434312	15.19	679859	18.03

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

10/27/08 14:55 FORM VIII Page 3 of 8 SW8270C

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0062.D Date Analyzed: 10/21/2008

Instrument ID: MS05_26 Time Analyzed: 10:59

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	698970	23.07	703253	25.85				
UPPER LIMIT	1397940	23.57	1406506	26.35				
LOWER LIMIT	349485	22.57	351627	25.35				
SAMPLE NO.								
01 CC10210885 OLM (CC10210885 OLM)	681735	23.05	703846	25.83				
02 MBSS-1 (0810083-001B)	646869	23.06	391291	25.84				
03 MBSS-1MS (0810083-001BMS)	591986	23.06	371124	25.83				
04 MBSS-3 (0810083-003B)	363351	23.06	133834*	25.83				
05 MBSS-4 (0810083-004B)	192602*	23.06	72964*	25.84				
06 MBSS-FD (0810083-005B)	208380*	23.06	76591*	25.84				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0072.D Date Analyzed: 10/23/2008

Instrument ID: MS05_26 Time Analyzed: 9:51

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	202798	9.47	672898	11.81	406423	15.14	677401	17.97
UPPER LIMIT	405596	9.97	1345796	12.31	812846	15.64	1354802	18.47
LOWER LIMIT	101399	8.97	336449	11.31	203212	14.64	338701	17.47
SAMPLE NO.								
01 CC10230885 OLM (CC10230885 OLM)	205197	9.47	706267	11.81	401584	15.13	679641	17.96
02 MB-8309 (MB-8309)	194987*	9.47	675102	11.81	376092	15.13	666113	17.97
03 LCS-8309 (LCS-8309)	188214	9.48	670538	11.82	377753	15.14	654572	17.97
04 MSB-8309 (MSB-8309)	192770	9.47	684704	11.81	376660	15.14	661526	17.97
05 MBSS-2DL (0810083-002BDL)	194609	9.47	679493	11.81	382470	15.14	643145	17.97
06 MBSS-1MSD (0810083-001BMSD)	215991	9.47	745535	11.81	428645	15.13	702929	17.97
07 MBSS-2 (0810083-002B)	211800	9.47	752150	11.82	428263	15.13	712195	17.97

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0072.D Date Analyzed: 10/23/2008

Instrument ID: MS05_26 Time Analyzed: 9:51

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	629124	23.01	633205	25.76				
UPPER LIMIT	1258248	23.51	1266410	26.26				
LOWER LIMIT	314562	22.51	316803	25.26				
SAMPLE NO.								
01 CC10230885 OLM (CC10230885 OLM)	518169	22.99	650344	25.76				
02 MB-8309 (MB-8309)	506045	22.99	638336	25.76				
03 LCS-8309 (LCS-8309)	503406	23.00	626074	25.76				
04 MSB-8309 (MSB-8309)	512436	23.00	632066	25.77				
05 MBSS-2DL (0810083-002BDL)	541887	22.99	479314	25.75				
06 MBSS-1MSD (0810083-001BMSD)	576809	23.01	388316	25.76				
07 MBSS-2 (0810083-002B)	585191	23.00	206140*	25.75				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

Trace Metals Data

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East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001B | SampType: PDS | TestCode: 6010S | Units: mg/Kg-dry | Prep Date: 10/20/2008 | RunNo: 15238
Client ID: MBSS-1 | Batch ID: 8301 | Method: SW6010B | (SW3050B) | Analysis Date: 10/21/2008 | SeqNo: 398356
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	44.1	1.2	46.7	0.318	94	75	125				
Chromium	70.1	1.2	46.7	29.3	87	75	125				
Copper	133	1.2	46.7	91	91	75	125				
Iron	15700	5.8	234	16200	0	75	125				S
Nickel	64.0	5.8	46.7	23.4	87	75	125				
Zinc	294	2.3	46.7	262	67	75	125				S

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

154 26-Oct-08

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East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS | SampType: MS | TestCode: 6010S | Units: mg/Kg-dry | Prep Date: 10/20/2008 | RunNo: 15238
Client ID: MBSS-1 | Batch ID: 8301 | Method: SW6010B | (SW3050B) | Analysis Date: 10/21/2008 | SeqNo: 398363
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	43.5	1.2	46.7	0.318	92	60	140				
Chromium	71.1	1.2	46.7	29.3	90	60	140				
Copper	130	1.2	46.7	91	82	60	140				
Iron	14700	5.8	234	16200	0	60	140				S
Nickel	61.1	5.8	46.7	23.4	81	60	140				
Zinc	286	2.3	46.7	262	50	60	140				S

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

152 26-Oct-08

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ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8301 | SampType: LCS | TestCode: 6010S | Units: mg/Kg | Prep Date: 10/20/2008 | RunNo: 15238
Client ID: ZZZZZ | Batch ID: 8301 | Method: SW6010B | (SW3050B) | Analysis Date: 10/21/2008 | SeqNo: 398361
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	20.6	1.0	20	0	103	85	115				
Chromium	20.5	1.0	20	0	102	85	115				
Copper	20.5	1.0	20	0	103	85	115				
Iron	104	5.0	100	0	104	85	115				
Nickel	20.3	5.0	20	0	102	85	115				
Zinc	21.0	2.0	20	0	105	85	115				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

155 26-Oct-08

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ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD | SampType: MSD | TestCode: 6010S | Units: mg/Kg-dry | Prep Date: 10/20/2008 | RunNo: 15238
Client ID: MBSS-1 | Batch ID: 8301 | Method: SW6010B | (SW3050B) | Analysis Date: 10/21/2008 | SeqNo: 398364
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	43.7	1.2	46.7	0.318	93	60	140	43.5	0	20	
Chromium	70.9	1.2	46.7	29.3	89	60	140	71.1	0	20	
Copper	134	1.2	46.7	91	91	60	140	130	3	20	
Iron	15400	5.8	234	16200	0	60	140	14700	4	20	S
Nickel	62.0	5.8	46.7	23.4	83	60	140	61.1	1	20	
Zinc	297	2.3	46.7	262	73	60	140	286	4	20	

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

153 26-Oct-08

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CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID: 0810083-001BMS | SampType: MS | TestCode: HG7471S | Units: mg/Kg-dry | Prep Date: 10/16/2008 | RunNo: 15221
Client ID: MBSS-1 | Batch ID: 8277 | Method: SW7471A | (SW7471A) | Analysis Date: 10/17/2008 | SeqNo: 397775
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.458	0.12	0.39	0.083	96	27	153				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

158 28-Oct-08

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CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID: MB-8301 | SampType: MBLK | TestCode: 6010S | Units: mg/Kg | Prep Date: 10/20/2008 | RunNo: 15238
Client ID: ZZZZZ | Batch ID: 8301 | Method: SW6010B | (SW3050B) | Analysis Date: 10/21/2008 | SeqNo: 398260
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	ND	1.0									
Chromium	ND	1.0									
Copper	ND	1.0									
Iron	1.17	5.0									J
Nickel	ND	5.0									
Zinc	ND	2.0									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

156 26-Oct-08

Life Science Laboratories, Inc.

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East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID: 0810083-001BMSD | SampType: MSD | TestCode: HG7471S | Units: mg/Kg-dry | Prep Date: 10/16/2008 | RunNo: 15221
Client ID: MBSS-1 | Batch ID: 8277 | Method: SW7471A | (SW7471A) | Analysis Date: 10/17/2008 | SeqNo: 397776
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.436	0.12	0.39	0.083	90	27	153	0.458	4.9	15	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

159 28-Oct-08

Mercury Data

157

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ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8277 SampType: MBLK TestCode: HG7471S Units: mg/Kg Prep Date: 10/16/2008 RunNo: 15221
Client ID: ZZZZZ Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397770
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

162 28-Oct-08

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ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-003B SampType: PDS TestCode: HG7471S Units: mg/Kg-dry Prep Date: 10/16/2008 RunNo: 15221
Client ID: MBSS-3 Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397786
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.697	0.13	0.42	0.297	95	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

160 28-Oct-08

Sample Data Package

163

Life Science Laboratories, Inc.

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ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8277 SampType: LCS TestCode: HG7471S Units: mg/Kg Prep Date: 10/16/2008 RunNo: 15221
Client ID: ZZZZZ Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397771
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.857	0.10	0.835	0	103	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

161 28-Oct-08

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL SUMMARY

NYS DEC SAMPLE ID	LABORATORY SAMPLE ID	Type	Analytical Requirements					
			VOA GC/MS Method #	BNA GC/MS Method #	VOA GC Method #	MISC GC Method #	METALS Method #	OTHER Method #
MBSS-1	0810083-001	MS	SW8260B	SW8270C			SW6010B SW7471A	
MBSS-1	0810083-001	MSD	SW8260B	SW8270C			SW6010B SW7471A	
MBSS-1	0810083-001	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-2	0810083-002	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-3	0810083-003	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-4	0810083-004	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
MBSS-FD	0810083-005	SAMP	SW8260B	SW8270C			SW7471A SW6010B	SM 2540 G
Trip Blank	0810083-006	SAMP	SW8260B					

SW8260B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIb

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0810083-001ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-001A	Soil	10/10/08	10/10/08		10/10/08
0810083-001AMS	Soil	10/10/08	10/10/08		10/13/08
0810083-001AMSD	Soil	10/10/08	10/10/08		10/13/08
0810083-002ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-002A	Soil	10/10/08	10/10/08		10/10/08
0810083-003ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-003A	Soil	10/10/08	10/10/08		10/10/08
0810083-004ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-004A	Soil	10/10/08	10/10/08		10/10/08
0810083-005ARA	Soil	10/10/08	10/10/08		10/13/08
0810083-005A	Soil	10/10/08	10/10/08		10/10/08
0810083-006A	Water Q	10/10/08	10/10/08		10/10/08

SW8260B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0810083-001A	Soil	SW8260B	NONE	NONE	1X
0810083-001AMS	Soil	SW8260B	NONE	NONE	1X
0810083-001AMSD	Soil	SW8260B	NONE	NONE	1X
0810083-001ARA	Soil	SW8260B	NONE	NONE	1X
0810083-002A	Soil	SW8260B	NONE	NONE	1.02X
0810083-002ARA	Soil	SW8260B	NONE	NONE	1X
0810083-003A	Soil	SW8260B	NONE	NONE	1X
0810083-003ARA	Soil	SW8260B	NONE	NONE	1X
0810083-004A	Soil	SW8260B	NONE	NONE	0.98X
0810083-004ARA	Soil	SW8260B	NONE	NONE	1X
0810083-005A	Soil	SW8260B	NONE	NONE	1X
0810083-005ARA	Soil	SW8260B	NONE	NONE	1X
0810083-006A	Water Q	SW8260B	NONE	NONE	1X

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIa

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0810083-001B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-001BMS	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-001BMSD	Soil	10/10/08	10/10/08	10/21/08	10/23/08
0810083-002B	Soil	10/10/08	10/10/08	10/21/08	10/23/08
0810083-002BDL	Soil	10/10/08	10/10/08	10/21/08	10/23/08
0810083-003B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-003BDL	Soil	10/10/08	10/10/08	10/15/08	10/20/08
0810083-004B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-004BDL	Soil	10/10/08	10/10/08	10/15/08	10/20/08
0810083-005B	Soil	10/10/08	10/10/08	10/15/08	10/21/08
0810083-005BDL	Soil	10/10/08	10/10/08	10/15/08	10/20/08

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0810083-001B	Soil	SW8270C	SW3550B	GPC	10X
0810083-001BMS	Soil	SW8270C	SW3550B	GPC	10X
0810083-001BMSD	Soil	SW8270C	SW3550B	GPC	10X
0810083-002B	Soil	SW8270C	SW3550B	GPC	10X
0810083-002BDL	Soil	SW8270C	SW3550B	GPC	25X
0810083-003B	Soil	SW8270C	SW3550B	GPC	2X
0810083-003BDL	Soil	SW8270C	SW3550B	GPC	25X
0810083-004B	Soil	SW8270C	SW3550B	GPC	2X
0810083-004BDL	Soil	SW8270C	SW3550B	GPC	25X
0810083-005B	Soil	SW8270C	SW3550B	GPC	2X
0810083-005BDL	Soil	SW8270C	SW3550B	GPC	25X

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

LABORATORY SAMPLE ID	MATRIX	METALS REQUESTED	DATE REC'D AT LAB	DATE DIGESTED	DATE ANALYZED
0810083-001B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-001BMS	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-001BMSD	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-002B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-003B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-003BDL	Soil	Zn	10/10/2008	10/20/2008	10/21/2008
0810083-004B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-004BDL	Soil	Zn	10/10/2008	10/20/2008	10/21/2008
0810083-005B	Soil	Be Cr Cu Fe Ni Zn	10/10/2008	10/20/2008	10/21/2008
0810083-005BDL	Soil	Zn	10/10/2008	10/20/2008	10/21/2008

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

LABORATORY SAMPLE ID	MATRIX	METALS REQUESTED	DATE REC'D AT LAB	DATE DIGESTED	DATE ANALYZED
0810083-001B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-001BMS	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-001BMSD	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-002B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-003B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-004B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008
0810083-005B	Soil	Hg	10/10/2008	10/16/2008	10/17/2008

NARRATIVE

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from O'Brien & Gere Engineers, Inc. for the City of Geneva project. Immediately following the narratives are the Work Order Sample Summary and Dates Report.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The coolers were received intact. When the coolers were received by the laboratory, the sample custodian(s) opened and inspected the shipments for damage, custody inconsistencies and proper preservation. The chain of custody forms documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

Discrepancies noted upon receipt are listed on the sample receipt checklist located in the chain of custody section of the report. The temperature of the iced cooler was 9.0°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1
Semivolatile Organics	SW8270C	1
ICP Metals	SW6010B	1
Mercury	SW7471A	1
Percent Moisture	SM 2540G	2

1) New York State Department of Environmental Conservation Analytical Services Protocol, June 2000.

2) Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992

QUALITY CONTROL

QA/QC results are summarized in the Laboratory Report Package and are also included in the raw data.

RAW DATA

The raw data is organized in the New York State Department of Environmental Conservation Analytical Services Protocol Category B order of data requirements.

Total # of pages in report: _____

GC/MS Volatile Organics Case Narrative

Client: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0810083
Methodology: 8260B

Analyzed/Reviewed by (Initials/Date): 10/27/08
Supervisor/Reviewed by (Initials/Date): 10-27-08
QA/QC Review (Initials/Date): 10/31/08

File Name: G:\Narratives\MSVoa\0810083msvnar.doc

GC/MS Volatile Organics
The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 40 m x 0.18 mm ID capillary column (MS01 & MS03), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), and Restek Rtx-VMS, 60 m x 0.25mm ID capillary column (MS04), and a Vocarb 3000 adsorbent trap.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Samples were unpreserved.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MBSS-1	0810083-001AMS/MSD	Methyl acetate	X	X	1

1 The associated LCS and MSB met acceptance limits.

Surrogate Standards
Surrogate recoveries exceeded the upper control limit for toluene-d8 and/or 4-bromofluorobenzene in all soil samples. Matrix effects are suspected. Recoveries may have been biased due to low response of the associated internal standard(s). Associated target analytes results may also be biased high. All samples were reanalyzed at the same sample weight and both results are reported.

Internal Standards
Internal standard recoveries exceeded the lower control limit for chlorobenzene-d5 and/or 1,4-dichlorobenzene-d4 in all soil samples. Matrix effects are suspected. Samples were reanalyzed at the same sample weight and both results were reported.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

GC/MS Volatile Organics Case Narrative - Page 2

Client: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order #: 0810083
Methodology: 8260B

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

GC/MS Semi-Volatile Organics Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva-Market Basket Site
Work Order #: 0810083
Methodology: 8270C

Analyzed/Reviewed by (Initials/Date): 11/6/08
Supervisor/Reviewed by (Initials/Date): 11-6-08
QA/QC Review (Initials/Date): 11/5/08

File Name: G:\Narratives\MSSemi\0810083svnar.doc

GC/MS Semi-Volatile Organics
The GC/MS Semi-volatile instruments used a J & W DB-5MS, 30 m x 0.25 mm ID capillary column.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Due to suspected contamination during initial sample preparation, samples MBSS-1 MSD [0810083-001BMSD] and MBSS-2 [0810083-002B] were re-extracted within method holding time, but outside ASP holding time. Limited sample prevented re-extraction of the parent sample and matrix spike for MBSS-1 [0810083-001B].

Laboratory Control Sample
The following compound(s) did not meet laboratory control sample recovery criteria:

LCS No.	Compound	Corrective Action
LCS-8270	4-Chloroaniline	1

1 The recovery for this compound in the associated MSB was within acceptance limits. No corrective action was taken.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MBSS-2	0810083-002B	several	X	X	1

1 Concentrations of several analytes in the sample were much greater than the concentration of the analyte spiked, which may bias recoveries. The sample extract was diluted, which also may bias recoveries. The recovery for all compounds in the associated MSB was within acceptance limits. No corrective action was taken.

GC/MS Semi-Volatile Organics Case Narrative - Page 2

Client ID: OBG-MS
Project/Order: City of Geneva-Market Basket Site
Work Order#: 0810083
Methodology: 8270C

Surrogate Standards
The following sample(s) did not meet surrogate recovery criteria:

Sample Description	Sample #	Surrogate	Corrective Action
MBSS-4	0810083-004B	Terphenyl-d14	1
MBSS-FD	0810083-005B	Terphenyl-d14	1

1 The recovery met acceptance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

Internal Standards
The internal standard area for the following sample(s) did not meet abundance criteria:

Sample Description	Sample #	Internal Standard	Corrective Action
MBSS-2	0810083-002B	Perylene-d12	1
MBSS-3	0810083-003B	Perylene-d12	1
MBSS-4	0810083-004B	Chrysene-d12	1
		Perylene-d12	1
MBSS-FD	0810083-005B	Chrysene-d12	1
		Perylene-d12	1

1 The recovery met acceptance criteria when reanalyzed at a higher dilution. Matrix interference is suspected. Both sets of data are reported. No further corrective action was taken.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order: 0810083
Methodology: ICP metals – SW6010B

Analyzed/Reviewed by (Date/Initials): 10-28-08 [illegible]

Supervisor/Reviewed by (Date/Initials): 10-28-08 [illegible]

QA/QC Review (Date/Initials): 10/30/08 [illegible]

Trace Metals

Holding Times
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD AND MS/MSD RPD
The following analytes did not meet matrix spike/matrix spike duplicate percent recovery criteria:

Sample Description	Sample #	Analyte	% REC	RPD	Corrective Action
MBSS-1	0810083-001B	Fe, Zn	X		1

1 The concentration of the analyte in the sample was much greater than the concentration of the spike added. A post-digestion spike was performed as required. No further corrective action was taken.

ICP Serial Dilution
All percent differences met method and/or project specific QC criteria.

Calibrations
All calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Trace Metals Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva – Market Basket Site
Work Order: 0810083
Methodology: Mercury – SW7471A

Analyzed/Reviewed by (Date/Initials): 10-28-08 [illegible]

Supervisor/Reviewed by (Date/Initials): 10-28-08 [illegible]

QA/QC Review (Date/Initials): 10/30/08 [illegible]

Trace Metals
There were no excursions to note. All QC results were within established control limits.

Life Science Laboratories, Inc. Date: *06-Nov-08*

CLIENT: O'Brien & Gere Engineers, Inc
Project: City of Geneva- Market Basket Site
Lab Order: 0810083

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0810083-001A	MBSS-1		10/10/2008	10/10/2008
0810083-001B	MBSS-1		10/10/2008	10/10/2008
0810083-002A	MBSS-2		10/10/2008	10/10/2008
0810083-002B	MBSS-2		10/10/2008	10/10/2008
0810083-003A	MBSS-3		10/10/2008	10/10/2008
0810083-003B	MBSS-3		10/10/2008	10/10/2008
0810083-004A	MBSS-4		10/10/2008	10/10/2008
0810083-004B	MBSS-4		10/10/2008	10/10/2008
0810083-005A	MBSS-FD		10/10/2008	10/10/2008
0810083-005B	MBSS-FD		10/10/2008	10/10/2008
0810083-006A	Trip Blank		10/10/2008	10/10/2008

Chain of Custody

External Chain of Custody

Life Science Laboratories, Inc.
Brittonfield Lab

5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: City of Geneva
Project: Marina Basin
Sampled by: Dave Meixell
Client Contact: Dave Meixell Phone # x2343

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No of Containers	8260	8270	Anything Chemistry Office from Marina Basin Site	Comments
MBSS-1	10/10/08	09:20	Soil	G	2	X	X	X	
MBSS-2		09:30				X	X	X	
MBSS-3		09:45				X	X	X	
MBSS-4		10:00				X	X	X	
MBSS-FD		10:05				X	X	X	

Relinquished by: Dave Meixell	Date: 10/10/08 Time: 1:20	Received by:	Date: Time:
Relinquished by:	Date: Time:	Received by:	Date: Time:
Relinquished by:	Date: Time:	Received by Lab: Monika Santucci	Date: 10/10/08 Time: 1:20 pm
Shipment Method:		Airbill Number:	

Turnaround Time Required:
Routine
Rush (Specify)
Temperature: 9°C - On ice

Comments:

Original - Laboratory
Copy - Client

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: OBG-MS — Date and Time Received: 10/10/2008 1:20:00 PM
Work Order Number: 0810083 — Received by: MS
Checklist completed by: Initials [illegible] Date 10/10/08 — Reviewed by: Initials MS Date 10/10/08
Matrix: — Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Comments:
Trip Blank (2 vials) received, but not listed on COC.

Corrective Action:
Trip Blank logged in

Monika Santucci

From: David Meixell [MeixelDK@obg.com]
Sent: Monday, October 13, 2008 6:54 AM
To: Monika Santucci
Subject: Re: Geneva

Yes, please select an MS/MSD.

>>> "Monika Santucci" <santuccim@lsl-inc.com> 10/10/2008 2:48 PM >>>
Hi Dave,

I just want to confirm that you want the lab to select an MS/MSD for the Geneva project. Also, we consider MS/MSD billable samples so I want to make sure that you are aware of that. I do recommend an MS/MSD from a data validation stand point.

Thanks

Monika Santucci
Project Manager
Life Science Laboratories, Inc.
Brittonfield Lab

5000 Brittonfield Parkway
Suite 200
East Syracuse, NY 13057
315.437.0200 X 2481 voice
315.437.0377 fax
santuccim@lsl-inc.com

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Client/Project Geneva 081008-3

Sample Control Record

Sample ID	Frac	Client Sample ID	Removed By	Date and Time Removed	Analysis	Date and Time Returned
001—006	A		[illegible]	10/10/08 16:00	8260S	10/10/08 17:00
081008-3-001→005	A		JR	10/13/08 10:15	8260	10/13/08 11:00
081008-3-001→005	B		HR	10-13-08 16:40	PM0157	10-13-08 17:00
0810083-001→005	B		CJR	10-15-08 17:25	8270S	10-15-08 18:45
0810083-001→005	B		C. Tran	10/16/08 10:00	Hg Dig	10/16/08 12:00
0810083-001→003	B		DR	10/20/08 09:50	3050B ~~3005~~	10/20/08 11:30
0810083-001→003	B		CJR	10/21/08 13:50	8270S	10/21/08 14:20

\QAQC\forms\GeneralLaboratory\Sign outLxls

Internal Chain of Custody

ICP METALS SAMPLE CONTROL LOG

QC Batch # : 8301 Date Digested : 10/20/08

Client / Job Number	Laboratory Sample Number Range	Laboratory Sample Numbers Removed	Removed By	Date Removed	Time Removed	Time Returned
City of Geneva	0810083_0018 → 0058	← same	C. Tran	10/21/08	10:00	16:00

Raw Data

GC/MS Volatile Organics Data

QC Summary

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: OBC-MS SAS No. _____ SDG No.: 0810083

Level: (low/med) LOW

	EPA SAMPLE NO.	LSL ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #				TOT OUT
01	LCS-15131	LCS-15131	92	98	101				0
02	MB-15131	MB-15131	96	104	110				0
03	Trip Blank	0810083-006A	99	103	111				0
04	MBSS-1	0810083-001A	102	118	129 *				1
05	MBSS-2	0810083-002A	98	129 *	141 *				2
06	MBSS-3	0810083-003A	105	129 *	141 *				2
07	MBSS-4	0810083-004A	101	132 *	143 *				2
08	MBSS-FD	0810083-005A	99	129 *	152 *				2
09	LCS-15143	LCS-15143	95	99	102				0
10	MSB-15143	MSB-15143	95	99	102				0
11	MBSS-1MS	0810083-001AMS	97	115	139 *				1
12	MBSS-1MSD	0810083-001AMSD	96	115	133 *				1
13	MB-15143	MB-15143	94	106	120				0
14	MBSS-1RA	0810083-001ARA	98	115	130 *				1
15	MBSS-2RA	0810083-002ARA	100	130 *	138 *				2
16	MBSS-3RA	0810083-003ARA	102	128 *	138 *				2
17	MBSS-4RA	0810083-004ARA	100	130 *	141 *				2
18	MBSS-FDRA	0810083-005ARA	105	129 *	144 *				2

		QC Limit
SMC1	(DCE) 1 = 1,2-Dichloroethane-d4	71-128
SMC2	(TOL) 1 = Toluene-d8	75-125
SMC3	(BFB) 1 = 4-Bromofluorobenzene	59-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 1 of 1 FORM II VOA-2 SW8260B

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMS | SampType: MS | TestCode: 826057_OLM | Units: µg/Kg-dry | Prep Date | RunNo: 15143
Client ID: MBSS-1 | Batch ID: R15143 | Method: SW826005 | Analysis Date: 10/13/08 | SeqNo: 396436
Instrument: MSD3_10 | Column/ID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	75.0	5.8	58.4	0	128	43	151				
Chloromethane	59.6	5.8	58.4	0	119	52	151				
Vinyl chloride	59.6	5.8	58.4	0	102	57	146				
Bromomethane	70.5	5.8	58.4	0	121	44	145				
Chloroethane	58.3	5.8	58.4	0	100	49	151				
Trichlorofluoromethane	73.4	5.8	58.4	0	126	59	156				
1,1-Dichloroethene	59.5	2.9	58.4	0	102	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	61.8	2.9	58.4	0	105	70	143				
Acetone	115	47	117	0	98	25	175				
Carbon disulfide	54.4	2.9	58.4	0	93	58	140				
Methyl acetate	91.8	2.9	58.4	0	157	70	130				
Methylene chloride	81.4	5.8	58.4	0	105	68	132				
trans-1,2-Dichloroethene	55.0	2.9	58.4	0	94	70	130				
Methyl tert-butyl ether	73.6	2.9	58.4	0	126	70	135				
1,1-Dichloroethane	62.1	2.9	58.4	0	106	70	133				
cis-1,2-Dichloroethene	56.5	2.9	58.4	0	97	70	130				
2-Butanone	122	47	117	0	104	30	162				
Chloroform	59.3	2.9	58.4	0	102	70	130				
1,1,1-Trichloroethane	59.0	2.9	58.4	0	101	70	142				
Cyclohexane	53.8	2.9	58.4	0	92	70	130				
Carbon tetrachloride	48.7	2.9	58.4	0	83	69	140				
Benzene	57.4	2.9	58.4	0	98	70	130				
1,2-Dichloroethane	59.2	2.9	58.4	0	101	68	125				
Trichloroethene	48.6	2.9	58.4	0.97	83	70	130				
Methylcyclohexane	43.2	2.9	58.4	0	74	70	130				
1,2-Dichloropropane	61.5	2.9	58.4	0	105	70	130				
Bromodichloromethane	57.2	2.9	58.4	0	98	68	128				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

Page 7 of 14

Life Science Laboratories, Inc.

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ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396437
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	53.0	2.9	58.4	0	91	55	139	50.3	5.2	20	
4-Methyl-2-pentanone	92.9	5.8	117	0	80	50	150	114	20	50	
Toluene	52.6	2.9	58.4	0	90	70	130	52.6	0.1	20	
trans-1,3-Dichloropropene	48.2	2.9	58.4	0	83	53	135	46.2	4.2	20	
1,1,2-Trichloroethane	54.8	2.9	58.4	0	94	70	132	55.3	0.6	20	
Tetrachloroethene	58.7	2.9	58.4	0	100	63	145	56.8	3.3	21	
2-Hexanone	87.9	5.8	117	0	75	38	150	104	17	50	
Dibromochloromethane	55.2	2.9	58.4	0	94	68	141	55.9	1.4	20	
1,2-Dibromoethane	64.6	2.9	58.4	0	111	70	130	65	0.6	20	
Chlorobenzene	59.4	2.9	58.4	0	102	70	130	55.7	6.5	20	
Ethylbenzene	60.0	2.9	58.4	0	103	70	130	57.5	4.3	20	
Xylenes (total)	165	5.8	175	0	94	70	130	158	4.4	20	
Styrene	51.3	2.9	58.4	0	88	70	130	47.6	7.5	20	
Bromoform	51.4	2.9	58.4	0	88	59	137	51.6	0.4	20	
Isopropylbenzene	87.4	2.9	58.4	0	150	57	168	87.1	0.3	20	
1,1,2,2-Tetrachloroethane	84.8	2.9	58.4	0	145	63	175	91	7.1	24	
1,3-Dichlorobenzene	61.1	2.9	58.4	0	105	70	139	58.2	4.9	20	
1,4-Dichlorobenzene	57.0	2.9	58.4	0	98	70	131	56.2	1.3	24	
1,2-Dichlorobenzene	60.2	2.9	58.4	0	103	70	132	57.9	3.9	20	
1,2-Dibromo-3-chloropropane	66.0	5.8	58.4	0	113	70	138	70.5	6.6	24	
1,2,4-Trichlorobenzene	36.1	5.8	58.4	0	62	48	131	36.7	1.8	24	
Surr: 1,2-Dichloroethane-d4	56.1	0.12	58.4	0	96	71	128	0		0	
Surr: Toluene-d8	67.4	0.12	58.4	0	115	75	125	0		0	
Surr: 4-Bromofluorobenzene	77.5	0.12	58.4	0	133	59	125	0		0	S

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

194 14-Oct-08

Life Science Laboratories, Inc.

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ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMS SampType: MS TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396436
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	50.3	2.9	58.4	0	86	55	139				
4-Methyl-2-pentanone	114	5.8	117	0	98	50	150				
Toluene	52.6	2.9	58.4	0	90	70	130				
trans-1,3-Dichloropropene	46.2	2.9	58.4	0	79	53	135				
1,1,2-Trichloroethane	55.3	2.9	58.4	0	95	70	132				
Tetrachloroethene	56.8	2.9	58.4	0	97	63	145				
2-Hexanone	104	5.8	117	0	88	38	150				
Dibromochloromethane	55.9	2.9	58.4	0	96	68	141				
1,2-Dibromoethane	65.0	2.9	58.4	0	111	70	130				
Chlorobenzene	55.7	2.9	58.4	0	95	70	130				
Ethylbenzene	57.5	2.9	58.4	0	98	70	130				
Xylenes (total)	158	5.8	175	0	90	70	130				
Styrene	47.6	2.9	58.4	0	82	70	130				
Bromoform	51.6	2.9	58.4	0	88	59	137				
Isopropylbenzene	87.1	2.9	58.4	0	149	57	168				
1,1,2,2-Tetrachloroethane	91.0	2.9	58.4	0	156	63	175				
1,3-Dichlorobenzene	58.2	2.9	58.4	0	100	70	139				
1,4-Dichlorobenzene	56.3	2.9	58.4	0	96	70	131				
1,2-Dichlorobenzene	57.9	2.9	58.4	0	99	70	132				
1,2-Dibromo-3-chloropropane	70.5	5.8	58.4	0	121	70	138				
1,2,4-Trichlorobenzene	36.7	5.8	58.4	0	63	48	131				
Surr: 1,2-Dichloroethane-d4	56.6	0.12	58.4	0	97	71	128				
Surr: Toluene-d8	67.1	0.12	58.4	0	115	75	125				
Surr: 4-Bromofluorobenzene	80.9	0.12	58.4	0	139	59	125				S

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

192 14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15143 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15143
Client ID: ZZZZZ Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396453
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	54.3	5.0	50	0	109	43	161				
Chloromethane	51.8	5.0	50	0	104	52	151				
Vinyl chloride	51.7	5.0	50	0	103	57	146				
Bromomethane	48.6	5.0	50	0	97	44	145				
Chloroethane	48.0	5.0	50	0	96	49	161				
Trichlorofluoromethane	48.6	5.0	50	0	97	59	156				
1,1-Dichloroethene	42.2	2.5	50	0	84	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	45.7	2.5	50	0	91	70	143				
Acetone	81.4	40	100	0	81	25	175				
Carbon disulfide	48.8	2.5	50	0	97	58	140				
Methyl acetate	45.4	2.5	50	0	91	70	130				
Methylene chloride	42.1	5.0	50	0	84	68	132				
trans-1,2-Dichloroethene	41.6	2.5	50	0	83	70	130				
Methyl tert-butyl ether	46.7	2.5	50	0	97	70	135				
1,1-Dichloroethane	43.8	2.5	50	0	87	70	133				
cis-1,2-Dichloroethene	43.6	2.5	50	0	87	70	130				
2-Butanone	97.5	40	100	0	98	30	162				
Chloroform	43.8	2.5	50	0	87	70	130				
1,1,1-Trichloroethane	43.2	2.5	50	0	86	70	142				
Cyclohexane	47.9	2.5	50	0	96	70	130				
Carbon tetrachloride	39.5	2.5	50	0	79	69	140				
Benzene	42.6	2.5	50	0	85	70	130				
1,2-Dichloroethane	44.4	2.5	50	0	89	68	135				
Trichloroethene	41.8	2.5	50	0	84	70	130				
Methylcyclohexane	46.9	2.5	50	0	94	70	130				
1,2-Dichloropropane	45.4	2.5	50	0	91	70	130				
Bromodichloromethane	45.7	2.5	50	0	91	68	138				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

195 14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMSD SampType: MSD TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396437
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	67.3	5.8	58.4	0	115	43	161	75	11	20	
Chloromethane	64.6	5.8	58.4	0	111	52	151	69.6	7.4	20	
Vinyl chloride	51.8	5.8	58.4	0	89	57	146	59.6	14	24	
Bromomethane	68.6	5.8	58.4	0	117	44	145	70.5	2.6	21	
Chloroethane	51.7	5.8	58.4	0	89	49	161	58.3	12	20	
Trichlorofluoromethane	64.6	5.8	58.4	0	111	59	156	73.4	13	20	
1,1-Dichloroethene	61.4	2.9	58.4	0	105	70	144	59.5	3.3	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	61.4	2.9	58.4	0	105	70	143	61.9	0.8	20	
Acetone	90.6	47	117	0	78	25	175	115	23	50	
Carbon disulfide	54.2	2.9	58.4	0	93	58	140	54.4	0.2	20	
Methyl acetate	118	2.9	58.4	0	202	70	130	61.9	25	20	RS
Methylene chloride	58.9	5.8	58.4	0	101	68	132	61.4	4.3	20	
trans-1,2-Dichloroethene	55.7	2.9	58.4	0	95	70	130	55	1.3	20	
Methyl tert-butyl ether	72.9	2.9	58.4	0	125	70	135	73.6	0.9	20	
1,1-Dichloroethane	61.6	2.9	58.4	0	105	70	133	62.1	0.9	20	
cis-1,2-Dichloroethene	57.3	2.9	58.4	0	98	70	130	56.5	1.5	20	
2-Butanone	97.8	47	117	0	84	30	162	122	22	50	
Chloroform	59.6	2.9	58.4	0	102	70	130	59.3	0.4	20	
1,1,1-Trichloroethane	58.8	2.9	58.4	0	101	70	142	59	0.3	20	
Cyclohexane	57.3	2.9	58.4	0	98	70	130	53.8	6.4	20	
Carbon tetrachloride	49.5	2.9	58.4	0	85	69	140	48.7	1.6	20	
Benzene	58.2	2.9	58.4	0	100	70	130	57.4	1.4	20	
1,2-Dichloroethane	59.4	2.9	58.4	0	102	68	135	59.2	0.3	20	
Trichloroethene	52.3	2.9	58.4	0.97	88	70	130	49.6	5.3	20	
Methylcyclohexane	46.5	2.9	58.4	0	80	70	130	43.2	7.3	20	
1,2-Dichloropropane	60.5	2.9	58.4	0	104	70	130	61.5	1.6	20	
Bromodichloromethane	56.6	2.9	58.4	0	97	68	138	57.2	1.1	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

193 14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15131 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15131
Client ID: ZZZZZ Batch ID: R15131 Method: SW8260B Analysis Date: 10/10/08 SeqNo: 396294
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	48.8	2.5	50	0	98	80	125				
4-Methyl-2-pentanone	87.4	5.0	100	0	87	50	150				
Toluene	47.2	2.5	50	0	94	80	121				
trans-1,3-Dichloropropene	48.2	2.5	50	0	96	78	124				
1,1,2-Trichloroethane	46.6	2.5	50	0	93	80	122				
Tetrachloroethene	50.3	2.5	50	0	101	74	125				
2-Hexanone	89.7	5.0	100	0	90	50	150				
Dibromochloromethane	45.3	2.5	50	0	91	78	135				
1,2-Dibromoethane	50.1	2.5	50	0	100	80	124				
Chlorobenzene	48.5	2.5	50	0	97	80	120				
Ethylbenzene	49.7	2.5	50	0	99	80	121				
Xylenes (total)	138	5.0	150	0	92	76	124				
Styrene	46.6	2.5	50	0	93	78	122				
Bromoform	48.4	2.5	50	0	97	70	138				
Isopropylbenzene	52.5	2.5	50	0	105	76	131				
1,1,2,2-Tetrachloroethane	46.3	2.5	50	0	93	69	138				
1,3-Dichlorobenzene	49.9	2.5	50	0	100	80	120				
1,4-Dichlorobenzene	49.3	2.5	50	0	99	80	120				
1,2-Dichlorobenzene	49.3	2.5	50	0	99	80	120				
1,2-Dibromo-3-chloropropane	44.4	5.0	50	0	89	69	132				
1,2,4-Trichlorobenzene	52.4	5.0	50	0	105	71	127				
Surr: 1,2-Dichloroethane-d4	46.0	0.10	50	0	92	71	126				
Surr: Toluene-d8	49.2	0.10	50	0	98	75	125				
Surr: 4-Bromofluorobenzene	50.5	0.10	50	0	101	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

198 13-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15143 SampType: MSB TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15143
Client ID: ZZZZZ Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396453
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	45.4	2.5	50	0	91	55	139				
4-Methyl-2-pentanone	95.7	5.0	100	0	96	50	150				
Toluene	43.6	2.5	50	0	87	70	130				
trans-1,3-Dichloropropene	45.3	2.5	50	0	91	53	135				
1,1,2-Trichloroethane	45.6	2.5	50	0	91	70	132				
Tetrachloroethene	43.5	2.5	50	0	87	63	145				
2-Hexanone	97.1	5.0	100	0	97	38	150				
Dibromochloromethane	41.6	2.5	50	0	83	68	141				
1,2-Dibromoethane	47.6	2.5	50	0	95	70	130				
Chlorobenzene	44.6	2.5	50	0	89	70	130				
Ethylbenzene	44.2	2.5	50	0	88	70	130				
Xylenes (total)	125	5.0	150	0	83	70	130				
Styrene	42.9	2.5	50	0	86	70	130				
Bromoform	46.1	2.5	50	0	92	59	137				
Isopropylbenzene	47.2	2.5	50	0	94	57	168				
1,1,2,2-Tetrachloroethane	46.8	2.5	50	0	94	63	175				
1,3-Dichlorobenzene	44.6	2.5	50	0	89	70	139				
1,4-Dichlorobenzene	44.4	2.5	50	0	89	70	131				
1,2-Dichlorobenzene	45.6	2.5	50	0	91	70	132				
1,2-Dibromo-3-chloropropane	45.7	5.0	50	0	91	70	138				
1,2,4-Trichlorobenzene	44.5	5.0	50	0	89	46	131				
Surr: 1,2-Dichloroethane-d4	47.6	0.10	50	0	95	71	126				
Surr: Toluene-d8	49.6	0.10	50	0	99	75	125				
Surr: 4-Bromofluorobenzene	50.9	0.10	50	0	102	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

196 14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15143 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15143
Client ID: ZZZZZ Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396435
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	54.3	5.0	50	0	109	55	142				
Chloromethane	51.8	5.0	50	0	104	62	141				
Vinyl chloride	51.7	5.0	50	0	103	68	135				
Bromomethane	48.6	5.0	50	0	97	56	147				
Chloroethane	48.0	5.0	50	0	96	63	142				
Trichlorofluoromethane	48.6	5.0	50	0	97	67	138				
1,1-Dichloroethene	42.2	2.5	50	0	84	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	45.7	2.5	50	0	91	80	134				
Acetone	81.4	40	100	0	81	25	175				
Carbon disulfide	48.6	2.5	50	0	97	73	130				
Methyl acetate	45.4	2.5	50	0	91	67	147				
Methylene chloride	42.1	5.0	50	0	84	75	124				
trans-1,2-Dichloroethene	41.8	2.5	50	0	83	77	123				
Methyl tert-butyl ether	48.7	2.5	50	0	97	76	126				
1,1-Dichloroethane	43.8	2.5	50	0	87	76	124				
cis-1,2-Dichloroethene	43.6	2.5	50	0	87	79	120				
2-Butanone	97.5	40	100	0	98	42	154				
Chloroform	43.6	2.5	50	0	87	77	121				
1,1,1-Trichloroethane	43.2	2.5	50	0	86	78	132				
Cyclohexane	47.9	2.5	50	0	96	80	128				
Carbon tetrachloride	39.5	2.5	50	0	79	74	138				
Benzene	42.6	2.5	50	0	85	80	121				
1,2-Dichloroethane	44.4	2.5	50	0	89	73	127				
Trichloroethene	41.8	2.5	50	0	84	80	120				
Methylcyclohexane	46.9	2.5	50	0	94	80	128				
1,2-Dichloropropane	45.4	2.5	50	0	91	80	125				
Bromodichloromethane	45.7	2.5	50	0	91	80	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

199 14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15131 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15131
Client ID: ZZZZZ Batch ID: R15131 Method: SW8260B Analysis Date: 10/10/08 SeqNo: 396294
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	58.2	5.0	50	0	116	55	142				
Chloromethane	53.3	5.0	50	0	107	62	141				
Vinyl chloride	52.6	5.0	50	0	106	68	135				
Bromomethane	48.7	5.0	50	0	97	56	147				
Chloroethane	48.3	5.0	50	0	97	63	142				
Trichlorofluoromethane	51.5	5.0	50	0	103	67	138				
1,1-Dichloroethene	48.6	2.5	50	0	97	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	52.0	2.5	50	0	104	80	134				
Acetone	78.4	40	100	0	78	25	175				
Carbon disulfide	49.4	2.5	50	0	99	73	130				
Methyl acetate	46.9	2.5	50	0	94	67	147				
Methylene chloride	45.5	5.0	50	0	91	75	124				
trans-1,2-Dichloroethene	47.3	2.5	50	0	95	77	123				
Methyl tert-butyl ether	51.6	2.5	50	0	103	76	126				
1,1-Dichloroethane	48.1	2.5	50	0	96	76	124				
cis-1,2-Dichloroethene	47.3	2.5	50	0	95	79	120				
2-Butanone	88.0	40	100	0	88	42	154				
Chloroform	47.5	2.5	50	0	95	77	121				
1,1,1-Trichloroethane	48.0	2.5	50	0	96	78	132				
Cyclohexane	54.0	2.5	50	0	108	80	128				
Carbon tetrachloride	45.8	2.5	50	0	92	74	138				
Benzene	47.4	2.5	50	0	95	80	121				
1,2-Dichloroethane	47.5	2.5	50	0	95	73	127				
Trichloroethene	47.3	2.5	50	0	95	80	120				
Methylcyclohexane	53.0	2.5	50	0	106	80	128				
1,2-Dichloropropane	48.5	2.5	50	0	97	80	125				
Bromodichloromethane	49.9	2.5	50	0	100	80	129				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

197 13-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15143 | SampType: LCS | TestCode: 8260S7_OLM | Units: µg/Kg | Prep Date: | RunNo: 15143
Client ID: ZZZZZ | Batch ID: R15143 | Method: SW8260B | Analysis Date: 10/13/08 | SeqNo: 396438
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	45.4	2.5	50	0	91	80	125				
4-Methyl-2-pentanone	95.7	5.0	100	0	96	50	150				
Toluene	43.6	2.5	50	0	87	80	121				
trans-1,3-Dichloropropene	45.3	2.5	50	0	91	78	124				
1,1,2-Trichloroethane	45.6	2.5	50	0	91	80	122				
Tetrachloroethene	43.5	2.5	50	0	87	74	125				
2-Hexanone	97.1	5.0	100	0	97	50	150				
Dibromochloromethane	41.6	2.5	50	0	83	76	135				
1,2-Dibromoethane	47.6	2.5	50	0	95	80	124				
Chlorobenzene	44.6	2.5	50	0	89	80	120				
Ethylbenzene	44.2	2.5	50	0	88	80	121				
Xylenes (total)	125	5.0	150	0	83	76	124				
Styrene	42.9	2.5	50	0	86	78	122				
Bromoform	46.1	2.5	50	0	92	70	138				
Isopropylbenzene	47.2	2.5	50	0	94	76	131				
1,1,2,2-Tetrachloroethane	46.9	2.5	50	0	94	69	138				
1,3-Dichlorobenzene	44.6	2.5	50	0	89	80	120				
1,4-Dichlorobenzene	44.4	2.5	50	0	89	80	120				
1,2-Dichlorobenzene	45.6	2.5	50	0	91	80	120				
1,2-Dibromo-3-chloropropane	45.7	5.0	50	0	91	69	132				
1,2,4-Trichlorobenzene	44.5	5.0	50	0	89	71	127				
Surr: 1,2-Dichloroethane-d4	47.6	0.10	50	0	95	71	126				
Surr: Toluene-d8	49.6	0.10	50	0	99	75	125				
Surr: 4-Bromofluorobenzene	50.9	0.10	50	0	102	59	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Life Science Laboratorie Contract: _____
Lab Code: LSLA Case No.: GEG-MS SAS No.: _____ SDG No.: 0810083
Lab File ID: J7316.D Lab Sample ID: MB-15131
Date Analyzed: 10/10/08 Time Analyzed: 16:32
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-15131	LCS-15131	J7352.D	13:53
02	Trip Blank	0810083-006A	J7357.D	17:06
03	MBSS-1	0810083-001A	J7363.D	20:27
04	MBSS-2	0810083-002A	J7364.D	21:01
05	MBSS-3	0810083-003A	J7365.D	21:35
06	MBSS-4	0810083-004A	J7366.D	22:08
07	MBSS-FD	0810083-005A	J7367.D	22:42

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Life Science Laboratorie Contract: _____
Lab Code: LSLA Case No.: GEG-MS SAS No.: _____ SDG No.: 0810083
Lab File ID: J7316.D Lab Sample ID: MB-15143
Date Analyzed: 10/13/08 Time Analyzed: 13:54
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MSB-15143	MSB-15143	J7370.D	10:49
02	LCS-15143	LCS-15143	J7370.D	10:49
03	MBSS-1MS	0810083-001AMS	J7371.D	11:23
04	MBSS-1MSD	0810083-001AMSD	J7372.D	11:57
05	MBSS-1RA	0810083-001ARA	J7376.D	14:11
06	MBSS-2RA	0810083-002ARA	J7377.D	14:45
07	MBSS-3RA	0810083-003ARA	J7378.D	15:10
08	MBSS-4RA	0810083-004ARA	J7379.D	15:52
09	MBSS-FDRA	0810083-005ARA	J7380.D	16:26

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories Contract: _____
Lab Code: LSLA Case No.: GEG-MS SAS No.: _____ SDG No.: 0810083
Lab File ID: TAA7335.D BFB Injection Date: 10/9/08
Instrument ID: MS03_10 BFB Injection Time: 6:26
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.8
75	30.0 - 66.0% of mass 95	54.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5 (0.81)
174	50.0 - 120.0% of mass 95	64.3
175	4.0 - 9.0% of mass 174	4.8 (7.51)
176	93.0 - 101.0% of mass 174	62.6 (97.41)
177	5.0 - 9.0% of mass 176	4.0 (6.51)

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ICAL 2.5 PPB	ICAL 2.5 PPB	J7336.D	10/09/08	7:48
02	ICAL 5.0 PPB	ICAL 5.0 PPB	J7337.D	10/09/08	8:22
03	ICAL 20 PPB	ICAL 20 PPB	J7339.D	10/09/08	9:40
04	ICAL 50 PPB	ICAL 50 PPB	J7340.D	10/09/08	10:14
05	ICAL 100 PPB	ICAL 100 PPB	J7341.D	10/09/08	10:47
06	ICAL 150 PPB	ICAL 150 PPB	J7342.D	10/09/08	11:21
07	ICAL 200 PPB	ICAL 200 PPB	J7344.D	10/09/08	14:13
08	25RC-15113	25RC-15113	J7345.D	10/09/08	16:30

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: TA\J7350.D BFB Injection Date: 10/10/08

Instrument ID: MS03_10 BFB Injection Time: 12:20

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.5
75	30.0 - 66.0% of mass 95	57.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	0.4 (0.6)1
174	50.0 - 120.0% of mass 95	63.2
175	4.0 - 9.0% of mass 174	4.8 (7.5)1
176	93.0 - 101.0% of mass 174	60.6 (95.8)1
177	5.0 - 9.0% of mass 176	4.2 (6.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-15131	CCV-15131	J7351.D	10/10/08	13:03
02	LCS-15131	LCS-15131	J7352.D	10/10/08	13:53
03	MB-15131	MB-15131	J7356.D	10/10/08	16:32
04	Trip Blank	0810083-006A	J7357.D	10/10/08	17:06
05	MBSS-1	0810083-001A	J7363.D	10/10/08	20:27
06	MBSS-2	0810083-002A	J7364.D	10/10/08	21:01
07	MBSS-3	0810083-003A	J7365.D	10/10/08	21:35
08	MBSS-4	0810083-004A	J7366.D	10/10/08	22:08
09	MBSS-FD	0810083-005A	J7367.D	10/10/08	22:42

page 2 of 3

FORM V VOA BFB_Tune

204

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: TA\J7368.D BFB Injection Date: 10/13/08

Instrument ID: MS03_10 BFB Injection Time: 9:46

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.9
75	30.0 - 66.0% of mass 95	57.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.3 (0.6)1
174	50.0 - 120.0% of mass 95	58.9
175	4.0 - 9.0% of mass 174	4.5 (7.7)1
176	93.0 - 101.0% of mass 174	56.1 (95.2)1
177	5.0 - 9.0% of mass 176	3.6 (6.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-15143	CCV-15143	J7369.D	10/13/08	10:16
02	MSB-15143	MSB-15143	J7370.D	10/13/08	10:49
03	LCS-15143	LCS-15143	J7370.D	10/13/08	10:49
04	MBSS-1MS	0810083-001AMS	J7371.D	10/13/08	11:23
05	MBSS-1MSD	0810083-001AMSD	J7372.D	10/13/08	11:57
06	MB-15143	MB-15143	J7374.D	10/13/08	13:04
07	MBSS-1RA	0810083-001ARA	J7376.D	10/13/08	14:11
08	MBSS-2RA	0810083-002ARA	J7377.D	10/13/08	14:45
09	MBSS-3RA	0810083-003ARA	J7378.D	10/13/08	15:19
10	MBSS-4RA	0810083-004ARA	J7379.D	10/13/08	15:52
11	MBSS-FDRA	0810083-005ARA	J7380.D	10/13/08	16:26

page 3 of 3

FORM V VOA BFB_Tune

205

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, inc SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): J7351.D Date Analyzed: 10/10/2008

Instrument ID: MS03_10 Time Analyzed: 13:03

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #		
12 HOUR STD	2092531	10.91	857823	15.80	564081	19.88		
UPPER LIMIT	4185062	11.41	1715646	16.30	1128162	20.38		
LOWER LIMIT	1046266	10.41	428912	15.30	282041	19.38		
SAMPLE NO.								
01 LCS-15131 (LCS-15131)	2177974	10.90	897973	15.81	555442	19.87		
02 MB-15131 (MB-15131)	2089617	10.91	792510	15.81	446667	19.88		
03 Trip Blank (0810083-006A)	2022542	10.91	764626	15.81	440673	19.88		
04 MBSS-1 (0810083-001A)	1633472	10.90	509130	15.83	198491*	19.88		
05 MBSS-2 (0810083-002A)	1691945	10.90	492706	15.82	147931*	19.88		
06 MBSS-3 (0810083-003A)	1825463	10.90	440465	15.81	146318*	19.87		
07 MBSS-4 (0810083-004A)	1693173	10.91	437918	15.82	125364*	19.88		
08 MBSS-FD (0810083-005A)	1709468	10.91	482333	15.82	140070*	19.88		

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

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

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

FORM VIII Page 1 of 4 SW8260B

206

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, inc SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): J7369.D Date Analyzed: 10/13/2008

Instrument ID: MS03_10 Time Analyzed: 10:16

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #		
12 HOUR STD	2171012	10.90	909102	15.81	611077	19.88		
UPPER LIMIT	4342024	11.40	1818204	16.31	1222154	20.38		
LOWER LIMIT	1085506	10.40	454551	15.31	305539	19.38		
SAMPLE NO.								
01 LCS-15143 (LCS-15143)	2076657	10.90	832386	15.81	531237	19.88		
02 MSB-15143 (MSB-15143)	2076657	10.90	832386	15.81	531237	19.88		
03 MBSS-1MS (0810083-001AMS)	1948412	10.90	591550	15.81	232890*	19.88		
04 MBSS-1MSD (0810083-001AMSD)	2163846	10.90	694538	15.81	294515*	19.88		
05 MB-15143 (MB-15143)	2242485	10.91	932192	15.81	415392	19.88		
06 MBSS-1RA (0810083-001ARA)	2022213	10.91	672948	15.82	277878*	19.88		
07 MBSS-2RA (0810083-002ARA)	1767404	10.91	479157	15.82	182340*	19.88		
08 MBSS-3RA (0810083-003ARA)	1772623	10.91	489944	15.82	167130*	19.88		
09 MBSS-4RA (0810083-004ARA)	1758301	10.90	467627	15.81	151092*	19.88		
10 MBSS-FDRA (0810083-005ARA)	1697738	10.91	456750	15.82	147328*	19.88		

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

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

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

FORM VIII Page 3 of 4 SW8260B

207

GC/MS Volatile Combined MDL Study Summary

Instrument ID(s): MS2/HP5973, MS3/HP5973 — Column ID(s): Rtx-502.2, 0.53 mm x105m, 3.0 df, Rtx-VMS, 0.18 mm x 40m, 1.0 df — MDL Sample Size = 8 g

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/Kg)	Std Dev	MDL (ug/Kg)	MDL VER (ug/Kg)
8260B	5035	Soil	Dichlorodifluoromethane	01/10/06	0.40	0.41	0.39	0.39	0.56	0.44	0.38	1.00	0.026	0.08	1.0
8260B	5035	Soil	Chloromethane	01/10/06	0.52	0.58	0.54	0.73	0.45	0.59	0.58	1.00	0.098	0.31	0.5
8260B	5035	Soil	Vinyl chloride	01/10/06	0.35	0.46	0.38	0.42	0.36	0.43	0.40	1.00	0.042	0.13	1.0
8260B	5035	Soil	Bromomethane	01/10/06	0.57	0.59	0.52	0.68	0.46	0.56	0.50	1.00	0.043	0.13	1.0
8260B	5035	Soil	Chloroethane	01/10/06	0.15	0.05	0.10	0.23	0.07	0.10	0.26	1.00	0.080	0.25	1.0
8260B	5035	Soil	Trichlorofluoromethane	01/10/06	0.51	0.56	0.49	0.54	0.53	0.56	0.51	1.00	0.027	0.08	1.0
8260B	5035	Soil	Acetone	01/05/06	0.88	0.83	0.77	1.00	0.60	1.00	0.80	0.50	0.096	0.30	20.0
8260B	5035	Soil	Acrolein	01/23/06	18.82	18.54	16.77	16.48	16.95	14.39	20.86	25.00	1.965	6.18	
8260B	5035	Soil	1,1-Dichloroethene	01/10/06	0.58	0.71	0.56	0.83	0.59	0.63	0.61	1.00	0.049	0.15	1.0
8260B	5035	Soil	Methyl iodide	01/10/06	0.45	0.44	0.38	0.38	0.36	0.42	0.44	1.00	0.039	0.12	10.0
8260B	5035	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	01/10/06	0.44	0.52	0.47	0.55	0.48	0.51	0.51	1.00	0.036	0.11	1.0
8260B	5035	Soil	Methyl acetate	01/10/06	0.83	0.85	0.85	0.91	0.80	0.93	0.91	1.00	0.048	0.15	10.0
8260B	5035	Soil	Acrylonitrile	01/10/06	2.99	2.59	2.38	2.83	2.75	3.20	2.58	5.00	0.278	0.87	5.0
8260B	5035	Soil	Methylene chloride	01/10/06	1.49	1.97	1.98	2.06	1.87	1.97	1.92	1.00	0.192	0.60	0.5
8260B	5035	Soil	Carbon disulfide	01/05/06	0.30	0.30	0.28	0.25	0.25	0.32	0.30	0.30	0.027	0.08	0.5
8260B	5035	Soil	trans-1,2-Dichloroethene	01/10/06	0.69	0.74	0.71	0.72	0.67	0.78	0.68	1.00	0.038	0.12	0.5
8260B	5035	Soil	Methyl tert-Butyl ether	01/05/06	0.12	0.05	0.14	0.10	0.11	0.05	0.15	0.30	0.040	0.13	0.5
8260B	5035	Soil	1,1-Dichloroethane	01/10/06	0.72	0.71	0.65	0.70	0.65	0.72	0.69	1.00	0.025	0.08	1.0
8260B	5035	Soil	Vinyl acetate	01/10/06	0.52	0.50	0.57	0.51	0.49	0.50	0.46	1.00	0.034	0.11	1.0
8260B	5035	Soil	2-Butanone	01/10/06	1.57	1.63	1.67	1.66	1.33	1.44	1.66	2.00	0.133	0.42	20.0
8260B	5035	Soil	cis-1,2-Dichloroethene	01/05/06	0.16	0.16	0.13	0.18	0.08	0.10	0.03	0.30	0.050	0.16	0.5
8260B	5035	Soil	Bromochloromethane	01/10/06	0.71	0.69	0.70	0.69	0.53	0.70	0.68	1.00	0.063	0.20	1.0
8260B	5035	Soil	Chloroform	01/05/06	0.18	0.20	0.21	0.17	0.24	0.20	0.20	0.30	0.022	0.07	0.5
8260B	5035	Soil	2,2-Dichloropropane	01/10/06	0.56	0.64	0.59	0.67	0.56	0.59	0.60	1.00	0.041	0.13	1.0
8260B	5035	Soil	Cyclohexane	01/10/06	0.41	0.60	0.52	0.52	0.53	0.56	0.55	1.00	0.059	0.18	1.0
8260B	5035	Soil	Dibromofluoromethane	01/05/06	0.46	0.44	0.49	0.46	0.42	0.45	0.45	0.30	0.021	0.07	*
8260B	5035	Soil	1,2-Dichloroethane-d4	01/05/06	0.51	0.53	0.53	0.49	0.51	0.53	0.58	0.30	0.022	0.07	0.5
8260B	5035	Soil	1,2-Dichloroethane	01/05/06	0.13	0.12	0.19	0.17	0.18	0.10	0.10	0.30	0.035	0.11	1.0
8260B	5035	Soil	1,1,1-Trichloroethane	01/05/06	0.17	0.12	0.14	0.03	0.12	0.10	0.13	0.30	0.044	0.14	1.0
8260B	5035	Soil	1,1-Dichloropropene	01/10/06	0.56	0.67	0.56	0.64	0.50	0.64	0.59	1.00	0.059	0.19	1.0
8260B	5035	Soil	Carbon tetrachloride	01/10/06	0.46	0.54	0.49	0.52	0.46	0.57	0.51	1.00	0.037	0.12	1.0

5-23-08

CMS01068260005.mdc.xls Life Science Laboratories, Inc. Page 1 of 3 5/23/2008 REV 0

208

GC/MS Volatile Combined MDL Study Summary

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/Kg)	Std Dev	MDL (ug/Kg)	MDL VER (ug/Kg)
8260B	5035	Soil	Benzene	01/05/06	0.23	0.23	0.24	0.22	0.20	0.24	0.24	0.30	0.015	0.05	0.5
8260B	5035	Soil	Trichloroethene	01/10/06	0.63	0.68	0.64	0.63	0.56	0.68	0.63	1.00	0.037	0.12	1.0
8260B	5035	Soil	Dibromomethane	01/05/06	0.12	0.00	0.17	0.12	0.16	0.08	0.13	0.30	0.038	0.12	1.0
8260B	5035	Soil	Methylcyclohexane	01/10/06	0.42	0.56	0.48	0.45	0.46	0.51	0.38	1.00	0.059	0.18	1.0
8260B	5035	Soil	1,2-Dichloropropane	01/10/06	0.68	0.74	0.69	0.65	0.55	0.75	0.81	1.00	0.071	0.22	1.0
8260B	5035	Soil	Bromodichloromethane	01/05/06	0.25	0.29	0.27	0.29	0.26	0.31	0.26	0.30	0.020	0.06	1.0
8260B	5035	Soil	2-Chloroethylvinyl ether	01/10/06	0.53	0.87	0.69	0.73	0.94	0.55	0.38	1.00	0.232	0.73	50.0
8260B	5035	Soil	4-Methyl-2-pentanone	01/10/06	1.46	1.58	1.50	1.51	1.26	1.41	1.47	2.00	0.101	0.32	2.0
8260B	5035	Soil	cis-1,3-Dichloropropene	01/05/06	0.12	0.16	0.15	0.10	0.19	0.14	0.15	0.30	0.029	0.09	0.5
8260B	5035	Soil	Toluene-d8	01/05/06	0.32	0.33	0.29	0.28	0.30	0.30	0.30	0.30	0.017	0.05	0.5
8260B	5035	Soil	Toluene	01/05/06	0.12	0.12	0.15	0.16	0.12	0.15	0.14	0.30	0.017	0.05	0.5
8260B	5035	Soil	trans-1,3-Dichloropropene	01/05/06	0.11	0.13	0.04	-0.02	0.15	0.08	0.08	0.30	0.047	0.15	0.5
8260B	5035	Soil	1,1,2-Trichloroethane	01/10/06	0.73	0.78	0.67	0.72	0.54	0.75	0.72	1.00	0.078	0.25	0.5
8260B	5035	Soil	2-Hexanone	01/10/06	0.92	1.13	1.08	1.07	0.84	1.04	0.83	2.00	0.122	0.38	2.0
8260B	5035	Soil	1,2-Dibromoethane	01/05/06	0.28	0.29	0.23	0.24	0.27	0.29	0.30	0.30	0.027	0.08	0.5
8260B	5035	Soil	1,3-Dichloropropane	01/05/06	0.28	0.26	0.26	0.30	0.26	0.32	0.32	0.30	0.028	0.09	0.5
8260B	5035	Soil	Dibromochloromethane	01/05/06	0.09	0.07	0.12	0.07	0.11	0.09	0.06	0.30	0.022	0.07	0.5
8260B	5035	Soil	Tetrachloroethene	01/10/06	0.58	0.67	0.60	0.62	0.60	0.63	0.57	1.00	0.034	0.11	1.0
8260B	5035	Soil	1-Chlorohexane	01/10/06	0.42	0.55	0.51	0.54	0.44	0.51	0.45	1.00	0.051	0.16	1.0
8260B	5035	Soil	1,1,1,2-Tetrachloroethane	01/10/06	0.73	0.70	0.70	0.70	0.63	0.80	0.73	1.00	0.051	0.16	1.0
8260B	5035	Soil	Chlorobenzene	01/05/06	0.32	0.31	0.30	0.31	0.29	0.36	0.31	0.30	0.022	0.07	1.0
8260B	5035	Soil	Ethylbenzene	01/05/06	0.33	0.34	0.33	0.34	0.34	0.34	0.23	0.30	0.041	0.13	0.5
8260B	5035	Soil	(m+p)-Xylene	01/05/06	0.34	0.24	0.31	0.26	0.24	0.24	0.29	0.60	0.040	0.13	1.0
8260B	5035	Soil	o-Xylene	01/10/06	0.55	0.68	0.59	0.63	0.53	0.65	0.60	1.00	0.053	0.17	0.5
8260B	5035	Soil	Styrene	01/05/06	0.16	0.14	0.16	0.12	0.12	0.06	0.09	0.30	0.037	0.12	0.5
8260B	5035	Soil	Bromoform	01/10/06	0.38	0.28	0.26	0.30	0.18	0.34	0.03	1.00	0.053	0.17	1.0
8260B	5035	Soil	Bromofluorobenzene	01/05/06	0.39	0.38	0.40	0.39	0.38	0.31	0.32	0.30	0.025	0.11	0.5
8260B	5035	Soil	trans-1,4-Dichloro-2-butene	01/23/06	2.59	3.08	3.09	3.64	3.65	3.20	4.45	5.00	0.594	1.87	10.0
8260B	5035	Soil	1,1,2,2-Tetrachloroethane	01/05/06	0.30	0.38	0.37	0.41	0.38	0.44	0.40	0.30	0.044	0.14	0.5
8260B	5035	Soil	Isopropylbenzene	01/05/06	0.19	0.17	0.19	0.22	0.19	0.19	0.17	0.30	0.017	0.05	0.5
8260B	5035	Soil	1,2,3-Trichloropropane	01/05/06	0.23	0.23	0.27	0.29	0.25	0.31	0.09	0.30	0.072	0.23	0.5
8260B	5035	Soil	Bromobenzene	01/05/06	0.14	0.10	0.21	0.07	0.11	0.07	0.14	0.30	0.049	0.15	0.5
8260B	5035	Soil	n-Propylbenzene	01/05/06	0.16	0.18	0.17	0.14	0.15	0.15	0.15	0.30	0.010	0.03	0.5

CMS01068260005.mdc.xls Life Science Laboratories, Inc. Page 2 of 3 5/23/2008 REV 0

209

GC/MS Volatile Combined MDL Study Summary

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/Kg)	Std Dev	MDL (ug/Kg)	MDL VER
8260B	5035	Soil	Dichlorodifluoromethane	01/10/06	0.40	0.41	0.39	0.39	0.56	0.44	0.38	1.00	0.026	0.08	1.0
8260B	5035	Soil	Chloromethane	01/10/06	0.52	0.58	0.54	0.73	0.45	0.59	0.58	1.00	0.098	0.31	0.5
8260B	5035	Soil	Vinyl chloride	01/10/06	0.35	0.46	0.38	0.42	0.36	0.43	0.40	1.00	0.042	0.13	1.0
8260B	5035	Soil	Bromomethane	01/10/06	0.57	0.59	0.52	0.68	0.46	0.56	0.50	1.00	0.043	0.13	1.0
8260B	5035	Soil	Chloroethane	01/10/06	0.15	0.05	0.10	0.23	0.07	0.10	0.26	1.00	0.080	0.25	1.0
8260B	5035	Soil	Trichlorofluoromethane	01/10/06	0.51	0.56	0.49	0.54	0.53	0.56	0.51	1.00	0.027	0.08	1.0
8260B	5035	Soil	Acetone	01/05/06	0.88	0.83	0.77	1.00	0.60	1.00	0.80	0.50	0.096	0.30	20.0
8260B	5035	Soil	Acrolein	01/23/06	18.82	18.54	16.77	16.48	16.95	14.39	20.86	25.00	1.965	6.18	
8260B	5035	Soil	1,1-Dichloroethene	01/10/06	0.58	0.71	0.56	0.83	0.59	0.63	0.61	1.00	0.049	0.15	1.0
8260B	5035	Soil	Methyl iodide	01/10/06	0.45	0.44	0.38	0.38	0.36	0.42	0.44	1.00	0.039	0.12	10.0
8260B	5035	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	01/10/06	0.44	0.52	0.47	0.55	0.48	0.51	0.51	1.00	0.036	0.11	1.0
8260B	5035	Soil	Methyl acetate	01/10/06	0.83	0.85	0.85	0.91	0.80	0.93	0.91	1.00	0.048	0.15	10.0
8260B	5035	Soil	Acrylonitrile	01/10/06	2.99	2.59	2.38	2.83	2.75	3.20	2.58	5.00	0.278	0.87	5.0
8260B	5035	Soil	Methylene chloride	01/10/06	1.49	1.97	1.98	2.06	1.87	1.97	1.92	1.00	0.192	0.60	0.5
8260B	5035	Soil	Carbon disulfide	01/05/06	0.30	0.30	0.28	0.25	0.25	0.32	0.30	0.30	0.027	0.08	0.5
8260B	5035	Soil	trans-1,2-Dichloroethene	01/10/06	0.69	0.74	0.71	0.72	0.67	0.78	0.68	1.00	0.038	0.12	0.5
8260B	5035	Soil	Methyl tert-Butyl ether	01/05/06	0.12	0.05	0.14	0.10	0.11	0.05	0.15	0.30	0.040	0.13	0.5
8260B	5035	Soil	1,1-Dichloroethane	01/10/06	0.72	0.71	0.65	0.70	0.65	0.72	0.69	1.00	0.025	0.08	1.0
8260B	5035	Soil	Vinyl acetate	01/10/06	0.52	0.50	0.57	0.51	0.49	0.50	0.46	1.00	0.034	0.11	1.0
8260B	5035	Soil	2-Butanone	01/10/06	1.57	1.63	1.67	1.66	1.33	1.44	1.66	2.00	0.133	0.42	20.0
8260B	5035	Soil	cis-1,2-Dichloroethene	01/05/06	0.16	0.16	0.13	0.18	0.08	0.10	0.03	0.30	0.050	0.16	0.5
8260B	5035	Soil	Bromochloromethane	01/10/06	0.71	0.69	0.70	0.69	0.53	0.70	0.68	1.00	0.063	0.20	1.0
8260B	5035	Soil	Chloroform	01/05/06	0.18	0.20	0.21	0.17	0.24	0.20	0.20	0.30	0.022	0.07	0.5
8260B	5035	Soil	2,2-Dichloropropane	01/10/06	0.56	0.64	0.59	0.67	0.56	0.59	0.60	1.00	0.041	0.13	1.0
8260B	5035	Soil	Cyclohexane	01/10/06	0.41	0.60	0.52	0.52	0.53	0.56	0.55	1.00	0.059	0.18	1.0
8260B	5035	Soil	Dibromofluoromethane	01/05/06	0.46	0.44	0.49	0.46	0.42	0.45	0.45	0.30	0.021	0.07	*
8260B	5035	Soil	1,2-Dichloroethane-d4	01/05/06	0.51	0.53	0.53	0.49	0.51	0.53	0.58	0.30	0.022	0.07	0.5
8260B	5035	Soil	1,2-Dichloroethane	01/05/06	0.13	0.12	0.19	0.17	0.18	0.10	0.10	0.30	0.035	0.11	1.0
8260B	5035	Soil	1,1,1-Trichloroethane	01/05/06	0.17	0.12	0.14	0.03	0.12	0.10	0.13	0.30	0.044	0.14	1.0
8260B	5035	Soil	1,1-Dichloropropene	01/10/06	0.56	0.67	0.56	0.64	0.50	0.64	0.59	1.00	0.059	0.19	1.0
8260B	5035	Soil	Carbon tetrachloride	01/10/06	0.46	0.54	0.49	0.52	0.46	0.57	0.51	1.00	0.037	0.12	1.0

CMS01068260005.mdc.xls Life Science Laboratories, Inc. Page 3 of 3 5/23/2008 REV 0

210

Sample Data

211

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10 Sample Size: 5 g	PrepDate:	
ColumnID:	Rtx-VMS %Moisture: 14.4	BatchNo:	R15131
Revision:	10/28/08 13:07 TestCode: 8260S7_OLM42	FileID:	1-SAMP-J7363.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Chloromethane	ND		5.8	0.58	µg/Kg-dry	1	10/10/08 20:27
Vinyl chloride	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Bromomethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Chloroethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
Trichlorofluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
1,1-Dichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Acetone	ND		47	23	µg/Kg-dry	1	10/10/08 20:27
Carbon disulfide	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Methyl acetate	ND		2.9	12	µg/Kg-dry	1	10/10/08 20:27
Methylene chloride	ND		5.8	0.58	µg/Kg-dry	1	10/10/08 20:27
trans-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Methyl tert-butyl ether	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
cis-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
2-Butanone	ND		47	23	µg/Kg-dry	1	10/10/08 20:27
Chloroform	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1,1-Trichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Cyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Carbon tetrachloride	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Benzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Trichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Methylcyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
1,2-Dichloropropane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Bromodichloromethane	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
cis-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
4-Methyl-2-pentanone	ND		5.8	2.3	µg/Kg-dry	1	10/10/08 20:27
Toluene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
trans-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1,2-Trichloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Tetrachloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396297 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10 Sample Size: 5 g	PrepDate:	
ColumnID:	Rtx-VMS %Moisture: 14.4	BatchNo:	R15131
Revision:	10/28/08 13:07 TestCode: 8260S7_OLM42	FileID:	1-SAMP-J7363.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.8	2.3	µg/Kg-dry	1	10/10/08 20:27
Dibromochloromethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dibromoethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Chlorobenzene	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Ethylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Xylenes (total)	ND		5.8	1.8	µg/Kg-dry	1	10/10/08 20:27
Styrene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
Bromoform	ND		2.9	1.2	µg/Kg-dry	1	10/10/08 20:27
Isopropylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,1,2,2-Tetrachloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,3-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,4-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/10/08 20:27
1,2-Dibromo-3-chloropropane	ND		5.8	1.2	µg/Kg-dry	1	10/10/08 20:27
1,2,4-Trichlorobenzene	ND		5.8	0.58	µg/Kg-dry	1	10/10/08 20:27
Surr: 1,2-Dichloroethane-d4	102		71-128	0.58	%REC	1	10/10/08 20:27
Surr: Toluene-d8	118		75-125	0.58	%REC	1	10/10/08 20:27
Surr: 4-Bromofluorobenzene	129 S		59-125	0.58	%REC	1	10/10/08 20:27

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396297 **Project Supervisor:** Monika Santucci

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7363.D                    Vial: 50
Acq On    : 10 Oct 2008  20:27                       Operator: GS
Sample    : 0810083-001A                               Inst    : #3MS10
Misc      : SAMP,8260S7_OLM42, 5.0G                  Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Oct 13 11:00 2008                 Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

 Internal Standards                R.T. QIon  Response  Conc Units Dev(Min)
 ------------------------------------------------------------------------
   1) Fluorobenzene                10.90  96  1633472   50.00 ug/L    0.00
  36) Chlorobenzene-d5             15.81  82   509130   50.00 ug/L    0.00
  47) 1,4-Dichlorobenzene-d4       19.88 152   198411   50.00 ug/L    0.00

 System Monitoring Compounds
  24) 1,2-Dichloroethane-d4        10.48  65   466787   50.78 ug/L    0.00
   Spiked Amount      50.000                   Recovery   =  101.56%
  37) Toluene-d8                   13.32  98  1428212   59.06 ug/L    0.00
   Spiked Amount      50.000                   Recovery   =  118.12%
  49) Bromofluorobenzene           17.88  95   295833   64.49 ug/L    0.00
   Spiked Amount      50.000                   Recovery   =  128.98%

 Target Compounds                                          Qvalue
  27) Trichloroethene              11.18  95     7849    0.83 ug/L      75

 ------------------------------------------------------------------------
 (#) = qualifier out of range (m) = manual integration
J7363.D  J009NTCS.M       Tue Oct 14 06:16:10 2008
```


Quantitation Report

```
Data File : C:\HPCHEM\1\DATA\J7363.D                    Vial: 50
Acq On    : 10 Oct 2008  20:27                       Operator: GS
Sample    : 0810083-001A                               Inst    : #3MS10
Misc      : SAMP,8260S7_OLM42, 5.0G                  Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:00 2008                 Quant Results File: J009NTCS.RES

Method       : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
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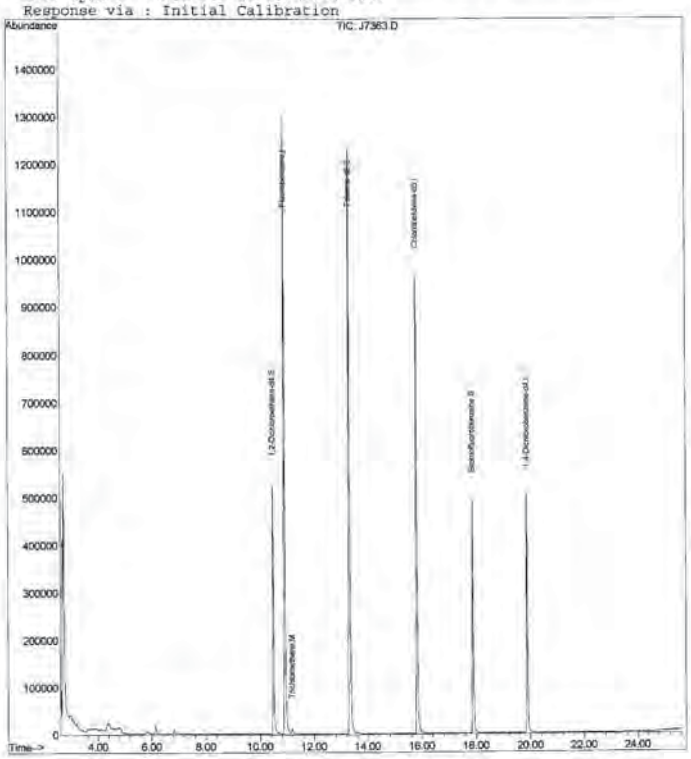
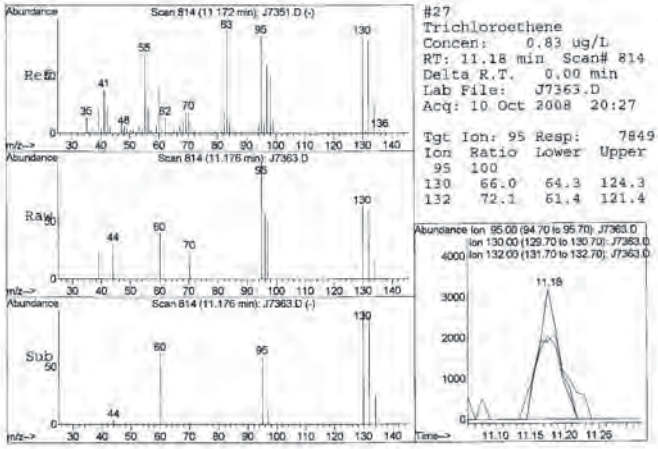


J7363.D J009NTCS.M Tue Oct 14 06:16:11 2008



#27
Trichloroethene
Concen: 0.83 ug/L
RT: 11.18 min Scan# 814
Delta R.T. 0.00 min
Lab File: J7363.D
Acq: 10 Oct 2008 20:27

Tgt Ion: 95 Resp: 7849

Ion	Ratio	Lower	Upper
95	100		
130	66.0	64.3	124.3
132	72.1	61.4	121.4

J7363.D JO09NTCS.M Tue Oct 14 06:16:11 2008 Pag

Form 1 TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810093

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7363.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 14 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 1 SW8260B

Tentatively Identified Compound (LSC) summary

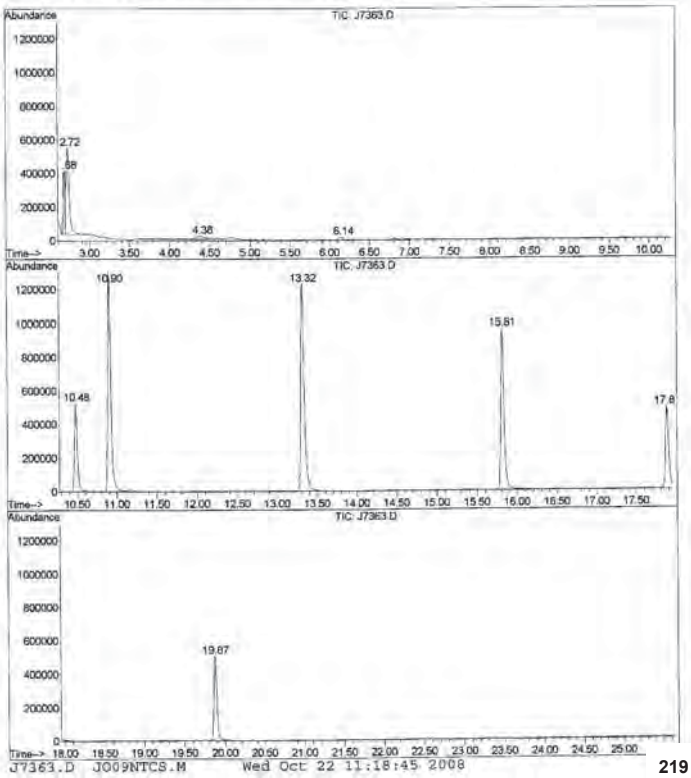
Operator ID: GS Date Acquired: 10 Oct 2008 20:27
Data File: C:\HPCHEM\1\DATA\J7363.D
Name: 0810083-001A
Misc: SAMP,8260S7_OLM42, 5.0G
Method: C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.68	9.9 ug/L	687744	ISTD01	10.90	3463190	50.0
Carbon dioxide	2.72	20.0 ug/L	1384410	ISTD01	10.90	3463190	50.0

J7363.D JO09NTCS.M Wed Oct 22 11:18:46 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7363.D
Operator : GS
Acquired : 10 Oct 2008 20:27 using AcqMethod JO09VOCS
Instrument : #3MS10
Sample Name: 0810083-001A
Misc Info : SAMP,8260S7_OLM42, 5.0G
Vial Number: 50
Quant File :JO09NTCS.RES (RTE Integrator)



J7363.D JO09NTCS.M Wed Oct 22 11:18:45 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7363.D
Acq On : 10 Oct 2008 20:27
Sample : 0810083-001A
Misc : SAMP,8260S7_OLM42, 5.0G
MS Integration Params: LSCINT.P

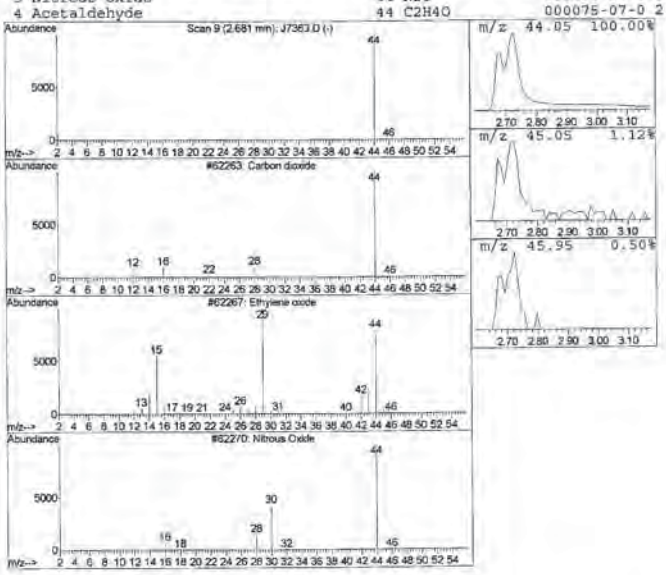
Vial: 50
Operator: GS
Inst : #3MS10
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	9.93 ug/L	687744	Fluorobenzene	10.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ RLA JM 11/22/08	44	CO2	000124-38-9	4
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7363.D J009NTCS.M Wed Oct 22 11:18:46 2008 Pa

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7363.D
Acq On : 10 Oct 2008 20:27
Sample : 0810083-001A
Misc : SAMP,8260S7_OLM42, 5.0G
MS Integration Params: LSCINT.P

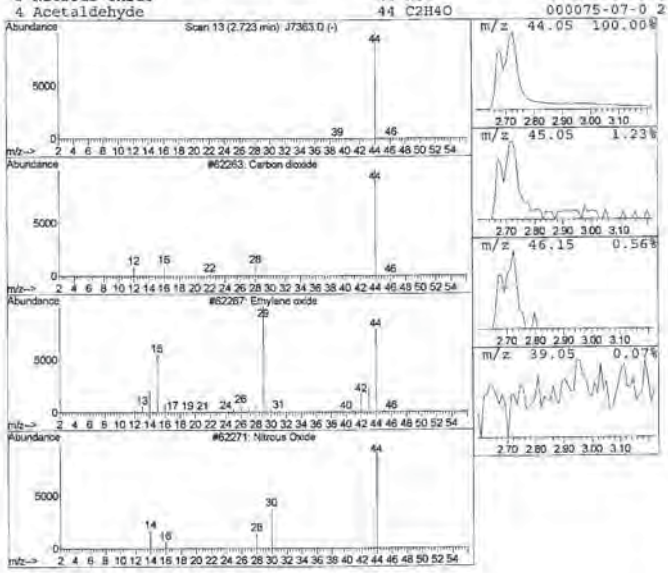
Vial: 50
Operator: GS
Inst : #3MS10
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.72	19.99 ug/L	1384410	Fluorobenzene	10.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ RLA JM 11/22/08	44	CO2	000124-38-9	4
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7363.D J009NTCS.M Wed Oct 22 11:18:46 2008 Pa

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15143
Revision:	10/28/08 13:17	FileID:	1-RA-J7376.D
Col Type:			

Sample Size: 5 g
%Moisture: 14.4
TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Chloromethane	ND		5.8	0.58	µg/Kg-dry	1	10/13/08 14:11
Vinyl chloride	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Bromomethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Chloroethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
Trichlorofluoromethane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
1,1-Dichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Acetone	ND		47	23	µg/Kg-dry	1	10/13/08 14:11
Carbon disulfide	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Methyl acetate	ND		2.9	12	µg/Kg-dry	1	10/13/08 14:11
Methylene chloride	ND		5.8	0.58	µg/Kg-dry	1	10/13/08 14:11
trans-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Methyl tert-butyl ether	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
cis-1,2-Dichloroethene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
2-Butanone	ND		47	23	µg/Kg-dry	1	10/13/08 14:11
Chloroform	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1,1-Trichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Cyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Carbon tetrachloride	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Benzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dichloroethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Trichloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Methylcyclohexane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
1,2-Dichloropropane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Bromodichloromethane	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
cis-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
4-Methyl-2-pentanone	ND		5.8	2.3	µg/Kg-dry	1	10/13/08 14:11
Toluene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
trans-1,3-Dichloropropene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1,2-Trichloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Tetrachloroethene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
F Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396439 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15143
Revision:	10/28/08 13:17	FileID:	1-RA-J7376.D
Col Type:			

Sample Size: 5 g
%Moisture: 14.4
TestCode: 8260S7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.8	2.3	µg/Kg-dry	1	10/13/08 14:11
Dibromochloromethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dibromoethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Chlorobenzene	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Ethylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Xylenes (total)	ND		5.8	1.8	µg/Kg-dry	1	10/13/08 14:11
Styrene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
Bromoform	ND		2.9	1.2	µg/Kg-dry	1	10/13/08 14:11
Isopropylbenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,1,2,2-Tetrachloroethane	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,3-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,4-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dichlorobenzene	ND		2.9	0.58	µg/Kg-dry	1	10/13/08 14:11
1,2-Dibromo-3-chloropropane	ND		5.8	1.2	µg/Kg-dry	1	10/13/08 14:11
1,2,4-Trichlorobenzene	ND		5.8	0.58	µg/Kg-dry	1	10/13/08 14:11
Surr: 1,2-Dichloroethane-d4	97.9		71-128	0.56	%REC	1	10/13/08 14:11
Surr: Toluene-d8	115		75-126	0.58	%REC	1	10/13/08 14:11
Surr: 4-Bromofluorobenzene	130 S		59-125	0.58	%REC	1	10/13/08 14:11

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
F Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396439 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7376.D Vial: 9
Acq On : 13 Oct 2008 14:11 Operator: JK
Sample : 0810083-001A Inst : #3MS10
Misc : RA ,8260S7_OLM42, 5G Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:35 2008 Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	2022213	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.82	82	672948	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	277978	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	557071	48.95 ug/L	0.00
Spiked Amount 50.000			Recovery	= 97.90%	
37) Toluene-d8	13.31	98	1845324	57.73 ug/L	0.00
Spiked Amount 50.000			Recovery	= 115.46%	
49) Bromofluorobenzene	17.87	95	419393	65.25 ug/L	0.00
Spiked Amount 50.000			Recovery	= 130.50%	

Target Compounds Qvalue

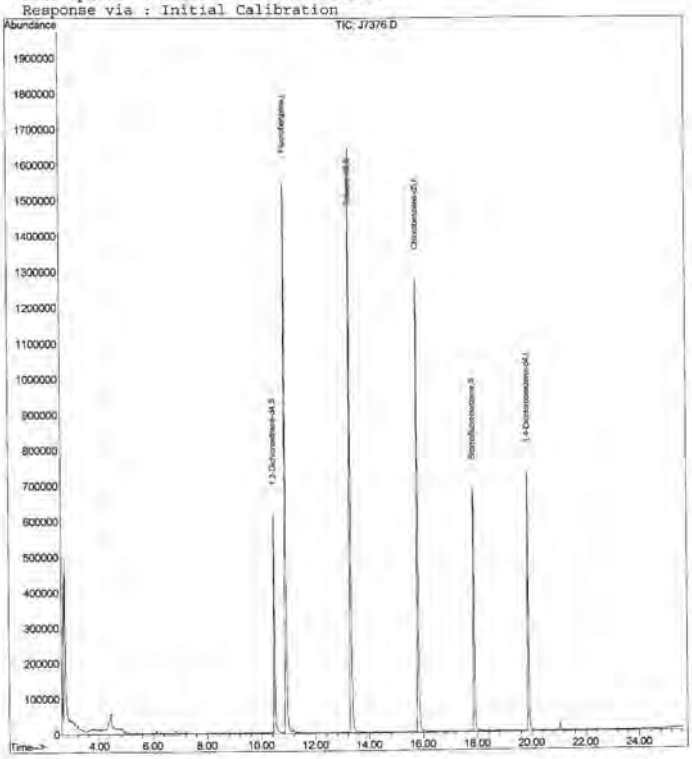
(#) = qualifier out of range (m) = manual integration
J7376.D J009NTCS.M Tue Oct 14 08:35:43 2008 Pa

224

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7376.D Vial: 9
Acq On : 13 Oct 2008 14:11 Operator: JK
Sample : 0810083-001A Inst : #3MS10
Misc : RA ,8260S7_OLM42, 5G Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:35 2008 Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration



J7376.D J009NTCS.M Tue Oct 14 08:35:44 2008 Pa

225

Life Science Laboratories, Inc. **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0810083-002A
Project: City of Geneva- Market Basket Site Client Sample ID: *MBSS-2*
W Order: 0810083 Collection Date: 10/10/08 9:30
Matrix: SOIL Date Received: 10/10/08 13:20
Inst. ID: MS03 10 Sample Size: 4.9 g PrepDate:
ColumnID: Rtx-VMS %Moisture: 25.1 BatchNo: R15131
Revision: 10/28/08 13:07 TestCode: 8260S7 OLM42 FileID: 1-SAMP-J7364.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Chloromethane	ND		6.8	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Vinyl chloride	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Bromomethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Chloroethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Trichlorofluoromethane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,1-Dichloroethene	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Acetone	ND		54	27	µg/Kg-dry	1.02	10/10/08 21:01
Carbon disulfide	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Methyl acetate	ND		3.4	14	µg/Kg-dry	1.02	10/10/08 21:01
Methylene chloride	ND		6.8	0.68	µg/Kg-dry	1.02	10/10/08 21:01
trans-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Methyl tert-butyl ether	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
cis-1,2-Dichloroethene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
2-Butanone	ND		54	27	µg/Kg-dry	1.02	10/10/08 21:01
Chloroform	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1,1-Trichloroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Cyclohexane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Carbon tetrachloride	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Benzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dichloroethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Trichloroethene	2.2	J	3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Methylcyclohexane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dichloropropane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Bromodichloromethane	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
cis-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
4-Methyl-2-pentanone	ND		6.8	2.7	µg/Kg-dry	1.02	10/10/08 21:01
Toluene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
trans-1,3-Dichloropropene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1,2-Trichloroethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Tetrachloroethene	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01

Qualifiers: * Value exceeds Maximum Contaminant Level; B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; H Holding times for preparation or analysis exceeded; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); P Prim./Conf. column %D or RPD exceeds limit; S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396298 Project Supervisor: Monika Santucci

226

Life Science Laboratories, Inc. **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0810083-002A
Project: City of Geneva- Market Basket Site Client Sample ID: *MBSS-2*
W Order: 0810083 Collection Date: 10/10/08 9:30
Matrix: SOIL Date Received: 10/10/08 13:20
Inst. ID: MS03 10 Sample Size: 4.9 g PrepDate:
ColumnID: Rtx-VMS %Moisture: 25.1 BatchNo: R15131
Revision: 10/28/08 13:07 TestCode: 8260S7 OLM42 FileID: 1-SAMP-J7364.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.8	2.7	µg/Kg-dry	1.02	10/10/08 21:01
Dibromochloromethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dibromoethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Chlorobenzene	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Ethylbenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Xylenes (total)	ND		6.8	2.0	µg/Kg-dry	1.02	10/10/08 21:01
Styrene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Bromoform	ND		3.4	1.4	µg/Kg-dry	1.02	10/10/08 21:01
Isopropylbenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,1,2,2-Tetrachloroethane	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,3-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,4-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dichlorobenzene	ND		3.4	0.68	µg/Kg-dry	1.02	10/10/08 21:01
1,2-Dibromo-3-chloropropane	ND		6.8	1.4	µg/Kg-dry	1.02	10/10/08 21:01
1,2,4-Trichlorobenzene	ND		6.8	0.68	µg/Kg-dry	1.02	10/10/08 21:01
Surr: 1,2-Dichloroethane-d4	97.7		71-128	0.68	%REC	1.02	10/10/08 21:01
Surr: Toluene-d8	129.5		75-125	0.68	%REC	1.02	10/10/08 21:01
Surr: 4-Bromofluorobenzene	141.5		59-125	0.68	%REC	1.02	10/10/08 21:01

Qualifiers: * Value exceeds Maximum Contaminant Level; B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; H Holding times for preparation or analysis exceeded; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); P Prim./Conf. column %D or RPD exceeds limit; S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396298 Project Supervisor: Monika Santucci

227

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7364.D Vial: 51
Acq On : 10 Oct 2008 21:01 Operator: GS
Sample : 0810083-002A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 4.9G Multiplr: 1.02
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:03 2008 Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

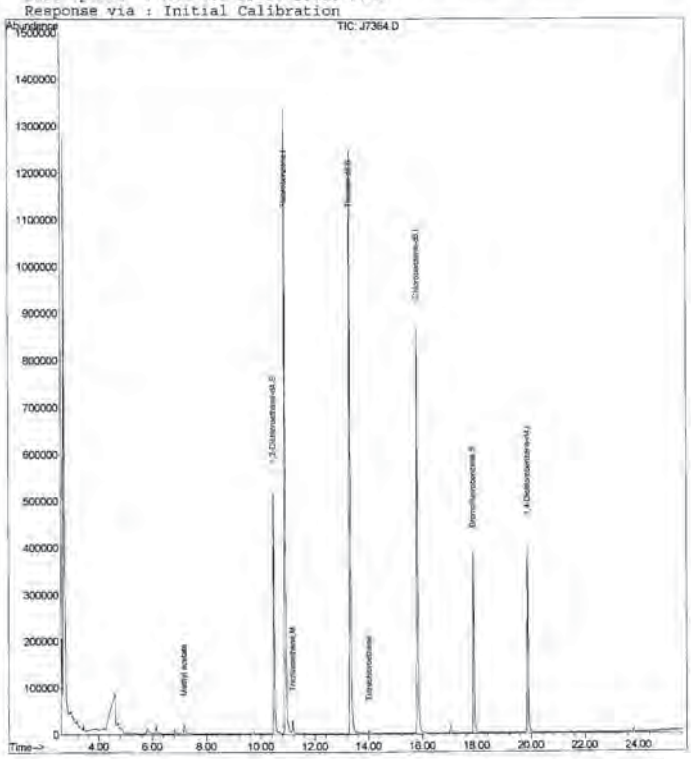
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	1691945	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.82	82	462706	50.00 ug/L	0.01
47) 1,4-Dichlorobenzene-d4	19.88	152	147931	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	465230	48.86 ug/L	0.00
Spiked Amount 50.000			Recovery = 97.72%		
37) Toluene-d8	13.32	98	1421140	64.66 ug/L	0.00
Spiked Amount 50.000			Recovery = 129.32%		
49) Bromofluorobenzene	17.87	95	241509	70.61 ug/L	0.00
Spiked Amount 50.000			Recovery = 141.22%		
Target Compounds					Qvalue
14) Methyl acetate	7.17	43	51440	8.73 ug/L	93
27) Trichloroethene	11.17	95	15603	1.59 ug/L	91
38) Tetrachloroethene	14.01	166	3646	0.69 ug/L	81

(#) = qualifier out of range (m) = manual integration
J7364.D J009NTCS.M Tue Oct 14 06:16:13 2008 Pag 228

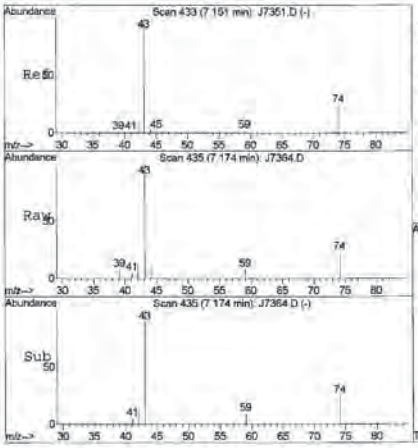
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7364.D Vial: 51
Acq On : 10 Oct 2008 21:01 Operator: GS
Sample : 0810083-002A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 4.9G Multiplr: 1.02
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:03 2008 Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration



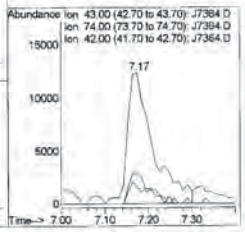
J7364.D J009NTCS.M Tue Oct 14 06:16:14 2008 Pag 229

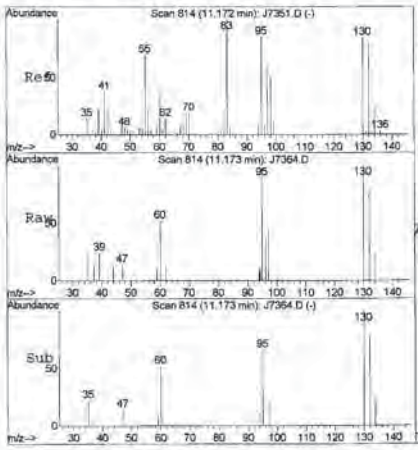


#14
Methyl acetate
Concen: 8.73 ug/L
RT: 7.17 min Scan# 435
Delta R.T. 0.02 min
Lab File: J7364.D
Acq: 10 Oct 2008 21:01

Tgt Ion: 43 Resp: 51440

Ion	Ratio	Lower	Upper
43	100		
74	18.8	0.0	53.7
42	13.3	0.0	42.9

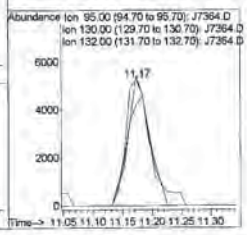




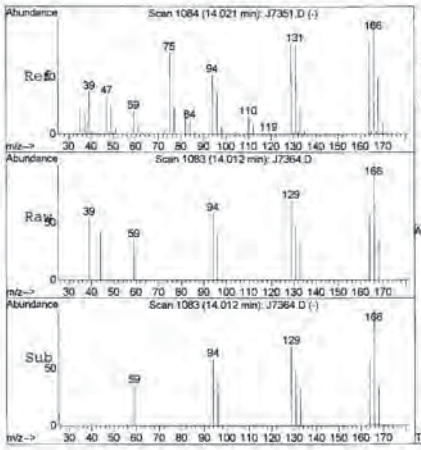
#27
Trichloroethene
Concen: 1.59 ug/L
RT: 11.17 min Scan# 814
Delta R.T. 0.00 min
Lab File: J7364.D
Acq: 10 Oct 2008 21:01

Tgt Ion: 95 Resp: 15603

Ion	Ratio	Lower	Upper
95	100		
130	85.8	64.3	124.3
132	82.1	61.4	121.4



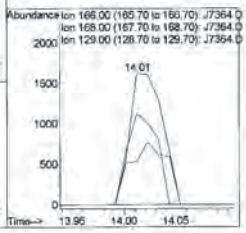
J7364.D J009NTCS.M Tue Oct 14 06:16:14 2008 Pag 230



#38
Tetrachloroethene
Concen: 0.69 ug/L
RT: 14.01 min Scan# 1083
Delta R.T. -0.01 min
Lab File: J7364.D
Acq: 10 Oct 2008 21:01

Tgt Ion:166 Resp: 3646

Ion	Ratio	Lower	Upper
166	100		
168	52.7	16.4	76.4
129	62.5	54.1	114.1



J7364.D J009NTCS.M Tue Oct 14 06:16:15 2008 Pag 231

Form 1 TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-2

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OHG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7364.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 25 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.02

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 5 SW8260B

Tentatively Identified Compound (LSC) summary

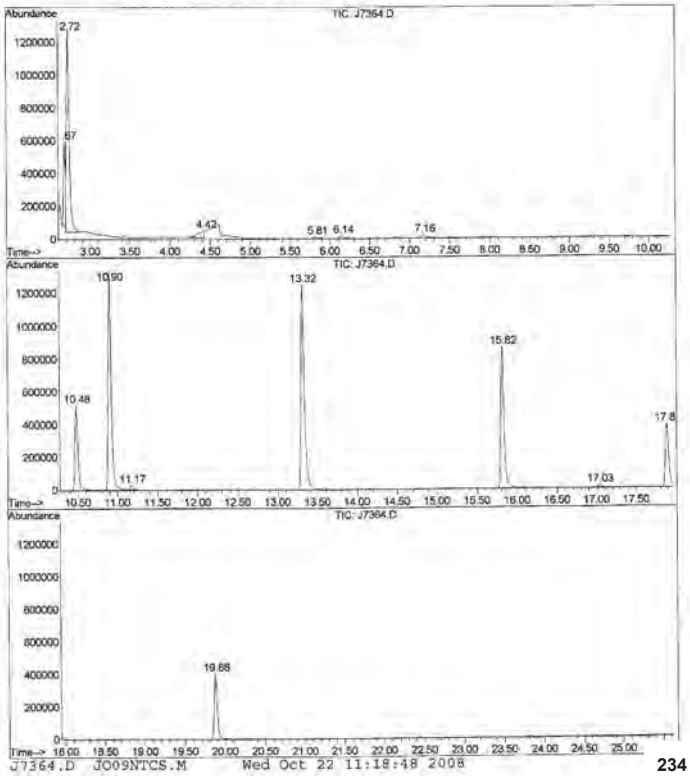
Operator ID: GS Date Acquired: 10 Oct 2008 21:01
Data File: C:\HPCHEM\1\DATA\J7364.D
Name: 0810083-002A
Misc: SAMP,8260S7_OLM42, 4.9G
Method: C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.67	12.5	ug/L	892128	ISTD01	10.90	3555880	50.0
Carbon dioxide	2.72	42.3	ug/L	3005070	ISTD01	10.90	3555880	50.0

J7364.D JO09NTCS.M Wed Oct 22 11:18:49 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7364.D
Operator : GS
Acquired : 10 Oct 2008 21:01 using AcqMethod JO09VOCS
Instrument : #3MS10
Sample Name: 0810083-002A
Misc Info : SAMP,8260S7_OLM42, 4.9G
Vial Number: 51
Quant File :JO09NTCS.RES (RTE Integrator)



J7364.D JO09NTCS.M Wed Oct 22 11:18:48 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7364.D Vial: 51
Acq On : 10 Oct 2008 21:01 Operator: GS
Sample : 0810083-002A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 4.9G Multiplr: 1.02
MS Integration Params: LSCINT.P

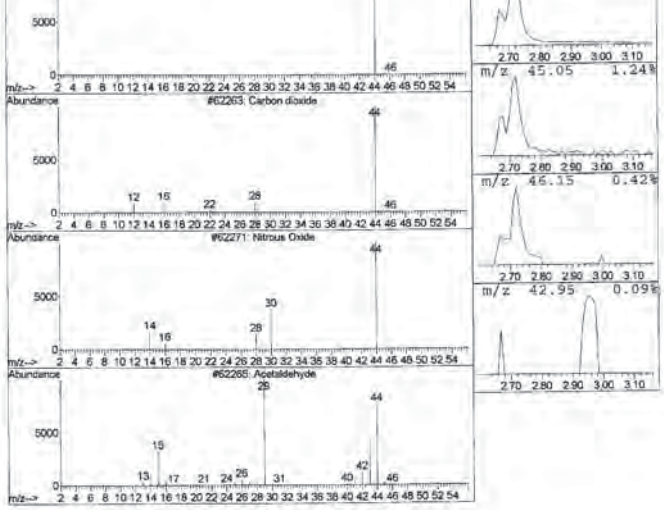
Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.67	12.54 ug/L	892128	Fluorobenzene	10.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ ASK 10/22/08	44	CO2	000124-38-9	4
2	Nitrous Oxide	44	N2O	010024-97-2	3
3	Acetaldehyde	44	C2H4O	000075-07-0	2
4	Ethyne, fluoro-	44	C2HF	002713-09-9	2



J7364.D JO09NTCS.M Wed Oct 22 11:18:49 2008

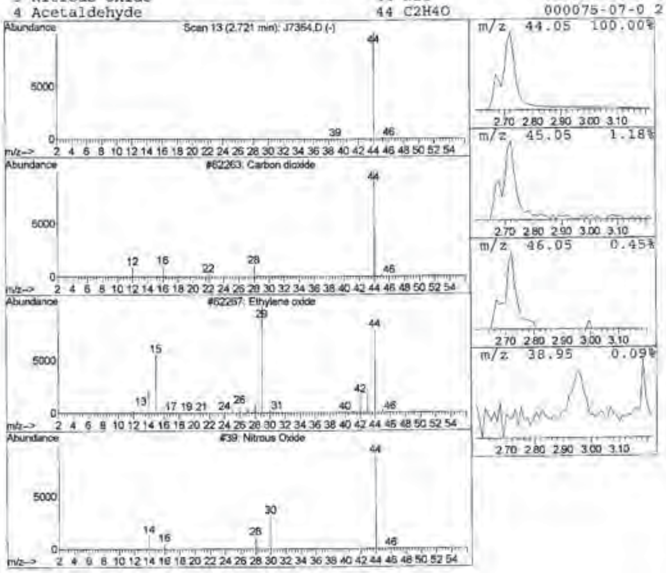
Library Search Compound Report

```
Data File : C:\HPCHEM\1\DATA\J7364.D                    Vial: 51
Acq On    : 10 Oct 2008  21:01                         Operator: GS
Sample    : 0810083-002A                               Inst     : #3MS10
Misc      : SAMP,8260S7_OLM42, 4.9G                    Multiplr: 1.02
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library      : C:\DATABASE\NBS75K.L
************************************************************************
Peak Number  2  Carbon dioxide                    Concentration Rank  1

  R.T.    EstConc          Area       Relative to ISTD          R.T.
-----------------------------------------------------------------------
  2.72   42.25 ug/L     3005070     Fluorobenzene              10.90

Hit# of  5     Tentative ID               MW  MolForm     CAS#       Qual
-----------------------------------------------------------------------
 1 Carbon dioxide  (struck through) ASA 10/22/08   44  CO2    000124-38-9  4
 2 Ethylene oxide                          44  C2H4O  000075-21-8  3
 3 Nitrous Oxide                           44  N2O    010024-97-2  3
 4 Acetaldehyde                            44  C2H4O  000075-07-0  2
```



LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057   (315) 437-0200
StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc.   **Lab ID:** 0810083-002ARA
Project: City of Geneva- Market Basket Site   **Client Sample ID:** *MBSS-2*
W Order: 0810083   **Collection Date:** 10/10/08 9:30
Matrix: SOIL   **Date Received:** 10/10/08 13:20
Inst. ID: MS03_10   **Sample Size:** 5 g   **PrepDate:**
ColumnID: Rtx-VMS   **%Moisture:** 25.1   **BatchNo:** R15143
Revision: 10/28/08 13:17   **TestCode:** 8260S7_OLM42   **FileID:** 1-RA-J7377.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Chloromethane	ND		6.7	0.67	µg/Kg-dry	1	10/13/08 14:45
Vinyl chloride	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Bromomethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Chloroethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
Trichlorofluoromethane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
1,1-Dichloroethene	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Acetone	ND		53	27	µg/Kg-dry	1	10/13/08 14:45
Carbon disulfide	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Methyl acetate	ND		3.3	13	µg/Kg-dry	1	10/13/08 14:45
Methylene chloride	ND		6.7	0.67	µg/Kg-dry	1	10/13/08 14:45
trans-1,2-Dichloroethene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Methyl tert-butyl ether	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
cis-1,2-Dichloroethene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
2-Butanone	ND		53	27	µg/Kg-dry	1	10/13/08 14:45
Chloroform	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1,1-Trichloroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Cyclohexane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Carbon tetrachloride	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Benzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dichloroethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Trichloroethene	1.4	J	3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Methylcyclohexane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
1,2-Dichloropropane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Bromodichloromethane	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
cis-1,3-Dichloropropene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
4-Methyl-2-pentanone	ND		6.7	2.7	µg/Kg-dry	1	10/13/08 14:45
Toluene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
trans-1,3-Dichloropropene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1,2-Trichloroethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Tetrachloroethene	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20   396440   **Project Supervisor:** Monika Santucci

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057   (315) 437-0200
StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc.   **Lab ID:** 0810083-002ARA
Project: City of Geneva- Market Basket Site   **Client Sample ID:** *MBSS-2*
W Order: 0810083   **Collection Date:** 10/10/08 9:30
Matrix: SOIL   **Date Received:** 10/10/08 13:20
Inst. ID: MS03_10   **Sample Size:** 5 g   **PrepDate:**
ColumnID: Rtx-VMS   **%Moisture:** 25.1   **BatchNo:** R15143
Revision: 10/28/08 13:17   **TestCode:** 8260S7_OLM42   **FileID:** 1-RA-J7377.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.7	2.7	µg/Kg-dry	1	10/13/08 14:45
Dibromochloromethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dibromoethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Chlorobenzene	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Ethylbenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Xylenes (total)	ND		6.7	2.0	µg/Kg-dry	1	10/13/08 14:45
Styrene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
Bromoform	ND		3.3	1.3	µg/Kg-dry	1	10/13/08 14:45
Isopropylbenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,1,2,2-Tetrachloroethane	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,3-Dichlorobenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,4-Dichlorobenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dichlorobenzene	ND		3.3	0.67	µg/Kg-dry	1	10/13/08 14:45
1,2-Dibromo-3-chloropropane	ND		6.7	1.3	µg/Kg-dry	1	10/13/08 14:45
1,2,4-Trichlorobenzene	ND		6.7	0.67	µg/Kg-dry	1	10/13/08 14:45
Surr: 1,2-Dichloroethane-d4	100		71-128	0.67	%REC	1	10/13/08 14:45
Surr: Toluene-d8	130	S	75-125	0.67	%REC	1	10/13/08 14:45
Surr: 4-Bromofluorobenzene	138	S	58-125	0.67	%REC	1	10/13/08 14:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20   396440   **Project Supervisor:** Monika Santucci

Quantitation Report   (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7377.D                    Vial: 10
Acq On    : 13 Oct 2008  14:45                         Operator: JK
Sample    : 0810083-002A                               Inst     : #3MS10
Misc      : RA  ,8260S7_OLM42, 5G                      Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14  8:36 2008               Quant Results File: JO09NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : JO09VOCS

 Internal Standards                 R.T.  QIon  Response  Conc Units Dev(Min)
-----------------------------------------------------------------------------
  1) Fluorobenzene                 10.91    96   1767404    50.00 ug/L    0.01
 36) Chlorobenzene-d5              15.82    82    479157    50.00 ug/L    0.01
 47) 1,4-Dichlorobenzene-d4        19.88   152    162340    50.00 ug/L    0.00

System Monitoring Compounds
 24) 1,2-Dichloroethane-d4         10.48    65    499461    50.22 ug/L    0.00
  Spiked Amount     50.000                     Recovery   =   100.44%
 37) Toluene-d8                    13.32    98   1479957    65.03 ug/L    0.01
  Spiked Amount     50.000                     Recovery   =   130.06%
 49) Bromofluorobenzene            17.87    95    259490    69.13 ug/L    0.00
  Spiked Amount     50.000                     Recovery   =   138.26%

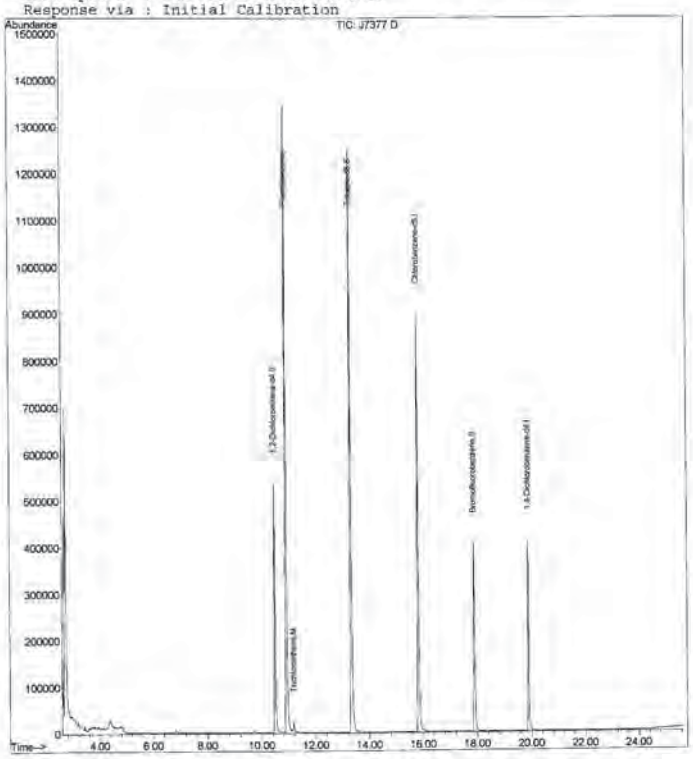
Target Compounds                                                      Qvalue
 27) Trichloroethene               11.17    95     10848     1.06 ug/L      91
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
```

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7377.D
Acq On : 13 Oct 2008 14:45
Sample : 0810083-002A
Misc : RA ,8260S7_OLM42, 5G
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:36 2008

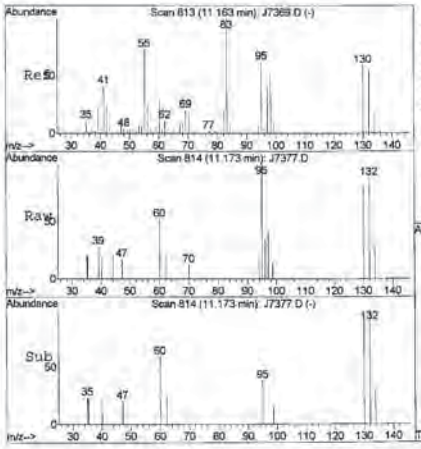
Vial: 10
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration



J7377.D J009NTCS.M Tue Oct 14 08:36:21 2008 Pa

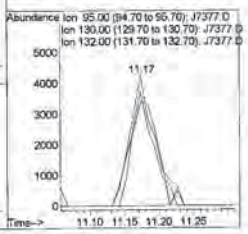
240



#27
Trichloroethene
Concen: 1.06 ug/L
RT: 11.17 min Scan# 814
Delta R.T. 0.01 min
Lab File: J7377.D
Acq: 13 Oct 2008 14:45

Tgt Ion: 95 Resp: 10848

Ion	Ratio	Lower	Upper
95	100		
130	91.4	64.3	124.3
132	76.9	61.4	121.4



J7377.D J009NTCS.M Tue Oct 14 08:36:22 2008 Pa

241

LSL Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0810083-003A
Project: City of Geneva- Market Basket Site Client Sample ID: *MBSS-3*
W Order: 0810083 Collection Date: 10/10/08 9:45
Matrix: SOIL Date Received: 10/10/08 13:20
Inst. ID: MS03 10 Sample Size: 5 g PrepDate:
ColumnID: Rtx-VMS %Moisture: 20.4 BatchNo: R15131
Revision: 10/28/08 13:07 TestCode: 8260S7 OLM42 FileID: 1-SAMP-J7365.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Chloromethane	ND		6.3	0.63	µg/Kg-dry	1	10/10/08 21:35
Vinyl chloride	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Bromomethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Chloroethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
Trichlorofluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
1,1-Dichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Acetone	ND		50	25	µg/Kg-dry	1	10/10/08 21:35
Carbon disulfide	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Methyl acetate	ND		3.1	13	µg/Kg-dry	1	10/10/08 21:35
Methylene chloride	ND		6.3	0.63	µg/Kg-dry	1	10/10/08 21:35
trans-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Methyl tert-butyl ether	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
cis-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
2-Butanone	ND		50	25	µg/Kg-dry	1	10/10/08 21:35
Chloroform	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1,1-Trichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Cyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Carbon tetrachloride	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Benzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Trichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Methylcyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
1,2-Dichloropropane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Bromodichloromethane	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
cis-1,3-Dichloropropene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
4-Methyl-2-pentanone	ND		6.3	2.5	µg/Kg-dry	1	10/10/08 21:35
Toluene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
trans-1,3-Dichloropropene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1,2-Trichloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Tetrachloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396299 Project Supervisor: Monika Santucci

242

LSL Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0810083-003A
Project: City of Geneva- Market Basket Site Client Sample ID: *MBSS-3*
W Order: 0810083 Collection Date: 10/10/08 9:45
Matrix: SOIL Date Received: 10/10/08 13:20
Inst. ID: MS03 10 Sample Size: 5 g PrepDate:
ColumnID: Rtx-VMS %Moisture: 20.4 BatchNo: R15131
Revision: 10/28/08 13:07 TestCode: 8260S7 OLM42 FileID: 1-SAMP-J7365.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.3	2.5	µg/Kg-dry	1	10/10/08 21:35
Dibromochloromethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dibromoethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Chlorobenzene	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Ethylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Xylenes (total)	ND		6.3	1.9	µg/Kg-dry	1	10/10/08 21:35
Styrene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
Bromoform	ND		3.1	1.3	µg/Kg-dry	1	10/10/08 21:35
Isopropylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,1,2,2-Tetrachloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,3-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,4-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/10/08 21:35
1,2-Dibromo-3-chloropropane	ND		6.3	1.3	µg/Kg-dry	1	10/10/08 21:35
1,2,4-Trichlorobenzene	ND		6.3	0.63	µg/Kg-dry	1	10/10/08 21:35
Surr: 1,2-Dichloroethane-d4	106		71-128	0.63	%REC	1	10/10/08 21:35
Surr: Toluene-d8	129 S		75-125	0.63	%REC	1	10/10/08 21:35
Surr: 4-Bromofluorobenzene	141 S		59-125	0.63	%REC	1	10/10/08 21:35

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396299 Project Supervisor: Monika Santucci

243

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7365.D Vial: 52
Acq On : 10 Oct 2008 21:35 Operator: GS
Sample : 0810083-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:03 2008 Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

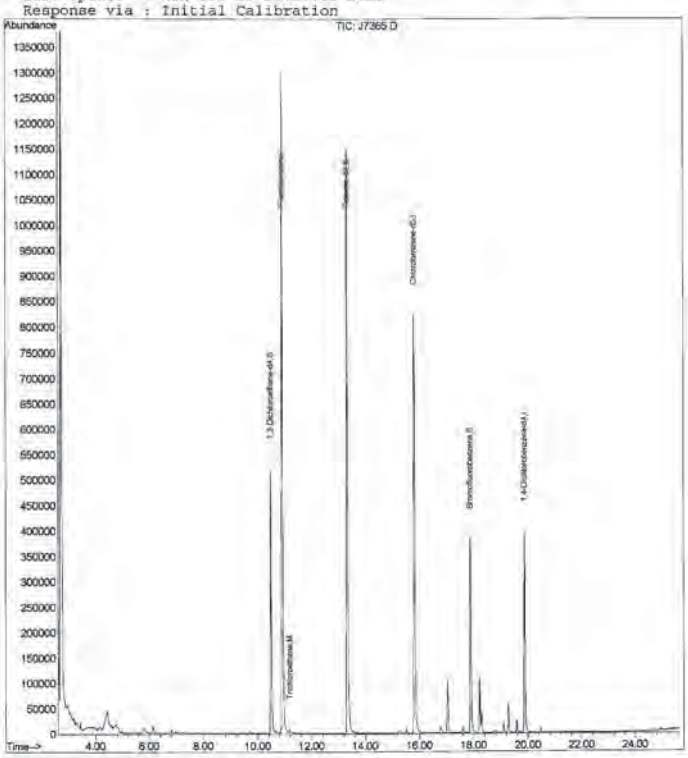
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	1625463	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	440460	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	146316	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	479207	52.39 ug/L	0.00
Spiked Amount 50.000			Recovery = 104.78%		
37) Toluene-d8	13.32	98	1345680	64.32 ug/L	0.00
Spiked Amount 50.000			Recovery = 128.64%		
49) Bromofluorobenzene	17.88	95	238261	70.43 ug/L	0.00
Spiked Amount 50.000			Recovery = 140.86%		
Target Compounds					Qvalue
27) Trichloroethene	11.18	95	4735	0.50 ug/L	81

(#) = qualifier out of range (m) = manual integration
J7365.D J009NTCS.M Tue Oct 14 06:16:17 2008 Pag 244

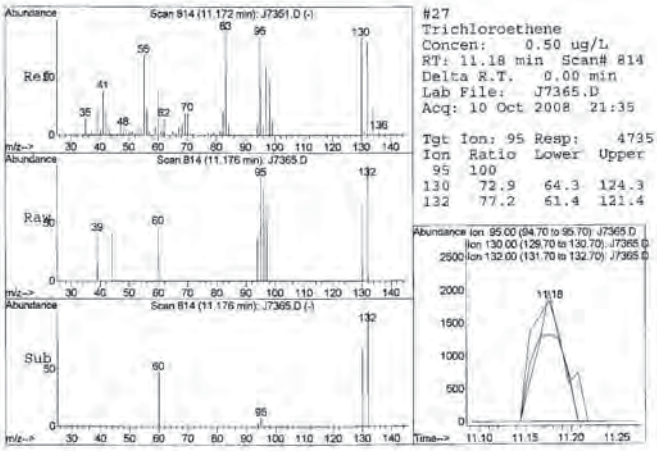
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7365.D Vial: 52
Acq On : 10 Oct 2008 21:35 Operator: GS
Sample : 0810083-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:03 2008 Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration



J7365.D J009NTCS.M Tue Oct 14 06:16:17 2008 Pag 245



#27
Trichloroethene
Concen: 0.50 ug/L
RT: 11.18 min Scan# 814
Delta R.T. 0.00 min
Lab File: J7365.D
Acq: 10 Oct 2008 21:35

Tgt Ion: 95 Resp: 4735

Ion	Ratio	Lower	Upper
95	100		
130	72.9	64.3	124.3
132	77.2	61.4	121.4

J7365.D J009NTCS.M Tue Oct 14 06:16:18 2008 Pag 246

Form I TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MRSS-3

Lab Name: Life Science Laboratories, Inc. Contract:
Lab Code: LSLB Case No.: OHG-MS SAS No.: SDG No.: 0810083
Matrix: (soil/water) SOIL Lab Sample ID: 0810083-003A
Sample wt/vol: 5 (g/mL) G Lab File ID: J7365.D
Level: LOW Date Received: 10/10/08
% Moisture: not dec. 20 Date Analyzed: 10/10/08
GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00
Extract Volume: (ul)

Number TICs found: 3 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000080-56-8	.alpha.-Pinene	17.03	8.8	JN
2. 003387-41-5	Bicyclo(3.1.0)hexane, 4-methyl	18.21	14	JN
3. 005989-54-8	Cyclohexene, 1-methyl-4-(1-met	19.27	8.1	JN

FORM I TIC 1 S8260B

247

Tentatively Identified Compound (LSC) summary

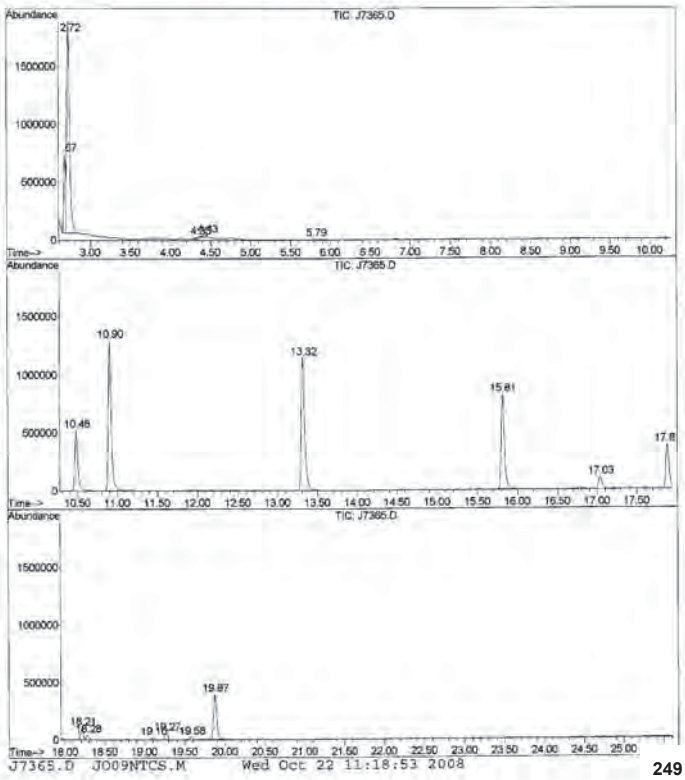
Operator ID: GS Date Acquired: 10 Oct 2008 21:35
Data File: C:\HPCHEM\1\DATA\J7365.D
Name: 0810083-003A
Misc: SAMP,8260S7_OLM42, 5.0G
Method: C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.67	18.2	ug/L	1241960	ISTD01	10.90	3411750	50.0
Carbon dioxide	2.72	63.9	ug/L	4361690	ISTD01	10.90	3411750	50.0
.alpha.-Pinene	17.03	7.0	ug/L	329924	ISTD02	15.81	2357090	50.0
Bicyclo[3.1.0]hexane	18.21	11.4	ug/L	249858	ISTD03	19.87	1095950	50.0
Cyclohexene, 1-methy	19.27	6.5	ug/L	141617	ISTD03	19.87	1095950	50.0

J7365.D J009NTCS.M Wed Oct 22 11:18:54 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7365.D
Operator : GS
Acquired : 10 Oct 2008 21:35 using AcqMethod J009VOCS
Instrument : #3MS10
Sample Name: 0810083-003A
Misc Info : SAMP,8260S7_OLM42, 5.0G
Vial Number: 52
Quant File :J009NTCS.RES (RTE Integrator)



J7365.D J009NTCS.M Wed Oct 22 11:18:53 2008

Library Search Compound Report

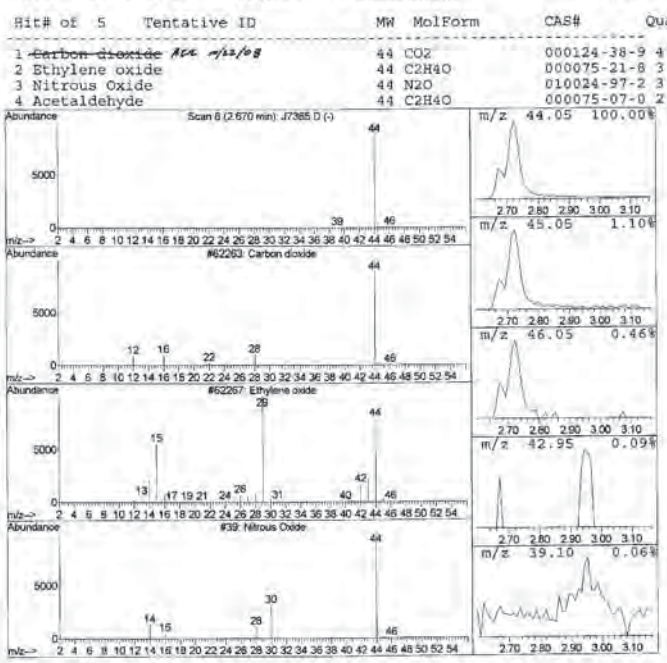
Data File : C:\HPCHEM\1\DATA\J7365.D Vial: 52
Acq On : 10 Oct 2008 21:35 Operator: GS
Sample : 0810083-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.67	18.20 ug/L	1241960	Fluorobenzene	10.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ RTK 11/12/08	44	CO2	000124-38-9	4
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7365.D J009NTCS.M Wed Oct 22 11:18:53 2008 Pa

Library Search Compound Report

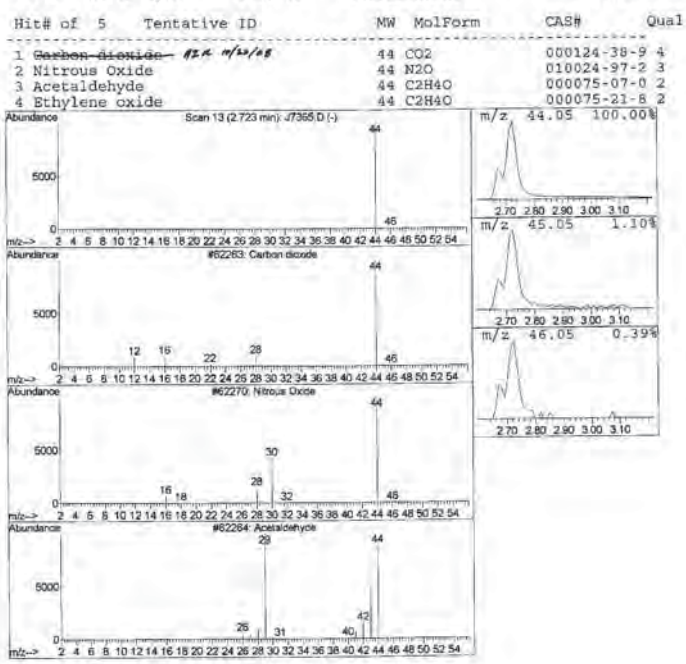
Data File : C:\HPCHEM\1\DATA\J7365.D Vial: 52
Acq On : 10 Oct 2008 21:35 Operator: GS
Sample : 0810083-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.72	63.92 ug/L	4361690	Fluorobenzene	10.90

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ RTK 11/12/08	44	CO2	000124-38-9	4
2	Nitrous Oxide	44	N2O	010024-97-2	3
3	Acetaldehyde	44	C2H4O	000075-07-0	2
4	Ethylene oxide	44	C2H4O	000075-21-8	2



J7365.D J009NTCS.M Wed Oct 22 11:18:53 2008 Pa

Library Search Compound Report

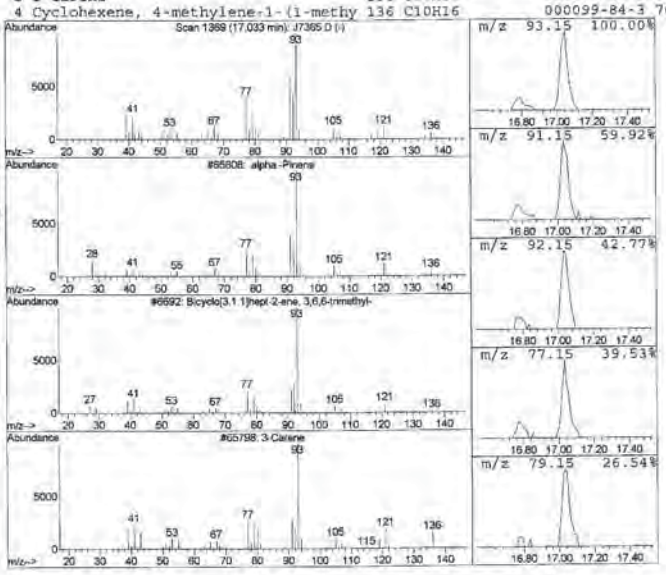
Data File : C:\HPCHEM\1\DATA\J7365.D Vial: 52
Acq On : 10 Oct 2008 21:35 Operator: GS
Sample : 0810083-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 .alpha.-Pinene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.03	7.00 ug/L	329924	Chlorobenzene-d5	15.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	.alpha.-Pinene	136	C10H16	000080-56-8	91
2	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	136	C10H16	004889-83-2	91
3	3-Carene	136	C10H16	013466-78-9	81
4	Cyclohexene, 4-methylene-1-(1-methy	136	C10H16	000099-84-3	76



J7365.D JO09NTCS.M Wed Oct 22 11:18:54 2008 Pa

Library Search Compound Report

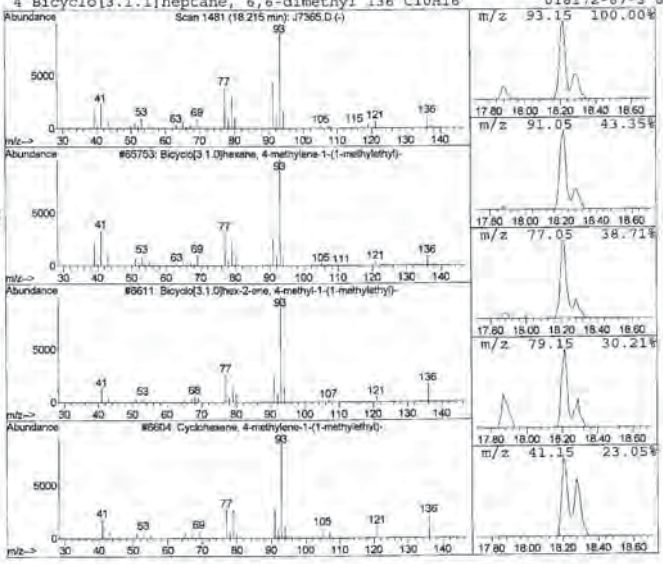
Data File : C:\HPCHEM\1\DATA\J7365.D Vial: 52
Acq On : 10 Oct 2008 21:35 Operator: GS
Sample : 0810083-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 Bicyclo[3.1.0]hexane, 4-methyl Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.21	11.40 ug/L	249858	1,4-Dichlorobenzene-d4	19.87

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Bicyclo[3.1.0]hexane, 4-methylene-1	136	C10H16	003387-41-5	91
2	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1	136	C10H16	028634-89-1	91
3	Cyclohexene, 4-methylene-1-(1-methy	136	C10H16	000099-84-3	91
4	Bicyclo[3.1.1]heptane, 6,6-dimethyl	136	C10H16	018172-67-3	80



J7365.D JO09NTCS.M Wed Oct 22 11:18:54 2008 Pa

Library Search Compound Report

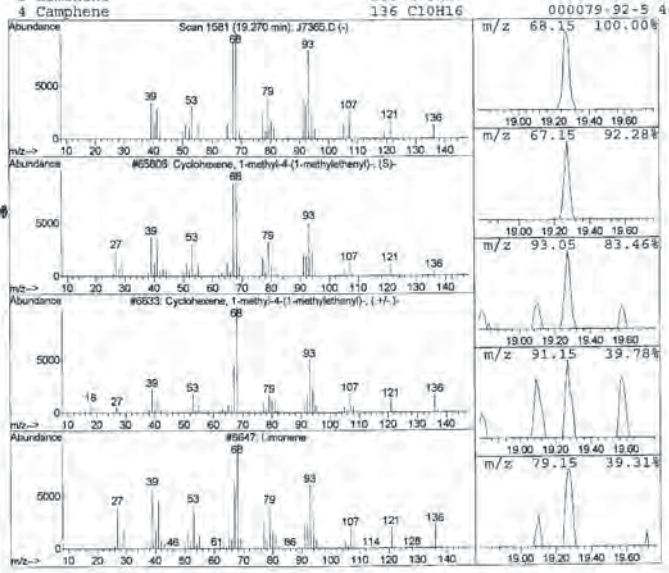
Data File : C:\HPCHEM\1\DATA\J7365.D Vial: 52
Acq On : 10 Oct 2008 21:35 Operator: GS
Sample : 0810083-003A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 5 Cyclohexene, 1-methyl-4-(1-met Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.27	6.46 ug/L	141617	1,4-Dichlorobenzene-d4	19.87

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Cyclohexene, 1-methyl-4-(1-methylet	136	C10H16	005989-54-8	90
2	Cyclohexene, 1-methyl-4-(1-methylet	136	C10H16	007705-14-8	68
3	Limonene	136	C10H16	000138-86-3	58
4	Camphene	136	C10H16	000079-92-5	46



J7365.D JO09NTCS.M Wed Oct 22 11:18:54 2008 Pa

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	0810083-003ARA
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MBSS-3*
W Order:	0810083	**Collection Date:**	10/10/08 9:45
Matrix:	SOIL	**Date Received:**	10/10/08 13:20
Inst. ID:	MS03 10	**Sample Size:** 5 g	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:** 20.4	**BatchNo:** R15143
Revision:	10/28/08 13:17	**TestCode:** 8260S7 OLM42	**FileID:** 1-RA-J7378.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Chloromethane	ND		6.3	0.62	µg/Kg-dry	1	10/13/08 15:19
Vinyl chloride	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Bromomethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Chloroethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
Trichlorofluoromethane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
1,1-Dichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Acetone	ND		50	25	µg/Kg-dry	1	10/13/08 15:19
Carbon disulfide	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Methyl acetate	ND		3.1	13	µg/Kg-dry	1	10/13/08 15:19
Methylene chloride	ND		6.3	0.63	µg/Kg-dry	1	10/13/08 15:19
trans-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Methyl tert-butyl ether	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
cis-1,2-Dichloroethene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
2-Butanone	ND		50	25	µg/Kg-dry	1	10/13/08 15:19
Chloroform	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1,1-Trichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Cyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Carbon tetrachloride	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Benzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dichloroethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Trichloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Methylcyclohexane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
1,2-Dichloropropane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Bromodichloromethane	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
cis-1,3-Dichloropropene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
4-Methyl-2-pentanone	ND		6.3	2.5	µg/Kg-dry	1	10/13/08 15:19
Toluene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
trans-1,3-Dichloropropene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1,2-Trichloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Tetrachloroethene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396441 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10 — Sample Size: 5 g	PrepDate:	
ColumnID:	Rtx-VMS — %Moisture: 20.4	BatchNo:	R15143
Revision:	10/28/08 13:17 — TestCode: 8260S7 OLM42	FileID:	1-RA-J7378.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.3	2.5	µg/Kg-dry	1	10/13/08 15:19
Dibromochloromethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dibromoethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Chlorobenzene	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Ethylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Xylenes (total)	ND		6.3	1.9	µg/Kg-dry	1	10/13/08 15:19
Styrene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
Bromoform	ND		3.1	1.3	µg/Kg-dry	1	10/13/08 15:19
Isopropylbenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,1,2,2-Tetrachloroethane	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,3-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,4-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dichlorobenzene	ND		3.1	0.63	µg/Kg-dry	1	10/13/08 15:19
1,2-Dibromo-3-chloropropane	ND		6.3	1.3	µg/Kg-dry	1	10/13/08 15:19
1,2,4-Trichlorobenzene	ND		6.3	0.63	µg/Kg-dry	1	10/13/08 15:19
Surr: 1,2-Dichloroethane-d4	102		71-128	0.63	%REC	1	10/13/08 15:19
Surr: Toluene-d8	128	S	75-125	0.63	%REC	1	10/13/08 15:19
Surr: 4-Bromofluorobenzene	138	S	59-125	0.63	%REC	1	10/13/08 15:19

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396441 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7378.D                    Vial: 11
Acq On    : 13 Oct 2008  15:19                       Operator: JK
Sample    : 0810083-003A                             Inst    : #3MS10
Misc      : RA  ,8260S7_OLM42, 5G                    Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Oct 14  8:36 2008                 Quant Results File: JO09NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : JO09VOCS

Internal Standards                  R.T. QIon  Response  Conc Units Dev(Min)
-------------------------------------------------------------------------------
 1) Fluorobenzene                  10.91   96  1772623   50.00 ug/L    0.01
 36) Chlorobenzene-d5              15.82   82   489944   50.00 ug/L    0.01
 47) 1,4-Dichlorobenzene-d4        19.88  152   167130   50.00 ug/L    0.00

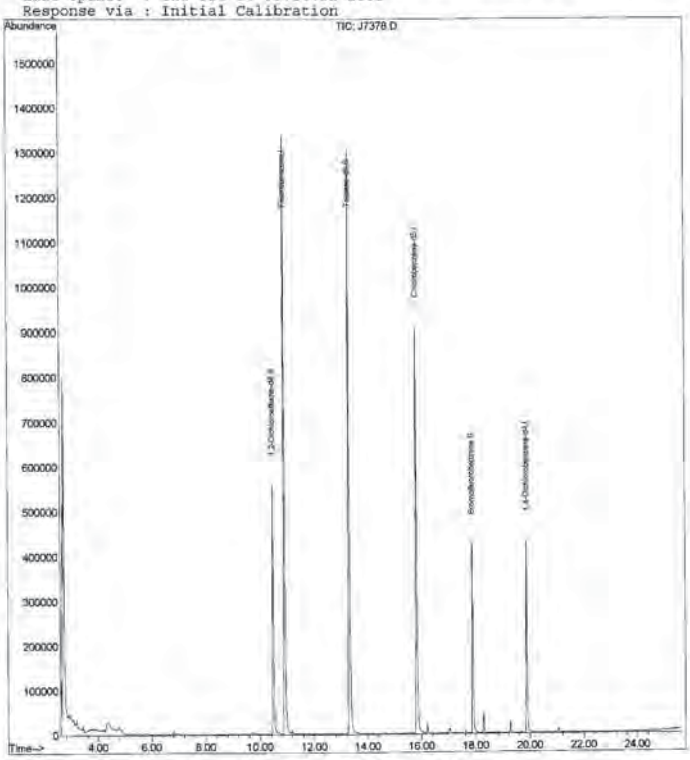
System Monitoring Compounds
 24) 1,2-Dichloroethane-d4         10.48   65   507207   50.84 ug/L    0.00
  Spiked Amount      50.000                     Recovery    =  101.68%
 37) Toluene-d8                    13.32   98  1489398   64.00 ug/L    0.01
  Spiked Amount      50.000                     Recovery    =  128.00%
 49) Bromofluorobenzene            17.87   95   266856   69.06 ug/L    0.00
  Spiked Amount      50.000                     Recovery    =  138.12%

Target Compounds                                                     Qvalue
-------------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J7378.D  JO09NTCS.M       Tue Oct 14 08:37:02 2008                        Pa
```


Quantitation Report

```
Data File : C:\HPCHEM\1\DATA\J7378.D                    Vial: 11
Acq On    : 13 Oct 2008  15:19                       Operator: JK
Sample    : 0810083-003A                             Inst    : #3MS10
Misc      : RA  ,8260S7_OLM42, 5G                    Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14  8:36 2008                 Quant Results File: JO09NTCS.RES

Method       : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
```



J7378.D JO09NTCS.M Tue Oct 14 08:37:02 2008 Pa

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10 — Sample Size: 5.1 g	PrepDate:	
ColumnID:	Rtx-VMS — %Moisture: 23.0	BatchNo:	R15131
Revision:	10/28/08 13:07 — TestCode: 8260S7 OLM42	FileID:	1-SAMP-J7366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Chloromethane	ND		6.4	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Vinyl chloride	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Bromomethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Chloroethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Trichlorofluoromethane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,1-Dichloroethene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Acetone	ND		51	25	µg/Kg-dry	0.98	10/10/08 22:08
Carbon disulfide	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Methyl acetate	ND		3.2	13	µg/Kg-dry	0.98	10/10/08 22:08
Methylene chloride	ND		6.4	0.64	µg/Kg-dry	0.98	10/10/08 22:08
trans-1,2-Dichloroethene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Methyl tert-butyl ether	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
cis-1,2-Dichloroethene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
2-Butanone	ND		51	25	µg/Kg-dry	0.98	10/10/08 22:08
Chloroform	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1,1-Trichloroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Cyclohexane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Carbon tetrachloride	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Benzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Trichloroethene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Methylcyclohexane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dichloropropane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Bromodichloromethane	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
cis-1,3-Dichloropropene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
4-Methyl-2-pentanone	ND		6.4	2.5	µg/Kg-dry	0.98	10/10/08 22:08
Toluene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
trans-1,3-Dichloropropene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1,2-Trichloroethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Tetrachloroethene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396300 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10 Sample Size: 5.1 g	PrepDate:	
ColumnID:	Rtx-VMS %Moisture: 23.0	BatchNo:	R15131
Revision:	10/28/08 13:07 TestCode: 8260S7 OLM42	FileID:	1-SAMP-J7366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.4	2.5	µg/Kg-dry	0.98	10/10/08 22:08
Dibromochloromethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dibromoethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Chlorobenzene	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Ethylbenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Xylenes (total)	ND		6.4	1.9	µg/Kg-dry	0.98	10/10/08 22:08
Styrene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Bromoform	ND		3.2	1.3	µg/Kg-dry	0.98	10/10/08 22:08
Isopropylbenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,1,2,2-Tetrachloroethane	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,3-Dichlorobenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,4-Dichlorobenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dichlorobenzene	ND		3.2	0.64	µg/Kg-dry	0.98	10/10/08 22:08
1,2-Dibromo-3-chloropropane	ND		6.4	1.3	µg/Kg-dry	0.98	10/10/08 22:08
1,2,4-Trichlorobenzene	ND		6.4	0.64	µg/Kg-dry	0.98	10/10/08 22:08
Surr: 1,2-Dichloroethane-d4	101		71-128	0.64	%REC	0.98	10/10/08 22:08
Surr: Toluene-d8	132	S	75-125	0.64	%REC	0.98	10/10/08 22:08
Surr: 4-Bromofluorobenzene	143	S	59-125	0.64	%REC	0.98	10/10/08 22:08

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396300 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7366.D Vial: 53
Acq On : 10 Oct 2008 22:08 Operator: GS
Sample : 0810083-004A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1G Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:03 2008 Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

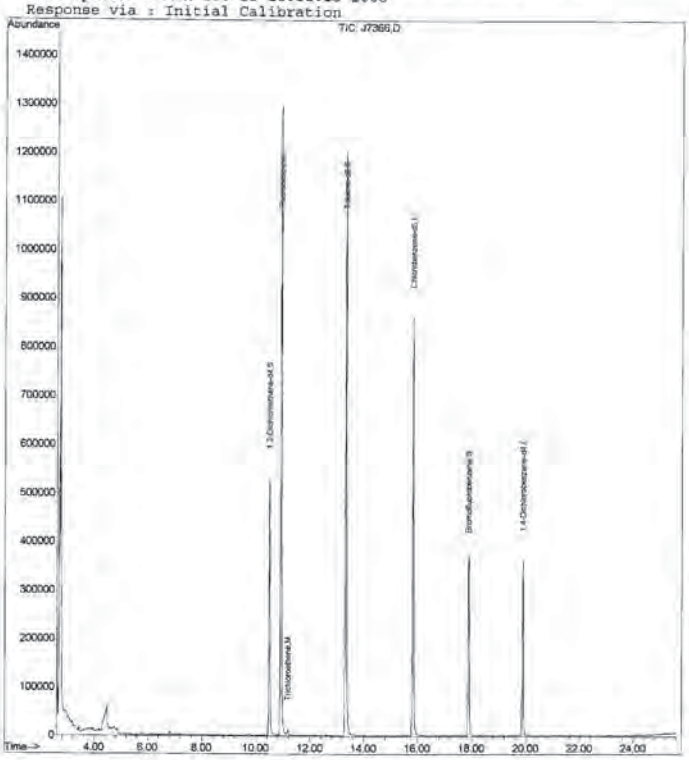
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	1693173	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.82	82	437918	50.00 ug/L	0.01
47) 1,4-Dichlorobenzene-d4	19.88	152	139364	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	478993	50.27 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.54%	
37) Toluene-d8	13.31	98	1371892	65.96 ug/L	0.00
Spiked Amount 50.000			Recovery	= 131.92%	
49) Bromofluorobenzene	17.87	95	229873	71.34 ug/L	0.00
Spiked Amount 50.000			Recovery	= 142.68%	
Target Compounds					Qvalue
27) Trichloroethene	11.18	95	5669	0.58 ug/L #	51

(#) = qualifier out of range (m) = manual integration
J7366.D J009NTCS.M Tue Oct 14 06:16:20 2008 Pa

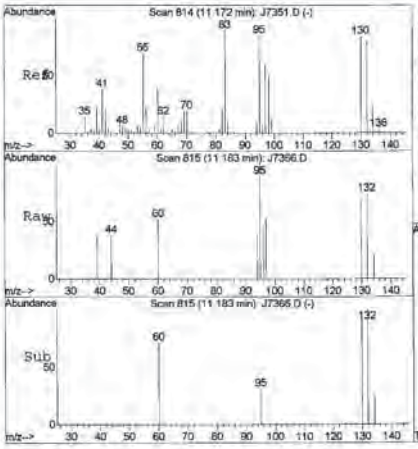
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7366.D Vial: 53
Acq On : 10 Oct 2008 22:08 Operator: GS
Sample : 0810083-004A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1G Multiplr: 0.98
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:03 2008 Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration



J7366.D J009NTCS.M Tue Oct 14 06:16:21 2008 Pag



#27
Trichloroethene
Concen: 0.58 ug/L
RT: 11.18 min Scan# 815
Delta R.T. 0.01 min
Lab File: J7366.D
Acq: 10 Oct 2008 22:08

Tgt Ion: 95 Resp: 5669

Ion	Ratio	Lower	Upper
95	100		
130	91.9	64.3	124.3
132	0.0	61.4	121.4#

J7366.D J009NTCS.M Tue Oct 14 06:16:21 2008 Pa

Form I TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MBS3-4

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7366.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. 23 Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 0.98

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 3 SW8260B

Tentatively Identified Compound (LSC) summary

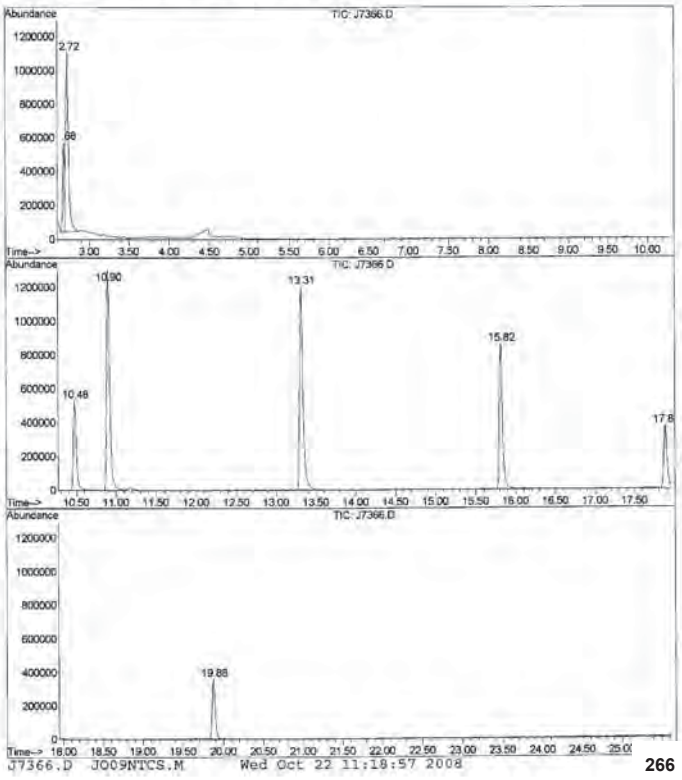
Operator ID: GS Date Acquired: 10 Oct 2008 22:08
Data File: C:\HPCHEM\1\DATA\J7366.D
Name: 0810083-004A
Misc: SAMP,8260S7_OLM42, 5.1G
Method: C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.68	12.4	ug/L	884950	ISTD01	10.91	3580460	50.0
Carbon dioxide	2.72	36.8	ug/L	2636320	ISTD01	10.91	3580460	50.0

J7366.D J009NTCS.M Wed Oct 22 11:18:58 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7366.D
Operator : GS
Acquired : 10 Oct 2008 22:08 using AcqMethod J009VOCS
Instrument : #3MS10
Sample Name: 0810083-004A
Misc Info : SAMP,8260S7_OLM42, 5.1G
Vial Number: 53
Quant File :J009NTCS.RES (RTE Integrator)



Library Search Compound Report

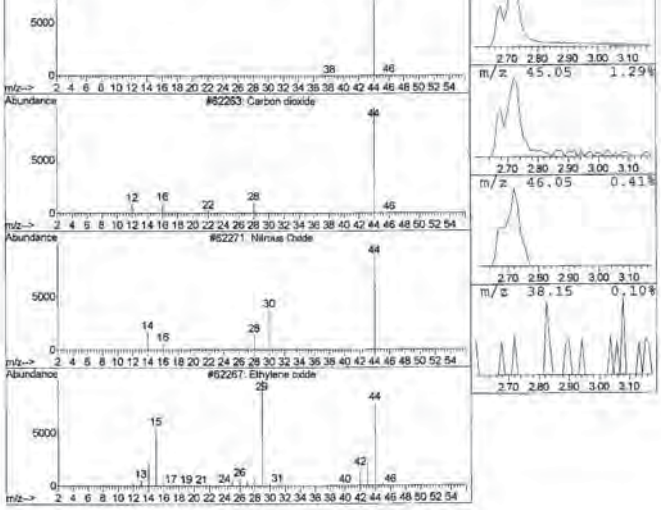
Data File : C:\HPCHEM\1\DATA\J7366.D Vial: 53
Acq On : 10 Oct 2008 22:08 Operator: GS
Sample : 0810083-004A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.1G Multiplr: 0.98
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	12.36 ug/L	884950	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ ASK 10/22/08	44	CO2	000124-38-9	4
2	Nitrous Oxide	44	N2O	010024-97-2	3
3	Ethylene oxide	44	C2H4O	000075-21-8	2
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7366.D J009NTCS.M Wed Oct 22 11:18:58 2008

Library Search Compound Report

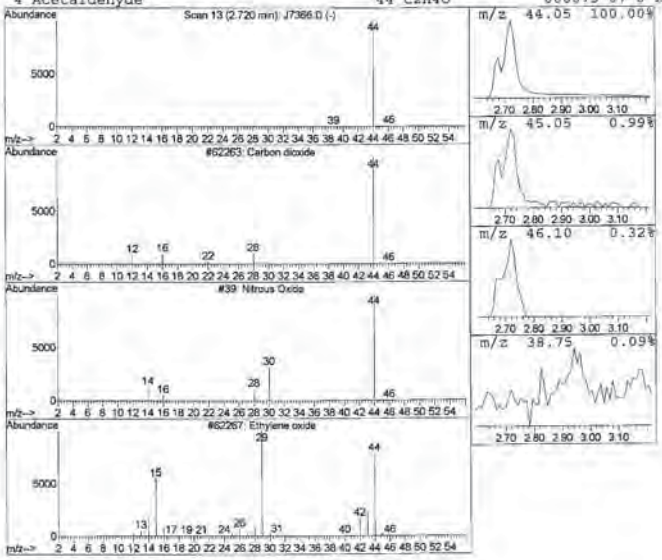
Data File : C:\HPCHEM\1\DATA\J7366.D Vial: 53
Acq On : 10 Oct 2008 22:08 Operator: GS
Sample : 0810083-004A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.10 Multiplr: 0.98
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.72	36.82 ug/L	2636320	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ NEA 11/12/08	44	CO2	000124-38-9	4
2	Nitrous Oxide	44	N2O	010024-97-2	3
3	Ethylene oxide	44	C2H4O	000075-21-8	2
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7366.D JO09NTCS.M Wed Oct 22 11:18:58 2008 P

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5 g		
ColumnID:	Rtx-VMS	%Moisture: 23.0	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7379.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Chloromethane	ND		6.5	0.65	µg/Kg-dry	1	10/13/08 15:52
Vinyl chloride	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Bromomethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Chloroethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
Trichlorofluoromethane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
1,1-Dichloroethene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Acetone	ND		52	26	µg/Kg-dry	1	10/13/08 15:52
Carbon disulfide	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Methyl acetate	ND		3.2	13	µg/Kg-dry	1	10/13/08 15:52
Methylene chloride	ND		6.5	0.65	µg/Kg-dry	1	10/13/08 15:52
trans-1,2-Dichloroethene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Methyl tert-butyl ether	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
cis-1,2-Dichloroethene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
2-Butanone	ND		52	26	µg/Kg-dry	1	10/13/08 15:52
Chloroform	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1,1-Trichloroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Cyclohexane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Carbon tetrachloride	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Benzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dichloroethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Trichloroethene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Methylcyclohexane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
1,2-Dichloropropane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Bromodichloromethane	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
cis-1,3-Dichloropropene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
4-Methyl-2-pentanone	ND		6.5	2.6	µg/Kg-dry	1	10/13/08 15:52
Toluene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
trans-1,3-Dichloropropene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1,2-Trichloroethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Tetrachloroethene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396442 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	5 g		
ColumnID:	Rtx-VMS	%Moisture: 23.0	BatchNo: R15143
Revision:	10/28/08 13:17	TestCode: 8260S7 OLM42	FileID: 1-RA-J7379.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.5	2.6	µg/Kg-dry	1	10/13/08 15:52
Dibromochloromethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dibromoethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Chlorobenzene	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Ethylbenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Xylenes (total)	ND		6.5	1.8	µg/Kg-dry	1	10/13/08 15:52
Styrene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
Bromoform	ND		3.2	1.3	µg/Kg-dry	1	10/13/08 15:52
Isopropylbenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,1,2,2-Tetrachloroethane	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,3-Dichlorobenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,4-Dichlorobenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dichlorobenzene	ND		3.2	0.65	µg/Kg-dry	1	10/13/08 15:52
1,2-Dibromo-3-chloropropane	ND		6.5	1.3	µg/Kg-dry	1	10/13/08 15:52
1,2,4-Trichlorobenzene	ND		6.5	0.65	µg/Kg-dry	1	10/13/08 15:52
Surr: 1,2-Dichloroethane-d4	100		71-128	0.65	%REC	1	10/13/08 15:52
Surr: Toluene-d8	130	S	75-125	0.65	%REC	1	10/13/08 15:52
Surr: 4-Bromofluorobenzene	141	S	59-125	0.65	%REC	1	10/13/08 15:52

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396442 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7379.D Vial: 12
Acq On : 13 Oct 2008 15:52 Operator: JK
Sample : 0810083-004A Inst : #3MS10
Misc : RA ,8260S7_OLM42, 5G Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:38 2008 Quant Results File: JO09NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : JO09VOCS

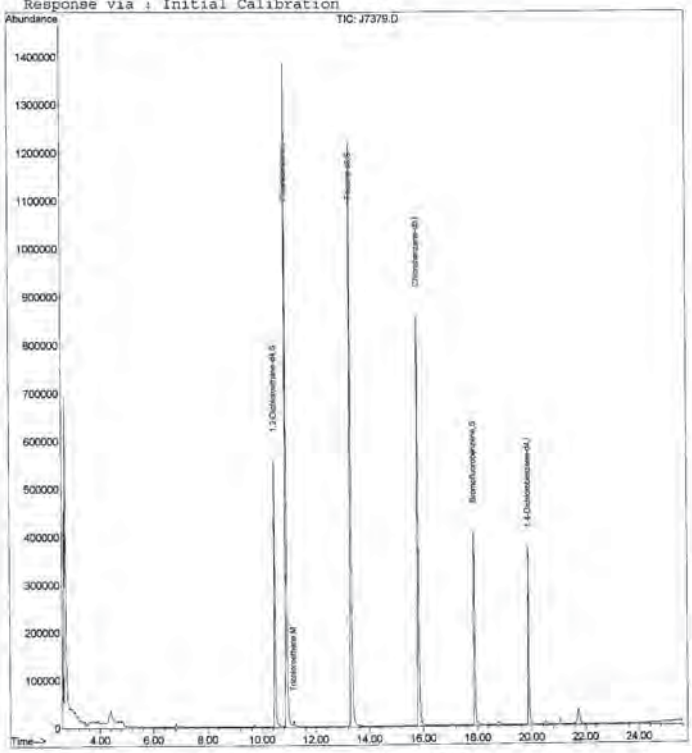
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.90	96	1758301	50.00	ug/L	0.00
36) Chlorobenzene-d5	15.81	82	467627	50.00	ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	151092	50.00	ug/L	0.00
System Monitoring Compounds						
24) 1,2-Dichloroethane-d4	10.48	65	496268	50.15	ug/L	0.00
Spiked Amount 50.000			Recovery	=	100.30%	
37) Toluene-d8	13.32	98	1438978	64.79	ug/L	0.01
Spiked Amount 50.000			Recovery	=	129.58%	
49) Bromofluorobenzene	17.88	95	246654	70.60	ug/L	0.00
Spiked Amount 50.000			Recovery	=	141.20%	
Target Compounds						Qvalue
27) Trichloroethene	11.16	95	5802	0.57	ug/L #	3

(#) = qualifier out of range (m) = manual integration
J7379.D JO09NTCS.M Tue Oct 14 08:38:31 2008 Pa

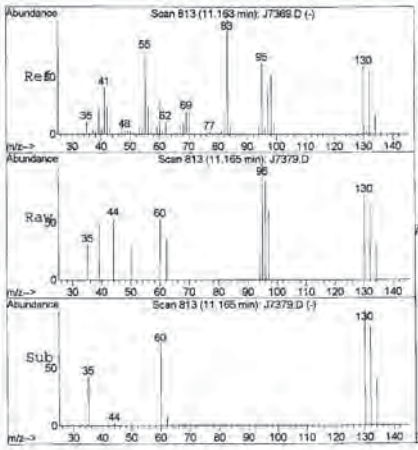
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7379.D Vial: 12
Acq On : 13 Oct 2008 15:52 Operator: JK
Sample : 0810083-004A Inst : #3MS10
Misc : RA ,8260S7_OLM42, 5G Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:38 2008 Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration



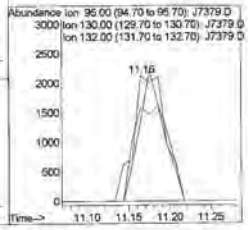
J7379.D J009NTCS.M Tue Oct 14 08:38:32 2008 Pa



#27
Trichloroethene
Concen: 0.57 ug/L
RT: 11.16 min Scan# 813
Delta R.T. 0.00 min
Lab File: J7379.D
Acq: 13 Oct 2008 15:52

Tgt Ion: 95 Resp: 5802

Ion	Ratio	Lower	Upper
95	100		
130	0.0	64.3	124.3#
132	0.0	61.4	121.4#



J7379.D J009NTCS.M Tue Oct 14 08:38:32 2008 Pa

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab ID: 0810083-005A
Client Sample ID: *MBSS-FD*
W Order: 0810083
Matrix: SOIL
Collection Date: 10/10/08 10:05
Date Received: 10/10/08 13:20
Inst. ID: MS03 10
Sample Size: 5 g
PrepDate:
ColumnID: Rtx-VMS
%Moisture: 17.8
BatchNo: R15131
Revision: 10/28/08 13:07
TestCode: 8260S7_OLM42
FileID: 1-SAMP-J7367.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Chloromethane	ND		6.1	0.61	µg/Kg-dry	1	10/10/08 22:42
Vinyl chloride	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Bromomethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Chloroethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
Trichlorofluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Acetone	ND		49	24	µg/Kg-dry	1	10/10/08 22:42
Carbon disulfide	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Methyl acetate	ND		3.0	12	µg/Kg-dry	1	10/10/08 22:42
Methylene chloride	ND		6.1	0.61	µg/Kg-dry	1	10/10/08 22:42
trans-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Methyl tert-butyl ether	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
cis-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
2-Butanone	ND		49	24	µg/Kg-dry	1	10/10/08 22:42
Chloroform	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Benzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
cis-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
4-Methyl-2-pentanone	ND		6.1	2.4	µg/Kg-dry	1	10/10/08 22:42
Toluene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
trans-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1,2-Trichloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396301 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab ID: 0810083-005A
Client Sample ID: *MBSS-FD*
W Order: 0810083
Matrix: SOIL
Collection Date: 10/10/08 10:05
Date Received: 10/10/08 13:20
Inst. ID: MS03 10
Sample Size: 5 g
PrepDate:
ColumnID: Rtx-VMS
%Moisture: 17.8
BatchNo: R15131
Revision: 10/28/08 13:07
TestCode: 8260S7_OLM42
FileID: 1-SAMP-J7367.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		6.1	2.4	µg/Kg-dry	1	10/10/08 22:42
Dibromochloromethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dibromoethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Ethylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Xylenes (total)	ND		6.1	1.8	µg/Kg-dry	1	10/10/08 22:42
Styrene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
Bromoform	ND		3.0	1.2	µg/Kg-dry	1	10/10/08 22:42
Isopropylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,1,2,2-Tetrachloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,3-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,4-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/10/08 22:42
1,2-Dibromo-3-chloropropane	ND		6.1	1.2	µg/Kg-dry	1	10/10/08 22:42
1,2,4-Trichlorobenzene	ND		6.1	0.61	µg/Kg-dry	1	10/10/08 22:42
Surr: 1,2-Dichloroethane-d4	98.6		71-128	0.61	%REC	1	10/10/08 22:42
Surr: Toluene-d8	129 S		75-125	0.61	%REC	1	10/10/08 22:42
Surr: 4-Bromofluorobenzene	152 S		59-125	0.61	%REC	1	10/10/08 22:42

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396301 **Project Supervisor:** Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7367.D
Acq On : 10 Oct 2008 22:42
Sample : 0810083-005A
Misc : SAMP,8260S7_OLM42, 5.0G
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:04 2008

Vial: 54
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	1709468	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.82	82	462335	50.00 ug/L	0.01
47) 1,4-Dichlorobenzene-d4	19.88	152	140070	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	475425	49.42 ug/L	0.00
Spiked Amount 50.000			Recovery = 98.84%		
37) Toluene-d8	13.31	98	1411376	64.27 ug/L	0.00
Spiked Amount 50.000			Recovery = 128.54%		
49) Bromofluorobenzene	17.88	95	246636	76.15 ug/L	0.01
Spiked Amount 50.000			Recovery = 152.30%		
Target Compounds					Qvalue
27) Trichloroethene	11.18	95	6891	0.69 ug/L	76

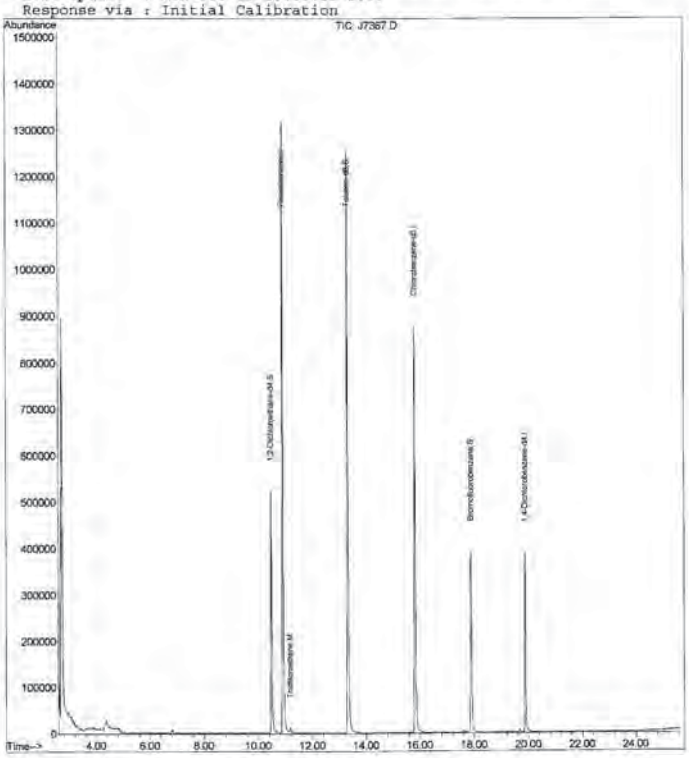
(#) = qualifier out of range (m) = manual integration
J7367.D J009NTCS.M Tue Oct 14 06:16:23 2008

Quantitation Report

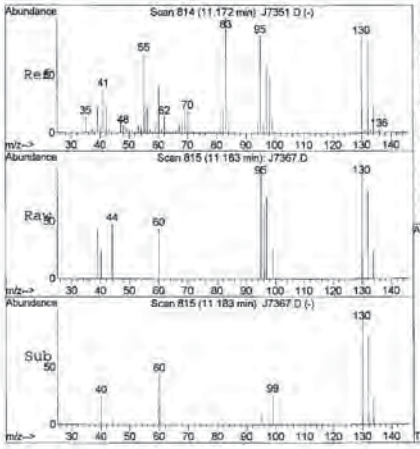
Data File : C:\HPCHEM\1\DATA\J7367.D
Acq On : 10 Oct 2008 22:42
Sample : 0810083-005A
Misc : SAMP,8260S7_OLM42, 5.0G
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:04 2008

Vial: 54
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration



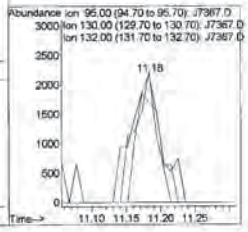
J7367.D J009NTCS.M Tue Oct 14 06:16:24 2008



#27
Trichloroethene
Concen: 0.69 ug/L
RT: 11.18 min Scan# 815
Delta R.T. 0.01 min
Lab File: J7367.D
Acq: 10 Oct 2008 22:42

Tgt Ion: 95 Resp: 6891

Ion	Ratio	Lower	Upper
95	100		
130	71.8	64.3	124.3
132	68.2	61.4	121.4



J7367.D J009NTCS.M Tue Oct 14 06:16:24 2008

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MBSS-FD

Lab Name: Life Science Laboratories, Inc. Contract: _____
Lab Code: LSLB Case No.: ONG-MS SAS No.: _____ SDG No.: 0810083
Matrix: (soil/water) SOIL Lab Sample ID: 0810083-005A
Sample wt/vol: 5 (g/mL) G Lab File ID: J7367.D
Level: LOW Date Received: 10/10/08
% Moisture: not dec. 18 Date Analyzed: 10/10/08
GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00
Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 11 SW8260B

Tentatively Identified Compound (LSC) summary

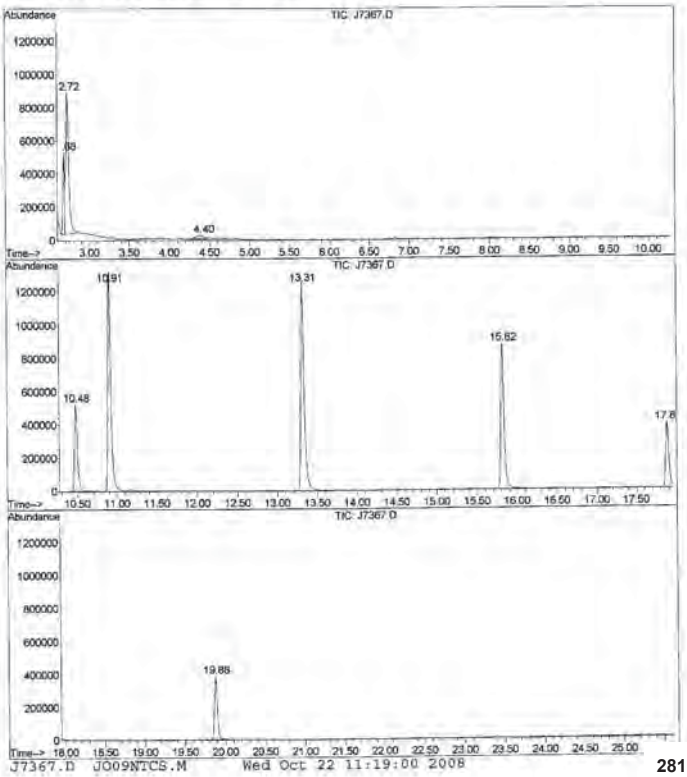
Operator ID: GS Date Acquired: 10 Oct 2008 22:42
Data File: C:\HPCHEM\1\DATA\J7367.D
Name: 0810083-005A
Misc: SAMP,8260S7_OLM42, 5.0G
Method: C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.68	10.8	ug/L	779572	ISTD01	10.91	3605580	50.0
Carbon dioxide	2.72	30.4	ug/L	2193540	ISTD01	10.91	3605580	50.0

J7367.D J009NTCS.M Wed Oct 22 11:19:01 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7367.D
Operator : GS
Acquired : 10 Oct 2008 22:42 using AcqMethod J009VOCS
Instrument : #3MS10
Sample Name: 0810083-005A
Misc Info : SAMP,8260S7_OLM42, 5.0G
Vial Number: 54
Quant File :J009NTCS.RES (RTE Integrator)



Library Search Compound Report

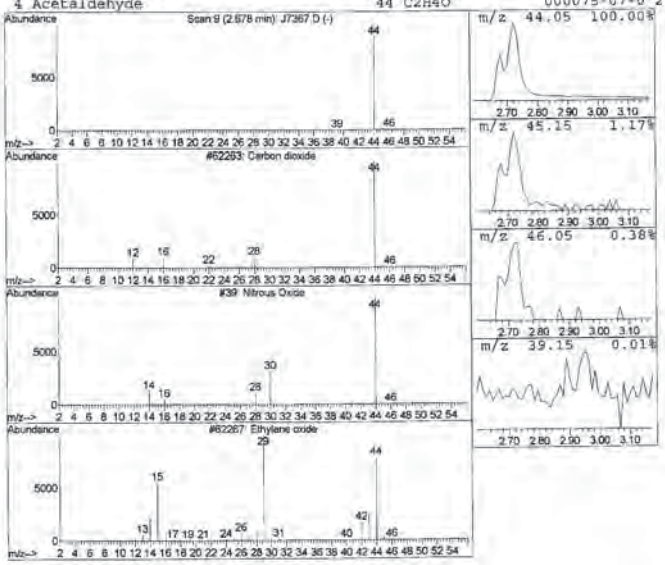
Data File : C:\HPCHEM\1\DATA\J7367.D Vial: 54
Acq On : 10 Oct 2008 22:42 Operator: GS
Sample : 0810083-005A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	10.81 ug/L	779572	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ AAK 11/12/08	44	CO2	000124-38-9	4
2	Nitrous Oxide	44	N2O	010024-97-2	3
3	Ethylene oxide	44	C2H4O	000075-21-8	2
4	Acetaldehyde	44	C2H4O	000075-07-0	2



Library Search Compound Report

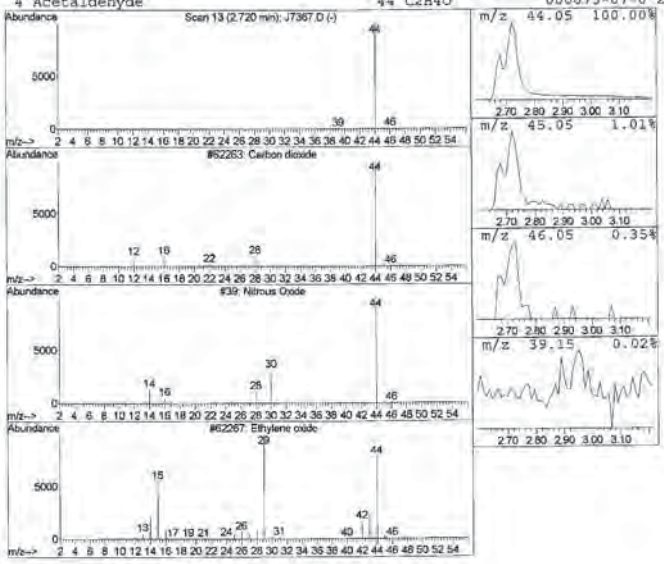
Data File : C:\HPCHEM\1\DATA\J7367.D Vial: 54
Acq On : 10 Oct 2008 22:42 Operator: GS
Sample : 0810083-005A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5.0G Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.72	30.42 ug/L	2193540	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ AAK 11/12/08	44	CO2	000124-38-9	4
2	Nitrous Oxide	44	N2O	010024-97-2	3
3	Ethylene oxide	44	C2H4O	000075-21-8	2
4	Acetaldehyde	44	C2H4O	000075-07-0	2



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15143
Revision:	10/28/08 13:17	FileID:	1-RA-J7380.D
Col Type:			

Sample Size: 5 g; %Moisture: 17.8; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Chloromethane	ND		6.1	0.61	µg/Kg-dry	1	10/13/08 16:26
Vinyl chloride	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Bromomethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Chloroethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
Trichlorofluoromethane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
1,1-Dichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Acetone	ND		49	24	µg/Kg-dry	1	10/13/08 16:26
Carbon disulfide	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Methyl acetate	ND		3.0	12	µg/Kg-dry	1	10/13/08 16:26
Methylene chloride	ND		6.1	0.61	µg/Kg-dry	1	10/13/08 16:26
trans-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Methyl tert-butyl ether	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
cis-1,2-Dichloroethene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
2-Butanone	ND		49	24	µg/Kg-dry	1	10/13/08 16:26
Chloroform	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1,1-Trichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Cyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Carbon tetrachloride	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Benzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dichloroethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Trichloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Methylcyclohexane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
1,2-Dichloropropane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Bromodichloromethane	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
cis-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
4-Methyl-2-pentanone	ND		6.1	2.4	µg/Kg-dry	1	10/13/08 16:26
Toluene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
trans-1,3-Dichloropropene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1,2-Trichloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Tetrachloroethene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. columns %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396443 **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005ARA
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15143
Revision:	10/28/08 13:17	FileID:	1-RA-J7380.D
Col Type:			

Sample Size: 5 g; %Moisture: 17.8; TestCode: 8260S7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		6.1	2.4	µg/Kg-dry	1	10/13/08 16:26
Dibromochloromethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dibromoethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Chlorobenzene	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Ethylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Xylenes (total)	ND		6.1	1.8	µg/Kg-dry	1	10/13/08 16:26
Styrene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
Bromoform	ND		3.0	1.2	µg/Kg-dry	1	10/13/08 16:26
Isopropylbenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,1,2,2-Tetrachloroethane	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,3-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,4-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dichlorobenzene	ND		3.0	0.61	µg/Kg-dry	1	10/13/08 16:26
1,2-Dibromo-3-chloropropane	ND		6.1	1.2	µg/Kg-dry	1	10/13/08 16:26
1,2,4-Trichlorobenzene	ND		6.1	0.61	µg/Kg-dry	1	10/13/08 16:26
Surr: 1,2-Dichloroethane-d4	105		71-128	0.61	%REC	1	10/13/08 16:26
Surr: Toluene-d8	129 S		75-125	0.61	%REC	1	10/13/08 16:26
Surr: 4-Bromofluorobenzene	144 S		59-125	0.61	%REC	1	10/13/08 16:26

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. columns %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396443 **Project Supervisor:** Monika Santucci

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7380.D                    Vial: 13
Acq On    : 13 Oct 2008  16:26                       Operator: JK
Sample    : 0810083-005A                             Inst    : #3MS10
Misc      : RA  ,8260S7_OLM42, 5G                    Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14  8:38 2008                 Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards                  R.T.  QIon  Response   Conc Units Dev(Min)
-------------------------------------------------------------------------------
 1) Fluorobenzene                  10.91   96  1697739    50.00 ug/L    0.01
 36) Chlorobenzene-d5              15.82   82   456750    50.00 ug/L    0.01
 47) 1,4-Dichlorobenzene-d4        19.88  152   147328    50.00 ug/L    0.00

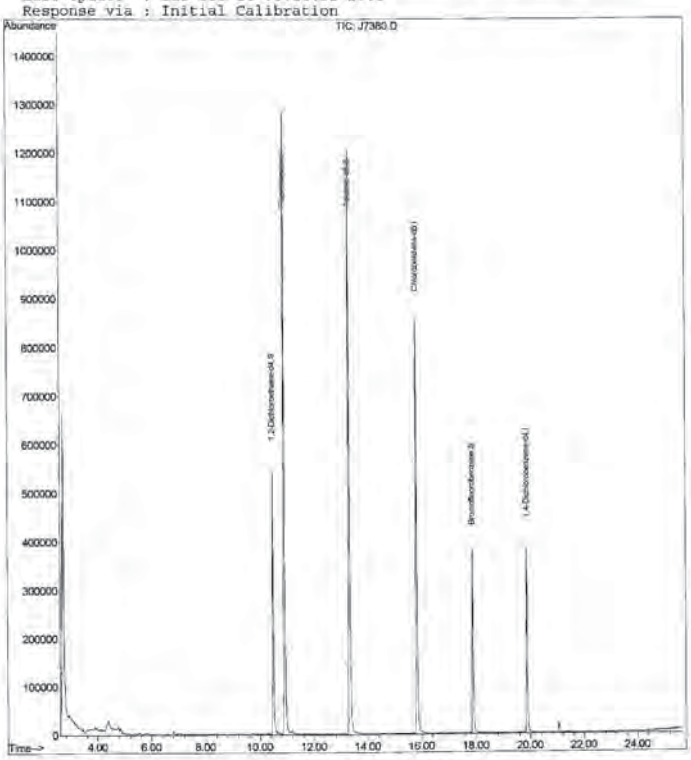
System Monitoring Compounds
 24) 1,2-Dichloroethane-d4         10.48   65   499895    52.32 ug/L    0.00
  Spiked Amount      50.000                     Recovery    =  104.64%
 37) Toluene-d8                    13.32   98  1394970    64.30 ug/L    0.01
  Spiked Amount      50.000                     Recovery    =  128.60%
 49) Bromofluorobenzene            17.87   95   244983    71.92 ug/L    0.00
  Spiked Amount      50.000                     Recovery    =  143.84%

Target Compounds                                                   Qvalue
-------------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J7380.D  J009NTCS.M       Tue Oct 14 08:39:01 2008                    Pag
```


Quantitation Report

```
Data File : C:\HPCHEM\1\DATA\J7380.D                    Vial: 13
Acq On    : 13 Oct 2008  16:26                       Operator: JK
Sample    : 0810083-005A                             Inst    : #3MS10
Misc      : RA  ,8260S7_OLM42, 5G                    Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14  8:38 2008                 Quant Results File: J009NTCS.RES

Method       : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
```



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	WATER Q	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10 Sample Size: 5 mL	PrepDate:	
ColumnID:	Rtx-VMS %Moisture:	BatchNo:	R15131
Revision:	10/28/08 13:07 TestCode: 8260S7 OLM42	FileID:	1-SAMP-J7357.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Chloromethane	ND		5.0	0.50	µg/L	1	10/10/08 17:06
Vinyl chloride	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Bromomethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Chloroethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
Trichlorofluoromethane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
1,1-Dichloroethene	ND		2.5	1.0	µg/L	1	10/10/08 17:06
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Acetone	ND		40	20	µg/L	1	10/10/08 17:06
Carbon disulfide	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Methyl acetate	ND		2.5	10	µg/L	1	10/10/08 17:06
Methylene chloride	ND		5.0	0.50	µg/L	1	10/10/08 17:06
trans-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Methyl tert-butyl ether	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1-Dichloroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
cis-1,2-Dichloroethene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
2-Butanone	ND		40	20	µg/L	1	10/10/08 17:06
Chloroform	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1,1-Trichloroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Cyclohexane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Carbon tetrachloride	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Benzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dichloroethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Trichloroethene	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Methylcyclohexane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
1,2-Dichloropropane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Bromodichloromethane	ND		2.5	1.0	µg/L	1	10/10/08 17:06
cis-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
4-Methyl-2-pentanone	ND		5.0	2.0	µg/L	1	10/10/08 17:06
Toluene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
trans-1,3-Dichloropropene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1,2-Trichloroethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Tetrachloroethene	ND		2.5	1.0	µg/L	1	10/10/08 17:06

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396296 Project Supervisor: Monika Santucci

288

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	WATER Q	Date Received:	10/10/08 13:20
Inst. ID:	MS03 10 Sample Size: 5 mL	PrepDate:	
ColumnID:	Rtx-VMS %Moisture:	BatchNo:	R15131
Revision:	10/28/08 13:07 TestCode: 8260S7 OLM42	FileID:	1-SAMP-J7357.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.0	2.0	µg/L	1	10/10/08 17:06
Dibromochloromethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dibromoethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Chlorobenzene	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Ethylbenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Xylenes (total)	ND		5.0	1.5	µg/L	1	10/10/08 17:06
Styrene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
Bromoform	ND		2.5	1.0	µg/L	1	10/10/08 17:06
Isopropylbenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,3-Dichlorobenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,4-Dichlorobenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dichlorobenzene	ND		2.5	0.50	µg/L	1	10/10/08 17:06
1,2-Dibromo-3-chloropropane	ND		5.0	1.0	µg/L	1	10/10/08 17:06
1,2,4-Trichlorobenzene	ND		5.0	0.50	µg/L	1	10/10/08 17:06
Surr: 1,2-Dichloroethane-d4	98.9		71-128	0.50	%REC	1	10/10/08 17:06
Surr: Toluene-d8	103		75-125	0.50	%REC	1	10/10/08 17:06
Surr: 4-Bromofluorobenzene	111		59-125	0.50	%REC	1	10/10/08 17:06

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 13:20 396296 Project Supervisor: Monika Santucci

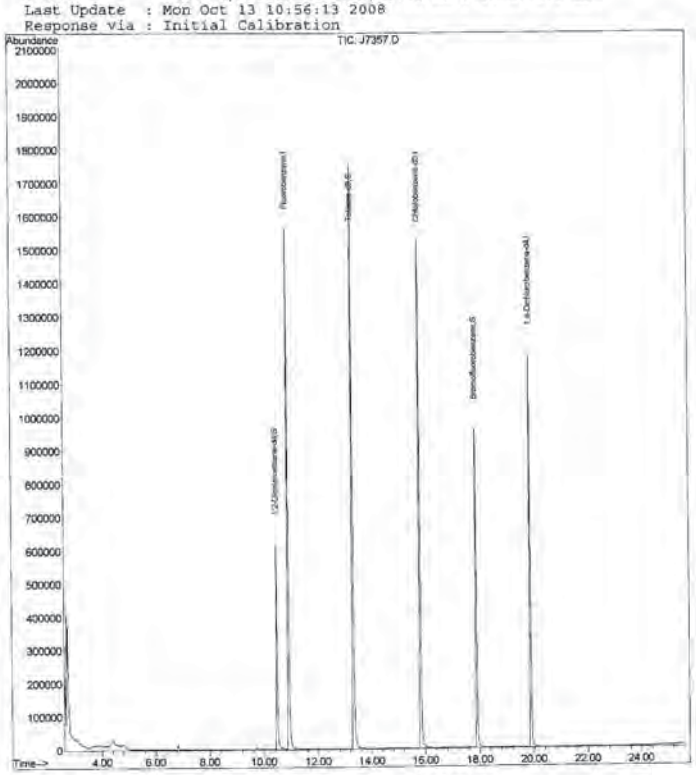
289

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7357.D
Acq On : 10 Oct 2008 17:06
Sample : 0810083-006A
Misc : SAMP,8260S7_OLM42, 5ML
MS Integration Params: RTEINT.P
Quant Time: Oct 13 11:00 2008

Vial: 44
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JO09NTCS.RES

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration



J7357.D JO09NTCS.M Mon Oct 13 11:00:23 2008

290

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: Trip Blank

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: J7357.D

Level: LOW Date Received: 10/10/08

% Moisture: not dec. Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: ~~ug/kg~~ ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 13 SW8260B

291

Tentatively Identified Compound (LSC) summary

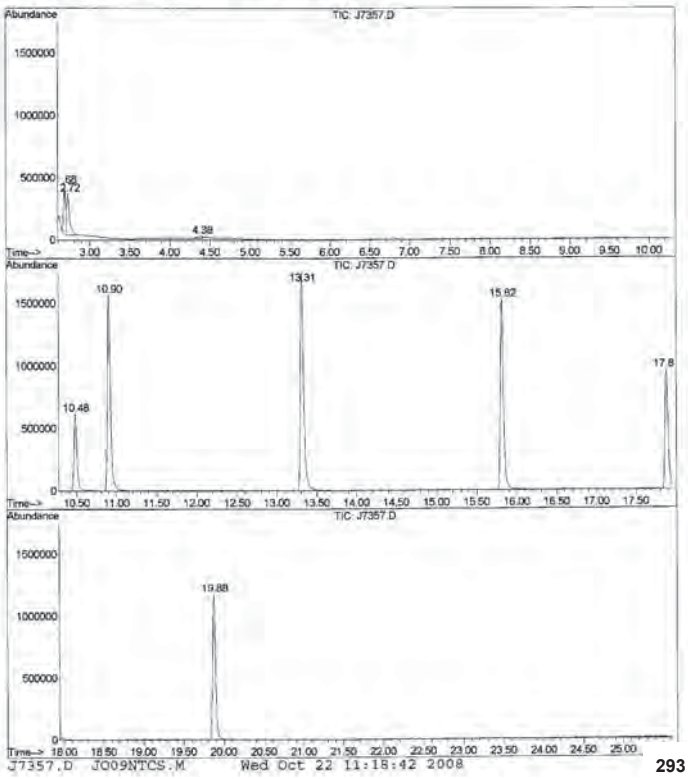
Operator ID: GS Date Acquired: 10 Oct 2008 17:06
Data File: C:\HPCHEM\1\DATA\J7357.D
Name: 0810083-006A
Misc: SAMP,8260S7_OLM42, 5ML
Method: C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.68	7.6	ug/L	646449	ISTD01	10.91	4277510	50.0
Carbon dioxide	2.72	9.7	ug/L	833154	ISTD01	10.91	4277510	50.0

J7357.D J009NTCS.M Wed Oct 22 11:18:43 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7357.D
Operator : GS
Acquired : 10 Oct 2008 17:06 using AcqMethod J009VOCS
Instrument : #3MS10
Sample Name: 0810083-006A
Misc Info : SAMP,8260S7_OLM42, 5ML
Vial Number: 44
Quant File :J009NTCS.RES (RTE Integrator)



J7357.D J009NTCS.M Wed Oct 22 11:18:42 2008

Library Search Compound Report

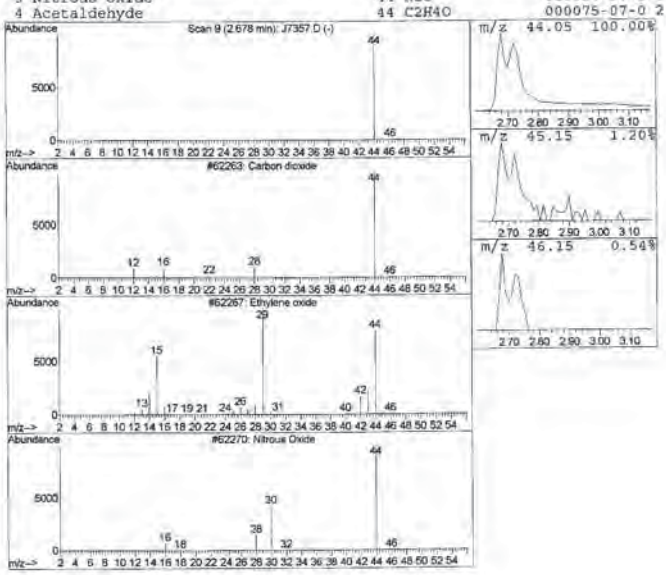
Data File : C:\HPCHEM\1\DATA\J7357.D Vial: 44
Acq On : 10 Oct 2008 17:06 Operator: GS
Sample : 0810083-006A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5ML Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	7.56 ug/L	646449	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ RCA JK 10/22/08	44	CO2	000124-38-9	4
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7357.D J009NTCS.M Wed Oct 22 11:18:42 2008

Library Search Compound Report

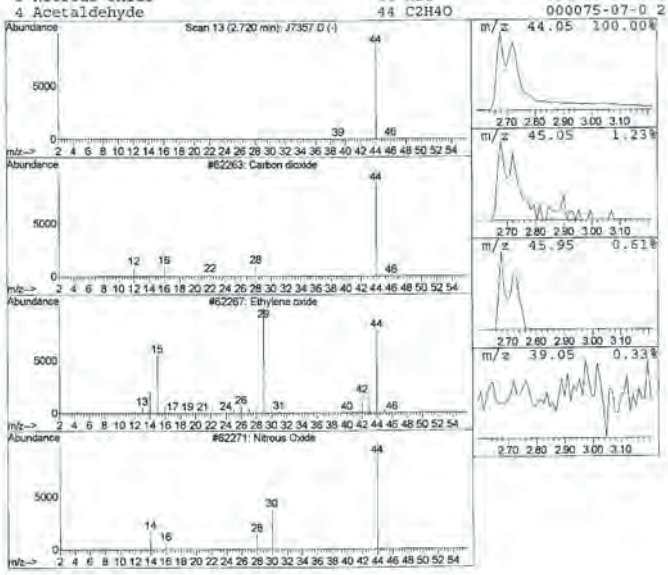
Data File : C:\HPCHEM\1\DATA\J7357.D Vial: 44
Acq On : 10 Oct 2008 17:06 Operator: GS
Sample : 0810083-006A Inst : #3MS10
Misc : SAMP,8260S7_OLM42, 5ML Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.72	9.74 ug/L	833154	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ RCA JK 10/22/08	44	CO2	000124-38-9	4
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Nitrous Oxide	44	N2O	010024-97-2	3
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7357.D J009NTCS.M Wed Oct 22 11:18:43 2008

Calibration Data

Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Initial Calibration

ICAL # 1355 10/22/08
1393

Calibration Files
2.5 =J7336.D 5.0 =J7337.D 20 =J7339.D
50 =J7340.D 100 =J7341.D 150 =J7342.D

		Compound	2.5	5.0	20	50	100	150	Avg	%RSD
1)	I	Fluorobenzene	ISTD							
2)		Dichlorodifluoromet	0.352	0.352	0.383	0.417	0.417	0.409	0.391	7.39
3)	P	Chloromethane	0.370	0.400	0.421	0.423	0.419	0.401	0.403	4.90
4)	CP	Vinyl chloride	0.389	0.436	0.460	0.466	0.471	0.454	0.445	6.30
5)		Bromomethane	0.604	0.511	0.405	0.383	0.386	0.395	0.437	20.07
6)		Chloroethane	0.415	0.433	0.423	0.382	0.375	0.355	0.388	9.15
7)		Trichlorofluorometh	0.673	0.667	0.753	0.732	0.714	0.701	0.708	4.34
8)	CPM	1,1-Dichloroethene	0.208	0.219	0.243	0.241	0.252	0.252	0.238	7.44
9)		Carbon disulfide	1.116	0.882	0.946	0.944	0.959	0.938	0.960	7.59
10)		1,1,2-Trichloro-1,2	0.268	0.263	0.285	0.277	0.279	0.275	0.276	2.95
11)		Methyl iodide	0.056	0.098	0.203	0.232	0.243	0.234	0.185	40.89
12)		Acrolein	0.020	0.029	0.040	0.043	0.046	0.045	0.038	25.72
13)		Methylene chloride	0.405	0.333	0.318	0.278	0.277	0.272	0.306	16.41
14)		Acetone		0.119	0.135	0.089	0.081	0.075	0.095	26.80
15)		trans-1,2-Dichloroe	0.245	0.250	0.272	0.267	0.274	0.271	0.264	4.42
16)		Methyl acetate	0.132	0.159	0.174	0.186	0.195	0.189	0.174	12.63
7)		Methyl tert-Butyl e	0.461	0.541	0.644	0.639	0.677	0.697	0.621	14.17
18)	P	1,1-Dichloroethane	0.423	0.472	0.511	0.489	0.498	0.484	0.479	5.80
19)		Acrylonitrile	0.052	0.072	0.088	0.092	0.094	0.091	0.082	18.36
20)		Vinyl acetate	0.160	0.195	0.290	0.335	0.344	0.348	0.288	27.32
21)		cis-1,2-Dichloroeth	0.260	0.256	0.296	0.290	0.299	0.298	0.285	6.42
22)		2,2-Dichloropropane	0.324	0.362	0.419	0.408	0.429	0.431	0.400	10.41
23)		Bromochloromethane	0.107	0.104	0.123	0.119	0.127	0.127	0.119	8.18
24)		Cyclohexane	0.395	0.414	0.507	0.504	0.523	0.517	0.481	11.05
25)	CP	Chloroform	0.402	0.454	0.502	0.466	0.475	0.471	0.462	6.54
26)		Carbon tetrachlorid	0.214	0.236	0.267	0.283	0.315	0.327	0.283	16.56
27)		1,1,1-Trichloroetha	0.349	0.375	0.428	0.416	0.437	0.435	0.411	8.50
28)		2-Butanone	0.069	0.095	0.119	0.121	0.120	0.115	0.107	17.83
29)		1,1-Dichloropropene	0.292	0.329	0.389	0.393	0.400	0.394	0.371	11.49
30)	M	Benzene	1.003	1.091	1.262	1.196	1.238	1.214	1.168	7.80
31)	S	1,2-Dichloroethane-	0.279	0.283	0.299	0.276	0.284	0.278	0.281	3.17
32)		1,2-Dichloroethane	0.283	0.320	0.353	0.336	0.338	0.331	0.326	6.67
33)		Methylcyclohexane	0.396	0.448	0.529	0.540	0.549	0.558	0.514	12.81
34)	M	Trichloroethene	0.249	0.274	0.309	0.291	0.299	0.300	0.290	7.42
35)		Dibromomethane	0.123	0.132	0.155	0.152	0.155	0.155	0.146	8.88
36)	CP	1,2-Dichloropropane	0.213	0.245	0.278	0.263	0.271	0.270	0.258	8.72
37)		Bromodichloromethan	0.238	0.264	0.307	0.304	0.325	0.336	0.301	12.31
38)		2-Chloroethylvinyl	0.075	0.096	0.133	0.140	0.146	0.147	0.126	22.60
39)		cis-1,3-Dichloropro	0.292	0.330	0.418	0.413	0.434	0.441	0.395	15.06
40)	CPM	Toluene	0.567	0.645	0.757	0.738	0.759	0.769	0.714	10.92
41)		4-Methyl-2-pentanon	0.126	0.160	0.216	0.226	0.236	0.232	0.202	20.88
42)		trans-1,3-Dichlorop	0.235	0.273	0.345	0.354	0.381	0.398	0.339	18.32
43)		1,1,2-Trichloroetha	0.145	0.176	0.190	0.180	0.193	0.184	0.177	8.29

Gwella Gallock 10/10/08

(#) = Out of Range ### Number of calibration levels exceeded format ##"
J009VOCS.M Fri Oct 10 12:05:36 2008

Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Initial Calibration

Calibration Files
2.5 =J7336.D 5.0 =J7337.D 20 =J7339.D
50 =J7340.D 100 =J7341.D 150 =J7342.D

		Compound	2.5	5.0	20	50	100	150	Avg	%RSD
44)		2-Hexanone	0.068	0.087	0.137	0.160	0.165	0.165	0.134	30.00
45)	I	Chlorobenzene-d5	ISTD							
46)	S	Toluene-d8	2.103	2.306	2.492	2.391	2.469	2.453	2.375	5.66
47)		Tetrachloroethene	0.518	0.540	0.586	0.571	0.578	0.580	0.569	5.45
48)		Dibromochloromethan	0.334	0.342	0.423	0.449	0.500	0.532	0.446	19.13
49)		1,3-Dichloropropane	0.784	0.821	0.968	0.908	0.928	0.918	0.888	7.21
50)		1,2-Dibromoethane	0.348	0.404	0.491	0.464	0.484	0.482	0.450	11.96
51)		1-Chlorohexane	0.651	0.711	0.878	0.916	0.935	0.937	0.858	14.61
52)	PM	Chlorobenzene	1.644	1.748	1.895	1.808	1.892	1.901	1.828	5.52
53)	CP	Ethylbenzene	2.880	3.053	3.514	3.440	3.539	3.512	3.339	7.85
54)		1,1,1,2-Tetrachloro	0.422	0.414	0.476	0.481	0.519	0.539	0.485	10.87
55)		(m+p)-Xylene	0.908	1.063	1.305	1.306	1.377	1.411	1.259	15.78
56)		o-Xylene	0.780	0.904	1.221	1.198	1.275	1.299	1.139	18.44
57)		Styrene	0.973	1.216	1.607	1.734	1.860	1.889	1.597	22.89
58)	P	Bromoform	0.124	0.138	0.192	0.214	0.251	0.275	0.211	29.91
9)	I	1,4-Dichlorobenzene-d	ISTD							
60)		Isopropylbenzene	3.304	3.942	4.849	4.540	4.754	4.762	4.372	12.83
61)	S	Bromofluorobenzene	1.077	1.171	1.213	1.130	1.175	1.177	1.156	3.75
62)		Bromobenzene	0.821	0.921	1.021	0.913	0.942	0.975	0.937	6.70
63)		n-Propylbenzene	3.876	4.606	5.811	5.678	5.974	5.960	5.354	14.97
64)	P	1,1,2,2-Tetrachloro	0.999	1.144	1.186	1.046	1.054	1.028	1.058	7.78
65)		2-Chlorotoluene	2.886	3.344	3.936	3.594	3.713	3.749	3.544	9.64
66)		1,3,5-Trimethylbenz	2.510	3.158	3.866	3.741	3.947	4.092	3.611	15.86
67)		1,2,3-Trichloroprop	0.892	0.985	1.016	0.899	0.908	0.893	0.916	7.08
68)		trans-1,4-Dichloro-	0.073	0.126	0.170	0.169	0.185	0.190	0.157	27.08
69)		4-Chlorotoluene	2.426	2.907	3.348	3.123	3.222	3.235	3.055	10.12
70)		tert-Butylbenzene	2.070	2.433	2.883	2.875	3.156	3.328	2.853	15.97
71)		1,2,4-Trimethylbenz	2.319	2.754	3.390	3.320	3.544	3.635	3.217	15.34
72)		sec-Butylbenzene	3.416	3.912	4.407	4.391	4.843	5.053	4.398	13.01
73)		p-Isopropyltoluene	2.343	2.833	3.298	3.361	3.734	3.945	3.346	17.68
74)		1,3-Dichlorobenzene	1.658	1.765	1.937	1.789	1.848	1.874	1.818	4.95
75)		1,4-Dichlorobenzene	1.680	1.784	1.860	1.675	1.712	1.770	1.748	3.74
76)		n-Butylbenzene	2.430	2.690	2.980	2.867	3.091	3.220	2.934	10.18
77)		1,2-Dichlorobenzene	1.398	1.656	1.751	1.623	1.683	1.748	1.650	7.10
78)		1,2-Dibromo-3-chlor	0.073	0.118	0.134	0.143	0.155	0.159	0.133	22.60
79)		Hexachlorobutadiene	0.357	0.385	0.342	0.315	0.337	0.380	0.356	7.36
80)		1,2,4-Trichlorobenz	0.699	0.743	0.828	0.758	0.809	0.856	0.798	8.48
81)		Naphthalene	1.246	1.619	1.972	1.976	2.037	2.114	1.853	16.75
82)		1,2,3-Trichlorobenz	0.548	0.633	0.747	0.660	0.683	0.738	0.678	10.68

(#) = Out of Range ### Number of calibration levels exceeded format ##"
J009VOCS.M Fri Oct 10 12:05:38 2008

Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Oct 10 12:17:04 2008
Response via : Initial Calibration

Calibration Files
200 =J7345.D = =
= = =

		Compound	200
1)	I	Fluorobenzene	ISTD
2)		Dichlorodifluoromet	0.406
3)	P	Chloromethane	0.387
4)	CP	Vinyl chloride	0.438
5)		Bromomethane	0.372
6)		Chloroethane	0.339
7)		Trichlorofluorometh	0.714
8)	CPM	1,1-Dichloroethene	0.253
9)		Carbon disulfide	0.937
10)		1,1,2-Trichloro-1,2	0.285
11)		Methyl iodide	0.230
12)		Acrolein	0.042
13)		Methylene chloride	0.264
14)		Acetone	0.073
15)		trans-1,2-Dichloroe	0.271
16)		Methyl acetate	0.184
7)		Methyl tert-Butyl e	0.689
18)	P	1,1-Dichloroethane	0.476
19)		Acrylonitrile	0.086
20)		Vinyl acetate	0.342
21)		cis-1,2-Dichloroeth	0.292
22)		2,2-Dichloropropane	0.431
23)		Bromochloromethane	0.127
24)		Cyclohexane	0.508
25)	CP	Chloroform	0.462
26)		Carbon tetrachlorid	0.337
27)		1,1,1-Trichloroetha	0.437
28)		2-Butanone	0.109
29)		1,1-Dichloropropene	0.398
30)	M	Benzene	1.171
31)	S	1,2-Dichloroethane-	0.271
32)		1,2-Dichloroethane	0.322
33)		Methylcyclohexane	0.574
34)	M	Trichloroethene	0.308
35)		Dibromomethane	0.152
36)	CP	1,2-Dichloropropane	0.264
37)		Bromodichloromethan	0.335
38)		2-Chloroethylvinyl	0.142
39)		cis-1,3-Dichloropro	0.440
40)	CPM	Toluene	0.765
41)		4-Methyl-2-pentanon	0.220
2)		trans-1,3-Dichlorop	0.388
.3)		1,1,2-Trichloroetha	0.178

(#) = Out of Range ### Number of calibration levels exceeded format ##
J009VOCS.M Fri Oct 10 12:17:10 2008

Response Factor Report #3MS10

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Oct 10 12:17:04 2008
Response via : Initial Calibration

Calibration Files
200 =J7345.D

		Compound	200
44)		2-Hexanone	0.157
45)	I	Chlorobenzene-d5	----------ISTD----------
46)	S	Toluene-d8	2.409
47)		Tetrachloroethene	0.612
48)		Dibromochloromethan	0.543
49)		1,3-Dichloropropane	0.888
50)		1,2-Dibromoethane	0.475
51)		1-Chlorohexane	0.974
52)	PM	Chlorobenzene	1.909
53)	CP	Ethylbenzene	3.436
54)		1,1,1,2-Tetrachloro	0.543
55)		(m+p)-Xylene	1.443
56)		o-Xylene	1.300
57)		Styrene	1.902
58)	P	Bromoform	0.281
59)	I	1,4-Dichlorobenzene-d	----------ISTD----------
60)		Isopropylbenzene	4.454
61)	S	Bromofluorobenzene	1.150
62)		Bromobenzene	0.967
63)		n-Propylbenzene	5.574
64)	P	1,1,2,2-Tetrachloro	0.947
65)		2-Chlorotoluene	3.586
66)		1,3,5-Trimethylbenz	3.965
67)		1,2,3-Trichloroprop	0.822
68)		trans-1,4-Dichloro-	0.183
69)		4-Chlorotoluene	3.125
70)		tert-Butylbenzene	3.225
71)		1,2,4-Trimethylbenz	3.560
72)		sec-Butylbenzene	4.766
73)		p-Isopropyltoluene	3.909
74)		1,3-Dichlorobenzene	1.853
75)		1,4-Dichlorobenzene	1.757
76)		n-Butylbenzene	3.263
77)		1,2-Dichlorobenzene	1.692
78)		1,2-Dibromo-3-chlor	0.151
79)		Hexachlorobutadiene	0.378
80)		1,2,4-Trichlorobenz	0.890
81)		Naphthalene	2.008
82)		1,2,3-Trichlorobenz	0.741

(#) = Out of Range ### Number of calibration levels exceeded format ##
J009VOCS.M Fri Oct 10 12:17:12 2008

Compound List Report #3MS10

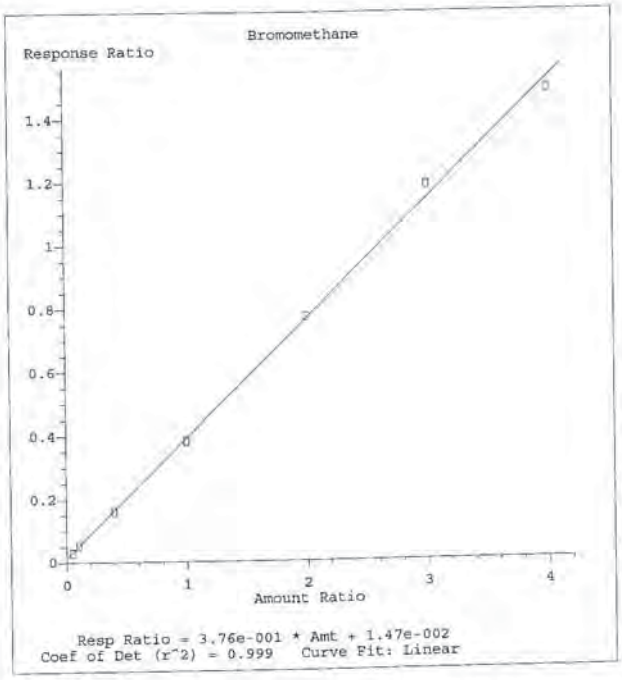
Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:21:51 2008
Response via : Initial Calibration
Total Cpnds : 82

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Fluorobenzene	96	10.90	1.000	A	1	A	B
2		Dichlorodifluoromethane	85	3.07	0.282	A	1	A	R
3	P	Chloromethane	50	3.42	0.314	A	1	A	R
4	CP	Vinyl chloride	62	3.62	0.332	A	1	A	R
5		Bromomethane	94	4.25	0.390	L	1	A	R
6		Chloroethane	64	4.46	0.409	A	1	A	R
7		Trichlorofluoromethane	101	4.74	0.435	A	1	A	R
8	CPM	1,1-Dichloroethene	96	5.75	0.528	A	2	A	R
9		Carbon disulfide	76	5.78	0.530	A	1	A	R
10		1,1,2-Trichloro-1,2,2-trifluor	101	5.85	0.536	A	2	A	R
11		Methyl iodide	142	6.00	0.551	L	1	A	R
12		Acrolein	56	6.39	0.587	L	2	A	R
13		Methylene chloride	84	6.82	0.625	L	2	A	R
14		Acetone	43	6.93	0.636	L	1	A	R
15		trans-1,2-Dichloroethene	96	7.10	0.651	A	2	A	R
16		Methyl acetate	43	7.14	0.655	A	2	A	R
17		Methyl tert-Butyl ether	73	7.30	0.670	A	2	A	R
18	P	1,1-Dichloroethane	63	8.11	0.744	A	2	A	R
19		Acrylonitrile	53	8.20	0.752	L	2	A	R
20		Vinyl acetate	43	8.54	0.783	L	1	A	R
21		cis-1,2-Dichloroethene	96	8.97	0.823	A	2	A	R
		2,2-Dichloropropane	77	9.14	0.838	A	1	A	R
23		Bromochloromethane	128	9.29	0.852	A	2	A	R
24		Cyclohexane	56	9.29	0.852	A	2	A	R
25	CP	Chloroform	83	9.39	0.862	A	1	A	R
26		Carbon tetrachloride	117	9.61	0.882	L	2	A	R
27		1,1,1-Trichloroethane	97	9.71	0.891	A	2	A	R
28		2-Butanone	43	9.88	0.906	L	1	A	R
29		1,1-Dichloropropene	75	9.90	0.908	A	2	A	R
30	M	Benzene	78	10.28	0.943	A	0	A	R
31	S	1,2-Dichloroethane-d4	65	10.48	0.961	A	1	A	R
32		1,2-Dichloroethane	62	10.58	0.971	A	1	A	R
33		Methylcyclohexane	83	11.15	1.023	A	2	A	R
34	M	Trichloroethene	95	11.16	1.024	A	2	A	R
35		Dibromomethane	93	11.81	1.083	A	2	A	R
36	CP	1,2-Dichloropropane	63	11.96	1.097	A	1	A	R
37		Bromodichloromethane	83	12.05	1.106	A	2	A	R
38		2-Chloroethylvinyl ether	63	12.91	1.184	L	2	A	R
39		cis-1,3-Dichloropropene	75	13.02	1.195	L	2	A	R
40	CPM	Toluene	92	13.39	1.228	A	1	A	R
41		4-Methyl-2-pentanone	43	13.97	1.282	L	2	A	R
42		trans-1,3-Dichloropropene	75	14.03	1.288	L	2	A	R
43		1,1,2-Trichloroethane	83	14.30	1.312	A	2	A	R
44		2-Hexanone	43	15.31	1.405	L	2	A	R
45	I	Chlorobenzene-d5	82	15.81	1.000	A	2	A	R
46	S	Toluene-d8	98	13.31	0.842	A	0	A	R
47		Tetrachloroethene	166	14.01	0.887	A	2	A	R
48		Dibromochloromethane	129	14.59	0.923	L	1	A	R
49		1,3-Dichloropropane	76	14.74	0.933	A	1	A	R
50		1,2-Dibromoethane	107	14.98	0.948	A	2	A	R
51		1-Chlorohexane	91	15.78	0.998	A	2	A	R
52	PM	Chlorobenzene	112	15.84	1.002	A	2	A	R

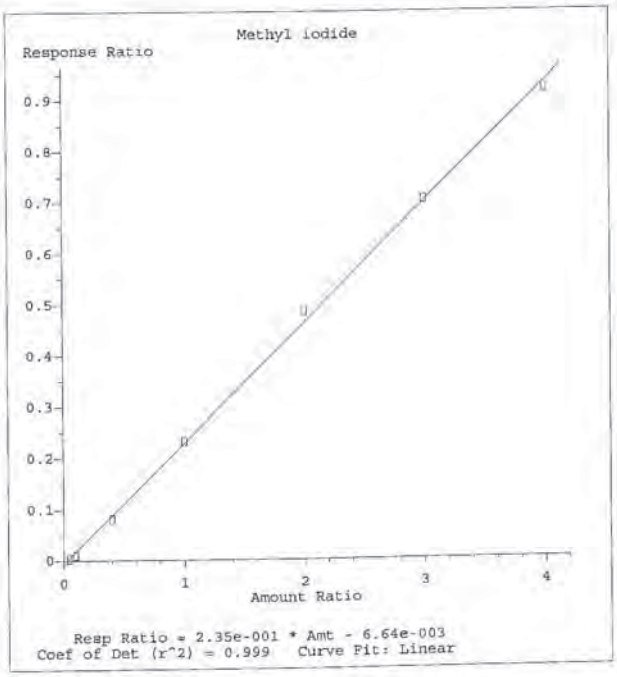
53	CP	Ethylbenzene	91	15.86	1.003	A	1	A	R
54		1,1,1,2-Tetrachloroethane	131	15.93	1.008	A	2	A	R
55		(m+p)-Xylene	106	16.10	1.019	L	1	A	R
56		o-Xylene	106	16.83	1.065	L	1	A	R
57		Styrene	104	16.93	1.071	L	1	A	R
58	P	Bromoform	173	16.99	1.075	L	2	A	R
59	I	1,4-Dichlorobenzene-d4	152	19.88	1.000	A	2	A	R
60		Isopropylbenzene	105	17.37	0.874	A	1	A	R
61	S	Bromofluorobenzene	95	17.88	0.899	A	2	A	R
62		Bromobenzene	156	18.07	0.909	A	2	A	R
63		n-Propylbenzene	91	18.09	0.910	A	1	A	R
64	P	1,1,2,2-Tetrachloroethane	83	18.21	0.916	A	2	A	R
65		2-Chlorotoluene	91	18.38	0.925	A	1	A	R
66		1,3,5-Trimethylbenzene	105	18.42	0.927	L	1	A	R
67		1,2,3-Trichloropropane	75	18.46	0.928	A	1	A	R
68		trans-1,4-Dichloro-2-butene	89	18.53	0.932	L	2	A	R
69		4-Chlorotoluene	91	18.68	0.939	A	1	A	R
70		tert-Butylbenzene	119	19.00	0.956	L	2	A	R
71		1,2,4-Trimethylbenzene	105	19.13	0.962	L	1	A	R
72		sec-Butylbenzene	105	19.32	0.972	A	1	A	R
73		p-Isopropyltoluene	119	19.57	0.985	L	2	A	R
74		1,3-Dichlorobenzene	146	19.74	0.993	A	2	A	R
75		1,4-Dichlorobenzene	146	19.90	1.001	A	2	A	R
76		n-Butylbenzene	91	20.36	1.024	A	2	A	R
77		1,2-Dichlorobenzene	146	20.68	1.040	A	2	A	R
78		1,2-Dibromo-3-chloropropane	75	22.17	1.115	L	2	A	R
79		Hexachlorobutadiene	225	23.31	1.173	A	2	A	R
80		1,2,4-Trichlorobenzene	180	23.36	1.175	A	2	A	R
81		Naphthalene	128	23.87	1.201	L	0	A	R
82		1,2,3-Trichlorobenzene	180	24.15	1.215	A	2	A	R

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

J009VOCS.M Wed Oct 15 08:02:02 2008



Method Name: C:\HPCHEM\1\METHODS\J009VOCS.M
Calibration Table Last Updated: Fri Oct 10 12:12:38 2008



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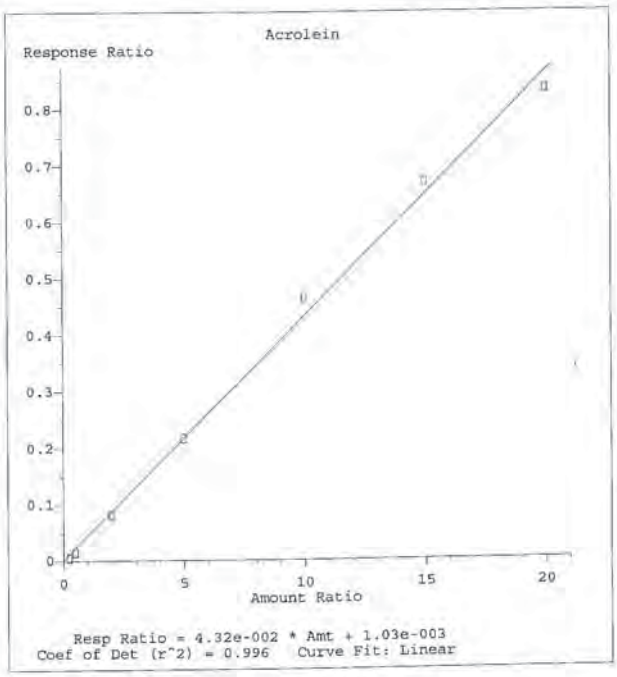

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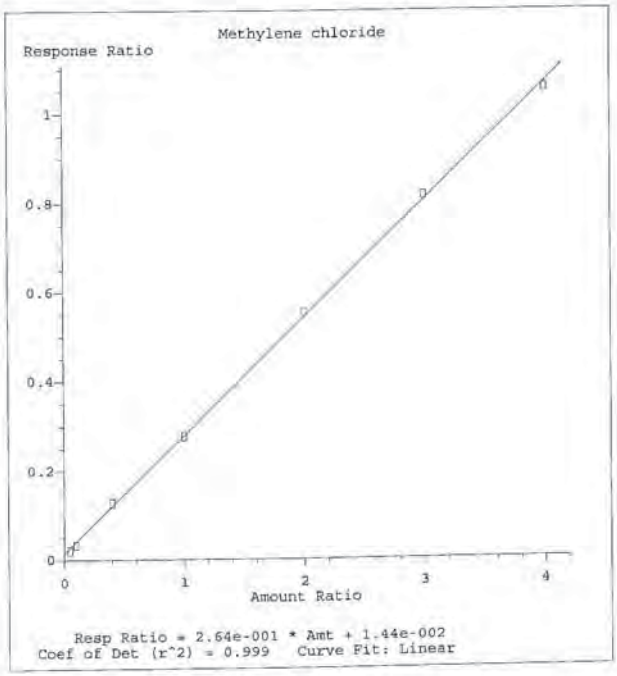

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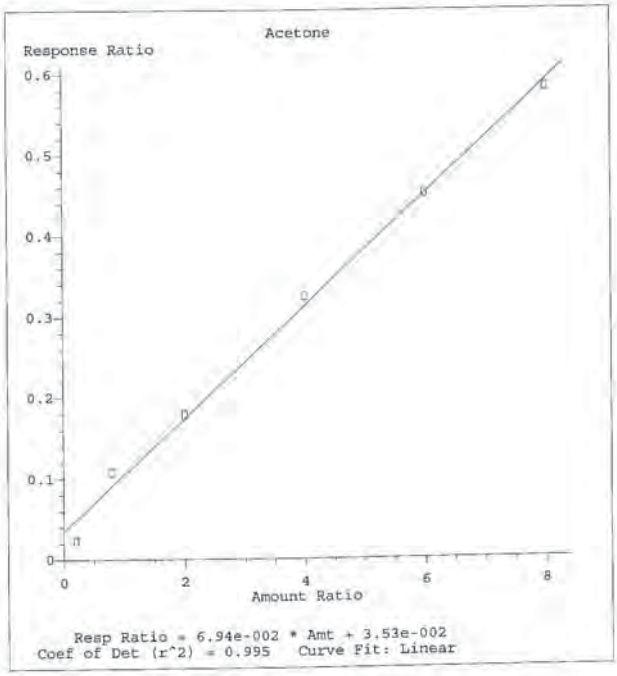

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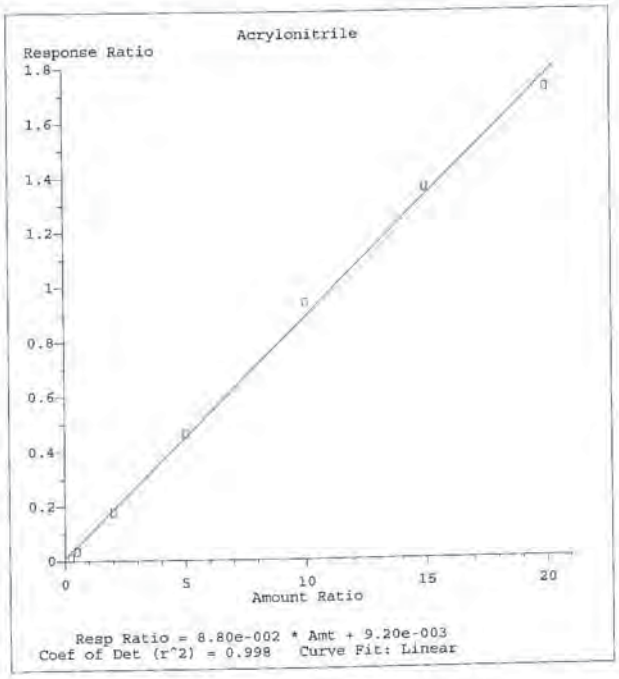

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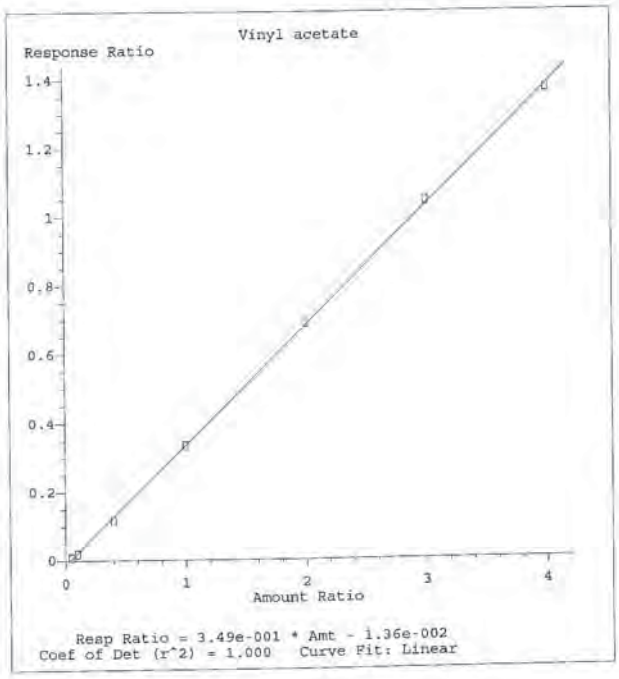

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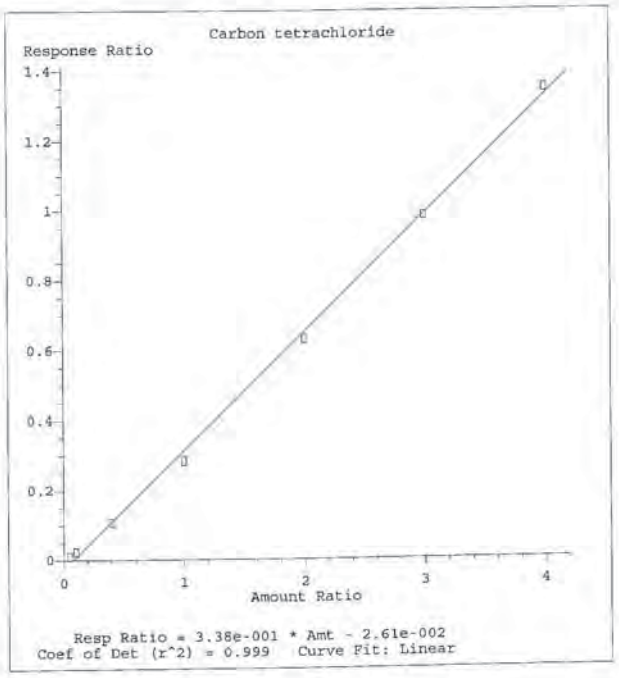

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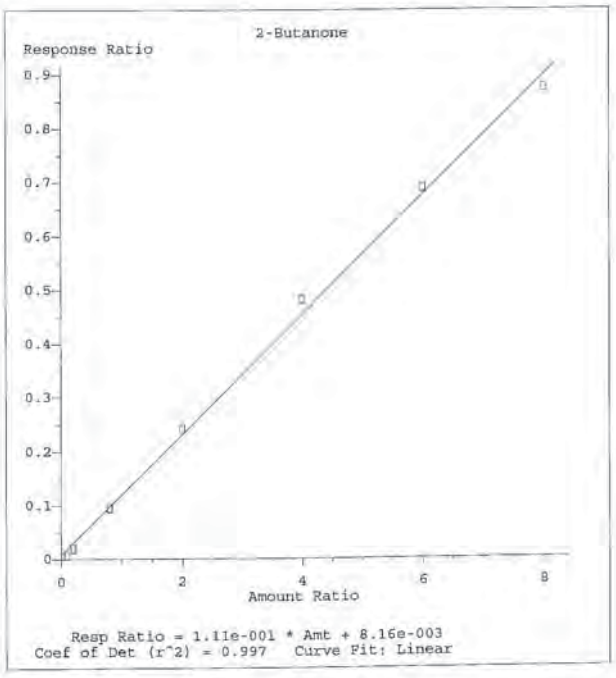

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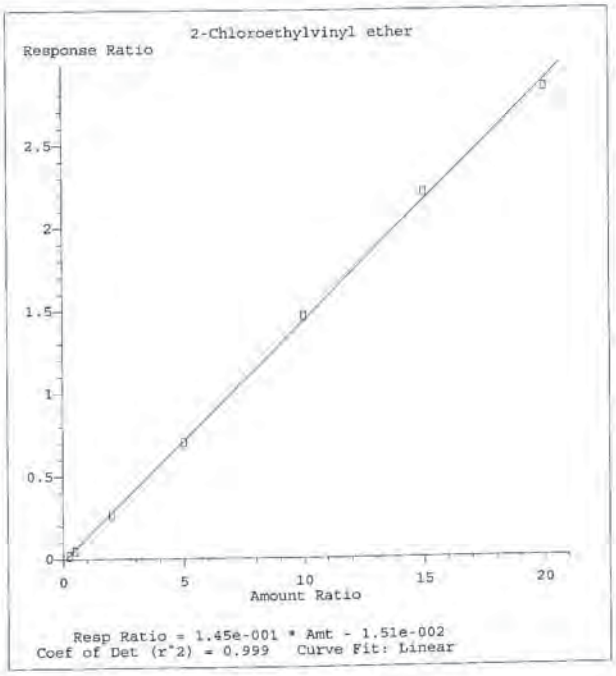

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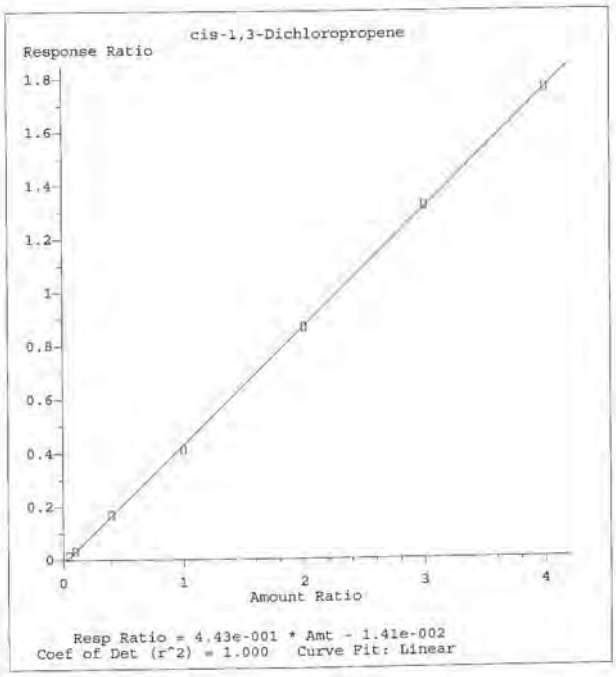

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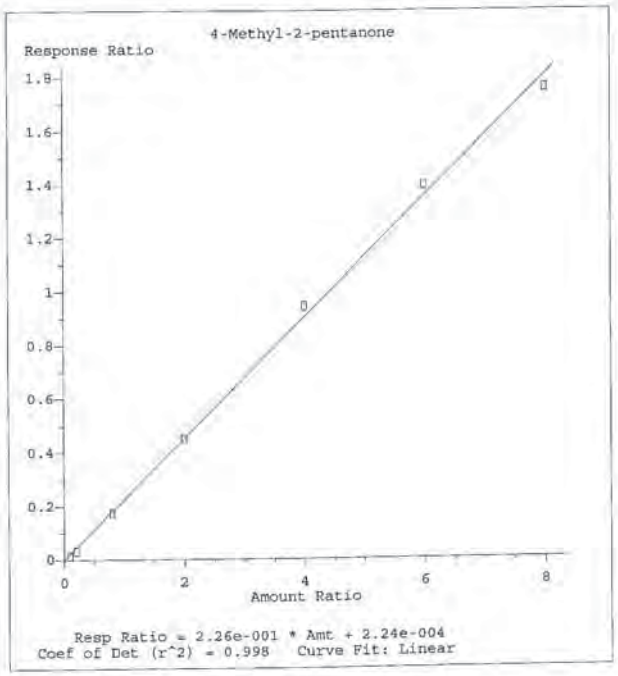

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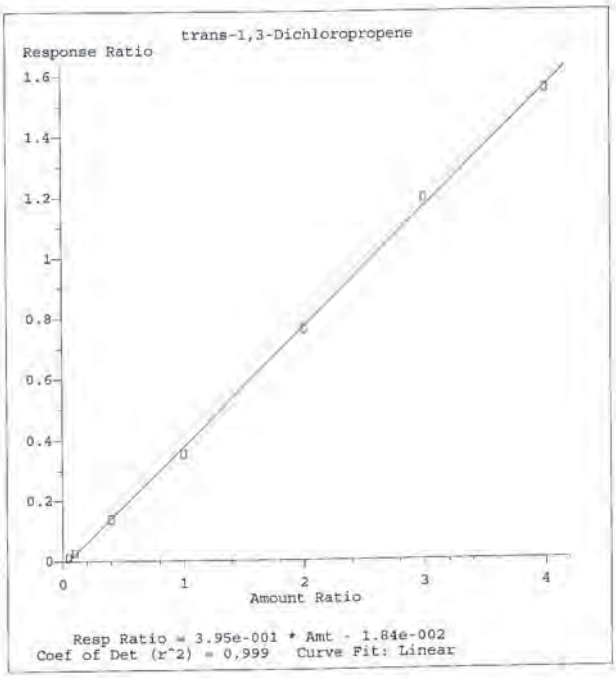

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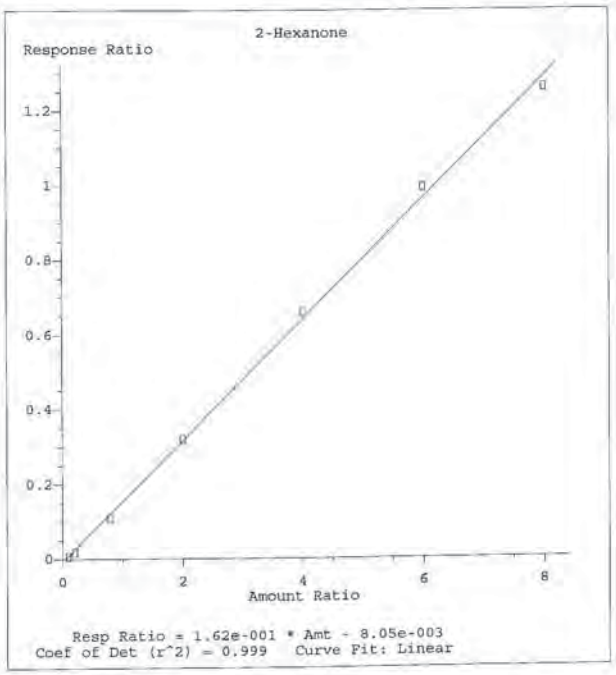
Calibration Table Last Updated: Fri Oct 10 12:12:38 2008



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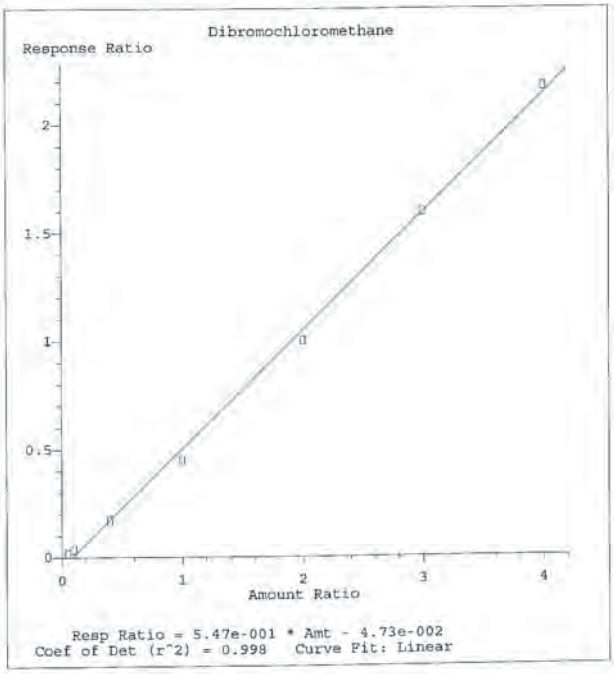

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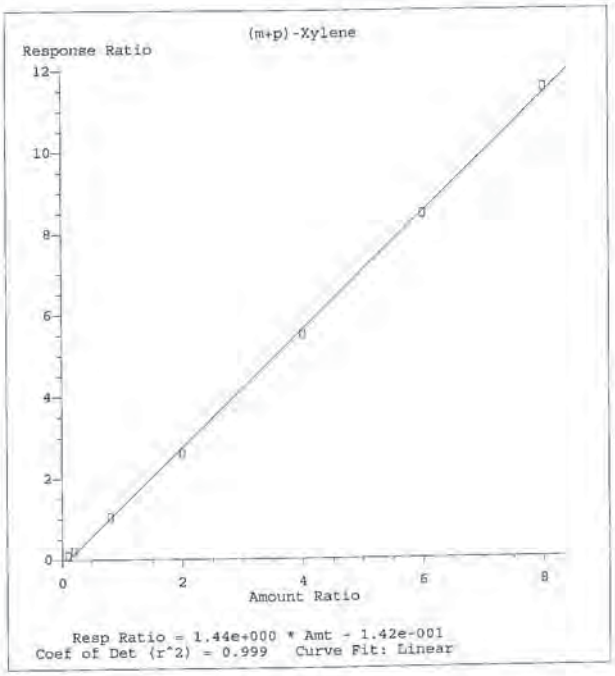

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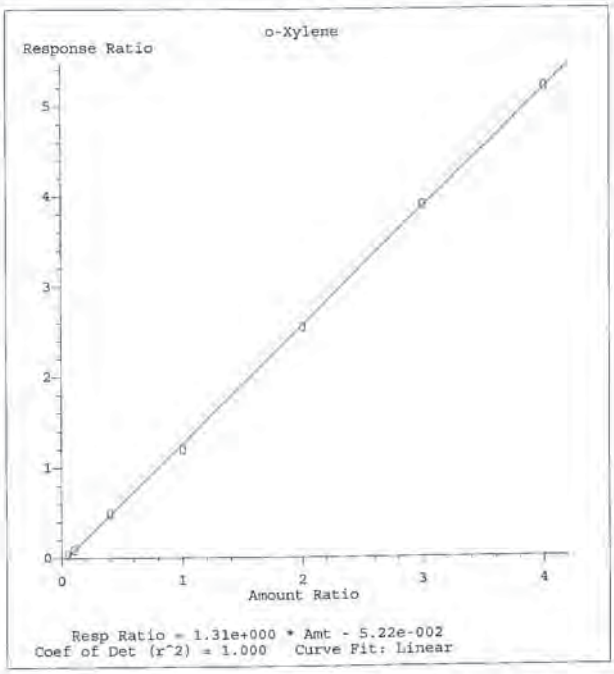

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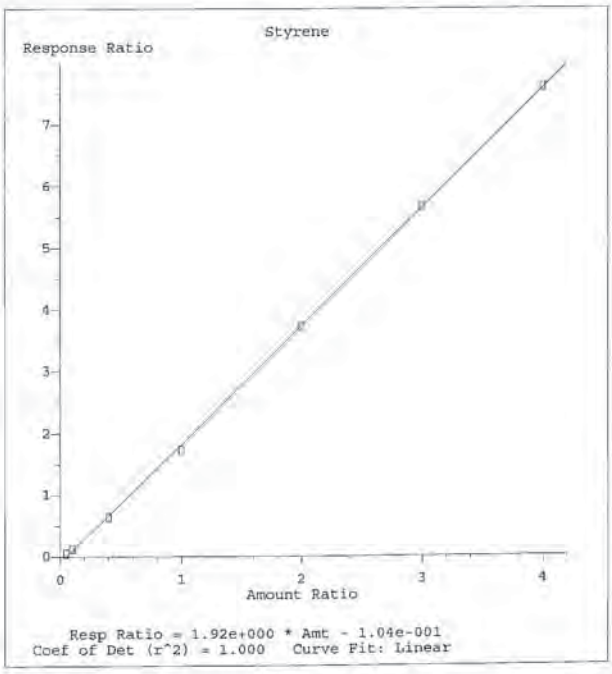

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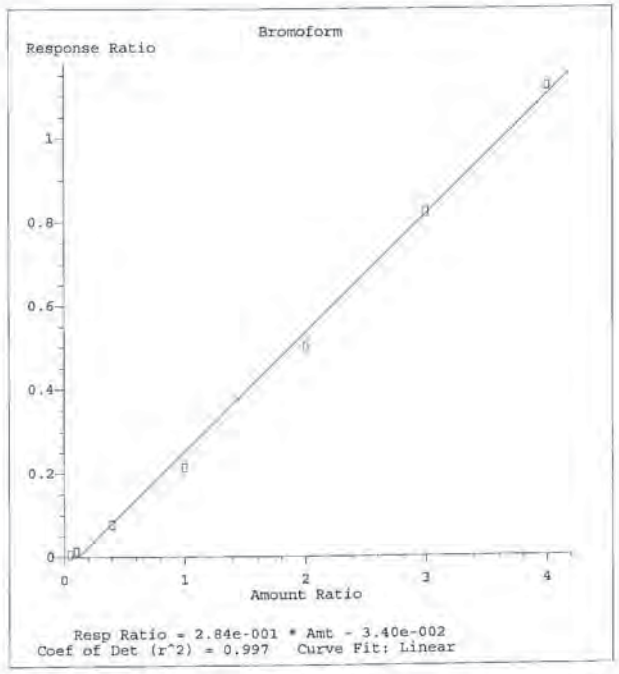

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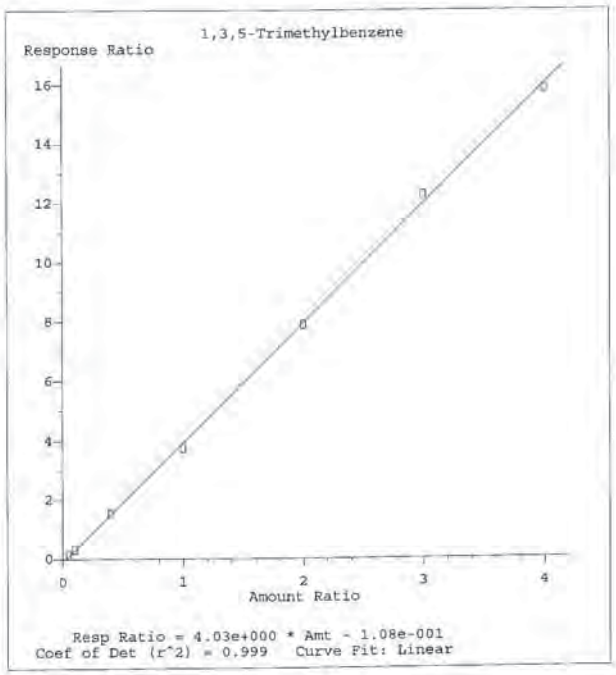

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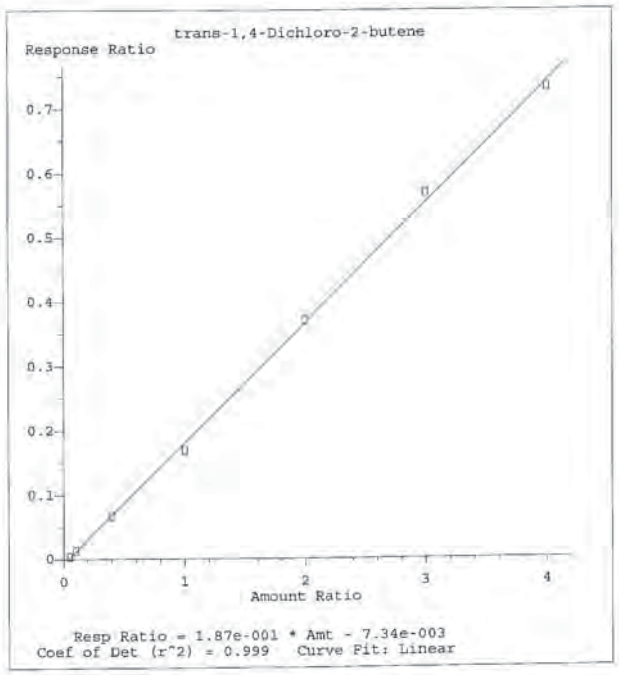

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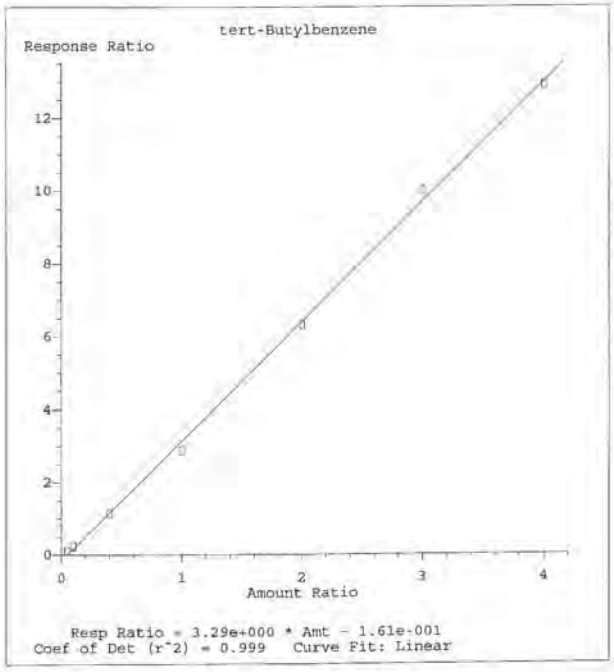

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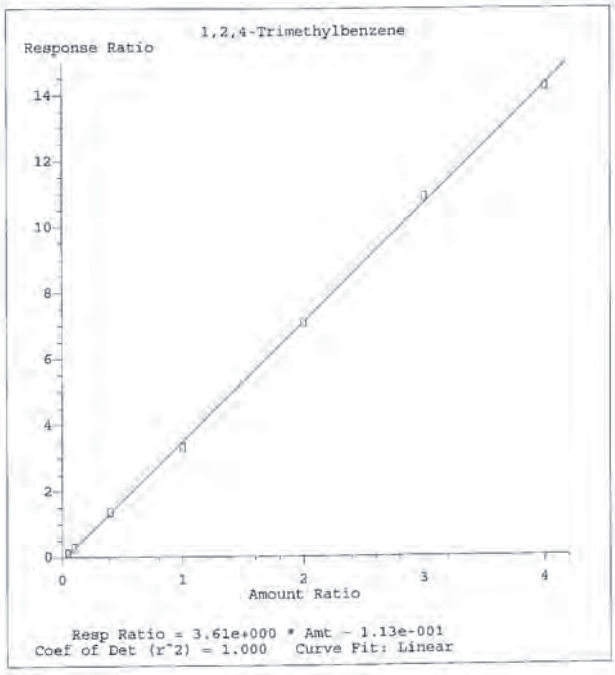

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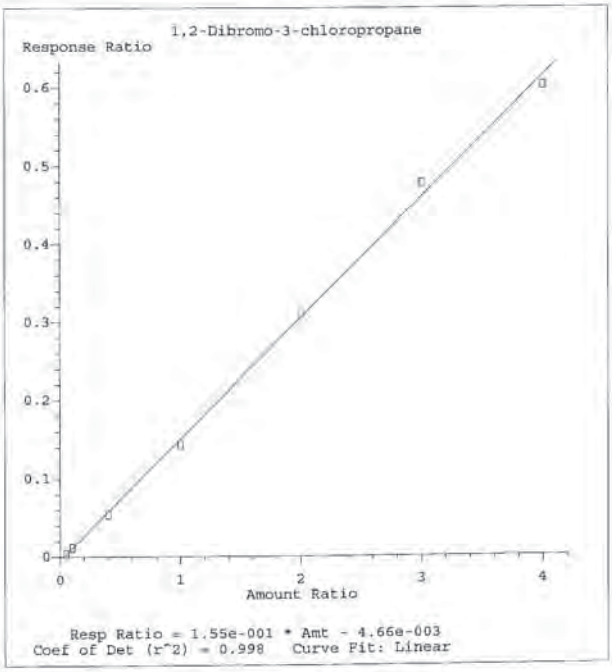

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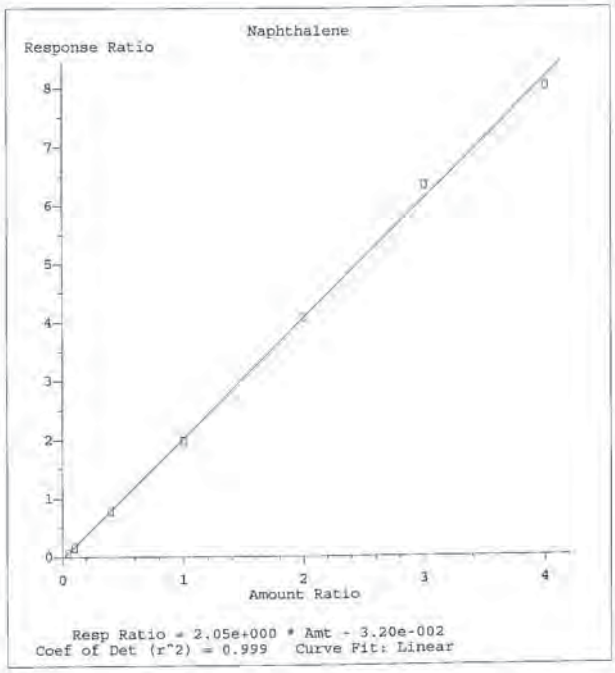


Method Name: C:\HPCHEM\1\METHODS\JO09VOCS.M
Calibration Table Last Updated: Fri Oct 10 12:12:38 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7336.D
Acq On : 9 Oct 2008 7:48
Sample : ICAL 2.5 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	1997352	50.00 ug/L	0.01
45) Chlorobenzene-d5	15.82	82	760434	50.00 ug/L	0.01
59) 1,4-Dichlorobenzene-d4	19.88	152	432502	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.49	65	27841	2.52 ug/L	0.01
Spiked Amount 50.000			Recovery =	5.04%	
46) Toluene-d8	13.33	98	79966	2.20 ug/L	0.01
Spiked Amount 50.000			Recovery =	4.40%	
61) Bromofluorobenzene	17.88	95	23280	2.38 ug/L	0.01
Spiked Amount 50.000			Recovery =	4.76%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.05	85	35152	2.11 ug/L	94
3) Chloromethane	3.41	50	36988	2.19 ug/L	95
4) Vinyl chloride	3.54	62	38837	2.09 ug/L	76
5) Bromomethane	4.20	94	60334	3.94 ug/L #	40
6) Chloroethane	4.46	64	41421	2.72 ug/L	85
7) Trichlorofluoromethane	4.75	101	67236	2.30 ug/L	99
8) 1,1-Dichloroethene	5.76	96	20791	2.16 ug/L	98
9) Carbon disulfide	5.79	76	111414	2.95 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	26791	2.42 ug/L	91
11) Methyl iodide	6.01	142	5630	0.61 ug/L	67
12) Acrolein	6.42	56	9674	5.71 ug/L #	95
13) Methylene chloride	6.83	84	40401	3.64 ug/L	96
14) Acetone	6.96	43	13801	3.87 ug/L	90
15) trans-1,2-Dichloroethene	7.11	96	24462	2.29 ug/L	90
16) Methyl acetate	7.18	43	13188	1.77 ug/L	74
17) Methyl tert-Butyl ether	7.32	73	46048	1.80 ug/L	90
18) 1,1-Dichloroethane	8.12	63	42292	2.17 ug/L	98
19) Acrylonitrile	8.24	53	26162	7.08 ug/L	85
20) Vinyl acetate	8.58	43	15977	1.19 ug/L	82
21) cis-1,2-Dichloroethene	8.99	96	25989	2.25 ug/L	92
22) 2,2-Dichloropropane	9.14	77	32363	1.99 ug/L	94
23) Bromochloromethane	9.28	128	10698	2.25 ug/L	87
24) Cyclohexane	9.29	56	39414	1.96 ug/L	93
25) Chloroform	9.40	83	40150	2.16 ug/L	96
26) Carbon tetrachloride	9.62	117	21367	1.89 ug/L	94
27) 1,1,1-Trichloroethane	9.72	97	34889	2.10 ug/L	96
28) 2-Butanone	9.92	43	13741	2.84 ug/L	99
29) 1,1-Dichloropropene	9.91	75	29177	1.86 ug/L	98
30) Benzene	10.29	78	100161	2.10 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7336.D J009VOCS.M Fri Oct 10 10:49:25 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7336.D
Acq On : 9 Oct 2008 7:48
Sample : ICAL 2.5 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.59	62	28303	2.11 ug/L	98
33) Methylcyclohexane	11.16	83	39520	1.83 ug/L	93
34) Trichloroethene	11.17	95	24916	2.15 ug/L	93
35) Dibromomethane	11.82	93	12330	2.04 ug/L	96
36) 1,2-Dichloropropane	11.95	63	21232	2.02 ug/L #	86
37) Bromodichloromethane	12.06	83	23798	1.96 ug/L	91
38) 2-Chloroethylvinyl ether	12.91	63	37632	6.71 ug/L	100
39) cis-1,3-Dichloropropene	13.03	75	29148	1.77 ug/L #	52
40) Toluene	13.40	92	56607	1.92 ug/L	98
41) 4-Methyl-2-pentanone	13.99	43	25209	2.80 ug/L	90
42) trans-1,3-Dichloropropene	14.05	75	23449	1.66 ug/L	93
43) 1,1,2-Trichloroethane	14.30	83	14482	2.01 ug/L	98
44) 2-Hexanone	15.34	43	13543	2.12 ug/L #	89
47) Tetrachloroethene	14.02	166	19697	2.27 ug/L	93
48) Dibromochloromethane	14.60	129	12681	1.86 ug/L	93
49) 1,3-Dichloropropane	14.74	76	29827	2.16 ug/L	100
50) 1,2-Dibromoethane	15.00	107	13215	1.87 ug/L #	5
51) 1-Chlorohexane	15.80	91	24738	1.78 ug/L #	18
52) Chlorobenzene	15.85	112	62513	2.27 ug/L	82
53) Ethylbenzene	15.87	91	109511	2.09 ug/L	98
54) 1,1,1,2-Tetrachloroethane	15.94	131	16029	2.19 ug/L	77
55) (m+p)-Xylene	16.11	106	69062	3.48 ug/L	95
56) o-Xylene	16.84	106	29642	1.63 ug/L	97
57) Styrene	16.93	104	36979	1.40 ug/L	100
58) Bromoform	17.00	173	4707	1.45 ug/L #	96
60) Isopropylbenzene	17.37	105	71447	1.82 ug/L	96
62) Bromobenzene	18.09	156	17763	2.25 ug/L	96
63) n-Propylbenzene	18.10	91	83826	1.71 ug/L	98
64) 1,1,2,2-Tetrachloroethane	18.21	83	21599	2.39 ug/L	95
65) 2-Chlorotoluene	18.39	91	62415	2.01 ug/L	94
66) 1,3,5-Trimethylbenzene	18.43	105	54286	1.68 ug/L	98
67) 1,2,3-Trichloropropane	18.48	75	19297	2.48 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	1589	1.09 ug/L #	78
69) 4-Chlorotoluene	18.68	91	52454	1.94 ug/L	98
70) tert-Butylbenzene	19.00	119	44774	1.80 ug/L	94
71) 1,2,4-Trimethylbenzene	19.13	105	50139	1.75 ug/L	98
72) sec-Butylbenzene	19.32	105	73861	1.94 ug/L	93
73) p-Isopropyltoluene	19.57	119	50661	1.74 ug/L	95
74) 1,3-Dichlorobenzene	19.75	146	35858	2.32 ug/L	94
75) 1,4-Dichlorobenzene	19.90	146	36331	2.51 ug/L	87
76) n-Butylbenzene	20.35	91	52545	2.12 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7336.D J009VOCS.M Fri Oct 10 10:49:26 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7336.D
Acq On : 9 Oct 2008 7:48
Sample : ICAL 2.5 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	30227	2.15 ug/L	97
78) 1,2-Dibromo-3-chloropropan	22.17	75	1575	1.27 ug/L #	75
79) Hexachlorobutadiene	23.31	225	7720	2.83 ug/L	89
80) 1,2,4-Trichlorobenzene	23.37	180	15110	2.30 ug/L	93
81) Naphthalene	23.88	128	26940	1.58 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	11844	2.08 ug/L	95

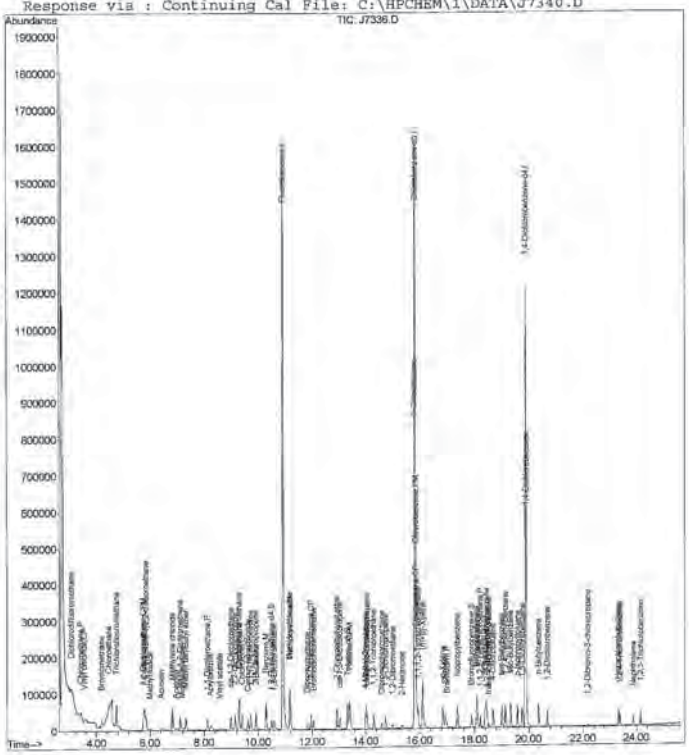
(#) = qualifier out of range (m) = manual integration
J7336.D J009VOCS.M Fri Oct 10 10:49:26 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7336.D
Acq On : 9 Oct 2008 7:48
Sample : ICAL 2.5 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D



J7336.D J009VOCS.M Fri Oct 10 10:49:28 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7337.D
Acq On : 9 Oct 2008 8:22
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	1907734	50.00 ug/L	0.01
45) Chlorobenzene-d5	15.82	82	747533	50.00 ug/L	0.01
59) 1,4-Dichlorobenzene-d4	19.88	152	413377	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.49	65	54036	5.13 ug/L	0.01
Spiked Amount 50.000			Recovery = 10.26%		
46) Toluene-d8	13.32	98	172416	4.82 ug/L	0.00
Spiked Amount 50.000			Recovery = 9.64%		
61) Bromofluorobenzene	17.89	95	48397	5.18 ug/L	0.01
Spiked Amount 50.000			Recovery = 10.36%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.05	85	67164	4.22 ug/L	92
3) Chloromethane	3.40	50	76386	4.73 ug/L	98
4) Vinyl chloride	3.60	62	83100	4.67 ug/L	90
5) Bromomethane	4.21	94	97540	6.67 ug/L	80
6) Chloroethane	4.46	64	82540	5.67 ug/L	97
7) Trichlorofluoromethane	4.74	101	127183	4.56 ug/L	97
8) 1,1-Dichloroethene	5.75	96	41839	4.56 ug/L	98
9) Carbon disulfide	5.79	76	168169	4.67 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	50242	4.76 ug/L	99
11) Methyl iodide	6.00	142	18745	2.11 ug/L	99
12) Acrolein	6.42	56	27926	16.90 ug/L #	95
13) Methylene chloride	6.82	84	63494	6.00 ug/L	96
14) Acetone	6.95	43	45471	13.35 ug/L	100
15) trans-1,2-Dichloroethene	7.10	96	47769	4.68 ug/L	98
16) Methyl acetate	7.17	43	30356	4.27 ug/L #	78
17) Methyl tert-Butyl ether	7.32	73	103184	4.23 ug/L	95
18) 1,1-Dichloroethane	8.11	63	90119	4.83 ug/L	97
19) Acrylonitrile	8.22	53	68366	19.37 ug/L	91
20) Vinyl acetate	8.57	43	37131	2.90 ug/L #	76
21) cis-1,2-Dichloroethene	8.98	96	48933	4.43 ug/L	98
22) 2,2-Dichloropropane	9.14	77	68970	4.44 ug/L	99
23) Bromochloromethane	9.28	128	19785	4.35 ug/L	88
24) Cyclohexane	9.28	56	78966	4.10 ug/L	95
25) Chloroform	9.40	83	86669	4.88 ug/L	97
26) Carbon tetrachloride	9.61	117	44937	4.16 ug/L	97
27) 1,1,1-Trichloroethane	9.71	97	71553	4.51 ug/L	99
28) 2-Butanone	9.91	43	36355	7.86 ug/L	86
29) 1,1-Dichloropropene	9.91	75	62703	4.18 ug/L	98
30) Benzene	10.26	78	208145	4.56 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7337.D J009VOCS.M Fri Oct 10 10:49:30 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7337.D
Acq On : 9 Oct 2008 8:22
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.59	62	61083	4.77 ug/L	99
33) Methylcyclohexane	11.16	83	85556	4.15 ug/L	95
34) Trichloroethene	11.17	95	52271	4.71 ug/L	97
35) Dibromomethane	11.82	93	25178	4.35 ug/L	97
36) 1,2-Dichloropropane	11.96	63	46673	4.65 ug/L	95
37) Bromodichloromethane	12.05	83	50459	4.36 ug/L	100
38) 2-Chloroethylvinyl ether	12.91	63	91524	17.09 ug/L	98
39) cis-1,3-Dichloropropene	13.03	75	63037	4.00 ug/L	98
40) Toluene	13.40	92	122955	4.37 ug/L	100
41) 4-Methyl-2-pentanone	13.98	43	60927	7.08 ug/L	96
42) trans-1,3-Dichloropropene	14.04	75	52101	3.85 ug/L	99
43) 1,1,2-Trichloroethane	14.30	83	33658	4.89 ug/L	95
44) 2-Hexanone	15.33	43	33324	5.46 ug/L	98
47) Tetrachloroethene	14.02	166	40383	4.73 ug/L	97
48) Dibromochloromethane	14.59	129	25588	3.81 ug/L	96
49) 1,3-Dichloropropane	14.74	76	61369	4.52 ug/L	100
50) 1,2-Dibromoethane	14.99	107	30178	4.35 ug/L #	98
51) 1-Chlorohexane	15.79	91	53135	3.88 ug/L	71
52) Chlorobenzene	15.85	112	130700	4.83 ug/L	89
53) Ethylbenzene	15.87	91	228186	4.44 ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.94	131	30943	4.30 ug/L	88
55) (m+p)-Xylene	16.11	106	158898	8.14 ug/L	99
56) o-Xylene	16.84	106	67540	3.77 ug/L	96
57) Styrene	16.94	104	90874	3.50 ug/L	100
58) Bromoform	16.99	173	10342	3.24 ug/L #	92
60) Isopropylbenzene	17.37	105	162950	4.34 ug/L	99
62) Bromobenzene	18.08	156	38055	5.04 ug/L	94
63) n-Propylbenzene	18.10	91	190408	4.06 ug/L	99
64) 1,1,2,2-Tetrachloroethane	18.21	83	47285	5.47 ug/L	98
65) 2-Chlorotoluene	18.39	91	138243	4.65 ug/L	100
66) 1,3,5-Trimethylbenzene	18.43	105	130544	4.22 ug/L	98
67) 1,2,3-Trichloropropane	18.47	75	40737	5.48 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.54	89	5207	3.73 ug/L #	85
69) 4-Chlorotoluene	18.69	91	120153	4.65 ug/L	97
70) tert-Butylbenzene	19.00	119	100580	4.23 ug/L	94
71) 1,2,4-Trimethylbenzene	19.13	105	113847	4.15 ug/L	98
72) sec-Butylbenzene	19.32	105	161699	4.45 ug/L	95
73) p-Isopropyltoluene	19.57	119	117114	4.21 ug/L	100
74) 1,3-Dichlorobenzene	19.75	146	72964	4.93 ug/L	99
75) 1,4-Dichlorobenzene	19.90	146	73758	5.33 ug/L	97
76) n-Butylbenzene	20.35	91	111200	4.69 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7337.D J009VOCS.M Fri Oct 10 10:49:30 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7337.D
Acq On : 9 Oct 2008 8:22
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	68473	5.10 ug/L	96
78) 1,2-Dibromo-3-chloropropan	22.19	75	4873	4.11 ug/L	96
79) Hexachlorobutadiene	23.32	225	15922	6.11 ug/L	93
80) 1,2,4-Trichlorobenzene	23.36	180	30697	4.90 ug/L	96
81) Naphthalene	23.87	128	66943	4.10 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	26179	4.80 ug/L	95

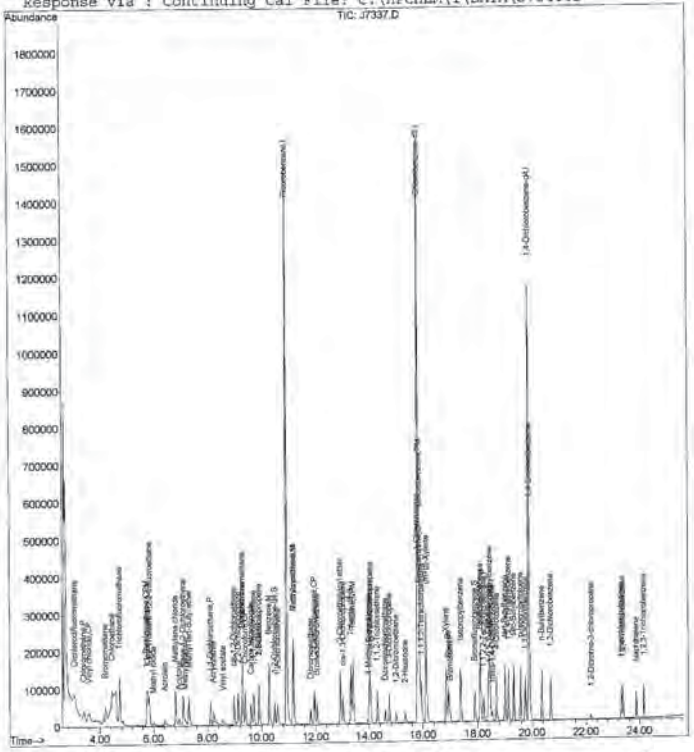
(#) = qualifier out of range (m) = manual integration
J7337.D J009VOCS.M Fri Oct 10 10:49:31 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7337.D
Acq On : 9 Oct 2008 8:22
Sample : ICAL 5.0 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D



J7337.D J009VOCS.M Fri Oct 10 10:49:33 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7339.D
Acq On : 9 Oct 2008 9:40
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	1876618	50.00 ug/L	0.01
45) Chlorobenzene-d5	15.81	82	760565	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	457599	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.49	65	224502	21.65 ug/L	0.01
Spiked Amount 50.000			Recovery =	43.30%	
46) Toluene-d8	13.32	98	758170	20.84 ug/L	0.00
Spiked Amount 50.000			Recovery =	41.68%	
61) Bromofluorobenzene	17.87	95	221990	21.46 ug/L	0.00
Spiked Amount 50.000			Recovery =	42.92%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.07	85	287130	18.33 ug/L	98
3) Chloromethane	3.42	50	315982	19.90 ug/L	99
4) Vinyl chloride	3.60	62	345504	19.74 ug/L	83
5) Bromomethane	4.24	94	303806	21.13 ug/L	93
6) Chloroethane	4.46	64	316363	22.09 ug/L	100
7) Trichlorofluoromethane	4.74	101	565592	20.60 ug/L	99
8) 1,1-Dichloroethene	5.75	96	182370	20.19 ug/L	99
9) Carbon disulfide	5.78	76	710170	20.04 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.83	101	214299	20.63 ug/L	99
11) Methyl iodide	6.01	142	152010	17.43 ug/L	96
12) Acrolein	6.40	56	150752	92.72 ug/L #	96
13) Methylene chloride	6.82	84	238584	22.90 ug/L	99
14) Acetone	6.94	43	202439	60.43 ug/L	93
15) trans-1,2-Dichloroethene	7.10	96	204099	20.35 ug/L	99
16) Methyl acetate	7.16	43	130470	18.65 ug/L	98
17) Methyl tert-Butyl ether	7.31	73	483087	20.13 ug/L	99
18) 1,1-Dichloroethane	8.11	63	383520	20.91 ug/L	99
19) Acrylonitrile	8.21	53	331315	95.43 ug/L	98
20) Vinyl acetate	8.54	43	217880	17.30 ug/L	97
21) cis-1,2-Dichloroethene	8.98	96	222166	20.43 ug/L	100
22) 2,2-Dichloropropane	9.14	77	314522	20.56 ug/L	97
23) Bromochloromethane	9.28	128	92003	20.56 ug/L	97
24) Cyclohexane	9.28	56	380538	20.11 ug/L	99
25) Chloroform	9.40	83	376492	21.55 ug/L	98
26) Carbon tetrachloride	9.61	117	200328	18.84 ug/L	100
27) 1,1,1-Trichloroethane	9.71	97	321334	20.59 ug/L	100
28) 2-Butanone	9.89	43	178151	39.18 ug/L	99
29) 1,1-Dichloropropene	9.90	75	292034	19.79 ug/L	97
30) Benzene	10.28	78	947261	21.11 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7339.D J009VOCS.M Fri Oct 10 10:49:40 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7339.D
Acq On : 9 Oct 2008 9:40
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	264740	21.00 ug/L	100
33) Methylcyclohexane	11.16	83	397333	19.61 ug/L	98
34) Trichloroethene	11.17	95	232154	21.28 ug/L	97
35) Dibromomethane	11.82	93	115997	20.39 ug/L	99
36) 1,2-Dichloropropane	11.95	63	208911	21.15 ug/L	98
37) Bromodichloromethane	12.05	83	230337	20.21 ug/L	99
38) 2-Chloroethylvinyl ether	12.90	63	498803	94.66 ug/L	100
39) cis-1,3-Dichloropropene	13.02	75	313675	20.24 ug/L	98
40) Toluene	13.39	92	568429	20.53 ug/L	100
41) 4-Methyl-2-pentanone	13.98	43	324424	38.32 ug/L	96
42) trans-1,3-Dichloropropene	14.04	75	259066	19.48 ug/L	100
43) 1,1,2-Trichloroethane	14.30	83	142736	21.09 ug/L	97
44) 2-Hexanone	15.32	43	204974	34.14 ug/L	99
47) Tetrachloroethene	14.02	166	178224	20.52 ug/L	100
48) Dibromochloromethane	14.59	129	128676	18.83 ug/L	97
49) 1,3-Dichloropropane	14.74	76	294586	21.34 ug/L	99
50) 1,2-Dibromoethane	14.99	107	149473	21.17 ug/L	96
51) 1-Chlorohexane	15.79	91	267233	19.17 ug/L	90
52) Chlorobenzene	15.84	112	576409	20.96 ug/L	98
53) Ethylbenzene	15.87	91	1068971	20.43 ug/L	100
54) 1,1,1,2-Tetrachloroethane	15.93	131	144814	19.79 ug/L	99
55) (m+p)-Xylene	16.10	106	794150	39.96 ug/L	99
56) o-Xylene	16.84	106	371493	20.38 ug/L	96
57) Styrene	16.93	104	488837	18.53 ug/L	98
58) Bromoform	16.99	173	58263	17.93 ug/L	93
60) Isopropylbenzene	17.37	105	887617	21.36 ug/L	99
62) Bromobenzene	18.06	156	186927	22.37 ug/L	98
63) n-Propylbenzene	18.09	91	1063644	20.47 ug/L	99
64) 1,1,2,2-Tetrachloroethane	18.21	83	217125	22.68 ug/L	97
65) 2-Chlorotoluene	18.38	91	720355	21.90 ug/L	99
66) 1,3,5-Trimethylbenzene	18.42	105	707703	20.67 ug/L	98
67) 1,2,3-Trichloropropane	18.46	75	186000	22.62 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	31047	20.10 ug/L	98
69) 4-Chlorotoluene	18.68	91	612843	21.44 ug/L	99
70) tert-Butylbenzene	19.00	119	527741	20.05 ug/L	99
71) 1,2,4-Trimethylbenzene	19.13	105	620458	20.42 ug/L	100
72) sec-Butylbenzene	19.32	105	806605	20.07 ug/L	98
73) p-Isopropyltoluene	19.57	119	603729	19.63 ug/L	98
74) 1,3-Dichlorobenzene	19.74	146	354524	21.65 ug/L	99
75) 1,4-Dichlorobenzene	19.90	146	340378	22.21 ug/L	100
76) n-Butylbenzene	20.35	91	545528	20.79 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7339.D J009VOCS.M Fri Oct 10 10:49:40 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7339.D
Acq On : 9 Oct 2008 9:40
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	320497	21.58 ug/L	98
78) 1,2-Dibromo-3-chloropropan	22.17	75	24603	18.74 ug/L	99
79) Hexachlorobutadiene	23.31	225	62676	21.74 ug/L	98
80) 1,2,4-Trichlorobenzene	23.36	180	151592	21.85 ug/L	97
81) Naphthalene	23.87	128	360878	19.96 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	136643	22.64 ug/L	94

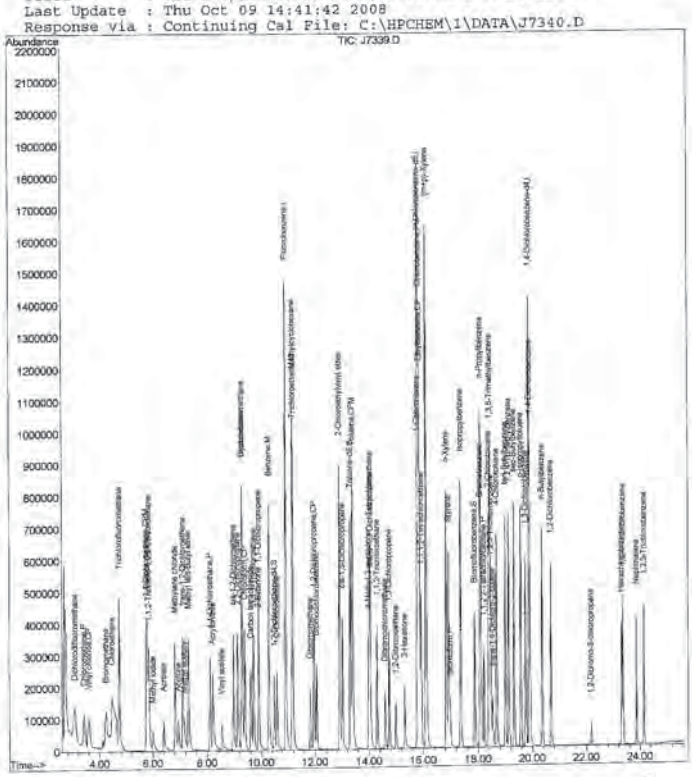
(#) = qualifier out of range (m) = manual integration
J7339.D J009VOCS.M Fri Oct 10 10:49:40 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7339.D
Acq On : 9 Oct 2008 9:40
Sample : ICAL 20 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D



J7339.D J009VOCS.M Fri Oct 10 10:49:43 2008

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\J7340.D
Acq On : 9 Oct 2008 10:14
Sample : ICAL 50 PPB
'isc : ICAL,8260S_CAL,
.S Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:14 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	2077589	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.81	82	852934	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	568004	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	574077	50.00 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.00%	
46) Toluene-d8	13.32	98	2039712	50.00 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.00%	
61) Bromofluorobenzene	17.87	95	641861	50.00 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.00%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.06	85	866886	50.00 ug/L	100
3) Chloromethane	3.41	50	878836	50.00 ug/L	100
4) Vinyl chloride	3.61	62	968662	50.00 ug/L	100
5) Bromomethane	4.25	94	796033	50.00 ug/L	100
6) Chloroethane	4.46	64	792710	50.00 ug/L	100
7) Trichlorofluoromethane	4.74	101	1520170	50.00 ug/L	100
8) 1,1-Dichloroethene	5.75	96	500088	50.00 ug/L	100
9) Carbon disulfide	5.78	76	1961846	50.00 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	575117	50.00 ug/L	100
11) Methyl iodide	6.01	142	482624	50.00 ug/L	100
12) Acrolein	6.39	56	449995	250.00 ug/L	100
13) Methylene chloride	6.82	84	576608	50.00 ug/L	100
14) Acetone	6.93	43	370859	100.00 ug/L	100
15) trans-1,2-Dichloroethene	7.10	96	555285	50.00 ug/L	100
16) Methyl acetate	7.15	43	387231	50.00 ug/L	100
17) Methyl tert-Butyl ether	7.31	73	1328444	50.00 ug/L	100
18) 1,1-Dichloroethane	8.11	63	1015481	50.00 ug/L	100
19) Acrylonitrile	8.20	53	960882	250.00 ug/L	100
20) Vinyl acetate	8.54	43	697021	50.00 ug/L	100
21) cis-1,2-Dichloroethene	8.98	96	602003	50.00 ug/L	100
22) 2,2-Dichloropropane	9.14	77	846784	50.00 ug/L	100
23) Bromochloromethane	9.28	128	247683	50.00 ug/L	100
24) Cyclohexane	9.28	56	1047674	50.00 ug/L	100
25) Chloroform	9.40	83	967212	50.00 ug/L	99
26) Carbon tetrachloride	9.61	117	588470	50.00 ug/L	100
27) 1,1,1-Trichloroethane	9.72	97	863864	50.00 ug/L	100
28) 2-Butanone	9.88	43	503412	100.00 ug/L	100
29) 1,1-Dichloropropene	9.90	75	816747	50.00 ug/L	100
30) Benzene	10.28	78	2484487	50.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7340.D J009VOCS.M Fri Oct 10 10:49:45 2008

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\J7340.D
Acq On : 9 Oct 2008 10:14
Sample : ICAL 50 PPB
'isc : ICAL,8260S_CAL,
.S Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:14 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	697726	50.00 ug/L	100
33) Methylcyclohexane	11.15	83	1121824	50.00 ug/L	100
34) Trichloroethene	11.16	95	603833	50.00 ug/L	100
35) Dibromomethane	11.82	93	314965	50.00 ug/L	100
36) 1,2-Dichloropropane	11.95	63	546641	50.00 ug/L	100
37) Bromodichloromethane	12.05	83	630901	50.00 ug/L	100
38) 2-Chloroethylvinyl ether	12.90	63	1458479	250.00 ug/L	100
39) cis-1,3-Dichloropropene	13.02	75	857955	50.00 ug/L	100
40) Toluene	13.39	92	1532524	50.00 ug/L	100
41) 4-Methyl-2-pentanone	13.97	43	937278	100.00 ug/L	100
42) trans-1,3-Dichloropropene	14.04	75	736301	50.00 ug/L	99
43) 1,1,2-Trichloroethane	14.30	83	374552	50.00 ug/L	100
44) 2-Hexanone	15.31	43	664621	100.00 ug/L	100
47) Tetrachloroethene	14.01	166	486920	50.00 ug/L	100
48) Dibromochloromethane	14.59	129	383181	50.00 ug/L	100
49) 1,3-Dichloropropane	14.74	76	774091	50.00 ug/L	100
50) 1,2-Dibromoethane	14.98	107	395980	50.00 ug/L	100
51) 1-Chlorohexane	15.77	91	781579	50.00 ug/L	100
52) Chlorobenzene	15.84	112	1542282	50.00 ug/L	100
53) Ethylbenzene	15.86	91	2933901	50.00 ug/L	100
54) 1,1,1,2-Tetrachloroethane	15.93	131	410322	50.00 ug/L	100
55) (m+p)-Xylene	16.10	106	2228583	100.00 ug/L	100
56) o-Xylene	16.83	106	1022210	50.00 ug/L	100
57) Styrene	16.92	104	1479170	50.00 ug/L	100
58) Bromoform	16.99	173	182204	50.00 ug/L	100
60) Isopropylbenzene	17.37	105	2578822	50.00 ug/L	100
62) Bromobenzene	18.06	156	518658	50.00 ug/L	100
63) n-Propylbenzene	18.09	91	3224961	50.00 ug/L	100
64) 1,1,2,2-Tetrachloroethane	18.21	83	594100	50.00 ug/L	100
65) 2-Chlorotoluene	18.38	91	2041608	50.00 ug/L	100
66) 1,3,5-Trimethylbenzene	18.42	105	2124925	50.00 ug/L	100
67) 1,2,3-Trichloropropane	18.45	75	510422	50.00 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	95852	50.00 ug/L	100
69) 4-Chlorotoluene	18.68	91	1773725	50.00 ug/L	100
70) tert-Butylbenzene	19.00	119	1633218	50.00 ug/L	100
71) 1,2,4-Trimethylbenzene	19.13	105	1885614	50.00 ug/L	100
72) sec-Butylbenzene	19.32	105	2493985	50.00 ug/L	100
73) p-Isopropyltoluene	19.57	119	1908952	50.00 ug/L	100
74) 1,3-Dichlorobenzene	19.74	146	1016372	50.00 ug/L	100
75) 1,4-Dichlorobenzene	19.90	146	951198	50.00 ug/L	100
76) n-Butylbenzene	20.35	91	1628726	50.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7340.D J009VOCS.M Fri Oct 10 10:49:45 2008

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\J7340.D
Acq On : 9 Oct 2008 10:14
Sample : ICAL 50 PPB
'isc : ICAL,8260S_CAL,
.S Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:14 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	921746	50.00 ug/L	100
78) 1,2-Dibromo-3-chloropropan	22.17	75	81478	50.00 ug/L	100
79) Hexachlorobutadiene	23.31	225	178909	50.00 ug/L	100
80) 1,2,4-Trichlorobenzene	23.36	180	430562	50.00 ug/L	100
81) Naphthalene	23.87	128	1122110	50.00 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	374599	50.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7340.D J009VOCS.M Fri Oct 10 10:49:45 2008

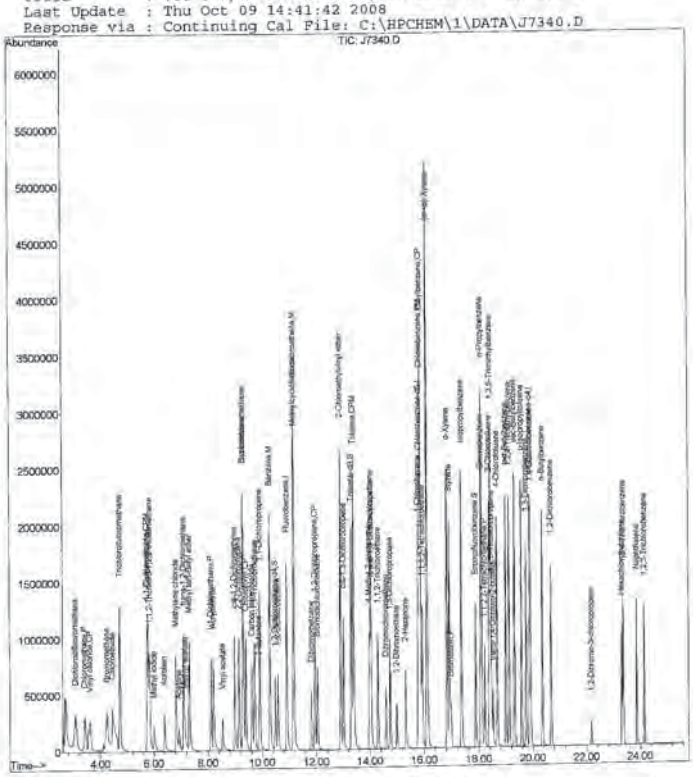
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7340.D
Acq On : 9 Oct 2008 10:14
Sample : ICAL 50 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:38 2008

Vial: 6
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D



J7340.D J009VOCS.M Fri Oct 10 10:49:48 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7341.D
Acq On : 9 Oct 2008 10:47
Sample : ICAL 100 PPB
'isc : ICAL,8260S_CAL,
.S Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	2113908	50.00 ug/L	0.01
45) Chlorobenzene-d5	15.81	82	871421	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	582366	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	1199390	102.67 ug/L	0.00
Spiked Amount 50.000			Recovery = 205.34%		
46) Toluene-d8	13.30	98	4302381	103.23 ug/L	-0.01
Spiked Amount 50.000			Recovery = 206.46%		
61) Bromofluorobenzene	17.87	95	1368575	103.98 ug/L	0.00
Spiked Amount 50.000			Recovery = 207.96%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.06	85	1762148	99.89 ug/L	99
3) Chloromethane	3.42	50	1773418	99.16 ug/L	99
4) Vinyl chloride	3.61	62	1990492	100.98 ug/L	99
5) Bromomethane	4.26	94	1630265	100.64 ug/L	96
6) Chloroethane	4.46	64	1584270	98.21 ug/L	98
7) Trichlorofluoromethane	4.74	101	3017585	97.55 ug/L	99
8) 1,1-Dichloroethene	5.75	96	1064431	104.60 ug/L	96
9) Carbon disulfide	5.78	76	4055958	101.59 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	1178444	100.69 ug/L	99
11) Methyl iodide	6.01	142	1027188	104.59 ug/L	96
12) Acrolein	6.39	56	981258	535.78 ug/L	99
13) Methylene chloride	6.81	84	1169892	99.70 ug/L	99
14) Acetone	6.93	43	686834	182.02 ug/L	99
15) trans-1,2-Dichloroethene	7.10	96	1158961	102.56 ug/L	99
16) Methyl acetate	7.14	43	826414	104.87 ug/L	98
17) Methyl tert-Butyl ether	7.31	73	2863798	105.94 ug/L	99
18) 1,1-Dichloroethane	8.11	63	2104767	101.85 ug/L	99
19) Acrylonitrile	8.20	53	1985933	507.82 ug/L	99
20) Vinyl acetate	9.52	43	1456343	102.67 ug/L	96
21) cis-1,2-Dichloroethene	8.98	96	1264460	103.22 ug/L	99
22) 2,2-Dichloropropane	9.14	77	1812070	105.16 ug/L	100
23) Bromochloromethane	9.28	128	535111	106.17 ug/L	97
24) Cyclohexane	9.28	56	2209945	103.66 ug/L	99
25) Chloroform	9.40	83	2008080	102.02 ug/L	100
26) Carbon tetrachloride	9.61	117	1331668	111.20 ug/L	98
27) 1,1,1-Trichloroethane	9.72	97	1846756	105.05 ug/L	100
28) 2-Butanone	9.88	43	1018590	198.86 ug/L	96
29) 1,1-Dichloropropene	9.90	75	1689709	101.66 ug/L	99
30) Benzene	10.28	78	5234954	103.54 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7341.D J009VOCS.M Fri Oct 10 10:49:50 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7341.D
Acq On : 9 Oct 2008 10:47
Sample : ICAL 100 PPB
'isc : ICAL,8260S_CAL,
.S Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	1428408	100.60 ug/L	100
33) Methylcyclohexane	11.16	83	2322692	101.74 ug/L	99
34) Trichloroethene	11.16	95	1264096	102.87 ug/L	98
35) Dibromomethane	11.81	93	657078	102.52 ug/L	97
36) 1,2-Dichloropropane	11.95	63	1146619	103.08 ug/L	99
37) Bromodichloromethane	12.05	83	1373576	106.99 ug/L	99
38) 2-Chloroethylvinyl ether	12.90	63	3096108	521.59 ug/L	99
39) cis-1,3-Dichloropropene	13.02	75	1833293	105.01 ug/L	99
40) Toluene	13.39	92	3208833	102.89 ug/L	100
41) 4-Methyl-2-pentanone	13.97	43	1995713	209.27 ug/L	99
42) trans-1,3-Dichloropropene	14.03	75	1612634	107.63 ug/L	99
43) 1,1,2-Trichloroethane	14.30	83	774114	101.56 ug/L	99
44) 2-Hexanone	15.31	43	1393705	206.10 ug/L	97
47) Tetrachloroethene	14.01	166	1007559	101.27 ug/L	99
48) Dibromochloromethane	14.59	129	871629	111.32 ug/L	99
49) 1,3-Dichloropropane	14.74	76	1617338	102.25 ug/L	100
50) 1,2-Dibromoethane	14.98	107	843973	104.31 ug/L	98
51) 1-Chlorohexane	15.77	91	1630406	102.09 ug/L	97
52) Chlorobenzene	15.84	112	3297232	104.63 ug/L	99
53) Ethylbenzene	15.86	91	6168474	102.89 ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.93	131	905081	107.95 ug/L	99
55) (m+p)-Xylene	16.10	106	4798458	210.75 ug/L	98
56) o-Xylene	16.83	106	2221442	106.35 ug/L	99
57) Styrene	16.92	104	3241234	107.24 ug/L	98
58) Bromoform	16.99	173	437937	117.63 ug/L	99
60) Isopropylbenzene	17.37	105	5537620	104.72 ug/L	100
62) Bromobenzene	18.06	156	1096669	103.11 ug/L	99
63) n-Propylbenzene	18.09	91	6958309	105.22 ug/L	99
64) 1,1,2,2-Tetrachloroethane	18.21	83	1227598	100.77 ug/L	100
65) 2-Chlorotoluene	18.38	91	4324826	103.31 ug/L	99
66) 1,3,5-Trimethylbenzene	18.42	105	4596790	105.50 ug/L	99
67) 1,2,3-Trichloropropane	18.45	75	1057543	101.04 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	216035	109.91 ug/L	93
69) 4-Chlorotoluene	18.68	91	3752481	103.17 ug/L	99
70) tert-Butylbenzene	19.00	119	3675972	109.76 ug/L	99
71) 1,2,4-Trimethylbenzene	19.13	105	4128014	106.76 ug/L	99
72) sec-Butylbenzene	19.32	105	5640891	110.30 ug/L	100
73) p-Isopropyltoluene	19.57	119	4349084	111.10 ug/L	99
74) 1,3-Dichlorobenzene	19.74	146	2152045	103.26 ug/L	100
75) 1,4-Dichlorobenzene	19.90	146	1993716	102.22 ug/L	98
76) n-Butylbenzene	20.35	91	3599696	107.78 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7341.D J009VOCS.M Fri Oct 10 10:49:50 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7341.D
Acq On : 9 Oct 2008 10:47
Sample : ICAL 100 PPB
'isc : ICAL,8260S_CAL,
.S Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	1959712	103.68 ug/L	99
78) 1,2-Dibromo-3-chloropropan	22.17	75	181044	108.36 ug/L	95
79) Hexachlorobutadiene	23.31	225	393079	107.15 ug/L	99
80) 1,2,4-Trichlorobenzene	23.36	180	942349	106.73 ug/L	99
81) Naphthalene	23.87	128	2372481	103.11 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	796045	103.63 ug/L	99

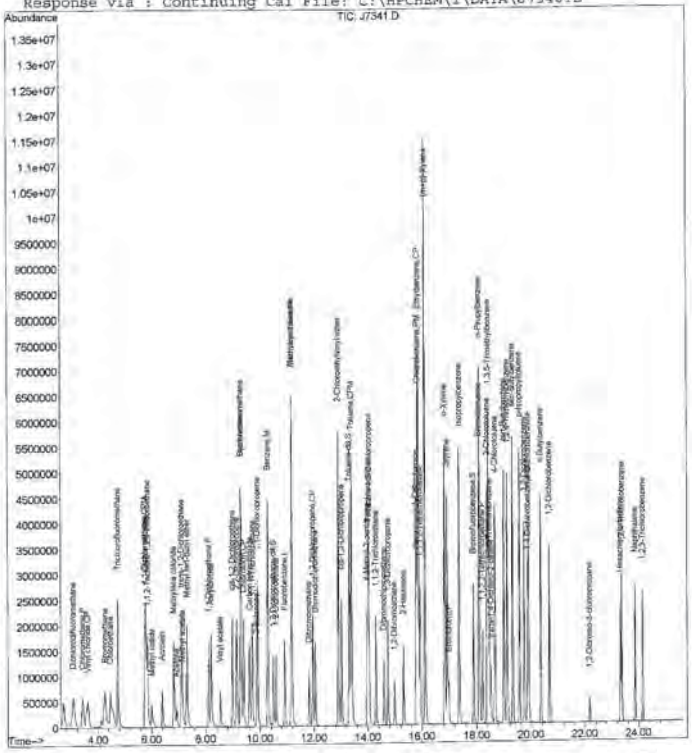
(#) = qualifier out of range (m) = manual integration
J7341.D J009VOCS.M Fri Oct 10 10:49:50 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7341.D
Acq On : 9 Oct 2008 10:47
Sample : ICAL 100 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D



J7341.D J009VOCS.M Fri Oct 10 10:49:53 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7342.D
Acq On : 9 Oct 2008 11:21
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	2281783	50.00 ug/L	0.01
45) Chlorobenzene-d5	15.81	82	955854	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.87	152	639114	50.00 ug/L	-0.01
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	1899809	150.66 ug/L	0.00
Spiked Amount 50.000			Recovery =	301.32%	
46) Toluene-d8	13.31	98	7033913	153.86 ug/L	-0.01
Spiked Amount 50.000			Recovery =	307.72%	
61) Bromofluorobenzene	17.88	95	2256922	156.25 ug/L	0.00
Spiked Amount 50.000			Recovery =	312.50%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.06	85	2799224	147.00 ug/L	100
3) Chloromethane	3.42	50	2741789	142.03 ug/L	100
4) Vinyl chloride	3.61	62	3107399	146.04 ug/L	83
5) Bromomethane	4.25	94	2705827	154.75 ug/L	98
6) Chloroethane	4.46	64	2428330	139.46 ug/L	98
7) Trichlorofluoromethane	4.74	101	4800685	143.77 ug/L	99
8) 1,1-Dichloroethene	5.75	96	1725063	157.04 ug/L	95
9) Carbon disulfide	5.78	76	6424255	149.08 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	1882969	149.05 ug/L	98
11) Methyl iodide	6.01	142	1604755	151.38 ug/L	99
12) Acrolein	6.39	56	1528515	773.19 ug/L	98
13) Methylene chloride	6.82	84	1862076	147.02 ug/L	97
14) Acetone	6.92	43	1032186	253.42 ug/L	100
15) trans-1,2-Dichloroethene	7.10	96	1853529	151.96 ug/L	98
16) Methyl acetate	7.14	43	1290965	151.77 ug/L	97
17) Methyl tert-Butyl ether	7.30	73	4773839	163.60 ug/L	98
18) 1,1-Dichloroethane	8.11	63	3314050	148.57 ug/L	99
19) Acrylonitrile	8.19	53	3103769	735.27 ug/L	100
20) Vinyl acetate	8.53	43	2383847	155.70 ug/L	95
21) cis-1,2-Dichloroethene	8.97	96	2043039	154.50 ug/L	98
22) 2,2-Dichloropropane	9.14	77	2949917	158.60 ug/L	100
23) Bromochloromethane	9.29	128	868759	159.68 ug/L	94
24) Cyclohexane	9.29	56	3538505	153.76 ug/L	98
25) Chloroform	9.39	83	3221664	151.64 ug/L	100
26) Carbon tetrachloride	9.61	117	2240342	173.32 ug/L	98
27) 1,1,1-Trichloroethane	9.71	97	2974374	156.75 ug/L	99
28) 2-Butanone	9.87	43	1571549	284.24 ug/L	96
29) 1,1-Dichloropropene	9.90	75	2696152	150.28 ug/L	99
30) Benzene	10.28	78	8307111	152.22 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7342.D J009VOCS.M Fri Oct 10 10:49:55 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7342.D
Acq On : 9 Oct 2008 11:21
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	2268375	148.01 ug/L	99
33) Methylcyclohexane	11.15	83	3818342	154.95 ug/L	98
34) Trichloroethene	11.16	95	2055752	154.99 ug/L	97
35) Dibromomethane	11.81	93	1061156	153.38 ug/L	98
36) 1,2-Dichloropropane	11.95	63	1846480	153.78 ug/L	100
37) Bromodichloromethane	12.05	83	2300381	165.99 ug/L	99
38) 2-Chloroethylvinyl ether	12.90	63	5036140	786.00 ug/L	98
39) cis-1,3-Dichloropropene	13.02	75	3021238	160.32 ug/L	98
40) Toluene	13.39	92	5262106	156.32 ug/L	98
41) 4-Methyl-2-pentanone	13.97	43	3181645	309.08 ug/L	98
42) trans-1,3-Dichloropropene	14.03	75	2723962	168.42 ug/L	97
43) 1,1,2-Trichloroethane	14.30	83	1256197	152.69 ug/L	99
44) 2-Hexanone	15.31	43	2264126	310.18 ug/L	97
47) Tetrachloroethene	14.01	166	1663526	152.43 ug/L	99
48) Dibromochloromethane	14.59	129	1525125	177.58 ug/L	98
49) 1,3-Dichloropropane	14.74	76	2633066	151.76 ug/L	99
50) 1,2-Dibromoethane	14.98	107	1381118	155.61 ug/L	99
51) 1-Chlorohexane	15.78	91	2688145	153.45 ug/L	93
52) Chlorobenzene	15.84	112	5452565	157.74 ug/L	98
53) Ethylbenzene	15.86	91	10071132	153.15 ug/L	99
54) 1,1,1,2-Tetrachloroethane	15.93	131	1546761	168.19 ug/L	98
55) (m+p)-Xylene	16.10	106	8090393	323.94 ug/L	92
56) o-Xylene	16.83	106	3724106	162.55 ug/L	97
57) Styrene	16.93	104	5418201	163.43 ug/L	98
58) Bromoform	16.99	173	787961	192.95 ug/L	97
60) Isopropylbenzene	17.36	105	9130733	157.34 ug/L	99
62) Bromobenzene	18.06	156	1868464	160.08 ug/L	97
63) n-Propylbenzene	18.09	91	11427277	157.46 ug/L	97
64) 1,1,2,2-Tetrachloroethane	18.21	83	1970397	147.38 ug/L	99
65) 2-Chlorotoluene	18.38	91	7188467	156.46 ug/L	99
66) 1,3,5-Trimethylbenzene	18.42	105	7845694	164.07 ug/L	99
67) 1,2,3-Trichloropropane	18.46	75	1712225	149.06 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.52	89	363489	168.51 ug/L	90
69) 4-Chlorotoluene	18.68	91	6202057	155.38 ug/L	99
70) tert-Butylbenzene	18.99	119	6381715	173.63 ug/L	99
71) 1,2,4-Trimethylbenzene	19.13	105	6968618	164.22 ug/L	99
72) sec-Butylbenzene	19.32	105	9688068	172.62 ug/L	99
73) p-Isopropyltoluene	19.57	119	7564384	176.08 ug/L	99
74) 1,3-Dichlorobenzene	19.74	146	3593212	157.10 ug/L	99
75) 1,4-Dichlorobenzene	19.90	146	3393675	158.54 ug/L	99
76) n-Butylbenzene	20.35	91	6174004	168.45 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7342.D J009VOCS.M Fri Oct 10 10:49:55 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7342.D
Acq On : 9 Oct 2008 11:21
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 12:38:32 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	3352149	161.61 ug/L	99
78) 1,2-Dibromo-3-chloropropan	22.17	75	305062	166.38 ug/L	93
79) Hexachlorobutadiene	23.31	225	729539	181.20 ug/L	99
80) 1,2,4-Trichlorobenzene	23.36	180	1641199	169.38 ug/L	99
81) Naphthalene	23.87	128	4053534	160.52 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	1414263	167.77 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7342.D J009VOCS.M Fri Oct 10 10:49:55 2008

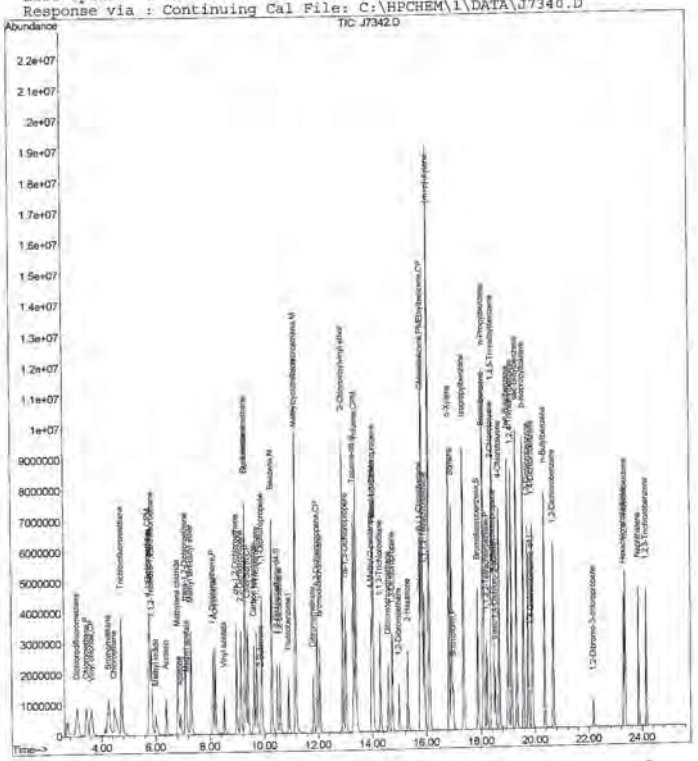
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7342.D
Acq On : 9 Oct 2008 11:21
Sample : ICAL 150 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 12:39 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: J009VOCS.RES

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D



J7342.D J009VOCS.M Fri Oct 10 10:49:58 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7345.D
Acq On : 9 Oct 2008 14:13
Sample : ICAL 200 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 14:39 2008

Vial: 11
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:05:50 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	2450267	50.00 ug/L	0.00
45) Chlorobenzene-d5	15.81	82	1031032	50.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	19.88	152	714444	50.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	10.48	65	2656545	196.18 ug/L	0.00
Spiked Amount 50.000			Recovery	= 392.36%	
46) Toluene-d8	13.31	98	9936236	201.50 ug/L	0.00
Spiked Amount 50.000			Recovery	= 403.00%	
61) Bromofluorobenzene	17.87	95	3287331	203.59 ug/L	0.00
Spiked Amount 50.000			Recovery	= 407.18%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.07	85	3978691	194.58 ug/L	100
3) Chloromethane	3.42	50	3790150	182.84 ug/L	99
4) Vinyl chloride	3.62	62	4295516	188.00 ug/L	82
5) Bromomethane	4.26	94	3642754	194.01 ug/L	95
6) Chloroethane	4.46	64	3320398	177.58 ug/L	97
7) Trichlorofluoromethane	4.74	101	7001187	195.25 ug/L	98
8) 1,1-Dichloroethene	5.75	96	2481366	210.36 ug/L	94
9) Carbon disulfide	5.78	76	9178708	198.35 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	2792696	205.87 ug/L	98
11) Methyl iodide	6.00	142	2253765	197.98 ug/L	99
12) Acrolein	6.38	56	2042656	962.22 ug/L	96
13) Methylene chloride	6.82	84	2585688	190.11 ug/L	97
14) Acetone	6.92	43	1426377	326.12 ug/L	99
15) trans-1,2-Dichloroethene	7.09	96	2656074	202.79 ug/L	98
16) Methyl acetate	7.14	43	1802651	197.36 ug/L	97
17) Methyl tert-Butyl ether	7.30	73	6756057	215.61 ug/L	97
18) 1,1-Dichloroethane	8.11	63	4664880	194.75 ug/L	99
19) Acrylonitrile	8.19	53	4213710	929.57 ug/L	100
20) Vinyl acetate	8.52	43	3354564	204.04 ug/L	94
21) cis-1,2-Dichloroethene	8.97	96	2865902	201.83 ug/L	97
22) 2,2-Dichloropropane	9.14	77	4228566	211.71 ug/L	99
23) Bromochloromethane	9.28	128	1243038	212.77 ug/L	92
24) Cyclohexane	9.28	56	4981901	201.60 ug/L	96
25) Chloroform	9.39	83	4528675	198.50 ug/L	100
26) Carbon tetrachloride	9.61	117	3300533	237.78 ug/L	98
27) 1,1,1-Trichloroethane	9.71	97	4287288	210.40 ug/L	100
28) 2-Butanone	9.86	43	2142391	360.85 ug/L	94
29) 1,1-Dichloropropene	9.90	75	3897674	202.32 ug/L	99
30) Benzene	10.28	78	11477978	195.86 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7345.D J009VOCS.M Fri Oct 10 10:50:08 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7345.D
Acq On : 9 Oct 2008 14:13
Sample : ICAL 200 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 14:39 2008

Vial: 11
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:05:50 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	10.58	62	3160474	192.04 ug/L	99
33) Methylcyclohexane	11.16	83	5627508	212.67 ug/L	96
34) Trichloroethene	11.16	95	3018213	211.91 ug/L	96
35) Dibromomethane	11.81	93	1487524	200.22 ug/L	96
36) 1,2-Dichloropropane	11.95	63	2590497	200.91 ug/L	99
37) Bromodichloromethane	12.05	83	3282885	220.60 ug/L	98
38) 2-Chloroethylvinyl ether	12.90	63	6960143	1011.59 ug/L	97
39) cis-1,3-Dichloropropene	13.02	75	4309296	212.94 ug/L	97
40) Toluene	13.39	92	7494831	207.33 ug/L	95
41) 4-Methyl-2-pentanone	13.97	43	4303795	389.34 ug/L	97
42) trans-1,3-Dichloropropene	14.03	75	3805106	219.09 ug/L	97
43) 1,1,2-Trichloroethane	14.30	83	1743094	197.30 ug/L	98
44) 2-Hexanone	15.31	43	3084544	393.52 ug/L	96
47) Tetrachloroethene	14.01	166	2524210	214.43 ug/L	99
48) Dibromochloromethane	14.59	129	2240798	241.89 ug/L	99
49) 1,3-Dichloropropane	14.74	76	3660732	195.61 ug/L	100
50) 1,2-Dibromoethane	14.98	107	1960937	204.83 ug/L	99
51) 1-Chlorohexane	15.77	91	4016380	212.56 ug/L	91
52) Chlorobenzene	15.84	112	7873650	211.17 ug/L	97
53) Ethylbenzene	15.86	91	14169768	199.77 ug/L	96
54) 1,1,1,2-Tetrachloroethane	15.93	131	2239836	225.79 ug/L	99
55) (m+p)-Xylene	16.10	106	11903506	441.86 ug/L #	78
56) o-Xylene	16.83	106	5363160	217.02 ug/L	95
57) Styrene	16.92	104	7842997	219.32 ug/L	99
58) Bromoform	16.99	173	1157262	262.72 ug/L	98
60) Isopropylbenzene	17.37	105	12727441	196.19 ug/L	97
62) Bromobenzene	18.06	156	2764668	211.89 ug/L	95
63) n-Propylbenzene	18.09	91	15929153	196.35 ug/L	93
64) 1,1,2,2-Tetrachloroethane	18.21	83	2706933	181.12 ug/L	100
65) 2-Chlorotoluene	18.38	91	10248005	199.54 ug/L	98
66) 1,3,5-Trimethylbenzene	18.42	105	11331598	211.98 ug/L	97
67) 1,2,3-Trichloropropane	18.45	75	2347719	182.84 ug/L #	100
68) trans-1,4-Dichloro-2-buten	18.53	89	523118	216.95 ug/L	89
69) 4-Chlorotoluene	18.68	91	8930216	200.14 ug/L	97
70) tert-Butylbenzene	19.00	119	9215086	224.29 ug/L	99
71) 1,2,4-Trimethylbenzene	19.13	105	10174414	214.49 ug/L	98
72) sec-Butylbenzene	19.32	105	13618772	217.07 ug/L	97
73) p-Isopropyltoluene	19.57	119	11172076	232.64 ug/L	99
74) 1,3-Dichlorobenzene	19.74	146	5296297	207.14 ug/L	99
75) 1,4-Dichlorobenzene	19.90	146	5021587	209.86 ug/L	98
76) n-Butylbenzene	20.35	91	9325207	227.60 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7345.D J009VOCS.M Fri Oct 10 10:50:09 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7345.D
Acq On : 9 Oct 2008 14:13
Sample : ICAL 200 PPB
Misc : ICAL,8260S_CAL,
S Integration Params: RTEINT.P
Quant Time: Oct 9 14:39 2008

Vial: 11
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:05:50 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.68	146	4834217	208.48 ug/L	99
78) 1,2-Dibromo-3-chloropropan	22.17	75	430188	209.88 ug/L	92
79) Hexachlorobutadiene	23.31	225	1079307	239.81 ug/L	99
80) 1,2,4-Trichlorobenzene	23.36	180	2544021	234.88 ug/L	99
81) Naphthalene	23.87	128	5737214	203.24 ug/L	100
82) 1,2,3-Trichlorobenzene	24.15	180	2116524	224.60 ug/L	98

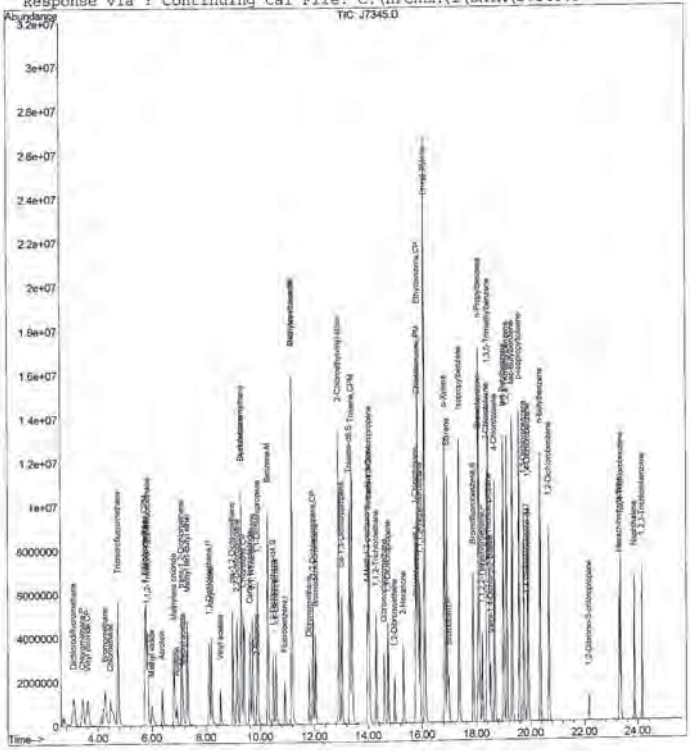
(#) = qualifier out of range (m) = manual integration
J7345.D J009VOCS.M Fri Oct 10 10:50:09 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7345.D
Acq On : 9 Oct 2008 14:13
Sample : ICAL 200 PPB
Misc : ICAL,8260S_CAL,
MS Integration Params: RTEINT.P
Quant Time: Oct 9 14:39 2008

Vial: 11
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009VOCS.RES

Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Oct 09 14:41:42 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7340.D



J7345.D J009VOCS.M Fri Oct 10 10:50:11 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7351.D
Acq On : 10 Oct 2008 13:03
Sample : CCV-15131
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: GS
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	101	0.00
2		Dichlorodifluoromethane	0.391	0.396	-1.3	96	0.00
3	P	Chloromethane	0.403	0.401	0.5	96	0.00
4	CP	Vinyl chloride	0.445	0.437	1.8	94	0.00
5		Bromomethane	0.437	0.364	16.7	96	0.00
6		Chloroethane	0.388	0.368	5.2	97	0.00
7		Trichlorofluoromethane	0.708	0.699	1.3	96	0.00
8	CPM	1,1-Dichloroethene	0.238	0.237	0.4	99	0.00
9		Carbon disulfide	0.960	0.895	6.8	95	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.276	0.272	1.4	99	0.00
11		Methylene chloride	0.306	0.268	12.4	97	0.00
12		Acetone	0.095	0.074	22.1#	84	0.00
13		trans-1,2-Dichloroethene	0.264	0.254	3.8	96	0.00
14		Methyl acetate	0.174	0.174	0.0	94	0.00
		Methyl tert-Butyl ether	0.621	0.632	-1.8	100	0.00
16	P	1,1-Dichloroethane	0.479	0.473	1.3	97	0.00
17		cis-1,2-Dichloroethene	0.285	0.283	0.7	98	0.00
18		Cyclohexane	0.481	0.489	-1.7	98	0.00
19	CP	Chloroform	0.462	0.457	1.1	99	0.00
20		Carbon tetrachloride	0.283	0.285	-0.7	101	0.00
21		1,1,1-Trichloroethane	0.411	0.411	0.0	100	0.00
22		2-Butanone	0.107	0.105	1.9	87	0.00
23	M	Benzene	1.168	1.168	0.0	98	0.00
24	S	1,2-Dichloroethane-d4	0.281	0.277	1.4	101	0.00
25		1,2-Dichloroethane	0.326	0.324	0.6	97	0.00
26		Methylcyclohexane	0.514	0.520	-1.2	97	0.00
27	M	Trichloroethene	0.290	0.282	2.8	98	0.00
28	CP	1,2-Dichloropropane	0.258	0.263	-1.9	101	0.00
29		Bromodichloromethane	0.301	0.307	-2.0	102	0.00
30		cis-1,3-Dichloropropene	0.395	0.410	-3.8	100	0.00
31	CPM	Toluene	0.714	0.721	-1.0	98	0.00
32		4-Methyl-2-pentanone	0.202	0.206	-2.0	92	0.00
33		trans-1,3-Dichloropropene	0.339	0.342	-0.9	97	0.00
34		1,1,2-Trichloroethane	0.177	0.175	1.1	98	0.00
35		2-Hexanone	0.134	0.143	-6.7	90	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00
37	S	Toluene-d8	2.375	2.381	-0.3	100	0.00
38		Tetrachloroethene	0.569	0.577	-1.4	102	0.00
39		Dibromochloromethane	0.446	0.465	-4.3	104	0.00
		1,2-Dibromoethane	0.450	0.457	-1.6	99	0.00

(#) = Out of Range
J7351.D JO09NTCS.M Mon Oct 13 10:58:15 2008 Giulia Stallach 10/13/08 Pa 356

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7351.D
Acq On : 10 Oct 2008 13:03
Sample : CCV-15131
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: GS
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	1.828	1.809	1.0	101	0.00
42	CP	Ethylbenzene	3.339	3.369	-0.9	98	0.00
43		(m+p)-Xylene	1.259	1.283	-1.9	99	0.00
44		o-Xylene	1.139	1.202	-5.5	101	0.00
45		Styrene	1.597	1.711	-7.1	99	0.00
46	P	Bromoform	0.211	0.223	-5.7	105	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
48		Isopropylbenzene	4.372	4.559	-4.3	100	0.00
49	S	Bromofluorobenzene	1.156	1.172	-1.4	103	0.00
50	P	1,1,2,2-Tetrachloroethane	1.058	0.999	5.6	95	0.00
51		1,3-Dichlorobenzene	1.818	1.825	-0.4	101	0.00
52		1,4-Dichlorobenzene	1.748	1.717	1.8	102	0.00
53		1,2-Dichlorobenzene	1.650	1.656	-0.4	101	0.00
		1,2-Dibromo-3-chloropropane	0.133	0.139	-4.5	96	0.00
55		1,2,4-Trichlorobenzene	0.798	0.809	-1.4	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7351.D JO09NTCS.M Mon Oct 13 10:58:15 2008 Pa 357

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7351.D
Acq On : 10 Oct 2008 13:03
Sample : CCV-15131
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: GS
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	50.000	50.000	0.0	101	0.00
2		Dichlorodifluoromethane	50.000	50.722	-1.4	96	0.00
3	P	Chloromethane	50.000	49.794	0.4	96	0.00
4	CP	Vinyl chloride	50.000	49.078	1.8	94	0.00
5		Bromomethane	50.000	46.449	7.1	96	0.00
6		Chloroethane	50.000	47.367	5.3	97	0.00
7		Trichlorofluoromethane	50.000	49.413	1.2	96	0.00
8	CPM	1,1-Dichloroethene	50.000	49.693	0.6	99	0.00
9		Carbon disulfide	50.000	46.583	6.8	95	0.00
10		1,1,2-Trichloro-1,2,2-trifl	50.000	49.268	1.5	99	0.00
11		Methylene chloride	50.000	48.039	3.9	97	0.00
12		Acetone	100.000	81.359	18.6	84	0.00
13		trans-1,2-Dichloroethene	50.000	48.115	3.8	96	0.00
14		Methyl acetate	50.000	50.004	-0.0	94	0.00
		Methyl tert-Butyl ether	50.000	50.872	-1.7	100	0.00
16	P	1,1-Dichloroethane	50.000	49.339	1.3	97	0.00
17		cis-1,2-Dichloroethene	50.000	49.647	0.7	96	0.00
18		Cyclohexane	50.000	50.801	-1.6	96	0.00
19	CP	Chloroform	50.000	49.492	1.0	99	0.00
20		Carbon tetrachloride	50.000	46.042	7.9	101	0.00
21		1,1,1-Trichloroethane	50.000	49.980	0.0	100	0.00
22		2-Butanone	100.000	90.345	9.7	87	0.00
23	M	Benzene	50.000	49.990	0.0	98	0.00
24	S	1,2-Dichloroethane-d4	50.000	49.291	1.4	101	0.00
25		1,2-Dichloroethane	50.000	49.691	0.6	97	0.00
26		Methylcyclohexane	50.000	50.580	-1.2	97	0.00
27	M	Trichloroethene	50.000	48.670	2.7	98	0.00
28	CP	1,2-Dichloropropane	50.000	50.977	-2.0	101	0.00
29		Bromodichloromethane	50.000	50.990	-2.0	102	0.00
30		cis-1,3-Dichloropropene	50.000	47.836	4.3	100	0.00
31	CPM	Toluene	50.000	50.463	-0.9	98	0.00
32		4-Methyl-2-pentanone	100.000	91.377	8.6	92	0.00
33		trans-1,3-Dichloropropene	50.000	45.607	8.8	97	0.00
34		1,1,2-Trichloroethane	50.000	49.676	0.6	98	0.00
35		2-Hexanone	100.000	90.977	9.0	90	0.00
36	I	Chlorobenzene-d5	50.000	50.000	0.0	101	0.00
37	S	Toluene-d8	50.000	50.120	-0.2	100	0.00
38		Tetrachloroethene	50.000	50.650	-1.3	102	0.00
39		Dibromochloromethane	50.000	46.830	6.3	104	0.00
		1,2-Dibromoethane	50.000	50.799	-1.6	99	0.00

(#) = Out of Range
J7351.D JO09NTCS.M Mon Oct 13 10:58:21 2008 Giulia Stallach 10/13/08 Pa 358

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7351.D
Acq On : 10 Oct 2008 13:03
Sample : CCV-15131
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 38
Operator: GS
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	50.000	49.462	1.1	101	0.00
42	CP	Ethylbenzene	50.000	50.442	-0.9	98	0.00
43		(m+p)-Xylene	100.000	93.759	6.2	99	0.00
44		o-Xylene	50.000	47.860	4.3	101	0.00
45		Styrene	50.000	47.242	5.5	99	0.00
46	P	Bromoform	50.000	45.216	9.6	105	0.00
47	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	99	0.00
48		Isopropylbenzene	50.000	52.139	-4.3	100	0.00
49	S	Bromofluorobenzene	50.000	50.695	-1.4	103	0.00
50	P	1,1,2,2-Tetrachloroethane	50.000	47.235	5.5	95	0.00
51		1,3-Dichlorobenzene	50.000	50.197	-0.4	101	0.00
52		1,4-Dichlorobenzene	50.000	49.096	1.8	102	0.00
53		1,2-Dichlorobenzene	50.000	50.183	-0.4	101	0.00
		1,2-Dibromo-3-chloropropane	50.000	46.197	7.6	96	0.00
55		1,2,4-Trichlorobenzene	50.000	50.724	-1.4	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7351.D JO09NTCS.M Mon Oct 13 10:58:21 2008 Pa 359

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7351.D
Acq On : 10 Oct 2008 13:03
Sample : CCV-15131
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 13 10:56 2008

Vial: 38
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:11 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.91	96	2092531	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.80	82	857823	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	564081	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	580460	49.29 ug/L	0.00
Spiked Amount 50.000			Recovery = 98.58%		
37) Toluene-d8	13.31	98	2042105	50.12 ug/L	0.00
Spiked Amount 50.000			Recovery = 100.24%		
49) Bromofluorobenzene	17.87	95	661189	50.70 ug/L	0.00
Spiked Amount 50.000			Recovery = 101.40%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.08	85	829536	50.72 ug/L	100
3) Chloromethane	3.42	50	839941	49.79 ug/L	99
4) Vinyl chloride	3.62	62	913710	49.08 ug/L	99
5) Bromomethane	4.26	94	761738	46.45 ug/L #	66
6) Chloroethane	4.46	64	769909	47.37 ug/L	98
7) Trichlorofluoromethane	4.73	101	1463682	49.41 ug/L	99
8) 1,1-Dichloroethene	5.75	96	495586	49.69 ug/L	96
9) Carbon disulfide	5.78	76	1872046	46.58 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	569285	49.27 ug/L	99
11) Methylene chloride	6.81	84	560296	48.04 ug/L	99
12) Acetone	6.93	43	310232	81.36 ug/L	100
13) trans-1,2-Dichloroethene	7.10	96	532300	48.12 ug/L	100
14) Methyl acetate	7.15	43	364534	50.00 ug/L	98
15) Methyl tert-Butyl ether	7.31	73	1322726	50.87 ug/L	98
16) 1,1-Dichloroethane	8.11	63	989218	49.34 ug/L	99
17) cis-1,2-Dichloroethene	8.98	96	591394	49.65 ug/L	99
18) Cyclohexane	9.28	56	1022850	50.80 ug/L	99
19) Chloroform	9.39	83	956073	49.49 ug/L	99
20) Carbon tetrachloride	9.61	117	596670	46.04 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	859697	49.98 ug/L	99
22) 2-Butanone	9.87	43	438357	90.35 ug/L	96
23) Benzene	10.28	78	2443194	49.99 ug/L	100
25) 1,2-Dichloroethane	10.58	62	678490	49.69 ug/L	100
26) Methylcyclohexane	11.16	83	1087088	50.58 ug/L	99
27) Trichloroethene	11.17	95	590877	48.67 ug/L	99
28) 1,2-Dichloropropane	11.95	63	549794	50.98 ug/L	98
29) Bromodichloromethane	12.05	83	642997	50.99 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	857938	47.84 ug/L	99
31) Toluene	13.39	92	1508085	50.46 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7351.D J009NTCS.M Mon Oct 13 10:58:26 2008

Pa 360

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7351.D
Acq On : 10 Oct 2008 13:03
Sample : CCV-15131
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 13 10:56 2008

Vial: 38
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:11 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	863523	91.38 ug/L	99
33) trans-1,3-Dichloropropene	14.04	75	715883	45.61 ug/L	98
34) 1,1,2-Trichloroethane	14.30	83	367188	49.68 ug/L	99
35) 2-Hexanone	15.31	43	600312	90.98 ug/L	99
38) Tetrachloroethene	14.02	166	494723	50.65 ug/L	98
39) Dibromochloromethane	14.59	129	398805	46.83 ug/L	99
40) 1,2-Dibromoethane	14.99	107	391965	50.80 ug/L	99
41) Chlorobenzene	15.84	112	1551458	49.46 ug/L	99
42) Ethylbenzene	15.87	91	2889655	50.44 ug/L	100
43) (m+p)-Xylene	16.10	106	2201200	93.76 ug/L	99
44) o-Xylene	16.84	106	1031523	47.86 ug/L	98
45) Styrene	16.92	104	1467897	47.24 ug/L	99
46) Bromoform	16.99	173	191263	45.22 ug/L	98
48) Isopropylbenzene	17.37	105	2571798	52.14 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.21	83	563621	47.24 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	1029426	50.20 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	968301	49.10 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	934173	50.18 ug/L	99
54) 1,2-Dibromo-3-chloropropan	22.18	75	78171	46.20 ug/L	98
55) 1,2,4-Trichlorobenzene	23.36	180	456395	50.72 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7351.D J009NTCS.M Mon Oct 13 10:58:26 2008

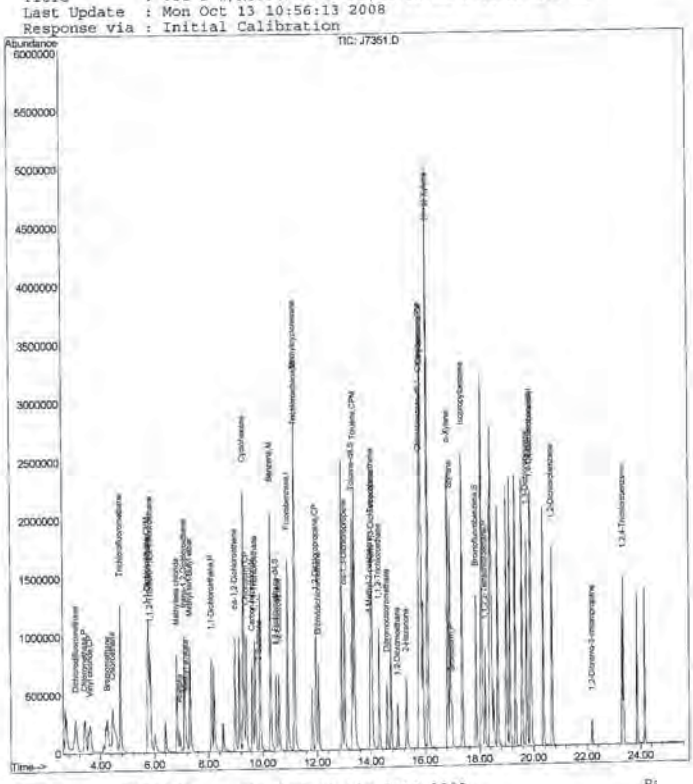
Pa 361

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7351.D
Acq On : 10 Oct 2008 13:03
Sample : CCV-15131
Misc : CCV ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 13 10:56 2008

Vial: 38
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration



J7351.D J009NTCS.M Mon Oct 13 10:58:29 2008

Pa 362

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7369.D
Acq On : 13 Oct 2008 10:16
Sample : CCV-15143
Misc : CCV- ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	104	0.00
2		Dichlorodifluoromethane	0.391	0.417	-6.6	104	0.00
3	P	Chloromethane	0.403	0.415	-3.0	103	0.00
4	CP	Vinyl chloride	0.445	0.449	-0.9	101	0.00
5		Bromomethane	0.437	0.355	18.8	97	0.00
6		Chloroethane	0.388	0.374	3.6	102	0.00
7		Trichlorofluoromethane	0.708	0.694	2.0	99	0.00
8	CPM	1,1-Dichloroethene	0.238	0.241	-1.3	105	0.00
9		Carbon disulfide	0.960	0.921	4.1	102	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.276	0.281	-1.8	106	0.00
11		Methylene chloride	0.306	0.275	10.1	104	0.00
12		Acetone	0.095	0.079	16.8	92	0.00
13		trans-1,2-Dichloroethene	0.264	0.262	0.8	102	0.00
14		Methyl acetate	0.174	0.189	-8.6	106	0.00
[illegible]		Methyl tert-Butyl ether	0.621	0.643	-3.5	105	0.00
[illegible]	P	1,1-Dichloroethane	0.479	0.486	-1.5	104	0.00
17		cis-1,2-Dichloroethene	0.285	0.284	0.4	102	0.00
18		Cyclohexane	0.481	0.506	-5.2	105	0.00
19	CP	Chloroform	0.462	0.465	-0.6	104	0.00
20		Carbon tetrachloride	0.283	0.281	0.7	104	0.00
21		1,1,1-Trichloroethane	0.411	0.417	-1.5	105	0.00
22		2-Butanone	0.107	0.107	0.0	93	0.00
23	M	Benzene	1.168	1.204	-3.1	105	0.00
24	S	1,2-Dichloroethane-d4	0.281	0.283	-0.7	107	0.00
25		1,2-Dichloroethane	0.326	0.335	-2.8	104	0.00
26		Methylcyclohexane	0.514	0.543	-5.6	105	0.00
27	M	Trichloroethene	0.290	0.288	0.7	104	0.00
28	CP	1,2-Dichloropropane	0.258	0.271	-5.0	108	0.00
29		Bromodichloromethane	0.301	0.308	-2.3	106	0.00
30		cis-1,3-Dichloropropene	0.395	0.415	-5.1	105	0.00
31	CPM	Toluene	0.714	0.741	-3.8	105	0.00
32		4-Methyl-2-pentanone	0.202	0.212	-5.0	98	0.00
33		trans-1,3-Dichloropropene	0.339	0.359	-5.9	106	0.00
34		1,1,2-Trichloroethane	0.177	0.177	0.0	102	0.00
35		2-Hexanone	0.134	0.150	-11.9	98	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
37	S	Toluene-d8	2.375	2.384	-0.4	106	0.00
38		Tetrachloroethene	0.569	0.564	0.9	105	0.00
[illegible]		Dibromochloromethane	0.446	0.453	-1.6	107	0.00
[illegible]		1,2-Dibromoethane	0.450	0.456	-1.3	105	0.00

(#) = Out of Range
J7369.D J009NTCS.M Tue Oct 14 08:32:45 2008

10/15/08

Pa 363

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7369.D
Acq On : 13 Oct 2008 10:16
Sample : CCV-15143
Misc : CCV- ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	1.828	1.785	2.4	105	0.00
42	CP	Ethylbenzene	3.339	3.387	-1.4	105	0.00
43		(m+p)-Xylene	1.259	1.287	-2.2	105	0.00
44		o-Xylene	1.139	1.203	-5.6	107	0.00
45		Styrene	1.597	1.722	-7.8	106	0.00
46	P	Bromoform	0.211	0.212	-0.5	106	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	0.00
48		Isopropylbenzene	4.372	4.468	-2.2	106	0.00
49	S	Bromofluorobenzene	1.156	1.143	1.1	109	0.00
50	P	1,1,2,2-Tetrachloroethane	1.058	1.003	5.2	103	0.00
51		1,3-Dichlorobenzene	1.818	1.791	1.5	108	0.00
52		1,4-Dichlorobenzene	1.748	1.690	3.3	109	0.00
53		1,2-Dichlorobenzene	1.650	1.620	1.8	107	0.00
*		1,2-Dibromo-3-chloropropane	0.133	0.144	-8.3	108	0.00
55		1,2,4-Trichlorobenzene	0.798	0.801	-0.4	114	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7369.D J009NTCS.M Tue Oct 14 08:32:46 2008 Pa

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7369.D
Acq On : 13 Oct 2008 10:16
Sample : CCV-15143
Misc : CCV- ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	50.000	50.000	0.0	104	0.00
2		Dichlorodifluoromethane	50.000	53.297	-6.6	104	0.00
3	P	Chloromethane	50.000	51.532	-3.1	103	0.00
4	CP	Vinyl chloride	50.000	50.439	-0.9	101	0.00
5		Bromomethane	50.000	45.257	9.5	97	0.00
6		Chloroethane	50.000	48.157	3.7	102	0.00
7		Trichlorofluoromethane	50.000	49.005	2.0	99	0.00
8	CPM	1,1-Dichloroethene	50.000	50.604	-1.2	105	0.00
9		Carbon disulfide	50.000	47.977	4.0	102	0.00
10		1,1,2-Trichloro-1,2,2-trifl	50.000	50.959	-1.9	106	0.00
11		Methylene chloride	50.000	49.397	1.2	104	0.00
12		Acetone	100.000	88.261	11.7	92	0.00
13		trans-1,2-Dichloroethene	50.000	49.525	1.0	102	0.00
14		Methyl acetate	50.000	54.332	-8.7	106	0.00
		Methyl tert-Butyl ether	50.000	51.753	-3.5	105	0.00
16	P	1,1-Dichloroethane	50.000	50.706	-1.4	104	0.00
17		cis-1,2-Dichloroethene	50.000	49.822	0.4	102	0.00
18		Cyclohexane	50.000	52.637	-5.3	105	0.00
19	CP	Chloroform	50.000	50.318	-0.6	104	0.00
20		Carbon tetrachloride	50.000	45.501	9.0	104	0.00
21		1,1,1-Trichloroethane	50.000	50.672	-1.3	105	0.00
22		2-Butanone	100.000	92.627	7.4	93	0.00
23	M	Benzene	50.000	51.543	-3.1	105	0.00
24	S	1,2-Dichloroethane-d4	50.000	50.201	-0.4	107	0.00
25		1,2-Dichloroethane	50.000	51.340	-2.7	104	0.00
26		Methylcyclohexane	50.000	52.875	-5.8	105	0.00
27	M	Trichloroethene	50.000	49.673	0.7	104	0.00
28	CP	1,2-Dichloropropane	50.000	52.556	-5.1	108	0.00
29		Bromodichloromethane	50.000	51.180	-2.4	106	0.00
30		cis-1,3-Dichloropropene	50.000	48.417	3.2	105	0.00
31	CPM	Toluene	50.000	51.883	-3.8	105	0.00
32		4-Methyl-2-pentanone	100.000	94.097	5.9	98	0.00
33		trans-1,3-Dichloropropene	50.000	47.748	4.5	106	0.00
34		1,1,2-Trichloroethane	50.000	50.050	-0.1	102	0.00
35		2-Hexanone	100.000	95.016	5.0	98	0.00
36	I	Chlorobenzene-d5	50.000	50.000	0.0	107	0.00
37	S	Toluene-d8	50.000	50.183	-0.4	106	0.00
38		Tetrachloroethene	50.000	49.542	0.9	105	0.00
39		Dibromochloromethane	50.000	45.733	8.5	107	0.00
		1,2-Dibromoethane	50.000	50.645	-1.3	105	0.00

(#) = Out of Range
J7369.D J009NTCS.M Tue Oct 14 08:32:52 2008 Pa

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7369.D
Acq On : 13 Oct 2008 10:16
Sample : CCV-15143
Misc : CCV- ,8260S7_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	50.000	48.819	2.4	105	0.00
42	CP	Ethylbenzene	50.000	50.722	-1.4	105	0.00
43		(m+p)-Xylene	100.000	94.032	6.0	105	0.00
44		o-Xylene	50.000	47.891	4.2	107	0.00
45		Styrene	50.000	47.524	5.0	106	0.00
46	P	Bromoform	50.000	43.329	13.3	106	0.00
47	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	108	0.00
48		Isopropylbenzene	50.000	51.094	-2.2	106	0.00
49	S	Bromofluorobenzene	50.000	49.441	1.1	109	0.00
50	P	1,1,2,2-Tetrachloroethane	50.000	47.416	5.2	103	0.00
51		1,3-Dichlorobenzene	50.000	49.269	1.5	108	0.00
52		1,4-Dichlorobenzene	50.000	48.337	3.3	109	0.00
53		1,2-Dichlorobenzene	50.000	49.078	1.8	107	0.00
		1,2-Dibromo-3-chloropropane	50.000	47.987	4.0	108	0.00
55		1,2,4-Trichlorobenzene	50.000	50.234	-0.5	114	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7369.D J009NTCS.M Tue Oct 14 08:32:52 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7369.D
Acq On : 13 Oct 2008 10:16
Sample : CCV-15143
Misc : CCV- ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:51 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	2171012	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	909102	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	611077	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	613347	50.20 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.40%	
37) Toluene-d8	13.31	98	2166883	50.18 ug/L	0.00
Spiked Amount 50.000			Recovery	= 100.36%	
49) Bromofluorobenzene	17.87	95	698554	49.44 ug/L	0.00
Spiked Amount 50.000			Recovery	= 98.88%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.07	85	904340	53.30 ug/L	100
3) Chloromethane	3.42	50	901871	51.53 ug/L	99
4) Vinyl chloride	3.62	62	974274	50.44 ug/L	97
5) Bromomethane	4.26	94	770841	45.26 ug/L	98
6) Chloroethane	4.46	64	812105	48.16 ug/L	99
7) Trichlorofluoromethane	4.74	101	1506019	49.00 ug/L	99
8) 1,1-Dichloroethene	5.75	96	523602	50.60 ug/L	98
9) Carbon disulfide	5.78	76	2000378	47.98 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	610901	50.96 ug/L	98
11) Methylene chloride	6.82	84	596861	49.40 ug/L	99
12) Acetone	6.93	43	342673	88.26 ug/L	98
13) trans-1,2-Dichloroethene	7.10	96	568439	49.52 ug/L	100
14) Methyl acetate	7.15	43	410945	54.33 ug/L	98
15) Methyl tert-Butyl ether	7.30	73	1396121	51.75 ug/L	100
16) 1,1-Dichloroethane	8.11	63	1054748	50.71 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	615738	49.82 ug/L	99
18) Cyclohexane	9.28	56	1099576	52.64 ug/L	100
19) Chloroform	9.39	83	1008476	50.32 ug/L	100
20) Carbon tetrachloride	9.61	117	611107	45.50 ug/L	97
21) 1,1,1-Trichloroethane	9.71	97	904295	50.67 ug/L	99
22) 2-Butanone	9.88	43	465838	92.63 ug/L	96
23) Benzene	10.28	78	2613533	51.54 ug/L	100
25) 1,2-Dichloroethane	10.58	62	727290	51.34 ug/L	100
26) Methylcyclohexane	11.15	83	1179034	52.88 ug/L	98
27) Trichloroethene	11.16	95	625683	49.67 ug/L	99
28) 1,2-Dichloropropane	11.95	63	588076	52.56 ug/L	98
29) Bromodichloromethane	12.05	83	669595	51.18 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	901290	48.42 ug/L	99
31) Toluene	13.39	92	1608663	51.88 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7369.D J009NTCS.M Tue Oct 14 08:32:57 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7369.D
Acq On : 13 Oct 2008 10:16
Sample : CCV-15143
Misc : CCV- ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:51 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	922561	94.10 ug/L	99
33) trans-1,3-Dichloropropene	14.03	75	779483	47.75 ug/L	99
34) 1,1,2-Trichloroethane	14.30	83	383823	50.05 ug/L	98
35) 2-Hexanone	15.31	43	651258	95.02 ug/L	100
38) Tetrachloroethene	14.01	166	512834	49.54 ug/L	99
39) Dibromochloromethane	14.59	129	411746	45.73 ug/L	98
40) 1,2-Dibromoethane	14.98	107	414141	50.65 ug/L	99
41) Chlorobenzene	15.84	112	1622841	48.82 ug/L	99
42) Ethylbenzene	15.86	91	3079395	50.72 ug/L	100
43) (m+p)-Xylene	16.10	106	2339948	94.03 ug/L	98
44) o-Xylene	16.83	106	1093917	47.89 ug/L	100
45) Styrene	16.92	104	1565518	47.52 ug/L	100
46) Bromoform	16.99	173	192947	43.33 ug/L	98
48) Isopropylbenzene	17.37	105	2730238	51.09 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.21	83	612916	47.42 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	1094574	49.27 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	1032761	48.34 ug/L	100
53) 1,2-Dichlorobenzene	20.68	146	989721	49.08 ug/L	100
54) 1,2-Dibromo-3-chloropropan	22.18	75	88075	47.99 ug/L	96
55) 1,2,4-Trichlorobenzene	23.36	180	489637	50.23 ug/L	100

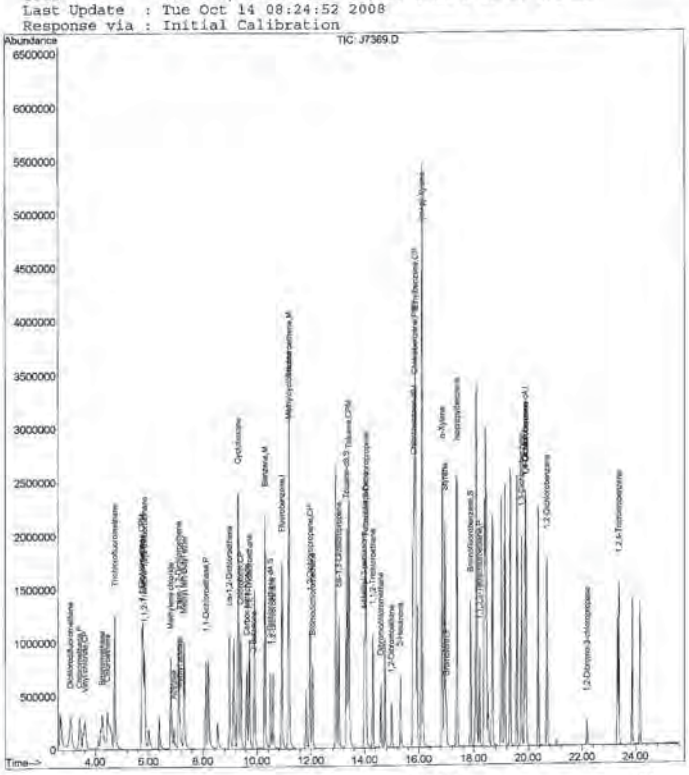
(#) = qualifier out of range (m) = manual integration
J7369.D J009NTCS.M Tue Oct 14 08:32:57 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7369.D
Acq On : 13 Oct 2008 10:16
Sample : CCV-15143
Misc : CCV- ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 2
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration



J7369.D J009NTCS.M Tue Oct 14 08:32:58 2008

Internal Standards

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): J7351.D Date Analyzed: 10/10/2008

Instrument ID: MS03_10 Time Analyzed: 13:03

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #		
12 HOUR STD	2092531	10.91	857823	15.60	564051	19.68		
UPPER LIMIT	4185062	11.41	1715646	16.30	1128162	20.38		
LOWER LIMIT	1046266	10.41	428912	15.30	282041	19.38		
SAMPLE NO.								
01 LCS-15131 (LCS-15131)	2377974	10.90	697673	15.61	555442	19.67		
02 MB-15131 (MB-15131)	2089617	10.91	792510	15.61	446957	19.68		
03 Trip Blank (0810083-009A)	2022642	10.91	794825	15.61	440573	19.68		
04 MBSS-1 (0810083-001A)	1633472	10.90	569130	15.61	198411*	19.68		
05 MBSS-2 (0810083-002A)	1691945	10.90	462706	15.62	147931*	19.68		
06 MBSS-3 (0810083-003A)	1625463	10.90	440460	15.61	145318*	19.67		
07 MBSS-4 (0810083-004A)	1693173	10.91	437918	15.62	139364*	19.68		
08 MBSS-FD (0810083-005A)	1709468	10.91	462335	15.62	140070*	19.68		

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

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No: 0810083

Lab Code: LSLB

Lab File ID (Standard): J7360.D Date Analyzed: 10/13/2008

Instrument ID: MS03_10 Time Analyzed: 10:16

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #		
12 HOUR STD	2171012	10.90	909102	15.81	611077	19.88		
UPPER LIMIT	4342024	11.40	1818204	16.31	1222154	20.38		
LOWER LIMIT	1085506	10.40	454551	15.31	305539	19.38		
SAMPLE NO.								
01 LCS-15143 (LCS-15143)	2078657	10.90	839385	15.81	331237	19.88		
02 MSB-15143 (MSB-15143)	2078657	10.90	832365	15.81	331237	19.88		
03 MBSS-1MS (0810083-001AMS)	1648412	10.90	591550	15.81	232864*	19.88		
04 MBSS-1MSD (0810083-001AMSD)	2183845	10.90	694536	15.81	234615*	19.88		
05 MB-15143 (MB-15143)	2242483	10.91	832192	15.81	419592	19.88		
06 MBSS-1RA (0810083-001ARA)	2022213	10.91	672948	15.82	277978*	19.88		
07 MBSS-2RA (0810083-002ARA)	1767404	10.91	479157	15.82	162340*	19.88		
08 MBSS-3RA (0810083-003ARA)	1772623	10.91	489944	15.82	167130*	19.88		
09 MBSS-4RA (0810083-004ARA)	1758301	10.90	467627	15.81	151092*	19.88		
10 MBSS-FDRA (0810083-005ARA)	1697739	10.91	490750	15.82	147328*	19.88		

IS1 = Fluorobenzene

IS2 = Chlorobenzene-d5

IS3 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

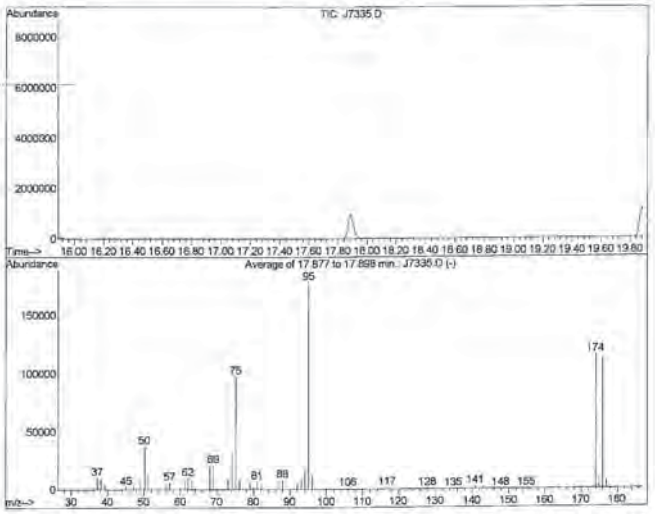
* Values outside of QC limits.

Raw QC Data

Tune Raw Data

BFB

Data File : C:\HPCHEM\1\DATA\J7335.D Vial: 1
Acq On : 9 Oct 2008 6:26 Operator: JK
Sample : TB100908A3 Inst : #3MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df



AutoFind: Scans 1449, 1450, 1451; Background Corrected with Scan 1442

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	37328	PASS
75	95	30	60	54.3	97600	PASS
95	95	100	100	100.0	179776	PASS
96	95	5	9	6.7	12026	PASS
173	174	0.00	2	0.8	895	PASS
174	95	50	100	64.3	115541	PASS
175	174	5	9	7.5	8623	PASS
176	174	95	101	97.4	112528	PASS
177	176	5	9	6.5	7271	PASS

J7335.D J009VOCS.M Fri Oct 10 09:24:09 2008

Lisetta Stalloch 10/10/08

Average of 17.877 to 17.898 min.: J7335.D
TB100908A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.20	1827	49.10	8508	64.10	778	76.15	7928
37.15	10146	50.15	37328	67.05	620	77.05	1365
38.15	9257	51.15	11981	68.10	19078	78.10	856
39.15	3814	52.15	820	69.05	20987	78.95	7156
39.95	292	55.15	199	70.00	1150	79.95	1850
40.25	171	56.10	3075	70.25	565	81.00	6796
44.00	711	57.10	6098	71.95	428	82.00	1518
44.25	658	60.00	1829	72.10	681	83.25	171
45.15	2219	61.10	8876	73.05	8572	87.00	7550
47.15	2545	62.10	9755	74.10	32869	88.00	8115
48.00	1388	63.10	7059	75.10	97600	91.00	963

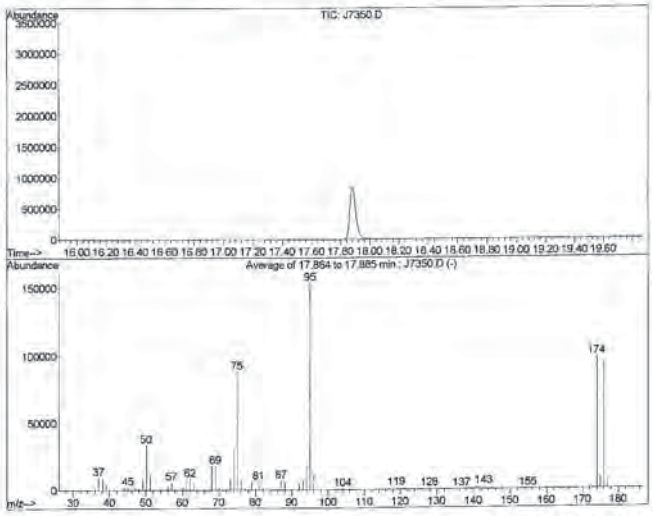
Average of 17.877 to 17.898 min.: J7335.D
TB100908A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.05	5445	115.90	739	149.05	176		
93.05	8618	116.95	1412	154.95	196		
94.10	23003	117.90	677	173.10	895		
95.05	179776	118.95	1004	174.00	115541		
96.05	12026	127.95	791	175.00	8623		
96.95	353	130.00	683	175.95	112528		
97.15	201	134.95	180	177.00	7271		
103.85	465	136.75	277				
104.05	710	141.00	2414				
105.15	256	143.00	1996				
106.00	1062	147.85	196				

BFB

Data File : C:\HPCHEM\1\DATA\J7350.D
Acq On : 10 Oct 2008 12:20
Sample : TB101008A3
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\J009VOCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df

Vial: 1
Operator: GS
Inst : #3MS10
Multiplr: 1.00



AutoFind: Scans 1448, 1449, 1450; Background Corrected with Scan 1442

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	33360	PASS
75	95	30	60	57.0	88307	PASS
95	95	100	100	100.0	154939	PASS
96	95	5	9	7.7	11944	PASS
173	174	0.00	2	0.6	550	PASS
174	95	50	100	63.2	97941	PASS
175	174	5	9	7.5	7376	PASS
176	174	95	101	95.8	93864	PASS
177	176	5	9	6.9	6492	PASS

J7350.D J009VOCS.M Mon Oct 13 08:52:08 2008

10/13/08

Average of 17.864 to 17.885 min.: J7350.D
TB101008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1842	50.10	33360	64.20	553	76.95	312
37.10	9170	51.15	11420	67.10	439	77.10	1195
38.15	8774	52.05	220	68.10	17761	78.05	462
39.10	3660	55.00	519	69.15	17886	79.00	6230
40.05	445	56.10	3019	70.15	1813	80.00	1504
44.10	1604	57.10	5609	71.85	251	80.95	6270
45.10	1974	60.10	1857	72.05	825	82.00	1306
46.35	199	61.10	7807	73.10	8267	87.05	6864
47.10	2269	62.10	8174	74.05	30888	88.05	6088
48.00	1276	63.10	6346	75.05	88307	91.00	410
49.10	8035	63.95	293	76.10	7715	92.05	4917

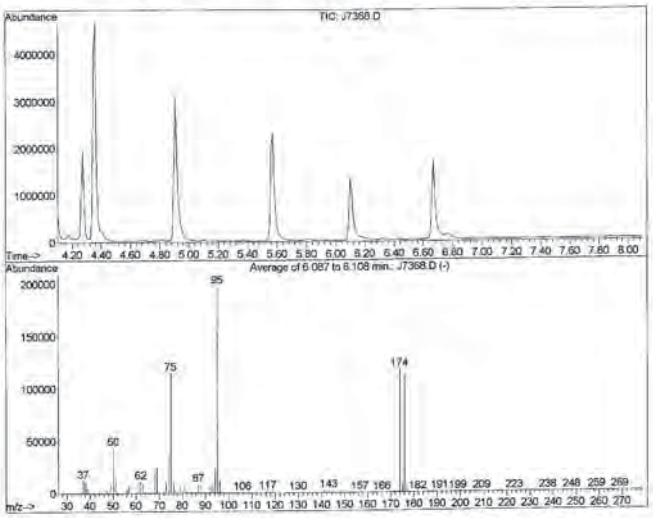
Average of 17.864 to 17.885 min.: J7350.D
TB101008A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.10	7428	127.85	278	174.00	97941		
94.05	20443	128.00	599	175.00	7376		
95.05	154939	129.95	411	175.95	93864		
96.10	11944	130.15	247	177.00	6492		
104.10	924	134.85	172				
105.95	800	136.85	201				
116.00	658	140.95	1522				
116.85	360	142.85	1718				
117.05	889	145.95	170				
117.95	247	154.95	170				
119.00	1209	172.85	550				

BFB

Data File : C:\HPCHEM\1\DATA\J7368.D
Acq On : 13 Oct 2008 9:46
Sample : TB101308A3
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\J009STRS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df

Vial: 1
Operator: JK
Inst : #3MS10
Multiplr: 1.00



AutoFind: Scans 190, 191, 192; Background Corrected with Scan 186

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	43675	PASS
75	95	30	60	57.6	115093	PASS
95	95	100	100	100.0	199683	PASS
96	95	5	9	6.5	12925	PASS
173	174	0.00	2	0.6	695	PASS
174	95	50	100	58.9	117605	PASS
175	174	5	9	7.7	9014	PASS
176	174	95	101	95.2	111931	PASS
177	176	5	9	6.4	7146	PASS

J7368.D J009STRS.M Mon Oct 13 13:37:47 2008

10/13/08

Average of 6.087 to 6.108 min.: J7368.D
TB101308A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	2017	47.10	2848	56.10	4172	65.00	94
37.15	12465	47.65	181	57.10	7163	65.35	68
38.15	11259	48.00	830	58.10	345	66.10	170
39.15	4409	48.25	194	58.95	211	67.05	412
41.95	183	49.05	9398	59.35	127	68.05	22675
42.80	196	50.15	43675	60.10	1765	69.05	24518
43.15	212	51.10	15493	61.10	10609	70.10	2022
43.30	180	52.05	738	62.05	11606	70.90	213
44.10	1378	53.05	75	63.10	9139	71.35	88
45.05	2053	53.35	83	63.85	159	72.10	1472
46.10	302	55.20	638	64.10	970	73.05	10181

Average of 6.087 to 6.108 min.: J7368.D
TB101308A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
74.05	38423	85.00	239	96.10	12925	105.85	176
75.00	115093	86.15	428	97.10	307	106.00	845
76.10	9441	87.00	8858	98.95	106	106.90	76
77.10	1681	88.00	8297	99.25	82	107.80	121
78.05	1110	89.15	95	100.15	66	109.35	118
78.95	6937	89.65	55	100.45	57	110.10	182
79.95	2087	90.95	1340	100.80	237	110.75	117
81.00	7706	92.05	6657	102.80	145	111.25	80
81.90	1353	93.05	8772	103.95	741	111.90	163
83.20	205	94.05	25005	104.85	377	113.05	34
84.15	95	95.05	199683	105.35	136	113.75	74

Average of 6.087 to 6.108 min.: J7368.D
TB101308A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
114.15	58	122.85	87	131.45	83	140.05	68
115.00	383	123.25	96	131.85	71	140.95	2313
115.75	132	123.90	162	133.85	193	141.95	379
115.90	730	126.05	68	134.85	537	142.35	87
117.00	1512	126.85	94	135.35	99	143.00	2414
118.00	820	127.15	77	135.75	99	143.55	70
119.05	1127	127.95	482	136.95	805	143.85	137
119.95	123	128.95	102	137.75	58	144.30	138
121.45	51	129.15	109	138.05	148	144.80	178
121.65	52	130.00	849	138.25	67	145.10	247
121.95	140	130.95	458	139.15	100	145.75	177

Average of 6.087 to 6.108 min.: J7368.D
TB101308A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.95	166	153.90	184	158.80	148	170.75	78
146.95	142	154.15	81	159.00	220	170.90	198
147.25	54	154.95	491	160.05	86	171.80	397
147.85	125	155.55	50	160.60	118	172.05	53
148.05	402	155.75	68	160.95	274	172.85	171
149.15	232	155.95	52	163.05	64	173.15	695
149.80	153	156.35	110	164.45	57	173.95	117605
151.30	216	156.90	543	164.75	62	175.00	9014
151.65	76	157.55	54	166.25	71	175.95	111931
152.15	86	157.75	59	170.05	71	176.95	7146
153.05	77	157.95	62	170.45	59	178.10	188

Average of 6.087 to 6.108 min.: J7368.D
TB101308A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
179.15	55	193.25	91	208.10	89	223.25	106
180.05	85	193.95	53	209.15	211	224.05	56
181.05	77	195.65	68	209.35	59	225.65	94
181.75	58	197.15	76	210.90	83	235.35	61
185.15	95	197.35	67	211.15	105	237.75	67
187.05	76	199.05	111	211.80	5	238.15	51
189.15	84	199.45	50	212.40	108	242.35	65
189.45	53	200.85	54	214.80	208	243.05	62
191.15	321	201.75	133	215.35	56	244.35	57
191.95	137	204.85	53	216.35	77	245.15	66
192.15	92	207.85	56	216.95	104	248.10	116

Average of 6.087 to 6.108 min.: J7368.D
TB101308A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
251.25	58						
252.85	64						
254.95	53						
257.05	58						
258.95	59						
266.55	50						
269.05	69						

Method Blank Data

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15131	SampType: MBLK	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:	RunNo: 15131
Client ID: ZZZZZ	Batch ID: R15131	Method: SW8260B		Analysis Date: 10/10/08	SeqNo: 396305
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	2.5									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.5									
Acetone	ND	40									
Carbon disulfide	ND	2.5									
Methyl acetate	ND	2.5									
Methylene chloride	ND	5.0									
trans-1,2-Dichloroethene	ND	2.5									
Methyl tert-butyl ether	ND	2.5									
1,1-Dichloroethane	ND	2.5									
cis-1,2-Dichloroethene	ND	2.5									
2-Butanone	ND	40									
Chloroform	ND	2.5									
1,1,1-Trichloroethane	ND	2.5									
Cyclohexane	ND	2.5									
Carbon tetrachloride	ND	2.5									
Benzene	ND	2.5									
1,2-Dichloroethane	ND	2.5									
Trichloroethene	ND	2.5									
Methylcyclohexane	ND	2.5									
1,2-Dichloropropane	ND	2.5									
Bromodichloromethane	ND	2.5									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limits (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

13-Oct-08

Page 1 of 2

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15131	SampType: MBLK	TestCode: 826087_OLM	Units: ug/Kg	Prep Date:	RunNo: 15131
Client ID: ZZZZZ	Batch ID: R15131	Method: SW8260B		Analysis Date: 10/10/08	SeqNo: 398305
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val.	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	2.5									
4-Methyl-2-pentanone	ND	5.0									
Toluene	ND	2.5									
trans-1,3-Dichloropropene	ND	2.5									
1,1,2-Trichloroethane	ND	2.5									
Tetrachloroethene	ND	2.5									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	2.5									
1,2-Dibromoethane	ND	2.5									
Chlorobenzene	ND	2.5									
Ethylbenzene	ND	2.5									
Xylenes (total)	ND	5.0									
Styrene	ND	2.5									
Bromoform	ND	2.5									
Isopropylbenzene	ND	2.5									
1,1,2,2-Tetrachloroethane	ND	2.5									
1,3-Dichlorobenzene	ND	2.5									
1,4-Dichlorobenzene	ND	2.5									
1,2-Dichlorobenzene	ND	2.5									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Surr: 1,2-Dichloroethane-d4	48.2	0.10	50	0	96	71	126				
Surr: Toluene-d8	62.1	0.10	50	0	104	79	125				
Surr: 4-Bromofluorobenzene	54.8	0.10	50	0	110	69	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

13-Oct-08

Page 2 of 2

384

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7356.D
Acq On : 10 Oct 2008 16:32
Sample : MB-15131
Misc : MBLK,8260S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 13 10:59 2008

Vial: 43
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JO09NTCS.RES

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration

J7356.D JO09NTCS.M Mon Oct 13 10:59:47 2008 Pag

385

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MB-15131

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: MB-15131

Sample wt/vol: 5 (g/mL) G Lab File ID: J7356.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/10/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 15 SW8260B

386

Tentatively Identified Compound (LSC) summary

Operator ID: GS Date Acquired: 10 Oct 2008 16:32
Data File: C:\HPCHEM\1\DATA\J7356.D
Name: MB-15131
Misc: MBLK,8260S7_OLM42,
Method: C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

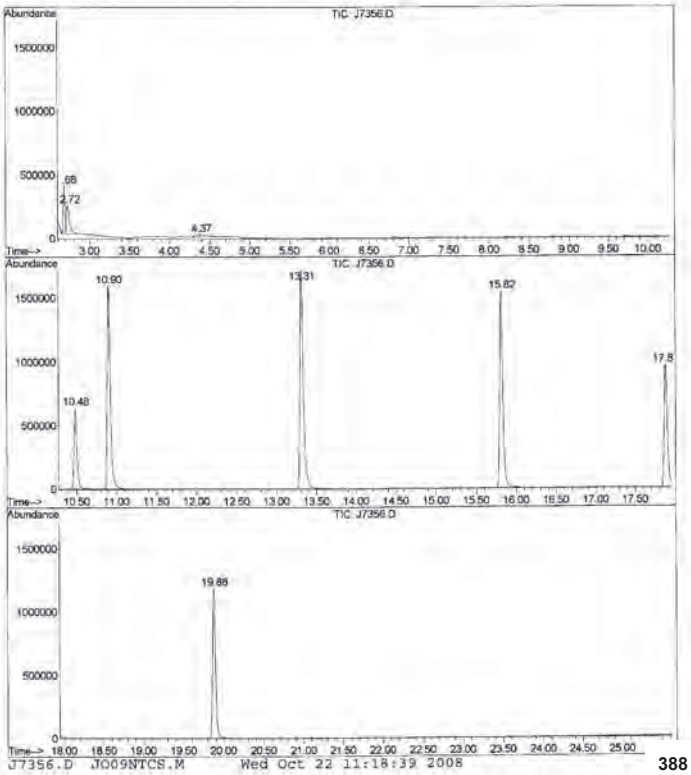
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.68	7.8	ug/L	682346	ISTD01	10.91	4387840	50.0
Carbon dioxide	2.72	7.0	ug/L	612323	ISTD01	10.91	4387840	50.0

J7356.D JO09NTCS.M Wed Oct 22 11:18:39 2008

387

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7356.D
Operator : GS
Acquired : 10 Oct 2008 16:32 using AcqMethod JO09VOCS
Instrument : #3MS10
Sample Name: MB-15131
Misc Info : MBLK,8260S7_OLM42,
Vial Number: 43
Quant File :JO09NTCS.RES (RTE Integrator)



J7356.D JO09NTCS.M Wed Oct 22 11:18:39 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7356.D
Acq On : 10 Oct 2008 16:32
Sample : MB-15131
Misc : MBLK,8260S7_OLM42,
MS Integration Params: LSCINT.P

Vial: 43
Operator: GS
Inst : #3MS10
Multiplr: 1.00

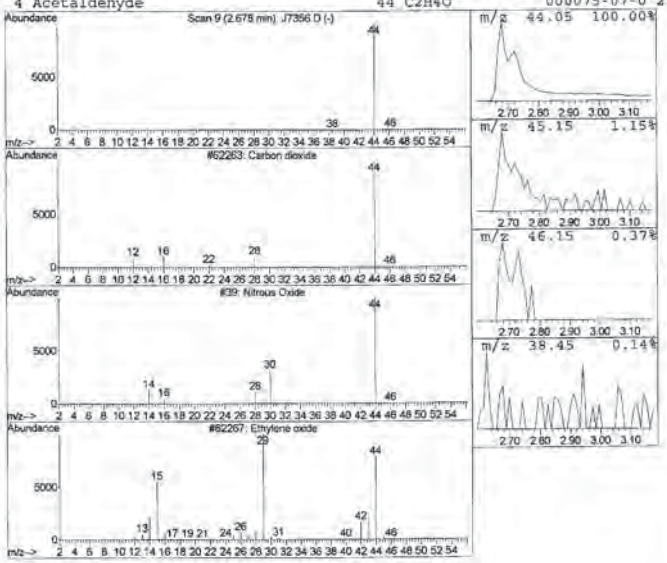
Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Carbon dioxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	7.78 ug/L	682346	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ ASK JK 10/22/08	44	CO2	000124-38-9	4
2	Nitrous Oxide	44	N2O	010024-97-2	3
3	Ethylene oxide	44	C2H4O	000075-21-8	2
4	Acetaldehyde	44	C2H4O	000075-07-0	2



J7356.D JO09NTCS.M Wed Oct 22 11:18:39 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7356.D
Acq On : 10 Oct 2008 16:32
Sample : MB-15131
Misc : MBLK,8260S7_OLM42,
MS Integration Params: LSCINT.P

Vial: 43
Operator: GS
Inst : #3MS10
Multiplr: 1.00

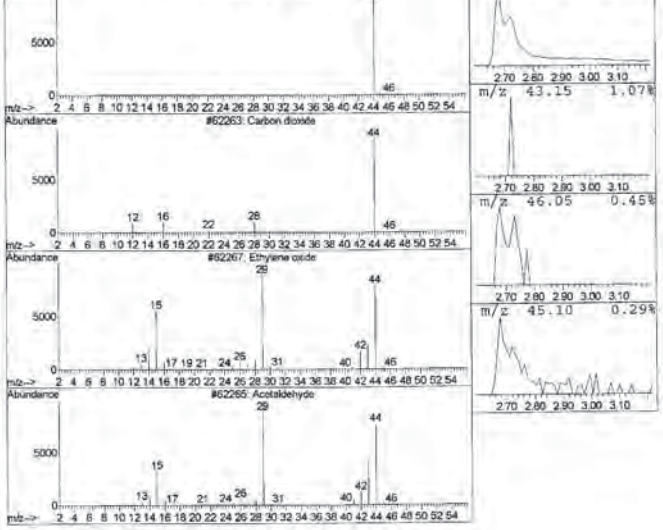
Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Carbon dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.72	6.98 ug/L	612323	Fluorobenzene	10.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	~~Carbon dioxide~~ ASK JK 10/22/08	44	CO2	000124-38-9	3
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Acetaldehyde	44	C2H4O	000075-07-0	2
4	Nitrous Oxide	44	N2O	010024-97-2	2



J7356.D JO09NTCS.M Wed Oct 22 11:18:39 2008

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID:	MB-15143	SampleType:	MBLK	TestCode:	8260S7_OLM	Units:	µg/Kg	Prep Date:				RunNo:	15143								
Client ID:	ZZZZZ	Batch ID:	R16143	Method:	SW8260B			Analysis Date:	10/13/08			SeqNo:	396438								
Instrument:	#3S03_10	ColumnID:	Rtx-VMS		Rtx-VMS, 1.0 df																
Analyte		QC Sample Result		PQL	SPK Added		Parent Sample Result		%REC	LowLimit	HighLimit	RPD Ref Val.		%RPD	RPDLimit	Qual	
Dichlorodifluoromethane		ND		5.0													
Chloromethane		ND		5.0													
Vinyl chloride		ND		5.0													
Bromomethane		ND		5.0													
Chloroethane		ND		5.0													
Trichlorofluoromethane		ND		5.0													
1,1-Dichloroethene		ND		2.5													
1,1,2-Trichloro-1,2,2-trifluoroethane		ND		2.5													
Acetone		ND		40													
Carbon disulfide		ND		2.5													
Methyl acetate		ND		2.5													
Methylene chloride		ND		5.0													
trans-1,2-Dichloroethene		ND		2.5													
Methyl tert-butyl ether		ND		2.5													
1,1-Dichloroethane		ND		2.5													
cis-1,2-Dichloroethene		ND		2.5													
2-Butanone		ND		40													
Chloroform		ND		2.5													
1,1,1-Trichloroethane		ND		2.5													
Cyclohexane		ND		2.5													
Carbon tetrachloride		ND		2.5													
Benzene		ND		2.5													
1,2-Dichloroethane		ND		2.5													
Trichloroethene		ND		2.5													
Methylcyclohexane		ND		2.5													
1,2-Dichloropropane		ND		2.5													
Bromodichloromethane		ND		2.5													

Qualifiers: B Analyte detected in the associated Method Blank
HD Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

Page 11 of 14

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0810683
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15143	SampType: MBLK	TestCode: 8260S7_OLM	Units: ug/Kg		Prep Date:				RunNo: 15143				
Client ID: ZZZZZ	Batch ID: R15143	Method: SW8260B			Analysis Date: 10/13/08				SeqNo: 356438				
Instrument: M450_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df											
Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
cis-1,3-Dichloropropene	ND	2.5											
4-Methyl-2-pentanone	ND	5.0											
Toluene	ND	2.5											
trans-1,3-Dichloropropene	ND	2.5											
1,1,2-Trichloroethane	ND	2.5											
Tetrachloroethene	ND	2.5											
2-Hexanone	ND	5.0											
Dibromochloromethane	ND	2.5											
1,2-Dibromoethane	ND	2.5											
Chlorobenzene	ND	2.5											
Ethylbenzene	ND	2.5											
Xylenes (total)	ND	5.0											
Styrene	ND	2.5											
Bromoform	ND	2.5											
Isopropylbenzene	ND	2.5											
1,1,2,2-Tetrachloroethane	ND	2.5											
1,3-Dichlorobenzene	ND	2.5											
1,4-Dichlorobenzene	ND	2.5											
1,2-Dichlorobenzene	ND	2.5											
1,2-Dibromo-3-chloropropane	ND	6.0											
1,2,4-Trichlorobenzene	ND	5.0											
Surr: 1,2-Dichloroethane-d4	46.8	0.10	50	0	94	71	126						
Surr: Toluene-d8	53.0	0.10	50	0	106	75	125						
Surr: 4-Bromofluorobenzene	59.9	0.10	50	0	120	59	126						

Qualifiers:
B: Analyte detected in the associated Method Blank
ND: Not Detected at the Practical Quantitation Limit (PQL)
U: Not Detected at the MDC or RL
E: Value exceeds the instrument calibration range
R: RPD exceeds accepted precision limit
J: Analyte detected below the PQL
S: Spike Recovery outside accepted recovery limits

14-Oct-08

Page 12 of 14

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7374.D
Acq On : 13 Oct 2008 13:04
Sample : MB-15143
Misc : MBLK,8260S7_OLM42, 5ML
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:34 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.91	96	2242483	50.00	ug/L	0.00
36) Chlorobenzene-d5	15.81	82	832192	50.00	ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	415392	50.00	ug/L	0.00
System Monitoring Compounds						
24) 1,2-Dichloroethane-d4	10.48	65	591025	46.83	ug/L	0.00
Spiked Amount 50.000			Recovery = 93.66%			
37) Toluene-d8	13.31	98	2095650	53.02	ug/L	0.00
Spiked Amount 50.000			Recovery = 106.04%			
49) Bromofluorobenzene	17.87	95	574896	59.86	ug/L	0.00
Spiked Amount 50.000			Recovery = 119.72%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
J7374.D JO09NTCS.M Tue Oct 14 08:35:00 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7374.D
Acq On : 13 Oct 2008 13:04
Sample : MB-15143
Misc : MBLK,8260S7_OLM42, 5ML
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:34 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration

J7374.D JO09NTCS.M Tue Oct 14 08:35:01 2008

Matrix Spike Blank

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

Prep Date: / Analysis Date: 10/13/08 — RunNo: 15143 / SeqNo: 396453

Sample ID: MSB-15143 / Client ID: ZZZZZ / Instrument: MS03_10	QC Sample Result	SampType: MSB / Batch ID: R15143 / ColumnID: Rtx-VMS	TestCode: 8260S7_OLM / Method: SW8260B Rtx-VMS, 1.0 df	PQL	SPK Added	Units: µg/Kg / Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	54.3			5.0	50	0	109		43	161			
Chloromethane	51.8			5.0	50	0	104		52	151			
Vinyl chloride	51.7			5.0	50	0	103		57	148			
Bromomethane	48.6			5.0	50	0	97		44	145			
Chloroethane	48.0			5.0	50	0	96		49	161			
Trichlorofluoromethane	48.6			5.0	50	0	97		59	150			
1,1-Dichloroethene	42.2			2.5	50	0	84		70	144			
1,1,2-Trichloro-1,2,2-trifluoroethane	45.7			2.5	50	0	91		70	143			
Acetone	81.4			40	100	0	81		25	175			
Carbon disulfide	48.6			2.5	50	0	97		58	140			
Methyl acetate	45.4			2.5	50	0	91		70	130			
Methylene chloride	42.1			5.0	50	0	84		56	132			
trans-1,2-Dichloroethene	41.6			2.5	50	0	83		70	130			
Methyl tert-butyl ether	48.7			2.5	50	0	97		70	135			
1,1-Dichloroethane	43.5			2.5	50	0	87		70	123			
cis-1,2-Dichloroethene	43.6			2.5	50	0	87		70	130			
2-Butanone	97.5			40	100	0	98		30	162			
Chloroform	43.5			2.5	50	0	87		70	130			
1,1,1-Trichloroethane	43.2			2.5	50	0	86		70	142			
Cyclohexane	47.9			2.5	50	0	96		70	130			
Carbon tetrachloride	39.5			2.5	50	0	79		69	140			
Benzene	42.6			2.5	50	0	85		70	130			
1,2-Dichloroethane	44.4			2.5	50	0	89		68	135			
Trichloroethene	41.8			2.5	50	0	84		70	130			
Methylcyclohexane	46.9			2.5	50	0	94		70	130			
1,2-Dichloropropane	45.4			2.5	50	0	91		70	130			
Bromodichloromethane	46.7			2.5	50	0	91		68	138			

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

14-Oct-08

396

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

Prep Date: / Analysis Date: 10/13/08 — RunNo: 15143 / SeqNo: 396453

Sample ID: MSB-15143 / Client ID: ZZZZZ / Instrument: MS03_10	QC Sample Result	SampType: MSB / Batch ID: R15143 / ColumnID: Rtx-VMS	TestCode: 8260S7_OLM / Method: SW8260B Rtx-VMS, 1.0 df	PQL	SPK Added	Units: µg/Kg / Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	45.4			2.5	50	0	91		55	139			
4-Methyl-2-pentanone	95.7			5.0	100	0	96		50	150			
Toluene	43.8			2.5	50	0	87		70	130			
trans-1,3-Dichloropropene	45.3			2.5	50	0	91		53	135			
1,1,2-Trichloroethane	45.6			2.5	50	0	91		70	132			
Tetrachloroethene	43.5			2.5	50	0	87		63	145			
2-Hexanone	97.1			5.0	100	0	97		38	150			
Dibromochloromethane	41.5			2.5	50	0	83		66	141			
1,2-Dibromoethane	47.5			2.5	50	0	95		70	130			
Chlorobenzene	44.6			2.5	50	0	89		70	130			
Ethylbenzene	44.2			2.5	50	0	88		70	130			
Xylenes (total)	125			5.0	150	0	83		70	130			
Styrene	42.9			2.5	50	0	86		70	130			
Bromoform	46.1			2.5	50	0	92		59	137			
Isopropylbenzene	47.2			2.5	50	0	94		57	158			
1,1,2,2-Tetrachloroethane	46.9			2.5	50	0	94		63	175			
1,3-Dichlorobenzene	44.6			2.5	50	0	89		70	139			
1,4-Dichlorobenzene	44.4			2.5	50	0	89		70	131			
1,2-Dichlorobenzene	45.6			2.5	50	0	91		70	132			
1,2-Dibromo-3-chloropropane	45.7			5.0	50	0	91		70	138			
1,2,4-Trichlorobenzene	44.5			5.0	50	0	89		48	131			
Surr: 1,2-Dichloroethane-d4	47.6			0.10	50	0	95		71	128			
Surr: Toluene-d8	49.6			0.10	50	0	99		75	125			
Surr: 4-Bromofluorobenzene	50.9			0.10	50	0	102		56	125			

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

14-Oct-08

397

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7370.D
Acq On : 13 Oct 2008 10:49
Sample : MSB-15143
Misc : MSB ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	2078657	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	832385	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	531237	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	557372	47.65 ug/L	0.00
Spiked Amount 50.000			Recovery =	95.30%	
37) Toluene-d8	13.31	98	1961562	49.61 ug/L	0.00
Spiked Amount 50.000			Recovery =	99.22%	
49) Bromofluorobenzene	17.88	95	624641	50.85 ug/L	0.00
Spiked Amount 50.000			Recovery =	101.70%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.06	85	882106	54.30 ug/L	99
3) Chloromethane	3.41	50	868247	51.82 ug/L	100
4) Vinyl chloride	3.61	62	956776	51.73 ug/L	84
5) Bromomethane	4.25	94	789740	48.56 ug/L	96
6) Chloroethane	4.46	64	775814	48.05 ug/L	99
7) Trichlorofluoromethane	4.74	101	1430870	48.63 ug/L	98
8) 1,1-Dichloroethene	5.75	96	417795	42.17 ug/L	97
9) Carbon disulfide	5.78	76	1940400	48.61 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.85	101	524533	45.70 ug/L	98
11) Methylene chloride	6.82	84	491452	42.10 ug/L	99
12) Acetone	6.93	43	308216	81.37 ug/L	98
13) trans-1,2-Dichloroethene	7.10	96	457700	41.65 ug/L	99
14) Methyl acetate	7.14	43	329062	45.44 ug/L	99
15) Methyl tert-Butyl ether	7.30	73	1258339	48.72 ug/L	100
16) 1,1-Dichloroethane	6.11	63	868402	43.60 ug/L	99
17) cis-1,2-Dichloroethene	6.97	96	515520	43.57 ug/L	98
18) Cyclohexane	9.29	56	957609	47.88 ug/L	99
19) Chloroform	9.39	83	836536	43.59 ug/L	99
20) Carbon tetrachloride	9.61	117	500235	39.46 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	738678	43.23 ug/L	100
22) 2-Butanone	9.88	43	468681	97.52 ug/L	100
23) Benzene	10.28	78	2068126	42.60 ug/L	100
25) 1,2-Dichloroethane	10.58	62	601527	44.35 ug/L	98
26) Methylcyclohexane	11.15	83	1000462	46.86 ug/L	99
27) Trichloroethene	11.16	95	503533	41.75 ug/L	99
28) 1,2-Dichloropropane	11.96	63	486018	45.36 ug/L	99
29) Bromodichloromethane	12.05	83	572445	45.70 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	808059	45.44 ug/L	99
31) Toluene	13.39	92	1295613	43.64 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7370.D J009NTCS.M Wed Oct 22 14:13:37 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7370.D
Acq On : 13 Oct 2008 10:49
Sample : MSB-15143
Misc : MSB ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

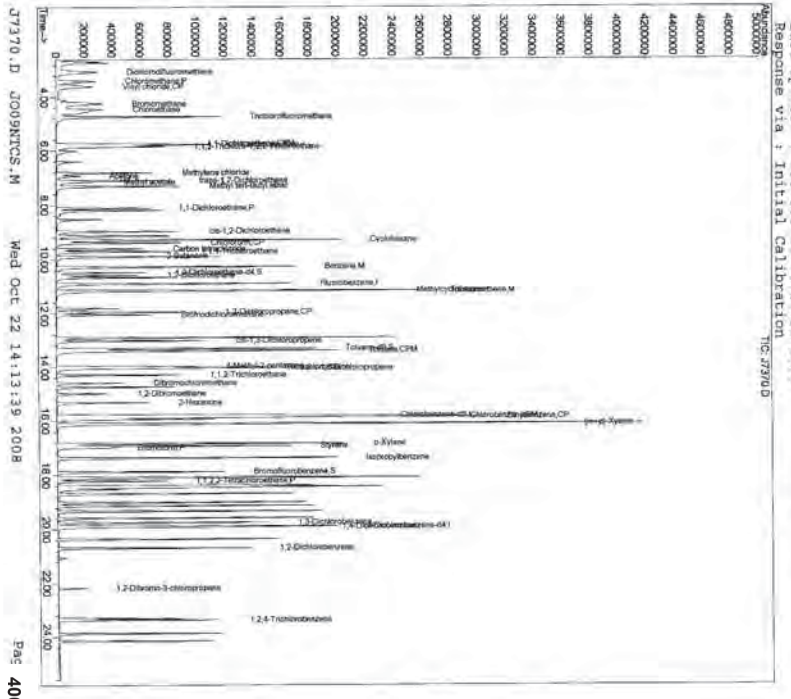
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	898038	95.67 ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	706538	45.33 ug/L	99
34) 1,1,2-Trichloroethane	14.30	83	334530	45.56 ug/L	99
35) 2-Hexanone	15.31	43	637492	97.08 ug/L	99
38) Tetrachloroethene	14.01	166	411916	43.46 ug/L	99
39) Dibromochloromethane	14.59	129	339598	41.63 ug/L	99
40) 1,2-Dibromoethane	14.98	107	356226	47.58 ug/L	100
41) Chlorobenzene	15.84	112	1358060	44.62 ug/L	99
42) Ethylbenzene	15.86	91	2458867	44.23 ug/L	100
43) (m+p)-Xylene	16.10	106	1867253	82.58 ug/L	99
44) o-Xylene	16.83	106	871918	41.95 ug/L	100
45) Styrene	16.93	104	1286132	42.92 ug/L	100
46) Bromoform	16.99	173	189881	46.12 ug/L	98
48) Isopropylbenzene	17.37	105	2193721	47.22 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.21	83	527361	46.93 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	860960	44.58 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	825521	44.44 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	798714	45.56 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	72761	45.68 ug/L	97
55) 1,2,4-Trichlorobenzene	23.36	180	377112	44.50 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7370.D J009NTCS.M Wed Oct 22 14:13:37 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7370.D Vial: 3
Acq On : 13 Oct 2008 10:49 Operator: JK
Sample : MSB-15143 Inst : #3MS10
Misc : MSB ,8260S7_OLM42, Multipl: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008 Quant Results File: JO09NTCS.RES

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration



J7370.D JO09NTCS.M Wed Oct 22 14:13:39 2008

Matrix Spike

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMS SampType: MS TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396436
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	75.0	5.8	58.4	0	128	43	161				
Chloromethane	69.6	5.8	58.4	0	119	52	151				
Vinyl chloride	59.6	5.8	58.4	0	102	57	146				
Bromomethane	70.5	5.8	58.4	0	121	44	145				
Chloroethane	56.3	5.8	58.4	0	100	49	161				
Trichlorofluoromethane	73.4	5.8	58.4	0	126	59	156				
1,1-Dichloroethene	59.5	2.9	58.4	0	102	70	144				
1,1,2-Trichloro-1,2,2-trifluoroethane	61.9	2.9	58.4	0	106	70	143				
Acetone	116	47	117	0	98	25	175				
Carbon disulfide	54.4	2.9	58.4	0	93	58	140				
Methyl acetate	91.9	2.9	58.4	0	157	70	130				S
Methylene chloride	61.4	5.8	58.4	0	105	68	132				
trans-1,2-Dichloroethene	55.0	2.9	58.4	0	94	70	130				
Methyl tert-butyl ether	73.8	2.9	58.4	0	126	70	135				
1,1-Dichloroethane	62.1	2.9	58.4	0	106	70	133				
cis-1,2-Dichloroethene	56.5	2.9	58.4	0	97	70	130				
2-Butanone	122	47	117	0	104	30	162				
Chloroform	59.3	2.9	58.4	0	102	70	130				
1,1,1-Trichloroethane	59.0	2.9	58.4	0	101	70	142				
Cyclohexane	53.8	2.9	58.4	0	92	70	130				
Carbon tetrachloride	48.7	2.9	58.4	0	83	69	140				
Benzene	57.4	2.9	58.4	0	98	70	130				
1,2-Dichloroethane	59.2	2.9	58.4	0	101	68	135				
Trichloroethene	49.6	2.9	58.4	0.97	83	70	130				
Methylcyclohexane	43.2	2.9	58.4	0	74	70	130				
1,2-Dichloropropane	61.5	2.9	58.4	0	105	70	130				
Bromodichloromethane	57.2	2.9	58.4	0	98	68	138				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMS SampType: MS TestCode: 8260S7_OLM Units: µg/Kg-dry Prep Date: RunNo: 15143
Client ID: MBSS-1 Batch ID: R15143 Method: SW8260B Analysis Date: 10/13/08 SeqNo: 396436
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	50.3	2.9	58.4	0	86	56	139				
4-Methyl-2-pentanone	114	5.8	117	0	98	50	150				
Toluene	52.6	2.9	58.4	0	90	70	130				
trans-1,3-Dichloropropene	46.2	2.9	58.4	0	79	53	135				
1,1,2-Trichloroethane	55.3	2.9	58.4	0	95	70	132				
Tetrachloroethene	56.8	2.9	58.4	0	97	63	145				
2-Hexanone	104	5.8	117	0	89	38	150				
Dibromochloromethane	55.9	2.9	58.4	0	96	68	141				
1,2-Dibromoethane	65.0	2.9	58.4	0	111	70	130				
Chlorobenzene	55.7	2.9	58.4	0	95	70	130				
Ethylbenzene	57.5	2.9	58.4	0	98	70	130				
Xylenes (total)	158	5.8	175	0	90	70	130				
Styrene	47.6	2.9	58.4	0	82	70	130				
Bromoform	51.6	2.9	58.4	0	88	59	137				
Isopropylbenzene	87.1	2.9	58.4	0	149	57	168				
1,1,2,2-Tetrachloroethane	91.0	2.9	58.4	0	156	63	175				
1,3-Dichlorobenzene	58.2	2.9	58.4	0	100	70	139				
1,4-Dichlorobenzene	56.3	2.9	58.4	0	96	70	131				
1,2-Dichlorobenzene	57.9	2.9	58.4	0	99	70	132				
1,2-Dibromo-3-chloropropane	70.5	5.8	58.4	0	121	70	138				
1,2,4-Trichlorobenzene	38.7	5.8	58.4	0	63	45	131				
Surr: 1,2-Dichloroethane-d4	56.6	0.12	58.4	0	97	71	128				
Surr: Toluene-d8	67.1	0.12	58.4	0	115	75	125				
Surr: 4-Bromofluorobenzene	80.9	0.12	58.4	0	139	59	125				S

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

14-Oct-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7371.D
Acq On : 13 Oct 2008 11:23
Sample : 0810083-001AMS
Misc : MS ,8260S7_OLM42, 5G
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:42 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:42:44 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	1848412	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	591550	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	232895	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	503809	48.43 ug/L	0.00
Spiked Amount 50.000			Recovery = 96.86%		
37) Toluene-d8	13.31	98	1615128	57.48 ug/L	0.00
Spiked Amount 50.000			Recovery = 114.96%		
49) Bromofluorobenzene	17.88	95	373067	69.28 ug/L	0.00
Spiked Amount 50.000			Recovery = 138.56%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.08	85	927033	64.17 ug/L	98
3) Chloromethane	3.42	50	887883	59.59 ug/L	99
4) Vinyl chloride	3.63	62	839072	51.02 ug/L	83
5) Bromomethane	4.27	94	865595	60.31 ug/L	92
6) Chloroethane	4.57	64	716608	49.91 ug/L	97
7) Trichlorofluoromethane	4.73	101	1645075	62.87 ug/L	99
8) 1,1-Dichloroethene	5.73	96	448447	50.90 ug/L	96
9) Carbon disulfide	5.75	76	1651689	46.53 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.81	101	541080	53.01 ug/L	98
11) Methylene chloride	6.82	84	539171	52.58 ug/L	99
12) Acetone	6.98	43	317145	98.16 ug/L	99
13) trans-1,2-Dichloroethene	7.09	96	460494	47.12 ug/L	98
14) Methyl acetate	7.17	43	506408	78.64 ug/L	99
15) Methyl tert-Butyl ether	7.33	73	1446595	62.98 ug/L	99
16) 1,1-Dichloroethane	8.11	63	942254	53.20 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	508528	48.33 ug/L	99
18) Cyclohexane	9.28	56	818731	46.03 ug/L	99
19) Chloroform	9.40	83	866387	50.77 ug/L	100
20) Carbon tetrachloride	9.60	117	472213	41.65 ug/L	98
21) 1,1,1-Trichloroethane	9.71	97	766815	50.47 ug/L	99
22) 2-Butanone	9.90	43	444445	104.24 ug/L	99
23) Benzene	10.28	78	2121907	49.15 ug/L	100
25) 1,2-Dichloroethane	10.58	62	610961	50.66 ug/L	100
26) Methylcyclohexane	11.15	83	702648	37.01 ug/L	99
27) Trichloroethene	11.16	95	455131	42.44 ug/L	97
28) 1,2-Dichloropropane	11.96	63	501332	52.62 ug/L	98
29) Bromodichloromethane	12.05	83	545457	48.97 ug/L	98
30) cis-1,3-Dichloropropene	13.02	75	679180	43.04 ug/L	99
31) Toluene	13.39	92	1188397	45.02 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7371.D JO09NTCS.M Tue Oct 14 08:43:01 2008 Pag

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7371.D
Acq On : 13 Oct 2008 11:23
Sample : 0810083-001AMS
Misc : MS ,8260S7_OLM42, 5G
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:42 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:42:44 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit		QValue
32) 4-Methyl-2-pentanone	13.98	43	814866	97.62 ug/L		99
33) trans-1,3-Dichloropropene	14.03	75	544472	39.59 ug/L		99
34) 1,1,2-Trichloroethane	14.30	83	309183	47.35 ug/L		99
35) 2-Hexanone	15.32	43	519616	89.20 ug/L		99
38) Tetrachloroethene	14.01	166	327367	48.60 ug/L		99
39) Dibromochloromethane	14.59	129	281864	47.89 ug/L		97
40) 1,2-Dibromoethane	14.98	107	296146	55.66 ug/L		96
41) Chlorobenzene	15.84	112	1030871	47.66 ug/L		99
42) Ethylbenzene	15.86	91	1944810	49.23 ug/L		99
43) (m+p)-Xylene	16.10	106	1435397	88.93 ug/L		99
44) o-Xylene	16.83	106	692591	46.65 ug/L		100
45) Styrene	16.93	104	864956	40.76 ug/L		100
46) Bromoform	16.98	173	128425	44.18 ug/L	#	34
48) Isopropylbenzene	17.37	105	1518446	74.56 ug/L		100
50) 1,1,2,2-Tetrachloroethane	18.21	83	383818	77.91 ug/L		99
51) 1,3-Dichlorobenzene	19.74	146	422034	49.84 ug/L		99
52) 1,4-Dichlorobenzene	19.90	146	392600	48.21 ug/L		99
53) 1,2-Dichlorobenzene	20.68	146	380663	49.53 ug/L		99
54) 1,2-Dibromo-3-chloropropan	22.17	75	42470	60.32 ug/L		98
55) 1,2,4-Trichlorobenzene	23.36	180	116788	31.44 ug/L		98

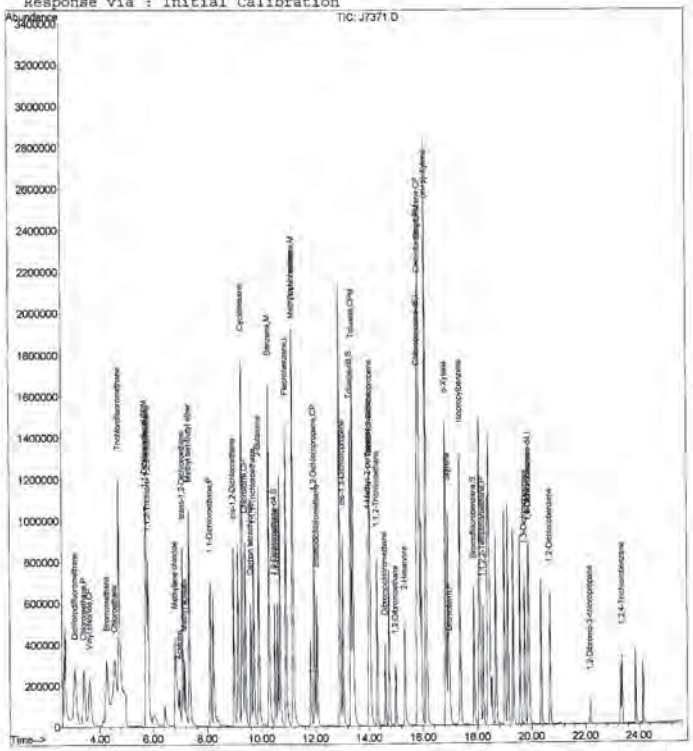
(#) = qualifier out of range (m) = manual integration
J7371.D JO09NTCS.M Tue Oct 14 08:43:02 2008 Pag

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7371.D
Acq On : 13 Oct 2008 11:23
Sample : 0810083-001AMS
Misc : MS ,8260S7_OLM42, 5G
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:42 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:42:44 2008
Response via : Initial Calibration



J7371.D JO09NTCS.M Tue Oct 14 08:43:03 2008 Pag

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMS0	SampType: MS/D	TestCode: 8260S7_OLM	Units: ppb/Kg-dry	Prep Date:	RunNo: 15143
Client ID: MBSS-1	Batch ID: R15143	Method: SW8260B		Analysis Date: 10/13/08	SeqNo: 356437
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val.	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	67.3	5.8	58.4	0	115	43	161	75	11	20	
Chloromethane	64.6	5.8	58.4	0	111	52	151	69.6	7.4	20	
Vinyl chloride	51.8	5.8	58.4	0	89	67	148	59.6	14	24	
Bromomethane	68.6	5.8	58.4	0	117	44	145	70.5	2.6	21	
Chloroethane	51.7	5.8	58.4	0	89	49	161	56.3	12	20	
Trichlorofluoromethane	64.8	5.8	58.4	0	111	59	156	73.4	13	20	
1,1-Dichloroethene	61.4	2.9	58.4	0	105	70	144	59.5	3.3	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	61.4	2.9	58.4	0	105	70	143	61.0	0.8	20	
Acetone	90.6	47	117	0	78	25	175	115	23	50	
Carbon disulfide	54.2	2.9	58.4	0	93	58	140	54.4	0.2	20	
Methyl acetate	118	2.9	58.4	0	202	70	130	81.8	25	20	RS
Methylene chloride	58.9	5.8	58.4	0	101	68	132	61.4	4.3	20	
trans-1,2-Dichloroethene	55.7	2.9	58.4	0	95	70	130	55	1.3	20	
Methyl tert-butyl ether	72.8	2.9	58.4	0	125	70	135	73.6	0.9	20	
1,1-Dichloroethane	61.8	2.9	58.4	0	105	70	133	62.1	0.4	20	
cis-1,2-Dichloroethene	57.3	2.9	58.4	0	98	70	130	56.5	1.5	20	
2-Butanone	97.8	47	117	0	84	30	162	122	22	50	
Chloroform	59.6	2.9	58.4	0	102	70	130	59.3	0.4	20	
1,1,1-Trichloroethane	58.8	2.9	58.4	0	101	70	142	58	0.3	20	
Cyclohexane	57.3	2.9	58.4	0	98	70	130	53.8	6.4	20	
Carbon tetrachloride	49.5	2.9	58.4	0	85	69	140	48.7	1.6	20	
Benzene	58.2	2.9	58.4	0	100	70	130	57.4	1.4	20	
1,2-Dichloroethane	58.4	2.9	58.4	0	102	69	130	58.2	0.3	20	
Trichloroethene	52.3	2.9	58.4	0.97	88	70	130	49.8	5.3	20	
Methylcyclohexane	46.5	2.9	58.4	0	80	70	130	43.2	7.3	20	
1,2-Dichloropropane	60.5	2.9	58.4	0	104	70	130	61.5	1.6	20	
Bromodichloromethane	56.6	2.9	58.4	0	97	68	136	57.2	1.1	20	

Qualifiers: B - Analyte detected in the associated Method Blank
ND - Not Detected at the Practical Quantitation Limit (PQL)
U - Not Detected at the MDL or RL
E - Value exceeds the instrument calibration range
R - RPD exceeds accepted precision limits
J - Analyte detected below the PQL
S - Spike Recovery outside accepted recovery limits

14-Oct-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001AMSD | SampType: MSD | TestCode: 8260S7_OLM | Units: µg/Kg-dry | Prep Date: | RunNo: 15143
Client ID: MBSS-1 | Batch ID: R15143 | Method: SW8260B | Analysis Date: 10/13/08 | SeqNo: 396437
Instrument: MSD3_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC-Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	53.0	2.9	58.4	0	91	55	139	50.3	5.2	20	
4-Methyl-2-pentanone	92.9	5.8	117	0	80	50	150	114	20	50	
Toluene	52.8	2.9	58.4	0	90	70	130	52.6	0.1	20	
trans-1,3-Dichloropropene	48.2	2.9	58.4	0	83	53	135	48.2	4.2	20	
1,1,2-Trichloroethane	54.8	2.9	58.4	0	94	70	132	55.3	0.8	20	
Tetrachloroethene	58.7	2.9	58.4	0	100	63	145	56.8	3.3	21	
2-Hexanone	87.9	5.8	117	0	75	38	150	104	17	50	
Dibromochloromethane	55.2	2.9	58.4	0	94	68	141	55.9	1.4	20	
1,2-Dibromoethane	64.6	2.9	58.4	0	111	70	130	65	0.6	20	
Chlorobenzene	59.4	2.9	58.4	0	102	70	130	55.7	6.5	20	
Ethylbenzene	60.0	2.9	58.4	0	103	70	130	57.5	4.3	20	
Xylenes (total)	165	5.8	175	0	94	70	130	158	4.4	20	
Styrene	51.3	2.9	58.4	0	88	70	130	47.6	7.5	20	
Bromoform	51.4	2.9	58.4	0	88	69	137	51.6	0.4	20	
Isopropylbenzene	87.4	2.9	58.4	0	150	57	168	87.1	0.3	20	
1,1,2,2-Tetrachloroethane	84.8	2.9	58.4	0	145	63	175	81	7.1	24	
1,3-Dichlorobenzene	61.1	2.9	58.4	0	105	70	139	58.2	4.9	20	
1,4-Dichlorobenzene	57.0	2.9	58.4	0	98	70	131	56.3	1.3	24	
1,2-Dichlorobenzene	60.2	2.9	58.4	0	103	70	132	57.9	3.9	20	
1,2-Dibromo-3-chloropropane	66.0	5.8	58.4	0	113	70	138	70.6	6.6	24	
1,2,4-Trichlorobenzene	36.3	5.8	58.4	0	62	48	131	36.7	1.6	24	
Surr: 1,2-Dichloroethane-d4	56.1	0.12	58.4	0	96	71	128	0		0	
Surr: Toluene-d8	67.4	0.12	58.4	0	115	75	125	0		0	
Surr: 4-Bromofluorobenzene	77.6	0.12	58.4	0	133	58	122	0		0	S

Qualifiers:
B Analyte detected in the associated Method Blank.
ND Not Detected at the Practical Quantitation Limits (PQL).
U Not Detected at the MDC or RL.
E Value exceeds the instrument calibration range.
R RPD exceeds accepted precision limit.
J Analyte detected below the PQL.
S Spike Recovery outside accepted recovery limits.

10/4/08

Page 10 of 14

408

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7372.D
Acq On : 13 Oct 2008 11:57
Sample : 0810083-001AMSD
Misc : MSD ,8260S7_OLM42, 5G
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:43 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JO09NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:42:44 2008
Response via : Initial Calibration
DataAcq Meth : JO09VOCS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.90	96	2163845	50.00	ug/L	0.00
36) Chlorobenzene-d5	15.81	82	694536	50.00	ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	294615	50.00	ug/L	0.00
System Monitoring Compounds						
24) 1,2-Dichloroethane-d4	10.49	65	584961	48.04	ug/L	0.00
Spiked Amount 50.000				Recovery =	96.08%	
37) Toluene-d8	13.30	98	1903306	57.70	ug/L	0.00
Spiked Amount 50.000				Recovery =	115.40%	
49) Bromofluorobenzene	17.87	95	451739	66.32	ug/L	0.00
Spiked Amount 50.000				Recovery =	132.64%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.09	85	974948	57.65	ug/L	100
3) Chloromethane	3.43	50	965310	55.34	ug/L	100
4) Vinyl chloride	3.64	62	854360	44.38	ug/L	84
5) Bromomethane	4.26	94	987718	58.74	ug/L	95
6) Chloroethane	4.58	64	743948	44.26	ug/L	90
7) Trichlorofluoromethane	4.73	101	1693926	55.30	ug/L	99
8) 1,1-Dichloroethene	5.72	96	542413	52.60	ug/L	95
9) Carbon disulfide	5.74	76	1929159	46.42	ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.80	101	628402	52.59	ug/L	99
11) Methylene chloride	6.81	84	606274	50.39	ug/L	100
12) Acetone	6.99	43	309466	77.58	ug/L	98
13) trans-1,2-Dichloroethene	7.09	96	545955	47.72	ug/L	100
14) Methyl acetate	7.17	43	760397	100.87	ug/L	98
15) Methyl tert-Butyl ether	7.35	73	1678132	62.41	ug/L	98
16) 1,1-Dichloroethane	8.11	63	1093528	52.74	ug/L	99
17) cis-1,2-Dichloroethene	8.98	96	604523	49.08	ug/L	99
18) Cyclohexane	9.27	56	1021818	49.08	ug/L	99
19) Chloroform	9.40	83	1018664	50.99	ug/L	100
20) Carbon tetrachloride	9.60	117	563861	42.41	ug/L	97
21) 1,1,1-Trichloroethane	9.71	97	895059	50.32	ug/L	98
22) 2-Butanone	9.91	43	421374	83.72	ug/L	97
23) Benzene	10.28	78	2519905	49.86	ug/L	100
25) 1,2-Dichloroethane	10.58	62	717400	50.81	ug/L	99
26) Methylcyclohexane	11.15	83	884660	39.81	ug/L	99
27) Trichloroethene	11.16	95	562089	44.77	ug/L	99
28) 1,2-Dichloropropane	11.95	63	577295	51.76	ug/L	100
29) Bromodichloromethane	12.06	83	631465	48.43	ug/L	98
30) cis-1,3-Dichloropropene	13.02	75	839522	45.35	ug/L	100
31) Toluene	13.39	92	1392627	45.06	ug/L	98

(#) = qualifier out of range (m) = manual integration
J7372.D JO09NTCS.M Tue Oct 14 08:44:00 2008

Pag 409

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7372.D
Acq On : 13 Oct 2008 11:57
Sample : 0810083-001AMSD
Misc : MSD ,8260S7_OLM42, 5G
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:43 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JO09NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:42:44 2008
Response via : Initial Calibration
DataAcq Meth : JO09VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.98	43	777298	79.54 ug/L	100
33) trans-1,3-Dichloropropene	14.04	75	666546	41.30 ug/L	98
34) 1,1,2-Trichloroethane	14.30	83	358827	46.95 ug/L	99
35) 2-Hexanone	15.32	43	510153	75.21 ug/L	99
38) Tetrachloroethene	14.01	166	397147	50.22 ug/L	99
39) Dibromochloromethane	14.59	129	325809	47.21 ug/L	100
40) 1,2-Dibromoethane	14.98	107	345742	55.34 ug/L	99
41) Chlorobenzene	15.84	112	1291024	50.84 ug/L	98
42) Ethylbenzene	15.87	91	2383902	51.40 ug/L	100
43) (m+p)-Xylene	16.10	106	1766574	92.98 ug/L	100
44) o-Xylene	16.84	106	849526	48.65 ug/L	100
45) Styrene	16.92	104	1100078	43.93 ug/L	100
46) Bromoform	16.99	173	150134	44.02 ug/L	100
48) Isopropylbenzene	17.37	105	1926727	74.79 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.21	83	452344	72.58 ug/L	100
51) 1,3-Dichlorobenzene	19.74	146	560563	52.34 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	502999	48.83 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	500755	51.50 ug/L	99
54) 1,2-Dibromo-3-chloropropan	22.18	75	50231	56.49 ug/L	96
55) 1,2,4-Trichlorobenzene	23.36	180	145348	30.93 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7372.D JO09NTCS.M Tue Oct 14 08:44:01 2008

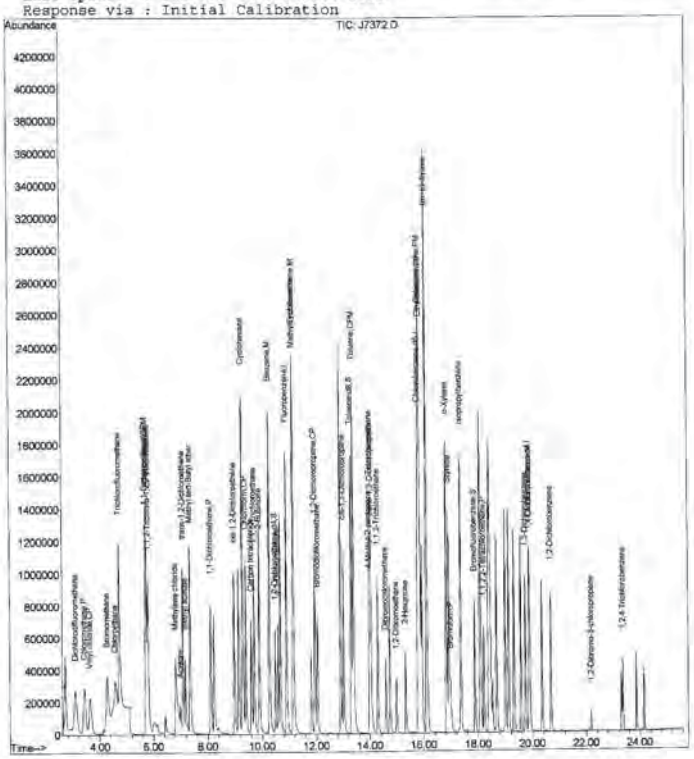
Pag 410

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7372.D
Acq On : 13 Oct 2008 11:57
Sample : 0810083-001AMSD
Misc : MSD ,8260S7_OLM42, 5G
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:43 2008

Vial: 5
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JO09NTCS.RES

Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:42:44 2008
Response via : Initial Calibration



J7372.D JO09NTCS.M Tue Oct 14 08:44:02 2008

Pag 411

Laboratory Control Sample

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

CLIENT: O'Brien & Gere Engineers, Inc.
Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID: LCS-15131 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15131
Client ID: ZZZZZ Batch ID: R15131 Method: SW8260B Analysis Date: 10/10/08 SeqNo: 396294
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	58.2	5.0	50	0	116	55	142				
Chloromethane	53.3	5.0	50	0	107	62	141				
Vinyl chloride	52.6	5.0	50	0	105	68	135				
Bromomethane	48.7	5.0	50	0	97	56	147				
Chloroethane	48.3	5.0	50	0	97	63	142				
Trichlorofluoromethane	51.5	5.0	50	0	103	67	136				
1,1-Dichloroethene	48.6	2.5	50	0	97	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	52.0	2.5	50	0	104	80	134				
Acetone	78.4	40	100	0	78	25	175				
Carbon disulfide	49.4	2.5	50	0	99	73	130				
Methyl acetate	46.9	2.5	50	0	94	67	147				
Methylene chloride	45.5	5.0	50	0	91	75	124				
trans-1,2-Dichloroethene	47.3	2.5	50	0	95	77	123				
Methyl tert-butyl ether	51.6	2.5	50	0	103	76	126				
1,1-Dichloroethane	48.1	2.5	50	0	96	76	124				
cis-1,2-Dichloroethene	47.3	2.5	50	0	95	79	120				
2-Butanone	88.0	40	100	0	88	42	154				
Chloroform	47.5	2.5	50	0	95	77	121				
1,1,1-Trichloroethane	48.0	2.5	50	0	96	78	132				
Cyclohexane	54.0	2.5	50	0	108	80	128				
Carbon tetrachloride	45.8	2.5	50	0	92	74	138				
Benzene	47.4	2.5	50	0	95	80	121				
1,2-Dichloroethane	47.5	2.5	50	0	95	73	127				
Trichloroethene	47.3	2.5	50	0	95	80	120				
Methylcyclohexane	53.0	2.5	50	0	106	80	128				
1,2-Dichloropropane	48.5	2.5	50	0	97	80	125				
Bromodichloromethane	49.9	2.5	50	0	100	80	129				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

13-Oct-08

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

CLIENT: O'Brien & Gere Engineers, Inc.
Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID: LCS-15131 SampType: LCS TestCode: 8260S7_OLM Units: µg/Kg Prep Date: RunNo: 15131
Client ID: ZZZZZ Batch ID: R15131 Method: SW8260B Analysis Date: 10/10/08 SeqNo: 396294
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	48.8	2.5	50	0	98	80	125				
4-Methyl-2-pentanone	87.4	5.0	100	0	87	50	150				
Toluene	47.2	2.5	50	0	94	80	121				
trans-1,3-Dichloropropene	48.2	2.5	50	0	96	78	124				
1,1,2-Trichloroethane	46.6	2.5	50	0	93	80	122				
Tetrachloroethene	50.3	2.5	50	0	101	74	125				
2-Hexanone	89.7	5.0	100	0	90	50	150				
Dibromochloromethane	45.3	2.5	50	0	91	76	135				
1,2-Dibromoethane	50.1	2.5	50	0	100	80	124				
Chlorobenzene	48.5	2.5	50	0	97	80	120				
Ethylbenzene	49.7	2.5	50	0	99	80	121				
Xylenes (total)	138	5.0	150	0	92	78	124				
Styrene	46.6	2.5	50	0	93	78	122				
Bromoform	48.4	2.5	50	0	97	70	138				
Isopropylbenzene	52.5	2.5	50	0	105	76	131				
1,1,2,2-Tetrachloroethane	46.3	2.5	50	0	93	69	136				
1,3-Dichlorobenzene	49.9	2.5	50	0	100	80	120				
1,4-Dichlorobenzene	49.3	2.5	50	0	99	80	120				
1,2-Dichlorobenzene	49.3	2.5	50	0	99	80	120				
1,2-Dibromo-3-chloropropane	44.4	5.0	50	0	89	69	132				
1,2,4-Trichlorobenzene	52.4	5.0	50	0	105	71	127				
Surr: 1,2-Dichloroethane-d4	46.0	0.10	50	0	92	71	128				
Surr: Toluene-d8	49.2	0.10	50	0	98	75	125				
Surr: 4-Bromofluorobenzene	50.5	0.10	50	0	101	59	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

13-Oct-08

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7352.D                    Vial: 39
Acq On    : 10 Oct 2008  13:53                      Operator: GS
Sample    : LCS-15131                               Inst    : #3MS10
Misc      : LCS ,8260S7_OLM42,                      Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Oct 13 10:56 2008              Quant Results File: JO09NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\JO09NTCS.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
DataAcq Meth : JO09VOCS
```

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	2177974	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	867673	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.87	152	555442	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	564305	46.04 ug/L	0.00
Spiked Amount 50.000			Recovery	= 92.08%	
37) Toluene-d8	13.31	98	2029882	49.25 ug/L	0.00
Spiked Amount 50.000			Recovery	= 98.50%	
49) Bromofluorobenzene	17.88	95	649029	50.54 ug/L	0.00
Spiked Amount 50.000			Recovery	= 101.08%	

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
2) Dichlorodifluoromethane	3.06	85	991178	58.23 ug/L	100
3) Chloromethane	3.41	50	936548	53.34 ug/L	100
4) Vinyl chloride	3.62	62	1019413	52.61 ug/L	99
5) Bromomethane	4.25	94	830338	48.74 ug/L #	63
6) Chloroethane	4.45	64	817669	48.33 ug/L	98
7) Trichlorofluoromethane	4.74	101	1587817	51.50 ug/L	99
8) 1,1-Dichloroethene	5.75	96	504155	48.57 ug/L	96
9) Carbon disulfide	5.78	76	2064497	49.36 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	5.84	101	625773	52.03 ug/L	99
11) Methylene chloride	6.81	84	553590	45.46 ug/L	99
12) Acetone	6.93	43	313870	78.37 ug/L	98
13) trans-1,2-Dichloroethene	7.09	96	544497	47.29 ug/L	99
14) Methyl acetate	7.15	43	356099	46.93 ug/L	97
15) Methyl tert-Butyl ether	7.30	73	1397188	51.63 ug/L	99
16) 1,1-Dichloroethane	8.11	63	1004359	48.13 ug/L	100
17) cis-1,2-Dichloroethene	8.97	96	586258	47.29 ug/L	98
18) Cyclohexane	9.29	56	1131431	53.99 ug/L	99
19) Chloroform	9.39	83	955956	47.54 ug/L	99
20) Carbon tetrachloride	9.60	117	618042	45.84 ug/L	98
21) 1,1,1-Trichloroethane	9.71	97	859879	48.03 ug/L	100
22) 2-Butanone	9.88	43	444940	88.01 ug/L	95
23) Benzene	10.28	78	2412501	47.43 ug/L	100
25) 1,2-Dichloroethane	10.59	62	675591	47.54 ug/L	100
26) Methylcyclohexane	11.16	83	1186341	53.03 ug/L	99
27) Trichloroethene	11.17	95	597843	47.31 ug/L	99
28) 1,2-Dichloropropane	11.96	63	544750	48.53 ug/L	98
29) Bromodichloromethane	12.05	83	655391	49.93 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	910819	48.76 ug/L	99
31) Toluene	13.39	92	1468138	47.20 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7352.D JO09NTCS.M Mon Oct 13 10:58:34 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7352.D
Acq On : 10 Oct 2008 13:53
Sample : LCS-15131
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 13 10:56 2008

Vial: 39
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	859820	87.41	ug/L	98
33) trans-1,3-Dichloropropene	14.04	75	790128	48.22	ug/L	98
34) 1,1,2-Trichloroethane	14.29	83	358659	46.62	ug/L	98
35) 2-Hexanone	15.31	43	615946	89.72	ug/L	98
38) Tetrachloroethene	14.02	166	497119	50.32	ug/L	98
39) Dibromochloromethane	14.60	129	388885	45.30	ug/L	97
40) 1,2-Dibromoethane	14.99	107	391269	50.13	ug/L	98
41) Chlorobenzene	15.84	112	1539696	48.53	ug/L	99
42) Ethylbenzene	15.86	91	2877952	49.67	ug/L	100
43) (m+p)-Xylene	16.10	106	2188207	92.23	ug/L	99
44) o-Xylene	16.83	106	1004026	46.13	ug/L	99
45) Styrene	16.93	104	1463514	46.61	ug/L	100
46) Bromoform	16.98	173	209257	48.42	ug/L	100
48) Isopropylbenzene	17.36	105	2547736	52.45	ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.22	83	544467	46.34	ug/L	97
51) 1,3-Dichlorobenzene	19.75	146	1006909	49.86	ug/L	100
52) 1,4-Dichlorobenzene	19.90	146	957428	49.30	ug/L	99
53) 1,2-Dichlorobenzene	20.67	146	903431	49.29	ug/L	99
54) 1,2-Dibromo-3-chloropropan	22.17	75	73961	44.45	ug/L	93
55) 1,2,4-Trichlorobenzene	23.36	180	464313	52.41	ug/L	98

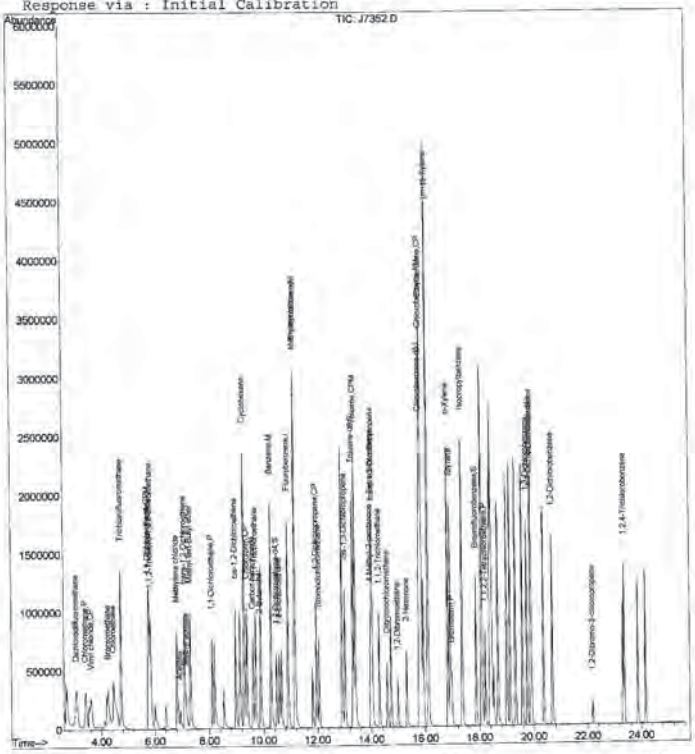
(#) = qualifier out of range (m) = manual integration
J7352.D JO09NTCS.M Mon Oct 13 10:58:34 2008 Pag

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7352.D
Acq On : 10 Oct 2008 13:53
Sample : LCS-15131
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 13 10:56 2008

Vial: 39
Operator: GS
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Oct 13 10:56:13 2008
Response via : Initial Calibration



J7352.D JO09NTCS.M Mon Oct 13 10:58:35 2008 Pag

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15143	SampType: LCS	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:	RunNo: 15143
Client ID: ZZZZZ	Batch ID: R15143	Method: SW8260B		Analysis Date: 10/13/08	SeqNo: 396435
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	Units	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	54.3	5.0	50	0	µg/Kg	109	55	142				
Chloromethane	51.8	5.0	50	0		104	62	141				
Vinyl chloride	51.7	5.0	50	0		103	68	135				
Bromomethane	48.6	5.0	50	0		97	56	147				
Chloroethane	48.0	5.0	50	0		96	63	142				
Trichlorofluoromethane	48.6	5.0	50	0		97	67	136				
1,1-Dichloroethene	42.2	2.5	50	0		84	76	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	45.7	2.5	50	0		91	80	134				
Acetone	81.4	40	100	0		81	25	175				
Carbon disulfide	48.6	2.5	50	0		97	73	130				
Methyl acetate	45.4	2.5	50	0		91	67	147				
Methylene chloride	42.1	5.0	50	0		84	75	124				
trans-1,2-Dichloroethene	41.6	2.5	50	0		83	77	123				
Methyl tert-butyl ether	48.7	2.5	50	0		97	78	128				
1,1-Dichloroethane	43.6	2.5	50	0		87	76	124				
cis-1,2-Dichloroethene	43.6	2.5	50	0		87	79	120				
2-Butanone	87.5	40	100	0		88	42	154				
Chloroform	43.8	2.5	50	0		87	77	121				
1,1,1-Trichloroethane	43.2	2.5	50	0		86	78	132				
Cyclohexane	47.9	2.5	50	0		96	80	128				
Carbon tetrachloride	39.5	2.5	50	0		79	74	138				
Benzene	42.6	2.5	50	0		85	80	121				
1,2-Dichloroethane	44.4	2.5	50	0		89	73	127				
Trichloroethene	41.8	2.5	50	0		84	80	120				
Methylcyclohexane	46.9	2.5	50	0		94	80	128				
1,2-Dichloropropane	46.4	2.5	50	0		91	80	125				
Bromodichloromethane	45.7	2.5	50	0		91	80	129				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15143	SampType: LCS	TestCode: 8260S7_OLM	Units: µg/Kg	Prep Date:	RunNo: 15143
Client ID: ZZZZZ	Batch ID: R15143	Method: SW8260B		Analysis Date: 10/13/08	SeqNo: 396436
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	Units	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	45.4	2.5	50	0	µg/Kg	91	80	125				
4-Methyl-2-pentanone	95.3	5.0	100	0		95	50	150				
Toluene	43.8	2.5	50	0		87	80	121				
trans-1,3-Dichloropropene	45.3	2.5	50	0		91	78	124				
1,1,2-Trichloroethane	43.8	2.5	50	0		88	80	122				
Tetrachloroethene	43.5	2.5	50	0		87	74	125				
2-Hexanone	97.1	5.0	100	0		97	50	150				
Dibromochloromethane	41.8	2.5	50	0		83	70	135				
1,2-Dibromoethane	47.8	2.5	50	0		95	80	124				
Chlorobenzene	44.8	2.5	50	0		89	80	120				
Ethylbenzene	44.2	2.5	50	0		88	80	121				
Xylenes (total)	125	5.0	150	0		83	76	124				
Styrene	42.9	2.5	50	0		86	75	122				
Bromoform	45.1	2.5	50	0		90	70	136				
Isopropylbenzene	47.2	2.5	50	0		94	76	131				
1,1,2,2-Tetrachloroethane	48.3	2.5	50	0		97	69	135				
1,3-Dichlorobenzene	44.6	2.5	50	0		89	80	120				
1,4-Dichlorobenzene	44.4	2.5	50	0		89	80	120				
1,2-Dichlorobenzene	45.6	2.5	50	0		91	80	120				
1,2-Dibromo-3-chloropropane	45.7	5.0	50	0		91	69	132				
1,2,4-Trichlorobenzene	44.5	5.0	50	0		89	71	127				
Surr: 1,2-Dichloroethane-d4	47.6	0.10	50	0		95	71	128				
Surr: Toluene-d8	49.8	0.10	50	0		99	75	125				
Surr: 4-Bromofluorobenzene	50.9	0.10	50	0		102	59	125				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

14-Oct-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7370.D
Acq On : 13 Oct 2008 10:49
Sample : LCS-15143
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.90	96	2078657	50.00 ug/L	0.00
36) Chlorobenzene-d5	15.81	82	832385	50.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	19.88	152	531237	50.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	10.48	65	557372	47.65 ug/L	0.00
Spiked Amount 50.000			Recovery =	95.30%	
37) Toluene-d8	13.31	98	1961562	49.61 ug/L	0.00
Spiked Amount 50.000			Recovery =	99.22%	
49) Bromofluorobenzene	17.88	95	624641	50.85 ug/L	0.00
Spiked Amount 50.000			Recovery =	101.70%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.06	85	882106	54.30 ug/L	99
3) Chloromethane	3.41	50	868247	51.82 ug/L	100
4) Vinyl chloride	3.61	62	956776	51.73 ug/L	84
5) Bromomethane	4.25	94	789740	48.56 ug/L	96
6) Chloroethane	4.46	64	775814	48.05 ug/L	99
7) Trichlorofluoromethane	4.74	101	1430870	48.63 ug/L	98
8) 1,1-Dichloroethene	5.75	96	417795	42.17 ug/L	97
9) Carbon disulfide	5.78	76	1940400	48.61 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	5.85	101	524533	45.70 ug/L	98
11) Methylene chloride	6.82	84	491452	42.10 ug/L	99
12) Acetone	6.93	43	308216	81.37 ug/L	98
13) trans-1,2-Dichloroethene	7.10	96	457700	41.65 ug/L	99
14) Methyl acetate	7.14	43	329062	45.44 ug/L	99
15) Methyl tert-Butyl ether	7.30	73	1258339	48.72 ug/L	100
16) 1,1-Dichloroethane	8.11	63	868402	43.60 ug/L	99
17) cis-1,2-Dichloroethene	8.97	96	515520	43.57 ug/L	98
18) Cyclohexane	9.29	56	957609	47.88 ug/L	99
19) Chloroform	9.39	83	836536	43.59 ug/L	99
20) Carbon tetrachloride	9.61	117	500235	39.46 ug/L	99
21) 1,1,1-Trichloroethane	9.71	97	738678	43.23 ug/L	100
22) 2-Butanone	9.88	43	468681	97.52 ug/L	100
23) Benzene	10.28	78	2068126	42.60 ug/L	100
25) 1,2-Dichloroethane	10.58	62	601527	44.35 ug/L	98
26) Methylcyclohexane	11.15	83	1000462	46.86 ug/L	99
27) Trichloroethene	11.16	95	503533	41.75 ug/L	99
28) 1,2-Dichloropropane	11.96	63	486018	45.36 ug/L	99
29) Bromodichloromethane	12.05	83	572445	45.70 ug/L	99
30) cis-1,3-Dichloropropene	13.02	75	808059	45.44 ug/L	99
31) Toluene	13.39	92	1295613	43.64 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7370.D J009NTCS.M Tue Oct 14 08:33:34 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7370.D
Acq On : 13 Oct 2008 10:49
Sample : LCS-15143
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Quant Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration
DataAcq Meth : J009VOCS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.97	43	898038	95.67 ug/L	98
33) trans-1,3-Dichloropropene	14.03	75	706538	45.33 ug/L	99
34) 1,1,2-Trichloroethane	14.30	83	334530	45.56 ug/L	99
35) 2-Hexanone	15.31	43	637492	97.08 ug/L	99
38) Tetrachloroethene	14.01	166	411916	43.46 ug/L	99
39) Dibromochloromethane	14.59	129	339598	41.63 ug/L	99
40) 1,2-Dibromoethane	14.98	107	356226	47.58 ug/L	100
41) Chlorobenzene	15.84	112	1358060	44.62 ug/L	99
42) Ethylbenzene	15.86	91	2458867	44.23 ug/L	100
43) (m+p)-Xylene	16.10	106	1867253	82.58 ug/L	99
44) o-Xylene	16.83	106	871918	41.95 ug/L	100
45) Styrene	16.93	104	1286132	42.92 ug/L	100
46) Bromoform	16.99	173	189881	46.12 ug/L	98
48) Isopropylbenzene	17.37	105	2193721	47.22 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.21	83	527361	46.93 ug/L	99
51) 1,3-Dichlorobenzene	19.74	146	860960	44.58 ug/L	99
52) 1,4-Dichlorobenzene	19.90	146	825521	44.44 ug/L	99
53) 1,2-Dichlorobenzene	20.68	146	798714	45.56 ug/L	98
54) 1,2-Dibromo-3-chloropropan	22.17	75	72761	45.68 ug/L	97
55) 1,2,4-Trichlorobenzene	23.36	180	377112	44.50 ug/L	98

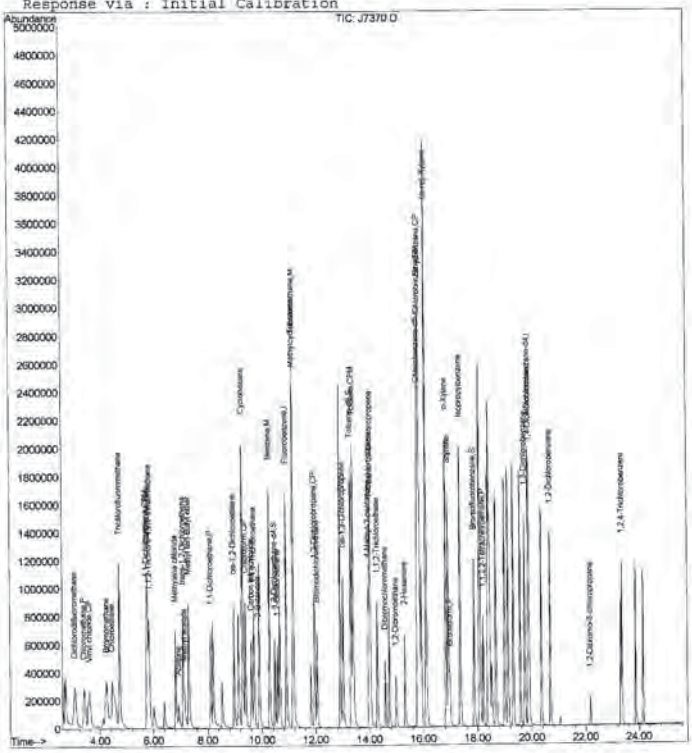
(#) = qualifier out of range (m) = manual integration
J7370.D J009NTCS.M Tue Oct 14 08:33:34 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7370.D
Acq On : 13 Oct 2008 10:49
Sample : LCS-15143
Misc : LCS ,8260S7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 8:25 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: J009NTCS.RES

Method : C:\HPCHEM\1\METHODS\J009NTCS.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Tue Oct 14 08:24:52 2008
Response via : Initial Calibration



J7370.D J009NTCS.M Tue Oct 14 08:33:36 2008

Laboratory Worksheets

Copy of Calculations

GC/MS SOIL SAMPLE CALCULATIONS

1. Relative Response Factors for GC/MS Volatiles and Semivolatiles

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where:
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specific internal standard
C_{is} = Concentration of the internal standard (µg/Kg)
C_x = Concentration of the compound to be measured (µg/Kg)

2. Relative Standard Deviation

$$\% \text{ RSD} = \frac{SD}{\bar{X}} \times 100$$

Where:
RSD = Relative Standard Deviation
SD = Standard Deviation of initial relative response factors (per compound)
$\bar{X}$ = Mean of initial relative response factors (per compound)

3. %Deviation for Continuing Calibration (for quantitation from RF only)

$$\% \text{ Deviation}_{(400.0)} = \frac{RRF_c - \overline{RRF_i}}{\overline{RRF_i}} \times 100$$

$$\% \text{ Deviation}_{(\text{software})} = \frac{\overline{RRF_i} - RRF_c}{\overline{RRFi}} \times 100$$

Where:
RRF_c = Relative response factor from continuing calibration standard
$\overline{RRF_i}$ = Mean relative response factor from most recent initial calibration meeting technical acceptance criteria

4. %Drift for Continuing Calibration (for quantitation from RF or Curve)

$$\% \text{ Drift}_{(400.0)} = \frac{C_c - C_i}{C_i} \times 100$$

$$\% \text{ Drift}_{(\text{software})} = \frac{C_i - C_c}{Ci} \times 100$$

Where:
C_i = Calibration check std concentration (theoretical)
C_c = Measured concentration

GC/MS SOIL SAMPLE CALCULATIONS

5. RRT Deviation

$$\Delta \text{ RRT} = \text{RRT}_t - \text{RRT}_c, \quad \text{RRT} = \frac{RT_t}{RT_i}$$

Where:
RRT_t = Relative RT of target compound in sample
RRT_c = RRT of target in continuing calibration standard
RT_t = RT of target compound
RT_i = RT of internal standard

6. Final Concentration for GC/MS Volatiles
Low Soil

$$\text{Concentration } (\mu g/kg) = \frac{A_x)(I_{is})V_o}{(A_{is})(RRF)(W_s)(D)}$$

Where:
V_o = Volume of water purged (5 to 25 mL)
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specified internal standard
I_{is} = Concentration of internal standard added in nanograms/ml
W_s = Weight of sample purged (1-5g)
D = % solids/100
RRF = Response factor for compound to be measured (average or single point) *

* For compounds calculated using a regression equation for initial calibration, the terms of the equation replace the RRF.

Medium Soil

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(V_A)Df}{(A_{is})(RRF)(W_s)(V_A)(D)}$$

Where:
RRF, A_x, A_{is}, I_{is} = Same as above
W_s = Weight of sample extracted (5g)
V_T = Total volume of methanol extract adjusted for sample moisture.

V_T = mL solvent + (%moisture x W_s/100)

V_A = Volume of methanol extract used for purging
V_o = Volume of water purged
Df = Dilution factor if original extract is diluted

7. Final Concentration for GC/MS Semivolatiles

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(Df)(2.0)}{(A_{is})(RRF)(V_I)(W_S)(D)}$$

Where:
RRF, A_x, A_{is}, I_{is} D, Df= Same as above
W_S = Weight of sample extracted (g)
V_I = Volume of concentrated extract (µL)

GC/MS SOIL SAMPLE CALCULATIONS

V_T = Volume of extract injected (µL)

The factor of 2.0 is used to account for the amount of extract that is not recovered from the GPC. If the GPC is not used, this factor is not used.

8. Matrix Spike Recovery for Volatiles and Semivolatiles

$$\text{Recovery } (\%) = \frac{(SSR) - (SR)}{(SA)} \times 100$$

Where:
SSR = Spike sample result
SR = Sample result
SA = Spike added

9. % RPD of Matrix Spike and Matrix Spike Duplicate

$$\%\text{RPD} = 100 \times \frac{|S - D|}{((S + D)/2)}$$

Where:
S = First Sample Value (Original)
D = Second Sample Value (Duplicate)

10. The Recovery of Reference Sample (LCS) and Surrogate

$$\text{Recovery } (\%) = \frac{SR}{SA} \times 100$$

Where:
SR = Sample results
SA = Sample spike added

11. The calculation of Library Search compounds (TICs) is similar to target compounds except a RRF of 1.0 is assumed.

Injection Logs

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: Soil Method
Heated Purge: (Y) N

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		ICAL # 1255 1393 10/21/08
3		
4		

	ALS No.	Client No.	Sample ID (Work Order - Samp#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Date	Time	Diln. Factor
1			TB10090803	JRFBS	5ml			J7335	10/9/08	6:26	—
2			ICAL -2.5PPB	J089VOCS		8260	VOC	J7336		7:48	1X
3			-5.0PPB					J7337		8:22	
4			-2.5PPB					J7338		9:03	
5			-20PPB					J7339		9:40	
6			-50PPB					J7340		10:14	
7			-100PPB					J7341		10:47	
8			-150PPB					J7342		11:21	
9			-200PPB					J7343		12:51	
10			BLANK -					J7344		13:25	
11			ICAL -200PPB					J7345		14:13	
12			BLANK -					J7346		14:47 15:56	
13			0809072-002A		2g			J7347		15:23	2.5X
14			BLANK -		5ml			J7348		15:56	1X
15			25RC -15113					J7349		16:30	
16			-					J			
17			-					J			
18			-					J			
19			-					J			
20			-					J			
21			-					J			
22			-					J			
23			-					J			
24			-					J			
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP = AP #000
(1) 624.2	EPA-600 Series Supp.III, Rev. 4.1	10/95	–01
(2) 624	Fed Register, Vol. 49, No. 209	10/29/84	–03
(3) TCLP	8260B w/ 1311 (AP #100-01)	12/96	–27A/100-01
(4) 8260B	USEPA SW846, Upd. III	12/96	–27A
(5) EPA CLP	USEPA CLP SOW OLM04.3	8/03	–39
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/03	–39

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or aq. med. extract added to 44mL vial)

Supervisor Review:

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

G:\Logbooks 2008\Organics\MSV3p1.XLS

Log Page No. 35

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (% of CCV/ICAL Area)

		Upper Limit
		Lower Limit

Pre-run maintenance
___ Replace Septa
___ Replace trap, Lot ___
___ Replace Helium
___ See Maint. log
Other:

Internal Standard Area Counts Int. Std. #1	Int. Std. #2	Int. Std. #3	Matrix Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—				15113			Y	1
1997352	760434	432502		X			V-8347, 47		Y 5ul, 2.5ul	2
1907734	747533	413377		X					Y 5ul, 5ul	3
1916541	753662	430089		X					N not needed 5ul, 20ul	4
1876618	760565	457599		X		15113			Y 5ul, 20ul	5
2077589	852934	568004		X			V-8343, 44, 45, 46		Y 5ul, 2.5ul, 2.5ul, 2.5ul	6
2113908	871421	582366		X					Y 5ul, 5ul, 5ul, 5ul	7
2281783	955854	639114		X					Y 7.5ul, 7.5ul, 7.5ul	8
2437322	1013755	667557		X			—		N Vial Contamination	9
2257314	953651	489756		X			V-8349		ok	10
2450267	1031032	714444		X		15113	V-8343, 44, 45, 46		Y 5ul, 10ul, 10ul, 10ul	11
2372677	823295	466546		X			V-8349		ok 5ul	12
2286477	781554	328405		X					Y	13
2272677	892500	505266		X					ok	14
2180243	856453	559255		X		15113	V-8349 50, 51, 52		Y 5ul, 2.5ul, 2.5ul, 2.5ul	15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review:

MSV3p2.XLS

Log Page No. 36

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: Soil Method
Heated Purge: (Y) (N)

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		[redacted]
3		OBC - Cory or Gordon
4		

	ALS No.	Client No.	Sample ID (Work Order - Samp#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Date	Time	Diln. Factor
1		1	TB10100803		5ml			J7350	10/11/08	12:20	—
2			LCV-15130,31	J089SRS, MTCS		8260	VOC	J7351		13:03	1X
3			LCS					J7352		13:53	
4		2	0810051-002AMS	J089SRS	5g			J7353		14:49	
5			-002AMSD					J7354		15:25	
6		1	BLK -	J089SRS, MTCS	5ml			J7355		15:58	
7			MB-150139,31					J7356		16:32	
8		3	0810083-006A	J089MTCS	5ml			J7357		17:06	
9		2	0810051-001A	J089SRS	5.1g			J7358		17:39	0.98X
10			-002A		5g			J7359		18:12	1X
11			-003A					J7360		18:47	
12			-004A		5.1g			J7361		19:20	0.98X
13			-005A		5g			J7362		19:54	1X
14		3	0810083-001A	J089MTCS				J7363		20:27	
15			-002A		4.9g			J7364		21:01	1.02X
16			-003A		5g			J7365		21:35	1X
17			-004A		5.1g			J7366		22:08	0.98X
18			-005A		5g			J7367		22:42	1X
19			-					J			
20			-					J			
21			-					J			
22			-					J			
23			-					J			
24			-					J			
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP = AP #000
(1) 624.2	EPA-600 Series Supp.III, Rev. 4.1	10/95	–01
(2) 624	Fed Register, Vol. 49, No. 209	10/29/84	–03
(3) TCLP	8260B w/ 1311 (AP #100-01)	12/96	–27A/100-01
(4) 8260B	USEPA SW846, Upd. III	12/96	–27A
(5) EPA CLP	USEPA CLP SOW OLM04.3	8/03	–39
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/03	–39

Samples Set By: G. Stallock

* = Volume(mL)/weight(g) of original sample purged (or aq. med. extract added to 44mL vial)

Supervisor Review:

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

G:\Logbooks 2008\Organics\MSV3p1.XLS

Log Page No. 37

Volatile GC/MS Injection Log

(page 2 of 2)

Internal Std Limits (% of CCV/ICAL Area)

		Upper Limit
		Lower Limit

Pre-run maintenance
- ___ Replace Septa
- ___ Replace trap, Lot ___
- ___ Replace Helium
- ___ See Maint. log
- ___ Other:

Internal Standard Area Counts — Matrix

Int. Std. #1	Int. Std. #2	Int. Std. #3	Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—					V-8333			1
2092531	852823	564081		X		R15130,31	V-8343,44,45,46		Sul, 2.5ul, 2.5ul, 2.5ul	2
2177924	862673	555442		X		↓	V-8349,50,51,52			3
2038570	809633	466347		X		R15130	↓			4
2311307	849698	454514		X		↓	↓		↓	5
2124882	806519	453729		X		R15130,31	V-8349		OK Sul	6
2089417	792510	446867		X		↓				7
2022842	784826	440573		X		R15131		×2		8
2009914	761877	436227		X		R15130				9
1985303	743618	362368		X					RIX, S3T	10
2029276	770317	434302		X						11
1878725	727170	391448		X						12
1952365	757749	421060		X		↓				13
1633972	509130	198411		X		R15131			RIX, I3b, S3T	14
1691945	462706	147931		X					I3b, S2,3T	15
1625463	440460	146318		X					I3b, S2,3T	16
1693173	437918	139364		X					I3b, S2,3T	17
1708468	462335	140070		X		↓	↓		↓ I3b, S2,3T	18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by: [signature]

Supervisor Review: [signature]

MSV3p2.XLS Log Page No. 38

Instrument:	MS3/HP5973 (10)
GC Column:	Rtx-VMS 0.18 mm x 40 m, 1.0 df
Conc. Trap:	VOCARB 3000
Conc. Mtd:	Soil Method
Heated Purge:	(Y) N

Volatile GC/MS Injection Log

(Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		✓ 0816 - Cert #1 General
3		✓ [redacted]
4		

	ALS No.	Client No.	Sample ID (Work Order - Sampl#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Data File Date	Time	Diln. Factor
1		t	TB101308A3		5ml			J 7368	10/13/08	9:46	—
2			CCV -15143/44	J0849MTCS, STAS		B620	VOC	J 7369		10:16	1X
3		↓	LCS - ↓	↓	↓			J 7370		10:49	
4		2	08101083 - 001AMS	J0849MTCS	5g			J 7371		11:23	
5		↓	↓ - 001AMSD	↓	↓			J 7372		11:57	
6		1	IBLK - —	J0849MTCS, STAS	5ml			J 7373		12:30	
7		↓	MB -15143/44	↓	↓			J 7374		13:04	
8		3	08101051 - 002A(RA)	J0849STAS	5g			J 7375		13:38	
9		2	08100083 - 001A(RA)	J0849MTCS	↓			J 7376		14:11	
10			- 002A(RA)					J 7377		14:45	
11			- 003A(RA)					J 7378		15:19	
12			- 004A(RA)					J 7379		15:52	
13		↓	↓ - 005A(RA)	↓				J 7380		16:26	
14		3	08101062 - 001A	J0849STAS				J 7381		17:00	
15			- 002A					J 7382		17:33	
16			- 003A					J 7383		18:07	
17			- 004A					J 7384		18:41	
18			↓ - 005A					J 7385		19:14	
19			08101075 - 001A					J 7386		19:48	
20			- 002A					J 7387		20:21	
21		↓	↓ - 003A	↓	↓	↓	↓	J 7388	↓	20:55	↓
22			-					J			
23			-					J			
24			-					J			
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP #AP-8000
(1) 624.2	EPA-500 Series Supp.B, Rev. 4.1	6/96	-01
(2) 624	Fed Register, Vol. 49, No. 209	10/29/84	-05
(3) TCLP	62000 of 1311 (AP #100-01)	12/96	-27A/100-01
(4) 8260B	USEPA SW846, Upd. III	12/96	-27A
(5) EPA CLP	USEPA CLP SOW OLM04.3	9/03	-39
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/03	-39

Samples Set By: [signature]

* 5-10ml(ml), 1(weight)g of original sample purged (or a), mod. extract added to 4(ml), wat

Supervisor Review: [signature]

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

G:\Logbooks 2006\Organics\MSV3p1.XLS Log Page No. 39

Volatile GC/MS Injection Log

(page 2 of 2)

Internal Std Limits (% of CCV/ICAL Area)

		Upper Limit
		Lower Limit

Pre-run maintenance
- ___ Replace Septa
- ___ Replace trap, Lot ___
- ___ Replace Helium
- ___ See Maint. log
- ___ Other:

Internal Standard Area Counts — Matrix

Int. Std. #1	Int. Std. #2	Int. Std. #3	Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—								1
2171012	909102	611077		X		R15143,44	V-8343,44,45,46		Sul, 2.5ul, 2.5ul, 2.5ul	2
2078657	832385	531237		X		↓	V-8349,50,51,52			3
1848412	591550	232845		X		R15143			I3b, S3T	4
2163845	884526	294615		X		↓	↓		↓ I3b, S3T	5
2289936	873920	464268		X		R15143,44	V-8349		OK Sul	6
2242483	832192	415392		X		↓			S3T (LL4)	7
2154626	778809	360634		X		R15144			S3T (Cont.)	8
2022213	672948	277928		X		R15143			I3b, S3T (Cont.)	9
1767404	479157	162340		X					I3b, S2,3T (Cont.)	10
1772623	489944	167130		X					I3b, S2,3T (Cont.)	11
1758301	467627	151092		X					I3b, S2,3T (Cont.)	12
1697739	456750	147328		X		↓			I3b, S2,3T (Cont.)	13
1985150	762533	415845		X		R15144				14
2007078	752161	362343		X						15
1976624	712329	367467		X					RIX, S3T	16
2002813	770190	380821		X					RIX, S3T	17
1932557	675452	290724		X					RIX, I3b, S3T	18
1967452	680366	289065		X					RIX, I3b, S3T	19
1949260	752352	391219		X						20
1975643	762002	395375		X		↓	↓			21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by: [signature]

Supervisor Review: [signature]

MSV3p2.XLS Log Page No. 40

Standards Logs

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent/Source ID No.	Conc. (ppm)	Exp. Date	Prep'd By
V-8192	4/28/08	7/23/08	Stock 2-Ref	—	—	—	—				—
			Methyl Cyclohexane-Ref	342.6ml	MeOH CU319	2ml	2000	V-8085	10,200	7/23/08	JK
			Methyl Acetate-Ref	400.0ml				V-8086	11,020		
			Cyclohexane-Ref	388.7ml				V-8087	10,070		
			1,1,2-TCTFE-Ref	366.7ml				V-8088	10,840		
V-8193	4/28/08	6/28/08	Gases-Ref	Cracker	MeOH	1.2ml	1000	V-7945	1000	8/18/08	JK
V-8194	4/28/08	6/28/08	8260-IS/SURR								
			8260-IS	50ml	MeOH CU319	2ml	50	V-8178	2000	8/25/08	
			8260-SURR	50ml				V-8169	2000	8/18/08	
V-8195	4/28/08	6/28/08	8260 Ref w/o Ketones								
			Stock 1-Ref								
			Stock 2-Ref								
V-8196	4/28/08	6/28/08	8260 Ketones-Ref								
V-8197	4/28/08	5/28/08	8260 Misc-Ref								
V-8198	4/29/08	9/25/08	TCLP Extraction Sol'n								
			1N NaOH	140ml	DI H_2O	2x2L	pH 4.98	V-7938	1N	9/25/08	
			Acetic Acid, glacial	11.4ml				V-8109		2/6/11	
V-8199	5/8/08	9/8/08	8260-IS/SURR MS3 Surr								
			8260-IS	588ml	MeOH CU319	2.0ml	58.8	V-8178	2000	8/25/08	JK
			8260-SURR	588ml			58.8	V-8169	2000	8/18/08	
V-8200	5/9/08										

JK 5/9/08

438 irep.xls Supervisor review _____ Page No. _____ 100

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent/Source ID No.	Conc. (ppm)	Exp. Date	Prep'd By
V-8173	4/18/08	5/18/08	8260 Misc Ref	—	—	—	—				—
			Vinyl Acetate-Ref	19.6ml	MeOH CU319	2ml	100	V-8085	10,200	7/23/08	JK
			2-Chex-Ref	90.5ml			500	V-8086	11,020		
			CS_2-Ref	19.9ml			100	V-8087	10,070		
			Acrylonitrile-Ref	92.2ml			500	V-8088	10,840		
			Acrolein-Ref	92.0ml				V-8089	10,870		
			Gases-Ref	200ml			100	V-8142	1000	5/27/08	
V-8174	4/22/08	10/22/08	1,4-Dioxane-Cal	51.3392 - 51.3316	MeOH CU319	10ml	10,160	Supelco Vol. 1686	99.5%	8/10	JK
~~V-8175~~	~~4/22/08~~	~~10/22/08~~	~~1,4-Dioxane-R~~	0.1016							
V-8175	4/22/08	10/22/08	1,4-Dioxane	51.3474 - 51.3472 0.1002	MeOH CU319	10ml	10,020	Supelco Vol. 1686	99.5%	8/10	JK
V-8176	4/22/08	6/22/08	1,4-Dioxane-Cal	197ml	MeOH CU319	2ml	1000	V-8174	10,160	10/22/08	JK
V-8177	4/22/08	6/22/08	1,4-Dioxane-Ref	200ml	MeOH CU319	2ml	1000	V-8175	10,020	10/22/08	JK
V-8178	4/23/08	8/25/08	8260-IS	Cracker	MeOH	1.2ml	2000	V-8128	2000	12/15/10	JK
V-8179	4/25/08	6/25/08	8260-IS/SURR	—							
			8260-IS	50ml	MeOH CU319	2ml	50	V-8178	2000	8/25/08	JK
			8260-SURR	50ml				V-8169	2000	8/18/08	
V-8180	4/28/08	8/28/08	524/8260 MM-Cal	Cracker	MeOH	1.2ml	2000	V-7947	2006	5/22/09	JK
V-8182	4/28/08	7/23/08	Stock 1-Cal	—							
			Methyl Iodide-Cal	342.9ml	MeOH CU319	2ml	2000	V-8060	11,630	7/23/08	JK
			t-1,4-DC-2B-Cal	375.9ml				V-8061	10,640		
			MTBE-Cal	349.8ml				V-8062	10,005		
			1-Chlorohexane-Cal	396.0ml				V-8063	10,100		

436 rep.xls Supervisor review _____ Page No. _____ 98

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc. (ppm)	Exp. Date	Prep'd By
V-8195	4/28/08	6/28/08	8260 Ref w/o Ketones	—	—	—	—				—
			Stock 1-Ref	100ml	MeOH CU319	2ml	100	V-8191	2000	7/23/08	JK
			Stock 2-Ref					V-8192	2000		
			524/8260 MM-Ref					V-8189	2000	8/28/08	
V-8196	4/28/08	6/28/08	8260 Ketones-Ref	200ml	MeOH CU319	2ml	200	V-8190	2000	7/28/08	JK
V-8197	4/28/08	5/28/08	8260 Misc-Ref	—	—	—	—				—
			Vinyl Acetate-Ref	19.6ml	MeOH CU319	2ml	100	V-8085	10,200	7/23/08	JK
			2-Chex-Ref	90.5ml			500	V-8086	11,020		
			CS_2-Ref	19.9ml			100	V-8087	10,070		
			Acrylonitrile-Ref	92.2ml			500	V-8088	10,840		
			Acrolein-Ref	92.0ml				V-8089	10,870		
			Gases-Ref	200ml			100	V-8193	1000	6/28/08	
V-8198	4/29/08	9/25/08	TCLP Extraction Sol'n	—	—	—	—				—
			1N NaOH	2x140ml	DI H_2O	2x2L	pH 4.98	V-7938	1N	9/25/08	GS
			Acetic Acid, Glacial	2x11.4ml				V-8109		2/6/11	
V-8199	5/8/08	9/8/08	8260-IS/SURR MS3 Surr	—	—	—	—				—
			8260-IS	588ml	MeOH CU319	20ml	58.8	V-8178	2000	8/25/08	JK
			8260-SURR	588ml			58.8	V-8169	2000	8/18/08	
V-8200	5/9/08	7/9/08	8260-Ketones Ref	200ml	MeOH CU319	2ml	200	V-8190	2000	7/28/08	JK
V-8201	5/13/08	7/13/08	8260 Ketones-Cal	200ml	MeOH CU319	2ml	200	V-8184	2000	7/28/08	JK
V-8202	5/13/08	8/13/08	8260 Ketones-Cal	Cracker	MeOH	1.2ml	2000	V-7916	2000	2/2/09	JK
V-8203	5/13/08	7/13/08	8260 Ketones-Cal	200ml	MeOH CU319	2ml	200	V-8202	2000	8/13/08	JK

439 Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

Volatile GC/MS Standard Prep Log

I.D. No.	Prep Date	Exp. Date	Description/ Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent/Source ID No.	Conc. (ppm)	Exp. Date	Prep'd By
V-8183	4/28/08	7/23/08	Stock 2-Cal	—	—	—	—				—
			Methyl Cyclohexane-Cal	399.2ml	MeOH CU319	2ml	2000	V-8070	10,020	7/23/08	JK
			Methyl Acetate-Cal	396.0ml				V-8071	10,100		
			Cyclohexane-Cal	388.3ml				V-8072	10,300		
			1,1,2-TCTFE-Cal	353.4ml				V-8073	11,320		
V-8184	4/28/08	7/28/08	Ketones-Cal	Cracker	MeOH	1.2ml	2000	V-7856	2000	2/2/09	JK
V-8185	4/28/08	6/28/08	8260-IS	50ml	MeOH CU319	2ml	50	V-8178	2000	8/25/08	JK
V-8186	4/28/08	6/28/08	8260 Cal w/o Ketones	—							
			Stock 1-Cal	100ml	MeOH CU319	2ml	100	V-8182	2000	7/23/08	JK
			Stock 2-Cal					V-8183			
			524/8260 MM-Cal					V-8180		8/28/08	
			Surr					V-8169		8/18/08	
V-8187	4/28/08	6/28/08	8260 Ketones-Cal	200ml	MeOH CU319	2ml	200	V-8184	2000	7/28/08	JK
V-8188	4/28/08	5/28/08	8260 Misc Cal	—	—	—	—				—
			Vinyl Acetate-Cal	19.7ml	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	JK
			2-Chex-Cal	91.0ml			500	V-8081	10,980		
			CS_2-Cal	19.5ml			100	V-8082	10,240		
			Acrylonitrile-Cal	90.2ml			500	V-8083	11,080		
			Acrolein-Cal	96.2ml				V-8084	10,390		
			Gases-Cal	200ml			100	V-8167	1000	6/18/08	
V-8189	4/28/08	8/28/08	524/8260 MM-Ref	Cracker	MeOH	1.2ml	2000	V-7857	2000	5/26/09	JK
V-8190	4/28/08	7/28/08	Ketones-Ref	Cracker	MeOH	1.2ml	2000	V-7948	2000	2/2/09	JK
V-8191	4/28/08	7/23/08	Stock 1-Ref	—	—	—	—				—
			Methyl Iodide-Ref	340.9ml	MeOH CU319	2ml	2000	V-8065	11,750	7/23/08	JK
			t-1,4-DC-2B-Ref	389.5ml				V-8066	10,270		
			MTBE-Ref	341.2ml				V-8067	11,890		
			1-Chlorohexane-Ref	391.4ml				V-8068	10,220		

437 rep.xls Supervisor review _____ Page No. _____ 99

GC/MS ~~SEMI~~VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V8221	5-30-08	9-30-08	8260 Surrogate Std.	Cracked	MeOH	1.2mL	2000	V8057	2000	2/2/10	MV
V8222	5-30-08	9-30-08	8260 Internal Std.	250µl	MeOH	10mL	50ppm	V8178	2000	8/25/08	MV
↓	↓	↓	8260 Surrogate Std.	250µl	lot CU319	↓	50ppm	V8221	↓	9/30/08	↓
V8223	6/3/08	6/19/09	TCLP Extraction Sol'n	—	—	—	—	—	—	—	—
↓	↓	↓	IN NaOH	140ml	DI H2O	2L	pH 5.01	V-8213	IN	5/19/09	HD
↓	↓	↓	Acetic Acid, glacial	11.4ml	↓	↓	↓	V-8109		2/6/11	↓
V-8224	6/9/08	11/11/10	524/8260 MM-Cal	3x1.2ml	MeOH	3x1.2ml	2000	ECS Lot#524MMIB		11/11/10	JK
V-8225	6/9/08	3/09	Acrolein	1g	Neat	1g	Neat	Chem Service Lot#396-142A		3/09	JK
V-8226	6/12/08	10/12/08	8260-IS	Cracked	MeOH	1.2ml	2000	V-8128	2000	12/15/10	JK
V-8227	6/12/08	8/12/08	Gases-Cal	Cracked	MeOH	1.2ml	1000	V-8110	1000	9/10	JK
V-8228	6/12/08	8/12/08	8260-IS	50µl	MeOH/CU319	2ml	50	V-8226	2000	10/12/08	JK
V-8229	6/12/08	7/23/08	8260 Cal w/o Ketones	—	—	—	—	—	—	—	—
↓	↓	↓	Stock 1-Cal	100ml	MeOH/CU319	2ml	100	V-8182	2000	7/23/08	JK
↓	↓	↓	Stock 2-Cal	↓	↓	↓	↓	V-8183	2000	↓	↓
↓	↓	↓	524/8260 MM-Cal	↓	↓	↓	↓	V-8180	2000	8/28/08	↓
↓	↓	↓	Surr	↓	↓	↓	↓	V-8221	2000	9/30/08	↓
V-8230	6/12/08	8/12/08	8260 Cal Ketones	200ml	MeOH/CU319	2ml	200	V-8202	2000	8/13/08	JK

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

442

GC/MS ~~SEMI~~VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8204	5/13/08	8/13/08	8260-Ketones Ref	Cracked	MeOH	1.2ml	2000	V-8130	2000	12/15/09	JK
V-8205	5/13/08	7/13/08	8260 Ketones-Ref	200ul	MeOH CU319	2ml	200	V-8204	2000	8/13/08	JK
V-8206	5/15/08	12/15/10	8260-IS	3x1.2ml	MeOH	3x1.2ml	2000	ECS Lot#V35846	2000	12/15/10	JK
V-8207	5/19/08	2/6/10	8260-Surr	3x1.2ml	MeOH	3x1.2ml	2000	ECS Lot#V05826	2000	2/6/10	JK
V-8208	5/13/08	9/30/10	8260-Gases-Ref	3x1.2ml	MeOH	3x1.2ml	1000	ECS Lot#VGM819	1000	9/30/10	JK
V-8209	5/19/08	7/19/08	8260-IS	50µl	MeOH CU319	2ml	50	V-8178	2000	8/25/08	HD
V-8210	5/19/08	6/18/08	MISC-CAL	—	—	—	—	—	—	—	—
↓	↓	↓	Vinyl Acetate-Cal	19.7µl	MeOH CU319	2ml	100	V-8080	10,160	7/23/08	HD
↓	↓	↓	2-CEVE-Cal	91.0µl	↓	↓	500	V-8081	10,950	↓	↓
↓	↓	↓	CS_2-Cal	19.5µl	↓	↓	100	V-8082	10,240	↓	↓
↓	↓	↓	Acrylonitrile-Cal	90.2µl	↓	↓	500	V-8083	11,080	↓	↓
↓	↓	↓	Acrolein-Cal	96.2µl	↓	↓	↓	V-8089	10,390	↓	↓
↓	↓	↓	Gases-Cal	200ml	↓	↓	100	V-8167	1000	6/18/08	↓
V8211	5-19-08	8/19-08	8260 Internal Std	50µl	MeOH/CU319	2.0ml	50ppm	V8138	2000	7/29/08	(MV)
↓	↓	5-20-08 ↓	8260 Surrogate Std	50µl	↓	↓	50ppm	V8169	2000	8/18/08	
V-8212	5/19/08	9/25/08	TCLP Ext'n Sol'n	—	—	—	—	—	—	—	—
↓	↓	↓	IN NaOH	2x140ml	DI H2O	2x2L	pH 4.99	V-7958	IN	9/25/08	HD
↓	↓	↓	Acetic Acid, glacial	2x11.4ml	↓	↓	↓	V-8109		2/6/11	↓
V-8213	5/19/08	5/19/09	IN NaOH	80g	DI H2O	2L	IN	Mallinckrodt	7708x26587		HD
V-8214	5/20/08	7/20/08	Ketones-Cal	200µl	MeOH CU319	2ml	200	V-8202	2000	8/13/08	HD
								HD 5/20/08			

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

440

GC/MS ~~SEMI~~VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8231	6/12/08	7/12/08	8260 MISC-Cal	—	—	—	—	—	—	—	—
↓	↓	↓	Vinyl Acetate	19.7ml	MeOH/CU319	2ml	100	V-8080	10,160	7/23/08	JK
↓	↓	↓	2-CEVE-Cal	91.0ml	↓	↓	500	V-8081	10,980	↓	↓
↓	↓	↓	CS_2-Cal	19.5ml	↓	↓	100	V-8082	10,240	↓	↓
↓	↓	↓	Acrylonitrile-Cal	90.2ml	↓	↓	500	V-8083	11,080	↓	↓
↓	↓	↓	Acrolein-Cal	96.2ml	↓	↓	↓	V-8089	10,390	↓	↓
↓	↓	↓	Gases-Cal	200ml	↓	↓	100	V-8227	1000	8/12/08	↓
V-8232	6/12/08	8/12/08	Gases-Ref	Cracked	MeOH	1.2ml	1000	V-8208	1000	9/30/10	JK
V-8233	6/12/08	8/12/08	8260-IS/Surr	—	—	—	—	—	—	—	—
4,4,6,0 ↓	↓	↓	8260-IS	50ul	MeOH/CU319	2ml	50	V-8226	2000	10/12/08	JK
↓	↓	↓	8260-Surr	↓	↓	↓	↓	V-8221	2000	9/30/08	↓
V-8234	6/12/08	7/23/08	8260 Ref w/o Ketones	—	—	—	—	—	—	—	—
↓	↓	↓	Stock 1-Ref	100ul	MeOH/CU319	2ml	100	V-8191	2000	7/23/08	JK
↓	↓	↓	Stock 2-Ref	↓	↓	↓	↓	V-8192			
↓	↓	↓	524/8260 MM-Ref	↓	↓	↓	↓	V-8189	↓	↓	
V-8235	6/12/08	8/12/08	8260 Ketones-Ref	200ul	MeOH/CU319	2ml	200	V-8204	2000	8/28/08	JK

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

443

GC/MS ~~SEMI~~VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8215	5/20/08	7/20/08	8260 Cal w/o Ketones	—	—	—	—	—	—	—	—
↓	↓	↓	Stock 1-Cal	100µl	MeOH CU319	2ml	100	V-8182	2000	7/23/08	HD
↓	↓	↓	Stock 2-Cal	↓	↓	↓	↓	V-8183		↓	↓
↓	↓	↓	524/8260 MM-Cal	↓	↓	↓	↓	V-8180		8/28/08	↓
↓	↓	↓	Surr	↓	↓	↓	↓	V-8169	↓	8/18/08	↓
V-8216	5/20/08	6/20/08	Misc-Ref	—	—	—	—	—	—	—	—
↓	↓	↓	Vinyl Acetate-Ref	19.6µl	MeOH CU319	2ml	100	V-8085	10,200	7/23/08	HD
↓	↓	↓	2-CEVE-Ref	90.5µl	↓	↓	500	V-8086	11,020	↓	↓
↓	↓	↓	CS_2-Ref	19.9µl	↓	↓	100	V-8087	10,070	↓	↓
↓	↓	↓	Acrylonitrile-Ref	92.2µl	↓	↓	500	V-8088	10,840	↓	↓
↓	↓	↓	Acrolein-Ref	92.0µl	↓	↓	↓	V-8089	10,870	↓	↓
↓	↓	↓	Gases-Ref	200µl	↓	↓	100	V-8193	1000	6/28/08	↓
V-8217	5/20/08	7/20/08	Ketones-Ref	200µl	MeOH CU319	2ml	200	V-8204	2000	8/13/08	HD
			~~Stock 1-Ref~~								
			Stock 2-Ref		HD 5/20/08						
			524/8260 MM-Ref								
V-8218	5/20/08	7/20/08	8260 Ref w/o Ketones	—	—	—	—	—	—	—	—
↓	↓	↓	Stock 1-Ref	100µl	MeOH CU319	2ml	100	V-8191	2000	7/23/08	HD
↓	↓	↓	Stock 2-Ref	↓	↓	↓	↓	V-8192		↓	
↓	↓	↓	524/8260 MM-Ref	↓	↓	↓	↓	V-8189	↓	8/28/08	↓
V-8219	5/21/08	9/21/08	BFB Sol'n	Cracked	MeOH	1.2ml	2000	V-7854	2000	5/21/10	JK
V-8220	5/21/08	7/21/08	BFB	150ul	MeOH CU319	2ml	150	V-8219	2000	9/21/08	JK

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

441

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8256	7/14/08	1/14/09	MTBE - REF	52.2220 - 52.8798	MeOH/CV200	10ml	10,020	V-8055	99.5%	3/10	JK
				0.1002							
V-8263	7/14/08	1/14/09	1-CHLOROHEXANE REF	51.6942 - 51.3796	MeOH/CV200	10ml	11,460	V-7231	98%	9/11	JK
				0.1146							
V-8254	7/14/08	11/14/08	STOCK 1 - REF	—	—	—	—				—
			METHYL IODIDE	407.7ul	MeOH/CV200	2ml	2000	V-8250	9,810	1/14/09	JK
			t-1,4-DC-2B	389.9ul				V-8251	10,260		
			MTBE	389.2ul				V-8252	10,020		
			1-CHLOROHEXANE	349.0ul				V-8253	11,460		
V-8255	7/14/08	1/14/09	METHYL CYCLOHEXANE REF	51.9982 - 53.8262	MeOH/CV200	10ml	10,200	V-7500	99.5%	3/10	JK
				0.1020							
V-8256	7/14/08	1/14/09	METHYL ACETATE - REF	51.0439 - 51.9468	MeOH/CV200	10ml	9,910	V-7747	99.5%	7/11	JK
				0.0991							
V-8257	7/14/08	1/14/09	CYCLOHEXANE - REF	50.3887 - 50.1514	MeOH/CV200	10ml	10,730	V-7563	99.5%	4/12	JK
				0.1073							
V-8258	7/14/08	1/14/09	1,1,2-TCTFE - REF	52.1476 - 53.0405	MeOH/CV200	10ml	10,710	V-7744	99.5%	11/21	JK
V-8259	7/14/08	11/14/08	STOCK 2 - REF	0.1071	—	—	—				—
			METHYL CYCLOHEXANE	393.2ul	MeOH/CV200	2ml	2000	V-8255	10,200	1/14/09	JK
			METHYL ACETATE	403.6ul				V-8256	9,910		
			CYCLOHEXANE	372.8ul				V-8257	10,730		
			1,1,2-TCTFE	373.5ul				V-8258	10,710		

Supervisor Review: _____

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8236	6/12/08	7/12/08	8260 MTSC - REF	—	—	—	—		—		—
			VINYL ACETATE - REF	19.6ml	MeOH/CV319	2ml	100	V-8085	10,200	7/12/08	JK
			2-CEVE - REF	90.5ul			500	V-8086	11,020		
			CS2 - REF	19.9ul			100	V-8087	10,070		
			ACRYLONITRILE - REF	92.2ul			500	V-8088	10,840		
			ACROLEIN - REF	92.0ul				V-8089	10,870		
			GASES - REF	200ul			100	V-8232	1000	8/12/08	
V8234	6-13-08	10-13-08	8260 Internal Std) MSI	570ul	MeOH/	25ml	45.5	V8226	2000	11-12-08	MV
		9-30-08	8260 Surrogate Std.) AgTech	570ul	CV319		45.5	V8221	2000	9-30-08	
V8238	7/8/08	10/13/08	IS/SURR for MS2 (STD#1)	—	—	—	—		—		
			8260-IS	580ul	MeOH CV200	20ml	58	V-8226	2000	10/13/08	
			8260-SURR	580ul				V-8239	2000	11/8/08	
V-8239	7/8/08	11/8/08	8260 Surrogates	cracked	MeOH	1.2ml	2000	V-8207	2000	4/2/2010	
V-8240	7/14/08	1/14/09	METHYL IODIDE - CAL	49.9015 - 49.7378	MeOH CV200	10ml	18,370	V-8056	99.5%	3/10	JK
				0.1837							
V-8241	7/14/08	1/14/09	t-1,4-DC-2B - CAL	48.8549 - 48.8558	MeOH CV200	10ml	10,060	V-7679	99.1%	5/09	JK
				0.1006							
V-8242	7/14/08	1/14/09	MTBE - CAL	51.1549 - 51.0516	MeOH CV200	10ml	10,330	V-8055	99.5%	3/10	JK
				0.1033							
V-8243	7/14/08	1/14/09	1-CHLOROHEXANE - CAL	49.9215 - 49.8152	MeOH CV200	10ml	10,730	V-7231	98%	9/11	JK
				0.1073							

Supervisor Review: _____

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8260	7/14/08	1/14/09	VINYL ACETATE - CAL	51.9822 - 51.6223	MeOH/CV200	10ml	11,030	V-6564	99.5%	9/08	JK
				0.1103							
V-8261	7/14/08	1/14/09	2-CEVE - CAL	51.5235 - 51.4551	MeOH/CV200	10ml	10,840	V-7858	98.2%	9/10	JK
				0.1084							
V-8262	7/14/08	1/14/09	CS2 - CAL	51.1350 - 51.0138	MeOH/CV200	10ml	12,220	V-7299	99.5%	10/08	JK
				0.1222							
V-8263	7/14/08	1/14/09	ACRYLONITRILE - CAL	51.3207 - 52.2264	MeOH/CV200	10ml	12-14/08 ~~10,030~~ ~~10,030~~	V-7746	99.5%	10/10	JK
				0.1003							
V-8264	7/14/08	1/14/09	ACROLEIN - CAL	51.8872 - 51.7881	MeOH/CV200	10ml	9,910	V-8225	96.1%	3/09	JK
				0.0991							
V-8265	7/14/08	1/14/09	VINYL ACETATE - REF	50.7683 - 50.6699	MeOH/CV200	10ml	9,890	V-6564	99.5%	9/08	JK
				0.0989							
V-8266	7/14/08	1/14/09	2-CEVE - REF	51.4846 - 51.3419	MeOH/CV200	10ml	10,270	V-7858	98.2%	9/10	JK
				0.1027							
V-8267	7/14/08	1/14/09	CS2 - REF	51.9040 - 51.7865	MeOH/CV200	10ml	11,750	V-7299	99.5%	10/08	JK
				0.1175							
V-8268	7/14/08	1/14/09	ACRYLONITRILE - REF	51.9660 - 51.8627	MeOH/CV200	10ml	10,330	V-7746	99.5%	10/10	JK
				0.1033							
V-8269	7/14/08	1/14/09	ACROLEIN - REF	51.3318 - 51.6232	MeOH/CV200	10ml	10,860	V-8225	96.1%	3/09	JK
				0.1086							
V-8270	7/14/08	11/14/08	8260-IS	CRACKED	MeOH	1.2ml	2000	V-8206	2000	12/15/10	JK
V-8271	7/14/08	11/14/08	8260-SURR	CRACKED	MeOH	1.2ml	2000	V-8207	2000	2/2/10	JK

Supervisor Review: _____

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8244	7/14/08	11/14/08	STOCK 1 - CAL	—	—	—	—		—		—
			METHYL IODIDE	217.7ul	MeOH/CV200	2ml	2000	V-8240	18,370	1/14/09	JK
			t-1,4-DC-2B	397.6ul				V-8241	10,060		
			MTBE	387.2ul				V-8242	10,330		
			1-CHLOROHEXANE	372.8ul				V-8243	10,730		
V-8245	7/14/08	11/14/08	METHYL CYCLOHEXANE - CAL	50.3611 - 50.2296	MeOH/CV200	10ml	10,150	V-7300	99.5%	2/10	JK
				0.1015							
V-8246	7/14/08	1/14/09	METHYL ACETATE - CAL	50.6380 - 50.5334	MeOH/CV200	10ml	10,460	V-7747	99.5%	7/11	JK
				0.1046							
V-8247	7/14/08	1/14/09	CYCLOHEXANE - CAL	49.6284 - 49.5244	MeOH/CV200	10ml	10,400	V-7563	99.5%	4/12	JK
				0.1040							
V-8248	7/14/08	1/14/09	1,1,2-TCTFE - CAL	51.3726 - 51.1814	MeOH/CV200	10ml	11,120	V-7744	99.5%	11/12	JK
				0.1112							
V-8249	7/14/08	11/14/08	STOCK 2 - CAL	—	—	—	—		—		—
			METHYL CYCLOHEXANE	394.1ul	MeOH/CV200	2ml	2000	V-8245	10,150	1/14/09	JK
			METHYL ACETATE	382.4ul				V-8246	10,460		
			CYCLOHEXANE	384.6ul				V-8247	10,400		
			1,1,2-TCTFE	359.7ul				V-8248	11,120		
V-8250	7/14/08	1/14/09	METHYL IODIDE - REF	50.7530 - 50.6549	MeOH/CV200	10ml	9,810	V-8056	99.5%	3/10	JK
				0.0981							
V-8251	7/14/08	1/14/09	t-1,4-DC-2B - REF	51.6831 - 51.5805	MeOH/CV200	10ml	10,260	V-7679	99.1%	5/09	JK
				0.1026							

Supervisor Review: _____

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V8287	8-13-08	12-13-08	8260 IS/Surr Solatek MS31	—	—	—	—	—	—	—	(JK)
↓	↓	↓	8260 Internal Std.	735 µl	MeOH /	25 mL	58.8 ppm	V8270	2000 ppm	11-14-08	↓
			8260 Surrogate Std.	735 µl	/CV200	↓	58.8 ppm	V8271	2000 ppm	11-14-08	↓
V-8288	8/18/08	10/18/08	8260 - IS	50 ml	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
V-8289	8/18/08	10/18/08	8260 Cal w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1 - Cal	100 ml	MeOH/CV200	2 ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal	↓	↓	↓	↓	V-8249	↓	↓	↓
			524/8260 MM - Cal					V-8272			
			8260 Surr					V-8271			
V-8290	8/18/08	10/18/08	Ketones - Cal	200 ml	MeOH/CV200	2 ml	200	V-8273	2000	10/14/08	JK
V-8291	8/18/08	9/14/08	8260 Misc - Cal	—	—	—	—				—
↓	↓	↓	Vinyl Acetate - Cal	18.1 ul	MeOH/CV200	2 ml	100	V-8260	11,030	11/14/09	JK
			2-CEVE - Cal	92.2 ml			500	V-8261	10,840		
			CS2 - Cal	16.4 ml			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7 ml			500	V-8263	10,030		
			Acrolein - Cal	100.9 ml			↓	V-8264	9,910	↓	
			Gases - Cal	200 ml	↓	↓	100	V-8274	1000	9/14/08	↓
V-8292 A,B,C	8/18/08	10/18/08	8260 - IS/Surr	—	—	—	—				—
↓	↓	↓	8260 - IS	50 ml	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
			8260 - Surr	50 ml	↓	↓	↓	V-8271	2000	↓	↓
											JK
											8/18/08

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

12

450

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8293	8/18/08	10/18/08	8260 Ref w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1 - Ref	100 ml	MeOH/CV200	2 ml	100 ml	V-8254	2000	11/14/08	JK
			Stock 2 - Ref	↓	↓	↓	↓	V-8259	↓	↓	↓
			524/8260 MM - Ref					V-8279		11/15/08	
V-8294	8/18/08	10/15/08	8260 Ketones - Ref	200 ml	MeOH/CV200	2 ml	200	V-8280	2000	10/15/08	JK
V-8295	8/18/08	9/15/08	8260 Misc Ref	—	—	—	—				—
↓	↓	↓	Vinyl Acetate - Ref	20.2 ml	MeOH/CV200	2 ml	100	V-8265	9,890	11/14/09	JK
			2-CEVE - Ref	97.4 ml			500	V-8266	10,270		
			CS2 - Ref	17.2 ml			100	V-8267	11,750		
			Acrylonitrile - Ref	96.8 ml			500	V-8268	10,330		
			Acrolein - Ref	92.1 ml			↓	V-8269	10,860	↓	
			Gases - Ref	200 ml	↓	↓	100	V-8281	1000	9/15/08	↓
V-8296	8/18/08	2/2/10	8260 - Surr	3x1.2 ml	MeOH	1.2 ml	2000	ECS Lot # V05020		2/2/10	JK
V-8297	8/18/08	9/30/10	8260 Gases - Ref	3x1.2 ml	MeOH	1.2 ml	1000	ECS Lot # VGM019		9/30/10	JK
V-8298	8/18/08	12/15/09	8260 Ketones - Ref	3x1.2 ml	MeOH	1.2 ml	2000	ECS Lot # KTM1555		12/15/09	JK
V-8299	8/18/08	9/21/08	BFB	150 ul	MeOH/CV200	2 ml	150	V-8219	2000	9/21/08	JK
V-8300	9/5/08	12/15/10	8260 ~~Cal Mix~~ IS Mix	3x1.2 ml	MeOH	3x1.2 ml	2000	ECS Lot # V15806	2000	12/15/10	JK
V-8301	9/9/08	5/31/10	BFB	4x1.2 ml	MeOH	4x1.2 ml	2000	Ultra Lot # CC-1035	2000	5/31/10	JK
V-8302	9/10/08	1/10/09	8260-IS	~~50 ml~~ 2000	MeOH CV200	2 ml	~~50~~ 2000	V-8300	2000	12/15/10	JK
V-8303	9/10/08	1/10/09	8260-IS	50 ml	MeOH CV200	2 ml	50	V-8302	2000	1/10/09	JK

JK 9/10/08

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

451

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8272	7/14/08	11/14/09	524/8260 MM - Cal	Cracked	MeOH	1.2 ml	2000	V-7947	2000	5/22/09	JK
V-8273	7/14/08	10/14/08	Ketones - Cal	Cracked	MeOH	1.2 ml	2000	V-7916	2000	2/6/09	JK
V-8274	7/14/08	9/14/08	Gases - Cal	Cracked	MeOH	1.2 ml	1000	V-8157	1000	9/10	JK
V-8275	7/14/08	9/14/08	8260 - IS	50 ml	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
V-8276	7/14/08	9/14/08	8260 Cal w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1 - Cal	100 ml	MeOH/CV200	2 ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal	↓	↓	↓	↓	V-8249	↓	↓	↓
			524/8260 MM - Cal					V-8272			
			Surr - Cal					V-8271			
V-8277	7/14/08	9/14/08	Ketones - Cal	200 ml	MeOH/CV200	2 ml	200	V-8273	2000	10/14/08	JK
V-8278	7/14/08	8/14/09	8260 Misc - Cal	—	—	—	—				—
↓	↓	↓	Vinyl Acetate - Cal	18.1 ul	MeOH/CV200	2 ml	100	V-8260	11,030	11/14/09	JK
			2-CEVE - Cal	92.2 ul			500	V-8261	10,840		
			CS2 - Cal	16.4 ul			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7 ul			500	V-8263	10,030		
			Acrolein - Cal	100.9 ul			↓	V-8264	9,910	↓	
			Gases - Cal	200 ml	↓	↓	100	V-8274	1000	9/14/08	↓
V-8279	7/15/08	11/15/08	524/8260 MM - Ref	Cracked	MeOH	1.2 ml	2000	V-8005	2000	5/22/09	JK
V-8280	7/15/08	10/15/08	Ketones - Ref	Cracked	MeOH	1.2 ml	2000	V-8130	2000	12/15/09	JK
V-8281	7/15/08	9/15/08	Gases - Ref	Cracked	MeOH	1.2 ml	1000	V-8208	1000	9/30/10	JK

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G:/Logbooks 2008/Organics/GCMSSVStandard Prep

10

448

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8281 A,B,C	7/15/08	9/15/08	8260 - IS/Surr	—	—	—	—				—
↓	↓	↓	8260 - IS	50 ml	MeOH/CV200	2 ml	50	V-8270	2000	11/14/08	JK
			8260 - Surr	50 ml	↓	↓	↓	V-8271	2000	↓	↓
V-8282	7/15/08	9/15/08	8260 Ref w/o Ketones	—	—	—	—				—
↓	↓	↓	Stock 1 - Ref	100 ml	MeOH/CV200	2 ml	100	V-8254	2000	11/14/08	JK
			Stock 2 - Ref	↓	↓	↓	↓	V-8259		↓	
			524/8260 MM - Ref					V-8279	↓	11/15/08	↓
V-8283	7/15/08	9/15/08	8260 Ketones - Ref	200 ml	MeOH/CV200	2 ml	200	V-8280	2000	10/15/08	JK
V-8284	7/15/08	8/15/08	8260 Misc - Ref	—	—	—	—				—
↓	↓	↓	Vinyl Acetate - Ref	20.2 ml	MeOH/CV200	2 ml	100	V-8265	9,890	11/14/09	JK
			2-CEVE - Ref	97.4 ml			500	V-8266	10,270		
			CS2 - Ref	17.2 ml			100	V-8267	11,750		
			Acrylonitrile - Ref	96.8 ml			500	V-8268	10,330		
			Acrolein - Ref	92.1 ml			↓	V-8269	10,860	↓	
			Gases - Ref	200 ml	↓	↓	100	V-8281	1000	9/15/08	↓
V-8285	7/15/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—				
↓	↓	↓	1N NaOH	140 ml	DI H_2O	2 L	pH 4.96	V-8213	1N	5/19/09	
			Acetic Acid, Glacial	11.4 ml	↓	↓	↓	V-8109		2/4/11	↓
V-8286	8/4/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—				
			1N NaOH	140 ml	DI H_2O	2 L	pH 4.99	V-8213	1N	5/19/09	
			Acetic Acid, Glacial	11.4 ml	↓	↓	↓	V-8109		2/4/11	↓

8-14-08

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

11

449

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8322	9/10/08	10/10/08	8260 MESC REF	—	—	—	—		—		—
			Vinyl Acetate - REF	20.2ml	MeOH/CV200	2ml	100	V-8265	9890	1/14/09	JK
			2-CEVE - REF	97.4ml			500	V-8266	10,270		
			CS2 - REF	17.2ml			100	V-8267	11,750		
			Acrylonitrile REF	96.8ml			500	V-8268	10,330		
			Acrolein - REF	92.1ml				V-8269	10,860		
			Gases - REF	200ml			100	V-8315	1000	11/10/08	
V-8323	9/11/08	9/13/08	8260 VOC MIX	—	—	—	—		—		—
			524/8260 MM - CAL	100ml	MeOH/CV200	1ml	10	V-8316	100	11/10/08	JK
			Ketones - CAL				20	V-8317	200		
			8260 MESC - CAL				10/50	V-8318	100/500	10/10/08	
V-8324	9/15/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—		—		
			1 N NaOH	140ml	DI H2O	2L	pH 9.96	V-8213	1N	5/19/09	
			Glacial Acetic Acid	11.4ml				V-8109		2/10/11	
V-8325	9/16/08	12/10/08	TCLP SPIKE Sol'N	CRACKED	MeOH	1.2ml	1000	V-8111	1000	10/31/09	JK
V8326	9/16/08	1/10/09	8260 IS/Surr Solatek MS3:	—	—	—	—	—	—	—	
			Std 8260 Internal Standard	263 µl	MeOH/	25mL	21.04	V8307	2000	1/10/09	
			#3 8260 Surrogate Standard	263 µl	CV200			V8308	2000	1/10/09	
V8327	9/18/08	1/10/09	8260 IS/Surr Solatek MS2	798 µl	—	—	—	—	—	—	
			Std 8260 Internal Standard	798 µl	MeOH/	25 mL	63.8	V8302	2000	1/10/09	
			#1 8260 Surrogate Standard	798 µl	CV200			V8308	2000	1/10/09	

454

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8504	9/10/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—		—		
			1 N NaOH	140ml	DI H2O	2L	pH 1.99	V-8213	1N	5/19/09	
			Acetic Acid, Glacial	11.4 ml				V-8109		2/10/11	
V-8305	9/10/08	3/10/09	2-CEVE - CAL	51.1250 - 50.6234 = 0.5016	MeOH/CV200	10ml	50,160	V-7858	98.2%	9/10	JK
V-8306	9/10/08	3/10/09	Acrylonitrile - CAL	50.4033 - 49.8993 = 0.5040	MeOH/CV200	10ml	50,400	V-7946	99.5%	10/10	JK
V-8307	9/10/08	3/10/09	Acrolein - CAL	51.1328 - 51.6276 = 0.5032	MeOH/CV200	10ml	50,320	V-8225	96.1%	3/09	JK
V-8308	9/10/08	11/10/09	8260 - SURR	CRACKED	MeOH	1.2ml	2000	V-8296	2000	2/2/10	JK
—	—	—	—	—	—	—	—		—		—
V-8309	9/10/08	11/10/09	524/8260 MM - CAL	CRACKED	MeOH	1.2ml	2000	V-8224	2000	11/11/08	JK
V-8310	9/10/08	12/10/08	Ketones - CAL	CRACKED	MeOH	1.2ml	2000	V-7916	2000	2/2/09	JK
V-8311	9/10/08	11/10/08	Gases - CAL	CRACKED	MeOH	1.2ml	1000	V-8110	1000	09/10	JK
V-8312	9/10/08	11/10/08	MESC CAL W/O GASES	—	—	—	—		—		—
			Vinyl Acetate - CAL	363ml	MeOH/CV200	2ml	2000	V-8260	11,030	11/14/09	JK
			2-CEVE - CAL	399ml			10,000	V-8305	50,160	3/10/09	
			CS2 - CAL	327ml			2,000	V-8262	12,220	11/14/09	
			Acrylonitrile - CAL	397ml			10,000	V-8306	50,400	3/10/09	
			Acrolein - CAL	397ml			10,000	V-8307	50,320		
V-8313	9/10/08	11/10/09	524/8260 MM - REF	CRACKED	MeOH	1.2ml	2000	V-8605	2000	5/26/09	JK
V-8314	9/10/08	12/10/08	Ketones - REF	CRACKED	MeOH	1.2ml	2000	V-8298	2000	12/15/09	JK

452

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V8328	9-16-08	1-10-09	8260 IS/Surr Solatek MS3:	—	—	—	—	—	—	—	
			Std 8260 Internal Standard	823 µl	MeOH/	25mL	65.8	V8302	2000	1/10/09	
			#2 8260 Surrogate Standard	823 µl	CV200		65.8	V8308	2000	1/10/09	
V8329	9-19-08	1-10-09	8260 IS/Surr Archon MS4:	—	—	—	—	—	—	—	
			Std 8260 Internal Std	625 µl	MeOH/	5mL	250	V8302	2000	1/10/09	
			#1 8260 Surrogate Std	625 µl	CV200			V8308	2000	1/10/09	
V8330	9-19-08	1-10-09	8260 IS/Surr Standard Archon MS4	—	—	—	—	—	—	—	
			Std 8260 Internal Standard	250 µl	MeOH/	5mL	100	V8302	2000	1/10/09	
			#2 8260 Surrogate Standard	250 µl	CV200			V8308	2000	1/10/09	
V8331	9-22-08	1-22-09	8260 Surrogate	Cracked	MeOH	1.8mL	2000	V8296	2000	2/2/10	
V-8332	9/24/08	1/24/09	BFB Stock Sol'n	Cracked	MeOH	1.2ml	2000	V-7854	2000	5/31/10	
V-8333	9/24/08	12/24/08	BFB Sol'n	150µl	MeOH/CV200	2ml	150	V-8332	2000	1/24/09	
V-8334	9/24/08	1/24/09	IS stock	Cracked	MeOH	1.2ml	2000	V-8300	2000	12/15/10	
V-8335	9/24/08	11/24/08	8260-IS	50µl	MeOH/CV200	2ml	50	V-8334	2000	1/24/09	
V-8336	9/24/08	11/14/08	8260 CAL w/o Ketones	—	—	—	—		—		—
			Stock 1 - Cal	100µl	MeOH/CV200	2ml	100	V-8244	2000	11/14/08	
			Stock 2 - Cal					V-8249			
			524/8260 MM - Cal					V-8309		1/10/09	
			8260 - Surr					V-8331		1/22/09	
V-8337	9/24/08	11/24/08	Ketones - Cal	200µl	MeOH/CV200	2ml	200	V-8310	2000	12/10/08	
9/24/08											

455

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8315	9/10/08	11/10/08	Gases - REF	CRACKED	MeOH	1.2ml	1000	V-8297	1000	9/30/10	JK
V-8316	9/10/08	11/10/08	8260 CAL W/O Ketones	—	—	—	—		—		—
			Stock 1 - Cal	100ul	MeOH/CV200	2ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal					V-8249			
			524/8260 MM - Cal					V-8309		1/10/09	
			8260 - Surr					V-8308			
V-8317	9/10/08	11/10/08	Ketones - Cal	200ul	MeOH/CV200	2ml	200	V-8310	2000	12/10/08	JK
V-8318	9/10/08	10/10/08	8260 MESC - CAL	—	—	—			—		—
			Vinyl Acetate - Cal	18.1ul	MeOH/CV200	2ml	100	V-8260	11,030	11/14/09	JK
			2-CEVE - Cal	97.2ul			500	V-8261	10,840		
			CS2 - Cal	16.4ul			100	V-8262	12,220		
			Acrylonitrile - Cal	99.2ul			500	V-8263	10,030		
			Acrolein - Cal	100.9ul				V-8264	9,910		
			Gases - Cal	200ul			100	V-8311	1000	11/10/08	
V-8319	9/10/08	11/10/08	8260 - IS/SURR	—	—	—	—		—		—
			8260 - IS	50ul	MeOH/CV200	2ml	50	V-8302	2000	1/10/09	JK
			8260 - SURR	50ul				V-8308			
V-8320	9/10/08	11/10/08	8260 REF W/O Ketones	—	—	—	—		—		
			Stock 1 - REF	100ul	MeOH/CV200	2ml	100	V-8254	2000	11/14/08	JK
			Stock 2 - REF					V-8259			
			524/8260 MM - REF					V-8313		1/10/09	
V-8321	9/10/08	11/10/08	8260 Ketones - REF	200ul	MeOH/CV200	2ml	200	V-8314	2000	12/10/08	JK

453

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8350	10/9/08	11/14/08	8260 Ref w/o Ketones	—	—	—	—				—
			Stock 1 - Ref	100 µl	MeOH CV200	2 ml	100	V-8254	2000	11/14/08	YS
			Stock 2 - Ref					V-8255	2000	11/14/08	
			524/8260 MM - Ref					V-8318	2000	1/10/09	
V-8351	10/9/08	12/9/08	8260 Ketones - Ref	200 µl	MeOH CV200	2 ml	200	V-8314	2000	12/10/08	YS
V-8352	10/9/08	11/9/08	8260 Misc - Ref	—	—	—	—				—
			Vinyl Acetate - Ref	20.2 µl	MeOH CV200	~~10~~ 2 ml	100	V-8265	9,890	1/14/09	YS
			2-CEVE - Ref	97.4 µl		500	500	V-8266	10,270		
			CS_2 - Ref	17.2 µl		100	100	V-8267	11,750		
			Acrylonitrile - Ref	96.8 µl		500	500	V-8268	10,330		
			Acrolein - Ref	92.1 µl		500	500	V-8269	10,860		
			Gases - Ref	200 µl		100	100	V-8348	1000	12/9/08	

Supervisor Review: _____

GCMS V Standard Prep

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8338	9/24/08	10/24/08	8260 Misc - Cal	—	—	—	—				—
			Vinyl Acetate - Cal	18.1 µl	MeOH/ CV200	2 ml	100	V-8260	11,030	1/14/09	YS
			2-CEVE - Cal	92.3 µl			500	V-8261	10,840		
			CS_2 - Cal	16.4 µl			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7 µl			500	V-8263	10,050		
			Acrolein - Cal	100.9 µl				V-8264	9,910		
			Gases - Cal	200 µl			100	V-8311	1000	11/10/08	
V-8337	9/24/08	10/24/08	8260 VOC Mix	—	—	—	—				—
			524/8260 MM - Cal	100 µl	MeOH/ CV200	1 ml	10	V-8336	100	11/14/08	YS
			Ketones - Cal				20	V-8357	200	11/24/08	
			8260 Misc - Cal				10/50	V-8358	100/500	10/24/08	
V-8340	9/24/08	10/24/08	8260 Misc - Ref	—	—	—	—				—
			Vinyl Acetate - Ref	20.2 µl	MeOH/ CV200	2 ml	100	V-8265	9,890	1/14/09	YS
			2-CEVE - Ref	97.4 µl			500	V-8266	10,270		
			CS_2 - Ref	17.2 µl			100	V-8267	11,750		
			Acrylonitrile - Ref	96.8 µl			500	V-8268	10,330		
			Acrolein - Ref	92.1 µl				V-8269	10,860		
			Gases - Ref	200 µl			100	V-8315	1000	11/10/08	
V-8341	9/25/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—				—
			1N NaOH	140 ml	DI H_2O	2 L	pH 4.94	V-8213	1N	5/19/09	YS
			Glacial Acetic Acid	11.4 ml				V-8109		2/6/11	
V-8342	10/9/08	12/9/08	Gases - Cal	Checked	MeOH	1.2 ml	1000	V-8110	1000	9/10	JK

Supervisor Review: _____

GCMS V Standard Prep

GC/MS Semivolatile Organics Data

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8343	10/9/08	12/9/08	8260 - IS	50 µl	MeOH/CV200	2 ml	50	V-8334	2000	1/24/09	JK
V-8344	10/9/08	11/14/08	8260 Cal w/o Ketones	—	—	—	—				—
			Stock 1 - Cal	100 µl	MeOH/CV200	2 ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal					V-8249			
			524/8260 MM - Cal					V-8309		1/10/09	
			8260 Surr					V-8331		1/22/09	
V-8345	10/9/08	12/9/08	Ketones - Cal	200 µl	MeOH/CV200	2 ml	200	V-8310	2000	12/10/08	JK
V-8346	10/9/08	11/9/08	Misc - Cal	—	—	—	—				—
			Vinyl Acetate - Cal	18.1 ml	MeOH/CV200	2 ml	100	V-8260	11,030	1/14/09	JK
			2-CEVE - Cal	92.2 ml			500	V-8261	10,840		
			CS_2 - Cal	16.4 ml			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7 ml			500	V-8263	10,050		
			Acrolein - Cal	100.9 ml				V-8264	9,910		
			Gases - Cal	200 ml			100	V-8342	1000	12/9/08	
V-8347	10/9/08	10/10/08	8260 VOC Mix - Cal	—	—	—	—				—
			8260 Cal w/o Ketones - Cal	50 ml	MeOH/CV200	1 ml	5	V-8344	100	11/14/08	JK
			Ketones - Cal				10	V-8345	200	12/9/08	
			8260 Misc - Cal				10/9/08 5/25	V-8346	100/500	11/9/08	
V-8348	10/9/08	12/9/08	Gases - Ref	Checked	MeOH	1.2 ml	1000	V-8208	1000	9/30/10	YS
V-8349	10/9/08	12/9/08	IS - Surr	—	—	—	—				YS
			8260 - IS	50 ml	MeOH CV200	2 ml	50	V-8334	2000	1/24/09	
			8260 - Surr	50 ml				V-8331	2000	1/22/09	

Supervisor Review: _____

GCMS V Standard Prep

QC Summary

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: CGS-MS SAS No.: _____ SDG No.: 0810083

Level: (low/med) LOW

SOIL SEMIVOLATILE SURROGATE RECOVERY

2D

EPA SAMPLE NO.		S1 (2FP) 1 #	S2 (FBP) 1 #	S3 (NB2) 1 #	S4 (2FB) 1 #	S5 (TPH) 1 #	S6 (TBP) 1 #	TOT OUT
01LCS-8270	LCS-8270	70	75	69	69	91	84	0
02MBS-8270	MBS-8270	73	78	74	72	95	89	0
03MD-8270	MD-8270	77	83	80	78	88	106	0
04MBSS-3DL	0810083-003BDL	61	66	59	58	63	78	0
05MBSS-4DL	0810083-004BDL	71	71	62	68	73	94	0
06MBSS-EDDL	0810083-005BDL	69	75	62	65	72	90	0
07MBSS-1	0810083-001B	75	77	74	75	77	95	0
08MBSS-1MS	0810083-001BMS	66	69	65	67	72	80	0
09MBSS-3	0810083-003B	68	71	67	67	82	129	0
10MBSS-4	0810083-004B	71	74	71	67	82	191 *	1
11MBSS-FD	0810083-005B	71	78	72	73	86	187 *	1
12MB-8309	MB-8309	76	83	79	75	92	93	0
13LCS-8309	LCS-8309	85	88	84	63	106	100	0
14MSB-8309	MSB-8309	69	73	71	67	88	82	0
15MBSS-2DL	0810083-002BDL	66	69	61	68	56	78	0
16MBSS-1MSD	0810083-001BMSD	72	72	69	69	70	81	0
17MBSS-2	0810083-002B	72	69	66	69	68	86	0

S1 (2FP) 1 = 2-Fluorophenol
S2 (FBP) 1 = 2-Fluorobiphenyl
S3 (NB2) 1 = Nitrobenzene-d5
S4 (2FB) 1 = Phenol-d5
S5 (TPH) 1 = 2,4,6-Tribromophenol
S6 (TBP) 1 = Terphenyl-d14

QC Limit
22-130
46-130
35-120
39-120
20-143
30-146

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 1 of 1 FORM II SV-2 WW8270C

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS06_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1500	3900	1950	0	77	30	130				J
2,4,5-Trichlorophenol	1000	20000	1950	0	51	34	130				J
2,4,6-Trichlorophenol	1130	3900	1950	0	58	33	130				J
2,4-Dichlorophenol	1230	3900	1950	0	63	39	130				J
2,4-Dimethylphenol	1320	3900	1950	0	68	22	130				J
2,4-Dinitrophenol	ND	20000	1950	0	0	10	130				S
2,4-Dinitrotoluene	1300	3900	1950	0	67	40	130				J
2,6-Dinitrotoluene	1350	3900	1950	0	69	36	130				J
2-Chloronaphthalene	1360	3900	1950	0	70	46	130				J
2-Chlorophenol	1340	3900	1950	0	69	39	130				J
2-Methylnaphthalene	1260	3900	1950	0	65	43	130				J
2-Methylphenol	1130	3900	1950	0	58	43	130				J
2-Nitroaniline	1120	20000	1950	0	57	43	130				J
2-Nitrophenol	1100	3900	1950	0	57	34	130				J
3,3'-Dichlorobenzidine	576	7700	1950	0	30	10	130				J
3-Nitroaniline	872	20000	1950	0	45	11	130				J
4,6-Dinitro-2-methylphenol	ND	20000	1950	0	0	15	130				S
4-Bromophenyl phenyl ether	1310	3900	1950	0	67	43	130				J
4-Chloro-3-methylphenol	1250	3900	1950	0	64	38	130				J
4-Chloroaniline	526	3900	1950	0	27	10	130				J
4-Chlorophenyl phenyl ether	1270	3900	1950	0	65	45	130				J
4-Methylphenol	1140	3900	1950	0	59	42	130				J
4-Nitroaniline	1050	20000	1950	0	54	23	130				J
4-Nitrophenol	1140	20000	1950	0	59	10	144				J
Acenaphthene	2480	3900	1950	1430	54	43	130				J
Acenaphthylene	1500	3900	1950	0	77	46	130				J
Acetophenone	1260	3900	1950	0	65	30	130				J

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS06_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2620	3900	1950	1730	46	37	130				J
Atrazine	1360	3900	1950	0	70	30	130				J
Benzaldehyde	1290	3900	1950	0	66	30	130				J
Benzo[a]anthracene	8800	3900	1950	9560	0	40	130				S
Benzo[a]pyrene	9650	3900	1950	10200	0	44	130				S
Benzo[b]fluoranthene	14600	3900	1950	17500	0	26	154				S
Benzo[g,h,i]perylene	3360	3900	1950	3230	7	16	130				JS
Benzo[k]fluoranthene	7130	3900	1950	6190	46	35	143				
bis(2-Chloroethoxy)methane	1260	3900	1950	0	65	43	130				J
bis(2-chloroethyl)ether	1270	3900	1950	0	65	41	130				J
bis(2-chloroisopropyl)ether	1460	3900	1950	0	75	34	130				J
bis(2-Ethylhexyl)phthalate	3800	3900	1950	670	151	42	154				JS
Butyl benzyl phthalate	1630	3900	1950	0	84	34	160				J
Caprolactam	1700	3900	1950	0	87	30	130				J
Carbazole	2660	3900	1950	1540	59	42	130				J
Chrysene	9560	3900	1950	10200	0	43	130				S
Di-n-butyl phthalate	1620	3900	1950	0	83	50	133				J
Di-n-octyl phthalate	1610	3900	1950	0	83	48	146				J
Dibenz[a,h]anthracene	1610	3900	1950	969	32	16	135				J
Dibenzofuran	1420	3900	1950	0	73	45	130				J
Diethyl phthalate	1460	3900	1950	0	76	48	130				J
Dimethyl phthalate	1440	3900	1950	0	74	46	130				J
Fluoranthene	16600	3900	1950	20800	0	45	130				S
Fluorene	1860	3900	1950	709	59	45	130				J
Hexachlorobenzene	1400	3900	1950	0	72	50	130				J
Hexachlorobutadiene	1230	3900	1950	0	63	37	130				J
Hexachlorocyclopentadiene	ND	3900	1950	0	0	10	130				S

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_DLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	3280	3900	1950	1730	79	37	130	2620	22	30	J
Atrazine	1410	3900	1950	0	73	30	130	1360	3.6	60	J
Benzaldehyde	1450	3900	1950	0	74	30	130	1290	12	60	J
Benzo[a]anthracene	12300	3900	1950	9560	141	40	130	8900	32	30	RS
Benzo[a]pyrene	12900	3900	1950	10200	140	44	130	9850	29	30	S
Benzo[b]fluoranthene	19300	3900	1950	17500	97	29	154	14600	28	32	
Benzo[g,h,i]perylene	4610	3900	1950	3230	71	10	130	3360	31	30	
Benzo[k]fluoranthene	9120	3900	1950	6190	150	35	143	7130	25	30	S
bis(2-Chloroethoxy)methane	1410	3900	1950	0	72	43	130	1260	11	40	J
bis(2-chloroethyl)ether	1350	3900	1950	0	69	41	130	1270	6.3	30	J
bis(2-chloroisopropyl)ether	1640	3900	1950	0	84	34	130	1460	12	30	J
bis(2-Ethylhexyl)phthalate	2950	3900	1950	670	117	42	154	3800	25	36	J
Butyl benzyl phthalate	1700	3900	1950	0	87	34	160	1630	4.2	37	J
Caprolactam	1850	3900	1950	0	95	30	130	1700	8.4	60	J
Carbazole	3130	3900	1950	1540	82	42	130	2660	16	36	J
Chrysene	12800	3900	1950	10200	132	43	130	9590	29	30	S
Di-n-butyl phthalate	1700	3900	1950	0	87	50	133	1620	4.5	39	J
Di-n-octyl phthalate	1710	3900	1950	0	88	48	146	1610	5.9	31	J
Dibenz[a,h]anthracene	1990	3900	1950	989	51	16	135	1610	21	30	J
Dibenzofuran	1570	3900	1950	0	80	45	130	1420	9.9	30	J
Diethyl phthalate	1520	3900	1950	0	78	48	130	1480	2.9	30	J
Dimethyl phthalate	1480	3900	1950	0	76	46	130	1440	2.1	38	J
Fluoranthene	24100	3900	1950	20800	169	45	130	16800	36	30	RS
Fluorene	2190	3900	1950	709	76	48	130	1800	16	30	J
Hexachlorobenzene	1480	3900	1950	0	76	50	130	1400	5.9	31	J
Hexachlorobutadiene	1270	3900	1950	0	65	37	130	1230	3.4	41	J
Hexachlorocyclopentadiene	ND	3900	1950	0	0	10	130	0		68	S

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

466 : 24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_DLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1300	3900	1950	0	67	23	130				J
Indeno[1,2,3-cd]pyrene	2120	3900	1950	2030	5	10	134				JS
Isophorone	1290	3900	1950	0	66	43	130				J
N-Nitroso-di-n-propylamine	1400	3900	1950	0	72	35	130				J
N-Nitrosodiphenylamine	1510	3900	1950	0	77	44	130				J
Naphthalene	1530	3900	1950	0	78	40	130				J
Nitrobenzene	1330	3900	1950	0	68	45	130				J
Pentachlorophenol	ND	20000	1950	0	0	10	130				S
Phenanthrene	9400	3900	1950	10600	0	45	130				S
Phenol	1210	3900	1950	0	62	33	130				J
Pyrene	15500	3900	1950	18200	0	18	164				S
Surr: 2,4,6-Tribromophenol	4190	0	5840	0	72	20	143				
Surr: 2-Fluorobiphenyl	2880	0	3890	0	69	46	130				
Surr: 2-Fluorophenol	3840	0	5840	0	66	22	130				
Surr: Nitrobenzene-d5	2540	0	3890	0	65	39	130				
Surr: Phenol-d5	3910	0	5840	0	67	33	130				
Surr: Terphenyl-d14	3130	0	3890	0	80	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

464 : 24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_DLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1490	3900	1950	0	77	23	130	1300	14	37	J
Indeno[1,2,3-cd]pyrene	3060	3900	1950	2030	53	10	134	2120	38	30	J
Isophorone	1429	3900	1950	0	73	43	130	1290	9.8	40	J
N-Nitroso-di-n-propylamine	1560	3900	1950	0	80	35	130	1400	11	30	J
N-Nitrosodiphenylamine	1650	3900	1950	0	85	44	130	1510	8.9	52	J
Naphthalene	1600	3900	1950	0	82	40	130	1530	16	35	J
Nitrobenzene	1440	3900	1950	0	74	45	130	1330	8.2	51	J
Pentachlorophenol	ND	20000	1950	0	0	10	130	0		53	S
Phenanthrene	13500	3900	1950	10600	153	45	130	9400	36	30	RS
Phenol	1320	3900	1950	0	68	33	130	1210	8.3	34	J
Pyrene	21800	3900	1950	18200	182	18	164	15500	34	30	RS
Surr: 2,4,6-Tribromophenol	4110	0	5840	0	70	20	143	0		0	
Surr: 2-Fluorobiphenyl	2780	0	3890	0	72	46	130	0		0	
Surr: 2-Fluorophenol	4190	0	5840	0	72	22	130	0		0	
Surr: Nitrobenzene-d5	2690	0	3890	0	69	39	130	0		0	
Surr: Phenol-d5	4040	0	5840	0	69	33	130	0		0	
Surr: Terphenyl-d14	3140	0	3890	0	81	36	146	0		0	

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

467 : 24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_DLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1650	3900	1950	0	85	30	130	1500	9.7	60	J
2,4,5-Trichlorophenol	1080	20000	1950	0	55	34	130	1000	7.5	44	J
2,4,6-Trichlorophenol	1180	3900	1950	0	61	33	130	1150	4.0	45	J
2,4-Dichlorophenol	1250	3900	1950	0	64	39	130	1230	1.9	53	J
2,4-Dimethylphenol	1350	3900	1950	0	69	22	130	1320	2.3	52	J
2,4-Dinitrophenol	4150	20000	1950	0	213	10	130	0		60	JS
2,4-Dinitrotoluene	1320	3900	1950	0	68	40	130	1300	1.5	32	J
2,6-Dinitrotoluene	1340	3900	1950	0	69	36	130	1350	0.9	43	J
2-Chloronaphthalene	1430	3900	1950	0	73	46	130	1360	4.7	30	J
2-Chlorophenol	1410	3900	1950	0	72	39	130	1340	4.8	36	J
2-Methylnaphthalene	1370	3900	1950	0	71	43	130	1260	8.6	35	J
2-Methylphenol	1140	3900	1950	0	59	43	130	1130	0.7	60	J
2-Nitroaniline	1210	20000	1950	0	62	42	130	1120	8.3	34	J
2-Nitrophenol	1180	3900	1950	0	61	34	130	1100	5.8	48	J
3,3'-Dichlorobenzidine	662	7700	1950	0	34	10	130	576	14	60	J
3-Nitroaniline	858	20000	1950	0	44	11	130	872	9.4	40	J
4,6-Dinitro-2-methylphenol	ND	20000	1950	0	0	13	130	0		60	S
4-Bromophenyl phenyl ether	1390	3900	1950	0	72	43	130	1310	6.3	37	J
4-Chloro-3-methylphenol	1270	3900	1950	0	65	38	130	1250	1.2	30	J
4-Chloroaniline	701	3900	1950	0	36	10	130	526	29	48	J
4-Chlorophenyl phenyl ether	1360	3900	1950	0	70	45	130	1270	6.8	32	J
4-Methylphenol	1200	3900	1950	0	61	42	130	1140	4.7	53	J
4-Nitroaniline	1100	20000	1950	0	56	23	130	1050	4.3	37	J
4-Nitrophenol	1200	20000	1950	0	62	10	144	1140	5.0	30	J
Acenaphthene	3090	3900	1950	1430	85	43	130	2480	22	30	J
Acenaphthylene	1600	3900	1950	0	82	46	130	1500	6.3	30	J
Acetophenone	1380	3900	1950	0	71	30	130	1260	9.2	60	J

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

465 : 28-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399135
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1310	330	1670	0	79	23	150				
Indeno[1,2,3-cd]pyrene	1450	330	1670	0	87	10	134				
Isophorone	1250	330	1670	0	75	43	150				
N-Nitroso-di-n-propylamine	1310	330	1670	0	79	35	130				
N-Nitrosodiphenylamine	1370	330	1670	0	82	44	150				
Naphthalene	1220	330	1670	0	73	40	130				
Nitrobenzene	1280	330	1670	0	77	45	130				
Pentachlorophenol	694	1700	1670	0	42	10	130				J
Phenanthrene	1320	330	1670	0	79	45	130				
Phenol	1160	330	1670	0	70	33	130				
Pyrene	1250	330	1670	0	75	18	164				
Surr: 2,4,6-Tribromophenol	4770	0	5000	0	95	20	143				
Surr: 2-Fluorobiphenyl	2600	0	3330	0	78	46	130				
Surr: 2-Fluorophenol	3670	0	5000	0	73	22	130				
Surr: Nitrobenzene-d5	2450	0	3330	0	74	39	130				
Surr: Phenol-d6	3620	0	5000	0	72	33	130				
Surr: Terphenyl-d14	2960	0	3330	0	89	38	148				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399135
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1450	330	1670	0	87	30	130				
2,4,5-Trichlorophenol	1110	1700	1670	0	67	34	130				J
2,4,6-Trichlorophenol	1280	330	1670	0	77	33	130				
2,4-Dichlorophenol	1260	330	1670	0	76	39	130				
2,4-Dimethylphenol	993	330	1670	0	60	22	130				
2,4-Dinitrophenol	759	1700	1670	0	46	10	130				J
2,4-Dinitrotoluene	1410	330	1670	0	84	40	130				
2,6-Dinitrotoluene	1400	330	1670	0	84	36	130				
2-Chloronaphthalene	1350	330	1670	0	81	46	130				
2-Chlorophenol	1320	330	1670	0	79	39	130				
2-Methylnaphthalene	1120	330	1670	0	67	43	130				
2-Methylphenol	1080	330	1670	0	65	43	130				
2-Nitroaniline	1140	1700	1670	0	68	42	130				J
2-Nitrophenol	1180	330	1670	0	71	34	130				
3,3'-Dichlorobenzidine	677	660	1670	0	41	10	130				
3-Nitroaniline	966	1700	1670	0	40	11	130				J
4,6-Dinitro-2-methylphenol	962	1700	1670	0	58	13	130				J
4-Bromophenyl phenyl ether	1370	330	1670	0	82	43	130				
4-Chloro-3-methylphenol	1210	330	1670	0	73	38	130				
4-Chloroaniline	287	330	1670	0	17	10	130				J
4-Chlorophenyl phenyl ether	1340	330	1670	0	81	45	130				
4-Methylphenol	1070	330	1670	0	64	42	130				
4-Nitroaniline	1186	1700	1670	0	71	23	130				J
4-Nitrophenol	1510	1700	1670	0	90	10	144				J
Acenaphthene	1330	330	1670	0	80	43	130				
Acenaphthylene	1310	330	1670	0	79	46	130				
Acetophenone	1240	330	1670	0	74	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8309 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399185
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1350	330	1670	0	81	30	130				
2,4,5-Trichlorophenol	1029	1700	1670	0	61	34	130				J
2,4,6-Trichlorophenol	1170	330	1670	0	70	33	130				
2,4-Dichlorophenol	1210	330	1670	0	72	39	130				
2,4-Dimethylphenol	1036	330	1670	0	62	22	130				
2,4-Dinitrophenol	912	1700	1670	0	55	10	130				J
2,4-Dinitrotoluene	1330	330	1670	0	80	40	130				
2,6-Dinitrotoluene	1330	330	1670	0	80	36	130				
2-Chloronaphthalene	1280	330	1670	0	77	46	130				
2-Chlorophenol	1230	330	1670	0	74	39	130				
2-Methylnaphthalene	1040	330	1670	0	63	43	130				
2-Methylphenol	991	330	1670	0	59	43	130				
2-Nitroaniline	1160	1700	1670	0	70	42	130				J
2-Nitrophenol	1170	330	1670	0	70	34	130				
3,3'-Dichlorobenzidine	931	660	1670	0	56	10	130				
3-Nitroaniline	847	1700	1670	0	51	11	130				J
4,6-Dinitro-2-methylphenol	1140	1700	1670	0	68	13	130				J
4-Bromophenyl phenyl ether	1290	330	1670	0	77	43	130				
4-Chloro-3-methylphenol	1150	330	1670	0	69	38	130				
4-Chloroaniline	531	330	1670	0	32	10	130				
4-Chlorophenyl phenyl ether	1240	330	1670	0	74	45	130				
4-Methylphenol	1000	330	1670	0	60	42	130				
4-Nitroaniline	1160	1700	1670	0	69	23	130				J
4-Nitrophenol	1560	1700	1670	0	93	10	144				J
Acenaphthene	1230	330	1670	0	74	43	130				
Acenaphthylene	1250	330	1670	0	75	46	130				
Acetophenone	1140	330	1670	0	69	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399135
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1330	330	1670	0	80	37	130				
Atrazine	1390	330	1670	0	83	30	130				
Benzaldehyde	1260	330	1670	0	76	30	130				
Benzo[a]anthracene	1330	330	1670	0	80	40	130				
Benzo[a]pyrene	1340	330	1670	0	80	44	130				
Benzo[b]fluoranthene	1310	330	1670	0	79	29	154				
Benzo[g,h,i]perylene	1430	330	1670	0	86	10	130				
Benzo[k]fluoranthene	1340	330	1670	0	81	35	143				
bis(2-Chloroethoxy)methane	1220	330	1670	0	73	43	130				
bis(2-chloroethyl)ether	1200	330	1670	0	72	41	130				
bis(2-chloroisopropyl)ether	1270	330	1670	0	76	34	130				
bis(2-Ethylhexyl)phthalate	1530	330	1670	0	92	42	154				
Butyl benzyl phthalate	1470	330	1670	0	88	34	160				
Caprolactam	1560	330	1670	0	95	30	130				
Carbazole	1460	330	1670	0	88	42	130				
Chrysene	1430	330	1670	0	86	43	130				
Di-n-butyl phthalate	1580	330	1670	0	95	50	133				
Di-n-octyl phthalate	1520	330	1670	0	91	48	146				
Dibenz[a,h]anthracene	1430	330	1670	0	86	16	135				
Dibenzofuran	1110	330	1670	0	67	45	130				
Diethyl phthalate	1490	330	1670	0	89	48	130				
Dimethyl phthalate	1440	330	1670	0	86	48	130				
Fluoranthene	1340	330	1670	0	81	45	130				
Fluorene	1320	330	1670	0	79	45	130				
Hexachlorobenzene	1410	330	1670	0	85	50	130				
Hexachlorobutadiene	1260	330	1670	0	76	37	130				
Hexachlorocyclopentadiene	904	330	1670	0	54	10	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/15/2008 | RunNo: 15271
Client ID: ZZZZZ | Batch ID: 8270 | Method: SW8270C (SW3550B) | Analysis Date: 10/20/2008 | SeqNo: 399134
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	POL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1350	330	1670	0	81	30	130				
2,4,5-Trichlorophenol	1020	1700	1670	0	61	43	131				J
2,4,6-Trichlorophenol	1200	330	1670	0	72	44	125				
2,4-Dichlorophenol	1170	330	1670	0	70	41	126				
2,4-Dimethylphenol	966	330	1670	0	58	25	126				
2,4-Dinitrophenol	734	1700	1670	0	44	25	125				J
2,4-Dinitrotoluene	1330	330	1670	0	80	54	136				
2,6-Dinitrotoluene	1320	330	1670	0	79	48	138				
2-Chloronaphthalene	1250	330	1670	0	75	49	126				
2-Chlorophenol	1240	330	1670	0	75	41	125				
2-Methylnaphthalene	1050	330	1670	0	63	44	125				
2-Methylphenol	999	330	1670	0	60	40	125				
2-Nitroaniline	1090	1700	1670	0	65	50	129				J
2-Nitrophenol	1120	330	1670	0	67	44	125				
3,3'-Dichlorobenzidine	563	660	1670	0	34	25	125				J
3-Nitroaniline	561	1700	1670	0	34	26	125				J
4,6-Dinitro-2-methylphenol	845	1700	1670	0	51	33	126				J
4-Bromophenyl phenyl ether	1300	330	1670	0	78	44	137				
4-Chloro-3-methylphenol	1140	330	1670	0	68	44	126				
4-Chloroaniline	232	330	1670	0	14	25	125				JE
4-Chlorophenyl phenyl ether	1260	330	1670	0	76	46	132				
4-Methylphenol	1040	330	1670	0	62	40	125				
4-Nitroaniline	1090	1700	1670	0	65	47	132				J
4-Nitrophenol	1410	1700	1670	0	85	37	140				J
Acenaphthene	1230	330	1670	0	74	49	125				
Acenaphthylene	1230	330	1670	0	74	47	125				
Acetophenone	1190	330	1670	0	71	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

474

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8309 | SampType: MSB | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399185
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	POL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1240	330	1670	0	74	37	130				
Atrazine	1250	330	1670	0	75	30	130				
Benzaldehyde	1210	330	1670	0	73	30	130				
Benzo[a]anthracene	1230	330	1670	0	74	40	130				
Benzo[a]pyrene	1260	330	1670	0	76	44	130				
Benzo[b]fluoranthene	1210	330	1670	0	73	29	154				
Benzo[g,h,i]perylene	1350	330	1670	0	81	10	130				
Benzo[k]fluoranthene	1270	330	1670	0	76	35	143				
bis(2-Chloroethoxy)methane	1140	330	1670	0	68	43	130				
bis(2-chloroethyl)ether	1120	330	1670	0	67	41	130				
bis(2-chloroisopropyl)ether	1270	330	1670	0	76	34	130				
bis(2-Ethylhexyl)phthalate	1440	330	1670	0	86	42	154				
Butyl benzyl phthalate	1360	330	1670	0	82	34	160				
Caprolactam	1620	330	1670	0	97	30	130				
Carbazole	1380	330	1670	0	83	42	130				
Chrysene	1300	330	1670	0	78	43	130				
Di-n-butyl phthalate	1490	330	1670	0	89	50	133				
Di-n-octyl phthalate	1380	330	1670	0	83	48	146				
Dibenz[a,h]anthracene	1390	330	1670	0	83	16	135				
Dibenzofuran	1040	330	1670	0	63	45	130				
Diethyl phthalate	1390	330	1670	0	84	48	130				
Dimethyl phthalate	1340	330	1670	0	81	46	130				
Fluoranthene	1270	330	1670	0	76	45	130				
Fluorene	1230	330	1670	0	74	45	130				
Hexachlorobenzene	1310	330	1670	0	79	50	130				
Hexachlorobutadiene	1180	330	1670	0	71	37	130				
Hexachlorocyclopentadiene	994	330	1670	0	60	10	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

472

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/15/2008 | RunNo: 15271
Client ID: ZZZZZ | Batch ID: 8270 | Method: SW8270C (SW3550B) | Analysis Date: 10/20/2008 | SeqNo: 399134
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	POL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1230	330	1670	0	74	60	125				
Atrazine	1300	330	1670	0	78	30	130				
Benzaldehyde	1180	330	1670	0	71	30	130				
Benzo[a]anthracene	1240	330	1670	0	74	60	125				
Benzo[a]pyrene	1250	330	1670	0	75	53	129				
Benzo[b]fluoranthene	1210	330	1670	0	72	55	126				
Benzo[g,h,i]perylene	1360	330	1670	0	82	51	134				
Benzo[k]fluoranthene	1280	330	1670	0	77	49	132				
bis(2-Chloroethoxy)methane	1140	330	1670	0	68	49	125				
bis(2-chloroethyl)ether	1150	330	1670	0	69	44	125				
bis(2-chloroisopropyl)ether	1190	330	1670	0	71	39	125				
bis(2-Ethylhexyl)phthalate	1420	330	1670	0	85	51	145				
Butyl benzyl phthalate	1390	330	1670	0	83	50	144				
Caprolactam	1470	330	1670	0	88	30	130				
Carbazole	1390	330	1670	0	84	51	131				
Chrysene	1320	330	1670	0	79	55	127				
Di-n-butyl phthalate	1490	330	1670	0	89	56	140				
Di-n-octyl phthalate	1410	330	1670	0	84	46	150				
Dibenz[a,h]anthracene	1380	330	1670	0	83	47	142				
Dibenzofuran	1050	330	1670	0	63	46	125				
Diethyl phthalate	1410	330	1670	0	85	52	137				
Dimethyl phthalate	1310	330	1670	0	78	51	134				
Fluoranthene	1280	330	1670	0	77	54	131				
Fluorene	1220	330	1670	0	73	50	126				
Hexachlorobenzene	1340	330	1670	0	80	43	139				
Hexachlorobutadiene	1210	330	1670	0	73	39	132				
Hexachlorocyclopentadiene	835	330	1670	0	50	25	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

475

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8309 | SampType: MSB | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399185
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	POL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1230	330	1670	0	74	23	130				
Indeno[1,2,3-cd]pyrene	1360	330	1670	0	82	10	134				
Isophorone	1200	330	1670	0	72	43	130				
N-Nitroso-di-n-propylamine	1240	330	1670	0	75	35	130				
N-Nitrosodiphenylamine	1330	330	1670	0	80	44	130				
Naphthalene	1160	330	1670	0	70	40	130				
Nitrobenzene	1250	330	1670	0	75	45	130				
Pentachlorophenol	874	1700	1670	0	52	10	130				J
Phenanthrene	1270	330	1670	0	76	48	130				
Phenol	1100	330	1670	0	66	32	130				
Pyrene	1170	330	1670	0	70	18	164				
Surr: 2,4,6-Tribromophenol	4390	0	5000	0	88	20	143				
Surr: 2-Fluorobiphenyl	2440	0	3330	0	73	46	130				
Surr: 2-Fluorophenol	3450	0	5000	0	69	22	130				
Surr: Nitrobenzene-d5	2360	0	3330	0	71	39	130				
Surr: Phenol-d5	3350	0	5000	0	67	33	130				
Surr: Terphenyl-d14	2720	0	3330	0	82	38	148				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

24-Oct-08

473

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399184
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1510	330	1670	0	90	60	125				
Atrazine	1530	330	1670	0	92	30	130				
Benzaldehyde	1500	330	1670	0	90	30	130				
Benzo[a]anthracene	1520	330	1670	0	91	60	125				
Benzo[a]pyrene	1570	330	1670	0	94	53	129				
Benzo[b]fluoranthene	1480	330	1670	0	89	55	126				
Benzo[g,h,i]perylene	1670	330	1670	0	100	51	134				
Benzo[k]fluoranthene	1560	330	1670	0	93	49	132				
bis(2-Chloroethoxy)methane	1400	330	1670	0	84	49	125				
bis(2-chloroethyl)ether	1370	330	1670	0	82	44	125				
bis(2-chloroisopropyl)ether	1550	330	1670	0	93	39	125				
bis(2-Ethylhexyl)phthalate	1680	330	1670	0	101	51	145				
Butyl benzyl phthalate	1680	330	1670	0	101	50	144				
Caprolactam	1900	330	1670	0	114	30	130				
Carbazole	1680	330	1670	0	101	51	131				
Chrysene	1600	330	1670	0	96	55	127				
Di-n-butyl phthalate	1810	330	1670	0	109	56	140				
Di-n-octyl phthalate	1670	330	1670	0	100	46	150				
Dibenz[a,h]anthracene	1730	330	1670	0	104	47	142				
Dibenzofuran	1240	330	1670	0	74	46	125				
Diethyl phthalate	1680	330	1670	0	99	52	137				
Dimethyl phthalate	1580	330	1670	0	95	51	134				
Fluoranthene	1520	330	1670	0	91	54	131				
Fluorene	1470	330	1670	0	88	50	126				
Hexachlorobenzene	1590	330	1670	0	95	43	139				
Hexachlorobutadiene	1440	330	1670	0	86	39	132				
Hexachlorocyclopentadiene	1240	330	1670	0	74	25	125				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

478

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/15/2008 | RunNo: 15271
Client ID: ZZZZZ | Batch ID: 8270 | Method: SW8270C (SW3550B) | Analysis Date: 10/20/2008 | SeqNo: 399134
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1230	330	1670	0	74	41	125				
Indeno[1,2,3-cd]pyrene	1380	330	1670	0	82	48	138				
Isophorone	1170	330	1670	0	70	48	125				
N-Nitroso-di-n-propylamine	1240	330	1670	0	74	40	128				
N-Nitrosodiphenylamine	1300	330	1670	0	78	46	135				
Naphthalene	1160	330	1670	0	70	46	125				
Nitrobenzene	1200	330	1670	0	72	47	125				
Pentachlorophenol	623	1700	1670	0	37	25	129				J
Phenanthrene	1240	330	1670	0	75	58	125				
Phenol	1110	330	1670	0	66	41	125				
Pyrene	1200	330	1670	0	72	55	127				
Surr: 2,4,6-Tribromophenol	4570	0	5000	0	91	20	143				
Surr: 2-Fluorobiphenyl	2480	0	3330	0	75	46	130				
Surr: 2-Fluorophenol	3460	0	5000	0	70	22	130				
Surr: Nitrobenzene-d5	2300	0	3330	0	69	39	130				
Surr: Phenol-d5	3440	0	5000	0	69	33	130				
Surr: Terphenyl-d14	2810	0	3330	0	84	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

476

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399184
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1510	330	1670	0	91	41	125				
Indeno[1,2,3-cd]pyrene	1680	330	1670	0	101	48	138				
Isophorone	1440	330	1670	0	86	48	125				
N-Nitroso-di-n-propylamine	1540	330	1670	0	92	40	128				
N-Nitrosodiphenylamine	1610	330	1670	0	97	48	135				
Naphthalene	1390	330	1670	0	84	46	125				
Nitrobenzene	1480	330	1670	0	89	47	125				
Pentachlorophenol	1090	1700	1670	0	65	25	129				J
Phenanthrene	1550	330	1670	0	93	58	125				
Phenol	1330	330	1670	0	80	41	125				
Pyrene	1430	330	1670	0	86	55	127				
Surr: 2,4,6-Tribromophenol	5300	0	5000	0	106	20	143				
Surr: 2-Fluorobiphenyl	3920	0	3330	0	98	46	130				
Surr: 2-Fluorophenol	4270	0	5000	0	85	22	130				
Surr: Nitrobenzene-d5	2790	0	3330	0	84	39	130				
Surr: Phenol-d5	4170	0	5000	0	83	33	130				
Surr: Terphenyl-d14	3320	0	3330	0	100	36	146				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

479

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 | SampType: LCS | TestCode: 8270S_OLM4 | Units: µg/Kg | Prep Date: 10/21/2008 | RunNo: 15276
Client ID: ZZZZZ | Batch ID: 8309 | Method: SW8270C (SW3550B) | Analysis Date: 10/23/2008 | SeqNo: 399184
Instrument: MS05_26 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1640	330	1670	0	99	30	130				
2,4,5-Trichlorophenol	1250	1700	1670	0	75	43	131				J
2,4,6-Trichlorophenol	1410	330	1670	0	85	44	125				
2,4-Dichlorophenol	1410	330	1670	0	85	41	125				
2,4-Dimethylphenol	1260	330	1670	0	76	25	128				
2,4-Dinitrophenol	1010	1700	1670	0	61	25	125				J
2,4-Dinitrotoluene	1610	330	1670	0	97	54	126				
2,6-Dinitrotoluene	1600	330	1670	0	96	48	126				
2-Chloronaphthalene	1530	330	1670	0	92	49	126				
2-Chlorophenol	1510	330	1670	0	91	41	125				
2-Methylnaphthalene	1240	330	1670	0	74	44	125				
2-Methylphenol	1240	330	1670	0	74	40	125				
2-Nitroaniline	1400	1700	1670	0	84	50	129				J
2-Nitrophenol	1380	330	1670	0	82	44	125				
3,3'-Dichlorobenzidine	1210	660	1670	0	73	25	125				
3-Nitroaniline	1040	1700	1670	0	63	26	125				J
4,6-Dinitro-2-methylphenol	1410	1700	1670	0	85	33	126				J
4-Bromophenyl phenyl ether	1570	330	1670	0	94	44	137				
4-Chloro-3-methylphenol	1370	330	1670	0	82	44	126				
4-Chloroaniline	707	330	1670	0	42	25	125				
4-Chlorophenyl phenyl ether	1490	330	1670	0	90	46	132				
4-Methylphenol	1250	330	1670	0	75	40	125				
4-Nitroaniline	1370	1700	1670	0	82	47	132				J
4-Nitrophenol	1840	1700	1670	0	110	37	140				
Acenaphthene	1490	330	1670	0	89	49	125				
Acenaphthylene	1470	330	1670	0	88	47	125				
Acetophenone	1450	330	1670	0	87	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

477

4B

EPA SAMPLE NO.

MB-8270

Lab Name: Life Science Laboratorie Contract: Life Science

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: N0044.D Lab Sample ID: MB-8270

Instrument ID: MS05 26 Date Extracted: 10/15/2008

Matrix: (soil/water) SOIL Date Analyzed: 10/20/2008

Level: (low/med) Time Analyzed: 12:16

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-8270	LCS-8270	N0040.D	9:43
02	MSB-8270	MSB-8270	N0041.D	10:22
03	MBSS-3DL	0810083-003BDL	N0054.D	18:37
04	MBSS-4DL	0810083-004BDL	N0055.D	19:16
05	MBSS-FDDL	0810083-005BDL	N0056.D	19:54
06	MBSS-1	0810083-001B	N0064.D	12:15
07	MBSS-1MS	0810083-001BMS	N0065.D	12:53
08	MBSS-3	0810083-003B	N0068.D	14:48
09	MBSS-4	0810083-004B	N0069.D	15:26
10	MBSS-FD	0810083-005B	N0070.D	16:04

COMMENTS: _____

page 1 of 2

FORM IV SV2703_OLM42

480

4B

EPA SAMPLE NO.

MB-8309

Lab Name: Life Science Laboratorie Contract: Life Science

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: N0074.D Lab Sample ID: MB-8309

Instrument ID: MS05 26 Date Extracted: 10/21/2008

Matrix: (soil/water) SOIL Date Analyzed: 10/23/2008

Level: (low/med) Time Analyzed: 11:07

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-8309	LCS-8309	N0075.D	11:45
02	MSB-8309	MSB-8309	N0076.D	12:23
03	MBSS-2DL	0810083-002BDL	N0085.D	18:05
04	MBSS-1MSD	0810083-001BMSD	N0086.D	18:43
05	MBSS-2	0810083-002B	N0087.D	19:21

COMMENTS: _____

page 2 of 2

FORM IV SV2703_OLM42

481

5D

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: YA\N9923.D DFTPP Injection Date: 10/14/2008

Instrument ID: MS05 26 DFTPP Injection Time: 8:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	45.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	65.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	45.4
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	23.0
365	Greater than 0.75% of mass 198	2.1
441	Present, but less than mass 443	11.1
442	40.0 - 110.0% of mass 198	75.9
443	15.0 - 24.0% of mass 442	12.7 (16.0)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160PPM	SSTD160PPM	N9924.D	10/14/08	8:47
02	SSTD120PPM	SSTD120PPM	N9925.D	10/14/08	9:25
03	SSTD080PPM	SSTD080PPM	N9926.D	10/14/08	10:04
04	SSTD060PPM	SSTD060PPM	N9927.D	10/14/08	10:42
05	SSTD050PPM	SSTD050PPM	N9928.D	10/14/08	11:20
06	SSTD040PPM	SSTD040PPM	N9929.D	10/14/08	11:58
07	SSTD020PPM	SSTD020PPM	N9930.D	10/14/08	12:37
08	SSTD010PPM	SSTD010PPM	N9931.D	10/14/08	13:15
09	SSTD005PPM	SSTD005PPM	N9932.D	10/14/08	13:53
10	SSTD001PPM	SSTD001PPM	N9933.D	10/14/08	14:31
11	2SRC-101408	2SRC-101408	N9934.D	10/14/08	15:09
12	SSTD160PPM OLM	SSTD160PPM OLM	N9935.D	10/14/08	15:47
13	SSTD120PPM OLM	SSTD120PPM OLM	N9936.D	10/14/08	16:26
14	SSTD080PPM OLM	SSTD080PPM OLM	N9937.D	10/14/08	17:04
15	SSTD050PPM OLM	SSTD050PPM OLM	N9938.D	10/14/08	17:42
16	SSTD040PPM OLM	SSTD040PPM OLM	N9939.D	10/14/08	18:20
17	SSTD020PPM OLM	SSTD020PPM OLM	N9940.D	10/14/08	18:58
18	SSTD010PPM OLM	SSTD010PPM OLM	N9941.D	10/14/08	19:37
19	SSTD005PPM OLM	SSTD005PPM OLM	N9942.D	10/14/08	20:15

page 1 of 7

FORM V SV SW8270C

482

5D

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: TA\N0037.D DFTPP Injection Date: 10/20/2008

Instrument ID: MS05 26 DFTPP Injection Time: 8:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	51.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	73.2
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	25.0 - 75.0% of mass 198	49.3
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	24.0
365	Greater than 0.75% of mass 198	2.7
441	Present, but less than mass 443	13.4
442	40.0 - 110.0% of mass 198	80.7
443	15.0 - 24.0% of mass 442	15.0 (18.6)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC102008A5	CC102008A5	N0038.D	10/20/08	8:27
02	CC102008B5 OLM	CC102008B5 OLM	N0039.D	10/20/08	9:05
03	LCS-8270	LCS-8270	N0040.D	10/20/08	9:43
04	MSB-8270	MSB-8270	N0041.D	10/20/08	10:22
05	MB-8270	MB-8270	N0044.D	10/20/08	12:16
06	MBSS-3DL	0810083-003BDL	N0054.D	10/20/08	18:37
07	MBSS-4DL	0810083-004BDL	N0055.D	10/20/08	19:16
08	MBSS-FDDL	0810083-005BDL	N0056.D	10/20/08	19:54

page 4 of 7

FORM V SV SW8270C

483

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: TA\N0061.D DFTPP Injection Date: 10/21/2008

Instrument ID: MS05_26 DFTPP Injection Time: 10:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	51.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	74.8
70	Less than 2.0% of mass 69	0.1 (0.1)1
127	25.0 - 75.0% of mass 198	49.6
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	21.9
365	Greater than 0.75% of mass 198	2.6
441	Present, but less than mass 443	12.5
442	40.0 - 110.0% of mass 198	80.5
443	15.0 - 24.0% of mass 442	15.5 (19.2)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC102108A5	CC102108A5	N0062.D	10/21/08	10:59
02	CC102108B5 OLM	CC102108B5 OLM	N0063.D	10/21/08	11:37
03	MBSS-1	0810083-001B	N0064.D	10/21/08	12:15
04	MBSS-1MS	0810083-001BMS	N0065.D	10/21/08	12:53
05	MBSS-3	0810083-003B	N0068.D	10/21/08	14:48
06	MBSS-4	0810083-004B	N0069.D	10/21/08	15:26
07	MBSS-FD	0810083-005B	N0070.D	10/21/08	16:04

page 6 of 7

FORM V SV SW8270C

484

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Lab File ID: TA\N0071.D DFTPP Injection Date: 10/23/2008

Instrument ID: MS05_26 DFTPP Injection Time: 9:30

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	75.3
70	Less than 2.0% of mass 69	0.3 (0.3)1
127	25.0 - 75.0% of mass 198	50.3
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	23.1
365	Greater than 0.75% of mass 198	2.7
441	Present, but less than mass 443	13.7
442	40.0 - 110.0% of mass 198	82.1
443	15.0 - 24.0% of mass 442	16.1 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC102308A5	CC102308A5	N0072.D	10/23/08	9:51
02	CC102308B5 OLM	CC102308B5 OLM	N0073.D	10/23/08	10:28
03	MB-8309	MB-8309	N0074.D	10/23/08	11:07
04	LCS-8309	LCS-8309	N0075.D	10/23/08	11:45
05	MSB-8309	MSB-8309	N0076.D	10/23/08	12:23
06	MBSS-2DL	0810083-002BDL	N0085.D	10/23/08	18:05
07	MBSS-1MSD	0810083-001BMSD	N0086.D	10/23/08	18:43
08	MBSS-2	0810083-002B	N0087.D	10/23/08	19:21

page 7 of 7

FORM V SV SW8270C

485

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0038.D Date Analyzed: 10/20/2008

Instrument ID: MS05_26 Time Analyzed: 8:27

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	160273	9.52	541103	11.87	321129	15.19	560608	16.02
UPPER LIMIT	320546	10.02	1082206	12.37	642258	15.69	1121216	16.52
LOWER LIMIT	80137	9.02	270552	11.37	160565	14.69	280304	17.52
SAMPLE NO.								
01 CC102008B5 OLM (CC102008B5 OLM)	159837	9.52	558896	11.86	319329	15.18	559979	16.01
02 LCS-8270 (LCS-8270)	150786	9.53	540425	11.87	312199	15.19	563179	16.02
03 MSB-8270 (MSB-8270)	147565	9.52	524995	11.87	298440	15.19	542687	16.02
04 MB-8270 (MB-8270)	150048	9.53	568894	11.87	397583	15.19	589872	16.02
05 MBSS-3DL (0810083-003BDL)	164998	9.53	582018	11.87	337599	15.19	565372	16.02
06 MBSS-4DL (0810083-004BDL)	180066	9.53	606714	11.87	352876	15.20	600202	16.03
07 MBSS-FDDL (0810083-005BDL)	189145	9.53	594669	11.87	348087	15.20	583716	16.03

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

FORM VIII Page 1 of 6 SW8270C

486

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0038.D Date Analyzed: 10/20/2008

Instrument ID: MS05_26 Time Analyzed: 8:27

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	526781	23.06	837878	25.83				
UPPER LIMIT	1053562	23.56	1675756	26.33				
LOWER LIMIT	263391	22.56	268939	25.33				
SAMPLE NO.								
01 CC102008B5 OLM (CC102008B5 OLM)	497777	23.04	805323	25.82				
02 LCS-8270 (LCS-8270)	521305	23.05	544897	25.83				
03 MSB-8270 (MSB-8270)	495881	23.05	522468	25.83				
04 MB-8270 (MB-8270)	561341	23.05	577831	25.83				
05 MBSS-3DL (0810083-003BDL)	464082	23.05	332335	25.83				
06 MBSS-4DL (0810083-004BDL)	474689	23.05	311221	25.84				
07 MBSS-FDDL (0810083-005BDL)	467523	23.06	313056	25.83				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

FORM VIII Page 2 of 6 SW8270C

487

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0062.D Date Analyzed: 10/21/2008

Instrument ID: MS05_26 Time Analyzed: 10:59

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	215188	9.53	724451	11.88	428804	15.20	751661	18.03
UPPER LIMIT	432376	10.03	1448902	12.38	856608	15.70	1503322	18.53
LOWER LIMIT	108094	9.03	362226	11.38	214902	14.70	375831	17.53
SAMPLE NO.								
01 CC102108B5 OLM (CC102108B5 OLM)	220775	9.53	741111	11.87	438310	15.19	747706	18.02
02 MBSS-1 (0810083-001B)	228023	9.53	788507	11.87	460851	15.19	767091	18.03
03 MBSS-1MS (0810083-001BMS)	202098	9.53	706902	11.87	414860	15.19	733017	18.02
04 MBSS-3 (0810083-003B)	227828	9.53	808252	11.87	455739	15.19	764847	18.02
05 MBSS-4 (0810083-004B)	231281	9.53	810108	11.87	459128	15.20	686837	18.03
06 MBSS-FD (0810083-005B)	217188	9.54	789125	11.87	434312	15.19	679886	18.03

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0062.D Date Analyzed: 10/21/2008

Instrument ID: MS05_26 Time Analyzed: 10:59

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	698970	23.07	703253	25.65				
UPPER LIMIT	1397940	23.57	1406506	26.35				
LOWER LIMIT	349485	22.57	351627	25.35				
SAMPLE NO.								
01 CC102108B5 OLM (CC102108B5 OLM)	681735	23.05	702846	25.63				
02 MBSS-1 (0810083-001B)	646899	23.06	691291	25.64				
03 MBSS-1MS (0810083-001BMS)	591986	23.06	371124	25.63				
04 MBSS-3 (0810083-003B)	363351	23.06	133834*	25.63				
05 MBSS-4 (0810083-004B)	192802*	23.06	72064*	25.64				
06 MBSS-FD (0810083-005B)	208360*	23.06	78591*	25.64				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0072.D Date Analyzed: 10/23/2008

Instrument ID: MS05_26 Time Analyzed: 9:51

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	202796	9.47	672898	11.81	406423	15.14	677401	17.97
UPPER LIMIT	405592	9.97	1345796	12.31	812846	15.64	1354802	18.47
LOWER LIMIT	101399	8.97	336449	11.31	203212	14.64	338701	17.47
SAMPLE NO.								
01 CC102308B5 OLM (CC102308B5 OLM)	205197	9.47	706267	11.81	421584	15.13	678641	17.96
02 MB-8309 (MB-8309)	194967	9.47	675102	11.81	376092	15.13	666113	17.97
03 LCS-8309 (LCS-8309)	186214	9.48	670558	11.82	377783	15.14	654572	17.97
04 MSB-8309 (MSB-8309)	192770	9.47	664704	11.81	376860	15.14	661626	17.97
05 MBSS-2DL (0810083-002BDL)	194606	9.47	670493	11.81	382470	15.14	643145	17.97
06 MBSS-1MSD (0810083-001BMSD)	215991	9.47	745535	11.81	426645	15.13	702929	17.97
07 MBSS-2 (0810083-002B)	211699	9.47	752150	11.82	426263	15.13	712196	17.97

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0072.D Date Analyzed: 10/23/2008

Instrument ID: MS05_26 Time Analyzed: 9:51

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	629124	23.01	633205	25.76				
UPPER LIMIT	1258248	23.51	1266410	26.26				
LOWER LIMIT	314562	22.51	316603	25.26				
SAMPLE NO.								
01 CC102308B5 OLM (CC102308B5 OLM)	619189	22.99	650344	25.76				
02 MB-8309 (MB-8309)	606045	22.99	638338	25.75				
03 LCS-8309 (LCS-8309)	603426	23.00	620074	25.75				
04 MSB-8309 (MSB-8309)	612436	23.00	632088	25.77				
05 MBSS-2DL (0810083-002BDL)	541887	22.99	479314	25.75				
06 MBSS-1MSD (0810083-001BMSD)	576609	23.01	369316	25.76				
07 MBSS-2 (0810083-002B)	535191	23.00	296140*	25.75				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

GC/MS Semivolatile Combined MDL Study Summary

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/mL)	MDL (ug/Kg)	VER (ug/Kg)
8270C	3550B	SOIL	Fluoranthene	02/24/06	0.67	0.67	0.70	0.72	0.70	0.71	0.70	0.80	0.019	0.06	1.99	
8270C	3550B	SOIL	Benzidine	02/24/06	81.45	67.83	53.29	51.09	46.87	40.40	50.78	50.00	13.971	43.91	1463.70	
8270C	3550B	SOIL	Pyrene	02/20/06	0.25	0.29	0.27	0.26	0.31	0.25	0.28	0.50	0.021	0.07	2.25	
8270C	3550B	SOIL	Terphenyl-d14	02/25/06	0.68	0.66	0.63	0.71	0.66	0.65	0.67	0.80	0.024	0.08	2.55	
8270C	3550B	SOIL	Butyl benzyl phthalate	02/20/06	0.12	0.12	0.11	0.13	0.14	0.09	0.10	0.50	0.017	0.05	1.80	
8270C	3550B	SOIL	3,3'-Dichlorobenzidine	02/24/06	0.69	0.39	0.30	0.23	0.26	0.33	0.32	2.00	0.154	0.48	15.15	40.00
8270C	3550B	SOIL	Benzo(a)anthracene	02/24/06	0.75	0.75	0.79	0.80	0.81	0.84	0.81	0.80	0.033	0.10	3.46	
8270C	3550B	SOIL	bis(2-Ethylhexyl)phthalate	02/20/06	0.34	0.52	0.27	0.32	0.19	0.23	0.58	0.50	0.142	0.45	14.84	
8270C	3550B	SOIL	Chrysene	02/20/06	0.27	0.33	0.34	0.30	0.34	0.34	0.31	0.50	0.027	0.08	2.80	
8270C	3550B	SOIL	Di-n-octyl phthalate	02/20/06	0.41	0.36	0.38	0.37	0.36	0.36	0.36	0.50	0.019	0.06	1.95	
8270C	3550B	SOIL	Indeno(1,2,3-cd)pyrene	02/25/06	0.43	0.42	0.46	0.49	0.42	0.43	0.44	0.80	0.025	0.08	2.67	
8270C	3550B	SOIL	Benzo(b)fluoranthene	02/20/06	0.39	0.37	0.44	0.32	0.27	0.60	0.31	0.50	0.110	0.35	11.52	
8270C	3550B	SOIL	Benzo(k)fluoranthene	02/20/06	0.34	0.36	0.45	0.31	0.26	0.58	0.34	0.50	0.106	0.33	11.13	
8270C	3550B	SOIL	Benzo(a)pyrene	02/25/06	0.47	0.47	0.52	0.47	0.46	0.47	0.47	0.80	0.020	0.06	2.06	
8270C	3550B	SOIL	Dibenz(a,h)anthracene	02/24/06	0.50	0.55	0.57	0.58	0.57	0.57	0.55	0.80	0.025	0.08	2.62	
8270C	3550B	SOIL	Benzo(g,h,i)perylene	02/24/06	0.56	0.56	0.57	0.62	0.61	0.62	0.60	0.80	0.038	0.12	3.97	
8270C	3550B	SOIL	Benzaldehyde	02/25/06	0.83	0.92	0.93	0.90	0.98	0.87	0.98	1.40	0.048	0.15	4.99	
8270C	3550B	SOIL	Acetophenone	02/25/06	0.99	1.02	1.05	1.10	1.18	1.09	1.08	1.40	0.062	0.19	6.45	40.00
8270C	3550B	SOIL	N-Nitrosopyrrolidine	02/24/06	0.86	0.84	0.78	0.74	0.77	0.79	0.76	1.40	0.069	0.22	7.27	*
8270C	3550B	SOIL	Caprolactam	02/25/06	0.78	0.88	0.94	0.95	0.92	1.09	1.18	1.40	0.133	0.42	13.93	40.00
8270C	3550B	SOIL	1,1'-Biphenyl	02/25/06	1.06	1.07	1.14	1.16	1.16	1.13	1.10	1.40	0.041	0.13	4.31	
8270C	3550B	SOIL	1,2,4,5-Tetrachlorobenzene	02/25/06	1.18	1.05	1.19	1.19	1.19	1.23	1.20	1.40	0.058	0.18	6.04	*
8270C	3550B	SOIL	2-Naphthylamine	02/24/06	0.89	0.83	0.55	0.57	0.51	0.58	0.57	1.40	0.127	0.40	13.28	*
8270C	3550B	SOIL	Atrazine	02/24/06	0.97	1.14	1.04	0.99	1.08	1.06	1.07	1.40	0.057	0.18	5.99	40.00

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984

MDL=(S.Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

The GC/MS instrument **minimum** threshold quantitation level is set to 0.5 (or 1.0 ug/mL) ug/mL of extract (dependant on the initial calibration low standard concentration).

MDL verified (MS5/MS6): 2-24-06 (* not verified)

4-8-08

GC/MS Semivolatile Combined MDL Study Summary

Instrument ID(s): MS5,MS6 Column ID(s): DB-5MS, 0.25 mm x 30m, 0.5 df MDL Sample Size = 30 g (EV = 1 mL)

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/mL)	MDL (ug/Kg)	MDL VER (ug/Kg)
8270C	3550B	SOIL	1,4-Dioxane	02/20/06	1.61	1.76	1.77	1.73	1.68	1.66	1.77	2.00	0.093	0.28	8.55	26.70
8270C	3550B	SOIL	N-nitrosodimethylamine	02/24/06	0.25	0.25	0.16	0.34	0.33	0.29	0.34	0.80	0.066	0.21	6.90	40.00
8270C	3550B	SOIL	Pyridine	02/25/06	0.64	0.45	0.44	0.38	0.42	0.40	0.40	0.80	0.088	0.28	9.27	40.00
8270C	3550B	SOIL	2-Fluorophenol	02/25/06	0.58	0.60	0.64	0.69	0.60	0.64	0.67	0.80	0.040	0.13	4.21	
8270C	3550B	SOIL	Phenol-d5	02/25/06	0.57	0.55	0.62	0.61	0.63	0.61	0.65	0.80	0.035	0.11	3.62	
8270C	3550B	SOIL	Phenol	02/20/06	0.32	0.31	0.36	0.27	0.31	0.30	0.28	0.50	0.029	0.09	3.07	
8270C	3550B	SOIL	Aniline	02/24/06	0.42	0.39	0.34	0.27	0.30	0.35	0.31	0.80	0.052	0.16	5.48	40.00
8270C	3550B	SOIL	bis(2-Chloroethyl)ether	02/25/06	0.65	0.59	0.66	0.80	0.62	0.73	0.58	0.80	0.049	0.15	5.12	
8270C	3550B	SOIL	2-Chlorophenol-d4	02/25/06	0.53	0.53	0.59	0.68	0.60	0.65	0.60	0.80	0.031	0.10	3.20	
8270C	3550B	SOIL	2-Chlorophenol	02/25/06	0.50	0.51	0.59	0.51	0.62	0.59	0.58	0.80	0.049	0.15	5.12	
8270C	3550B	SOIL	1,3-Dichlorobenzene	02/25/06	0.60	0.57	0.63	0.59	0.66	0.64	0.65	0.80	0.034	0.11	3.53	
8270C	3550B	SOIL	1,4-Dichlorobenzene	02/25/06	0.62	0.62	0.57	0.72	0.65	0.66	0.62	0.80	0.046	0.15	4.87	
8270C	3550B	SOIL	Benzyl alcohol	02/24/06	0.31	0.37	0.37	0.42	0.41	0.44	0.46	0.80	0.051	0.16	5.30	
8270C	3550B	SOIL	1,2-Dichlorobenzene-d4	02/25/06	0.62	0.63	0.63	0.62	0.64	0.61	0.62	0.80	0.010	0.03	1.02	
8270C	3550B	SOIL	1,2-Dichlorobenzene	02/24/06	0.68	0.72	0.68	0.71	0.71	0.71	0.76	0.80	0.027	0.09	2.84	
8270C	3550B	SOIL	2-Methylphenol	02/20/06	0.51	0.46	0.45	0.42	0.46	0.42	0.40	0.50	0.035	0.11	3.71	
8270C	3550B	SOIL	2,2'-oxybis(1-chloropropane)	02/25/06	0.65	0.69	0.69	0.80	0.72	0.77	0.77	0.80	0.054	0.17	5.70	
8270C	3550B	SOIL	bis(2-Chloroisopropyl)ether	02/25/06	0.65	0.69	0.69	0.80	0.72	0.77	0.77	0.80	0.054	0.17	5.70	
8270C	3550B	SOIL	4-Methylphenol	02/24/06	0.64	0.58	0.63	0.62	0.64	0.59	0.58	0.80	0.027	0.09	2.86	
8270C	3550B	SOIL	(3+4)-Methylphenol	02/24/06	0.64	0.58	0.63	0.62	0.64	0.59	0.58	0.80	0.027	0.09	2.86	
8270C	3550B	SOIL	N-Nitroso-di-n-propylamine	02/25/06	0.47	0.50	0.55	0.55	0.54	0.54	0.58	0.80	0.036	0.11	3.81	
8270C	3550B	SOIL	Hexachloroethane	02/25/06	0.46	0.62	0.56	0.57	0.54	0.58	0.57	0.80	0.049	0.15	5.16	40.00
8270C	3550B	SOIL	Nitrobenzene-d5	02/25/06	0.56	0.62	0.54	0.57	0.55	0.58	0.60	0.80	0.029	0.09	2.99	
8270C	3550B	SOIL	Nitrobenzene	02/25/06	0.53	0.53	0.61	0.59	0.54	0.54	0.59	0.80	0.034	0.11	3.55	
8270C	3550B	SOIL	Isophorone	02/25/06	0.45	0.45	0.50	0.48	0.46	0.52	0.47	0.80	0.028	0.08	2.76	
8270C	3550B	SOIL	2-Nitrophenol	02/25/06	0.35	0.32	0.40	0.38	0.33	0.41	0.38	0.80	0.035	0.11	3.61	
8270C	3550B	SOIL	2,4-Dimethylphenol	02/20/06	0.43	0.39	0.37	0.29	0.32	0.24	0.22	0.50	0.078	0.25	8.20	66.70
8270C	3550B	SOIL	Benzoic acid	02/20/06	30.05	30.00	21.93	25.47	25.40	23.45	21.21	15.00	3.663	11.20	373.30	
8270C	3550B	SOIL	bis(2-Chloroethoxy)methane	02/25/06	0.58	0.66	0.62	0.59	0.56	0.63	0.56	0.80	0.029	0.09	3.08	
8270C	3550B	SOIL	2,4-Dichlorophenol	02/25/06	0.41	0.38	0.46	0.42	0.41	0.42	0.49	0.80	0.036	0.11	3.81	
8270C	3550B	SOIL	1,2,4-Trichlorobenzene	02/20/06	0.45	0.46	0.47	0.51	0.49	0.48	0.46	0.50	0.020	0.06	2.07	
8270C	3550B	SOIL	Naphthalene	02/25/06	0.61	0.63	0.63	0.64	0.68	0.62	0.66	0.80	0.024	0.08	2.53	
8270C	3550B	SOIL	4-Chloroaniline	02/25/06	0.29	0.33	0.42	0.36	0.42	0.43	0.43	0.80	0.056	0.18	5.92	40.00

Sample Data

GC/MS Semivolatile Combined MDL Study Summary

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/mL)	MDL (ug/Kg)	VER (ug/Kg)
8270C	3550B	SOIL	Hexachlorobutadiene	02/20/06	0.22	0.22	0.21	0.20	0.26	0.22	0.28	0.50	0.029	0.09	3.02	
8270C	3550B	SOIL	4-Chloro-3-methylphenol	02/24/06	0.50	0.63	0.57	0.68	0.56	0.55	0.59	0.80	0.026	0.08	2.71	
8270C	3550B	SOIL	2-Methylnaphthalene	02/20/06	0.45	0.48	0.49	0.48	0.47	0.45	0.47	0.50	0.015	0.05	1.60	
8270C	3550B	SOIL	Hexachlorocyclopentadiene	02/20/06	2.50	2.29	2.28	1.88	1.73	2.72	2.04	3.00	0.347	1.09	36.38	166.70
8270C	3550B	SOIL	2,4,6-Trichlorophenol	02/24/06	0.50	0.53	0.51	0.51	0.44	0.54	0.62	0.80	0.054	0.17	5.66	
8270C	3550B	SOIL	2,4,5-Trichlorophenol	02/25/06	4.14	4.10	4.29	4.40	4.12	4.22	4.66	7.80	0.200	0.63	20.95	
8270C	3550B	SOIL	2-Fluorobiphenyl	02/25/06	0.66	0.61	0.66	0.67	0.66	0.54	0.63	0.80	0.021	0.07	2.24	
8270C	3550B	SOIL	2-Chloronaphthalene	02/20/06	0.31	0.33	0.34	0.32	0.31	0.41	0.32	0.50	0.035	0.11	3.67	
8270C	3550B	SOIL	2-Nitroaniline	02/25/06	0.52	0.52	0.55	0.53	0.66	0.48	0.54	1.10	0.056	0.18	5.89	
8270C	3550B	SOIL	Dimethyl phthalate	02/20/06	0.32	0.30	0.31	0.31	0.29	0.38	0.28	0.50	0.033	0.10	3.41	
8270C	3550B	SOIL	2,6-Dinitrotoluene	02/20/06	0.19	0.16	0.05	0.12	0.11	0.21	0.15	0.50	0.054	0.17	5.62	
8270C	3550B	SOIL	Acenaphthylene	02/20/06	0.13	0.15	0.10	0.12	0.19	0.08	0.09	0.50	0.038	0.12	4.00	
8270C	3550B	SOIL	3-Nitroaniline	02/20/06	0.75	0.71	0.51	0.53	0.51	0.50	0.52	1.50	0.108	0.35	11.15	40.00
8270C	3550B	SOIL	Acenaphthene	02/25/06	0.58	0.60	0.61	0.66	0.61	0.56	0.62	0.80	0.032	0.10	3.31	
8270C	3550B	SOIL	2,4-Dinitrophenol	02/20/06	2.51	2.70	2.60	2.85	2.48	2.28	2.08	9.00	0.257	0.81	26.88	333.00
8270C	3550B	SOIL	4-Nitrophenol	02/20/06	0.41	0.36	0.37	0.31	0.42	0.06	0.26	1.40	0.128	0.40	13.41	66.60
8270C	3550B	SOIL	2,4-Dinitrotoluene	02/20/06	0.23	0.16	0.20	0.13	0.10	0.21	0.16	0.50	0.046	0.14	4.83	
8270C	3550B	SOIL	Dibenzofuran	02/20/06	0.33	0.34	0.33	0.31	0.28	0.42	0.36	0.50	0.044	0.14	4.58	
8270C	3550B	SOIL	Diethyl phthalate	02/20/06	0.34	0.34	0.36	0.31	0.27	0.35	0.29	0.50	0.034	0.11	3.51	
8270C	3550B	SOIL	4-Chlorophenyl phenyl ether	02/20/06	0.31	0.29	0.30	0.27	0.26	0.38	0.30	0.50	0.039	0.12	4.08	
8270C	3550B	SOIL	Fluorene	02/20/06	0.31	0.27	0.30	0.27	0.23	0.33	0.28	0.50	0.033	0.10	3.41	
8270C	3550B	SOIL	4-Nitroaniline	02/25/06	0.38	0.38	0.41	0.44	0.40	0.40	0.37	1.10	0.024	0.07	2.47	40.00
8270C	3550B	SOIL	1,2-Diphenylhydrazine	02/25/06	0.40	0.44	0.48	0.47	0.49	0.49	0.50	0.80	0.035	0.11	3.67	
8270C	3550B	SOIL	2,4,6-Tribromophenol	02/25/06	0.08	0.29	0.24	0.00	0.08	0.18	0.12	0.80	0.101	0.32	10.59	
8270C	3550B	SOIL	4,6-Dinitro-2-methylphenol	02/20/06	1.16	1.23	1.23	1.08	1.12	1.40	1.08	5.00	0.113	0.35	11.83	167.00
8270C	3550B	SOIL	n-Nitrosodiphenylamine	02/24/06	0.63	0.68	0.68	0.68	0.70	0.67	0.67	0.80	0.021	0.07	2.24	
8270C	3550B	SOIL	4-Bromophenyl phenyl ether	02/25/06	0.57	0.52	0.61	0.52	0.64	0.51	0.56	0.80	0.049	0.15	5.16	
8270C	3550B	SOIL	Hexachlorobenzene	02/25/06	0.57	0.50	0.58	0.62	0.62	0.49	0.57	0.80	0.051	0.16	5.39	
8270C	3550B	SOIL	Pentachlorophenol	02/24/06	2.90	2.83	2.65	2.81	2.48	2.40	1.63	6.00	0.921	2.90	96.51	333.00
8270C	3550B	SOIL	Phenanthrene	02/25/06	0.49	0.50	0.51	0.50	0.50	0.49	0.53	0.50	0.014	0.04	1.45	
8270C	3550B	SOIL	Anthracene	02/24/06	0.68	0.68	0.69	0.70	0.73	0.72	0.73	0.80	0.022	0.07	2.35	
8270C	3550B	SOIL	Carbazole	02/25/06	0.54	0.50	0.56	0.58	0.60	0.55	0.58	0.80	0.021	0.06	2.16	
8270C	3550B	SOIL	Di-n-butyl phthalate	02/24/06	2.66	2.34	0.73	1.63	0.85	0.75	2.05	0.80	0.807	2.54	84.59	

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 14.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0064.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		3900	50	µg/Kg-dry	10	10/21/08 12:15
2,4,5-Trichlorophenol	ND		20000	240	µg/Kg-dry	10	10/21/08 12:15
2,4,6-Trichlorophenol	ND		3900	66	µg/Kg-dry	10	10/21/08 12:15
2,4-Dichlorophenol	ND		3900	45	µg/Kg-dry	10	10/21/08 12:15
2,4-Dimethylphenol	ND		3900	780	µg/Kg-dry	10	10/21/08 12:15
2,4-Dinitrophenol	ND		20000	3900	µg/Kg-dry	10	10/21/08 12:15
2,4-Dinitrotoluene	ND		3900	56	µg/Kg-dry	10	10/21/08 12:15
2,6-Dinitrotoluene	ND		3900	66	µg/Kg-dry	10	10/21/08 12:15
2-Chloronaphthalene	ND		3900	43	µg/Kg-dry	10	10/21/08 12:15
2-Chlorophenol	ND		3900	60	µg/Kg-dry	10	10/21/08 12:15
2-Methylnaphthalene	ND		3900	19	µg/Kg-dry	10	10/21/08 12:15
2-Methylphenol	ND		3900	43	µg/Kg-dry	10	10/21/08 12:15
2-Nitroaniline	ND		20000	69	µg/Kg-dry	10	10/21/08 12:15
2-Nitrophenol	ND		3900	180	µg/Kg-dry	10	10/21/08 12:15
3,3'-Dichlorobenzidine	ND		7700	470	µg/Kg-dry	10	10/21/08 12:15
3-Nitroaniline	ND		20000	470	µg/Kg-dry	10	10/21/08 12:15
4,6-Dinitro-2-methylphenol	ND		20000	2000	µg/Kg-dry	10	10/21/08 12:15
4-Bromophenyl phenyl ether	ND		3900	61	µg/Kg-dry	10	10/21/08 12:15
4-Chloro-3-methylphenol	ND		3900	120	µg/Kg-dry	10	10/21/08 12:15
4-Chloroaniline	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
4-Chlorophenyl phenyl ether	ND		3900	48	µg/Kg-dry	10	10/21/08 12:15
4-Methylphenol	ND		3900	33	µg/Kg-dry	10	10/21/08 12:15
4-Nitroaniline	ND		20000	470	µg/Kg-dry	10	10/21/08 12:15
4-Nitrophenol	ND		20000	780	µg/Kg-dry	10	10/21/08 12:15
Acenaphthene	1400 J		3900	39	µg/Kg-dry	10	10/21/08 12:15
Acenaphthylene	ND		3900	47	µg/Kg-dry	10	10/21/08 12:15
Acetophenone	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Anthracene	1700 J		3900	27	µg/Kg-dry	10	10/21/08 12:15
Atrazine	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Benzaldehyde	ND		3900	58	µg/Kg-dry	10	10/21/08 12:15
Benzo[a]anthracene	9600		3900	40	µg/Kg-dry	10	10/21/08 12:15
Benzo[a]pyrene	10000		3900	120	µg/Kg-dry	10	10/21/08 12:15
Benzo[b]fluoranthene	17000		3900	130	µg/Kg-dry	10	10/21/08 12:15
Benzo[g,h,i]perylene	3200 J		3900	160	µg/Kg-dry	10	10/21/08 12:15

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399156 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 14.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0064.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	6200		3900	130	µg/Kg-dry	10	10/21/08 12:15
bis(2-Chloroethoxy)methane	ND		3900	36	µg/Kg-dry	10	10/21/08 12:15
bis(2-chloroethyl)ether	ND		3900	60	µg/Kg-dry	10	10/21/08 12:15
bis(2-chloroisopropyl)ether	ND		3900	67	µg/Kg-dry	10	10/21/08 12:15
bis(2-Ethylhexyl)phthalate	670 J		3900	170	µg/Kg-dry	10	10/21/08 12:15
Butyl benzyl phthalate	ND		3900	160	µg/Kg-dry	10	10/21/08 12:15
Caprolactam	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Carbazole	1500 J		3900	120	µg/Kg-dry	10	10/21/08 12:15
Chrysene	10000		3900	33	µg/Kg-dry	10	10/21/08 12:15
Di-n-butyl phthalate	ND		3900	990	µg/Kg-dry	10	10/21/08 12:15
Di-n-octyl phthalate	ND		3900	23	µg/Kg-dry	10	10/21/08 12:15
Dibenz[a,h]anthracene	990 J		3900	160	µg/Kg-dry	10	10/21/08 12:15
Dibenzofuran	ND		3900	54	µg/Kg-dry	10	10/21/08 12:15
Diethyl phthalate	ND		3900	41	µg/Kg-dry	10	10/21/08 12:15
Dimethyl phthalate	ND		3900	40	µg/Kg-dry	10	10/21/08 12:15
Fluoranthene	21000		3900	120	µg/Kg-dry	10	10/21/08 12:15
Fluorene	710 J		3900	40	µg/Kg-dry	10	10/21/08 12:15
Hexachlorobenzene	ND		3900	63	µg/Kg-dry	10	10/21/08 12:15
Hexachlorobutadiene	ND		3900	35	µg/Kg-dry	10	10/21/08 12:15
Hexachlorocyclopentadiene	ND		3900	1900	µg/Kg-dry	10	10/21/08 12:15
Hexachloroethane	ND		3900	470	µg/Kg-dry	10	10/21/08 12:15
Indeno[1,2,3-cd]pyrene	2000 J		3900	160	µg/Kg-dry	10	10/21/08 12:15
Isophorone	ND		3900	32	µg/Kg-dry	10	10/21/08 12:15
N-Nitroso-di-n-propylamine	ND		3900	45	µg/Kg-dry	10	10/21/08 12:15
N-Nitrosodiphenylamine	ND		3900	26	µg/Kg-dry	10	10/21/08 12:15
Naphthalene	ND		3900	30	µg/Kg-dry	10	10/21/08 12:15
Nitrobenzene	ND		3900	41	µg/Kg-dry	10	10/21/08 12:15
Pentachlorophenol	ND		20000	3900	µg/Kg-dry	10	10/21/08 12:15
Phenanthrene	11000		3900	17	µg/Kg-dry	10	10/21/08 12:15
Phenol	ND		3900	36	µg/Kg-dry	10	10/21/08 12:15
Pyrene	18000		3900	26	µg/Kg-dry	10	10/21/08 12:15
Surr: 2,4,6-Tribromophenol	77.5		20-143	0	%REC	10	10/21/08 12:15
Surr: 2-Fluorobiphenyl	77.1		46-130	0	%REC	10	10/21/08 12:15
Surr: 2-Fluorophenol	75.2		22-130	0	%REC	10	10/21/08 12:15

Qualifiers:
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E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399156 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 14.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0064.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	74.2		39-130	0	%REC	10	10/21/08 12:15
Surr: Phenol-d5	75.5		33-130	0	%REC	10	10/21/08 12:15
Surr: Terphenyl-d14	94.9		36-146	0	%REC	10	10/21/08 12:15

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399156 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-1

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-001B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0064.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 14 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 10.00

Extract Volume: 1000 (µl)

Number TICs found: 6 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	aldol	6.71	78000	JBA
2.	unknown (19.19)	19.19	2200	J
3. 000084-65-1	9,10-Anthracenedione	19.58	1600	JN
4.	unknown PAH (25.22)	25.22	1900	J
5.	unknown PAH (25.59)	25.59	8800	J
6.	unknown (26.7)	26.70	2600	J

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:08 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	229023	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	798507	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.19	164	460651	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.03	188	787691	40.00 ug/mL	0.00
58) Chrysene-d12	23.06	240	646899	40.00 ug/mL	0.00
68) Perylene-d12	25.84	264	391291	40.00 ug/mL	-0.01
System Monitoring Compounds					
2) 2-Fluorophenol	7.22	112	71273	11.28 ug/mL	0.00
Spiked Amount 150.000			Recovery =	7.52%	
3) Phenol-d5	8.82	99	97819	11.32 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	7.55%	
14) Nitrobenzene-d5	10.52	82	68248	7.42 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	7.42%	
30) 2-Fluorobiphenyl	13.89	172	110291	7.71 ug/mL	0.00
Spiked Amount 100.000			Recovery =	7.71%	
46) 2,4,6-Tribromophenol	16.68	330	37182	11.62 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	7.75%	
60) Terphenyl-d14	21.03	244	110187	9.49 ug/mL	0.00
Spiked Amount 100.000			Recovery =	9.49%	
Target Compounds					Qvalue
37) Acenaphthene	15.25	153	45605	3.67 ug/mL	92
44) Fluorene	16.23	166	27768	1.82 ug/mL	97
53) Phenanthrene	18.07	178	534108	27.10 ug/mL	99
54) Anthracene	18.16	178	89165	4.43 ug/mL	98
55) Carbazole	18.46	167	72510	3.95 ug/mL	96
57) Fluoranthene	20.34	202	1055077	53.45 ug/mL	98
59) Pyrene	20.78	202	925234	46.84 ug/mL	99
63) Benzo[a]anthracene	23.04	228	427716	24.54 ug/mL	92
64) bis(2-Ethylhexyl)phthalate	23.00	149	28659	1.72 ug/mL	91
65) Chrysene	23.11	228	425525	26.26 ug/mL	96
67) Indeno[1,2,3-cd]pyrene	28.53	276	95814	5.22 ug/mL	95
69) Benzo[b]fluoranthene	25.02	252	476543	44.83 ug/mL	92
70) Benzo[k]fluoranthene	25.07	252	160604m	15.90 ug/mL	
71) Benzo[a]pyrene	25.71	252	253426	26.23 ug/mL	96
72) Dibenz[a,h]anthracene	28.55	278	23094	2.54 ug/mL	93
73) Benzo[g,h,i]perylene	29.15	276	74082	8.30 ug/mL	91

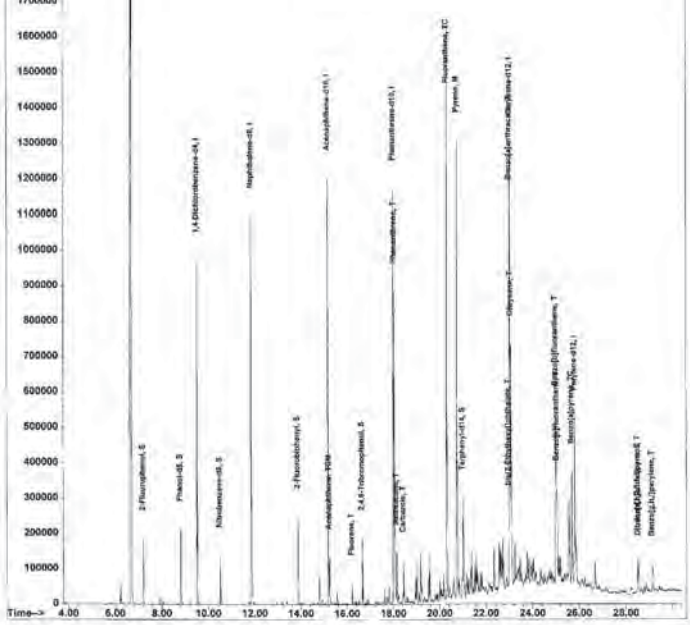
(#) = qualifier out of range (m) = manual integration
N0064.D N014OL42.M Wed Oct 22 13:32:25 2008 Pag

500

Quantitation Report

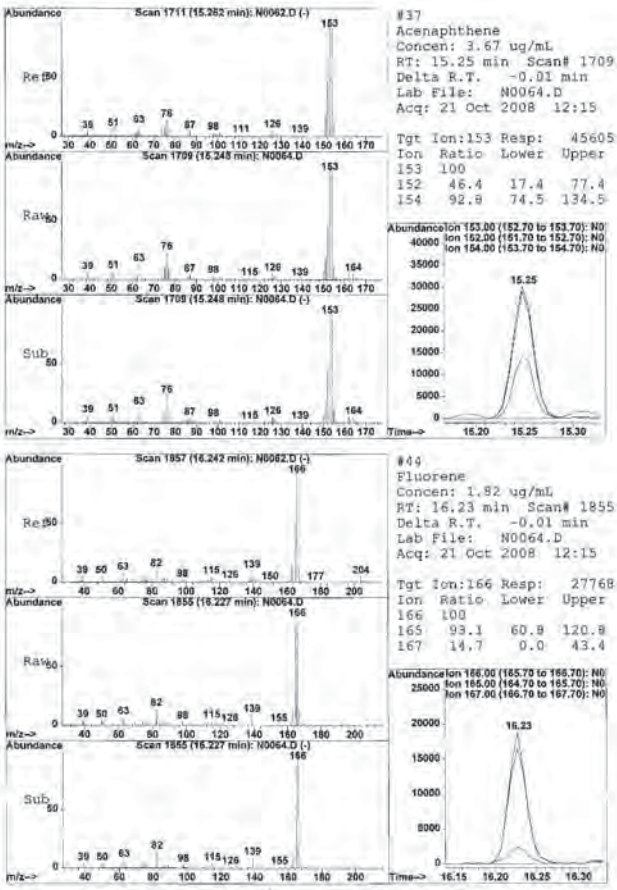
Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:08 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration



N0064.D N014OL42.M Wed Oct 22 13:32:26 2008 Pag

501



#37
Acenaphthene
Concen: 3.67 ug/mL
RT: 15.25 min Scan# 1709
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:153 Resp: 45605

Ion	Ratio	Lower	Upper
153	100		
152	46.4	17.4	77.4
154	92.8	74.5	134.5

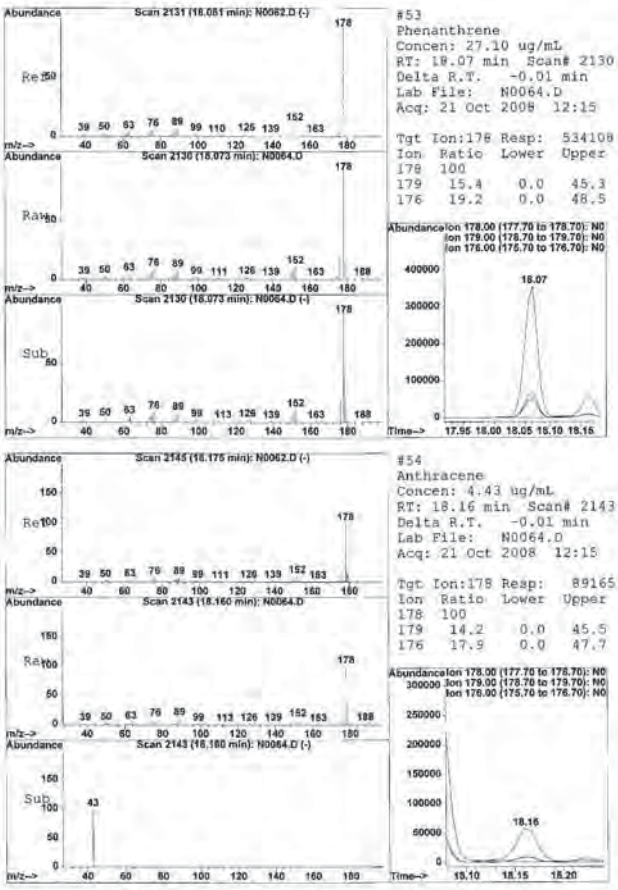
#44
Fluorene
Concen: 1.82 ug/mL
RT: 16.23 min Scan# 1855
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:166 Resp: 27768

Ion	Ratio	Lower	Upper
166	100		
165	93.1	60.8	120.8
167	14.7	0.0	43.4

N0064.D N014OL42.M Wed Oct 22 13:32:27 2008 Pag

502



#53
Phenanthrene
Concen: 27.10 ug/mL
RT: 18.07 min Scan# 2130
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:178 Resp: 534108

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.3
176	19.2	0.0	48.5

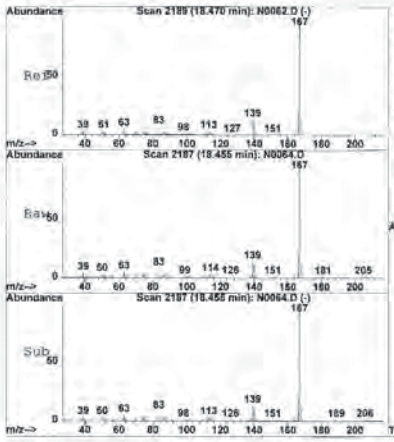
#54
Anthracene
Concen: 4.43 ug/mL
RT: 18.16 min Scan# 2143
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:178 Resp: 89165

Ion	Ratio	Lower	Upper
178	100		
179	14.2	0.0	45.5
176	17.9	0.0	47.7

N0064.D N014OL42.M Wed Oct 22 13:32:28 2008 Pag

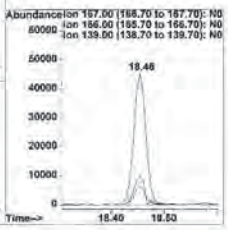
503

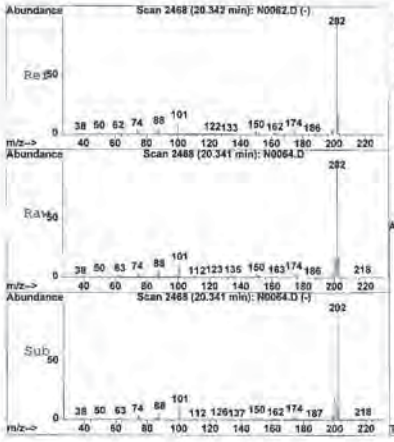


#55
Carbazole
Concen: 3.85 ug/mL
RT: 18.46 min Scan# 2187
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:167 Resp: 72510

Ion	Ratio	Lower	Upper
167	100		
166	19.4	0.0	51.2
139	13.6	0.0	42.2

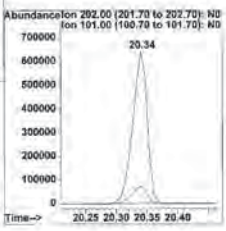


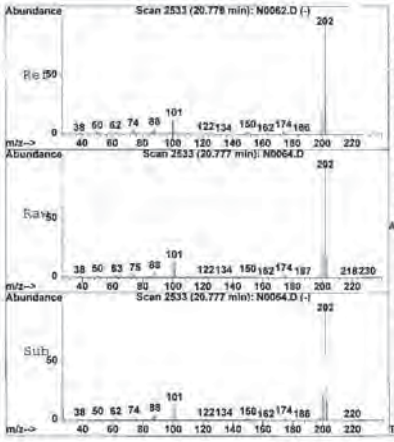


#57
Fluoranthene
Concen: 53.45 ug/mL
RT: 20.34 min Scan# 2468
Delta R.T. -0.00 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:202 Resp: 1055077

Ion	Ratio	Lower	Upper
202	100		
101	12.4	0.0	43.2

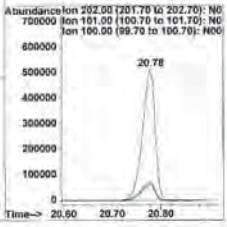


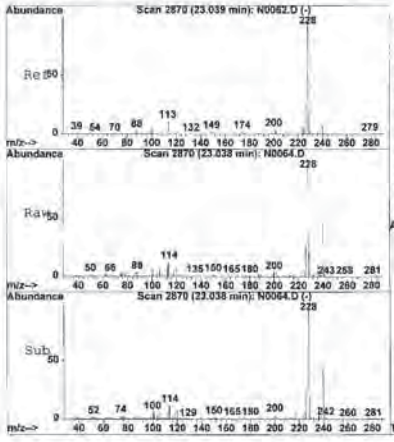


#59
Pyrene
Concen: 46.84 ug/mL
RT: 20.78 min Scan# 2533
Delta R.T. -0.00 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:202 Resp: 925224

Ion	Ratio	Lower	Upper
202	100		
101	16.2	0.0	45.7
100	13.6	0.0	43.7

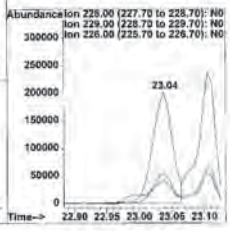


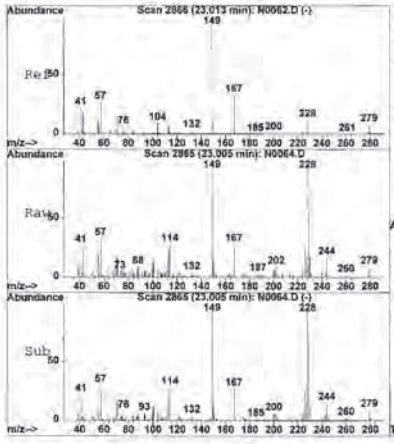


#63
Benzo[a]anthracene
Concen: 24.54 ug/mL
RT: 23.04 min Scan# 2870
Delta R.T. -0.00 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:228 Resp: 427716

Ion	Ratio	Lower	Upper
228	100		
229	27.1	0.0	49.7
226	26.6	0.0	55.5

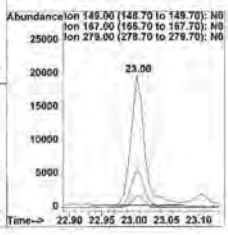


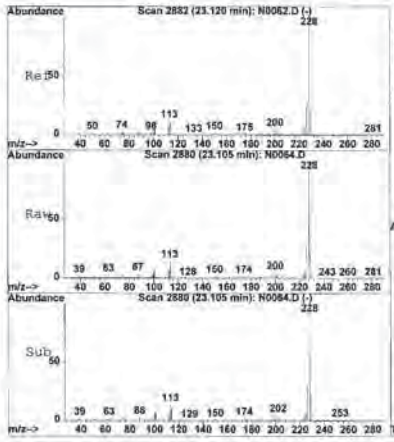


#64
bis(2-Ethylhexyl)phthalate
Concen: 1.72 ug/mL
RT: 23.00 min Scan# 2865
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:149 Resp: 29659

Ion	Ratio	Lower	Upper
149	100		
167	27.6	3.9	63.9
279	7.6	0.0	38.4

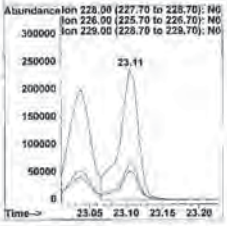


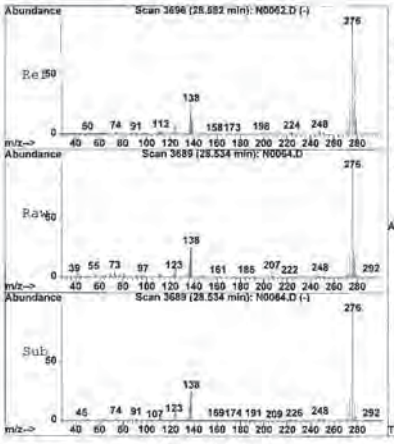


#65
Chrysene
Concen: 26.26 ug/mL
RT: 23.11 min Scan# 2880
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:228 Resp: 425525

Ion	Ratio	Lower	Upper
228	100		
226	28.5	0.0	58.0
229	22.8	0.0	49.4

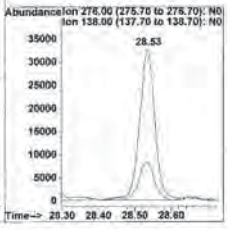


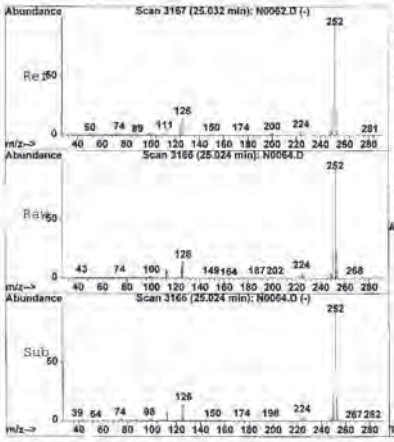


#67
Indeno[1,2,3-cd]pyrene
Concen: 5.22 ug/mL
RT: 28.53 min Scan# 3689
Delta R.T. -0.05 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:276 Resp: 95814

Ion	Ratio	Lower	Upper
276	100		
138	26.0	0.0	58.7

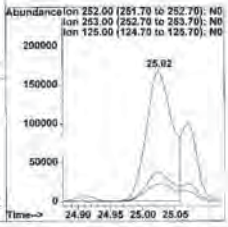


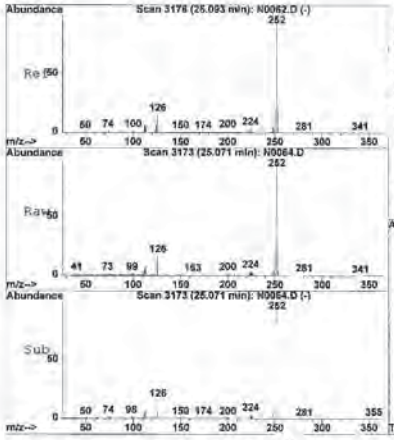


#69
Benzo[b]fluoranthene
Concen: 44.83 ug/mL
RT: 25.02 min Scan# 3166
Delta R.T. -0.01 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:252 Resp: 476543

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	52.0
125	20.0	0.0	42.3

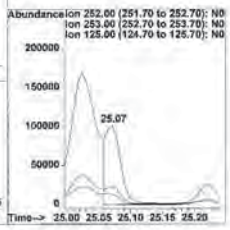


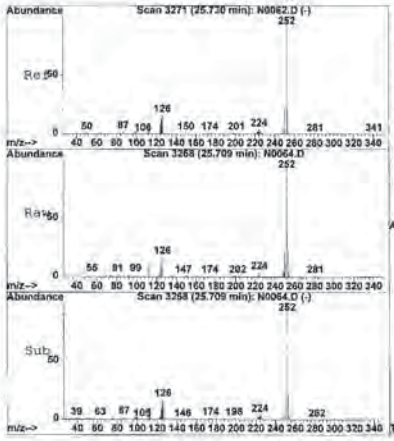


#70
Benzo[k]fluoranthene
Concen: 15.90 ug/mL m
RT: 25.07 min Scan# 3173
Delta R.T. -0.02 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:252 Resp: 160604

Ion	Ratio	Lower	Upper
252	100		
253	66.1	0.0	52.1#
125	59.3	0.0	42.7#

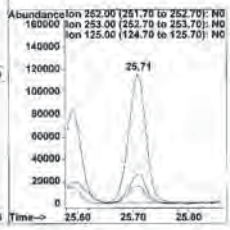


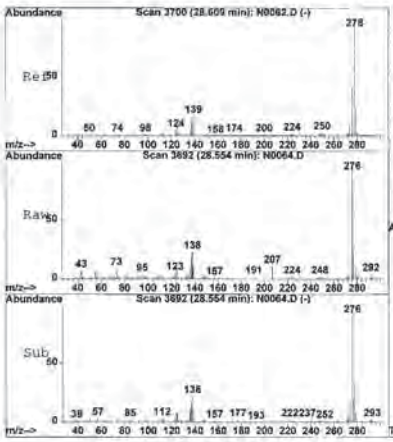


#71
Benzo[a]pyrene
Concen: 26.23 ug/mL
RT: 25.71 min Scan# 3268
Delta R.T. -0.02 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:252 Resp: 253426

Ion	Ratio	Lower	Upper
252	100		
253	23.8	0.0	52.0
125	15.0	0.0	43.7

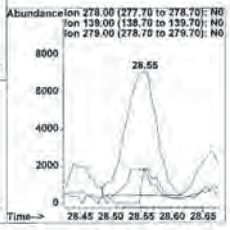


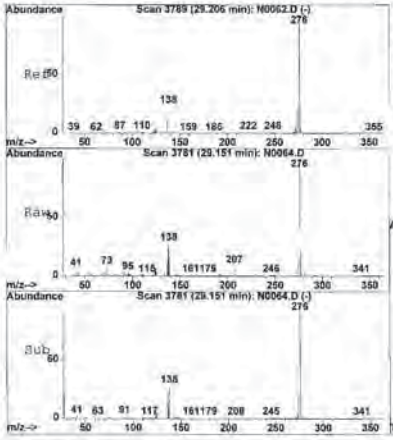


#72
Dibenz[a,h]anthracene
Concen: 2.54 ug/mL
RT: 28.55 min Scan# 3692
Delta R.T. -0.05 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:278 Resp: 23094

Ion	Ratio	Lower	Upper
278	100		
139	12.8	0.0	45.5
279	27.3	0.0	53.7

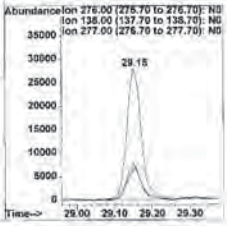




#73
Benzo[g,h,i]perylene
Concen: 8.30 ug/mL
RT: 29.15 min Scan# 3781
Delta R.T. -0.05 min
Lab File: N0064.D
Acq: 21 Oct 2008 12:15

Tgt Ion:276 Resp: 74082

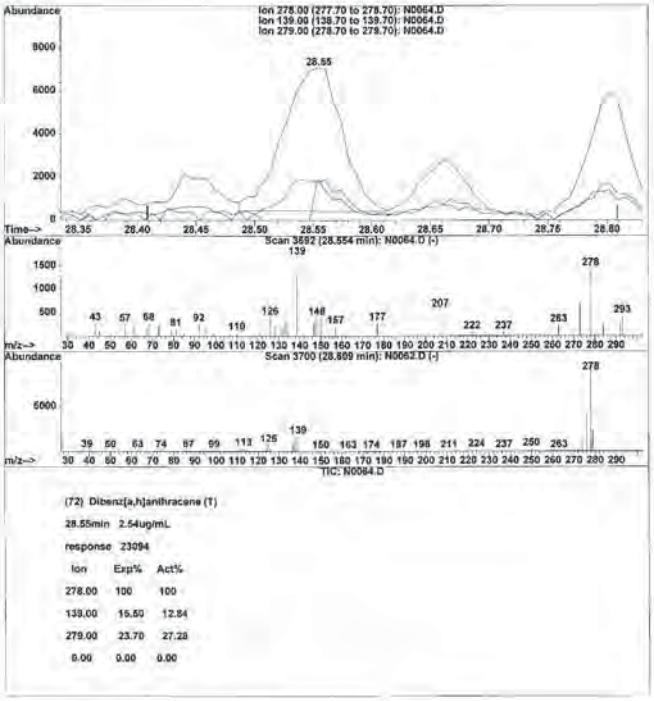
Ion	Ratio	Lower	Upper
276	100		
138	29.8	0.0	54.3
277	27.4	0.0	53.6



Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
Quant Time: Oct 22 13:08 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:52 2008 Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	229023	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	798507	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	460651	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.03	188	787691	40.00 ug/mL	0.00
14) Chrysene-d12	23.06	240	646899	40.00 ug/mL	0.00
15) Perylene-d12	25.84	264	391291	40.00 ug/mL	0.00

System Monitoring Compounds

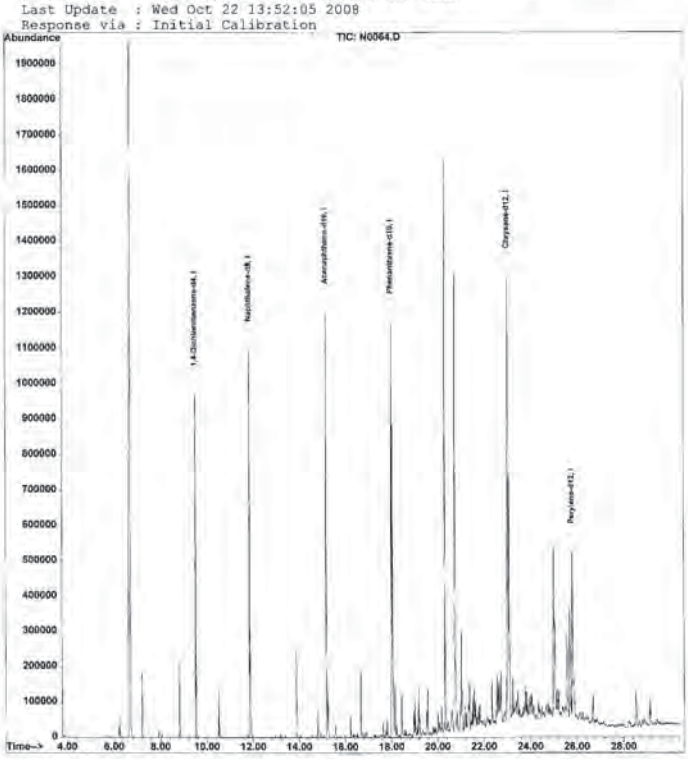
Target Compounds Qvalue

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:52 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration



N0064.D NO14OLM.M Wed Oct 22 13:58:51 2008 Pag

512

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Oct 2008 12:15
Data File: C:\HPCHEM\1\DATA\N0064.D
Name: 0810083-001B
Misc: SAMP,8270S_OLM42, 50uL/.5mL
Method: C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title: BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library Searched: C:\DATABASE\NBS75K.L

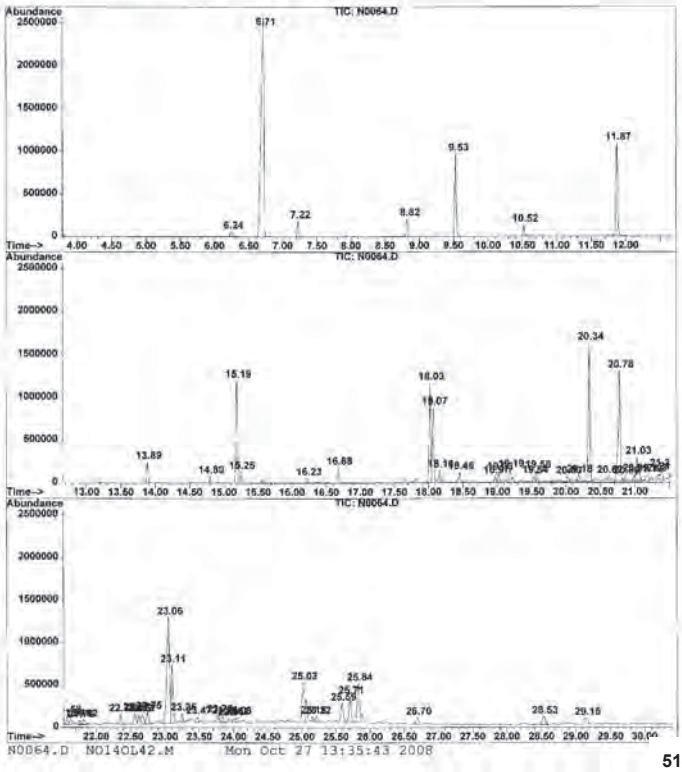
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
2-Pentanone, 4-hydro	6.71	199.5	ug/mL	7347990	ISTD01	9.53	1473090	40.0
4H-Cyclopenta[def]ph	19.19	5.6	ug/mL	278142	ISTD04	18.03	1996160	40.0
9,10-Anthracenedione	19.58	4.2	ug/mL	210341	ISTD04	18.03	1996160	40.0
Perylene	25.22	4.0	ug/mL	130264	ISTD06	25.84	1080390	40.0
Perylene	25.59	22.7	ug/mL	612368	ISTD06	25.84	1080390	40.0
Pentacosane	26.70	6.7	ug/mL	180633	ISTD06	25.84	1080390	40.0

N0064.D NO14OL42.M Mon Oct 27 13:35:46 2008

513

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\N0064.D
Operator : MEG
Acquired : 21 Oct 2008 12:15 using AcqMethod NO14FULL
Instrument : #5MS26
Sample Name: 0810083-001B
Misc Info : SAMP,8270S_OLM42, 50uL/.5mL
Vial Number: 4
Quant File :NO14OL42.RES (RTE Integrator)



N0064.D NO14OL42.M Mon Oct 27 13:35:43 2008

514

Library Search Compound Report

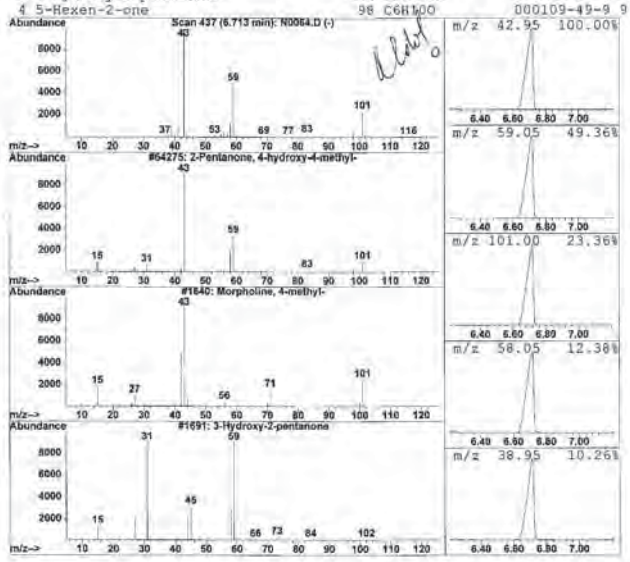
Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.71	199.53 ug/mL	7347990	1,4-Dichlorobenzene-d4	9.53

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
3	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
4	5-Hexen-2-one	98	C6H10O	000109-49-9	9



N0064.D NO14OL42.M Mon Oct 27 13:35:43 2008 Pag

515

Library Search Compound Report

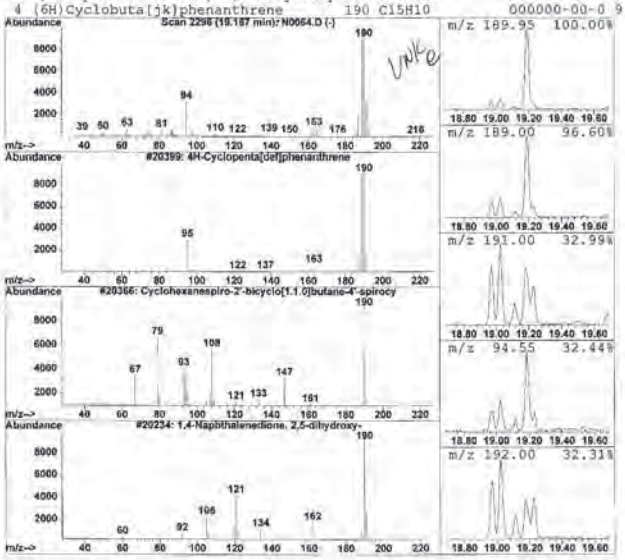
Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 4H-Cyclopenta[def]phenanthrene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.19	5.57 ug/mL	278142	Phenanthrene-d10	18.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
2	Cyclohexanespiro-2'-bicyclo[1.1.0]b	190	C14H22	000000-00-0	27
3	1,4-Naphthalenedione, 2,5-dihydroxy	190	C10H6O4	004923-55-1	9
4	(6H)Cyclobuta[jk]phenanthrene	190	C15H10	000000-00-0	9



N0064.D NO14OL42.M Mon Oct 27 13:35:44 2008 Pag 516

Library Search Compound Report

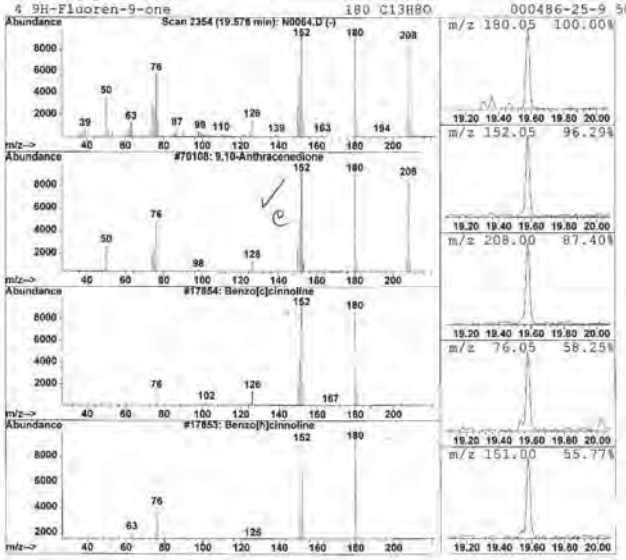
Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 9,10-Anthracenedione Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.58	4.21 ug/mL	210341	Phenanthrene-d10	18.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Anthracenedione	208	C14H8O2	000084-65-1	98
2	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	93
3	Benzo[h]cinnoline	180	C12H8N2	000000-00-0	52
4	9H-Fluoren-9-one	180	C13H8O	000486-25-9	50



N0064.D NO14OL42.M Mon Oct 27 13:35:44 2008 Pag 517

Library Search Compound Report

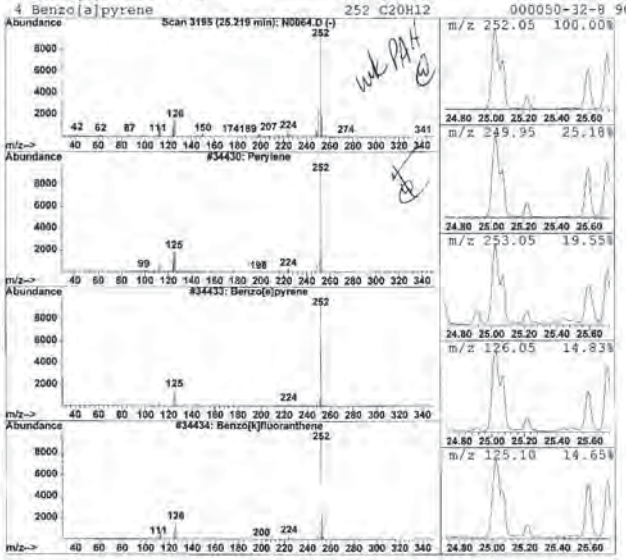
Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 Perylene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.22	4.82 ug/mL	130264	Perylene-d12	25.84

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene	252	C20H12	000198-55-0	93
2	Benzo[e]pyrene	252	C20H12	000192-97-2	93
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	91
4	Benzo[a]pyrene	252	C20H12	000050-32-8	90



N0064.D NO14OL42.M Mon Oct 27 13:35:45 2008 Pag 518

Library Search Compound Report

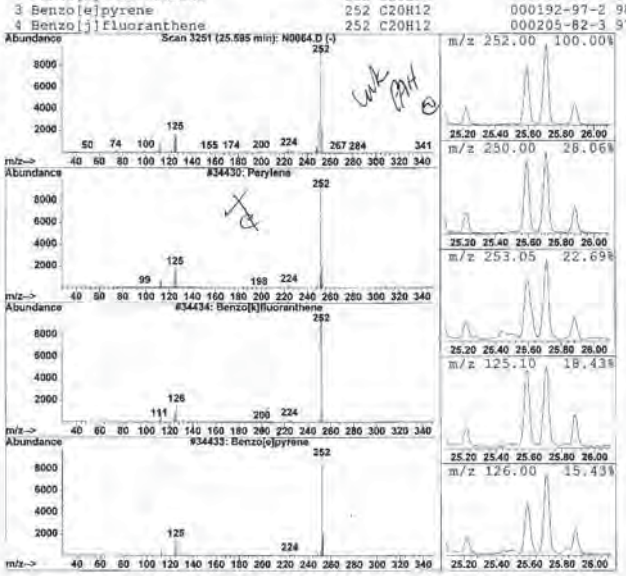
Data File : C:\HPCHEM\1\DATA\N0064.D Vial: 4
Acq On : 21 Oct 2008 12:15 Operator: MEG
Sample : 0810083-001B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 5 Perylene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.59	22.67 ug/mL	612368	Perylene-d12	25.84

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene	252	C20H12	000198-55-0	98
2	Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
3	Benzo[e]pyrene	252	C20H12	000192-97-2	98
4	Benzo[j]fluoranthene	252	C20H12	000205-82-3	97



N0064.D NO14OL42.M Mon Oct 27 13:35:45 2008 Pag 519

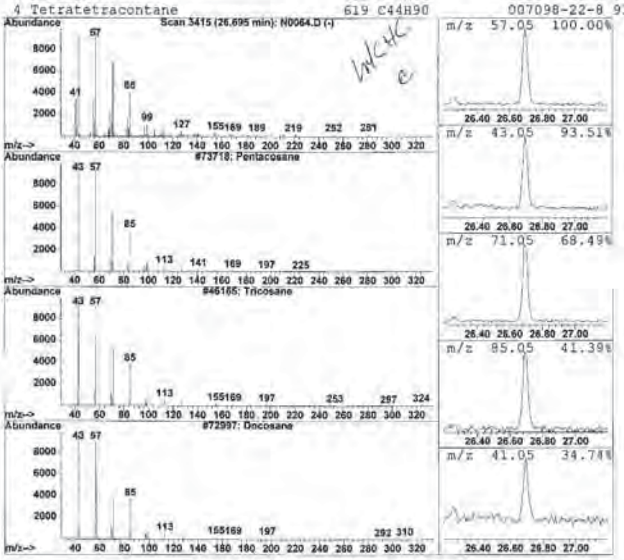
Library Search Compound Report

```
Data File : C:\HPCHEM\1\DATA\N0064.D                          Vial: 4
Acq On    : 21 Oct 2008  12:15                            Operator: MEG
Sample    : 0810083-001B                                  Inst     : #5MS26
Misc      : SAMP,8270S_OLM42, 50uL/.5mL                   Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library      : C:\DATABASE\NBS75K.L
**************************************************************************
Peak Number  6  Pentacosane                          Concentration Rank  3
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.70	6.69 ug/mL	180633	Perylene-d12	25.84

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentacosane	352	C25H52	000629-99-2	91
2	Tricosane	324	C23H48	000638-67-5	91
3	Docosane	310	C22H46	000629-97-0	91
4	Tetratetracontane	619	C44H90	007098-22-8	91



N0064.D N014OL42.M Mon Oct 27 13:35:46 2008 Pag

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site			Client Sample ID:	*MBSS-2*
W Order:	0810083			Collection Date:	10/10/08 9:30
Matrix:	SOIL			Date Received:	10/10/08 13:20
Inst. ID:	MS05_26	Sample Size:	30 g	PrepDate:	10/21/08 14:09
ColumnID:	DB-5MS	%Moisture:	25.1	BatchNo:	8309/R15276
Revision:	10/27/08 14:18	TestCode:	8270S_OLM42	FileID:	1-SAMP-N0087.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		4400	58	µg/Kg-dry	10	10/23/08 19:21
2,4,5-Trichlorophenol	ND		22000	280	µg/Kg-dry	10	10/23/08 19:21
2,4,6-Trichlorophenol	ND		4400	76	µg/Kg-dry	10	10/23/08 19:21
2,4-Dichlorophenol	ND		4400	51	µg/Kg-dry	10	10/23/08 19:21
2,4-Dimethylphenol	ND		4400	850	µg/Kg-dry	10	10/23/08 19:21
2,4-Dinitrophenol	ND		22000	4400	µg/Kg-dry	10	10/23/08 19:21
2,4-Dinitrotoluene	ND		4400	64	µg/Kg-dry	10	10/23/08 19:21
2,6-Dinitrotoluene	ND		4400	75	µg/Kg-dry	10	10/23/08 19:21
2-Chloronaphthalene	ND		4400	49	µg/Kg-dry	10	10/23/08 19:21
2-Chlorophenol	ND		4400	68	µg/Kg-dry	10	10/23/08 19:21
2-Methylnaphthalene	ND		4400	21	µg/Kg-dry	10	10/23/08 19:21
2-Methylphenol	ND		4400	50	µg/Kg-dry	10	10/23/08 19:21
2-Nitroaniline	ND		22000	79	µg/Kg-dry	10	10/23/08 19:21
2-Nitrophenol	ND		4400	180	µg/Kg-dry	10	10/23/08 19:21
3,3'-Dichlorobenzidine	ND		8800	530	µg/Kg-dry	10	10/23/08 19:21
3-Nitroaniline	ND		22000	530	µg/Kg-dry	10	10/23/08 19:21
4,6-Dinitro-2-methylphenol	ND		22000	2200	µg/Kg-dry	10	10/23/08 19:21
4-Bromophenyl phenyl ether	ND		4400	69	µg/Kg-dry	10	10/23/08 19:21
4-Chloro-3-methylphenol	ND		4400	130	µg/Kg-dry	10	10/23/08 19:21
4-Chloroaniline	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
4-Chlorophenyl phenyl ether	ND		4400	54	µg/Kg-dry	10	10/23/08 19:21
4-Methylphenol	ND		4400	38	µg/Kg-dry	10	10/23/08 19:21
4-Nitroaniline	ND		22000	530	µg/Kg-dry	10	10/23/08 19:21
4-Nitrophenol	ND		22000	890	µg/Kg-dry	10	10/23/08 19:21
Acenaphthene	500	J	4400	44	µg/Kg-dry	10	10/23/08 19:21
Acenaphthylene	ND		4400	53	µg/Kg-dry	10	10/23/08 19:21
Acetophenone	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Anthracene	1100	J	4400	31	µg/Kg-dry	10	10/23/08 19:21
Atrazine	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Benzaldehyde	ND		4400	67	µg/Kg-dry	10	10/23/08 19:21
Benzo[a]anthracene	5400		4400	46	µg/Kg-dry	10	10/23/08 19:21
Benzo[a]pyrene	5100		4400	130	µg/Kg-dry	10	10/23/08 19:21
Benzo[b]fluoranthene	8300		4400	150	µg/Kg-dry	10	10/23/08 19:21
Benzo[g,h,i]perylene	1700	J	4400	180	µg/Kg-dry	10	10/23/08 19:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399188 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site			Client Sample ID:	*MBSS-2*
W Order:	0810083			Collection Date:	10/10/08 9:30
Matrix:	SOIL			Date Received:	10/10/08 13:20
Inst. ID:	MS05_26	Sample Size:	30 g	PrepDate:	10/21/08 14:09
ColumnID:	DB-5MS	%Moisture:	25.1	BatchNo:	8309/R15276
Revision:	10/27/08 14:18	TestCode:	8270S_OLM42	FileID:	1-SAMP-N0087.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	3200	J	4400	150	µg/Kg-dry	10	10/23/08 19:21
bis(2-Chloroethoxy)methane	ND		4400	41	µg/Kg-dry	10	10/23/08 19:21
bis(2-chloroethyl)ether	ND		4400	68	µg/Kg-dry	10	10/23/08 19:21
bis(2-chloroisopropyl)ether	ND		4400	76	µg/Kg-dry	10	10/23/08 19:21
bis(2-Ethylhexyl)phthalate	ND		4400	200	µg/Kg-dry	10	10/23/08 19:21
Butyl benzyl phthalate	ND		4400	160	µg/Kg-dry	10	10/23/08 19:21
Caprolactam	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Carbazole	710	J	4400	130	µg/Kg-dry	10	10/23/08 19:21
Chrysene	5500		4400	37	µg/Kg-dry	10	10/23/08 19:21
Di-n-butyl phthalate	ND		4400	1100	µg/Kg-dry	10	10/23/08 19:21
Di-n-octyl phthalate	ND		4400	26	µg/Kg-dry	10	10/23/08 19:21
Dibenz[a,h]anthracene	620	J	4400	180	µg/Kg-dry	10	10/23/08 19:21
Dibenzofuran	ND		4400	61	µg/Kg-dry	10	10/23/08 19:21
Diethyl phthalate	ND		4400	47	µg/Kg-dry	10	10/23/08 19:21
Dimethyl phthalate	ND		4400	46	µg/Kg-dry	10	10/23/08 19:21
Fluoranthene	11000		4400	130	µg/Kg-dry	10	10/23/08 19:21
Fluorene	470	J	4400	46	µg/Kg-dry	10	10/23/08 19:21
Hexachlorobenzene	ND		4400	72	µg/Kg-dry	10	10/23/08 19:21
Hexachlorobutadiene	ND		4400	40	µg/Kg-dry	10	10/23/08 19:21
Hexachlorocyclopentadiene	ND		4400	2200	µg/Kg-dry	10	10/23/08 19:21
Hexachloroethane	ND		4400	530	µg/Kg-dry	10	10/23/08 19:21
Indeno[1,2,3-cd]pyrene	960	J	4400	180	µg/Kg-dry	10	10/23/08 19:21
Isophorone	ND		4400	37	µg/Kg-dry	10	10/23/08 19:21
N-Nitroso-di-n-propylamine	ND		4400	51	µg/Kg-dry	10	10/23/08 19:21
N-Nitrosodiphenylamine	ND		4400	30	µg/Kg-dry	10	10/23/08 19:21
Naphthalene	ND		4400	34	µg/Kg-dry	10	10/23/08 19:21
Nitrobenzene	ND		4400	47	µg/Kg-dry	10	10/23/08 19:21
Pentachlorophenol	ND		22000	4400	µg/Kg-dry	10	10/23/08 19:21
Phenanthrene	5800		4400	19	µg/Kg-dry	10	10/23/08 19:21
Phenol	ND		4400	41	µg/Kg-dry	10	10/23/08 19:21
Pyrene	11000		4400	30	µg/Kg-dry	10	10/23/08 19:21
Surr: 2,4,6-Tribromophenol	68.3		20-143	0	%REC	10	10/23/08 19:21
Surr: 2-Fluorobiphenyl	68.8		46-130	0	%REC	10	10/23/08 19:21
Surr: 2-Fluorophenol	71.6		22-130	0	%REC	10	10/23/08 19:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399188 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site			Client Sample ID:	*MBSS-2*
W Order:	0810083			Collection Date:	10/10/08 9:30
Matrix:	SOIL			Date Received:	10/10/08 13:20
Inst. ID:	MS05_26	Sample Size:	30 g	PrepDate:	10/21/08 14:09
ColumnID:	DB-5MS	%Moisture:	25.1	BatchNo:	8309/R15276
Revision:	10/27/08 14:18	TestCode:	8270S_OLM42	FileID:	1-SAMP-N0087.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	66.4		39-130	0	%REC	10	10/23/08 19:21
Surr: Phenol-d5	69.3		33-130	0	%REC	10	10/23/08 19:21
Surr: Terphenyl-d14	66.1		36-146	0	%REC	10	10/23/08 19:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399188 Project Supervisor: Monika Santucci

Form 1 TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBS3-2

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-002B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0087.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 25 Date Analyzed: 10/23/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 10.00

Extract Volume: 1000 (pl)

Number TICs found: 4 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	aldol	6.64	78000	JBA
2.	unknown hydrocarbon (25.09)	25.09	2400	J
3. 000192-97-2	Benzo[e]pyrene	25.51	5100	JN
4.	unknown hydrocarbon (26.61)	26.61	4100	J

FORM I TIC 5 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:55 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

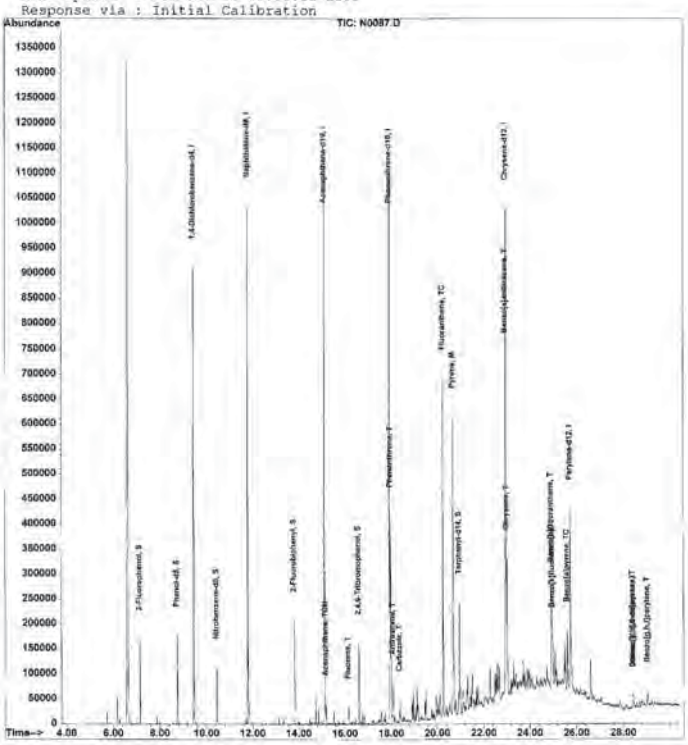
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	211900	40.00 ug/mL	0.00
13) Naphthalene-d8	11.82	136	752150	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.13	164	428263	40.00 ug/mL	0.00
47) Phenanthrene-d10	17.97	188	712195	40.00 ug/mL	0.00
58) Chrysene-d12	23.00	240	535191	40.00 ug/mL	-0.01
68) Perylene-d12	25.75	264	296140	40.00 ug/mL	-0.01
System Monitoring Compounds					
2) 2-Fluorophenol	7.16	112	62778	10.74 ug/mL	0.00
Spiked Amount 150.000			Recovery =	7.16%	
3) Phenol-d5	8.76	99	83120	10.39 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	6.93%	
14) Nitrobenzene-d5	10.47	82	57494	6.64 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	6.64%	
30) 2-Fluorobiphenyl	13.83	172	91435	6.88 ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.88%	
46) 2,4,6-Tribromophenol	16.63	330	30463	10.24 ug/mL	0.00
Spiked Amount 150.000			Recovery =	6.83%	
60) Terphenyl-d14	20.98	244	82653	8.61 ug/mL	0.00
Spiked Amount 100.000			Recovery =	8.61%	
Target Compounds					Qvalue
37) Acenaphthene	15.19	153	13095	1.13 ug/mL	90
44) Fluorene	16.17	166	14902	1.05 ug/mL	94
53) Phenanthrene	18.01	178	232270	13.03 ug/mL	99
54) Anthracene	18.10	178	45577	2.51 ug/mL	96
55) Carbazole	18.40	167	26394	1.59 ug/mL	95
57) Fluoranthene	20.28	202	428906	24.03 ug/mL	96
59) Pyrene	20.71	202	395846	24.22 ug/mL	94
63) Benzo[a]anthracene	22.98	228	175164	12.15 ug/mL	92
65) Chrysene	23.04	228	166939	12.45 ug/mL	96
67) Indeno[1,2,3-cd]pyrene	28.43	276	32601	2.15 ug/mL	90
69) Benzo[b]fluoranthene	24.95	252	167757	20.85 ug/mL	90
70) Benzo[k]fluoranthene	25.00	252	5567(m)	7.28 ug/mL	
71) Benzo[a]pyrene	25.63	252	84423	11.55 ug/mL	92
72) Dibenz[a,h]anthracene	28.46	278	9636	1.40 ug/mL	92
73) Benzo[g,h,i]perylene	29.07	276	25766	3.82 ug/mL	89

(#) = qualifier out of range (m) = manual integration
N0087.D N014OL42.M Fri Oct 24 08:59:51 2008 Pag

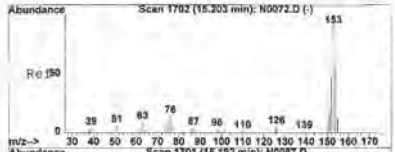
Quantitation Report

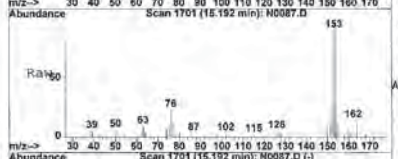
Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:55 2008 Quant Results File: N014OL42.RES

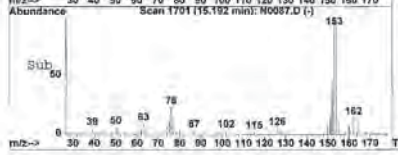
Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



N0087.D N014OL42.M Fri Oct 24 08:59:52 2008 Pag



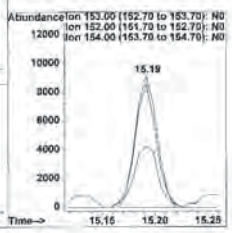


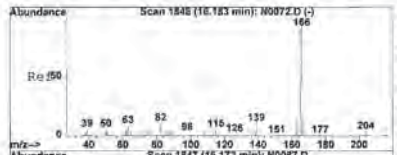


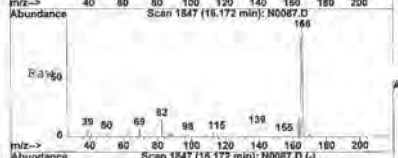
#37
Acenaphthene
Concen: 1.13 ug/mL
RT: 15.19 min Scan# 1701
Delta R.T. -0.01 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

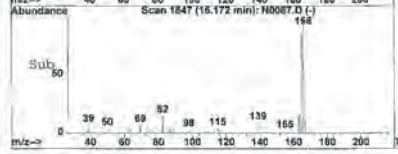
Tgt Ion:153 Resp: 13095

Ion	Ratio	Lower	Upper
153	100		
152	51.1	17.4	77.4
154	91.5	74.5	134.5





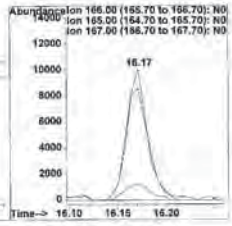




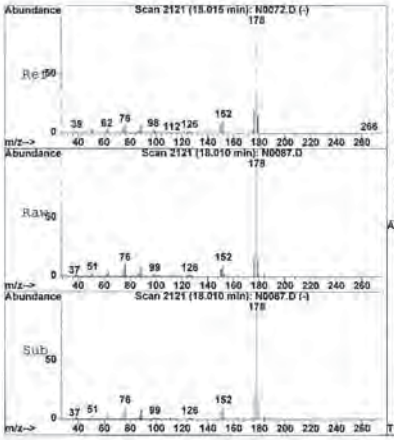
#44
Fluorene
Concen: 1.05 ug/mL
RT: 16.17 min Scan# 1847
Delta R.T. -0.01 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:166 Resp: 14902

Ion	Ratio	Lower	Upper
166	100		
165	96.2	60.8	120.8
167	15.5	0.0	43.4



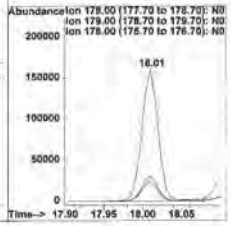
N0087.D N014OL42.M Fri Oct 24 08:59:53 2008 Pag

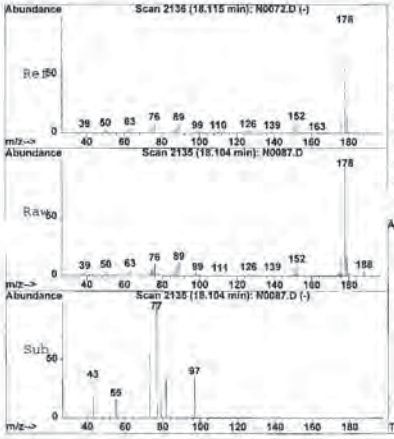


#53
Phenanthrene
Concen: 13.03 ug/mL
RT: 18.01 min Scan# 2121
Delta R.T. -0.00 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:178 Resp: 232270

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.3
176	18.7	0.0	48.5

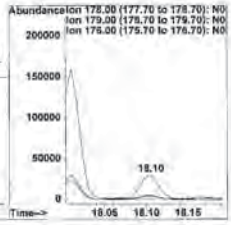


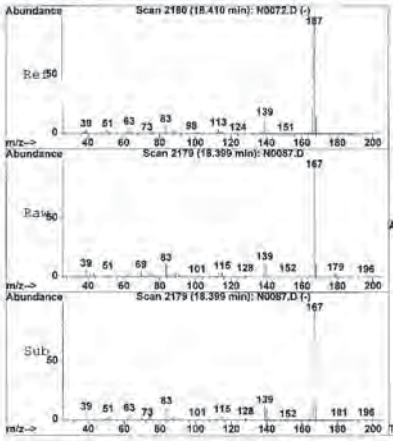


#54
Anthracene
Concen: 2.51 ug/mL
RT: 18.10 min Scan# 2135
Delta R.T. -0.01 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:178 Resp: 45577

Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	45.5
176	20.3	0.0	47.7

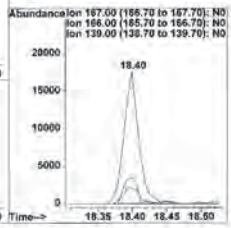


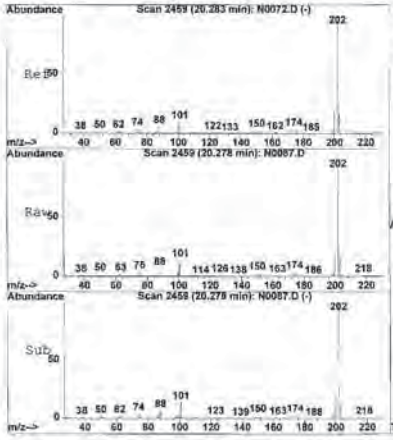


#55
Carbazole
Concen: 1.59 ug/mL
RT: 18.40 min Scan# 2179
Delta R.T. -0.01 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:167 Resp: 26394

Ion	Ratio	Lower	Upper
167	100		
166	18.6	0.0	51.2
139	13.2	0.0	42.2

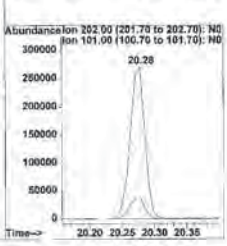


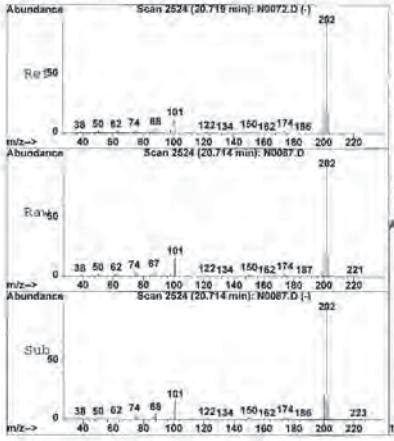


#57
Fluoranthene
Concen: 24.03 ug/mL
RT: 20.28 min Scan# 2459
Delta R.T. -0.00 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:202 Resp: 428906

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	42.2

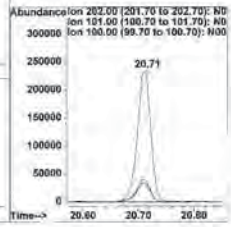


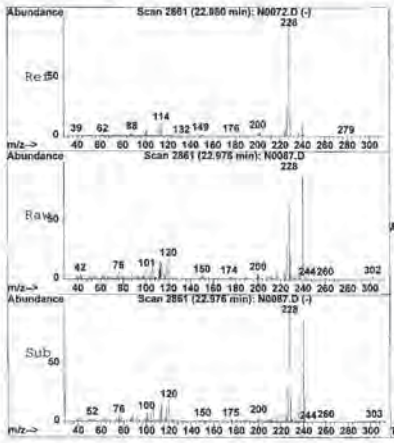


#59
Pyrene
Concen: 24.22 ug/mL
RT: 20.71 min Scan# 2524
Delta R.T. -0.00 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:202 Resp: 395846

Ion	Ratio	Lower	Upper
202	100		
101	18.8	0.0	45.7
100	15.5	0.0	43.7

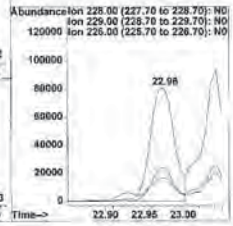


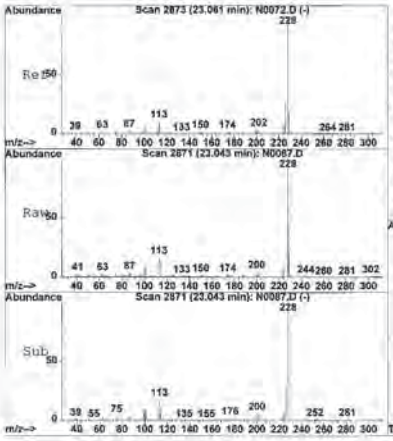


#63
Benzo[a]anthracene
Concen: 12.15 ug/mL
RT: 22.98 min Scan# 2861
Delta R.T. -0.00 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:228 Resp: 175164

Ion	Ratio	Lower	Upper
228	100		
229	14.9	0.0	48.7
226	28.6	0.0	55.5

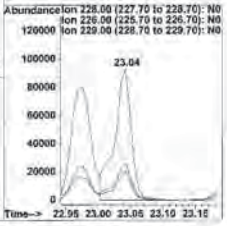


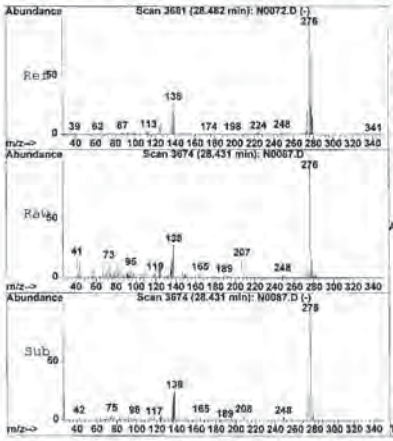


#65
Chrysene
Concen: 12.45 ug/mL
RT: 23.04 min Scan# 2871
Delta R.T. -0.02 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:228 Resp: 166939

Ion	Ratio	Lower	Upper
228	100		
226	28.9	0.0	58.0
229	22.5	0.0	49.4

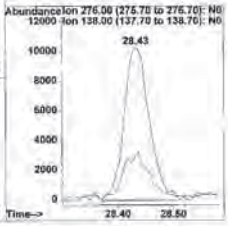


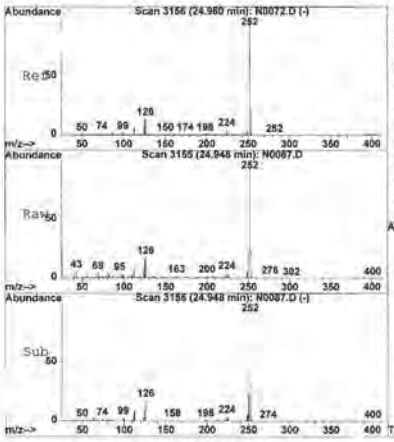


#67
Indeno[1,2,3-cd]pyrene
Concen: 2.15 ug/mL
RT: 28.43 min Scan# 3674
Delta R.T. -0.05 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:276 Resp: 32601

Ion	Ratio	Lower	Upper
276	100		
138	33.8	0.0	58.7

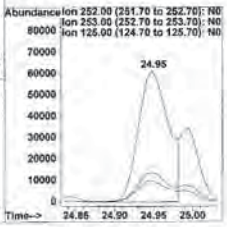


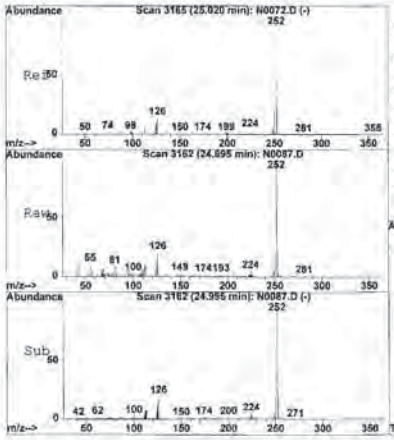


#69
Benzo[b]fluoranthene
Concen: 20.85 ug/mL
RT: 24.95 min Scan# 3155
Delta R.T. -0.01 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:252 Resp: 167757

Ion	Ratio	Lower	Upper
252	100		
253	21.0	0.0	52.0
125	21.6	0.0	42.3

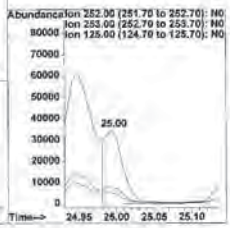


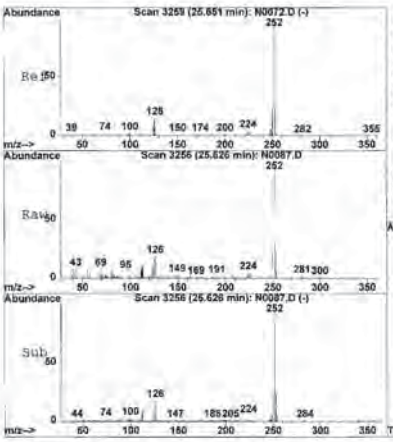


#70
Benzo[k]fluoranthene
Concen: 7.28 ug/mL m
RT: 25.00 min Scan# 3162
Delta R.T. -0.02 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:252 Resp: 55671

Ion	Ratio	Lower	Upper
252	100		
253	62.8	0.0	52.1#
125	65.0	0.0	42.7#

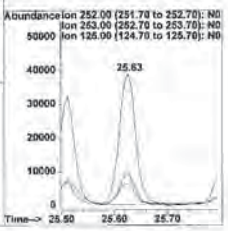


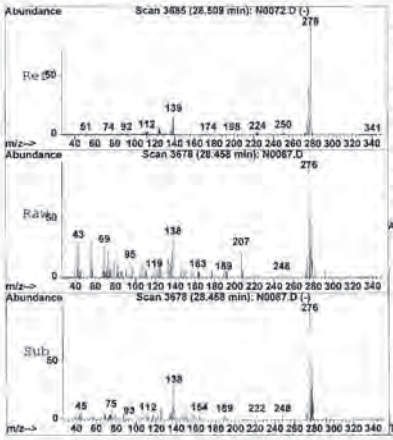


#71
Benzo[a]pyrene
Concen: 11.55 ug/mL
RT: 25.63 min Scan# 3256
Delta R.T. -0.02 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:252 Resp: 84423

Ion	Ratio	Lower	Upper
252	100		
253	25.7	0.0	52.0
125	17.6	0.0	43.7

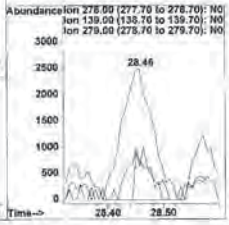




#72
Dibenz[a,h]anthracene
Concen: 1.40 ug/mL
RT: 28.46 min Scan# 3678
Delta R.T. -0.05 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:278 Resp: 9638

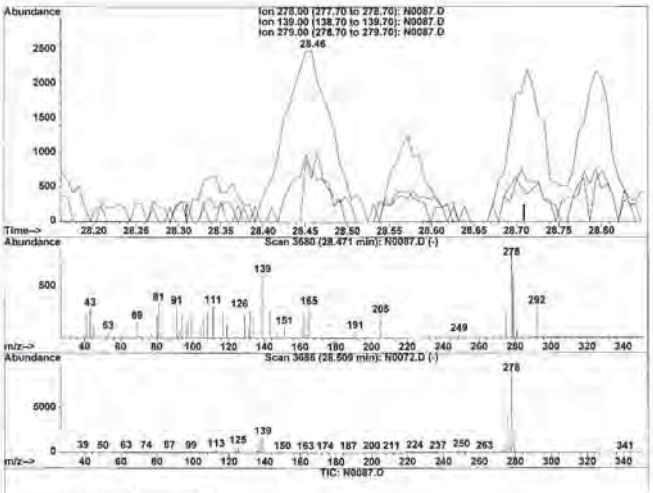
Ion	Ratio	Lower	Upper
278	100		
139	20.5	0.0	45.5
279	26.8	0.0	53.7



Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
Quant Time: Oct 24 8:55 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Multiple Level Calibration

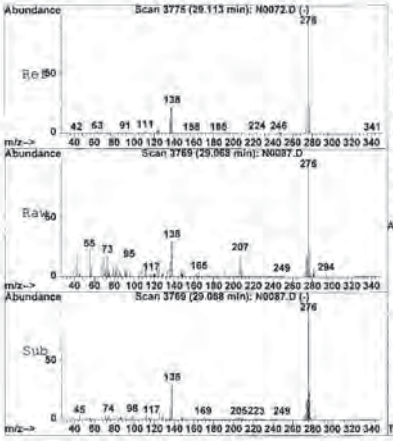


(72) Dibenz[a,h]anthracene (T)

28.46min 1.40ug/mL

response 9638

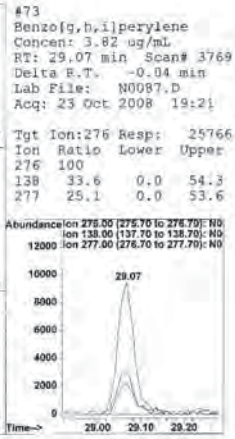
Ion	Exp%	Act%
278.00	100	100
139.00	15.50	20.45
279.00	23.70	26.76
0.00	0.00	0.00



#73
Benzo[g,h,i]perylene
Concen: 3.82 ug/mL
RT: 29.07 min Scan# 3769
Delta R.T. -0.04 min
Lab File: N0087.D
Acq: 23 Oct 2008 19:21

Tgt Ion:276 Resp: 25766

Ion	Ratio	Lower	Upper
276	100		
138	33.6	0.0	54.3
277	25.1	0.0	53.6



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008 Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	211900	40.00 ug/mL	0.00
5) Naphthalene-d8	11.82	136	752150	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.13	164	428263	40.00 ug/mL	0.00
11) Phenanthrene-d10	17.97	188	712195	40.00 ug/mL	0.00
14) Chrysene-d12	23.00	240	535191	40.00 ug/mL	0.00
15) Perylene-d12	25.75	264	296140	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

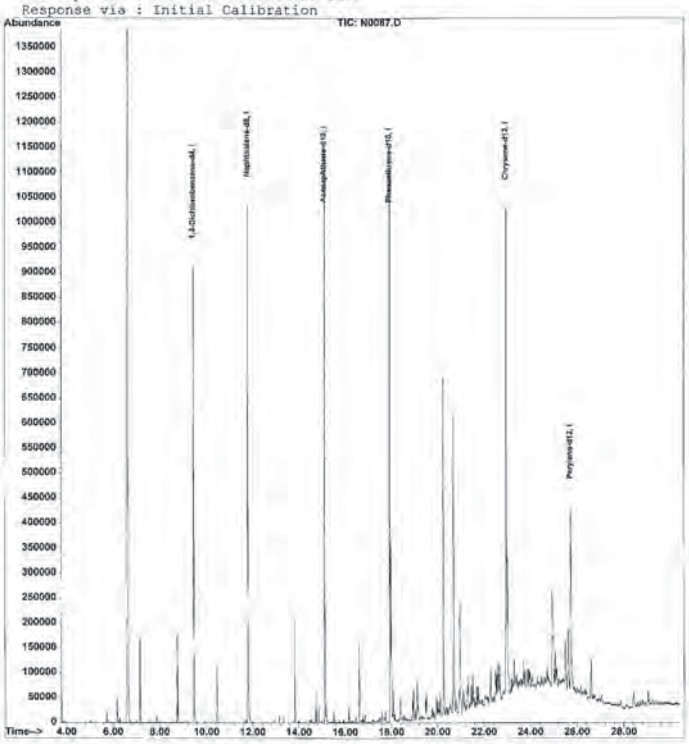
(#) = qualifier out of range (m) = manual integration
N0087.D NO14OLM.M Fri Oct 24 09:08:53 2008 Pag

536

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



N0087.D NO14OLM.M Fri Oct 24 09:08:53 2008 Pag

537

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 23 Oct 2008 19:21
Data File: C:\HPCHEM\1\DATA\N0087.D
Name: 0810083-002B
Misc: SAMP,8270S_OLM42, 50uL/.5mL
Method: C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title: BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library Searched: C:\DATABASE\NB375K.L

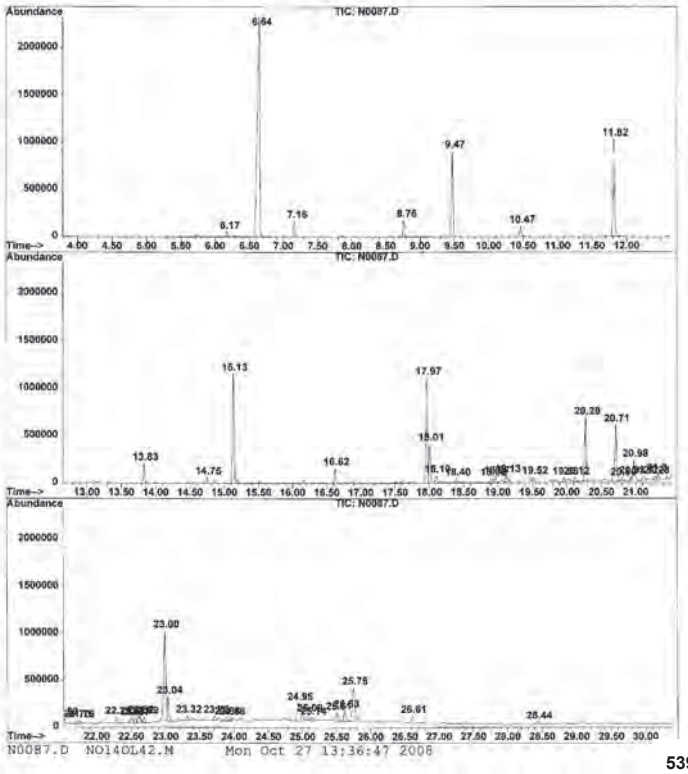
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
2-Pentanone, 4-hydro	6.64	175.4	ug/mL	6151270	ISTD01	9.47	1402710	40.0
Octadecane	25.09	5.4	ug/mL	115831	ISTD06	25.75	863595	40.0
Benzo[e]pyrene	25.51	11.5	ug/mL	248432	ISTD06	25.75	863595	40.0
Hexatriacontane	26.61	9.3	ug/mL	199795	ISTD06	25.75	863595	40.0

N0087.D NO14OL42.M Mon Oct 27 13:36:49 2008

538

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\N0087.D
Operator : MEG
Acquired : 23 Oct 2008 19:21 using AcqMethod NO14FULL
Instrument : #5MS26
Sample Name: 0810083-002B
Misc Info : SAMP,8270S_OLM42, 50uL/.5mL
Vial Number: 17
Quant File :NO14OL42.RES (RTE Integrator)



N0087.D NO14OL42.M Mon Oct 27 13:36:47 2008

539

Library Search Compound Report

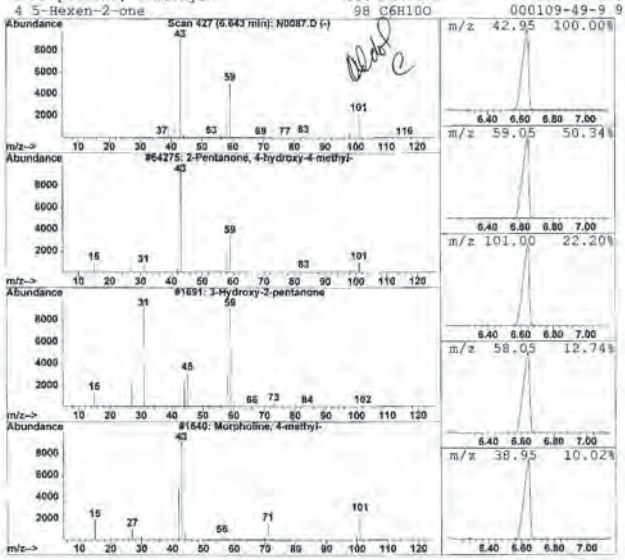
Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.64	175.41 ug/mL	6151270	1,4-Dichlorobenzene-d4	9.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	5-Hexen-2-one	98	C6H10O	000109-49-9	9



Library Search Compound Report

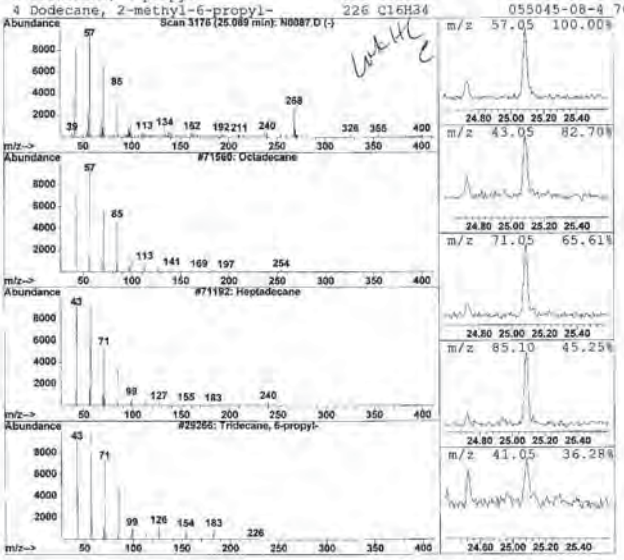
Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Octadecane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.09	5.37 ug/mL	115831	Perylene-d12	25.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	93
2	Heptadecane	240	C17H36	000629-78-7	89
3	Tridecane, 6-propyl-	226	C16H34	055045-10-8	89
4	Dodecane, 2-methyl-6-propyl-	226	C16H34	055045-08-4	76



Library Search Compound Report

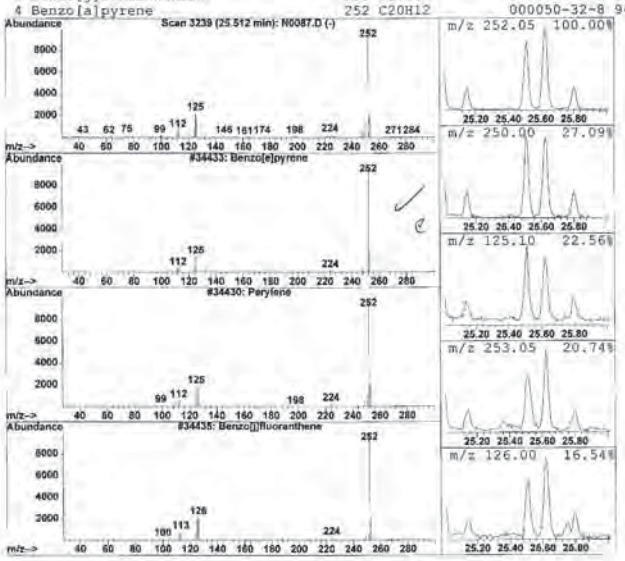
Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 Benzo[e]pyrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.51	11.51 ug/mL	248432	Perylene-d12	25.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	98
2	Perylene	252	C20H12	000198-55-0	97
3	Benzo[j]fluoranthene	252	C20H12	000205-82-3	96
4	Benzo[a]pyrene	252	C20H12	000050-32-8	94



Library Search Compound Report

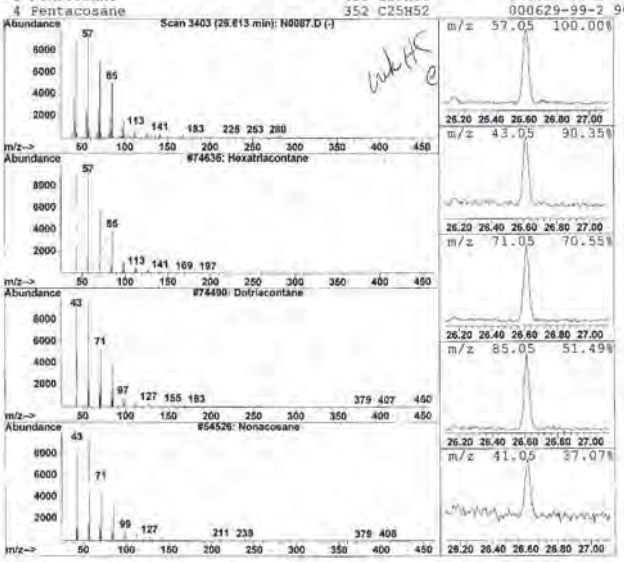
Data File : C:\HPCHEM\1\DATA\N0087.D Vial: 17
Acq On : 23 Oct 2008 19:21 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 Hexatriacontane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.61	9.25 ug/mL	199795	Perylene-d12	25.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexatriacontane	507	C36H74	000630-06-8	91
2	Dotriacontane	451	C32H66	000544-85-4	91
3	Nonacosane	408	C29H60	000630-03-5	91
4	Pentacosane	352	C25H52	000629-99-2	90



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/21/08 14:09
ColumnID:	DB-5MS	%Moisture: 25.1	BatchNo: 8309/R15276
Revision:	10/27/08 14:18	TestCode: 8270S OLM42	FileID: 1-DL-N0085.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		11000	140	µg/Kg-dry	25	10/23/08 18:05
2,4,5-Trichlorophenol	ND		56000	700	µg/Kg-dry	25	10/23/08 18:05
2,4,6-Trichlorophenol	ND		11000	190	µg/Kg-dry	25	10/23/08 18:05
2,4-Dichlorophenol	ND		11000	130	µg/Kg-dry	25	10/23/08 18:05
2,4-Dimethylphenol	ND		11000	2200	µg/Kg-dry	25	10/23/08 18:05
2,4-Dinitrophenol	ND		56000	11000	µg/Kg-dry	25	10/23/08 18:05
2,4-Dinitrotoluene	ND		11000	160	µg/Kg-dry	25	10/23/08 18:05
2,6-Dinitrotoluene	ND		11000	190	µg/Kg-dry	25	10/23/08 18:05
2-Chloronaphthalene	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
2-Chlorophenol	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
2-Methylnaphthalene	ND		11000	53	µg/Kg-dry	25	10/23/08 18:05
2-Methylphenol	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
2-Nitroaniline	ND		56000	200	µg/Kg-dry	25	10/23/08 18:05
2-Nitrophenol	ND		11000	440	µg/Kg-dry	25	10/23/08 18:05
3,3'-Dichlorobenzidine	ND		22000	1300	µg/Kg-dry	25	10/23/08 18:05
3-Nitroaniline	ND		56000	1300	µg/Kg-dry	25	10/23/08 18:05
4,6-Dinitro-2-methylphenol	ND		56000	5600	µg/Kg-dry	25	10/23/08 18:05
4-Bromophenyl phenyl ether	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
4-Chloro-3-methylphenol	ND		11000	330	µg/Kg-dry	25	10/23/08 18:05
4-Chloroaniline	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
4-Chlorophenyl phenyl ether	ND		11000	140	µg/Kg-dry	25	10/23/08 18:05
4-Methylphenol	ND		11000	95	µg/Kg-dry	25	10/23/08 18:05
4-Nitroaniline	ND		56000	1300	µg/Kg-dry	25	10/23/08 18:05
4-Nitrophenol	ND		56000	2200	µg/Kg-dry	25	10/23/08 18:05
Acenaphthene	ND		11000	110	µg/Kg-dry	25	10/23/08 18:05
Acenaphthylene	ND		11000	130	µg/Kg-dry	25	10/23/08 18:05
Acetophenone	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Anthracene	ND		11000	78	µg/Kg-dry	25	10/23/08 18:05
Atrazine	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Benzaldehyde	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
Benzo[a]anthracene	5600 J		11000	120	µg/Kg-dry	25	10/23/08 18:05
Benzo[a]pyrene	4800 J		11000	330	µg/Kg-dry	25	10/23/08 18:05
Benzo[b]fluoranthene	7500 J		11000	380	µg/Kg-dry	25	10/23/08 18:05
Benzo[g,h,i]perylene	2100 J		11000	440	µg/Kg-dry	25	10/23/08 18:05

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399186 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/21/08 14:09
ColumnID:	DB-5MS	%Moisture: 25.1	BatchNo: 8309/R15276
Revision:	10/27/08 14:18	TestCode: 8270S OLM42	FileID: 1-DL-N0085.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	3200 J		11000	370	µg/Kg-dry	25	10/23/08 18:05
bis(2-Chloroethoxy)methane	ND		11000	100	µg/Kg-dry	25	10/23/08 18:05
bis(2-chloroethyl)ether	ND		11000	170	µg/Kg-dry	25	10/23/08 18:05
bis(2-chloroisopropyl)ether	ND		11000	190	µg/Kg-dry	25	10/23/08 18:05
bis(2-Ethylhexyl)phthalate	ND		11000	500	µg/Kg-dry	25	10/23/08 18:05
Butyl benzyl phthalate	ND		11000	440	µg/Kg-dry	25	10/23/08 18:05
Caprolactam	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Carbazole	ND		11000	330	µg/Kg-dry	25	10/23/08 18:05
Chrysene	5600 J		11000	93	µg/Kg-dry	25	10/23/08 18:05
Di-n-butyl phthalate	ND		11000	2800	µg/Kg-dry	25	10/23/08 18:05
Di-n-octyl phthalate	ND		11000	65	µg/Kg-dry	25	10/23/08 18:05
Dibenz[a,h]anthracene	ND		11000	440	µg/Kg-dry	25	10/23/08 18:05
Dibenzofuran	ND		11000	150	µg/Kg-dry	25	10/23/08 18:05
Diethyl phthalate	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
Dimethyl phthalate	ND		11000	110	µg/Kg-dry	25	10/23/08 18:05
Fluoranthene	11000 J		11000	330	µg/Kg-dry	25	10/23/08 18:05
Fluorene	ND		11000	110	µg/Kg-dry	25	10/23/08 18:05
Hexachlorobenzene	ND		11000	180	µg/Kg-dry	25	10/23/08 18:05
Hexachlorobutadiene	ND		11000	100	µg/Kg-dry	25	10/23/08 18:05
Hexachlorocyclopentadiene	ND		11000	5600	µg/Kg-dry	25	10/23/08 18:05
Hexachloroethane	ND		11000	1300	µg/Kg-dry	25	10/23/08 18:05
Indeno[1,2,3-cd]pyrene	1900 J		11000	440	µg/Kg-dry	25	10/23/08 18:05
Isophorone	ND		11000	92	µg/Kg-dry	25	10/23/08 18:05
N-Nitroso-di-n-propylamine	ND		11000	130	µg/Kg-dry	25	10/23/08 18:05
N-Nitrosodiphenylamine	ND		11000	75	µg/Kg-dry	25	10/23/08 18:05
Naphthalene	ND		11000	84	µg/Kg-dry	25	10/23/08 18:05
Nitrobenzene	ND		11000	120	µg/Kg-dry	25	10/23/08 18:05
Pentachlorophenol	ND		56000	11000	µg/Kg-dry	25	10/23/08 18:05
Phenanthrene	5800 J		11000	48	µg/Kg-dry	25	10/23/08 18:05
Phenol	ND		11000	100	µg/Kg-dry	25	10/23/08 18:05
Pyrene	9400 J		11000	75	µg/Kg-dry	25	10/23/08 18:05
Surr: 2,4,6-Tribromophenol	56.2		20-143	0	%REC	25	10/23/08 18:05
Surr: 2-Fluorobiphenyl	68.5		46-130	0	%REC	25	10/23/08 18:05
Surr: 2-Fluorophenol	65.8		22-130	0	%REC	25	10/23/08 18:05

Qualifiers:
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- J Analyte detected below the PQL
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Print Date: 10/27/08 15:08 399186 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/21/08 14:09
ColumnID:	DB-5MS	%Moisture: 25.1	BatchNo: 8309/R15276
Revision:	10/27/08 14:18	TestCode: 8270S OLM42	FileID: 1-DL-N0085.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	61.0		39-130	0	%REC	25	10/23/08 18:05
Surr: Phenol-d5	65.2		33-130	0	%REC	25	10/23/08 18:05
Surr: Terphenyl-d14	78.0		36-148	0	%REC	25	10/23/08 18:05

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/27/08 15:08 399186 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\N0085.D                    Vial: 15
Acq On    : 23 Oct 2008  18:05                     Operator: MEG
Sample    : 0810083-002B                              Inst   : #5MS26
Misc      : DL  ,8270S_OLM42, 20uL/.5mL            Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24  8:55 2008              Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update  : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards                  R.T. QIon  Response   Conc Units Dev(Min)
-------------------------------------------------------------------------------
 1) 1,4-Dichlorobenzene-d4          9.47  152   194609    40.00 ug/mL   0.00
13) Naphthalene-d8                 11.81  136   670493    40.00 ug/mL   0.00
26) Acenaphthene-d10               15.14  164   382470    40.00 ug/mL   0.00
47) Phenanthrene-d10               17.97  188   643145    40.00 ug/mL   0.00
58) Chrysene-d12                   22.99  240   541887    40.00 ug/mL  -0.01
68) Perylene-d12                   25.75  264   479314    40.00 ug/mL  -0.01

System Monitoring Compounds
 2) 2-Fluorophenol                  7.15  112    21195     3.95 ug/mL   0.00
  Spiked Amount    150.000                        Recovery    =    2.63%
 3) Phenol-d5                       8.76   99    30007     4.09 ug/mL  -0.01
  Spiked Amount    150.000                        Recovery    =    2.73%
14) Nitrobenzene-d5                10.47   82    18849     2.44 ug/mL  -0.01
  Spiked Amount    100.000                        Recovery    =    2.44%
30) 2-Fluorobiphenyl               13.83  172    32491     2.74 ug/mL   0.00
  Spiked Amount    100.000                        Recovery    =    2.74%
46) 2,4,6-Tribromophenol           16.63  330     8943     3.37 ug/mL   0.00
  Spiked Amount    150.000                        Recovery    =    2.25%
60) Terphenyl-d14                  20.97  244    30304     3.12 ug/mL   0.00
  Spiked Amount    100.000                        Recovery    =    3.12%

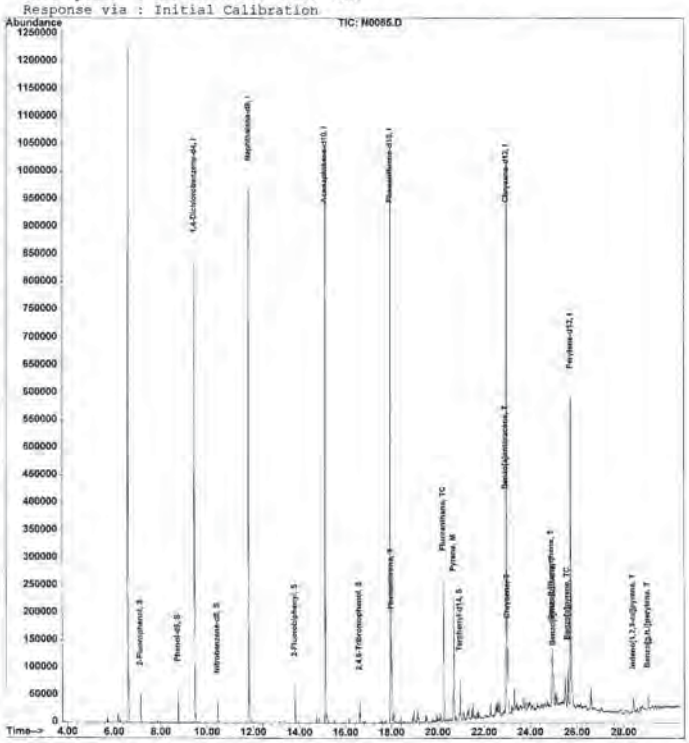
Target Compounds                                                     Qvalue
53) Phenanthrene                   18.01  178    83733     5.20 ug/mL     98
57) Fluoranthene                   20.27  202   153658     9.53 ug/mL     95
59) Pyrene                         20.71  202   140294     8.48 ug/mL     93
63) Benzo[a]anthracene             22.97  228    73223     5.02 ug/mL     92
65) Chrysene                       23.03  228    67048     4.94 ug/mL     94
67) Indeno[1,2,3-cd]pyrene         28.43  276    26924     1.75 ug/mL     97
69) Benzo[b]fluoranthene           24.94  252    87850     6.75 ug/mL     85
70) Benzo[k]fluoranthene           24.99  252    35149m    2.84 ug/mL
71) Benzo[a]pyrene                 25.62  252    51082     4.32 ug/mL     95
73) Benzo[g,h,i]perylene           29.07  276    21026     1.92 ug/mL     87

(#) = qualifier out of range (m) = manual integration
N0085.D  NO14OL42.M       Fri Oct 24 09:02:19 2008
```

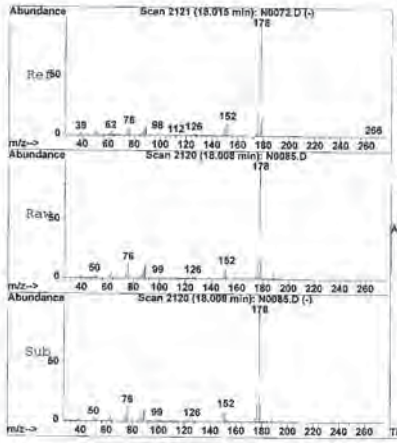
Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0085.D Vial: 15
Acq On : 23 Oct 2008 18:05 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:55 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:06 2008
Response via : Initial Calibration



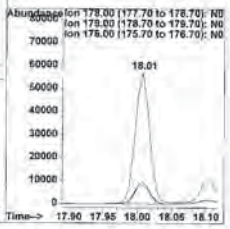
N0085.D N014OL42.M Fri Oct 24 09:02:20 2008 Pa

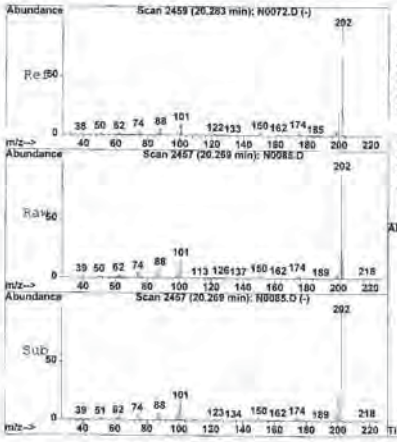


#53
Phenanthrene
Concen: 5.20 ug/mL
RT: 18.01 min Scan# 2120
Delta R.T. -0.01 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:178 Resp: 83733

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.3
176	16.9	0.0	48.5

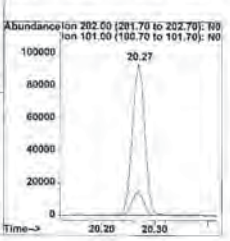




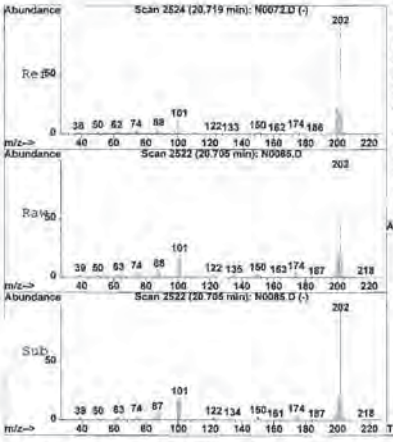
#57
Fluoranthene
Concen: 9.53 ug/mL
RT: 20.27 min Scan# 2457
Delta R.T. -0.01 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:202 Resp: 153658

Ion	Ratio	Lower	Upper
202	100		
101	15.2	0.0	43.2



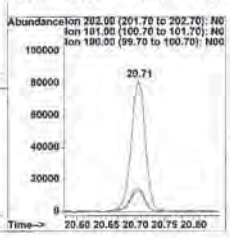
N0085.D N014OL42.M Fri Oct 24 08:59:46 2008 Pa

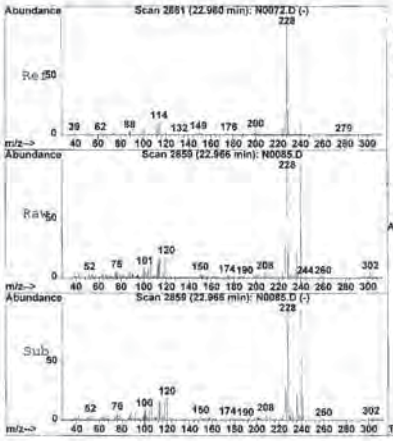


#59
Pyrene
Concen: 8.48 ug/mL
RT: 20.71 min Scan# 2522
Delta R.T. -0.01 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:202 Resp: 140294

Ion	Ratio	Lower	Upper
202	100		
101	19.2	0.0	45.7
100	16.4	0.0	43.7

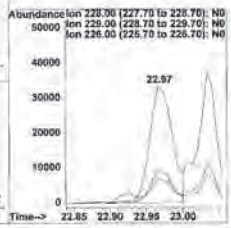




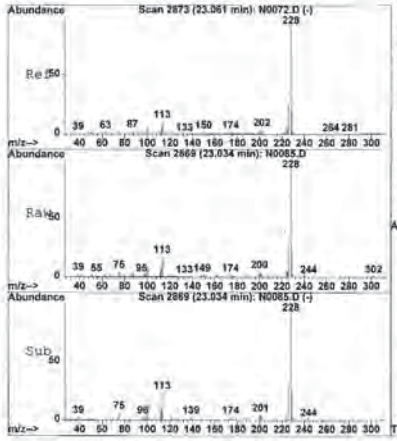
#63
Benzo[a]anthracene
Concen: 5.02 ug/mL
RT: 22.97 min Scan# 2859
Delta R.T. -0.01 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:228 Resp: 73223

Ion	Ratio	Lower	Upper
228	100		
229	14.2	0.0	49.7
226	28.3	0.0	55.5



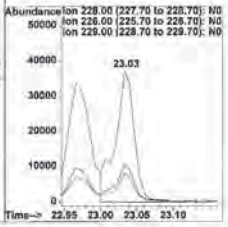
N0085.D N014OL42.M Fri Oct 24 08:59:46 2008 Pa

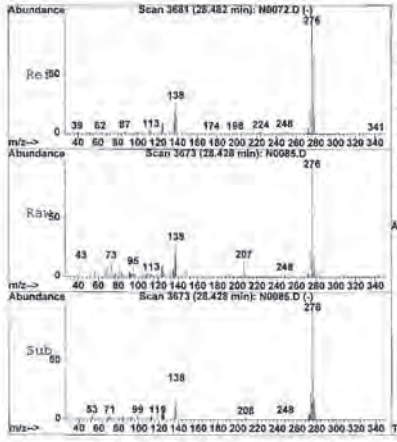


#65
Chrysene
Concen: 4.94 ug/mL
RT: 23.03 min Scan# 2869
Delta R.T. -0.03 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:228 Resp: 67048

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.0	58.0
229	23.8	0.0	49.4

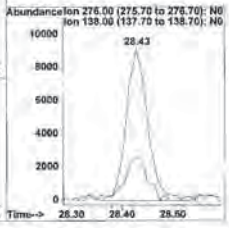




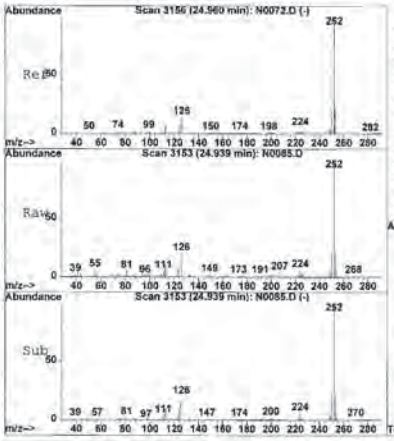
#67
Indeno[1,2,3-cd]pyrene
Concen: 1.75 ug/mL
RT: 28.43 min Scan# 3673
Delta R.T. -0.05 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:276 Resp: 26924

Ion	Ratio	Lower	Upper
276	100		
138	30.5	0.0	58.7



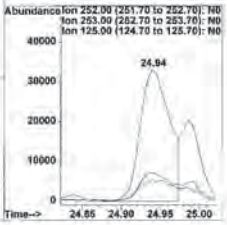
N0085.D N014OL42.M Fri Oct 24 08:59:46 2008 Pa

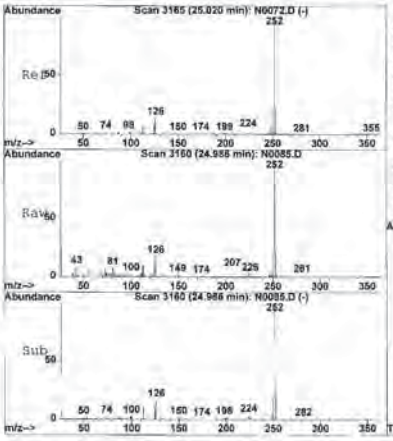


#69
Benzo[b]fluoranthene
Concen: 6.75 ug/mL
RT: 24.94 min Scan# 3153
Delta R.T. -0.02 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:252 Resp: 87850

Ion	Ratio	Lower	Upper
252	100		
253	24.6	0.0	52.0
125	24.8	0.0	42.3

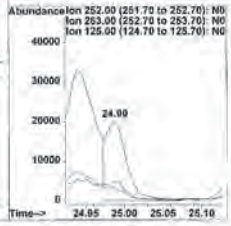




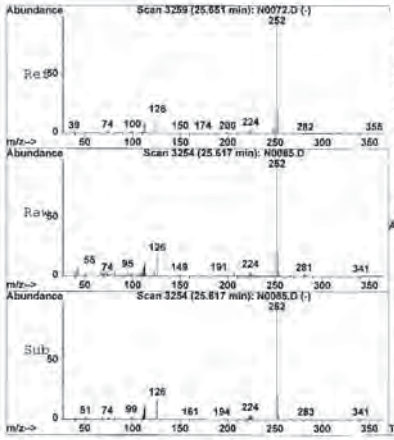
#70
Benzo[k]fluoranthene
Concen: 2.84 ug/mL m
RT: 24.99 min Scan# 3160
Delta R.T. -0.03 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:252 Resp: 35149

Ion	Ratio	Lower	Upper
252	100		
253	61.6	0.0	52.1#
125	62.1	0.0	42.7#



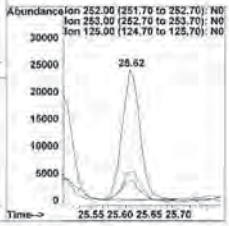
N0085.D NO14OL42.M Fri Oct 24 08:59:47 2008 P

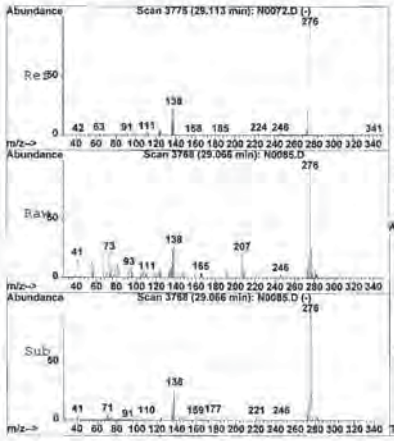


#71
Benzo[a]pyrene
Concen: 4.32 ug/mL
RT: 25.62 min Scan# 3254
Delta R.T. -0.03 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:252 Resp: 51082

Ion	Ratio	Lower	Upper
252	100		
253	24.9	0.0	52.0
125	15.4	0.0	43.7

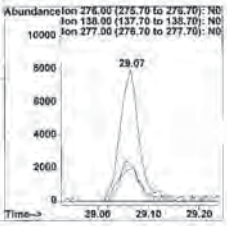




#73
Benzo[g,h,i]perylene
Concen: 1.92 ug/mL
RT: 29.07 min Scan# 3768
Delta R.T. -0.05 min
Lab File: N0085.D
Acq: 23 Oct 2008 18:05

Tgt Ion:276 Resp: 21026

Ion	Ratio	Lower	Upper
276	100		
138	34.4	0.0	54.3
277	26.4	0.0	53.6



N0085.D NO14OL42.M Fri Oct 24 08:59:47 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0085.D Vial: 15
Acq On : 23 Oct 2008 18:05 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008 Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	194609	40.00 ug/mL	0.00
5) Naphthalene-d8	11.81	136	669472	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.14	164	382470	40.00 ug/mL	0.00
11) Phenanthrene-d10	17.97	188	643145	40.00 ug/mL	0.00
14) Chrysene-d12	22.99	240	541887	40.00 ug/mL	0.00
15) Perylene-d12	25.75	264	479314	40.00 ug/mL	0.00

System Monitoring Compounds

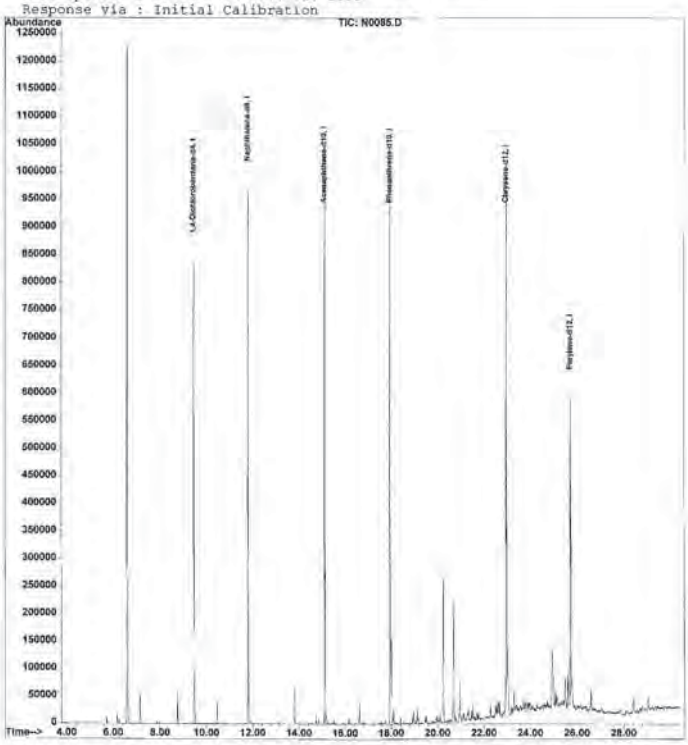
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N0085.D NO14OLM.M Fri Oct 24 09:08:49 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0085.D Vial: 15
Acq On : 23 Oct 2008 18:05 Operator: MEG
Sample : 0810083-002B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



N0085.D NO14OLM.M Fri Oct 24 09:08:50 2008 P

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0068.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		830	11	µg/Kg-dry	2	10/21/08 14:48
2,4,5-Trichlorophenol	ND		4200	53	µg/Kg-dry	2	10/21/08 14:48
2,4,6-Trichlorophenol	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
2,4-Dichlorophenol	ND		830	9.6	µg/Kg-dry	2	10/21/08 14:48
2,4-Dimethylphenol	ND		830	170	µg/Kg-dry	2	10/21/08 14:48
2,4-Dinitrophenol	ND		4200	840	µg/Kg-dry	2	10/21/08 14:48
2,4-Dinitrotoluene	ND		830	12	µg/Kg-dry	2	10/21/08 14:48
2,6-Dinitrotoluene	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
2-Chloronaphthalene	ND		830	9.2	µg/Kg-dry	2	10/21/08 14:48
2-Chlorophenol	ND		830	13	µg/Kg-dry	2	10/21/08 14:48
2-Methylnaphthalene	150	J	830	4.0	µg/Kg-dry	2	10/21/08 14:48
2-Methylphenol	ND		830	9.3	µg/Kg-dry	2	10/21/08 14:48
2-Nitroaniline	ND		4200	15	µg/Kg-dry	2	10/21/08 14:48
2-Nitrophenol	ND		830	33	µg/Kg-dry	2	10/21/08 14:48
3,3'-Dichlorobenzidine	ND		1700	100	µg/Kg-dry	2	10/21/08 14:48
3-Nitroaniline	ND		4200	100	µg/Kg-dry	2	10/21/08 14:48
4,6-Dinitro-2-methylphenol	ND		4200	420	µg/Kg-dry	2	10/21/08 14:48
4-Bromophenyl phenyl ether	ND		830	13	µg/Kg-dry	2	10/21/08 14:48
4-Chloro-3-methylphenol	ND		830	25	µg/Kg-dry	2	10/21/08 14:48
4-Chloroaniline	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
4-Chlorophenyl phenyl ether	ND		830	10	µg/Kg-dry	2	10/21/08 14:48
4-Methylphenol	ND		830	7.2	µg/Kg-dry	2	10/21/08 14:48
4-Nitroaniline	ND		4200	100	µg/Kg-dry	2	10/21/08 14:48
4-Nitrophenol	ND		4200	170	µg/Kg-dry	2	10/21/08 14:48
Acenaphthene	160	J	830	8.3	µg/Kg-dry	2	10/21/08 14:48
Acenaphthylene	230	J	830	10	µg/Kg-dry	2	10/21/08 14:48
Acetophenone	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Anthracene	260	J	830	5.9	µg/Kg-dry	2	10/21/08 14:48
Atrazine	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Benzaldehyde	150	J	830	13	µg/Kg-dry	2	10/21/08 14:48
Benzo[a]anthracene	1800		830	8.7	µg/Kg-dry	2	10/21/08 14:48
Benzo[a]pyrene	1800		830	25	µg/Kg-dry	2	10/21/08 14:48
Benzo[b]fluoranthene	3900		830	25	µg/Kg-dry	2	10/21/08 14:48
Benzo[g,h,i]perylene	870		830	33	µg/Kg-dry	2	10/21/08 14:48

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399158 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0068.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1200		830	28	µg/Kg-dry	2	10/21/08 14:48
bis(2-Chloroethoxy)methane	ND		830	7.7	µg/Kg-dry	2	10/21/08 14:48
bis(2-chloroethyl)ether	ND		830	13	µg/Kg-dry	2	10/21/08 14:48
bis(2-chloroisopropyl)ether	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
bis(2-Ethylhexyl)phthalate	1600		830	37	µg/Kg-dry	2	10/21/08 14:48
Butyl benzyl phthalate	ND		830	33	µg/Kg-dry	2	10/21/08 14:48
Caprolactam	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Carbazole	190	J	830	25	µg/Kg-dry	2	10/21/08 14:48
Chrysene	1900		830	7.0	µg/Kg-dry	2	10/21/08 14:48
Di-n-butyl phthalate	ND		830	210	µg/Kg-dry	2	10/21/08 14:48
Di-n-octyl phthalate	ND		830	4.9	µg/Kg-dry	2	10/21/08 14:48
Dibenz[a,h]anthracene	280	J	830	33	µg/Kg-dry	2	10/21/08 14:48
Dibenzofuran	120	J	830	12	µg/Kg-dry	2	10/21/08 14:48
Diethyl phthalate	ND		830	8.8	µg/Kg-dry	2	10/21/08 14:48
Dimethyl phthalate	ND		830	8.6	µg/Kg-dry	2	10/21/08 14:48
Fluoranthene	3100		830	25	µg/Kg-dry	2	10/21/08 14:48
Fluorene	110	J	830	8.6	µg/Kg-dry	2	10/21/08 14:48
Hexachlorobenzene	ND		830	14	µg/Kg-dry	2	10/21/08 14:48
Hexachlorobutadiene	ND		830	7.6	µg/Kg-dry	2	10/21/08 14:48
Hexachlorocyclopentadiene	ND		830	420	µg/Kg-dry	2	10/21/08 14:48
Hexachloroethane	ND		830	100	µg/Kg-dry	2	10/21/08 14:48
Indeno[1,2,3-cd]pyrene	300	J	830	33	µg/Kg-dry	2	10/21/08 14:48
Isophorone	ND		830	6.9	µg/Kg-dry	2	10/21/08 14:48
N-Nitroso-di-n-propylamine	ND		830	9.6	µg/Kg-dry	2	10/21/08 14:48
N-Nitrosodiphenylamine	ND		830	5.6	µg/Kg-dry	2	10/21/08 14:48
Naphthalene	270	J	830	6.4	µg/Kg-dry	2	10/21/08 14:48
Nitrobenzene	ND		830	8.9	µg/Kg-dry	2	10/21/08 14:48
Pentachlorophenol	ND		4200	840	µg/Kg-dry	2	10/21/08 14:48
Phenanthrene	1500		830	3.6	µg/Kg-dry	2	10/21/08 14:48
Phenol	ND		830	7.7	µg/Kg-dry	2	10/21/08 14:48
Pyrene	4500		830	5.7	µg/Kg-dry	2	10/21/08 14:48
Surr: 2,4,6-Tribromophenol	82.1		20-143	0	%REC	2	10/21/08 14:48
Surr: 2-Fluorobiphenyl	71.2		48-130	0	%REC	2	10/21/08 14:48
Surr: 2-Fluorophenol	67.6		22-130	0	%REC	2	10/21/08 14:48

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399158 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 20.4	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0068.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	66.5		39-130	0	%REC	2	10/21/08 14:48
Surr: Phenol-d5	67.4		33-130	0	%REC	2	10/21/08 14:48
Surr: Terphenyl-d14	129		36-146	0	%REC	2	10/21/08 14:48

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399158 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-3

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-003B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0068.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 20 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 2.00

Extract Volume: 1000 (ul)

Number TICs found: 14 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.27)	6.27	1200	J
2.	aldol	6.80	80000	JBA
3.	unknown (14.8)	14.80	970	JB
4.	unknown (15.14)	15.14	1100	J
5.	unknown biphenyl (20.14)	20.14	740	J
6.	unknown biphenyl (20.17)	20.17	770	J
7.	unknown biphenyl (20.51)	20.51	920	J
8.	unknown biphenyl (21.46)	21.46	1300	J
9.	unknown biphenyl (22.16)	22.16	950	J
10.	unknown hydrocarbon (23.94)	23.94	800	J
11. 056554-86-0	17-Octadecenal	24.79	7800	JN
12.	unknown hydrocarbon (25.16)	25.16	5600	J
13.	unknown (25.2)	25.20	3400	J
14.	unknown hydrocarbon (26.7)	26.70	4800	J

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:26 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	227826	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	808252	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.19	164	456739	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.02	188	764647	40.00 ug/mL	0.00
58) Chrysene-d12	23.06	240	363351	40.00 ug/mL	0.00
68) Perylene-d12	25.83	264	133834	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.24	112	318469	50.68 ug/mL	0.03
Spiked Amount 150.000			Recovery =	33.79%	
3) Phenol-d5	8.83	99	434650	50.54 ug/mL	0.00
Spiked Amount 150.000			Recovery =	33.69%	
14) Nitrobenzene-d5	10.93	82	309587	33.27 ug/mL	0.00
Spiked Amount 100.000			Recovery =	33.27%	
30) 2-Fluorobiphenyl	13.89	172	504996	35.61 ug/mL	0.00
Spiked Amount 100.000			Recovery =	35.61%	
46) 2,4,6-Tribromophenol	16.69	330	195290	61.58 ug/mL	0.00
Spiked Amount 150.000			Recovery =	41.05%	
60) Terphenyl-d14	21.04	244	421858	64.69 ug/mL	0.00
Spiked Amount 100.000			Recovery =	64.69%	
Target Compounds					Qvalue
21) Naphthalene	11.90	128	62134	3.17 ug/mL	99
25) 2-Methylnaphthalene	13.21	142	28433	1.81 ug/mL	98
35) Acenaphthylene	14.92	152	56316	2.72 ug/mL	97
37) Acenaphthene	15.25	153	23639	1.92 ug/mL	90
41) Dibenzofuran	15.57	168	33072	1.49 ug/mL	93
44) Fluorene	16.23	166	20046	1.33 ug/mL	86
53) Phenanthrene	18.07	178	332151	17.36 ug/mL	98
54) Anthracene	18.16	178	61342	3.14 ug/mL	98
55) Carbazole	18.45	167	40213	2.26 ug/mL	95
56) Di-n-butyl phthalate	19.08	149	40698	1.61 ug/mL	99
57) Fluoranthene	20.34	202	709821	37.04 ug/mL	99
59) Pyrene	20.78	202	593889	53.52 ug/mL	98
63) Benzo[a]anthracene	23.04	228	205778	21.02 ug/mL	89
64) bis(2-Ethylhexyl)phthalate	23.01	149	182576	19.47 ug/mL	96
65) Chrysene	23.10	228	207885	22.84 ug/mL	97
67) Indeno[1,2,3-cd]pyrene	28.54	276	36939	3.58 ug/mL	97
69) Benzo[b]fluoranthene	25.02	252	168664	46.39 ug/mL	92
70) Benzo[k]fluoranthene	25.06	252	48614m	14.08 ug/mL	
71) Benzo[a]pyrene	25.71	252	71950	21.78 ug/mL	92

(#) = qualifier out of range (m) = manual integration
N0068.D N014OL42.M Wed Oct 22 13:33:48 2008 Pa

560

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:26 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
72) Dibenz[a,h]anthracene	28.55	278	10297	3.31 ug/mL	88
73) Benzo[g,h,i]perylene	29.15	276	31797	10.42 ug/mL	87

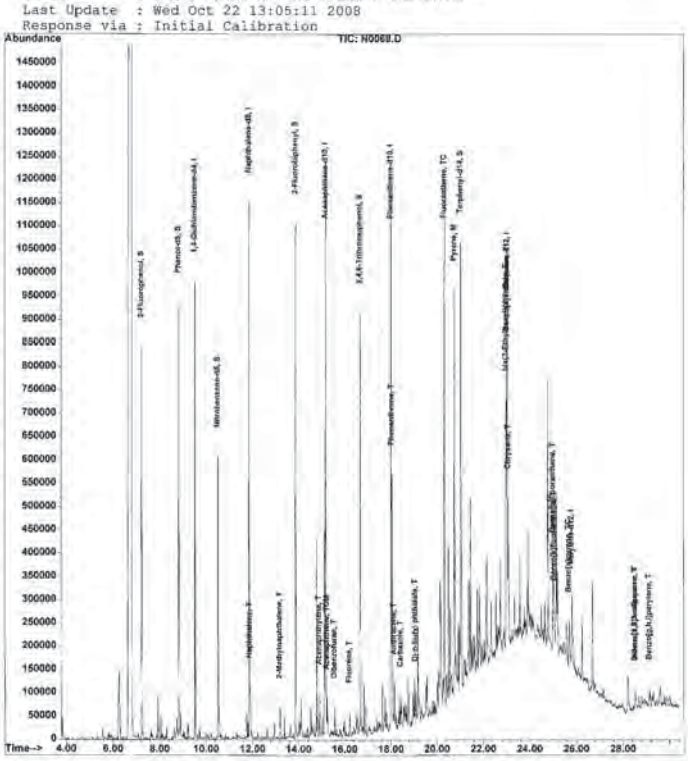
(#) = qualifier out of range (m) = manual integration
N0068.D N014OL42.M Wed Oct 22 13:33:48 2008 Pa

561

Quantitation Report

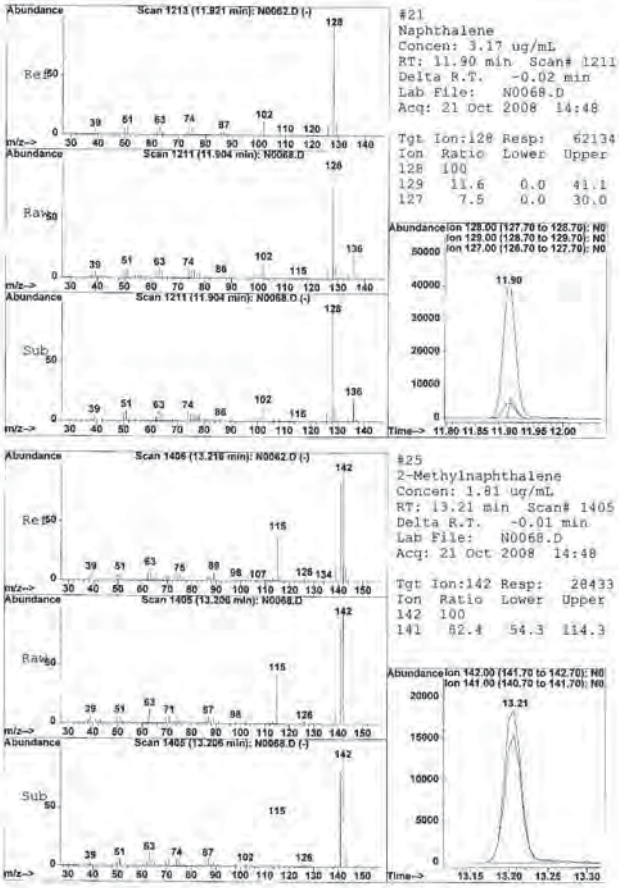
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:26 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration



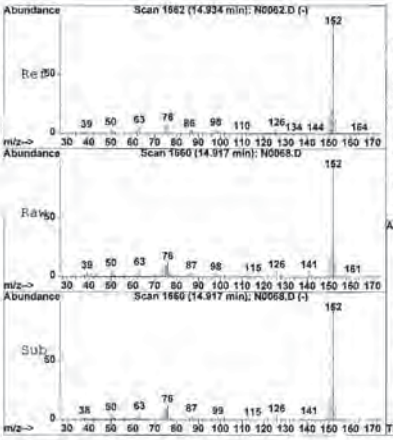
N0068.D N014OL42.M Wed Oct 22 13:33:49 2008 Pa

562



N0068.D N014OL42.M Wed Oct 22 13:33:50 2008 Pa

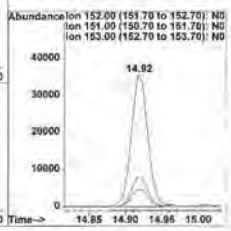
563

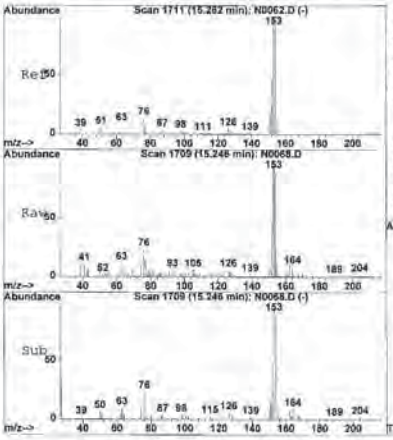


#35
Acenaphthylene
Concen: 2.72 ug/mL
RT: 14.92 min Scan# 1660
Delta R.T. -0.02 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:152 Resp: 56316

Ion	Ratio	Lower	Upper
152	100		
151	21.8	0.0	50.0
153	13.1	0.0	43.0

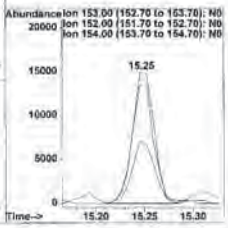


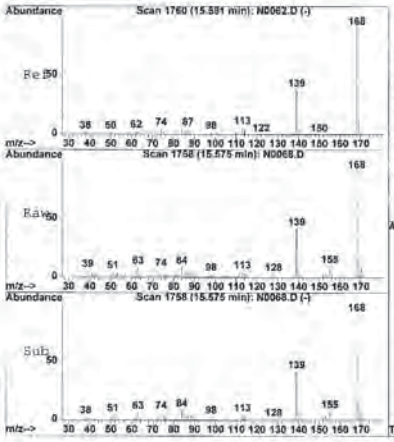


#37
Acenaphthene
Concen: 1.92 ug/mL
RT: 15.25 min Scan# 1709
Delta R.T. -0.02 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:153 Resp: 23639

Ion	Ratio	Lower	Upper
153	100		
152	48.8	17.4	77.4
154	90.0	74.5	134.5

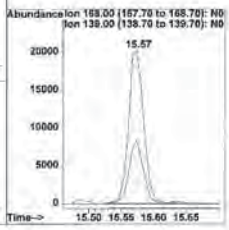


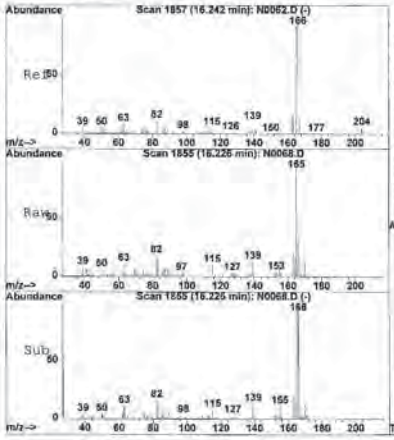


#41
Dibenzofuran
Concen: 1.49 ug/mL
RT: 15.57 min Scan# 1758
Delta R.T. -0.02 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:168 Resp: 33072

Ion	Ratio	Lower	Upper
168	100		
139	39.0	4.8	64.8

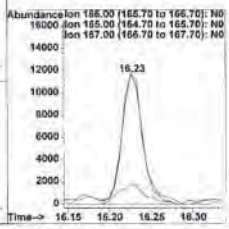


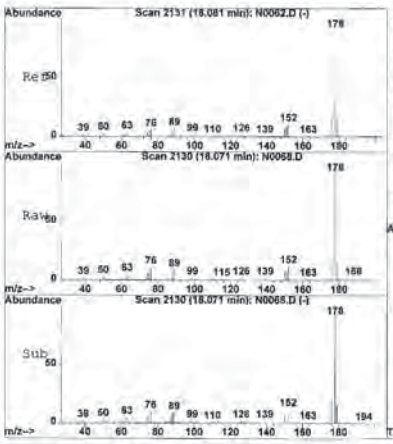


#44
Fluorene
Concen: 1.33 ug/mL
RT: 16.23 min Scan# 1855
Delta R.T. -0.02 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:166 Resp: 20046

Ion	Ratio	Lower	Upper
166	100		
165	103.1	60.8	120.8
167	20.3	0.0	43.4

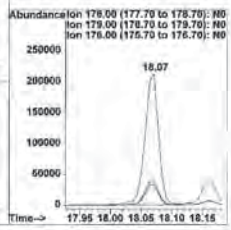


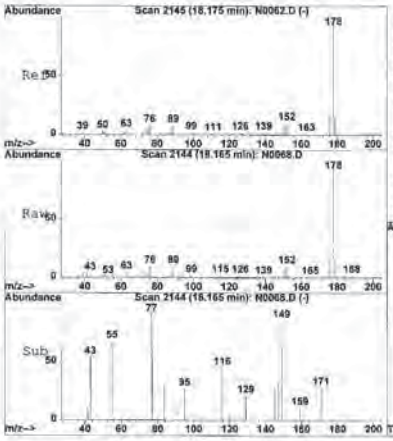


#53
Phenanthrene
Concen: 17.36 ug/mL
RT: 18.07 min Scan# 2130
Delta R.T. -0.01 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:178 Resp: 332151

Ion	Ratio	Lower	Upper
178	100		
179	16.3	0.0	45.3
176	19.4	0.0	48.5

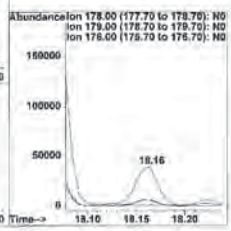


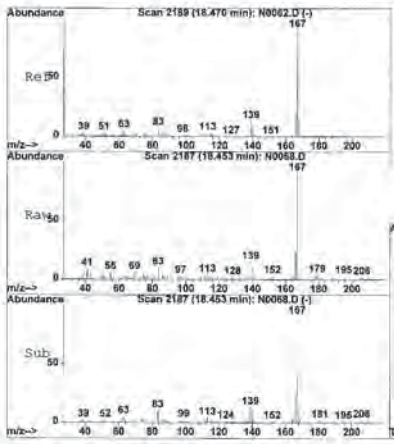


#54
Anthracene
Concen: 3.14 ug/mL
RT: 18.16 min Scan# 2144
Delta R.T. -0.01 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:178 Resp: 61342

Ion	Ratio	Lower	Upper
178	100		
179	14.4	0.0	45.5
176	18.3	0.0	47.7

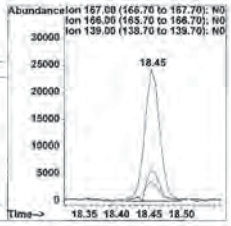


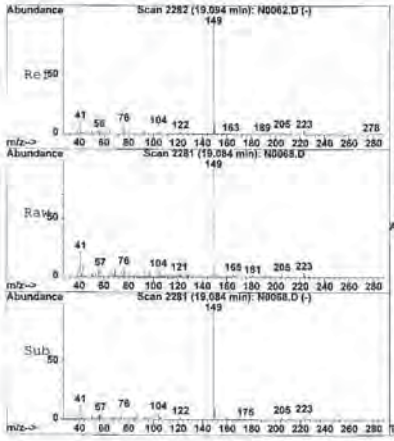


#55
Carbazole
Concen: 2.26 ug/mL
RT: 18.45 min Scan# 2187
Delta R.T. -0.02 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:167 Resp: 40213

Ion	Ratio	Lower	Upper
167	100		
166	22.5	0.0	51.2
139	15.8	0.0	42.2

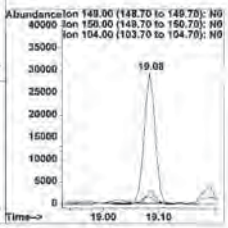


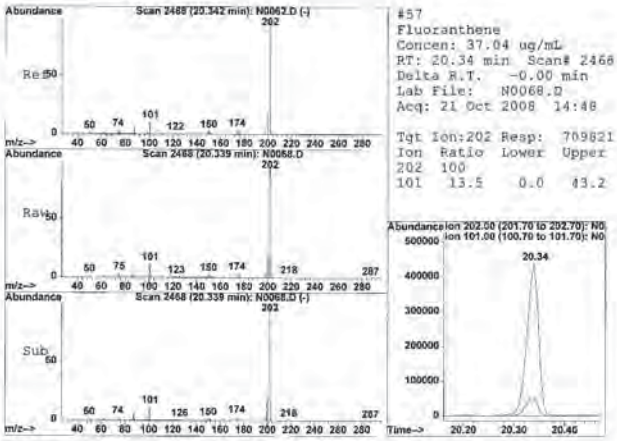


#56
Di-n-butyl phthalate
Concen: 1.61 ug/mL
RT: 19.08 min Scan# 2281
Delta R.T. -0.01 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:149 Resp: 40698

Ion	Ratio	Lower	Upper
149	100		
150	9.4	0.0	39.3
104	6.5	0.0	35.9

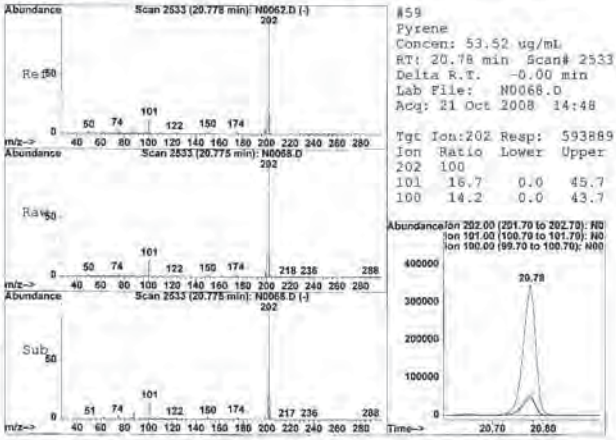




#57
Fluoranthene
Concen: 37.04 ug/mL
RT: 20.34 min Scan# 2466
Delta R.T. -0.00 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:202 Resp: 709821

Ion	Ratio	Lower	Upper
202	100		
101	13.5	0.0	43.2

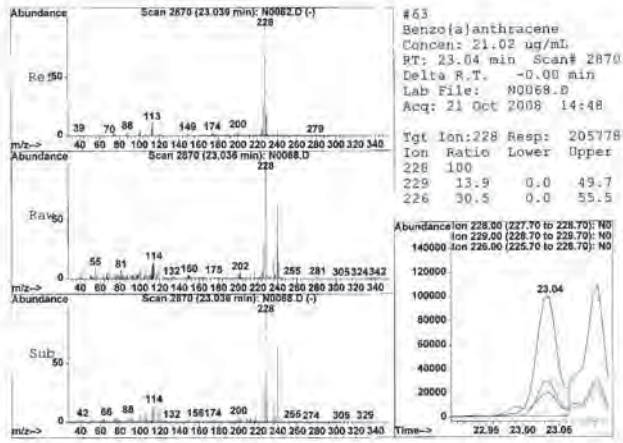


#59
Pyrene
Concen: 53.52 ug/mL
RT: 20.78 min Scan# 2533
Delta R.T. -0.00 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:202 Resp: 593889

Ion	Ratio	Lower	Upper
202	100		
101	16.7	0.0	45.7
100	14.2	0.0	43.7

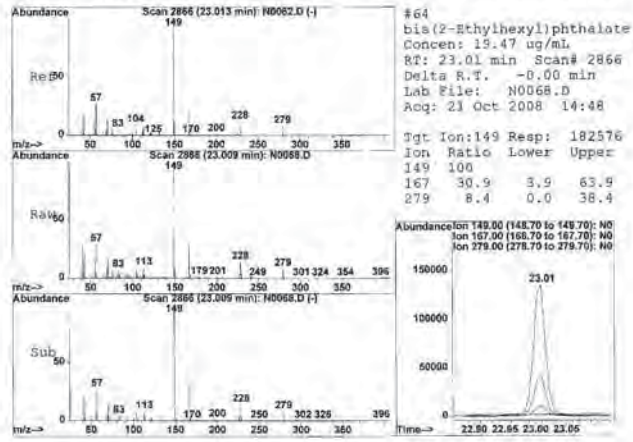
N0068.D N014OL42.M Wed Oct 22 13:33:52 2008



#63
Benzo(a)anthracene
Concen: 21.02 ug/mL
RT: 23.04 min Scan# 2870
Delta R.T. -0.00 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:228 Resp: 205778

Ion	Ratio	Lower	Upper
228	100		
229	13.9	0.0	49.7
226	30.5	0.0	55.5

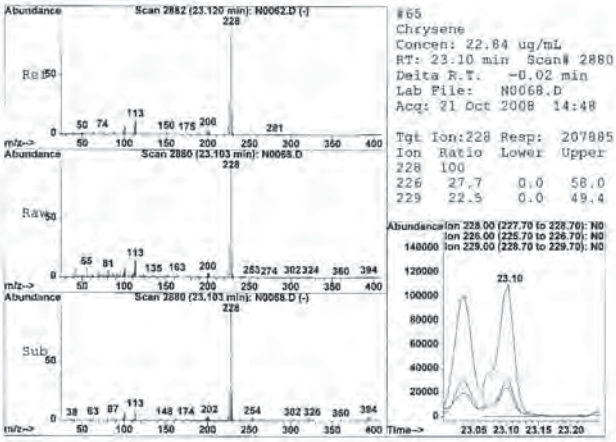


#64
bis(2-Ethylhexyl)phthalate
Concen: 19.47 ug/mL
RT: 23.01 min Scan# 2866
Delta R.T. -0.00 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:149 Resp: 182576

Ion	Ratio	Lower	Upper
149	100		
167	30.9	3.9	63.9
279	8.4	0.0	38.4

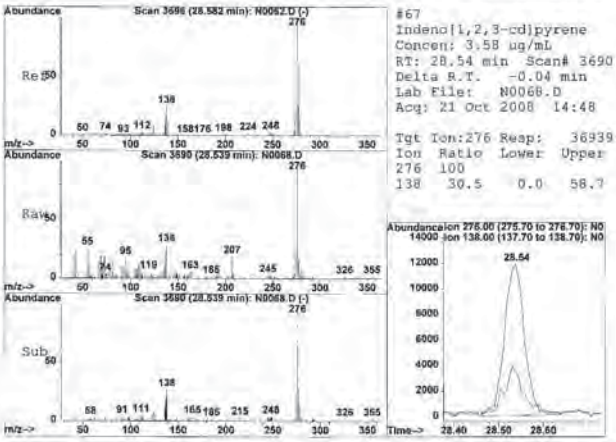
N0068.D N014OL42.M Wed Oct 22 13:33:53 2008



#65
Chrysene
Concen: 22.84 ug/mL
RT: 23.10 min Scan# 2880
Delta R.T. -0.02 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:228 Resp: 207885

Ion	Ratio	Lower	Upper
228	100		
226	27.7	0.0	58.0
229	22.5	0.0	49.4

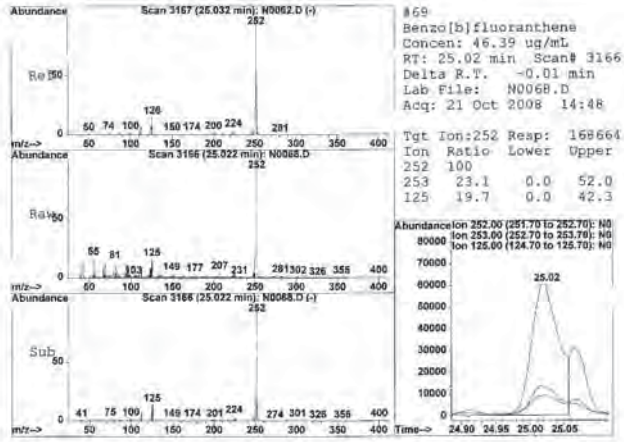


#67
Indeno[1,2,3-cd]pyrene
Concen: 3.58 ug/mL
RT: 28.54 min Scan# 3690
Delta R.T. -0.04 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:276 Resp: 36939

Ion	Ratio	Lower	Upper
276	100		
138	30.5	0.0	58.7

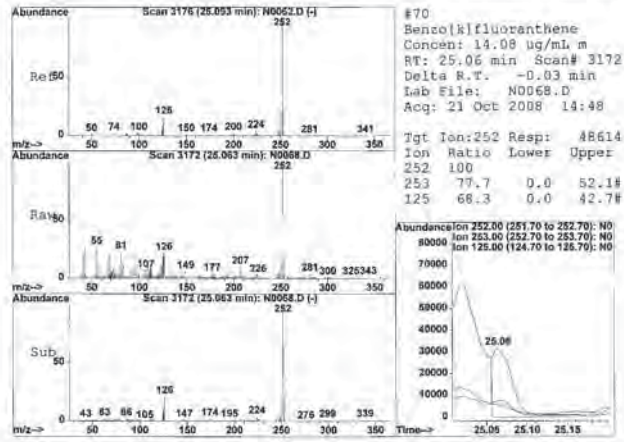
N0068.D N014OL42.M Wed Oct 22 13:33:53 2008



#69
Benzo[b]fluoranthene
Concen: 46.39 ug/mL
RT: 25.02 min Scan# 3166
Delta R.T. -0.01 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:252 Resp: 168664

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	52.0
125	19.7	0.0	42.3

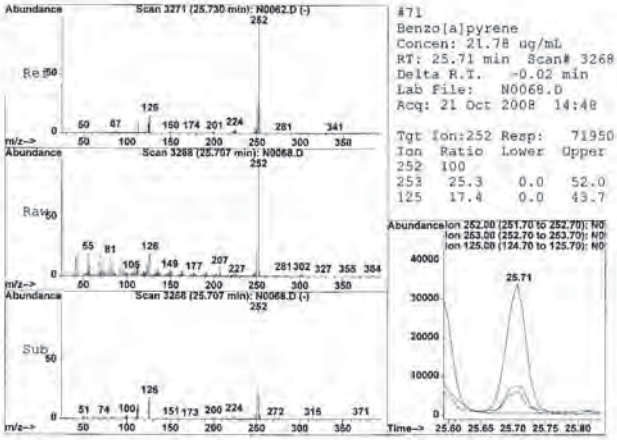


#70
Benzo[k]fluoranthene
Concen: 14.08 ug/mL m
RT: 25.06 min Scan# 3172
Delta R.T. -0.03 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:252 Resp: 48614

Ion	Ratio	Lower	Upper
252	100		
253	77.7	0.0	52.1#
125	68.3	0.0	42.7#

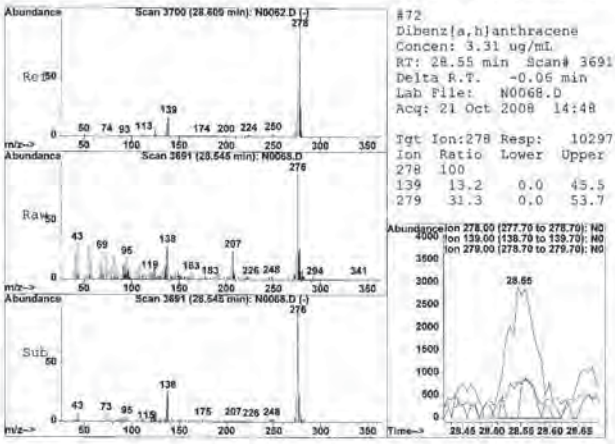
N0068.D N014OL42.M Wed Oct 22 13:33:54 2008



#71
Benzo[a]pyrene
Concen: 21.78 ug/mL
RT: 25.71 min Scan# 3268
Delta R.T. -0.02 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:252 Resp: 71950

Ion	Ratio	Lower	Upper
252	100		
253	25.3	0.0	52.0
125	17.4	0.0	43.7



#72
Dibenz[a,h]anthracene
Concen: 3.31 ug/mL
RT: 28.55 min Scan# 3691
Delta R.T. -0.06 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:278 Resp: 10297

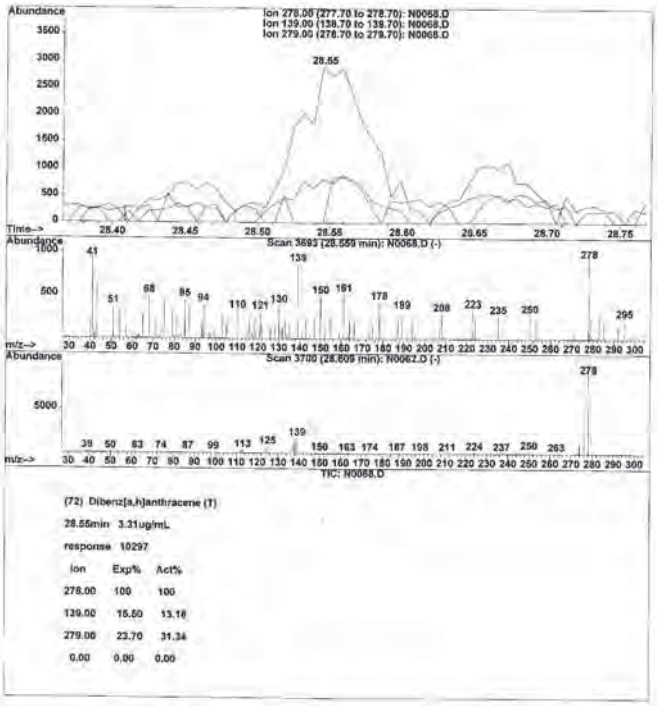
Ion	Ratio	Lower	Upper
278	100		
139	13.2	0.0	45.5
279	31.3	0.0	53.7

N0068.D N014OL42.M Wed Oct 22 13:33:54 2008

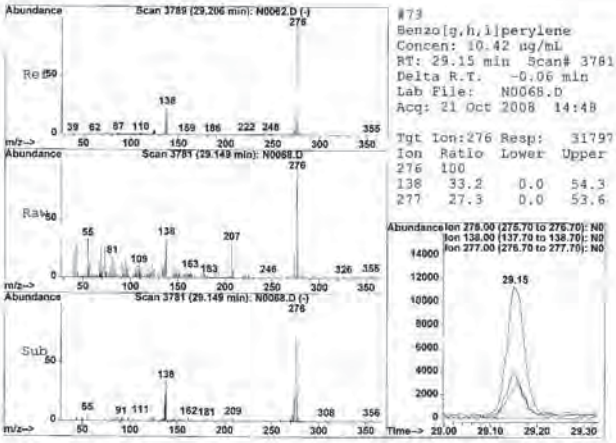
Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
Quant Time: Oct 22 13:26 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration



N0068.D N014OL42.M Wed Oct 22 13:27:19 2008



#73
Benzo[g,h,i]perylene
Concen: 10.42 ug/mL
RT: 29.15 min Scan# 3781
Delta R.T. -0.06 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion:276 Resp: 31797

Ion	Ratio	Lower	Upper
276	100		
138	33.2	0.0	54.3
277	27.3	0.0	53.6

N0068.D N014OL42.M Wed Oct 22 13:33:54 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:54 2008 Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	227826	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	808252	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	456739	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.02	188	764647	40.00 ug/mL	0.00
14) Chrysene-d12	23.06	240	363351	40.00 ug/mL	0.00
15) Perylene-d12	25.83	264	133834	40.00 ug/mL	0.00

System Monitoring Compounds

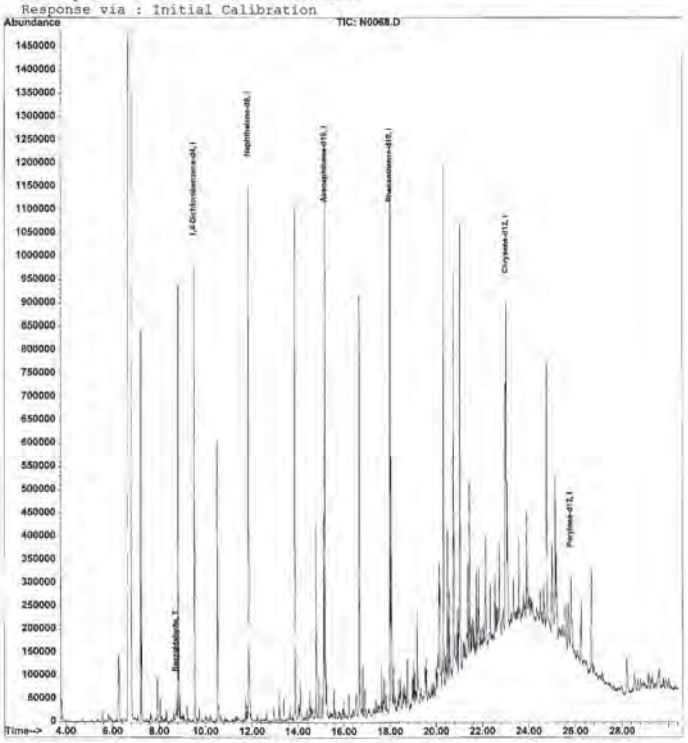
Target Compounds					Qvalue
2) Benzaldehyde	8.75	77	11669	1.80 ug/mL	97

(#) = qualifier out of range (m) = manual integration
N0068.D N014OLM.M Wed Oct 22 13:58:56 2008

Quantitation Report

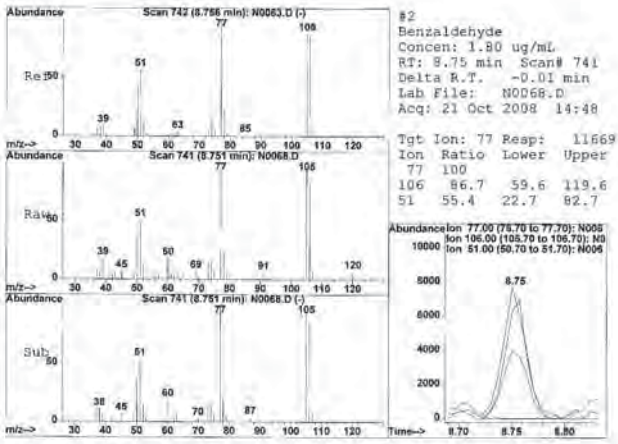
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:54 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration



N0068.D NO14OLM.M Wed Oct 22 13:58:57 2008 Pa

576



#2
Benzaldehyde
Concen: 1.80 ug/mL
RT: 8.75 min Scan# 741
Delta R.T. -0.01 min
Lab File: N0068.D
Acq: 21 Oct 2008 14:48

Tgt Ion: 77 Resp: 11669

Ion	Ratio	Lower	Upper
77	100		
106	86.7	59.6	119.6
51	55.4	22.7	82.7

N0068.D NO14OLM.M Wed Oct 22 13:58:58 2008 Pa

577

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Oct 2008 14:48
Data File: C:\HPCHEM\1\DATA\N0068.D
Name: 0810083-003B
Misc: SAMP,8270S_OLM42, 200uL/.4mL
Method: C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title: BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library Searched: C:\DATABASE\NBS75K.L

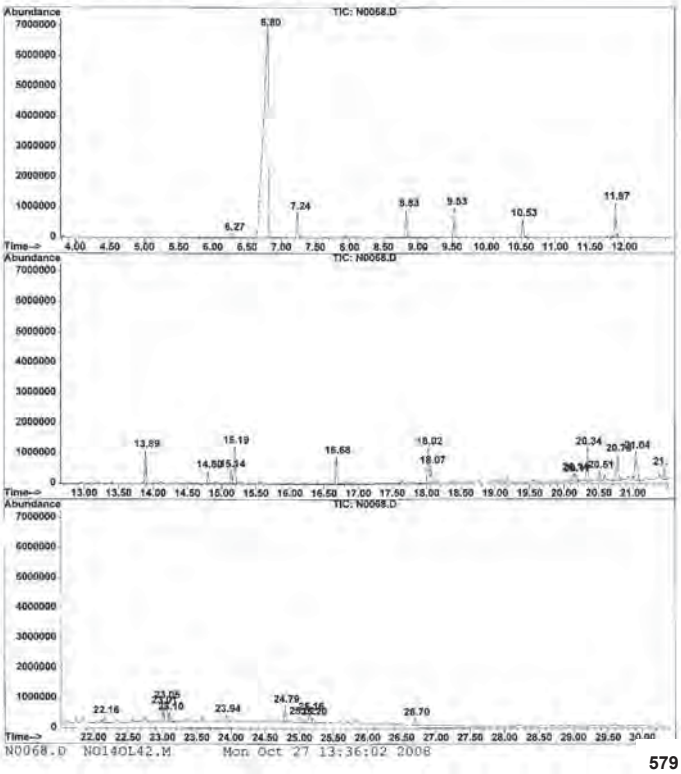
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
1-Pentanol, 2,3-dime	6.27	14.3	ug/mL	533916	ISTD01	9.53	1495900	40.0
2-Pentanone, 4-hydro	6.80	956.8	ug/mL	35783700	ISTD01	9.53	1495900	40.0
Cyclododecane	14.80	11.6	ug/mL	574637	ISTD03	15.19	1987230	40.0
1H-Cyclopenta[1,3]cy	15.14	13.5	ug/mL	671783	ISTD03	15.19	1987230	40.0
1,1'-Biphenyl, 2,4,4	20.14	8.8	ug/mL	415638	ISTD04	18.02	1882310	40.0
1,1'-Biphenyl, 2,3,3	20.17	9.2	ug/mL	434757	ISTD04	18.02	1882310	40.0
1,1'-Biphenyl, 2,3,4	20.51	11.0	ug/mL	519119	ISTD04	18.02	1882310	40.0
1,1'-Biphenyl, 2,3',	21.46	15.0	ug/mL	575518	ISTD05	23.06	1530430	40.0
1,1'-Biphenyl, 2,2',	22.16	10.2	ug/mL	389212	ISTD05	23.06	1530430	40.0
Heptacosane	23.94	9.5	ug/mL	363821	ISTD05	23.06	1530430	40.0
17-Octadecenal	24.79	92.7	ug/mL	881980	ISTD06	25.83	380676	40.0
Nonacosane	25.16	67.2	ug/mL	639697	ISTD06	25.83	380676	40.0
9-Hexacosene	25.20	40.0	ug/mL	380676	ISTD06	25.83	380676	40.0
Heptadecane, 2,6,10,	26.70	56.9	ug/mL	541378	ISTD06	25.83	380676	40.0

N0068.D NO14OL42.M Mon Oct 27 13:36:09 2008

578

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\N0068.D
Operator : MEG
Acquired : 21 Oct 2008 14:48 using AcqMethod NO14FULL
Instrument : #5MS26
Sample Name: 0810083-003B
Misc Info : SAMP,8270S_OLM42, 200uL/.4mL
Vial Number: 8
Quant File :NO14OL42.RES (RTE Integrator)



N0068.D NO14OL42.M Mon Oct 27 13:36:02 2008

579

Library Search Compound Report

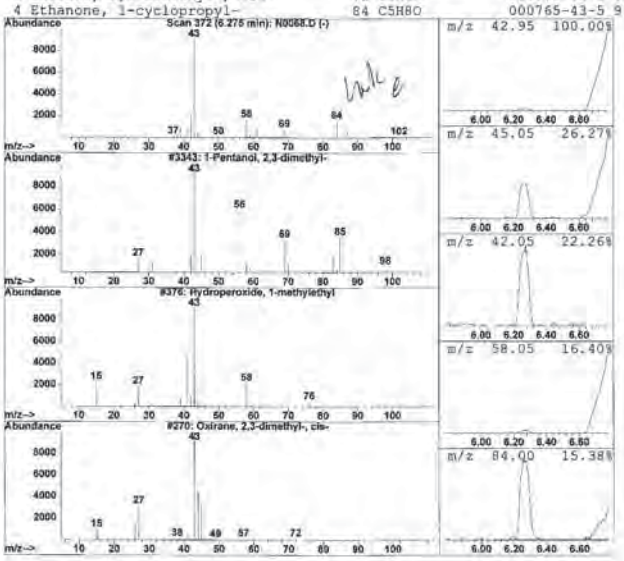
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 1-Pentanol, 2,3-dimethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.27	14.28 ug/mL	533916	1,4-Dichlorobenzene-d4	9.53

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentanol, 2,3-dimethyl-	116	C7H16O	010143-23-4	39
2	Hydroperoxide, 1-methylethyl	76	C3H8O2	003031-75-2	38
3	Oxirane, 2,3-dimethyl-, cis-	72	C4H8O	001758-33-4	12
4	Ethanone, 1-cyclopropyl-	84	C5H8O	000765-43-5	9



N0068.D NO14OL42.M Mon Oct 27 13:36:03 2008 Pa 580

Library Search Compound Report

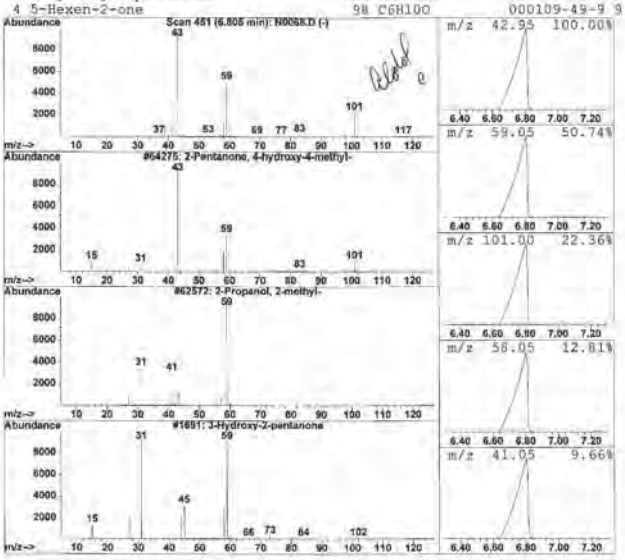
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.80	956.85 ug/mL	35783700	1,4-Dichlorobenzene-d4	9.53

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	2-Propanol, 2-methyl-	74	C4H10O	000075-65-0	17
3	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
4	5-Hexen-2-one	98	C6H10O	000109-49-9	9



N0068.D NO14OL42.M Mon Oct 27 13:36:03 2008 Pa 581

Library Search Compound Report

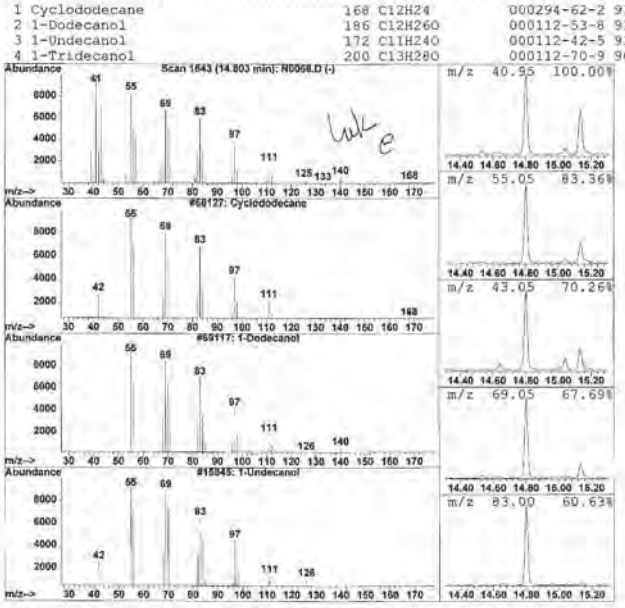
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 Cyclododecane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.80	11.57 ug/mL	574637	Acenaphthene-d10	15.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclododecane	168	C12H24	000294-62-2	91
2	1-Dodecanol	186	C12H26O	000112-53-8	91
3	1-Undecanol	172	C11H24O	000112-42-5	91
4	1-Tridecanol	200	C13H28O	000112-70-9	90



N0068.D NO14OL42.M Mon Oct 27 13:36:04 2008 Pa 582

Library Search Compound Report

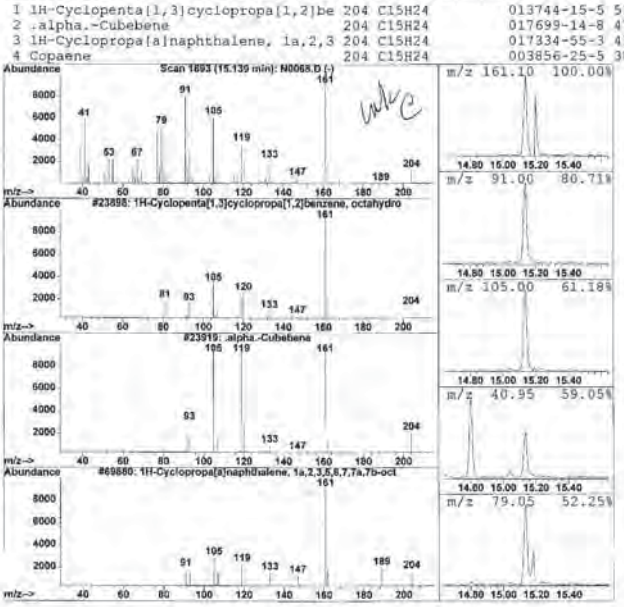
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 1H-Cyclopenta[1,3]cyclopropa[1 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.14	13.52 ug/mL	671783	Acenaphthene-d10	15.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Cyclopenta[1,3]cyclopropa[1,2]be	204	C15H24	013744-15-5	53
2	.alpha.-Cubebene	204	C15H24	017699-14-8	47
3	1H-Cyclopropa[a]naphthalene, 1a,2,3	204	C15H24	017334-55-3	43
4	Copaene	204	C15H24	003856-25-5	38



N0068.D NO14OL42.M Mon Oct 27 13:36:04 2008 Pa 583

Library Search Compound Report

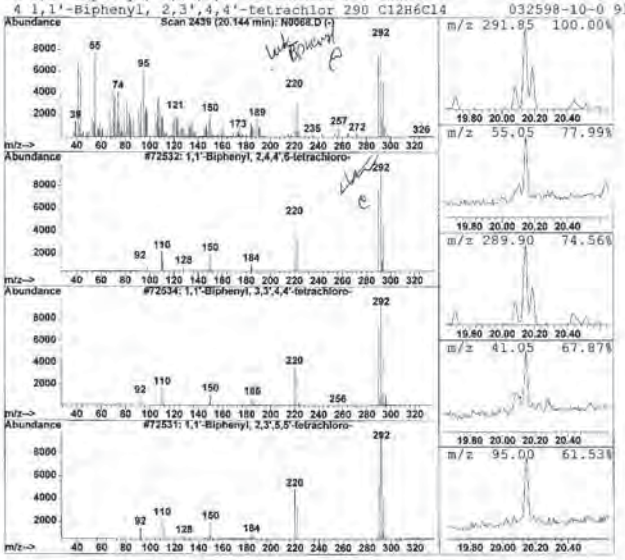
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 5 1,1'-Biphenyl, 2,4,4',6-tetrac Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.14	8.83 ug/mL	41563B	Phenanthrene-d10	18.02

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,4,4',6-tetrachloro	290	C12H6Cl4	032598-12-2	99
2	1,1'-Biphenyl, 3,3',4,4'-tetrachlor	290	C12H6Cl4	032598-13-3	99
3	1,1'-Biphenyl, 2,3',5,5'-tetrachlor	290	C12H6Cl4	041464-42-0	99
4	1,1'-Biphenyl, 2,3',4,4'-tetrachlor	290	C12H6Cl4	032598-10-0	91



N0068.D NO14OL42.M Mon Oct 27 13:36:05 2008 Pa 584

Library Search Compound Report

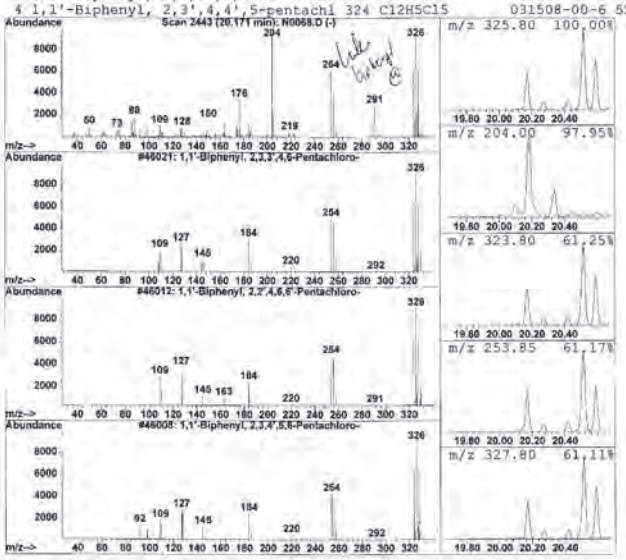
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 6 1,1'-Biphenyl, 2,3,3',4,6-Pent Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.17	9.24 ug/mL	434757	Phenanthrene-d10	18.02

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,6-Pentachlo	324	C12H5Cl5	074472-35-8	70
2	1,1'-Biphenyl, 2,2',4,6,6'-Pentachl	324	C12H5Cl5	056558-16-8	62
3	1,1'-Biphenyl, 2,3,4',5,6-Pentachlo	324	C12H5Cl5	068194-11-6	62
4	1,1'-Biphenyl, 2,3',4,4',5-pentachl	324	C12H5Cl5	031508-00-6	55



N0068.D NO14OL42.M Mon Oct 27 13:36:05 2008 Pa 585

Library Search Compound Report

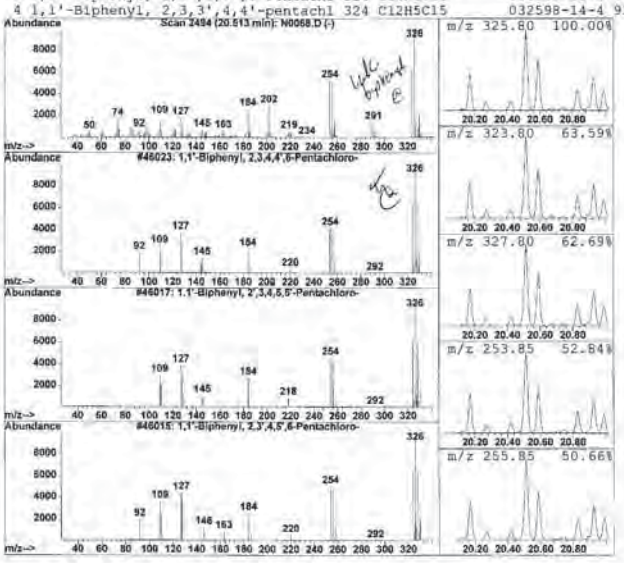
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 7 1,1'-Biphenyl, 2,3,4,4',6-Pent Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.51	11.03 ug/mL	519119	Phenanthrene-d10	18.02

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,4,4',6-Pentachlo	324	C12H5Cl5	074472-38-1	94
2	1,1'-Biphenyl, 2',3,4,5,5'-Pentachl	324	C12H5Cl5	070424-70-3	94
3	1,1'-Biphenyl, 2,3',4,5',6-Pentachl	324	C12H5Cl5	056558-18-0	94
4	1,1'-Biphenyl, 2,3,3',4,4'-pentachl	324	C12H5Cl5	032598-14-4	93



N0068.D NO14OL42.M Mon Oct 27 13:36:06 2008 Pa 586

Library Search Compound Report

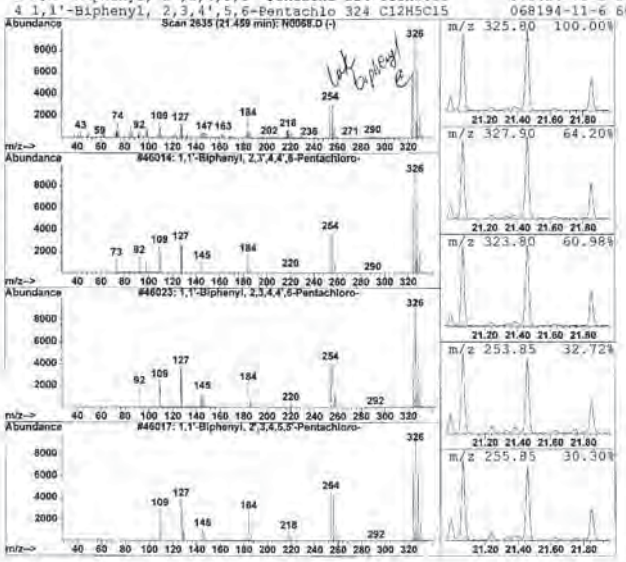
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 8 1,1'-Biphenyl, 2,3',4,4',6-Pen Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.46	15.04 ug/mL	575518	Chrysene-d12	23.06

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3',4,4',6-Pentachl	324	C12H5Cl5	056558-17-9	94
2	1,1'-Biphenyl, 2,3,4,4',6-Pentachlo	324	C12H5Cl5	074472-38-1	94
3	1,1'-Biphenyl, 2',3,4,5,5'-Pentachl	324	C12H5Cl5	070424-70-3	87
4	1,1'-Biphenyl, 2,3,4',5,6-Pentachlo	324	C12H5Cl5	068194-11-6	68



N0068.D NO14OL42.M Mon Oct 27 13:36:06 2008 Pa 587

Library Search Compound Report

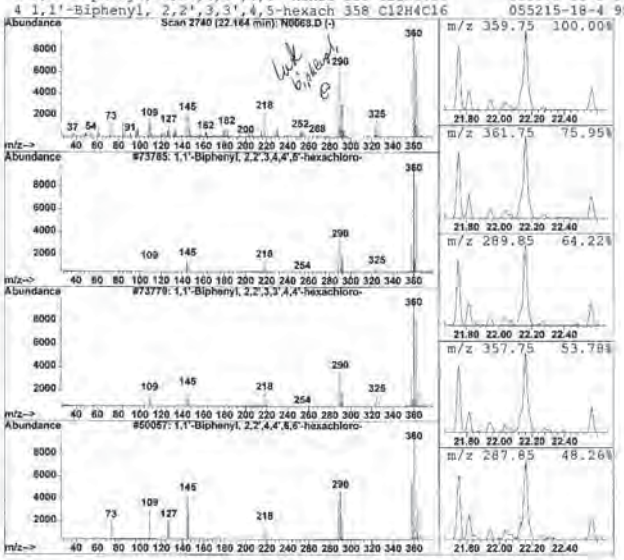
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 9 1,1'-Biphenyl, 2,2',3,4,4',5'- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.16	10.17 ug/mL	389212	Chrysene-d12	23.06

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,4,4',5'-hexac	358	C12H4Cl6	035065-28-2	98
2	1,1'-Biphenyl, 2,2',3,3',4,4'-hexac	358	C12H4Cl6	038380-07-3	98
3	1,1'-Biphenyl, 2,2',4,4',6,6'-hexac	358	C12H4Cl6	033979-03-2	96
4	1,1'-Biphenyl, 2,2',3,3',4,5-hexach	358	C12H4Cl6	055215-18-4	95



Library Search Compound Report

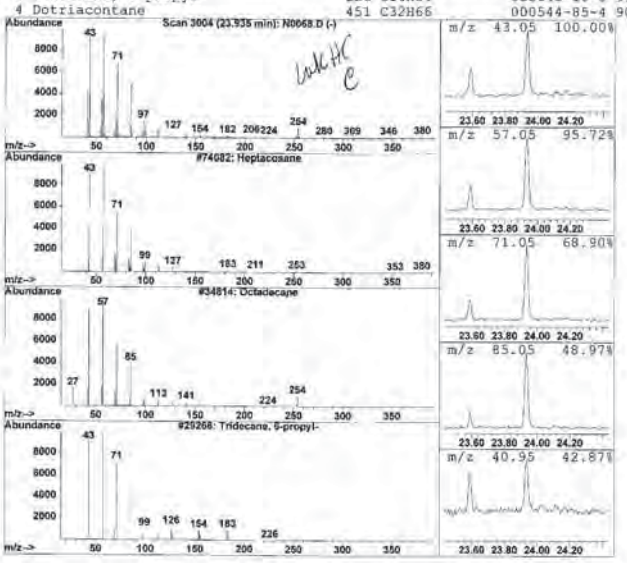
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 10 Heptacosane Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.94	9.51 ug/mL	363821	Chrysene-d12	23.06

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptacosane	380	C27H56	000593-49-7	94
2	Octadecane	254	C18H38	000593-45-3	93
3	Tridecane, 6-propyl-	226	C16H34	055045-10-8	91
4	Dotriacontane	451	C32H66	000544-85-4	90



Library Search Compound Report

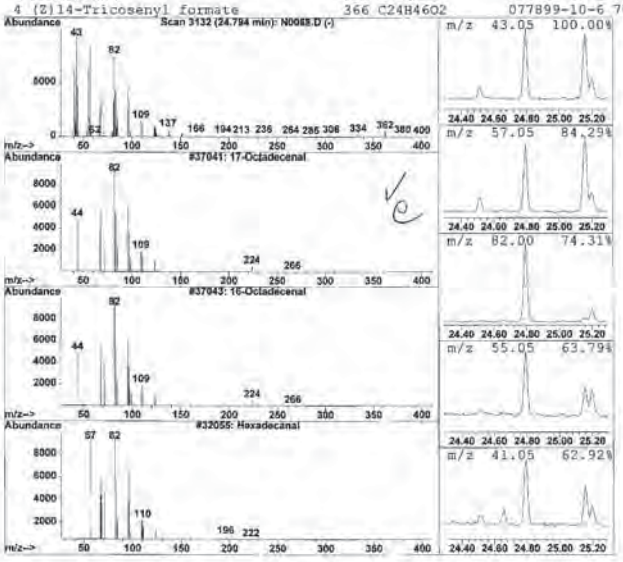
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 11 17-Octadecenal Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.79	92.68 ug/mL	881980	Perylene-d12	25.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	17-Octadecenal	266	C18H34O	056554-86-0	90
2	16-Octadecenal	266	C18H34O	056554-87-1	86
3	Hexadecanal	240	C16H32O	000629-80-1	72
4	(Z)14-Tricosenyl formate	366	C24H46O2	077899-10-6	70



Library Search Compound Report

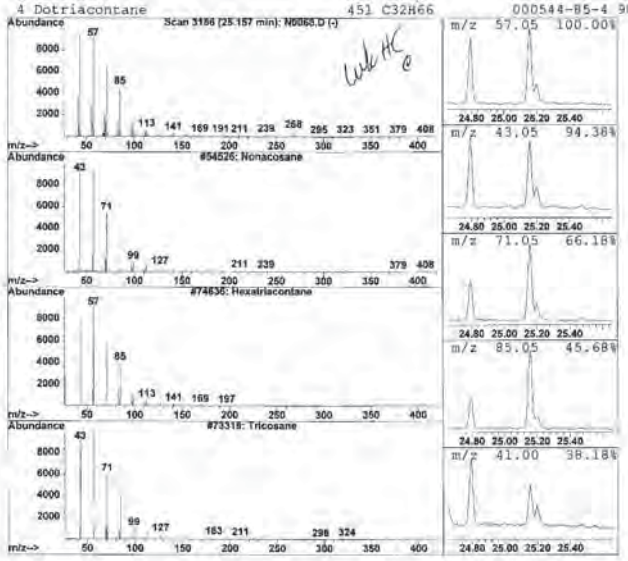
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 12 Nonacosane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.16	67.22 ug/mL	639697	Perylene-d12	25.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	99
2	Hexatriacontane	507	C36H74	000630-06-8	93
3	Tricosane	324	C23H48	000638-67-5	90
4	Dotriacontane	451	C32H66	000544-85-4	90



Library Search Compound Report

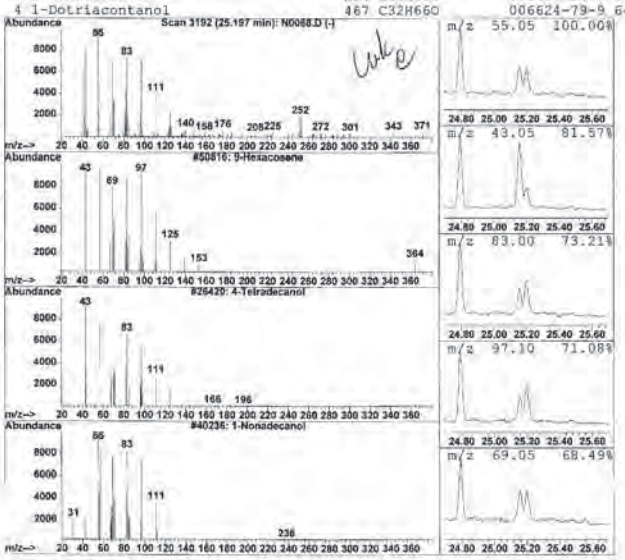
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 13 9-Hexacosene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.20	40.00 ug/mL	380676	Perylene-d12	25.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Hexacosene	364	C26H52	000000-00-0	80
2	4-Tetradecanol	214	C14H30O	001653-33-4	64
3	1-Nonadecanol	284	C19H40O	001454-84-8	64
4	1-Dotriacontanol	467	C32H66O	006624-79-9	64



N0068.D NO14OL42.M Mon Oct 27 13:36:08 2008 Pa 592

Library Search Compound Report

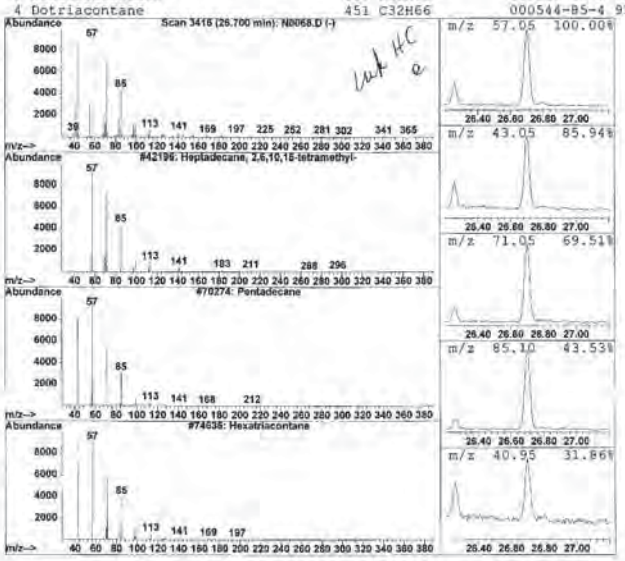
Data File : C:\HPCHEM\1\DATA\N0068.D Vial: 8
Acq On : 21 Oct 2008 14:48 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 14 Heptadecane, 2,6,10,15-tetrame Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.70	56.89 ug/mL	541378	Perylene-d12	25.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	96
2	Pentadecane	212	C15H32	000629-62-9	94
3	Hexatriacontane	507	C36H74	000630-06-8	93
4	Dotriacontane	451	C32H66	000544-85-4	91



N0068.D NO14OL42.M Mon Oct 27 13:36:09 2008 Pa 593

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0810083-003BDL**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***MBSS-3***
W Order:	0810083	**Collection Date:**	10/10/08 9:45
Matrix:	SOIL	**Date Received:**	10/10/08 13:20
Inst. ID:	MS05 26	**PrepDate:**	10/15/08 12:52
ColumnID:	DB-5MS	**BatchNo:**	8270/R15271
Revision:	10/24/08 9:48	**FileID:**	1-DL-N0054.D
Col Type:			

Sample Size: 30 g
%Moisture: 20.4
TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8270C**		**(SW3550B)**
1,1'-Biphenyl	ND		10000	140	µg/Kg-dry	25	10/20/08 18:37
2,4,5-Trichlorophenol	ND		52000	860	µg/Kg-dry	25	10/20/08 18:37
2,4,6-Trichlorophenol	ND		10000	180	µg/Kg-dry	25	10/20/08 18:37
2,4-Dichlorophenol	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
2,4-Dimethylphenol	ND		10000	2100	µg/Kg-dry	25	10/20/08 18:37
2,4-Dinitrophenol	ND		52000	10000	µg/Kg-dry	25	10/20/08 18:37
2,4-Dinitrotoluene	ND		10000	150	µg/Kg-dry	25	10/20/08 18:37
2,6-Dinitrotoluene	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
2-Chloronaphthalene	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
2-Chlorophenol	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
2-Methylnaphthalene	ND		10000	50	µg/Kg-dry	25	10/20/08 18:37
2-Methylphenol	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
2-Nitroaniline	ND		52000	150	µg/Kg-dry	25	10/20/08 18:37
2-Nitrophenol	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
3,3'-Dichlorobenzidine	ND		21000	1300	µg/Kg-dry	25	10/20/08 18:37
3-Nitroaniline	ND		52000	1300	µg/Kg-dry	25	10/20/08 18:37
4,6-Dinitro-2-methylphenol	ND		52000	5200	µg/Kg-dry	25	10/20/08 18:37
4-Bromophenyl phenyl ether	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
4-Chloro-3-methylphenol	ND		10000	310	µg/Kg-dry	25	10/20/08 18:37
4-Chloroaniline	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
4-Chlorophenyl phenyl ether	ND		10000	130	µg/Kg-dry	25	10/20/08 18:37
4-Methylphenol	ND		10000	90	µg/Kg-dry	25	10/20/08 18:37
4-Nitroaniline	ND		52000	1300	µg/Kg-dry	25	10/20/08 18:37
4-Nitrophenol	ND		52000	2100	µg/Kg-dry	25	10/20/08 18:37
Acenaphthene	ND		10000	100	µg/Kg-dry	25	10/20/08 18:37
Acenaphthylene	ND		10000	130	µg/Kg-dry	25	10/20/08 18:37
Acetophenone	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Anthracene	ND		10000	73	µg/Kg-dry	25	10/20/08 18:37
Atrazine	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Benzaldehyde	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
Benzo[a]anthracene	1700 J		10000	110	µg/Kg-dry	25	10/20/08 18:37
Benzo[a]pyrene	1900 J		10000	310	µg/Kg-dry	25	10/20/08 18:37
Benzo[b]fluoranthene	3400 J		10000	360	µg/Kg-dry	25	10/20/08 18:37
Benzo[g,h,i]perylene	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37

Qualifiers:
* Value exceeds Maximum Contaminant Level
B Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399137 **Project Supervisor:** Monika Santucci

594

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0810083-003BDL**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***MBSS-3***
W Order:	0810083	**Collection Date:**	10/10/08 9:45
Matrix:	SOIL	**Date Received:**	10/10/08 13:20
Inst. ID:	MS05 26	**PrepDate:**	10/15/08 12:52
ColumnID:	DB-5MS	**BatchNo:**	8270/R15271
Revision:	10/24/08 9:48	**FileID:**	1-DL-N0054.D
Col Type:			

Sample Size: 30 g
%Moisture: 20.4
TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8270C**		**(SW3550B)**
Benzo[k]fluoranthene	ND		10000	350	µg/Kg-dry	25	10/20/08 18:37
bis(2-Chloroethoxy)methane	ND		10000	97	µg/Kg-dry	25	10/20/08 18:37
bis(2-chloroethyl)ether	ND		10000	160	µg/Kg-dry	25	10/20/08 18:37
bis(2-chloroisopropyl)ether	ND		10000	180	µg/Kg-dry	25	10/20/08 18:37
bis(2-Ethylhexyl)phthalate	1400 J		10000	470	µg/Kg-dry	25	10/20/08 18:37
Butyl benzyl phthalate	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
Caprolactam	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Carbazole	ND		10000	310	µg/Kg-dry	25	10/20/08 18:37
Chrysene	2000 J		10000	88	µg/Kg-dry	25	10/20/08 18:37
Di-n-butyl phthalate	ND		10000	2700	µg/Kg-dry	25	10/20/08 18:37
Di-n-octyl phthalate	ND		10000	61	µg/Kg-dry	25	10/20/08 18:37
Dibenz[a,h]anthracene	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
Dibenzofuran	ND		10000	140	µg/Kg-dry	25	10/20/08 18:37
Diethyl phthalate	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Dimethyl phthalate	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Fluoranthene	3300 J		10000	310	µg/Kg-dry	25	10/20/08 18:37
Fluorene	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Hexachlorobenzene	ND		10000	170	µg/Kg-dry	25	10/20/08 18:37
Hexachlorobutadiene	ND		10000	85	µg/Kg-dry	25	10/20/08 18:37
Hexachlorocyclopentadiene	ND		10000	5200	µg/Kg-dry	25	10/20/08 18:37
Hexachloroethane	ND		10000	1300	µg/Kg-dry	25	10/20/08 18:37
Indeno(1,2,3-cd)pyrene	ND		10000	420	µg/Kg-dry	25	10/20/08 18:37
Isophorone	ND		10000	87	µg/Kg-dry	25	10/20/08 18:37
N-Nitroso-di-n-propylamine	ND		10000	120	µg/Kg-dry	25	10/20/08 18:37
N-Nitrosodiphenylamine	ND		10000	70	µg/Kg-dry	25	10/20/08 18:37
Naphthalene	ND		10000	79	µg/Kg-dry	25	10/20/08 18:37
Nitrobenzene	ND		10000	110	µg/Kg-dry	25	10/20/08 18:37
Pentachlorophenol	ND		52000	10000	µg/Kg-dry	25	10/20/08 18:37
Phenanthrene	1400 J		10000	48	µg/Kg-dry	25	10/20/08 18:37
Phenol	ND		10000	96	µg/Kg-dry	25	10/20/08 18:37
Pyrene	3000 J		10000	71	µg/Kg-dry	25	10/20/08 18:37
Surr: 2,4,6-Tribromophenol	62.7		20-143	0	%REC	25	10/20/08 18:37
Surr: 2-Fluorobiphenyl	65.8		46-130	0	%REC	25	10/20/08 18:37
Surr: 2-Fluorophenol	60.5		22-130	0	%REC	25	10/20/08 18:37

Qualifiers:
* Value exceeds Maximum Contaminant Level
B Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399137 **Project Supervisor:** Monika Santucci

595

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003BDT.
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0054.D
Col Type:			

Sample Size: 30 g; %Moisture: 20.4; TestCode: 8270S_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	58.6		39-130	0	%REC	25	10/20/08 18:37
Surr: Phenol-d5	58.3		33-130	0	%REC	25	10/20/08 18:37
Surr: Terphenyl-d14	78.3		36-146	0	%REC	25	10/20/08 18:37

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399137 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0054.D Vial: 18
Acq On : 20 Oct 2008 18:37 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:54 2008 Quant Results File: N0140L42.RES

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

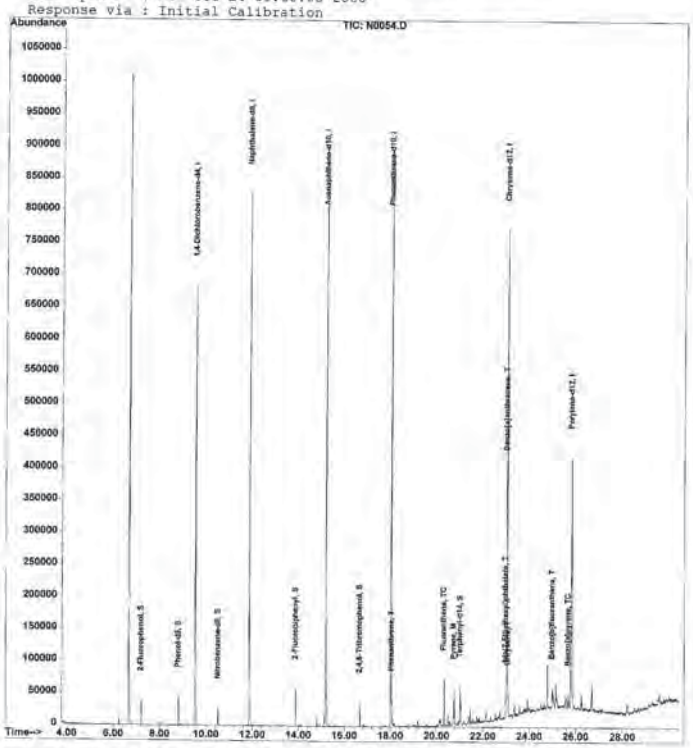
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	164996	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	582018	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.19	164	337599	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.02	188	585372	40.00 ug/mL	0.00
58) Chrysene-d12	23.05	240	464082	40.00 ug/mL	0.00
68) Perylene-d12	25.83	264	332335	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.21	112	16533	3.63 ug/mL	0.01
Spiked Amount 150.000			Recovery = 2.42%		
3) Phenol-d5	8.82	99	21791	3.50 ug/mL	0.00
Spiked Amount 150.000			Recovery = 2.33%		
14) Nitrobenzene-d5	10.52	82	15668	2.34 ug/mL	0.00
Spiked Amount 100.000			Recovery = 2.34%		
30) 2-Fluorobiphenyl	13.89	172	27616	2.63 ug/mL	0.00
Spiked Amount 100.000			Recovery = 2.63%		
46) 2,4,6-Tribromophenol	16.69	330	8820	3.76 ug/mL	0.00
Spiked Amount 150.000			Recovery = 2.51%		
60) Terphenyl-d14	21.03	244	26078	3.13 ug/mL	0.00
Spiked Amount 100.000			Recovery = 3.13%		
Target Compounds					Qvalue
53) Phenanthrene	18.07	178	19588	1.34 ug/mL	99
57) Fluoranthene	20.33	202	45631	3.11 ug/mL	96
59) Pyrene	20.77	202	40593	2.86 ug/mL	95
63) Benzo[a]anthracene	23.03	228	20922	1.67 ug/mL	91
64) bis(2-Ethylhexyl)phthalate	23.00	149	15595	1.30 ug/mL	90
65) Chrysene	23.10	228	22577	1.94 ug/mL	98
69) Benzo[b]fluoranthene	25.01	252	28931	3.20 ug/mL	81
71) Benzo[a]pyrene	25.69	252	15264	1.86 ug/mL	93

(#) = qualifier out of range (m) = manual integration
N0054.D N0140L42.M Fri Oct 24 09:34:32 2008

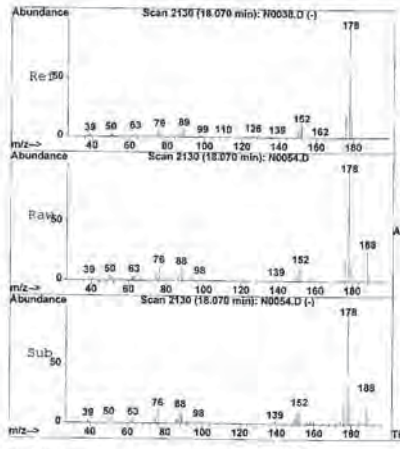
Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0054.D Vial: 18
Acq On : 20 Oct 2008 18:37 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:54 2008 Quant Results File: N0140L42.RES

Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



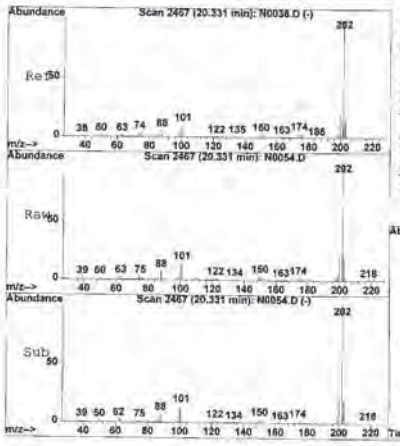
N0054.D N0140L42.M Fri Oct 24 09:34:33 2008



#53
Phenanthrene
Concen: 1.34 ug/mL
RT: 18.07 min Scan# 2130
Delta R.T. 0.00 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

Tgt Ion:178 Resp: 19588

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.3
176	18.2	0.0	48.5

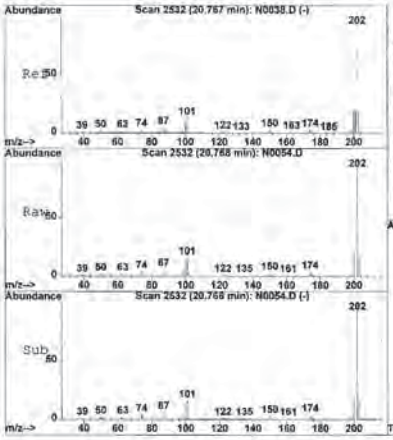


#57
Fluoranthene
Concen: 3.11 ug/mL
RT: 20.33 min Scan# 2467
Delta R.T. 0.00 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

Tgt Ion:202 Resp: 45631

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	43.2

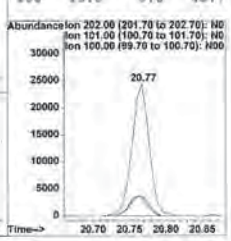
N0054.D N0140L42.M Fri Oct 24 09:34:34 2008

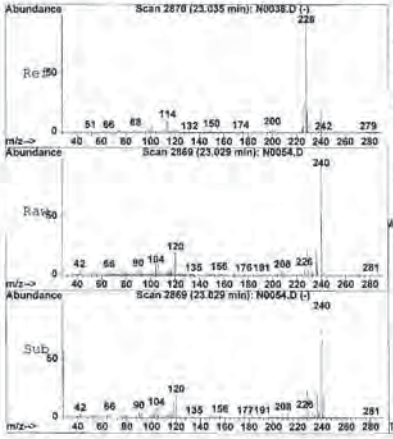


#59
Pyrene
Concen: 2.86 ug/mL
RT: 20.77 min Scan# 2532
Delta R.T. 0.00 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

Tgt Ion:202 Resp: 40593

Ion	Ratio	Lower	Upper
202	100		
101	18.2	0.0	45.7
100	15.0	0.0	43.7

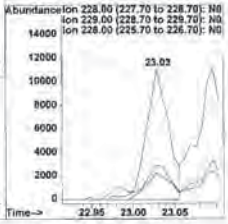




#63
Benzo[a]anthracene
Concen: 1.67 ug/mL
RT: 23.03 min Scan# 2869
Delta R.T. -0.01 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

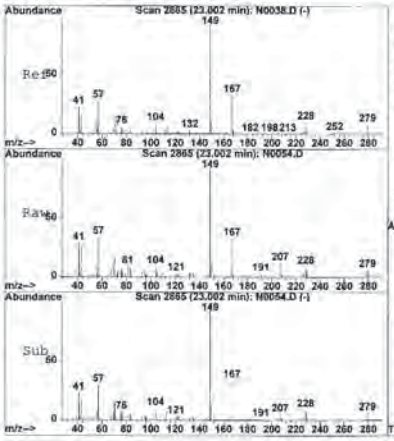
Tgt Ion:228 Resp: 20922

Ion	Ratio	Lower	Upper
228	100		
229	13.2	0.0	49.7
226	28.4	0.0	55.5



N0054.D N014OL42.M Fri Oct 24 09:34:34 2008

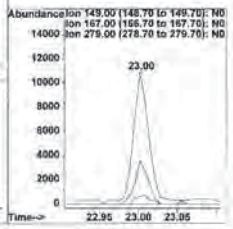
600

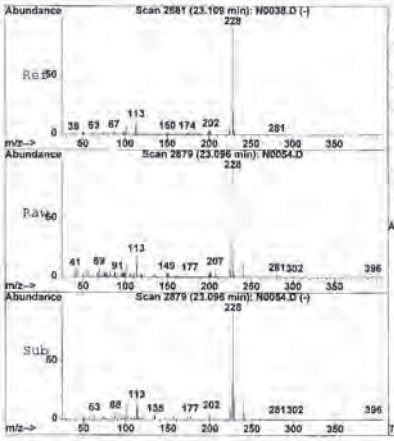


#64
bis(2-Ethylhexyl)phthalate
Concen: 1.30 ug/mL
RT: 23.00 min Scan# 2865
Delta R.T. 0.00 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

Tgt Ion:149 Resp: 15595

Ion	Ratio	Lower	Upper
149	100		
167	27.8	3.9	63.9
279	6.3	0.0	38.4

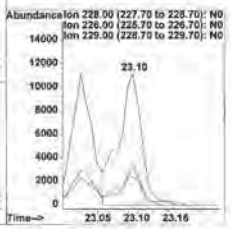




#65
Chrysene
Concen: 1.94 ug/mL
RT: 23.10 min Scan# 2879
Delta R.T. -0.01 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

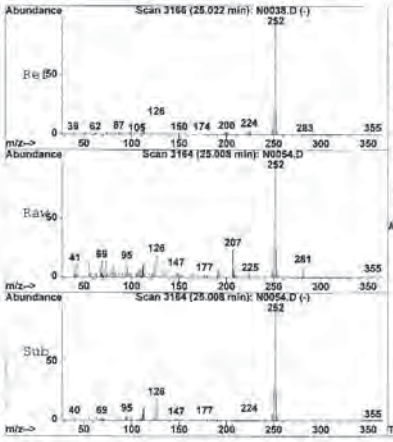
Tgt Ion:228 Resp: 22577

Ion	Ratio	Lower	Upper
228	100		
226	27.8	0.0	58.0
229	17.6	0.0	49.4



N0054.D N014OL42.M Fri Oct 24 09:34:35 2008

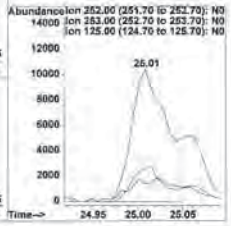
601

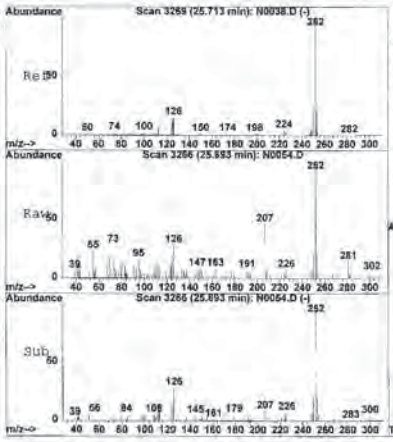


#69
Benzo[b]fluoranthene
Concen: 3.20 ug/mL
RT: 25.01 min Scan# 3164
Delta R.T. -0.01 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

Tgt Ion:252 Resp: 28931

Ion	Ratio	Lower	Upper
252	100		
253	32.0	0.0	52.0
125	18.7	0.0	42.3

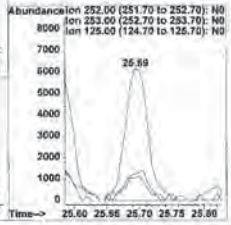




#71
Benzo[a]pyrene
Concen: 1.86 ug/mL
RT: 25.69 min Scan# 3266
Delta R.T. -0.02 min
Lab File: N0054.D
Acq: 20 Oct 2008 18:37

Tgt Ion:252 Resp: 15264

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	52.0
125	19.5	0.0	43.7



N0054.D N014OL42.M Fri Oct 24 09:34:35 2008

602

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0054.D Vial: 18
Acq On : 20 Oct 2008 18:37 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008 Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	164996	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	581708	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	337972	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.02	188	585372	40.00 ug/mL	0.00
14) Chrysene-d12	23.05	240	464082	40.00 ug/mL	0.00
15) Perylene-d12	25.93	264	332335	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

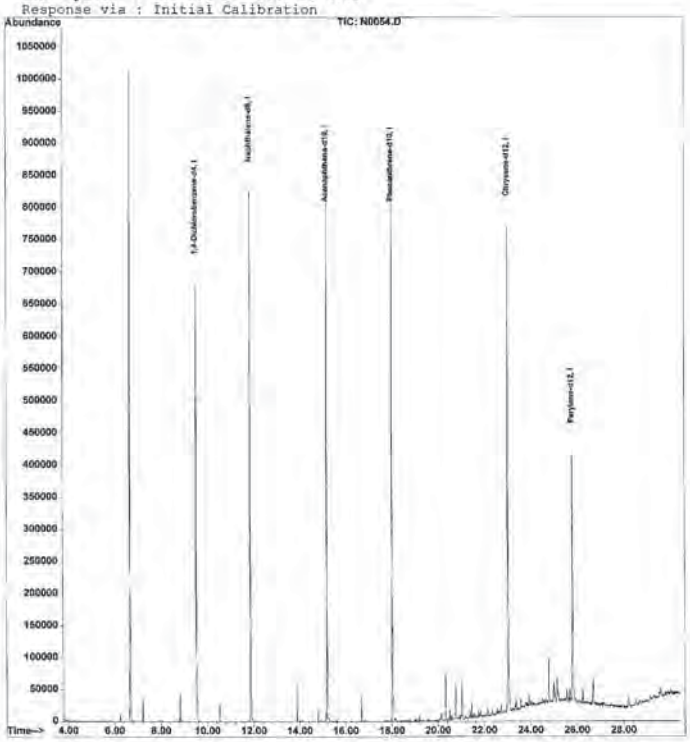
(#) = qualifier out of range (m) = manual integration
N0054.D N014OLM.M Fri Oct 24 09:38:04 2008

603

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0054.D Vial: 18
Acq On : 20 Oct 2008 18:37 Operator: MEG
Sample : 0810083-003B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008 Quant Results File: NOI4OLM.RES

Method : C:\HPCHEM\1\METHODS\NOI4OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



N0054.D NOI4OLM.M Fri Oct 24 09:38:04 2008 P

604

Life Science Laboratories, Inc. **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0069.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	150 J		860	11	µg/Kg-dry	2	10/21/08 15:26
2,4,5-Trichlorophenol	ND		4300	54	µg/Kg-dry	2	10/21/08 15:26
2,4,6-Trichlorophenol	ND		860	15	µg/Kg-dry	2	10/21/08 15:26
2,4-Dichlorophenol	ND		860	9.9	µg/Kg-dry	2	10/21/08 15:26
2,4-Dimethylphenol	ND		860	170	µg/Kg-dry	2	10/21/08 15:26
2,4-Dinitrophenol	ND		4300	860	µg/Kg-dry	2	10/21/08 15:26
2,4-Dinitrotoluene	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
2,6-Dinitrotoluene	ND		860	15	µg/Kg-dry	2	10/21/08 15:26
2-Chloronaphthalene	ND		860	9.5	µg/Kg-dry	2	10/21/08 15:26
2-Chlorophenol	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
2-Methylnaphthalene	1100		860	4.2	µg/Kg-dry	2	10/21/08 15:26
2-Methylphenol	ND		860	9.6	µg/Kg-dry	2	10/21/08 15:26
2-Nitroaniline	ND		4300	15	µg/Kg-dry	2	10/21/08 15:26
2-Nitrophenol	ND		860	35	µg/Kg-dry	2	10/21/08 15:26
3,3'-Dichlorobenzidine	ND		1700	100	µg/Kg-dry	2	10/21/08 15:26
3-Nitroaniline	ND		4300	100	µg/Kg-dry	2	10/21/08 15:26
4,6-Dinitro-2-methylphenol	ND		4300	430	µg/Kg-dry	2	10/21/08 15:26
4-Bromophenyl phenyl ether	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
4-Chloro-3-methylphenol	ND		860	26	µg/Kg-dry	2	10/21/08 15:26
4-Chloroaniline	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
4-Chlorophenyl phenyl ether	ND		860	11	µg/Kg-dry	2	10/21/08 15:26
4-Methylphenol	310 J		860	7.4	µg/Kg-dry	2	10/21/08 15:26
4-Nitroaniline	ND		4300	100	µg/Kg-dry	2	10/21/08 15:26
4-Nitrophenol	ND		4300	170	µg/Kg-dry	2	10/21/08 15:26
Acenaphthene	190 J		860	8.6	µg/Kg-dry	2	10/21/08 15:26
Acenaphthylene	320 J		860	10	µg/Kg-dry	2	10/21/08 15:26
Acetophenone	140 J		860	100	µg/Kg-dry	2	10/21/08 15:26
Anthracene	520 J		860	6.1	µg/Kg-dry	2	10/21/08 15:26
Atrazine	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
Benzaldehyde	ND		860	13	µg/Kg-dry	2	10/21/08 15:26
Benzo[a]anthracene	1900		860	9.0	µg/Kg-dry	2	10/21/08 15:26
Benzo[a]pyrene	2200		860	26	µg/Kg-dry	2	10/21/08 15:26
Benzo[b]fluoranthene	4300		860	30	µg/Kg-dry	2	10/21/08 15:26
Benzo[g,h,i]perylene	1700		860	35	µg/Kg-dry	2	10/21/08 15:26

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399159 Project Supervisor: Monika Santucci

605

Life Science Laboratories, Inc. **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0069.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1400		860	29	µg/Kg-dry	2	10/21/08 15:26
bis(2-Chloroethoxy)methane	ND		860	8.0	µg/Kg-dry	2	10/21/08 15:26
bis(2-chloroethyl)ether	87 J		860	13	µg/Kg-dry	2	10/21/08 15:26
bis(2-chloroisopropyl)ether	ND		860	15	µg/Kg-dry	2	10/21/08 15:26
bis(2-Ethylhexyl)phthalate	290 J		860	39	µg/Kg-dry	2	10/21/08 15:26
Butyl benzyl phthalate	ND		860	35	µg/Kg-dry	2	10/21/08 15:26
Caprolactam	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
Carbazole	350 J		860	26	µg/Kg-dry	2	10/21/08 15:26
Chrysene	2500		860	7.3	µg/Kg-dry	2	10/21/08 15:26
Di-n-butyl phthalate	ND		860	220	µg/Kg-dry	2	10/21/08 15:26
Di-n-octyl phthalate	ND		860	5.1	µg/Kg-dry	2	10/21/08 15:26
Dibenz[a,h]anthracene	400 J		860	35	µg/Kg-dry	2	10/21/08 15:26
Dibenzofuran	280 J		860	12	µg/Kg-dry	2	10/21/08 15:26
Diethyl phthalate	ND		860	9.1	µg/Kg-dry	2	10/21/08 15:26
Dimethyl phthalate	ND		860	6.8	µg/Kg-dry	2	10/21/08 15:26
Fluoranthene	3200		860	26	µg/Kg-dry	2	10/21/08 15:26
Fluorene	200 J		860	8.9	µg/Kg-dry	2	10/21/08 15:26
Hexachlorobenzene	ND		860	14	µg/Kg-dry	2	10/21/08 15:26
Hexachlorobutadiene	ND		860	7.8	µg/Kg-dry	2	10/21/08 15:26
Hexachlorocyclopentadiene	ND		860	430	µg/Kg-dry	2	10/21/08 15:26
Hexachloroethane	ND		860	100	µg/Kg-dry	2	10/21/08 15:26
Indeno[1,2,3-cd]pyrene	620 J		860	35	µg/Kg-dry	2	10/21/08 15:26
Isophorone	ND		860	7.2	µg/Kg-dry	2	10/21/08 15:26
N-Nitroso-di-n-propylamine	ND		860	9.9	µg/Kg-dry	2	10/21/08 15:26
N-Nitrosodiphenylamine	ND		860	5.8	µg/Kg-dry	2	10/21/08 15:26
Naphthalene	740 J		860	6.8	µg/Kg-dry	2	10/21/08 15:26
Nitrobenzene	ND		860	9.2	µg/Kg-dry	2	10/21/08 15:26
Pentachlorophenol	ND		4300	860	µg/Kg-dry	2	10/21/08 15:26
Phenanthrene	2600		860	3.8	µg/Kg-dry	2	10/21/08 15:26
Phenol	94 J		860	8.0	µg/Kg-dry	2	10/21/08 15:26
Pyrene	8200		860	5.8	µg/Kg-dry	2	10/21/08 15:26
Surr: 2,4,6-Tribromophenol	81 S		20-143	0	%REC	2	10/21/08 15:26
Surr: 2-Fluorobiphenyl	74.2		48-130	0	%REC	2	10/21/08 15:26
Surr: 2-Fluorophenol	71.1		22-130	0	%REC	2	10/21/08 15:26

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399159 Project Supervisor: Monika Santucci

606

Life Science Laboratories, Inc. **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	Sample Size: 30 g	PrepDate: 10/15/08 12:52
ColumnID:	DB-5MS	%Moisture: 23.0	BatchNo: 8270/R15275
Revision:	10/24/08 9:53	TestCode: 8270S OLM42	FileID: 1-SAMP-N0069.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	71.6		39-130	0	%REC	2	10/21/08 15:26
Surr: Phenol-d5	71.3		33-130	0	%REC	2	10/21/08 15:26
Surr: Terphenyl-d14	191 S		36-146	0	%REC	2	10/21/08 15:26

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399159 Project Supervisor: Monika Santucci

607

Form I TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-4

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-004B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0069.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 23 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 2.00

Extract Volume: 1000 (ul)

Number TICs found: 5 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.26)	6.26	1300	J
2.	aldol	6.81	86000	JBA
3. 000581-42-0	Naphthalene, 2,6-dimethyl-	14.39	850	JN
4.	unknown (14.8)	14.80	1000	JB
5.	unknown hydrocarbon	16.93	1800	J

FORM I TIC 9 SW8270C

608

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:28 2008 Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	231281	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	810108	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.20	164	458128	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.03	188	689837	40.00 ug/mL	0.00
58) Chrysene-d12	23.06	240	192602	40.00 ug/mL	0.00
68) Perylene-d12	25.84	264	72964	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.24	112	340090	53.31 ug/mL	0.03
Spiked Amount 150.000			Recovery =	35.54%	
3) Phenol-d5	8.83	99	467084	53.50 ug/mL	0.00
Spiked Amount 150.000			Recovery =	35.67%	
14) Nitrobenzene-d5	10.53	82	334133	35.82 ug/mL	0.00
Spiked Amount 100.000			Recovery =	35.82%	
30) 2-Fluorobiphenyl	13.89	172	527530	37.09 ug/mL	0.00
Spiked Amount 100.000			Recovery =	37.09%	
46) 2,4,6-Tribromophenol	16.69	330	195283	61.39 ug/mL	0.00
Spiked Amount 150.000			Recovery =	40.93%	
60) Terphenyl-d14	21.05	244	329568	95.34 ug/mL	0.00
Spiked Amount 100.000			Recovery =	95.34%	
Target Compounds					Qvalue
4) Phenol	8.85	94	11301	1.09 ug/mL#	1
5) bis(2-Chloroethyl)ether	9.02	93	8223	1.01 ug/mL#	32
10) 4-Methylphenol	10.21	108	28402	3.53 ug/mL	88
21) Naphthalene	11.91	128	166739	8.50 ug/mL	100
25) 2-Methylnaphthalene	13.21	142	203000	12.93 ug/mL	99
35) Acenaphthylene	14.92	152	75522	3.64 ug/mL	90
37) Acenaphthene	15.25	153	27261	2.20 ug/mL	85
41) Dibenzofuran	15.58	168	71744	3.22 ug/mL	91
44) Fluorene	16.23	166	35298	2.33 ug/mL	82
53) Phenanthrene	18.08	178	511181	29.61 ug/mL	99
54) Anthracene	18.17	178	106451	6.04 ug/mL	93
55) Carbazole	18.46	167	66019	4.10 ug/mL	88
57) Fluoranthene	20.35	202	638397	36.93 ug/mL	96
59) Pyrene	20.78	202	554755	34.32 ug/mL	99
63) Benzo[a]anthracene	23.05	228	115138	22.19 ug/mL	90
64) bis(2-Ethylhexyl)phthalate	23.01	149	16589	3.34 ug/mL	99
65) Chrysene	23.11	228	141068	29.24 ug/mL	98
67) Indeno[1,2,3-cd]pyrene	28.55	276	32602	5.97 ug/mL	95
69) Benzo[b]fluoranthene	25.03	252	99456	50.17 ug/mL	93

(#) = qualifier out of range (m) = manual integration
N0069.D NO14OL42.M Wed Oct 22 13:41:22 2008 Pa

609

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:28 2008 Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
70) Benzo[k]fluoranthene	25.08	252	30630	16.27 ug/mL	95
71) Benzo[a]pyrene	25.72	252	46011	25.54 ug/mL	95
72) Dibenz[a,h]anthracene	28.56	278	7853m	4.63 ug/mL	
73) Benzo[g,h,i]perylene	29.17	276	33423	20.09 ug/mL	92

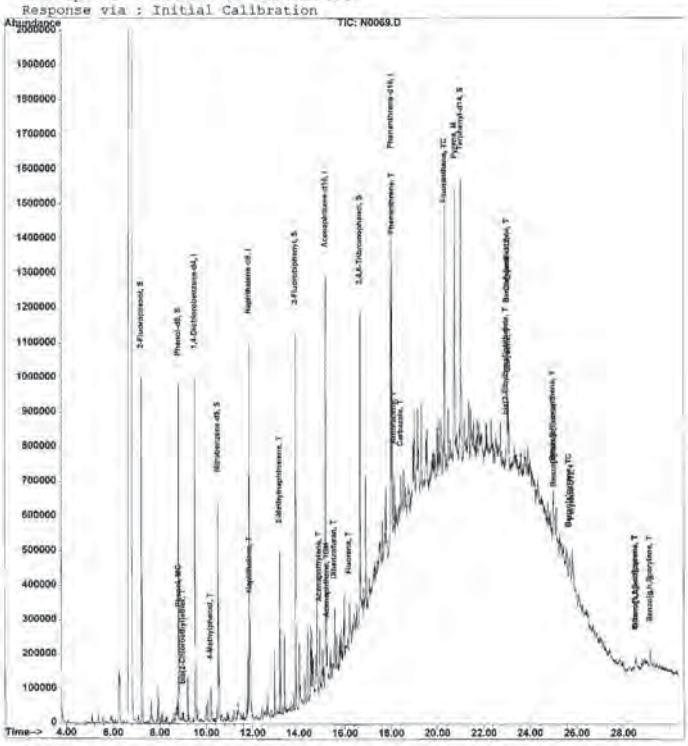
(#) = qualifier out of range (m) = manual integration
N0069.D NO14OL42.M Wed Oct 22 13:41:22 2008 Pa

610

Quantitation Report

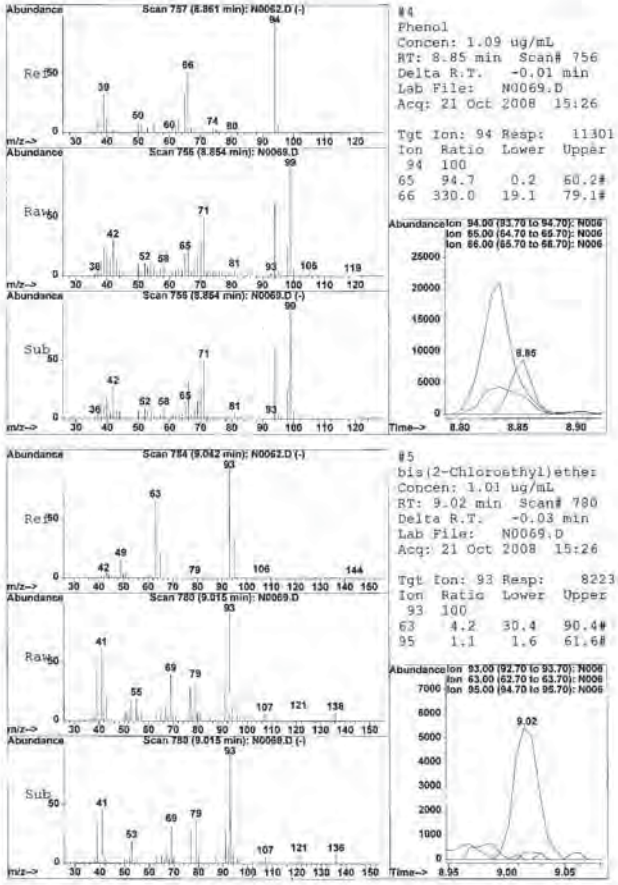
Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:28 2008 Quant Results File: NO14OL42.RES

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration



N0069.D NO14OL42.M Wed Oct 22 13:41:24 2008 Pa

611



#4
Phenol
Concen: 1.09 ug/mL
RT: 8.85 min Scan# 756
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion: 94 Resp: 11301

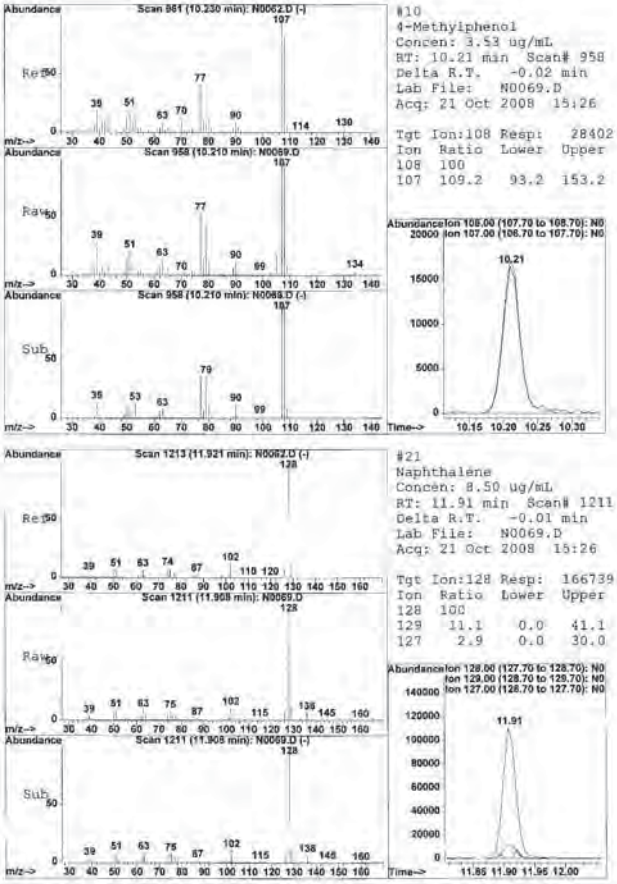
Ion	Ratio	Lower	Upper
94	100		
65	94.7	0.2	60.2#
66	330.0	19.1	79.1#

#5
bis(2-Chloroethyl)ether
Concen: 1.01 ug/mL
RT: 9.02 min Scan# 780
Delta R.T. -0.03 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion: 93 Resp: 8223

Ion	Ratio	Lower	Upper
93	100		
63	4.2	30.4	90.4#
95	1.1	1.6	61.6#

N0069.D N014OL42.M Wed Oct 22 13:41:24 2008



#10
4-Methylphenol
Concen: 3.53 ug/mL
RT: 10.21 min Scan# 958
Delta R.T. -0.02 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:108 Resp: 28402

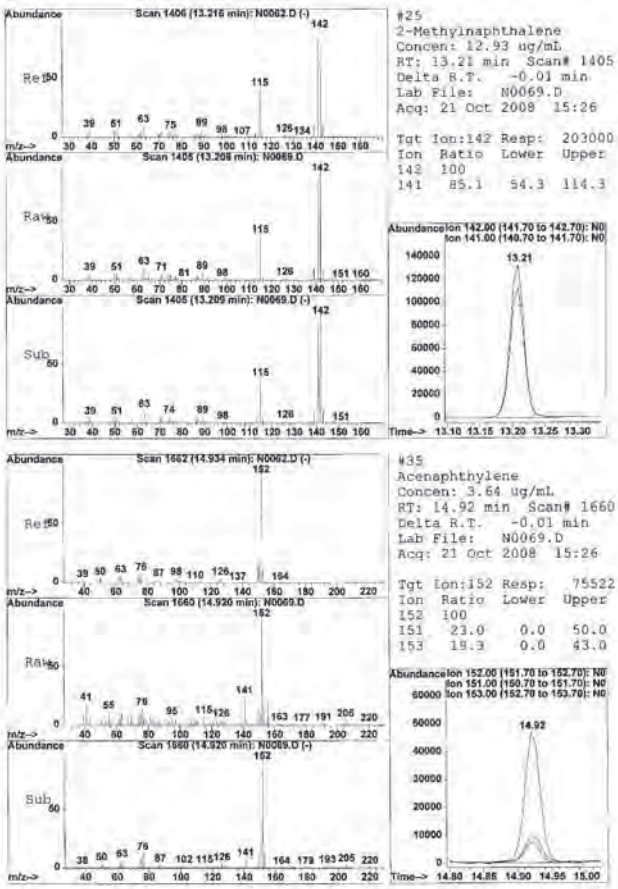
Ion	Ratio	Lower	Upper
108	100		
107	109.2	93.2	153.2

#21
Naphthalene
Concen: 8.50 ug/mL
RT: 11.91 min Scan# 1211
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:128 Resp: 166739

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	41.1
127	2.9	0.0	30.0

N0069.D N014OL42.M Wed Oct 22 13:41:25 2008



#25
2-Methylnaphthalene
Concen: 12.93 ug/mL
RT: 13.21 min Scan# 1405
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:142 Resp: 203000

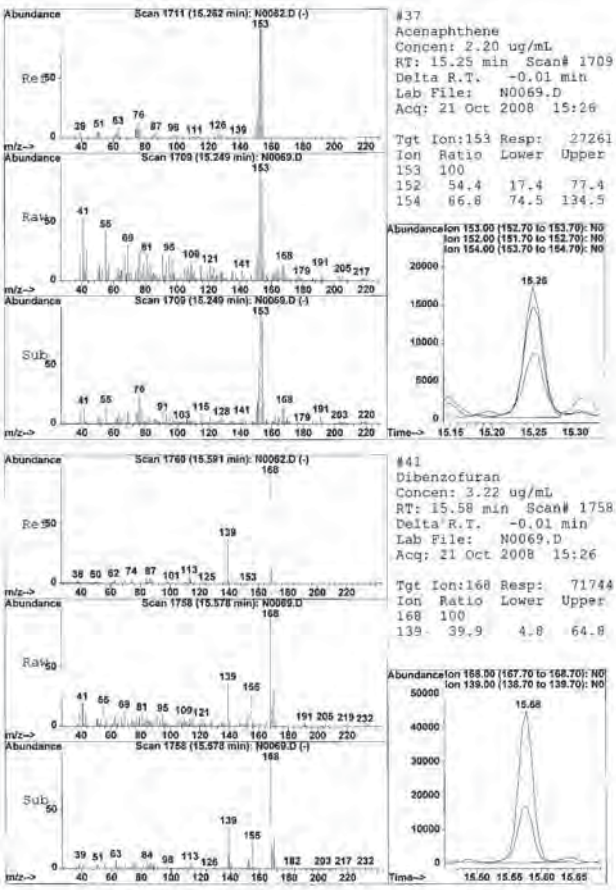
Ion	Ratio	Lower	Upper
142	100		
141	85.1	54.3	114.3

#35
Acenaphthylene
Concen: 3.64 ug/mL
RT: 14.92 min Scan# 1660
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:152 Resp: 75522

Ion	Ratio	Lower	Upper
152	100		
151	23.0	0.0	50.0
153	19.3	0.0	43.0

N0069.D N014OL42.M Wed Oct 22 13:41:25 2008



#37
Acenaphthene
Concen: 2.20 ug/mL
RT: 15.25 min Scan# 1709
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:153 Resp: 27261

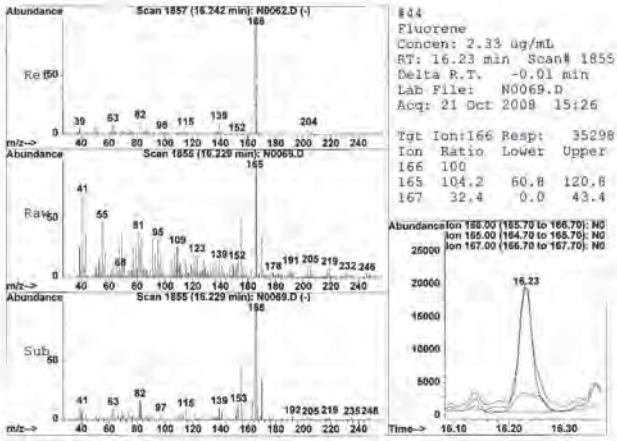
Ion	Ratio	Lower	Upper
153	100		
152	54.4	17.4	77.4
154	86.8	74.5	134.5

#41
Dibenzofuran
Concen: 3.22 ug/mL
RT: 15.58 min Scan# 1758
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:168 Resp: 71744

Ion	Ratio	Lower	Upper
168	100		
139	39.9	4.8	64.8

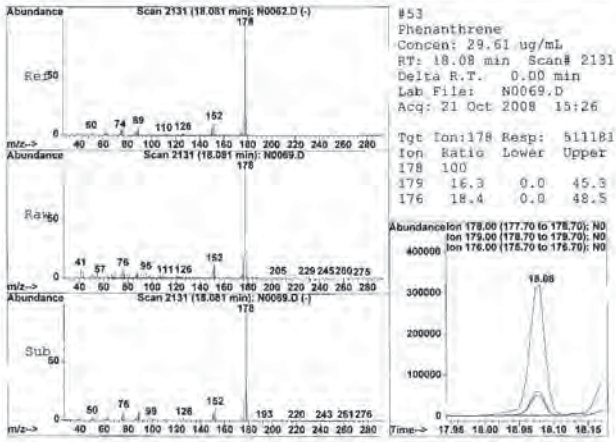
N0069.D N014OL42.M Wed Oct 22 13:41:26 2008



#44
Fluorene
Concen: 2.33 ug/mL
RT: 16.23 min Scan# 1855
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:166 Resp: 35298

Ion	Ratio	Lower	Upper
166	100		
165	104.2	60.8	120.8
167	32.4	0.0	43.4



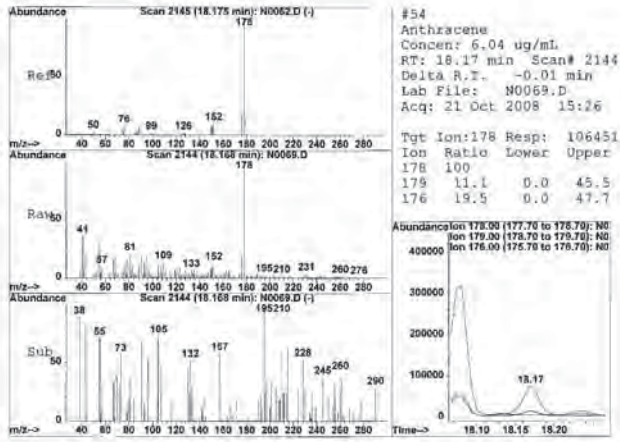
#53
Phenanthrene
Concen: 29.61 ug/mL
RT: 18.08 min Scan# 2131
Delta R.T. 0.00 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:178 Resp: 511181

Ion	Ratio	Lower	Upper
178	100		
179	16.3	0.0	45.3
176	18.4	0.0	48.5

N0069.D N014OL42.M Wed Oct 22 13:41:26 2008 Pa

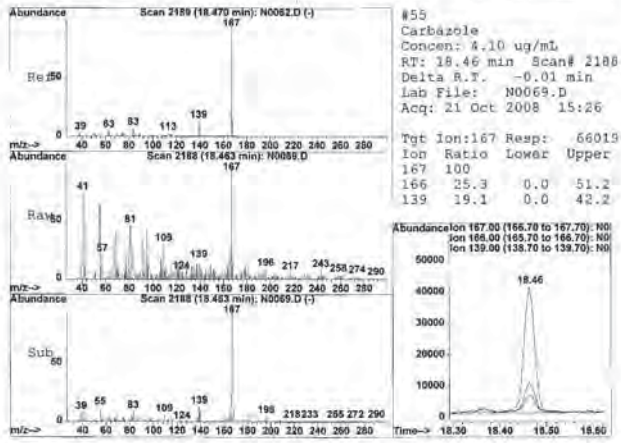
616



#54
Anthracene
Concen: 6.04 ug/mL
RT: 18.17 min Scan# 2144
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:178 Resp: 106451

Ion	Ratio	Lower	Upper
178	100		
179	11.1	0.0	45.5
176	19.5	0.0	47.7



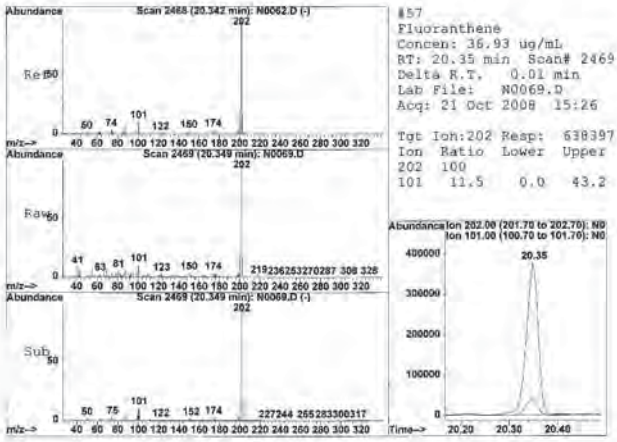
#55
Carbazole
Concen: 4.10 ug/mL
RT: 18.46 min Scan# 2188
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:167 Resp: 66019

Ion	Ratio	Lower	Upper
167	100		
166	25.3	0.0	51.2
139	19.1	0.0	42.2

N0069.D N014OL42.M Wed Oct 22 13:41:27 2008 Pa

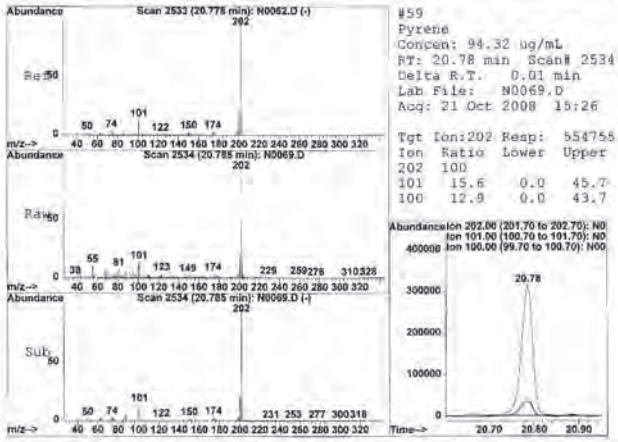
617



#57
Fluoranthene
Concen: 36.93 ug/mL
RT: 20.35 min Scan# 2469
Delta R.T. 0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:202 Resp: 638397

Ion	Ratio	Lower	Upper
202	100		
101	11.5	0.0	43.2



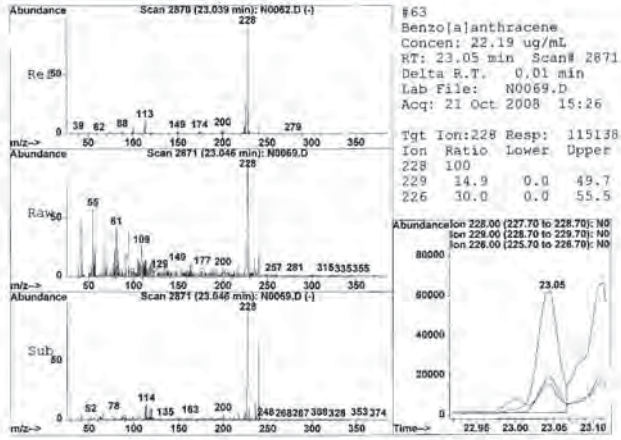
#59
Pyrene
Concen: 94.32 ug/mL
RT: 20.78 min Scan# 2534
Delta R.T. 0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:202 Resp: 554755

Ion	Ratio	Lower	Upper
202	100		
101	15.6	0.0	45.7
100	12.9	0.0	43.7

N0069.D N014OL42.M Wed Oct 22 13:41:27 2008 Pa

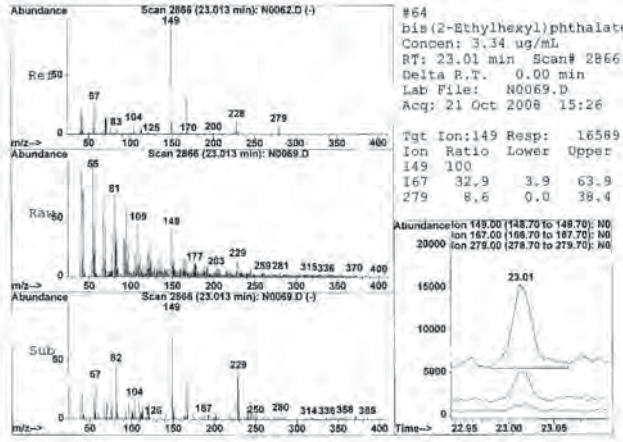
618



#63
Benzo[a]anthracene
Concen: 22.19 ug/mL
RT: 23.05 min Scan# 2871
Delta R.T. 0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:228 Resp: 115138

Ion	Ratio	Lower	Upper
228	100		
229	14.9	0.0	49.7
226	30.0	0.0	55.5



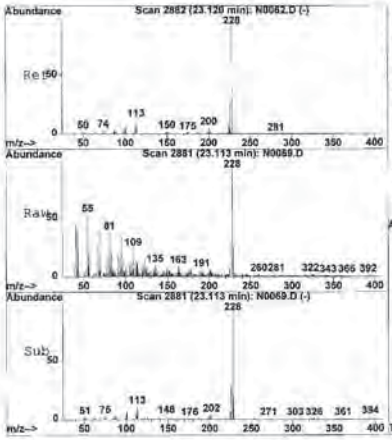
#64
bis(2-Ethylhexyl)phthalate
Concen: 3.34 ug/mL
RT: 23.01 min Scan# 2866
Delta R.T. 0.00 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:149 Resp: 16589

Ion	Ratio	Lower	Upper
149	100		
167	32.9	3.9	63.9
279	8.6	0.0	38.4

N0069.D N014OL42.M Wed Oct 22 13:41:28 2008 Pa

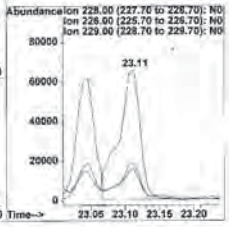
619

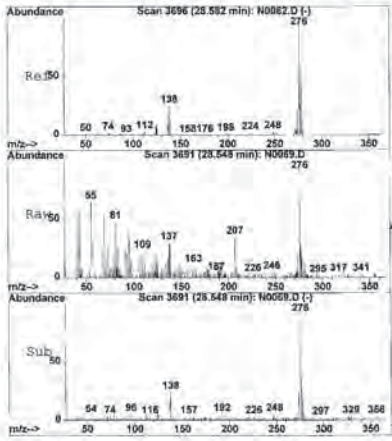


#65
Chrysene
Concen: 29.24 ug/mL
RT: 23.11 min Scan# 2881
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:228 Resp: 141068

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	58.0
229	18.7	0.0	49.4

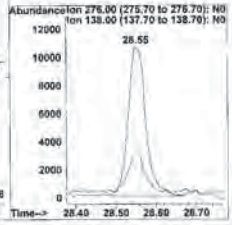




#67
Indeno[1,2,3-cd]pyrene
Concen: 5.97 ug/mL
RT: 28.55 min Scan# 3691
Delta R.T. -0.03 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

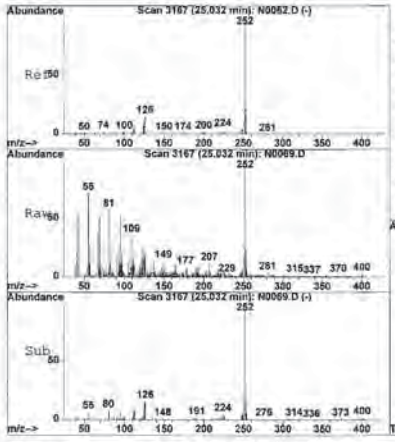
Tgt Ion:276 Resp: 32602

Ion	Ratio	Lower	Upper
276	100		
138	25.8	0.0	58.7



N0069.D N014OL42.M Wed Oct 22 13:41:28 2008 Pa

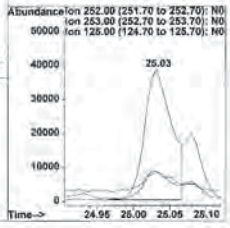
620

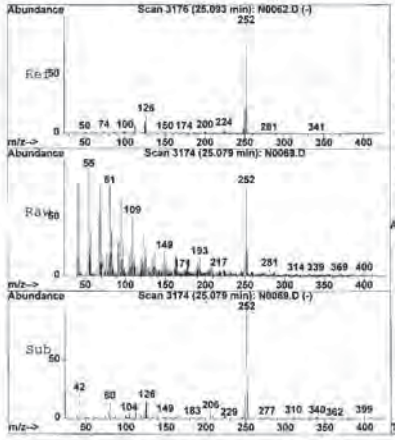


#69
Benzo[b]fluoranthene
Concen: 50.17 ug/mL
RT: 25.03 min Scan# 3167
Delta R.T. 0.00 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:252 Resp: 99456

Ion	Ratio	Lower	Upper
252	100		
253	23.6	0.0	52.0
125	17.0	0.0	42.3

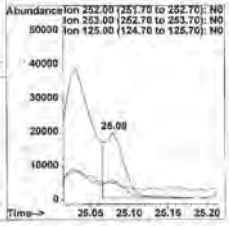




#70
Benzo[k]fluoranthene
Concen: 16.27 ug/mL
RT: 25.08 min Scan# 3174
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

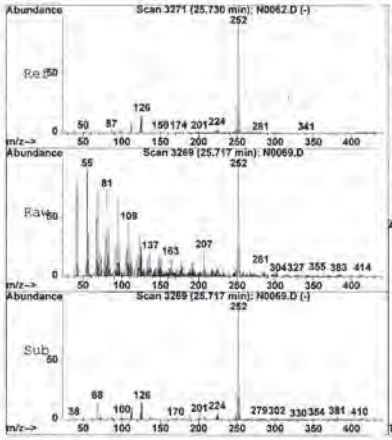
Tgt Ion:252 Resp: 30630

Ion	Ratio	Lower	Upper
252	100		
253	25.2	0.0	52.1
125	12.0	0.0	42.7



N0069.D N014OL42.M Wed Oct 22 13:41:28 2008 Pa

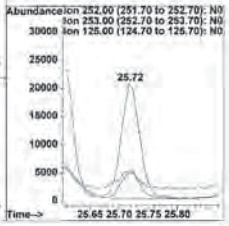
621

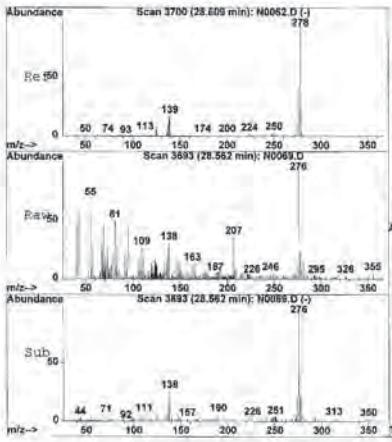


#71
Benzo[a]pyrene
Concen: 25.54 ug/mL
RT: 25.72 min Scan# 3269
Delta R.T. -0.01 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:252 Resp: 46011

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	52.0
125	18.5	0.0	43.7

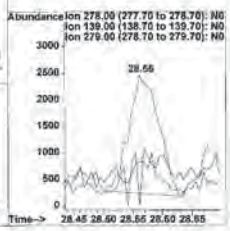




#72
Dibenz[a,h]anthracene
Concen: 4.63 ug/mL m
RT: 28.56 min Scan# 3693
Delta R.T. -0.05 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:278 Resp: 7853

Ion	Ratio	Lower	Upper
278	100		
139	7.8	0.0	45.5
279	8.0	0.0	53.7



N0069.D N014OL42.M Wed Oct 22 13:41:29 2008 Pa

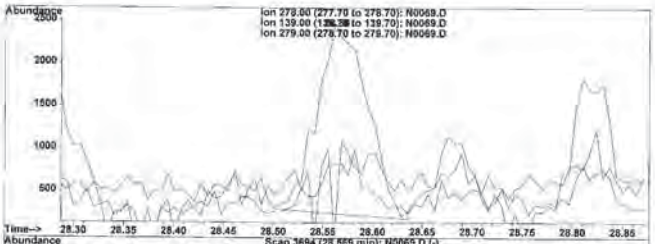
622

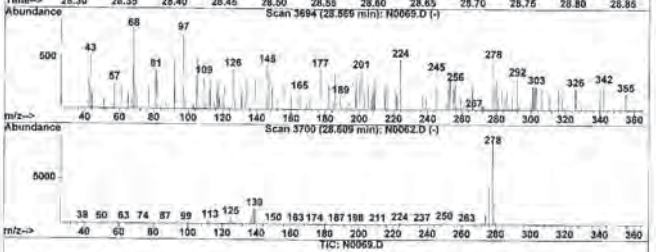
Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0069.D
Acq On : 21 Oct 2008 15:26
Sample : 0810083-004B
Misc : SAMP,8270S_OLM42, 200uL/.4mL
Quant Time: Oct 22 13:28 2008

Vial: 9
Operator: MEG
Inst : #5MS26
Multiplr: 2.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration





(72) Dibenz[a,h]anthracene (T)

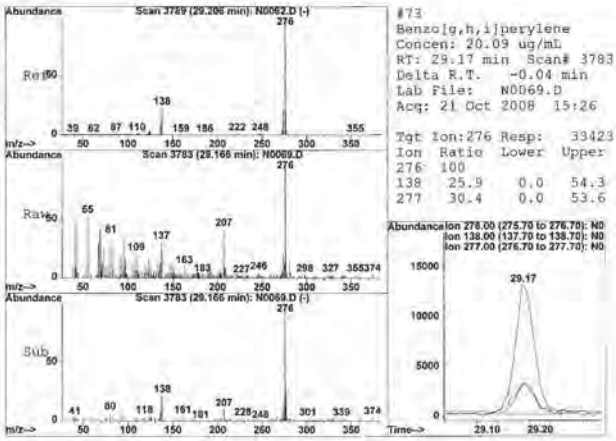
28.56min 4.63ug/mL m

response 7853

Ion	Exp%	Act%
278.00	100	100
139.00	15.50	7.84
279.00	23.70	8.02
0.00	0.00	0.00

N0069.D N014OL42.M Wed Oct 22 13:29:16 2008

623



#73
Benzo[g,h,i]perylene
Concen: 20.09 ug/mL
RT: 29.17 min Scan# 3783
Delta R.T. -0.04 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:276 Resp: 33423

Ion	Ratio	Lower	Upper
276	100		
138	25.9	0.0	54.3
277	30.4	0.0	53.6

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 14:05 2008 Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	231281	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	810108	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.20	164	458128	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.03	188	689837	40.00 ug/mL	0.01
14) Chrysene-d12	23.06	240	192602	40.00 ug/mL	0.01
15) Perylene-d12	25.84	264	72964	40.00 ug/mL	0.01

System Monitoring Compounds

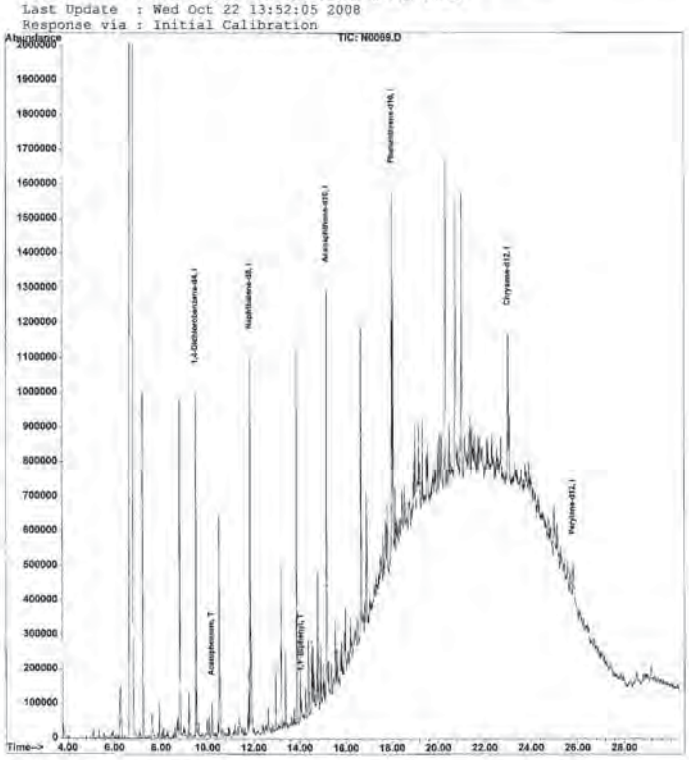
Target Compounds					Qvalue
4) Acetophenone	10.22	105	15809	1.62 ug/mL#	49
8) 1,1'-Biphenyl	14.08	154	25340	1.77 ug/mL	98

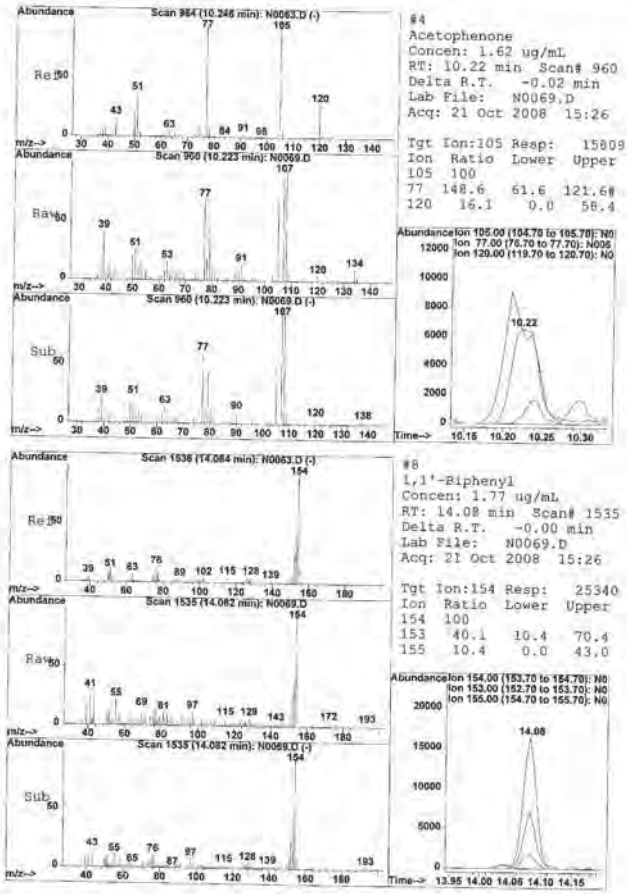
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 14:05 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration





#4
Acetophenone
Concen: 1.62 ug/mL
RT: 10.22 min Scan# 960
Delta R.T. -0.02 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

Tgt Ion:105 Resp: 15809

Ion	Ratio	Lower	Upper
105	100		
77	148.6	61.6	121.6#
120	16.1	0.0	58.4

#8
1,1'-Biphenyl
Concen: 1.77 ug/mL
RT: 14.08 min Scan# 1535
Delta R.T. -0.00 min
Lab File: N0069.D
Acq: 21 Oct 2008 15:26

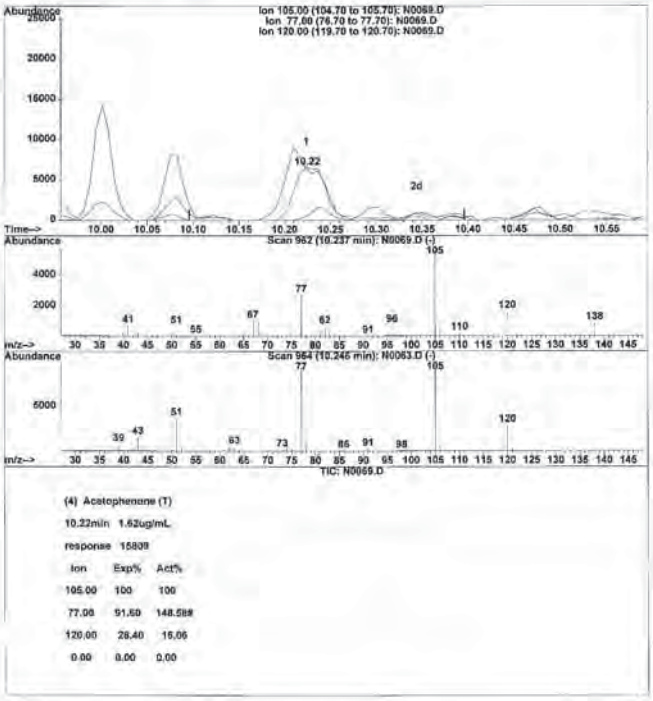
Tgt Ion:154 Resp: 25340

Ion	Ratio	Lower	Upper
154	100		
153	40.1	10.4	70.4
155	10.4	0.0	43.0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
Quant Time: Oct 22 13:54 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Multiple Level Calibration



(4) Acetophenone (T)

10.22min 1.62ug/mL

response 15809

Ion	Exp%	Act%
105.00	100	100
77.00	91.60	148.589
120.00	28.40	16.06
0.00	0.00	0.00

N0069.D NO14OLM.M Wed Oct 22 13:55:37 2008

Tentatively Identified Compound (LSC) summary

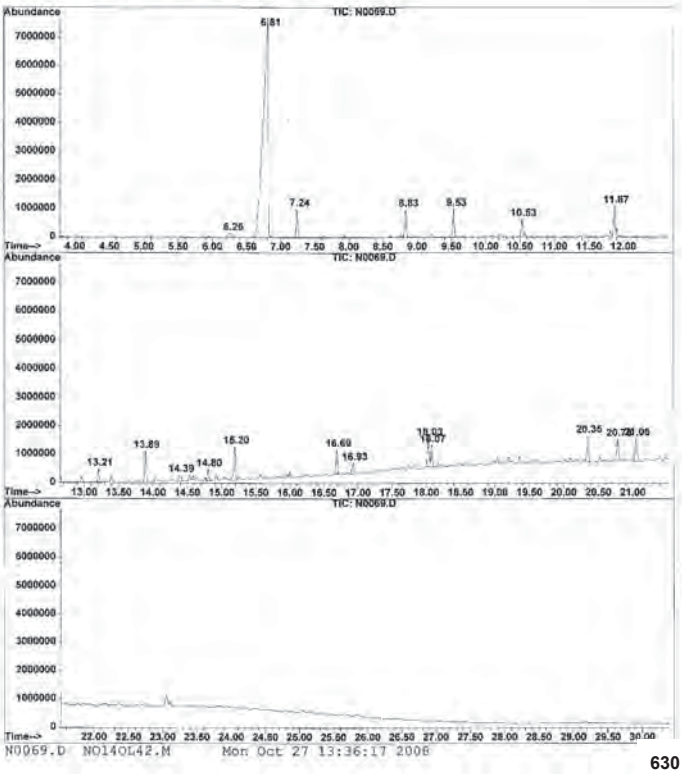
Operator ID: MEG Date Acquired: 21 Oct 2008 15:26
Data File: C:\HPCHEM\1\DATA\N0069.D
Name: 0810083-004B
Misc: SAMP,8270S_OLM42, 200uL/.4mL
Method: C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title: BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
2,7-Octanedione	6.26	15.2	ug/mL	592097	ISTD01	9.53	1559290	40.0
2-Pentanone, 4-hydro	6.81	993.8	ug/mL	38739300	ISTD01	9.53	1559290	40.0
Naphthalene, 2,6-dim	14.39	9.8	ug/mL	534798	ISTD03	15.20	2182870	40.0
Cyclopentane, 1-ethy	14.80	11.6	ug/mL	635452	ISTD03	15.20	2182870	40.0
Dodecane, 4,6-dimeth	16.93	20.3	ug/mL	820301	ISTD04	18.03	1613750	40.0

N0069.D NO14OL42.M Mon Oct 27 13:36:20 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\N0069.D
Operator : MEG
Acquired : 21 Oct 2008 15:26 using AcqMethod NO14FULL
Instrument : #5MS26
Sample Name: 0810083-004B
Misc Info : SAMP,8270S_OLM42, 200uL/.4mL
Vial Number: 9
Quant File :NO14OL42.RES (RTE Integrator)



N0069.D NO14OL42.M Mon Oct 27 13:36:17 2008

Library Search Compound Report

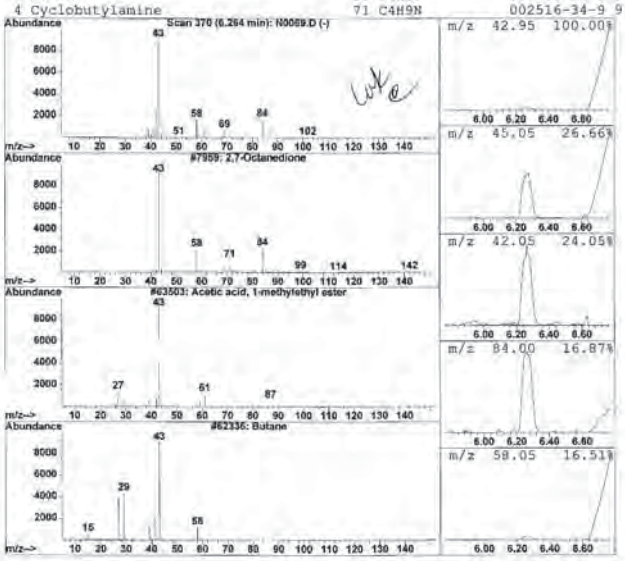
Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 2,7-Octanedione Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.26	15.19 ug/mL	592097	1,4-Dichlorobenzene-d4	9.53

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,7-Octanedione	142	C8H14O2	001626-09-1	17
2	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	12
3	Butane	58	C4H10	000106-97-8	9
4	Cyclobutylamine	71	C4H9N	002516-34-9	9



N0069.D NO14OL42.M Mon Oct 27 13:36:18 2008

Library Search Compound Report

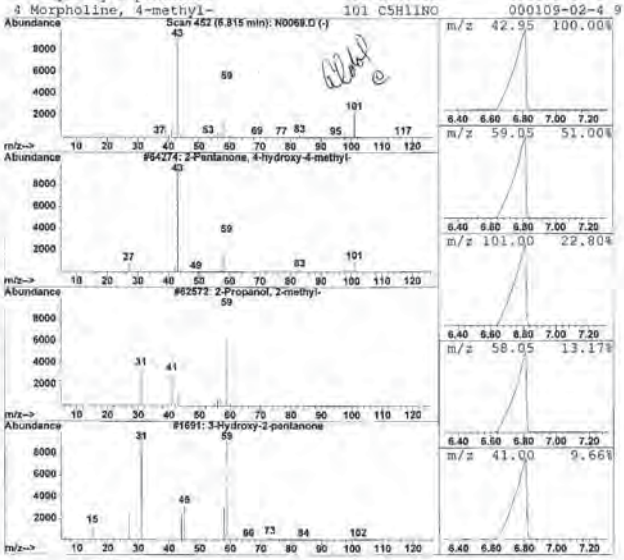
Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.81	993.77 ug/mL	38739300	1,4-Dichlorobenzene-d4	9.53

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	2-Propanol, 2-methyl-	74	C4H10O	000075-65-0	17
3	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9



Library Search Compound Report

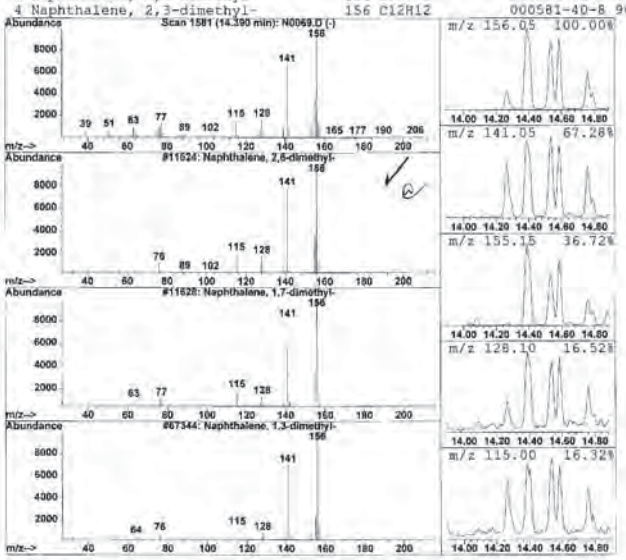
Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 Naphthalene, 2,6-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.39	9.80 ug/mL	534798	Acenaphthene-d10	15.20

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	98
2	Naphthalene, 1,7-dimethyl-	156	C12H12	000575-37-1	97
3	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	96
4	Naphthalene, 2,3-dimethyl-	156	C12H12	000581-40-8	96



Library Search Compound Report

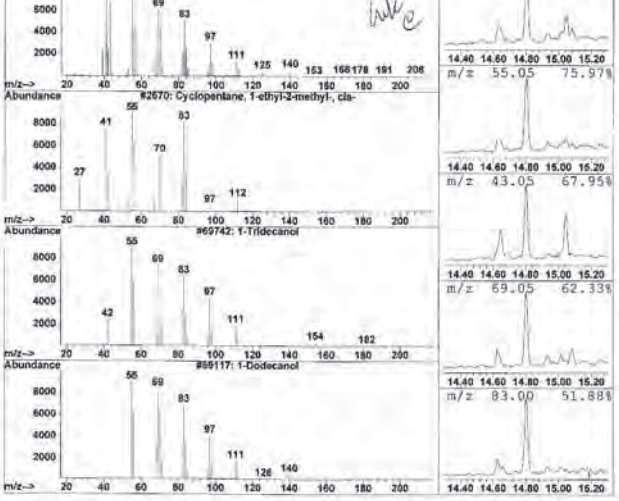
Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 Cyclopentane, 1-ethyl-2-methyl Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.80	11.64 ug/mL	635452	Acenaphthene-d10	15.20

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, 1-ethyl-2-methyl-, ci	112	C8H16	000930-89-2	93
2	1-Tridecanol	200	C13H28O	000112-70-9	91
3	1-Dodecanol	186	C12H26O	000112-53-8	91
4	1-Undecanol	172	C11H24O	000112-42-5	91



Library Search Compound Report

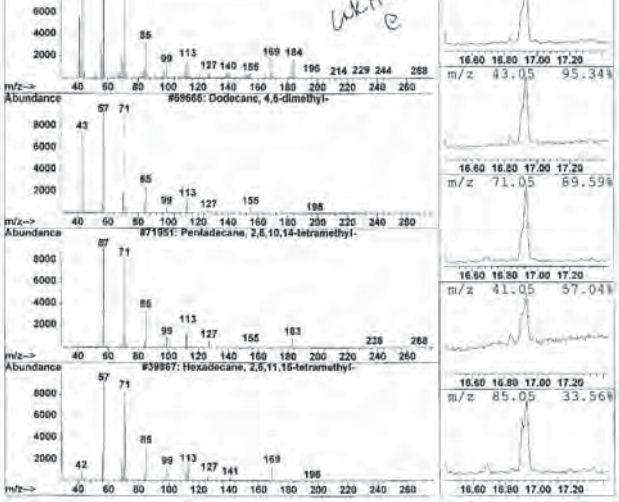
Data File : C:\HPCHEM\1\DATA\N0069.D Vial: 9
Acq On : 21 Oct 2008 15:26 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 5 Dodecane, 4,6-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.93	20.33 ug/mL	820301	Phenanthrene-d10	18.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 4,6-dimethyl-	198	C14H30	061141-72-8	90
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	87
3	Hexadecane, 2,6,11,15-tetramethyl-	282	C20H42	000504-44-9	87
4	Octadecane, 2,6-dimethyl-	282	C20H42	075163-97-2	83



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0055.D
Col Type:			

Sample Size: 30 g; %Moisture: 23.0; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		11000	140	µg/Kg-dry	25	10/20/08 19:16
2,4,5-Trichlorophenol	ND		54000	680	µg/Kg-dry	25	10/20/08 19:16
2,4,6-Trichlorophenol	ND		11000	180	µg/Kg-dry	25	10/20/08 19:16
2,4-Dichlorophenol	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
2,4-Dimethylphenol	ND		11000	2200	µg/Kg-dry	25	10/20/08 19:16
2,4-Dinitrophenol	ND		54000	11000	µg/Kg-dry	25	10/20/08 19:16
2,4-Dinitrotoluene	ND		11000	180	µg/Kg-dry	25	10/20/08 19:16
2,6-Dinitrotoluene	ND		11000	180	µg/Kg-dry	25	10/20/08 19:16
2-Chloronaphthalene	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
2-Chlorophenol	ND		11000	170	µg/Kg-dry	25	10/20/08 19:16
2-Methylnaphthalene	1100 J		11000	52	µg/Kg-dry	25	10/20/08 19:16
2-Methylphenol	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
2-Nitroaniline	ND		54000	190	µg/Kg-dry	25	10/20/08 19:16
2-Nitrophenol	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
3,3'-Dichlorobenzidine	ND		21000	1300	µg/Kg-dry	25	10/20/08 19:16
3-Nitroaniline	ND		54000	1300	µg/Kg-dry	25	10/20/08 19:16
4,6-Dinitro-2-methylphenol	ND		54000	5400	µg/Kg-dry	25	10/20/08 19:16
4-Bromophenyl phenyl ether	ND		11000	170	µg/Kg-dry	25	10/20/08 19:16
4-Chloro-3-methylphenol	ND		11000	320	µg/Kg-dry	25	10/20/08 19:16
4-Chloroaniline	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
4-Chlorophenyl phenyl ether	ND		11000	130	µg/Kg-dry	25	10/20/08 19:16
4-Methylphenol	ND		11000	93	µg/Kg-dry	25	10/20/08 19:16
4-Nitroaniline	ND		54000	1300	µg/Kg-dry	25	10/20/08 19:16
4-Nitrophenol	ND		54000	2200	µg/Kg-dry	25	10/20/08 19:16
Acenaphthene	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Acenaphthylene	ND		11000	130	µg/Kg-dry	25	10/20/08 19:16
Acetophenone	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Anthracene	ND		11000	76	µg/Kg-dry	25	10/20/08 19:16
Atrazine	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Benzaldehyde	ND		11000	160	µg/Kg-dry	25	10/20/08 19:16
Benzo[a]anthracene	2100 J		11000	110	µg/Kg-dry	25	10/20/08 19:16
Benzo[a]pyrene	2100 J		11000	320	µg/Kg-dry	25	10/20/08 19:16
Benzo[b]fluoranthene	4200 J		11000	370	µg/Kg-dry	25	10/20/08 19:16
Benzo[g,h,i]perylene	1200 J		11000	430	µg/Kg-dry	25	10/20/08 19:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399138 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0055.D
Col Type:			

Sample Size: 30 g; %Moisture: 23.0; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo(k)fluoranthene	1400 J		11000	360	µg/Kg-dry	25	10/20/08 19:16
bis(2-Chloroethoxy)methane	ND		11000	100	µg/Kg-dry	25	10/20/08 19:16
bis(2-chloroethyl)ether	ND		11000	170	µg/Kg-dry	25	10/20/08 19:16
bis(2-chloroisopropyl)ether	ND		11000	190	µg/Kg-dry	25	10/20/08 19:16
bis(2-Ethylhexyl)phthalate	ND		11000	480	µg/Kg-dry	25	10/20/08 19:16
Butyl benzyl phthalate	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
Caprolactam	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Carbazole	ND		11000	320	µg/Kg-dry	25	10/20/08 19:16
Chrysene	2400 J		11000	91	µg/Kg-dry	25	10/20/08 19:16
Di-n-butyl phthalate	ND		11000	2700	µg/Kg-dry	25	10/20/08 19:16
Di-n-octyl phthalate	ND		11000	63	µg/Kg-dry	25	10/20/08 19:16
Dibenz[a,h]anthracene	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
Dibenzofuran	ND		11000	150	µg/Kg-dry	25	10/20/08 19:16
Diethyl phthalate	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Dimethyl phthalate	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Fluoranthene	4300 J		11000	320	µg/Kg-dry	25	10/20/08 19:16
Fluorene	ND		11000	110	µg/Kg-dry	25	10/20/08 19:16
Hexachlorobenzene	ND		11000	180	µg/Kg-dry	25	10/20/08 19:16
Hexachlorobutadiene	ND		11000	88	µg/Kg-dry	25	10/20/08 19:16
Hexachlorocyclopentadiene	ND		11000	5400	µg/Kg-dry	25	10/20/08 19:16
Hexachloroethane	ND		11000	1300	µg/Kg-dry	25	10/20/08 19:16
Indeno(1,2,3-cd)pyrene	ND		11000	430	µg/Kg-dry	25	10/20/08 19:16
Isophorone	ND		11000	90	µg/Kg-dry	25	10/20/08 19:16
N-Nitroso-di-n-propylamine	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
N-Nitrosodiphenylamine	ND		11000	73	µg/Kg-dry	25	10/20/08 19:16
Naphthalene	ND		11000	82	µg/Kg-dry	25	10/20/08 19:16
Nitrobenzene	ND		11000	120	µg/Kg-dry	25	10/20/08 19:16
Pentachlorophenol	ND		54000	11000	µg/Kg-dry	25	10/20/08 19:16
Phenanthrene	2700 J		11000	47	µg/Kg-dry	25	10/20/08 19:16
Phenol	ND		11000	100	µg/Kg-dry	25	10/20/08 19:16
Pyrene	4200 J		11000	72	µg/Kg-dry	25	10/20/08 19:16
Surr: 2,4,6-Tribromophenol	75.2		20-143	0	%REC	25	10/20/08 19:16
Surr: 2-Fluorobiphenyl	71.0		46-130	0	%REC	25	10/20/08 19:16
Surr: 2-Fluorophenol	71.3		22-130	0	%REC	25	10/20/08 19:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399138 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15271
Revision:	10/24/08 9:48	FileID:	1-DL-N0055.D
Col Type:			

Sample Size: 30 g; %Moisture: 23.0; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	61.8		39-130	0	%REC	25	10/20/08 19:16
Surr: Phenol-d5	57.8		33-130	0	%REC	25	10/20/08 19:16
Surr: Terphenyl-d14	93.8		36-146	0	%REC	25	10/20/08 19:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399138 Project Supervisor: Monika Santucci

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0055.D Vial: 19
Acq On : 20 Oct 2008 19:16 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:55 2008 Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

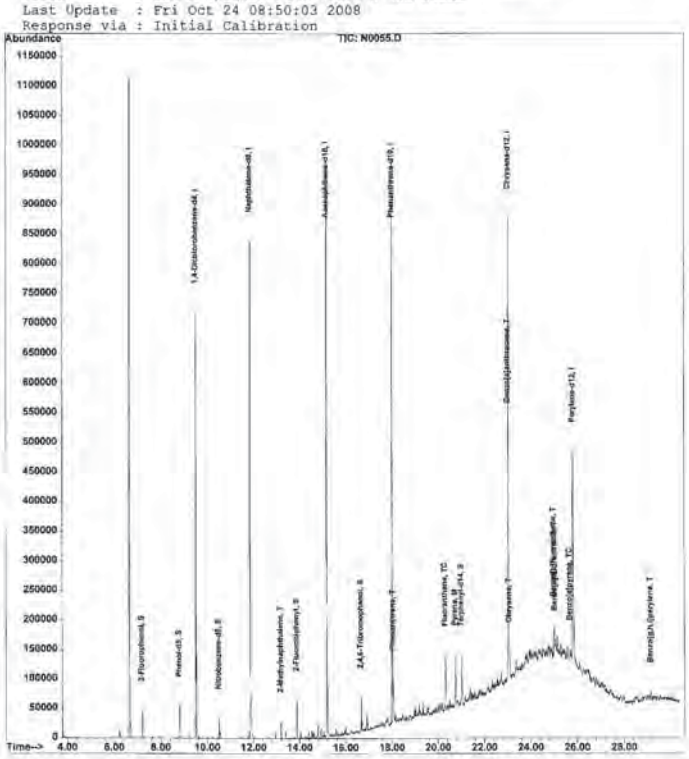
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	169986	40.00	ug/mL	0.01
13) Naphthalene-d8	11.87	136	606714	40.00	ug/mL	0.00
26) Acenaphthene-d10	15.20	164	352876	40.00	ug/mL	0.00
47) Phenanthrene-d10	18.03	188	602302	40.00	ug/mL	0.00
58) Chrysene-d12	23.05	240	474889	40.00	ug/mL	0.00
68) Perylene-d12	25.84	264	311221	40.00	ug/mL	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	7.21	112	20089	4.28	ug/mL	0.01
Spiked Amount 150.000			Recovery	=	2.85%	
3) Phenol-d5	8.81	99	26112	4.07	ug/mL	0.00
Spiked Amount 150.000			Recovery	=	2.71%	
14) Nitrobenzene-d5	10.53	82	17232	2.47	ug/mL	0.00
Spiked Amount 100.000			Recovery	=	2.47%	
30) 2-Fluorobiphenyl	13.89	172	31089	2.84	ug/mL	0.00
Spiked Amount 100.000			Recovery	=	2.84%	
46) 2,4,6-Tribromophenol	16.69	330	10753	4.39	ug/mL	0.00
Spiked Amount 150.000			Recovery	=	2.93%	
60) Terphenyl-d14	21.03	244	31993	3.75	ug/mL	0.00
Spiked Amount 100.000			Recovery	=	3.75%	
Target Compounds						Qvalue
25) 2-Methylnaphthalene	13.21	142	12365	1.05	ug/mL	100
53) Phenanthrene	18.07	178	37218	2.47	ug/mL	98
57) Fluoranthene	20.33	202	60423	4.00	ug/mL	99
59) Pyrene	20.77	202	56582	3.90	ug/mL	95
63) Benzo[a]anthracene	23.03	228	24895	1.95	ug/mL	88
65) Chrysene	23.10	228	26781	2.25	ug/mL	93
69) Benzo[b]fluoranthene	25.01	252	32505m	3.84	ug/mL	
70) Benzo[k]fluoranthene	25.07	252	10392	1.29	ug/mL	67
71) Benzo[a]pyrene	25.70	252	14877	1.94	ug/mL	99
73) Benzo[g,h,i]perylene	29.16	276	7706	1.09	ug/mL	82

(#) = qualifier out of range (m) = manual integration
N0055.D NO14OL42.M Fri Oct 24 09:34:39 2008

Quantitation Report

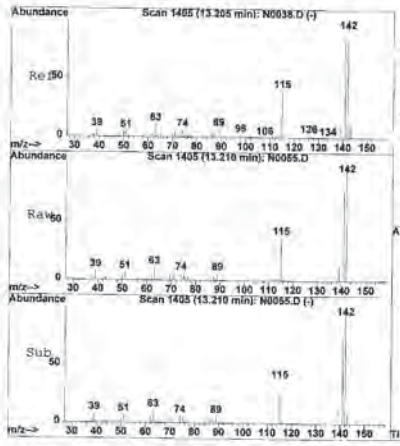
Data File : C:\HPCHEM\1\DATA\N0055.D Vial: 19
Acq On : 20 Oct 2008 19:16 Operator: MEG
Sample : 0810083-004B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:55 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



N0055.D N014OL42.M Fri Oct 24 09:34:40 2008 Pa

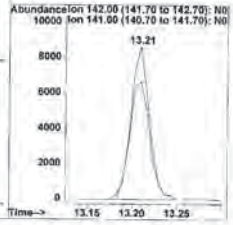
640

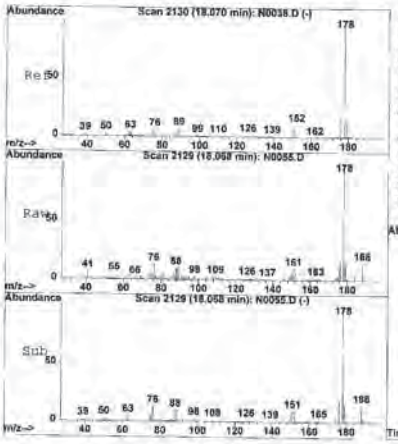


#25
2-Methylnaphthalene
Concen: 1.05 ug/mL
RT: 13.21 min Scan# 1405
Delta R.T. 0.00 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

Tgt Ion:142 Resp: 12365

Ion	Ratio	Lower	Upper
142	100		
141	83.9	54.3	114.3

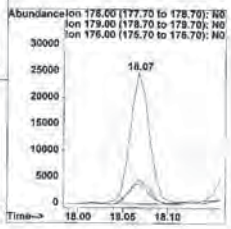




#53
Phenanthrene
Concen: 2.47 ug/mL
RT: 18.07 min Scan# 2129
Delta R.T. -0.00 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

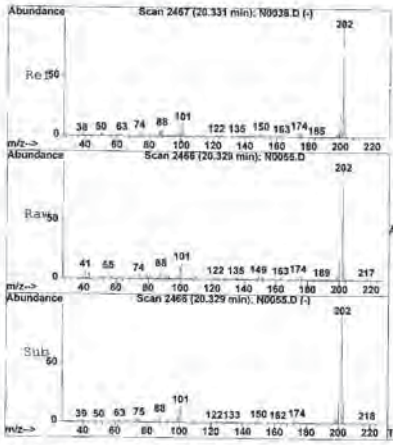
Tgt Ion:178 Resp: 37218

Ion	Ratio	Lower	Upper
178	100		
179	16.7	0.0	45.3
176	18.6	0.0	48.5



N0055.D N014OL42.M Fri Oct 24 09:34:41 2008 Pag

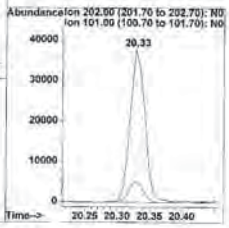
641

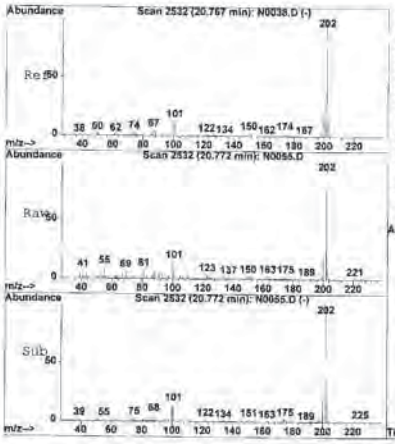


#57
Fluoranthene
Concen: 4.00 ug/mL
RT: 20.33 min Scan# 2466
Delta R.T. -0.00 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

Tgt Ion:202 Resp: 60423

Ion	Ratio	Lower	Upper
202	100		
101	13.8	0.0	43.2

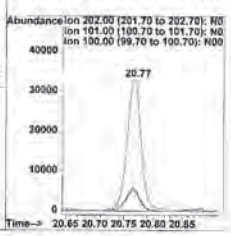




#59
Pyrene
Concen: 3.90 ug/mL
RT: 20.77 min Scan# 2532
Delta R.T. 0.00 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

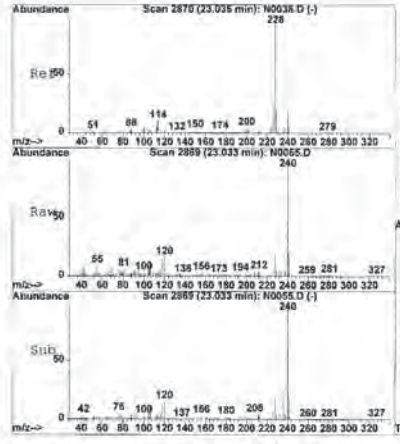
Tgt Ion:202 Resp: 56582

Ion	Ratio	Lower	Upper
202	100		
101	17.8	0.0	45.7
100	15.4	0.0	43.7



N0055.D N014OL42.M Fri Oct 24 09:34:42 2008 Pag

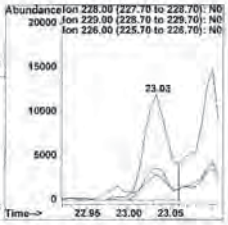
642

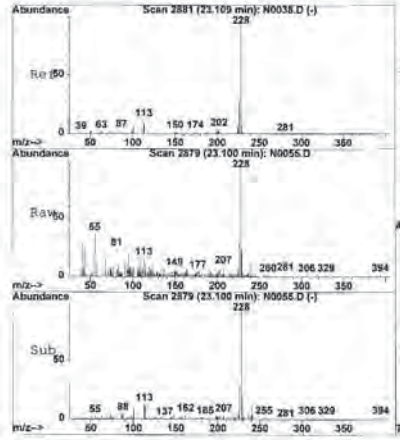


#63
Benzo[a]anthracene
Concen: 1.95 ug/mL
RT: 23.03 min Scan# 2869
Delta R.T. -0.00 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

Tgt Ion:228 Resp: 24895

Ion	Ratio	Lower	Upper
228	100		
229	12.5	0.0	49.7
226	30.2	0.0	55.5

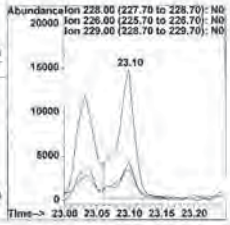




#65
Chrysene
Concen: 2.25 ug/mL
RT: 23.10 min Scan# 2879
Delta R.T. -0.01 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

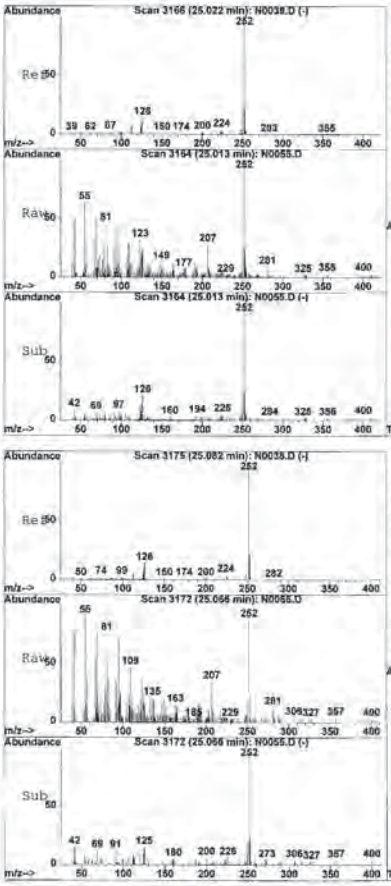
Tgt Ion:228 Resp: 26781

Ion	Ratio	Lower	Upper
228	100		
226	33.3	0.0	58.0
229	20.1	0.0	49.4



N0055.D N014OL42.M Fri Oct 24 09:34:42 2008 Pa

643



#69
Benzo[b]fluoranthene
Concen: 3.84 ug/mL m
RT: 25.01 min Scan# 3164
Delta R.T. -0.01 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

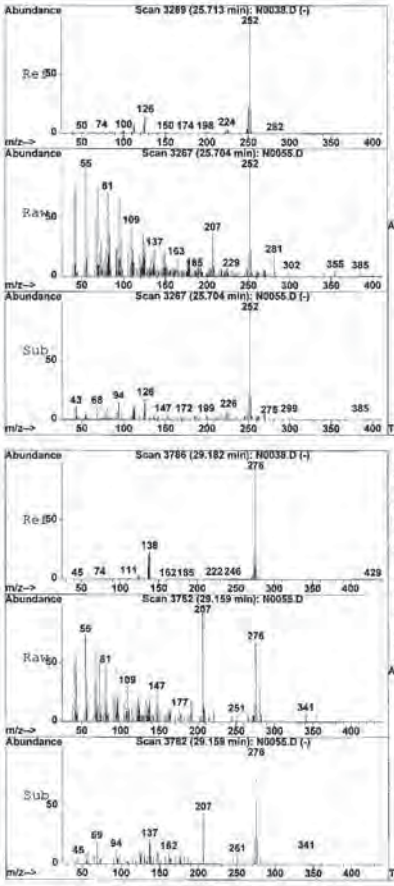
Tgt Ion:252 Resp: 32505

Ion	Ratio	Lower	Upper
252	100		
253	1.3	0.0	52.0
125	0.6	0.0	42.3

#70
Benzo[k]fluoranthene
Concen: 1.29 ug/mL
RT: 25.07 min Scan# 3172
Delta R.T. -0.02 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

Tgt Ion:252 Resp: 10392

Ion	Ratio	Lower	Upper
252	100		
253	4.2	0.0	52.1
125	2.5	0.0	42.7



#71
Benzo[a]pyrene
Concen: 1.94 ug/mL
RT: 25.70 min Scan# 3267
Delta R.T. -0.01 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

Tgt Ion:252 Resp: 14977

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.0
125	14.7	0.0	43.7

#73
Benzo[g,h,i]perylene
Concen: 1.09 ug/mL
RT: 29.16 min Scan# 3782
Delta R.T. -0.02 min
Lab File: N0055.D
Acq: 20 Oct 2008 19:16

Tgt Ion:276 Resp: 7706

Ion	Ratio	Lower	Upper
276	100		
138	38.6	0.0	54.3
277	27.0	0.0	53.6

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0055.D Vial: 19
Acq On : 20 Oct 2008 19:16 Operator: MEG
Sample : 08I0083-004B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:28 2008 Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	169986	40.00 ug/mL	0.01
5) Naphthalene-d8	11.87	136	606714	40.00 ug/mL	0.01
7) Acenaphthene-d10	15.20	164	352876	40.00 ug/mL	0.01
11) Phenanthrene-d10	18.03	188	602302	40.00 ug/mL	0.01
14) Chrysene-d12	23.05	240	474889	40.00 ug/mL	0.01
15) Perylene-d12	25.84	264	311221	40.00 ug/mL	0.02

System Monitoring Compounds

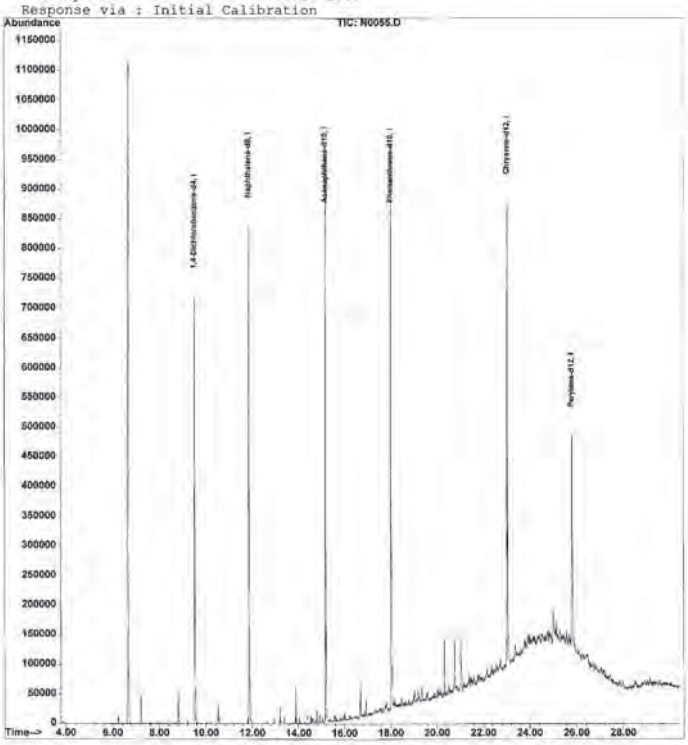
Target Compounds QValue

(#) = qualifier out of range (m) = manual integration
N0055.D N014OLM.M Fri Oct 24 09:38:06 2008 Pa
646

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0055.D Vial: 19
Acq On : 20 Oct 2008 19:16 Operator: MEG
Sample : 08I0083-004B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:28 2008 Quant Results File: N014OLM.RES

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15275
Revision:	10/24/08 9:53	FileID:	1-SAMP-N0070.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.8; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	150 J		800	10	µg/Kg-dry	2	10/21/08 16:04
2,4,5-Trichlorophenol	ND		4100	51	µg/Kg-dry	2	10/21/08 16:04
2,4,6-Trichlorophenol	ND		800	14	µg/Kg-dry	2	10/21/08 16:04
2,4-Dichlorophenol	ND		800	9.3	µg/Kg-dry	2	10/21/08 16:04
2,4-Dimethylphenol	ND		800	160	µg/Kg-dry	2	10/21/08 16:04
2,4-Dinitrophenol	ND		4100	310	µg/Kg-dry	2	10/21/08 16:04
2,4-Dinitrotoluene	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
2,6-Dinitrotoluene	ND		800	14	µg/Kg-dry	2	10/21/08 16:04
2-Chloronaphthalene	ND		800	8.9	µg/Kg-dry	2	10/21/08 16:04
2-Chlorophenol	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
2-Methylnaphthalene	1200		800	3.9	µg/Kg-dry	2	10/21/08 16:04
2-Methylphenol	ND		800	9.0	µg/Kg-dry	2	10/21/08 16:04
2-Nitroaniline	ND		4100	14	µg/Kg-dry	2	10/21/08 16:04
2-Nitrophenol	ND		800	32	µg/Kg-dry	2	10/21/08 16:04
3,3'-Dichlorobenzidine	ND		1600	97	µg/Kg-dry	2	10/21/08 16:04
3-Nitroaniline	ND		4100	97	µg/Kg-dry	2	10/21/08 16:04
4,6-Dinitro-2-methylphenol	ND		4100	410	µg/Kg-dry	2	10/21/08 16:04
4-Bromophenyl phenyl ether	ND		800	13	µg/Kg-dry	2	10/21/08 16:04
4-Chloro-3-methylphenol	ND		800	24	µg/Kg-dry	2	10/21/08 16:04
4-Chloroaniline	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
4-Chlorophenyl phenyl ether	ND		800	9.9	µg/Kg-dry	2	10/21/08 16:04
4-Methylphenol	210 J		800	7.0	µg/Kg-dry	2	10/21/08 16:04
4-Nitroaniline	ND		4100	97	µg/Kg-dry	2	10/21/08 16:04
4-Nitrophenol	ND		4100	150	µg/Kg-dry	2	10/21/08 16:04
Acenaphthene	120 J		800	8.1	µg/Kg-dry	2	10/21/08 16:04
Acenaphthylene	310 J		800	9.7	µg/Kg-dry	2	10/21/08 16:04
Acetophenone	130 J		800	97	µg/Kg-dry	2	10/21/08 16:04
Anthracene	370 J		800	6.7	µg/Kg-dry	2	10/21/08 16:04
Atrazine	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
Benzaldehyde	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
Benzo[a]anthracene	1400		800	8.4	µg/Kg-dry	2	10/21/08 16:04
Benzo[a]pyrene	1600		800	24	µg/Kg-dry	2	10/21/08 16:04
Benzo[b]fluoranthene	3400		800	28	µg/Kg-dry	2	10/21/08 16:04
Benzo[g,h,i]perylene	1400		800	32	µg/Kg-dry	2	10/21/08 16:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399160 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15275
Revision:	10/24/08 9:53	FileID:	1-SAMP-N0070.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.8; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1000		800	27	µg/Kg-dry	2	10/21/08 16:04
bis(2-Chloroethoxy)methane	ND		800	7.5	µg/Kg-dry	2	10/21/08 16:04
bis(2-chloroethyl)ether	ND		800	12	µg/Kg-dry	2	10/21/08 16:04
bis(2-chloroisopropyl)ether	ND		800	14	µg/Kg-dry	2	10/21/08 16:04
bis(2-Ethylhexyl)phthalate	180 J		800	36	µg/Kg-dry	2	10/21/08 16:04
Butyl benzyl phthalate	ND		800	32	µg/Kg-dry	2	10/21/08 16:04
Caprolactam	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
Carbazole	240 J		800	24	µg/Kg-dry	2	10/21/08 16:04
Chrysene	1900		800	6.8	µg/Kg-dry	2	10/21/08 16:04
Di-n-butyl phthalate	ND		800	210	µg/Kg-dry	2	10/21/08 16:04
Di-n-octyl phthalate	ND		800	4.7	µg/Kg-dry	2	10/21/08 16:04
Dibenz[a,h]anthracene	360 J		800	32	µg/Kg-dry	2	10/21/08 16:04
Dibenzofuran	260 J		800	11	µg/Kg-dry	2	10/21/08 16:04
Diethyl phthalate	ND		800	8.5	µg/Kg-dry	2	10/21/08 16:04
Dimethyl phthalate	ND		800	8.3	µg/Kg-dry	2	10/21/08 16:04
Fluoranthene	2600		800	24	µg/Kg-dry	2	10/21/08 16:04
Fluorene	120 J		800	8.3	µg/Kg-dry	2	10/21/08 16:04
Hexachlorobenzene	ND		800	13	µg/Kg-dry	2	10/21/08 16:04
Hexachlorobutadiene	ND		800	7.3	µg/Kg-dry	2	10/21/08 16:04
Hexachlorocyclopentadiene	ND		800	410	µg/Kg-dry	2	10/21/08 16:04
Hexachloroethane	ND		800	97	µg/Kg-dry	2	10/21/08 16:04
Indeno[1,2,3-cd]pyrene	390 J		800	32	µg/Kg-dry	2	10/21/08 16:04
Isophorone	ND		800	6.7	µg/Kg-dry	2	10/21/08 16:04
N-Nitroso-di-n-propylamine	ND		800	9.3	µg/Kg-dry	2	10/21/08 16:04
N-Nitrosodiphenylamine	ND		800	5.5	µg/Kg-dry	2	10/21/08 16:04
Naphthalene	670 J		800	6.2	µg/Kg-dry	2	10/21/08 16:04
Nitrobenzene	ND		800	8.8	µg/Kg-dry	2	10/21/08 16:04
Pentachlorophenol	ND		4100	810	µg/Kg-dry	2	10/21/08 16:04
Phenanthrene	1800		800	3.5	µg/Kg-dry	2	10/21/08 16:04
Phenol	110 J		800	7.5	µg/Kg-dry	2	10/21/08 16:04
Pyrene	5900		800	5.5	µg/Kg-dry	2	10/21/08 16:04
Surr: 2,4,6-Tribromophenol	86.1		20-143	0	%REC	2	10/21/08 16:04
Surr: 2-Fluorobiphenyl	77.6		46-130	0	%REC	2	10/21/08 16:04
Surr: 2-Fluorophenol	71.4		22-130	0	%REC	2	10/21/08 16:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399160 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	MS05 26	PrepDate:	10/15/08 12:52
ColumnID:	DB-5MS	BatchNo:	8270/R15275
Revision:	10/24/08 9:53	FileID:	1-SAMP-N0070.D
Col Type:			

Sample Size: 30 g; %Moisture: 17.8; TestCode: 8270S OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	72.0		39-130	0	%REC	2	10/21/08 16:04
Surr: Phenol-d5	72.9		33-130	0	%REC	2	10/21/08 16:04
Surr: Terphenyl-d14	187 S		38-146	0	%REC	2	10/21/08 16:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05 399160 Project Supervisor: Monika Santucci

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MBSS-FD

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: 0810083-005B

Sample wt/vol: 30 (g/mL) g Lab File ID: N0070.D

Level: LOW Date Received: 10/10/2008

% Moisture: not dec. 18 Date Analyzed: 10/21/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 2.00

Extract Volume: 1000 (µl)

Number TICs found: 7 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.27)	6.27	1200	J
2.	aldol	6.81	82000	JBEA
3. 000090-12-0	Naphthalene, 1-methyl-	13.39	710	JN
4. 000581-42-0	Naphthalene, 2,6-dimethyl-	14.39	880	JN
5. 000581-40-8	Naphthalene, 2,3-dimethyl-	14.53	610	JN
6.	unknown (14.8)	14.80	1000	JB
7.	unknown hydrocarbon	16.93	1600	J

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:29 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.54	152	217186	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	769125	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.19	164	434312	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.03	188	679859	40.00 ug/mL	0.00
58) Chrysene-d12	23.06	240	208380	40.00 ug/mL	0.00
68) Perylene-d12	25.84	264	76591	40.00 ug/mL	-0.01
System Monitoring Compounds					
2) 2-Fluorophenol	7.24	112	320714	53.54 ug/mL	0.03
Spiked Amount 150.000			Recovery =	35.69%	
3) Phenol-d5	8.84	99	448228	54.68 ug/mL	0.00
Spiked Amount 150.000			Recovery =	36.45%	
14) Nitrobenzene-d5	10.53	82	318961	36.02 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	36.02%	
30) 2-Fluorobiphenyl	13.89	172	523123	38.79 ug/mL	0.00
Spiked Amount 100.000			Recovery =	38.79%	
46) 2,4,6-Tribromophenol	16.69	330	194807	64.80 ug/mL	0.00
Spiked Amount 150.000			Recovery =	43.07%	
60) Terphenyl-d14	21.05	244	349327	93.41 ug/mL	0.00
Spiked Amount 100.000			Recovery =	93.41%	

Target Compounds					Qvalue
4) Phenol	8.86	94	12663	1.30 ug/mL#	1
10) 4-Methylphenol	10.21	108	19936	2.64 ug/mL	84
21) Naphthalene	11.91	128	153776	8.26 ug/mL	100
25) 2-Methylnaphthalene	13.21	142	211887	14.21 ug/mL	98
35) Acenaphthylene	14.92	152	75702	3.85 ug/mL	90
37) Acenaphthene	15.25	153	17838	1.52 ug/mL	85
41) Dibenzofuran	15.58	168	67336	3.19 ug/mL	87
44) Fluorene	16.23	166	20964	1.46 ug/mL	75
53) Phenanthrene	18.08	178	382047	22.46 ug/mL	98
54) Anthracene	18.17	178	79629	4.59 ug/mL	97
55) Carbazole	18.47	167	47035	2.97 ug/mL	95
57) Fluoranthene	20.35	202	547840	32.15 ug/mL	96
59) Pyrene	20.79	202	459231	72.17 ug/mL	98
63) Benzo[a]anthracene	23.04	228	97854	17.43 ug/mL	88
64) bis(2-Ethylhexyl)phthalate	23.02	149	11956	2.22 ug/mL	98
65) Chrysene	23.11	228	120397	23.07 ug/mL	98
67) Indeno[1,2,3-cd]pyrene	28.55	276	28080	4.75 ug/mL	93
69) Benzo[b]fluoranthene	25.03	252	86042	41.35 ug/mL	93
70) Benzo[k]fluoranthene	25.08	252	24397	12.34 ug/mL	86

(#) = qualifier out of range (m) = manual integration
N0070.D N014OL42.M Wed Oct 22 13:41:34 2008 Pa

652

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:29 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
71) Benzo[a]pyrene	25.72	252	37088	19.61 ug/mL	95
72) Dibenz[a,h]anthracene	28.57	278	7853	4.41 ug/mL	96
73) Benzo[g,h,i]perylene	29.18	276	29514	16.90 ug/mL	92

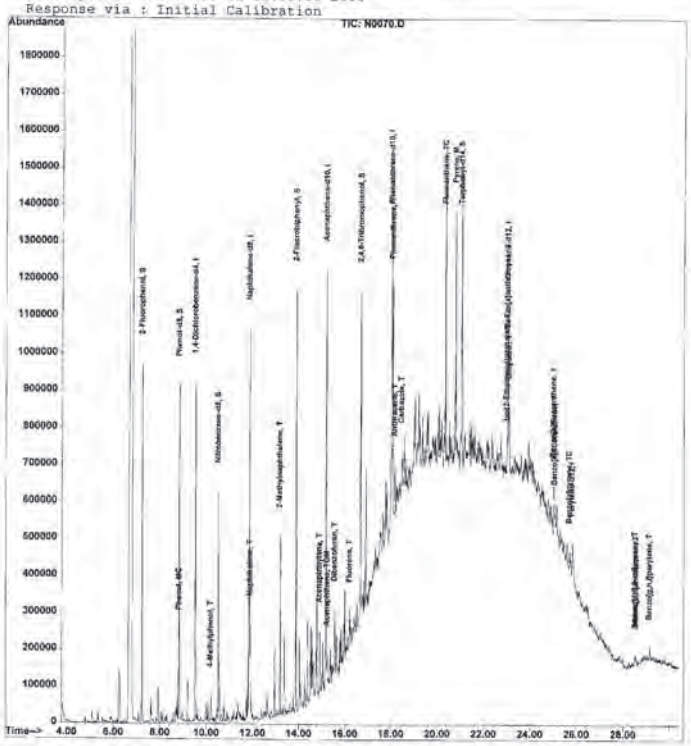
(#) = qualifier out of range (m) = manual integration
N0070.D N014OL42.M Wed Oct 22 13:41:34 2008 Pa

653

Quantitation Report

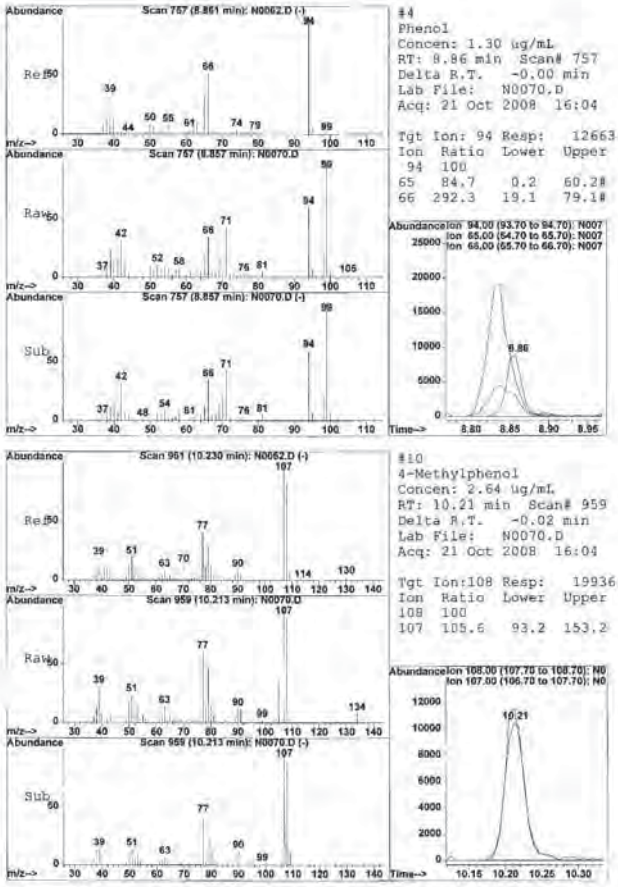
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:29 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration



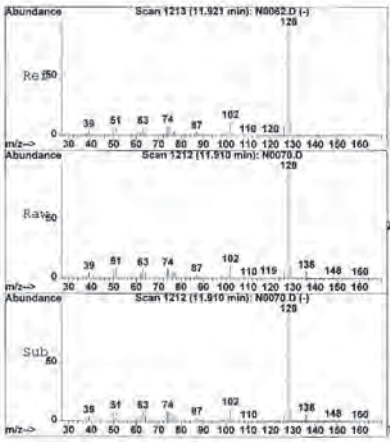
N0070.D N014OL42.M Wed Oct 22 13:41:36 2008 Pa

654



N0070.D N014OL42.M Wed Oct 22 13:41:36 2008 Pa

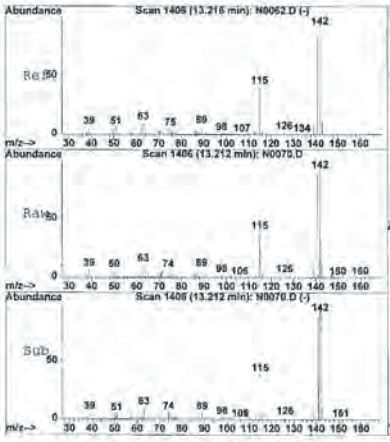
655



#21
Naphthalene
Concen: 8.26 ug/mL
RT: 11.91 min Scan# 1212
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:128 Resp: 153776

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	41.1
127	5.3	0.0	30.0



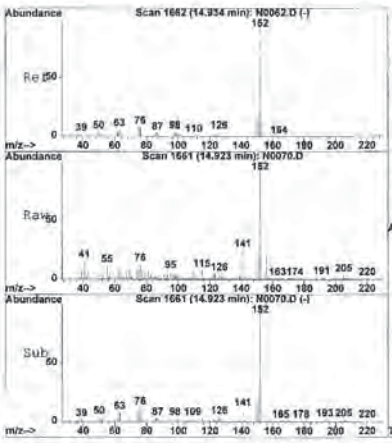
#25
2-Methylnaphthalene
Concen: 14.21 ug/mL
RT: 13.21 min Scan# 1406
Delta R.T. -0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:142 Resp: 211887

Ion	Ratio	Lower	Upper
142	100		
141	85.9	54.3	114.3

N0070.D N014OL42.M Wed Oct 22 13:41:37 2008 Pa

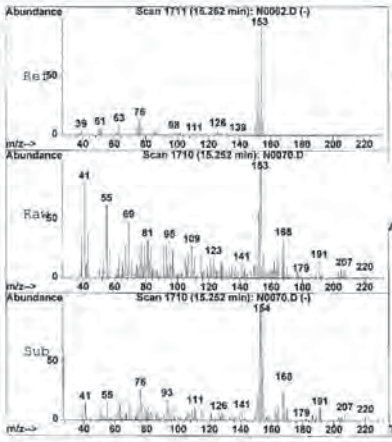
656



#35
Acenaphthylene
Concen: 3.85 ug/mL
RT: 14.92 min Scan# 1661
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:152 Resp: 75702

Ion	Ratio	Lower	Upper
152	100		
151	23.3	0.0	50.0
153	18.4	0.0	43.0



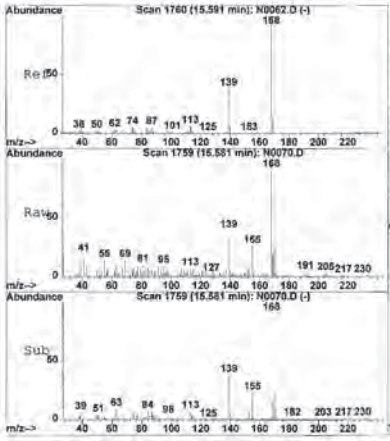
#37
Acenaphthene
Concen: 1.52 ug/mL
RT: 15.25 min Scan# 1710
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:153 Resp: 17838

Ion	Ratio	Lower	Upper
153	100		
152	56.6	17.4	77.4
154	87.9	74.5	134.5

N0070.D N014OL42.M Wed Oct 22 13:41:37 2008 Pa

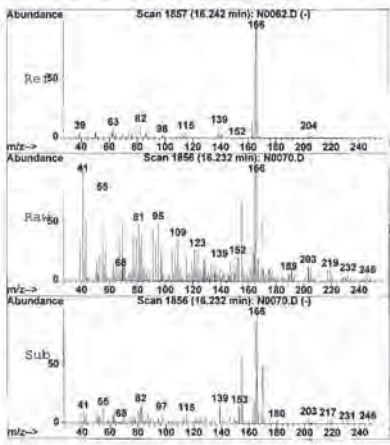
657



#41
Dibenzofuran
Concen: 3.19 ug/mL
RT: 15.58 min Scan# 1759
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:168 Resp: 67336

Ion	Ratio	Lower	Upper
168	100		
139	42.1	4.8	64.8



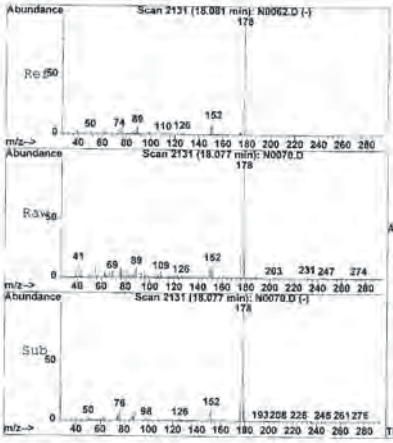
#44
Fluorene
Concen: 1.46 ug/mL
RT: 16.23 min Scan# 1856
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:166 Resp: 20964

Ion	Ratio	Lower	Upper
166	100		
165	114.2	60.8	120.8
167	25.4	0.0	43.4

N0070.D N014OL42.M Wed Oct 22 13:41:38 2008 Pa

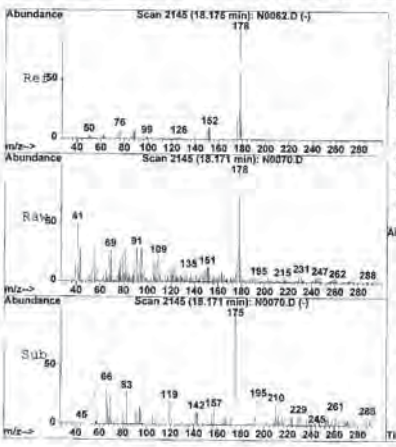
658



#53
Phenanthrene
Concen: 22.46 ug/mL
RT: 18.08 min Scan# 2131
Delta R.T. -0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:178 Resp: 382047

Ion	Ratio	Lower	Upper
178	100		
179	16.3	0.0	45.3
176	19.4	0.0	48.5



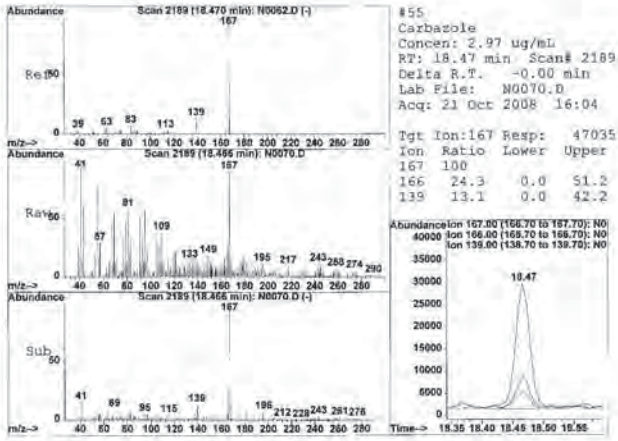
#54
Anthracene
Concen: 4.59 ug/mL
RT: 18.17 min Scan# 2145
Delta R.T. -0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:178 Resp: 79629

Ion	Ratio	Lower	Upper
178	100		
179	13.2	0.0	45.5
176	17.4	0.0	47.7

N0070.D N014OL42.M Wed Oct 22 13:41:39 2008 Pa

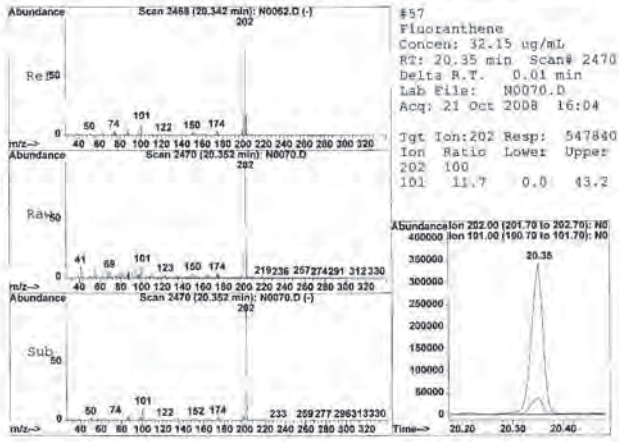
659



#55
Carbazole
Concen: 2.97 ug/mL
RT: 18.47 min Scan# 2189
Delta R.T. -0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:167 Resp: 47035

Ion	Ratio	Lower	Upper
167	100		
166	24.3	0.0	51.2
139	13.1	0.0	42.2



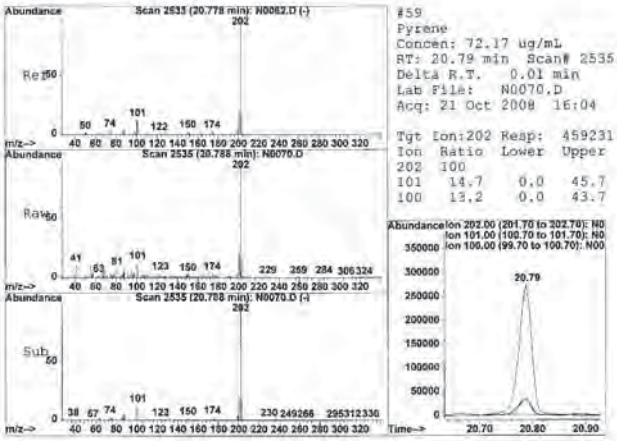
#57
Fluoranthene
Concen: 32.15 ug/mL
RT: 20.35 min Scan# 2470
Delta R.T. 0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:202 Resp: 547840

Ion	Ratio	Lower	Upper
202	100		
101	11.7	0.0	43.2

N0070.D N014OL42.M Wed Oct 22 13:41:39 2008

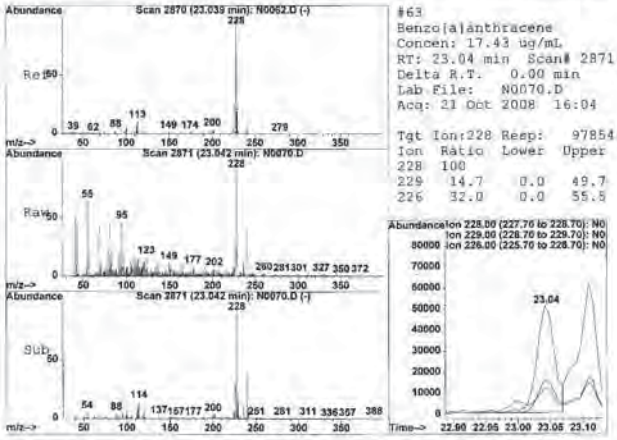
660



#59
Pyrene
Concen: 72.17 ug/mL
RT: 20.79 min Scan# 2535
Delta R.T. 0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:202 Resp: 459231

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	45.7
100	13.2	0.0	43.7



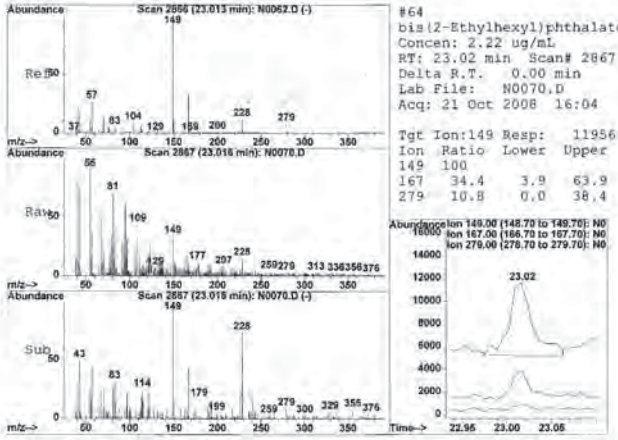
#63
Benzo[a]anthracene
Concen: 17.43 ug/mL
RT: 23.04 min Scan# 2871
Delta R.T. 0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:228 Resp: 97854

Ion	Ratio	Lower	Upper
228	100		
229	14.7	0.0	49.7
226	32.0	0.0	55.8

N0070.D N014OL42.M Wed Oct 22 13:41:40 2008

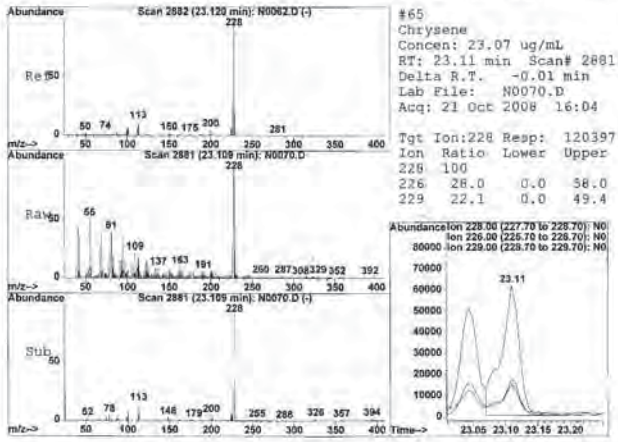
661



#64
bis(2-Ethylhexyl)phthalate
Concen: 2.22 ug/mL
RT: 23.02 min Scan# 2867
Delta R.T. 0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:149 Resp: 11956

Ion	Ratio	Lower	Upper
149	100		
167	34.4	3.9	63.9
279	10.8	0.0	38.4



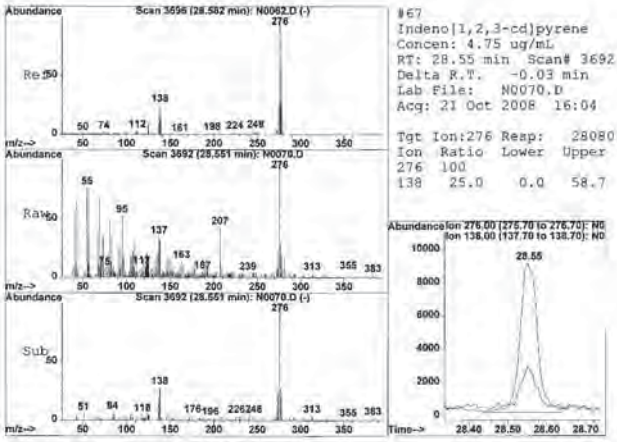
#65
Chrysene
Concen: 23.07 ug/mL
RT: 23.11 min Scan# 2881
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:228 Resp: 120397

Ion	Ratio	Lower	Upper
228	100		
226	28.0	0.0	58.0
229	22.1	0.0	49.4

N0070.D N014OL42.M Wed Oct 22 13:41:40 2008

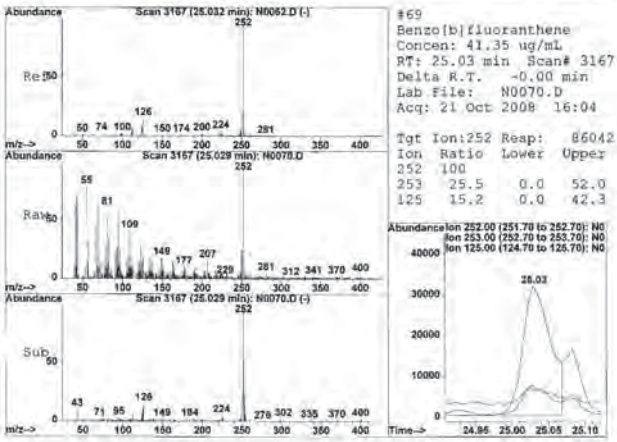
662



#67
Indeno[1,2,3-cd]pyrene
Concen: 4.75 ug/mL
RT: 28.55 min Scan# 3692
Delta R.T. -0.03 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:276 Resp: 28080

Ion	Ratio	Lower	Upper
276	100		
138	25.0	0.0	58.7



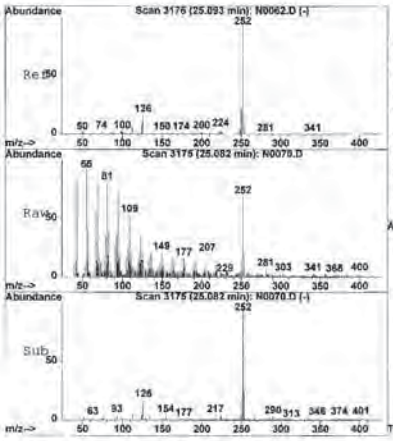
#69
Benzo[b]fluoranthene
Concen: 41.35 ug/mL
RT: 25.03 min Scan# 3167
Delta R.T. -0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:252 Resp: 86042

Ion	Ratio	Lower	Upper
252	100		
253	25.5	0.0	52.0
125	15.2	0.0	42.3

N0070.D N014OL42.M Wed Oct 22 13:41:41 2008

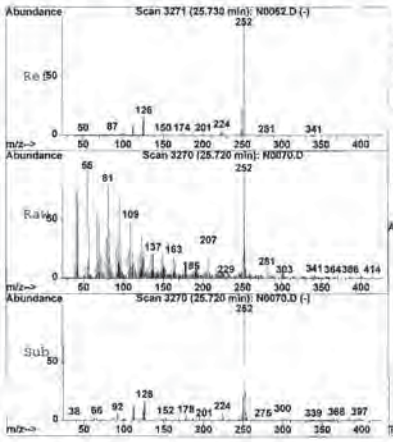
663



#70
Benzo[k]fluoranthene
Concen: 12.34 ug/mL
RT: 25.08 min Scan# 3175
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:252 Resp: 24397

Ion	Ratio	Lower	Upper
252	100		
253	30.9	0.0	52.1
125	10.0	0.0	42.7

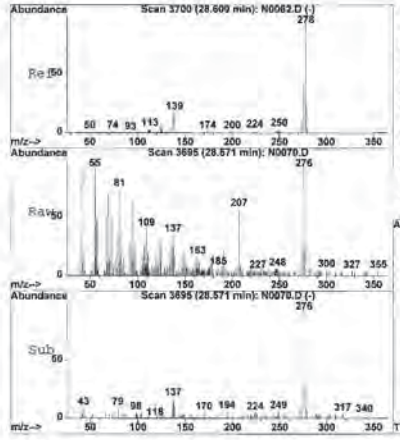


#71
Benzo[a]pyrene
Concen: 19.61 ug/mL
RT: 25.72 min Scan# 3270
Delta R.T. -0.01 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:252 Resp: 37088

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.0
125	18.5	0.0	43.7

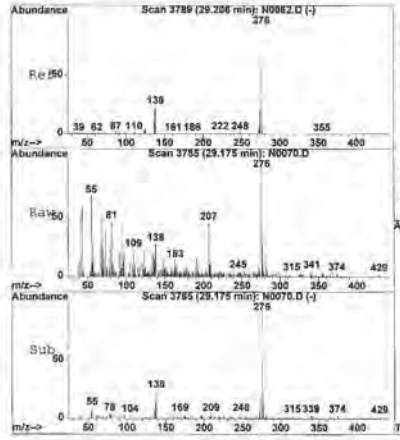
N0070.D N014OL42.M Wed Oct 22 13:41:41 2008 Pa



#72
Dibenz[a,h]anthracene
Concen: 4.41 ug/mL
RT: 28.57 min Scan# 3695
Delta R.T. -0.04 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:278 Resp: 7853

Ion	Ratio	Lower	Upper
278	100		
139	19.4	0.0	45.5
279	23.6	0.0	53.7



#73
Benzo[g,h,i]perylene
Concen: 16.90 ug/mL
RT: 29.18 min Scan# 3785
Delta R.T. -0.03 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:276 Resp: 29514

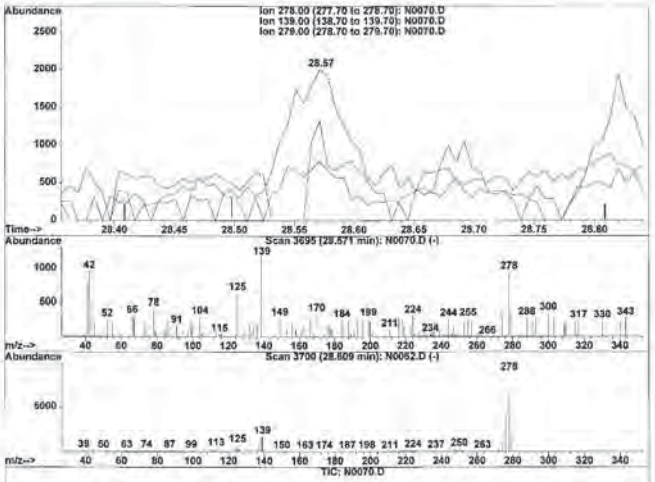
Ion	Ratio	Lower	Upper
276	100		
138	23.6	0.0	54.3
277	30.6	0.0	53.6

N0070.D N014OL42.M Wed Oct 22 13:41:41 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
Quant Time: Oct 22 13:29 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration



(72) Dibenz[a,h]anthracene (T)

28.57min 4.41ug/mL

response 7853

Ion	Exp%	Act%
278.00	100	100
139.00	15.50	19.42
279.00	23.70	23.65
0.00	0.00	0.00

N0070.D N014OL42.M Wed Oct 22 13:30:47 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 14:05 2008 Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.54	152	217186	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	769125	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	434312	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.03	188	679859	40.00 ug/mL	0.00
14) Chrysene-d12	23.06	240	208380	40.00 ug/mL	0.01
15) Perylene-d12	25.84	264	76591	40.00 ug/mL	0.00

System Monitoring Compounds

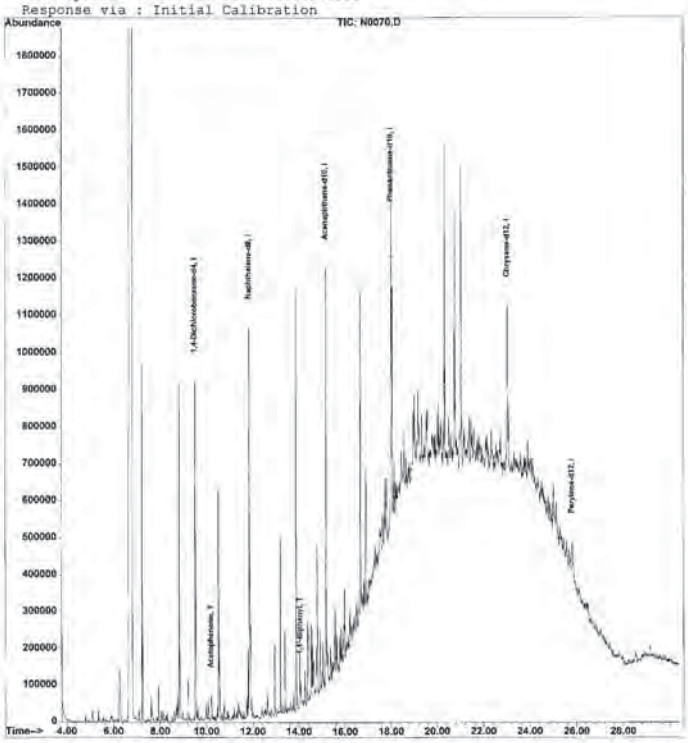
Target Compounds					Qvalue
4) Acetophenone	10.23	105	14879m	1.63 ug/mL	
8) 1,1'-Biphenyl	14.08	154	24511	1.81 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N0070.D N014OLM.M Wed Oct 22 14:06:00 2008 Pag

Quantitation Report

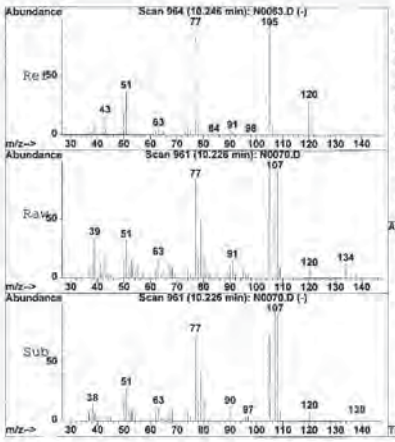
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 14:05 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration



N0070.D NO14OLM.M Wed Oct 22 14:06:00 2008 Pa

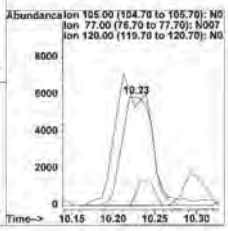
668

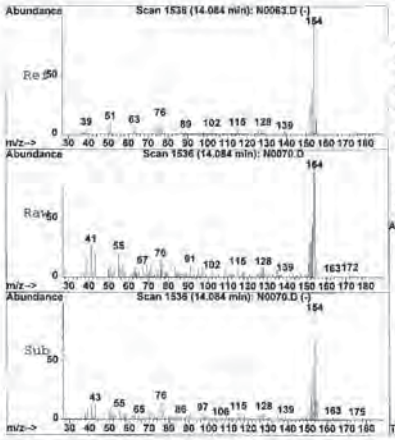


#4
Acetophenone
Concen: 1.63 ug/mL m
RT: 10.23 min Scan# 961
Delta R.T. -0.02 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:105 Resp: 14879

Ion	Ratio	Lower	Upper
105	100		
77	8.4	61.6	121.6#
120	3.6	0.0	58.4

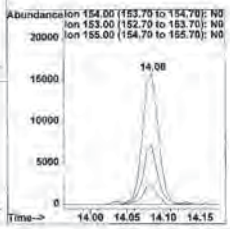




#8
1,1'-Biphenyl
Concen: 1.81 ug/mL
RT: 14.08 min Scan# 1536
Delta R.T. 0.00 min
Lab File: N0070.D
Acq: 21 Oct 2008 16:04

Tgt Ion:154 Resp: 24511

Ion	Ratio	Lower	Upper
154	100		
153	41.4	10.4	70.4
155	13.3	0.0	43.0



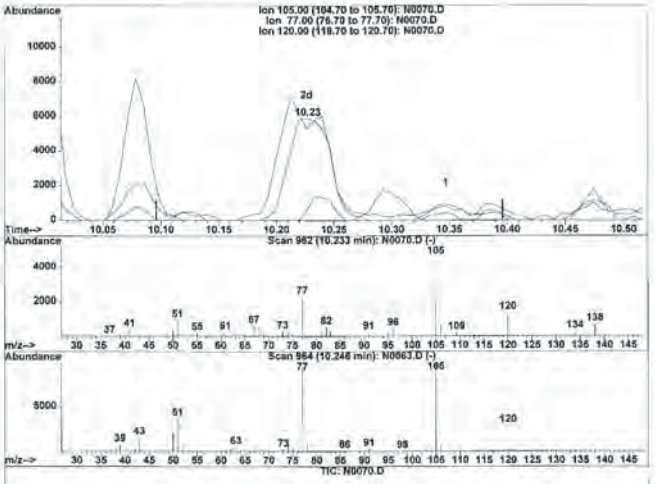
N0070.D NO14OLM.M Wed Oct 22 14:06:01 2008 Pa

669

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
Quant Time: Oct 22 13:56 2008 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Multiple Level Calibration



TIC: N0070.D

(4) Acetophenone (T)

10.23min 1.63ug/mL m

response 14879

Ion	Exp%	Act%
105.00	100	100
77.00	91.60	8.39#
120.00	28.40	3.61
0.00	0.00	0.00

N0070.D NO14OLM.M Wed Oct 22 13:56:46 2008

670

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 21 Oct 2008 16:04
Data File: C:\HPCHEM\1\DATA\N0070.D
Name: 0810083-005B
Misc: SAMP,8270S_OLM42, 200uL/.4mL
Method: C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title: BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library Searched: C:\DATABASE\NBS75K.L

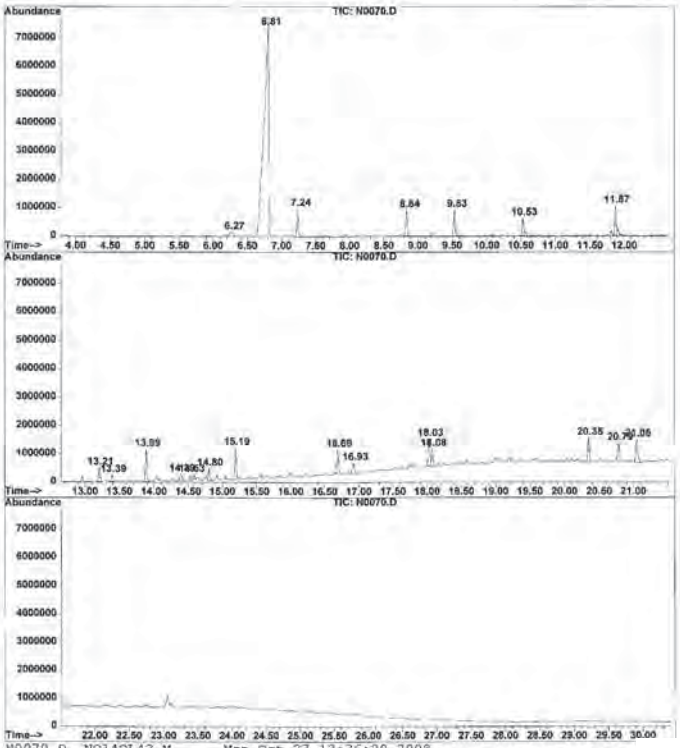
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Butane	6.27	14.8	ug/mL	549563	ISTD01	9.54	1486800	40.0
2-Pentanone, 4-hydro	6.81	1006.3	ug/mL	37405200	ISTD01	9.54	1486800	40.0
Naphthalene, 1-methy	13.39	8.8	ug/mL	374974	ISTD02	11.87	1702050	40.0
Naphthalene, 2,6-dim	14.39	10.9	ug/mL	551594	ISTD03	15.19	2029300	40.0
Naphthalene, 2,3-dim	14.53	7.6	ug/mL	384170	ISTD03	15.19	2029300	40.0
1-Dodecanol	14.80	12.4	ug/mL	629818	ISTD03	15.19	2029300	40.0
Hexadecane, 2,6,11,1	16.93	19.7	ug/mL	803823	ISTD04	18.03	1636120	40.0

N0070.D NO14OL42.M Mon Oct 27 13:36:32 2008

671

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\N0070.D
Operator : MEG
Acquired : 21 Oct 2008 16:04 using AcqMethod NO14FULL
Instrument : #5MS26
Sample Name: 0810083-005B
Misc Info : SAMP,8270S_OLM42, 200uL/.4mL
Vial Number: 10
Quant File :NO14OL42.RES (RTE Integrator)



Library Search Compound Report

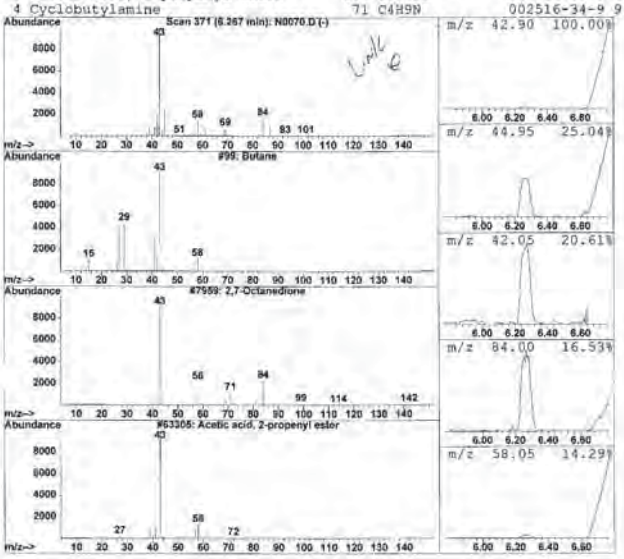
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Butane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.27	14.79 ug/mL	549563	1,4-Dichlorobenzene-d4	9.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	9
2	2,7-Octanedione	142	C8H14O2	001626-09-1	9
3	Acetic acid, 2-propenyl ester	100	C5H8O2	000591-87-7	9
4	Cyclobutylamine	71	C4H9N	002516-34-9	9



N0070.D NO14OL42.M Mon Oct 27 13:36:29 2008

Library Search Compound Report

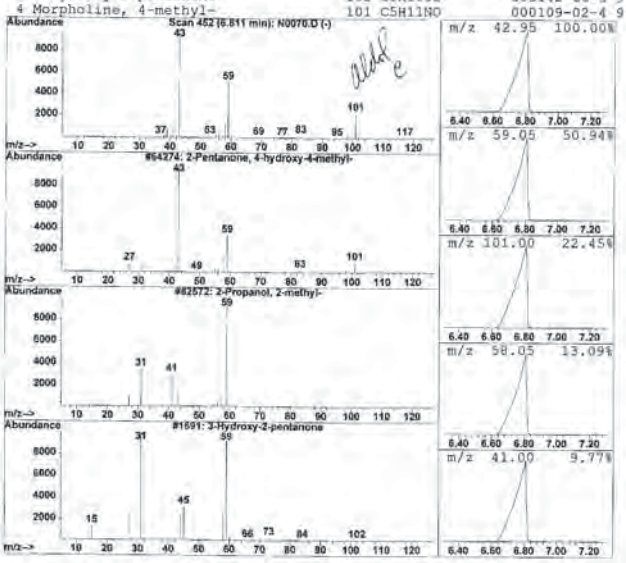
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.81	1006.33 ug/mL	37405200	1,4-Dichlorobenzene-d4	9.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
2	2-Propanol, 2-methyl-	74	C4H10O	000075-65-0	17
3	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9



N0070.D NO14OL42.M Mon Oct 27 13:36:30 2008

Library Search Compound Report

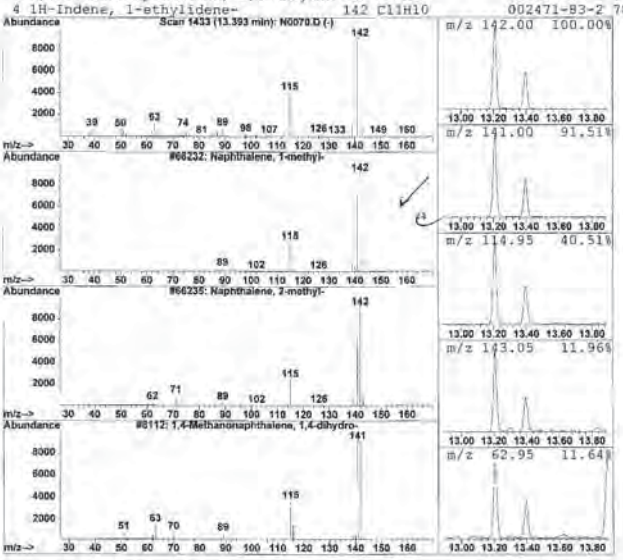
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 Naphthalene, 1-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.39	8.81 ug/mL	374974	Naphthalene-d8	11.87

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	87
3	1,4-Methanonaphthalene, 1,4-dihydro	142	C11H10	004453-90-1	86
4	1H-Indene, 1-ethylidene-	142	C11H10	002471-83-2	78



N0070.D NO14OL42.M Mon Oct 27 13:36:30 2008

Library Search Compound Report

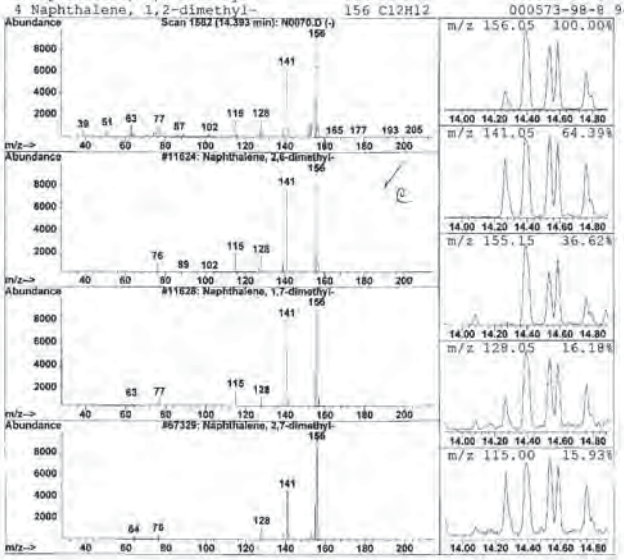
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 Naphthalene, 2,6-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.39	10.87 ug/mL	551594	Acenaphthene-d10	15.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	97
2	Naphthalene, 1,7-dimethyl-	156	C12H12	000575-37-1	96
3	Naphthalene, 2,7-dimethyl-	156	C12H12	000582-16-1	94
4	Naphthalene, 1,2-dimethyl-	156	C12H12	000573-98-8	94



N0070.D NO14OL42.M Mon Oct 27 13:36:30 2008 Pa 676

Library Search Compound Report

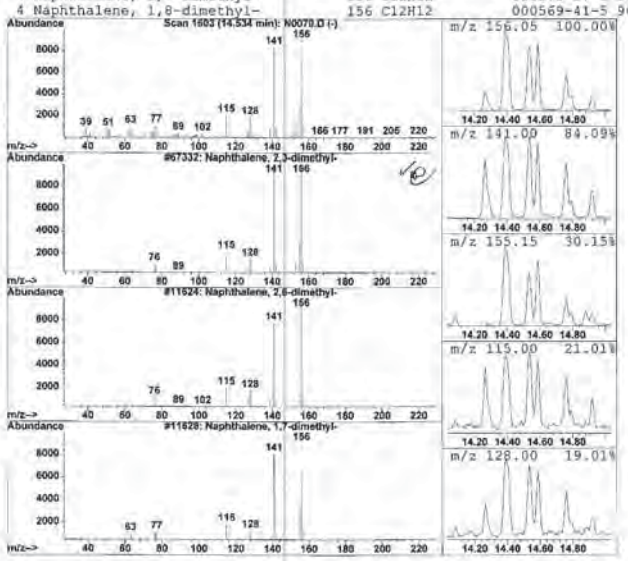
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 5 Naphthalene, 2,3-dimethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.53	7.57 ug/mL	384170	Acenaphthene-d10	15.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2,3-dimethyl-	156	C12H12	000581-40-8	97
2	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	97
3	Naphthalene, 1,7-dimethyl-	156	C12H12	000575-37-1	96
4	Naphthalene, 1,8-dimethyl-	156	C12H12	000569-41-5	96



N0070.D NO14OL42.M Mon Oct 27 13:36:31 2008 Pa 677

Library Search Compound Report

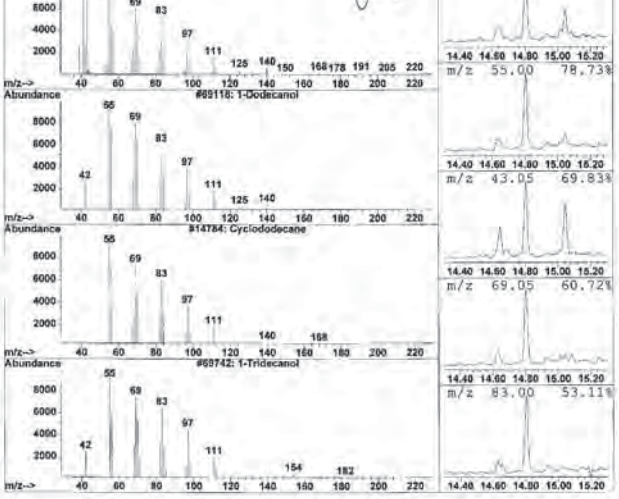
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 6 1-Dodecanol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.80	12.41 ug/mL	629818	Acenaphthene-d10	15.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Dodecanol	186	C12H26O	000112-53-8	91
2	Cyclododecane	168	C12H24	000294-62-2	91
3	1-Tridecanol	200	C13H28O	000112-70-9	91
4	Cyclotetradecane	196	C14H28	000295-17-0	90



N0070.D NO14OL42.M Mon Oct 27 13:36:31 2008 Pa 678

Library Search Compound Report

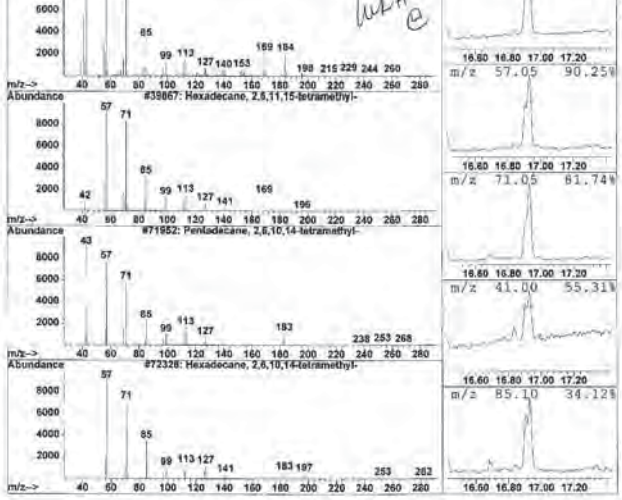
Data File : C:\HPCHEM\1\DATA\N0070.D Vial: 10
Acq On : 21 Oct 2008 16:04 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : SAMP,8270S_OLM42, 200uL/.4mL Multiplr: 2.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 7 Hexadecane, 2,6,11,15-tetramet Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.93	19.65 ug/mL	803823	Phenanthrene-d10	18.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,11,15-tetramethyl-	282	C20H42	000504-44-9	81
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	78
3	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	64
4	Octadecane, 4-methyl-	268	C19H40	010544-95-3	64



N0070.D NO14OL42.M Mon Oct 27 13:36:32 2008 Pa 679

Life Science Laboratories, Inc. — Analytical Results

LSL
Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			**Lab ID:**	0810083-005BDL
Project:	City of Geneva- Market Basket Site			**Client Sample ID:**	*MBSS-FD*
W Order:	0810083			**Collection Date:**	10/10/08 10:05
Matrix:	SOIL			**Date Received:**	10/10/08 13:20
Inst. ID:	MS05_26	**Sample Size:**	30 g	**PrepDate:**	10/15/08 12:52
ColumnID:	DB-5MS	**%Moisture:**	17.8	**BatchNo:**	8270/R15271
Revision:	10/24/08 9:48	**TestCode:**	8270S_OLM42	**FileID:**	1-DL-N0056.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
1,1'-Biphenyl	ND		10000	130	µg/Kg-dry	25	10/20/08 19:54
2,4,5-Trichlorophenol	ND		51000	640	µg/Kg-dry	25	10/20/08 19:54
2,4,6-Trichlorophenol	ND		10000	170	µg/Kg-dry	25	10/20/08 19:54
2,4-Dichlorophenol	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
2,4-Dimethylphenol	ND		10000	2000	µg/Kg-dry	25	10/20/08 19:54
2,4-Dinitrophenol	ND		51000	10000	µg/Kg-dry	25	10/20/08 19:54
2,4-Dinitrotoluene	ND		10000	150	µg/Kg-dry	25	10/20/08 19:54
2,6-Dinitrotoluene	ND		10000	170	µg/Kg-dry	25	10/20/08 19:54
2-Chloronaphthalene	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
2-Chlorophenol	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
2-Methylnaphthalene	1000	J	10000	49	µg/Kg-dry	25	10/20/08 19:54
2-Methylphenol	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
2-Nitroaniline	ND		51000	180	µg/Kg-dry	25	10/20/08 19:54
2-Nitrophenol	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
3,3'-Dichlorobenzidine	ND		20000	1200	µg/Kg-dry	25	10/20/08 19:54
3-Nitroaniline	ND		51000	1200	µg/Kg-dry	25	10/20/08 19:54
4,6-Dinitro-2-methylphenol	ND		51000	5100	µg/Kg-dry	25	10/20/08 19:54
4-Bromophenyl phenyl ether	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
4-Chloro-3-methylphenol	ND		10000	300	µg/Kg-dry	25	10/20/08 19:54
4-Chloroaniline	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
4-Chlorophenyl phenyl ether	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
4-Methylphenol	ND		10000	87	µg/Kg-dry	25	10/20/08 19:54
4-Nitroaniline	ND		51000	1200	µg/Kg-dry	25	10/20/08 19:54
4-Nitrophenol	ND		51000	2000	µg/Kg-dry	25	10/20/08 19:54
Acenaphthene	ND		10000	100	µg/Kg-dry	25	10/20/08 19:54
Acenaphthylene	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
Acetophenone	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Anthracene	ND		10000	71	µg/Kg-dry	25	10/20/08 19:54
Atrazine	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Benzaldehyde	ND		10000	150	µg/Kg-dry	25	10/20/08 19:54
Benzo[a]anthracene	1600	J	10000	110	µg/Kg-dry	25	10/20/08 19:54
Benzo[a]pyrene	1600	J	10000	300	µg/Kg-dry	25	10/20/08 19:54
Benzo[b]fluoranthene	2800	J	10000	350	µg/Kg-dry	25	10/20/08 19:54
Benzo[g,h,i]perylene	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05   399139   **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

LSL
Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			**Lab ID:**	0810083-005BDL
Project:	City of Geneva- Market Basket Site			**Client Sample ID:**	*MBSS-FD*
W Order:	0810083			**Collection Date:**	10/10/08 10:05
Matrix:	SOIL			**Date Received:**	10/10/08 13:20
Inst. ID:	MS05_26	**Sample Size:**	30 g	**PrepDate:**	10/15/08 12:52
ColumnID:	DB-5MS	**%Moisture:**	17.8	**BatchNo:**	8270/R15271
Revision:	10/24/08 9:48	**TestCode:**	8270S_OLM42	**FileID:**	1-DL-N0056.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Benzo[k]fluoranthene	1400	J	10000	340	µg/Kg-dry	25	10/20/08 19:54
bis(2-Chloroethoxy)methane	ND		10000	94	µg/Kg-dry	25	10/20/08 19:54
bis(2-chloroethyl)ether	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
bis(2-chloroisopropyl)ether	ND		10000	170	µg/Kg-dry	25	10/20/08 19:54
bis(2-Ethylhexyl)phthalate	ND		10000	450	µg/Kg-dry	25	10/20/08 19:54
Butyl benzyl phthalate	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
Caprolactam	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Carbazole	ND		10000	300	µg/Kg-dry	25	10/20/08 19:54
Chrysene	2000	J	10000	85	µg/Kg-dry	25	10/20/08 19:54
Di-n-butyl phthalate	ND		10000	2600	µg/Kg-dry	25	10/20/08 19:54
Di-n-octyl phthalate	ND		10000	59	µg/Kg-dry	25	10/20/08 19:54
Dibenz[a,h]anthracene	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
Dibenzofuran	ND		10000	140	µg/Kg-dry	25	10/20/08 19:54
Diethyl phthalate	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
Dimethyl phthalate	ND		10000	100	µg/Kg-dry	25	10/20/08 19:54
Fluoranthene	3200	J	10000	300	µg/Kg-dry	25	10/20/08 19:54
Fluorene	ND		10000	100	µg/Kg-dry	25	10/20/08 19:54
Hexachlorobenzene	ND		10000	160	µg/Kg-dry	25	10/20/08 19:54
Hexachlorobutadiene	ND		10000	92	µg/Kg-dry	25	10/20/08 19:54
Hexachlorocyclopentadiene	ND		10000	5100	µg/Kg-dry	25	10/20/08 19:54
Hexachloroethane	ND		10000	1200	µg/Kg-dry	25	10/20/08 19:54
Indeno[1,2,3-cd]pyrene	ND		10000	400	µg/Kg-dry	25	10/20/08 19:54
Isophorone	ND		10000	84	µg/Kg-dry	25	10/20/08 19:54
N-Nitroso-di-n-propylamine	ND		10000	120	µg/Kg-dry	25	10/20/08 19:54
N-Nitrosodiphenylamine	ND		10000	68	µg/Kg-dry	25	10/20/08 19:54
Naphthalene	ND		10000	77	µg/Kg-dry	25	10/20/08 19:54
Nitrobenzene	ND		10000	110	µg/Kg-dry	25	10/20/08 19:54
Pentachlorophenol	ND		51000	10000	µg/Kg-dry	25	10/20/08 19:54
Phenanthrene	1900	J	10000	44	µg/Kg-dry	25	10/20/08 19:54
Phenol	ND		10000	93	µg/Kg-dry	25	10/20/08 19:54
Pyrene	3100	J	10000	68	µg/Kg-dry	25	10/20/08 19:54
Surr: 2,4,6-Tribromophenol	72.0		20-143	0	%REC	25	10/20/08 19:54
Surr: 2-Fluorobiphenyl	75.0		46-130	0	%REC	25	10/20/08 19:54
Surr: 2-Fluorophenol	68.5		22-130	0	%REC	25	10/20/08 19:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05   399139   **Project Supervisor:** Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

LSL
Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			**Lab ID:**	0810083-005BDL
Project:	City of Geneva- Market Basket Site			**Client Sample ID:**	*MBSS-FD*
W Order:	0810083			**Collection Date:**	10/10/08 10:05
Matrix:	SOIL			**Date Received:**	10/10/08 13:20
Inst. ID:	MS05_26	**Sample Size:**	30 g	**PrepDate:**	10/15/08 12:52
ColumnID:	DB-5MS	**%Moisture:**	17.8	**BatchNo:**	8270/R15271
Revision:	10/24/08 9:48	**TestCode:**	8270S_OLM42	**FileID:**	1-DL-N0056.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3550B)
Surr: Nitrobenzene-d5	61.6		39-130	0	%REC	25	10/20/08 19:54
Surr: Phenol-d5	65.3		33-130	0	%REC	25	10/20/08 19:54
Surr: Terphenyl-d14	90.3		36-146	0	%REC	25	10/20/08 19:54

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/24/08 10:05   399139   **Project Supervisor:** Monika Santucci


```
                     Quantitation Report    (QT Reviewed)

 Data File : C:\HPCHEM\1\DATA\N0056.D                        Vial: 20
 Acq On    : 20 Oct 2008  19:54                          Operator: MEG
 Sample    : 0810083-005B                                Inst    : #5MS26
 Misc      : DL  ,8270S_OLM42,  20uL/.5mL                Multiplr: 25.00
 MS Integration Params: RTEINT.P
 Quant Time: Oct 21  9:55 2008                  Quant Results File: NO14OL42.RES

 Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
 Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
 Last Update  : Tue Oct 21 09:46:08 2008
 Response via : Initial Calibration
 DataAcq Meth : NO14FULL

Internal Standards                         R.T. QIon  Response  Conc Units Dev(Min)
---------------------------------------------------------------------------------
  1) 1,4-Dichlorobenzene-d4                9.53  152   169143    40.00 ug/mL   0.00
 13) Naphthalene-d8                       11.87  136   598569    40.00 ug/mL   0.00
 26) Acenaphthene-d10                     15.20  164   346087    40.00 ug/mL   0.00
 47) Phenanthrene-d10                     18.03  188   583716    40.00 ug/mL   0.00
 58) Chrysene-d12                         23.06  240   467522    40.00 ug/mL   0.00
 68) Perylene-d12                         25.83  264   313056    40.00 ug/mL   0.00

System Monitoring Compounds
  2) 2-Fluorophenol                        7.21  112    19155     4.11 ug/mL   0.01
  Spiked Amount    150.000                         Recovery   =    2.74%
  3) Phenol-d5                             8.82   99    25000     3.92 ug/mL   0.00
  Spiked Amount    150.000                         Recovery   =    2.61%
 14) Nitrobenzene-d5                      10.53   82    17053     2.47 ug/mL   0.00
  Spiked Amount    100.000                         Recovery   =    2.47%
 30) 2-Fluorobiphenyl                     13.89  172    32282     3.00 ug/mL   0.00
  Spiked Amount    100.000                         Recovery   =    3.00%
 46) 2,4,6-Tribromophenol                 16.69  330    10375     4.32 ug/mL   0.00
  Spiked Amount    150.000                         Recovery   =    2.88%
 60) Terphenyl-d14                        21.04  244    30290     3.61 ug/mL   0.00
  Spiked Amount    100.000                         Recovery   =    3.61%

Target Compounds                                                          Qvalue
 25) 2-Methylnaphthalene                  13.21  142    11947     1.03 ug/mL     97
 53) Phenanthrene                         18.07  178    27436     1.88 ug/mL     96
 57) Fluoranthene                         20.33  202    45488     3.11 ug/mL     97
 59) Pyrene                               20.77  202    44097     3.09 ug/mL     98
 63) Benzo[a]anthracene                   23.04  228    19486     1.55 ug/mL     86
 65) Chrysene                             23.10  228    22898     1.96 ug/mL     89
 69) Benzo[b]fluoranthene                 25.01  252    23468m    2.76 ug/mL
 70) Benzo[k]fluoranthene                 25.06  252    10916m    1.35 ug/mL
 71) Benzo[a]pyrene                       25.71  252    12445     1.61 ug/mL     80

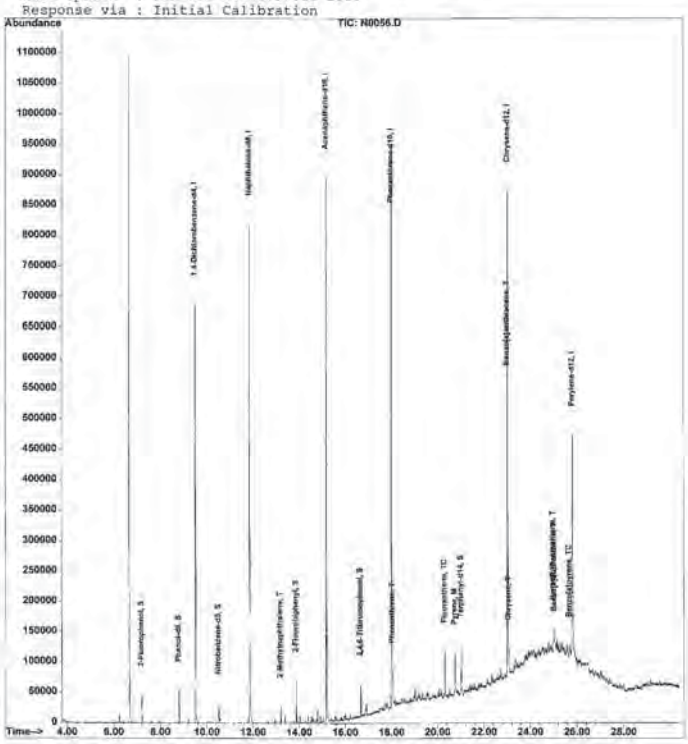
---------------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
N0056.D  NO14OL42.M        Fri Oct 24 09:34:47 2008                          Pa
```

Quantitation Report

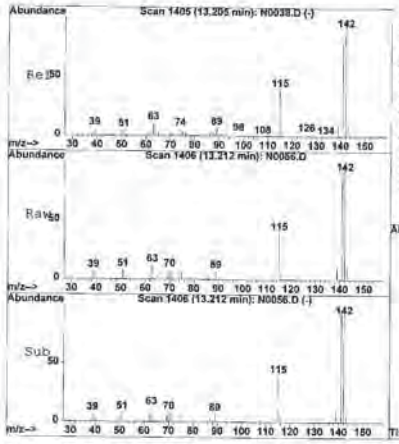
Data File : C:\HPCHEM\1\DATA\N0056.D
Acq On : 20 Oct 2008 19:54
Sample : 0810083-005B
Misc : DL ,8270S_OLM42, 20uL/.5mL
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:55 2008

Vial: 20
Operator: MEG
Inst : #5MS26
Multiplr: 25.00
Quant Results File: N0140L42.RES

Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



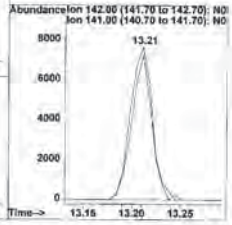
N0056.D N0140L42.M Fri Oct 24 09:34:48 2008 Pa

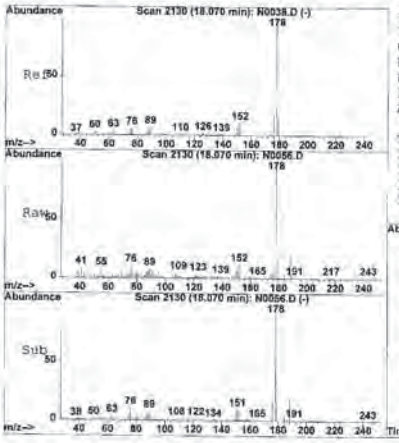


#25
2-Methylnaphthalene
Concen: 1.03 ug/mL
RT: 13.21 min Scan# 1406
Delta R.T. 0.01 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:142 Resp: 11947

Ion	Ratio	Lower	Upper
142	100		
141	87.5	54.3	114.3

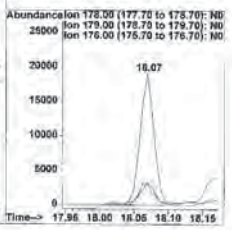




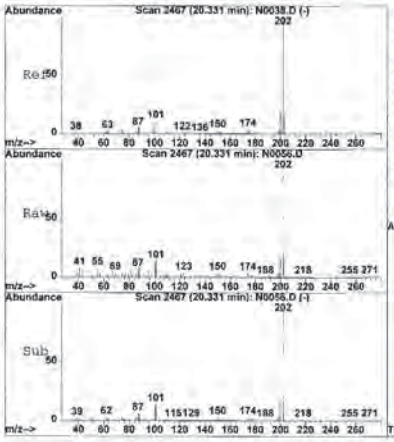
#53
Phenanthrene
Concen: 1.88 ug/mL
RT: 18.07 min Scan# 2130
Delta R.T. -0.00 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:178 Resp: 27436

Ion	Ratio	Lower	Upper
178	100		
179	17.5	0.0	45.3
176	19.5	0.0	48.5



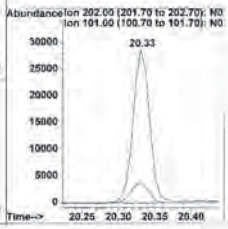
N0056.D N0140L42.M Fri Oct 24 09:34:49 2008 Pa

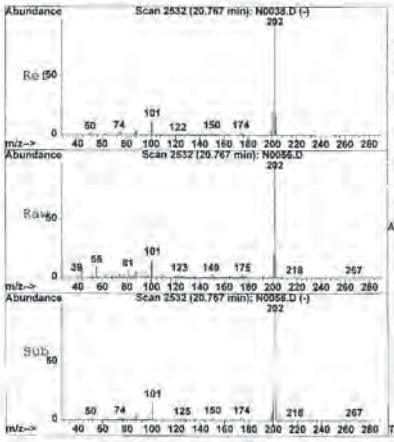


#57
Fluoranthene
Concen: 3.11 ug/mL
RT: 20.33 min Scan# 2467
Delta R.T. -0.00 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:202 Resp: 45488

Ion	Ratio	Lower	Upper
202	100		
101	14.4	0.0	43.2

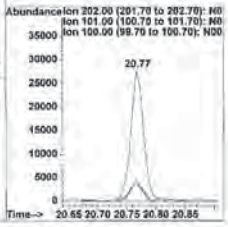




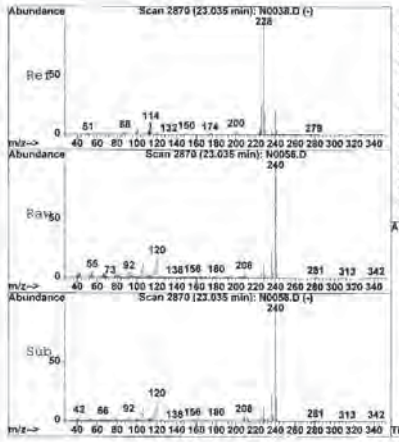
#59
Pyrene
Concen: 3.09 ug/mL
RT: 20.77 min Scan# 2532
Delta R.T. -0.00 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:202 Resp: 44097

Ion	Ratio	Lower	Upper
202	100		
101	17.5	0.0	45.7
100	13.7	0.0	43.7



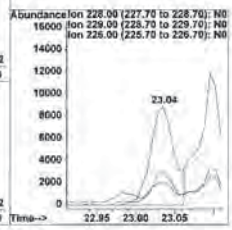
N0056.D N0140L42.M Fri Oct 24 09:34:50 2008 Pa

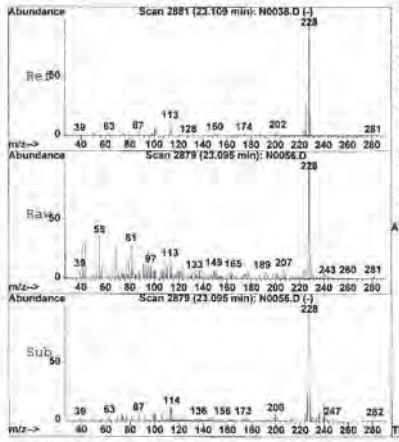


#63
Benzo[a]anthracene
Concen: 1.55 ug/mL
RT: 23.04 min Scan# 2870
Delta R.T. -0.00 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:228 Resp: 19486

Ion	Ratio	Lower	Upper
228	100		
229	14.0	0.0	49.7
226	32.8	0.0	55.5

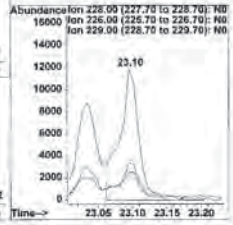




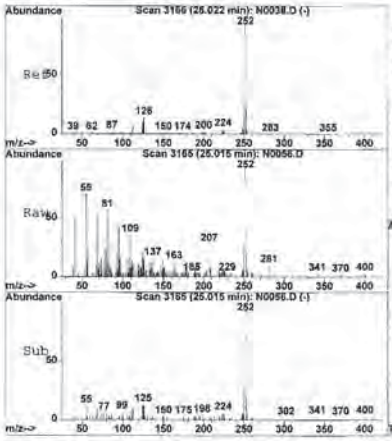
#65
Chrysene
Concen: 1.96 ug/mL
RT: 23.10 min Scan# 2879
Delta R.T. -0.01 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:228 Resp: 22898

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.0	58.0
229	29.9	0.0	49.4



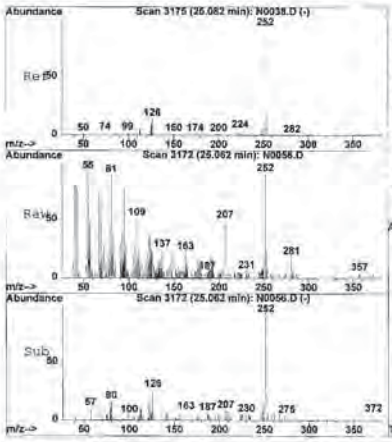
N0056.D N0140L42.M Fri Oct 24 09:34:50 2008 Pa



#69
Benzo[b]fluoranthene
Concen: 2.76 ug/mL m
RT: 25.01 min Scan# 3165
Delta R.T. -0.01 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:252 Resp: 23468

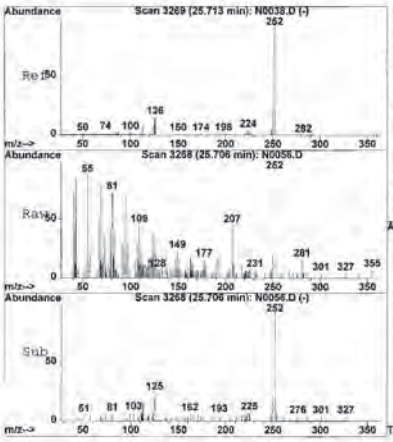
Ion	Ratio	Lower	Upper
252	100		
253	26.3	0.0	52.0
125	21.7	0.0	42.3



#70
Benzo[k]fluoranthene
Concen: 1.35 ug/mL m
RT: 25.06 min Scan# 3172
Delta R.T. -0.02 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:252 Resp: 10916

Ion	Ratio	Lower	Upper
252	100		
253	56.6	0.0	52.1#
125	46.7	0.0	42.7#



#71
Benzo[a]pyrene
Concen: 1.61 ug/mL
RT: 25.71 min Scan# 3268
Delta R.T. -0.01 min
Lab File: N0056.D
Acq: 20 Oct 2008 19:54

Tgt Ion:252 Resp: 12445

Ion	Ratio	Lower	Upper
252	100		
253	28.4	0.0	52.0
125	25.5	0.0	43.7

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0056.D Vial: 20
Acq On : 20 Oct 2008 19:54 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:28 2008 Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	169143	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	598252	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.20	164	346087	40.00 ug/mL	0.02
11) Phenanthrene-d10	18.03	188	583716	40.00 ug/mL	0.02
14) Chrysene-d12	23.06	240	467522	40.00 ug/mL	0.02
15) Perylene-d12	25.83	264	313056	40.00 ug/mL	0.02

System Monitoring Compounds

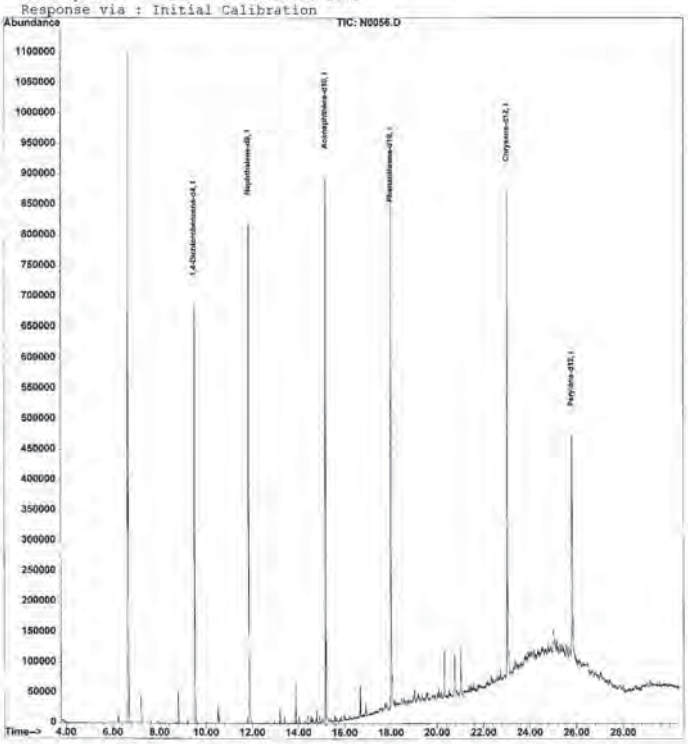
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N0056.D NO14OLM.M Fri Oct 24 09:38:07 2008 Pa
690

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0056.D Vial: 20
Acq On : 20 Oct 2008 19:54 Operator: MEG
Sample : 0810083-005B Inst : #5MS26
Misc : DL ,8270S_OLM42, 20uL/.5mL Multiplr: 25.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:28 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



Standards Data

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator) /1382
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Initial Calibration

Calibration Files
160 =N9924.D 120 =N9925.D 80 =N9926.D
60 =N9927.D 50 =N9928.D 40 =N9929.D

		Compound	160	120	80	60	50	40	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	1,4-Dioxane	0.593	0.561	0.567	0.575	0.553	0.589	0.574	2.54
3)	T	N-nitrosodimethylam	0.791	0.780	0.791	0.773	0.789	0.801	0.776	3.20
4)	T	Pyridine	1.450	1.406	1.421	1.395	1.418	1.421	1.406	2.20
5)	S	2-Fluorophenol	1.107	1.120	1.130	1.120	1.129	1.130	1.103	2.95
6)	S	Phenol-d5	1.475	1.500	1.532	1.520	1.512	1.527	1.510	1.37
7)	MC	Phenol	1.696	1.771	1.795	1.781	1.789	1.834	1.788	2.38
8)	T	Aniline	2.407	2.452	2.482	2.456	2.486	2.576	2.480	1.93
9)	T	bis(2-Chloroethyl)e	1.340	1.379	1.416	1.388	1.418	1.451	1.413	2.96
10)	S	2-Chlorophenol-d4							0.000	-1.00
11)	M	2-Chlorophenol	1.201	1.243	1.247	1.228	1.248	1.263	1.237	2.01
12)	T	1,3-Dichlorobenzene	1.451	1.485	1.513	1.478	1.513	1.536	1.514	2.56
13)	MC	1,4-Dichlorobenzene	1.422	1.439	1.487	1.457	1.461	1.497	1.480	2.68
14)	T	Benzyl alcohol	0.940	0.955	0.969	0.963	0.972	0.989	0.952	3.12
15)	S	1,2-Dichlorobenzene							0.000	-1.00
16)	T	1,2-Dichlorobenzene	1.357	1.393	1.422	1.392	1.422	1.447	1.422	3.07
17)	T	2-Methylphenol	1.256	1.291	1.303	1.288	1.309	1.331	1.308	2.08
18)	T	2,2'-oxybis(1-chlor	1.374	1.433	1.485	1.505	1.568	1.620	1.565	8.02
19)	T	bis(2-Chloroisoprop	1.374	1.433	1.485	1.505	1.568	1.620	1.565	8.02
20)	T	4-Methylphenol	1.334	1.370	1.416	1.399	1.405	1.442	1.391	2.18
21)	T	(3+4)-Methylphenol	1.334	1.370	1.416	1.399	1.405	1.442	1.391	2.18
22)	MP	N-Nitroso-di-n-prop	0.964	1.005	1.002	0.996	1.004	1.049	1.005	2.64
23)	T	Hexachloroethane	0.591	0.626	0.628	0.622	0.628	0.625	0.621	1.89
24)	I	Naphthalene-d8	----------ISTD----------							
25)	S	Nitrobenzene-d5	0.455	0.466	0.465	0.466	0.466	0.460	0.461	1.91
26)	T	Nitrobenzene	0.466	0.484	0.481	0.482	0.493	0.481	0.482	1.71
27)	T	Isophorone	0.860	0.880	0.883	0.869	0.875	0.874	0.871	1.38
28)	TC	2-Nitrophenol	0.240	0.245	0.241	0.243	0.245	0.236	0.232	7.12
29)	T	2,4-Dimethylphenol	0.380	0.399	0.397	0.391	0.388	0.388	0.384	3.08
30)	T	Benzoic acid	0.265	0.241	0.204	0.166	0.153	0.112	0.167	48.81
31)	T	bis(2-Chloroethoxy)	0.482	0.492	0.495	0.489	0.492	0.503	0.498	2.15
32)	TC	2,4-Dichlorophenol	0.355	0.359	0.356	0.348	0.350	0.350	0.344	4.92
33)	M	1,2,4-Trichlorobenz	0.389	0.399	0.397	0.390	0.389	0.386	0.388	1.77
34)	T	Naphthalene	0.925	0.962	0.958	0.949	0.964	0.974	0.969	2.71
35)	T	4-Chloroaniline	0.508	0.525	0.523	0.518	0.512	0.519	0.515	1.73
36)	TC	Hexachlorobutadiene	0.207	0.216	0.219	0.214	0.211	0.216	0.212	2.19
37)	MC	4-Chloro-3-methylph	0.352	0.357	0.356	0.352	0.352	0.350	0.347	4.01
38)	T	2-Methylnaphthalene	0.758	0.780	0.779	0.774	0.783	0.767	0.775	1.08
39)	I	Acenaphthene-d10	----------ISTD----------							
40)	T	1,2,4,5-Tetrachloro							0.000	-1.00
1)	TP	Hexachlorocyclopent	0.382	0.376	0.383	0.371	0.365	0.363	0.352	11.82

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14FULL.M Wed Oct 15 08:16:19 2008 Pa

10/15/

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Initial Calibration

Calibration Files
160 =N9924.D 120 =N9925.D 80 =N9926.D
60 =N9927.D 50 =N9928.D 40 =N9929.D

		Compound	160	120	80	60	50	40	Avg	%RSD
42)	TC	2,4,6-Trichlorophen	0.414	0.402	0.408	0.386	0.387	0.398	0.380	8.76
43)	T	2,4,5-Trichlorophen	0.490	0.482	0.492	0.477	0.483	0.484	0.464	7.03
44)	S	2-Fluorobiphenyl	1.230	1.242	1.242	1.228	1.247	1.263	1.242	1.01
45)	T	2-Chloronaphthalene	1.139	1.139	1.167	1.125	1.144	1.168	1.143	1.65
46)	T	2-Nitroaniline	0.471	0.470	0.467	0.474	0.477	0.494	0.470	2.63
47)	T	Dimethyl phthalate	1.451	1.450	1.465	1.446	1.446	1.497	1.448	1.87
48)	T	2,6-Dinitrotoluene	0.376	0.378	0.382	0.372	0.368	0.382	0.366	5.28
49)	T	Acenaphthylene	1.768	1.775	1.817	1.813	1.819	1.870	1.812	1.79
50)	T	3-Nitroaniline	0.425	0.413	0.422	0.420	0.421	0.429	0.414	3.38
51)	TCM	Acenaphthene	1.055	1.065	1.074	1.060	1.068	1.136	1.080	2.39
52)	TP	2,4-Dinitrophenol	0.271	0.271	0.264	0.239	0.224	0.209	0.231	20.01
53)	MP	4-Nitrophenol	0.211	0.207	0.201	0.192	0.187	0.185	0.192	8.75
54)	M	2,4-Dinitrotoluene	0.469	0.476	0.486	0.481	0.476	0.488	0.462	6.61
55)	T	Dibenzofuran	1.931	1.931	1.976	1.938	1.934	1.988	1.946	1.78
56)	T	Diethyl phthalate	1.411	1.395	1.425	1.414	1.420	1.463	1.421	1.69
57)	T	4-Chlorophenyl phen	0.611	0.615	0.632	0.609	0.612	0.617	0.608	2.59
58)	T	Fluorene	1.326	1.325	1.354	1.312	1.325	1.328	1.324	1.39
59)	T	4-Nitroaniline	0.427	0.412	0.432	0.424	0.435	0.424	0.414	4.89
60)	T	1,2-Diphenylhydrazi	1.500	1.521	1.592	1.612	1.636	1.687	1.622	4.55
61)	S	2,4,6-Tribromopheno	0.300	0.298	0.299	0.293	0.288	0.295	0.278	11.13
62)	I	Phenanthrene-d10	----------ISTD----------							
63)	T	4,6-Dinitro-2-methy	0.145	0.173	0.175	0.165	0.166	0.160	0.160	8.78
64)	TC	n-Nitrosodiphenylam	0.521	0.504	0.515	0.509	0.520	0.527	0.515	1.53
65)	T	4-Bromophenyl pheny	0.217	0.215	0.213	0.212	0.216	0.218	0.213	3.27
66)	T	Hexachlorobenzene	0.279	0.277	0.281	0.278	0.286	0.291	0.284	1.98
67)	MC	Pentachlorophenol	0.158	0.159	0.157	0.146	0.145	0.135	0.143	13.62
68)	T	Phenanthrene	0.956	0.987	0.999	0.976	1.012	1.009	1.001	2.37
69)	T	Anthracene	0.988	1.020	1.018	1.007	1.043	1.040	1.021	1.86
70)	T	Carbazole	0.833	0.934	0.928	0.922	0.940	0.964	0.933	4.51
71)	T	Di-n-butyl phthalat	1.161	1.223	1.283	1.344	1.364	1.404	1.325	6.57
72)	TC	Fluoranthene	0.921	0.961	1.007	1.002	1.026	1.044	1.002	3.81
73)	I	Chrysene-d12	----------ISTD----------							
74)	T	Benzidine	0.489	0.540	0.512	0.544	0.522	0.567	0.538	6.33
75)	M	Pyrene	1.160	1.213	1.192	1.249	1.241	1.259	1.222	2.49
76)	S	Terphenyl-d14	0.663	0.708	0.707	0.729	0.730	0.741	0.718	3.47
77)	T	Butyl benzyl phthal	0.707	0.736	0.725	0.744	0.752	0.757	0.732	3.47
78)	T	3,3'-Dichlorobenzid	0.408	0.420	0.417	0.426	0.420	0.420	0.421	1.53
79)	T	Benzo[a]anthracene	1.064	1.088	1.069	1.064	1.074	1.096	1.078	1.02
80)	T	bis(2-Ethylhexyl)ph	1.008	1.045	1.020	1.050	1.034	1.074	1.032	3.06
81)	T	Chrysene	0.977	1.007	1.002	1.010	1.018	1.027	1.002	1.56
82)	TC	Di-n-octyl phthalat	1.851	1.900	1.842	1.872	1.866	1.880	1.818	5.17
83)	T	Indeno[1,2,3-cd]pyr	1.132	1.206	1.183	1.212	1.180	1.205	1.135	8.17

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14FULL.M Wed Oct 15 08:16:25 2008 Pa

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Initial Calibration

Calibration Files
160 =N9924.D 120 =N9925.D 80 =N9926.D
60 =N9927.D 50 =N9928.D 40 =N9929.D

		Compound	160	120	80	60	50	40	Avg	%RSD
84)	I	Perylene-d12	----------ISTD----------							
85)	T	Benzo[b]fluoranthen	1.201	1.123	1.072	1.058	1.093	1.097	1.087	4.97
86)	T	Benzo[k]fluoranthen	0.891	1.029	1.045	1.060	1.039	1.061	1.032	5.35
87)	TC	Benzo[a]pyrene	0.993	1.020	1.004	0.998	1.003	1.001	0.988	2.93
88)	T	Dibenz[a,h]anthrace	0.911	0.960	0.958	0.974	0.961	0.986	0.929	6.34
89)	T	Benzo[g,h,i]perylen	0.882	0.948	0.944	0.950	0.935	0.956	0.912	5.30

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14FULL.M Wed Oct 15 08:16:26 2008 Pa

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator) /1382
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:15:54 2008
Response via : Initial Calibration

Calibration Files
20 =N9930.D 10 =N9931.D 5.0 =N9932.D
1.0 =N9753.D " "

		Compound	20	10	5.0	1.0	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------					
2)	T	1,4-Dioxane	0.558	0.579	0.587			
3)	T	N-nitrosodimethylam	0.789	0.726	0.745			
4)	T	Pyridine	1.414	1.393	1.337			
5)	S	2-Fluorophenol	1.094	1.046	1.054			
6)	S	Phenol-d5	1.536	1.492	1.494			
7)	MC	Phenol	1.841	1.810	1.771			
8)	T	Aniline	2.514	2.496	2.450			
9)	T	bis(2-Chloroethyl)e	1.429	1.410	1.485			
10)	S	2-Chlorophenol-d4						
11)	M	2-Chlorophenol	1.262	1.245	1.193			
12)	T	1,3-Dichlorobenzene	1.574	1.520	1.557			
13)	MC	1,4-Dichlorobenzene	1.551	1.512	1.494			
14)	T	Benzyl alcohol	0.968	0.905	0.904			
15)	S	1,2-Dichlorobenzene						
16)	T	1,2-Dichlorobenzene	1.441	1.412	1.513			
17)	T	2-Methylphenol	1.336	1.342	1.316			
)	T	2,2'-oxybis(1-chlor	1.657	1.692	1.751			
19)	T	bis(2-Chloroisoprop	1.657	1.692	1.751			
20)	T	4-Methylphenol	1.384	1.376	1.389			
21)	T	(3+4)-Methylphenol	1.384	1.376	1.389			
22)	MP	N-Nitroso-di-n-prop	1.036	1.015	0.975			
23)	T	Hexachloroethane	0.627	0.621	0.622			
24)	I	Naphthalene-d8	----------ISTD----------					
25)	S	Nitrobenzene-d5	0.467	0.458	0.440			
26)	T	Nitrobenzene	0.492	0.487	0.475			
27)	T	Isophorone	0.879	0.872	0.844			
28)	TC	2-Nitrophenol	0.232	0.212	0.198			
29)	T	2,4-Dimethylphenol	0.381	0.367	0.366			
30)	T	Benzoic acid	0.026					
31)	T	bis(2-Chloroethoxy)	0.510	0.511	0.509			
32)	TC	2,4-Dichlorophenol	0.343	0.325	0.307			
33)	M	1,2,4-Trichlorobenz	0.378	0.384	0.380			
34)	T	Naphthalene	0.971	1.006	1.009			
35)	T	4-Chloroaniline	0.519	0.518	0.496			
36)	TC	Hexachlorobutadiene	0.208	0.210	0.205			
37)	MC	4-Chloro-3-methylph	0.352	0.332	0.315			
38)	T	2-Methylnaphthalene	0.782	0.782	0.774			
39)	I	Acenaphthene-d10	----------ISTD----------					
40)	T	1,2,4,5-Tetrachloro						
)	TP	Hexachlorocyclopent	0.315	0.264				

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14FULL.M Wed Oct 15 08:18:07 2008 Pag

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:15:54 2008
Response via : Initial Calibration

Calibration Files
20 =N9930.D 10 =N9931.D 5.0 =N9932.D
1.0 =N9753.D " "

		Compound	20	10	5.0	1.0	Avg	%RSD
42)	TC	2,4,6-Trichlorophen	0.370	0.347	0.310			
43)	T	2,4,5-Trichlorophen	0.448	0.418	0.405			
44)	S	2-Fluorobiphenyl	1.242	1.257	1.226			
45)	T	2-Chloronaphthalene	1.130	1.159	1.114			
46)	T	2-Nitroaniline	0.465	0.461	0.448			
47)	T	Dimethyl phthalate	1.444	1.442	1.392			
48)	T	2,6-Dinitrotoluene	0.356	0.355	0.322			
49)	T	Acenaphthylene	1.802	1.849	1.798			
50)	T	3-Nitroaniline	0.409	0.398	0.386			
51)	TCM	Acenaphthene	1.074	1.106	1.083			
52)	TP	2,4-Dinitrophenol	0.141					
53)	MP	4-Nitrophenol	0.161					
54)	M	2,4-Dinitrotoluene	0.454	0.446	0.393			
55)	T	Dibenzofuran	1.968	1.973	1.874			
56)	T	Diethyl phthalate	1.431	1.443	1.384			
57)	T	4-Chlorophenyl phen	0.597	0.600	0.576			
58)	T	Fluorene	1.327	1.336	1.286			
59)	T	4-Nitroaniline	0.409	0.385	0.378			
)	T	1,2-Diphenylhydrazi	1.681	1.710	1.663			
61)	S	2,4,6-Tribromopheno	0.272	0.242	0.212			
62)	I	Phenanthrene-d10	----------ISTD----------					
63)	T	4,6-Dinitro-2-methy	0.137					
64)	TC	n-Nitrosodiphenylam	0.511	0.519	0.505			
65)	T	4-Bromophenyl pheny	0.211	0.219	0.196			
66)	T	Hexachlorobenzene	0.291	0.290	0.282			
67)	MC	Pentachlorophenol	0.104					
68)	T	Phenanthrene	1.025	1.019	1.025			
69)	T	Anthracene	1.047	1.014	1.016			
70)	T	Carbazole	0.984	0.951	0.937			
71)	T	Di-n-butyl phthalat	1.419	1.394	1.329			
72)	TC	Fluoranthene	1.026	1.021	1.014			
73)	I	Chrysene-d12	----------ISTD----------					
74)	T	Benzidine	0.591					
75)	M	Pyrene	1.235	1.224	1.221			
76)	S	Terphenyl-d14	0.741	0.735	0.708			
77)	T	Butyl benzyl phthal	0.759	0.728	0.681			
78)	T	3,3'-Dichlorobenzid	0.423	0.432	0.422			
79)	T	Benzo[a]anthracene	1.082	1.079	1.084			
80)	T	bis(2-Ethylhexyl)ph	1.062	1.030	0.968			
81)	T	Chrysene	0.993	0.998	0.985			
82)	TC	Di-n-octyl phthalat	1.831	1.703	1.618			
)	T	Indeno[1,2,3-cd]pyr	1.120	1.040	0.937			

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14FULL.M Wed Oct 15 08:18:13 2008 Pag

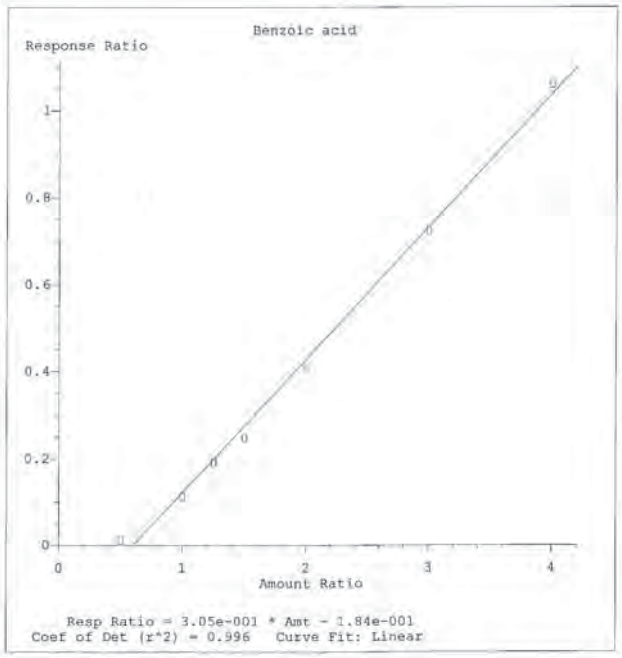
Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:15:54 2008
Response via : Initial Calibration

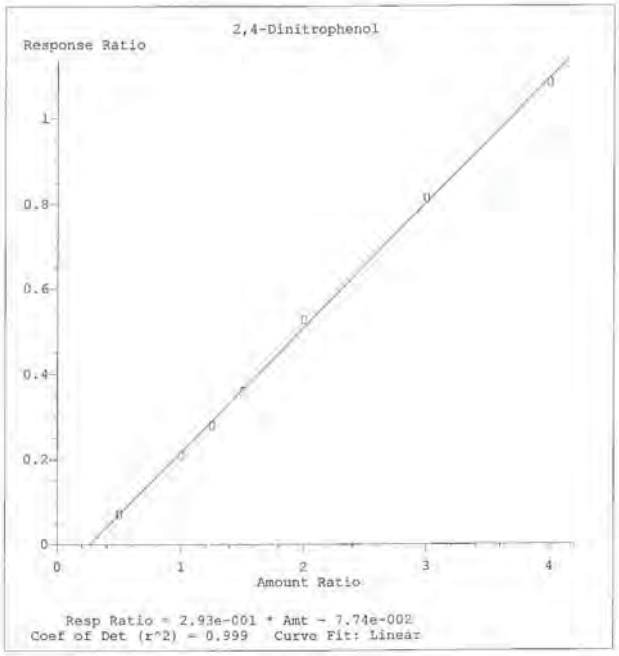
Calibration Files
20 =N9930.D 10 =N9931.D 5.0 =N9932.D
1.0 =N9753.D " "

		Compound	20	10	5.0	1.0	Avg	%RSD
84)	I	Perylene-d12	----------ISTD----------					
85)	T	Benzo[b]fluoranthen	1.072	1.061	1.003			
86)	T	Benzo[k]fluoranthen	1.072	1.061	1.031			
87)	TC	Benzo[a]pyrene	0.974	0.974	0.921			
88)	T	Dibenz[a,h]anthrace	0.942	0.869	0.804			
89)	T	Benzo[g,h,i]perylen	0.908	0.873	0.812			

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14FULL.M Wed Oct 15 08:18:13 2008 Pag



Method Name: C:\HPCHEM\1\METHODS\NO14FULL.M
Calibration Table Last Updated: Wed Oct 15 08:15:54 2008



Method Name: C:\HPCHEM\1\METHODS\NO14FULL.M
Calibration Table Last Updated: Wed Oct 15 08:15:54 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9924.D
Acq On : 14 Oct 2008 8:47
Sample : SSTD160PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:58 2008

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	160759	40.00 ug/mL	0.00
24) Naphthalene-d8	12.11	136	536078	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.43	164	319572	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	568651	40.00 ug/mL	0.00
73) Chrysene-d12	23.33	240	479586	40.00 ug/mL	0.02
84) Perylene-d12	26.20	264	499113	40.00 ug/mL	0.01
System Monitoring Compounds					
5) 2-Fluorophenol	7.43	112	711909	156.85 ug/mL	0.00
Spiked Amount 150.000				Recovery = 104.57%	
6) Phenol-d5	9.06	99	948459	156.11 ug/mL	0.02
Spiked Amount 150.000				Recovery = 104.07%	
10) 2-Chlorophenol-d4	9.38	132	927	0.00 ul/mL	0.00
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.76	152	160759	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.78	82	976725	156.37 ug/mL	0.02
Spiked Amount 100.000				Recovery = 156.37%	
44) 2-Fluorobiphenyl	14.13	172	1572756	157.88 ug/mL	0.00
Spiked Amount 100.000				Recovery = 157.88%	
61) 2,4,6-Tribromophenol	16.94	330	383686	166.76 ug/mL	0.01
Spiked Amount 150.000				Recovery = 111.17%	
76) Terphenyl-d14	21.29	244	1271304	145.31 ug/mL	0.01
Spiked Amount 100.000				Recovery = 145.31%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.44	88	152555	68.67 ug/mL	96
3) N-nitrosodimethylamine	5.05	74	508959	160.49 ug/mL	97
4) Pyridine	5.10	79	932498	163.66 ug/mL	99
7) Phenol	9.09	94	1090843	151.75 ug/mL	98
8) Aniline	9.17	93	1547470	154.87 ug/mL	100
9) bis(2-Chloroethyl)ether	9.27	93	861638	151.24 ug/mL	98
11) 2-Chlorophenol	9.39	128	772095	153.92 ug/mL	98
12) 1,3-Dichlorobenzene	9.66	146	933226	153.46 ug/mL	99
13) 1,4-Dichlorobenzene	9.79	146	914300	155.68 ug/mL	98
14) Benzyl alcohol	9.99	108	604416	154.80 ug/mL	97
16) 1,2-Dichlorobenzene	10.07	146	872445	152.68 ug/mL	100
17) 2-Methylphenol	10.17	108	807549	153.44 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.23	45	883803	140.22 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.23	45	883803	140.22 ug/mL	99
20) 4-Methylphenol	10.46	108	858116	152.01 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9924.D NO14FULL.M Wed Oct 15 08:20:29 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9924.D
Acq On : 14 Oct 2008 8:47
Sample : SSTD160PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:58 2008

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.46	108	858116	152.01 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.51	70	619623	153.53 ug/mL	99
23) Hexachloroethane	10.69	117	379910	150.41 ug/mL	97
26) Nitrobenzene	10.82	77	999709	151.34 ug/mL	99
27) Isophorone	11.27	82	1845086	157.36 ug/mL	99
28) 2-Nitrophenol	11.39	139	515508	156.96 ug/mL	97
29) 2,4-Dimethylphenol	11.43	107	815301	156.72 ug/mL	100
30) Benzoic acid	11.72	105	568918	277.80 ug/mL	98
31) bis(2-Chloroethoxy)methane	11.62	93	1032507	156.73 ug/mL	99
32) 2,4-Dichlorophenol	11.83	162	760589	162.05 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.00	180	834141	160.12 ug/mL	99
34) Naphthalene	12.16	128	1984088	153.58 ug/mL#	100
35) 4-Chloroaniline	12.23	127	1090075	159.00 ug/mL	98
36) Hexachlorobutadiene	12.36	225	444046	156.71 ug/mL	99
37) 4-Chloro-3-methylphenol	13.11	107	754903	159.82 ug/mL	99
38) 2-Methylnaphthalene	13.45	142	1624991	154.87 ug/mL	99
41) Hexachlorocyclopentadiene	13.74	237	487956	167.49 ug/mL	100
42) 2,4,6-Trichlorophenol	13.96	196	528908	171.01 ug/mL	97
43) 2,4,5-Trichlorophenol	14.03	196	626074	162.10 ug/mL	99
45) 2-Chloronaphthalene	14.38	162	1456094	159.28 ug/mL	99
46) 2-Nitroaniline	14.56	65	602590	158.26 ug/mL	98
47) Dimethyl phthalate	14.90	163	1855415	160.58 ug/mL	100
48) 2,6-Dinitrotoluene	15.02	165	480914	163.37 ug/mL	99
49) Acenaphthylene	15.18	152	2260407	155.51 ug/mL	99
50) 3-Nitroaniline	15.35	138	543374	161.50 ug/mL	99
51) Acenaphthene	15.51	153	1348119	150.01 ug/mL	97
52) 2,4-Dinitrophenol	15.54	184	346232	193.17 ug/mL#	1
53) 4-Nitrophenol	15.63	109	269899	180.95 ug/mL	86
54) 2,4-Dinitrotoluene	15.79	165	599289	157.43 ug/mL	99
55) Dibenzofuran	15.84	168	2468300	159.76 ug/mL	99
56) Diethyl phthalate	16.23	149	1803899m	158.99 ug/mL	
57) 4-Chlorophenyl phenyl ethe	16.47	204	781438	159.74 ug/mL	99
58) Fluorene	16.49	166	1694960	160.08 ug/mL	100
59) 4-Nitroaniline	16.55	138	545887m	156.91 ug/mL	
60) 1,2-Diphenylhydrazine	16.78	77	1917755	146.69 ug/mL	97
63) 4,6-Dinitro-2-methylphenol	16.58	198	330550	139.87 ug/mL	98
64) n-Nitrosodiphenylamine	16.69	169	1186150	160.57 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.41	248	494280	160.91 ug/mL	100
66) Hexachlorobenzene	17.53	284	634221	156.14 ug/mL	99
67) Pentachlorophenol	17.89	266	359313	173.98 ug/mL	99
68) Phenanthrene	18.33	178	2175195	151.14 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9924.D NO14FULL.M Wed Oct 15 08:20:30 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9924.D
Acq On : 14 Oct 2008 8:47
Sample : SSTD160PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:58 2008

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.43	178	2247096	151.53 ug/mL	99
70) Carbazole	18.72	167	1894431	141.74 ug/mL	99
71) Di-n-butyl phthalate	19.33	149	2640897	136.23 ug/mL	100
72) Fluoranthene	20.60	202	2095541	143.68 ug/mL	96
74) Benzidine	20.82	184	937931	149.74 ug/mL	99
75) Pyrene	21.04	202	2225880	149.61 ug/mL	96
77) Butyl benzyl phthalate	22.20	149	1355974	150.38 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.24	252	783055	155.60 ug/mL	100
79) Benzo(a)anthracene	23.30	228	2040381	158.51 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.25	149	1932978	155.96 ug/mL	97
81) Chrysene	23.39	228	1874983	153.69 ug/mL	99
82) Di-n-octyl phthalate	24.44	149	3550580	158.73 ug/mL	99
83) Indeno[1,2,3-cd]pyrene	29.01	276	2171883	153.52 ug/mL	97
85) Benzo[b]fluoranthene	25.37	252	2397542	175.79 ug/mL	99
86) Benzo[k]fluoranthene	25.43	252	1777968	137.16 ug/mL	99
87) Benzo[a]pyrene	26.10	252	1981968	158.30 ug/mL	99
88) Dibenz[a,h]anthracene	29.05	278	1819154	151.70 ug/mL	99
89) Benzo[g,h,i]perylene	29.63	276	1760594	150.91 ug/mL	99

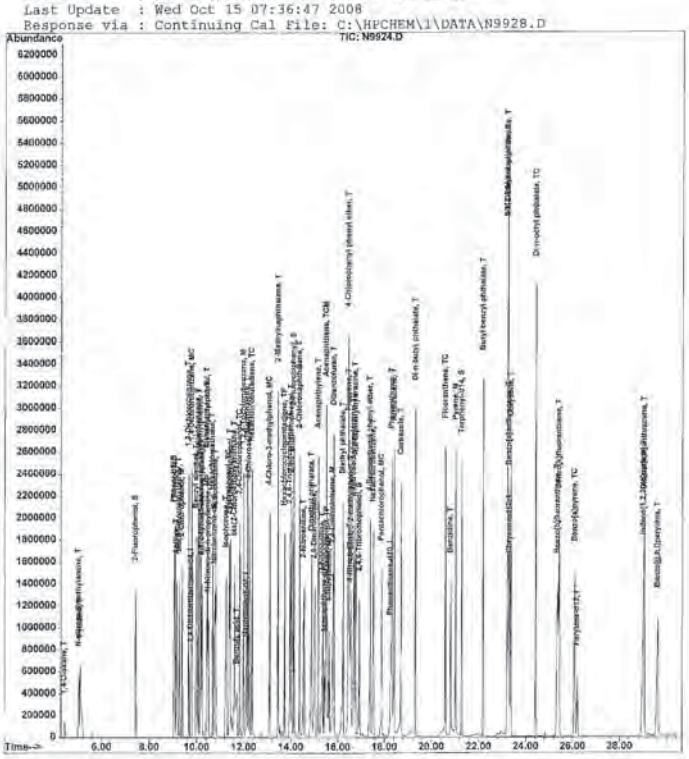
(#) = qualifier out of range (m) = manual integration
N9924.D NO14FULL.M Wed Oct 15 08:20:30 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9924.D
Acq On : 14 Oct 2008 8:47
Sample : SSTD160PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:58 2008

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9924.D NO14FULL.M Wed Oct 15 08:20:34 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9925.D
Acq On : 14 Oct 2008 9:25
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:53 2008

Vial: 3
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	156094	40.00 ug/mL	0.00
24) Naphthalene-d8	12.11	136	522056	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.44	164	321835	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	579569	40.00 ug/mL	0.00
73) Chrysene-d12	23.32	240	485433	40.00 ug/mL	0.00
84) Perylene-d12	26.20	264	312160	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.42	112	524589	119.03 ug/mL	0.00
Spiked Amount 150.000				Recovery = 79.35%	
6) Phenol-d5	9.05	99	702645	119.11 ug/mL	0.01
Spiked Amount 150.000				Recovery = 79.41%	
10) 2-Chlorophenol-d4	9.38	132	610	0.00 ul/mL	0.00
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.76	152	156094	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.77	82	730205	120.04 ug/mL	0.01
Spiked Amount 100.000				Recovery = 120.04%	
44) 2-Fluorobiphenyl	14.13	172	1199142	119.53 ug/mL	0.00
Spiked Amount 100.000				Recovery = 119.53%	
61) 2,4,6-Tribromophenol	16.94	330	288048	124.32 ug/mL	0.00
Spiked Amount 150.000				Recovery = 82.88%	
76) Terphenyl-d14	21.29	244	1030714	116.39 ug/mL	0.00
Spiked Amount 100.000				Recovery = 116.39%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.44	88	105022	48.69 ug/mL	97
3) N-nitrosodimethylamine	5.04	74	365075	118.56 ug/mL	96
4) Pyridine	5.10	79	658500	119.03 ug/mL	98
7) Phenol	9.07	94	829192	118.80 ug/mL	99
8) Aniline	9.17	93	1148018	118.33 ug/mL	100
9) bis(2-Chloroethyl)ether	9.26	93	645626	116.71 ug/mL	98
11) 2-Chlorophenol	9.38	128	582275	119.55 ug/mL	98
12) 1,3-Dichlorobenzene	9.66	146	695309	117.76 ug/mL	100
13) 1,4-Dichlorobenzene	9.79	146	674089	118.21 ug/mL	98
14) Benzyl alcohol	9.99	108	447356	118.00 ug/mL	99
16) 1,2-Dichlorobenzene	10.07	146	652516	117.61 ug/mL	100
17) 2-Methylphenol	10.16	108	604694	118.33 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.23	45	670915	109.63 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.23	45	670915	109.63 ug/mL	99
20) 4-Methylphenol	10.45	108	641588	117.05 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9925.D NO14FULL.M Wed Oct 15 08:20:37 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9925.D
Acq On : 14 Oct 2008 9:25
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:53 2008

Vial: 3
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.45	108	641588	117.05 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.49	70	470803	120.15 ug/mL	100
23) Hexachloroethane	10.69	117	293211	119.55 ug/mL	99
26) Nitrobenzene	10.81	77	758096	117.85 ug/mL	99
27) Isophorone	11.25	82	1377551	120.64 ug/mL	99
28) 2-Nitrophenol	11.38	139	383463	119.89 ug/mL	97
29) 2,4-Dimethylphenol	11.43	107	624528	123.27 ug/mL	99
30) Benzoic acid	11.68	105	377858	189.46 ug/mL	98
31) bis(2-Chloroethoxy)methane	11.61	93	770667	120.12 ug/mL	100
32) 2,4-Dichlorophenol	11.83	162	562853	123.15 ug/mL	100
33) 1,2,4-Trichlorobenzene	11.99	180	624877	123.17 ug/mL	100
34) Naphthalene	12.15	128	1505981	119.70 ug/mL#	100
35) 4-Chloroaniline	12.24	127	822514	123.20 ug/mL	98
36) Hexachlorobutadiene	12.36	225	337677	122.37 ug/mL	100
37) 4-Chloro-3-methylphenol	13.10	107	559290	121.58 ug/mL	100
38) 2-Methylnaphthalene	13.45	142	1221757	119.56 ug/mL	100
41) Hexachlorocyclopentadiene	13.73	237	363308	123.83 ug/mL	99
42) 2,4,6-Trichlorophenol	13.96	196	388419	124.70 ug/mL	99
43) 2,4,5-Trichlorophenol	14.03	196	465028	119.55 ug/mL	99
45) 2-Chloronaphthalene	14.38	162	1099684	119.45 ug/mL	99
46) 2-Nitroaniline	14.56	65	453680	118.31 ug/mL	99
47) Dimethyl phthalate	14.89	163	1399614	120.28 ug/mL	100
48) 2,6-Dinitrotoluene	15.02	165	365027	123.13 ug/mL	99
49) Acenaphthylene	15.17	152	1713370	117.05 ug/mL	99
50) 3-Nitroaniline	15.35	138	398544	117.62 ug/mL	99
51) Acenaphthene	15.50	153	1028244	119.67 ug/mL	97
52) 2,4-Dinitrophenol	15.54	184	261855	145.07 ug/mL#	1
53) 4-Nitrophenol	15.62	109	199538	132.84 ug/mL	94
54) 2,4-Dinitrotoluene	15.78	165	459274	119.80 ug/mL	99
55) Dibenzofuran	15.83	168	1864754	119.85 ug/mL	99
56) Diethyl phthalate	16.23	149	1347037	117.89 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.46	204	593750	120.52 ug/mL	98
58) Fluorene	16.49	166	1279456	119.99 ug/mL	100
59) 4-Nitroaniline	16.54	138	397450	113.44 ug/mL	96
60) 1,2-Diphenylhydrazine	16.77	77	1468295	111.52 ug/mL	98
63) 4,6-Dinitro-2-methylphenol	16.58	198	300481	124.75 ug/mL	99
64) n-Nitrosodiphenylamine	16.69	169	876799	116.46 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.40	248	373887	119.42 ug/mL	99
66) Hexachlorobenzene	17.53	284	482355	116.51 ug/mL	98
67) Pentachlorophenol	17.89	266	276656	131.44 ug/mL	99
68) Phenanthrene	18.33	178	1715732	116.97 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9925.D NO14FULL.M Wed Oct 15 08:20:38 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9925.D
Acq On : 14 Oct 2008 9:25
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:53 2008

Vial: 3
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.43	178	1772625	117.28 ug/mL	99
70) Carbazole	18.72	167	1623682	119.19 ug/mL	99
71) Di-n-butyl phthalate	19.33	149	2127117	107.66 ug/mL	100
72) Fluoranthene	20.60	202	1670895	112.40 ug/mL	97
74) Benzidine	20.82	184	785724	123.93 ug/mL	98
75) Pyrene	21.04	202	1766430	117.30 ug/mL	96
77) Butyl benzyl phthalate	22.19	149	1071958	117.45 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.23	252	611280	120.00 ug/mL	99
79) Benzo[a]anthracene	23.30	228	1583958	121.57 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	23.25	149	1521608	121.29 ug/mL	98
81) Chrysene	23.38	228	1466477	118.76 ug/mL	99
82) Di-n-octyl phthalate	24.43	149	2767487	122.23 ug/mL	99
83) Indeno[1,2,3-cd]pyrene	29.00	276	1756161	122.64 ug/mL	97
85) Benzo[b]fluoranthene	25.35	252	1724988	123.26 ug/mL	99
86) Benzo[k]fluoranthene	25.42	252	1581582	118.90 ug/mL	98
87) Benzo[a]pyrene	26.09	252	1566508	121.93 ug/mL	99
88) Dibenz[a,h]anthracene	29.03	278	1475255	119.89 ug/mL	100
89) Benzo[g,h,i]perylene	29.61	276	1456076	121.63 ug/mL	98

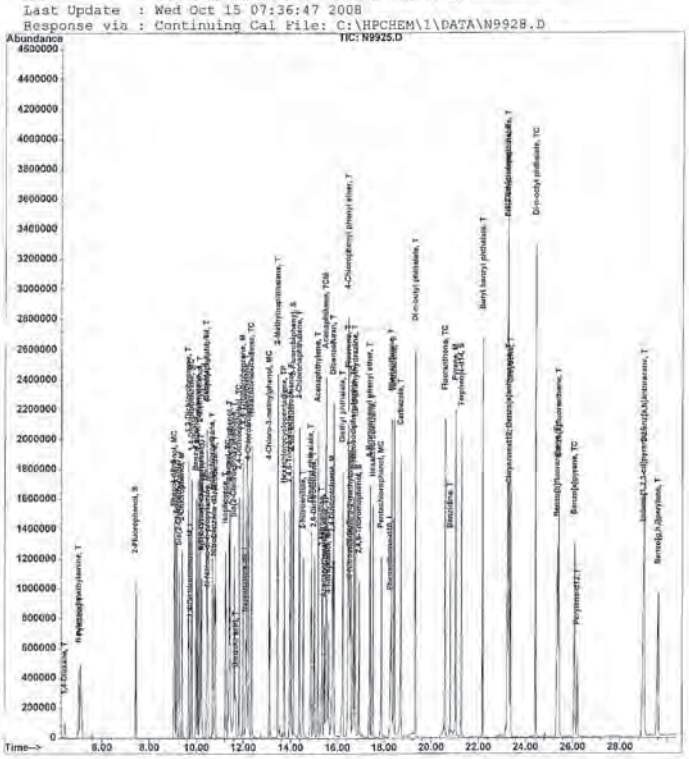
(#) = qualifier out of range (m) = manual integration
N9925.D NO14FULL.M Wed Oct 15 08:20:39 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9925.D
Acq On : 14 Oct 2008 9:25
Sample : SSTD120PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:53 2008

Vial: 3
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9925.D NO14FULL.M Wed Oct 15 08:20:42 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9926.D
Acq On : 14 Oct 2008 10:04
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	169590	40.00 ug/mL	0.00
24) Naphthalene-d8	12.11	136	575680	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.44	164	345674	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	632347	40.00 ug/mL	0.00
73) Chrysene-d12	23.32	240	551265	40.00 ug/mL	0.00
84) Perylene-d12	26.20	264	577338	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.42	112	383258	80.04 ug/mL	0.00
Spiked Amount 150.000				Recovery = 53.36%	
6) Phenol-d5	9.04	99	519564	81.06 ug/mL	0.00
Spiked Amount 150.000				Recovery = 54.04%	
10) 2-Chlorophenol-d4	9.38	132	412	0.00 ul/mL	0.00
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.76	152	169590	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.77	82	535874	79.89 ug/mL	0.00
Spiked Amount 100.000				Recovery = 79.89%	
44) 2-Fluorobiphenyl	14.13	172	858763	79.69 ug/mL	0.00
Spiked Amount 100.000				Recovery = 79.69%	
61) 2,4,6-Tribromophenol	16.93	330	206737	83.07 ug/mL	0.00
Spiked Amount 150.000				Recovery = 55.38%	
76) Terphenyl-d14	21.28	244	779443	77.50 ug/mL	0.00
Spiked Amount 100.000				Recovery = 77.50%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.45	88	76903	32.81 ug/mL	98
3) N-nitrosodimethylamine	5.04	74	268439	80.24 ug/mL	97
4) Pyridine	5.10	79	481832	80.16 ug/mL	99
7) Phenol	9.07	94	608865	80.29 ug/mL	99
8) Aniline	9.16	93	841914	79.87 ug/mL	100
9) bis(2-Chloroethyl)ether	9.26	93	480172	79.89 ug/mL	98
11) 2-Chlorophenol	9.38	128	422791	79.90 ug/mL	99
12) 1,3-Dichlorobenzene	9.66	146	513160	79.99 ug/mL	100
13) 1,4-Dichlorobenzene	9.79	146	504290	81.40 ug/mL	98
14) Benzyl alcohol	9.99	108	328668	79.79 ug/mL	99
16) 1,2-Dichlorobenzene	10.07	146	482251	80.00 ug/mL	99
17) 2-Methylphenol	10.16	108	442025	79.62 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.22	45	503833	75.77 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.22	45	503833	75.77 ug/mL	99
20) 4-Methylphenol	10.44	108	480130	80.63 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9926.D NO14FULL.M Wed Oct 15 08:20:46 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9926.D
Acq On : 14 Oct 2008 10:04
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.44	108	480130	80.63 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.48	70	339774	79.81 ug/mL	100
23) Hexachloroethane	10.69	117	213103	79.98 ug/mL	100
26) Nitrobenzene	10.81	77	554201	78.13 ug/mL	99
27) Isophorone	11.24	82	1016736	80.75 ug/mL	99
28) 2-Nitrophenol	11.38	139	277992	78.82 ug/mL	98
29) 2,4-Dimethylphenol	11.42	107	457038	81.81 ug/mL	100
30) Benzoic acid	11.65	105	235433	107.05 ug/mL	96
31) bis(2-Chloroethoxy)methane	11.61	93	569715	80.53 ug/mL	98
32) 2,4-Dichlorophenol	11.83	162	409411	81.23 ug/mL	99
33) 1,2,4-Trichlorobenzene	11.99	180	456784	81.65 ug/mL	100
34) Naphthalene	12.16	128	1102494	79.47 ug/mL#	100
35) 4-Chloroaniline	12.23	127	601903	81.76 ug/mL	98
36) Hexachlorobutadiene	12.36	225	252030	82.83 ug/mL	99
37) 4-Chloro-3-methylphenol	13.10	107	409975	80.82 ug/mL	100
38) 2-Methylnaphthalene	13.45	142	897262	79.63 ug/mL	99
41) Hexachlorocyclopentadiene	13.73	237	264463	83.92 ug/mL	99
42) 2,4,6-Trichlorophenol	13.96	196	281741	84.21 ug/mL	98
43) 2,4,5-Trichlorophenol	14.03	196	339978	81.38 ug/mL	100
45) 2-Chloronaphthalene	14.38	162	807127	81.63 ug/mL	99
46) 2-Nitroaniline	14.56	65	322610	78.33 ug/mL	99
47) Dimethyl phthalate	14.89	163	1012769	81.03 ug/mL	100
48) 2,6-Dinitrotoluene	15.01	165	263926	82.89 ug/mL	100
49) Acenaphthylene	15.17	152	1256189	79.90 ug/mL	99
50) 3-Nitroaniline	15.34	138	292024	80.24 ug/mL	99
51) Acenaphthene	15.50	153	742630	80.47 ug/mL	98
52) 2,4-Dinitrophenol	15.53	184	182318	94.04 ug/mL#	81
53) 4-Nitrophenol	15.62	109	139132	86.24 ug/mL	98
54) 2,4-Dinitrotoluene	15.78	165	335691	81.52 ug/mL	99
55) Dibenzofuran	15.83	168	1365782	81.72 ug/mL	100
56) Diethyl phthalate	16.22	149	985294	80.28 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.46	204	437151	82.61 ug/mL	99
58) Fluorene	16.48	166	936391	81.76 ug/mL	99
59) 4-Nitroaniline	16.52	138	298352	79.28 ug/mL	95
60) 1,2-Diphenylhydrazine	16.77	77	1100299	77.81 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.56	198	220880	84.05 ug/mL	96
64) n-Nitrosodiphenylamine	16.68	169	650954	79.25 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.40	248	269356	78.85 ug/mL	99
66) Hexachlorobenzene	17.53	284	355158	78.63 ug/mL	99
67) Pentachlorophenol	17.89	266	198711	86.53 ug/mL	99
68) Phenanthrene	18.32	178	1263152	78.93 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9926.D NO14FULL.M Wed Oct 15 08:20:47 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9926.D
Acq On : 14 Oct 2008 10:04
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.42	178	1287699	78.09 ug/mL	99
70) Carbazole	18.71	167	1174198	79.00 ug/mL	100
71) Di-n-butyl phthalate	19.32	149	1622882	75.28 ug/mL	100
72) Fluoranthene	20.59	202	1273498	78.52 ug/mL	98
74) Benzidine	20.81	184	564549	78.41 ug/mL	99
75) Pyrene	21.03	202	1314313	76.85 ug/mL	98
77) Butyl benzyl phthalate	22.19	149	799783	77.16 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.22	252	460212	79.56 ug/mL	99
79) Benzo[a]anthracene	23.29	228	1178841	79.67 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.25	149	1124214	78.91 ug/mL	99
81) Chrysene	23.37	228	1104301	78.75 ug/mL	99
82) Di-n-octyl phthalate	24.43	149	2030876	78.99 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	28.98	276	1304417	80.21 ug/mL	98
85) Benzo[b]fluoranthene	25.34	252	1238107	78.48 ug/mL	100
86) Benzo[k]fluoranthene	25.41	252	1207100	80.50 ug/mL	99
87) Benzo[a]pyrene	26.08	252	1159119	80.03 ug/mL	99
88) Dibenz[a,h]anthracene	29.01	278	1106257	79.75 ug/mL	99
89) Benzo[g,h,i]perylene	29.59	276	1089533	80.73 ug/mL	99

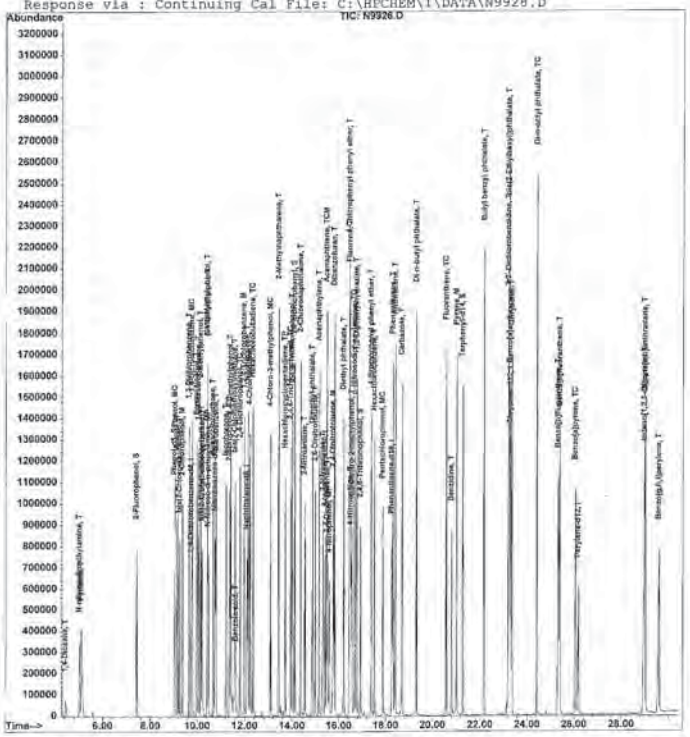
(#) = qualifier out of range (m) = manual integration
N9926.D NO14FULL.M Wed Oct 15 08:20:47 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9926.D
Acq On : 14 Oct 2008 10:04
Sample : SSTD080PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9926.D NO14FULL.M Wed Oct 15 08:20:51 2008 Pa

712

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9927.D
Acq On : 14 Oct 2008 10:42
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	158210	40.00 ug/mL	0.00
24) Naphthalene-d8	12.11	136	528225	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.43	164	319947	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	588067	40.00 ug/mL	0.00
73) Chrysene-d12	23.31	240	501924	40.00 ug/mL	0.00
84) Perylene-d12	26.19	264	529510	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.42	112	265725	59.49 ug/mL	0.00
Spiked Amount 150.000				Recovery = 39.66%	
6) Phenol-d5	9.03	99	360778	60.34 ug/mL	0.00
Spiked Amount 150.000				Recovery = 40.23%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.75	152	158210	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.76	82	369109	59.97 ug/mL	0.00
Spiked Amount 100.000				Recovery = 59.97%	
44) 2-Fluorobiphenyl	14.13	172	589432	59.10 ug/mL	0.00
Spiked Amount 100.000				Recovery = 59.10%	
61) 2,4,6-Tribromophenol	16.93	330	140635	61.05 ug/mL	0.00
Spiked Amount 150.000				Recovery = 40.70%	
76) Terphenyl-d14	21.28	244	548716	59.93 ug/mL	0.00
Spiked Amount 100.000				Recovery = 59.93%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.44	88	54620	24.98 ug/mL	96
3) N-nitrosodimethylamine	5.03	74	183549	58.81 ug/mL	99
4) Pyridine	5.09	79	331089	59.05 ug/mL	99
7) Phenol	9.06	94	422767	59.76 ug/mL	100
8) Aniline	9.16	93	582760	59.26 ug/mL	100
9) bis(2-Chloroethyl)ether	9.25	93	329406	58.75 ug/mL	100
11) 2-Chlorophenol	9.37	128	291485	59.05 ug/mL	100
12) 1,3-Dichlorobenzene	9.66	146	350730	58.61 ug/mL	100
13) 1,4-Dichlorobenzene	9.78	146	345730	59.82 ug/mL	98
14) Benzyl alcohol	9.98	108	228507	59.47 ug/mL	99
16) 1,2-Dichlorobenzene	10.07	146	330410	58.76 ug/mL	100
17) 2-Methylphenol	10.15	108	305720	59.03 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.22	45	357257	57.59 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.22	45	357257	57.59 ug/mL	99
20) 4-Methylphenol	10.43	108	332121	59.78 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9927.D NO14FULL.M Wed Oct 15 08:20:54 2008 Pa

713

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9927.D
Acq On : 14 Oct 2008 10:42
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.43	108	332121	59.78 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.47	70	236461	59.54 ug/mL	99
23) Hexachloroethane	10.68	117	147576	59.37 ug/mL	100
26) Nitrobenzene	10.80	77	381784	58.66 ug/mL	99
27) Isophorone	11.23	82	688715	59.61 ug/mL	99
28) 2-Nitrophenol	11.38	139	192371	59.44 ug/mL	99
29) 2,4-Dimethylphenol	11.42	107	309491	60.38 ug/mL	100
30) Benzoic acid	11.62	105	131181	65.01 ug/mL	99
31) bis(2-Chloroethoxy)methane	11.61	93	387663	59.72 ug/mL	100
32) 2,4-Dichlorophenol	11.82	162	276105	59.70 ug/mL	99
33) 1,2,4-Trichlorobenzene	11.98	180	308696	60.14 ug/mL	99
34) Naphthalene	12.15	128	752230	59.09 ug/mL#	100
35) 4-Chloroaniline	12.22	127	410416	60.73 ug/mL	99
36) Hexachlorobutadiene	12.35	225	169214	60.61 ug/mL	99
37) 4-Chloro-3-methylphenol	13.10	107	278863	59.91 ug/mL	100
38) 2-Methylnaphthalene	13.45	142	613264	59.31 ug/mL	99
41) Hexachlorocyclopentadiene	13.73	237	178045	61.04 ug/mL	99
42) 2,4,6-Trichlorophenol	13.96	196	185326	59.85 ug/mL	98
43) 2,4,5-Trichlorophenol	14.02	196	228774	59.16 ug/mL	99
45) 2-Chloronaphthalene	14.37	162	540150	59.02 ug/mL	100
46) 2-Nitroaniline	14.55	65	227282	59.62 ug/mL	100
47) Dimethyl phthalate	14.88	163	694036	60.00 ug/mL	100
48) 2,6-Dinitrotoluene	15.00	165	178596	60.60 ug/mL	99
49) Acenaphthylene	15.17	152	869926	59.78 ug/mL	99
50) 3-Nitroaniline	15.33	138	201548	59.83 ug/mL	99
51) Acenaphthene	15.50	153	508823	59.57 ug/mL	98
52) 2,4-Dinitrophenol	15.52	184	114636	63.88 ug/mL	93
53) 4-Nitrophenol	15.61	109	92002	61.61 ug/mL	98
54) 2,4-Dinitrotoluene	15.78	165	230637	60.51 ug/mL	99
55) Dibenzofuran	15.83	168	929973	60.12 ug/mL	100
56) Diethyl phthalate	16.22	149	678407	59.72 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.46	204	292068	59.63 ug/mL	100
58) Fluorene	16.48	166	629459	59.38 ug/mL	100
59) 4-Nitroaniline	16.51	138	203329	58.38 ug/mL	90
60) 1,2-Diphenylhydrazine	16.76	77	773435	59.09 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.55	198	145427	59.50 ug/mL	99
64) n-Nitrosodiphenylamine	16.68	169	449239	58.81 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.39	248	187438	59.00 ug/mL	99
66) Hexachlorobenzene	17.52	284	245393	58.42 ug/mL	99
67) Pentachlorophenol	17.88	266	128543	60.19 ug/mL	99
68) Phenanthrene	18.32	178	860700	57.83 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9927.D NO14FULL.M Wed Oct 15 08:20:55 2008 Pa

714

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9927.D
Acq On : 14 Oct 2008 10:42
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.42	178	888121	57.91 ug/mL	99
70) Carbazole	18.71	167	813479	58.85 ug/mL	100
71) Di-n-butyl phthalate	19.32	149	1185798	59.15 ug/mL	100
72) Fluoranthene	20.59	202	883480	58.57 ug/mL	100
74) Benzidine	20.81	184	409882	62.52 ug/mL	100
75) Pyrene	21.03	202	940052	60.37 ug/mL	99
77) Butyl benzyl phthalate	22.18	149	559935	59.33 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.21	252	321098	60.96 ug/mL	99
79) Benzo[a]anthracene	23.29	228	801311	59.48 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.24	149	790455	60.94 ug/mL	100
81) Chrysene	23.37	228	760290	59.55 ug/mL	99
82) Di-n-octyl phthalate	24.42	149	1409198	60.20 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	28.97	276	912786	61.65 ug/mL	99
85) Benzo[b]fluoranthene	25.34	252	840728	58.10 ug/mL	100
86) Benzo[k]fluoranthene	25.40	252	841986	61.22 ug/mL	99
87) Benzo[a]pyrene	26.07	252	792963	59.70 ug/mL	100
88) Dibenz[a,h]anthracene	28.99	278	773381	60.79 ug/mL	99
89) Benzo[g,h,i]perylene	29.59	276	754486	60.96 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9927.D NO14FULL.M Wed Oct 15 08:20:56 2008 Pa

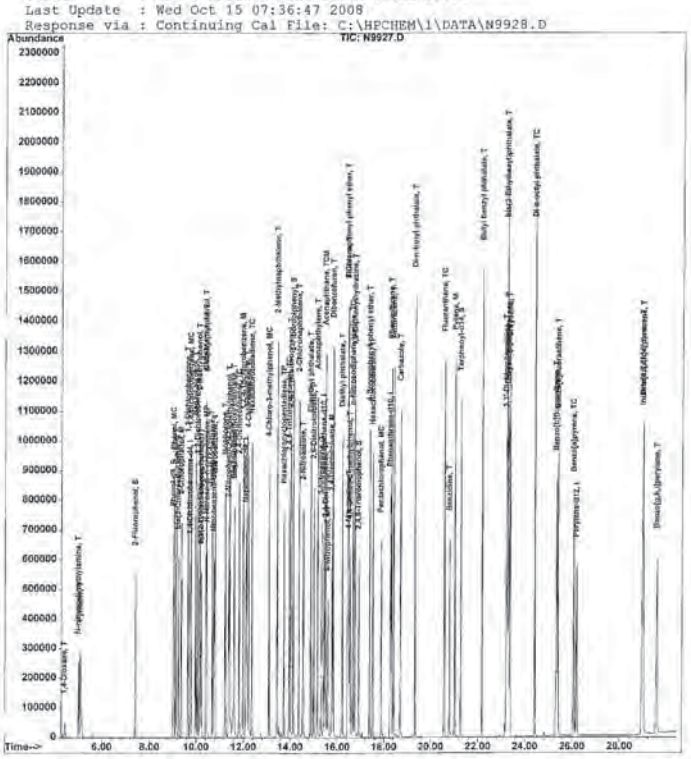
715

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9927.D
Acq On : 14 Oct 2008 10:42
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9927.D NO14FULL.M Wed Oct 15 08:20:59 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9928.D
Acq On : 14 Oct 2008 11:20
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:50 2008

Vial: 6
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:50:28 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	169318	40.00 ug/mL	0.00
24) Naphthalene-d8	12.11	136	569230	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.44	164	342062	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	615099	40.00 ug/mL	0.00
73) Chrysene-d12	23.31	240	535065	40.00 ug/mL	0.00
84) Perylene-d12	26.19	264	559301	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.42	112	239029	50.00 ug/mL	0.00
Spiked Amount 150.000				Recovery = 33.33%	
6) Phenol-d5	9.04	99	319953	50.00 ug/mL	0.00
Spiked Amount 150.000				Recovery = 33.33%	
10) 2-Chlorophenol-d4	9.38	132	100	0.00 ul/mL	0.00
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.75	152	169318	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.76	82	331635	50.00 ug/mL	0.00
Spiked Amount 100.000				Recovery = 50.00%	
44) 2-Fluorobiphenyl	14.13	172	533153	50.00 ug/mL	0.00
Spiked Amount 100.000				Recovery = 50.00%	
61) 2,4,6-Tribromophenol	16.93	330	123134	50.00 ug/mL	0.00
Spiked Amount 150.000				Recovery = 33.33%	
76) Terphenyl-d14	21.28	244	488065	50.00 ug/mL	0.00
Spiked Amount 100.000				Recovery = 50.00%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.45	88	46798	20.00 ug/mL	100
3) N-nitrosodimethylamine	5.03	74	167009	50.00 ug/mL	100
4) Pyridine	5.10	79	300048	50.00 ug/mL	100
7) Phenol	9.06	94	378555	50.00 ug/mL	100
8) Aniline	9.16	93	526195	50.00 ug/mL	100
9) bis(2-Chloroethyl)ether	9.26	93	300032	50.00 ug/mL	100
11) 2-Chlorophenol	9.38	128	264156	50.00 ug/mL	100
12) 1,3-Dichlorobenzene	9.65	146	320241	50.00 ug/mL	100
13) 1,4-Dichlorobenzene	9.79	146	309273	50.00 ug/mL	100
14) Benzyl alcohol	9.98	108	205624	50.00 ug/mL	100
16) 1,2-Dichlorobenzene	10.06	146	300915	50.00 ug/mL	100
17) 2-Methylphenol	10.16	108	277151	50.00 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.22	45	331928	50.00 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.22	45	331928	50.00 ug/mL	100
20) 4-Methylphenol	10.43	108	297275	50.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9928.D NO14FULL.M Wed Oct 15 08:21:03 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9928.D
Acq On : 14 Oct 2008 11:20
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:50 2008

Vial: 6
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:50:28 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.43	108	297275	50.00 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.46	70	212529	50.00 ug/mL	100
23) Hexachloroethane	10.69	117	133016	50.00 ug/mL	100
26) Nitrobenzene	10.80	77	350700	50.00 ug/mL	100
27) Isophorone	11.23	82	622532	50.00 ug/mL	100
28) 2-Nitrophenol	11.38	139	174375	50.00 ug/mL	100
29) 2,4-Dimethylphenol	11.42	107	276202	50.00 ug/mL	100
30) Benzoic acid	11.61	105	108728	50.00 ug/mL	100
31) bis(2-Chloroethoxy)methane	11.61	93	349768	50.00 ug/mL	100
32) 2,4-Dichlorophenol	11.82	162	249183	50.00 ug/mL	100
33) 1,2,4-Trichlorobenzene	11.99	180	276588	50.00 ug/mL	100
34) Naphthalene	12.15	128	685880	50.00 ug/mL#	100
35) 4-Chloroaniline	12.22	127	363989	50.00 ug/mL	100
36) Hexachlorobutadiene	12.36	225	150438	50.00 ug/mL	100
37) 4-Chloro-3-methylphenol	13.09	107	250785	50.00 ug/mL	100
38) 2-Methylnaphthalene	13.44	142	557090	50.00 ug/mL	100
41) Hexachlorocyclopentadiene	13.73	237	155914	50.00 ug/mL	100
42) 2,4,6-Trichlorophenol	13.96	196	165530	50.00 ug/mL	100
43) 2,4,5-Trichlorophenol	14.03	196	206710	50.00 ug/mL	100
45) 2-Chloronaphthalene	14.38	162	489239	50.00 ug/mL	100
46) 2-Nitroaniline	14.55	65	203779	50.00 ug/mL	100
47) Dimethyl phthalate	14.88	163	618371	50.00 ug/mL	100
48) 2,6-Dinitrotoluene	15.01	165	157546	50.00 ug/mL	100
49) Acenaphthylene	15.17	152	777908	50.00 ug/mL	100
50) 3-Nitroaniline	15.34	138	180069	50.00 ug/mL	100
51) Acenaphthene	15.50	153	456601	50.00 ug/mL	100
52) 2,4-Dinitrophenol	15.52	184	95923	50.00 ug/mL	100
53) 4-Nitrophenol	15.61	109	79826	50.00 ug/mL	100
54) 2,4-Dinitrotoluene	15.77	165	203734	50.00 ug/mL	100
55) Dibenzofuran	15.83	168	826879	50.00 ug/mL	100
56) Diethyl phthalate	16.22	149	607217	50.00 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.46	204	261808	50.00 ug/mL	100
58) Fluorene	16.48	166	566668	50.00 ug/mL	100
59) 4-Nitroaniline	16.51	138	186195	50.00 ug/mL	100
60) 1,2-Diphenylhydrazine	16.77	77	699681	50.00 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.55	198	127819	50.00 ug/mL	100
64) n-Nitrosodiphenylamine	16.68	169	399513	50.00 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.40	248	166139	50.00 ug/mL	100
66) Hexachlorobenzene	17.52	284	219687	50.00 ug/mL	100
67) Pentachlorophenol	17.89	266	111695	50.00 ug/mL	100
68) Phenanthrene	18.32	178	778367	50.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9928.D NO14FULL.M Wed Oct 15 08:21:04 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9928.D
Acq On : 14 Oct 2008 11:20
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:50 2008

Vial: 6
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:50:28 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.42	178	802040	50.00 ug/mL	100
70) Carbazole	18.70	167	722859	50.00 ug/mL	100
71) Di-n-butyl phthalate	19.32	149	1068446	50.00 ug/mL	100
72) Fluoranthene	20.58	202	788812	50.00 ug/mL	100
74) Benzidine	20.80	184	349423	50.00 ug/mL	100
75) Pyrene	21.03	202	829959	50.00 ug/mL	100
77) Butyl benzyl phthalate	22.18	149	503011	50.00 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.21	252	280738	50.00 ug/mL	100
79) Benzo[a]anthracene	23.29	228	718065	50.00 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.24	149	691403	50.00 ug/mL	100
81) Chrysene	23.36	228	680559	50.00 ug/mL	100
82) Di-n-octyl phthalate	24.42	149	1247793	50.00 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	28.96	276	789189	50.00 ug/mL	100
85) Benzo[b]fluoranthene	25.33	252	762796	50.00 ug/mL	100
86) Benzo[k]fluoranthene	25.39	252	725005	50.00 ug/mL	100
87) Benzo[a]pyrene	26.07	252	700267	50.00 ug/mL	100
88) Dibenz[a,h]anthracene	28.99	278	670678	50.00 ug/mL	100
89) Benzo[g,h,i]perylene	29.58	276	652515	50.00 ug/mL	100

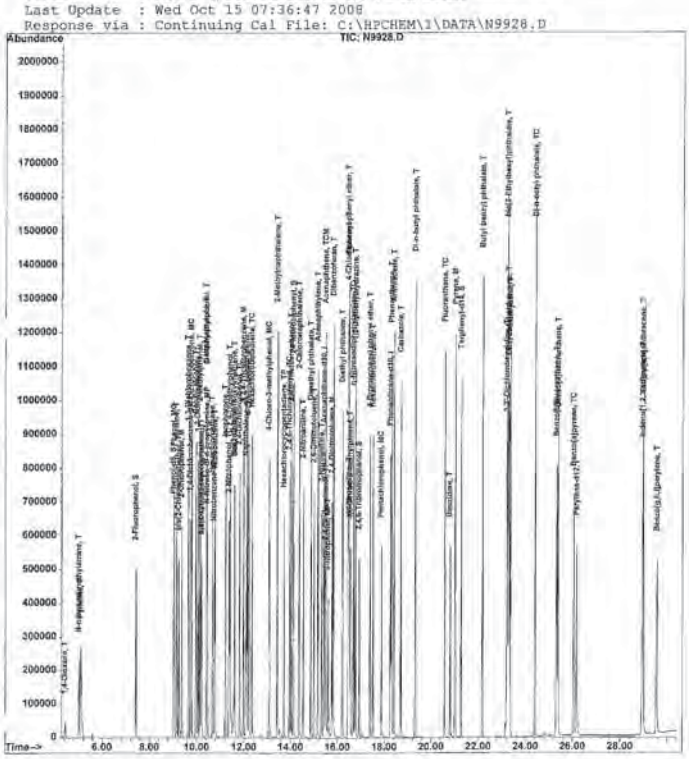
(#) = qualifier out of range (m) = manual integration
N9928.D NO14FULL.M Wed Oct 15 08:21:05 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9928.D
Acq On : 14 Oct 2008 11:20
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:50 2008

Vial: 6
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9928.D NO14FULL.M Wed Oct 15 08:21:08 2008 Pa

720

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9929.D
Acq On : 14 Oct 2008 11:58
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 7
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	156941	40.00 ug/mL	0.00
24) Naphthalene-d8	12.10	136	534979	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.43	164	312778	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	565272	40.00 ug/mL	0.00
73) Chrysene-d12	23.31	240	497402	40.00 ug/mL	0.00
84) Perylene-d12	26.19	264	518302	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.42	112	177348	40.02 ug/mL	0.00
Spiked Amount 150.000				Recovery = 26.68%	
6) Phenol-d5	9.03	99	239697	40.41 ug/mL	0.00
Spiked Amount 150.000				Recovery = 26.94%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.75	152	156941	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.75	82	246221	39.50 ug/mL	0.00
Spiked Amount 100.000				Recovery = 39.50%	
44) 2-Fluorobiphenyl	14.12	172	395010	40.51 ug/mL	0.00
Spiked Amount 100.000				Recovery = 40.51%	
61) 2,4,6-Tribromophenol	16.93	330	92306	40.99 ug/mL	0.00
Spiked Amount 150.000				Recovery = 27.33%	
76) Terphenyl-d14	21.27	244	368505	40.61 ug/mL	0.00
Spiked Amount 100.000				Recovery = 40.61%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.45	88	36954	17.04 ug/mL	98
3) N-nitrosodimethylamine	5.02	74	125695	40.60 ug/mL	98
4) Pyridine	5.10	79	223006	40.09 ug/mL	100
7) Phenol	9.06	94	287857	41.02 ug/mL	100
8) Aniline	9.16	93	404258	41.44 ug/mL	100
9) bis(2-Chloroethyl)ether	9.25	93	227703	40.94 ug/mL	98
11) 2-Chlorophenol	9.37	128	198163	40.47 ug/mL	99
12) 1,3-Dichlorobenzene	9.65	146	241004	40.60 ug/mL	99
13) 1,4-Dichlorobenzene	9.79	146	234940	40.98 ug/mL	99
14) Benzyl alcohol	9.97	108	155268	40.73 ug/mL	99
16) 1,2-Dichlorobenzene	10.06	146	227074	40.71 ug/mL	100
17) 2-Methylphenol	10.15	108	208884	40.66 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.22	45	254220	41.31 ug/mL	98
19) bis(2-Chloroisopropyl)ethe	10.22	45	254220	41.31 ug/mL	98
20) 4-Methylphenol	10.42	108	226277	41.06 ug/mL	98

(#) = qualifier out of range (m) = manual integration
N9929.D NO14FULL.M Wed Oct 15 08:21:11 2008 Pa

721

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9929.D
Acq On : 14 Oct 2008 11:58
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 7
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.42	108	226277	41.06 ug/mL	98
22) N-Nitroso-di-n-propylamine	10.46	70	164556	41.77 ug/mL	99
23) Hexachloroethane	10.69	117	98148	39.80 ug/mL	98
26) Nitrobenzene	10.79	77	257102	39.00 ug/mL	99
27) Isophorone	11.22	82	467739	39.97 ug/mL	100
28) 2-Nitrophenol	11.38	139	126260	38.52 ug/mL	98
29) 2,4-Dimethylphenol	11.42	107	207520	39.97 ug/mL	99
30) Benzoic acid	11.59	105	60123	29.42 ug/mL	97
31) bis(2-Chloroethoxy)methane	11.61	93	269034	40.92 ug/mL	99
32) 2,4-Dichlorophenol	11.81	162	187464	40.02 ug/mL	100
33) 1,2,4-Trichlorobenzene	11.99	180	206649	39.75 ug/mL	99
34) Naphthalene	12.15	128	521065	40.42 ug/mL	99
35) 4-Chloroaniline	12.22	127	277513	40.56 ug/mL	99
36) Hexachlorobutadiene	12.36	225	115289	40.77 ug/mL	98
37) 4-Chloro-3-methylphenol	13.10	107	187440	39.76 ug/mL	100
38) 2-Methylnaphthalene	13.44	142	410189	39.17 ug/mL	100
41) Hexachlorocyclopentadiene	13.73	237	113673	39.87 ug/mL	99
42) 2,4,6-Trichlorophenol	13.95	196	124337	41.07 ug/mL	98
43) 2,4,5-Trichlorophenol	14.02	196	151309	40.03 ug/mL	100
45) 2-Chloronaphthalene	14.37	162	365291	40.83 ug/mL	100
46) 2-Nitroaniline	14.54	65	154468	41.45 ug/mL	98
47) Dimethyl phthalate	14.87	163	468136	41.40 ug/mL	100
48) 2,6-Dinitrotoluene	15.00	165	119562	41.50 ug/mL	99
49) Acenaphthylene	15.17	152	584911	41.11 ug/mL	100
50) 3-Nitroaniline	15.33	138	134191	40.75 ug/mL	98
51) Acenaphthene	15.50	153	355365	42.56 ug/mL	98
52) 2,4-Dinitrophenol	15.52	184	65494	37.34 ug/mL#	81
53) 4-Nitrophenol	15.60	109	57712	39.53 ug/mL	96
54) 2,4-Dinitrotoluene	15.77	165	152569	40.95 ug/mL	99
55) Dibenzofuran	15.82	168	621730	41.11 ug/mL	100
56) Diethyl phthalate	16.22	149	457663	41.21 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.46	204	193110	40.33 ug/mL	99
58) Fluorene	16.48	166	415504	40.09 ug/mL	99
59) 4-Nitroaniline	16.50	138	132484	38.91 ug/mL	89
60) 1,2-Diphenylhydrazine	16.76	77	527734	41.24 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.54	198	90557	38.55 ug/mL	96
64) n-Nitrosodiphenylamine	16.68	169	298093	40.60 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.39	248	123228	40.35 ug/mL	99
66) Hexachlorobenzene	17.52	284	164262	40.68 ug/mL	99
67) Pentachlorophenol	17.88	266	76115	37.08 ug/mL	99
68) Phenanthrene	18.32	178	570397	39.87 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9929.D NO14FULL.M Wed Oct 15 08:21:12 2008 Pa

722

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9929.D
Acq On : 14 Oct 2008 11:58
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 7
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.42	178	588068	39.89 ug/mL	99
70) Carbazole	18.70	167	545197	41.04 ug/mL	100
71) Di-n-butyl phthalate	19.32	149	793525	41.18 ug/mL	100
72) Fluoranthene	20.58	202	590058	40.70 ug/mL	99
74) Benzidine	20.80	184	281780	43.37 ug/mL	99
75) Pyrene	21.02	202	626190	40.58 ug/mL	98
77) Butyl benzyl phthalate	22.18	149	376393	40.25 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.21	252	208843	40.01 ug/mL	99
79) Benzo[a]anthracene	23.28	228	545280	40.84 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.24	149	534267	41.56 ug/mL	99
81) Chrysene	23.36	228	511008	40.39 ug/mL	100
82) Di-n-octyl phthalate	24.41	149	935256	40.31 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	28.95	276	599324	40.85 ug/mL	100
85) Benzo[b]fluoranthene	25.33	252	568763	40.16 ug/mL	100
86) Benzo[k]fluoranthene	25.39	252	550176	40.87 ug/mL	100
87) Benzo[a]pyrene	26.06	252	518903	39.91 ug/mL	100
88) Dibenz[a,h]anthracene	28.98	278	511152	41.05 ug/mL	99
89) Benzo[g,h,i]perylene	29.57	276	495724	40.92 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9929.D NO14FULL.M Wed Oct 15 08:21:13 2008 Pa

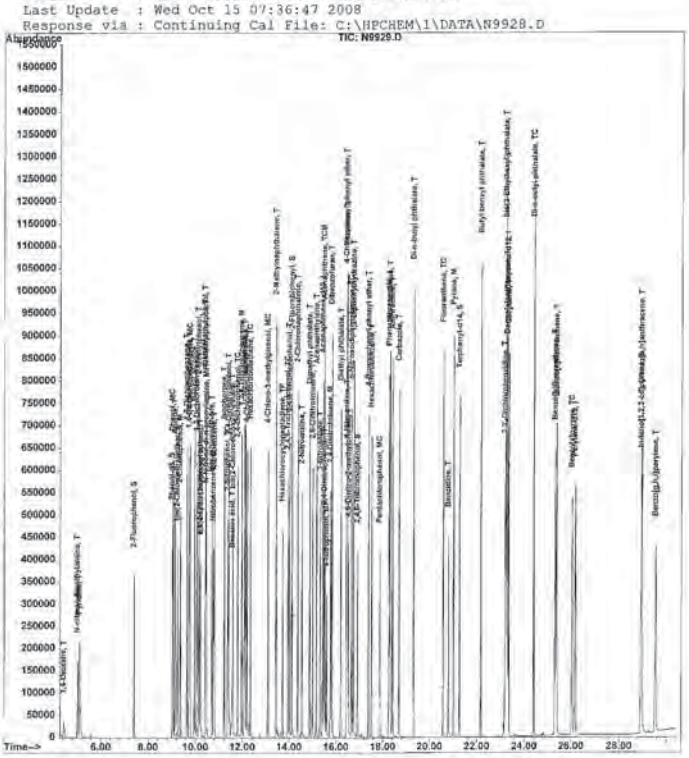
723

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9929.D
Acq On : 14 Oct 2008 11:58
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 7
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9929.D NO14FULL.M Wed Oct 15 08:21:16 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9930.D
Acq On : 14 Oct 2008 12:37
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 8
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	159574	40.00 ug/mL	0.00
24) Naphthalene-d8	12.10	136	539989	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.43	164	322476	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	565829	40.00 ug/mL	0.00
73) Chrysene-d12	23.31	240	495897	40.00 ug/mL	0.00
84) Perylene-d12	26.18	264	513484	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.42	112	87255	19.37 ug/mL	0.00
Spiked Amount 150.000				Recovery = 12.91%	
6) Phenol-d5	9.03	99	122524	20.32 ug/mL	0.00
Spiked Amount 150.000				Recovery = 13.55%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.75	152	159574	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.75	82	126206	20.06 ug/mL	0.00
Spiked Amount 100.000				Recovery = 20.06%	
44) 2-Fluorobiphenyl	14.12	172	200191	19.91 ug/mL	0.00
Spiked Amount 100.000				Recovery = 19.91%	
61) 2,4,6-Tribromophenol	16.92	330	43833	18.88 ug/mL	0.00
Spiked Amount 150.000				Recovery = 12.59%	
76) Terphenyl-d14	21.27	244	183634	20.30 ug/mL	0.00
Spiked Amount 100.000				Recovery = 20.30%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.44	88	17819	8.08 ug/mL	97
3) N-nitrosodimethylamine	5.02	74	62925	19.99 ug/mL	98
4) Pyridine	5.09	79	112787	19.94 ug/mL	99
7) Phenol	9.05	94	146873	20.58 ug/mL	97
8) Aniline	9.15	93	200563	20.22 ug/mL	97
9) bis(2-Chloroethyl)ether	9.25	93	113995	20.16 ug/mL	99
11) 2-Chlorophenol	9.37	128	100674	20.22 ug/mL	98
12) 1,3-Dichlorobenzene	9.65	146	125578	20.80 ug/mL	98
13) 1,4-Dichlorobenzene	9.78	146	123762	21.23 ug/mL	97
14) Benzyl alcohol	9.97	108	77206	19.92 ug/mL	100
16) 1,2-Dichlorobenzene	10.06	146	115004	20.28 ug/mL	99
17) 2-Methylphenol	10.15	108	106613	20.41 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.21	45	132198	21.13 ug/mL	98
19) bis(2-Chloroisopropyl)ethe	10.21	45	132198	21.13 ug/mL	98
20) 4-Methylphenol	10.42	108	110399	19.70 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9930.D NO14FULL.M Wed Oct 15 08:21:20 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9930.D
Acq On : 14 Oct 2008 12:37
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 8
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.42	108	110399	19.70 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.45	70	82648	20.63 ug/mL	98
23) Hexachloroethane	10.68	117	50062	19.97 ug/mL	97
26) Nitrobenzene	10.78	77	132832	19.96 ug/mL	99
27) Isophorone	11.21	82	237399	20.10 ug/mL	99
28) 2-Nitrophenol	11.37	139	62605	18.92 ug/mL	98
29) 2,4-Dimethylphenol	11.41	107	102968	19.65 ug/mL	97
30) Benzoic acid	11.54	105	6917	3.35 ug/mL	89
31) bis(2-Chloroethoxy)methane	11.60	93	137765	20.76 ug/mL	98
32) 2,4-Dichlorophenol	11.81	162	92579	19.58 ug/mL	99
33) 1,2,4-Trichlorobenzene	11.99	180	102104	19.46 ug/mL	99
34) Naphthalene	12.14	128	262194	20.15 ug/mL#	99
35) 4-Chloroaniline	12.21	127	140151	20.29 ug/mL	99
36) Hexachlorobutadiene	12.35	225	56122	19.66 ug/mL	99
37) 4-Chloro-3-methylphenol	13.09	107	95072	19.98 ug/mL	98
38) 2-Methylnaphthalene	13.44	142	211116	19.97 ug/mL	99
41) Hexachlorocyclopentadiene	13.73	237	50786	17.28 ug/mL	97
42) 2,4,6-Trichlorophenol	13.95	196	59646	19.11 ug/mL	98
43) 2,4,5-Trichlorophenol	14.02	196	72252	18.54 ug/mL	99
45) 2-Chloronaphthalene	14.37	162	182271	19.76 ug/mL	100
46) 2-Nitroaniline	14.54	65	74986	19.52 ug/mL	99
47) Dimethyl phthalate	14.87	163	232843	19.97 ug/mL	99
48) 2,6-Dinitrotoluene	14.99	165	57339	19.30 ug/mL	99
49) Acenaphthylene	15.16	152	290531	19.81 ug/mL	99
50) 3-Nitroaniline	15.32	138	65902	19.41 ug/mL	100
51) Acenaphthene	15.49	153	173169	20.11 ug/mL	97
52) 2,4-Dinitrophenol	15.52	184	22812	12.61 ug/mL#	15
53) 4-Nitrophenol	15.60	109	26009	17.28 ug/mL	98
54) 2,4-Dinitrotoluene	15.76	165	73166	19.05 ug/mL	99
55) Dibenzofuran	15.82	168	317388	20.36 ug/mL	99
56) Diethyl phthalate	16.21	149	230755	20.16 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.45	204	96185	19.49 ug/mL	99
58) Fluorene	16.47	166	213982	20.03 ug/mL	100
59) 4-Nitroaniline	16.48	138	65984	18.80 ug/mL	90
60) 1,2-Diphenylhydrazine	16.76	77	271060	20.55 ug/mL	97
63) 4,6-Dinitro-2-methylphenol	16.53	198	38756	16.48 ug/mL	95
64) n-Nitrosodiphenylamine	16.67	169	144639	19.68 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.39	248	59704	19.53 ug/mL	98
66) Hexachlorobenzene	17.51	284	82357	20.38 ug/mL	99
67) Pentachlorophenol	17.88	266	29415	14.31 ug/mL	98
68) Phenanthrene	18.31	178	290037	20.25 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9930.D NO14FULL.M Wed Oct 15 08:21:21 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9930.D
Acq On : 14 Oct 2008 12:37
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 8
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.41	178	296141	20.07 ug/mL	99
70) Carbazole	18.70	167	278436	20.94 ug/mL	100
71) Di-n-butyl phthalate	19.31	149	401364	20.81 ug/mL	100
72) Fluoranthene	20.58	202	290191	20.00 ug/mL	98
74) Benzidine	20.80	184	146467	22.61 ug/mL	98
75) Pyrene	21.02	202	306209	19.90 ug/mL	97
77) Butyl benzyl phthalate	22.18	149	187960	20.16 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.20	252	104978	20.17 ug/mL	100
79) Benzo[a]anthracene	23.28	228	268181	20.15 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.23	149	263310	20.55 ug/mL	99
81) Chrysene	23.35	228	246254	19.52 ug/mL	99
82) Di-n-octyl phthalate	24.41	149	454024	19.63 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	28.94	276	277627	18.98 ug/mL	97
85) Benzo[b]fluoranthene	25.32	252	275206	19.61 ug/mL	99
86) Benzo[k]fluoranthene	25.37	252	275331	20.65 ug/mL	99
87) Benzo[a]pyrene	26.05	252	250137	19.42 ug/mL	99
88) Dibenz[a,h]anthracene	28.96	278	241795	19.60 ug/mL	98
89) Benzo[g,h,i]perylene	29.55	276	233036	19.42 ug/mL	98

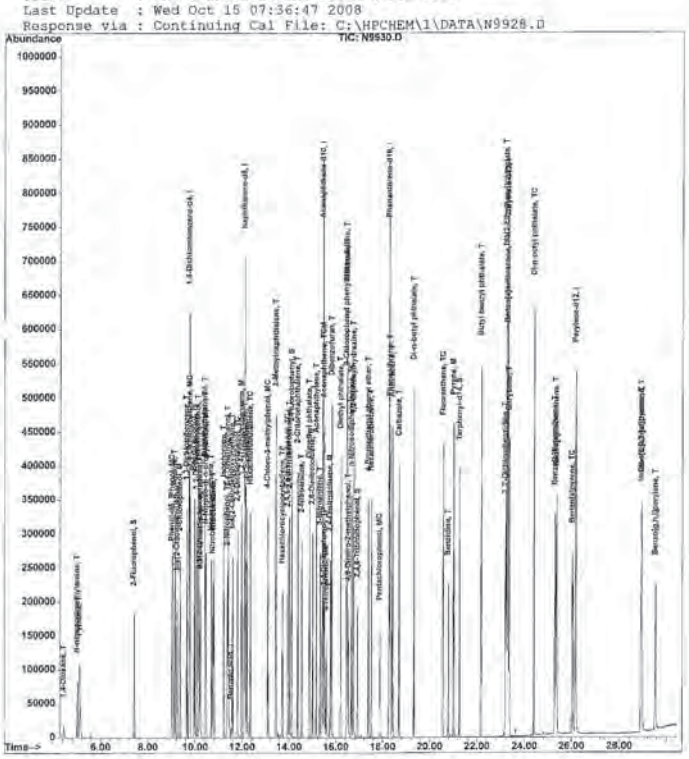
(#) = qualifier out of range (m) = manual integration
N9930.D NO14FULL.M Wed Oct 15 08:21:21 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9930.D
Acq On : 14 Oct 2008 12:37
Sample : SSTD020PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 8
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9930.D NO14FULL.M Wed Oct 15 08:21:25 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9931.D
Acq On : 14 Oct 2008 13:15
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 9
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	162602	40.00 ug/mL	0.00
24) Naphthalene-d8	12.11	136	540476	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.43	164	315609	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	559215	40.00 ug/mL	0.00
73) Chrysene-d12	23.30	240	492901	40.00 ug/mL	0.00
84) Perylene-d12	26.18	264	498102	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.42	112	42534	9.26 ug/mL	0.00
Spiked Amount 150.000				Recovery = 6.17%	
6) Phenol-d5	9.03	99	60655	9.87 ug/mL	0.00
Spiked Amount 150.000				Recovery = 6.58%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000				Recovery = 0.00%	
15) 1,2-Dichlorobenzene-d4	9.76	152	162602	0.00 ul/mL	0.00
Spiked Amount 100.000				Recovery = 0.00%	
25) Nitrobenzene-d5	10.75	82	61900	9.83 ug/mL	0.00
Spiked Amount 100.000				Recovery = 9.83%	
44) 2-Fluorobiphenyl	14.12	172	99200	10.08 ug/mL	0.00
Spiked Amount 100.000				Recovery = 10.08%	
61) 2,4,6-Tribromophenol	16.92	330	19099	8.41 ug/mL	0.00
Spiked Amount 150.000				Recovery = 5.61%	
76) Terphenyl-d14	21.27	244	90608	10.08 ug/mL	0.00
Spiked Amount 100.000				Recovery = 10.08%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.44	88	9418	4.19 ug/mL	93
3) N-nitrosodimethylamine	5.02	74	29507	9.20 ug/mL	96
4) Pyridine	5.10	79	56619	9.82 ug/mL	99
7) Phenol	9.05	94	73591	10.12 ug/mL	96
8) Aniline	9.15	93	101463	10.04 ug/mL	98
9) bis(2-Chloroethyl)ether	9.25	93	57324	9.95 ug/mL	97
11) 2-Chlorophenol	9.37	128	50613	9.98 ug/mL	99
12) 1,3-Dichlorobenzene	9.66	146	61775	10.04 ug/mL	100
13) 1,4-Dichlorobenzene	9.78	146	61465	10.35 ug/mL	95
14) Benzyl alcohol	9.97	108	36785	9.31 ug/mL	99
16) 1,2-Dichlorobenzene	10.07	146	57398	9.93 ug/mL	100
17) 2-Methylphenol	10.15	108	54538	10.25 ug/mL	98
18) 2,2'-oxybis(1-chloropropan	10.21	45	68777	10.79 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.21	45	68777	10.79 ug/mL	99
20) 4-Methylphenol	10.41	108	55936	9.80 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9931.D NO14FULL.M Wed Oct 15 08:21:28 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9931.D
Acq On : 14 Oct 2008 13:15
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 9
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.41	108	55936	9.80 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.45	70	41257	10.11 ug/mL	96
23) Hexachloroethane	10.69	117	25258	9.89 ug/mL	95
26) Nitrobenzene	10.78	77	65786	9.88 ug/mL	99
27) Isophorone	11.21	82	117881	9.97 ug/mL	98
28) 2-Nitrophenol	11.37	139	28642	8.65 ug/mL	99
29) 2,4-Dimethylphenol	11.41	107	49524	9.44 ug/mL	99
31) bis(2-Chloroethoxy)methane	11.60	93	69093	10.40 ug/mL	97
32) 2,4-Dichlorophenol	11.81	162	43943	9.29 ug/mL	99
33) 1,2,4-Trichlorobenzene	11.98	180	51905	9.88 ug/mL	98
34) Naphthalene	12.15	128	135958	10.44 ug/mL	100
35) 4-Chloroaniline	12.21	127	69950	10.12 ug/mL	98
36) Hexachlorobutadiene	12.35	225	28360	9.93 ug/mL	99
37) 4-Chloro-3-methylphenol	13.09	107	44892	9.43 ug/mL	99
38) 2-Methylnaphthalene	13.44	142	105625	9.98 ug/mL	99
41) Hexachlorocyclopentadiene	13.73	237	20846	7.25 ug/mL	98
42) 2,4,6-Trichlorophenol	13.95	196	27351	8.95 ug/mL	98
43) 2,4,5-Trichlorophenol	14.02	196	33013	8.65 ug/mL	99
45) 2-Chloronaphthalene	14.37	162	91457	10.13 ug/mL	100
46) 2-Nitroaniline	14.54	65	36397	9.68 ug/mL	100
47) Dimethyl phthalate	14.86	163	113786	9.97 ug/mL	99
48) 2,6-Dinitrotoluene	14.99	165	28006	9.63 ug/mL	96
49) Acenaphthylene	15.17	152	145890	10.16 ug/mL	100
50) 3-Nitroaniline	15.31	138	31417	9.45 ug/mL	98
51) Acenaphthene	15.49	153	87258	10.36 ug/mL	94
52) 2,4-Dinitrophenol	15.51	184	5138	2.90 ug/mL#	1
53) 4-Nitrophenol	15.59	109	10882	7.39 ug/mL	95
54) 2,4-Dinitrotoluene	15.76	165	34402	9.15 ug/mL	96
55) Dibenzofuran	15.82	168	155635	10.20 ug/mL	100
56) Diethyl phthalate	16.21	149	113860	10.16 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.45	204	47349	9.80 ug/mL	98
58) Fluorene	16.47	166	105376	10.08 ug/mL	99
59) 4-Nitroaniline	16.47	138	30381	8.84 ug/mL	87
60) 1,2-Diphenylhydrazine	16.76	77	134942	10.45 ug/mL	97
63) 4,6-Dinitro-2-methylphenol	16.53	198	13911	5.99 ug/mL	95
64) n-Nitrosodiphenylamine	16.67	169	72508	9.98 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.39	248	30578	10.12 ug/mL	98
66) Hexachlorobenzene	17.51	284	40578	10.16 ug/mL	99
67) Pentachlorophenol	17.88	266	8610	4.24 ug/mL	98
68) Phenanthrene	18.31	178	142435	10.06 ug/mL	100
69) Anthracene	18.41	178	141757	9.72 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9931.D NO14FULL.M Wed Oct 15 08:21:29 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9931.D
Acq On : 14 Oct 2008 13:15
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 9
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
70) Carbazole	18.69	167	132996	10.12 ug/mL	99
71) Di-n-butyl phthalate	19.31	149	194933	10.23 ug/mL	99
72) Fluoranthene	20.58	202	142809	9.96 ug/mL	96
74) Benzidine	20.80	184	73547	11.42 ug/mL	98
75) Pyrene	21.02	202	150848	9.87 ug/mL	96
77) Butyl benzyl phthalate	22.18	149	89704	9.68 ug/mL	98
78) 3,3'-Dichlorobenzidine	23.20	252	53196	10.28 ug/mL	99
79) Benzo[a]anthracene	23.28	228	133001	10.05 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.24	149	126905	9.96 ug/mL	98
81) Chrysene	23.34	228	122972	9.81 ug/mL	99
82) Di-n-octyl phthalate	24.41	149	209874	9.13 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	28.93	276	128109	8.81 ug/mL	96
85) Benzo[b]fluoranthene	25.31	252	132108	9.71 ug/mL	98
86) Benzo[k]fluoranthene	25.37	252	132136	10.21 ug/mL	99
87) Benzo[a]pyrene	26.04	252	121231	9.70 ug/mL	99
88) Dibenz[a,h]anthracene	28.96	278	108214	9.04 ug/mL	97
89) Benzo[g,h,i]perylene	29.54	276	108738	9.34 ug/mL	98

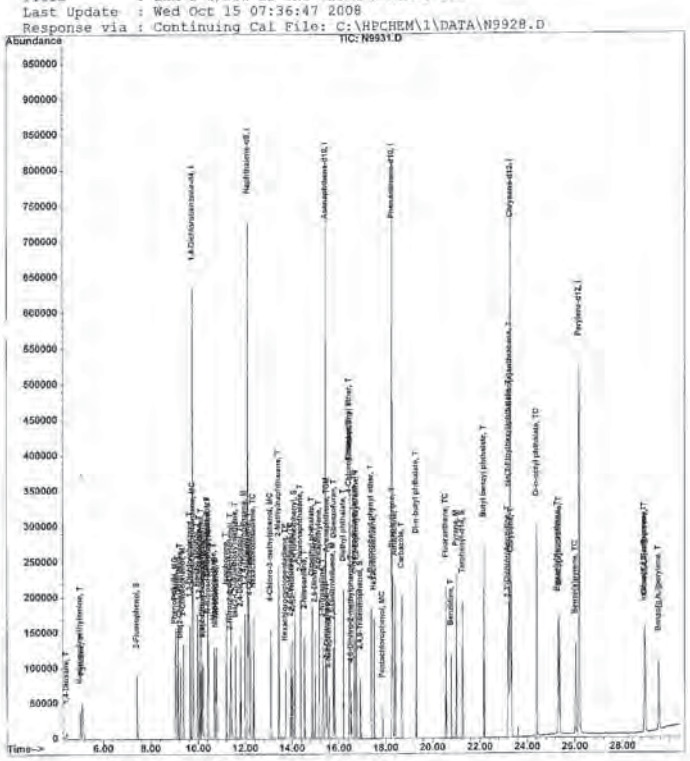
(#) = qualifier out of range (m) = manual integration
N9931.D NO14FULL.M Wed Oct 15 08:21:29 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9931.D
Acq On : 14 Oct 2008 13:15
Sample : SSTD010PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 13:54 2008

Vial: 9
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9931.D NO14FULL.M Wed Oct 15 08:21:33 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9932.D
Acq On : 14 Oct 2008 13:53
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 14:24 2008

Vial: 10
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:15 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	179589	40.00 ug/mL	0.00
24) Naphthalene-d8	12.10	136	614106	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.43	164	362221	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.27	188	636115	40.00 ug/mL	0.00
73) Chrysene-d12	23.30	240	557261	40.00 ug/mL	0.00
84) Perylene-d12	26.19	264	556420	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.43	112	23652	4.66 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 3.11%	
6) Phenol-d5	9.02	99	33539	4.94 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 3.29%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery	= 0.00%	
15) 1,2-Dichlorobenzene-d4	9.75	152	179589	0.00 ul/mL	0.00
Spiked Amount 100.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	10.75	82	33768	4.72 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 4.72%	
44) 2-Fluorobiphenyl	14.12	172	55525	4.92 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 4.92%	
61) 2,4,6-Tribromophenol	16.92	330	9600	3.68 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 2.45%	
76) Terphenyl-d14	21.27	244	49335	4.85 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 4.85%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.45	88	5270	2.12 ug/mL	95
3) N-nitrosodimethylamine	5.03	74	16722	4.72 ug/mL	99
4) Pyridine	5.11	79	30006	4.71 ug/mL	97
7) Phenol	9.05	94	39747	4.95 ug/mL	100
8) Aniline	9.15	93	54996	4.93 ug/mL	98
9) bis(2-Chloroethyl)ether	9.24	93	33335	5.24 ug/mL	99
11) 2-Chlorophenol	9.36	128	26776	4.78 ug/mL	97
12) 1,3-Dichlorobenzene	9.65	146	34960	5.15 ug/mL	99
13) 1,4-Dichlorobenzene	9.79	146	33549	5.11 ug/mL	98
14) Benzyl alcohol	9.97	108	20302	4.65 ug/mL	99
16) 1,2-Dichlorobenzene	10.06	146	33937	5.32 ug/mL	98
17) 2-Methylphenol	10.14	108	29543	5.02 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.21	45	39317	5.58 ug/mL	97
19) bis(2-Chloroisopropyl)ethe	10.21	45	39317	5.58 ug/mL	97
20) 4-Methylphenol	10.41	108	31186	4.95 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9932.D NO14FULL.M Wed Oct 15 08:21:36 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9932.D
Acq On : 14 Oct 2008 13:53
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 14:24 2008

Vial: 10
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:15 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) (3+4)-Methylphenol	10.41	108	31186	4.95 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.44	70	21892	4.86 ug/mL	99
23) Hexachloroethane	10.69	117	13962	4.95 ug/mL	96
26) Nitrobenzene	10.79	77	36466	4.82 ug/mL	99
27) Isophorone	11.22	82	64804	4.82 ug/mL	99
28) 2-Nitrophenol	11.38	139	15190	4.04 ug/mL	85
29) 2,4-Dimethylphenol	11.41	107	28083	4.71 ug/mL	97
31) bis(2-Chloroethoxy)methane	11.60	93	39108	5.18 ug/mL	97
32) 2,4-Dichlorophenol	11.81	162	23590	4.39 ug/mL	99
33) 1,2,4-Trichlorobenzene	11.98	180	29182	4.89 ug/mL	98
34) Naphthalene	12.14	128	77454	5.23 ug/mL	100
35) 4-Chloroaniline	12.22	127	38055	4.85 ug/mL	97
36) Hexachlorobutadiene	12.35	225	15722	4.84 ug/mL	98
37) 4-Chloro-3-methylphenol	13.10	107	24176	4.47 ug/mL	98
38) 2-Methylnaphthalene	13.44	142	59445	4.95 ug/mL	100
41) Hexachlorocyclopentadiene	13.73	237	9354	2.83 ug/mL	100
42) 2,4,6-Trichlorophenol	13.95	196	14046	4.01 ug/mL	98
43) 2,4,5-Trichlorophenol	14.02	196	18323	4.19 ug/mL	98
45) 2-Chloronaphthalene	14.37	162	50423	4.87 ug/mL	100
46) 2-Nitroaniline	14.54	65	20290	4.70 ug/mL	95
47) Dimethyl phthalate	14.87	163	63032	4.81 ug/mL	100
48) 2,6-Dinitrotoluene	14.99	165	14571	4.37 ug/mL	95
49) Acenaphthylene	15.16	152	81405	4.94 ug/mL	99
50) 3-Nitroaniline	15.32	138	17480	4.58 ug/mL	98
51) Acenaphthene	15.49	153	49041	5.07 ug/mL	94
53) 4-Nitrophenol	15.59	109	4874	2.88 ug/mL	92
54) 2,4-Dinitrotoluene	15.76	165	17808	4.13 ug/mL	96
55) Dibenzofuran	15.81	168	84871	4.85 ug/mL	99
56) Diethyl phthalate	16.20	149	62652	4.87 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.45	204	26077	4.70 ug/mL	97
58) Fluorene	16.47	166	58217	4.85 ug/mL	99
59) 4-Nitroaniline	16.47	138	17119	4.34 ug/mL	86
60) 1,2-Diphenylhydrazine	16.75	77	75307	5.08 ug/mL	97
63) 4,6-Dinitro-2-methylphenol	16.53	198	4891	1.85 ug/mL	93
64) n-Nitrosodiphenylamine	16.67	169	40139	4.86 ug/mL	97
65) 4-Bromophenyl phenyl ether	17.39	248	15574	4.53 ug/mL	94
66) Hexachlorobenzene	17.52	284	22460	4.94 ug/mL	95
68) Phenanthrene	18.31	178	81496	5.06 ug/mL	99
69) Anthracene	18.41	178	80815	4.87 ug/mL	100
70) Carbazole	18.70	167	74524	4.98 ug/mL	99
71) Di-n-butyl phthalate	19.32	149	105686	4.87 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N9932.D NO14FULL.M Wed Oct 15 08:21:37 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9932.D
Acq On : 14 Oct 2008 13:53
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 14:24 2008

Vial: 10
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 14 13:52:15 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
72) Fluoranthene	20.58	202	80667	4.94 ug/mL	98
74) Benzidine	20.80	184	38360	5.27 ug/mL	96
75) Pyrene	21.01	202	85040	4.92 ug/mL	96
77) Butyl benzyl phthalate	22.17	149	47418	4.53 ug/mL	98
78) 3,3'-Dichlorobenzidine	23.20	252	29369	5.02 ug/mL	96
79) Benzo[a]anthracene	23.28	228	75533	5.05 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	23.23	149	67432	4.68 ug/mL	97
81) Chrysene	23.35	228	68613	4.84 ug/mL	99
82) Di-n-octyl phthalate	24.41	149	112718	4.34 ug/mL	99
83) Indeno[1,2,3-cd]pyrene	28.93	276	65276	3.97 ug/mL	94
85) Benzo[b]fluoranthene	25.31	252	69789	4.59 ug/mL	98
86) Benzo[k]fluoranthene	25.37	252	71707	4.96 ug/mL	98
87) Benzo[a]pyrene	26.04	252	64046	4.59 ug/mL	97
88) Dibenz[a,h]anthracene	28.96	278	55924	4.18 ug/mL	97
89) Benzo[g,h,i]perylene	29.54	276	56459	4.34 ug/mL	98

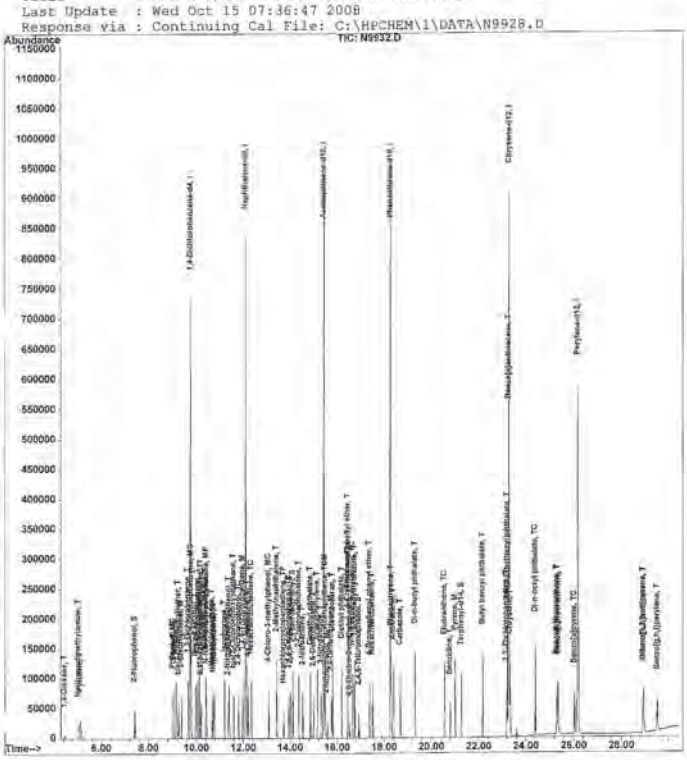
(#) = qualifier out of range (m) = manual integration
N9932.D NO14FULL.M Wed Oct 15 08:21:38 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9932.D
Acq On : 14 Oct 2008 13:53
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 14 14:24 2008

Vial: 10
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14FULL.RES

Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 07:36:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9928.D



N9932.D NO14FULL.M Wed Oct 15 08:21:41 2008 Pa

736

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator) /1382
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Initial Calibration

Calibration Files
160 =N9935.D 120 =N9936.D 80 =N9937.D
50 =N9938.D 40 =N9939.D 20 =N9940.D

		Compound	160	120	80	50	40	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	T	Benzaldehyde	1.140	1.133	1.155	1.179	1.172	1.159	1.136	3.77
3)	T	2-Octanol							0.000#	-1.00
4)	T	Acetophenone	1.696	1.729	1.700	1.757	1.707	1.678	1.685	3.44
5)	I	Naphthalene-d8	ISTD							
6)	T	Caprolactam	0.128	0.127	0.129	0.130	0.126	0.117	0.120	10.72
7)	I	Acenaphthene-d10	ISTD							
8)	T	1,1'-Biphenyl	1.216	1.253	1.236	1.265	1.254	1.239	1.247	1.33
9)	T	1-Phenyl-1-[4-methy	0.735	0.753	0.745	0.746	0.724	0.689	0.726	3.20
10)	T	1-Phenyl-1-[2,4-dim	0.877	0.901	0.877	0.884	0.863	0.841	0.864	2.87
11)	I	Phenanthrene-d10	ISTD							
12)	T	Atrazine	0.192	0.191	0.191	0.187	0.186	0.180	0.183	5.78
13)	T	2-Ethylanthraquinon							0.000#	-1.00
.)	I	Chrysene-d12	ISTD							
15)	I	Perylene-d12	ISTD							

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14OLM.M Wed Oct 15 08:28:32 2008 Pa

6/15/08

737

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:28 2008
Response via : Initial Calibration

Calibration Files
10 =N9941.D 5. =N9942.D =

		Compound	10	5.	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD			
2)	T	Benzaldehyde	1.094	1.053		
3)	T	2-Octanol				
4)	T	Acetophenone	1.647	1.566		
5)	I	Naphthalene-d8	ISTD			
6)	T	Caprolactam	0.113	0.092		
7)	I	Acenaphthene-d10	ISTD			
8)	T	1,1'-Biphenyl	1.265	1.248		
9)	T	1-Phenyl-1-[4-methy	0.718	0.698		
10)	T	1-Phenyl-1-[2,4-dim	0.831	0.840		
11)	I	Phenanthrene-d10	ISTD			
12)	T	Atrazine	0.172	0.162		
13)	T	2-Ethylanthraquinon				
.)	I	Chrysene-d12	ISTD			
15)	I	Perylene-d12	ISTD			

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO14OLM.M Wed Oct 15 08:30:01 2008 Pag

738

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9935.D
Acq On : 14 Oct 2008 15:47
Sample : SSTD160PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 13
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:25:46 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QTon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	172267	40.00 ug/mL	0.00
5) Naphthalene-d8	12.10	136	589333	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.43	164	340090	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.27	188	577064	40.00 ug/mL	0.00
14) Chrysene-d12	23.30	240	515246	40.00 ug/mL	0.00
15) Perylene-d12	26.18	264	497894	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.99	77	785552	154.65 ug/mL	100
4) Acetophenone	10.48	105	1168433	154.41 ug/mL	98
6) Caprolactam	12.89	55	301879	157.68 ug/mL	96
8) 1,1'-Biphenyl	14.33	154	1653620	153.79 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.41	181	999697	157.71 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.15	195	1192412	158.58 ug/mL	99
12) Atrazine	17.69	200	442920	164.23 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N9935.D NO14OLM.M Wed Oct 15 08:31:19 2008 Pa

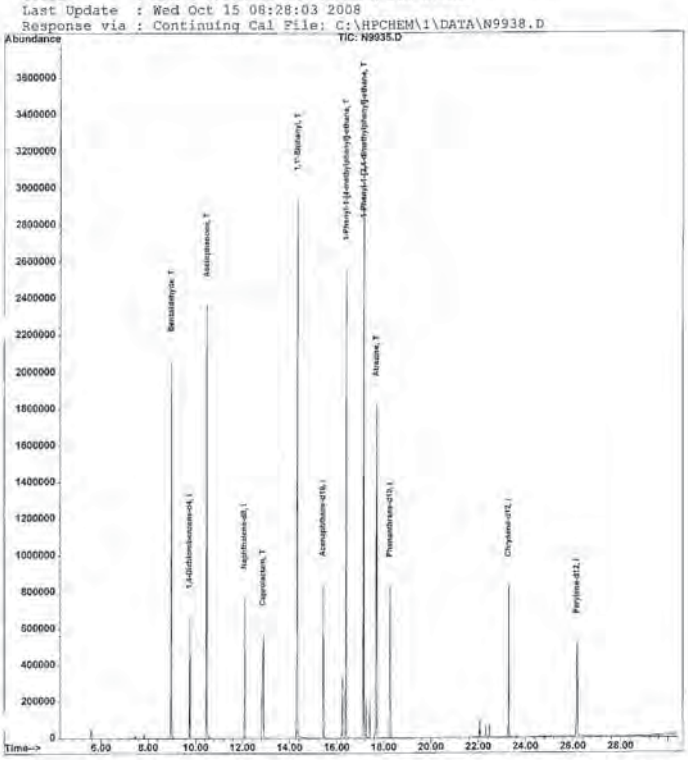
739

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9935.D
Acq On : 14 Oct 2008 15:47
Sample : SSTD160PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 13
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9935.D NO14OLM.M Wed Oct 15 08:31:19 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9936.D
Acq On : 14 Oct 2008 16:26
Sample : SSTD120PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 14
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 10 09:13:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	161782	40.00 ug/mL	0.00
5) Naphthalene-d8	12.10	136	547577	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.43	164	313237	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.27	188	542788	40.00 ug/mL	0.00
14) Chrysene-d12	23.30	240	481789	40.00 ug/mL	0.00
15) Perylene-d12	26.18	264	474075	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.98	77	549752	115.24 ug/mL	99
4) Acetophenone	10.47	105	839335	118.10 ug/mL	100
6) Caprolactam	12.87	55	209344	117.68 ug/mL	96
8) 1,1'-Biphenyl	14.32	154	1177893	118.94 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.40	181	707638	121.21 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.14	195	846446	122.22 ug/mL	99
12) Atrazine	17.68	200	311532	122.81 ug/mL	99

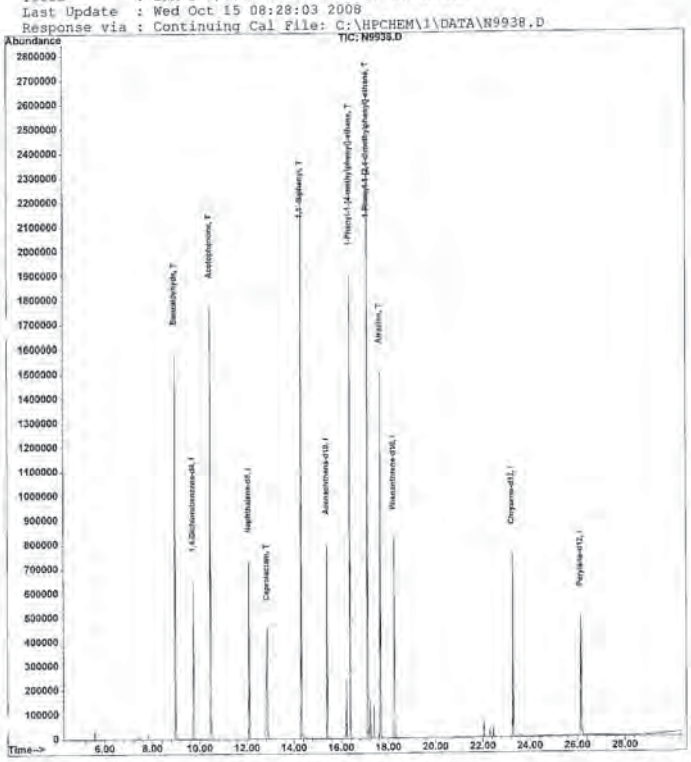
(#) = qualifier out of range (m) = manual integration
N9936.D NO14OLM.M Wed Oct 15 08:31:21 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9936.D
Acq On : 14 Oct 2008 16:26
Sample : SSTD120PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 14
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9936.D NO14OLM.M Wed Oct 15 08:31:22 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9937.D
Acq On : 14 Oct 2008 17:04
Sample : SSTD080PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 15
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 10 09:13:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	174753	40.00 ug/mL	0.00
5) Naphthalene-d8	12.10	136	585224	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.42	164	338938	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.27	188	583030	40.00 ug/mL	0.00
14) Chrysene-d12	23.29	240	514670	40.00 ug/mL	0.00
15) Perylene-d12	26.18	264	509879	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.98	77	403800	78.36 ug/mL	99
4) Acetophenone	10.46	105	594329	77.42 ug/mL	99
6) Caprolactam	12.85	55	150721	79.28 ug/mL	97
8) 1,1'-Biphenyl	14.32	154	837740	78.18 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.40	181	504813	79.91 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.14	195	594566	79.34 ug/mL	100
12) Atrazine	17.68	200	222396	81.62 ug/mL	100

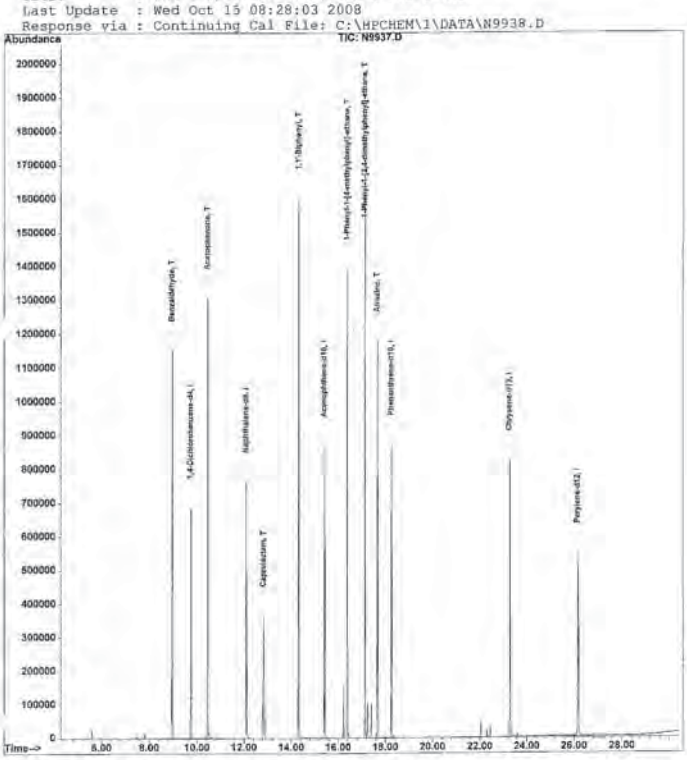
(#) = qualifier out of range (m) = manual integration
N9937.D NO14OLM.M Wed Oct 15 08:31:23 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9937.D
Acq On : 14 Oct 2008 17:04
Sample : SSTD080PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 15
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9937.D NO14OLM.M Wed Oct 15 08:31:24 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9938.D
Acq On : 14 Oct 2008 17:42
Sample : SSTD050PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:25 2008

Vial: 16
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:25:10 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	172716	40.00 ug/mL	0.00
5) Naphthalene-d8	12.10	136	589416	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.43	164	340231	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.27	188	592650	40.00 ug/mL	0.00
14) Chrysene-d12	23.30	240	523485	40.00 ug/mL	0.00
15) Perylene-d12	26.18	264	507978	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.97	77	254645	50.00 ug/mL	100
4) Acetophenone	10.46	105	379351	50.00 ug/mL	100
6) Caprolactam	12.84	55	95741	50.00 ug/mL	100
8) 1,1'-Biphenyl	14.32	154	537848	50.00 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.39	181	317067	50.00 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.14	195	376116	50.00 ug/mL	100
12) Atrazine	17.67	200	138490	50.00 ug/mL	100

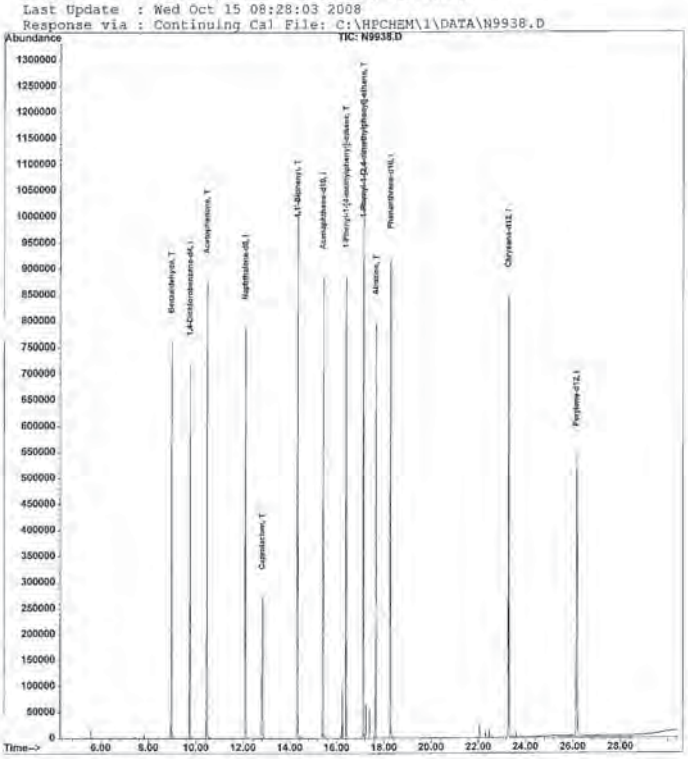
(#) = qualifier out of range (m) = manual integration
N9938.D NO14OLM.M Wed Oct 15 08:31:25 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9938.D
Acq On : 14 Oct 2008 17:42
Sample : SSTD050PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:25 2008

Vial: 16
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9938.D NO14OLM.M Wed Oct 15 08:31:26 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9939.D
Acq On : 14 Oct 2008 18:20
Sample : SSTD040PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 17
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 10 09:13:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	162634	40.00 ug/mL	0.00
5) Naphthalene-d8	12.10	136	553276	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.42	164	321236	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.26	188	555943	40.00 ug/mL	0.00
14) Chrysene-d12	23.29	240	495665	40.00 ug/mL	0.00
15) Perylene-d12	26.17	264	478542	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.97	77	190679	39.76 ug/mL	99
4) Acetophenone	10.46	105	277636	38.86 ug/mL	100
6) Caprolactam	12.83	55	69603	38.72 ug/mL	99
8) 1,1'-Biphenyl	14.32	154	402949	39.67 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.39	181	232509	38.83 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.13	195	277191	39.03 ug/mL	99
12) Atrazine	17.66	200	103159	39.70 ug/mL	100

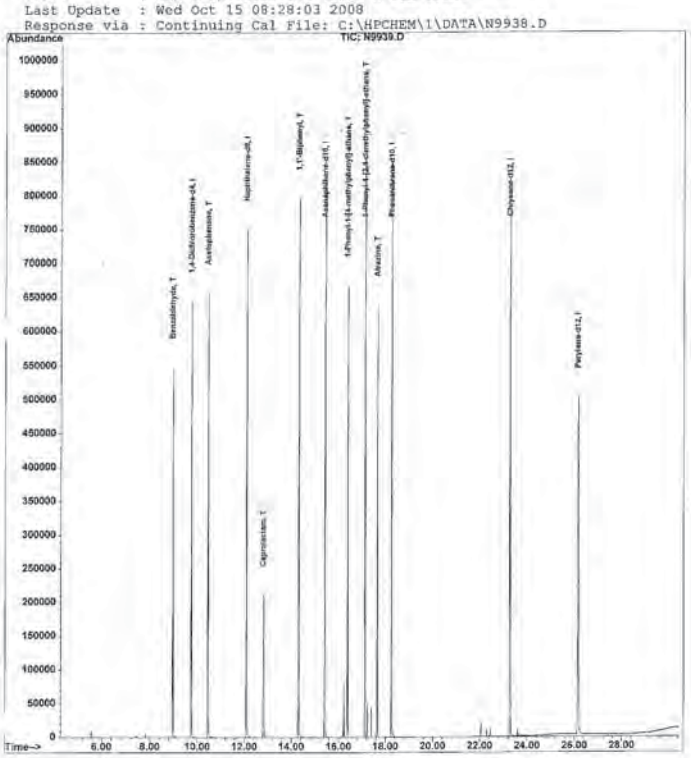
(#) = qualifier out of range (m) = manual integration
N9939.D NO14OLM.M Wed Oct 15 08:31:28 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9939.D
Acq On : 14 Oct 2008 18:20
Sample : SSTD040PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 17
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9939.D NO14OLM.M Wed Oct 15 08:31:28 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9940.D
Acq On : 14 Oct 2008 18:58
Sample : SSTD020PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 18
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 10 09:13:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	160912	40.00 ug/mL	0.00
5) Naphthalene-d8	12.10	136	546490	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.43	164	317835	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.26	188	544439	40.00 ug/mL	0.00
14) Chrysene-d12	23.30	240	482054	40.00 ug/mL	0.00
15) Perylene-d12	26.18	264	461923	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.97	77	93260	19.66 ug/mL	97
4) Acetophenone	10.45	105	134992	19.10 ug/mL	99
6) Caprolactam	12:82	55	31858	17.94 ug/mL	98
8) 1,1'-Biphenyl	14.31	154	196936	19.60 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.39	181	109460	18.48 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.13	195	133710	19.03 ug/mL	99
12) Atrazine	17.66	200	49022	19.27 ug/mL	99

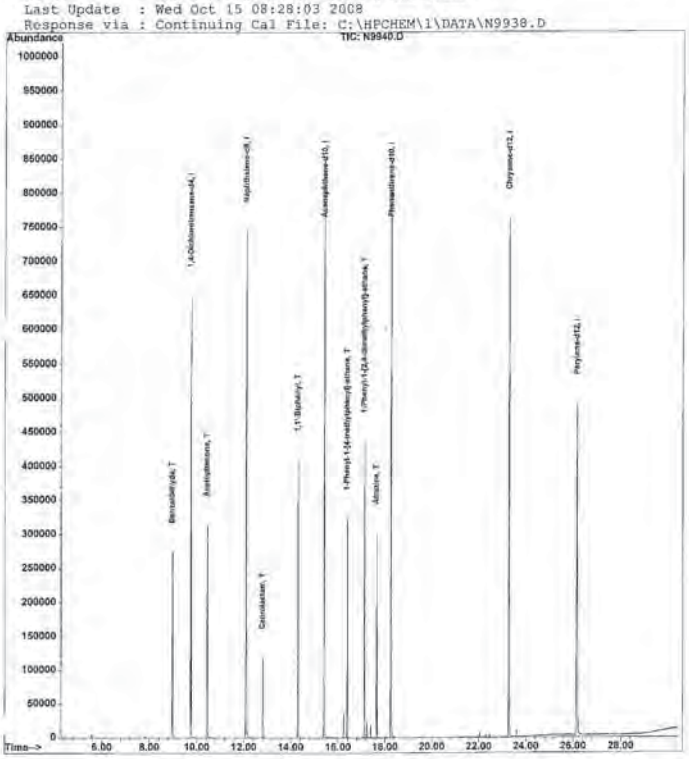
(#) = qualifier out of range (m) = manual integration
N9940.D NO14OLM.M Wed Oct 15 08:31:30 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9940.D
Acq On : 14 Oct 2008 18:58
Sample : SSTD020PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 18
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9940.D NO14OLM.M Wed Oct 15 08:31:30 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9941.D
Acq On : 14 Oct 2008 19:37
Sample : SSTD010PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 19
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 10 09:13:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	177266	40.00 ug/mL	0.00
5) Naphthalene-d8	12.10	136	599835	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.42	164	343409	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.26	188	602025	40.00 ug/mL	0.00
14) Chrysene-d12	23.29	240	520639	40.00 ug/mL	0.00
15) Perylene-d12	26.17	264	512882	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.97	77	48473	9.27 ug/mL	99
4) Acetophenone	10.46	105	72993	9.37 ug/mL	100
6) Caprolactam	12.81	55	16901	8.67 ug/mL	100
8) 1,1'-Biphenyl	14.31	154	108631	10.01 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.38	181	61645	9.63 ug/mL	98
10) 1-Phenyl-1-[2,4-dimethylph	17.13	195	71305	9.39 ug/mL	99
12) Atrazine	17.65	200	25879	9.20 ug/mL	99

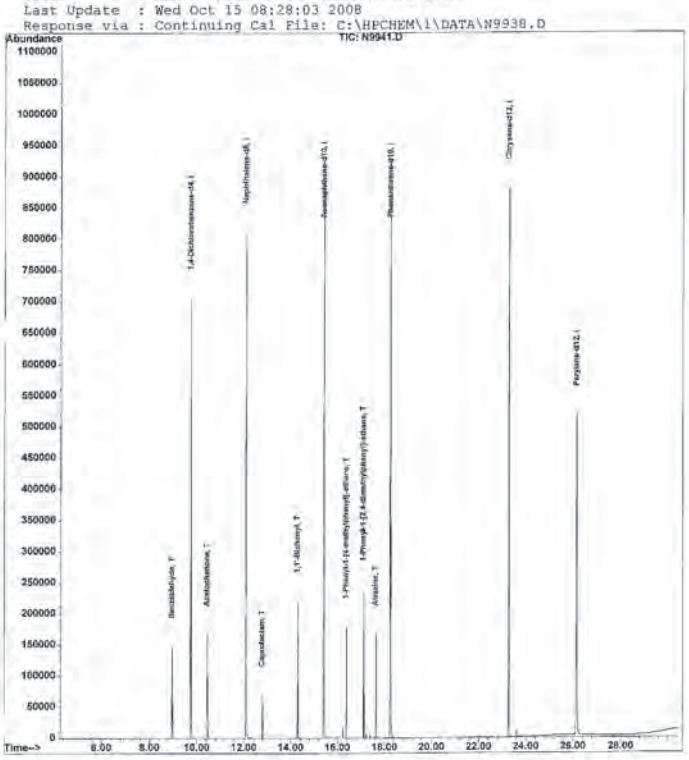
(#) = qualifier out of range (m) = manual integration
N9941.D NO14OLM.M Wed Oct 15 08:31:32 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9941.D
Acq On : 14 Oct 2008 19:37
Sample : SSTD010PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 19
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9941.D NO14OLM.M Wed Oct 15 08:31:33 2008 Pa

752

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N9942.D
Acq On : 14 Oct 2008 20:15
Sample : SSTD005PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 20
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 10 09:13:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	159534	40.00 ug/mL	0.00
5) Naphthalene-d8	12.09	136	540463	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.42	164	310623	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.26	188	529420	40.00 ug/mL	0.00
14) Chrysene-d12	23.29	240	478465	40.00 ug/mL	0.00
15) Perylene-d12	26.17	264	460296	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.97	77	20998	4.46 ug/mL	99
4) Acetophenone	10.46	105	31235	4.46 ug/mL	97
6) Caprolactam	12.80	55	6236	3.55 ug/mL	94
8) 1,1'-Biphenyl	14.31	154	48469	4.94 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.38	181	27103	4.68 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.13	195	32615	4.75 ug/mL	98
12) Atrazine	17.65	200	10753	4.35 ug/mL	98

(#) = qualifier out of range (m) = manual integration
N9942.D NO14OLM.M Wed Oct 15 08:31:34 2008 Pa

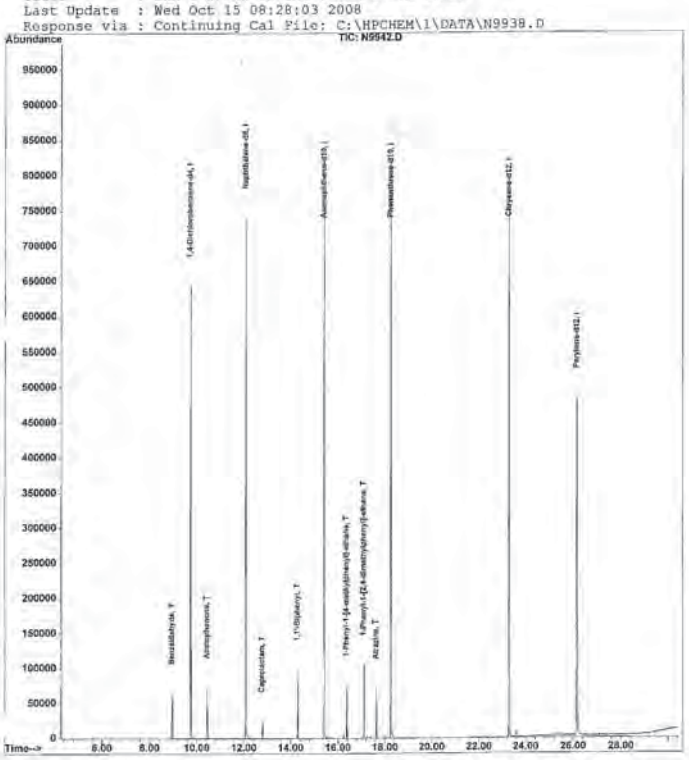
753

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N9942.D
Acq On : 14 Oct 2008 20:15
Sample : SSTD005PPM OLM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Oct 15 8:26 2008

Vial: 20
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 15 08:28:03 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\N9938.D



N9942.D NO14OLM.M Wed Oct 15 08:31:35 2008 Pa

754

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0038.D
Acq On : 20 Oct 2008 8:27
Sample : CC102008A5
Misc : CCV ,8270S,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:37 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	-0.08
2	S	2-Fluorophenol	1.103	1.047	5.1	88	-0.06
3	S	Phenol-d5	1.510	1.360	9.9	85	-0.05
4	MC	Phenol	1.788	1.631	8.8	86	-0.05
5	T	bis(2-Chloroethyl)ether	1.413	1.243	12.0	83	-0.07
6	M	2-Chlorophenol	1.237	1.241	-0.3	94	-0.07
7	T	2-Methylphenol	1.308	1.181	9.7	85	-0.06
8	T	2,2'-oxybis(1-chloropropane	1.565	1.398	10.7	84	-0.08
9	T	bis(2-Chloroisopropyl)ether	1.565	1.398	10.7	84	-0.08
10	T	4-Methylphenol	1.391	1.288	7.4	87	-0.06
11	MF	N-Nitroso-di-n-propylamine	1.005	0.967	3.8	91	-0.07
12	T	Hexachloroethane	0.621	0.618	0.5	93	-0.08
13	I	Naphthalene-d8	1.000	1.000	0.0	95	-0.08
	S	Nitrobenzene-d5	0.461	0.453	1.7	92	-0.07
15	T	Nitrobenzene	0.482	0.478	0.8	92	-0.07
16	T	Isophorone	0.871	0.825	5.3	90	-0.07
17	TC	2-Nitrophenol	0.232	0.238	-2.6	93	-0.08
18	T	2,4-Dimethylphenol	0.384	0.318	17.2	78	-0.07
19	T	bis(2-Chloroethoxy)methane	0.498	0.443	11.0	86	-0.07
20	TC	2,4-Dichlorophenol	0.344	0.347	-0.9	94	-0.07
21	T	Naphthalene	0.969	0.962	0.7	95	-0.08
22	T	4-Chloroaniline	0.515	0.503	2.3	94	-0.07
23	TC	Hexachlorobutadiene	0.212	0.209	1.4	94	-0.08
24	MC	4-Chloro-3-methylphenol	0.347	0.341	1.7	92	-0.06
25	T	2-Methylnaphthalene	0.775	0.777	-0.3	94	-0.08
26	I	Acenaphthene-d10	1.000	1.000	0.0	94	-0.08
27	TP	Hexachlorocyclopentadiene	0.352	0.276	21.6	71	-0.08
28	TC	2,4,6-Trichlorophenol	0.380	0.391	-2.9	95	-0.07
29	T	2,4,5-Trichlorophenol	0.464	0.465	-0.2	90	-0.07
30	S	2-Fluorobiphenyl	1.242	1.214	2.3	91	-0.08
31	T	2-Chloronaphthalene	1.143	1.164	-1.8	96	-0.08
32	T	2-Nitroaniline	0.470	0.485	-3.2	96	-0.07
33	T	Dimethyl phthalate	1.448	1.480	-2.2	96	-0.08
34	T	2,6-Dinitrotoluene	0.366	0.377	-3.0	96	-0.07
35	T	Acenaphthylene	1.812	1.853	-2.3	96	-0.08
36	T	3-Nitroaniline	0.414	0.427	-3.1	95	-0.07
37	TCM	Acenaphthene	1.080	1.103	-2.1	97	-0.08
	TP	2,4-Dinitrophenol	0.231	0.146	36.8#	61	-0.07
	MP	4-Nitrophenol	0.192	0.215	-12.0	108	-0.05

(#) = Out of Range
N0038.D NO14OL42.M Tue Oct 21 09:45:24 2008 Pa

10/21/08

755

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0038.D Vial: 2
Acq On : 20 Oct 2008 8:27 Operator: MEG
Sample : CC102008A5 Inst : #5MS2E
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:37 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	0.462	0.474	-2.6	93	-0.07
41	T	Dibenzofuran	1.946	1.952	-0.3	95	-0.08
42	T	Diethyl phthalate	1.421	1.497	-5.3	99	-0.08
43	T	4-Chlorophenyl phenyl ether	0.608	0.584	3.9	89	-0.08
44	T	Fluorene	1.324	1.346	-1.7	95	-0.08
45	T	4-Nitroaniline	0.414	0.442	-6.8	95	-0.07
46	S	2,4,6-Tribromophenol	0.278	0.319	-14.7	104	-0.08
47	I	Phenanthrene-d10	1.000	1.000	0.0	91	-0.08
48	T	4,6-Dinitro-2-methylphenol	0.160	0.127	20.6	70	-0.07
49	TC	n-Nitrosodiphenylamine	0.515	0.526	-2.1	92	-0.08
50	T	4-Bromophenyl phenyl ether	0.213	0.225	-5.6	95	-0.08
51	T	Hexachlorobenzene	0.284	0.301	-6.0	96	-0.08
52	MC	Pentachlorophenol	0.143	0.125	12.6	78	-0.08
	T	Phenanthrene	1.001	1.040	-3.9	94	-0.08
54	T	Anthracene	1.021	1.044	-2.3	91	-0.08
55	T	Carbazole	0.933	0.964	-3.3	93	-0.08
56	T	Di-n-butyl phthalate	1.325	1.529	-15.4	102	-0.08
57	TC	Fluoranthene	1.002	1.069	-6.7	95	-0.08
58	I	Chrysene-d12	1.000	1.000	0.0	98	-0.08
59	M	Pyrene	1.222	1.173	4.0	93	-0.09
60	S	Terphenyl-d14	0.718	0.739	-2.9	100	-0.08
61	T	Butyl benzyl phthalate	0.732	0.780	-6.6	102	-0.08
62	T	3,3'-Dichlorobenzidine	0.421	0.392	6.9	92	-0.08
63	T	Benzo[a]anthracene	1.078	1.074	0.4	99	-0.08
64	T	bis(2-Ethylhexyl)phthalate	1.032	1.092	-5.8	104	-0.08
65	T	Chrysene	1.002	0.984	1.8	95	-0.08
66	TC	Di-n-octyl phthalate	1.818	1.915	-5.3	101	-0.08
67	T	Indeno[1,2,3-cd]pyrene	1.135	1.205	-6.2	101	-0.13
68	I	Perylene-d12	1.000	1.000	0.0	96	-0.12
69	T	Benzo[b]fluoranthene	1.087	1.098	-1.0	97	-0.10
70	T	Benzo[k]fluoranthene	1.032	1.021	1.1	95	-0.10
71	TC	Benzo[a]pyrene	0.988	0.970	1.8	93	-0.12
72	T	Dibenz[a,h]anthracene	0.929	1.008	-8.5	101	-0.14
73	T	Benzo[g,h,i]perylene	0.912	0.966	-5.9	100	-0.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0038.D N014OL42.M Tue Oct 21 09:45:28 2008 Pa

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0038.D Vial: 2
Acq On : 20 Oct 2008 8:27 Operator: MEG
Sample : CC102008A5 Inst : #5MS2E
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:37 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	95	-0.08
2	S	2-Fluorophenol	50.000	47.461	5.1	88	-0.06
3	S	Phenol-d5	50.000	45.029	9.9	85	-0.05
4	MC	Phenol	50.000	45.623	8.8	86	-0.05
5	T	bis(2-Chloroethyl)ether	50.000	44.007	12.0	83	-0.07
6	M	2-Chlorophenol	50.000	50.179	-0.4	94	-0.07
7	T	2-Methylphenol	50.000	45.153	9.7	85	-0.06
8	T	2,2'-oxybis(1-chloropropane	50.000	44.672	10.7	84	-0.08
9	T	bis(2-Chloroisopropyl)ether	50.000	44.672	10.7	84	-0.08
10	T	4-Methylphenol	50.000	46.314	7.4	87	-0.06
11	MP	N-Nitroso-di-n-propylamine	50.000	48.085	3.8	91	-0.07
12	T	Hexachloroethane	50.000	49.744	0.5	93	-0.08
13	I	Naphthalene-d8	40.000	40.000	0.0	95	-0.08
	S	Nitrobenzene-d5	50.000	49.166	1.7	92	-0.07
15	T	Nitrobenzene	50.000	49.506	1.0	92	-0.07
16	T	Isophorone	50.000	47.363	5.3	90	-0.07
17	TC	2-Nitrophenol	50.000	51.293	-2.6	93	-0.08
18	T	2,4-Dimethylphenol	50.000	41.455	17.1	78	-0.07
19	T	bis(2-Chloroethoxy)methane	50.000	44.496	11.0	86	-0.07
20	TC	2,4-Dichlorophenol	50.000	50.498	-1.0	94	-0.07
21	T	Naphthalene	50.000	49.680	0.6	95	-0.08
22	T	4-Chloroaniline	50.000	48.849	2.3	94	-0.07
23	TC	Hexachlorobutadiene	50.000	49.372	1.3	94	-0.08
24	MC	4-Chloro-3-methylphenol	50.000	49.131	1.7	92	-0.06
25	T	2-Methylnaphthalene	50.000	50.076	-0.2	94	-0.08
26	I	Acenaphthene-d10	40.000	40.000	0.0	94	-0.08
27	TP	Hexachlorocyclopentadiene	50.000	39.116	21.8	71	-0.08
28	TC	2,4,6-Trichlorophenol	50.000	51.488	-3.0	95	-0.07
29	T	2,4,5-Trichlorophenol	50.000	50.030	-0.1	90	-0.07
30	S	2-Fluorobiphenyl	50.000	48.885	2.2	91	-0.08
31	T	2-Chloronaphthalene	50.000	50.926	-1.9	96	-0.08
32	T	2-Nitroaniline	50.000	51.623	-3.2	96	-0.07
33	T	Dimethyl phthalate	50.000	51.092	-2.2	96	-0.08
34	T	2,6-Dinitrotoluene	50.000	51.588	-3.2	96	-0.07
35	T	Acenaphthylene	50.000	51.132	-2.3	96	-0.08
36	T	3-Nitroaniline	50.000	51.626	-3.3	95	-0.07
37	TCM	Acenaphthene	50.000	51.048	-2.1	97	-0.08
38	TP	2,4-Dinitrophenol	50.000	35.459	29.1#	61	-0.07
	MP	4-Nitrophenol	50.000	56.038	-12.1	108	-0.05

(#) = Out of Range
N0038.D N014OL42.M Tue Oct 21 09:45:40 2008 Pa

10/21/08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0038.D Vial: 2
Acq On : 20 Oct 2008 8:27 Operator: MEG
Sample : CC102008A5 Inst : #5MS2E
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:37 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	50.000	51.345	-2.7	93	-0.07
41	T	Dibenzofuran	50.000	50.162	-0.3	95	-0.08
42	T	Diethyl phthalate	50.000	52.676	-5.4	99	-0.08
43	T	4-Chlorophenyl phenyl ether	50.000	48.011	4.0	89	-0.08
44	T	Fluorene	50.000	50.803	-1.6	95	-0.08
45	T	4-Nitroaniline	50.000	53.427	-6.9	95	-0.07
46	S	2,4,6-Tribromophenol	50.000	57.461	-14.9	104	-0.08
47	I	Phenanthrene-d10	40.000	40.000	0.0	91	-0.08
48	T	4,6-Dinitro-2-methylphenol	50.000	39.609	20.8	70	-0.07
49	TC	n-Nitrosodiphenylamine	50.000	51.083	-2.2	92	-0.08
50	T	4-Bromophenyl phenyl ether	50.000	52.852	-5.7	95	-0.08
51	T	Hexachlorobenzene	50.000	53.083	-6.2	96	-0.08
52	MC	Pentachlorophenol	50.000	43.588	12.8	78	-0.08
	T	Phenanthrene	50.000	51.948	-3.9	94	-0.08
54	T	Anthracene	50.000	51.092	-2.2	91	-0.08
55	T	Carbazole	50.000	51.673	-3.3	93	-0.08
56	T	Di-n-butyl phthalate	50.000	57.732	-15.5	102	-0.08
57	TC	Fluoranthene	50.000	53.342	-6.7	95	-0.08
58	I	Chrysene-d12	40.000	40.000	0.0	98	-0.08
59	M	Pyrene	50.000	48.002	4.0	93	-0.09
60	S	Terphenyl-d14	50.000	51.458	-2.9	100	-0.08
61	T	Butyl benzyl phthalate	50.000	53.260	-6.5	102	-0.08
62	T	3,3'-Dichlorobenzidine	50.000	46.606	6.8	92	-0.08
63	T	Benzo[a]anthracene	50.000	49.837	0.3	99	-0.08
64	T	bis(2-Ethylhexyl)phthalate	50.000	52.891	-5.8	104	-0.08
65	T	Chrysene	50.000	49.105	1.8	95	-0.08
66	TC	Di-n-octyl phthalate	50.000	52.653	-5.3	101	-0.08
67	T	Indeno[1,2,3-cd]pyrene	50.000	53.063	-6.1	101	-0.13
68	I	Perylene-d12	40.000	40.000	0.0	96	-0.12
69	T	Benzo[b]fluoranthene	50.000	50.508	-1.0	97	-0.10
70	T	Benzo[k]fluoranthene	50.000	49.473	1.1	95	-0.10
71	TC	Benzo[a]pyrene	50.000	49.123	1.8	93	-0.12
72	T	Dibenz[a,h]anthracene	50.000	54.251	-8.5	101	-0.14
73	T	Benzo[g,h,i]perylene	50.000	52.960	-5.9	100	-0.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0038.D N014OL42.M Tue Oct 21 09:45:41 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0038.D Vial: 2
Acq On : 20 Oct 2008 8:27 Operator: MEG
Sample : CC102008A5 Inst : #5MS2E
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:44 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:40 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	Qion	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.52	152	160273	40.00	ug/mL	-0.08
13) Naphthalene-d8	11.87	136	541103	40.00	ug/mL	-0.08
26) Acenaphthene-d10	15.19	164	321129	40.00	ug/mL	-0.08
47) Phenanthrene-d10	18.02	188	560608	40.00	ug/mL	-0.08
58) Chrysene-d12	23.06	240	526781	40.00	ug/mL	-0.08
68) Perylene-d12	25.83	264	537878	40.00	ug/mL	-0.12
System Monitoring Compounds						
2) 2-Fluorophenol	7.20	112	209817	47.46	ug/mL	-0.06
Spiked Amount 150.000			Recovery = 31.64%			
3) Phenol-d5	8.82	99	272403	45.03	ug/mL	-0.05
Spiked Amount 150.000			Recovery = 30.02%			
14) Nitrobenzene-d5	10.53	82	306297	49.17	ug/mL	-0.07
Spiked Amount 100.000			Recovery = 49.17%			
30) 2-Fluorobiphenyl	13.89	172	487422	48.89	ug/mL	-0.08
Spiked Amount 100.000			Recovery = 48.89%			
46) 2,4,6-Tribromophenol	16.69	330	128121	57.46	ug/mL	-0.08
Spiked Amount 150.000			Recovery = 38.31%			
60) Terphenyl-d14	21.03	244	486499	51.46	ug/mL	-0.08
Spiked Amount 100.000			Recovery = 51.46%			
Target Compounds						Qvalue
4) Phenol	8.85	94	326773	45.62	ug/mL	90
5) bis(2-Chloroethyl)ether	9.02	93	249109	44.01	ug/mL	95
6) 2-Chlorophenol	9.15	128	248628	50.18	ug/mL	98
7) 2-Methylphenol	9.93	108	236664	45.15	ug/mL	99
8) 2,2'-oxybis(1-chloropropan	9.99	45	280151	44.67	ug/mL	98
9) bis(2-Chloroisopropyl)ethe	9.99	45	280151	44.67	ug/mL	98
10) 4-Methylphenol	10.21	108	258046	46.31	ug/mL	99
11) N-Nitroso-di-n-propylamine	10.24	70	193648	48.08	ug/mL	99
12) Hexachloroethane	10.45	117	123834	49.74	ug/mL	94
15) Nitrobenzene	10.57	77	323004	49.51	ug/mL	99
16) Isophorone	11.00	82	557948	47.36	ug/mL	98
17) 2-Nitrophenol	11.15	139	161309	51.29	ug/mL	98
18) 2,4-Dimethylphenol	11.19	107	215364	41.46	ug/mL	95
19) bis(2-Chloroethoxy)methane	11.38	93	299834	44.50	ug/mL	100
20) 2,4-Dichlorophenol	11.59	162	234851	50.50	ug/mL	99
21) Naphthalene	11.91	128	650996	49.68	ug/mL#	100
22) 4-Chloroaniline	11.99	127	340470	48.85	ug/mL	99
23) Hexachlorobutadiene	12.12	225	141341	49.37	ug/mL	98
24) 4-Chloro-3-methylphenol	12.88	107	230350	49.13	ug/mL	97

(#) = qualifier out of range (m) = manual integration
N0038.D N014OL42.M Tue Oct 21 09:45:47 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0038.D
Acq On : 20 Oct 2008 8:27
Sample : CC102008A5
Misc : CCV ,8270S,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:44 2008

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:40 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.21	142	525283	50.08 ug/mL	100
27) Hexachlorocyclopentadiene	13.49	237	110650	39.12 ug/mL	100
28) 2,4,6-Trichlorophenol	13.73	196	157130	51.49 ug/mL	97
29) 2,4,5-Trichlorophenol	13.80	196	186469	50.03 ug/mL	99
31) 2-Chloronaphthalene	14.13	162	467278	50.93 ug/mL	99
32) 2-Nitroaniline	14.32	65	194625	51.62 ug/mL	98
33) Dimethyl phthalate	14.65	163	594002	51.09 ug/mL	99
34) 2,6-Dinitrotoluene	14.78	165	151458	51.59 ug/mL	94
35) Acenaphthylene	14.92	152	743945	51.13 ug/mL	99
36) 3-Nitroaniline	15.10	138	171465	51.63 ug/mL	96
37) Acenaphthene	15.25	153	442655	51.05 ug/mL	99
38) 2,4-Dinitrophenol	15.29	184	58616	35.46 ug/mL#	1
39) 4-Nitrophenol	15.39	109	86331	56.04 ug/mL	90
40) 2,4-Dinitrotoluene	15.54	165	190442	51.35 ug/mL	92
41) Dibenzofuran	15.58	168	783618	50.16 ug/mL	96
42) Diethyl phthalate	15.98	149	600815	52.68 ug/mL	98
43) 4-Chlorophenyl phenyl ethe	16.22	204	234239	48.01 ug/mL	93
44) Fluorene	16.23	166	540158	50.80 ug/mL	100
45) 4-Nitroaniline	16.27	138	177541	53.43 ug/mL	91
48) 4,6-Dinitro-2-methylphenol	16.32	198	88906	39.61 ug/mL	93
49) n-Nitrosodiphenylamine	16.44	169	368424	51.08 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.15	248	157818	52.85 ug/mL	95
51) Hexachlorobenzene	17.28	284	211239	53.08 ug/mL	95
52) Pentachlorophenol	17.64	266	87604	43.59 ug/mL	99
53) Phenanthrene	18.07	178	728703	51.95 ug/mL	99
54) Anthracene	18.17	178	731416	51.09 ug/mL	100
55) Carbazole	18.66	167	675507	51.67 ug/mL	99
56) Di-n-butyl phthalate	19.09	149	1071771	57.73 ug/mL	100
57) Fluoranthene	20.33	202	749450	53.34 ug/mL	97
59) Pyrene	20.77	202	772202	48.00 ug/mL	96
61) Butyl benzyl phthalate	21.94	149	513397	53.26 ug/mL	98
62) 3,3'-Dichlorobenzidine	22.96	252	258343	46.61 ug/mL	99
63) Benzo[a]anthracene	23.04	228	707368	49.84 ug/mL	99
64) bis(2-Ethylhexyl)phthalate	23.00	149	718972	52.89 ug/mL	99
65) Chrysene	23.11	228	647903	49.11 ug/mL	100
66) Di-n-octyl phthalate	24.18	149	1260719	52.65 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	28.56	276	793148	53.06 ug/mL	98
69) Benzo[b]fluoranthene	25.02	252	738104	50.51 ug/mL	98
70) Benzo[k]fluoranthene	25.08	252	686721	49.47 ug/mL	99
71) Benzo[a]pyrene	25.71	252	652317	49.12 ug/mL	100
72) Dibenz[a,h]anthracene	28.58	278	678061	54.25 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N0038.D N014OL42.M Tue Oct 21 09:45:48 2008

Pa

760

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0038.D
Acq On : 20 Oct 2008 8:27
Sample : CC102008A5
Misc : CCV ,8270S,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:44 2008

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:40 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	29.18	276	649411	52.96 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N0038.D N014OL42.M Tue Oct 21 09:45:48 2008

Pa

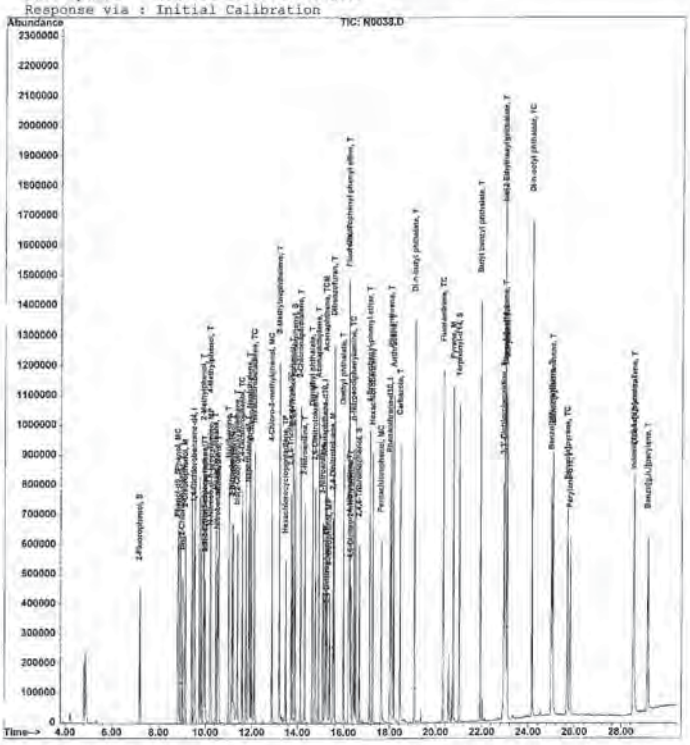
761

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0038.D
Acq On : 20 Oct 2008 8:27
Sample : CC102008A5
Misc : CCV ,8270S,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:44 2008

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:16:40 2008
Response via : Initial Calibration



N0038.D N014OL42.M Tue Oct 21 09:45:51 2008

Pa

762

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0039.D
Acq On : 20 Oct 2008 9:05
Sample : CC102008B5 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P

Vial: 3
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:35:54 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	-0.08
2 T	Benzaldehyde	1.136	1.125	1.0	88	-0.07
3 T	2-Octanol	0.000	0.001#	0.0	0#	-0.08
4 T	Acetophenone	1.685	1.655	1.8	87	-0.07
5 I	Naphthalene-d8	1.000	1.000	0.0	95	-0.08
6 T	Caprolactam	0.120	0.120	0.0	88	-0.06
7 I	Acenaphthene-d10	1.000	1.000	0.0	94	-0.08
8 T	1,1'-Biphenyl	1.247	1.306	-4.7	97	-0.08
9 T	1-Phenyl-1-[4-methylphenyl]	0.726	0.753	-3.7	95	-0.08
10 T	1-Phenyl-1-[2,4-dimethylpho	0.864	0.896	-3.7	95	-0.08
11 I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.08
T	Atrazine	0.183	0.187	-2.2	95	-0.07
13 T	2-Ethylanthraquinone	0.000	0.000#	0.0	0#	-22.67#
14 I	Chrysene-d12	1.000	1.000	0.0	95	-0.08
15 I	Perylene-d12	1.000	1.000	0.0	99	-0.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0039.D N014OLM.M Tue Oct 21 12:26:00 2008

Pa

763

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0039.D
Acq On : 20 Oct 2008 9:05
Sample : CC102008B5 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:25 2008

Vial: 3
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:35:54 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.52	152	159837	40.00 ug/mL	-0.08
5) Naphthalene-d8	11.86	136	559895	40.00 ug/mL	-0.08
7) Acenaphthene-d10	15.18	164	319329	40.00 ug/mL	-0.08
11) Phenanthrene-d10	18.01	188	559979	40.00 ug/mL	-0.08
14) Chrysene-d12	23.04	240	497777	40.00 ug/mL	-0.08
15) Perylene-d12	25.82	264	505323	40.00 ug/mL	-0.12

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.75	77	224831	49.54 ug/mL	97
4) Acetophenone	10.24	105	330730	49.12 ug/mL	97
6) Caprolactam	12.62	55	84045	49.95 ug/mL	95
8) 1,1'-Biphenyl	14.08	154	521149	52.35 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.15	181	300590	51.87 ug/mL	97
10) 1-Phenyl-1-[2,4-dimethylph	16.90	195	357781	51.86 ug/mL	97
12) Atrazine	17.44	200	131082	51.27 ug/mL	99

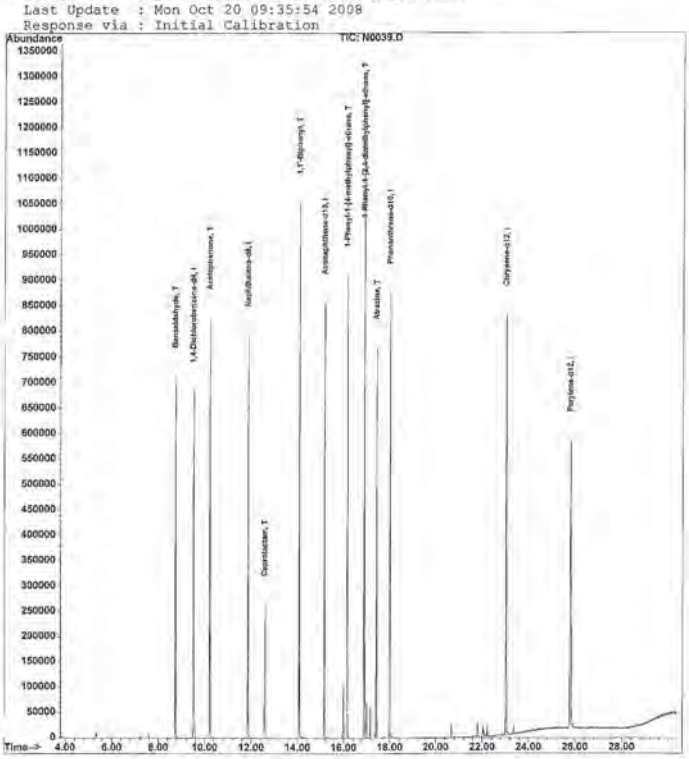
(#) = qualifier out of range (m) = manual integration
N0039.D NO14OLM.M Tue Oct 21 12:26:06 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0039.D
Acq On : 20 Oct 2008 9:05
Sample : CC102008B5 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:25 2008

Vial: 3
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 20 09:35:54 2008
Response via : Initial Calibration



N0039.D NO14OLM.M Tue Oct 21 12:26:07 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0062.D
Acq On : 21 Oct 2008 10:59
Sample : CC102108A5
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	128	0.01
2 S	2-Fluorophenol	1.103	1.082	1.9	122	0.01
3 S	Phenol-d5	1.510	1.435	5.0	121	0.01
4 MC	Phenol	1.788	1.686	5.7	120	0.01
5 T	bis(2-Chloroethyl)ether	1.413	1.285	9.1	116	0.02
6 M	2-Chlorophenol	1.237	1.254	-1.4	128	0.01
7 T	2-Methylphenol	1.308	1.202	8.1	117	0.01
8 T	2,2'-oxybis(1-chloropropane	1.565	1.493	4.6	122	0.01
9 T	bis(2-Chloroisopropyl)ether	1.565	1.493	4.6	122	0.01
10 T	4-Methylphenol	1.391	1.325	4.7	120	0.02
11 MP	N-Nitroso-di-n-propylamine	1.005	1.033	-2.8	131	0.01
12 T	Hexachloroethane	0.621	0.629	-1.3	128	0.01
13 I	Naphthalene-d8	1.000	1.000	0.0	127	0.01
S	Nitrobenzene-d5	0.461	0.462	-0.2	126	0.01
15 T	Nitrobenzene	0.482	0.487	-1.0	126	0.01
16 T	Isophorone	0.871	0.841	3.4	122	0.02
17 TC	2-Nitrophenol	0.232	0.243	-4.7	126	0.01
18 T	2,4-Dimethylphenol	0.384	0.329	14.3	108	0.01
19 T	bis(2-Chloroethoxy)methane	0.498	0.461	7.4	119	0.01
20 TC	2,4-Dichlorophenol	0.344	0.346	-0.6	126	0.01
21 T	Naphthalene	0.969	0.952	1.8	126	0.01
22 T	4-Chloroaniline	0.515	0.517	-0.4	129	0.01
23 TC	Hexachlorobutadiene	0.212	0.209	1.4	126	0.01
24 MC	4-Chloro-3-methylphenol	0.347	0.345	0.6	125	0.01
25 T	2-Methylnaphthalene	0.775	0.793	-2.3	129	0.01
26 I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00
27 TP	Hexachlorocyclopentadiene	0.352	0.314	10.8	108	0.01
28 TC	2,4,6-Trichlorophenol	0.380	0.378	0.5	123	0.00
29 T	2,4,5-Trichlorophenol	0.464	0.453	2.4	118	0.00
30 S	2-Fluorobiphenyl	1.242	1.225	1.4	123	0.00
31 T	2-Chloronaphthalene	1.143	1.165	-1.9	128	0.01
32 T	2-Nitroaniline	0.470	0.507	-7.9	134	0.01
33 T	Dimethyl phthalate	1.448	1.455	-0.5	126	0.01
34 T	2,6-Dinitrotoluene	0.366	0.369	-0.8	126	0.01
35 T	Acenaphthylene	1.812	1.835	-1.3	127	0.01
36 T	3-Nitroaniline	0.414	0.435	-5.1	130	0.01
37 TCM	Acenaphthene	1.080	1.120	-3.7	132	0.01
TP	2,4-Dinitrophenol	0.231	0.200	13.4	112	0.01
MP	4-Nitrophenol	0.192	0.227	-18.2	153	0.01

(#) = Out of Range
N0062.D NO14OL42.M Wed Oct 22 13:01:00 2008

10/22/08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0062.D
Acq On : 21 Oct 2008 10:59
Sample : CC102108A5
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40 M	2,4-Dinitrotoluene	0.462	0.472	-2.2	125	0.01
41 T	Dibenzofuran	1.946	1.961	-0.8	127	0.01
42 T	Diethyl phthalate	1.421	1.475	-3.8	130	0.01
43 T	4-Chlorophenyl phenyl ether	0.608	0.586	3.6	120	0.00
44 T	Fluorene	1.324	1.353	-2.2	128	0.01
45 T	4-Nitroaniline	0.414	0.452	-9.2	130	0.02
46 S	2,4,6-Tribromophenol	0.278	0.319	-14.7	139	0.01
47 I	Phenanthrene-d10	1.000	1.000	0.0	122	0.00
48 T	4,6-Dinitro-2-methylphenol	0.160	0.156	2.5	115	0.01
49 TC	n-Nitrosodiphenylamine	0.515	0.517	-0.4	122	0.01
50 T	4-Bromophenyl phenyl ether	0.213	0.218	-2.3	124	0.01
51 T	Hexachlorobenzene	0.284	0.301	-6.0	129	0.00
52 MC	Pentachlorophenol	0.143	0.136	4.9	115	0.01
T	Phenanthrene	1.001	1.026	-2.5	124	0.01
54 T	Anthracene	1.021	1.036	-1.5	121	0.00
55 T	Carbazole	0.933	0.983	-5.4	128	0.01
56 T	Di-n-butyl phthalate	1.325	1.493	-12.7	134	0.00
57 TC	Fluoranthene	1.002	1.033	-3.1	123	0.01
58 I	Chrysene-d12	1.000	1.000	0.0	131	0.01
59 M	Pyrene	1.222	1.150	5.9	121	0.01
60 S	Terphenyl-d14	0.718	0.713	0.7	128	0.01
61 T	Butyl benzyl phthalate	0.732	0.762	-4.1	132	0.01
62 T	3,3'-Dichlorobenzidine	0.421	0.429	-1.9	134	0.01
63 T	Benzo[a]anthracene	1.078	1.060	1.7	129	0.00
64 T	bis(2-Ethylhexyl)phthalate	1.032	1.072	-3.9	136	0.01
65 T	Chrysene	1.002	0.981	2.1	126	0.01
66 TC	Di-n-octyl phthalate	1.818	1.903	-4.7	133	0.00
67 T	Indeno[1,2,3-cd]pyrene	1.135	1.192	-5.0	132	0.02
68 I	Perylene-d12	1.000	1.000	0.0	126	0.02
69 T	Benzo[b]fluoranthene	1.087	1.083	0.4	125	0.01
70 T	Benzo[k]fluoranthene	1.032	1.073	-4.0	130	0.01
71 TC	Benzo[a]pyrene	0.988	0.976	1.2	123	0.02
72 T	Dibenz[a,h]anthracene	0.929	1.026	-10.4	134	0.02
73 T	Benzo[g,h,i]perylene	0.912	0.974	-6.8	131	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0062.D NO14OL42.M Wed Oct 22 13:01:04 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0062.D Vial: 2
Acq On : 21 Oct 2008 10:59 Operator: MEG
Sample : CC102108A5 Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	128	0.01
2	S	2-Fluorophenol	50.000	49.024	2.0	122	0.01
3	S	Phenol-d5	50.000	47.522	5.0	121	0.01
4	MC	Phenol	50.000	47.155	5.7	120	0.01
5	T	bis(2-Chloroethyl)ether	50.000	45.470	9.1	116	0.02
6	M	2-Chlorophenol	50.000	50.695	-1.4	128	0.01
7	T	2-Methylphenol	50.000	45.926	8.1	117	0.01
8	T	2,2'-oxybis(1-chloropropane	50.000	47.685	4.6	122	0.01
9	T	bis(2-Chloroisopropyl)ether	50.000	47.685	4.6	122	0.01
10	T	4-Methylphenol	50.000	47.655	4.7	120	0.02
11	MP	N-Nitroso-di-n-propylamine	50.000	51.368	-2.7	131	0.01
12	T	Hexachloroethane	50.000	50.644	-1.3	128	0.01
[illegible]	I	Naphthalene-d8	40.000	40.000	0.0	127	0.01
[illegible]	S	Nitrobenzene-d5	50.000	50.157	-0.3	126	0.01
15	T	Nitrobenzene	50.000	50.441	-0.9	126	0.01
16	T	Isophorone	50.000	48.272	3.5	122	0.02
17	TC	2-Nitrophenol	50.000	52.209	-4.4	126	0.01
18	T	2,4-Dimethylphenol	50.000	42.806	14.4	108	0.01
19	T	bis(2-Chloroethoxy)methane	50.000	46.313	7.4	119	0.01
20	TC	2,4-Dichlorophenol	50.000	50.361	-0.7	126	0.01
21	T	Naphthalene	50.000	49.118	1.8	126	0.01
22	T	4-Chloroaniline	50.000	50.162	-0.3	129	0.01
23	TC	Hexachlorobutadiene	50.000	49.406	1.2	126	0.01
24	MC	4-Chloro-3-methylphenol	50.000	49.755	0.5	125	0.01
25	T	2-Methylnaphthalene	50.000	51.114	-2.2	129	0.01
26	I	Acenaphthene-d10	40.000	40.000	0.0	126	0.00
27	TP	Hexachlorocyclopentadiene	50.000	44.564	10.9	108	0.01
28	TC	2,4,6-Trichlorophenol	50.000	49.769	0.5	123	0.00
29	T	2,4,5-Trichlorophenol	50.000	48.801	2.4	118	0.00
30	S	2-Fluorobiphenyl	50.000	49.336	1.3	123	0.00
31	T	2-Chloronaphthalene	50.000	50.946	-1.9	128	0.01
32	T	2-Nitroaniline	50.000	53.990	-8.0	134	0.01
33	T	Dimethyl phthalate	50.000	50.227	-0.5	126	0.01
34	T	2,6-Dinitrotoluene	50.000	50.409	-0.8	126	0.01
35	T	Acenaphthylene	50.000	50.638	-1.3	127	0.01
36	T	3-Nitroaniline	50.000	52.621	-5.2	130	0.01
37	TCM	Acenaphthene	50.000	51.942	-3.7	132	0.01
	TP	2,4-Dinitrophenol	50.000	44.673	10.7	112	0.01
	MP	4-Nitrophenol	50.000	59.098	-18.2	153	0.01

(#) = Out of Range
N0062.D NO14OL42.M Wed Oct 22 13:00:32 2008 Pa

10/22/08

768

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0062.D Vial: 2
Acq On : 21 Oct 2008 10:59 Operator: MEG
Sample : CC102108A5 Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	50.000	51.120	-2.2	125	0.01
41	T	Dibenzofuran	50.000	50.390	-0.8	127	0.01
42	T	Diethyl phthalate	50.000	51.907	-3.8	130	0.01
43	T	4-Chlorophenyl phenyl ether	50.000	48.247	3.5	120	0.00
44	T	Fluorene	50.000	51.074	-2.1	128	0.01
45	T	4-Nitroaniline	50.000	54.573	-9.1	130	0.02
46	S	2,4,6-Tribromophenol	50.000	57.405	-14.8	139	0.01
47	I	Phenanthrene-d10	40.000	40.000	0.0	122	0.00
48	T	4,6-Dinitro-2-methylphenol	50.000	48.852	2.3	115	0.01
49	TC	n-Nitrosodiphenylamine	50.000	50.224	-0.4	122	0.01
50	T	4-Bromophenyl phenyl ether	50.000	51.255	-2.5	124	0.01
51	T	Hexachlorobenzene	50.000	53.051	-6.1	129	0.00
[illegible]	MC	Pentachlorophenol	50.000	47.573	4.9	115	0.01
	T	Phenanthrene	50.000	51.276	-2.6	124	0.01
54	T	Anthracene	50.000	50.688	-1.4	121	0.00
55	T	Carbazole	50.000	52.714	-5.4	128	0.01
56	T	Di-n-butyl phthalate	50.000	56.371	-12.7	134	0.00
57	TC	Fluoranthene	50.000	51.546	-3.1	123	0.01
58	I	Chrysene-d12	40.000	40.000	0.0	131	0.01
59	M	Pyrene	50.000	47.081	5.8	121	0.01
60	S	Terphenyl-d14	50.000	49.640	0.7	128	0.01
61	T	Butyl benzyl phthalate	50.000	52.039	-4.1	132	0.01
62	T	3,3'-Dichlorobenzidine	50.000	51.014	-2.0	134	0.01
63	T	Benzo[a]anthracene	50.000	49.186	1.6	129	0.00
64	T	bis(2-Ethylhexyl)phthalate	50.000	51.950	-3.9	136	0.01
65	T	Chrysene	50.000	49.966	2.1	126	0.01
66	TC	Di-n-octyl phthalate	50.000	52.329	-4.7	133	0.00
67	T	Indeno[1,2,3-cd]pyrene	50.000	52.517	-5.0	132	0.02
68	I	Perylene-d12	40.000	40.000	0.0	126	0.02
69	T	Benzo[b]fluoranthene	50.000	49.819	0.4	125	0.01
70	T	Benzo[k]fluoranthene	50.000	51.974	-3.9	130	0.01
71	TC	Benzo[a]pyrene	50.000	49.440	1.1	123	0.02
72	T	Dibenz[a,h]anthracene	50.000	53.177	-10.4	134	0.02
73	T	Benzo[g,h,i]perylene	50.000	53.420	-6.8	131	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0062.D NO14OL42.M Wed Oct 22 13:00:33 2008 Pa

769

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0062.D Vial: 2
Acq On : 21 Oct 2008 10:59 Operator: MEG
Sample : CC102108A5 Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 12:59 2008 Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	216188	40.00 ug/mL	0.01
13) Naphthalene-d8	11.88	136	724451	40.00 ug/mL	0.01
26) Acenaphthene-d10	15.20	164	429804	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.03	188	751661	40.00 ug/mL	0.00
58) Chrysene-d12	23.07	240	698970	40.00 ug/mL	0.01
68) Perylene-d12	25.85	264	703253	40.00 ug/mL	0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.21	112	292336	49.02 ug/mL	0.01
Spiked Amount 150.000			Recovery = 32.68%		
3) Phenol-d5	8.83	99	387784	47.52 ug/mL	0.01
Spiked Amount 150.000			Recovery = 31.68%		
14) Nitrobenzene-d5	10.54	82	418348	50.16 ug/mL	0.01
Spiked Amount 100.000			Recovery = 50.16%		
30) 2-Fluorobiphenyl	13.89	172	658394	49.34 ug/mL	0.00
Spiked Amount 100.000			Recovery = 49.34%		
46) 2,4,6-Tribromophenol	16.70	330	171313	57.41 ug/mL	0.01
Spiked Amount 150.000			Recovery = 38.27%		
60) Terphenyl-d14	21.04	244	622717	49.64 ug/mL	0.01
Spiked Amount 100.000			Recovery = 49.64%		
Target Compounds					Qvalue
4) Phenol	8.86	94	455577	47.15 ug/mL	90
5) bis(2-Chloroethyl)ether	9.04	93	347182	45.47 ug/mL	94
6) 2-Chlorophenol	9.16	128	338814	50.69 ug/mL	99
7) 2-Methylphenol	9.94	108	324695	45.93 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	10.00	45	403373	47.68 ug/mL	100
9) bis(2-Chloroisopropyl)ethe	10.00	45	403373	47.68 ug/mL	100
10) 4-Methylphenol	10.23	108	358151	47.66 ug/mL	100
11) N-Nitroso-di-n-propylamine	10.25	70	279044	51.37 ug/mL	98
12) Hexachloroethane	10.46	117	170059	50.64 ug/mL	93
15) Nitrobenzene	10.58	77	440618	50.44 ug/mL	100
16) Isophorone	11.01	82	761331	48.27 ug/mL	98
17) 2-Nitrophenol	11.16	139	219824	52.21 ug/mL	98
18) 2,4-Dimethylphenol	11.20	107	297736	42.81 ug/mL	97
19) bis(2-Chloroethoxy)methane	11.39	93	417830	46.31 ug/mL	100
20) 2,4-Dichlorophenol	11.60	162	313577	50.36 ug/mL	99
21) Naphthalene	11.92	128	861712	49.12 ug/mL#	100
22) 4-Chloroaniline	12.00	127	468093	50.16 ug/mL	98
23) Hexachlorobutadiene	12.13	225	189363	49.41 ug/mL	99
24) 4-Chloro-3-methylphenol	12.89	107	312322	49.75 ug/mL	98

(#) = qualifier out of range (m) = manual integration
N0062.D NO14OL42.M Wed Oct 22 13:01:33 2008 Pa

770

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0062.D Vial: 2
Acq On : 21 Oct 2008 10:59 Operator: MEG
Sample : CC102108A5 Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 12:59 2008 Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	QValue
25) 2-Methylnaphthalene	13.22	142	717856	51.11 ug/mL	100
27) Hexachlorocyclopentadiene	13.50	237	168721	44.56 ug/mL	100
28) 2,4,6-Trichlorophenol	13.73	196	203285	49.77 ug/mL	98
29) 2,4,5-Trichlorophenol	13.80	196	243439	48.80 ug/mL	99
31) 2-Chloronaphthalene	14.14	162	625665	50.95 ug/mL	99
32) 2-Nitroaniline	14.33	65	272430	53.99 ug/mL	96
33) Dimethyl phthalate	14.66	163	781556	50.23 ug/mL	99
34) 2,6-Dinitrotoluene	14.79	165	198078	50.41 ug/mL	94
35) Acenaphthylene	14.93	152	986086	50.64 ug/mL	99
36) 3-Nitroaniline	15.11	138	233918	52.62 ug/mL	95
37) Acenaphthene	15.26	153	601680	51.84 ug/mL	94
38) 2,4-Dinitrophenol	15.30	184	107484	44.67 ug/mL#	1
39) 4-Nitrophenol	15.40	109	121857	59.10 ug/mL	92
40) 2,4-Dinitrotoluene	15.55	165	253773	51.12 ug/mL	90
41) Dibenzofuran	15.59	168	1053582	50.39 ug/mL	95
42) Diethyl phthalate	15.99	149	792389	51.91 ug/mL	98
43) 4-Chlorophenyl phenyl ethe	16.22	204	315052	48.25 ug/mL	93
44) Fluorene	16.24	166	726810	51.07 ug/mL	99
45) 4-Nitroaniline	16.29	138	242722	54.57 ug/mL	90
48) 4,6-Dinitro-2-methylphenol	16.33	198	147022	48.85 ug/mL	92
49) n-Nitrosodiphenylamine	16.45	169	485672	50.22 ug/mL	96
50) 4-Bromophenyl phenyl ether	17.16	248	205209	51.26 ug/mL	94
51) Hexachlorobenzene	17.28	284	283053	53.05 ug/mL	96
52) Pentachlorophenol	17.65	266	128197	47.57 ug/mL	99
53) Phenanthrene	18.08	178	964402	51.28 ug/mL	99
54) Anthracene	18.17	178	972932	50.69 ug/mL	99
55) Carbazole	18.47	167	923950	52.71 ug/mL	99
56) Di-n-butyl phthalate	19.09	149	1403152	56.37 ug/mL	99
57) Fluoranthene	20.34	202	971031	51.55 ug/mL	97
59) Pyrene	20.78	202	1004963	47.08 ug/mL	97
61) Butyl benzyl phthalate	21.95	149	665601	52.04 ug/mL	99
62) 3,3'-Dichlorobenzidine	22.97	252	375211	51.01 ug/mL	99
63) Benzo[a]anthracene	23.04	228	926338	49.19 ug/mL	99
64) bis(2-Ethylhexyl)phthalate	23.01	149	937012	51.95 ug/mL	98
65) Chrysene	23.12	228	857241	48.97 ug/mL	99
66) Di-n-octyl phthalate	24.18	149	1662537	52.33 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	28.58	276	1041562	52.52 ug/mL	100
69) Benzo[b]fluoranthene	25.03	252	951881	49.82 ug/mL	100
70) Benzo[k]fluoranthene	25.09	252	943246	51.97 ug/mL	99
71) Benzo[a]pyrene	25.73	252	858378	49.44 ug/mL	100
72) Dibenz[a,h]anthracene	28.61	278	901659	55.18 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N0062.D NO14OL42.M Wed Oct 22 13:01:34 2008 Pa

771

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0062.D Vial: 2
Acq On : 21 Oct 2008 10:59 Operator: MEG
Sample : CC102108A5 Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 12:59 2008 Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	29.21	276	856454	53.42 ug/mL	100

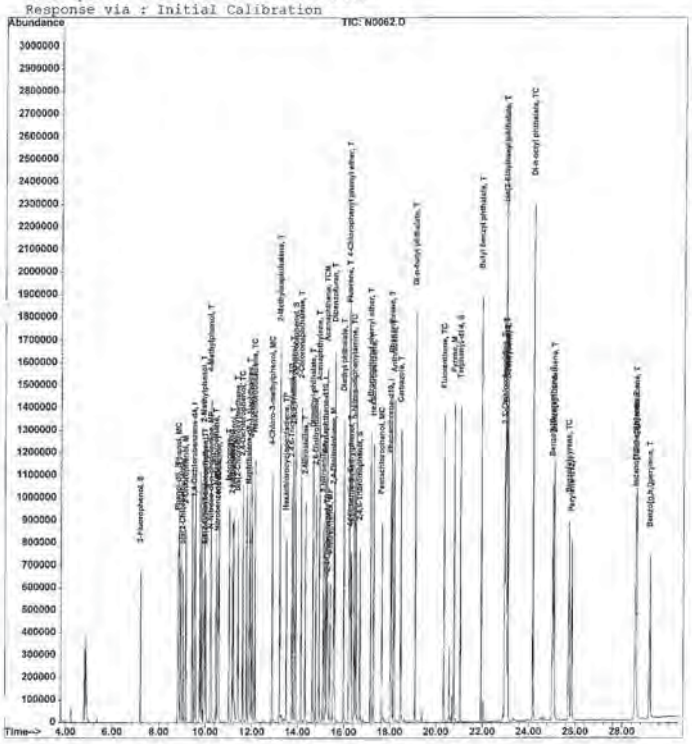
(#) = qualifier out of range (m) = manual integration
N0062.D NO14OL42.M Wed Oct 22 13:01:34 2008 Pa

772

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0062.D Vial: 2
Acq On : 21 Oct 2008 10:59 Operator: MEG
Sample : CC102108A5 Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 12:59 2008 Quant Results File: NO14OL42.RES

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:11 2008
Response via : Initial Calibration



N0062.D NO14OL42.M Wed Oct 22 13:01:37 2008 Pa

773

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0063.D Vial: 3
Acq On : 21 Oct 2008 11:37 Operator: MEG
Sample : CC102108B5 OLM Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	128	0.00
2	T	Benzaldehyde	1.136	1.122	1.2	122	0.00
3	T	2-Octanol	0.000	0.001#	0.0	0#	0.02
4	T	Acetophenone	1.685	1.671	0.8	122	0.00
5	I	Naphthalene-d8	1.000	1.000	0.0	126	0.00
6	T	Caprolactam	0.120	0.130	-8.3	126	0.00
7	I	Acenaphthene-d10	1.000	1.000	0.0	128	0.00
8	T	1,1'-Biphenyl	1.247	1.288	-3.3	131	0.00
9	T	1-Phenyl-1-[4-methylphenyl]	0.726	0.743	-2.3	128	0.00
10	T	1-Phenyl-1-[2,4-dimethylphe	0.864	0.884	-2.3	128	0.00
11	I	Phenanthrene-d10	1.000	1.000	0.0	126	0.00
	T	Atrazine	0.183	0.190	-3.8	128	0.00
13	T	2-Ethylanthraquinone	0.000	0.000#	0.0	0#	-22.67#
14	I	Chrysene-d12	1.000	1.000	0.0	130	0.00
15	I	Perylene-d12	1.000	1.000	0.0	138	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0063.D NO14OLM.M Wed Oct 22 13:51:06 2008

Mark Chesters 10/27/08

774

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0063.D Vial: 3
Acq On : 21 Oct 2008 11:37 Operator: MEG
Sample : CC102108B5 OLM Inst : #5MS26
Misc : CCV ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:50 2008 Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:03 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	220775	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	741111	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	436310	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.02	188	747706	40.00 ug/mL	0.00
14) Chrysene-d12	23.05	240	681735	40.00 ug/mL	0.00
15) Perylene-d12	25.83	264	702846	40.00 ug/mL	0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.76	77	309626	49.39 ug/mL	96
4) Acetophenone	10.25	105	461069	49.57 ug/mL	97
6) Caprolactam	12.63	55	120194	53.97 ug/mL	99
8) 1,1'-Biphenyl	14.08	154	702637	51.65 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.16	181	405291	51.19 ug/mL	96
10) 1-Phenyl-1-[2,4-dimethylph	16.90	195	482366	51.17 ug/mL	97
12) Atrazine	17.45	200	177692	52.05 ug/mL	98

(#) = qualifier out of range (m) = manual integration
N0063.D NO14OLM.M Wed Oct 22 13:51:12 2008 Pa

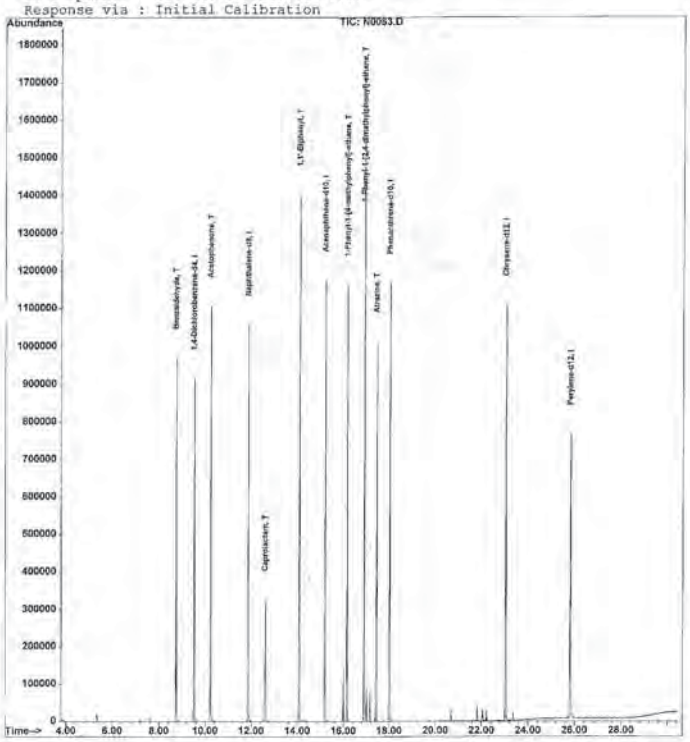
775

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0063.D
Acq On : 21 Oct 2008 11:37
Sample : CC102108B5 OLM
Misc : CCV ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:50 2008

Vial: 3
Operator: MEG
Inst : #5MS26
Multipir: 1.00
Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:03 2008
Response via : Initial Calibration



N0063.D NO14OLM.M Wed Oct 22 13:51:12 2008 Pa

776

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0072.D
Acq On : 23 Oct 2008 9:51
Sample : CC102308A5
Misc : CCV ,8270S,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	-0.07
2	S	2-Fluorophenol	1.103	1.069	3.1	113	-0.06
3	S	Phenol-d5	1.510	1.416	6.2	112	-0.06
4	MC	Phenol	1.788	1.669	6.7	112	-0.06
5	T	bis(2-Chloroethyl)ether	1.413	1.275	9.8	108	-0.07
6	M	2-Chlorophenol	1.237	1.250	-1.1	120	-0.07
7	T	2-Methylphenol	1.308	1.213	7.3	111	-0.06
8	T	2,2'-oxybis(1-chloropropane	1.565	1.460	6.7	111	-0.06
9	T	bis(2-Chloroisopropyl)ether	1.565	1.460	6.7	111	-0.06
10	T	4-Methylphenol	1.391	1.289	7.3	110	-0.06
11	MP	N-Nitroso-di-n-propylamine	1.005	0.999	0.6	119	-0.06
12	T	Hexachloroethane	0.621	0.625	-0.6	119	-0.07
[illegible]	I	Naphthalene-d8	1.000	1.000	0.0	118	-0.07
[illegible]	S	Nitrobenzene-d5	0.461	0.472	-2.4	120	-0.06
15	T	Nitrobenzene	0.482	0.492	-2.1	118	-0.07
16	T	Isophorone	0.871	0.824	5.4	111	-0.07
17	TC	2-Nitrophenol	0.232	0.247	-6.5	119	-0.06
18	T	2,4-Dimethylphenol	0.384	0.327	14.8	100	-0.05
19	T	bis(2-Chloroethoxy)methane	0.498	0.457	8.2	110	-0.06
20	TC	2,4-Dichlorophenol	0.344	0.358	-4.1	121	-0.06
21	T	Naphthalene	0.969	0.967	0.2	119	-0.07
22	T	4-Chloroaniline	0.515	0.511	0.8	118	-0.06
23	TC	Hexachlorobutadiene	0.212	0.213	-0.5	119	-0.07
24	MC	4-Chloro-3-methylphenol	0.347	0.341	1.7	114	-0.06
25	T	2-Methylnaphthalene	0.775	0.801	-3.4	121	-0.06
26	I	Acenaphthene-d10	1.000	1.000	0.0	119	-0.06
27	TP	Hexachlorocyclopentadiene	0.352	0.307	12.8	100	-0.06
28	TC	2,4,6-Trichlorophenol	0.380	0.381	-0.3	117	-0.06
29	T	2,4,5-Trichlorophenol	0.464	0.448	3.4	110	-0.06
30	S	2-Fluorobiphenyl	1.242	1.193	3.9	114	-0.06
31	T	2-Chloronaphthalene	1.143	1.139	0.3	118	-0.06
32	T	2-Nitroaniline	0.470	0.483	-2.8	120	-0.07
33	T	Dimethyl phthalate	1.448	1.458	-0.7	120	-0.06
34	T	2,6-Dinitrotoluene	0.366	0.357	2.5	115	-0.06
35	T	Acenaphthylene	1.812	1.818	-0.3	119	-0.07
36	T	3-Nitroaniline	0.414	0.428	-3.4	121	-0.06
37	TCM	Acenaphthene	1.080	1.093	-1.2	122	-0.06
	TP	2,4-Dinitrophenol	0.231	0.212	8.2	112	-0.06
[illegible]	MP	4-Nitrophenol	0.192	0.224	-16.7	142	-0.06

(#) = Out of Range
N0072.D NO14OL42.M Fri Oct 24 08:48:47 2008 Pa

777

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0072.D
Acq On : 23 Oct 2008 9:51
Sample : CC102308A5
Misc : CCV ,8270S,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	0.462	0.470	-1.7	117	-0.06
41	T	Dibenzofuran	1.946	1.917	1.5	118	-0.06
42	T	Diethyl phthalate	1.421	1.451	-2.1	121	-0.06
43	T	4-Chlorophenyl phenyl ether	0.608	0.568	6.6	110	-0.06
44	T	Fluorene	1.324	1.304	1.5	117	-0.06
45	T	4-Nitroaniline	0.414	0.443	-7.0	121	-0.07
46	S	2,4,6-Tribromophenol	0.278	0.312	-12.2	129	-0.07
47	I	Phenanthrene-d10	1.000	1.000	0.0	110	-0.06
48	T	4,6-Dinitro-2-methylphenol	0.160	0.162	-1.3	107	-0.06
49	TC	n-Nitrosodiphenylamine	0.515	0.535	-3.9	113	-0.06
50	T	4-Bromophenyl phenyl ether	0.213	0.222	-4.2	113	-0.07
51	T	Hexachlorobenzene	0.284	0.297	-4.6	115	-0.06
[illegible]	MC	Pentachlorophenol	0.143	0.137	4.2	104	-0.06
[illegible]	T	Phenanthrene	1.001	1.034	-3.3	112	-0.07
54	T	Anthracene	1.021	1.057	-3.5	112	-0.06
55	T	Carbazole	0.933	0.977	-4.7	114	-0.06
56	T	Di-n-butyl phthalate	1.325	1.497	-13.0	121	-0.06
57	TC	Fluoranthene	1.002	1.023	-2.1	110	-0.06
58	I	Chrysene-d12	1.000	1.000	0.0	118	-0.06
59	M	Pyrene	1.222	1.154	5.6	109	-0.06
60	S	Terphenyl-d14	0.718	0.700	2.5	113	-0.06
61	T	Butyl benzyl phthalate	0.732	0.768	-4.9	120	-0.06
62	T	3,3'-Dichlorobenzidine	0.421	0.395	6.2	111	-0.06
63	T	Benzo[a]anthracene	1.078	1.082	-0.4	118	-0.06
64	T	bis(2-Ethylhexyl)phthalate	1.032	1.079	-4.6	123	-0.06
65	T	Chrysene	1.002	0.978	2.4	113	-0.06
66	TC	Di-n-octyl phthalate	1.818	1.903	-4.7	120	-0.06
67	T	Indeno[1,2,3-cd]pyrene	1.135	1.229	-8.3	122	-0.10
68	I	Perylene-d12	1.000	1.000	0.0	113	-0.09
69	T	Benzo[b]fluoranthene	1.087	1.080	0.6	112	-0.07
70	T	Benzo[k]fluoranthene	1.032	1.053	-2.0	115	-0.07
71	TC	Benzo[a]pyrene	0.988	0.984	0.4	111	-0.08
72	T	Dibenz[a,h]anthracene	0.929	1.067	-14.9	126	-0.10
73	T	Benzo[g,h,i]perylene	0.912	1.016	-11.4	123	-0.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0072.D NO14OL42.M Fri Oct 24 08:48:50 2008 Pa

778

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0072.D
Acq On : 23 Oct 2008 9:51
Sample : CC102308A5
Misc : CCV ,8270S,
MS Integration Params: RTEINT.P

Vial: 2
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	120	-0.07
2	S	2-Fluorophenol	50.000	48.467	3.1	113	-0.06
3	S	Phenol-d5	50.000	46.877	6.2	112	-0.06
4	MC	Phenol	50.000	46.691	6.6	112	-0.06
5	T	bis(2-Chloroethyl)ether	50.000	45.110	9.8	108	-0.07
6	M	2-Chlorophenol	50.000	50.525	-1.0	120	-0.07
7	T	2-Methylphenol	50.000	46.357	7.3	111	-0.06
8	T	2,2'-oxybis(1-chloropropane	50.000	46.638	6.7	111	-0.06
9	T	bis(2-Chloroisopropyl)ether	50.000	46.638	6.7	111	-0.06
10	T	4-Methylphenol	50.000	46.332	7.3	110	-0.06
11	MP	N-Nitroso-di-n-propylamine	50.000	49.673	0.7	119	-0.06
12	T	Hexachloroethane	50.000	50.325	-0.7	119	-0.07
[illegible]	I	Naphthalene-d8	40.000	40.000	0.0	118	-0.07
[illegible]	S	Nitrobenzene-d5	50.000	51.193	-2.4	120	-0.06
15	T	Nitrobenzene	50.000	51.053	-2.1	118	-0.07
16	T	Isophorone	50.000	47.329	5.3	111	-0.07
17	TC	2-Nitrophenol	50.000	53.133	-6.3	119	-0.06
18	T	2,4-Dimethylphenol	50.000	42.548	14.9	100	-0.05
19	T	bis(2-Chloroethoxy)methane	50.000	45.880	8.2	110	-0.06
20	TC	2,4-Dichlorophenol	50.000	52.106	-4.2	121	-0.06
21	T	Naphthalene	50.000	49.907	0.2	119	-0.07
22	T	4-Chloroaniline	50.000	49.615	0.8	118	-0.06
23	TC	Hexachlorobutadiene	50.000	50.394	-0.8	119	-0.07
24	MC	4-Chloro-3-methylphenol	50.000	49.155	1.7	114	-0.06
25	T	2-Methylnaphthalene	50.000	51.633	-3.3	121	-0.06
26	I	Acenaphthene-d10	40.000	40.000	0.0	119	-0.06
27	TP	Hexachlorocyclopentadiene	50.000	43.572	12.9	100	-0.06
28	TC	2,4,6-Trichlorophenol	50.000	50.101	-0.2	117	-0.06
29	T	2,4,5-Trichlorophenol	50.000	48.288	3.4	110	-0.06
30	S	2-Fluorobiphenyl	50.000	48.024	4.0	114	-0.06
31	T	2-Chloronaphthalene	50.000	49.809	0.4	118	-0.06
32	T	2-Nitroaniline	50.000	51.440	-2.9	120	-0.07
33	T	Dimethyl phthalate	50.000	50.356	-0.7	120	-0.06
34	T	2,6-Dinitrotoluene	50.000	48.861	2.3	115	-0.06
35	T	Acenaphthylene	50.000	50.148	-0.3	119	-0.07
36	T	3-Nitroaniline	50.000	51.729	-3.5	121	-0.06
37	TCM	Acenaphthene	50.000	50.614	-1.2	122	-0.06
[illegible]	TP	2,4-Dinitrophenol	50.000	46.635	6.7	112	-0.06
[illegible]	MP	4-Nitrophenol	50.000	58.242	-16.5	142	-0.06

(#) = Out of Range
N0072.D NO14OL42.M Fri Oct 24 08:49:00 2008 Pa

779

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0072.D Vial: 2
Acq On : 23 Oct 2008 9:51 Operator: MEG
Sample : CC102308A5 Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	50.000	50.865	-1.7	117	-0.06
41	T	Dibenzofuran	50.000	49.247	1.5	118	-0.06
42	T	Diethyl phthalate	50.000	51.067	-2.1	121	-0.06
43	T	4-Chlorophenyl phenyl ether	50.000	46.718	6.6	110	-0.06
44	T	Fluorene	50.000	49.238	1.5	117	-0.06
45	T	4-Nitroaniline	50.000	53.545	-7.1	121	-0.07
46	S	2,4,6-Tribromophenol	50.000	56.123	-12.2	129	-0.07
47	I	Phenanthrene-d10	40.000	40.000	0.0	110	-0.06
48	T	4,6-Dinitro-2-methylphenol	50.000	50.603	-1.2	107	-0.06
49	TC	n-Nitrosodiphenylamine	50.000	51.935	-3.9	113	-0.06
50	T	4-Bromophenyl phenyl ether	50.000	52.059	-4.1	113	-0.07
51	T	Hexachlorobenzene	50.000	52.354	-4.7	115	-0.06
52	MC	Pentachlorophenol	50.000	47.657	4.7	104	-0.06
	T	Phenanthrene	50.000	51.652	-3.3	112	-0.07
54	T	Anthracene	50.000	51.761	-3.5	112	-0.06
55	T	Carbazole	50.000	52.380	-4.8	114	-0.06
56	T	Di-n-butyl phthalate	50.000	56.522	-13.0	121	-0.06
57	TC	Fluoranthene	50.000	51.000	-2.0	110	-0.06
58	I	Chrysene-d12	40.000	40.000	0.0	118	-0.06
59	M	Pyrene	50.000	47.228	5.5	109	-0.06
60	S	Terphenyl-d14	50.000	48.734	2.5	113	-0.06
61	T	Butyl benzyl phthalate	50.000	52.453	-4.9	120	-0.06
62	T	3,3'-Dichlorobenzidine	50.000	46.939	6.1	111	-0.06
63	T	Benzo[a]anthracene	50.000	50.179	-0.4	118	-0.06
64	T	bis(2-Ethylhexyl)phthalate	50.000	52.250	-4.5	123	-0.06
65	T	Chrysene	50.000	48.816	2.4	113	-0.06
66	TC	Di-n-octyl phthalate	50.000	52.347	-4.7	120	-0.06
67	T	Indeno[1,2,3-cd]pyrene	50.000	54.141	-8.3	122	-0.10
68	I	Perylene-d12	40.000	40.000	0.0	113	-0.09
69	T	Benzo[b]fluoranthene	50.000	49.683	0.6	112	-0.07
70	T	Benzo[k]fluoranthene	50.000	51.009	-2.0	115	-0.07
71	TC	Benzo[a]pyrene	50.000	49.807	0.4	113	-0.08
72	T	Dibenz[a,h]anthracene	50.000	57.392	-14.8	126	-0.10
73	T	Benzo[g,h,i]perylene	50.000	55.685	-11.4	123	-0.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0072.D N014OL42.M Fri Oct 24 08:49:01 2008 Pag

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0072.D Vial: 2
Acq On : 23 Oct 2008 9:51 Operator: MEG
Sample : CC102308A5 Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:47 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:14 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	202798	40.00 ug/mL	-0.07
13) Naphthalene-d8	11.81	136	672898	40.00 ug/mL	-0.07
26) Acenaphthene-d10	15.14	164	406423	40.00 ug/mL	-0.06
47) Phenanthrene-d10	17.97	188	677401	40.00 ug/mL	-0.06
58) Chrysene-d12	23.01	240	629124	40.00 ug/mL	-0.06
68) Perylene-d12	25.76	264	633205	40.00 ug/mL	-0.09
System Monitoring Compounds					
2) 2-Fluorophenol	7.15	112	271113	48.47 ug/mL	-0.06
Spiked Amount 150.000				Recovery = 32.31%	
3) Phenol-d5	8.77	99	358830	46.88 ug/mL	-0.06
Spiked Amount 150.000				Recovery = 31.25%	
14) Nitrobenzene-d5	10.48	82	396609	51.19 ug/mL	-0.06
Spiked Amount 100.000				Recovery = 51.19%	
30) 2-Fluorobiphenyl	13.83	172	606014	48.02 ug/mL	-0.06
Spiked Amount 100.000				Recovery = 48.02%	
46) 2,4,6-Tribromophenol	16.63	330	158375	56.12 ug/mL	-0.07
Spiked Amount 150.000				Recovery = 37.41%	
60) Terphenyl-d14	20.98	244	550256	48.73 ug/mL	-0.06
Spiked Amount 100.000				Recovery = 48.73%	
Target Compounds					Qvalue
4) Phenol	8.80	94	423154	46.69 ug/mL	88
5) bis(2-Chloroethyl)ether	8.98	93	323101	45.11 ug/mL	94
6) 2-Chlorophenol	9.09	128	316765	50.53 ug/mL	99
7) 2-Methylphenol	9.88	108	307439	46.36 ug/mL	99
8) 2,2'-oxybis(1-chloropropan	9.94	45	370084	46.64 ug/mL	100
9) bis(2-Chloroisopropyl)ethe	9.94	45	370084	46.64 ug/mL	100
10) 4-Methylphenol	10.17	108	326640	46.33 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.19	70	253122	49.67 ug/mL	95
12) Hexachloroethane	10.39	117	158522	50.33 ug/mL	94
15) Nitrobenzene	10.51	77	414230	51.05 ug/mL	98
16) Isophorone	10.95	82	693344	47.33 ug/mL	98
17) 2-Nitrophenol	11.10	139	207793	53.13 ug/mL	96
18) 2,4-Dimethylphenol	11.15	107	274880	42.55 ug/mL	96
19) bis(2-Chloroethoxy)methane	11.33	93	384466	45.88 ug/mL	100
20) 2,4-Dichlorophenol	11.54	162	301357	52.11 ug/mL	98
21) Naphthalene	11.85	128	813253	49.91 ug/mL#	100
22) 4-Chloroaniline	11.94	127	430037	49.61 ug/mL	99
23) Hexachlorobutadiene	12.06	225	179408	50.39 ug/mL	98
24) 4-Chloro-3-methylphenol	12.83	107	286598	49.15 ug/mL	97

(#) = qualifier out of range (m) = manual integration
N0072.D N014OL42.M Fri Oct 24 08:49:32 2008 Pag

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0072.D Vial: 2
Acq On : 23 Oct 2008 9:51 Operator: MEG
Sample : CC102308A5 Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:47 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:14 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.16	142	673541	51.63 ug/mL	99
27) Hexachlorocyclopentadiene	13.44	237	155991	43.57 ug/mL	98
28) 2,4,6-Trichlorophenol	13.67	196	193507	50.10 ug/mL	97
29) 2,4,5-Trichlorophenol	13.74	196	227779	48.29 ug/mL	99
31) 2-Chloronaphthalene	14.08	162	578425	49.81 ug/mL	99
32) 2-Nitroaniline	14.26	65	245444	51.44 ug/mL	98
33) Dimethyl phthalate	14.60	163	740947	50.36 ug/mL	99
34) 2,6-Dinitrotoluene	14.73	165	181551	48.86 ug/mL	92
35) Acenaphthylene	14.87	152	923418	50.15 ug/mL	99
36) 3-Nitroaniline	15.06	138	217442	51.73 ug/mL	95
37) Acenaphthene	15.20	153	555473	50.61 ug/mL	95
38) 2,4-Dinitrophenol	15.24	184	107480	46.63 ug/mL#	1
39) 4-Nitrophenol	15.34	109	113558	58.24 ug/mL	89
40) 2,4-Dinitrotoluene	15.49	165	238769	50.86 ug/mL	89
41) Dibenzofuran	15.53	168	973669	49.25 ug/mL	94
42) Diethyl phthalate	15.93	149	737169	51.07 ug/mL	98
43) 4-Chlorophenyl phenyl ethe	16.16	204	288474	46.72 ug/mL	91
44) Fluorene	16.18	166	662567	49.24 ug/mL	99
45) 4-Nitroaniline	16.22	138	225194	53.54 ug/mL	88
48) 4,6-Dinitro-2-methylphenol	16.27	198	137248	50.60 ug/mL	90
49) n-Nitrosodiphenylamine	16.39	169	452597	51.93 ug/mL	96
50) 4-Bromophenyl phenyl ether	17.10	248	187835	52.06 ug/mL	94
51) Hexachlorobenzene	17.22	284	251742	52.35 ug/mL	94
52) Pentachlorophenol	17.59	266	115738	47.66 ug/mL	99
53) Phenanthrene	18.01	178	875496	51.65 ug/mL	99
54) Anthracene	18.12	178	895374	51.76 ug/mL	99
55) Carbazole	18.41	167	827398	52.38 ug/mL	98
56) Di-n-butyl phthalate	19.03	149	1267911	56.52 ug/mL	99
57) Fluoranthene	20.28	202	865829	51.00 ug/mL	96
59) Pyrene	20.72	202	907357	47.23 ug/mL	96
61) Butyl benzyl phthalate	21.89	149	603854	52.45 ug/mL	99
62) 3,3'-Dichlorobenzidine	22.91	252	310740	46.94 ug/mL	99
63) Benzo[a]anthracene	22.98	228	850598	50.18 ug/mL	99
64) bis(2-Ethylhexyl)phthalate	22.95	149	848245	52.25 ug/mL	98
65) Chrysene	23.06	228	769224	48.82 ug/mL	99
66) Di-n-octyl phthalate	24.12	149	1496913	52.35 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	28.48	276	966485	54.14 ug/mL	99
69) Benzo[b]fluoranthene	24.96	252	854738	49.68 ug/mL	100
70) Benzo[k]fluoranthene	25.02	252	833525	51.01 ug/mL	99
71) Benzo[a]pyrene	25.65	252	778613	49.81 ug/mL	100
72) Dibenz[a,h]anthracene	28.51	278	844445	57.39 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N0072.D N014OL42.M Fri Oct 24 08:49:33 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0072.D Vial: 2
Acq On : 23 Oct 2008 9:51 Operator: MEG
Sample : CC102308A5 Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:47 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:14 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

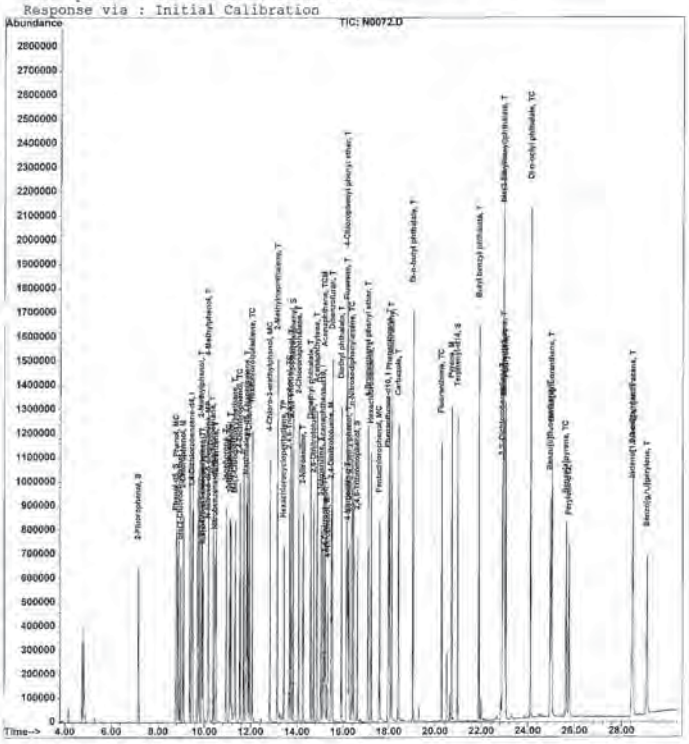
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	29.11	276	803839	55.68 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N0072.D N014OL42.M Fri Oct 24 08:49:33 2008 Pag

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0072.D Vial: 2
Acq On : 23 Oct 2008 9:51 Operator: MEG
Sample : CC102308A5 Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:47 2008 Quant Results File: N0140L42.RES

Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:14 2008
Response via : Initial Calibration



N0072.D N0140L42.M Fri Oct 24 08:49:35 2008 Pa

784

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\N0073.D Vial: 3
Acq On : 23 Oct 2008 10:28 Operator: MEG
Sample : CC102308B5 OLM Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\N0140LM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	119	-0.06
2	T	Benzaldehyde	1.136	1.128	0.7	114	-0.06
3	T	2-Octanol	0.000	0.000#	0.0	0#	-0.07
4	T	Acetophenone	1.695	1.666	1.1	113	-0.06
5	I	Naphthalene-d8	1.000	1.000	0.0	120	-0.06
6	T	Caprolactam	0.120	0.126	-5.0	116	-0.06
7	I	Acenaphthene-d10	1.000	1.000	0.0	118	-0.06
8	T	1,1'-Biphenyl	1.247	1.306	-4.7	122	-0.06
9	T	1-Phenyl-1-[4-methylphenyl]	0.726	0.741	-2.1	117	-0.06
10	T	1-Phenyl-1-[2,4-dimethylphe	0.864	0.879	-1.7	117	-0.06
11	I	Phenanthrene-d10	1.000	1.000	0.0	114	-0.06
	T	Atrazine	0.183	0.190	-3.8	116	-0.06
13	T	2-Ethylanthraquinone	0.000	0.000#	0.0	0#	-22.67#
14	I	Chrysene-d12	1.000	1.000	0.0	118	-0.06
15	I	Perylene-d12	1.000	1.000	0.0	128	-0.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0073.D N0140LM.M Fri Oct 24 09:05:19 2008 Pa

785

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0073.D Vial: 3
Acq On : 23 Oct 2008 10:28 Operator: MEG
Sample : CC102308B5 OLM Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:04 2008 Quant Results File: N0140LM.RES

Quant Method : C:\HPCHEM\1\METHODS\N0140LM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	205197	40.00 ug/mL	-0.06
5) Naphthalene-d8	11.81	136	706267	40.00 ug/mL	-0.06
7) Acenaphthene-d10	15.13	164	401584	40.00 ug/mL	-0.06
11) Phenanthrene-d10	17.96	188	676641	40.00 ug/mL	-0.06
14) Chrysene-d12	22.99	240	619189	40.00 ug/mL	-0.06
15) Perylene-d12	25.76	264	650344	40.00 ug/mL	-0.08

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.69	77	289282	49.65 ug/mL	96
4) Acetophenone	10.18	105	427233	49.42 ug/mL	98
6) Caprolactam	12.57	55	111393	52.49 ug/mL	99
8) 1,1'-Biphenyl	14.03	154	655645	52.37 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.10	181	372179	51.07 ug/mL	96
10) 1-Phenyl-1-[2,4-dimethylph	16.85	195	441114	50.84 ug/mL	97
12) Atrazine	17.39	200	160878	52.08 ug/mL	99

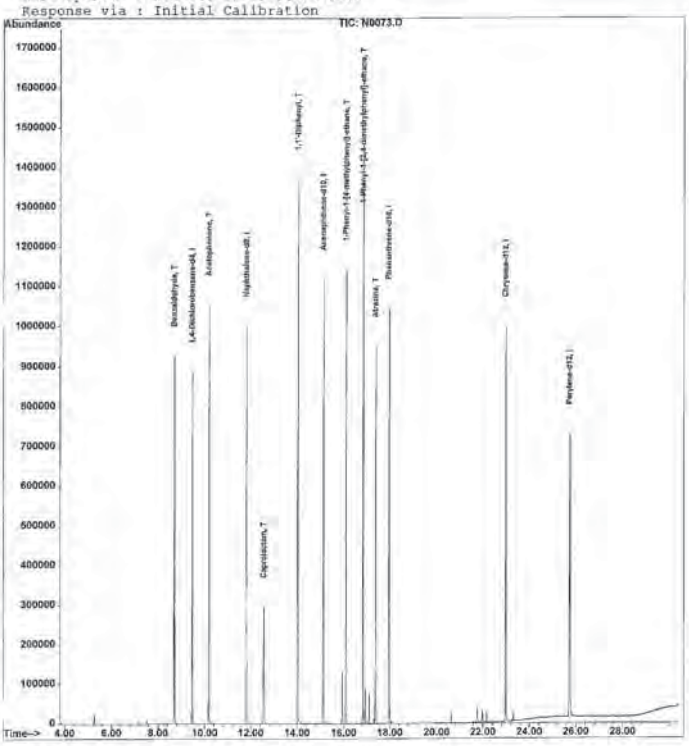
(#) = qualifier out of range (m) = manual integration
N0073.D N0140LM.M Fri Oct 24 09:05:26 2008 Pa

786

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0073.D Vial: 3
Acq On : 23 Oct 2008 10:28 Operator: MEG
Sample : CC102308B5 OLM Inst : #5MS26
Misc : CCV ,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:04 2008 Quant Results File: N0140LM.RES

Method : C:\HPCHEM\1\METHODS\N0140LM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration



N0073.D N0140LM.M Fri Oct 24 09:05:26 2008 Pa

787

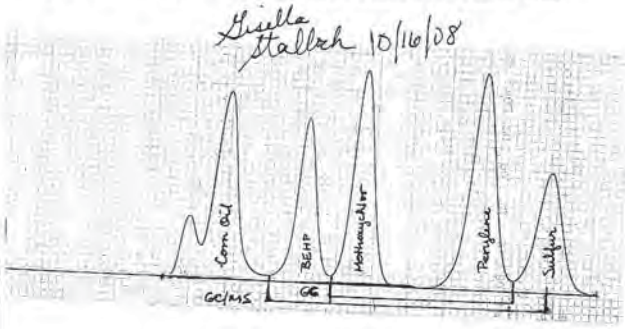
GPC CALIBRATION Column A

Rise Time 0.1 Sec
Input 10 mV
Chart Speed 20 cm/hr
Detector Range 0.5 AUF

Pressure w/ Detector 10
Flow Rate 5.0mL/min
Temperature 22.5 °C
Calibration Stock # E602

Program #1: 60 min DUMP / 0 min COLLECT / 0 min WASH / Load time: 1:00

Giulia Stallch 10/16/08



	GC/MS	GC		%Res.	Criteria
DUMP	0:00-28:36	0:00-26:36	Corn oil + phthalate	98	>85
COLLECT	28:36-44:24	26:36-41:42	Phthalate + methoxychlor	95	>85
WASH	44:24-62:00	41:42-62:00	Methoxychlor + perylene	100	>85
			Perylene + sulfur	90	>90

%D1 = $\frac{RT1(new) - RT1(old)}{RT1(old)} * 100$

%D5 = $\frac{RT5(new) - RT5(old)}{RT5(old)} * 100$

%DRT = $\frac{DRT(new) - DRT(old)}{DRT(old)} * 100$

RT = PD*2
DRT = RT5 - RT1
Results: DRT ____
%DI ____
%D5 ____
%DRT ____

Calibrated by: G. Stallch Date: 10/16/08

Reviewed by: [illegible] Date: 10-29-08

87

Internal Standards

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0038.D Date Analyzed: 10/20/2008

Instrument ID: MS05_26 Time Analyzed: 8:27

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	160273	9.52	541103	11.87	321129	15.19	560608	18.02
UPPER LIMIT	320546	10.02	1082206	12.37	642258	15.69	1121216	18.52
LOWER LIMIT	80137	9.02	270552	11.37	160565	14.69	280304	17.52
SAMPLE NO.								
01 CC10200885 OLM (CC10200885 OLM)	159937	9.52	559899	11.86	319329	15.19	559979	18.01
02 LCS-8270 (LCS-8270)	160760	9.53	546428	11.87	312109	15.19	563173	18.02
03 MSB-8270 (MSB-8270)	147565	9.52	524995	11.87	298440	15.19	542967	18.02
04 MB-8270 (MB-8270)	190049	9.53	660894	11.87	387583	15.19	663672	18.03
05 MBSS-3DL (0810083-003BDL)	164496	9.53	582018	11.87	337506	15.19	585373	18.02
06 MBSS-4DL (0810083-004BDL)	169966	9.53	605714	11.87	352878	15.20	602303	18.03
07 MBSS-FDDL (0810083-005BDL)	169143	9.53	588563	11.87	346097	15.20	583715	18.03

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

10/27/08 14:50 FORM VIII Page 1 of 8 SW8270C

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0038.D Date Analyzed: 10/20/2008

Instrument ID: MS05_26 Time Analyzed: 8:27

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	526761	23.06	537879	25.83				
UPPER LIMIT	1053562	23.56	1075756	26.33				
LOWER LIMIT	263391	22.56	268939	25.33				
SAMPLE NO.								
01 CC10200885 OLM (CC10200885 OLM)	497777	23.04	505323	25.82				
02 LCS-8270 (LCS-8270)	521305	23.05	544897	25.83				
03 MSB-8270 (MSB-8270)	495881	23.05	522488	25.83				
04 MB-8270 (MB-8270)	591341	23.05	377831	25.83				
05 MBSS-3DL (0810083-003BDL)	464083	23.05	332335	25.83				
06 MBSS-4DL (0810083-004BDL)	474689	23.05	311221	25.84				
07 MBSS-FDDL (0810083-005BDL)	467522	23.06	313058	25.83				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

10/27/08 14:50 FORM VIII Page 2 of 8 SW8270C

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0052.D Date Analyzed: 10/21/2008

Instrument ID: MS05_26 Time Analyzed: 10:59

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	216188	9.53	724451	11.88	429804	15.20	751661	18.03
UPPER LIMIT	432376	10.03	1448902	12.38	859608	15.70	1503322	18.53
LOWER LIMIT	108094	9.03	362226	11.38	214902	14.70	375831	17.53
SAMPLE NO								
01 CC102108B5 OLM (CC102108B5 OLM)	220775	9.53	741111	11.87	435310	15.19	747796	18.02
02 MBSS-1 (0810083-001B)	229023	9.53	798507	11.87	460681	15.19	787691	18.03
03 MBSS-1MS (0810083-001BMS)	202996	9.53	709302	11.87	414950	15.19	733017	18.02
04 MBSS-3 (0810083-003B)	227826	9.53	808252	11.87	458739	15.19	764647	18.02
05 MBSS-4 (0810083-004B)	231281	9.53	810108	11.87	458128	15.20	689637	18.03
06 MBSS-FD (0810083-005B)	217186	9.54	769126	11.87	434312	15.19	679889	18.03

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0052.D Date Analyzed: 10/21/2008

Instrument ID: MS05_26 Time Analyzed: 10:59

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	698970	23.07	703253	25.85				
UPPER LIMIT	1397940	23.57	1406506	26.35				
LOWER LIMIT	349485	22.57	351627	25.35				
SAMPLE NO								
01 CC102108B5 OLM (CC102108B5 OLM)	681735	23.05	702860	25.83				
02 MBSS-1 (0810083-001B)	646899	23.06	391291	25.84				
03 MBSS-1MS (0810083-001BMS)	591895	23.06	371121	25.83				
04 MBSS-3 (0810083-003B)	363351	23.06	133634*	25.83				
05 MBSS-4 (0810083-004B)	192862*	23.06	72964*	25.84				
06 MBSS-FD (0810083-005B)	208360*	23.06	76591*	25.84				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0072.D Date Analyzed: 10/23/2008

Instrument ID: MS05_26 Time Analyzed: 9:51

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	202798	9.47	672896	11.81	406423	15.14	677401	17.97
UPPER LIMIT	405596	9.97	1345796	12.31	812846	15.64	1354802	18.47
LOWER LIMIT	101399	8.97	336449	11.31	203212	14.64	338701	17.47
SAMPLE NO								
01 CC102308B5 OLM (CC102308B5 OLM)	205197	9.47	706267	11.81	401554	15.13	676641	17.96
02 MB-8309 (MB-8309)	194667	9.47	675102	11.81	376092	15.13	668113	17.97
03 LCS-8309 (LCS-8309)	186214	9.48	670503	11.82	377753	15.14	654572	17.97
04 MSB-8309 (MSB-8309)	192770	9.47	664704	11.81	379660	15.14	661528	17.97
05 MBSS-2DL (0810083-002BDL)	194809	9.47	679463	11.81	382470	15.14	643145	17.97
06 MBSS-1MSD (0810083-001BMSD)	215991	9.47	745535	11.81	428645	15.13	702929	17.97
07 MBSS-2 (0810083-002B)	211990	9.47	752150	11.82	429263	15.13	712195	17.97

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0810083

Lab Code: LSLB

Lab File ID (Standard): N0072.D Date Analyzed: 10/23/2008

Instrument ID: MS05_26 Time Analyzed: 9:51

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	629124	23.01	633205	25.78				
UPPER LIMIT	1258248	23.51	1266410	26.26				
LOWER LIMIT	314562	22.51	316803	25.26				
SAMPLE NO								
01 CC102308B5 OLM (CC102308B5 OLM)	619189	22.99	650344	25.78				
02 MB-8309 (MB-8309)	606045	22.99	638336	25.76				
03 LCS-8309 (LCS-8309)	603408	23.00	628074	25.78				
04 MSB-8309 (MSB-8309)	612436	23.00	632069	25.77				
05 MBSS-2DL (0810083-002BDL)	541887	22.99	479314	25.75				
06 MBSS-1MSD (0810083-001BMSD)	570609	23.01	389316	25.78				
07 MBSS-2 (0810083-002B)	535191	23.00	296140*	25.75				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

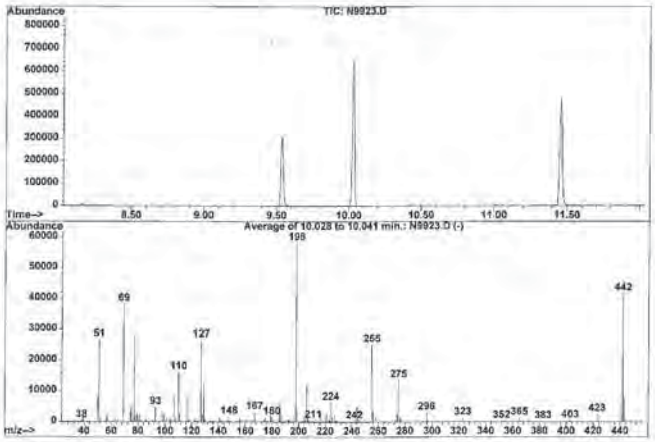
Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Raw QC Data

Tune Raw Data

DFTPP

Data File : C:\HPCHEM\1\DATA\N9923.D Vial: 1
Acq On : 14 Oct 2008 8:26 Operator: MEG
Sample : TD101408A5 Inst : #SMS26
Misc : TUNE,DFTPP, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\NO10SIM.M (RTE Integrator)
Title : BNA's (SIM's) W/J & W DB-5MS ,25mm x 30m 0.5df



AutoFind: Scans 924, 925, 926; Background Corrected with Scan 918

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.6	26708	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	65.1	38132	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	45.4	26615	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	58605	PASS
199	198	5	9	6.3	3716	PASS
275	198	10	30	23.0	13488	PASS
365	198	1	100	2.1	1252	PASS
441	443	0.01	100	86.9	6493	PASS
442	198	40	100	70.9	41523	PASS
443	442	17	23	18.0	7470	PASS

N9923.D NO10SIM.M Tue Oct 14 09:18:51 2008

Average of 10.028 to 10.041 min.: N9923.D
TD101408A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.85	165	56.95	1823	77.05	28279	90.85	620
38.05	449	60.95	320	78.00	2013	91.90	360
38.95	2600	61.95	390	78.95	2512	92.90	4750
39.95	88	62.95	1192	79.95	1781	93.95	363
42.85	247	64.00	137	80.95	2524	95.90	162
43.95	67	64.95	411	81.90	503	98.00	3492
50.00	8203	68.95	38132	82.85	461	99.00	2288
50.95	26708	72.85	155	84.95	395	99.80	76
51.95	1341	74.05	3358	85.95	920	100.90	1252
55.05	228	74.95	4933	86.95	315	103.05	458
56.00	878	76.05	224	87.80	83	103.90	890

Average of 10.028 to 10.041 min.: N9923.D
TD101408A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
104.95	666	124.00	391	137.85	69	152.95	472
106.95	8661	124.95	282	139.90	183	153.90	351
108.00	1314	127.00	26615	140.85	1553	154.90	686
110.00	16046	128.05	2364	141.95	521	156.00	1212
110.95	2500	129.00	12499	142.90	259	156.95	74
111.95	274	129.90	1095	146.00	282	157.85	247
115.90	109	130.85	204	146.95	533	158.95	120
116.95	7910	133.90	345	147.15	285	159.95	361
117.90	709	134.95	1010	147.95	1667	160.95	678
121.90	604	135.95	314	149.00	335	162.05	105
122.95	935	136.90	455	151.05	108	163.95	81

Average of 10.028 to 10.041 min.: N9923.D
TD101408A5
M fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.90	635	177.00	473	188.00	94	202.85	413
166.00	580	177.85	109	188.90	516	203.95	1734
166.95	3141	178.95	2230	190.90	181	205.00	2887
167.90	1364	179.95	1539	191.90	680	206.00	11983
168.95	154	180.90	663	192.90	665	207.00	1677
171.00	159	183.85	68	193.80	76	207.90	467
171.90	283	184.05	99	195.95	1610	208.90	70
173.00	249	185.00	599	197.90	58605	210.10	89
174.00	591	185.95	6870	198.90	3716	210.50	173
174.95	1124	186.95	1907	200.00	184	211.00	440
175.95	340	187.80	68	201.60	167	216.90	3480

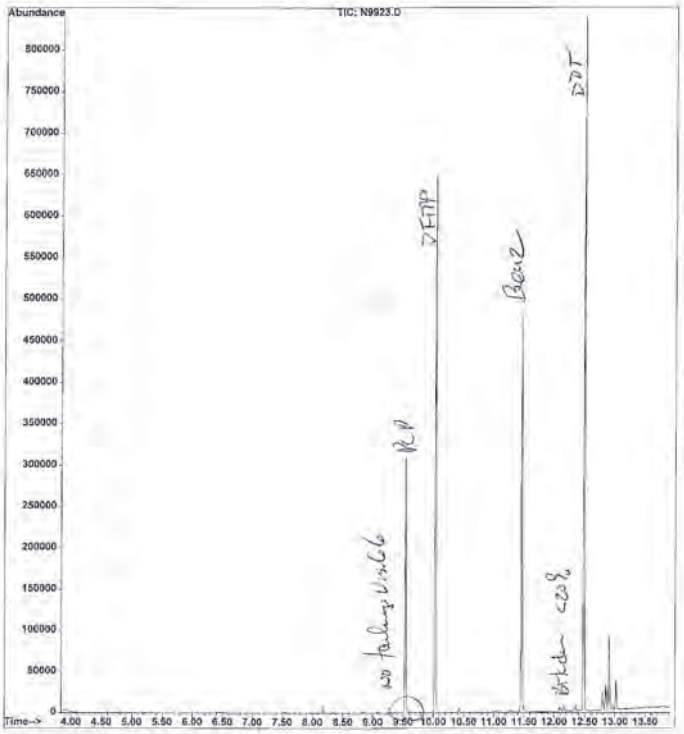
Average of 10.028 to 10.041 min.: N9923.D
TD101408A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
217.85	306	236.00	85	254.95	25064	276.90	895
221.00	2779	236.85	164	255.90	3520	277.95	81
223.00	693	240.85	84	257.05	158	284.95	84
224.00	6249	241.90	198	257.85	1453	292.80	201
224.95	1522	242.85	79	258.75	105	295.90	2979
226.90	2524	243.95	4865	264.85	523	296.80	509
227.85	367	244.95	793	272.85	426	302.90	352
228.90	496	245.90	882	273.05	374	314.80	134
230.95	195	246.90	177	273.95	2503	315.00	119
233.90	105	248.85	157	274.95	13488	315.90	102
234.90	107	253.35	70	275.95	1695	320.90	67

Average of 10.028 to 10.041 min.: N9923.D
TD101408A5
Modified:subtracted

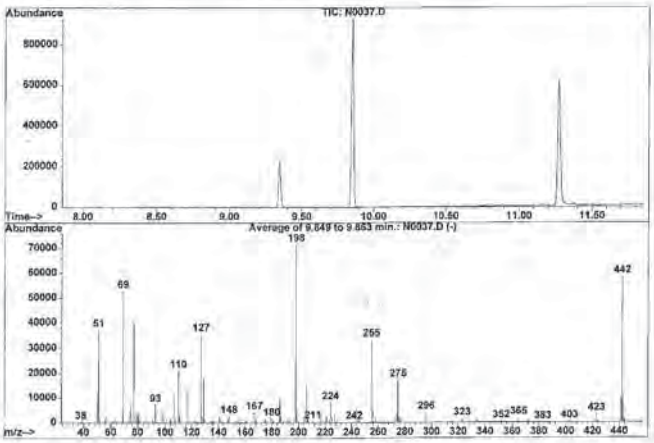
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
322.90	1216	365.85	86	442.00	41523		
323.90	94	370.85	78	442.95	7470		
326.80	78	371.90	660	443.90	748		
333.95	584	372.95	68				
334.90	90	382.75	67				
340.80	90	401.85	252				
345.85	75	402.90	330				
351.85	225	420.85	207				
352.85	110	422.90	2389				
353.95	337	423.90	451				
364.85	1252	441.05	6493				

File : C:\HPCHEM\1\DATA\N9923.D
Operator : MEG
Acquired : 14 Oct 2008 8:26 using AcqMethod DFTPP1UL
Instrument : #5MS26
Sample Name: TD101408A5
Misc Info : TUNE,DFTPP,
Vial Number: 1



DFTPP

Data File : C:\HPCHEM\1\DATA\N0037.D Vial: 1
Acq On : 20 Oct 2008 8:08 Operator: MEG
Sample : TD102008A5 Inst : #5MS26
Misc : TUNE,DFTPP, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\N010SIM.M (RTE Integrator)
Title : BNA's (SIM's) w/J & W DB-5MS .25mm x 30m 0.5df



Spectrum Information: Average of 9.849 to 9.863 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.6	37375	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	73.2	53011	PASS
70	69	0.00	2	0.2	88	PASS
127	198	40	60	49.3	35699	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	72405	PASS
199	198	5	9	6.7	4887	PASS
275	198	10	30	24.0	17391	PASS
365	198	1	100	2.7	1933	PASS
441	443	0.01	100	89.3	9723	PASS
442	198	40	100	80.7	58459	PASS
443	442	17	23	18.6	10885	PASS

N0037.D N010SIM.M Tue Oct 21 07:08:06 2008

10/21

Average of 9.849 to 9.863 min.: N0037.D
TD102008A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.95	237	55.90	1262	69.95	88	84.95	648
38.00	482	56.95	2435	73.00	834	85.95	1167
38.95	3584	57.95	90	74.05	5393	86.95	458
40.95	76	60.95	585	74.95	7493	90.95	1026
42.95	169	61.95	656	77.05	39936	91.90	392
44.85	161	63.00	1825	78.00	2740	92.90	7380
48.75	77	64.00	237	79.00	4118	93.90	533
49.95	12006	65.00	607	79.95	2905	96.00	215
50.95	37375	65.95	68	80.95	3896	98.00	5385
51.95	1876	67.05	103	81.90	906	98.95	3317
54.95	431	68.95	53011	82.90	662	99.90	182

Average of 9.849 to 9.863 min.: N0037.D
TD102008A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
100.10	198	117.00	13066	127.00	35699	137.00	702
100.95	1649	117.90	748	128.10	2510	138.95	77
102.85	560	118.90	70	129.00	18097	140.85	2412
103.95	1339	119.80	70	129.95	1545	142.00	679
104.95	1233	120.10	73	130.80	119	142.90	539
107.00	11503	120.80	70	131.05	201	146.00	369
108.00	1725	121.10	75	131.90	75	147.00	1474
110.00	21174	121.95	950	133.00	73	147.95	2846
111.00	2960	122.95	1242	134.00	588	148.95	532
111.90	437	123.95	686	134.95	1401	150.95	303
115.20	67	125.00	455	136.00	615	151.95	79

Average of 9.849 to 9.863 min.: N0037.D
TD102008A5
M .fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.95	789	164.95	897	176.05	459	186.90	2605
153.90	564	166.95	4257	176.90	741	187.95	291
154.95	1293	168.00	1749	178.95	3200	188.95	725
155.95	1665	169.00	329	179.95	1830	191.00	418
156.95	413	169.95	98	181.00	947	191.90	1079
157.90	440	170.95	104	181.95	70	192.95	1215
158.95	222	171.95	381	182.85	72	193.90	143
159.85	382	172.65	147	183.85	84	196.00	1841
160.05	355	173.00	271	184.15	259	197.90	72405
160.95	1038	174.00	903	185.05	1057	198.90	4887
161.90	255	175.00	1409	186.05	9413	199.95	425

Average of 9.849 to 9.863 min.: N0037.D
TD102008A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.00	71	214.90	150	230.90	347	246.85	351
201.65	228	216.90	4474	233.80	105	249.00	226
202.95	426	217.90	503	234.95	244	253.05	81
203.95	2606	221.00	2722	235.80	89	254.95	33472
205.00	4250	223.00	1271	236.90	334	255.95	4830
206.00	15465	224.00	8321	239.00	77	256.85	451
206.95	2052	225.00	2179	239.95	69	257.90	1927
207.95	661	226.90	3917	241.90	398	258.90	196
208.85	278	227.85	281	243.95	6597	264.90	879
210.05	326	228.10	210	245.00	616	265.85	72
210.90	678	228.95	899	245.90	1337	272.95	1106

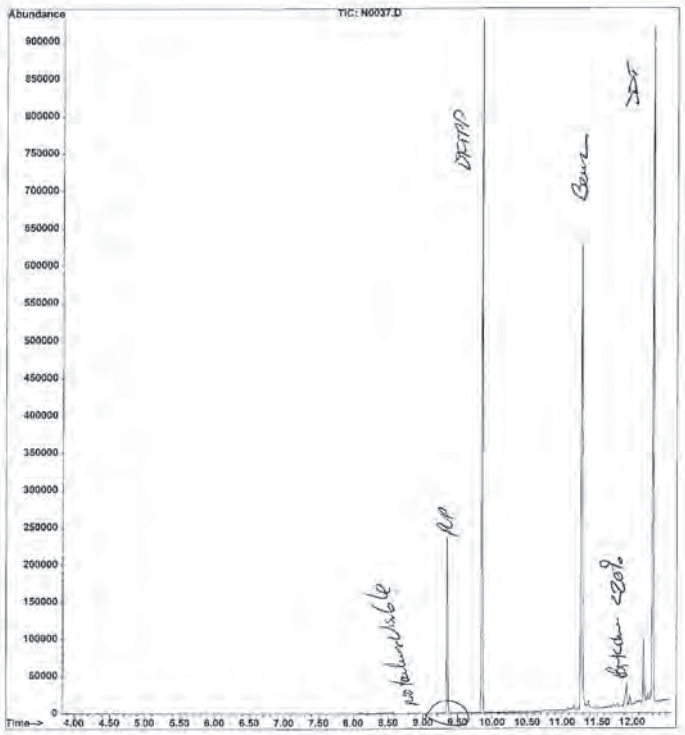
Average of 9.849 to 9.863 min.: N0037.D
TD102008A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.05	3424	313.85	184	340.90	88	389.85	69
274.95	17391	314.90	435	345.85	338	401.85	249
275.95	2104	315.90	285	351.95	511	402.85	397
276.95	1329	320.80	77	352.85	269	403.95	151
277.95	115	322.95	1574	353.05	97	420.95	344
282.95	82	323.90	208	353.90	445	421.95	311
284.95	86	326.85	189	364.85	1933	422.95	3301
292.85	338	327.90	71	370.95	73	423.90	608
295.90	4166	332.80	74	371.95	891	441.00	9723
296.85	522	334.00	939	372.90	161	442.00	58459
302.85	411	334.80	69	382.90	164	443.00	10885

Average of 9.849 to 9.863 min.: N0037.D
TD102008A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.95	957						

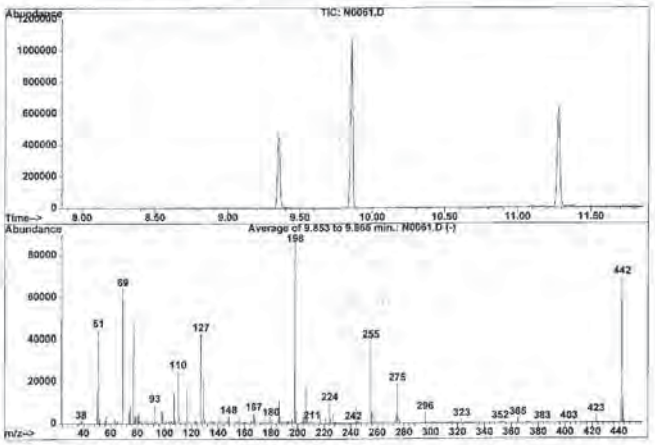
File : C:\HPCHEM\1\DATA\N0037.D
Operator : MEG
Acquired : 20 Oct 2008 8:08 using AcqMethod DFTPPIUL
Instrument : #5MS26
Sample Name: TD102008A5
Misc Info : TUNE,DFTPP,
Vial Number: 1



DFTPP

Data File : C:\HPCHEM\1\DATA\N0061.D
Acq On : 21 Oct 2008 10:38
Sample : TD102108A5
Misc : TUNE,DFTPP,
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Vial: 1
Operator: MEG
Inst : #5MS26
Multiplr: 1.00



Spectrum Information: Average of 9.853 to 9.866 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.9	44464	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	74.8	64093	PASS
70	69	0.00	2	0.1	87	PASS
127	198	40	60	49.6	42533	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	85733	PASS
199	198	5	9	6.9	5884	PASS
275	198	10	30	21.9	18803	PASS
365	198	1	100	2.6	2259	PASS
441	443	0.01	100	80.8	10715	PASS
442	198	40	100	80.5	69027	PASS
443	442	17	23	19.2	13256	PASS

N0061.D NO14OL42.M Wed Oct 22 07:18:41 2008

Mark standards 10/ 1.8

Average of 9.853 to 9.866 min.: N0061.D
TD102108A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.85	307	56.95	3061	74.05	6090	86.95	633
38.10	1026	57.85	72	74.95	9045	88.00	101
38.95	4253	59.85	76	77.05	47699	90.95	1244
39.85	128	61.00	642	78.05	3057	91.90	625
43.75	93	62.05	559	78.95	4725	92.90	8881
50.05	15423	63.00	2013	80.00	3611	93.95	514
50.95	44464	63.95	218	81.00	4417	94.80	83
51.95	2235	65.00	851	81.85	1144	95.95	210
52.95	92	66.85	104	82.95	770	97.95	6128
54.95	229	68.95	64093	84.95	827	98.90	4194
56.00	1575	69.85	87	85.90	1395	101.00	1827

Average of 9.853 to 9.866 min.: N0061.D
TD102108A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
101.80	97	117.95	1139	132.00	88	144.85	102
103.00	738	120.80	69	133.00	93	145.95	516
103.95	1357	122.00	1209	133.95	538	146.95	1530
104.95	1454	123.00	1667	134.95	1797	147.95	3370
107.00	14192	124.00	789	135.90	721	148.90	490
108.00	2104	124.95	737	136.95	802	151.00	346
110.00	24877	127.00	42533	137.80	160	151.75	74
110.95	3856	128.05	2287	139.95	181	152.90	629
111.95	513	129.00	21551	140.90	2963	153.25	79
112.90	94	130.00	1847	141.95	865	153.95	707
117.00	16412	130.95	413	142.85	560	154.95	1235

Average of 9.853 to 9.866 min.: N0061.D
TD102108A5
M fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
156.00	1940	167.95	2259	176.35	124	188.05	259
157.00	379	168.85	415	176.90	873	188.85	802
157.95	551	169.95	93	178.95	3659	189.85	139
158.90	375	170.25	72	179.95	2427	190.90	373
159.95	861	170.95	149	180.95	1300	191.90	1143
160.95	1078	171.90	294	182.05	94	192.90	1066
161.85	149	172.90	562	183.95	238	193.90	199
162.05	179	173.85	356	185.05	1793	195.95	2010
164.90	1037	174.05	662	186.05	11127	197.90	85733
166.00	900	175.05	1838	186.95	3265	198.90	5884
166.95	4827	176.05	176	187.90	128	199.95	322

Average of 9.853 to 9.866 min.: N0061.D
TD102108A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.35	435	216.90	5324	230.95	384	245.90	1669
203.00	724	217.90	642	233.95	404	246.85	150
204.00	2925	221.00	3146	234.95	363	248.90	215
205.00	4848	221.70	245	235.80	68	254.95	39173
206.00	17812	223.00	258	236.90	263	255.90	5474
207.00	2714	224.00	9750	238.90	101	256.80	254
207.95	825	224.95	2422	239.75	87	257.05	183
208.90	239	226.90	4809	240.85	215	257.85	2554
209.90	259	227.95	616	241.90	497	258.90	352
210.85	889	228.95	927	243.95	7705	260.75	75
214.95	305	229.90	82	244.95	1025	264.90	1030

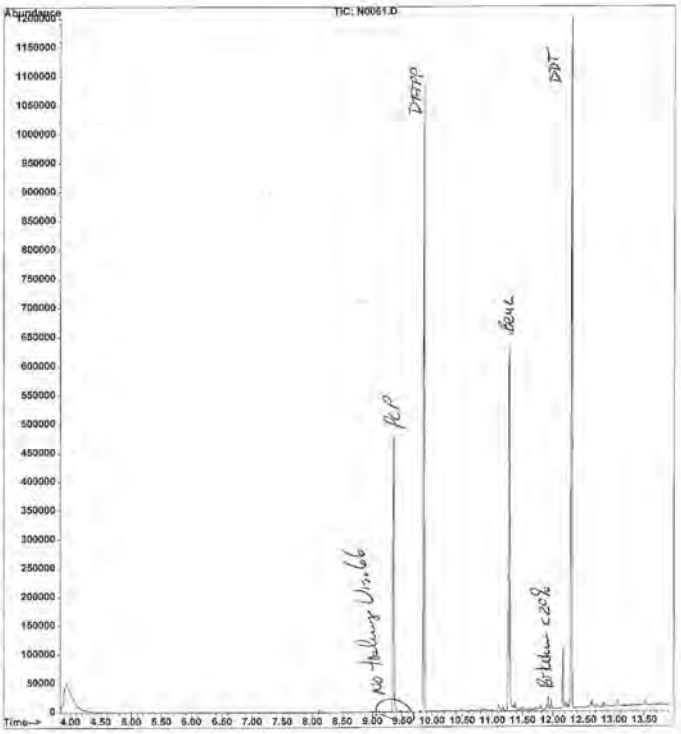
Average of 9.853 to 9.866 min.: N0061.D
TD102108A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.85	104	295.90	5063	340.85	168	382.90	259
272.95	1290	296.90	648	345.85	471	389.90	208
74.00	3679	302.95	615	351.90	524	401.80	323
274.95	18803	314.05	331	352.75	89	402.80	105
275.95	2606	314.95	563	352.90	326	402.95	356
276.90	1476	315.95	288	353.95	646	403.90	68
277.90	261	323.00	1779	364.85	2259	420.90	342
282.95	115	323.90	311	365.80	258	421.95	443
283.95	124	326.85	377	370.85	72	422.95	3757
284.90	168	334.00	1075	371.95	945	423.85	728
292.85	324	334.90	225	372.90	206	441.05	10715

Average of 9.853 to 9.866 min.: N0061.D
TD102108A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.00	69027						
443.00	13256						
443.95	1194						

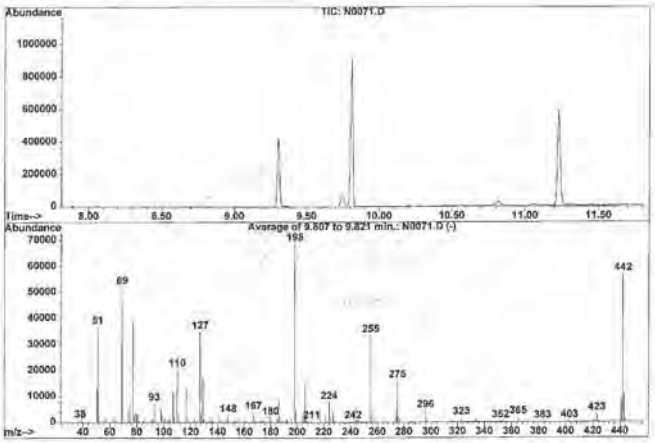
File : C:\HPCHEM\1\DATA\N0061.D
Operator : MEG
Acquired : 21 Oct 2008 10:38 using AcqMethod DFTPP1UL
Instrument : #5MS26
Sample Name: TD102108A5
Misc Info : TUNE,DFTPP,
Vial Number: 1



DFTPP

Data File : C:\HPCHEM\1\DATA\N0071.D
Acq On : 23 Oct 2008 9:30
Sample : TD102308A5
Misc : TUNE,DFTPP,
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\NO14FULL.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Vial: 1
Operator: MEG
Inst : #5MS26
Multiplr: 1.00



Spectrum Information: Average of 9.807 to 9.821 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.1	36767	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	75.3	52168	PASS
70	69	0.00	2	0.3	175	PASS
127	198	40	60	50.3	34822	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	69277	PASS
199	198	5	9	6.8	4745	PASS
275	198	10	30	23.1	15999	PASS
365	198	1	100	2.7	1887	PASS
441	443	0.01	100	85.4	9492	PASS
442	198	40	100	82.1	56872	PASS
443	442	17	23	19.6	11121	PASS

N0071.D NO14FULL.M Fri Oct 24 07:09:12 2008

10/24/

Average of 9.807 to 9.821 min.: N0071.D
TD102308A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	318	56.95	1586	74.95	7058	87.80	104
37.95	765	60.95	466	77.05	38551	91.00	954
38.95	3643	61.95	525	78.05	2576	92.05	1173
39.90	175	62.95	1429	78.95	3866	92.95	7302
43.85	146	63.95	93	80.00	3046	93.80	156
50.05	12781	64.15	126	81.00	3494	93.95	290
50.95	36767	64.95	636	81.80	642	97.95	5111
51.90	1806	68.95	52168	83.90	76	98.95	3097
52.95	67	69.95	175	84.95	641	99.90	243
54.85	313	70.85	68	85.90	1409	100.90	1698
55.95	1105	74.00	5013	87.00	476	103.00	545

Average of 9.807 to 9.821 min.: N0071.D
TD102308A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
104.00	1288	117.90	787	131.00	215	142.85	453
104.70	80	118.10	130	131.90	80	144.95	77
104.95	878	119.95	150	133.00	77	145.85	422
107.00	11585	122.00	1038	133.95	934	146.95	1295
107.95	1669	123.00	1266	134.95	1183	147.95	2861
110.00	20569	123.90	388	135.95	678	148.75	316
110.95	3299	124.95	515	136.85	394	149.05	221
111.90	355	127.00	34822	137.05	264	150.85	133
112.90	77	128.05	3207	137.70	182	151.15	168
116.00	158	129.00	17431	140.95	2554	151.85	76
117.00	13302	129.90	1494	142.00	735	152.90	722

Average of 9.807 to 9.821 min.: N0071.D
TD102308A5
M .fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
153.85	184	166.05	230	175.85	330	187.95	299
154.00	305	166.95	4046	176.15	84	188.90	810
155.00	1042	168.00	1560	177.00	601	189.90	67
155.95	1536	168.90	312	178.95	3235	190.95	245
157.05	228	169.95	126	179.95	1908	191.95	904
157.95	273	171.05	177	180.95	908	192.90	965
158.90	350	171.85	122	182.05	102	193.90	78
159.90	724	172.15	122	184.05	285	195.95	1660
160.95	1065	173.00	509	185.10	1502	197.90	69277
162.05	184	174.00	751	186.00	8820	198.90	4745
164.95	1028	175.05	1185	186.95	2472	199.80	243

Average of 9.807 to 9.821 min.: N0071.D
TD102308A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.45	229	214.90	101	230.00	82	243.05	273
203.00	588	216.90	4921	230.95	313	243.95	6171
204.00	2499	217.90	604	233.95	329	245.05	908
205.00	4090	221.00	2583	234.80	103	245.90	1268
206.00	15335	221.70	458	234.95	200	246.75	109
206.95	1922	223.00	487	236.90	261	248.85	195
207.90	642	224.00	7844	238.90	92	254.95	33411
208.95	182	225.00	1972	239.85	67	255.95	4608
209.95	294	226.90	3810	240.75	72	257.00	417
210.70	169	227.90	512	241.05	126	257.95	1850
211.00	431	228.95	688	241.90	400	258.80	283

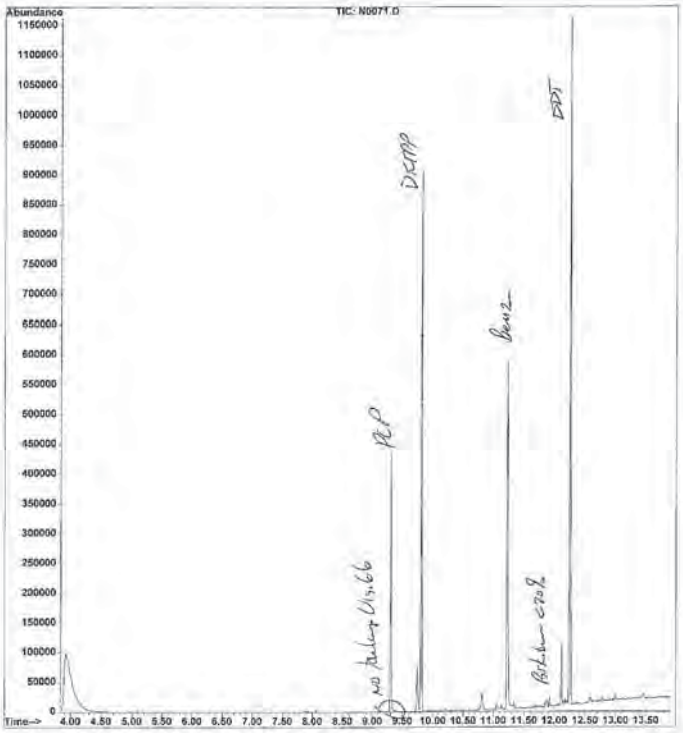
Average of 9.807 to 9.821 min.: N0071.D
TD102308A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
264.90	874	295.90	4372	327.80	90	372.85	93
265.75	85	296.90	666	333.90	989	382.90	213
272.95	1077	302.95	453	334.85	182	401.90	352
274.00	2930	313.90	167	340.90	156	402.85	415
274.95	15999	314.90	499	345.90	234	420.90	432
275.95	2157	315.90	266	351.95	360	421.90	172
276.90	1251	320.90	82	352.90	315	422.95	3207
277.95	180	322.95	1659	353.90	475	423.90	627
282.85	83	323.95	301	364.90	1887	441.05	9492
284.90	304	326.80	101	365.80	312	442.00	56872
292.85	209	327.00	80	371.95	754	443.00	11121

Average of 9.807 to 9.821 min.: N0071.D
TD102308A5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.95	1004						

File : C:\HPCHEM\1\DATA\N0071.D
Operator : MEG
Acquired : 23 Oct 2008 9:30 using AcqMethod DFTPP1UL
Instrument : #5MS26
Sample Name: TD102308A5
Misc Info : TUNE,DFTPP,
Vial Number: 1



Preparation Blanks

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Marisat Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8270	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008	RunNo: 18271						
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C (SW3550B)		Analysis Date: 10/20/2008	SeqNo: 259135						
Instrument: N5ms_26	ColumnID: DB-5MS	ZB-5, 0.5 dil									
Analyte	QC Sample Result	POL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	330									
2,4,5-Trichlorophenol	ND	1700									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	330									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1700									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1700									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									
3-Nitroaniline	ND	1700									
4,6-Dinitro-2-methylphenol	ND	1700									
4-Bromophenyl phenyl ether	ND	330									
4-Chloro-3-methylphenol	ND	330									
4-Chloroaniline	ND	330									
4-Chlorophenyl phenyl ether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1700									
4-Nitrophenol	ND	1700									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Acetophenone	ND	330									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
24-Oct-08
H Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8270	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008	RunNo: 15271
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C (SW3550B)		Analysis Date: 10/20/2008	SeqNo: 399136
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	330									
Atrazine	ND	330									
Benzaldehyde	ND	330									
Benzo[a]anthracene	ND	330									
Benzo[a]pyrene	ND	330									
Benzo[b]fluoranthene	ND	330									
Benzo[g,h,i]perylene	ND	330									
Benzo[k]fluoranthene	ND	330									
bis(2-Chloroethoxy)methane	ND	330									
bis(2-chloroethyl)ether	ND	330									
bis(2-chloroisopropyl)ether	ND	330									
bis(2-Ethylhexyl)phthalate	127	330									
Butyl benzyl phthalate	ND	330									
Caprolactam	ND	330									
Carbazole	ND	330									
Chrysene	ND	330									
Di-n-butyl phthalate	ND	330									
Di-n-octyl phthalate	ND	330									
Dibenz[a,h]anthracene	ND	330									
Dibenzofuran	ND	330									
Diethyl phthalate	ND	330									
Dimethyl phthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	330									
Hexachlorocyclopentadiene	ND	330									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

816

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8270	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/15/2008	RunNo: 15271
Client ID: ZZZZZ	Batch ID: 8270	Method: SW8270C (SW3550B)		Analysis Date: 10/20/2008	SeqNo: 399136
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	330									
Indeno[1,2,3-cd]pyrene	ND	330									
Isophorone	ND	330									
N-Nitroso-di-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1700									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 2,4,6-Tribromophenol	4410	0	5000	0	88	20	143				
Surr: 2-Fluorobiphenyl	2750	0	3330	0	83	46	130				
Surr: 2-Fluorophenol	3860	0	5000	0	77	22	130				
Surr: Nitrobenzene-d5	2660	0	3330	0	80	39	130				
Surr: Phenol-d5	3890	0	5000	0	78	33	130				
Surr: Terphenyl-d14	3530	0	3330	0	106	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

817

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

Form 1 TIC

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-8270

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: 15LS Case No.: OBG-MS SAS No.: SDG No.: 0810083

Matrix: (soil/water) SOIL Lab Sample ID: MB-8270

Sample wt/vol: 30 (g/ml) g Lab File ID: N0044.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ml)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	aldol	6.87	78000	JBA
2.	unknown	14.80	800	J

FORM I TIC 14 SW8270C

818

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0044.D
Acq On : 20 Oct 2008 12:16
Sample : MB-8270
Misc : MBLK,8270S,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008

Vial: 8
Operator: MEG
Inst : #5MS26
Multiplr: 1.00

Quant Results File: N0140L42.RES

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards

	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	190048	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	660894	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.19	164	397583	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.02	188	693672	40.00 ug/mL	0.00
58) Chrysene-d12	23.05	240	561341	40.00 ug/mL	0.00
68) Perylene-d12	25.83	264	377831	40.00 ug/mL	0.00

System Monitoring Compounds

2) 2-Fluorophenol	7.25	112	606495	115.70 ug/mL	0.05
Spiked Amount 150.000			Recovery =	77.13%	
3) Phenol-d5	8.64	99	837285	116.72 ug/mL	0.01
Spiked Amount 150.000			Recovery =	77.81%	
14) Nitrobenzene-d5	10.53	82	607652	79.86 ug/mL	0.00
Spiked Amount 100.000			Recovery =	79.86%	
30) 2-Fluorobiphenyl	13.90	172	1019602	82.60 ug/mL	0.00
Spiked Amount 100.000			Recovery =	82.60%	
46) 2,4,6-Tribromophenol	16.69	330	365503	132.40 ug/mL	0.00
Spiked Amount 150.000			Recovery =	88.27%	
60) Terphenyl-d14	21.05	244	1066247	105.84 ug/mL	0.02
Spiked Amount 100.000			Recovery =	105.84%	

Target Compounds Qvalue

64) bis(2-Ethylhexyl)phthalate	23.00	149	56256	3.81 ug/mL	94

(#) = qualifier out of range (m) = manual integration
N0044.D N0140L42.M Tue Oct 21 12:56:18 2008

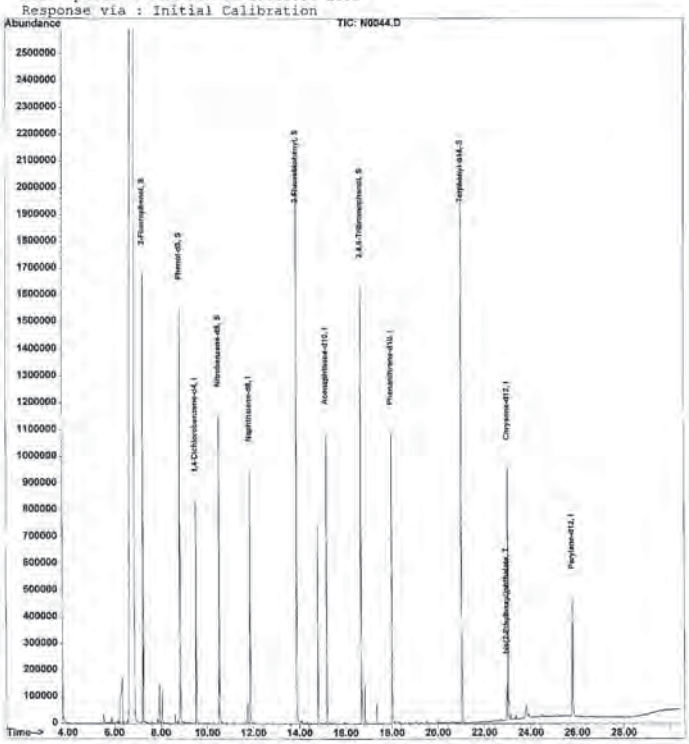
Pg

819

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0044.D Vial: 8
Acq On : 20 Oct 2008 12:16 Operator: MEG
Sample : MB-8270 Inst : #5MS26
Misc : MBLK,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration



N0044.D N014OL42.M Tue Oct 21 12:56:20 2008 Pa

820

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0044.D Vial: 8
Acq On : 20 Oct 2008 12:16 Operator: MEG
Sample : MB-8270 Inst : #5MS26
Misc : MBLK,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008 Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	190048	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	660060	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	397583	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.02	188	693672	40.00 ug/mL	0.00
14) Chrysene-d12	23.05	240	561341	40.00 ug/mL	0.00
15) Perylene-d12	25.83	264	377831	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

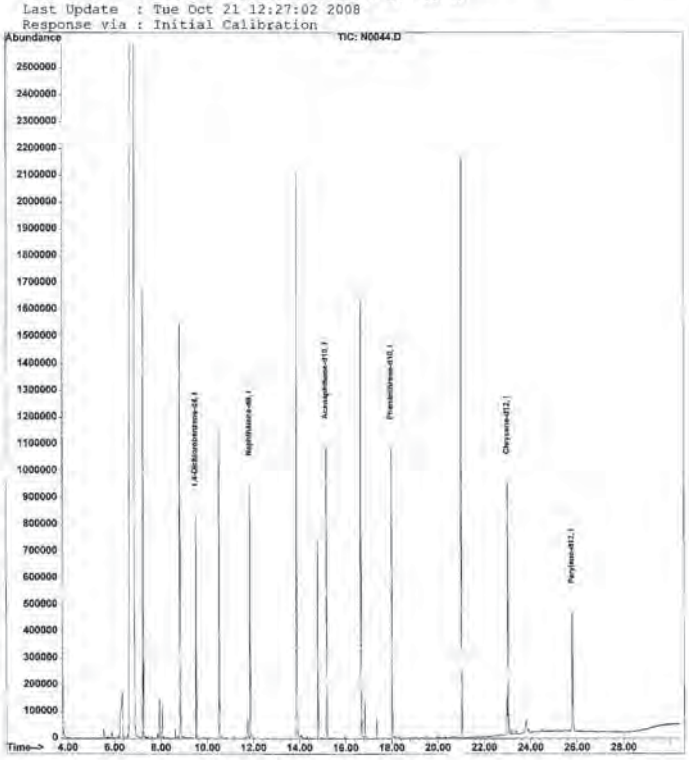
(#) = qualifier out of range (m) = manual integration
N0044.D N014OLM.M Tue Oct 21 12:33:12 2008 Pa

821

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0044.D Vial: 8
Acq On : 20 Oct 2008 12:16 Operator: MEG
Sample : MB-8270 Inst : #5MS26
Misc : MBLK,8270S, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008 Quant Results File: N014OLM.RES

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration



N0044.D N014OLM.M Tue Oct 21 12:33:12 2008 Pa

822

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 20 Oct 2008 12:16
Data File: C:\HPCHEM\1\DATA\N0044.D
Name: MB-8270
Misc: MBLK,8270S,
Method: C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title: BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library Searched: C:\DATABASE\NBS75K.L

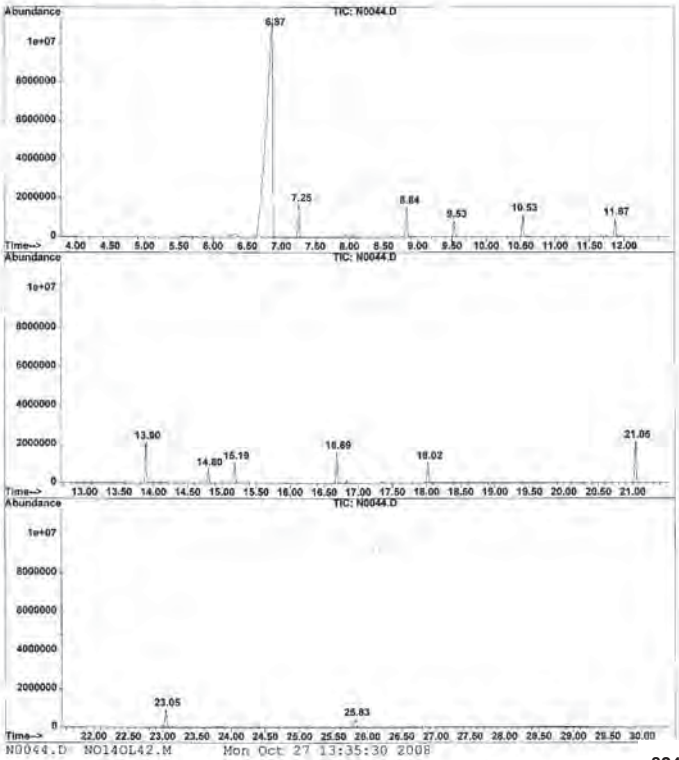
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
2-Pentanone, 4-hydro	6.87	2345.6	ug/mL	72706600	ISTD01	9.53	1239880	40.0
Cyclododecane	14.80	24.0	ug/mL	1000890	ISTD03	15.19	1669580	40.0

N0044.D N014OL42.M Mon Oct 27 13:35:31 2008

823

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\N0044.D
Operator : MEG
Acquired : 20 Oct 2008 12:16 using AcqMethod NO14FULL
Instrument : #5MS26
Sample Name: MB-8270
Misc Info : MBLK,8270S,
Vial Number: 8
Quant File :NO14OL42.RES (RTE Integrator)



N0044.D NO14OL42.M Mon Oct 27 13:35:30 2008

Library Search Compound Report

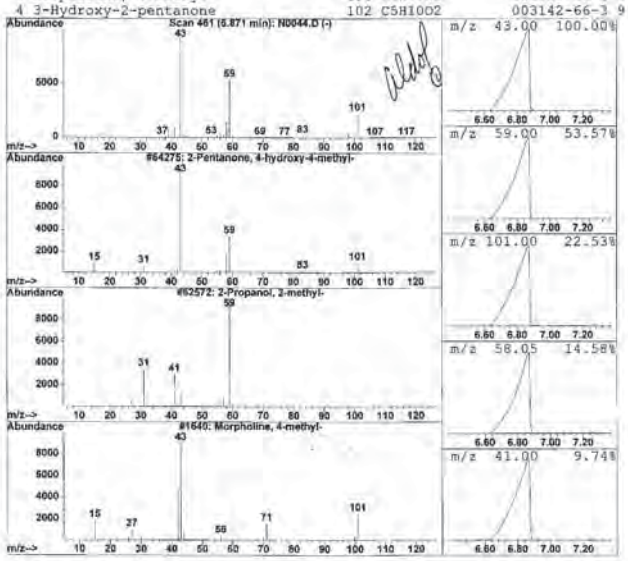
Data File : C:\HPCHEM\1\DATA\N0044.D Vial: 8
Acq On : 20 Oct 2008 12:16 Operator: MEG
Sample : MB-8270 Inst : #5MS26
Misc : MBLK,8270S, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.87	2345.60 ug/mL	72706600	1,4-Dichlorobenzene-d4	9.53

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	2-Propanol, 2-methyl-	74	C4H10O	000075-65-0	17
3	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
4	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9



N0044.D NO14OL42.M Mon Oct 27 13:35:30 2008

Library Search Compound Report

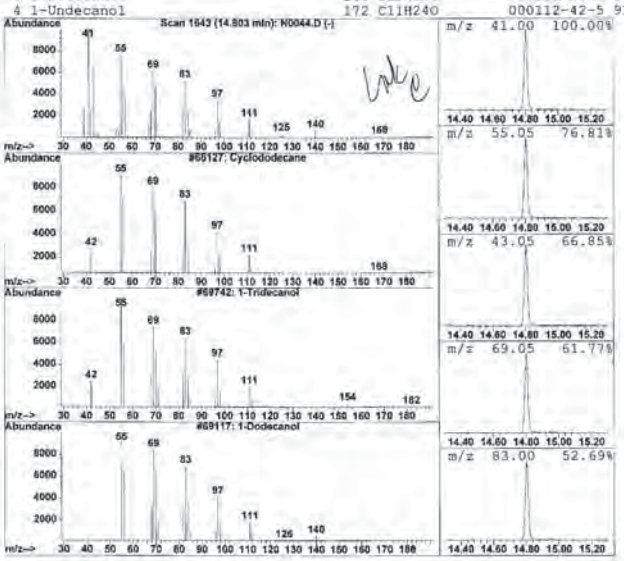
Data File : C:\HPCHEM\1\DATA\N0044.D Vial: 8
Acq On : 20 Oct 2008 12:16 Operator: MEG
Sample : MB-8270 Inst : #5MS26
Misc : MBLK,8270S, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Cyclododecane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.80	23.98 ug/mL	1000890	Acenaphthene-d10	15.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclododecane	168	C12H24	000294-62-2	91
2	1-Tridecanol	200	C13H28O	000112-70-9	91
3	1-Dodecanol	186	C12H26O	000112-53-8	91
4	1-Undecanol	172	C11H24O	000112-42-5	91



N0044.D NO14OL42.M Mon Oct 27 13:35:31 2008

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID: MB-8309	SampType: MBLK	TestCode: 8270S, OLM4	Units: µg/Kg	Prep Date: 10/21/2008	RunNo: 15276
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW846)		Analysis Date: 10/23/2008	SeqNo: 399193
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	330									
2,4,5-Trichlorophenol	ND	1700									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	330									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1700									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1700									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									
3-Nitroaniline	ND	1700									
4,6-Dinitro-2-methylphenol	ND	1700									
4-Bromophenyl phenyl ether	ND	330									
4-Chloro-3-methylphenol	ND	330									
4-Chloroaniline	ND	330									
4-Chlorophenyl phenyl ether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1700									
4-Nitrophenol	ND	1700									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Acetophenone	ND	330									

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
24-Oct-08

E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
/ Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

Page 13 of 21

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8309	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/21/2008	RunNo: 15276
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW3550B)		Analysis Date: 10/23/2008	SeqNo: 399183
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	330									
Atrazine	ND	330									
Benzaldehyde	ND	330									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
bis(2-Chloroethoxy)methane	ND	330									
bis(2-chloroethyl)ether	ND	330									
bis(2-chloroisopropyl)ether	ND	330									
bis(2-Ethylhexyl)phthalate	38.3	330									
Butyl benzyl phthalate	ND	330									
Caprolactam	ND	330									
Carbazole	ND	330									
Chrysene	ND	330									
Di-n-butyl phthalate	ND	330									
Di-n-octyl phthalate	ND	330									
Dibenz(a,h)anthracene	ND	330									
Dibenzofuran	ND	330									
Diethyl phthalate	ND	330									
Dimethyl phthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	330									
Hexachlorocyclopentadiene	ND	330									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limits
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Form 1 TIC
Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MB-8309

Lab Name: Life Science Laboratories, Inc. Contract:
Lab Code: LSLab Case No.: OHM-MS SAS No.: SDG No.: 0810083
Matrix: (soil/water) SOIL Lab Sample ID: MB-8309
Sample wt/vol: 30 (g/ml) g Lab File ID: N0074.D
Level: LOW Date Received:
% Moisture: not dec. Date Analyzed: 10/23/2008
GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00
Extract Volume: 1000 (ul)

Number TICs found: 2 CONCENTRATION UNITS: UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	alcol		6.80	7100	JSA
2.	unknown		18.75	750	J

FORM I TIC 15 SW8270C

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8309	SampType: MBLK	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/21/2008	RunNo: 15276
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW3550B)		Analysis Date: 10/23/2008	SeqNo: 399183
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Isophorone	ND	330									
N-Nitroso-di-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1700									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 2,4,6-Tribromophenol	4620	0	5000	0	92	20	143				
Surr: 2-Fluorobiphenyl	2770	0	3330	0	83	46	130				
Surr: 2-Fluorophenol	3810	0	5000	0	76	22	130				
Surr: Nitrobenzene-d5	2640	0	3330	0	79	39	130				
Surr: Phenol-d5	3750	0	5000	0	75	33	130				
Surr: Terphenyl-d14	3110	0	3330	0	93	35	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limits
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0074.D Vial: 4
Acq On : 23 Oct 2008 11:07 Operator: MEG
Sample : MB-8309 Inst : #5MS26
Misc : MBLK,8270S OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:50 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/JW DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : N014PULA

Internal Standards	R.T.	Qion	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	194967	40.00 ug/mL	0.00
13) Naphthalene-d8	11.81	136	675102	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.13	164	376092	40.00 ug/mL	0.00
47) Phenanthrene-d10	17.97	188	666113	40.00 ug/mL	0.00
58) Chrysene-d12	22.99	240	606045	40.00 ug/mL	-0.01
68) Perylene-d12	25.76	264	638336	40.00 ug/mL	0.00

System Monitoring Compounds						
2) 2-Fluorophenol						
Spiked Amount 150.000	7.20	112	615385	114.43 ug/mL		0.05
3) Phenol-d5			Recovery =	76.29%		
Spiked Amount 150.000	8.79	99	827024	112.38 ug/mL		0.01
14) Nitrobenzene-d5			Recovery =	74.92%		
Spiked Amount 100.000	10.48	82	616322	79.29 ug/mL		0.00
30) 2-Fluorobiphenyl			Recovery =	79.29%		
Spiked Amount 100.000	13.83	172	971782	83.22 ug/mL		0.00
46) 2,4,6-Tribromophenol			Recovery =	83.22%		
Spiked Amount 150.000	16.63	330	362200	138.70 ug/mL		0.00
60) Terphenyl-d14			Recovery =	92.47%		
Spiked Amount 100.000	20.99	244	1013351	93.17 ug/mL		0.00
			Recovery =	93.17%		

Target Compounds					Qvalue
64) bis(2-Ethylhexyl)phthalate	22.95	149	17966	1.15 ug/mL	90

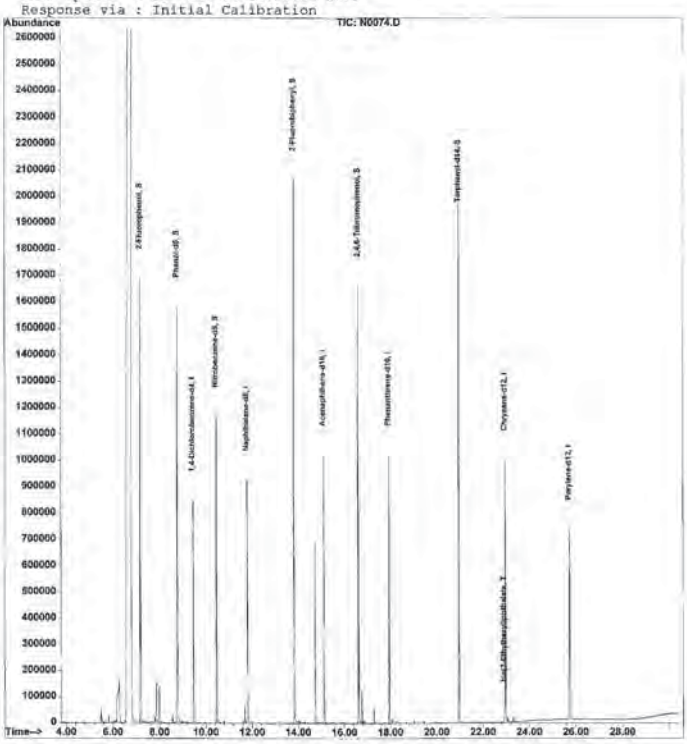
(#) = qualifier out of range (m) = manual integration
N0074.D N014OL42.M Fri Oct 24 08:59:38 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0074.D
Acq On : 23 Oct 2008 11:07
Sample : MB-8309
Misc : MBLK,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:50 2008

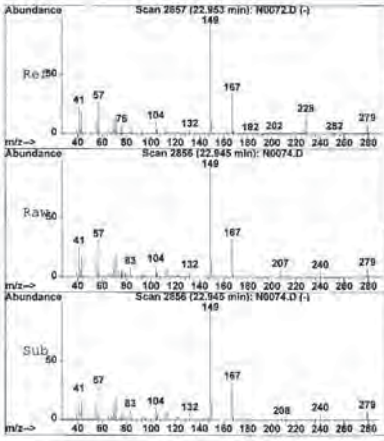
Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



N0074.D N014OL42.M Fri Oct 24 08:59:39 2008

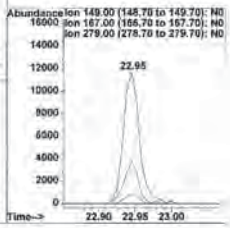
832



#64
bis(2-Ethylhexyl)phthalate
Concen: 1.15 ug/mL
RT: 22.95 min Scan# 2856
Delta R.T. -0.01 min
Lab File: N0074.D
Acq: 23 Oct 2008 11:07

Tgt Ion:149 Resp: 17966

Ion	Ratio	Lower	Upper
149	100		
167	27.8	3.9	63.9
279	6.3	0.0	38.4



N0074.D N014OL42.M Fri Oct 24 08:59:40 2008

833

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0074.D
Acq On : 23 Oct 2008 11:07
Sample : MB-8309
Misc : MBLK,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	194967	40.00 ug/mL	0.00
5) Naphthalene-d8	11.81	136	674254	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.13	164	376092	40.00 ug/mL	0.00
11) Phenanthrene-d10	17.97	188	666113	40.00 ug/mL	0.00
14) Chrysene-d12	22.99	240	606045	40.00 ug/mL	0.00
15) Perylene-d12	25.76	264	638336	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N0074.D N014OLM.M Fri Oct 24 09:08:42 2008

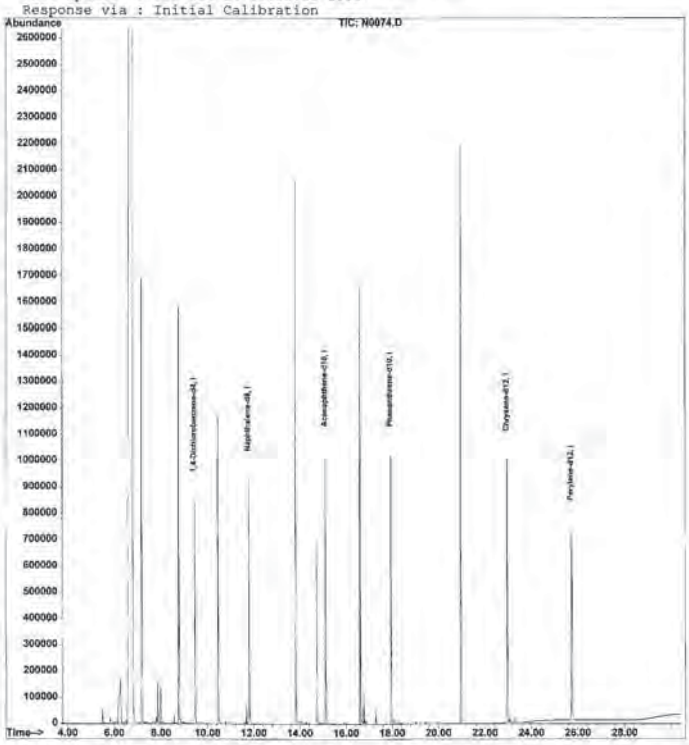
834

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0074.D
Acq On : 23 Oct 2008 11:07
Sample : MB-8309
Misc : MBLK,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



N0074.D N014OLM.M Fri Oct 24 09:08:43 2008

835

Tentatively Identified Compound (LSC) summary

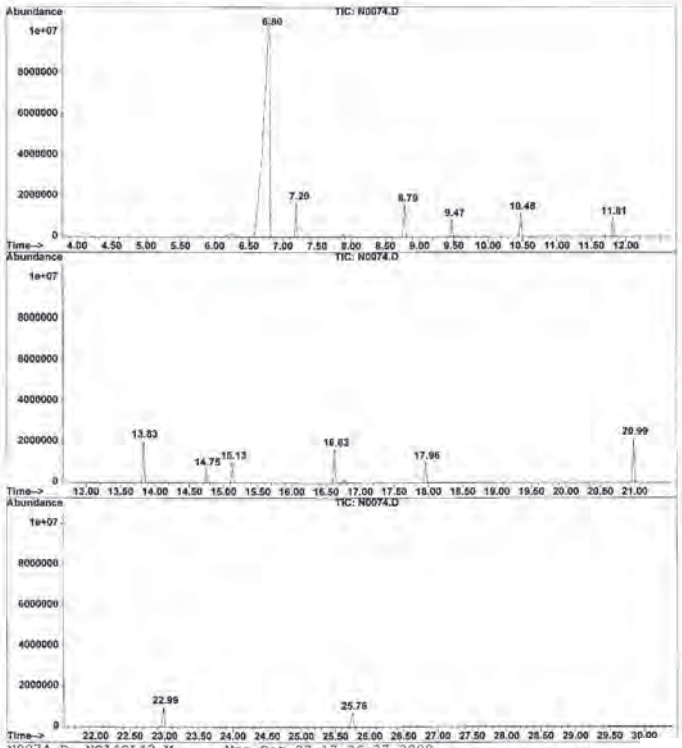
Operator ID: MEG Date Acquired: 23 Oct 2008 11:07
Data File: C:\HPCHEM\1\DATA\N0074.D
Name: MB-8309
Misc: MBLK,8270S_OLM42,
Method: C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title: BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea	ISConc
2-Pentanone, 4-hydro	6.80	2143.6 ug/mL	67852300	ISTD01	9.47	1266150	40.0
1-Dodecanol	14.75	22.5 ug/mL	906818	ISTD03	15.13	1609830	40.0

N0074.D NO14OL42.M Mon Oct 27 13:36:38 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\N0074.D
Operator : MEG
Acquired : 23 Oct 2008 11:07 using AcqMethod NO14FULL
Instrument : #5MS26
Sample Name: MB-8309
Misc Info : MBLK,8270S_OLM42,
Vial Number: 4
Quant File :NO14OL42.RES (RTE Integrator)



N0074.D NO14OL42.M Mon Oct 27 13:36:37 2008

Library Search Compound Report

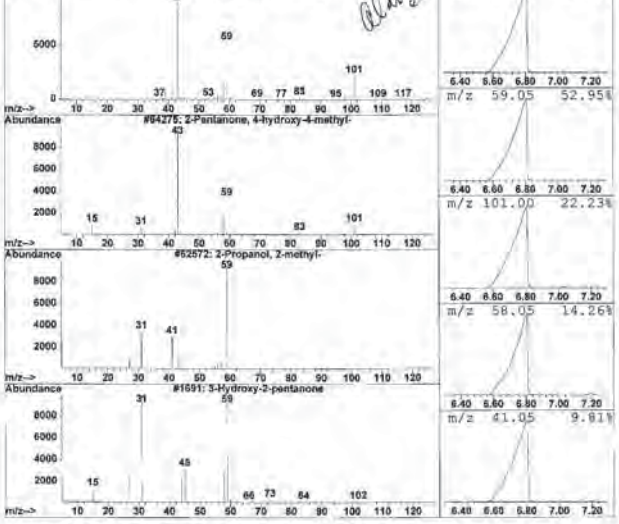
Data File : C:\HPCHEM\1\DATA\N0074.D Vial: 4
Acq On : 23 Oct 2008 11:07 Operator: MEG
Sample : MB-8309 Inst : #5MS26
Misc : MBLK,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.80	2143.58 ug/mL	67852300	1,4-Dichlorobenzene-d4	9.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
2	2-Propanol, 2-methyl-	74	C4H10O	000075-65-0	17
3	3-Hydroxy-2-pentanone	102	C5H10O2	003142-66-3	9
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9



N0074.D NO14OL42.M Mon Oct 27 13:36:38 2008 Pa

Library Search Compound Report

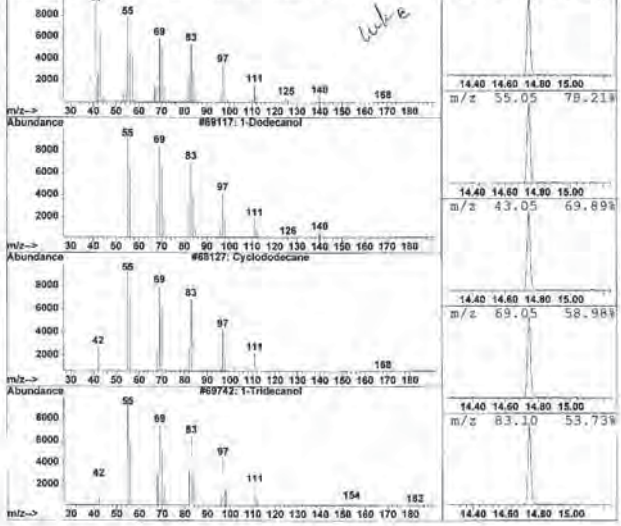
Data File : C:\HPCHEM\1\DATA\N0074.D Vial: 4
Acq On : 23 Oct 2008 11:07 Operator: MEG
Sample : MB-8309 Inst : #5MS26
Misc : MBLK,8270S_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 1-Dodecanol Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.75	22.53 ug/mL	906818	Acenaphthene-d10	15.13

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Dodecanol	186	C12H26O	000112-53-8	91
2	Cyclododecane	168	C12H24	000294-62-2	91
3	1-Tridecanol	200	C13H28O	000112-70-9	91
4	1-Undecanol	172	C11H24O	000112-42-5	91



N0074.D NO14OL42.M Mon Oct 27 13:36:38 2008 Pa

Matrix Spike Blanks

840

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399135
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antthracene	1330	330	1670	0	80	37	130				
Atrazine	1380	330	1670	0	83	30	130				
Benzaldehyde	1260	330	1670	0	76	30	130				
Benzo[a]anthracene	1330	330	1670	0	80	40	130				
Benzo[a]pyrene	1340	330	1670	0	80	44	130				
Benzo[b]fluoranthene	1310	330	1670	0	79	29	154				
Benzo[g,h,i]perylene	1430	330	1670	0	86	10	130				
Benzo[k]fluoranthene	1340	330	1670	0	81	35	143				
bis(2-Chloroethoxy)methane	1220	330	1670	0	73	43	130				
bis(2-chloroethyl)ether	1200	330	1670	0	72	41	130				
bis(2-chloroisopropyl)ether	1270	330	1670	0	76	34	130				
bis(2-Ethylhexyl)phthalate	1530	330	1670	0	92	42	154				
Butyl benzyl phthalate	1470	330	1670	0	88	34	160				
Caprolactam	1580	330	1670	0	95	30	130				
Carbazole	1460	330	1670	0	88	42	130				
Chrysene	1430	330	1670	0	86	43	130				
Di-n-butyl phthalate	1580	330	1670	0	95	50	133				
Di-n-octyl phthalate	1520	330	1670	0	91	48	146				
Dibenz[a,h]anthracene	1430	330	1670	0	86	16	136				
Dibenzofuran	1110	330	1670	0	67	45	130				
Diethyl phthalate	1490	330	1670	0	89	48	130				
Dimethyl phthalate	1440	330	1670	0	86	46	130				
Fluoranthene	1340	330	1670	0	81	45	130				
Fluorene	1320	330	1670	0	79	46	130				
Hexachlorobenzene	1410	330	1670	0	85	50	130				
Hexachlorobutadiene	1260	330	1670	0	76	37	130				
Hexachlorocyclopentadiene	904	330	1670	0	54	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

842

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399135
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1310	330	1670	0	79	22	130				
Indeno[1,2,3-cd]pyrene	1450	330	1670	0	87	10	134				
Isophorone	1260	330	1670	0	75	43	130				
N-Nitroso-di-n-propylamine	1310	330	1670	0	79	35	130				
N-Nitrosodiphenylamine	1370	330	1670	0	82	44	130				
Naphthalene	1220	330	1670	0	73	40	130				
Nitrobenzene	1280	330	1670	0	77	45	130				
Pentachlorophenol	694	1700	1670	0	42	19	130				J
Phenanthrene	1320	330	1670	0	79	45	130				
Phenol	1160	330	1670	0	70	33	130				
Pyrene	1250	330	1670	0	75	18	164				
Surr: 2,4,6-Tribromophenol	4770	0	5000	0	95	20	143				
Surr: 2-Fluorobiphenyl	2600	0	3330	0	78	46	130				
Surr: 2-Fluorophenol	3670	0	5000	0	73	22	130				
Surr: Nitrobenzene-d5	2450	0	3330	0	74	39	130				
Surr: Phenol-d5	3620	0	5000	0	72	33	130				
Surr: Terphenyl-d14	2960	0	3330	0	88	38	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

843

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8270 SampType: MSB TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399135
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1450	330	1670	0	87	30	130				
2,4,5-Trichlorophenol	1110	1700	1670	0	67	34	130				J
2,4,6-Trichlorophenol	1280	330	1670	0	77	33	130				
2,4-Dichlorophenol	1260	330	1670	0	76	39	130				
2,4-Dimethylphenol	993	330	1670	0	60	22	130				
2,4-Dinitrophenol	759	1700	1670	0	46	10	130				J
2,4-Dinitrotoluene	1410	330	1670	0	84	40	130				
2,6-Dinitrotoluene	1400	330	1670	0	84	36	130				
2-Chloronaphthalene	1350	330	1670	0	81	46	130				
2-Chlorophenol	1320	330	1670	0	79	39	130				
2-Methylnaphthalene	1120	330	1670	0	67	43	130				
2-Methylphenol	1080	330	1670	0	65	43	130				
2-Nitroaniline	1140	1700	1670	0	68	42	130				J
2-Nitrophenol	1180	330	1670	0	71	34	130				
3,3'-Dichlorobenzidine	677	660	1670	0	41	10	130				
3-Nitroaniline	686	1700	1670	0	40	11	130				J
4,6-Dinitro-2-methylphenol	962	1700	1670	0	58	13	130				J
4-Bromophenyl phenyl ether	1370	330	1670	0	82	43	130				
4-Chloro-3-methylphenol	1210	330	1670	0	73	38	130				
4-Chloroaniline	287	330	1670	0	17	10	130				J
4-Chlorophenyl phenyl ether	1340	330	1670	0	81	45	130				
4-Methylphenol	1070	330	1670	0	64	42	130				
4-Nitroaniline	1180	1700	1670	0	71	23	130				J
4-Nitrophenol	1510	1700	1670	0	90	10	144				J
Acenaphthene	1330	330	1670	0	80	43	130				
Acenaphthylene	1310	330	1670	0	79	46	130				
Acetophenone	1240	330	1670	0	74	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

841

24-Oct-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0041.D Vial: 5
Acq On : 20 Oct 2008 10:22 Operator: MEG
Sample : MSB-8270 Inst : #5MS26
Misc : MSB ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.52	152	147565	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	524995	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.19	164	298440	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.02	188	542667	40.00 ug/mL	0.00
58) Chrysene-d12	23.05	240	495881	40.00 ug/mL	0.00
68) Perylene-d12	25.83	264	522488	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.23	112	448468	110.18 ug/mL	0.03
Spiked Amount 150.000			Recovery =	73.45%	
3) Phenol-d5	8.83	99	605427	108.70 ug/mL	0.00
Spiked Amount 150.000			Recovery =	72.47%	
14) Nitrobenzene-d5	10.54	82	445038	73.63 ug/mL	0.00
Spiked Amount 100.000			Recovery =	73.63%	
30) 2-Fluorobiphenyl	13.89	172	723751	78.11 ug/mL	0.00
Spiked Amount 100.000			Recovery =	78.11%	
46) 2,4,6-Tribromophenol	16.69	330	296784	143.22 ug/mL	0.00
Spiked Amount 150.000			Recovery =	95.48%	
60) Terphenyl-d14	21.04	244	789458	88.71 ug/mL	0.00
Spiked Amount 100.000			Recovery =	88.71%	
Target Compounds					Qvalue
4) Phenol	8.86	94	229755	34.84 ug/mL	79
5) bis(2-Chloroethyl)ether	9.03	93	188210	36.11 ug/mL	95
6) 2-Chlorophenol	9.15	128	180699	39.61 ug/mL	99
7) 2-Methylphenol	9.94	108	156331	32.40 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	9.99	45	220523	38.19 ug/mL	100
9) bis(2-Chloroisopropyl)ethe	9.99	45	220523	38.19 ug/mL	100
10) 4-Methylphenol	10.21	108	165227	32.21 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.23	70	145765	39.31 ug/mL	94
12) Hexachloroethane	10.45	117	90024	39.28 ug/mL	93
15) Nitrobenzene	10.57	77	243450	38.46 ug/mL	100
16) Isophorone	11.00	82	431481	37.75 ug/mL	99
17) 2-Nitrophenol	11.15	139	108428	35.54 ug/mL	97
18) 2,4-Dimethylphenol	11.19	107	150174	29.79 ug/mL	97
19) bis(2-Chloroethoxy)methane	11.38	93	239577	36.64 ug/mL	99
20) 2,4-Dichlorophenol	11.59	162	170863	37.87 ug/mL	98
21) Naphthalene	11.91	128	464349	36.52 ug/mL#	100
22) 4-Chloroaniline	11.99	127	58125	8.60 ug/mL	98
23) Hexachlorobutadiene	12.12	225	105043	37.82 ug/mL	99
24) 4-Chloro-3-methylphenol	12.89	107	164964	36.26 ug/mL	96

(#) = qualifier out of range (m) = manual integration
N0041.D N014OL42.M Fri Oct 24 09:40:15 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0041.D Vial: 5
Acq On : 20 Oct 2008 10:22 Operator: MEG
Sample : MSB-8270 Inst : #5MS26
Misc : MSB ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.21	142	340631	33.47 ug/mL	100
27) Hexachlorocyclopentadiene	13.49	237	71257	27.11 ug/mL	99
28) 2,4,6-Trichlorophenol	13.73	196	108509	38.26 ug/mL	97
29) 2,4,5-Trichlorophenol	13.80	196	115430	33.32 ug/mL	100
31) 2-Chloronaphthalene	14.13	162	345161	40.48 ug/mL	100
32) 2-Nitroaniline	14.31	65	119971	34.24 ug/mL	98
33) Dimethyl phthalate	14.65	163	466600	43.18 ug/mL	99
34) 2,6-Dinitrotoluene	14.77	165	114599	42.00 ug/mL	94
35) Acenaphthylene	14.92	152	531621	39.32 ug/mL	99
36) 3-Nitroaniline	15.09	138	61664	19.98 ug/mL	97
37) Acenaphthene	15.25	153	321485	39.89 ug/mL	97
38) 2,4-Dinitrophenol	15.29	184	26727	22.78 ug/mL#	1
39) 4-Nitrophenol	15.39	109	64766	45.24 ug/mL	91
40) 2,4-Dinitrotoluene	15.53	165	145369	42.17 ug/mL	93
41) Dibenzofuran	15.58	168	484073	33.34 ug/mL	96
42) Diethyl phthalate	15.98	149	474361	44.75 ug/mL	98
43) 4-Chlorophenyl phenyl ethe	16.21	204	182789	40.31 ug/mL	93
44) Fluorene	16.23	166	390762	39.55 ug/mL	100
45) 4-Nitroaniline	16.26	138	109724	35.53 ug/mL	92
48) 4,6-Dinitro-2-methylphenol	16.31	198	62703	28.86 ug/mL	94
49) n-Nitrosodiphenylamine	16.44	169	287745	41.22 ug/mL	96
50) 4-Bromophenyl phenyl ether	17.15	248	118566	41.02 ug/mL	94
51) Hexachlorobenzene	17.27	284	163238	42.38 ug/mL	96
52) Pentachlorophenol	17.64	266	40521	20.83 ug/mL	99
53) Phenanthrene	18.07	178	535900	39.47 ug/mL	100
54) Anthracene	18.17	178	553634	39.95 ug/mL	99
55) Carbazole	18.46	167	554778	43.84 ug/mL	99
56) Di-n-butyl phthalate	19.08	149	853504	47.49 ug/mL	99
57) Fluoranthene	20.33	202	547829	40.28 ug/mL	99
59) Pyrene	20.77	202	565922	37.37 ug/mL	99
61) Butyl benzyl phthalate	21.94	149	401018	44.19 ug/mL	99
62) 3,3'-Dichlorobenzidine	22.96	252	105927	20.30 ug/mL	99
63) Benzo[a]anthracene	23.03	228	534265	39.99 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.00	149	586722	45.85 ug/mL	97
65) Chrysene	23.10	228	533204	42.93 ug/mL	99
66) Di-n-octyl phthalate	24.17	149	1030041	45.70 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	28.55	276	611282	43.44 ug/mL	99
69) Benzo[b]fluoranthene	25.02	252	558520	39.34 ug/mL	100
70) Benzo[k]fluoranthene	25.07	252	543072	40.28 ug/mL	99
71) Benzo[a]pyrene	25.71	252	517653	40.13 ug/mL	99
72) Dibenz[a,h]anthracene	28.58	278	521263	42.93 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N0041.D N014OL42.M Fri Oct 24 09:40:16 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0041.D Vial: 5
Acq On : 20 Oct 2008 10:22 Operator: MEG
Sample : MSB-8270 Inst : #5MS26
Misc : MSB ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

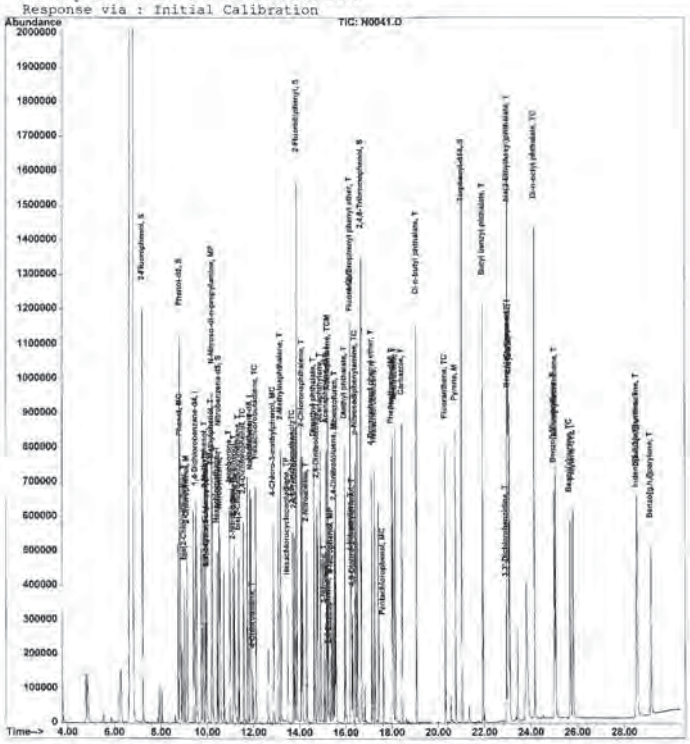
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	29.17	276	512695	43.04 ug/mL	100

(#) = qualifier out of range (m) = manual integration
N0041.D N014OL42.M Fri Oct 24 09:40:16 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0041.D Vial: 5
Acq On : 20 Oct 2008 10:22 Operator: MEG
Sample : MSB-8270 Inst : #5MS26
Misc : MSB ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:06 2008
Response via : Initial Calibration



N0041.D N014OL42.M Fri Oct 24 09:40:18 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0041.D
Acq On : 20 Oct 2008 10:22
Sample : MSB-8270
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.52	152	147565	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	524995	40.00 ug/mL	0.01
7) Acenaphthene-d10	15.19	164	298440	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.02	188	542667	40.00 ug/mL	0.01
14) Chrysene-d12	23.05	240	495881	40.00 ug/mL	0.01
15) Perylene-d12	25.83	264	522488	40.00 ug/mL	0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.75	77	158630	37.86 ug/mL	97
4) Acetophenone	10.24	105	231181	37.19 ug/mL	100
6) Caprolactam	12.65	55	74728	47.37 ug/mL	96
8) 1,1'-Biphenyl	14.09	154	405675	43.60 ug/mL	99
12) Atrazine	17.45	200	103279	41.69 ug/mL	98

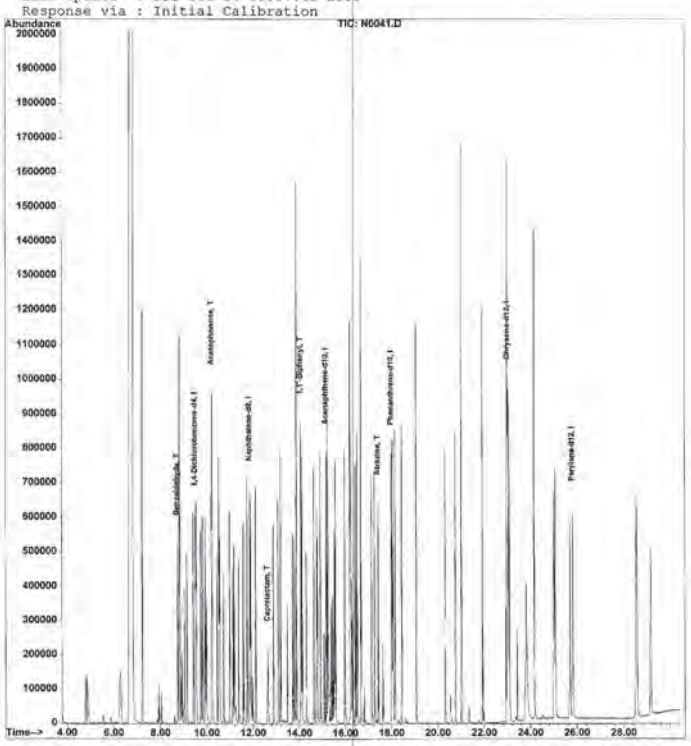
(#) = qualifier out of range (m) = manual integration
N0041.D N014OLM.M Fri Oct 24 09:40:07 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0041.D
Acq On : 20 Oct 2008 10:22
Sample : MSB-8270
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:37:49 2008
Response via : Initial Calibration



N0041.D N014OLM.M Fri Oct 24 09:40:07 2008

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT
Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8309	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/21/2008	RunNo: 15276
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW3550B)		Analysis Date: 10/23/2008	SeqNo: 399183
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1350	330	1670	0	81	30	130				
2,4,5-Trichlorophenol	1020	1700	1670	0	61	34	130				J
2,4,6-Trichlorophenol	1170	330	1670	0	70	33	130				
2,4-Dichlorophenol	1210	330	1670	0	72	39	130				
2,4-Dimethylphenol	1030	330	1670	0	62	22	130				
2,4-Dinitrophenol	912	1700	1670	0	55	10	130				
2,4-Dinitrotoluene	1330	330	1670	0	80	40	150				J
2,6-Dinitrotoluene	1330	330	1670	0	80	36	150				
2-Chloronaphthalene	1280	330	1670	0	77	48	130				
2-Chlorophenol	1230	330	1670	0	74	39	130				
2-Methylnaphthalene	1040	330	1670	0	63	43	130				
2-Methylphenol	991	330	1670	0	59	43	130				
2-Nitroaniline	1160	1700	1670	0	70	42	130				J
2-Nitrophenol	1170	330	1670	0	70	34	130				
3,3'-Dichlorobenzidine	931	840	1670	0	56	10	130				
3-Nitroaniline	847	1700	1670	0	51	11	130				J
4,6-Dinitro-2-methylphenol	1140	1700	1670	0	68	13	130				J
4-Bromophenyl phenyl ether	1290	330	1670	0	77	43	130				
4-Chloro-3-methylphenol	1150	330	1670	0	69	38	130				
4-Chloroaniline	531	330	1670	0	32	10	130				
4-Chlorophenyl phenyl ether	1240	330	1670	0	74	45	130				
4-Methylphenol	1000	330	1670	0	60	42	130				
4-Nitroaniline	1160	1700	1670	0	69	23	130				J
4-Nitrophenol	1660	1700	1670	0	93	10	144				J
Acenaphthene	1230	330	1670	0	74	45	130				
Acenaphthylene	1250	330	1670	0	75	46	130				
Acetophenone	1140	330	1670	0	69	30	130				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT
Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8308	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg	Prep Date: 10/21/2008	RunNo: 15276
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW3550B)		Analysis Date: 10/23/2008	SeqNo: 399185
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1240	330	1670	0	74	37	130				
Atrazine	1250	330	1670	0	75	30	130				
Benzaldehyde	1210	330	1670	0	73	30	130				
Benzo(a)anthracene	1230	330	1670	0	74	40	130				
Benzo(a)pyrene	1260	330	1670	0	76	44	130				
Benzo(b)fluoranthene	1210	330	1670	0	73	28	154				
Benzo(g,h,i)perylene	1350	330	1670	0	81	10	130				
Benzo(k)fluoranthene	1270	330	1670	0	76	35	143				
bis(2-Chloroethoxy)methane	1140	330	1670	0	68	43	130				
bis(2-chloroethyl)ether	1128	330	1670	0	67	41	130				
bis(2-chloroisopropyl)ether	1270	330	1670	0	76	34	130				
bis(2-Ethylhexyl)phthalate	1440	330	1670	0	86	42	154				
Butyl benzyl phthalate	1360	330	1670	0	82	34	160				
Caprolactam	1620	330	1670	0	97	30	130				
Carbazole	1380	330	1670	0	83	42	130				
Chrysene	1300	330	1670	0	78	43	130				
Di-n-butyl phthalate	1490	330	1670	0	89	50	133				
Di-n-octyl phthalate	1380	330	1670	0	83	48	146				
Dibenz(a,h)anthracene	1350	330	1670	0	81	10	135				
Dibenzofuran	1040	330	1670	0	62	45	150				
Diethyl phthalate	1390	330	1670	0	84	48	150				
Dimethyl phthalate	1340	330	1670	0	81	48	130				
Fluoranthene	1270	330	1670	0	76	45	130				
Fluorene	1230	330	1670	0	74	45	130				
Hexachlorobenzene	1310	330	1670	0	79	50	130				
Hexachlorobutadiene	1180	330	1670	0	71	37	130				
Hexachlorocyclopentadiene	984	330	1670	0	60	10	130				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Prep Date: 10/21/2008 RunNo: 15276
Analysis Date: 10/23/2008 SeqNo: 396185

Sample ID: MSB 8309	SampType: MSB	TestCode: 8270S_OLM4	Units: µg/Kg							
Client ID: ZZZZZ	Batch ID: 8309	Method: SW8270C (SW3550B)								
Instrument: MS05_26	ColumnID: DB-5MS	ZB-5, 0.5 df								

Analyte	QC Sample Result	SPK Added	PQL	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1230	1670	330	0	74	23	130				
Indeno[1,2,3-cd]pyrene	1380	1670	330	0	82	10	134				
Isophorone	1200	1670	330	0	72	43	130				
N-Nitroso-di-n-propylamine	1240	1670	330	0	75	35	130				
N-Nitrosodiphenylamine	1330	1670	330	0	80	44	130				
Naphthalene	1190	1670	330	0	70	40	130				
Nitrobenzene	1250	1670	330	0	75	46	130				
Pentachlorophenol	874	1670	1700	0	52	19	130				
Phenanthrene	1270	1670	330	0	76	45	130				
Phenol	1100	1670	330	0	66	33	130				
Pyrene	1170	1670	330	0	70	18	164				
Surr: 2,4,6-Tribromophenol	4390	5000	0	0	88	20	143				
Surr: 2-Fluorobiphenyl	2440	3330	0	0	73	46	130				
Surr: 2-Fluorophenol	3450	5000	0	0	69	22	130				
Surr: Nitrobenzene-d5	2360	3330	0	0	71	30	130				
Surr: Phenol-d5	3350	5000	0	0	67	33	130				
Surr: Terphenyl-d14	2720	3330	0	0	82	36	146				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
/ Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Page 21 of 31

852

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0076.D Vial: 6
Acq On : 23 Oct 2008 12:23 Operator: MEG
Sample : MSB-8309 Inst : #5MS26
Misc : MSB ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:51 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	192770	40.00	ug/mL	0.00
13) Naphthalene-d8	11.81	136	664704	40.00	ug/mL	0.00
26) Acenaphthene-d10	15.14	164	376660	40.00	ug/mL	0.00
47) Phenanthrene-d10	17.97	188	661626	40.00	ug/mL	0.00
58) Chrysene-d12	23.00	240	612436	40.00	ug/mL	0.00
68) Perylene-d12	25.77	264	632068	40.00	ug/mL	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	7.19	112	550984	103.62	ug/mL	0.04
Spiked Amount 150.000			Recovery =	69.08%		
3) Phenol-d5	8.79	99	731973	100.60	ug/mL	0.01
Spiked Amount 150.000			Recovery =	67.07%		
14) Nitrobenzene-d5	10.48	82	542221	70.85	ug/mL	0.00
Spiked Amount 100.000			Recovery =	70.85%		
30) 2-Fluorobiphenyl	13.84	172	854593	73.07	ug/mL	0.00
Spiked Amount 100.000			Recovery =	73.07%		
46) 2,4,6-Tribromophenol	16.64	330	344743	131.82	ug/mL	0.00
Spiked Amount 150.000			Recovery =	87.88%		
60) Terphenyl-d14	20.99	244	896283	81.54	ug/mL	0.00
Spiked Amount 100.000			Recovery =	81.54%		
Target Compounds						Qvalue
4) Phenol	8.82	94	283201	32.87	ug/mL	78
5) bis(2-Chloroethyl)ether	8.98	93	227801	33.46	ug/mL	94
6) 2-Chlorophenol	9.10	128	220389	36.98	ug/mL	98
7) 2-Methylphenol	9.89	108	187412	29.73	ug/mL	98
8) 2,2'-oxybis(1-chloropropan	9.94	45	286338	37.96	ug/mL	96
9) bis(2-Chloroisopropyl)ethe	9.94	45	286338	37.96	ug/mL	96
10) 4-Methylphenol	10.16	108	202002	30.14	ug/mL	99
11) N-Nitroso-di-n-propylamine	10.18	70	180753	37.32	ug/mL	91
12) Hexachloroethane	10.40	117	110801	37.01	ug/mL	90
15) Nitrobenzene	10.51	77	301073	37.56	ug/mL	98
16) Isophorone	10.94	82	521747	36.05	ug/mL	98
17) 2-Nitrophenol	11.10	139	135600	35.10	ug/mL	96
18) 2,4-Dimethylphenol	11.14	107	197047	30.88	ug/mL	97
19) bis(2-Chloroethoxy)methane	11.33	93	283246	34.22	ug/mL	99
20) 2,4-Dichlorophenol	11.54	162	207007	36.23	ug/mL	99
21) Naphthalene	11.86	128	560786	34.84	ug/mL#	99
22) 4-Chloroaniline	11.94	127	136337	15.92	ug/mL	99
23) Hexachlorobutadiene	12.06	225	124435	35.38	ug/mL	98
24) 4-Chloro-3-methylphenol	12.84	107	198207	34.41	ug/mL	96

(#) = qualifier out of range (m) = manual integration
N0076.D N014OL42.M Fri Oct 24 08:56:54 2008 Pa

853

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0076.D Vial: 6
Acq On : 23 Oct 2008 12:23 Operator: MEG
Sample : MSB-8309 Inst : #5MS26
Misc : MSB ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.F
Quant Time: Oct 24 8:51 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
25) 2-Methylnaphthalene	13.15	142	403300	31.30	ug/mL	99
27) Hexachlorocyclopentadiene	13.44	237	98932	29.82	ug/mL	99
28) 2,4,6-Trichlorophenol	13.67	196	125514	35.06	ug/mL	98
29) 2,4,5-Trichlorophenol	13.75	196	133967	30.64	ug/mL	98
31) 2-Chloronaphthalene	14.08	162	413725	38.44	ug/mL	99
32) 2-Nitroaniline	14.26	65	153892	34.80	ug/mL	94
33) Dimethyl phthalate	14.59	163	549804	40.32	ug/mL	99
34) 2,6-Dinitrotoluene	14.72	165	137122	39.82	ug/mL	94
35) Acenaphthylene	14.87	152	640119	37.51	ug/mL	99
36) 3-Nitroaniline	15.04	138	98995	25.41	ug/mL	95
37) Acenaphthene	15.20	153	376522	37.02	ug/mL	99
38) 2,4-Dinitrophenol	15.24	184	46418	27.37	ug/mL#	1
39) 4-Nitrophenol	15.34	109	84414	46.72	ug/mL	92
40) 2,4-Dinitrotoluene	15.49	165	173480	39.88	ug/mL	89
41) Dibenzofuran	15.53	168	573732	31.31	ug/mL	95
42) Diethyl phthalate	15.93	149	558771	41.77	ug/mL	97
43) 4-Chlorophenyl phenyl ethe	16.16	204	212680	37.17	ug/mL	92
44) Fluorene	16.18	166	460794	36.95	ug/mL	100
45) 4-Nitroaniline	16.21	138	135086	34.66	ug/mL	93
48) 4,6-Dinitro-2-methylphenol	16.26	198	90711	34.24	ug/mL	89
49) n-Nitrosodiphenylamine	16.39	169	339577	39.89	ug/mL	95
50) 4-Bromophenyl phenyl ether	17.10	248	136502	38.73	ug/mL	94
51) Hexachlorobenzene	17.22	284	184654	39.32	ug/mL	94
52) Pentachlorophenol	17.59	266	62200	26.22	ug/mL	97
53) Phenanthrene	18.01	178	630134	38.06	ug/mL	100
54) Anthracene	18.11	178	626049	37.05	ug/mL	99
55) Carbazole	18.40	167	638448	41.38	ug/mL	98
56) Di-n-butyl phthalate	19.03	149	978427	44.66	ug/mL	99
57) Fluoranthene	20.28	202	629672	37.97	ug/mL	100
59) Pyrene	20.71	202	655614	35.05	ug/mL	99
61) Butyl benzyl phthalate	21.89	149	456773	40.76	ug/mL	98
62) 3,3'-Dichlorobenzidine	22.91	252	179963	27.93	ug/mL	99
63) Benzo[a]anthracene	22.97	228	609966	36.96	ug/mL	100
64) bis(2-Ethylhexyl)phthalate	22.95	149	682819	43.21	ug/mL	97
65) Chrysene	23.05	228	599000	39.05	ug/mL	99
66) Di-n-octyl phthalate	24.12	149	1155440	41.51	ug/mL	100
67) Indeno[1,2,3-cd]pyrene	28.48	276	711408	40.94	ug/mL	97
69) Benzo[b]fluoranthene	24.95	252	623921	36.33	ug/mL	99
70) Benzo[k]fluoranthene	25.01	252	623002	38.19	ug/mL	99
71) Benzo[a]pyrene	25.64	252	590201	37.82	ug/mL	99
72) Dibenz[a,h]anthracene	28.50	278	613252	41.75	ug/mL	99

(#) = qualifier out of range (m) = manual integration
N0076.D N014OL42.M Fri Oct 24 08:56:55 2008 Pa

854

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0076.D Vial: 6
Acq On : 23 Oct 2008 12:23 Operator: MEG
Sample : MSB-8309 Inst : #5MS26
Misc : MSB ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:51 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73) Benzo[g,h,i]perylene	29.10	276	582682	40.44	ug/mL	98

(#) = qualifier out of range (m) = manual integration
N0076.D N014OL42.M Fri Oct 24 08:56:55 2008 Pa

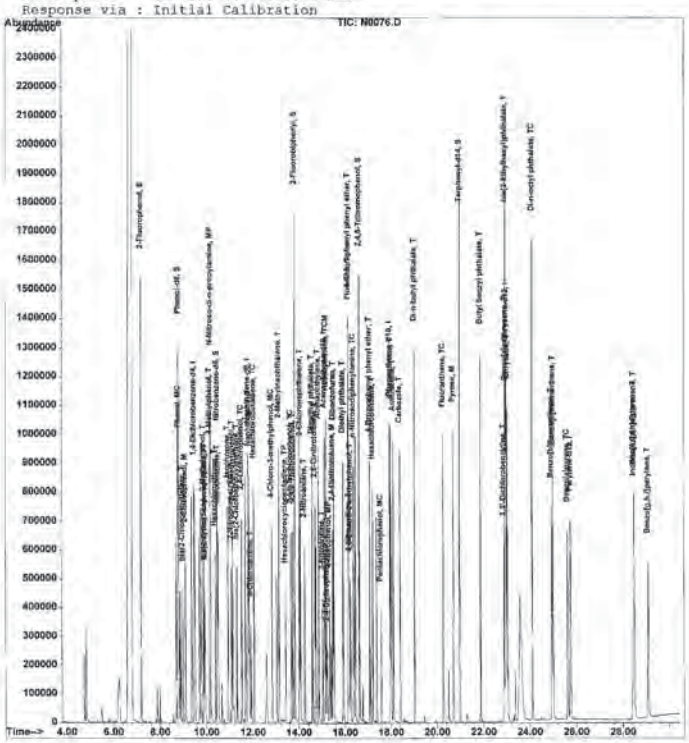
855

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0076.D
Acq On : 23 Oct 2008 12:23
Sample : MSB-8309
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:51 2008

Vial: 6
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N0140L42.RES

Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



N0076.D N0140L42.M Fri Oct 24 08:56:58 2008 Pa

856

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0076.D
Acq On : 23 Oct 2008 12:23
Sample : MSB-8309
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008

Vial: 6
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N0140LM.RES

Quant Method : C:\HPCHEM\1\METHODS\N0140LM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	192770	40.00 ug/mL	0.00
5) Naphthalene-d8	11.81	136	664704	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.14	164	377113	40.00 ug/mL	0.00
11) Phenanthrene-d10	17.97	188	661626	40.00 ug/mL	0.00
14) Chrysene-d12	23.00	240	612436	40.00 ug/mL	0.00
15) Perylene-d12	25.77	264	632068	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.70	77	198864	36.33 ug/mL	95
4) Acetophenone	10.19	105	278663	34.31 ug/mL#	66
6) Caprolactam	12.60	55	96829	48.48 ug/mL	98
8) 1,1'-Biphenyl	14.03	154	476900	40.56 ug/mL	99
12) Atrazine	17.39	200	113321	37.52 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N0076.D N0140LM.M Fri Oct 24 09:08:46 2008 Pa

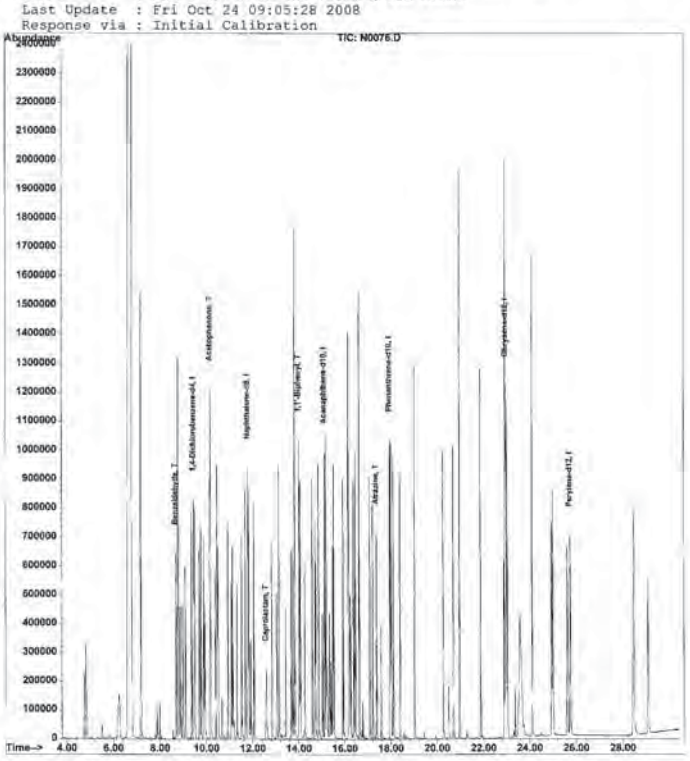
857

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0076.D
Acq On : 23 Oct 2008 12:23
Sample : MSB-8309
Misc : MSB ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008

Vial: 6
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N0140LM.RES

Method : C:\HPCHEM\1\METHODS\N0140LM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



N0076.D N0140LM.M Fri Oct 24 09:08:46 2008 Pa

858

Matrix Spikes

859

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1500	3900	1950	0	77	30	130				J
2,4,5-Trichlorophenol	1000	20000	1950	0	51	34	130				J
2,4,6-Trichlorophenol	1130	3900	1950	0	58	33	130				J
2,4-Dichlorophenol	1230	3900	1950	0	63	39	130				J
2,4-Dimethylphenol	1320	3900	1950	0	68	22	130				J
2,4-Dinitrophenol	ND	20000	1950	0	0	10	130				S
2,4-Dinitrotoluene	1300	3900	1950	0	67	40	130				J
2,6-Dinitrotoluene	1350	3900	1950	0	69	36	130				J
2-Chloronaphthalene	1360	3900	1950	0	70	46	130				J
2-Chlorophenol	1340	3900	1950	0	69	39	130				J
2-Methylnaphthalene	1260	3900	1950	0	65	43	130				J
2-Methylphenol	1130	3900	1950	0	58	43	130				J
2-Nitroaniline	1120	20000	1950	0	57	42	130				J
2-Nitrophenol	1100	3900	1950	0	57	34	130				J
3,3'-Dichlorobenzidine	576	7700	1950	0	30	10	130				J
3-Nitroaniline	872	20000	1950	0	45	11	130				J
4,6-Dinitro-2-methylphenol	ND	20000	1950	0	0	13	130				S
4-Bromophenyl phenyl ether	1310	3900	1950	0	67	43	130				J
4-Chloro-3-methylphenol	1250	3900	1950	0	64	38	130				J
4-Chloroaniline	526	3900	1950	0	27	10	130				J
4-Chlorophenyl phenyl ether	1270	3900	1950	0	65	45	130				J
4-Methylphenol	1140	3900	1950	0	59	42	130				J
4-Nitroaniline	1050	20000	1950	0	54	23	130				J
4-Nitrophenol	1140	20000	1950	0	59	10	144				J
Acenaphthene	2480	3900	1950	1430	54	43	130				J
Acenaphthylene	1500	3900	1950	0	77	48	130				J
Acetophenone	1260	3900	1950	0	65	30	130				J

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	2820	3900	1950	1730	46	37	130				J
Atrazine	1360	3900	1950	0	70	30	130				J
Benzaldehyde	1290	3900	1950	0	66	30	130				J
Benzo[a]anthracene	8900	3900	1950	9560	0	40	130				S
Benzo[a]pyrene	9650	3900	1950	10200	0	44	130				S
Benzo[b]fluoranthene	14600	3900	1950	17500	0	29	154				S
Benzo[g,h,i]perylene	3360	3900	1950	3230	7	10	130				JS
Benzo[k]fluoranthene	7130	3900	1950	6190	48	35	143				
bis(2-Chloroethoxy)methane	1260	3900	1950	0	65	43	130				J
bis(2-chloroethyl)ether	1270	3900	1950	0	65	41	130				J
bis(2-chloroisopropyl)ether	1460	3900	1950	0	75	34	130				J
bis(2-Ethylhexyl)phthalate	3800	3900	1950	670	161	42	154				JS
Butyl benzyl phthalate	1630	3900	1950	0	84	34	150				J
Caprolactam	1700	3900	1950	0	87	30	130				J
Carbazole	2680	3900	1950	1540	58	42	130				J
Chrysene	9590	3900	1950	10200	0	43	130				S
Di-n-butyl phthalate	1620	3900	1950	0	83	50	133				J
Di-n-octyl phthalate	1610	3900	1950	0	83	48	146				J
Dibenz[a,h]anthracene	1610	3900	1950	989	32	16	135				J
Dibenzofuran	1420	3900	1950	0	73	45	130				J
Diethyl phthalate	1480	3900	1950	0	76	48	130				J
Dimethyl phthalate	1440	3900	1950	0	74	46	130				J
Fluoranthene	16800	3900	1950	20800	0	45	130				S
Fluorene	1860	3900	1950	709	59	45	130				J
Hexachlorobenzene	1400	3900	1950	0	72	50	130				J
Hexachlorobutadiene	1230	3900	1950	0	63	37	130				J
Hexachlorocyclopentadiene	ND	3900	1950	0	0	10	130				S

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/15/2008 RunNo: 15275
Client ID: MBSS-1 Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/21/2008 SeqNo: 399157
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1300	3900	1950	0	67	23	130				J
Indeno[1,2,3-cd]pyrene	2120	3900	1950	2030	5	10	134				JS
Isophorone	1290	3900	1950	0	66	43	130				J
N-Nitroso-di-n-propylamine	1400	3900	1950	0	72	35	130				J
N-Nitrosodiphenylamine	1510	3900	1950	0	77	44	130				J
Naphthalene	1530	3900	1950	0	78	40	130				J
Nitrobenzene	1330	3900	1950	0	68	45	130				J
Pentachlorophenol	ND	20000	1950	0	0	10	130				S
Phenanthrene	9400	3900	1950	10600	0	45	130				S
Phenol	1210	3900	1950	0	62	33	130				J
Pyrene	15600	3900	1950	18200	0	18	164				S
Surr: 2,4,6-Tribromophenol	4190	0	5840	0	72	20	143				
Surr: 2-Fluorobiphenyl	2680	0	3890	0	69	46	130				
Surr: 2-Fluorophenol	3840	0	5840	0	66	22	130				
Surr: Nitrobenzene-d5	2540	0	3890	0	65	39	130				
Surr: Phenol-d5	3910	0	5840	0	67	33	130				
Surr: Terphenyl-d14	3130	0	3890	0	80	38	146				

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

24-Oct-08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                         Quantitation Report   (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0065.D                    Vial: 5
Acq On    : 21 Oct 2008  12:53                       Operator: MEG
Sample    : 0810083-001BMS                           Inst    : #5MS26
Misc      : MS  ,8270S_OLM42, 50uL/.5mL              Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:09 2008           Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update  : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards                 R.T. QIon  Response  Conc Units Dev(Min)
------------------------------------------------------------------------------
  1) 1,4-Dichlorobenzene-d4        9.53  152   202996    40.00 ug/mL    0.00
 13) Naphthalene-d8               11.87  136   709302    40.00 ug/mL   -0.01
 26) Acenaphthene-d10             15.19  164   414950    40.00 ug/mL    0.00
 47) Phenanthrene-d10             18.02  188   733017    40.00 ug/mL    0.00
 58) Chrysene-d12                 23.06  240   591986    40.00 ug/mL   -0.01
 68) Perylene-d12                 25.83  264   371124    40.00 ug/mL   -0.02

System Monitoring Compounds
  2) 2-Fluorophenol                7.22  112    55247     9.87 ug/mL    0.00
  Spiked Amount    150.000                   Recovery  =     6.58%
  3) Phenol-d5                     8.82   99    76935    10.04 ug/mL   -0.02
  Spiked Amount    150.000                   Recovery  =     6.69%
 14) Nitrobenzene-d5              10.52   82    53215     6.52 ug/mL   -0.02
  Spiked Amount    100.000                   Recovery  =     6.52%
 30) 2-Fluorobiphenyl             13.89  172    88655     6.88 ug/mL    0.00
  Spiked Amount    100.000                   Recovery  =     6.88%
 46) 2,4,6-Tribromophenol         16.68  330    31033    10.77 ug/mL   -0.02
  Spiked Amount    150.000                   Recovery  =     7.18%
 60) Terphenyl-d14                21.03  244    85318     8.03 ug/mL   -0.01
  Spiked Amount    100.000                   Recovery  =     8.03%

Target Compounds                                                     Qvalue
  4) Phenol                        8.84   94    28245     3.11 ug/mL      79
  5) bis(2-Chloroethyl)ether       9.02   93    23379     3.26 ug/mL      96
  6) 2-Chlorophenol                9.15  128    21682     3.45 ug/mL      99
  7) 2-Methylphenol                9.93  108    19297     2.91 ug/mL      96
  8) 2,2'-oxybis(1-chloropropan    9.99   45    29761     3.75 ug/mL      96
  9) bis(2-Chloroisopropyl)ethe    9.99   45    29761     3.75 ug/mL      96
 10) 4-Methylphenol               10.20  108    20657     2.93 ug/mL      99
 11) N-Nitroso-di-n-propylamine   10.22   70    18348     3.60 ug/mL      97
 12) Hexachloroethane             10.45  117    10503     3.33 ug/mL      88
 15) Nitrobenzene                 10.55   77    29180     3.41 ug/mL      98
 16) Isophorone                   10.98   82    50941     3.30 ug/mL      99
 17) 2-Nitrophenol                11.15  139    11658     2.83 ug/mL      96
 18) 2,4-Dimethylphenol           11.19  107    23100     3.39 ug/mL      99
 19) bis(2-Chloroethoxy)methane   11.37   93    28550     3.23 ug/mL      98
 20) 2,4-Dichlorophenol           11.58  162    19188     3.15 ug/mL      98
 21) Naphthalene                  11.91  128    67272     3.92 ug/mL#     99
 22) 4-Chloroaniline              11.98  127    12372     1.35 ug/mL      98
 23) Hexachlorobutadiene          12.12  225    11855     3.16 ug/mL     100
 24) 4-Chloro-3-methylphenol      12.88  107    19804     3.22 ug/mL      99
------------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
N0065.D  NO14OL42.M      Fri Oct 24 09:47:48 2008                          Pa
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0065.D Vial: 5
Acq On : 21 Oct 2008 12:53 Operator: MEG
Sample : 0810083-001BMS Inst : #5MS26
Misc : MS ,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:09 2008 Quant Results File: N014OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:05:11 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

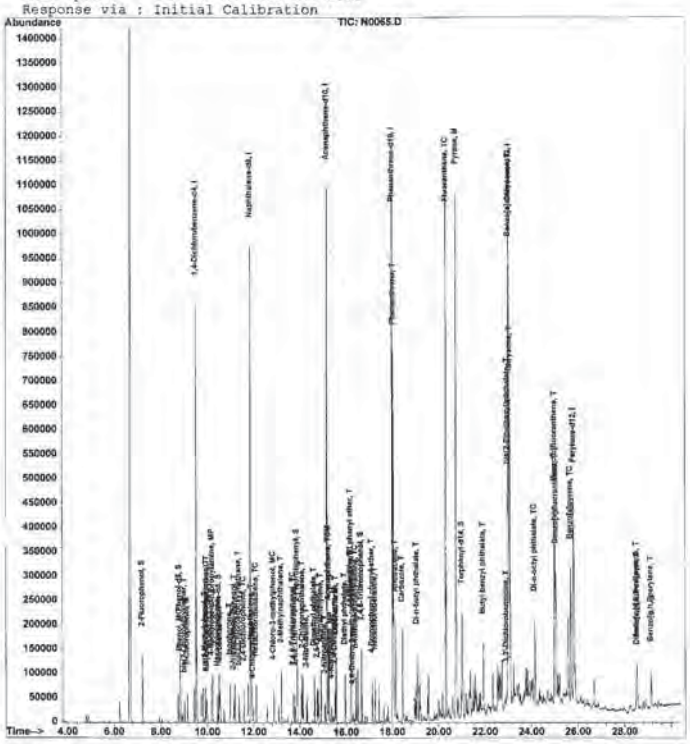
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.21	142	44560	3.24 ug/mL	92
28) 2,4,6-Trichlorophenol	13.72	196	11457	2.91 ug/mL	98
29) 2,4,5-Trichlorophenol	13.80	196	12393	2.57 ug/mL	96
31) 2-Chloronaphthalene	14.13	162	41491	3.50 ug/mL	99
32) 2-Nitroaniline	14.31	65	13989	2.87 ug/mL	95
33) Dimethyl phthalate	14.63	163	55751	3.71 ug/mL	98
34) 2,6-Dinitrotoluene	14.76	165	13114	3.46 ug/mL	94
35) Acenaphthylene	14.92	152	72542	3.86 ug/mL	99
36) 3-Nitroaniline	15.08	138	9599	2.24 ug/mL	95
37) Acenaphthene	15.25	153	71482	6.38 ug/mL	92
39) 4-Nitrophenol	15.37	109	5861	2.94 ug/mL	94
40) 2,4-Dinitrotoluene	15.53	165	15952	3.33 ug/mL	92
41) Dibenzofuran	15.57	168	73455	3.64 ug/mL	97
42) Diethyl phthalate	15.98	149	55980	3.80 ug/mL	97
43) 4-Chlorophenyl phenyl ethe	16.21	204	20529	3.26 ug/mL	91
44) Fluorene	16.22	166	65611	4.78 ug/mL	96
45) 4-Nitroaniline	16.24	138	11607	2.70 ug/mL#	79
48) 4,6-Dinitro-2-methylphenol	16.31	198	3236	1.10 ug/mL	86
49) n-Nitrosodiphenylamine	16.43	169	36492	3.87 ug/mL	90
50) 4-Bromophenyl phenyl ether	17.15	248	13106	3.36 ug/mL	91
51) Hexachlorobenzene	17.27	284	18662	3.59 ug/mL	93
53) Phenanthrene	18.07	178	442717	24.14 ug/mL	100
54) Anthracene	18.16	178	126035	6.73 ug/mL	96
55) Carbazole	18.45	167	116919	6.84 ug/mL	98
56) Di-n-butyl phthalate	19.08	149	101139	4.17 ug/mL	99
57) Fluoranthene	20.34	202	794218	43.23 ug/mL	100
59) Pyrene	20.77	202	718234	39.73 ug/mL	99
61) Butyl benzyl phthalate	21.94	149	45420	4.19 ug/mL	95
62) 3,3'-Dichlorobenzidine	22.95	252	9203	1.48 ug/mL	93
63) Benzo[a]anthracene	23.04	228	364631	22.86 ug/mL	95
64) bis(2-Ethylhexyl)phthalate	23.00	149	148963	9.75 ug/mL	94
65) Chrysene	23.10	228	365174	24.63 ug/mL	97
66) Di-n-octyl phthalate	24.17	149	111166	4.13 ug/mL	99
67) Indeno[1,2,3-cd]pyrene	28.53	276	91624	5.45 ug/mL	98
69) Benzo[b]fluoranthene	25.02	252	379310	37.62 ug/mL	97
70) Benzo[k]fluoranthene	25.07	252	175269	18.30 ug/mL	99
71) Benzo[a]pyrene	25.71	252	227041	24.78 ug/mL	97
72) Dibenz[a,h]anthracene	28.56	278	35692	4.14 ug/mL	93
73) Benzo[g,h,i]perylene	29.15	276	73017	8.63 ug/mL	95

(#) = qualifier out of range (m) = manual integration
N0065.D N014OL42.M Fri Oct 24 09:47:49 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0065.D Vial: 5
Acq On : 21 Oct 2008 12:53 Operator: MEG
Sample : 0810083-001BMS Inst : #5MS26
Misc : MS ,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:09 2008 Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:06 2008
Response via : Initial Calibration



N0065.D N014OL42.M Fri Oct 24 09:47:51 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0065.D Vial: 5
Acq On : 21 Oct 2008 12:53 Operator: MEG
Sample : 0810083-001BMS Inst : #5MS26
Misc : MS ,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:52 2008 Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Wed Oct 22 13:52:05 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	202996	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	708996	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	415164	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.02	188	733017	40.00 ug/mL	0.00
14) Chrysene-d12	23.06	240	591986	40.00 ug/mL	0.00
15) Perylene-d12	25.83	264	371124	40.00 ug/mL	0.00

System Monitoring Compounds

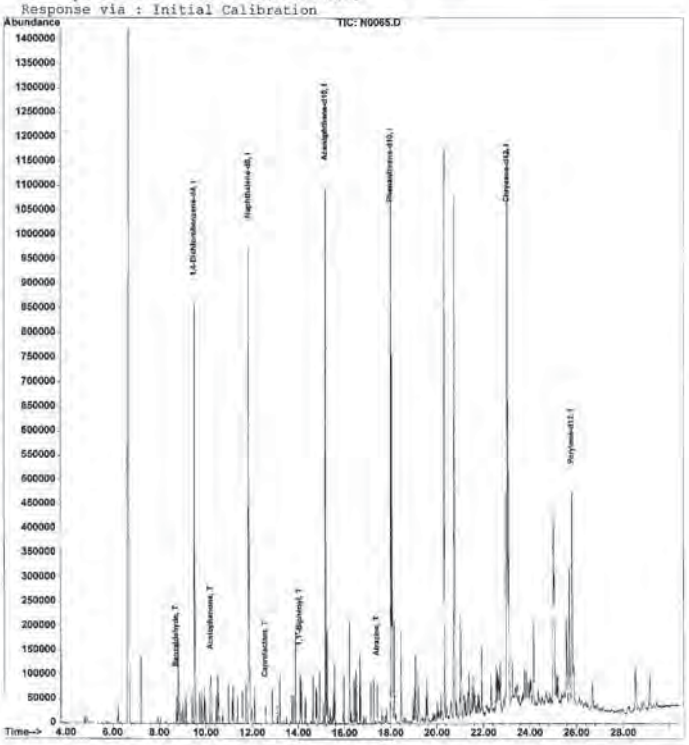
Target Compounds					Qvalue
2) Benzaldehyde	8.75	77	19013	3.30 ug/mL	97
4) Acetophenone	10.24	105	27664	3.23 ug/mL	95
6) Caprolactam	12.59	55	9299	4.36 ug/mL	91
8) 1,1'-Biphenyl	14.08	154	49720	3.84 ug/mL	99
12) Atrazine	17.43	200	11719	3.50 ug/mL	97

(#) = qualifier out of range (m) = manual integration
N0065.D N014OLM.M Fri Oct 24 09:48:05 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0065.D Vial: 5
Acq On : 21 Oct 2008 12:53 Operator: MEG
Sample : 0810083-001BMS Inst : #5MS26
Misc : MS ,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 22 13:52 2008 Quant Results File: N014OLM.RES

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:29 2008
Response via : Initial Calibration



N0065.D N014OLM.M Fri Oct 24 09:48:05 2008 P

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1650	3900	1950	0	85	30	130	1500	9.7	60	J
2,4,5-Trichlorophenol	1080	20000	1950	0	55	34	130	1000	7.5	44	J
2,4,6-Trichlorophenol	1180	3900	1950	0	61	33	130	1130	4.0	45	J
2,4-Dichlorophenol	1250	3900	1950	0	64	39	130	1230	1.9	53	J
2,4-Dimethylphenol	1350	3900	1950	0	69	22	130	1320	2.3	52	J
2,4-Dinitrophenol	4150	20000	1950	0	213	10	130	0		60	JS
2,4-Dinitrotoluene	1320	3900	1950	0	68	40	130	1300	1.6	32	J
2,6-Dinitrotoluene	1340	3900	1950	0	69	38	130	1350	0.9	43	J
2-Chloronaphthalene	1430	3900	1950	0	73	46	130	1360	4.7	30	J
2-Chlorophenol	1410	3900	1950	0	72	39	130	1340	4.8	38	J
2-Methylnaphthalene	1370	3900	1950	0	71	43	130	1260	8.6	35	J
2-Methylphenol	1140	3900	1950	0	59	43	130	1130	0.7	60	J
2-Nitroaniline	1210	20000	1950	0	62	42	130	1120	8.3	34	J
2-Nitrophenol	1180	3900	1950	0	61	34	130	1100	6.8	48	J
3,3'-Dichlorobenzidine	682	7700	1950	0	34	10	130	576	14	60	J
3-Nitroaniline	968	20000	1950	0	49	11	130	872	9.4	40	J
4,6-Dinitro-2-methylphenol	ND	20000	1950	0	0	13	130	0		60	S
4-Bromophenyl phenyl ether	1390	3900	1950	0	72	43	130	1310	6.3	37	J
4-Chloro-3-methylphenol	1270	3900	1950	0	65	38	130	1250	1.2	30	J
4-Chloroaniline	701	3900	1950	0	36	10	130	526	29	48	J
4-Chlorophenyl phenyl ether	1360	3900	1950	0	70	45	130	1270	6.8	32	J
4-Methylphenol	1200	3900	1950	0	61	42	130	1140	4.7	53	J
4-Nitroaniline	1100	20000	1950	0	56	23	130	1050	4.3	37	J
4-Nitrophenol	1200	20000	1950	0	62	10	144	1140	5.0	30	J
Acenaphthene	3090	3900	1950	1430	85	43	130	2480	22	30	J
Acenaphthylene	1600	3900	1950	0	82	46	130	1500	6.3	30	J
Acetophenone	1380	3900	1950	0	71	38	130	1260	9.2	60	J

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	3260	3900	1950	1730	79	37	130	2620	22	30	J
Atrazine	1410	3900	1950	0	73	30	130	1360	3.6	60	J
Benzaldehyde	1450	3900	1950	0	74	30	130	1290	12	60	J
Benzo[a]anthracene	12300	3900	1950	9560	141	40	130	8900	32	30	RS
Benzo[a]pyrene	12900	3900	1950	10200	140	44	130	9650	29	30	S
Benzo[b]fluoranthene	19300	3900	1950	17500	97	29	154	14600	28	32	
Benzo[g,h,i]perylene	4610	3900	1950	3230	71	10	130	3360	31	30	
Benzo[k]fluoranthene	9120	3900	1950	6190	150	36	143	7130	25	30	S
bis(2-Chloroethoxy)methane	1410	3900	1950	0	72	43	130	1260	11	40	J
bis(2-chloroethyl)ether	1350	3900	1950	0	69	41	130	1270	6.2	30	J
bis(2-chloroisopropyl)ether	1640	3900	1950	0	84	34	130	1460	12	30	J
bis(2-Ethylhexyl)phthalate	2950	3900	1950	670	117	42	154	3800	25	36	J
Butyl benzyl phthalate	1700	3900	1950	0	87	34	150	1630	4.2	37	J
Caprolactam	1860	3900	1950	0	95	30	130	1700	9.4	60	J
Carbazole	3130	3900	1950	1540	82	42	130	2660	16	36	J
Chrysene	12800	3900	1950	10200	132	43	130	9590	29	30	S
Di-n-butyl phthalate	1700	3900	1950	0	87	50	133	1620	4.5	39	J
Di-n-octyl phthalate	1710	3900	1950	0	88	48	146	1610	5.9	31	J
Dibenz[a,h]anthracene	1990	3900	1950	989	51	16	135	1610	21	30	J
Dibenzofuran	1570	3900	1950	0	80	45	130	1420	9.9	30	J
Diethyl phthalate	1520	3900	1950	0	78	48	130	1480	2.9	30	J
Dimethyl phthalate	1480	3900	1950	0	76	46	130	1440	2.1	39	J
Fluoranthene	24100	3900	1950	20800	169	45	130	18800	36	30	RS
Fluorene	2190	3900	1950	709	76	45	130	1860	16	30	J
Hexachlorobenzene	1480	3900	1950	0	76	50	130	1400	5.9	31	J
Hexachlorobutadiene	1270	3900	1950	0	65	37	130	1230	3.4	41	J
Hexachlorocyclopentadiene	ND	3900	1950	0	0	10	130	0		58	S

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: 8270S_OLM4 Units: µg/Kg-dry Prep Date: 10/21/2008 RunNo: 15276
Client ID: MBSS-1 Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399200
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1460	3900	1950	0	77	23	130	1300	14	37	J
Indeno[1,2,3-cd]pyrene	3060	3900	1950	2030	53	10	134	2120	38	30	J
Isophorone	1420	3900	1950	0	73	43	130	1290	9.8	40	J
N-Nitroso-di-n-propylamine	1560	3900	1950	0	80	35	130	1400	11	30	J
N-Nitrosodiphenylamine	1650	3900	1950	0	85	44	130	1510	8.9	52	J
Naphthalene	1800	3900	1950	0	92	40	130	1530	18	33	J
Nitrobenzene	1440	3900	1950	0	74	45	130	1330	8.2	51	J
Pentachlorophenol	ND	20000	1950	0	0	10	130	0		53	S
Phenanthrene	13500	3900	1950	10500	153	48	130	9400	36	30	RS
Phenol	1320	3900	1950	0	68	33	130	1210	8.3	34	J
Pyrene	21600	3900	1950	18200	182	18	164	15500	34	30	RS
Surr: 2,4,6-Tribromophenol	4110	0	5840	0	70	20	143	0		0	
Surr: 2-Fluorobiphenyl	2780	0	3890	0	72	48	130	0		0	
Surr: 2-Fluorophenol	4190	0	5840	0	72	22	130	0		0	
Surr: Nitrobenzene-d5	2690	0	3890	0	69	39	130	0		0	
Surr: Phenol-d5	4040	0	5840	0	69	33	130	0		0	
Surr: Terphenyl-d14	3140	0	3890	0	81	38	146	0		0	

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL


```
                     Quantitation Report    (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0086.D                   Vial: 16
Acq On    : 23 Oct 2008  18:43                     Operator: MEG
Sample    : 0810083-001BMSD                            Inst   : #5MS26
Misc      : SAMP,8270S_OLM42, 50uL/.5mL            Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24  8:51 2008              Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update  : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards                  R.T. QIon  Response  Conc Units Dev(Min)
-------------------------------------------------------------------------------
  1) 1,4-Dichlorobenzene-d4         9.47  152   215991    40.00 ug/mL    0.00
 13) Naphthalene-d8                11.81  136   745535    40.00 ug/mL    0.00
 26) Acenaphthene-d10              15.13  164   428645    40.00 ug/mL    0.00
 47) Phenanthrene-d10              17.97  188   702929    40.00 ug/mL    0.00
 58) Chrysene-d12                  23.01  240   576609    40.00 ug/mL    0.00
 68) Perylene-d12                  25.76  264   389316    40.00 ug/mL    0.00

System Monitoring Compounds
  2) 2-Fluorophenol                 7.16  112    64034    10.75 ug/mL    0.00
  Spiked Amount     150.000                     Recovery    =     7.17%
  3) Phenol-d5                      8.76   99    84553    10.37 ug/mL   -0.01
  Spiked Amount     150.000                     Recovery    =     6.91%
 14) Nitrobenzene-d5               10.46   82    59257     6.90 ug/mL   -0.01
  Spiked Amount     100.000                     Recovery    =     6.90%
 30) 2-Fluorobiphenyl              13.83  172    95223     7.15 ug/mL    0.00
  Spiked Amount     100.000                     Recovery    =     7.15%
 46) 2,4,6-Tribromophenol          16.62  330    31422    10.56 ug/mL    0.00
  Spiked Amount     150.000                     Recovery    =     7.04%
 60) Terphenyl-d14                 20.97  244    83527     8.07 ug/mL    0.00
  Spiked Amount     100.000                     Recovery    =     8.07%

Target Compounds                                                    Qvalue
  4) Phenol                         8.79   94    32585     3.38 ug/mL     81
  5) bis(2-Chloroethyl)ether        8.97   93    26487     3.47 ug/mL     94
  6) 2-Chlorophenol                 9.09  128    24142     3.62 ug/mL     96
  7) 2-Methylphenol                 9.87  108    20719     2.93 ug/mL     98
  8) 2,2'-oxybis(1-chloropropan     9.93   45    35695     4.22 ug/mL     95
  9) bis(2-Chloroisopropyl)ethe     9.93   45    35695     4.22 ug/mL     95
 10) 4-Methylphenol                10.14  108    23041     3.07 ug/mL     99
 11) N-Nitroso-di-n-propylamine    10.17   70    21790     4.01 ug/mL     93
 12) Hexachloroethane              10.40  117    12851     3.83 ug/mL     84
 15) Nitrobenzene                  10.50   77    33259     3.70 ug/mL     98
 16) Isophorone                    10.93   82    59119     3.64 ug/mL     99
 17) 2-Nitrophenol                 11.09  139    13137     3.03 ug/mL     98
 18) 2,4-Dimethylphenol            11.14  107    24850     3.47 ug/mL     97
 19) bis(2-Chloroethoxy)methane    11.32   93    33629     3.62 ug/mL     98
 20) 2,4-Dichlorophenol            11.52  162    20601     3.21 ug/mL     97
 21) Naphthalene                   11.85  128    83299     4.61 ug/mL     99
 22) 4-Chloroaniline               11.93  127    17328     1.80 ug/mL     98
 23) Hexachlorobutadiene           12.06  225    12908     3.27 ug/mL     97
 24) 4-Chloro-3-methylphenol       12.82  107    21078     3.26 ug/mL     97
-------------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
N0086.D  NO14OL42.M     Fri Oct 24 08:57:06 2008
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0086.D Vial: 16
Acq On : 23 Oct 2008 18:43 Operator: MEG
Sample : 0810083-001BMSD Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:51 2008 Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

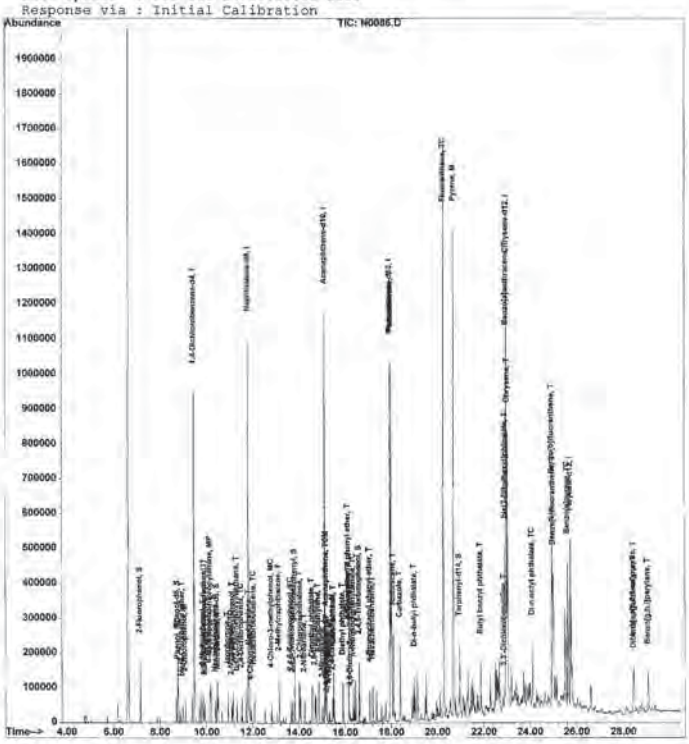
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.15	142	50995	3.53 ug/mL	97
28) 2,4,6-Trichlorophenol	13.67	196	12344	3.03 ug/mL	97
29) 2,4,5-Trichlorophenol	13.74	196	13787	2.77 ug/mL	97
31) 2-Chloronaphthalene	14.07	162	44910	3.67 ug/mL	98
32) 2-Nitroaniline	14.25	65	15725	3.12 ug/mL	93
33) Dimethyl phthalate	14.58	163	58842	3.79 ug/mL	98
34) 2,6-Dinitrotoluene	14.71	165	13429	3.43 ug/mL	94
35) Acenaphthylene	14.87	152	79887	4.11 ug/mL	99
36) 3-Nitroaniline	15.03	138	10903	2.46 ug/mL	97
37) Acenaphthene	15.19	153	91763	7.93 ug/mL	93
38) 2,4-Dinitrophenol	15.23	184	334	10.66 ug/mL#	1
39) 4-Nitrophenol	15.32	109	6359	3.09 ug/mL	92
40) 2,4-Dinitrotoluene	15.47	165	16756	3.38 ug/mL	90
41) Dibenzofuran	15.52	168	83925	4.02 ug/mL	95
42) Diethyl phthalate	15.92	149	59463	3.91 ug/mL	96
43) 4-Chlorophenyl phenyl ethe	16.15	204	22722	3.49 ug/mL	90
44) Fluorene	16.17	166	79784	5.62 ug/mL	99
45) 4-Nitroaniline	16.18	138	12503	2.82 ug/mL#	75
48) 4,6-Dinitro-2-methylphenol	16.24	198	3774	1.34 ug/mL#	69
49) n-Nitrosodiphenylamine	16.38	169	38288	4.23 ug/mL	98
50) 4-Bromophenyl phenyl ether	17.09	248	13402	3.58 ug/mL	94
51) Hexachlorobenzene	17.21	284	19021	3.81 ug/mL	93
53) Phenanthrene	18.01	178	611063	34.74 ug/mL	99
54) Anthracene	18.11	178	150239	8.37 ug/mL	96
55) Carbazole	18.40	167	131947	8.05 ug/mL	96
56) Di-n-butyl phthalate	19.03	149	101511	4.36 ug/mL	99
57) Fluoranthene	20.29	202	1090419	61.90 ug/mL	99
59) Pyrene	20.72	202	984780	55.93 ug/mL	98
61) Butyl benzyl phthalate	21.88	149	46155	4.37 ug/mL	99
62) 3,3'-Dichlorobenzidine	22.90	252	10326	1.70 ug/mL	92
63) Benzo[a]anthracene	22.98	228	490676	31.58 ug/mL	93
64) bis(2-Ethylhexyl)phthalate	22.95	149	112796	7.58 ug/mL	93
65) Chrysene	23.05	228	474478	32.85 ug/mL	97
66) Di-n-octyl phthalate	24.11	149	114732	4.38 ug/mL	97
67) Indeno[1,2,3-cd]pyrene	28.45	276	128504	7.85 ug/mL	96
69) Benzo[b]fluoranthene	24.96	252	525344	49.67 ug/mL	92
70) Benzo[k]fluoranthene	25.01	252	235310	23.42 ug/mL	96
71) Benzo[a]pyrene	25.64	252	319272	33.22 ug/mL	95
72) Dibenz[a,h]anthracene	28.47	278	46214	5.11 ug/mL	89
73) Benzo[g,h,i]perylene	29.07	276	105099	11.84 ug/mL	92

(#) = qualifier out of range (m) = manual integration
N0086.D NO14OL42.M Fri Oct 24 08:57:07 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0086.D Vial: 16
Acq On : 23 Oct 2008 18:43 Operator: MEG
Sample : 0810083-001BMSD Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:51 2008 Quant Results File: NO14OL42.RES

Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



N0086.D NO14OL42.M Fri Oct 24 08:57:09 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0086.D Vial: 16
Acq On : 23 Oct 2008 18:43 Operator: MEG
Sample : 0810083-001BMSD Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008 Quant Results File: NO14OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.47	152	215991	40.00 ug/mL	0.00
5) Naphthalene-d8	11.81	136	745215	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.13	164	428645	40.00 ug/mL	0.00
11) Phenanthrene-d10	17.97	188	702929	40.00 ug/mL	0.00
14) Chrysene-d12	23.01	240	576609	40.00 ug/mL	0.01
15) Perylene-d12	25.76	264	389316	40.00 ug/mL	0.00

System Monitoring Compounds

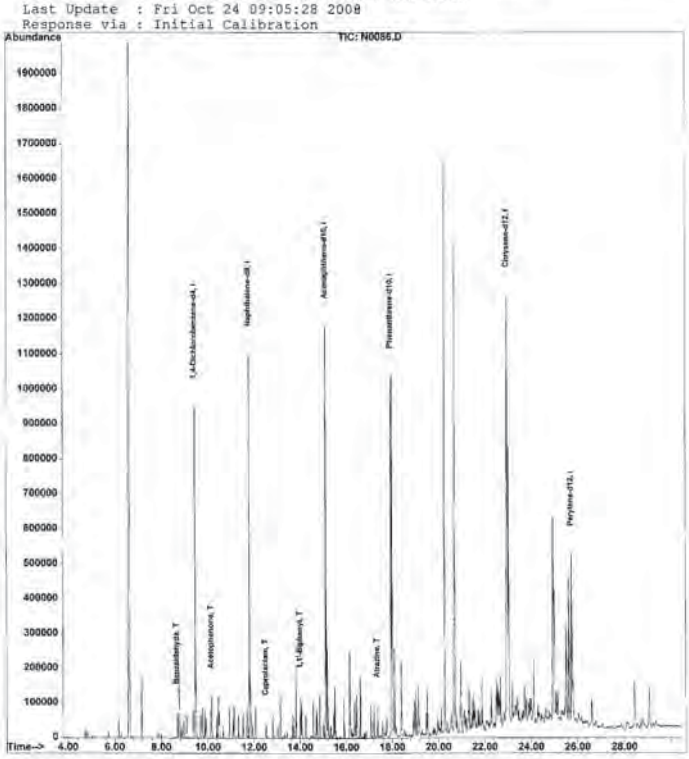
Target Compounds					Qvalue
2) Benzaldehyde	8.69	77	22818	3.72 ug/mL	96
4) Acetophenone	10.18	105	32210	3.54 ug/mL	99
6) Caprolactam	12.53	55	10604	4.74 ug/mL	92
8) 1,1'-Biphenyl	14.03	154	56553	4.23 ug/mL	97
12) Atrazine	17.38	200	11642	3.63 ug/mL	96

(#) = qualifier out of range (m) = manual integration
N0086.D NO14OLM.M Fri Oct 24 09:08:51 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0086.D Vial: 16
Acq On : 23 Oct 2008 18:43 Operator: MEG
Sample : 0810083-001BMSD Inst : #5MS26
Misc : SAMP,8270S_OLM42, 50uL/.5mL Multiplr: 10.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008 Quant Results File: NO14OLM.RES

Method : C:\HPCHEM\1\METHODS\NO14OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



N0086.D NO14OLM.M Fri Oct 24 09:08:52 2008 Pa

Laboratory Control Sample

876

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399134
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1230	330	1670	0	74	60	125				
Atrazine	1300	330	1670	0	78	30	130				
Benzaldehyde	1180	330	1670	0	71	30	130				
Benzo[a]anthracene	1240	330	1670	0	74	60	125				
Benzo[a]pyrene	1250	330	1670	0	75	53	129				
Benzo[b]fluoranthene	1210	330	1670	0	72	55	128				
Benzo[g,h,i]perylene	1360	330	1670	0	82	51	134				
Benzo[k]fluoranthene	1280	330	1670	0	77	49	132				
bis(2-Chloroethoxy)methane	1140	330	1670	0	68	49	125				
bis(2-chloroethyl)ether	1150	330	1670	0	69	44	125				
bis(2-chloroisopropyl)ether	1190	330	1670	0	71	39	125				
bis(2-Ethylhexyl)phthalate	1420	330	1670	0	85	51	145				
Butyl benzyl phthalate	1390	330	1670	0	83	50	144				
Caprolactam	1470	330	1670	0	88	30	130				
Carbazole	1390	330	1670	0	84	51	131				
Chrysene	1320	330	1670	0	79	55	127				
Di-n-butyl phthalate	1490	330	1670	0	89	56	140				
Di-n-octyl phthalate	1410	330	1670	0	84	46	150				
Dibenz[a,h]anthracene	1380	330	1670	0	83	47	142				
Dibenzofuran	1050	330	1670	0	63	48	125				
Diethyl phthalate	1410	330	1670	0	85	52	137				
Dimethyl phthalate	1310	330	1670	0	79	51	134				
Fluoranthene	1280	330	1670	0	77	54	131				
Fluorene	1220	330	1670	0	73	50	128				
Hexachlorobenzene	1340	330	1670	0	80	43	139				
Hexachlorobutadiene	1210	330	1670	0	73	39	132				
Hexachlorocyclopentadiene	835	330	1670	0	50	25	125				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

878

24-Oct-08

Page 2 of 21

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399134
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1230	330	1670	0	74	41	125				
Indeno[1,2,3-cd]pyrene	1360	330	1670	0	82	48	138				
Isophorone	1170	330	1670	0	70	48	125				
N-Nitroso-di-n-propylamine	1240	330	1670	0	74	40	128				
N-Nitrosodiphenylamine	1300	330	1670	0	78	48	135				
Naphthalene	1160	330	1670	0	70	46	125				
Nitrobenzene	1200	330	1670	0	72	47	125				
Pentachlorophenol	623	1700	1670	0	37	25	129				J
Phenanthrene	1240	330	1670	0	75	58	125				
Phenol	1110	330	1670	0	66	41	125				
Pyrene	1200	330	1670	0	72	55	127				
Surr: 2,4,6-Tribromophenol	4570	0	5000	0	91	20	143				
Surr: 2-Fluorobiphenyl	2480	0	3330	0	75	46	130				
Surr: 2-Fluorophenol	3480	0	5000	0	70	22	130				
Surr: Nitrobenzene-d5	2300	0	3330	0	69	39	130				
Surr: Phenol-d5	3440	0	5000	0	69	33	130				
Surr: Terphenyl-d14	2510	0	3330	0	84	36	148				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

879

24-Oct-08

Page 3 of 21

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8270 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/15/2008 RunNo: 15271
Client ID: ZZZZZ Batch ID: 8270 Method: SW8270C (SW3550B) Analysis Date: 10/20/2008 SeqNo: 399134
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	1360	330	1670	0	81	30	130				
2,4,5-Trichlorophenol	1020	1700	1670	0	61	43	131				J
2,4,6-Trichlorophenol	1200	330	1670	0	72	44	125				
2,4-Dichlorophenol	1170	330	1670	0	70	41	125				
2,4-Dimethylphenol	966	330	1670	0	58	25	126				
2,4-Dinitrophenol	734	1700	1670	0	44	25	125				J
2,4-Dinitrotoluene	1330	330	1670	0	80	54	136				
2,6-Dinitrotoluene	1320	330	1670	0	79	48	136				
2-Chloronaphthalene	1250	330	1670	0	75	48	125				
2-Chlorophenol	1240	330	1670	0	75	41	125				
2-Methylnaphthalene	1050	330	1670	0	63	44	125				
2-Methylphenol	999	330	1670	0	60	40	125				
2-Nitroaniline	1090	1700	1670	0	65	50	129				J
2-Nitrophenol	1120	330	1670	0	67	44	125				
3,3'-Dichlorobenzidine	563	660	1670	0	34	25	125				J
3-Nitroaniline	561	1700	1670	0	34	26	125				J
4,6-Dinitro-2-methylphenol	845	1700	1670	0	51	33	126				J
4-Bromophenyl phenyl ether	1300	330	1670	0	78	44	137				
4-Chloro-3-methylphenol	1140	330	1670	0	68	44	126				
4-Chloroaniline	232	330	1670	0	14	25	125				JS
4-Chlorophenyl phenyl ether	1280	330	1670	0	76	46	132				
4-Methylphenol	1040	330	1670	0	62	40	125				
4-Nitroaniline	1090	1700	1670	0	65	47	132				J
4-Nitrophenol	1410	1700	1670	0	85	37	140				J
Acenaphthene	1230	330	1670	0	74	49	125				
Acenaphthylene	1230	330	1670	0	74	47	125				
Acetophenone	1190	330	1670	0	71	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

877

24-Oct-08

Page 1 of 21

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0040.D Vial: 4
Acq On : 20 Oct 2008 9:43 Operator: MEG
Sample : LCS-8270 Inst : #5MS26
Misc : LCS ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N0140L42.RES

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	150760	40.00 ug/mL	0.00
13) Naphthalene-d8	11.87	136	540426	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.19	164	312109	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.02	188	563179	40.00 ug/mL	0.00
58) Chrysene-d12	23.05	240	521305	40.00 ug/mL	0.00
68) Perylene-d12	25.83	264	544897	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.23	112	434738	104.54 ug/mL	0.03
Spiked Amount 150.000			Recovery =	69.69%	
3) Phenol-d5	8.84	99	587533	103.25 ug/mL	0.01
Spiked Amount 150.000			Recovery =	68.83%	
14) Nitrobenzene-d5	10.53	82	430239	69.15 ug/mL	0.00
Spiked Amount 100.000			Recovery =	69.15%	
30) 2-Fluorobiphenyl	13.89	172	722065	74.51 ug/mL	0.00
Spiked Amount 100.000			Recovery =	74.51%	
46) 2,4,6-Tribromophenol	16.69	330	297053	137.08 ug/mL	0.00
Spiked Amount 150.000			Recovery =	91.39%	
60) Terphenyl-d14	21.04	244	789258	84.36 ug/mL	0.01
Spiked Amount 100.000			Recovery =	84.36%	

Target Compounds					Qvalue
4) Phenol	8.86	94	223492	33.17 ug/mL	78
5) bis(2-Chloroethyl)ether	9.03	93	183949	34.55 ug/mL	96
6) 2-Chlorophenol	9.15	128	174010	37.34 ug/mL	98
7) 2-Methylphenol	9.94	108	147763	29.97 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	9.99	45	210518	35.69 ug/mL	99
9) bis(2-Chloroisopropyl)ethe	9.99	45	210518	35.69 ug/mL	99
10) 4-Methylphenol	10.21	108	162905	31.08 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.24	70	140389	37.06 ug/mL	94
12) Hexachloroethane	10.45	117	86577	36.97 ug/mL	93
15) Nitrobenzene	10.57	77	234290	35.95 ug/mL	100
16) Isophorone	11.00	82	411415	34.97 ug/mL	98
17) 2-Nitrophenol	11.14	139	105497	33.59 ug/mL	98
18) 2,4-Dimethylphenol	11.19	107	150307	28.97 ug/mL	97
19) bis(2-Chloroethoxy)methane	11.38	93	229952	34.17 ug/mL	99
20) 2,4-Dichlorophenol	11.59	162	163540	35.21 ug/mL	99
21) Naphthalene	11.91	128	456879	34.91 ug/mL	100
22) 4-Chloroaniline	11.98	127	48431	6.96 ug/mL	100
23) Hexachlorobutadiene	12.12	225	103702	36.27 ug/mL	98
24) 4-Chloro-3-methylphenol	12.89	107	160108	34.19 ug/mL	96

(#) = qualifier out of range (m) = manual integration
N0040.D N0140L42.M Tue Oct 21 12:56:03 2008 Pa

880

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0040.D Vial: 4
Acq On : 20 Oct 2008 9:43 Operator: MEG
Sample : LCS-8270 Inst : #5MS26
Misc : LCS ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N0140L42.RES

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.20	142	328601	31.37 ug/mL	100
27) Hexachlorocyclopentadiene	13.49	237	68908	25.06 ug/mL	98
28) 2,4,6-Trichlorophenol	13.73	196	106513	35.91 ug/mL	97
29) 2,4,5-Trichlorophenol	13.80	196	110752	30.57 ug/mL	99
31) 2-Chloronaphthalene	14.14	162	333768	37.43 ug/mL	100
32) 2-Nitroaniline	14.31	65	119616	32.64 ug/mL	97
33) Dimethyl phthalate	14.65	163	445508	39.43 ug/mL	99
34) 2,6-Dinitrotoluene	14.77	165	112976	39.59 ug/mL	95
35) Acenaphthylene	14.92	152	521880	36.91 ug/mL	100
36) 3-Nitroaniline	15.09	138	54288	16.82 ug/mL	97
37) Acenaphthene	15.25	153	311368	36.95 ug/mL	97
38) 2,4-Dinitrophenol	15.28	184	26256	22.03 ug/mL#	1
39) 4-Nitrophenol	15.38	109	63448	42.37 ug/mL	92
40) 2,4-Dinitrotoluene	15.53	165	144017	39.95 ug/mL	92
41) Dibenzofuran	15.58	168	478642	31.52 ug/mL	96
42) Diethyl phthalate	15.99	149	468774	42.29 ug/mL	98
43) 4-Chlorophenyl phenyl ethe	16.22	204	179248	37.80 ug/mL	93
44) Fluorene	16.23	166	379771	36.75 ug/mL	99
45) 4-Nitroaniline	16.26	138	105210	32.58 ug/mL	93
48) 4,6-Dinitro-2-methylphenol	16.31	198	57155	25.35 ug/mL	94
49) n-Nitrosodiphenylamine	16.44	169	283486	39.13 ug/mL	97
50) 4-Bromophenyl phenyl ether	17.15	248	116775	38.93 ug/mL	96
51) Hexachlorobenzene	17.27	284	160871	40.24 ug/mL	96
52) Pentachlorophenol	17.64	266	37731	18.69 ug/mL	97
53) Phenanthrene	18.07	178	525283	37.28 ug/mL	99
54) Anthracene	18.16	178	529635	36.83 ug/mL	99
55) Carbazole	18.46	167	549099	41.81 ug/mL	99
56) Di-n-butyl phthalate	19.09	149	833430	44.69 ug/mL	100
57) Fluoranthene	20.33	202	542428	38.43 ug/mL	99
59) Pyrene	20.77	202	571599	35.91 ug/mL	99
61) Butyl benzyl phthalate	21.94	149	396777	41.59 ug/mL	98
62) 3,3'-Dichlorobenzidine	22.95	252	92581	16.88 ug/mL	99
63) Benzo[a]anthracene	23.03	228	522240	37.18 ug/mL	99
64) bis(2-Ethylhexyl)phthalate	23.01	149	574606	42.71 ug/mL	98
65) Chrysene	23.10	228	515107	39.45 ug/mL	100
66) Di-n-octyl phthalate	24.17	149	999739	42.19 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	28.55	276	603444	40.80 ug/mL	99
69) Benzo[b]fluoranthene	25.01	252	536578	36.24 ug/mL	99
70) Benzo[k]fluoranthene	25.07	252	540213	38.42 ug/mL	99
71) Benzo[a]pyrene	25.70	252	503907	37.46 ug/mL	100
72) Dibenz[a,h]anthracene	28.58	278	523944	41.38 ug/mL	98

(#) = qualifier out of range (m) = manual integration
N0040.D N0140L42.M Tue Oct 21 12:56:05 2008 Pa

881

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0040.D Vial: 4
Acq On : 20 Oct 2008 9:43 Operator: MEG
Sample : LCS-8270 Inst : #5MS26
Misc : LCS ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N0140L42.RES

Quant Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	29.17	276	507024	40.82 ug/mL	99

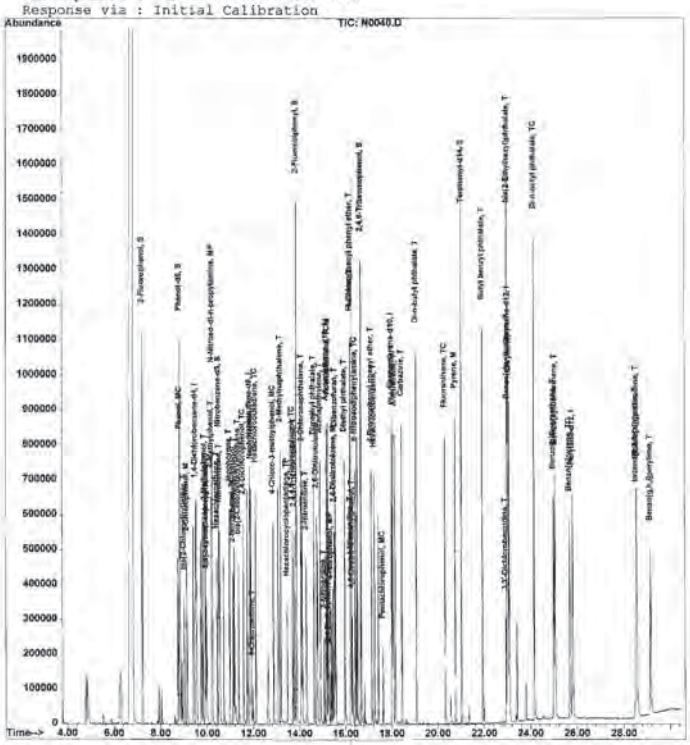
(#) = qualifier out of range (m) = manual integration
N0040.D N0140L42.M Tue Oct 21 12:56:05 2008 Pa

882

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0040.D Vial: 4
Acq On : 20 Oct 2008 9:43 Operator: MEG
Sample : LCS-8270 Inst : #5MS26
Misc : LCS ,8270S_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 21 9:46 2008 Quant Results File: N0140L42.RES

Method : C:\HPCHEM\1\METHODS\N0140L42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 09:46:08 2008
Response via : Initial Calibration



N0040.D N0140L42.M Tue Oct 21 12:56:07 2008 Pa

883

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0040.D
Acq On : 20 Oct 2008 9:43
Sample : LCS-8270
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.53	152	150760	40.00 ug/mL	0.00
5) Naphthalene-d8	11.87	136	540426	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.19	164	312109	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.02	188	563179	40.00 ug/mL	0.00
14) Chrysene-d12	23.05	240	521305	40.00 ug/mL	0.01
15) Perylene-d12	25.83	264	544897	40.00 ug/mL	0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.75	77	151756	35.45 ug/mL	97
4) Acetophenone	10.24	105	226465	35.66 ug/mL#	70
6) Caprolactam	12.65	55	71646	44.12 ug/mL	95
8) 1,1'-Biphenyl	14.08	154	394696	40.56 ug/mL	100
12) Atrazine	17.44	200	100194	38.97 ug/mL	99

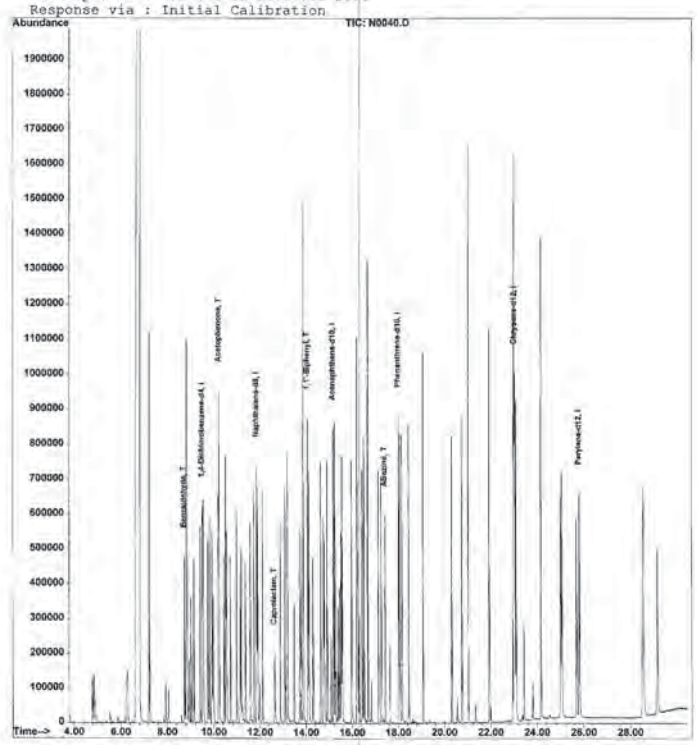
(#) = qualifier out of range (m) = manual integration
N0040.D N014OLM.M Tue Oct 21 12:32:24 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0040.D
Acq On : 20 Oct 2008 9:43
Sample : LCS-8270
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 21 12:27 2008

Vial: 4
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 21 12:27:02 2008
Response via : Initial Calibration



N0040.D N014OLM.M Tue Oct 21 12:32:25 2008

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399164
Instrument: M505_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Biphenyl	1840	330	1670	0	99	39	130				
2,4,5-Trichlorophenol	1250	1700	1670	0	75	43	131				J
2,4,6-Trichlorophenol	1410	330	1670	0	85	44	125				
2,4-Dichlorophenol	1410	330	1670	0	85	41	126				
2,4-Dimethylphenol	1260	330	1670	0	75	25	128				
2,4-Dinitrophenol	1010	1700	1670	0	61	25	125				J
2,4-Dinitrotoluene	1610	330	1670	0	97	54	136				
2,6-Dinitrotoluene	1600	330	1670	0	96	48	136				
2-Chloronaphthalene	1530	330	1670	0	92	49	128				
2-Chlorophenol	1510	330	1670	0	91	41	125				
2-Methylnaphthalene	1240	330	1670	0	74	44	125				
2-Methylphenol	1240	330	1670	0	74	40	125				
2-Nitroaniline	1400	1700	1670	0	84	50	129				J
2-Nitrophenol	1360	330	1670	0	82	44	125				
3,3'-Dichlorobenzidine	1210	660	1670	0	73	25	125				
3-Nitroaniline	1040	1700	1670	0	63	26	125				J
4,6-Dinitro-2-methylphenol	1410	1700	1670	0	85	33	126				J
4-Bromophenyl phenyl ether	1570	330	1670	0	94	44	137				
4-Chloro-3-methylphenol	1370	330	1670	0	82	44	126				
4-Chloroaniline	707	330	1670	0	42	25	125				
4-Chlorophenyl phenyl ether	1490	330	1670	0	90	46	132				
4-Methylphenol	1250	330	1670	0	75	40	125				
4-Nitroaniline	1370	1700	1670	0	82	47	132				J
4-Nitrophenol	1840	1700	1670	0	110	37	140				
Acenaphthene	1490	330	1670	0	89	49	125				
Acenaphthylene	1470	330	1670	0	88	47	125				
Acetophenone	1450	330	1670	0	87	30	130				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399164
Instrument: M505_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1510	330	1670	0	90	60	126				
Atrazine	1530	330	1670	0	92	30	150				
Benzaldehyde	1500	330	1670	0	90	30	130				
Benzo(a)anthracene	1520	330	1670	0	91	60	125				
Benzo(a)pyrene	1570	330	1670	0	94	53	128				
Benzo(b)fluoranthene	1490	330	1670	0	89	56	126				
Benzo(g,h,i)perylene	1670	330	1670	0	100	51	134				
Benzo(k)fluoranthene	1560	330	1670	0	93	49	132				
bis(2-Chloroethoxy)methane	1400	330	1670	0	84	46	125				
bis(2-chloroethyl)ether	1370	330	1670	0	82	44	125				
bis(2-chloroisopropyl)ether	1550	330	1670	0	93	39	125				
bis(2-Ethylhexyl)phthalate	1680	330	1670	0	101	51	145				
Butyl benzyl phthalate	1680	330	1670	0	101	50	144				
Caprolactam	1900	330	1670	0	114	30	130				
Carbazole	1680	330	1670	0	101	51	131				
Chrysene	1600	330	1670	0	96	56	127				
Di-n-butyl phthalate	1810	330	1670	0	108	56	140				
Di-n-octyl phthalate	1670	330	1670	0	100	46	150				
Dibenz(a,h)anthracene	1730	330	1670	0	104	47	142				
Dibenzofuran	1240	330	1670	0	74	46	125				
Diethyl phthalate	1660	330	1670	0	99	52	137				
Dimethyl phthalate	1560	330	1670	0	95	51	134				
Fluoranthene	1520	330	1670	0	91	54	131				
Fluorene	1470	330	1670	0	88	50	126				
Hexachlorobenzene	1590	330	1670	0	95	43	139				
Hexachlorobutadiene	1440	330	1670	0	86	39	132				
Hexachlorocyclopentadiene	1240	330	1670	0	74	25	125				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

24-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8309 SampType: LCS TestCode: 8270S_OLM4 Units: µg/Kg Prep Date: 10/21/2008 RunNo: 15276
Client ID: ZZZZZ Batch ID: 8309 Method: SW8270C (SW3550B) Analysis Date: 10/23/2008 SeqNo: 399184
Instrument: MS05_26 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	1510	330	1670	0	91	41	125				
Indeno[1,2,3-cd]pyrene	1680	330	1670	0	101	48	138				
Isophorone	1440	330	1670	0	86	48	125				
N-Nitroso-di-n-propylamine	1540	330	1670	0	92	40	128				
N-Nitrosodiphenylamine	1610	330	1670	0	97	48	135				
Naphthalene	1390	330	1670	0	84	46	125				
Nitrobenzene	1480	330	1670	0	89	47	125				
Pentachlorophenol	1090	1700	1670	0	65	25	129				
Phenanthrene	1550	330	1670	0	93	58	125				
Phenol	1330	330	1670	0	80	41	125				
Pyrene	1430	330	1670	0	86	55	127				
Surr: 2,4,6-Tribromophenol	5300	0	5000	0	106	20	143				
Surr: 2-Fluorobiphenyl	2920	0	3330	0	88	46	130				
Surr: 2-Fluorophenol	4270	0	5000	0	85	22	130				
Surr: Nitrobenzene-d5	2790	0	3330	0	84	39	130				
Surr: Phenol-d5	4170	0	5000	0	83	33	130				
Surr: Terphenyl-d14	3320	0	3330	0	100	36	146				

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

24-Oct-08

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\N0075.D                 Vial: 5
Acq On    : 23 Oct 2008  11:45                      Operator: MEG
Sample    : LCS-8309                                Inst    : #5MS26
Misc      : LCS ,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24  8:50 2008              Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update  : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

Internal Standards               R.T. QIon  Response  Conc Units Dev(Min)
-----------------------------------------------------------------------------
  1) 1,4-Dichlorobenzene-d4      9.48  152    186214    40.00 ug/mL    0.00
 13) Naphthalene-d8             11.82  136    670538    40.00 ug/mL    0.00
 26) Acenaphthene-d10           15.14  164    377753    40.00 ug/mL    0.00
 47) Phenanthrene-d10           17.97  188    654572    40.00 ug/mL    0.00
 58) Chrysene-d12               23.00  240    603406    40.00 ug/mL    0.00
 68) Perylene-d12               25.76  264    620074    40.00 ug/mL    0.00

System Monitoring Compounds
  2) 2-Fluorophenol              7.20  112    658469   128.20 ug/mL    0.05
 Spiked Amount   150.000                      Recovery   =    85.47%
  3) Phenol-d5                   8.80   99    880176   125.23 ug/mL    0.02
 Spiked Amount   150.000                      Recovery   =    83.49%
 14) Nitrobenzene-d5            10.48   82    645228    83.58 ug/mL    0.00
 Spiked Amount   100.000                      Recovery   =    83.58%
 30) 2-Fluorobiphenyl           13.84  172   1026793    87.54 ug/mL    0.00
 Spiked Amount   100.000                      Recovery   =    87.54%
 46) 2,4,6-Tribromophenol       16.64  330    416988   158.98 ug/mL    0.00
 Spiked Amount   150.000                      Recovery   =   105.99%
 60) Terphenyl-d14              20.99  244   1079800    99.71 ug/mL    0.00
 Spiked Amount   100.000                      Recovery   =    99.71%

Target Compounds                                                    Qvalue
  4) Phenol                      8.82   94    332660    39.97 ug/mL     76
  5) bis(2-Chloroethyl)ether     8.99   93    269804    41.02 ug/mL     93
  6) 2-Chlorophenol              9.10  128    261449    45.42 ug/mL     98
  7) 2-Methylphenol              9.89  108    226768    37.24 ug/mL     98
  8) 2,2'-oxybis(1-chloropropan  9.94   45    339594    46.61 ug/mL     97
  9) bis(2-Chloroisopropyl)ethe  9.94   45    339594    46.61 ug/mL     97
 10) 4-Methylphenol             10.17  108    242578    37.47 ug/mL     99
 11) N-Nitroso-di-n-propylamine 10.19   70    215852    46.13 ug/mL     91
 12) Hexachloroethane           10.39  117    131052    45.31 ug/mL     92
 15) Nitrobenzene               10.52   77    359987    44.52 ug/mL     98
 16) Isophorone                 10.94   82    629133    43.10 ug/mL     99
 17) 2-Nitrophenol              11.10  139    158830    40.76 ug/mL     97
 18) 2,4-Dimethylphenol         11.15  107    244058    37.91 ug/mL     96
 19) bis(2-Chloroethoxy)methane 11.33   93    350459    41.97 ug/mL     99
 20) 2,4-Dichlorophenol         11.54  162    244119    42.36 ug/mL     99
 21) Naphthalene                11.86  128    678138    41.76 ug/mL#    99
 22) 4-Chloroaniline            11.94  127    183316    21.22 ug/mL     99
 23) Hexachlorobutadiene        12.07  225    153352    43.23 ug/mL     98
 24) 4-Chloro-3-methylphenol    12.84  107    239149    41.16 ug/mL     97
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
N0075.D  NO14OL42.M      Fri Oct 24 08:56:48 2008                         Pa
```


Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\N0075.D                 Vial: 5
Acq On    : 23 Oct 2008  11:45                      Operator: MEG
Sample    : LCS-8309                                Inst    : #5MS26
Misc      : LCS ,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24  8:50 2008              Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update  : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

    Compound                     R.T. QIon  Response  Conc Unit   Qvalue
-----------------------------------------------------------------------------
 25) 2-Methylnaphthalene        13.15  142    482630    37.13 ug/mL     98
 27) Hexachlorocyclopentadiene  13.43  237    123745    37.19 ug/mL     99
 28) 2,4,6-Trichlorophenol      13.68  196    152137    42.38 ug/mL     97
 29) 2,4,5-Trichlorophenol      13.76  196    164486    37.52 ug/mL     99
 31) 2-Chloronaphthalene        14.08  162    496273    45.98 ug/mL     99
 32) 2-Nitroaniline             14.27   65    186744    42.11 ug/mL     93
 33) Dimethyl phthalate         14.59  163    648727    47.43 ug/mL     99
 34) 2,6-Dinitrotoluene         14.72  165    165397    47.89 ug/mL     94
 35) Acenaphthylene             14.87  152    753217    44.01 ug/mL     99
 36) 3-Nitroaniline             15.04  138    122384    31.32 ug/mL     95
 37) Acenaphthene               15.20  153    455780    44.68 ug/mL     98
 38) 2,4-Dinitrophenol          15.24  184     54921    30.39 ug/mL#     1
 39) 4-Nitrophenol              15.35  109    100041    55.20 ug/mL     90
 40) 2,4-Dinitrotoluene         15.49  165    211335    48.44 ug/mL     91
 41) Dibenzofuran               15.53  168    683775    37.21 ug/mL     94
 42) Diethyl phthalate          15.94  149    666710    49.69 ug/mL     97
 43) 4-Chlorophenyl phenyl ethe 16.17  204    256925    44.77 ug/mL     92
 44) Fluorene                   16.18  166    550976    44.05 ug/mL    100
 45) 4-Nitroaniline             16.22  138    160487    41.06 ug/mL     91
 48) 4,6-Dinitro-2-methylphenol 16.27  198    110999    42.35 ug/mL     90
 49) n-Nitrosodiphenylamine     16.39  169    407541    48.40 ug/mL     97
 50) 4-Bromophenyl phenyl ether 17.10  248    164657    47.23 ug/mL     95
 51) Hexachlorobenzene          17.23  284    221623    47.70 ug/mL     94
 52) Pentachlorophenol          17.59  266     76511    32.60 ug/mL     98
 53) Phenanthrene               18.02  178    760611    46.44 ug/mL    100
 54) Anthracene                 18.12  178    756151    45.24 ug/mL     99
 55) Carbazole                  18.41  167    771202    50.53 ug/mL     98
 56) Di-n-butyl phthalate       19.04  149   1177683    54.33 ug/mL     99
 57) Fluoranthene               20.28  202    746768    45.52 ug/mL     99
 59) Pyrene                     20.71  202    791126    42.93 ug/mL     98
 61) Butyl benzyl phthalate     21.89  149    555278    50.29 ug/mL     99
 62) 3,3'-Dichlorobenzidine     22.91  252    230765    36.34 ug/mL     99
 63) Benzo[a]anthracene         22.98  228    739326    45.47 ug/mL    100
 64) bis(2-Ethylhexyl)phthalate 22.96  149    786938    50.54 ug/mL     97
 65) Chrysene                   23.06  228    726184    48.05 ug/mL     99
 66) Di-n-octyl phthalate       24.12  149   1372212    50.03 ug/mL    100
 67) Indeno[1,2,3-cd]pyrene     28.47  276    863769    50.45 ug/mL     99
 69) Benzo[b]fluoranthene       24.96  252    749587    44.49 ug/mL    100
 70) Benzo[k]fluoranthene       25.02  252    746991    46.68 ug/mL    100
 71) Benzo[a]pyrene             25.65  252    718802    46.95 ug/mL    100
 72) Dibenz[a,h]anthracene      28.50  278    746036    51.78 ug/mL     99
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
N0075.D  NO14OL42.M      Fri Oct 24 08:56:49 2008                         Pa
```


Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\N0075.D                 Vial: 5
Acq On    : 23 Oct 2008  11:45                      Operator: MEG
Sample    : LCS-8309                                Inst    : #5MS26
Misc      : LCS ,8270S_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 24  8:50 2008              Quant Results File: NO14OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\NO14OL42.M (RTE Integrator)
Title        : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update  : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration
DataAcq Meth : NO14FULL

    Compound                     R.T. QIon  Response  Conc Unit   Qvalue
-----------------------------------------------------------------------------
 73) Benzo[g,h,i]perylene       29.11  276    708533    50.12 ug/mL    100

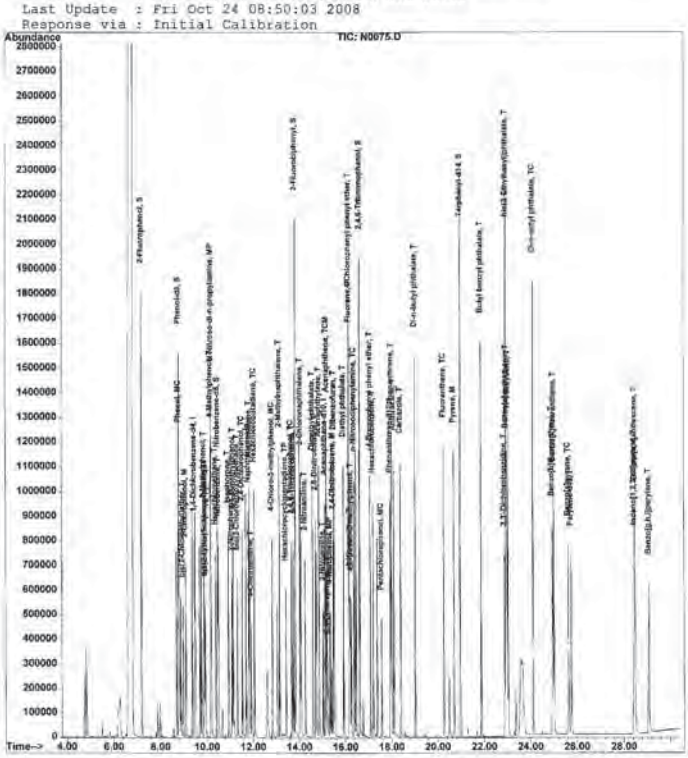
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
N0075.D  NO14OL42.M      Fri Oct 24 08:56:49 2008                         Pa
```

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0075.D
Acq On : 23 Oct 2008 11:45
Sample : LCS-8309
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 8:50 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OL42.RES

Method : C:\HPCHEM\1\METHODS\N014OL42.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 08:50:03 2008
Response via : Initial Calibration



N0075.D N014OL42.M Fri Oct 24 08:56:52 2008

892

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\N0075.D
Acq On : 23 Oct 2008 11:45
Sample : LCS-8309
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration
DataAcq Meth : N014FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.48	152	186214	40.00 ug/mL	0.01
5) Naphthalene-d8	11.82	136	670097	40.00 ug/mL	0.01
7) Acenaphthene-d10	15.14	164	377753	40.00 ug/mL	0.01
11) Phenanthrene-d10	17.97	188	654572	40.00 ug/mL	0.01
14) Chrysene-d12	23.00	240	603406	40.00 ug/mL	0.01
15) Perylene-d12	25.76	264	620074	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	8.70	77	238137	45.04 ug/mL	95
4) Acetophenone	10.20	105	342009	43.60 ug/mL#	68
6) Caprolactam	12.62	55	114807	57.01 ug/mL	99
8) 1,1'-Biphenyl	14.03	154	580358	49.28 ug/mL	100
12) Atrazine	17.39	200	137056	45.86 ug/mL	99

(#) = qualifier out of range (m) = manual integration
N0075.D N014OLM.M Fri Oct 24 09:08:44 2008

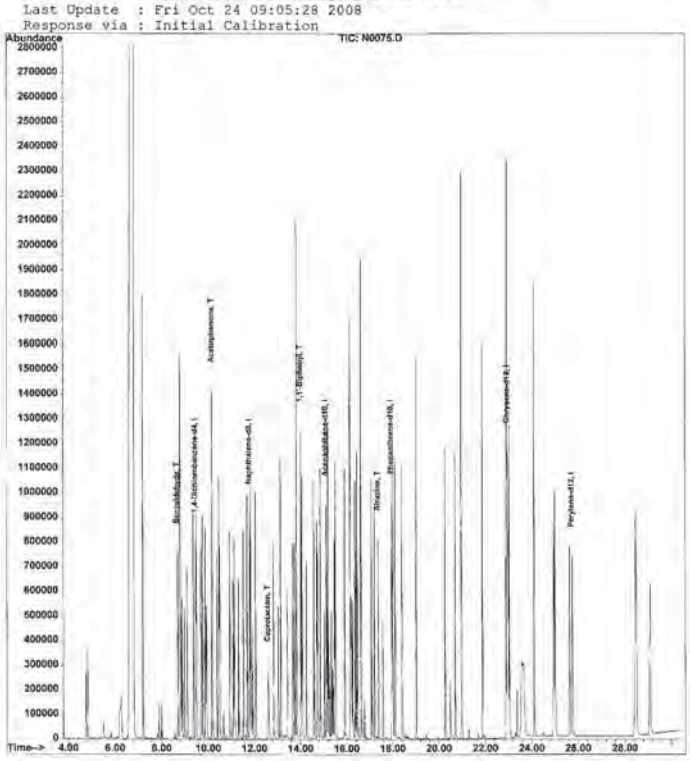
893

Quantitation Report

Data File : C:\HPCHEM\1\DATA\N0075.D
Acq On : 23 Oct 2008 11:45
Sample : LCS-8309
Misc : LCS ,8270S_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Oct 24 9:06 2008

Vial: 5
Operator: MEG
Inst : #5MS26
Multiplr: 1.00
Quant Results File: N014OLM.RES

Method : C:\HPCHEM\1\METHODS\N014OLM.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Fri Oct 24 09:05:28 2008
Response via : Initial Calibration



N0075.D N014OLM.M Fri Oct 24 09:08:45 2008

894

Laboratory Worksheets

895

Copy of Calculations

GC/MS SOIL SAMPLE CALCULATIONS

1. Relative Response Factors for GC/MS Volatiles and Semivolatiles

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where:
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specific internal standard
C_{is} = Concentration of the internal standard (µg/Kg)
C_x = Concentration of the compound to be measured (µg/Kg)

2. Relative Standard Deviation

$$\% \text{ RSD} = \frac{SD}{\bar{X}} \times 100$$

Where:
RSD = Relative Standard Deviation
SD = Standard Deviation of initial relative response factors (per compound)
$\bar{X}$ = Mean of initial relative response factors (per compound)

3. %Deviation for Continuing Calibration (for quantitation from RF only)

$$\% \text{ Deviation}_{(8000B)} = \frac{RRF_c - \overline{RRF_i}}{\overline{RRF_i}} \times 100$$

$$\% \text{ Deviation}_{(software)} = \frac{\overline{RRF_i} - RRF_c}{\overline{RRF_i}} \times 100$$

Where:
RRF_c = Relative response factor from continuing calibration standard
$\overline{RRF_i}$ = Mean relative response factor from most recent initial calibration meeting technical acceptance criteria

4. %Drift for Continuing Calibration (for quantitation from RF or Curve)

$$\% \text{ Drift}_{(8000B)} = \frac{C_c - C_t}{C_t} \times 100$$

$$\% \text{ Drift}_{(software)} = \frac{C_t - C_c}{C_t} \times 100$$

Where:
C_t = Calibration check std concentration (theoretical)
C_c = Measured concentration

GC/MS SOIL SAMPLE CALCULATIONS

5. RRT Deviation

$$\Delta \text{ RRT} = \text{RRT}_x - \text{RRT}_c \text{ ; RRT} = \frac{RT_t}{RT_i}$$

Where:
RRT_1 = Relative RT of target compound in sample
RRT_c = RRT of target in continuing calibration standard
RT_t = RT of target compound
RT_i = RT of internal standard

6. Final Concentration for GC/MS Volatiles
Low Soil

$$\text{Concentration } (\mu g/kg) = \frac{A_x)(I_{is})V_o}{(A_{is})(RRF)(W_s)(D)}$$

Where:
V_o = Volume of water purged (5 to 25 mL)
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specified internal standard
I_{is} = Concentration of internal standard added in nanograms/ml
W_s = Weight of sample purged (1-5g)
D = % solids/100
RRF = Response factor for compound to be measured (average or single point) *

* For compounds calculated using a regression equation for initial calibration, the terms of the equation replace the RRF.

Medium Soil

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(V_o)Df}{(A_{is})(RRF)(W_s)(V_A)(D)}$$

Where:
RRF, A_x, A_{is}, I_{is} = Same as above
W_s = Weight of sample extracted (5g)
V_T = Total volume of methanol extract adjusted for sample moisture:

V_T = mL solvent + (%moisture x W_s/100)

V_A = Volume of methanol extract used for purging
V_o = Volume of water purged
Df = Dilution factor if original extract is diluted

7. Final Concentration for GC/MS Semivolatiles

$$\text{Concentration } (\mu g/kg) = \frac{(A_x)(I_{is})(V_T)(D)(2.0)}{(A_{is})(RRF)(V_i)(W_s)(D)}$$

Where:
RRF, A_x, A_{is}, I_{is}, D, Df= Same as above
W_S = Weight of sample extracted (g)
V_T = Volume of concentrated extract (µL)

GC/MS SOIL SAMPLE CALCULATIONS

V_i = Volume of extract injected (µL)

The factor of 2.0 is used to account for the amount of extract that is not recovered from the GPC. If the GPC is not used, this factor is not used.

8. Matrix Spike Recovery for Volatiles and Semivolatiles

$$\text{Recovery } (\%) = \frac{(SSR) - (SR)}{(SA)} \times 100$$

Where:
SSR = Spike sample result
SR = Sample result
SA = Spike added

9. % RPD of Matrix Spike and Matrix Spike Duplicate

$$\%\text{RPD} = 100 \times \frac{|S - D|}{((S + D)/2)}$$

Where:
S = First Sample Value (Original)
D = Second Sample Value (Duplicate)

10. The Recovery of Reference Sample (LCS) and Surrogate

$$\text{Recovery } (\%) = \frac{SR}{SA} \times 100$$

Where:
SR = Sample results
SA = Sample spike added

11. The calculation of Library Search compounds (TICs) is similar to target compounds except a RRF of 1.0 is assumed.

GC/MS Semivolatile Sample Extraction Log - Soil by Sonication Method SW3550

Date Extracted: 10-15-08 QC Batch #: 8270 Log Review By/Date: MA 10/20/08

Client Name/Project	Sample ID	Test Code	QC Level	Init pH	Sample Size(g)	Target E.V. mL	Initial Ext Vol (ml)	ml*needed onto GPC	Post GPC Vol (ml)	Final EV ml	Comments
—	MB-8270	8270S.sim	6	—	30.0	1.0	10.0	5.0	5.0	1.0	1) 3)
	LCS-8270										2)
	MSB-8270										
OBG-MS (Genera)	0810083-001B	8270S.sim									4)
	-001BMS										2)
	-001BMSD										
	-002B										
	-003B										
	-004B										
	-005B										
[redacted]	0810099-001A	8270S									
	-002A										

CER 10-16-08

Extracted By/Date: C. Renfro 10-15-08 Extracts in Fridge # 6A By/Date: C. Renfro 10-20-08 *Only 5ml goes through GPC

Concentrated By/Date: C. Renfro 10-16 Supervisor Review/Date: (MD) 10-29-08

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902

Extraction Logs

900

SOP # 300-18A QC Batch # 8270 * CER 10-15-08

Reagents Used	
Baked $NaSO_4$	082908A
10N NaOH	—

Solvent	Lot/ID #
DCM	627400
AT/DCM 1:1	100808A

Comments:

1) Surrogate: 1000 ul of 100/150 ug/mL of BNR surrogate standard # 2013

2) Spike: 500 ul of 100 ug/ml LCS Soln # 2014
500 ul of 100 ppm OLM 4.2 Soln # 2016

Surrogate/Spike by CER witnessed by MA

3) Cleanups: GPC

4) Sample foamed during concentration

5)

6)

Log Review By/Date: MA 10/20/08

Supervisor Review/Date: (MD) 10-29-08

Q:\Logbooks 2008\Organic Prep\SVOA23 pg2.xls

903

Life Science Laboratories, Inc.

PREP BATCH REPORT

Page 1 of 1

Prep Start Date: 10/15/2008 12:52:4
Prep End Date: 10/20/2008 9:20:00
Prep Batch 8270 Prep Code: 3550S_8270S Technician: Cassondra L. Renf

Prep Factor Units: mL / g

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0810083-001B	Soil		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
0810083-001BMS	Soil		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
0810083-003B	Soil		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
0810083-004B	Soil		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
0810083-005B	Soil		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
0810099-001A	Soil		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
0810099-002A	Soil		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
LCS-8270	Solid		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
MB-8270	Solid		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC
MSB-8270	Solid		30	0	0	1	0.033	10/15/2008	10/20/2008 GPC

901

SOP # 300-18A QC Batch #: 8309

Reagents Used	
Baked $NaSO_4$	101608A
10N NaOH	—

Solvent	Lot/ID #
DCM	627400
AT/DCM 1:1	100808A

Comments:
1) Surrogate: 1000 uL of 100/150 ug/mL of BNA surrogate standard # 2013 ✓

2) Spike: 500 ul of 100 ug/ml LCS Soln # 2014 ✓
500 ul of 100ppm OUM 4.2 Soln # 2016 ✓

Surrogate/Spike by CLR witnessed by MA

3) Cleanups: GPC

4)

5)

6)

Log Review By/Date: MA 10/23/08

Supervisor Review/Date: (MA) 10-29-08

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906

88

Life Science Laboratories, Inc.

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 10/21/2008 2:09:53
Prep End Date: 10/23/2008 9:30:00

Prep Batch 8309 Prep Code: 3550S_8270S Technician: Cassondra L. Renf Prep Factor Units: mL / g

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0810083-001BMSD	Soil		30	0	0	1	0.033	10/21/2008	10/23/2008 GPC
The prep HoldTime was exceeded by 6.00 days.									
0810083-002B	Soil		30	0	0	1	0.033	10/21/2008	10/23/2008 GPC
The prep HoldTime was exceeded by 6.00 days.									
MB-8309	Solid		30	0	0	1	0.033	10/21/2008	10/23/2008 GPC
LCS-8309	Solid		30	0	0	1	0.033	10/21/2008	10/23/2008 GPC
MSB-8309	Solid		30	0	0	1	0.033	10/21/2008	10/23/2008 GPC

904

GC/MS Semivolatile Sample Extraction Log - Soil by Sonication Method SW3550

Date Extracted: 10-21-08 QC Batch #: 8309 Log Review By/Date: MA 10/23/08

Client Name/Project	Sample ID	Test Code	QC Level	Init pH	Sample Size( )	Target E.V mL	Inject Ext Vol (ml)	ml loaded into GPC	Post GPC Vol (ml)	Final EV ml	Comments
—	MB-8309	8270S_OUM	L0	–	30.0	1.0	10.0	5.0	5.0	1.0	1) 3)
↓	LCS-8309	↓	↓	↓	↓	↓	↓	↓	↓	↓	2)
	MSB-8309										
OBG-MS (Genesis)	0810083-001BMSD										
↓	-002B										

CLR 10-23-08

Extracted By/Date: C. Renfro 10-21-08 Extracts in Fridge # 6A By/Date: C. Renfro 10-23-08
Concentrated By/Date: C. Renfro 10-22-08 Supervisor Review/Date: (MA) 10-29-08

*Only 5ml goes through GPC

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905

Gel Permeation Chromatography Log Sheet

Column A

Date: 10-17-08 Calibration Date: 10-16-08

Port #	Sample #	Client Number	Matrix	Sample Inj Vol	Extract Volume	Final Volume	Comments
1	mb-8270		DCM	5 mls	10.0	5.0	8270S
2	LCS-1			5 mls			
3	MSB/MSD			5 mls			
4	0810083-001B OBG-MS			5 mls			
5	-001A			5 mls			
6	0810083-002B			5 mls			
7	-002BMS			5 mls			
8	-001BMSD			5 mls			
9	-002B			5 mls			
10	-002B			5 mls			
11	-001B			5 mls			
12	-002A			5 mls			
13				5 mls			
14				5 mls			
15				5 mls			
15				5 mls			
17				5 mls			
18				5 mls			
19				5 mls			
20				5 mls			
21				5 mls			
22				5 mls			
23				5 mls			

Conditions:
Program # 4
Load Time: 60 Sec
Dump Time: 0-21:26 Min
Collect Time: 21:36 - 44:24 Min
Wash Time: 44:24 - 62:10 Min

Start Sample # 1
Terminal Sample # 13
Degree C: 25°
PSI: 5
Analyst: CLR
Reviewed By: (MA) 10-29-08

Comments:

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907

Gel Permeation Chromatography Log Sheet

Column A

Date: 10-22-08 Calibration Date: 10-16-08

Port #	Sample #	Client Number	Matrix	Sample Inj Vol	Extract Volume	Final Volume	Comments
1	MB-8300		DCM	5 mls	10.0	5.0	
2	LCS-8300			5 mls			
3	LCSD-8300			5 mls			
4	0810028-0020	[redacted]		5 mls			16256
5	MB-8309			5 mls			
6	LCS-8309			5 mls			
7	MSB-8309			5 mls			
8	0810083-00[illegible]MSD	086-MS		5 mls			82705.dum
9	0810083-0026	↓	↓	5 mls	↓	↓	↓
10				5 mls			
11				5 mls			
12				5 mls			
13				5 mls			
14				5 mls			
15				5 mls			
16				5 mls			
17				5 mls			
18				5 mls			
19				5 mls			
20				5 mls			
21				5 mls			
22				5 mls			
23				5 mls			

Conditions:
Program # 4

Load Time: 60 Sec
Dump Time: 0-21:36 Min
Collect Time: 21:36-44:24 Min
Wash Time: 44:24-62:00 Min

Start Sample # 1
Terminal Sample # 9

22 Degree C
6 PSI

Comments:

Analyst: CRR
Reviewed By: 10-29-08

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Injection Logs

Semi-Volatile GC/MS Injection Log

(Page 1 of 2)

Instrument: MSS7 HP5972 (26)
GC Column ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 10/14/08
+Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2		
3		
4		
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol.	Method	List	Data File Number	Data File Date	Data File Time	Dil. Factor	I.S. No.
1		TD101408A5	METHOD	1µl	8270	-	N 9923	101408	0826	-	-
2		SSTD1ug/ml	NOLIMIT				N 9924		0847		1976
3		120					N 9925		0925		
4		090					N 9926		1004		
5		060					N 9927		1042		
6		040					N 9928	29	1158		
7		020					N 9929	30	1237		
8		010					N 9930	31	1215		
9		005					N 9931	32	1253		
10		050					N 9932	28	1120		
11		001					N 9933		1431		
12		25RC-101408					N 9934		1509		
13		SSTD16ug/ml-DCM	NOLIMIT			1µl	N 9935		1547		
14		120					N 9936		1626		
15		090					N 9937		1704		
16		050					N 9938		1742		
17		040					N 9939		1820		
18		020					N 9940		1858		
19		010					N 9941		1937		
20		005					N 9942		2015		
21		-					N				
22		-					N				
23		-					N				
24		-					N				
25		-					N				
26		-					N				
27		-					N				
28		-					N				
29		-					N				

Comments: Reviewed 10/15/08

Method	Source	Date	SOP # or MDL
(1) 624	Fed Register, Vol 49, No. 209	10/30/84	-33
(2) TCLP	8270C w/ 1311 (AP 8400.00)	12/96	-12A/400.00
(4) 8270C	USEPA SW846, Upd. III	12/96	-12A
(5) EPA CLP	USEPA CLP SOW OLM4.3	3/90	-41
(6) DOD ASB	USEPA CLP SOW OLM03.1	3/90	-41

Samples Set By:

Supervisor Review

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E. Syracuse NY, 13057

MSSV1.p1.200

Semi-Volatile GC/MS Injection Log

(Page 2 of 2)

Pre-run maintenance
- Replace septa
- Replace insert, seal
- Prune column
- Replace Helium
- See Maint. log
- Other:

Internal Std Limits (% of CCV / ICAL area)

84154	88465	121031	307349	261532	279150	Upper Limit
						Lower Limit

Internal Standard Area Counts

Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments	
—	—	—	—	—	—			✓	✓ 1386 / 2027	1
160759	526078	319542	572218	474424	499231				✓ 2028	2
156084	522052	321835	579568	485433	512160				✓ 2029	3
169590	548580	345674	632347	551114	577480				✓ 2030	4
158210	528225	319476	588267	501905	529570				✓ 2031	5
158441	534978	312778	585272	497177	518724				✓ 2033	6
159571	538893	322476	585829	495889	513811				✓ 2034	7
162602	534401	315495	558215	492901	498096				✓ 2035	8
179289	614106	362221	636115	557861	536420				✓ 2036	9
169318	582230	342662	615099	535605	538301				✓ 2037	10
162392	560546	325216	559122	483640	482035				✓ 2037	11
154532	527828	317772	558785	487571	500461				✓ 2038	12
177267	588962	340090	577864	515246	498201				✓ 2039	13
161782	547577	313237	542788	481576	474481				✓ 2040	14
174753	585284	338938	583020	514670	509877				✓ 2041	15
172376	589486	340291	582670	523485	527978				✓ 2042	16
162634	553276	321286	553943	495615	478742				✓ 2043	17
160912	546490	317835	544437	482059	461982				✓ 2044	18
177266	594535	343909	602025	520639	572582				✓ 2045	19
159534	540483	319623	529420	478465	460296				✓ 2046	20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

Data Processed by:

Supervisor Review

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E. Syracuse NY, 13057

MSSV1.p2.2006.xls

Log PageNo.

Semi-Volatile GC/MS Injection Log (Page 1 of 2)

Instrument: MS5/ HP5972 (26)
GC Column ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 10/14/08
+Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2	[redacted]	[redacted]
3		
4		
5	City of Geneva	OBG-MS

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol.	Method	List	Data File Number	Data File Date	Data File Time	Dil Factor	I.S. No.
1	1)	TD10200845	DFTPPLC	1.2	8270		N0037	10/20/08	0808		
2		CC10200845	N014FULL			FULL	N0038		0827	-	1970
3	↓	CC10200885 CM	N014CLM				N0039		0905	-	
4		LCS-8270	N014FULL				N0040		0943	1X	
5	↓	LCSD-8270/MSB	↓				N0041		1022		
6	2)	0810097-001A	N014BSL			HSL	N0042		1100		
7	↓	↓ -002A	↓			↓	N0043		1138		
8	1)	MB-8270	N014FULL			FULL	N0044		1216		
9	3)	0810127-001B	↓		625	PAH	N0045		1254	↓	
10	4)	0810110-003B(DL)	N014042CLM		8270	42	N0046		1333	10X	
11		-004B					N0047		1411		
12	↓	↓ -005B	↓			↓	N0048		1449		
13	2)	0810099-002A(DL)	N014HSL			HSL	N0049		1527	↓	
14	5)	0810083-001B	N014042CLM			42	N0050		1605	25X	
15		-001B MS					N0051		1643		
16		-001B MSD					N0052		1721		
17		-002B					N0053		1759		
18		-003B(DL)					N0054		1837		
19		-004B(DL)					N0055		1916		
20	↓	-005B(DL)				↓	N0056		1954		
21	3)	MB-8280	N014FULL		625	PAH	N0057		2033	1X	
22		LCS-8280					N0058		2111		
23	↓	LCSD 8280			↓	↓	N0059		2149	↓	
24	6)	0809117-001D	*N014FULX*				N0060		2228	25X	
25		-					N				
26		-					N				
27		-					N				
28		-					N				
29		-					N				

Comments: #[redacted] * N014FULX includes a 1.0 p— STD [redacted] the Calibration Curve *

Method	Source	Date	SOP#
(1) 625	Fed Register, Vol 49, No. 209	10/26/84	[illegible]
(3) TCLP	8270C w/ 1311	[illegible]	[illegible]
(4) 8270C	USEPA SW846, Upd III	12/96	[illegible]
(5) EPA CLP	USEPA CLP SOW OLM04.3	[illegible]	[illegible]
(6) DEC ASP	USEPA CLP SOW OLM04.3	[illegible]	[illegible]

Samples Set By: [signature]

[signature] Supervisor Review

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E. Syracuse NY, 13057

MSSV1.p1.2006

Semi-Volatile GC/MS Injection Log (Page 2 of 2)

Internal Std Limits (% of CCV / ICAL area)

						Upper Limit
						Lower Limit

Pre-run maintenance
__ Replace septa
✓ Replace insert, seal
__ Prune column
__ Replace Helium
__ See Maint. log
__ Other:

Internal Standard Area Counts

Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments	
—	—	—	—	—	—				Y (72k) 2027	1
160273	541103	321129	560608	526781	537878				N 2032	2
158837	560339	319329	559979	497777	505323				Y 2042	3
150760	540113	312109	563179	521679	544897		✓	8270	Y	4
147585	524023	288440	542667	495881	522158		✓		Y	5
191869	672728	406059	658054	347287	141223		✓		Y ICL	6
160792	578129	338875	566529	349017	461946		✓		Y ICL	7
190048	659530	396747	683692	561541	377831		✓	↓	Y	8
167637	587396	344437	609214	488270	333329	✓		8280	Y	9
182222	647402	380557	668426	493821	315785	✓		8267	Y	10
174405	593599	347912	645616	476365	331681	✓			Y	11
168443	602174	356995	610410	489812	345258	✓		↓	Y	12
155418	548571	324386	562331	454457	326967		✓	8270	Y, C	13
162568	624344	331794	575114	464572	334637		✓		N R10X	14
164950	577503	343652	580439	497332	340466		✓		N	15
168893	585223	350054	613798	478136	328286		✓		N	16
161806	559596	327819	~~577919~~	452518	300192		✓		N ↓	17
160996	580956	336106	562388	463685	332335		✓		Y, C R2X	18
164986	606714	357876	602302	474947	311221		✓		Y, C	19
169139	597480	346087	583716	467522	313056		✓	↓	Y, C	20
175487	598629	355218	615735	488219	346094	✓		8280	Y	21
168794	571520	346275	590298	487766	331310	✓			Y	22
151974	539319	311877	552548	469153	317478	✓		↓	Y	23
162329	580643	332167	562686	443883	327093	✓		8123	Y	24
										25
										26
										27
										28
										29

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

Data Processed by: [signature]

[signature] Supervisor Review

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MSSV1.p2.2006.xls Log PageNo. ______ 34

Semi-Volatile GC/MS Injection Log (Page 1 of 2)

Instrument: MS5/ HP5972 (26)
GC Column ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 10/14/08
+Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2	City of Geneva	OBG-MS
3		
4		
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol.	Method	List	Data File Number	Data File Date	Data File Time	Dil. Factor	I.S. No.
1	1)	TD10210845	DFTPPLC	1.2	8270		N0061	10/21/08	1038		
2		CC10210845	N014CL42			42	N0062		1059		1970
3	↓	CC10210885CM	N014CLM				N0063		1137		
4	2)	0810083-001B					N0064		1215	10X	
5		-001B MS					N0065		1253		
6		-001B MSD					N0066		1331		
7		-002B					N0067		1410	↓	
8		-003B					N0068		1448	2X	
9		-004B					N0069		1526		
10	↓	↓ -005B	↓	↓	↓	↓	N0070	↓	1604	↓	↓
11		-					N				
12		-					N				
13		-					N				
14		-					N				
15		-					N				
16		-					N				
17		-					N				
18		-					N				
19		-					N				
20		-					N				
21		-					N				
22		-					N				
23		-					N				
24		-					N				
25		-					N				
26		-					N				
27		-					N				
28		-					N				
29		-					N				

Comments:

Method	Source	Date	SOP#
(1) 625	Fed Register, Vol 49, No. 209	10/26/84	[illegible]
(3) TCLP	8270C w/ 1311	[illegible]	[illegible]
(4) 8270C	USEPA SW846, Upd III	12/96	[illegible]
(5) EPA CLP	USEPA CLP SOW OLM04.3	[illegible]	[illegible]
(6) DEC ASP	USEPA CLP SOW OLM04.3	[illegible]	[illegible]

Samples Set By: [signature]

[signature] Supervisor Review

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5000 Brittonfield Parkway, E. Syracuse NY, 13057

MSSV1.p1.2006

Semi-Volatile GC/MS Injection Log (Page 2 of 2)

Internal Std Limits (% of CCV / ICAL area)

						Upper Limit
						Lower Limit

Pre-run maintenance
__ Replace septa
__ Replace insert, seal
__ Prune column
__ Replace Helium
__ See Maint. log
__ Other:

Internal Standard Area Counts

Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments	
—	—	—	—	—	—				Y (85k) 2027	1
216188	724451	429804	757661	698970	703253				N 2032	2
220775	741593	436316	747706	681735	702846				Y 2042	3
229023	799384	460651	787691	646899	391291		✓	8270	Y	4
202996	709302	415164	733017	591986	371124		✓		Y	5
223306	785174	456768	783310	603457	307369		✓		N IG↓	6
224467	792245	467487	780588	553566	*241793		✓		N IG↓	7
227826	809077	456739	764647	363351	*133834		✓		Y, C IS IG↓	8
231281	811265	458128	689837	992602	*72964		✓		Y, C ↓ ↓	9
217186	769595	434312	679859	908380	*76591		✓	↓	Y, C	10
										11
										12
										13
										14
										15
										16
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										27
										28
										29

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

Data Processed by: [signature]

[signature] Supervisor Review

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MSSV1.p2.2006.xls Log PageNo. ______

Semi-Volatile GC/MS Injection Log (Page 1 of 2)

Instrument: MS5/ HP5972 (26)
GC Column ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 10/11/08
+Init Cal Date 2:

	Client No.	Client Name / QA/QC
1		
2	[illegible]	CBC-MS
3	[redacted]	[redacted]
4		[redacted]
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol.	Method	List	Data File Number	Date	Time	Dil. Factor	I.S. No.
1		TD1023085	DFTPP01.D	1uL	8270	-	N0071	10/23/08	0850	-	
2		CC 1023085	N0114.FRM			8270	N0072		0851	-	1980
3		CC1023085 DM	N0140.M			4.2	N0073		1028	-	
4	2	MB-8309	N0140.M/N0140				N0074		1107	1X	
5		LCS 8309					N0075		1145		
6		MB-8309					N0076		1223		
7	3	LCS 8315			625	DMF	N0077		1301		
8		LCSD 8315					N0078		1339		
9	4	LCSD-8300	N0140.M			8270	N0079		1417		
10	3	0810149-001B				DMF	N0080		1455		
11	4	0810128-002D				625	N0081		1533	10X	
12	4	MB-8300					N0082		1611	1X	
13	3	MB-8315				DMF	N0083		1649	1X	
14	2	0810052-001B	DFTPP01.D	N0140.M		4.2	N0084		1727	25X	
15		-002B					N0085		1805		
16		-001B MSD					N0086		1843	10X	
17		-002B					N0087		1921	10X	
18		-					N				
19		-					N				
20		-					N				
21		-					N				
22		-					N				
23		-					N				
24		-					N				
25		-					N				
26		-					N				
27		-					N				
28		-					N				
29		-					N				

Comments:

Method	Source	Date	SOP + AE #(s)
(1) 625	Fed Register, Vol. 49, No. 209	10/30/84	-03
(2) TCLP	8270C or 1311 (AE #400-08)	12/96	-10,400-08
(3) 8270C	USEPA DWMP, Upd. III	12/96	-04
(4) SPA CLP	USEPA CLP SOW OLM04.3	9/03	-41
(5) DEC ASP	USEPA CLP SOW OLM04.3	9/03	-41

Samples Set By: [signature]

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Semi-Volatile GC/MS Injection Log (Page 2 of 2)

Pre-run maintenance
- Replace septa
- Replace insert. seal
- Prune column
- Replace Helium
- See Maint. log
- Other:

Internal Std Limits (% of CCV / ICAL area)

						Upper Limit
					616539	Lower Limit

Internal Standard Area Counts

Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments	
—	—	—	—	—	—				(1696) 7077	1
702798	672858	706923	672401	628558	633598				2032	2
205797	706267	701584	676441	647189	652844				2042	3
194467	673352	376092	666119	666015	638336		✓	8309		4
186214	670097	377658	654572	603380	620074		✓			5
192770	664724	376817	661626	612326	632068		✓			6
196797	683277	391711	691282	620386	667964	✓		8315		7
171957	662634	345967	584671	581016	558155	✓				8
183977	656148	372653	654957	638477	653101	✓		8300		9
177641	615250	352636	586740	592867	560598	✓		8315		10
213350	741638	418908	714522	633530	638355	✓		8300		11
226626	746834	447875	742890	677600	642678	✓		8300		12
215030	727905	415763	765802	624186	635972	✓		8315		13
221347	769864	438337	742700	637199	559222		✓	8309	~~1.6~~ N, R10X	14
184609	668851	382470	649315	541387	479324		✓			15
215391	749400	428645	702587	576639	365316		✓			16
211848	731655	427683	712195	635191	596140		✓		Exc	17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

Data Processed by: [signature]

Supervisor Reviewer

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5000 Brittonfield Parkway, E. Syracuse NY, 13057

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Log Page No. _____

3R

Standards Log

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	ID No.	Parent / Source Conc (ppm)	Exp Date	Prep'd By
1804	3-21-08	4-27-08	SSTD 100ppm OLM	1000.0	DCM EPA/HPLC	1mL	100ppm	1803	1600	5-22-08	M.G.
1805			100ppm	750.0			120				
1806			80ppm	500.0			80	1804		4-27-08	
1807			70	392.0			70	1803		5-22-08	
1808			40	500.0			40	1806	80ppm	4-27-08	
1809			20				20	1808	40ppm		
1810			10				10	1809	20ppm		
1811			5				5	1810	10ppm		
1812	3-21-08	4-25-08	OLM 4.2	—	mOH: CH2Cl2	50mL					
			Acetophenone	500µL			100ppm	1731	1000ppm	4-25-08	
			Atrazine	610µL				1732	2500ppm	1-23-09	
			Benzaldehyde	427µL				1733	1700ppm	4-25-08	
			Biphenyl	641µL				1534	7900ppm	9-4-08	
			Caprolactam	526µL				1630	5300ppm	12-2-08	
1813	4-2-08	10-2-08	LCS Sol'n —		mOH: CH2Cl2	50mL					
			Phenols Mix	2500µL			100ppm	1627	2000ppm	12-16-08	
			Benzidine Mix	2500µL				1628	2000ppm	12-16-08	
			625 Bnr/Base/Neut Mix	2500µL				1629	2000ppm	12-16-08	
			8270 Acid Mix	2500µL				1630	2000ppm	12-16-08	
			PAH's	2500µL				1631	2000ppm	12-16-08	

Supervisor Review: [signature] 4-2-08

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1831	4/22/08	5/22/08	DFTPP/IL	50 ul	DCM E404400	1 mL	50 ppm	1454	1000 ppm	6-28-08	MG
1832	4/30/08	5/30/08	50 ppm STD	312 ul	DCM E404400	1 mL	50 ppm	1764	1600 ppm	6/12/08	MG
1833	4/30/08	5/22/08	50 ppm OLM STD	312 ul	DCM E404400	1 mL	50 ppm	1833	1600 ppm	5/22/08	MG
1834	4/30/08	4/30/09	DFTPP STOCK SOLN	crocked	—	1 x 1 mL	1000 ppm	1431	1000 ppm	7/09	MG
1835	4/30/08	5/30/08	DFTPP IL	50 ul	DCM E404400	1 mL	50 ppm	1834	1000 ppm	4/30/09	MG
1836	4/30/08	5/22/08	Misc 625 STD								MG
			Octadecane	167 ul	DCM E404400	5 mL	160 ppm	1381	4,800 ppm	5/22/08	
			N-Decane	89 ul	↓	↓	↓	1382	9,000 ppm	5/22/08	
1837	4/30/08	5/22/08	160 ppm STD 625 misc	1000 ul	DCM E404400	1 mL	160 ppm	1836	160 ppm	5/22/08	MG
1838	↓	↓	50 ppm	312 ul	↓	↓	50 ppm	↓	↓	↓	MG
1839			10 ppm	100 ul	↓	500 ul	10 ppm	1838	50 ppm	5/22/08	MG
1846	5/6/09	5/6/09	1,4 Dioxane	53.234	DCM E404400	10 mL	10,240 ppm	1686	neat	8/10	[illegible]
1841	5/6/08	11/6/08	1,4-Dioxane (Prep)	53.132							
				.102 g							
↓				98 ul	MeOH (3826)	10 mL	100 ppm	1840	10,200 ppm	5/6/09	MG
1842	5/9/08	5/9/09	Int standard	Received	SAE022	1 x 5 mL	4000 ppm	ECS	4000 ppm	12/2010	MG
1843	5/15/08	5/15/09	phenol-d6	23.863 g	DCM E404400	10 mL	19,300 ppm	Chems 1875	neat	4/10	MG
				3.056							
				.193 g							
1844	5/15/08	5/15/09	Caprolactam (CAL)	43.242	DCM E404400	10 mL	11,400 ppm	1841	neat	1/12	MG
				43.128							
				.114 g							

Supervisor Review: _____

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1814	4-2-08	4-2-09	p-Terphenyl d14	2.903	DCM: E404400	10 mL	5800 ppm	1632	neat	5-11	[illegible]
				2.845							
				.058 g							
1815	4/4/08	8/27/08	Sim Cal STD								
			PAH soln	400 ul	DCM E404400	5 mL	160 ppm	1726	2000 ppm	12-16-09	MG
			2-Methylnaphthalene	101 ul				1521	7,800 ppm	8-27-08	
			2-chloronaphthalene	53 ul				1523	15,600 ppm	↓	
			Dibenzofuran	78 ul				1522	10,300 ppm	↓	
			Terphenyl-d14	137 ul				1814	5800 ppm	4-2-09	
			Perfluorobiphenyl	51 ul				1520	15,600 ppm	8-27-08	
1816	4/4/08	5/4/08	STD 080 ppm SIM	500.0	DCM E404400	1 mL	80 ppm	1815	160 ppm	8/27/08	MG
1817			060	375.0			60 ppm	↓	↓		
1818			040	500.0			40 ppm	1816	80 ppm	5/4/08	
1819			020	↓			20 ppm	1818	40 ppm	/	
1820			010				10 ppm	1819	20 ppm	/	
1821			005	100.0			10 ppm	1820	10 ppm		
1822			0002	200.0			0.2 ppm	1821	1 ppm		
1823			0001	500.0			0.1 ppm	1822	0.4 ppm		
1824			0005	↓			0.05 ppm	1823	0.2 ppm		✓
								Int 4-4-08			

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1845	5/15/08	5/15/09	1,1'-Biphenyl	43.236	DCM E404400	10 mL	10,700 ppm	1343	neat	10/11	MG
				43.129							
				.107 g							
1846	5/15/08	5/15/09	Acetophenone	48.728	DCM E404400	10 mL	9,200 ppm	1332	neat	10/10	MG
				48.636							
				.092 g							
1847	5/15/08	11/15/08	BNA CAL Surrogate		DCM E404400						
			Nitrobenzene	459 ul		5 mL	800 ppm	1644	8710 ppm	11/30/08	MG
			2-Fluorobiphenyl	333 ul				1643	12,010 ppm	↓	
			Terphenyl-d14	690 ul				1814	5,800 ppm	4/2/09	
			2-Fluorophenol	320 ul				1656	12,490 ppm	12/11/08	
			2,4,6-Tribromophenol	478 ul				1645	8,370 ppm	11/30/08	
			phenol-d6	207 ul				1343	19,300 ppm	5/15/09	
1848	5/15/08	11/15/08	BNA CAL STD								
			CAL SUR	1000.0	DCM E404400	5 mL	160 ppm	1847	800 ppm	11/15/08	MG
			phenols	400 ul				1722	2000 ppm	12/16/09	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH	↓				1726			
			1,4-Dioxane	30.1 ul			64 ppm	1752	10,600 ppm	8/10	
										Int 5/15/08	

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1825	4-4-07	5-4-07	ICV-040408 SIM		DCM E404400	1 mL	10 ppm				MG
			PAH Soln	5 ul				1631	2000 ppm	12-16-09	
			2-Methylnaphthalene	1.0 ul				1559	10,600 ppm	9-17-08	
			2-chloronaphthalene	0.94 ul				1558	12,000 ppm	9-17-08	
			Dibenzofuran	1.06 ul				1560	9400 ppm	9-17-08	
1826	4-7-08	5-7-08	ICV 040708		DCM E404400	1 mL	50 ppm				MG
			Phenols	25 ul				1627	2000 ppm	12-16-09	
			Benzidines					1628			
			625's					1629			
			8270's					1630			
			PAHS	↓				1631			
1827	4-14-08	4-14-09	Int STD	crocked	SAE021	1 mL	4000 ppm	1642	4000 ppm	x 6/10 (2/10)	MG
1828	↓	↓									
1829											
1830	4-21-08	10-21-08	BNA Surr.	—	neat	200 mL					[illegible]
			2-Fluorobiphenyl	1665 ul			100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene	2296 ul				1644	8710 ppm	11-30-08	
			Terphenyl-d14	3448 ul				1814	5800 ppm	4-2-09	
			Phenol-d6	2027 ul			150 ppm	1642	14800 ppm	12-2-08	
			2-Fluorophenol	2402 ul				1656	12490 ppm	12-11-08	
			2,4,6-Tribromophenol	3584 ul				1645	8370 ppm	11-30-08	
						[illegible]	4-21-08				

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1864	5/20/08	6/20/08	SSTD 160 ppm DCM	1000 µl	DCM E42400	1.0 mL	160 ppm	1849	160 ppm	11/15/08	MG
1865			120	750 µl			120				
1866			080	500 µl			80	1864	160 ppm	6/20/08	
1867			060	312 µl			60	1849		11/15/08	
1868			040	500 µl			40	1866	80 ppm	6/20/08	
1869			020				20	1868	40 ppm		
1870			010				10	1869	20 ppm		
1871			005				5	1870	10 ppm		
1872	5/22/08	11/22/08	BNA Surrogate (Prep)		MeOH	100 mL					MG
			Nitrobenzene-d5	1,148 µl			100 ppm	1644	8710 ppm	11/30/08	
			2-Fluorobiphenyl	832 µl				1643	12,010 ppm	11/30/08	
			Terphenyl-d14	1,724 µl				1814	5800 ppm	4-2-09	
			2-Fluorophenol	1,201 µl			150 ppm	1656	12,490 ppm	12-11-08	
			Phenol-d6	777 µl				1843	19,300 ppm	5-15-09	
			2,4,6-Tribromophenol	1,792 µl				1645	8370 ppm	11-30-08	
1873	5/28/08	4/2011	Phenol-d6	received	-	-	Neat	chems	neat	331-328	MG
1874	6/2/08	7/2/08	DFTPP 1µL	50 µl	DCM E42400	1 mL	50 ppm	1834	1000 ppm	4/30/05	MG

926

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1849	5/15/08	11/15/08	OLM CLP STD		DCM E42400	5 mL	160 ppm				MG
			1,1'-Biphenyl	75 µl				1845	10,700 ppm	5/15/09	
			Caprolactam	70 µl				1844	11,400 ppm		
			Acetophenone	87 µl				1846	9,200 ppm		
			Benzaldehyde	102 µl				1727	7,800 ppm	10/31/08	
			Atrazine	78 µl				1663	10,200 ppm	12/31/08	
			PTE	68 µl				1046	11,700 ppm	11/16/08	
			PXE	72 µl				1043	11,100 ppm	11/16/08	
1850	5/19/08	5/19/09	Acetophenone	43.248 g	DCM: E42400	10 mL	12300 ppm	1732	neat	10-10	
				43.125							
				.123 g							
1851	5/19/08	~~5/19/09~~ 12/31/08	Benzaldehyde	43.214 g	DCM E42400	10 mL	8600 ppm	1283	neat	10-08	
				43.128							
				.086 g							
1852	5-19-08	~~10-31-08~~ 9-4-08	OLM 4.2	—	MeOH: C38E01	50 mL					
			Acetophenone	407 µl			100 ppm	1850	12300 ppm	5-19-09	
			Atrazine	610 µl				1738	8200 ppm	1-22-09	
			Benzaldehyde	581 µl				1851	8600 ppm	12-31-08	
			Biphenyl	641 µl				1524	7800 ppm	9-4-08	
			Caprolactam	526 µl				1650	9500 ppm	12-3-08	

924

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1875	6/2/08	12/2/08	BNA LCS SCL10		MeOH C38E01						MG
			Phenols	2500 µl		50 mL	100 ppm	1627	2000 ppm	12-16-09	
			Benzidines					1628			
			1625's					1629			
			8270's					1630			
			PAH's					1631			
1876	6/2/08	11/09	Benzaldehyde	Received	-	5g	neat	chemserv	neat	1/09	MG
1877	6/4/08	8/27/08	Sim Surrogate		MeOH C38E01	10 mL					MG
			Decafluorobiphenyl	64 µl			100 ppm	1520	15,600 ppm	8/27/08	
			Terphenyl-d14	172 µl				1814	5,800 ppm	4/2/09	
1878	6/10/08	11/30/08	8270 BNA Surrogate (Prep)		MeOH C38E01						
			Nitrobenzene-d5	1,148 µl		100 mL	100 ppm	1644	8710 ppm	11-30-08	MG
			2-Fluorobiphenyl	832 µl				1643	12,010 ppm		
			Terphenyl-d14	1,724 µl				1814	5800 ppm	4-2-09	
			2-Fluorophenol	1,201 µl			150 ppm	1656	12,490 ppm	12-11-08	
			Phenol-d6	777 µl				1843	19,300 ppm	5-15-09	
			2,4,6-Tribromophenol	1,792 µl				1645	8370 ppm	11-30-08	
1879	6/11/08	4/2011	Phenol-d6	received	-	-	neat	chems	neat	331-328	MG

927

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1853	5/20/08	6/20/08	SSTD 160 ppm	1000 µl	DCM E42400	1.0 mL	160 ppm	1848	160 ppm	11/15/08	MG
1854			120	750 µl			120	1848			
1855			080	500 µl			80	1853	160 ppm	6/20/08	
1856			060				60	1854	120 ppm		
1857			050	312 µl			50	1848	160 ppm	11/15/08	
1858			040	500 µl			40	1855	80 ppm	6/20/08	
1859			020				20	1858	40 ppm		
1860			010				10	1859	20 ppm		
1861			005				5	1860	10 ppm		
1862			001	100 µl		500 µl	1	1861	5 ppm		
1863	5/20/08	6/20/08	ICV-2SRC								
			PAH's	25 µl	DCM E42400	1.0 mL	50 ppm	1631	2000 ppm	12/16/09	MG
			Phenols					1627			
			Benzidines					1628			
			1625's					1629			
			8270's					1630			

925

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1905	7/7/08	8/7/08	SSTD 160 ppm	1000 µl	DCM E42400	1 mL	160 ppm	1848	160 ppm	11/15/08	MG
1906			120	750 µl			120	↓			
1907			080	500 µl			80	1905	↓	8/7/08	
1908			060	↓			60	1906	120 ppm	↓	
1909			050	312 µl			50	1848	160 ppm	11/15/08	
1910			040	500 µl			40	1907	80 ppm	8/7/08	
1911			020				20	1910	40 ppm		
1912			010				10	1911	20 ppm		
1913			005	↓			5	1912	10 ppm		
1914			001	100 µl			1	1913	5 ppm	↓	
1915	7/7/08	8/7/08	ICV 2SBC 070708								MG
			phenols	25 µl	DCM E42400	1 mL	50 ppm	1700	2025 ppm	12/16/09	
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAH's					1704			
			SSTD 160 ppm OLM								
			120								
			080								
			050								
			040								
			020								

MG 7/7/08

Supervisor Review: _____

930

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1880	6/16/08	7/16/08	SSTD 080 ppm SIM	500 µl	DCM E42400	1 mL	80 ppm	1815	160 ppm	8/27/08	MG
1881			060	375 µl			60 ppm	↓			
1882			040	500 µl			40	1880	80 ppm	7/16/08	
1883			020				20	1882	40 ppm		
1884			010	↓			10	1883	20 ppm		
1885			001	100 µl			1.0	1884	10 ppm		
1886			0002	500 µl			0.2	1885	1.0 ppm		
1887			0001				0.1	1886	0.2		
1888			00005	↓			~~0.005~~	1887	0.1	↓	
1889	6/16/08	7/16/08	SIMS ICV								
			~~phenols~~					~~1700~~	~~2025 ppm~~	~~12/16/09~~	~~MG~~
			~~Benzidines~~					~~1701~~			6/16/08
			~~625's~~					~~1702~~			
			~~8270's~~					~~1703~~			
			PAH's	5 µl				1704			
			2-chloronaphthalene	0.54 µl				1558	18,500 ppm	9/17/08	
			2-methylnaphthalene	1.0 µl				1559	10,000 ppm		
			Dibenzofuran	1.06 µl				1526	9,400 ppm		
1890	6/23/08	7/23/08	50 ppm STD	312 µl	DCM E42400	1 mL	50 ppm	1848	160 ppm	11/15/08	MG
1891	6/23/08	7/23/08	50 ppm STD OLM	312 µl	↓	↓	↓	1849	160 ppm	11/15/08	MG

MG 6/23/08

Supervisor Review: _____

928

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1916	8/7/08	8/7/08	SSTD 160 ppm OLM	1000 µl	DCM E42400	1 mL	160 ppm	1849	160 ppm	11/15/08	MG
1917			120 ppm	750 µl			120	↓			
1918			080	500 µl			80	1916	↓	8/7/08	
1919			050	312 µl			50	1849	↓	11/15/08	
1920			040	500 µl			40	1918	80 ppm	8/7/08	
1921			020				20	1920	40 ppm		
1922			010				10	1924	20 ppm		
1923	↓		005	↓		↓	5	1922	10 ppm	↓	
1924	7/7/08	12/2010	INT STD	received	–	5 mL	4000 ppm	ECS	2V10022	12/2010	MG
1925	7/11/08	11/11/08	PTE/PXE LCS' SOLÚ		MeOH	10 mL	100 ppm				MG
			PTE	105 µl	C38E01	↓	↓	1199	9,500	11-16-08	
			PXE	94 µl				1241	10,600	↓	↓
1926	7/11/08	Hold 11/11/08	BNA Surrogate			100 mL					MG
			2-Fluorobiphenyl	832	MeOH		100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene-d5	1,148 µl	C38E01			1644	8710 ppm	11-30-08	
			p-Terphenyl-d14	1,887			↓	1897	5500	6-26-09	
			2-Fluorophenol	1,201 µl			150 ppm	1626	12,490 ppm	12-11-08	
			2,4,6-Tribromophenol	1,792		↓		1645	8370 ppm	11-30-08	
			Phenol-d6	777 µl			↓	1843	19,300 ppm	5/15/09	
1927	7/16/08	1/2/09	2,4 dimethylphenol	243 uL	MeOH C38E01	25 mL	100 ppm	1684	10300 ppm	1/2/09	MR
1928	7/28/08	8/28/08	DFTPPIUL	50 µl	DCM E42400	1 mL	50 ppm	1834	1000 ppm	x 4/30/09	MG
1929	7/31/08	8/27/08	SSTD 010 ppm SIM	62.5 µl	DCM E42400	1 mL	10 ppm	1815	160 ppm	x 8/27/08	MG

Supervisor Review: _____

931

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1892	6/23/08	6/23/09	IS A	–	–	1 mL	4000 ppm	1842	1000 ppm	12/2010	MG
1893			IS B	–	–						
1894	↓	↓	IS C	–	–	↓	↓	↓			↓
1895	6/24/08	7/24/08	DFTPPIUL	50 µl	DCM E42400	1 mL	50 ppm	1834	1000 ppm	4/30/08	MG
1896	6/26/08	11/26/08	PTE/PXE LCS SOLÚ			10 mL					MG
↓	↓	↓	PTE	105 µl	MeOH	↓	100 ppm	1199	9,500 ppm	11-16-08	
			PXE	94 µl	C38E01	↓	↓	1241	10,600 ppm	↓	↓
1897	6/26/08	6/26/09	p-Terphenyl d14	2.9890	DCM E42400	10 mL	5300 ppm	1632	neat	5-11	MG
↓	↓	↓	↓	2.956	↓	↓	↓	↓	↓	↓	↓
				0.053							
1898	6/27/08	6/25/2011	OBG PA4 ISTDS89 Mix	1 x 5 mL	–	5 mL	2000 ppm	ECS	2000 ppm	6-25-2011	MG
1899	6/27/08	12/16/09	Phenols Mix	1 x 5 mL	–	5 mL	2000 ppm	ECS	2000 ppm	12-16-09	
1900	6/27/08		Benzidines								
1901	6/27/08	↓	625's								
1902	6/27/08		8270's								
1903	6/27/08	↓	PAHS	↓	↓	↓	↓	↓			↓
1904	6/30/08	11-30-08	BNA Surrogate Solú		MeOH	100 mL					
			2-Fluorophenol	1,201 µl	C38E01		150 ppm	1626	12490 ppm	12-11-08	MG
			2,4,6-Tribromophenol	1,792 µl			↓	1645	8370 ppm	11-30-08	
			Phenol-d6	777 µl				1843	19,300 ppm	5-15-09	
			Nitro Benzene-d5	1,148 µl			100 ppm	1644	8,710 ppm	11-30-08	
			2-Fluorobiphenyl	833 µl			↓	1643	12,010 ppm	↓	
			Terphenyl-d14	1,887 µl			↓	1897	5,300 ppm	6-26-09	

Supervisor Review: _____

929

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1941	8/12/08	9/12/08	DFTPP 1uL	50.0	DCM E42400	1mL	50ppm	1834	1000 ppm	4/30/09	MG
1942	8/12/08	9/12/08	SSTD 160 ppm	1000			160ppm	1939	160 ppm	11/15/08	MG
1943			120	750			120				
1944			080	500			80	1942		9/12/08	
1945			060				60	1943	120 ppm		
1946			050	312			50	1939	160 ppm	11/15/08	
1947			040	500			40	1944	80 ppm	9/12/08	
1948			020				20	1947	40 ppm		
1949			010				10	1948	20 ppm		
1950			005				5	1949	10 ppm		
1951			001	100				1950	5 ppm		
1952	8/12/08	9/12/08	2,3,8C-081208		DCM E42400	1mL	50ppm				
			Phenols	25				1700	2000 ppm	12/16/09	MG
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAH's					1704			

Supervisor Review: _____

934

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1938	8/8/08	9/8/08	IS SIM	Capsules	—	1mL	2000ppm	1898	2000 ppm	6/25/11	MG
1931											
1932											
1933	8/8/08	9/8/08	50ppm STD	312 uL	DCM E42400	1mL	50 ppm	1848	160 ppm	11/15/08	
1934	8/10/08	2/10/09	LCS Soln								
			Phenols Mix	250uL	Neat	50 mL	100 ppm	1700	2000 ppm	12/16/09	
			Benzidine Mix					1701			
			625 Base/Neutral Mix					1702			
			8270 BNA Add-ons					1703			
			PAHs					1704			
1935	8/10/08	11/30/08	BNA Surr Soln								
			2-Fluorophenol	400	Neat	50mL	100 ppm	1656	12490 ppm	12/11/08	
			2,4,6-Tribromophenol	597				1645	8370 ppm	11/30/08	
			phenol-d6	259				1833	19300 ppm	5/15/09	
			2-Fluorobiphenyl	624			150 ppm	1643	12010 ppm	11/30/08	
			Nitrobenzene	561				1644	8370 ppm	11/30/08	
			Terphenyl	1415				1697	5300 ppm	6/26/09	
1936	8/11/08	8/11/09	Benzaldehyde (CALS)	51.011	DCM E42400	10mL	12,300ppm	1876	Neat	11-31-09	MG
				50.888							
				.123g							

Supervisor Review: _____

932

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1953	8/13/08	9/13/08	SSTD 160 ppm CLP	1000	DCM E42400	1mL	160ppm	1940	160 ppm	12-13-08	MG
1954			120	750			120				
1955			080	500			80	1953		9-13-08	
1956			060 050	312			50	1940	160 ppm	12-13-08	
1957			040	500			40	1955	80 ppm	9-13-08	
1958			020				20	1957	40 ppm		
1959			010				10	1958	20 ppm		
1960			005				5	1959	10 ppm		
1961	8/13/08	9/13/08	625 misc CAL Soln		DCM E42400						
			n-Decane	2000 uL		10 mL	160ppm	1937	7,700 ppm	8/11/09	MG
			Octadecane	123				1938	12,000 ppm	8/11/09	
1962	8/14/08	9/14/08	SSTD 160 ppm 625M	1000	DCM E42400	1mL	160ppm	1961	160 ppm	2/10/09	
1963			50 ppm 625M	312			50ppm				
1964			10 ppm 625MS	100		5mL	10 ppm	1963	50 ppm	9/14/08	
1965	8/18/08	2/18/09	BNA Surr Soln		Neat CAL Std						MG
			Nitrobenzene d5	1,524	1148	100 mL	100 ppm	1644	8710 ppm	11-30-08	
			2-Fluorobiphenyl	416	816			1643	12010 ppm		
			Terphenyl-d14	945	1887			1697	5300 ppm	6/26/09	
			Phenol-d6	388	777		150 ppm	1843	19,300 ppm	5/15/09	
			2-Fluorophenol	600	1200			1656	12,490 ppm	11/11/08	
			2,4,6-Tribromophenol	996	1992			1645	8370 ppm	11/30/08	

Supervisor Review: _____

935

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1937	8/11/08	8/11/09	n-Decane	52.350	DCM E42400	10mL	7700	6077	Neat	—	
				52.273							
				.077							
1938	8/11/08	8/11/09	Octadecane	43.270	DCM	10mL	12,000	6076	Neat	—	
				43.140	E42400						
				.130							
1939	8/11/08	11/15/08	BNA CAL STD		DCM E42400	5mL					
			Cal SURR	1000			160 ppm	1847	8000 ppm	11-15-08	MG
			Phenols	400				1722	2000 ppm	12/16/08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH's					1726			
			1,4-Dioxane	30.1			64 ppm	1752	10,000 ppm	8/10/09	1349
1940	8/11/08	12/11/08	DLM CAL STD		E42400	5mL					
			1,1'-Biphenyl	7.5			160 ppm	1845	10,700	5/15/09	
			Caprolactam	70				1844	11,400		
			Acetophenone	87				1846	9,200		
			Benzaldehyde	65				1936	12,300	8/11/09	
			Atrazine	78				1663	10,200	12/13/08	
			PTE	68				1640	11,700	11/11/08	
			PXE	72				1643	11,100 ppm		

Supervisor Review: _____

933

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1983	9/16/08	10/16/08	SSTD 040 ppm	500 ul	DCM E8240	40 ppm ↔ 1 mL		1988	80 ppm	10-16-08	MG
1984			020			20		1983	40 ppm		
1985			010			10		1984	20 ppm		
1986			005			5.0		1985	10 ppm		
1987			001	100 ul		1.0		1986	5 ppm		
1988	9/16/08	12/16/08	OLM CAL STD								
			Atrazine	75 ul	DCM E8240	5 mL	100 ppm	1663	10,200 ppm	12/3/08	MG
			Benzaldehyde	65 ul				1836	12,300 ppm	8/16/09	
			1,1'-Biphenyl	75 ul				1845	10,200 ppm	5/15/09	
			Acetophenone	87 ul				1846	9,200 ppm	5/15/09	
			Caprolactam	70 ul				1844	11,400 ppm	↓	
			PXE	72 ul				1043	11,100 ppm	11-16-08	
			PTE	68 ul				1046	11,700 ppm	11-16-08	
1989	8/16/08	10/16/08	SSTD 160 ppm OLM	1000 ul	Solvent	1 mL	160 ppm	1988	160 ppm	10/15/08	MG
1990			120	750 ul	DCM E8240		120 ppm	↓	↓		
1991			080	500 ul			80	1989	↓	10/16/08	
1992			060	312 ul			60	1988	160 ppm	12/3/08	
1993			040	500 ul			40	1991	80 ppm	10-16-08	
1994			020			20		1993	40 ppm		
1995			010			10		1994	20 ppm		
1996			005			5		1995	10 ppm		
1997											

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

938

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1966	8/27/08	2/27/09	BNA Surr Sol'n		Meoh C38E01	10 mL					MG
			Nitrobenzene-d5	1148 ul			100 ppm	1644	8710 ppm	11-30-08	
			2-Fluorobiphenyl (2-Fluorophenol)	~~816~~ ul (832 ul)				1643	12010 ppm	↓	
			Terphenyl-d14	1887 ul			↓	1887	5300 ppm	12/2/09	
			Phenol-d6	777 ul			150 ppm	1843	19300 ppm	5/15/09	
			2-Fluorophenol	1200 ul				1656	12490 ppm	10/1/08	
			2,4,6-Tribromophenol	1792 ul			↓	1645	8370 ppm	11/30/08	
1967	8/27/08	8/27/09	Terphenyl-d14	2.891	DCM E8240	10 mL		1556	Neat	5/20/11	MG
				2.839 g							
				.052 g			5,200 ppm				
1968	9/8/08	9/8/09	INT STANDARD	1 mL	—	1 mL	4000 ppm	1924	4000 ppm	12/9/2010	MG
1969					—						
1970					—						
1971	9/1/08	11/30/08	BNA Surrogate								
			2-Fluorobiphenyl	833 ul	MeOH	100 mL	100 ppm	1643	12010 ppm	11-30-08	MG
			Nitrobenzene-d5	1148 ul	C38E01			1644	8710 ppm	↓	
			Terphenyl-d14	1,923 ul			↓	1967	5,200 ppm	8-27-09	
			2-Fluorophenol	1,200 ul			150 ppm	1656	12490 ppm	10-1-08	
			2,4,6-Tribromophenol	1,792 ul				1645	8370 ppm	11-30-08	
			Phenol-d6	777 ul			↓	1843	19300 ppm	5/15/09	
1972	9/12/08	9/12/09	Diphenyl	45.850							
				45.677	DCM	10 mL	17,300 ppm	1743	Neat	10/2011	
				.173 g							

* 8/27/08

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

936

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1997	9/16/08	10/16/08	2SBC-091608		DCM E8240	1 mL					
			Phenols	25 ul			50 ppm	1744	2000 ppm	12/2/09	MG
			Benzidines					1761			
			625's					1762			
			8270's					1763			
			PAH's					1764			
1998	9/16/08	9/2012	Terphenyl-d14	received	—	2X 50 mg	—	chems	Neat	9/2012	MG
1999	9/17/08	11/16/08	PTE/PXE LCS Soln		MeOH	10 mL					MG
			PTE	105 ul	C38E01		100 ppm	1199	9,500	11-16-08	
			PXE	94 ul			↓	1241	10,600	↓	
2000	9/25/08	9/25/09	2-Methylnaphthalene	43.248	DCM E8240	10 mL	12,100 ppm	984	Neat	5/2011	MG
				43.127							
				.121							
2001	9/25/08	9/25/09	2-Chloronaphthalene	43.205	DCM E8240	10 mL	7,200 ppm	1557	Neat	12/2010	MG
				43.133							
				.072							
2002	9/25/08	9/25/09	Dibenzofuran	43.270	DCM E8240	10 mL	13,200 ppm	983	Neat	8/2010	MG
				43.138							
				.132							
2003	9/25/08	9/25/09	SIM Surrogates		Meoh	10 mL					MG
			Decafluorobiphenyl	86 ul	C38E01		100 ppm	1787	11,600 ppm	3/2009	
			Terphenyl-d14	192 ul			↓	1967	5,200 ppm	8-27-09	

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

939

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1973	9/12/08	10/31/08	OLM 4.2	—	MeOH	25 mL					CBR
			Acetophenone	203 ul	C38E01		100 ppm	1850	12,300 ppm	5/19/09	
			Atrazine	305 ul				1738	8300 ppm	1/22/09	
			Benzaldehyde	291 ul				1851	8600 ppm	10/31/08	
			Biphenyl	144 ul				1972	17,300 ppm	9/12/09	
			Caprolactam	263 ul			↓	1650	9500 ppm	12/3/08	
1974	9/15/08	10/15/08	DFTPP/ISL	50 ul	DCM E8240	1 mL	50 ppm	1834	1000 ppm	11/20/08	MG
1975	9/15/08	10/15/08	50 ppm STD	312 ul	DCM E8240	1 mL	50 ppm	1839	160 ppm	11/18/08	MG
1976	9/15/08	10/15/08	50 ppm OLM STD	312 ul	DCM E8240	1 mL	50 ppm	1840	160 ppm	12/3/08	MG
1977	9/15/08	12/16/08	BNA CAL STD		DCM E8240	5 mL	160 ppm				MG
			cal std	1000 ul				1847	800 ppm	11-15-08	
			Phenols	400 ul				1722	2000 ppm	12-16-08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH's					1726			
			1,4-Dioxane	312 ul			64 ppm	1752	10,600 ppm	1/30/09	
1978	9/16/08	10/16/08	SSTD 160 ppm	1000 ul	DCM E8240	1 mL	160 ppm	1977	1000 ppm	12-16-08	MG
1979			120	750 ul			120	↓			
1980			080	500 ul			80	1978	↓	10/16/08	
1981			060	↓			60	1979	120 ppm	↓	
1982			050	312 ul			50	1977	160 ppm	12-16-08	

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

937

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2011	9/29/08	12/10/08	BNA Surrogate		Meoh	100 mL					MG
			2-Fluorobiphenyl	833 µl	C38E01		100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene-d5	1148 µl			↓	1644	8710	↓	
			Terphenyl-d14	1983 µl				1967	5,200	8-27-08	
			2-Fluorophenol	1200 µl			150 ppm	E 1656	12,490	12-11-08	
			2,4,6-Tribromophenol	1792 µl				1645	8370	11-30-08	
			Phenol-d6	777 µl			↓	1843	19,300	5/15/08	
2012	10/7/08	7/2011	Internal STANDARD	Received	—	1x5mL	400 ppm	ECS	400 ppm	SVE023	MG
2013	10/9/08	12/10/08	BNA Surrogate		Meoh	100 mL					MG
			2-Fluorobiphenyl	833 µl	C38E01		100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene-d5	1148 µl			↓	1644	8710 ppm		
			Terphenyl-d14	1983 µl				1967	5200	8-27-08	
			2-Fluorophenol	1200 µl			150 ppm	1656	12490	12-11-08	
			2,4,6-Tribromophenol	1792 µl				1645	8370	11-30-08	
			Phenol-d6	777 µl			↓	1843	19,300	5/15/08	
2014	10/9/08	4/9/09	BNA LCS Soln		Meoh	50 mL	100 ppm				MG
			Phenols	2,500 µl	C38E01			1700	2000 ppm	12/16/09	
			Benzidines	↓				1701			
			625's					1702			
			8270's					1703			
			PAHs	↓				1704	↓		
2015											

Supervisor Review: _____

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942

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2004	9/25/08	3/25/09	SIM LCS Soln		Meoh	10 mL	100 ppm				MG
			PAH	500 µl	C38E01			1704	2000 ppm	12-16-09	
			2-Methylnaphthalene	83 µl				2000	12,100 ppm	9/25/09	
			2-Chloronaphthalene	139 µl				2003	7,200 ppm	9/25/09	
			Dibenzofuran	75 µl				2002	13,200 ppm	9/25/09	
2005	9/29/08	9/28/09	2-Chloronaphthalene	43.216	DCM	10 mL	8,000 ppm	1557	neat	12-2010	MG
				43.136	E424100						
				.080							
2006	9/29/08	9/29/09	2-Methylnaphthalene	43.215	DCM	10 mL	7,900 ppm	984	neat	5-2010	MG
				43.136	E424100						
				.079							
2007	9/29/08	9/29/09	Dibenzofuran	43.226	DCM	10 mL	9,500 ppm	983	neat	8-2010	MG
				43.131	E424100						
				.095							
2008	9/29/08	9/29/09	Decafluorobiphenyl	43.314	DCM	10 mL	18,300 ppm	1345	neat	8-2011	MG
				43.131	E424100						
				.183							
2009	9/29/08										

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

940

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2015	10/9/08	10/9/09	Benzaldehyde-Prep	51.300	Meoh	10	11,200 ppm	1556	neat	11/2009	MG
				51.188	DCM E424100						
				.112							
2016	10/9/08	12/3/08	OLM 4.2 LCS Soln		Meoh	25 mL					MG
			Acetophenone	203 µl	C38E01		100 ppm	1550	12,300 ppm	5/19/09	
			Quinoline	305 µl				1738	8200 ppm	11/22/09	
			1,1'-Biphenyl	144 µl				1972	17,300 ppm	9/12/09	
			Benzaldehyde	823 µl				2015	11,200 ppm	10/9/09	
			Caprolactam	763 µl			↓	1650	9500 ppm	12/08	
2017	10/10/08	11/10/08	SSTD 080 ppm SEM	500 µl	DCM E424100	10 mL	80 ppm	2009	160 ppm	3-28-09	MG
2018			060	375 µl			60	↓			
2019			040	500 µl			40	2017	80 ppm	11/10/08	
2020			020	↓			20	2019	40 ppm		
2021			010				10	2020	20 ppm		
2022			001	100 µl			1.0	20211	10 ppm		
2023			.002	200 µl			0.2	20221	1 ppm		
2024			.001	500 µl			0.1	20231	0.2 ppm		
2025	↓	↓	.0005	↓	↓	↓	0.05	20241	0.1 ppm	↓	↓

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

943

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2009	9/29/08	3/28/09	SIM CAL STD		DCM	5 mL					
			PAH Soln	400 µl	E424100		160 ppm				
			2-Methylnaphthalene	101 µl				2006	7,900 ppm	9-29-09	
			2-Chloronaphthalene	100 µl				2005	8,000 ppm		
			Dibenzofuran	84 µl				2007	9,500 ppm	↓	
			Terphenyl-d14	154 µl				1967	5,200 ppm	8-27-09	
			Decafluorobiphenyl	44 µl			↓	2008	18,300 ppm	9-23-09	
2010	9/29/08	10/29/08	MDLV SIM Soln		C38E01	10 mL	0.080 ppm	2009	160 ppm	10-29-08	MG
			SIM CAL STD	38 µl	Meoh						

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

941

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2026	10/14/08	11/14/08	ICV 10/2008 SVM		DCM 012408	1mL					MG
			PAH	5uL			10ppm	1704	2000 ppm	12/16/08	
			2-Methylnaphthalene	0.83 uL				2000	12,100 ppm	9/25/08	
			2-Chloronaphthalene	1.38 uL				2001	7,200 ppm		
			Dibenzofuran	0.76 uL				2002	18,200 ppm		
2027	10/13/08	11/13/08	DFTPP mix	50 uL	DCM 012408	1mL	50ppm	1834	1000 ppm	4/30/09	MG
2028	10/14/08	11/14/08	STD 160 ppm	1000 uL	DCM 012408	1mL	160ppm	1977	160 ppm	12-16-08	MG
2029			120	750 uL			120				
2030			080	500.0			80	2028		11/14/08	
2031			060				60	2029	120 ppm		
2032			050	312 uL			50	1977	160 ppm	12-16-08	
2033			040	500 uL			40	2030	80 ppm	11/14/08	
2034			020				20	2033	40 ppm		
2035			010				10	2034	20 ppm		
2036			005				5	2035	10 ppm		
2037			001	100 uL			1	2036	5 ppm		
2038	10/14/08	11/14/08	2580-101408		DCM 012408	1mL					MG
			Phenols	25 uL			50ppm	1701	2000 ppm	12-16-09	
			Benzidines					1702			
			625's					1703			
			8270's					1704			
			PAH					1705			

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

944

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2039	10/14/08	11/14/08	STD 160 ppm OCM	1000 uL	DCM 012408	1mL	160ppm	1988	160 ppm	12-13-08	MG
2040			120	750 uL			120				
2041			080	500.0			80	2039	160 ppm	11/14/08	
2042			050	312 uL			50	1988		12-13-08	
2043			040	500 uL			40	2041	80 ppm	11/14/08	
2044			020				20	2043	40 ppm		
2045			010				10	2044	20 ppm		
2046			005				5	2045	10 ppm		
2047	10/21/08	12/21/08	BNA Surrogate		Alcell	100 uL					MG
			2-Fluorobiphenyl	833 uL	C38E01		100ppm	1643	12010 ppm	11-30-08	
			Nitrobenzene-d5	1148 uL				1644	8710 ppm		
			Terphenyl-d14	1823 uL				1867	5200 ppm	8-27-09	
			2-Fluorophenol	1200 uL			150ppm	1656	12,490 ppm	12-11-08	
			2,4,6-Tribromophenol	1792 uL				1645	8370	11-30-08	
			Phenol-d6	777 uL				1843	19,500	15-15-08	
2048	10/22/08	12/16/09	625 BN Mix #1	Received	625BN 018	5mL	2000ppm	ECS	2000ppm	12/16/09	MG
2049			8270 Semi add ons		8270A 17						
2050			Benzidines Mix		BZD 026						
2051			phenols Mix		PHN 023						
2052			PAH Mix		PAH 16						

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

945

Trace Metals Data

946

Analytical Results

947

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 14.4	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93053
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.32 J		1.2	0.0067	mg/Kg-dry	1	10/21/08 16:16
Chromium	29		1.2	0.16	mg/Kg-dry	1	10/21/08 16:16
Copper	91		1.2	0.47	mg/Kg-dry	1	10/21/08 16:16
Iron	16000		5.8	0.55	mg/Kg-dry	1	10/21/08 16:16
Nickel	23		5.8	0.23	mg/Kg-dry	1	10/21/08 16:16
Zinc	260		2.3	0.93	mg/Kg-dry	1	10/21/08 16:16

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398362 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 25.1	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93061
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.39 J		1.3	0.0076	mg/Kg-dry	1	10/21/08 16:55
Chromium	97		1.3	0.19	mg/Kg-dry	1	10/21/08 16:55
Copper	460		1.3	0.53	mg/Kg-dry	1	10/21/08 16:55
Iron	24000		6.7	0.63	mg/Kg-dry	1	10/21/08 16:55
Nickel	46		6.7	0.27	mg/Kg-dry	1	10/21/08 16:55
Zinc	530		2.7	1.1	mg/Kg-dry	1	10/21/08 16:55

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398370 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 20.4	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93062
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.65 J		1.3	0.0072	mg/Kg-dry	1	10/21/08 16:59
Chromium	65		1.3	0.18	mg/Kg-dry	1	10/21/08 16:59
Copper	320		1.3	0.50	mg/Kg-dry	1	10/21/08 16:59
Iron	31000		6.3	0.59	mg/Kg-dry	1	10/21/08 16:59
Nickel	38		6.3	0.25	mg/Kg-dry	1	10/21/08 16:59
Zinc	670	E	2.5	1.0	mg/Kg-dry	1	10/21/08 16:59

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398371 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 20.4	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-DL-93070
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Zinc	990		13	5.0	mg/Kg-dry	5	10/21/08 17:36

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398379 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 23.0	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93074
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.29	J	6.5	0.057	mg/Kg-dry	5	10/21/08 17:53
Chromium	430		6.5	0.91	mg/Kg-dry	5	10/21/08 17:53
Copper	2000		6.5	2.6	mg/Kg-dry	5	10/21/08 17:53
Iron	120000		32	3.0	mg/Kg-dry	5	10/21/08 17:53
Nickel	170		32	1.3	mg/Kg-dry	5	10/21/08 17:53
Zinc	5100	E	13	5.2	mg/Kg-dry	5	10/21/08 17:53

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398383 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 23.0	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-DL-93075
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Zinc	5200		26	10	mg/Kg-dry	10	10/21/08 17:57

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398384 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 17.8	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-SAMP-93064
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Beryllium	0.32	J	1.2	0.0069	mg/Kg-dry	1	10/21/08 17:06
Chromium	550		1.2	0.17	mg/Kg-dry	1	10/21/08 17:06
Copper	1700		1.2	0.49	mg/Kg-dry	1	10/21/08 17:06
Iron	61000		6.1	0.57	mg/Kg-dry	1	10/21/08 17:06
Nickel	150		6.1	0.24	mg/Kg-dry	1	10/21/08 17:06
Zinc	2100	E	2.4	0.97	mg/Kg-dry	1	10/21/08 17:06

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398373 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — Analytical Results

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005BDL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	ICAP 61E	Sample Size: 0.5 g	PrepDate: 10/20/08 0:00
ColumnID:		%Moisture: 17.8	BatchNo: 8301/R15238
Revision:	10/22/08 9:32	TestCode: 6010S	FileID: 1-DL-93076
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3050B)
Zinc	2900		24	9.7	mg/Kg-dry	10	10/21/08 18:02

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/26/08 12:13 398385 Project Supervisor: Monika Santucci

QC Summary

956

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICV | SampType: ICV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398340
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.982	0.10	1	0	98	90	110				
Antimony	0.205	0.060	0.2	0	103	90	110				
Arsenic	0.201	0.010	0.2	0	101	90	110				
Barium	0.193	0.10	0.2	0	97	90	110				
Beryllium	0.202	0.010	0.2	0	101	90	110				
Boron	0.499	0.050	0.5	0	99	90	110				
Cadmium	0.196	0.010	0.2	0	98	90	110				
Calcium	9.85	1.0	10	0	98	90	110				
Chromium	0.200	0.010	0.2	0	100	90	110				
Cobalt	0.196	0.050	0.2	0	98	90	110				
Copper	0.199	0.010	0.2	0	100	90	110				
Iron	1.01	0.050	1	0	101	90	110				
Lead	0.202	0.010	0.2	0	101	90	110				
Magnesium	9.95	1.0	10	0	99	90	110				
Manganese	0.198	0.050	0.2	0	99	90	110				
Molybdenum	0.192	0.050	0.2	0	96	90	110				
Nickel	0.200	0.050	0.2	0	100	90	110				
Potassium	9.87	5.0	10	0	99	90	110				
Selenium	0.195	0.010	0.2	0	97	90	110				
Silver	0.0478	0.010	0.05	0	95	90	110				
Sodium	9.90	1.0	10	0	99	90	110				
Strontium	0.203	0.050	0.2	0	101	90	110				
Thallium	0.195	0.020	0.2	0	98	90	110				
Tin	0.197	0.050	0.2	0	98	90	110				
Titanium	0.203	0.050	0.2	0	101	90	110				
Vanadium	0.200	0.050	0.2	0	100	90	110				
Zinc	0.201	0.020	0.2	0	100	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

958

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV/IPC | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398341
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.94	0.10	5	0	99	90	110				
Antimony	0.497	0.060	0.5	0	99	90	110				
Arsenic	0.499	0.010	0.5	0	100	90	110				
Barium	0.501	0.10	0.5	0	100	90	110				
Beryllium	0.501	0.010	0.5	0	100	90	110				
Boron	0.500	0.050	0.5	0	100	90	110				
Cadmium	0.502	0.010	0.5	0	100	90	110				
Calcium	9.90	1.0	10	0	99	90	110				
Chromium	0.499	0.010	0.5	0	100	90	110				
Cobalt	0.499	0.050	0.5	0	100	90	110				
Copper	0.498	0.010	0.5	0	100	90	110				
Iron	0.995	0.050	1	0	99	90	110				
Lead	0.502	0.010	0.5	0	100	90	110				
Magnesium	10.0	1.0	10	0	100	90	110				
Manganese	0.499	0.050	0.5	0	100	90	110				
Molybdenum	0.501	0.050	0.5	0	100	90	110				
Nickel	0.495	0.050	0.5	0	100	90	110				
Potassium	9.95	5.0	10	0	100	90	110				
Selenium	0.493	0.010	0.5	0	99	90	110				
Silver	0.247	0.010	0.25	0	99	90	110				
Sodium	9.54	1.0	10	0	95	90	110				
Strontium	0.508	0.050	0.5	0	101	90	110				
Thallium	0.496	0.020	0.5	0	99	90	110				
Tin	0.499	0.050	0.5	0	100	90	110				
Titanium	0.501	0.050	0.5	0	100	90	110				
Vanadium	0.497	0.050	0.5	0	99	90	110				
Zinc	0.503	0.020	0.5	0	101	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

959

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICVH | SampType: ICVH | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398339
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	50.3	1.0	50	0	101	90	110				
Chromium	5.13	0.010	5	0	103	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.1	0.050	10	0	101	90	110				
Lead	10.2	0.010	10	0	102	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	50.1	1.0	50	0	100	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

957

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV1 SampType: CCV TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398349
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.96	0.10	5	0	99	90	110				
Antimony	0.498	0.060	0.5	0	100	90	110				
Arsenic	0.500	0.010	0.5	0	100	90	110				
Barium	0.508	0.10	0.5	0	102	90	110				
Beryllium	0.504	0.010	0.5	0	101	90	110				
Boron	0.499	0.050	0.5	0	100	90	110				
Cadmium	0.503	0.010	0.5	0	101	90	110				
Calcium	9.87	1.0	10	0	99	90	110				
Chromium	0.500	0.010	0.5	0	100	90	110				
Cobalt	0.500	0.050	0.5	0	100	90	110				
Copper	0.498	0.010	0.5	0	100	90	110				
Iron	0.988	0.050	1	0	99	90	110				
Lead	0.507	0.010	0.5	0	101	90	110				
Magnesium	10.0	1.0	10	0	100	90	110				
Manganese	0.498	0.050	0.5	0	100	90	110				
Molybdenum	0.501	0.050	0.5	0	100	90	110				
Nickel	0.498	0.050	0.5	0	100	90	110				
Potassium	9.98	5.0	10	0	100	90	110				
Selenium	0.493	0.010	0.5	0	99	90	110				
Silver	0.248	0.010	0.25	0	98	90	110				
Sodium	9.99	1.0	10	0	100	90	110				
Strontium	0.511	0.050	0.5	0	102	90	110				
Thallium	0.489	0.020	0.5	0	98	90	110				
Tin	0.499	0.050	0.5	0	100	90	110				
Titanium	0.507	0.050	0.5	0	101	90	110				
Vanadium	0.495	0.050	0.5	0	99	90	110				
Zinc	0.505	0.020	0.5	0	101	90	110				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICB SampType: ICB TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398342
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB1 SampType: CCB TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398350
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVH1 SampType: CCVH TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398348
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	49.9	1.0	50	0	100	90	110				
Chromium	5.14	0.010	5	0	103	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.0	0.050	10	0	100	90	110				
Lead	10.1	0.010	10	0	101	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	50.0	1.0	50	0	100	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV2 | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398351
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	49.6	1.0	50	0	99	90	110				
Chromium	5.10	0.010	5	0	102	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	9.97	0.050	10	0	100	90	110				
Lead	10.1	0.010	10	0	101	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	49.7	1.0	50	0	99	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

964

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398352
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.93	0.10	5	0	99	90	110				
Antimony	0.495	0.060	0.5	0	99	90	110				
Arsenic	0.494	0.010	0.5	0	99	90	110				
Barium	0.503	0.10	0.5	0	101	90	110				
Beryllium	0.499	0.010	0.5	0	100	90	110				
Boron	0.493	0.050	0.5	0	99	90	110				
Cadmium	0.497	0.010	0.5	0	99	90	110				
Calcium	9.79	1.0	10	0	98	90	110				
Chromium	0.493	0.010	0.5	0	99	90	110				
Cobalt	0.494	0.050	0.5	0	99	90	110				
Copper	0.494	0.010	0.5	0	99	90	110				
Iron	0.977	0.050	1	0	98	90	110				
Lead	0.502	0.010	0.5	0	100	90	110				
Magnesium	9.89	1.0	10	0	99	90	110				
Manganese	0.493	0.050	0.5	0	99	90	110				
Molybdenum	0.494	0.050	0.5	0	99	90	110				
Nickel	0.492	0.050	0.5	0	98	90	110				
Potassium	9.98	5.0	10	0	100	90	110				
Selenium	0.486	0.010	0.5	0	97	90	110				
Silver	0.244	0.010	0.25	0	98	90	110				
Sodium	9.99	1.0	10	0	100	90	110				
Strontium	0.505	0.050	0.5	0	101	90	110				
Thallium	0.486	0.020	0.5	0	97	90	110				
Tin	0.489	0.050	0.5	0	98	90	110				
Titanium	0.502	0.050	0.5	0	100	90	110				
Vanadium	0.490	0.050	0.5	0	98	90	110				
Zinc	0.500	0.020	0.5	0	100	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

965

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB2 | SampType: CCB | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398353
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

966

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVH3 | SampType: CCVH | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398354
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	49.8	1.0	50	0	100	90	110				
Chromium	5.13	0.010	5	0	103	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.0	0.050	10	0	100	90	110				
Lead	10.1	0.010	10	0	101	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	49.9	1.0	50	0	100	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

967

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV3 | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398356
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.98	0.10	5	0	100	90	110				
Antimony	0.497	0.060	0.5	0	99	90	110				
Arsenic	0.501	0.010	0.5	0	100	90	110				
Barium	0.508	0.10	0.5	0	102	90	110				
Beryllium	0.505	0.010	0.5	0	101	90	110				
Boron	0.502	0.050	0.5	0	100	90	110				
Cadmium	0.504	0.010	0.5	0	101	90	110				
Calcium	9.92	1.0	10	0	99	90	110				
Chromium	0.500	0.010	0.5	0	100	90	110				
Cobalt	0.500	0.050	0.5	0	100	90	110				
Copper	0.499	0.010	0.5	0	100	90	110				
Iron	0.990	0.050	1	0	99	90	110				
Lead	0.507	0.010	0.5	0	101	90	110				
Magnesium	10.0	1.0	10	0	100	90	110				
Manganese	0.498	0.050	0.5	0	100	90	110				
Molybdenum	0.501	0.050	0.5	0	100	90	110				
Nickel	0.500	0.050	0.5	0	100	90	110				
Potassium	9.99	5.0	10	0	100	90	110				
Selenium	0.491	0.010	0.5	0	98	90	110				
Silver	0.248	0.010	0.25	0	99	90	110				
Sodium	10.0	1.0	10	0	100	90	110				
Strontium	0.510	0.050	0.5	0	102	90	110				
Thallium	0.492	0.020	0.5	0	98	90	110				
Tin	0.497	0.050	0.5	0	99	90	110				
Titanium	0.507	0.050	0.5	0	101	90	110				
Vanadium	0.496	0.050	0.5	0	99	90	110				
Zinc	0.506	0.020	0.5	0	101	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB3 | SampType: CCB | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398356
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV4 | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398358
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.06	0.10	5	0	101	90	110				
Antimony	0.505	0.060	0.5	0	101	90	110				
Arsenic	0.509	0.010	0.5	0	102	90	110				
Barium	0.514	0.10	0.5	0	103	90	110				
Beryllium	0.512	0.010	0.5	0	102	90	110				
Boron	0.509	0.050	0.5	0	102	90	110				
Cadmium	0.512	0.010	0.5	0	102	90	110				
Calcium	10.1	1.0	10	0	101	90	110				
Chromium	0.508	0.010	0.5	0	102	90	110				
Cobalt	0.509	0.050	0.5	0	102	90	110				
Copper	0.508	0.010	0.5	0	101	90	110				
Iron	1.01	0.050	1	0	101	90	110				
Lead	0.516	0.010	0.5	0	103	90	110				
Magnesium	10.2	1.0	10	0	102	90	110				
Manganese	0.504	0.050	0.5	0	101	90	110				
Molybdenum	0.509	0.050	0.5	0	102	90	110				
Nickel	0.507	0.050	0.5	0	101	90	110				
Potassium	10.1	5.0	10	0	101	90	110				
Selenium	0.498	0.010	0.5	0	100	90	110				
Silver	0.249	0.010	0.25	0	100	90	110				
Sodium	10.2	1.0	10	0	102	90	110				
Strontium	0.516	0.050	0.5	0	103	90	110				
Thallium	0.501	0.020	0.5	0	100	90	110				
Tin	0.509	0.050	0.5	0	102	90	110				
Titanium	0.514	0.050	0.5	0	103	90	110				
Vanadium	0.503	0.050	0.5	0	101	90	110				
Zinc	0.514	0.020	0.5	0	103	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVH4 | SampType: CCVH | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398357
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	49.6	1.0	50	0	99	90	110				
Chromium	5.10	0.010	5	0	102	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	0.99	0.050	10	0	100	90	110				
Lead	10.1	0.010	10	0	101	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	49.8	1.0	50	0	100	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV5 SampType: CCV TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398366
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.01	0.10	5	0	100	90	110				
Antimony	0.502	0.060	0.5	0	100	90	110				
Arsenic	0.503	0.010	0.5	0	101	90	110				
Barium	0.508	0.10	0.5	0	102	90	110				
Beryllium	0.508	0.010	0.5	0	102	90	110				
Boron	0.506	0.050	0.5	0	101	90	110				
Cadmium	0.509	0.010	0.5	0	102	90	110				
Calcium	10.0	1.0	10	0	100	90	110				
Chromium	0.506	0.010	0.5	0	101	90	110				
Cobalt	0.505	0.050	0.5	0	101	90	110				
Copper	0.500	0.010	0.5	0	100	90	110				
Iron	0.997	0.050	1	0	100	90	110				
Lead	0.515	0.010	0.5	0	103	90	110				
Magnesium	10.1	1.0	10	0	101	90	110				
Manganese	0.498	0.050	0.5	0	100	90	110				
Molybdenum	0.504	0.050	0.5	0	101	90	110				
Nickel	0.504	0.050	0.5	0	101	90	110				
Potassium	10.0	5.0	10	0	100	90	110				
Selenium	0.496	0.010	0.5	0	99	90	110				
Silver	0.248	0.010	0.25	0	99	90	110				
Sodium	10.1	1.0	10	0	101	90	110				
Strontium	0.508	0.050	0.5	0	102	90	110				
Thallium	0.499	0.020	0.5	0	100	90	110				
Tin	0.507	0.050	0.5	0	101	90	110				
Titanium	0.508	0.050	0.5	0	102	90	110				
Vanadium	0.498	0.050	0.5	0	100	90	110				
Zinc	0.511	0.020	0.5	0	102	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

974

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB4 SampType: CCB TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398359
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

972

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB5 SampType: CCB TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398369
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

975

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc

Sample ID: CCVH5 SampType: CCVH TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398367
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	50.0	1.0	50	0	100	90	110				
Chromium	5.21	0.010	5	0	104	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.2	0.050	10	0	102	90	110				
Lead	10.3	0.010	10	0	103	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	50.4	1.0	50	0	101	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

973

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB8 | SampType: CCB | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398382
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

978

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVH6 | SampType: CCVH | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398380
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	49.8	1.0	50	0	100	90	110				
Chromium	5.23	0.010	5	0	105	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.1	0.050	10	0	101	90	110				
Lead	10.2	0.010	10	0	102	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	50.4	1.0	50	0	101	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

976

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCVH7 | SampType: CCVH | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398388
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	50.2	1.0	50	0	100	90	110				
Chromium	5.32	0.010	5	0	106	90	110				
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	10.2	0.050	10	0	102	90	110				
Lead	10.4	0.010	10	0	104	90	110				
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	51.0	1.0	50	0	102	90	110				
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

979

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV8 | SampType: CCV | TestCode: 6010W05 | Units: mg/L | Prep Date: | RunNo: 15238
Client ID: ZZZZZ | Batch ID: R15238 | Method: SW6010B | Analysis Date: 10/21/2008 | SeqNo: 398381
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.97	0.10	5	0	99	90	110				
Antimony	0.495	0.060	0.5	0	99	90	110				
Arsenic	0.496	0.010	0.5	0	99	90	110				
Barium	0.504	0.10	0.5	0	101	90	110				
Beryllium	0.504	0.010	0.5	0	101	90	110				
Boron	0.499	0.050	0.5	0	100	90	110				
Cadmium	0.505	0.010	0.5	0	101	90	110				
Calcium	9.96	1.0	10	0	100	90	110				
Chromium	0.502	0.010	0.5	0	100	90	110				
Cobalt	0.502	0.050	0.5	0	100	90	110				
Copper	0.494	0.010	0.5	0	99	90	110				
Iron	0.988	0.050	1	0	99	90	110				
Lead	0.512	0.010	0.5	0	102	90	110				
Magnesium	10.1	1.0	10	0	101	90	110				
Manganese	0.494	0.050	0.5	0	99	90	110				
Molybdenum	0.497	0.050	0.5	0	99	90	110				
Nickel	0.498	0.050	0.5	0	100	90	110				
Potassium	9.98	5.0	10	0	100	90	110				
Selenium	0.492	0.010	0.5	0	98	90	110				
Silver	0.246	0.010	0.25	0	98	90	110				
Sodium	10.1	1.0	10	0	101	90	110				
Strontium	0.503	0.050	0.5	0	101	90	110				
Thallium	0.498	0.020	0.5	0	100	90	110				
Tin	0.501	0.050	0.5	0	100	90	110				
Titanium	0.504	0.050	0.5	0	101	90	110				
Vanadium	0.493	0.050	0.5	0	99	90	110				
Zinc	0.503	0.020	0.5	0	101	90	110				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

977

26-Oct-08

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

AA CRDL Standard Source: 2B

ICP CRDL Standard Source: CRDL STANDARD FOR AA AND ICP

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	%R	Final True	Final Found	%R
Antimony				60.0	53.97	100.0			
Arsenic				10.0	10.24	102.4			
Barium				100.0	94.25	94.3			
Beryllium				10.0	9.77	97.7			
Cadmium				10.0	8.52	85.2			
Chromium				10.0	10.48	104.8			
Cobalt				50.0	48.37	96.7			
Copper				10.0	9.58	95.8			
Iron				50.0	49.93	99.9			
Lead				10.0	9.47	94.7			
Nickel				50.0	49.05	98.1			
Selenium				10.0	10.57	105.7			
Silver				10.0	10.02	100.2			
Thallium				20.0	17.54	87.7			
Vanadium				50.0	48.69	97.4			
Zinc				20.0	19.92	99.6			

FORM II (Part 2) - IN

IL9094.1

982

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV7 SampType: CCV TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398389
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.05	0.10	5	0	101	90	110				
Antimony	0.501	0.060	0.5	0	100	90	110				
Arsenic	0.508	0.010	0.5	0	102	90	110				
Barium	0.508	0.10	0.5	0	102	90	110				
Beryllium	0.510	0.010	0.5	0	102	90	110				
Boron	0.509	0.050	0.5	0	102	90	110				
Cadmium	0.515	0.010	0.5	0	103	90	110				
Calcium	10.2	1.0	10	0	102	90	110				
Chromium	0.512	0.010	0.5	0	102	90	110				
Cobalt	0.511	0.050	0.5	0	102	90	110				
Copper	0.500	0.010	0.5	0	100	90	110				
Iron	1.00	0.050	1	0	100	90	110				
Lead	0.516	0.010	0.5	0	103	90	110				
Magnesium	10.2	1.0	10	0	102	90	110				
Manganese	0.500	0.050	0.5	0	100	90	110				
Molybdenum	0.507	0.050	0.5	0	101	90	110				
Nickel	0.509	0.050	0.5	0	102	90	110				
Potassium	10.2	5.0	10	0	102	90	110				
Selenium	0.496	0.010	0.5	0	99	90	110				
Silver	0.248	0.010	0.25	0	99	90	110				
Sodium	10.2	1.0	10	0	102	90	110				
Strontium	0.510	0.050	0.5	0	102	90	110				
Thallium	0.510	0.020	0.5	0	102	90	110				
Tin	0.514	0.050	0.5	0	103	90	110				
Titanium	0.509	0.050	0.5	0	102	90	110				
Vanadium	0.501	0.050	0.5	0	100	90	110				
Zinc	0.508	0.020	0.5	0	102	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

980 : *26-Oct-08*

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8301 SampType: MBLK TestCode: 6010S Units: mg/Kg Prep Date: 10/20/2008 RunNo: 15238
Client ID: ZZZZZ Batch ID: 8301 Method: SW6010B (SW3050B) Analysis Date: 10/21/2008 SeqNo: 398360
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	ND	1.0									
Chromium	ND	1.0									
Copper	ND	1.0									
Iron	1.17	5.0									J
Nickel	ND	5.0									
Zinc	ND	2.0									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

983 : *26-Oct-08*

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCB7 SampType: CCB TestCode: 6010W05 Units: mg/L Prep Date: RunNo: 15238
Client ID: ZZZZZ Batch ID: R15238 Method: SW6010B Analysis Date: 10/21/2008 SeqNo: 398390
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.10									
Antimony	ND	0.060									
Arsenic	ND	0.010									
Barium	ND	0.10									
Beryllium	ND	0.010									
Boron	ND	0.050									
Cadmium	ND	0.010									
Calcium	ND	1.0									
Chromium	ND	0.010									
Cobalt	ND	0.050									
Copper	ND	0.010									
Iron	ND	0.050									
Lead	ND	0.010									
Magnesium	ND	1.0									
Manganese	ND	0.050									
Molybdenum	ND	0.050									
Nickel	ND	0.050									
Potassium	ND	5.0									
Selenium	ND	0.010									
Silver	ND	0.010									
Sodium	ND	1.0									
Strontium	ND	0.050									
Thallium	ND	0.020									
Tin	ND	0.050									
Titanium	ND	0.050									
Vanadium	ND	0.050									
Zinc	ND	0.020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

981 : *26-Oct-08*

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: SAS No.: SDG No.: 0810083

ICP ID Number: ICAP 61E ICS Source:

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	% R	Final Found Sol. A	Final Found Sol. AB	% R
Aluminum	500000	500000	483796	476381.3	95.3	497188	489479.1	97.9
Antimony	0	600	-2	596.4	99.4	1	612.9	102.1
Arsenic	0	100	-3	35.4	95.4	-1	97.5	97.5
Barium	0	500	-1	479.7	95.9	0	496.2	99.2
Beryllium	0	500	0	470.7	94.1	0	487.4	97.5
Boron	0	500	1	473.8	94.8	4	490.5	98.1
Cadmium	0	1000	0	871.7	87.2	1	906.1	90.6
Calcium	500000	500000	504831	496578.8	99.3	517148	518920.5	102.4
Chromium	0	500	0	442.3	88.5	1	453.8	90.8
Cobalt	0	500	-3	458.0	91.6	0	472.5	94.5
Copper	0	500	-1	504.9	101.0	-2	519.5	103.9
Iron	200000	200000	184805	182200.7	91.1	190608	188722.9	94.4
Lead	0	35	7	50.1	100.2	5	51.2	102.3
Magnesium	500000	500000	496776	488558.9	97.7	517512	510471.2	102.1
Manganese	0	500	0	462.0	92.4	0	472.6	94.5
Molybdenum	0	500	-1	442.9	88.4	1	453.3	90.7
Nickel	0	1000	0	889.6	89.0	0	920.9	92.1
Potassium	0	5000	-26	4945.7	98.9	57	5178.7	103.6
Selenium	0	50	0	45.8	91.5	3	50.5	101.0
Silver	0	200	0	193.5	96.7	0	200.1	100.1
Sodium	0	1000	-7	920.5	92.0	5	973.9	97.4
Strontium	0	500	0	481.3	96.3	0	491.6	98.3
Thallium	0	100	-2	89.1	89.1	6	99.6	99.6
Tin	0	500	2	451.3	90.3	5	469.3	93.9
Titanium	0	500	2	473.1	94.6	3	489.2	97.8
Vanadium	0	500	0	467.7	93.5	0	482.2	96.4
Zinc	0	1000	2	949.2	94.9	2	979.3	97.9

FORM IV - IN

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 6010S Units: mg/Kg-dry Prep Date: 10/20/2008 RunNo: 15238
Client ID: MBSS-1 Batch ID: 8301 Method: SW6010B (SW3050B) Analysis Date: 10/21/2008 SeqNo: 398363
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	43.5	1.2	46.7	0.318	92	60	140				
Chromium	71.1	1.2	46.7	29.3	90	60	140				
Copper	130	1.2	46.7	91	82	60	140				
Iron	14700	5.8	234	16200	0	60	140				S
Nickel	61.1	5.8	46.7	23.4	81	60	140				
Zinc	286	2.3	46.7	262	50	60	140				S

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001B SampType: PDS TestCode: 6010S Units: mg/Kg-dry Prep Date: 10/20/2008 RunNo: 15238
Client ID: MBSS-1 Batch ID: 8301 Method: SW6010B (SW3050B) Analysis Date: 10/21/2008 SeqNo: 398396
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	44.1	1.2	46.7	0.318	94	75	125				
Chromium	70.1	1.2	46.7	29.3	87	75	125				
Copper	133	1.2	46.7	91	91	75	125				
Iron	15700	5.8	234	16200	0	75	125				S
Nickel	64.0	5.8	46.7	23.4	87	75	125				
Zinc	294	2.3	46.7	262	67	75	125				S

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

26-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: 6010S Units: mg/Kg-dry Prep Date: 10/20/2008 RunNo: 15238
Client ID: MBSS-1 Batch ID: 8301 Method: SW6010B (SW3050B) Analysis Date: 10/21/2008 SeqNo: 398363
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	43.5	1.2	46.7	0.318	92	60	140				
Chromium	71.1	1.2	46.7	29.3	90	60	140				
Copper	130	1.2	46.7	91	82	60	140				
Iron	14700	5.8	234	16200	0	60	140				S
Nickel	61.1	5.8	46.7	23.4	81	60	140				
Zinc	286	2.3	46.7	262	50	60	140				S

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

26-Oct-08

METALS MDL Verification Summary (NELAC)

Instrument ID(s): TJA ICAP-61E — Verification Dates: 8/23/2007 & 9/20/2007 & 10/2/2007 — Units = mg/L

Analytical Method	Prep Method	Matrix	Analyte	Initial MDL	MDL to be Verified	MDL Ver Conc #1	MDL Ver Result	MDL Ver %Rec	Rec Met 85-140%	MDL Ver Conc #2	MDL Ver Result	MDL Ver %Rec	Rec Met 85-140%	Verified MDL	RL
6010B	3050B	Solid	Aluminum	1.7549	4.0	4.0	4.835	121%	yes	n/a	n/a			4.00	10.0
6010B	3050B	Solid	Antimony	0.1629	0.1629	0.30	0.167	56%	no	0.450	0.461	102%	yes	0.450	5.0
6010B	3050B	Solid	Arsenic	0.1594	0.40	0.40	0.466	117%	yes	n/a	n/a			0.40	1.0
6010B	3050B	Solid	Barium	0.0377	0.0377	0.20	0.198	99%	yes	n/a	n/a			0.0377	10.0
6010B	3050B	Solid	Beryllium	0.0057	0.0057	0.020	0.02	100%	yes	n/a	n/a			0.00574	1.0
6010B	3050B	Solid	Boron	0.1525	0.50	0.50	0.491	98%	yes	n/a	n/a			0.50	5.0
6010B	3050B	Solid	Cadmium	0.0305	0.0305	0.10	0.098	98%	yes	n/a	n/a			0.0305	1.0
6010B	3050B	Solid	Calcium	1.704	1.704	4.0	3.888	97%	yes	n/a	n/a			1.704	100.0
6010B	3050B	Solid	Chromium	0.1406	0.1406	0.40	0.409	102%	yes	n/a	n/a			0.1406	1.0
6010B	3050B	Solid	Cobalt	0.1471	0.1471	0.40	0.393	98%	yes	n/a	n/a			0.1471	5.0
6010B	3050B	Solid	Copper	0.0867	0.40	0.40	0.439	110%	yes	n/a	n/a			0.40	1.0
6010B	3050B	Solid	Iron	0.4695	0.4695	1.0	1.303	130%	yes	n/a	n/a			0.4695	5.0
6010B	3050B	Solid	Lead	0.1410	0.1410	0.40	0.491	123%	yes	n/a	n/a			0.1410	1.0
6010B	3050B	Solid	Magnesium	0.9350	4.0	4.0	3.775	94%	yes	n/a	n/a			4.00	100.0
6010B	3050B	Solid	Manganese	0.0233	0.0233	0.10	0.098	98%	yes	n/a	n/a			0.0233	5.0
6010B	3050B	Solid	Molybdenum	0.2305	0.2305	0.50	0.544	109%	yes	n/a	n/a			0.2305	5.0
6010B	3050B	Solid	Nickel	0.0683	0.20	0.20	0.223	112%	yes	n/a	n/a			0.20	5.0
6010B	3050B	Solid	Potassium	8.5431	20.0	20.0	19.207	96%	yes	n/a	n/a			20.0	500.0
6010B	3050B	Solid	Selenium	0.1920	0.1920	0.50	0.566	113%	yes	n/a	n/a			0.1920	1.0
6010B	3050B	Solid	Silver	0.0974	0.0974	0.20	0.191	96%	yes	n/a	n/a			0.0974	1.0
6010B	3050B	Solid	Sodium	5.5606	4.0	4.0	7.905	198%	no	8.0	10.278	128%	yes	5.00	100.0
6010B	3050B	Solid	Strontium	0.0165	0.0165	0.050	0.034	68%	yes	n/a	n/a			0.0165	5.0
6010B	3050B	Solid	Thallium	0.5211	0.5211	1.0	0.899	90%	yes	n/a	n/a			0.5211	2.0
6010B	3050B	Solid	Tin	0.4129	1.0	1.0	1.853	185%	no	3.0	3.746	125%	yes	3.00	5.0
6010B	3050B	Solid	Titanium	0.0768	0.0768	0.20	0.198	99%	yes	n/a	n/a			0.0768	5.0
6010B	3050B	Solid	Vanadium	0.0829	0.0829	0.20	0.176	88%	yes	n/a	n/a			0.0829	5.0
6010B	3050B	Solid	Zinc	0.2560	0.2560	0.40	0.703	176%	no	0.80	1.090	136%	yes	0.80	2.0

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984.

MDL=(S.Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW6010B
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8301 SampType: LCS TestCode: 6010S Units: mg/Kg Prep Date: 10/20/2008 RunNo: 15238
Client ID: ZZZZZ Batch ID: 8301 Method: SW6010B (SW3050B) Analysis Date: 10/21/2008 SeqNo: 398361
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	20.6	1.0	20	0	103	85	115				
Chromium	20.5	1.0	20	0	102	85	115				
Copper	20.5	1.0	20	0	103	85	115				
Iron	104	5.0	100	0	104	85	115				
Nickel	20.3	5.0	20	0	102	85	115				
Zinc	21.0	2.0	20	0	105	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

26-Oct-08

METALS MDL Verification Summary (NELAC)

Instrument ID(s): TJA ICAP-61E — Verification Dates: 4/30/2008 — Units = mg/L

Analytical Method	Prep Method	Matrix	Analyte	Initial MDL	MDL to be Verified	MDL Ver Conc #1	MDL Ver Result	MDL Ver %Rec	Rec Met 85-140%	MDL Ver Conc #2	MDL Ver Result	MDL Ver %Rec	Rec Met 85-140%	Verified MDL	RL
6010B	3005A	Water	Aluminum	0.01245	0.040	0.04	0.03812	95%	yes	n/a	n/a			0.040	0.100
6010B	3005A	Water	Antimony	0.00152	0.00152	0.003	0.00369	123%	yes	n/a	n/a			0.00152	0.060
6010B	3005A	Water	Arsenic	0.00120	0.0040	0.004	0.00436	109%	yes	n/a	n/a			0.0040	0.010
6010B	3005A	Water	Barium	0.00054	0.00054	0.002	0.00165	83%	yes	n/a	n/a			0.00054	0.100
6010B	3005A	Water	Beryllium	0.00010	0.00010	0.0002	0.00023	115%	yes	n/a	n/a			0.00010	0.010
6010B	3005A	Water	Boron	0.00300	0.00300	0.006	0.00669	111%	yes	n/a	n/a			0.0030	0.050
6010B	3005A	Water	Cadmium	0.00042	0.00042	0.001	0.00127	127%	yes	n/a	n/a			0.00042	0.010
6010B	3005A	Water	Calcium	0.00688	0.040	0.04	0.04852	121%	yes	n/a	n/a			0.040	1.000
6010B	3005A	Water	Chromium	0.00144	0.00144	0.004	0.00468	117%	yes	n/a	n/a			0.00144	0.010
6010B	3005A	Water	Cobalt	0.00182	0.0060	0.006	0.00523	87%	yes	n/a	n/a			0.0060	0.050
6010B	3005A	Water	Copper	0.00188	0.00188	0.004	0.00409	102%	yes	n/a	n/a			0.00188	0.010
6010B	3005A	Water	Iron	0.00500	0.00500	0.01	0.0104	104%	yes	n/a	n/a			0.0050	0.050
6010B	3005A	Water	Lead	0.00064	0.0040	0.004	0.00423	106%	yes	n/a	n/a			0.0040	0.010
6010B	3005A	Water	Magnesium	0.01208	0.040	0.04	0.04746	119%	yes	n/a	n/a			0.040	1.000
6010B	3005A	Water	Manganese	0.00026	0.0015	0.0015	0.00111	74%	yes	n/a	n/a			0.0015	0.030
6010B	3005A	Water	Molybdenum	0.00292	0.00292	0.005	0.00602	120%	yes	n/a	n/a			0.00292	0.050
6010B	3005A	Water	Nickel	0.00112	0.00112	0.002	0.00207	104%	yes	n/a	n/a			0.00112	0.050
6010B	3005A	Water	Potassium	0.06756	0.06756	0.2	0.15858	79%	yes	n/a	n/a			0.06756	5.000
6010B	3005A	Water	Selenium	0.00264	0.00264	0.005	0.00443	89%	yes	n/a	n/a			0.00264	0.010
6010B	3005A	Water	Silver	0.00090	0.00090	0.002	0.00213	106%	yes	n/a	n/a			0.00090	0.010
6010B	3005A	Water	Sodium	0.00846	0.040	0.04	0.03528	88%	yes	n/a	n/a			0.040	1.000
6010B	3005A	Water	Strontium	0.00018	0.0005	0.0005	0.0005	100%	yes	n/a	n/a			0.0005	0.050
6010B	3005A	Water	Thallium	0.00587	0.00587	0.01	0.01264	126%	yes	n/a	n/a			0.00587	0.020
6010B	3005A	Water	Tin	0.00647	0.00647	0.01	0.01265	127%	yes	n/a	n/a			0.00647	0.050
6010B	3005A	Water	Titanium	0.00076	0.00076	0.002	0.0021	105%	yes	n/a	n/a			0.00076	0.050
6010B	3005A	Water	Vanadium	0.00066	0.00066	0.002	0.0019	95%	yes	n/a	n/a			0.00066	0.050
6010B	3005A	Water	Zinc	0.00135	0.0040	0.004	0.00554	138%	yes	n/a	n/a			0.0040	0.020

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984.

MDL=(S.Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

ICP SERIAL DILUTIONS

Lab Name: Life Science Laboratories, Inc Contract:
Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083
Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (1)	C	Serial Dilution Result (5)	C	% Difference	Q	M
Beryllium	2.72	U	2.72	U	0.0	U	P
Chromium	250.65		270.85		8.0		P
Copper	79.12		75.50		2.5		P
Iron	138792.84		146899.70		5.8		P
Nickel	200.52		210.55		5.2		P
Zinc	2246.66		2310.58		2.8		P

FORM IX - IN

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

ICP ID Number: ICAP-61E Date: 1/2/2008

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	308.22			0.0002329		0.0003869
Antimony	206.83			0.0000540		0.0056575
Arsenic	196.70			-0.0000088		-0.0028173
Barium	493.41	0.0000169				
Beryllium	313.04					
Cadmium	228.80	0.0000358		0.0000504		
Calcium	317.93					
Chromium	267.72	0.0000112		0.0000252	0.0000335	
Cobalt	228.62			0.0000222		0.0000852
Copper	324.75			-0.0000420		-0.0001146
Iron	259.94	0.0000684				0.0000632
Lead	220.35	0.0005899	-0.000003	0.0000666		0.0000749
Magnesium	279.08			0.0000364		0.0006914
Manganese	257.61	0.0000065		0.0000141	0.0000063	
Molybdenum	202.03			-0.0000080		0.0000628
Nickel	231.60					
Potassium	766.49		-0.000209		-0.0003263	0.0013548
Selenium	196.03			0.0000097		-0.0000263
Silver	328.07					
Sodium	589.00					
Thallium	190.86	0.0004934		0.0000926		0.0002990
Vanadium	292.40			0.0000196		0.0000254
Zinc	213.86			0.0000672		

Comments:

FORM XI (PART 2) - IN ILM0 992

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

ICP ID Number: ICAP-61E Date: 1/2/2008

Analyte	Wave-length (nm)	Interelement Correction Factors for: V	Mo	Ni	Co	Mn
Aluminum	308.22	0.0264364	0.0091866			
Antimony	206.83	-0.0062988		-0.0017197		
Arsenic	196.70		-0.0010716			
Barium	493.41					
Beryllium	313.04	0.0002798				
Cadmium	228.80			0.0001133		
Calcium	317.93					
Chromium	267.72	0.0002748				
Cobalt	228.62			0.0003386		
Copper	324.75		0.0003037			
Iron	259.94					
Lead	220.35		-0.0003878	0.0002857		
Magnesium	279.08					
Manganese	257.61					
Molybdenum	202.03					
Nickel	231.60				-0.0011731	
Potassium	766.49					
Selenium	196.03				0.000443	0.0003626
Silver	328.07		-0.0005618			
Sodium	589.00					
Thallium	190.86	0.0020255			0.003453	0.001534
Vanadium	292.40		-0.0014470			
Zinc	213.86			0.0043830		

Comments:

FORM XI (PART 2) - IN ILM0 993

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

ICP ID Number: ICAP-61E Date: 1/2/2008

Analyte	Wave-length (nm)	Interelement Correction Factors for: Tl	Pb	___	___	___
Aluminum	308.22					
Antimony	206.83					
Arsenic	196.70					
Barium	493.41					
Beryllium	313.04					
Cadmium	228.80					
Calcium	317.93					
Chromium	267.72					
Cobalt	228.62					
Copper	324.75					
Iron	259.94					
Lead	220.35					
Magnesium	279.08					
Manganese	257.61					
Molybdenum	202.03					
Nickel	231.60					
Potassium	766.49					
Selenium	196.03					
Silver	328.07					
Sodium	589.00					
Thallium	190.86	0.001853	0.0003639			
Vanadium	292.40					
Zinc	213.86					

Comments:

FORM XI (PART 2) - IN ILM0 994

12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

ICP ID Number: ICAP 61E Date: 05/05/2008

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum		600000	P
Antimony		10000	P
Arsenic		10000	P
Barium		10000	P
Beryllium		5000	P
Boron		50000	P
Cadmium		5000	P
Calcium		2000000	P
Chromium		200000	P
Cobalt		30000	P
Copper		20000	P
Iron		500000	P
Lead		200000	P
Magnesium		600000	P
Manganese		50000	P
Molybdenum		20000	P
Nickel		50000	P
Potassium		100000	P
Selenium		10000	P
Silver		5000	P
Sodium		2000000	P
Strontium		5000	P
Thallium		20000	P
Vanadium		20000	P
Zinc		5000	P

Comments:

FORM XII - IN ILM04.1

995

13
PREPARATION LOG

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

Method: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
~~LCS-8301~~	~~10/20/2008~~	~~0.50~~	~~50~~
LCS-8301	10/20/2008	0.50	50
MB-8301	10/20/2008	0.50	50
MBSS-1	10/20/2008	0.50	50
MBSS-1S	10/20/2008	0.50	50
MBSS-1SD	10/20/2008	0.50	50
MBSS-2	10/20/2008	0.50	50
MBSS-3	10/20/2008	0.50	50
MBSS-4	10/20/2008	0.50	50
MBSS-FD	10/20/2008	0.50	50

FORM XIII - IN ILM04.1

14
ANALYSIS RUN LOG

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

Instrument ID Number: ICAP 61E Method: P

Start Date: 10/21/2008 End Date: 10/21/2008

EPA Sample No.	D/F	Time	% R	Analytes																					
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1139		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S3	1.00	1143		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S2	1.00	1147		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S1	1.00	1149		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICVH	1.00	1154		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICV	1.00	1158		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV/IPC	1.00	1202		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICB	1.00	1206		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1210			X	X	X	X	X		X	X	X	X	X				X		X	X		X	X	X	
ICSA	1.00	1226		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1231		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCVH1	1.00	1312		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV1	1.00	1315		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB1	1.00	1319		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCVH2	1.00	1402		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1.00	1406		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB2	1.00	1410		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCVH3	1.00	1453		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV3	1.00	1457		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB3	1.00	1501		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCVH4	1.00	1542		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV4	1.00	1546		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB4	1.00	1550		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
~~ZZZZZZ~~ MB 8301	1.00	1609			X	X	X	X	X		X	X	X	X	X				X		X	X		X	X	X	
LCS-8301	1.00	1613			X	X	X	X	X		X	X	X	X	X				X		X	X		X	X	X	
MBSS-1	1.00	1616						X				X	X	X					X							X	
MBSS-1S	1.00	1620						X				X	X	X					X							X	
MBSS-1SD	1.00	1623						X				X	X	X					X							X	
MBSS-1L	5.00	1632						X				X	X	X					X							X	
MBSS-1A	1.00	1635						X				X	X	X					X							X	
CCVH5	1.00	1644		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV5	1.00	1647		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB5	1.00	1652		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MBSS-2	1.00	1655						X				X	X	X					X							X	
MBSS-3	1.00	1659						X				X	X	X					X							X	

FORM XIV - IN ILM04.1

14
ANALYSIS RUN LOG

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

Instrument ID Number: ICAP 61E Method: P

Start Date: 10/21/2008 End Date: 10/21/2008

EPA Sample No.	D/F	Time	% R	Analytes																					
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MBSS-FD	1.00	1706						X			X	X	X					X								X	
ZZZZZZ	1.00	1715			X	X	X	X	X		X	X	X	X	X			X		X	X		X	X		X	
ZZZZZZ	1.00	1718			X																						
ZZZZZZ	1.00	1722			X																						
MBSS-3	5.00	1735																								X	
CCVH6	1.00	1740		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV6	1.00	1744		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB6	1.00	1748		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MBSS-4	5.00	1753						X				X	X	X					X							X	
MBSS-4	10.00	1757																								X	
MBSS-FD	10.00	1802																								X	
ICSA	1.00	1806		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1811		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCVH7	1.00	1815		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV7	1.00	1820		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB7	1.00	1824		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

FORM XIV - IN ILM04.1

Raw Data

Life Science Laboratories, Inc. - Brittonfield

ICAP-61E Analysis Run Log

Analysis Date: 10/21/08 Lab Method: KICAP

Standard #	Sample ID	Batch ID	DF	Method	Comment
	Profile	1.0 mg/L As			Vernier set: 474 Time: 10:00 AM
	BLANK		1		RA
	STD3		1		
	STD2		1		
	STD1		1		
7152-5	BLANK		1	6010B	
7157-5	STD3		1		
7154-5	STD2		1		
7155-5	STD1		1		
7088-5	ICVH		1		
7558-5	ICV		1		
7157-5	CCV/IPC		1		
7152-5	ICB		1		
7159-5	CRI(PQL)		1		
7718-5	Low Level Cal STD		1		
7701-5	ICSA-INITIAL		1		
7702-5	ICSAB-INITIAL		1		
	0809196-005A	8219	10	6010B	For Cu only
	0810026-001A	8291	1		
	MB-8298	8298	1		
	LCS-8298		1		
	0810016-001G		1		
	0810016-002G		1		
7156-5	CCVH1		1		
7157-5	CCV1		1		
7152-5	CCB1		1		
	0810016-003G	8298	1		
	0810016-004G		1		
	0810016-005G		1		
	0810016-005GMS		1		
	0810016-005GMSD		1		
	0810016-005GSD		5		
	0810016-005GPDS		1		
	0810016-006G		1		
	0810016-007G		1		
	0810016-008G		1		
	CCVH2		1		
	CCV2		1		
	CCB2		1		
	0810016-009G	8298	1		
	0810016-010G		1		

N/A = Not Applicable, >LR = Greater than Linear Range, D/RA = Dilute and Reanalyze, RA = Reanalyze

Life Science Laboratories, Inc. - Brittonfield

ICAP-61E Analysis Run Log

Analysis Date: 10/21/08 Lab Method: KICAP

Standard #	Sample ID	Batch ID	DF	Method	Comment
	0810016-011G	8298	1	6010B	
	0810016-012G		1		
	0810016-013G		1		
	MB-8299	8299	1		
	LCS-8299		1		
	0810016-001C		1		
	0810016-002C		1		
	0810016-003C		1		
	CCVH3		1		
	CCV3		1		
	CCB3		1		
	0810016-004C	8299	1		
	0810016-005C		1		
	0810016-005CMS		1		
	0810016-005CMSD		1		
	0810016-005CSD		5		
	0810016-005CPDS		1		
	0810016-006C		1		
	0810016-007C		1		
	0810016-008C		1		
	0810016-009C		1		
	CCVH4		1		
	CCV4		1		
	CCB4		1		
	0810016-010C	8299	1		
	0810016-011C		1		
	0810016-012C		1		
	MB-8301	8301	1		
	LCS-8301		1		
	0810083-001B		1		
	0810083-001BMS		1		
	0810083-001BMSD		1		
	0810083-001BSD		5		
	0810083-001BPDS		1		
	CCVH5		1		
	CCV5		1		
	CCB5		1		
	0810083-002B	8301	1		
	0810083-003B		1		Zn > LR, D/RA for Zn
	0810083-004B		1		Fe, Zn > LR, D/RA for all elements
	0810083-005B		1		Zn > LR, D/RA for Zn

N/A = Not Applicable, >LR = Greater than Linear Range, D/RA = Dilute and Reanalyze, RA = Reanalyze

Life Science Laboratories, Inc. - Brittonfield

ICAP-61E Analysis Run Log

Analysis Date: 10/21/08 Lab Method: KICAP

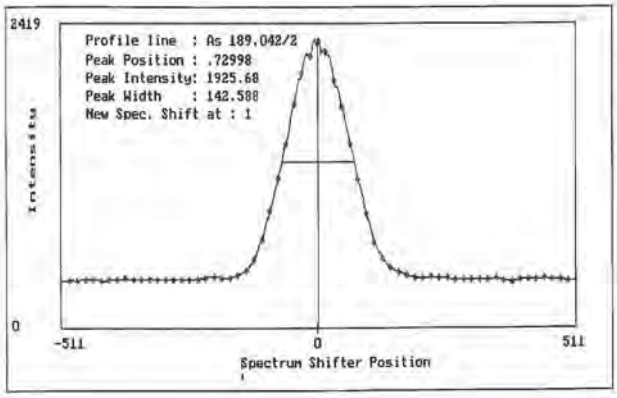
Standard #	Sample ID	Batch ID	DF	Method	Comment
	MB-8308	8308	1	6010B	
	LCS-8308		1		
	LCSD-8308		1		
	0808080-002A		1		
	0808080-002ADUP		1		
	0810083-003B	8301	5		For Zn only
	CCVH6		1		
	CCV6		1		
	CCB6		1		
	0810083-004B	8301	5		Zn > LR, D/RA
	0810083-004B		10		For Zn only
	0810083-005B		10		
	ICSA-FINAL		1		
	ICSAB-FINAL		1		
	CCVH7		1		
	CCV7		1		
	CCB7		1		

Analyst: Cang Tian Date: 10/22/08

Reviewer: M Tulli Date: 10/23/08

Print Date: 10/22/08

N/A = Not Applicable, >LR = Greater than Linear Range, D/RA = Dilute and Reanalyze, RA = Reanalyze



CT 10/22/08

Standardization Rpt. 10/21/08 11:26:40 AM page 1

Method: KICAP Standard: BLANK
Run Time: 10/21/08 11:23:25

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Ca
Avge	.02699	.8143	2.2655	.18324	.36982	.8722	1.004
SDev	.02106	.0032	.0070	.00115	.00200	.0042	.033
%RSD	78.042	.3946	.30987	.62984	.54054	.4771	3.315
#1	.02499	.8106	2.2589	.18191	.36782	.8676	.9935
#2	.04898	.8166	2.2729	.18391	.37181	.8756	1.041
#3	.00700	.8156	2.2649	.18391	.36982	.8736	.9775

Elem	Cd2265	Co2286	Cr	Cr	Cu3247	Fe	Fe
Avge	22.011	2.2655	4.5667	4.8696	.05564	.93220	6.7713
SDev	.112	.0090	.0265	.0341	.00472	.00231	.1114
%RSD	.50862	.39788	.58030	.69938	8.4895	.24762	1.6458
#1	21.882	2.2569	4.5377	4.8306	.05197	.92954	6.6597
#2	22.077	2.2749	4.5897	4.8936	.06097	.93353	6.7716
#3	22.075	2.2849	4.5727	4.8846	.05397	.93353	6.8826

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na	Na	Ni2316
Avge	15.20	.6460	.86124	.00900	2.784	7.693	-.00400
SDev	.06	.0040	.00231	.00721	.020	.056	.00100
%RSD	.3962	.6253	.26802	80.123	.7272	.7303	25.000
#1	15.14	.6417	.85857	.00300	2.762	7.629	-.00500
#2	15.26	.6497	.86257	.01699	2.801	7.733	-.00300
#3	15.21	.6467	.86257	.00700	2.791	7.718	-.00400

Elem	Sn1899	Sr4215	Ti3349	V_2924	Zn2138	As1890	Tl1908
Avge	2.6500	.67899	.41413	.00233	.01299	.01899	6.9025
SDev	.0197	.00231	.00208	.00208	.00100	.07623	.0411
%RSD	.74421	.33995	.50241	89.214	7.6923	401.42	.59475
#1	2.6407	.67766	.41179	.00400	.01399	.00300	6.8736
#2	2.6727	.68166	.41579	.00300	.01199	.10195	6.8846
#3	2.6367	.67766	.41479	.00000	.01299	-.04798	6.9495

Elem	2203/1	2203/2	Pb	1960/1	1960/2	2068/1	2068/2
Avge	.70498	-.30418	7.3990	.04764	-.01066	-.20490	.06830
SDev	.46420	.13593	.0310	.05726	.02052	.10882	.01266
%RSD	65.845	44.688	.41884	120.19	192.44	53.108	18.530
#1	.37281	-.16792	7.3683	.04098	.01199	-.08196	.08196
#2	.50675	-.30485	7.4303	-.00600	-.01599	-.24388	.06597
#3	1.2354	-.43978	7.3983	.10795	-.02799	-.28886	.05697

CT 10/22/08

1004

Standardization Rpt. 10/21/08 11:32:52 AM page 1

Method: KICAP Standard: STD3
Run Time: 10/21/08 11:29:37

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Avge	23.285	12.35	33.250	11.440	120.58	182.5	1377.1
SDev	.025	.02	.069	.014	.07	.4	1.4
%RSD	.10913	.1616	.20883	.12053	.05675	.2352	.10166
#1	23.300	12.33	33.176	11.445	120.54	182.1	1375.8
#2	23.298	12.37	33.259	11.450	120.66	182.7	1378.4
#3	23.255	12.35	33.314	11.424	120.54	182.9	1377.3

Elem	Co2286	Cr	Cu3247	Fe	Mg2790	Mn2576	Mo2020
Avge	31.929	76.256	16.075	248.81	24.21	83.144	8.2169
SDev	.020	.113	.021	.23	.05	.066	.0510
%RSD	.06418	.14812	.13106	.09092	.2259	.07989	.62072
#1	31.905	76.126	16.088	248.57	24.15	83.131	8.1589
#2	31.941	76.327	16.087	249.01	24.24	83.216	8.2549
#3	31.940	76.316	16.051	248.86	24.25	83.085	8.2369

Elem	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924	Zn2138
Avge	1017.	6.5131	14.829	96.950	13.128	18.608	19.740
SDev	2.	.0196	.022	.112	.014	.021	.015
%RSD	.2283	.30085	.14597	.11554	.10559	.11100	.07493
#1	1018.	6.4948	14.832	97.010	13.116	18.591	19.750
#2	1019.	6.5337	14.849	97.018	13.143	18.631	19.747
#3	1014.	6.5107	14.806	96.821	13.124	18.602	19.723

Elem	As1890	Tl1908	2203/1	2203/2	1960/1	1960/2	2068/1
Avge	52.856	29.837	236.15	218.92	24.400	28.119	39.223
SDev	.209	.082	1.34	2.49	.275	.297	.685
%RSD	.39465	.27359	.56547	1.1364	1.1288	1.0550	1.7458
#1	53.080	29.743	235.53	216.94	24.215	27.851	38.838
#2	52.819	29.874	237.68	221.72	24.717	28.438	40.014
#3	52.668	29.893	235.23	218.12	24.269	28.068	38.819

Elem	2068/2
Avge	53.147
SDev	.368
%RSD	.69248
#1	52.802
#2	53.534
#3	53.106

1005

Standardization Rpt. 10/21/08 11:34:44 AM page 1

Method: KICAP Standard: STD2
Run Time: 10/21/08 11:33:03

Elem	Ca	Cr	Fe	Na	Pb
Avge	110.1	23.164	14.319	17.46	67.733
SDev	.6	.117	.073	.07	.317
%RSD	.5004	.50546	.51326	.3909	.46780
#1	109.5	23.030	14.235	17.39	67.370
#2	110.4	23.215	14.348	17.48	67.957
#3	110.4	23.247	14.373	17.52	67.871

1006

Standardization Rpt. 10/21/08 11:36:35 AM page 1

Method: KICAP Standard: STD1
Run Time: 10/21/08 11:34:55

Elem	K_7664
Avge	88.41
SDev	.42
%RSD	.4754
#1	88.04
#2	88.31
#3	88.87

1007

Standardization Report 10/21/08 11:36:39 AM page 1

Method: KICAP Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	STD3	BLANK	.021474	-.000580	10/21/08 11:34:55
Al3082	308.215	STD3	BLANK	1.93204	.734329	10/21/08 11:34:55
B_2496	249.676	STD3	BLANK	.032328	-.073240	10/21/08 11:34:55
Ba4934	493.409	STD3	BLANK	.088837	-.016279	10/21/08 11:34:55
Be3130	313.042	STD3	BLANK	.008321	-.003077	10/21/08 11:34:55
Ca	317.933	STD3	BLANK	.110171	-.110630	10/21/08 11:34:55
Ca	370.603	STD2	BLANK	1.91841	.253070	10/21/08 11:34:55
Cd2265	226.502	STD3	BLANK	.000738	-.016252	10/21/08 11:34:55
Co2286	228.616	STD3	BLANK	.033729	-.076415	10/21/08 11:34:55
Cr	267.716	STD3	BLANK	.014018	-.068262	10/21/08 11:34:55
Cr	298.919	STD2	BLANK	.653249	2.42010	10/21/08 11:34:55
Cu3247	324.753	STD3	BLANK	.062431	-.003474	10/21/08 11:34:55
Fe	271.441	STD2	BLANK	2.25195	-.285840	10/21/08 11:34:55
Fe	259.940	STD3	BLANK	.008266	-.055972	10/21/08 11:34:55
K_7664	766.491	STD1	BLANK	1.77970	-1.10586	10/21/08 11:34:55
Mg2790	279.078	STD3	BLANK	2.47779	-.269010	10/21/08 11:34:55
Mn2576	257.610	STD3	BLANK	.012158	-.010471	10/21/08 11:34:55
Mo2020	202.030	STD3	BLANK	.121840	-.001096	10/21/08 11:34:55
Na	588.995	STD3	BLANK	.760467	-1.32424	10/21/08 11:34:55
Na	330.232	STD2	BLANK	1.55013	4.46929	10/21/08 11:34:55
Ni2316	231.604	STD3	BLANK	.153286	.000613	10/21/08 11:34:55
Sn1899	189.989	STD3	BLANK	.082370	-.218281	10/21/08 11:34:55
Sr4215	421.552	STD3	BLANK	.010390	-.007055	10/21/08 11:34:55
Ti3349	334.941	STD3	BLANK	.078734	-.032606	10/21/08 11:34:55
V_2924	292.402	STD3	BLANK	.053674	-.000125	10/21/08 11:34:55
Zn2138	213.856	STD3	BLANK	.050922	-.000662	10/21/08 11:34:55
As1890	189.042	STD3	BLANK	.018853	-.000358	10/21/08 11:34:55
Tl1908	190.864	STD3	BLANK	.044231	-.305306	10/21/08 11:34:55
Pb	220.353	NONE	NONE	1.00000	.000000	*10/21/08 11:34:55
Se1960	196.026	NONE	NONE	1.00000	.000000	*10/21/08 11:34:55
Sb2068	206.838	NONE	NONE	1.00000	.000000	*10/21/08 11:34:55
2203/1	220.351	STD3	BLANK	.004272	-.003012	10/21/08 11:34:55
2203/2	220.352	STD3	BLANK	.004544	.001382	10/21/08 11:34:55
Pb	405.782	STD2	BLANK	1.49461	3.50348	10/21/08 11:34:55
1960/1	196.021	STD3	BLANK	.041097	-.001958	10/21/08 11:34:55
1960/2	196.022	STD3	BLANK	.035541	.000379	10/21/08 11:34:55
2068/1	206.831	STD3	BLANK	.025305	.005185	10/21/08 11:34:55
2068/2	206.832	STD3	BLANK	.018814	-.001285	10/21/08 11:34:55

Standardization Rpt. 10/21/08 11:43:04 AM page 1

Method: KICAP Standard: BLANK
Run Time: 10/21/08 11:39:49

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Ca
Avge	.02533	.7913	2.2068	.17791	.35915	.8409	.9562
SDev	.00850	.0006	.0055	.00000	.00115	.0011	.0064
%RSD	33.572	.0729	.24947	.00000	.32134	.1372	.6720
#1	.02499	.7906	2.2029	.17791	.35782	.8396	.9635
#2	.03398	.7916	2.2129	.17791	.35982	.8416	.9535
#3	.01699	.7916	2.2039	.17791	.35982	.8416	.9515

Elem	Cd2265	Co2286	Cr	Cr	Cu3247	Fe	Fe
Avge	21.260	2.1802	4.3888	4.6423	.05197	.89788	6.4388
SDev	.061	.0076	.0201	.0055	.00600	.00288	.0151
%RSD	.28913	.34712	.45718	.11858	11.538	.32134	.23439
#1	21.198	2.1749	4.3658	4.6367	.04598	.89455	6.4528
#2	21.260	2.1769	4.3978	4.6477	.05197	.89955	6.4408
#3	21.321	2.1889	4.4028	4.6427	.05797	.89955	6.4228

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na	Na	Ni2316
Avge	14.82	.6237	.82892	.00733	2.690	7.563	-.00533
SDev	.07	.0035	.00416	.00907	.012	.023	.00115
%RSD	.4836	.5551	.50201	123.73	.4207	.3015	21.651
#1	14.73	.6197	.82559	-.00100	2.677	7.583	-.00400
#2	14.87	.6257	.82759	.00600	2.698	7.567	-.00600
#3	14.85	.6257	.83358	.01699	2.696	7.538	-.00600

Elem	Sn1899	Sr4215	Ti3349	V_2924	Zn2138	As1890	Tl1908
Avge	2.5924	.65700	.40113	.00500	.00366	.00350	6.6750
SDev	.0040	.00305	.00115	.00700	.00153	.02652	.0405
%RSD	.15582	.46476	.28771	140.00	41.660	758.22	.60682
#1	2.5917	.65767	.39980	-.00200	.00400	-.02049	6.6547
#2	2.5967	.65967	.40180	.01199	.00200	-.00100	6.7216
#3	2.5887	.65367	.40180	.00500	.00500	.03198	6.6487

Elem	2203/1	2203/2	Pb	1960/1	1960/2	2068/1	2068/2
Avge	-.07230	-.16159	7.1321	-.04831	.06230	-.01633	.01699
SDev	.47117	.32611	.0406	.03892	.02729	.07155	.12354
%RSD	651.72	201.82	.56914	80.566	43.798	438.27	727.06
#1	-.34583	.17191	7.0855	-.07696	.03098	.04698	-.11494
#2	-.34283	-.47976	7.1514	-.06397	.08096	-.09395	.03598
#3	.47176	-.17691	7.1594	-.00400	.07496	-.00200	.12994

Standardization Rpt. 10/21/08 11:46:55 AM page 1

Method: KICAP Standard: STD3
Run Time: 10/21/08 11:43:41

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Avge	23.258	12.37	33.256	11.429	120.32	182.9	1375.2
SDev	.084	.03	.043	.038	.50	.8	6.7
%RSD	.36316	.2100	.13070	.33075	.41354	.4258	.48592
#1	23.355	12.40	33.305	11.469	120.85	183.7	1382.7
#2	23.215	12.35	33.241	11.423	120.25	182.7	1373.3
#3	23.203	12.35	33.222	11.394	119.86	182.2	1369.8

Elem	Co2286	Cr	Cu3247	Fe	Mg2790	Mn2576	Mo2020
Avge	31.892	76.197	16.066	248.05	24.15	82.946	8.2559
SDev	.152	.278	.058	1.05	.10	.384	.0193
%RSD	.47769	.36541	.36262	.42408	.4299	.46254	.23350
#1	32.060	76.498	16.131	249.20	24.27	83.364	8.2339
#2	31.852	76.146	16.047	247.82	24.12	82.863	8.2699
#3	31.763	75.948	16.019	247.13	24.07	82.611	8.2639

Elem	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924	Zn2138
Avge	1013.	6.5297	14.796	96.902	13.093	18.621	19.665
SDev	3.	.0327	.077	.419	.043	.083	.083
%RSD	.2888	.50047	.52030	.43194	.32637	.44334	.42222
#1	1017.	6.5667	14.885	97.334	13.141	18.712	19.750
#2	1012.	6.5177	14.758	96.873	13.079	18.603	19.661
#3	1011.	6.5047	14.746	96.499	13.059	18.550	19.584

Elem	As1890	Tl1908	2203/1	2203/2	1960/1	1960/2	2068/1
Avge	52.797	29.878	235.62	218.34	24.408	28.115	39.444
SDev	.209	.077	1.32	.95	.260	.125	.363
%RSD	.39568	.25900	.55951	.43318	1.0638	.44370	.92151
#1	53.038	29.920	237.14	217.36	24.705	27.972	39.068
#2	52.679	29.926	234.76	219.25	24.296	28.174	39.794
#3	52.674	29.789	234.96	218.41	24.223	28.200	39.469

Elem	2068/2
Avge	53.044
SDev	.332
%RSD	.62614
#1	53.398
#2	52.740
#3	52.995

Standardization Rpt. 10/21/08 11:48:43 AM page 1

Method: KICAP Standard: STD2
Run Time: 10/21/08 11:47:03

Elem	Ca	Cr	Fe	Na	Pb
Avge	109.1	22.942	14.172	17.39	67.196
SDev	1.0	.175	.133	.14	.597
%RSD	.9342	.76103	.93577	.8244	.88775
#1	108.0	22.752	14.027	17.23	66.545
#2	109.2	22.981	14.203	17.43	67.326
#3	110.0	23.094	14.287	17.51	67.716 .

Standardization Rpt. 10/21/08 11:51:04 AM page 1

Method: KICAP Standard: STD1
Run Time: 10/21/08 11:49:23

Elem	K_7664
Avge	88.32
SDev	.52
%RSD	.5871
#1	87.73
#2	88.56
#3	88.68

Standardization Report 10/21/08 11:51:17 AM page 1

Method: KICAP Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	STD3	BLANK	.021497	-.000544	10/21/08 11:49:23
Al3082	308.215	STD3	BLANK	1.92604	.783496	10/21/08 11:49:23
B_2496	249.678	STD3	BLANK	.032260	-.071183	10/21/08 11:49:23
Ba4934	493.409	STD3	BLANK	.088882	-.015813	10/21/08 11:49:23
Be3130	313.042	STD3	BLANK	.008338	-.002995	10/21/08 11:49:23
Ca	317.933	STD3	BLANK	.109945	-.105128	10/21/08 11:49:23
Ca	370.603	STD2	BLANK	1.93638	.298041	10/21/08 11:49:23
Cd2265	226.502	STD3	BLANK	.000739	-.015710	10/21/08 11:49:23
Co2286	228.616	STD3	BLANK	.033675	-.073419	10/21/08 11:49:23
Cr	267.716	STD3	BLANK	.013985	-.064924	10/21/08 11:49:23
Cr	298.919	STD2	BLANK	.654809	2.52947	10/21/08 11:49:23
Cu3247	324.753	STD3	BLANK	.062454	-.003246	10/21/08 11:49:23
Fe	271.441	STD2	BLANK	2.27094	-.225614	10/21/08 11:49:23
Fe	259.940	STD3	BLANK	.008281	-.053317	10/21/08 11:49:23
K_7664	766.491	STD1	BLANK	1.77241	-.313571	10/21/08 11:49:23
Mg2790	279.078	STD3	BLANK	2.48158	-.216063	10/21/08 11:49:23
Mn2576	257.610	STD3	BLANK	.012183	-.010099	10/21/08 11:49:23
Mo2020	202.030	STD3	BLANK	.121239	-.000889	10/21/08 11:49:23
Na	588.995	STD3	BLANK	.763234	-1.24585	10/21/08 11:49:23
Na	330.232	STD2	BLANK	1.54785	4.62158	10/21/08 11:49:23
Ni2316	231.604	STD3	BLANK	.152864	.000815	10/21/08 11:49:23
Sn1899	189.989	STD3	BLANK	.082201	-.213096	10/21/08 11:49:23
Sr4215	421.552	STD3	BLANK	.010393	-.006828	10/21/08 11:49:23
Ti3349	334.941	STD3	BLANK	.078869	-.031637	10/21/08 11:49:23
V_2924	292.402	STD3	BLANK	.053642	-.000268	10/21/08 11:49:23
Zn2138	213.856	STD3	BLANK	.051092	-.000187	10/21/08 11:49:23
As1890	189.042	STD3	BLANK	.018868	-.000066	10/21/08 11:49:23
Tl1908	190.864	STD3	BLANK	.043718	-.291816	10/21/08 11:49:23
Pb	220.353	NONE	NONE	1.00000	.000000	*10/21/08 11:49:23
Se1960	196.026	NONE	NONE	1.00000	.000000	*10/21/08 11:49:23
Sb2068	206.838	NONE	NONE	1.00000	.000000	*10/21/08 11:49:23
2203/1	220.351	STD3	BLANK	.004268	.000309	10/21/08 11:49:23
2203/2	220.352	STD3	BLANK	.004560	.000737	10/21/08 11:49:23
Pb	405.782	STD2	BLANK	1.50133	3.85439	10/21/08 11:49:23
1960/1	196.021	STD3	BLANK	.040923	.001977	10/21/08 11:49:23
1960/2	196.022	STD3	BLANK	.035638	-.002220	10/21/08 11:49:23
2068/1	206.831	STD3	BLANK	.025285	.000413	10/21/08 11:49:23
2068/2	206.832	STD3	BLANK	.018832	-.000320	10/21/08 11:49:23

Analysis Report QC Standard 10/21/08 11:58:03 AM page 1

Method: KICAP Sample Name: ICVH Operator: CT
Run Time: 10/21/08 11:54:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00032	.0070	.00056	-.00018	-.00002	50.27	-.00019
SDev	.00065	.0005	.00020	.00000	.00001	.14	.00006
%RSD	206.35	6.895	36.334	.00028	57.395	.2700	32.384
#1	-.00091	.0067	.00066	-.00018	-.00003	50.15	-.00014
#2	-.00042	.0076	.00070	-.00018	-.00001	50.41	-.00018
#3	.00038	.0067	.00033	-.00018	-.00002	50.24	-.00026
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value						50.00	
Range						10.00	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00122	5.1299	-.00006	10.124	-.0238	-.0033	.00000
SDev	.00012	.0248	.00012	.035	.0042	.0009	.00004
%RSD	10.134	.48413	186.80	.35023	17.74	25.80	31461.
#1	-.00128	5.1064	.00006	10.105	-.0265	-.0042	.00002
#2	-.00108	5.1559	-.00018	10.165	-.0189	-.0025	-.00005
#3	-.00131	5.1274	-.00007	10.102	-.0260	-.0033	.00002
Errors	NOCHECK	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value		5.0000		10.000			
Range		10.000		10.000			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	50.06	.00035	-.00036	.00016	.00049	-.00029
SDev	.00088	.16	.00053	.00164	.00002	.00009	.00019
%RSD	578.92	.3192	149.08	459.49	12.600	17.827	66.733
#1	.00116	49.91	.00005	-.00162	.00015	.00050	-.00050
#2	-.00029	50.23	.00005	.00150	.00018	.00040	-.00024
#3	-.00041	50.03	.00097	-.00096	.00014	.00057	-.00013
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value		50.00					
Range		10.00					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00066	-.00159	-.00152	10.204	-.00268	.00154	9.9379
SDev	.00010	.00054	.00307	.025	.00188	.00083	.0076
%RSD	15.380	33.806	202.33	.24927	70.334	54.195	.07649
#1	.00067	-.00213	-.00213	10.183	-.00109	.00184	9.9457
#2	.00056	-.00158	.00181	10.232	-.00476	.00060	9.9305
#3	.00077	-.00106	-.00423	10.196	-.00219	.00218	9.9376
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report QC Standard 10/21/08 11:58:03 AM page 2

Value				10.000	
Range				10.000	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	9.9485	-.00239	-.00282	-.00015	.00188
SDev	.1548	.00507	.00176	.00449	.00318
%RSD	1.5558	211.98	62.455	3043.1	168.87
#1	9.7968	.00344	-.00335	-.00515	.00457
#2	10.106	-.00576	-.00426	.00354	-.00162
#3	9.9424	-.00486	-.00086	.00116	.00270
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report QC Standard 10/21/08 12:02:09 PM page 1

Method: KICAP Sample Name: ICV Operator: CT
Run Time: 10/21/08 11:58:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04775	.9821	.49563	.19307	.20171	9.846	.19565
SDev	.00036	.0077	.00464	.00159	.00124	.048	.00088
%RSD	.74687	.7805	.93704	.82481	.61664	.4826	.44976
#1	.04808	.9781	.49225	.19206	.20096	9.828	.19537
#2	.04737	.9772	.49370	.19224	.20102	9.811	.19494
#3	.04780	.9909	.50092	.19491	.20314	9.900	.19663
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	1.000	.50000	.20000	.20000	10.00	.20000
Range	10.000	10.00	10.000	10.000	10.000	10.00	10.000

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19579	.20039	.19909	1.0091	9.867	9.947	.19845
SDev	.00079	.00086	.00116	.0059	.064	.050	.00123
%RSD	.40516	.42855	.58239	.58726	.6495	.5010	.62007
#1	.19571	.20058	.19813	1.0060	9.840	9.923	.19769
#2	.19504	.19946	.19875	1.0053	9.821	9.914	.19779
#3	.19662	.20115	.20036	1.0159	9.940	10.00	.19987
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.20000	.20000	.20000	1.0000		10.00	.20000
Range	10.000	10.000	10.000	10.000		10.00	10.000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19226	9.902	.19955	.19689	.20262	.20255	.20011
SDev	.00273	.076	.00124	.00191	.00136	.00152	.00127
%RSD	1.4192	.7639	.61914	.96752	.67190	.74977	.63590
#1	.18960	9.858	.19843	.19514	.20179	.20145	.19938
#2	.19214	9.858	.19935	.19892	.20188	.20192	.19938
#3	.19505	9.989	.20088	.19662	.20419	.20428	.20158
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	10.00	.20000	.20000	.20000	.20000	.20000
Range	10.000	10.00	10.000	10.000	10.000	10.000	10.000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20071	.20107	.19522	.20192	.19499	.20521	.19909
SDev	.00132	.00169	.00072	.00046	.00230	.00144	.00072
%RSD	.65878	.83904	.37068	.22534	1.1817	.70113	.36292
#1	.20000	.19969	.19447	.20190	.19286	.20424	.19853
#2	.19990	.20295	.19591	.20238	.19468	.20453	.19884
#3	.20224	.20057	.19528	.20147	.19743	.20686	.19991
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 10/21/08 12:02:09 PM page 2

Value	.20000	.20000	.20000	.20000	.20000	.20000
Range	10.000	10.000	10.000	10.000	10.000	10.000
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.20333	.19227	.19634	.20504	.20505	
SDev	.00097	.00231	.00274	.00159	.00227	
%RSD	.47932	1.2005	1.3969	.77622	1.1073	
#1	.20359	.18963	.19447	.20449	.20336	
#2	.20415	.19388	.19507	.20379	.20415	
#3	.20226	.19331	.19949	.20683	.20763	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value						
Range						

Analysis Report QC Standard 10/21/08 12:06:15 PM page 1

Method: KICAP Sample Name: CCV/IPC Operator: CT
Run Time: 10/21/08 12:02:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24712	4.942	.50045	.50113	.50132	9.900	.50210
SDev	.00193	.047	.00529	.00397	.00425	.083	.00434
%RSD	.77938	.9468	1.0575	.79141	.84755	.8345	.86415
#1	.24496	4.890	.49463	.49659	.49654	9.809	.49726
#2	.24778	4.954	.50177	.50281	.50273	9.922	.50339
#3	.24864	4.981	.50496	.50397	.50469	9.970	.50565
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.25000	5.000	.50000	.50000	.50000	10.00	.50000
Range	5.0000	5.000	5.0000	5.0000	5.0000	5.000	5.0000

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49925	.49918	.49783	.99470	9.953	10.01	.49887
SDev	.00485	.00446	.00467	.00916	.076	.08	.00422
%RSD	.97060	.89312	.93898	.92141	.7676	.8356	.84646
#1	.49383	.49423	.49246	.98437	9.869	9.912	.49409
#2	.50079	.50044	.50001	.99785	9.971	10.03	.50044
#3	.50315	.50287	.50101	1.0019	10.02	10.07	.50208
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.50000	.50000	.50000	1.0000		10.00	.50000
Range	5.0000	5.0000	5.0000	5.0000		5.000	5.0000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50057	9.937	.49819	.49918	.50497	.50137	.49681
SDev	.00747	.077	.00386	.00424	.00434	.00407	.00418
%RSD	1.4923	.7749	.77504	.85012	.86010	.81111	.84148
#1	.49241	9.850	.49391	.49457	.50005	.49672	.49233
#2	.50222	9.966	.49926	.50005	.50662	.50310	.49749
#3	.50707	9.996	.50140	.50292	.50825	.50428	.50061
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	10.00	.50000	.50000	.50000	.50000	.50000
Range	5.0000	5.000	5.0000	5.0000	5.0000	5.0000	5.0000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50260	.49899	.49587	.50178	.49305	.49733	.50096
SDev	.00452	.00345	.00744	.00601	.00580	.00557	.00607
%RSD	.89911	.69086	1.5005	1.1976	1.1766	1.1206	1.2117
#1	.49750	.49585	.48795	.49569	.48778	.49269	.49543
#2	.50421	.49845	.50271	.50196	.49211	.49581	.50000
#3	.50609	.50268	.49695	.50770	.49927	.50351	.50746
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 10/21/08 12:06:15 PM page 2

Value	.50000	.50000	.50000	.50000	.50000	.50000
Range	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.50219	.49570	.49173	.49559	.49845	
SDev	.00604	.00593	.00642	.00678	.00583	
%RSD	1.2027	1.1956	1.3052	1.3683	1.1704	
#1	.49582	.49347	.48494	.48843	.49631	
#2	.50294	.49121	.49256	.49643	.49400	
#3	.50783	.50242	.49769	.50192	.50506	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value						
Range						

Analysis Report Blank Sample 10/21/08 12:10:21 PM page 1

Method: KICAP Sample Name: ICB Operator: CT
Run Time: 10/21/08 12:06:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.0128	.00381	.00003	.00006	.0074	.00014
SDev	.00050	.0009	.00093	.00005	.00006	.0023	.00007
%RSD	329.49	6.722	24.386	173.28	101.91	30.75	51.446
#1	.00008	.0128	.00485	.00009	.00014	.0095	.00021
#2	-.00031	.0119	.00356	-.00000	.00003	.0076	.00011
#3	.00068	.0136	.00304	-.00000	.00002	.0050	.00009

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00055	.00038	.00029	.00017	.0134	.0037	.00011
SDev	.00020	.00004	.00019	.00017	.0071	.0014	.00005
%RSD	35.907	10.685	65.566	99.982	53.29	37.63	50.498
#1	.00033	.00035	.00025	.00027	.0095	.0034	.00017
#2	.00070	.00035	.00012	-.00003	.0090	.0025	.00007
#3	.00063	.00042	.00050	.00026	.0216	.0052	.00008

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00129	.0018	.00046	.00128	.00006	.00021	.00029
SDev	.00021	.0006	.00032	.00191	.00006	.00014	.00030
%RSD	16.238	34.81	69.269	148.41	107.48	65.042	105.90
#1	.00141	.0024	.00082	.00347	.00013	.00037	.00054
#2	.00141	.0011	.00020	.00035	.00002	.00013	-.00005
#3	.00105	.0018	.00036	.00002	.00003	.00013	.00038

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.00003	.00363	.00132	-.00007	-.00022	.00090
SDev	.00005	.00064	.00075	.00065	.00122	.00165	.00208
%RSD	333.99	2319.8	20.656	49.003	1869.0	760.26	231.96
#1	.00006	-.00065	.00443	.00086	-.00016	.00073	.00236
#2	.00002	.00062	.00352	.00104	.00120	.00075	.00181
#3	-.00004	.00011	.00295	.00208	-.00124	-.00213	-.00148

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00153	-.00200	.00090	-.00170	.00027
SDev	.00201	.00095	.00139	.00315	.00345
%RSD	130.88	47.257	154.19	185.13	1260.8
#1	.00011	-.00175	.00063	.00037	.00016
#2	.00066	-.00121	.00241	-.00533	.00378
#3	.00383	-.00305	-.00033	-.00014	-.00312

1020

Analysis Report 10/21/08 12:14:27 PM page 1

Method: KICAP Sample Name: CRI(PQL) Operator: CT
Run Time: 10/21/08 12:10:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00988	.1057	.04184	.09725	.00992	1.007	.00867
SDev	.00037	.0023	.00018	.00045	.00006	.005	.00003
%RSD	3.7195	2.149	.42453	.45980	.61829	.4668	.40196
#1	.01012	.1083	.04196	.09719	.00990	1.005	.00867
#2	.00945	.1040	.04193	.09683	.00988	1.004	.00863
#3	.01006	.1049	.04164	.09772	.00999	1.013	.00870

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04901	.01052	.01077	.05192	4.923	1.029	.05019
SDev	.00025	.00053	.00044	.00113	.081	.006	.00025
%RSD	.51895	5.0479	4.0717	2.1796	1.647	.5587	.50124
#1	.04924	.01038	.01122	.05141	5.004	1.026	.05011
#2	.04904	.01007	.01072	.05113	4.923	1.025	.04998
#3	.04874	.01110	.01035	.05322	4.842	1.036	.05047

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05045	.9997	.05042	.04863	.05093	.05096	.04965
SDev	.00007	.0036	.00038	.00264	.00021	.00046	.00040
%RSD	.13872	.3590	.76199	5.4378	.41604	.90566	.81038
#1	.05049	1.004	.05007	.04945	.05088	.05078	.04988
#2	.05049	.9991	.05037	.05077	.05075	.05062	.04918
#3	.05037	.9965	.05083	.04567	.05116	.05149	.04988

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02143	.00953	.01836	.01092	.00939	.06123	.01287
SDev	.00018	.00040	.00120	.00094	.00076	.00067	.00047
%RSD	.83255	4.2298	6.5381	8.6549	8.0522	1.0957	3.6682
#1	.02144	.00980	.01744	.01143	.00854	.06096	.01306
#2	.02124	.00973	.01972	.00983	.00966	.06073	.01321
#3	.02159	.00907	.01792	.01149	.00998	.06199	.01233

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00994	.01002	.00908	.05775	.06346
SDev	.00158	.00182	.00126	.00224	.00118
%RSD	15.886	18.164	13.837	3.8803	1.8597
#1	.01062	.00905	.00829	.05597	.06420
#2	.00814	.01212	.00843	.05701	.06409
#3	.01107	.00889	.01053	.06026	.06210

1021

Analysis Report QC Standard 10/21/08 12:30:05 PM page 1

Method: KICAP Sample Name: ICSA-INITIAL Operator: CT
Run Time: 10/21/08 12:26:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	483.8	.00086	-.00066	-.00009	504.8	-.00001
SDev	.00020	2.5	.00043	.00000	.00000	1.8	.00001
%RSD	92.641	.5100	50.287	.37299	2.9796	.3643	243.31
#1	-.00001	486.5	.00125	-.00066	-.00008	507.0	-.00001
#2	.00027	481.7	.00039	-.00066	-.00009	503.6	-.00001
#3	.00038	483.2	.00094	-.00066	-.00009	503.7	.00001
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.0				500.0	
Range		20.00				20.00	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00250	.00034	-.00071	184.80	-.0261	496.8	-.00020
SDev	.00008	.00022	.00003	.77	.0047	2.2	.00004
%RSD	3.2926	63.760	3.5989	.41420	18.01	.4370	17.546
#1	-.00255	.00016	-.00068	185.68	-.0300	499.2	-.00022
#2	-.00256	.00058	-.00072	184.50	-.0209	495.9	-.00016
#3	-.00241	.00027	-.00073	184.24	-.0276	495.2	-.00022
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	QC Pass	NOCHECK
Value				200.00		500.0	
Range				20.000		20.00	

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00073	-.0067	.00010	-.00155	.00016	.00157	.00016
SDev	.00183	.0005	.00019	.00214	.00001	.00015	.00014
%RSD	251.82	7.819	193.02	138.30	6.7175	9.9243	91.794
#1	.00138	-.0062	-.00002	-.00062	.00015	.00139	.00002
#2	-.00190	-.0068	.00032	-.00003	.00016	.00165	.00030
#3	-.00166	-.0072	.00000	-.00400	.00017	.00166	.00015
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00165	-.00265	-.00224	.00719	.00021	-.00184	.00951
SDev	.00016	.00323	.00170	.00089	.00426	.00125	.00420
%RSD	9.5739	121.67	75.747	12.398	2023.0	67.754	44.150
#1	.00174	.00068	-.00031	.00647	-.00260	-.00041	.01428
#2	.00147	-.00288	-.00294	.00819	-.00188	-.00243	.00639
#3	.00175	-.00576	-.00347	.00692	.00511	-.00269	.00786
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

1022

Analysis Report QC Standard 10/21/08 12:30:05 PM page 2

	2203/2	1960/1	1960/2	2068/1	2068/2
Value Range					
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00604	.00507	-.00222	-.01136	.00291
SDev	.00328	.00827	.00326	.00907	.00494
%RSD	54.317	163.07	146.85	79.819	169.60
#1	.00257	.00367	-.00573	-.01740	.00732
#2	.00909	-.00241	-.00162	-.00093	-.00242
#3	.00645	.01396	.00070	-.01575	.00384
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

1023

Analysis Report QC Standard 10/21/08 12:35:10 PM page 1

Method: KICAP Sample Name: ICSAB-INITIAL Operator: CT
Run Time: 10/21/08 12:31:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19349	476.4	.47380	.47966	.47069	496.6	.87169
SDev	.00026	1.2	.00224	.00133	.00056	.6	.00207
%RSD	.13265	.2562	.47331	.27777	.11850	.1129	.23795
#1	.19349	477.8	.47124	.48120	.47006	496.1	.86946
#2	.19375	475.9	.47475	.47889	.47086	496.5	.87203
#3	.19323	475.5	.47540	.47889	.47114	497.2	.87357
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	500.0	.50000	.50000	.50000	500.0	1.0000
Range	20.000	20.00	20.000	20.000	20.000	20.00	20.000

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.44234	.45797	.50487	182.20	4.946	488.6	.46202
SDev	.00135	.00167	.00167	.25	.016	1.3	.00038
%RSD	.30562	.36401	.33055	.13452	.3190	.2627	.08199
#1	.44080	.45641	.50680	181.95	4.934	487.2	.46169
#2	.44335	.45778	.50388	182.20	4.940	488.7	.46195
#3	.44287	.45972	.50394	182.44	4.954	489.8	.46243
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00		500.0	.50000
Range	20.000	20.000	20.000	20.000		20.00	20.000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.44189	.9205	.88960	.45133	.48129	.47305	.46772
SDev	.00208	.0027	.00036	.00345	.00089	.00049	.00019
%RSD	.47068	.2970	.04093	.76523	.18500	.10252	.04029
#1	.44157	.9234	.88918	.45483	.48232	.47357	.46771
#2	.43999	.9180	.88981	.44793	.48078	.47261	.46754
#3	.44412	.9201	.88981	.45122	.48078	.47298	.46792
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000		1.0000	.50000	.50000	.50000	.50000
Range	20.000		20.000	20.000	20.000	20.000	20.000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94924	.09546	.08907	.05010	.04577	.59640	.05832
SDev	.00075	.00212	.00386	.00173	.00385	.00351	.00052
%RSD	.07884	2.2232	4.3331	3.4635	8.4009	.58823	.89204
#1	.94979	.09602	.08489	.04825	.04592	.59259	.05861
#2	.94839	.09311	.08982	.05169	.04186	.59949	.05862
#3	.94954	.09724	.09249	.05035	.04954	.59714	.05771
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 10/21/08 12:35:10 PM page 2

Value	1.0000	.10000	.10000	.05000	.05000	.60000
Range	20.000	20.000	20.000	20.000	20.000	20.000

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.04599	.05069	.04332	.59629	.59696
SDev	.00265	.00984	.00685	.01925	.00524
%RSD	5.7535	19.405	15.811	3.2275	.87727
#1	.04307	.06191	.03794	.57407	.60258
#2	.04823	.04358	.04100	.60779	.59609
#3	.04667	.04656	.05103	.60701	.59222
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report 10/21/08 01:15:53 PM page 1

Method: KICAP Sample Name: CCVH1 Operator: CT
Run Time: 10/21/08 13:12:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00034	.0001	.00018	-.00006	-.00004	49.93	-.00011
SDev	.00007	.0020	.00021	.00010	.00000	.33	.00003
%RSD	19.963	1550.	117.38	173.20	.23099	.6642	27.430
#1	-.00039	.0024	.00014	-.00000	-.00004	49.73	-.00010
#2	-.00027	-.0010	.00040	.00000	-.00004	49.75	-.00009
#3	-.00037	-.0010	-.00001	-.00018	-.00004	50.32	-.00014
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00106	5.1408	.00043	10.044	-.0092	-.0033	-.00010
SDev	.00011	.0202	.00038	.052	.0050	.0009	.00002
%RSD	10.063	.39243	86.558	.52061	54.36	26.69	19.271
#1	-.00097	5.1268	.00006	10.013	-.0136	-.0033	-.00010
#2	-.00104	5.1317	.00081	10.014	-.0038	-.0024	-.00008
#3	-.00118	5.1640	.00044	10.104	-.0101	-.0042	-.00012
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00066	49.97	.00041	.00069	.00016	.00052	.00002
SDev	.00163	.10	.00035	.00016	.00012	.00011	.00022
%RSD	248.07	.1987	86.841	23.530	73.928	20.868	1290.1
#1	.00116	50.03	.00020	.00069	.00025	.00059	.00015
#2	-.00114	49.85	.00020	.00053	.00019	.00058	.00014
#3	-.00199	50.02	.00081	.00085	.00003	.00040	-.00024
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00307	-.00210	-.00185	10.137	.00159	.00488	9.8992
SDev	.00235	.00133	.00117	.047	.00151	.00170	.0176
%RSD	76.568	63.395	63.129	.46593	94.950	34.761	.17752
#1	.00123	-.00347	-.00056	10.105	.00031	.00473	9.8900
#2	.00226	-.00201	-.00214	10.115	.00326	.00665	9.8881
#3	.00572	-.00092	-.00284	10.192	.00120	.00327	9.9194
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 10/21/08 01:15:53 PM page 2

High				11.090	
Low				8.9900	

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.104	-.00044	.00261	.00622	.00471
SDev	.131	.00067	.00204	.00293	.00082
%RSD	1.2985	152.31	78.281	47.076	17.346
#1	9.9567	-.00122	.00108	.00602	.00558
#2	10.207	-.00007	.00493	.00925	.00461
#3	10.149	-.00003	.00182	.00340	.00395
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 01:19:46 PM page 1

Method: KICAP Sample Name: CCV1 Operator: CT
Run Time: 10/21/08 13:15:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24609	4.957	.49907	.50764	.50444	9.872	.50312
SDev	.00261	.059	.00903	.00620	.00719	.128	.00663
%RSD	1.0608	1.181	1.8103	1.2218	1.4261	1.301	1.3171
#1	.24311	4.892	.48905	.50068	.49657	9.733	.49578
#2	.24722	4.974	.50155	.50965	.50608	9.898	.50492
#3	.24795	5.005	.50660	.51259	.51068	9.986	.50866
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49991	.49959	.49797	.98753	9.982	10.00	.49839
SDev	.00619	.00670	.00508	.01285	.127	.15	.00656
%RSD	1.2376	1.3415	1.0202	1.3013	1.276	1.481	1.3173
#1	.49292	.49239	.49233	.97362	10.03	9.844	.49112
#2	.50210	.50075	.49938	.99000	10.08	10.04	.50020
#3	.50469	.50564	.50219	.99896	9.837	10.13	.50387
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50052	9.994	.49762	.49907	.51125	.50660	.49511
SDev	.00827	.062	.00701	.00582	.00616	.00673	.00632
%RSD	1.6521	.6214	1.4084	1.1666	1.2049	1.3282	1.2772
#1	.49119	9.950	.48997	.49243	.50439	.49909	.48820
#2	.50343	10.07	.49915	.50145	.51307	.50862	.49653
#3	.50695	9.968	.50373	.50333	.51630	.51209	.50061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50465	.50008	.48855	.50693	.49282	.49848	.50447
SDev	.00592	.00684	.00903	.00566	.00860	.00750	.00314
%RSD	1.1721	1.3676	1.8480	1.1158	1.7446	1.5038	.62136
#1	.49798	.49277	.47914	.50128	.48359	.48982	.50132
#2	.50672	.50113	.48936	.50691	.49425	.50266	.50452
#3	.50925	.50633	.49714	.51259	.50061	.50295	.50758
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

Analysis Report 10/21/08 01:19:46 PM page 2

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.50815	.49098	.49373	.50245	.49649
SDev	.00692	.00550	.01020	.01047	.00539
%RSD	1.3610	1.1199	2.0661	2.0848	1.0853
#1	.50126	.48476	.48301	.49036	.49031
#2	.50810	.49301	.49487	.50845	.49902
#3	.51509	.49518	.50332	.50855	.50016
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 01:23:40 PM page 1

Method: KICAP Sample Name: CCB1 Operator: CT
Run Time: 10/21/08 13:19:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00016	-.0007	.00329	.00003	.00002	.0169	.00008
SDev	.00033	.0027	.00052	.00010	.00004	.0025	.00006
%RSD	201.54	367.0	15.935	346.42	201.46	14.60	79.671
#1	.00004	-.0036	.00375	.00009	.00006	.0190	.00006
#2	.00002	-.0002	.00340	.00009	.00001	.0142	.00014
#3	-.00055	.0016	.00272	-.00009	-.00001	.0175	.00003

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00002	.00017	.00073	-.00011	-.0020	-.0029	.00006
SDev	.00020	.00018	.00024	.00022	.0103	.0015	.00001
%RSD	876.64	107.03	32.407	198.40	519.3	52.27	21.270
#1	.00006	-.00004	.00062	-.00009	-.0139	-.0038	.00004
#2	.00012	.00030	.00100	.00010	.0037	-.0011	.00006
#3	-.00025	.00024	.00056	-.00035	.0043	-.0038	.00007

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00141	-.0002	.00015	.00134	.00004	-.00005	-.00028
SDev	.00262	.0005	.00009	.00187	.00017	.00009	.00032
%RSD	185.63	218.3	57.903	139.01	458.18	171.08	111.97
#1	.00299	.0002	.00020	.00052	.00019	.00005	-.00016
#2	.00287	-.0000	.00020	.00003	.00007	-.00011	-.00005
#3	-.00162	-.0008	.00005	.00348	-.00015	-.00011	-.00065

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00065	-.00098	.00172	.00084	.00119	-.00060	.00252
SDev	.00030	.00077	.00284	.00034	.00119	.00126	.00206
%RSD	46.368	78.424	165.18	40.043	99.901	209.61	81.471
#1	.00053	-.00154	.00278	.00049	.00246	.00047	.00024
#2	.00042	-.00129	.00387	.00116	.00103	-.00200	.00312
#3	.00099	-.00010	-.00150	.00088	.00009	-.00028	.00421

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.00480	-.00061	-.00485	.00201
SDev	.00071	.00039	.00198	.00118	.00057
%RSD	69680.	8.2199	326.98	24.263	28.395
#1	.00061	.00435	.00152	-.00378	.00184
#2	.00017	.00496	-.00094	-.00611	.00155
#3	-.00078	.00509	-.00240	-.00465	.00265

Analysis Report 10/21/08 02:06:34 PM page 1

Method: KICAP Sample Name: CCVH2 Operator: CT
Run Time: 10/21/08 14:02:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00009	-.0047	.00012	-.00012	-.00005	49.59	-.00018
SDev	.00108	.0030	.00040	.00010	.00001	.15	.00011
%RSD	1258.2	63.86	329.60	86.604	23.058	.3041	60.934
#1	.00132	-.0019	.00054	.00000	-.00004	49.43	-.00008
#2	-.00063	-.0044	.00009	-.00018	-.00006	49.63	-.00017
#3	-.00044	-.0079	-.00026	-.00016	-.00007	49.72	-.00030
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00119	5.0971	.00076	9.9687	-.0168	-.0047	-.00011
SDev	.00020	.0077	.00007	.0210	.0065	.0031	.00006
%RSD	16.401	.15156	9.5543	.21096	38.90	64.67	59.343
#1	-.00097	5.0940	.00080	9.9467	-.0109	-.0015	-.00003
#2	-.00131	5.1059	.00080	9.9886	-.0157	-.0050	-.00014
#3	-.00130	5.0913	.00068	9.9707	-.0238	-.0076	-.00014
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00061	49.66	.00036	-.00183	.00020	.00050	.00006
SDev	.00037	.12	.00055	.00205	.00010	.00018	.00046
%RSD	60.171	.2504	155.12	112.52	47.773	37.143	822.86
#1	-.00029	49.69	.00081	.00020	.00030	.00061	.00057
#2	-.00053	49.76	.00051	-.00177	.00019	.00060	-.00028
#3	-.00102	49.52	-.00026	-.00391	.00011	.00028	-.00012
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01021	-.00121	-.00305	10.060	-.00010	.00495	9.8064
SDev	.00465	.00130	.00243	.020	.00155	.00146	.0677
%RSD	45.525	107.68	79.794	.19404	1556.5	29.490	.69010
#1	.01492	-.00096	-.00026	10.039	-.00187	.00360	9.8863
#2	.01007	-.00262	-.00473	10.077	.00061	.00650	9.7751
#3	.00563	-.00005	-.00415	10.063	.00096	.00476	9.7638
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.002	-.00108	.00039	.00380	.00528
SDev	.136	.00336	.00065	.00043	.00180
%RSD	1.3608	309.93	166.83	11.259	34.023
#1	9.8469	-.00490	-.00036	.00409	.00411
#2	10.057	.00025	.00079	.00331	.00735
#3	10.102	.00140	.00075	.00400	.00439
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Method: KICAP Sample Name: CCV2 Operator: CT
Run Time: 10/21/08 14:06:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24400	4.932	.49313	.50332	.49905	9.788	.49717
SDev	.00238	.068	.00904	.00728	.00778	.151	.00726
%RSD	.97515	1.388	1.8330	1.4470	1.5593	1.539	1.4602
#1	.24128	4.853	.48281	.49491	.49012	9.617	.48888
#2	.24569	4.962	.49698	.50752	.50260	9.847	.50022
#3	.24503	4.980	.49962	.50752	.50442	9.900	.50240
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49391	.49318	.49402	.97691	9.977	9.891	.49288
SDev	.00697	.00754	.00647	.01463	.189	.154	.00705
%RSD	1.4113	1.5298	1.3087	1.4980	1.899	1.554	1.4307
#1	.48589	.48459	.48665	.96016	10.09	9.718	.48477
#2	.49729	.49621	.49876	.98332	10.08	9.943	.49626
#3	.49854	.49874	.49664	.98724	9.759	10.01	.49760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49435	9.963	.49247	.48949	.50527	.50235	.49033
SDev	.00913	.076	.00841	.00741	.00753	.00713	.00700
%RSD	1.8472	.7641	1.7077	1.5143	1.4900	1.4190	1.4275
#1	.48380	9.922	.48293	.48168	.49659	.49413	.48229
#2	.49980	10.05	.49563	.49036	.50930	.50602	.49363
#3	.49943	9.917	.49884	.49643	.50993	.50689	.49508
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49960	.49424	.48575	.50174	.48638	.49485	.49808
SDev	.00622	.00628	.01210	.00429	.00706	.00410	.00539
%RSD	1.2454	1.2701	2.4901	.85449	1.4519	.82786	1.0812
#1	.49244	.48711	.47244	.49710	.47881	.49012	.49233
#2	.50372	.49894	.48875	.50256	.48753	.49720	.49889
#3	.50263	.49668	.49607	.50556	.49280	.49724	.50301
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.50357	.48635	.48640	.49746	.49231	
SDev	.00374	.00457	.00831	.00816	.00239	
%RSD	.74313	.94052	1.7086	1.6409	.48530	
#1	.49948	.48133	.47756	.48821	.48958	
#2	.50440	.48745	.48757	.50051	.49405	
#3	.50683	.49027	.49406	.50365	.49329	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
High						
Low						

Method: KICAP Sample Name: CCB2 Operator: CT
Run Time: 10/21/08 14:10:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	-.0019	.00300	.00003	.00003	.0180	.00003
SDev	.00067	.0030	.00094	.00014	.00004	.0010	.00005
%RSD	2275.1	159.8	31.337	458.25	150.67	5.677	143.02
#1	.00079	-.0036	.00407	.00018	.00007	.0188	.00005
#2	-.00048	-.0036	.00259	.00000	.00002	.0183	-.00002
#3	-.00022	.0016	.00233	-.00009	-.00001	.0168	.00006

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00005	.00073	-.00017	-.0077	-.0026	.00001
SDev	.00017	.00010	.00067	.00019	.0087	.0018	.00004
%RSD	1474.0	215.82	91.668	108.93	113.5	69.86	319.41
#1	-.00001	.00007	.00150	-.00003	-.0057	-.0011	.00006
#2	-.00018	-.00007	.00037	-.00039	-.0172	-.0046	-.00002
#3	.00016	.00013	.00031	-.00010	-.0001	-.0020	-.00000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00145	.0027	.00061	.00121	.00006	-.00011	.00002
SDev	.00142	.0007	.00044	.00109	.00017	.00016	.00035
%RSD	97.658	25.99	72.171	90.053	310.71	149.05	1755.6
#1	.00250	.0033	.00112	.00143	.00022	.00005	.00038
#2	.00202	.0019	.00036	.00216	.00006	-.00026	.00000
#3	-.00016	.0029	.00036	.00003	-.00012	-.00011	-.00032

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00093	-.00059	.00006	.00142	.00031	-.00121	.00179
SDev	.00045	.00067	.00055	.00093	.00097	.00040	.00148
%RSD	47.810	113.12	926.06	65.624	311.59	33.249	82.680
#1	.00062	-.00002	.00060	.00242	-.00073	-.00118	.00344
#2	.00073	-.00133	-.00049	.00129	.00049	-.00082	.00134
#3	.00145	-.00043	.00007	.00056	.00118	-.00162	.00058

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00124	.00153	-.00030	-.00145	-.00084
SDev	.00068	.00279	.00182	.00024	.00019
%RSD	54.538	182.37	612.22	16.646	23.065
#1	.00191	.00210	-.00215	-.00171	-.00092
#2	.00126	-.00150	.00148	-.00123	-.00062
#3	.00055	.00398	-.00023	-.00141	-.00098

Analysis Report 10/21/08 02:57:16 PM page 1

Method: KICAP Sample Name: CCVH3 Operator: CT
Run Time: 10/21/08 14:53:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00027	-.0016	.00039	-.00018	-.00005	49.84	-.00016
SDev	.00010	.0043	.00046	.00000	.00001	.72	.00001
%RSD	37.433	267.9	119.42	.00244	28.315	1.446	4.3530
#1	-.00031	-.0061	-.00011	-.00018	-.00007	49.13	-.00015
#2	-.00035	-.0010	.00046	-.00018	-.00004	49.80	-.00016
#3	-.00016	.0024	.00080	-.00018	-.00004	50.57	-.00016
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00122	5.1267	.00066	10.039	-.0220	-.0059	-.00012
SDev	.00015	.0869	.00021	.145	.0131	.0026	.00004
%RSD	12.711	1.6943	32.018	1.4422	59.31	43.09	34.760
#1	-.00136	5.0440	.00042	9.9003	-.0360	-.0085	-.00015
#2	-.00124	5.1188	.00080	10.028	-.0201	-.0059	-.00013
#3	-.00106	5.2172	.00076	10.189	-.0100	-.0034	-.00007
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00017	49.87	.00041	-.00035	.00013	.00035	-.00016
SDev	.00111	.38	.00038	.00053	.00010	.00010	.00021
%RSD	643.51	.7570	94.686	149.56	74.227	27.830	133.94
#1	-.00138	49.49	.00081	-.00012	.00022	.00024	-.00039
#2	.00007	49.88	.00005	-.00095	.00016	.00043	.00004
#3	.00079	50.24	.00036	.00002	.00002	.00037	-.00013
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00087	-.00157	-.00185	10.119	-.00048	.00309	9.9358
SDev	.00008	.00130	.00188	.131	.00141	.00126	.0930
%RSD	9.1429	82.756	101.63	1.2977	290.99	40.746	.93577
#1	.00083	-.00248	-.00402	9.9886	-.00089	.00417	9.8292
#2	.00083	-.00008	-.00087	10.117	-.00165	.00339	9.9787
#3	.00097	-.00214	-.00066	10.251	.00108	.00171	9.9996
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 10/21/08 02:57:16 PM page 2

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.077	-.00085	-.00030	.00254	.00336
SDev	.148	.00126	.00228	.00480	.00135
%RSD	1.4715	147.99	756.93	189.25	40.082
#1	9.9099	-.00220	-.00023	.00417	.00492
#2	10.130	.00029	-.00262	.00632	.00268
#3	10.192	-.00065	.00195	-.00287	.00249
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 03:01:10 PM page 1

Method: KICAP Sample Name: CCV3 Operator: CT
Run Time: 10/21/08 14:57:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24648	4.983	.50151	.50808	.50538	9.924	.50440
SDev	.00103	.008	.00255	.00194	.00191	.019	.00104
%RSD	.41839	.1666	.50946	.38081	.37798	.1904	.20718
#1	.24590	4.976	.49858	.50592	.50325	9.902	.50320
#2	.24767	4.992	.50261	.50868	.50595	9.931	.50512
#3	.24587	4.981	.50332	.50965	.50694	9.938	.50488
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50034	.50038	.49907	.99020	9.992	10.03	.49810
SDev	.00063	.00147	.00125	.00235	.208	.03	.00141
%RSD	.12627	.29488	.24963	.23774	2.085	.3258	.28231
#1	.49961	.49867	.49770	.98755	10.14	9.992	.49648
#2	.50072	.50124	.50013	.99098	10.08	10.04	.49876
#3	.50069	.50121	.49938	.99206	9.754	10.05	.49905
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50145	9.996	.49960	.49736	.50993	.50702	.49608
SDev	.00439	.076	.00107	.00408	.00167	.00227	.00201
%RSD	.87607	.7621	.21399	.82086	.32834	.44671	.40580
#1	.49640	10.04	.50037	.49890	.50808	.50460	.49378
#2	.50440	10.04	.49838	.50045	.51034	.50736	.49691
#3	.50355	9.908	.50006	.49273	.51136	.50909	.49755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50576	.50060	.49175	.50748	.49083	.49746	.50149
SDev	.00144	.00067	.00188	.00350	.00423	.00448	.00185
%RSD	.28507	.13469	.38231	.68920	.86097	.89993	.36899
#1	.50441	.50101	.48966	.50345	.48595	.49304	.50305
#2	.50728	.50096	.49229	.50974	.49313	.49735	.50197
#3	.50559	.49982	.49330	.50926	.49339	.50199	.49944
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

Analysis Report 10/21/08 03:01:10 PM page 2

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.51048	.49040	.49104	.50017	.49586	
SDev	.00591	.00351	.00805	.00880	.00148	
%RSD	1.1581	.71537	1.6404	1.7597	.29859	
#1	.50366	.49432	.48177	.49073	.49569	
#2	.51362	.48929	.49505	.50162	.49447	
#3	.51416	.48757	.49630	.50815	.49741	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
High						
Low						

Analysis Report 10/21/08 03:05:05 PM page 1

Method: KICAP Sample Name: CCB3 Operator: CT
Run Time: 10/21/08 15:01:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	-.0019	.00297	.00003	.00007	.0172	.00001
SDev	.00018	.0017	.00068	.00005	.00004	.0112	.00004
%RSD	610.43	91.37	22.916	173.20	61.089	64.97	427.18
#1	-.00018	-.0036	.00372	.00009	.00009	.0043	-.00003
#2	.00010	-.0019	.00278	.00000	.00002	.0230	.00004
#3	.00017	-.0002	.00240	.00000	.00011	.0243	.00002

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00012	.00006	.00067	.00009	-.0096	-.0020	.00004
SDev	.00014	.00017	.00025	.00027	.0121	.0015	.00003
%RSD	109.87	304.83	37.930	309.05	125.4	74.88	69.212
#1	-.00025	-.00009	.00094	.00031	-.0235	-.0038	.00004
#2	-.00015	.00002	.00062	-.00022	-.0017	-.0011	.00001
#3	.00002	.00024	.00044	.00017	-.0036	-.0011	.00006

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00230	.0070	.00076	-.00014	.00008	-.00021	-.00014
SDev	.00018	.0013	.00038	.00054	.00013	.00009	.00017
%RSD	8.0393	19.05	50.359	394.91	167.32	43.379	123.26
#1	.00226	.0071	.00036	-.00063	.00021	-.00011	-.00021
#2	.00214	.0056	.00081	.00044	.00005	-.00026	.00006
#3	.00250	.0083	.00112	-.00022	-.00003	-.00026	-.00026

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00267	-.00053	.00192	.00126	-.00071	-.00026	.00328
SDev	.00202	.00152	.00212	.00099	.00183	.00060	.00389
%RSD	75.821	288.58	110.18	78.220	257.68	233.32	118.63
#1	.00099	.00119	.00405	.00234	.00065	-.00094	.00715
#2	.00211	-.00169	.00191	.00104	.00000	.00021	.00333
#3	.00491	-.00108	-.00019	.00041	-.00278	-.00005	-.00063

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00025	.00001	-.00107	-.00351	.00162
SDev	.00058	.00485	.00052	.00073	.00042
%RSD	229.80	35442.	48.792	20.846	25.807
#1	-.00006	.00427	-.00115	-.00366	.00117
#2	-.00011	.00104	-.00051	-.00272	.00168
#3	.00093	-.00526	-.00154	-.00416	.00200

Analysis Report 10/21/08 03:46:24 PM page 1

Method: KICAP Sample Name: CCVH4 Operator: CT
Run Time: 10/21/08 15:42:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00057	-.0036	.00053	-.00006	-.00005	49.64	-.00012
SDev	.00111	.0030	.00024	.00010	.00001	.95	.00008
%RSD	196.13	84.68	44.910	173.22	19.639	1.913	66.863
#1	-.00104	-.0069	.00053	.00000	-.00006	48.70	-.00020
#2	.00070	-.0027	.00076	.00000	-.00004	49.63	-.00013
#3	-.00136	-.0011	.00029	-.00018	-.00004	50.60	-.00004
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00095	5.1017	.00078	9.9941	-.0125	-.0001	-.00002
SDev	.00016	.1068	.00019	.1804	.0086	.0004	.00003
%RSD	16.494	2.0926	23.931	1.8052	68.85	563.4	148.21
#1	-.00103	4.9945	.00085	9.8119	-.0219	-.0006	-.00003
#2	-.00077	5.1026	.00093	9.9976	-.0108	.0002	.00001
#3	-.00102	5.2081	.00057	10.173	-.0049	.0001	-.00005
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	49.75	.00046	-.00073	.00029	.00052	-.00039
SDev	.00019	.46	.00009	.00132	.00019	.00007	.00041
%RSD	122.63	.9224	19.309	181.04	66.537	14.210	104.17
#1	.00032	49.28	.00036	.00054	.00045	.00059	-.00044
#2	-.00005	49.78	.00051	-.00210	.00035	.00044	.00004
#3	.00019	50.19	.00051	-.00064	.00008	.00053	-.00077
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00101	-.00255	-.00205	10.095	.00195	.00399	9.8388
SDev	.00007	.00094	.00273	.144	.00118	.00041	.1357
%RSD	6.4881	36.706	133.13	1.4228	60.631	10.304	1.3797
#1	.00094	-.00363	-.00372	9.9506	.00090	.00361	9.6843
#2	.00103	-.00208	-.00352	10.096	.00172	.00443	9.8927
#3	.00107	-.00194	.00110	10.238	.00324	.00393	9.9392
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 10/21/08 03:46:24 PM page 2

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.014	.00388	.00099	-.00079	.00638
SDev	.139	.00280	.00095	.00415	.00132
%RSD	1.3881	72.124	95.452	525.24	20.759
#1	9.8645	.00287	-.00008	-.00498	.00790
#2	10.037	.00173	.00172	.00333	.00573
#3	10.139	.00704	.00134	-.00072	.00550
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 03:49:57 PM page 1

Method: KICAP Sample Name: CCV4 Operator: CT
Run Time: 10/21/08 15:46:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24936	5.064	.50889	.51415	.51194	10.11	.51197
SDev	.00118	.026	.00377	.00325	.00337	.07	.00318
%RSD	.47268	.5043	.73996	.63115	.65805	.6977	.62130
#1	.24907	5.051	.50683	.51401	.51084	10.09	.51072
#2	.24836	5.048	.50660	.51099	.50925	10.05	.50961
#3	.25066	5.094	.51323	.51747	.51572	10.19	.51559
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50867	.50832	.50648	1.0064	10.12	10.19	.50437
SDev	.00326	.00384	.00262	.0073	.18	.08	.00310
%RSD	.64059	.75488	.51719	.72653	1.791	.7893	.61572
#1	.50728	.50701	.50750	1.0051	10.28	10.14	.50310
#2	.50634	.50530	.50350	.99986	10.15	10.15	.50174
#3	.51240	.51264	.50844	1.0143	9.920	10.28	.50767
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50881	10.16	.50679	.50854	.51555	.51355	.50251
SDev	.00364	.06	.00276	.00383	.00333	.00313	.00338
%RSD	.71459	.5555	.54415	.75391	.64593	.61026	.67262
#1	.50513	10.22	.50458	.50545	.51510	.51263	.50066
#2	.50889	10.14	.50603	.50734	.51247	.51098	.50045
#3	.51240	10.11	.50985	.51283	.51908	.51704	.50641
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51387	.50861	.50052	.51572	.49799	.50464	.51035
SDev	.00301	.00211	.00534	.00160	.00176	.00241	.00060
%RSD	.58583	.41494	1.0675	.30986	.35344	.47740	.11654
#1	.51364	.51049	.49737	.51443	.49682	.50214	.50988
#2	.51098	.50632	.49751	.51522	.50001	.50695	.51015
#3	.51698	.50902	.50669	.51751	.49714	.50484	.51102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

Analysis Report 10/21/08 03:49:57 PM page 2

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.51840	.49695	.49851	.50715	.50264
SDev	.00210	.00250	.00218	.00418	.00138
%RSD	.40488	.50296	.43649	.82342	.27561
#1	.51670	.49792	.49627	.50233	.50205
#2	.51774	.49882	.50061	.50939	.50423
#3	.52075	.49411	.49866	.50972	.50166
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 03:54:24 PM page 1

Method: KICAP Sample Name: CCB4 Operator: CT
Run Time: 10/21/08 15:50:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00014	-.0025	.00240	-.00006	-.00001	.0191	.00001
SDev	.00044	.0013	.00065	.00010	.00003	.0023	.00007
%RSD	311.93	53.71	27.297	173.21	300.24	12.08	1321.2
#1	.00006	-.0036	.00311	.00000	.00002	.0183	.00007
#2	.00017	-.0028	.00182	.00000	-.00004	.0173	-.00008
#3	-.00065	-.0010	.00227	-.00018	-.00001	.0217	.00003

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.00003	.00094	.00004	.0022	-.0032	-.00000
SDev	.00042	.00030	.00027	.00062	.0080	.0013	.00003
%RSD	1247.9	1073.3	29.074	1710.9	369.9	41.88	814.34
#1	.00002	-.00008	.00125	-.00026	-.0022	-.0029	.00002
#2	-.00048	-.00020	.00081	-.00037	-.0027	-.0046	-.00004
#3	.00036	.00037	.00075	.00074	.0114	-.0020	.00001

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00186	.0086	.00081	-.00005	-.00005	-.00011	.00000
SDev	.00018	.0028	.00026	.00041	.00012	.00000	.00030
%RSD	9.9614	32.60	32.485	760.51	232.45	.16884	11100.
#1	.00190	.0069	.00112	.00036	.00008	-.00011	.00006
#2	.00166	.0070	.00066	-.00046	-.00008	-.00011	.00027
#3	.00202	.0118	.00066	-.00005	-.00016	-.00011	-.00032

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00066	.00048	-.00036	.00102	.00072	-.00081	.00490
SDev	.00015	.00136	.00228	.00032	.00181	.00114	.00137
%RSD	22.407	284.57	628.99	30.901	252.33	139.34	28.002
#1	.00057	.00161	.00178	.00069	.00046	-.00203	.00583
#2	.00058	.00084	-.00277	.00131	.00264	.00022	.00332
#3	.00083	-.00102	-.00010	.00107	-.00095	-.00064	.00553

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.00091	.00258	-.00021	-.00651	.00253
SDev	.00112	.00289	.00131	.00402	.00145
%RSD	122.78	112.07	614.14	61.779	57.181
#1	-.00188	.00275	-.00069	-.01078	.00384
#2	.00031	.00537	.00127	-.00279	.00098
#3	-.00115	-.00040	-.00122	-.00596	.00277

Analysis Report 10/21/08 04:13:09 PM page 1

Method: KICAP Sample Name: MB-8301 Operator: CT
Run Time: 10/21/08 16:09:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00037	.0177	.00010	-.00009	-.00006	.0683	-.00015
SDev	.00016	.0010	.00019	.00009	.00000	.0094	.00005
%RSD	43.712	5.587	193.80	99.979	7.5190	13.78	34.112
#1	-.00052	.0171	-.00012	-.00009	-.00007	.0611	-.00017
#2	-.00020	.0188	.00020	-.00000	-.00006	.0789	-.00018
#3	-.00039	.0171	.00020	-.00018	-.00006	.0648	-.00009

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00067	.00117	.00106	.01169	-.0073	-.0029	.00009
SDev	.00019	.00044	.00006	.00072	.0112	.0009	.00003
%RSD	28.379	37.992	5.8364	6.1730	154.7	30.16	39.616
#1	-.00062	.00102	.00100	.01128	-.0186	-.0038	.00007
#2	-.00052	.00167	.00106	.01252	.0039	-.0020	.00013
#3	-.00089	.00082	.00112	.01126	-.0071	-.0029	.00007

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00089	.0266	-.00000	.00909	-.00005	-.00011	-.00043
SDev	.00152	.0009	.00044	.00234	.00008	.00000	.00030
%RSD	170.50	3.338	47355.	25.801	159.23	.43041	69.584
#1	-.00065	.0256	-.00026	.01087	-.00001	-.00011	-.00048
#2	.00093	.0271	.00051	.00996	.00001	-.00011	-.00011
#3	.00238	.0272	-.00026	.00643	-.00014	-.00011	-.00069

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00308	.00012	-.00269	.00206	-.00069	-.00144	.00481
SDev	.00009	.00101	.00033	.00110	.00074	.00250	.00172
%RSD	2.9043	839.08	12.295	53.241	108.06	174.54	35.845
#1	.00301	-.00104	-.00299	.00082	.00004	.00088	.00367
#2	.00303	.00084	-.00273	.00247	-.00065	-.00109	.00396
#3	.00318	.00055	-.00234	.00290	-.00144	-.00409	.00679

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00070	.00134	-.00170	-.00560	.00090
SDev	.00119	.00466	.00316	.00235	.00194
%RSD	170.96	348.94	186.34	41.851	216.39
#1	-.00060	.00063	-.00026	-.00384	.00249
#2	.00173	-.00293	.00049	-.00470	.00146
#3	.00096	.00631	-.00532	-.00827	-.00126

Analysis Report 10/21/08 04:16:42 PM page 1

Method: KICAP Sample Name: LCS-8301 Operator: CT
Run Time: 10/21/08 16:13:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04823	1.037	.48479	.19876	.20576	10.08	.19955
SDev	.00024	.006	.00364	.00057	.00088	.05	.00081
%RSD	.49986	.5960	.74977	.28736	.42560	.4764	.40374
#1	.04838	1.030	.48064	.19811	.20477	10.03	.19867
#2	.04795	1.042	.48637	.19917	.20607	10.10	.19971
#3	.04836	1.038	.48737	.19899	.20644	10.12	.20026

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19961	.20481	.20502	1.0397	10.16	10.12	.20195
SDev	.00081	.00087	.00075	.0051	.06	.05	.00088
%RSD	.40849	.42506	.36554	.48701	.6364	.4824	.43435
#1	.19867	.20383	.20425	1.0341	10.16	10.06	.20094
#2	.20008	.20511	.20575	1.0410	10.22	10.14	.20238
#3	.20008	.20549	.20506	1.0440	10.09	10.16	.20252

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19198	10.08	.20318	.20789	.20570	.20435	.20161
SDev	.00233	.04	.00146	.00284	.00076	.00077	.00080
%RSD	1.2130	.3617	.71776	1.3661	.36922	.37896	.39543
#1	.18948	10.06	.20165	.20466	.20483	.20349	.20093
#2	.19408	10.12	.20333	.20901	.20609	.20459	.20142
#3	.19239	10.06	.20455	.20999	.20618	.20498	.20249

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20963	.20071	.20028	.20681	.19468	.20403	.20530
SDev	.00087	.00271	.00377	.00159	.00096	.00069	.00186
%RSD	.41410	1.3519	1.8833	.76976	.49175	.34076	.90484
#1	.20872	.19767	.19644	.20516	.19459	.20477	.20807
#2	.21045	.20288	.20044	.20691	.19378	.20339	.20664
#3	.20973	.20158	.20398	.20834	.19569	.20394	.20318

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.20756	.19182	.19611	.20593	.20333
SDev	.00314	.00294	.00044	.00134	.00096
%RSD	1.5114	1.5337	.22272	.64894	.47273
#1	.20471	.19053	.19661	.20636	.20247
#2	.20705	.18975	.19579	.20443	.20437
#3	.21092	.19519	.19594	.20699	.20316

Analysis Report 10/21/08 04:20:14 PM page 1

Method: KICAP Sample Name: 0810083-001B Operator: CT
Run Time: 10/21/08 16:16:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00007	25.71	.09122	.31677	.00272	1847.	.00758
SDev	.00029	.18	.00059	.00170	.00002	9.	.00003
%RSD	397.38	.6962	.64502	.53722	.64891	.5078	.44858
#1	-.00002	25.68	.09182	.31561	.00274	1838.	.00758
#2	-.00039	25.90	.09118	.31872	.00272	1857.	.00755
#3	.00019	25.55	.09065	.31597	.00271	1845.	.00761

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05546	.25086	.77912	138.79	9.145	96.62	3.1878
SDev	.00027	.00152	.00536	.69	.109	.45	.0158
%RSD	.49101	.60433	.68779	.49852	1.192	.4671	.49563
#1	.05526	.24923	.77621	138.16	9.172	96.19	3.1747
#2	.05577	.25224	.78531	139.53	9.239	97.09	3.2053
#3	.05534	.25110	.77585	138.69	9.025	96.58	3.1833

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00887	1.163	.20052	.07377	1.5055	.40342	.11312
SDev	.00037	.014	.00070	.00250	.0085	.00254	.00060
%RSD	4.1434	1.187	.34936	3.3905	.56520	.62926	.53370
#1	.00927	1.169	.19976	.07662	1.4989	.40112	.11249
#2	.00880	1.172	.20067	.07272	1.5151	.40614	.11369
#3	.00855	1.147	.20113	.07196	1.5025	.40299	.11317

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.2467	.04724	.01060	1.5266	.00383	.00952	1.5021
SDev	.0121	.00087	.00094	.0106	.00164	.00124	.0037
%RSD	.53995	1.8406	8.8711	.69130	42.777	13.007	.24822
#1	2.2391	.04779	.00955	1.5145	.00544	.00810	1.5004
#2	2.2607	.04624	.01135	1.5342	.00216	.01012	1.5064
#3	2.2402	.04768	.01092	1.5310	.00389	.01035	1.4995

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	1.5388	.00463	.00343	.00764	.01021
SDev	.0149	.00167	.00310	.00279	.00011
%RSD	.97020	35.956	90.191	36.472	1.0663
#1	1.5216	.00421	.00605	.00546	.01017
#2	1.5480	.00646	.00002	.00669	.01034
#3	1.5468	.00322	.00423	.01078	.01014

Analysis Report 10/21/08 04:23:46 PM page 1

Method: KICAP Sample Name: 0810083-001BMS Operator: CT
Run Time: 10/21/08 16:20:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09361	31.37	.96737	.67593	.37227	1728.	.34541
SDev	.00021	.18	.01113	.00690	.00395	16.	.00297
%RSD	.22445	.5631	1.1508	1.0208	1.0618	.9356	.86063
#1	.09367	31.27	.95854	.67069	.36916	1716.	.34316
#2	.09378	31.28	.96369	.67335	.37094	1723.	.34429
#3	.09338	31.58	.97987	.66375	.37672	1746.	.34878

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.39942	.60899	1.1091	126.06	30.90	120.9	3.2794
SDev	.00297	.00515	.0088	1.17	.27	1.2	.0289
%RSD	.74317	.84584	.79074	.93186	.8835	.9733	.88139
#1	.39722	.60498	1.1029	125.13	31.15	120.0	3.2570
#2	.39824	.60720	1.1053	125.67	30.94	120.5	3.2692
#3	.40279	.61480	1.1191	127.38	30.61	122.2	3.3120

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.34572	22.38	.52301	.38940	1.7661	.77091	.48154
SDev	.00365	.16	.00560	.00416	.0167	.00678	.00412
%RSD	1.0545	.7208	1.0715	1.0690	.94815	.87919	.85624
#1	.34216	22.29	.51883	.38481	1.7532	.76570	.47819
#2	.34555	22.27	.52082	.39046	1.7601	.76845	.48028
#3	.34944	22.56	.52937	.39293	1.7850	.77857	.48614

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.4485	.41312	.35175	3.7549	.35791	.21939	3.7180
SDev	.0184	.00328	.00754	.0244	.00428	.00090	.0140
%RSD	.75225	.79273	2.1427	.65109	1.1945	.41098	.37642
#1	2.4349	.41454	.34601	3.7274	.35349	.21845	3.7070
#2	2.4411	.40938	.34895	3.7630	.35820	.21949	3.7132
#3	2.4695	.41545	.36028	3.7743	.36203	.22024	3.7337

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	3.7733	.35722	.35825	.21785	.22066
SDev	.0311	.00349	.00468	.00207	.00171
%RSD	.82370	.97799	1.3075	.95091	.77407
#1	3.7377	.35387	.35331	.21550	.21917
#2	3.7878	.35696	.35882	.21939	.22029
#3	3.7945	.36084	.36262	.21867	.22253

Analysis Report 10/21/08 04:27:19 PM page 1

Method: KICAP Sample Name: 0810083-001BMSD Operator: CT
Run Time: 10/21/08 16:23:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09393	32.74	.98297	.70779	.37413	1729.	.34739
SDev	.00051	.13	.00908	.00531	.00326	13.	.00262
%RSD	.54005	.4071	.92365	.75016	.87121	.7737	.75381
#1	.09342	32.61	.97427	.70338	.37143	1718.	.34520
#2	.09396	32.72	.98224	.70831	.37322	1725.	.34668
#3	.09443	32.88	.99239	.71368	.37775	1744.	.35029

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.40259	.60707	1.1448	131.84	31.51	129.8	3.3542
SDev	.00315	.00541	.0075	1.10	.14	1.1	.0257
%RSD	.78235	.89195	.65473	.83440	.4361	.8470	.76681
#1	.39956	.60222	1.1382	130.90	31.61	128.9	3.3326
#2	.40235	.60610	1.1432	131.57	31.57	129.5	3.3474
#3	.40585	.61291	1.1529	133.05	31.35	131.0	3.3826

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.34742	22.59	.53054	.39885	1.7829	.78941	.48732
SDev	.00381	.13	.00379	.00253	.0138	.00581	.00377
%RSD	1.0981	.5555	.71426	.63506	.77609	.73666	.77306
#1	.34305	22.47	.52783	.39742	1.7709	.78351	.48386
#2	.34911	22.56	.52891	.39736	1.7797	.78958	.48675
#3	.35009	22.72	.53487	.40178	1.7980	.79514	.49133

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.5390	.42116	.35492	2.7272	.36101	.21879	2.6879
SDev	.0143	.00167	.00670	.0204	.00528	.00202	.0205
%RSD	.56351	.39644	1.8885	.74655	1.4628	.92407	.76088
#1	2.5276	.41946	.34814	2.7095	.35493	.21735	2.6686
#2	2.5345	.42121	.35508	2.7228	.36447	.21792	2.6857
#3	2.5551	.42280	.36154	2.7495	.36362	.22110	2.7093

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	2.7469	.35752	.36275	.21850	.21968
SDev	.0204	.00451	.00567	.00293	.00299
%RSD	.74226	1.2610	1.5621	1.3421	1.3624
#1	2.7299	.35234	.35622	.21945	.21630
#2	2.7413	.36055	.36643	.21521	.22077
#3	2.7695	.35969	.36559	.22085	.22198

Analysis Report 10/21/08 04:35:31 PM page 1

Method: KICAP Sample Name: 0810083-001BSD Operator: CT
Run Time: 10/21/08 16:32:03
Comment:
Mode: CONC Corr. Factor: 5

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	25.93	.10189	.30957	.00272	1769.	.00624
SDev	.00103	.06	.00149	.00044	.00000	2.	.00018
%RSD	289.55	.2207	1.4632	.14346	.01378	.0852	2.8909
#1	-.00046	25.96	.10355	.31002	.00272	1771.	.00640
#2	-.00132	25.96	.10066	.30957	.00272	1768.	.00605
#3	.00072	25.86	.10146	.30913	.00272	1768.	.00626

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05262	.27089	.75951	146.90	7.846	99.78	3.2064
SDev	.00140	.00063	.00355	.08	.032	.06	.0043
%RSD	2.6585	.23060	.46739	.05261	.4099	.0569	.12973
#1	.05306	.27019	.76346	146.98	7.877	99.84	3.3111
#2	.05105	.27138	.75847	146.82	7.848	99.73	3.3053
#3	.05374	.27110	.75660	146.90	7.813	99.76	3.3027

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00727	1.059	.21096	.08476	1.5222	.42201	.11532
SDev	.00550	.004	.00076	.00512	.0033	.00128	.00068
%RSD	75.608	.3490	.36156	6.0389	.21565	.30402	.58616
#1	.01353	1.060	.21019	.08831	1.5255	.42142	.11542
#2	.00323	1.062	.21172	.08708	1.5221	.42112	.11460
#3	.00505	1.055	.21096	.07890	1.5189	.42348	.11594

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.3106	.04586	.00624	1.6018	.00143	.01051	1.5856
SDev	.0065	.00310	.00847	.0073	.00844	.00700	.0118
%RSD	.28320	6.7675	135.80	.45302	591.92	66.684	.74165
#1	2.3175	.04439	.01196	1.5959	-.00241	.00615	1.5932
#2	2.3098	.04377	.01024	1.6099	-.00442	.01859	1.5915
#3	2.3045	.04942	-.00349	1.5996	.01110	.00678	1.5721

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	1.6099	.00909	-.00240	.00649	.01501
SDev	.0113	.00462	.01496	.02388	.00871
%RSD	.70273	50.843	622.83	367.79	58.060
#1	1.5973	.01134	-.00927	-.02034	.01937
#2	1.6191	.01216	-.01269	.01441	.02067
#3	1.6133	.00378	.01476	.02541	.00497

Analysis Report 10/21/08 04:39:04 PM page 1

Method: KICAP Sample Name: 0810083-001BPDS Operator: CT
Run Time: 10/21/08 16:35:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09715	26.59	1.0613	.68141	.37740	1777.	.35140
SDev	.00045	.11	.0094	.00555	.00303	14.	.00208
%RSD	.46142	.4069	.88484	.81388	.80365	.7791	.59187
#1	.09676	26.60	1.0527	.67745	.37484	1766.	.34975
#2	.09764	26.48	1.0598	.67904	.37661	1774.	.35071
#3	.09706	26.69	1.0713	.68775	.38075	1793.	.35374

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.40943	.60028	1.1428	134.56	30.41	110.9	3.4027
SDev	.00246	.00341	.0065	.90	.24	.8	.0219
%RSD	.60043	.56806	.56666	.67144	.7811	.7320	.64461
#1	.40712	.59750	1.1386	133.83	30.64	110.2	3.3859
#2	.40915	.59926	1.1394	134.29	30.42	110.7	3.3948
#3	.41201	.60409	1.1502	135.57	30.17	111.8	3.4275

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.37042	23.06	.54796	.43528	1.8154	.77455	.48216
SDev	.00341	.08	.00346	.00576	.0120	.00565	.00311
%RSD	.92072	.3564	.63033	1.3225	.65876	.72906	.64519
#1	.36718	22.98	.54470	.43002	1.8069	.76987	.47939
#2	.37009	23.06	.54760	.43439	1.8103	.77297	.48158
#3	.37398	23.14	.55158	.44143	1.8291	.78082	.48552

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.5132	.42910	.37333	1.8150	.37513	.41086	1.7938
SDev	.0131	.00476	.00086	.0205	.00562	.00563	.0072
%RSD	.52264	1.1094	.23172	1.1271	1.4988	1.3712	.39951
#1	2.5033	.42628	.37319	1.7914	.36870	.40437	1.8018
#2	2.5081	.42642	.37254	1.8286	.37761	.41384	1.7918
#3	2.5281	.43459	.37425	1.8248	.37909	.41439	1.7879

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	1.8255	.37577	.37482	.40910	.41199
SDev	.0340	.00015	.00839	.01764	.00158
%RSD	1.8641	.03978	2.2394	4.3106	.38399
#1	1.7863	.37566	.36522	.38874	.41367
#2	1.8470	.37594	.37844	.41943	.41179
#3	1.8432	.37570	.38079	.41914	.41052

Analysis Report 10/21/08 04:47:34 PM page 1

Method: KICAP Sample Name: CCVH5 Operator: CT
Run Time: 10/21/08 16:44:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	.0067	.00473	-.00000	-.00001	50.03	.00007
SDev	.00028	.0031	.00049	.00000	.00002	.62	.00007
%RSD	67.803	45.66	10.358	44.713	198.47	1.248	103.39
#1	-.00016	.0033	.00529	-.00000	-.00002	49.46	-.00001
#2	-.00072	.0076	.00448	-.00000	-.00001	49.94	.00011
#3	-.00037	.0092	.00441	-.00000	.00001	50.70	.00012
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00004	5.2116	.00051	10.151	.0066	.0032	.00006
SDev	.00033	.0713	.00018	.131	.0173	.0055	.00013
%RSD	915.60	1.3683	34.933	1.2861	261.9	171.2	228.99
#1	-.00033	5.1419	.00037	10.026	-.0102	-.0016	-.00003
#2	.00016	5.2086	.00044	10.140	.0058	.0020	-.00000
#3	.00028	5.2844	.00071	10.286	.0242	.0092	.00020
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00070	50.42	.00036	.00243	.00021	.00086	-.00013
SDev	.00025	.13	.00067	.00010	.00008	.00011	.00016
%RSD	36.314	.2480	186.72	4.2565	39.842	13.059	121.91
#1	-.00042	50.29	.00112	.00249	.00028	.00075	-.00013
#2	-.00090	50.43	.00005	.00249	.00023	.00087	-.00029
#3	-.00079	50.54	-.00010	.00231	.00012	.00098	.00003
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00330	-.00277	.00171	10.284	.00163	.00338	10.034
SDev	.00211	.00142	.00182	.084	.00057	.00253	.136
%RSD	63.778	51.350	105.90	.82090	34.916	74.740	1.3537
#1	.00149	-.00424	.00014	10.203	.00185	.00497	9.9370
#2	.00281	-.00268	.00370	10.277	.00098	.00047	9.9753
#3	.00561	-.00140	.00131	10.372	.00206	.00470	10.189
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 10/21/08 04:47:34 PM page 2

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.172	.00415	.00037	.00225	.00419
SDev	.144	.00298	.00124	.00521	.00187
%RSD	1.4135	71.852	333.49	231.84	44.488
#1	10.026	.00209	.00173	.00780	.00281
#2	10.177	.00279	.00008	-.00251	.00345
#3	10.314	.00757	-.00070	.00145	.00632
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 04:51:06 PM page 1

Method: KICAP Sample Name: CCV5 Operator: CT
Run Time: 10/21/08 16:47:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24756	5.010	.50647	.50779	.50756	10.00	.50904
SDev	.00091	.036	.00490	.00437	.00482	.09	.00388
%RSD	.36642	.7226	.96700	.85992	.94903	.8625	.76298
#1	.24663	4.968	.50084	.50281	.50210	9.908	.50456
#2	.24845	5.026	.50889	.50956	.50939	10.02	.51141
#3	.24761	5.035	.50970	.51099	.51119	10.08	.51115
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50486	.50559	.49995	.99703	10.03	10.13	.49845
SDev	.00312	.00340	.00324	.00851	.29	.10	.00397
%RSD	.61739	.67278	.64893	.85381	2.928	.9793	.79705
#1	.50126	.50177	.49620	.98811	10.26	10.02	.49391
#2	.50661	.50672	.50194	.99793	10.12	10.15	.50012
#3	.50671	.50829	.50169	1.0051	9.698	10.22	.50131
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50384	10.06	.50414	.50730	.50825	.50835	.49807
SDev	.00770	.09	.00502	.00235	.00429	.00494	.00410
%RSD	1.5291	.8659	.99494	.46410	.84448	.97270	.82401
#1	.49495	10.11	.49828	.50556	.50334	.50279	.49341
#2	.50864	10.11	.50755	.50997	.51011	.51003	.49965
#3	.50792	9.962	.50649	.50636	.51129	.51224	.50115
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51071	.50323	.49941	.51525	.49635	.50210	.51009
SDev	.00462	.00262	.00556	.00280	.00528	.00324	.00323
%RSD	.90447	.51983	1.1140	.54342	1.0629	.64520	.63331
#1	.50555	.50030	.49311	.51244	.49168	.49916	.50753
#2	.51214	.50534	.50364	.51526	.49499	.50157	.50901
#3	.51445	.50405	.50148	.51804	.50217	.50557	.51372
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

Analysis Report 10/21/08 04:51:06 PM page 2

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.51783	.49446	.49729	.50802	.49940
SDev	.00270	.00033	.00779	.00604	.00117
%RSD	.52063	.06628	1.5666	1.1889	.23460
#1	.51490	.49408	.49078	.50124	.49962
#2	.51837	.49465	.49516	.50996	.49813
#3	.52020	.49465	.50592	.51284	.50044
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 04:55:33 PM page 1

Method: KICAP Sample Name: CCB5 Operator: CT
Run Time: 10/21/08 16:52:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00004	.0044	.00501	.00021	.00003	.0084	.00029
SDev	.00027	.0053	.00070	.00014	.00002	.0059	.00012
%RSD	639.56	118.6	13.945	65.468	69.287	70.09	42.242
#1	-.00033	-.0002	.00565	.00036	.00004	.0045	.00026
#2	.00021	.0033	.00427	.00009	.00001	.0054	.00019
#3	-.00001	.0102	.00510	.00018	.00004	.0151	.00043

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00112	.00125	.00073	.00109	.0385	.0061	.00015
SDev	.00024	.00060	.00069	.00082	.0222	.0040	.00008
%RSD	21.695	48.232	94.820	75.370	57.65	64.55	51.431
#1	.00096	.00101	.00081	.00053	.0252	.0043	.00011
#2	.00100	.00080	-.00000	.00070	.0261	.0034	.00011
#3	.00140	.00193	.00137	.00203	.0641	.0107	.00024

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00133	.0092	.00031	.00096	.00005	.00042	.00000
SDev	.00067	.0026	.00035	.00094	.00013	.00024	.00005
%RSD	50.070	27.62	115.03	97.781	253.90	57.287	2854.3
#1	.00178	.0071	.00051	.00200	.00019	.00037	-.00005
#2	.00057	.0086	-.00010	.00068	.00003	.00021	.00000
#3	.00166	.0121	.00051	.00019	-.00007	.00068	.00006

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00225	-.00027	.00580	.00166	-.00023	-.00049	.00172
SDev	.00160	.00043	.00164	.00046	.00147	.00056	.00203
%RSD	71.084	155.99	28.244	27.810	629.46	114.91	117.85
#1	.00078	-.00050	.00680	.00120	-.00193	-.00013	.00170
#2	.00201	.00022	.00391	.00166	.00065	-.00020	-.00029
#3	.00395	-.00054	.00670	.00212	.00059	-.00113	.00376

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00163	.00344	-.00207	-.00153	.00128
SDev	.00088	.00068	.00190	.00292	.00044
%RSD	54.261	19.789	92.018	190.72	33.890
#1	.00095	.00271	-.00425	-.00060	.00161
#2	.00263	.00353	-.00080	.00081	.00079
#3	.00131	.00406	-.00115	-.00480	.00145

Analysis Report 10/21/08 04:59:05 PM page 1

Method: KICAP Sample Name: 0810083-002B Operator: CT
Run Time: 10/21/08 16:55:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00072	39.53	.10369	.88537	.00292	739.4	.00946
SDev	.00019	.14	.00093	.00628	.00003	6.7	.00003
%RSD	26.875	.3439	.89604	.70951	1.0748	.9024	.31704
#1	.00050	39.37	.10269	.87829	.00289	732.0	.00943
#2	.00082	39.64	.10385	.88753	.00294	741.2	.00949
#3	.00084	39.57	.10452	.89029	.00294	744.9	.00947

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04995	.72314	3.4317	177.04	7.561	80.06	3.1153
SDev	.00041	.00621	.0184	1.53	.147	.74	.0235
%RSD	.81638	.85931	.53713	.86430	1.941	.9277	.75359
#1	.04948	.71609	3.4104	175.34	7.658	79.25	3.0889
#2	.05012	.72554	3.4421	177.49	7.633	80.25	3.1232
#3	.05024	.72780	3.4426	178.30	7.392	80.70	3.1338

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01917	1.031	.34576	.13448	.81460	.86311	.15993
SDev	.00155	.007	.00191	.00317	.00593	.00666	.00151
%RSD	8.1074	.7205	.55242	2.3580	.72756	.77208	.94083
#1	.01738	1.035	.34387	.13147	.80789	.85567	.15835
#2	.01994	1.036	.34570	.13419	.81679	.86512	.16008
#3	.02019	1.022	.34769	.13779	.81911	.86853	.16135

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9850	.08239	.00858	3.5131	.01254	.01394	3.4770
SDev	.0203	.00127	.00092	.0484	.00078	.00204	.0098
%RSD	.50878	1.5433	10.660	1.3772	6.2020	14.622	.28074
#1	3.9616	.08216	.00806	3.4655	.01166	.01170	3.4664
#2	3.9961	.08376	.00964	3.5114	.01314	.01568	3.4856
#3	3.9974	.08125	.00804	3.5622	.01282	.01444	3.4791

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	3.5311	.01334	.01214	.01086	.01573
SDev	.0696	.00254	.00168	.00144	.00217
%RSD	1.9707	19.032	13.869	13.300	13.779
#1	3.4651	.01381	.01059	.00931	.01364
#2	3.5243	.01560	.01191	.01110	.01797
#3	3.6036	.01059	.01393	.01216	.01558

Analysis Report 10/21/08 05:02:38 PM page 1

Method: KICAP Sample Name: 0810083-003B Operator: CT
Run Time: 10/21/08 16:59:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00047	44.09	.09529	.83180	.00516	339.2	.02138
SDev	.00034	.34	.00058	.00787	.00007	3.8	.00024
%RSD	73.269	.7713	.60770	.94600	1.2912	1.109	1.1121
#1	.00072	43.74	.09468	.82374	.00510	335.4	.02113
#2	.00061	44.11	.09537	.83218	.00516	339.2	.02141
#3	.00008	44.42	.09583	.83947	.00523	342.9	.02160

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05833	.51356	1.7152	244.24	8.756	56.98	3.2710
SDev	.00094	.00562	.0127	2.69	.141	.67	.0324
%RSD	1.6194	1.0947	.74220	1.0998	1.613	1.182	.99083
#1	.05741	.50768	1.7020	241.53	8.869	56.31	3.2385
#2	.05829	.51412	1.7162	244.28	8.800	56.98	3.2713
#3	.05930	.51888	1.7274	246.90	8.598	57.66	3.3033

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03484	.6914	.30101	.10938	.47908	.96158	.17473
SDev	.00128	.0023	.00359	.00237	.00457	.00986	.00166
%RSD	3.6749	.3305	1.1924	2.1702	.95412	1.0255	.95189
#1	.03337	.6920	.29740	.10676	.47442	.95136	.17302
#2	.03569	.6932	.30108	.11140	.47926	.96234	.17484
#3	.03546	.6888	.30458	.10997	.48356	.97104	.17634

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.9488	.10022	.00767	3.3355	.01352	.01836	3.2980
SDev	.0479	.00162	.00150	.0317	.00281	.00071	.0298
%RSD	.68905	1.8126	19.554	.95057	20.808	3.8860	.90325
#1	6.8988	.10191	.00762	3.2999	.01307	.01870	3.2636
#2	6.9536	.09830	.00619	3.3456	.01097	.01754	3.3150
#3	6.9942	.10046	.00919	3.3609	.01654	.01884	3.3153

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	3.3542	.01381	.01338	.01414	.01946
SDev	.0333	.00100	.00374	.00190	.00072
%RSD	.99194	7.2480	27.940	13.409	3.7240
#1	3.3181	.01395	.01262	.01387	.01960
#2	3.3609	.01274	.01008	.01239	.02010
#3	3.3836	.01473	.01744	.01616	.01868

1060

Analysis Report 10/21/08 05:06:10 PM page 1

Method: KICAP Sample Name: 0810083-004B Operator: CT
Run Time: 10/21/08 17:02:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00219	46.29	.13742	1.1640	.00145	212.8	.04259
SDev	.00082	.23	.00091	.0056	.00001	1.1	.00005
%RSD	37.248	.4992	.66352	.50023	.80409	.5093	.11914
#1	.00138	46.12	.13648	1.1608	.00144	211.8	.04253
#2	.00302	46.19	.13831	1.1605	.00146	212.6	.04261
#3	.00218	46.55	.13747	1.1707	.00144	213.9	.04262

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10760	4.0445	15.722	966.44	7.042	71.04	7.7083
SDev	.00069	.0295	.072	5.96	.019	.40	.0371
%RSD	.64280	.73107	.45847	.61624	.2678	.5659	.48102
#1	.10680	4.0110	15.689	960.86	7.030	70.63	7.6754
#2	.10797	4.0669	15.672	965.76	7.032	71.04	7.7010
#3	.10803	4.0557	15.804	972.71	7.064	71.44	7.7485

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22108	1.262	1.2440	.33006	.73248	1.2740	.38445
SDev	.00178	.006	.0083	.00432	.00372	.0061	.00239
%RSD	.80756	.4376	.66974	1.3079	.50768	.47876	.62196
#1	.21910	1.260	1.2359	.33056	.73024	1.2698	.38226
#2	.22156	1.257	1.2437	.32551	.73044	1.2712	.38409
#3	.22258	1.268	1.2525	.33410	.73678	1.2810	.38700

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.615	.29427	.01039	30.785	.05282	.15752	27.981
SDev	.077	.00123	.00173	.186	.00152	.00154	.080
%RSD	.32750	.41717	16.671	.60444	2.8716	.97879	.28524
#1	23.526	.29339	.00856	30.686	.05236	.15835	27.894
#2	23.656	.29568	.01060	30.670	.05451	.15574	27.998
#3	23.664	.29375	.01201	31.000	.05158	.15846	28.051

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	28.462	.03080	.06381	.15066	.16094
SDev	.220	.00228	.00129	.00302	.00161
%RSD	.77402	7.3901	2.0261	2.0035	.99810
#1	28.225	.03112	.06297	.15119	.16268
#2	28.500	.03290	.06530	.14740	.16065
#3	28.661	.02838	.06317	.15337	.15950

1061

Analysis Report 10/21/08 05:09:43 PM page 1

Method: KICAP Sample Name: 0810083-005B Operator: CT
Run Time: 10/21/08 17:06:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00182	50.00	.10880	1.4336	.00260	189.3	.02743
SDev	.00021	.18	.00050	.0076	.00002	1.1	.00016
%RSD	11.442	.3614	.46039	.53344	.80758	.5961	.59839
#1	.00200	49.79	.10827	1.4253	.00259	188.1	.02725
#2	.00187	50.08	.10927	1.4353	.00260	189.3	.02747
#3	.00159	50.12	.10885	1.4403	.00263	190.4	.02758

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08741	4.4991	14.088	498.42	7.115	89.52	4.8537
SDev	.00042	.0275	.052	3.09	.144	.59	.0236
%RSD	.47798	.61053	.37087	.62096	2.021	.6625	.48653
#1	.08697	4.4772	14.027	495.23	7.239	88.93	4.8287
#2	.08744	4.4901	14.117	498.62	7.148	89.53	4.8568
#3	.08781	4.5299	14.118	501.41	6.957	90.11	4.8756

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.23882	1.218	1.2270	.33580	.53430	1.3022	.31827
SDev	.00158	.006	.0056	.00070	.00248	.0077	.00132
%RSD	.66051	.5252	.45478	.20809	.46462	.59001	.41595
#1	.23702	1.221	1.2216	.33499	.53160	1.2940	.31683
#2	.23947	1.222	1.2268	.33626	.53482	1.3035	.31853
#3	.23997	1.210	1.2327	.33614	.53649	1.3092	.31944

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.570	.19554	.01267	11.615	.03663	.08961	10.687
SDev	.057	.00074	.00023	.035	.00145	.00261	.037
%RSD	.32551	.38066	1.8432	.29205	3.9491	2.9073	.34409
#1	17.513	.19515	.01288	11.775	.03496	.08660	10.645
#2	17.570	.19507	.01242	11.834	.03741	.09118	10.712
#3	17.627	.19640	.01271	11.836	.03751	.09104	10.705

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.943	.03008	.03990	.08757	.09062
SDev	.086	.00205	.00129	.00614	.00087
%RSD	.78516	6.8276	3.2367	7.0118	.96028
#1	10.858	.02787	.03650	.08051	.08964
#2	10.942	.03193	.04015	.09168	.09094
#3	11.030	.03045	.04104	.09053	.09129

1062

Analysis Report 10/21/08 05:39:58 PM page 1

Method: KICAP Sample Name: 0810083-003B Operator: CT
Run Time: 10/21/08 17:35:35
Comment:
Mode: CONC Corr. Factor: 5

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00088	45.42	.10856	.85294	.00592	337.4	.02395
SDev	.00266	.52	.00124	.01134	.00005	4.8	.00011
%RSD	303.28	1.149	1.1445	1.3300	.84874	1.428	.44424
#1	.00374	44.88	.10991	.84124	.00596	332.6	.02399
#2	.00041	45.46	.10746	.85368	.00586	337.5	.02383
#3	-.00152	45.92	.10830	.86390	.00594	342.2	.02403

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07059	.55958	1.7417	259.76	8.668	60.94	3.4724
SDev	.00080	.00694	.0190	3.73	.122	.87	.0476
%RSD	1.1374	1.2403	1.0936	1.4341	1.403	1.422	1.3699
#1	.07089	.55253	1.7213	255.91	8.777	60.07	3.4230
#2	.06968	.55981	1.7449	260.02	8.691	60.96	3.4764
#3	.07119	.56641	1.7590	263.35	8.537	61.80	3.5179

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03309	.6773	.32287	.13850	.49663	1.0157	.18277
SDev	.00059	.0015	.00420	.00776	.00650	.0101	.00134
%RSD	1.7896	.2203	1.3019	5.6015	1.3091	.99620	.73458
#1	.03367	.6777	.31854	.13031	.48985	1.0061	.18124
#2	.03248	.6785	.32312	.13943	.49722	1.0146	.18330
#3	.03311	.6756	.32694	.14574	.50282	1.0263	.18377

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.8892	.10507	.04287	3.6048	.01265	.03335	3.5692
SDev	.0868	.00497	.00520	.0303	.00840	.00484	.0369
%RSD	1.0997	4.7269	12.119	.84049	66.396	14.515	1.0336
#1	7.7963	.11078	.04887	3.5879	.00364	.02860	3.5405
#2	7.9033	.10260	.03970	3.5867	.02026	.03828	3.5563
#3	7.9681	.10182	.04006	3.6398	.01404	.03318	3.6108

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	3.6226	.00325	.01734	.01332	.04085
SDev	.0278	.01356	.00639	.00538	.00339
%RSD	.76861	417.28	36.832	40.394	8.3016
#1	3.6115	-.01234	.01162	.01132	.03723
#2	3.6019	.01231	.02423	.01942	.04395
#3	3.6542	.00978	.01617	.00923	.04139

1063

Analysis Report 10/21/08 05:44:26 PM page 1

Method: KICAP Sample Name: CCVH6 Operator: CT
Run Time: 10/21/08 17:40:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00025	.0075	.00251	.00036	.00001	49.78	.00033
SDev	.00042	.0017	.00021	.00000	.00001	.17	.00007
%RSD	168.51	22.84	8.4093	.00049	67.774	.3503	20.939
#1	.00032	.0076	.00275	.00036	.00003	49.62	.00040
#2	-.00020	.0058	.00245	.00036	.00001	49.75	.00027
#3	.00064	.0093	.00234	.00036	.00001	49.96	.00032
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00101	5.2292	.00086	10.078	.0587	.0129	.00021
SDev	.00028	.0192	.00014	.039	.0040	.0015	.00005
%RSD	27.905	.36659	16.778	.38566	6.782	12.04	23.080
#1	.00111	5.2091	.00094	10.044	.0542	.0120	.00022
#2	.00124	5.2312	.00069	10.069	.0600	.0120	.00016
#3	.00070	5.2473	.00095	10.120	.0619	.0147	.00026
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	50.42	.00061	.00227	.00027	.00150	.00005
SDev	.00067	.07	.00023	.00078	.00006	.00026	.00033
%RSD	686.15	.1472	38.174	34.298	21.985	17.510	649.67
#1	-.00006	50.46	.00066	.00200	.00033	.00135	.00041
#2	.00055	50.47	.00082	.00314	.00027	.00134	-.00002
#3	-.00078	50.34	.00036	.00166	.00021	.00180	-.00024
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00181	-.00211	.00374	10.207	-.00146	.00550	9.9574
SDev	.00056	.00129	.00132	.008	.00149	.00188	.0395
%RSD	30.913	61.293	35.374	.07539	102.43	34.257	.39649
#1	.00149	-.00112	.00255	10.198	-.00058	.00407	9.9408
#2	.00148	-.00163	.00516	10.211	-.00061	.00478	9.9289
#3	.00245	-.00357	.00349	10.212	-.00318	.00763	10.002
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 10/21/08 05:44:26 PM page 2

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.122	-.00011	-.00213	.00400	.00574
SDev	.197	.00288	.00104	.00274	.00123
%RSD	1.9465	2523.2	48.872	68.331	21.440
#1	9.8953	.00042	-.00108	.00270	.00476
#2	10.221	.00246	-.00214	.00217	.00534
#3	10.250	-.00322	-.00316	.00715	.00712
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 05:48:54 PM page 1

Method: KICAP Sample Name: CCV6 Operator: CT
Run Time: 10/21/08 17:44:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24571	4.974	.49897	.50406	.50419	9.958	.50529
SDev	.00093	.022	.00418	.00175	.00266	.051	.00274
%RSD	.37726	.4429	.83810	.34715	.52742	.5164	.54262
#1	.24481	4.949	.49417	.50210	.50114	9.898	.50222
#2	.24666	4.986	.50090	.50548	.50599	9.990	.50751
#3	.24567	4.987	.50183	.50459	.50545	9.984	.50613
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.32500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50179	.50152	.49414	.98791	9.984	10.11	.49374
SDev	.00281	.00294	.00150	.00642	.117	.07	.00254
%RSD	.56080	.58704	.30325	.85220	1.175	.6432	.51506
#1	.49857	.49813	.49246	.97921	10.06	10.03	.49082
#2	.50379	.50339	.49533	.98850	10.04	10.18	.49543
#3	.50301	.50304	.49464	.99602	9.849	10.15	.49498
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.89900		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49689	10.09	.49818	.50071	.50302	.50442	.49345
SDev	.00528	.05	.00194	.00572	.00194	.00264	.00248
%RSD	1.0630	.5064	.38895	1.1416	.38468	.52277	.50283
#1	.49083	10.12	.49609	.49431	.50082	.50137	.49061
#2	.49931	10.13	.49991	.50251	.50447	.50594	.49524
#3	.50052	10.03	.49854	.50530	.50377	.50594	.49449
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50303	.49609	.49760	.51194	.49187	.49549	.50576
SDev	.00204	.00287	.00500	.00499	.00875	.00344	.00420
%RSD	.40510	.57891	1.0048	.97555	1.7787	.69411	.83069
#1	.50071	.49298	.49210	.50618	.48188	.49152	.50093
#2	.50452	.49664	.50186	.51494	.49814	.49747	.50861
#3	.50386	.49864	.49885	.51470	.49560	.49748	.50773
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

Analysis Report 10/21/08 05:48:54 PM page 2

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.51503	.49037	.49262	.50184	.49257	
SDev	.00540	.00501	.01068	.00804	.00267	
%RSD	1.0484	1.0222	2.1675	1.6010	.54292	
#1	.50880	.48459	.48052	.49260	.48948	
#2	.51811	.49297	.50072	.50577	.49407	
#3	.51818	.49354	.49663	.50716	.49415	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
High						
Low						

Analysis Report 10/21/08 05:53:21 PM page 1

Method: KICAP Sample Name: CCB6 Operator: CT
Run Time: 10/21/08 17:48:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00008	.0159	.00523	.00068	.00010	.0160	.00060
SDev	.00044	.0026	.00067	.00014	.00003	.0028	.00004
%RSD	565.17	16.50	12.873	19.925	30.767	17.35	6.4685
#1	.00040	.0153	.00600	.00080	.00013	.0155	.00064
#2	-.00046	.0136	.00478	.00053	.00007	.0136	.00057
#3	-.00018	.0188	.00491	.00071	.00009	.0190	.00058

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00270	.00257	.00083	.00270	.0578	.0197	.00037
SDev	.00031	.00023	.00020	.00137	.0130	.0032	.00007
%RSD	11.570	8.8475	24.099	50.596	13.30	16.46	19.325
#1	.00261	.00273	.00106	.00223	.1003	.0188	.00040
#2	.00245	.00231	.00075	.00164	.0837	.0170	.00029
#3	.00305	.00267	.00069	.00424	.1093	.0233	.00042

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00206	.0119	.00026	.00427	.00021	.00100	-.00030
SDev	.00055	.0010	.00038	.00031	.00012	.00000	.00040
%RSD	26.526	8.205	149.09	7.3027	58.448	.01583	133.97
#1	.00263	.0116	.00021	.00405	.00034	.00100	.00011
#2	.00153	.0111	.00066	.00462	.00018	.00100	-.00069
#3	.00202	.0130	-.00010	.00413	.00010	.00100	-.00032

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00245	-.00063	.00870	.00165	-.00120	-.00026	.00561
SDev	.00099	.00099	.00181	.00091	.00192	.00084	.00101
%RSD	40.486	158.73	20.853	54.798	160.36	320.62	18.008
#1	.00180	.00052	.00709	.00181	-.00086	.00043	.00660
#2	.00195	-.00115	.00636	.00068	-.00327	-.00119	.00564
#3	.00359	-.00124	.01067	.00247	.00053	-.00002	.00458

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.00032	-.00027	-.00166	-.00554	.00213
SDev	.00162	.00237	.00209	.00349	.00205
%RSD	501.26	866.15	125.71	62.926	96.289
#1	-.00058	-.00162	-.00047	-.00296	.00062
#2	-.00180	-.00166	-.00407	-.00951	.00446
#3	.00141	.00247	-.00044	-.00415	.00130

Analysis Report 10/21/08 05:57:49 PM page 1

Method: KICAP Sample Name: 0810083-004B Operator: CT
Run Time: 10/21/08 17:53:25
Comment:
Mode: CONC Corr. Factor: 5

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00167	46.22	.16644	1.1674	.00221	211.5	.04950
SDev	.00419	.51	.00205	.0130	.00005	2.5	.00047
%RSD	251.21	1.109	1.2309	1.1147	2.1150	1.178	.94879
#1	.00504	45.67	.16439	1.1526	.00224	208.7	.04896
#2	-.00303	46.30	.16644	1.1726	.00216	212.3	.04976
#3	.00299	46.69	.16849	1.1770	.00223	213.5	.04978

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13051	3.3127	15.737	916.36	6.987	75.77	8.2109
SDev	.00158	.0375	.144	10.46	.077	.91	.0885
%RSD	1.2082	1.1327	.91797	1.1412	1.097	1.203	1.0780
#1	.12992	3.2708	15.570	904.54	7.058	74.76	8.1104
#2	.12931	3.3243	15.817	920.12	6.997	76.00	8.2453
#3	.13229	3.3431	15.824	924.41	6.906	76.54	8.2771

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22857	1.246	1.3362	.36810	.74598	1.3170	.40117
SDev	.00383	.004	.0120	.00536	.00738	.0139	.00268
%RSD	1.6740	.3114	.89834	1.4565	.98884	1.0558	.66733
#1	.23071	1.245	1.3232	.36432	.73755	1.3012	.39892
#2	.22415	1.250	1.3385	.37423	.74914	1.3224	.40046
#3	.23085	1.243	1.3469	.36574	.75125	1.3275	.40413

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.219	.29701	.06203	30.221	.03842	.16503	30.050
SDev	.311	.00328	.01088	.388	.00513	.00727	.059
%RSD	.79407	1.1046	17.534	1.2631	13.346	4.4064	.19557
#1	38.860	.30068	.07447	29.773	.03931	.15715	30.092
#2	39.375	.29437	.05434	30.435	.03291	.17148	29.983
#3	39.420	.29598	.05727	30.454	.04304	.16647	30.075

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	30.306	.03754	.03886	.14122	.17817
SDev	.599	.01417	.00997	.02027	.00504
%RSD	1.9781	37.754	25.652	14.355	2.8272
#1	29.614	.05388	.03204	.12083	.17903
#2	30.661	.03024	.03424	.14146	.18272
#3	30.643	.02851	.05030	.16137	.17276

Analysis Report 10/21/08 06:02:17 PM page 1

Method: KICAP Sample Name: 0810083-004B Operator: CT
Run Time: 10/21/08 17:57:53
Comment:
Mode: CONC Corr. Factor: 10

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00030	44.35	.16391	1.1229	.00205	205.5	.04948
SDev	.00236	.36	.00878	.0076	.00014	1.7	.00033
%RSD	777.54	.8185	3.5278	.67594	6.9921	.8034	.66420
#1	.00241	44.04	.17051	1.1158	.00215	203.9	.04948
#2	-.00188	44.27	.15971	1.1220	.00188	205.3	.04981
#3	-.00145	44.75	.16152	1.1309	.00211	207.2	.04915

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13045	3.2045	15.118	883.70	6.691	73.59	7.9449
SDev	.00161	.0223	.105	7.37	.111	.61	.0616
%RSD	1.2358	.69742	.69347	.83450	1.652	.8328	.77576
#1	.13123	3.1865	15.014	876.93	6.819	73.07	7.8883
#2	.12860	3.1976	15.115	882.60	6.630	73.44	7.9359
#3	.13152	3.2295	15.224	891.56	6.624	74.27	8.0106

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22370	1.171	1.2832	.36590	.71799	1.2746	.38577
SDev	.00532	.003	.0038	.00883	.00522	.0096	.00342
%RSD	2.3775	.2410	.29944	2.4139	.72774	.75070	.88659
#1	.21760	1.174	1.2791	.36680	.71282	1.2662	.38286
#2	.22733	1.168	1.2868	.35666	.71789	1.2725	.38490
#3	.22618	1.172	1.2837	.37425	.72327	1.2850	.38954

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.200	.28287	.09119	29.364	.03307	.16871	28.995
SDev	.235	.00254	.01615	.214	.01245	.01153	.163
%RSD	.58498	.89937	17.708	.72727	37.642	6.8325	.56338
#1	39.981	.28577	.10647	29.117	.04530	.16625	28.848
#2	40.172	.28100	.09280	29.488	.03350	.18127	28.966
#3	40.448	.28185	.07430	29.486	.02041	.15862	29.171

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	29.548	.02405	.03757	.14004	.18303
SDev	.262	.00600	.02166	.01129	.01000
%RSD	.88645	24.948	57.634	8.0652	5.4658
#1	29.252	.01833	.05876	.15059	.18155
#2	29.749	.02352	.03848	.14140	.19369
#3	29.644	.03029	.01548	.12812	.17384

Analysis Report 10/21/08 06:06:44 PM page 1

Method: KICAP Sample Name: 0810083-005B Operator: CT
Run Time: 10/21/08 18:02:20
Comment:
Mode: CONC Corr. Factor: 10

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00243	47.65	.13124	1.3953	.00327	182.8	.03109
SDev	.00484	.57	.00062	.0159	.00008	2.2	.00025
%RSD	199.18	1.193	.47081	1.1395	2.4509	1.218	.80938
#1	.00801	47.03	.13147	1.3778	.00318	180.5	.03080
#2	-.00015	47.77	.13054	1.3991	.00332	182.9	.03124
#3	-.00058	48.14	.13171	1.4089	.00331	184.9	.03123

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10976	3.9664	13.662	491.97	6.900	91.24	4.9466
SDev	.00273	.0458	.134	5.97	.020	1.13	.0574
%RSD	2.4900	1.1550	.98344	1.2128	.2856	1.240	1.1613
#1	.10694	3.9202	13.516	485.71	6.923	90.08	4.8853
#2	.10995	3.9672	13.687	492.62	6.888	91.28	4.9554
#3	.11239	4.0118	13.782	497.59	6.889	92.35	4.9991

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24394	1.149	1.2572	.38100	.52504	1.3067	.32323
SDev	.00878	.010	.0189	.00815	.00534	.0059	.00336
%RSD	3.5980	.8510	1.4999	2.1402	1.0161	.75730	1.0411
#1	.23420	1.138	1.2363	.39019	.51929	1.2991	.32192
#2	.24636	1.154	1.2623	.37820	.52601	1.3030	.32072
#3	.25124	1.155	1.2730	.37462	.52983	1.3179	.32705

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.933	.19474	.09026	11.165	.01739	.09863	11.175
SDev	.254	.00169	.01258	.201	.01004	.01346	.097
%RSD	1.0604	.86994	13.935	1.8025	57.690	13.650	.87091
#1	23.661	.19281	.07623	10.939	.02510	.09536	11.078
#2	23.974	.19597	.09403	11.229	.00605	.08710	11.174
#3	24.163	.19544	.10052	11.325	.02103	.11343	11.273

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	11.159	.00726	.02245	.06479	.10803
SDev	.256	.00904	.01056	.04331	.00222
%RSD	2.2898	124.39	47.057	66.853	2.0551
#1	10.869	.01340	.03095	.05035	.11034
#2	11.257	-.00311	.01062	.03054	.10785
#3	11.352	.01151	.02579	.11347	.10591

Analysis Report QC Standard 10/21/08 06:11:14 PM page 1

Method: KICAP Sample Name: ICSA-FINAL Operator: CT
Run Time: 10/21/08 18:06:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00016	497.2	.00394	-.00014	-.00001	517.1	.00075
SDev	.00027	2.5	.00012	.00000	.00001	2.2	.00007
%RSD	163.37	.5045	3.0348	1.7683	108.15	.4177	9.6620
#1	-.00035	495.3	.00380	-.00014	.00000	514.8	.00066
#2	.00014	500.0	.00401	-.00014	-.00002	519.1	.00079
#3	-.00029	496.2	.00401	-.00014	-.00002	517.5	.00079
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.0				500.0	
Range		20.00				20.00	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00020	.00068	-.00061	190.61	.0569	517.5	-.00018
SDev	.00007	.00011	.00045	.79	.0061	1.9	.00005
%RSD	34.635	15.708	73.471	.41596	10.70	.3765	27.766
#1	-.00019	.00078	-.00041	189.78	.0609	515.7	-.00014
#2	-.00013	.00068	-.00030	191.36	.0599	519.6	-.00024
#3	-.00027	.00057	-.00113	190.69	.0499	517.3	-.00016
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	QC Pass	NOCHECK
Value				200.00		500.0	
Range				20.000		20.00	

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00073	.0054	.00025	.00498	.00023	.00263	-.00005
SDev	.00094	.0038	.00025	.00053	.00003	.00006	.00009
%RSD	128.65	70.78	100.61	10.622	12.681	2.1078	175.28
#1	.00177	.0095	.00052	.00553	.00025	.00261	.00004
#2	.00045	.0046	.00002	.00494	.00024	.00270	-.00005
#3	-.00004	.0020	.00021	.00447	.00020	.00259	-.00014
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00202	-.00087	.00602	.00477	.00259	.00085	.02035
SDev	.00016	.00046	.00278	.00224	.00105	.00163	.00706
%RSD	8.0077	52.439	46.194	46.875	40.372	191.31	34.686
#1	.00220	-.00138	.00822	.00333	.00206	.00036	.02848
#2	.00199	-.00052	.00290	.00364	.00192	.00268	.01665
#3	.00188	-.00071	.00695	.00735	.00380	-.00048	.01591
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Analysis Report QC Standard 10/21/08 06:11:14 PM page 2

Value Range	2203/2	1960/1	1960/2	2068/1	2068/2
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.00301	.00783	-.00002	-.01256	.00680
SDev	.00615	.01002	.00623	.01611	.00726
%RSD	204.76	128.02	25168.	128.27	106.71
#1	-.00923	.01873	-.00626	-.03117	.01461
#2	-.00286	.00577	-.00001	-.00308	.00555
#3	.00307	-.00101	.00619	-.00344	.00025
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report QC Standard 10/21/08 06:15:42 PM page 1

Method: KICAP Sample Name: ICSAB-FINAL Operator: CT
Run Time: 10/21/08 18:11:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20011	489.5	.49046	.49617	.48743	511.9	.90607
SDev	.00210	4.6	.00744	.00498	.00480	5.2	.00917
%RSD	1.0495	.9324	1.5162	1.0032	.98549	1.008	1.0124
#1	.19768	484.4	.48192	.49043	.48190	506.0	.89557
#2	.20126	490.8	.49396	.49877	.48984	514.3	.91007
#3	.20138	493.3	.49550	.49930	.49055	515.4	.91255
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	500.0	.50000	.50000	.50000	500.0	1.0000
Range	20.000	20.00	20.000	20.000	20.000	20.00	20.000

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45978	.47350	.51947	188.72	5.179	510.5	.47262
SDev	.00490	.00495	.00549	1.93	.055	5.3	.00479
%RSD	1.0653	1.0451	1.0566	1.0253	1.062	1.032	1.0127
#1	.45417	.46780	.51313	186.50	5.117	504.4	.46711
#2	.46195	.47596	.52266	189.65	5.198	512.9	.47498
#3	.46321	.47674	.52262	190.02	5.222	514.1	.47576
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00		500.0	.50000
Range	20.000	20.000	20.000	20.000		20.00	20.000

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45333	.9739	.92089	.46934	.49165	.48922	.48222
SDev	.00520	.0097	.00877	.00529	.00522	.00499	.00475
%RSD	1.1481	.9985	.95211	1.1277	1.0609	1.0202	.98515
#1	.44778	.9627	.91084	.46466	.48566	.48347	.47674
#2	.45810	.9781	.92485	.46828	.49413	.49184	.48484
#3	.45411	.9807	.92697	.47508	.49517	.49235	.48509
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000		1.0000	.50000	.50000	.50000	.50000
Range	20.000		20.000	20.000	20.000	20.000	20.000

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97929	.09750	.09965	.05116	.05048	.61289	.06703
SDev	.00958	.00166	.00381	.00155	.00074	.00783	.00451
%RSD	.97860	1.7008	3.8214	3.0349	1.4715	1.2769	6.7337
#1	.96825	.09569	.09557	.04964	.04967	.60405	.07115
#2	.98425	.09895	.10311	.05110	.05063	.61894	.06772
#3	.98539	.09786	.10026	.05275	.05114	.61568	.06221
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK

Analysis Report QC Standard 10/21/08 06:15:42 PM page 2

Value	1.0000	.10000	.10000	.05000	.05000	.60000
Range	20.000	20.000	20.000	20.000	20.000	20.000

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.04324	.05806	.04670	.60372	.61672
SDev	.00458	.00452	.00324	.01896	.00585
%RSD	10.582	7.7786	6.9417	3.1407	.94812
#1	.03890	.06117	.04393	.58285	.61389
#2	.04280	.06013	.04589	.60841	.62344
#3	.04802	.05288	.05027	.61989	.61283
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

Analysis Report 10/21/08 06:20:10 PM page 1

Method: KICAP Sample Name: CCVH7 Operator: CT
Run Time: 10/21/08 18:15:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.0661	.00602	.00053	.00011	50.24	.00067
SDev	.00014	.0333	.00058	.00018	.00004	.37	.00011
%RSD	87.693	50.36	9.5800	33.332	37.014	.7452	16.427
#1	.00006	.1040	.00665	.00071	.00016	49.84	.00080
#2	.00010	.0523	.00591	.00053	.00011	50.31	.00063
#3	.00032	.0419	.00551	.00036	.00007	50.58	.00059
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						55.09	
Low						44.90	

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00224	5.3192	.00044	10.218	.0994	.0625	.00035
SDev	.00010	.0399	.00029	.073	.0041	.0335	.00004
%RSD	4.5724	.75100	65.717	.71584	4.163	53.64	12.022
#1	.00231	5.2774	.00014	10.138	.1038	.1009	.00040
#2	.00230	5.3232	.00046	10.234	.0957	.0468	.00035
#3	.00213	5.3570	.00072	10.262	.0987	.0396	.00031
Errors	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK
High		5.5090		11.090			
Low		4.4900		8.9900			

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00075	51.05	.00061	.00566	.00040	.00187	.00010
SDev	.00079	.28	.00035	.00257	.00011	.00011	.00030
%RSD	105.39	.5473	57.529	45.333	28.176	6.0318	295.38
#1	-.00006	50.73	.00082	.00327	.00049	.00195	.00041
#2	.00079	51.27	.00082	.00838	.00043	.00192	-.00019
#3	.00151	51.13	.00021	.00534	.00027	.00174	.00008
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		55.09					
Low		44.90					

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00136	-.00075	.00912	10.372	-.00159	.00236	10.135
SDev	.00003	.00053	.00111	.061	.00103	.00080	.044
%RSD	2.3127	70.796	12.186	.58751	64.398	33.813	.43906
#1	.00138	-.00022	.00960	10.302	-.00106	.00164	10.105
#2	.00132	-.00074	.00991	10.409	-.00278	.00322	10.113
#3	.00137	-.00128	.00785	10.406	-.00095	.00223	10.186
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK

Analysis Report 10/21/08 06:20:10 PM page 2

High				11.090	
Low				8.9900	
Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	10.168	.00083	-.00280	-.00099	.00479
SDev	.193	.00345	.00019	.00123	.00159
%RSD	1.8966	417.74	6.8340	123.94	33.146
#1	9.9516	.00250	-.00284	-.00224	.00507
#2	10.322	-.00314	-.00260	.00022	.00622
#3	10.229	.00312	-.00298	-.00096	.00308
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

Analysis Report 10/21/08 06:24:37 PM page 1

Method: KICAP Sample Name: CCV7 Operator: CT
Run Time: 10/21/08 18:20:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24784	5.046	.50865	.50794	.51026	10.20	.51474
SDev	.00035	.020	.00377	.00205	.00213	.06	.00170
%RSD	.14014	.3987	.74097	.40353	.41690	.5881	.33001
#1	.24806	5.038	.50527	.50708	.50867	10.16	.51365
#2	.24744	5.031	.50795	.50646	.50944	10.16	.51388
#3	.24802	5.069	.51171	.51028	.51268	10.26	.51670
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.27500	5.510	.55100	.55100	.55100	11.09	.55100
Low	.22500	4.490	.44900	.44900	.44900	8.990	.44900

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51149	.51198	.50001	1.0034	10.19	10.24	.50032
SDev	.00167	.00387	.00128	.0079	.14	.05	.00190
%RSD	.32654	.75678	.25620	.78721	1.398	.5208	.37907
#1	.51035	.50885	.50007	.99867	10.32	10.20	.49907
#2	.51072	.51077	.49670	.99898	10.21	10.22	.49939
#3	.51341	.51631	.50126	1.0125	10.04	10.30	.50250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass
High	.55100	.55100	.55100	1.1090		11.09	.55100
Low	.44900	.44900	.44900	.8990		8.990	.44900

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50727	10.17	.50939	.51413	.51029	.50929	.50148
SDev	.00424	.04	.00257	.00124	.00239	.00200	.00221
%RSD	.83482	.4152	.50492	.24084	.46873	.39378	.44145
#1	.50258	10.22	.50848	.51539	.50921	.50829	.49980
#2	.50840	10.15	.50741	.51408	.50863	.50798	.50066
#3	.51082	10.14	.51230	.51292	.51303	.51160	.50399
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55100	11.09	.55100	.55100	.55100	.55100	.55100
Low	.44900	8.990	.44900	.44900	.44900	.44900	.44900

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50808	.50814	.50990	.51574	.49589	.50093	.51752
SDev	.00084	.00220	.00316	.00654	.00880	.00575	.00422
%RSD	.16598	.43348	.61893	1.2685	1.7745	1.1486	.81513
#1	.50760	.50573	.50787	.50828	.48574	.49443	.51699
#2	.50760	.50864	.50830	.51847	.50068	.50298	.51358
#3	.50906	.51005	.51354	.52048	.50127	.50537	.52197
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK

Analysis Report 10/21/08 06:24:37 PM page 2

High	.55100	.55100	.55100	.55100	.55100	.55100
Low	.44900	.44900	.44900	.44900	.44900	.44900
Elem	2203/2	1960/1	1960/2	2068/1	2068/2	
Units	ppm	ppm	ppm	ppm	ppm	
Avge	.51485	.49714	.49527	.49544	.50317	
SDev	.00949	.00774	.01082	.01670	.00258	
%RSD	1.8423	1.5572	2.1841	3.3707	.51348	
#1	.50392	.49105	.48309	.47624	.50351	
#2	.52091	.49452	.50375	.50659	.50043	
#3	.51973	.50585	.49898	.50350	.50556	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
High						
Low						

Analysis Report 10/21/08 06:29:05 PM page 1

Method: KICAP Sample Name: CCB7 Operator: CT
Run Time: 10/21/08 18:24:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	B_2496	Ba4934	Be3130	Ca	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00011	.0202	.00616	.00059	.00015	.0223	.00075
SDev	.00035	.0018	.00102	.00010	.00005	.0040	.00000
%RSD	303.39	8.841	16.513	17.321	30.045	17.82	.45276
#1	.00021	.0222	.00733	.00071	.00016	.0209	.00075
#2	-.00048	.0197	.00575	.00053	.00011	.0192	.00075
#3	-.00007	.0188	.00542	.00053	.00020	.0267	.00075

Elem	Co2286	Cr	Cu3247	Fe	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00311	.00282	.00048	.00247	.0952	.0200	.00040
SDev	.00015	.00045	.00004	.00081	.0069	.0026	.00006
%RSD	5.0039	15.855	7.4985	32.925	7.234	12.99	14.342
#1	.00329	.00284	.00050	.00217	.0996	.0215	.00042
#2	.00302	.00237	.00050	.00185	.0873	.0170	.00034
#3	.00302	.00326	.00044	.00339	.0987	.0215	.00045

Elem	Mo2020	Na	Ni2316	Sn1899	Sr4215	Ti3349	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00097	.0084	.00041	.00695	.00024	.00100	-.00012
SDev	.00049	.0031	.00023	.00045	.00005	.00000	.00006
%RSD	50.526	37.08	56.790	6.5183	19.825	.02812	49.732
#1	.00153	.0066	.00036	.00643	.00030	.00100	-.00016
#2	.00069	.0066	.00021	.00725	.00021	.00100	-.00005
#3	.00069	.0120	.00067	.00717	.00021	.00100	-.00016

Elem	Zn2138	As1890	Tl1908	Pb	Se1960	Sb2068	2203/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	-.00044	.01078	.00179	-.00072	.00102	.00125
SDev	.00012	.00123	.00077	.00044	.00119	.00120	.00115
%RSD	11.664	280.75	7.1670	24.782	165.40	118.25	92.331
#1	.00093	.00069	.01040	.00136	-.00001	-.00033	.00251
#2	.00094	-.00175	.01167	.00176	-.00210	.00139	.00098
#3	.00114	-.00025	.01027	.00225	-.00005	.00199	.00025

Elem	2203/2	1960/1	1960/2	2068/1	2068/2
Units	ppm	ppm	ppm	ppm	ppm
Avge	.00206	.00061	-.00139	-.00073	.00164
SDev	.00123	.00156	.00186	.00199	.00160
%RSD	59.764	255.37	134.32	272.20	97.321
#1	.00079	.00226	-.00115	.00088	-.00018
#2	.00215	.00042	-.00336	-.00296	.00281
#3	.00324	-.00085	.00035	-.00011	.00229

Laboratory Worksheets

LIFE SCIENCE LABORATORIES, INC.

TRACE METALS SOIL DIGESTION LOGBOOK Method # 3050B QC Batch # 5301 Date: 10-20-08

Sample ID	Client ID	Initial Weight (g)	Final Volume (ml)	Comments
MB - 5301	-	0.50	50	ZEROW CHECK (2527.0)
LCS - 5301	↓	↓	↓	A+B ↓
0810082 - 001A	[redacted]			
↓ 002A	↓			
0810083 - 001B	CITY OF GRAZED			
- 001B MS				C.)
- 001B MSD				C.)
002B				
003B				
004B				
005B				

MT 10-20-08

Reagents:
1:1 HNO_3# 2864-R conc. HNO_3# J.T.Baker 917027
conc. HCl # J.T.Baker G05039 H_2O_2 # J.T.Baker G06A19
(A) 0.5 ml of ICP Spike# 7556-3
(B) 0.5 ml of ICP Spike# 7557-3
(C) 1.0 ml of ICP Spike# 7556-3, 7557-3

Prepared by: [signature]
Date: 10-20-08
Reviewed By: [signature]
Date: 10-20-08
Digestion Temperature: 92 °C

G:\Logbooks 2006\TM\TM4 SD 2006

Life Science Laboratories, Inc. Trace Metals Section Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6334-S	3/8/07	10/31/10	Al - 10,000 ppm	Stock, Received 100 mL	100 mL	10,000 ppm	ACCUTD	B709303	CT
6335-S		9/30/10	Sb - 1000 ppm			1,000 ppm			
6336-S		2/28/11	As - 1000 ppm					B711036	
6337-S		9/30/10	Ba - 1000 ppm					B720034	
6338-S		7/31/11	Be - 1000 ppm					B711083	
6339-S		9/31/11	B - 1000 ppm					B608026	
6340-S		11/30/11	Cd - 1000 ppm					B611069	
6341-S		8/31/10	Ca - 10,000 ppm			10,000 ppm		B665137	
6342-S		6/30/11	Cr - 1000 ppm			1,000 ppm		B665124	
6343-S		12/31/11	Co - 1000 ppm					B612534	
6344-S		9/30/11	Fe - 1000 ppm					B603048	
6345-S		8/31/11	Pb - 1000 ppm					B607096	
6346-S		9/30/10	Mg - 10,000 ppm			10,000 ppm		B701118	
6347-S		6/30/11	Mn - 1000 ppm			1,000 ppm		B606026	
6348-S		7/31/11	Mo - 1000 ppm					B606081	
6349-S		6/30/11	Ni - 1000 ppm					B465040	
6350-S		9/30/10	K - 10,000 ppm			10,000 ppm		B707123	
6351-S		6/30/11	Se - 1000 ppm			1,000 ppm		B606029	
6352-S		12/31/11	Ag - 1000 ppm					B612604	
6353-S		7/31/11	Na - 10,000 ppm			10,000 ppm		B602812	
6354-S		9/30/10	Sr - 1000 ppm			1,000 ppm		B507151	
6355-S		5/31/11	Tl - 1000 ppm					B605036	
6356-S		1/31/11	Sn - 1000 ppm					B605089	
6357-S		9/30/10	Ti - 1000 ppm					B708713	
6358-S		2/28/12	V - 1000 ppm					B702721	
6359-S		2/28/11	Zn - 1000 ppm					B601140	

111

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Initial: _____

Life Science Laboratories, Inc. Trace Metals Section Standards Prep Logbook

nDP 3/12/07

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6360-S	3/8/07	9/30/11	Cu-1000 ppm	Stock, Received 100 mL	100 mL	1,000 ppm	AccuSTD	B6095096	CT
6361-S	→	2/28/11	As-10,000 ppm	→	→	10,000 ppm	→	B6025008	→
6362-S		5/31/11	Ba-10,000 ppm					B6051064	
6363-S		6/30/11	Cr-10,000 ppm					B6061734	
6364-S		8/31/11	Fe-10,000 ppm					B6085027	
6365-S		12/31/11	Pb-10,000 ppm					B6125378	
6366-S		6/30/11	Nd-1000 ppm			1,000 ppm		B6065096	
6367-S	3/12/07	3/12/07	Hg Cal Curve (Soil)	0.0 mL (6368-S) 0.2 0.5 1.0 3.0 5.0 10.0	150 mL w/ DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	AccuSTD	6368-S	DP
6368-S	3/12/07	3/12/07	Hg - 50 ppb (working STD)	0.5 mL (6037-S) +2 mL conc HNO3	200 mL w/DI	50.0 ppb	AccuSTD Baker	6037-S C38065	DP
6369-S	3/12/07	3/12/07	Hg - 50 ppb (REF STD)	0.5 mL (6038-S) + 2.0 mL conc HNO3	→	50.0 ppb	ULTRA Baker	6038-S C38065	DP
6370-S	3/12/07	3/12/07	ICB/CCB	0.5 mL conc. HNO3	150 mL w/DI	—	Baker	C38065	DP
6371-S	3/12/07	3/12/07	ICV (Hg)	4.0 mL (6369-S)		4.0 ppb	ULTRA	6369-S	DP
6372-S	3/12/07	3/12/07	CRA (Hg)	0.2 mL (6368-S)		0.2 ppb	AccuSTD	6368-S	DP
6373-S	3/12/07	3/12/07	CCV (Hg)	2.0 mL (6368-S)		2.0 ppb	↓	↓	DP
6374-S	3/12/07	3/12/07	Hg Cal Curve (Water)	0.0 mL (6368-S) 0.2	150 mL w/DI	0.0 ppb 0.2	AccuSTD	6368-S	DP

Reviewed

112

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ISO 9001:2000

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025

(6334-S)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 10/31/10

Item Number: ICP-01N-10X-1

Density: 1.059g/mL
Lot Number: B5105043
Expiration Date: Oct / 2010

Element: Aluminum
Concentration: 9919 µg/mL
Matrix: Al(NO3)3 · 9H2O in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	0.06	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	*	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	N/A	K	0.6	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	0.13	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	0.44	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	N/A
Bi	N/A	Ga	N/A	Mg	0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	0.10	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.37	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3101a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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ISO 9001:2000

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025

(6335-S)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-02N-1

Density: 1.013g/mL
Lot Number: B5095031
Expiration Date: Sep / 2010

Element: Antimony
Concentration: 1001 µg/mL
Matrix: 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	N/A
Al	N/A	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	*	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	N/A
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using bromate which was standardized against NIST SRM #83d (arsenic trioxide).

The concentration of the final solution was verified by ICP against NIST SRM# 3102a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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ISO 9001:2000

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025

(6336-S)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 2/28/11

Item Number: ICP-03N-1

Density: 1.012 g/mL
Lot Number: B5115036
Expiration Date: Feb / 2011

Element: Arsenic
Concentration: 1000 µg/mL
Matrix: As in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	*	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3103a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

(6337-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-04N-1

Element: Barium
Concentration: 1000 µg/mL
Matrix: Ba(NO3)2 in 2% HNO3

Lot Number: B5025074
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	N/A	Sb	N/A	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	N/A	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	N/A	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	*	Eu	nd<0.02	Li	N/A	Pd	N/A	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	N/A	Ge	N/A	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	N/A	Na	N/A	Rh	N/A	Te	N/A		
Co	N/A	Hg	N/A	Nb	N/A	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3104a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

(6338-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 7/31/11

Item Number: ICP-05N-1

Density: 1.016g/mL

Element: Beryllium
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Lot Number: B5115083
Expiration Date: Jul / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	*	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3105a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

(6339-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 8/31/11

Item Number: ICP-07W-1

Density: 1.002g/mL

Element: Boron
Concentration: 1000 µg/mL
Matrix: H3BO3 in H2O tr. NH4OH

Lot Number: B6085025
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	N/A	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	*	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed by acid/base titration using NaOH which was standardized against NIST SRM #841 (potassium hydrogen phtalate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3107

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

(6340-5)

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 11/30/11

Item Number: ICP-08N-1

Density: 1.012 g/mL

Element: Cadmium
Concentration: 1000 µg/mL
Matrix: Cd in 2% HNO3

Lot Number: B6115069
Expiration Date: Nov / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	0.10	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	N/A	Tl	nd<0.2
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	N/A	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	*	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3108

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6341-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 8/21/11

Item Number: ICP-09N-10X-1

Element: Calcium
Concentration: 10000 µg/mL
Matrix: CaCO3 in 2% HNO3

Density: 1.042g/mL
Lot Number: B6065137
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	0.03	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	nd<0.2	Er	nd<0.02	La	0.26	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	0.03	Yb	nd<0.02
Ca	*	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	0.1	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.1	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3109a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6342-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 6/20/11

Item Number: ICP-13N-1

Element: Chromium
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.013 g/mL
Lot Number: B6065124
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	*	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	N/A	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3112a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6347-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 12/21/11

Item Number: ICP-14N-1

Element: Cobalt
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.014 g/mL
Lot Number: B6125064
Expiration Date: Dec / 2011

Elements in µg/mL

Ag	N/A	Cr	N/A	Ho	N/A	Nd	N/A	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	N/A	Sb	N/A	Tl	N/A
As	N/A	Cu	N/A	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	N/A	Pd	N/A	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	N/A	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	0.08	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	N/A
Cd	nd<0.02	Ge	N/A	Mo	N/A	Re	N/A	Tb	N/A	Zr	nd<0.02
Ce	nd<0.2	Hf	0.05	Na	N/A	Rh	N/A	Te	N/A		
Co	*	Hg	N/A	Nb	N/A	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3113

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6360-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/11

Item Number: ICP-15N-1

Element: Copper
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.013g/mL
Lot Number: B6095096
Expiration Date: Sep / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	*	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	N/A	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	N/A	Th	N/A		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3114

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6344-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 10/31/11

Item Number: ICP-27N-1

Element: Iron
Concentration: 1000 µg/mL
Matrix: Fe in 5% HNO3

Density: 1.032 g/mL
Lot Number: B6035048
Expiration Date: Oct / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	*	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	N/A	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	N/A	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3126a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6345-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 8/31/11

Item Number: ICP-29N-1

Element: Lead
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Density: 1.011g/mL
Lot Number: B6075090
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	*	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3128

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6346-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-32N-10X-1

Element: Magnesium
Concentration: 10000 µg/mL
Matrix: 2% HNO3

Density: 1.055g/mL
Lot Number: B5015118
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	0.05	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	*	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.45	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	0.06	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	N/A	Na	0.13	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3131a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6347-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-33N-1

Element: Manganese
Concentration: 1000 µg/mL
Matrix: Mn(C2H3O2)2 in 2% HNO3

Density: 1.012g/mL
Lot Number: B6065026
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Tl	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	N/A	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	N/A	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	*	Rb	N/A	Ta	N/A	Zn	N/A
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	N/A		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3132

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6348-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 7/31/07 11

Item Number: ICP-35W-1

CT 9/8/07

Density: 1.000g/mL
Element: Molybdenum
Lot Number: B6065081
Concentration: 1000 µg/mL
Expiration Date: Jul / 2011
Matrix: Water, tr NH_4OH

Elements in µg/mL

Ag	N/A	Cr	nd<0.02	Ho	N/A	Nd	N/A	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	N/A	Sb	N/A	Tl	N/A
As	N/A	Cu	N/A	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	N/A
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	N/A	Er	N/A	La	nd<0.02	Pb	N/A	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	N/A	Li	nd<0.02	Pd	N/A	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	*	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	N/A	Na	N/A	Rh	N/A	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3134

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6349-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-37N-1

Density: 1.014g/mL
Element: Nickel
Lot Number: B4065040
Concentration: 1000 µg/mL
Expiration Date: Jun / 2011
Matrix: Ni in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	*	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	0.11	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3136

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6350-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-43N-10X-1

Density: 1.028g/mL
Element: Potassium
Lot Number: B5075123
Concentration: 9999 µg/mL
Expiration Date: Sep / 2010
Matrix: KNO3 in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	*	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	0.38	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3141a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6351-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-51N-1

Density: 1.012g/mL
Element: Selenium
Lot Number: B6065129
Concentration: 1000 µg/mL
Expiration Date: Jun / 2011
Matrix: Se in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	N/A	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	*	U	N/A
B	nd<0.2	Er	N/A	La	nd<0.02	Pb	N/A	Si	N/A	V	N/A
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	N/A
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	N/A
Ca	nd<0.02	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	N/A
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	N/A	Hf	N/A	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	N/A	Hg	nd<0.2	Nb	nd<0.2	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3149

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6352-5

Received - 3/8/07
Opened - 3/8/07
Expire - 12/31/11

Item Number: ICP-53N-1

Density: 1.012 g/mL

Element: Silver
Concentration: 1000 µg/mL
Matrix: AgNO3 in 2% HNO3

Lot Number: B6125004
Expiration Date: Dec / 2011

Elements in µg/mL

Ag	*	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	0.03	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	N/A	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	0.04	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	N/A
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	N/A	Hf	nd<0.02	Na	0.04	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using a Volhlhard titration calibrated against 99.999% silver shot.

The concentration of the final solution was verified by ICP against NIST SRM# 3151

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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1104

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6353-5

Received - 3/8/07
Opened - 3/8/07
Expire - 3/31/11

Item Number: ICP-54N-10X-1

Density: 1.036 g/mL

Element: Sodium
Concentration: 10000 µg/mL
Matrix: NaNO3 in 2% HNO3

Lot Number: B6025117
Expiration Date: Mar / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	N/A	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	*	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3152a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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Inorganic QC Supervisor

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1105

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6354-5

Received - 3/8/07
Opened - 3/8/07
Expire - 9/20/10

Item Number: ICP-55N-1

Element: Strontium
Concentration: 1000 µg/mL
Matrix: Sr(NO3)2 in 2% HNO3

Lot Number: B5035151
Expiration Date: Sep / 2010

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	N/A	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	*	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	N/A
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3153a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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1106

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6355-5

Received - 3/8/07
Opened - 3/8/07
Expire - 5/31/11

Item Number: ICP-60N-1

Density: 1.011 g/mL

Element: Thallium
Concentration: 1000 µg/mL
Matrix: Tl in 2% HNO3

Lot Number: B6055036
Expiration Date: May / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	*
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3158

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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1107

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6356-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 1/31/11

Item Number: ICP-63N-1

Density: 1.012 g/mL
Element: Tin
Lot Number: B6015089
Concentration: 1000 µg/mL
Expiration Date: Jan / 2011
Matrix: Sn in 2-5% HNO3 tr. HF

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	*	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3161

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6357-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 9/30/10

Item Number: ICP-64W-1

Density: 1.000g/mL
Element: Titanium
Lot Number: B5085113
Concentration: 1000 µg/mL
Expiration Date: Sep / 2010
Matrix: (NH4)2TiF6 in H2O tr HF

Elements in µg/mL

Ag	N/A	Cr	nd<0.02	Ho	nd<0.02	Nd	N/A	S	N/A	Ti	*
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	N/A	Cu	N/A	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	N/A
B	0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	N/A	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	N/A	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	nd<0.02	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	N/A	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.104	Rh	N/A	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3162a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6358-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 2/28/12

Item Number: ICP-67N-1

Density: 1.014 g/mL
Element: Vanadium
Lot Number: B7025121
Concentration: 1000 µg/mL
Expiration Date: Feb / 2012
Matrix: V_2O_5 in 2% HNO_3

Elements in µg/mL

Ag	nd<0.02	Cr	N/A	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	*
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	0.02	Lu	N/A	Pr	N/A	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	N/A	Pt	N/A	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.03	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	N/A	Ru	nd<0.02	Th	N/A		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3165

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

(6359-5)

Received - 3/8/07
Opened - 3/8/07
Expire - 2/28/11

Item Number: ICP-70N-1

Density: 1.013g/mL
Element: Zinc
Lot Number: B6015140
Concentration: 1000 µg/mL
Expiration Date: Feb / 2011
Matrix: Zn in 2% HNO3

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	N/A	Tl	nd<0.2
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	nd<0.2	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	*
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate).

The concentration of the final solution was verified by ICP against NIST SRM# 3168a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6361-5

Received - 3/8/07
Opened - 3/8/07
Expire - 2/28/11

Item Number: ICP-03N-10X-1

Element: Arsenic
Concentration: 10022 µg/mL
Matrix: As in 2% HNO3

Density: 1.011g/mL
Lot Number: B6025008
Expiration Date: Feb / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	nd<0.02	Sb	nd<0.2	Tl	nd<0.2
As	*	Cu	0.03	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	0.09
Au	nd<0.02	Dy	nd<0.02	K	nd<0.2	P	N/A	Se	N/A	U	nd<0.2
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.04	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.09	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3103a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6362-5

Received - 3/8/07
Opened - 3/8/07
Expire - 5/31/11

Item Number: ICP-04N-10X-1

Element: Barium
Concentration: 10000 µg/mL
Matrix: Ba(NO3)2 in 2% HNO3

Lot Number: B6055064
Expiration Date: May / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	N/A	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	N/A	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	N/A	Er	nd<0.02	La	nd<0.02	Pb	nd<0.2	Si	0.3	V	nd<0.02
Ba	*	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	N/A	Y	nd<0.02
Bi	N/A	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	N/A	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	nd<0.02	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3104a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

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Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6363-5

Received - 3/8/07
Opened - 3/8/07
Expire - 6/28/11

Item Number: ICP-13N-10X-1

Element: Chromium
Concentration: 10000 µg/mL
Matrix: 2-5% HNO3

Density: 1.044 g/mL
Lot Number: B6065134
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	*	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	nd<0.2	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	0.3	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	N/A	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	N/A	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	0.38	Rh	nd<0.2	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	nd<0.2	Ru	N/A	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed gravimetrically, using a balance calibrated against weight sets, ID #NJ86563, traceable to NIST.

The concentration of the final solution was verified by ICP against NIST SRM# 3112a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

6364-5

Received - 3/8/07
Opened - 3/8/07
Expire - 8/31/11

Item Number: ICP-27N-10X-1

Element: Iron
Concentration: 10000 µg/mL
Matrix: Fe in 5% HNO3

Density: 1.084g/mL
Lot Number: B6085027
Expiration Date: Aug / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	N/A	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	N/A	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	N/A
Be	nd<0.02	Fe	*	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	N/A	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	N/A
Ca	nd<0.02	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	0.32
Cd	N/A	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	N/A	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	N/A		
Co	N/A	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3126a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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ISO 9001:2000

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025

6365-S

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 12/31/10

Item Number: ICP-29N-10X-1

Element: Lead
Concentration: 10000 µg/mL
Matrix: 2% HNO3

Lot Number: B6125078
Expiration Date: Dec / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	nd<0.02	Nd	nd<0.02	S	N/A	Ti	nd<0.02
Al	nd<0.02	Cs	N/A	In	nd<0.2	Ni	N/A	Sb	N/A	Tl	N/A
As	nd<0.2	Cu	N/A	Ir	N/A	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	nd<0.02	K	N/A	P	N/A	Se	N/A	U	N/A
B	nd<0.2	Er	nd<0.02	La	nd<0.02	Pb	*	Si	nd<0.2	V	nd<0.02
Ba	nd<0.02	Eu	nd<0.02	Li	nd<0.02	Pd	nd<0.2	Sm	nd<0.2	W	nd<0.2
Be	nd<0.02	Fe	N/A	Lu	nd<0.02	Pr	nd<0.2	Sn	nd<0.02	Y	nd<0.02
Bi	nd<0.2	Ga	nd<0.02	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	0.05	Gd	nd<0.02	Mn	nd<0.02	Rb	N/A	Ta	nd<0.2	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	nd<0.02	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	nd<0.2	Hf	nd<0.02	Na	N/A	Rh	nd<0.2	Te	nd<0.2		
Co	nd<0.02	Hg	N/A	Nb	nd<0.2	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3128

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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ISO 9001:2000

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025

6366-S

AccuTrace™ Reference Standard

Received - 3/8/07
Opened - 3/8/07
Expire - 6/30/11

Item Number: ICP-36N-1

Element: Neodymium
Concentration: 1000 µg/mL
Matrix: 2% HNO3

Lot Number: B6065096
Expiration Date: Jun / 2011

Elements in µg/mL

Ag	nd<0.02	Cr	nd<0.02	Ho	N/A	Nd	*	S	N/A	Ti	nd<0.02
Al	N/A	Cs	N/A	In	N/A	Ni	nd<0.02	Sb	nd<0.2	Tl	N/A
As	N/A	Cu	nd<0.02	Ir	nd<0.2	Os	N/A	Sc	nd<0.02	Tm	nd<0.02
Au	nd<0.02	Dy	N/A	K	N/A	P	N/A	Se	nd<0.2	U	N/A
B	nd<0.2	Er	N/A	La	N/A	Pb	N/A	Si	nd<0.2	V	N/A
Ba	nd<0.02	Eu	N/A	Li	0.07	Pd	N/A	Sm	N/A	W	N/A
Be	nd<0.02	Fe	nd<0.02	Lu	nd<0.02	Pr	N/A	Sn	N/A	Y	nd<0.02
Bi	nd<0.2	Ga	N/A	Mg	nd<0.02	Pt	nd<0.2	Sr	nd<0.02	Yb	nd<0.02
Ca	N/A	Gd	N/A	Mn	nd<0.02	Rb	N/A	Ta	N/A	Zn	nd<0.02
Cd	nd<0.02	Ge	nd<0.2	Mo	N/A	Re	nd<0.2	Tb	nd<0.02	Zr	nd<0.02
Ce	N/A	Hf	nd<0.02	Na	0.22	Rh	N/A	Te	N/A		
Co	nd<0.02	Hg	nd<0.2	Nb	N/A	Ru	nd<0.02	Th	nd<0.02		

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

This solution was assayed titrimetrically, using EDTA which was standardized against NIST SRM #928 (lead nitrate.)

The concentration of the final solution was verified by ICP against NIST SRM# 3135a

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6433-S	3/20/07	3/20/08	Low Level Cal STD.W (100X)	See prep sheet in Certificate Book			AccuSTD	–	CT
6434-S	3/20/07	3/20/08	Low Level Cal STD-S (100X)	See prep sheet in Certificate Book			AccuSTD	–	CT
6435-S	3/20/07	3/20/08	Low Level Cal STD.W (1X)	1.0 mL (6433-S)	↗ 100 mL	See #	AccuSTD	6433-S	CT
				+ 5 mL conc. HCl	w/ DI	6433-S	Baker	C26042	↓
				+ 3 mL Conc HNO3	↓		↓	C38065	↓
6436-S	3/20/07	3/20/08	Low Level Cal STD-S (1X)	1.0 mL (6434-S)	↗ 100 mL	See #	AccuSTD	6434-S	CT
				+ 5 mL Conc. HCl	w/ DI	6434-S	Baker	C26042	↓
				+ 3 mL Conc. HNO3	↓		↓	C38065	↓
6437-S	3/20/07	3/20/08	CRI (ONEIDA) 1000X	0.1 mL (6340-S) Cd	↗ 100 mL	Cd - 1 ppm	AccuSTD	6340-S	CT
↓	↓	↓	↓	0.5 mL (6342-S) Cr	w/ DI	Cr. 5	↓	6342-S	↓
				0.5 mL (6360-S) Cu	↓	Cu. 5		6360-S	
				1.0 mL (6349-S) Ni		Ni - 10		6349-S	
				0.5 mL (6336-S) As		As. 5		6336-S	
				0.5 mL (6345-S) Pb		Pb. 5		6345-S	
				0.5 mL (6351-S) Se		Se. 5		6351-S	
				+ 5 mL conc. HNO3			Baker	C38065	
6438-S	3/20/07	3/20/08	CRI (ONEIDA)	0.1 mL (6437-S)	↗ 100 mL	See #	AccuSTD	6437-S	CT
↓	↓	↓	↓	+ 5 mL Conc. HCl	w/ DI	6437-S	Baker	C26042	↓
				+ 3 mL Conc HNO3			↓	C38065	
6439-S	3/22/07	3/22/07	Hg - 50 ppb (Working STD)	0.5 mL (6037-S)	↑ 200 mL	50.0 ppb	AccuSTD	6037-S	DP
				+ 2.0 mL conc. HNO3	w/ DI	↓	Baker	C38065	↓
6440-S	3/22/07	3/22/07	Hg - 50 ppb (REF STD)	0.5 mL (6038-S)	↓		ULTRA	6038-S	↓
				+ 2.0 mL conc. HNO3			Baker	C38065	

Reviewed ______

118

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Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - W (100X)   Standard Number: 6433-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	0.50	5
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.30	3
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.50	5
Beryllium	AccuSTD	B5115083	6447-S	100	100	0.40	0.4
Boron	AccuSTD	B6085025	6339-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.10	110
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.60	6
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.10	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	2.00	20
Lead	AccuSTD	B6075090	6449-S	100	100	2.50	2.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6450-S	100	100	1.50	1.5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	1.00	100
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.80	8
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	C38065	-	Conc.	100	6.0	6%

Comment: ______

Date Prepared: 3/20/07   Date Expires: 3/20/08

Prepared By: Cong Tran   Reviewed By: [signature]

Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - S (100X) Standard Number: 6434-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	1.00	10
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.50	5
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.10	1
Beryllium	AccuSTD	B5115083	6338-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.00	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.10	1
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.20	2
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.30	3
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.30	3
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.30	3
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	2.00	200
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.60	6
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	C38065	-	Conc.	100	6.0	6%

Comment:

Date Prepared: 3/20/07 Date Expires: 3/20/08

Prepared By: Cong Tran Reviewed By:

1120

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacture	Lot # and/or Standard #	Prepared by
6441-S	3/22/07	3/22/07	ICB/CCB	0.5 mL conc. HNO3	↑ 200 mL w/DI	—	Baker	C38065	DP
6442-S	3/22/07	3/22/07	Hg Cal Curve (Water)	0.0 mL (6439-S)	↑ 50 mL w/DI	0.0 ppb	AccuSTD	6439-S	DP
				0.2 mL		0.2			
				0.5 mL		0.5			
				1.0 mL		1.0			
				2.0 mL		2.0			
				5.0 mL		5.0			
				10.0 mL		10.0			
6443-S	3/22/07	3/22/07	ICV (Hg)	4.0 mL (6440-S)	↑ 50 mL w/DI	4.0 ppb	ULTRA	6440-S	DP
6444-S	3/22/07	3/22/07	CRA (Hg)	0.2 mL (6441-S)		0.2 ppb	AccuSTD	6489-S	DP
6445-S	3/22/07	3/22/07	CCV (Hg)	2.0 mL (6444-S) (6439-S)		2.0 ppb	AccuSTD	6437-S	DP
6446-S	3/19/07	3/19/08	Ag-500 ppm	10 mL (6372-S) Ag	↑ 20 mL w/DI	Ag-500 ppm	AccuSTD	6372-S	CT
				~~1 mL DI~~ + 1 mL HNO3 CT 3/19/07			Baker	C38065	
6447-S	3/20/07	3/20/08	Be-100 ppm	1 mL (6338-S)	↑ 10 mL w/DI	Be-100 ppm	AccuSTD	6338-S	CT
6448-S			Cd-100 ppm	1 mL (6340-S)		Cd-100 ppm			
			Pb-100 ppm	1 mL (6345-S)		Pb-100 ppm		6340-S	
6449-S			Mn-100 ppm	1 mL (6348-S)		Mn-100 ppm		6345-S	
6450-S	3/27/07	3/27/07	Hg-50 ppb (Custom STD)	0.5 mL (6437-S)	↑ 200 mL w/DI	50.0 ppb	AccuSTD	6348-S	
				+ 2.0 mL conc. HNO3			Baker	C38065	DP
6451-S	3/27/07	3/27/07	Hg-50 ppb (REF STD)	0.5 mL conc. HNO3			ULTRA	6037-S	
				+ 2.0 mL conc. HNO3			Baker	6038-S	
6452-S	3/27/07	3/27/07	Hg-50 ppb (REF STD)	0.5 mL (6038-S)				C38065	
				+ 2.0 mL conc. HNO3					

Reviewed: ____ Date: ____

119

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacture	Lot # and/or Standard #	Prepared by
6461-S	3/29/07	3/29/07	Hg Cal Curve (Soil)	10.0 mL (6458-S)	↑ 50 mL w/DI	10.0 ppb	AccuSTD	6458-S	DP
6462-S	3/29/07	3/29/07	ICV (Hg)	4.0 mL (6459-S)	↑ 50 mL w/DI	4.0 ppb	ULTRA	6459-S	DP
6463-S	3/29/07	3/29/07	CRA (Hg)	0.2 mL (6458-S)		0.2 ppb	AccuSTD	6458-S	DP
6464-S	3/29/07	3/29/07	CCV (Hg)	2.0 mL (6458-S)		2.0 ppb			DP
6465-S	4/4/07	4/4/08	CRI (HWLCP)	See prep sheet in Certificate Book			AccuSTD	—	CT
6466-S	4/4/07	4/4/08	CRC (HWLCP)	1 mL (6465-S)	↑ 100 mL w/DI	See #	AccuSTD	6465-S	CT
			100X	+ 10 mL Rxn HCl		6466-S	Baker	2297-R	
				+ 3 mL Conc HNO3				C38065	
6467-S	4/4/07	4/4/08	Sb-100 ppm	1 mL (6337-S)	↑ 10 mL w/DI	Sb-100 ppm	AccuSTD	6337-S	CT
6468-S			Be-100 ppm	1 mL (6338-S)		Be-100		6338-S	
6469-S			Cd-100 ppm	1 mL (6340-S)		Cd-100		6340-S	
6470-S			Mn-100 ppm	1 mL (6347-S)		Mn-100		6347-S	
6471-S	4/5/07	4/5/07	Hg-50 ppb (Custom STD)	0.5 mL (6037-S)	↑ 200 mL w/DI	50.0 ppb	AccuSTD	6037-S	DP
				+ 2.0 mL conc. HNO3			Baker	C38065	
6472-S	4/5/07	4/5/07	Hg-50 ppb (REF STD)	0.5 mL (6038-S)			ULTRA	6038-S	DP
				+ 2.0 mL conc. HNO3			Baker	C38065	
6473-S	4/5/07	4/5/07	ICB/CCB	0.5 mL conc. HNO3	↑ 50 mL w/DI	—			DP
6474-S	4/5/07	4/5/07	Hg Cal Curve (Water)	0.0 mL (6471-S)		0.0 ppb	AccuSTD	6471-S	DP
				0.2		0.2			
				0.5		0.5			

Reviewed: ____ Date: ____

121

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1122

(6479-S)
Received - 4/9/07
Opened - 4/9/07
Expire - 4/2/08

HIGH-PURITY STANDARDS

P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

CAT. NO. CLP-INF-1

Certificate of Analysis

CLP Interference Check Standard 1

Lot # 626224

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.98+%	HNO_3, 5%	µg/mL ± 0.5%
			Aluminum 5000
			Calcium 5000
			Iron 2000
			Magnesium 5000

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

APR 0 2 2008

Exp Date:
MSDS ATTACHED

Theodore C. Rains, Ph.D.
President

1123

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
DF 5/21/07 6659-2	5/21/07	5/21/07	Hg Cal Curve (Soil)	0.0 ml (6589-S)	↑ 50 ml w/DI	0.0 ppb	AccuSTD	(6589-S)	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6593-S	5/21/07	5/21/07	ICV (Hg)	4.0 ml (6590-S)	↑ 50 ml w/DI	4.0 ppb	ULTRA	(6590-S)	DP
6594-S	5/21/07	5/21/07	CRA (Hg)	0.2 ml (6589-S)		0.2 ppb	AccuSTD	(6589-S)	DP
6595-S	5/21/07	5/21/07	CCV (Hg)	2.0 ml (6589-S)		2.0 ppb			DP
				CT 5/21/07					
6596-S	5/21/07	5/21/08	As - 100 ppm	1 ml (6336-S)	↑ 10 ml w/ DI	As - 100 ppm	AccuSTD	6336-S	CT
6597-S			Cd - 100 ppm	1 ml (6343-S)		Cd - 100		6343-S	
6598-S			Pb - 100 ppm	1 ml (6345-S)		Pb - 100		6345-S	
6599-S			Se - 100 ppm	1 ml (6351-S)		Se - 100		6351-S	
				CT 5/21/07					
6600-S	5/21/07	5/21/08	CRI (FRONTIER)	See prep sheet in Certificate Book			AccuSTD	—	CT
		CT 5/21/07	100X						
6601-S	5/21/07	5/21/08	CRI (FRONTIER)	1 ml (6600-S)	↑ 100 ml w/ DI	See #	AccuSTD	6600-S	CT
			1X	+ 5 ml Conc. HCl		6600-S	Baker	C38027	
				+ 3 ml Conc. HNO_3				C38065	
6602-S	5/22/07	5/22/07	Hg - 50 ppb (Working STD)	0.5 ml (6037-S)	↑ 200 ml w/ DI	50 ppb	AccuSTD	6037-S	DP
				+ 2.0 ml conc. HNO_3			Baker	C38065	
6603-S	5/22/07	5/22/07	Hg - 50 ppb (Ref STD)	0.5 ml (6038-S)		50 ppb	ULTRA	6038-S	DP
				+ 2.0 ml conc. HNO_3			Baker	C38065	
6604-S	5/22/07	5/22/07	ICB/CCB	0.5 ml conc. HNO_3		—			DP

Reviewed By: _____

Date: _____

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1126

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
	4/5/07	4/5/07	Hg Cal Curve (Water)	1.0 ml (6471-S)	↑ 50 ml w/DI	1.0 ppb	AccuSTD	6471-S	DP
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6475-S	4/5/07	4/5/07	ICV (Hg)	4.0 ml (6472-S)	↑ 50 ml w/DI	4.0 ppb	ULTRA	6472-S	DP
6476-S	4/5/07	4/5/07	CRA (Hg)	0.2 ml (6471-S)		0.2 ppb	AccuSTD	6471-S	DP
6477-S	4/5/07	4/5/07	CCV (Hg)	2.0 ml (6471-S)		2.0 ppb			DP
6478-S	4/5/07	4/5/07	Hg Cal Curve (Soil)	0.0 ml (6471-S)	↑ 50 ml w/DI	0.0 ppb	AccuSTD	6471-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6479-S	4/9/07	4/2/08	ICSA	Stock, Received 250 ml	250 ml	See # 6479-S	High Purity	626224	CT
6480-S	4/10/07	5/10/07	Hg TCLP SPK SOLN	2.5 ml of 6037-S + 5 ml conc HNO_3	↑ 50 ml w/ DI	1 mg/L	AccuTrace	6037-S	DR
6481-S	4/12/07	4/12/08	3005A MDL Verification (100x)	See prep sheet in Certificate Book			BAKER	C38065	
6482-S	4/12/07	4/12/08	3010A MDL Verification (100x)				AccuSTD	—	CT

Reviewed _____

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122

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1124

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6483-S	4/17/07	4/13/08	MDL Ver1	0.5 ml (6481-S)	↑ 50 ml w/ DI	See # 6481-S	AccuSTD	6481-S	CT
6484-S			MDL Ver2	0.7 ml					
6485-S			MDL Ver3	1.0 ml					
6486-S			MDL-Ver4	1.2 ml					
6487-S			MDL-Ver5	1.5 ml					
6488-S			MDL-Ver6	1.7 ml					
6489-S			MDL-Ver7	2.0 ml					
6490-S			MDL-Ver8	2.2 ml					
6491-S			MDL-Ver9	2.5 ml					
6492-S	4/17/07	4/17/08	MDL-Ver1	0.5 ml (6482-S)	↑ 50 ml w/ DI	See # 6482-S	AccuSTD	6482-S	CT
6493-S			MDL-Ver2	0.7 ml					
6494-S			MDL-Ver3	1.0 ml					
6495-S			MDL-Ver4	1.2 ml					
6496-S			MDL-Ver5	1.5 ml					
6497-S			MDL-Ver6	1.7 ml					
6498-S			MDL-Ver7	2.0 ml					
6499-S			MDL-Ver8	2.2 ml					
6500-S			MDL-Ver9	2.5 ml					
6501-S	4/12/07	4/12/08	Ba - 100 ppm	1 ml (6337-S)	↑ 10 ml w/ DI	Ba - 100 ppm	AccuSTD	6337-S	CT
6502-S	4/12/07	4/12/08	Sr - 100 ppm	1 ml (6354-S)		Sr - 100 ppm		6354-S	CT
6503-S	4/16/07	4/16/08	3050B MDL Verification (100x)	See prep sheet in Certificate Book			AccuSTD	—	CT
6504-S	4/16/07	4/16/08	MDL-Ver1	0.5 ml (6337-S) + 0.5 g Teflon chips (2379-R)	↑ 50 ml w/ DI	See # 6503-S	AccuSTD	6503-S	CT
6505-S			MDL Ver2	0.7 ml					
6506-S			MDL Ver3	1.0 ml					

Reviewed _____

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123

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1125

Multielement Standard Preparation

Name of Standard: CRI (FRONTIER) 100X Standard Number: 6600-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.10	10.0
Antimony	AccuSTD	B5095031	6467-S	100	100	0.50	0.50
Arsenic	AccuSTD	B5115036	6396-S	100	100	0.50	0.50
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.20	2.00
Beryllium	AccuSTD	B5115083	6468-S	100	100	0.30	0.30
Cadmium	AccuSTD	B6115069	6469-S	100	100	0.10	0.10
Calcium	AccuSTD	B6065137	6341-S	10,000	100	0.10	10.0
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1.00
Cobalt	AccuSTD	B6125064	6397-S	100	100	2.50	2.50
Copper	AccuSTD	B6095086	6360-S	1,000	100	0.10	1.00
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.50	5.00
Lead	AccuSTD	B6075090	6398-S	100	100	0.50	0.50
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	0.30	30.0
Manganese	AccuSTD	B6065026	6470-S	1,000	100	0.10	1.00
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.50	5.00
Potassium	AccuSTD	B5075123	6350-S	10,000	100	5.00	500.0
Selenium	AccuSTD	B6065129	6399-S	100	100	0.50	0.50
Silver	AccuSTD	B6125064	6446-S	1000	100	0.10	1.00
Sodium	AccuSTD	B6025117	6353-S	10,000	100	0.30	30.0
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.50	5.00
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.10	1.00
HNO3	J T Baker	C38065	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 5/21/07 Date Expires: 5/21/08

Prepared By: [signature] Reviewed By: _____

1127

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6691-S	6/27/07	6/27/07	ICV (Hg)	4.0 ml (6688-S)	↑50 ml w/DI	4.0 ppb	Absolute	6688-S	DP
6692-S	6/27/07	6/27/07	CRA (Hg)	0.2 ml (6687-S)	↓	0.2 ppb	AccuSTD	6687-S	DP
6693-S	6/27/07	6/27/07	CCV (Hg)	2.0 ml (6687-S)	↓	2.0 ppb	↓	↓	DP
6694-S	6/27/07	6/27/07	Hg Cal Curve (Water)	0.0 ml (6687-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	6687-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6695-S	6/27/07	6/27/07	ICV (Hg)	4.0 ml (6688-S)	↑50 ml w/DI	4.0 ppb	Absolute	6688-S	DP
6696-S	6/27/07	6/27/07	CRA (Hg)	0.2 ml (6687-S)	↓	0.2 ppb	AccuSTD	6687-S	DP
6697-S	6/27/07	6/27/07	CCV (Hg)	2.0 ml (6687-S)	↓	2.0 ppb	↓	↓	DP
6698-S	6/27/07	6/27/07	Sn-50 ppm	0.5 ml (6356-S)	↑10 ml w/DI	Sn. 50 ppm	AccuSTD	6356-S	CT
				+ 0.5 ml conc. HNO3			Baker	E09043	
6699-S	6/27/07	7/27/07	Low Level Cal STD - W	1 ml (6477-S)	↑100 ml w/DI	See # 6477-S	AccuSTD	6477-S	
				0.1 ml (6498-S)			↓	6498-S	
				+ 5 ml conc. HCl			Baker	C09074	
				+ 3 ml conc HNO3				E09043	
6700-S	6/27/07	7/27/07	ICSA	2.0 ml (6479-S)	↑200 ml w/DI	See # 6479-S	High Purity	6479-S	CT
				+ 10 ml conc. HCl			Baker	C09074	
				+ 6 ml conc. HNO3			↓	E09043	

Reviewed By: _____

Date: _____

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16

1130

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6616-S	5/29/07	5/29/08	CRI (PARSONS) 100X	See prep sheet in Certificate Book			AccuSTD	—	CT
6617-S	5/29/07	5/29/08	CRI (PARSONS) 1X	1 ml (6616-S)	↗100 ml w/DI	See # 6616-S	AccuSTD	6616-S	CT
				+ 5 ml conc. HCl			Baker	C38032	↓
				+ 3 ml conc HNO3			↓	E09043	
6618-S	6/1/07	6/1/07	Hg - 50 ppb (Working STD)	0.5 ml (6037-S)	↑200 ml w/DI	50 ppb	AccuSTD	6037-S	DP
				+ 2.0 ml conc. HNO3			Baker	C38065	
6619-S	6/1/07	6/1/07	Hg - 50 ppb (Ref STD)	0.5 ml (6038-S)		50 ppb	ULTRA	6038-S	DP
				+ 2.0 ml conc. HNO3			Baker	C38065	
6620-S	6/1/07	6/1/07	ICB/CCB	0.5 ml conc. HNO3	↓	—	↓	↓	DP
6621-S	6/1/07	6/1/07	Hg Cal Curve (Water)	0.0 ml (6618-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	(6618-S)	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6622-S	6/1/07	6/1/07	ICV (Hg)	4.0 ml (6619-S)		4.0	ULTRA	(6619-S)	DP
6623-S	6/1/07	6/1/07	CRA (Hg)	0.2 ml (6618-S)		0.2	AccuSTD	(6618-S)	DP
6624-S	6/1/07	6/1/07	CCV (Hg)	2.0 ml (6618-S)	↓	2.0 ↓	↓	↓	DP
6625-S	6/4/07	6/4/07	Hg - 100 ppb (Working STD)	1.0 ml (6037-S)	↑200 ml w/DI	100 ppb	AccuSTD	6037-S	DP
				+ 2.0 ml conc. HNO3			Baker	C38065	
6626-S	6/4/07	6/4/07	Hg - 100 ppb (REF STD)	1.0 ml (6038-S)		100 ppb	ULTRA	6038-S	DP
				+ 2.0 ml conc. HNO3			Baker	C38065	
6627-S	6/4/07	6/4/07	ICB/CCB	0.5 ml conc. HNO3	↓	—	↓	↓	DP

Reviewed By: _____

Date: _____

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9

1128

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6701-S	6/27/07	7/28/07	ICIAB	20 ml (6479-S)	↗200 ml w/DI	See # 6479-S	High Purity	6479-S	CT
				2 ml (5712-S)		5712-S	↓	5712-S	
				2 ml (6431-S)		6431-S	AccuSTD	6431-S	
				+ 10 ml conc. HCl		6431-S	Baker	C09074	
				+ 6 ml conc. HNO3			↓	E09043	
6702-S	6/29/07	6/29/07	Hg - 50 ppb (Working STD)	0.5 ml (6037-S)	↑200 ml w/DI	50 ppb	AccuSTD	6037-S	DP
				+ 2.0 ml conc. HNO3			Baker	C38065	
6703-S	6/29/07	6/29/07	Hg - 50 ppb (Ref STD)	0.5 ml (5487-S)		50 ppb	Absolute	5487-S	DP
				+ 4.0 ml conc. HNO3			Baker	C38065	
6704-S	6/29/07	6/29/07	ICB/CCB	0.5 ml conc. HNO3	↓	—	↓	↓	DP
6705-S	6/29/07	6/29/07	Hg Cal Curve (Water)	0.0 ml ~~conc~~ (6702-S)	↑50 ml w/DI	0.0 ppb ~~AccuSTD~~	AccuSTD	6702-S	DP
				0.2		0.2 ppb			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6706-S	6/29/07	6/29/07	ICV (Hg)	4.0 ml (6703-S)	↑50 ml w/DI	4.0 ppb	Absolute	6703-S	DP
6707-S	6/29/07	6/29/07	CRA (Hg)	0.2 ml (6702-S)	↓	0.2 ppb	AccuSTD	6702-S	DP
6708-S	6/29/07	6/29/07	CCV (Hg)	2.0 ml (6702-S)	↓	2.0 ppb	↓	↓	DP
6709-S	7/2/07	7/2/07	Hg - 50 ppb (Working STD)	0.5 ml (6037-S)	↑200 ml w/DI	50 ppb	AccuSTD	6037-S	DP
				+ 2.0 ml conc. HNO3			Baker	C38065	
6710-S	7/2/07	7/2/07	Hg - 50 ppb (REF STD)	0.5 ml (5487-S)		50 ppb	Absolute	5487-S	DP
				+ 4.0 ml conc. HNO3			Baker	C38065	

Reviewed By: _____

Date: _____

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17

1131

Multielement Standard Preparation

Name of Standard: CRI(PARSONS) 100X Standard Number: 6616-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.2	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	1.0	10
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.5	5
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.1	1
Beryllium	AccuSTD	B5115083	6468-S	100	100	0.5	0.5
Cadmium	AccuSTD	B6115069	6469-S	100	100	0.5	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.0	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.1	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.1	1
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.2	2
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.3	3
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.3	3
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.0	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.1	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.3	3
Nickel	AccuSTD	B4105040	6349-S	1,000	100	0.2	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	2.0	200
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.3	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.2	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.0	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.6	6
Tin	AccuSTD	B6015089	6356-S	1,000	100	0.5	5
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.1	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.2	2
HNO3	J T Baker	E09043	.	Conc.	100	6.0	6%

Comment:

Date Prepared: 5/29/07 Date Expires: 5/29/08

Prepared By: Cindy Tran Reviewed By: [illegible]

1129

Multielement Standard Preparation

Name of Standard: CRI (EDISON) 100X Standard Number: 6727-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.100	10
Antimony	AccuSTD	B5095031	6722-S	100	100	0.600	0.6
Arsenic	AccuSTD	B5115036	6723-S	100	100	0.500	0.5
Barium	AccuSTD	B5025074	6337-S	1,000	100	1.000	10
Beryllium	AccuSTD	B5115083	6724-S	100	100	0.100	0.1
Cadmium	AccuSTD	B6115069	6725-S	100	100	0.400	0.4
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.000	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.100	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.500	5
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.100	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.500	5
Lead	AccuSTD	B6075090	6726-S	100	100	0.500	0.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.000	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.500	5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.500	5
Potassium	AccuSTD	B5075123	6350-S	10,000	100	5.000	500
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.100	1
Silver	AccuSTD	B6125004	6446-S	1,000	100	0.100	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.000	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.200	2
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.500	5
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.200	2
HNO3	J T Baker	E09043	-	Conc.	100	5.0	5%

Comment:

Date Prepared: 7/3/07 Date Expires: 7/3/08

Prepared By: C. Gaines / T. Ra Reviewed By: [illegible]

1134

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6711-S	7/2/07	7/2/07	ICB/CCB	0.5 ml conc. HNO_3	↑200 ml w/DI	—	Baker	C38066	DP
6712-S	7/2/07	7/2/07	Hg Cal Curve (Soil)	0.0 ml (6709-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	6709-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6713-S	7/2/07	7/2/07	ICV (Hg)	4.0 ml (6710-S)		4.0 ppb	Absolute	6710-S	DP
6714-S	7/2/07	7/2/07	CRA (Hg)	0.2 ml (6709-S)		0.2 ppb	AccuSTD	6709-S	DP
6715-S	7/2/07	7/2/07	CCV (Hg)	2.0 ml (6709-S)		20 ppb			DP
6716-S	7/2/07	7/2/08	Li. 10,000 ppm	12.5 g (6544-S)	↑200 ml w/DI	10,000 ppm	High Purity	6544-S	CT
				+ 10 ml Conc. HNO_3			Baker	E09043	
6717-S	7/2/07	11/24/07	ICVH (ICAP)	1 ml (5557-S) Ca	↑200 ml w/DI	Ca-50 ppm	High Purity	5557-S	CT
				1 ml (5558-S) Cr		Cr-5		5558-S	
				2 ml (5559-S) Fe		Fe-10		5559-S	
				1 ml (5560-S) Na		Na-50		5560-S	
				2 ml (5561-S) Pb		Pb-10		5561-S	
				+ 10 ml Conc. HCl			Baker	C09074	
				+ 6 ml Conc. HNO_3				E09043	
DP 7/2/07 ~~6718-S~~	~~Hg Cal Cu~~								
6718-S	7/2/07	7/2/07	ICV (Hg)	4.0 ml (6710-S)	↑50 ml DI	4.0 ppb	Absolute	6710-S	DP
6719-S	7/2/07	7/2/07	CRA (Hg)	0.2 ml (6709-S)		0.2 ppb	AccuSTD	6709-S	DP
6720-S	7/2/07	7/2/07	CCV (Hg)	2.0 ml (6709-S)		2.0 ppb			DP

Reviewed By: _____

Date: _____

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1132

18

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6721-S	7/2/07	7/2/07	Hg Cal Curve (Water)	0.0 ml (6709-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	6709-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6722-S	7/3/07	7/3/08	Sb-100 ppm	1 ml (6375-S)	↑10 ml w/DI	Sb-100 ppm	AccuSTD	6375-S	CT
6723-S			As-100 ppm	1 ml (6376-S)		As-100		6376-S	
6724-S			Be-100 ppm	1 ml (6378-S)		Be-100		6378-S	
6725-S			Cd-100 ppm	1 ml (6340-S)		Cd-100		6340-S	
6726-S			Pb-100 ppm	1 ml (6345-S)		Pb-100		6345-S	
6727-S	7/3/07	7/3/08	CRI (EDISON) 100X	See prep sheet in Certificate Book			AccuSTD	—	CT
6728-S	7/3/07	7/3/08	CRI (EDISON)	1 ml (6727-S)	↑100 ml w/DI	See # 6727-S	AccuSTD	6727-S	CT
				+ 5 ml Conc. HCl			Baker	C09074	
				+ 3 ml Conc. HNO_3				E09043	

Reviewed By: _____

Date: _____

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1133

19

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6764-S	7/16/07	7/16/07	Hg Cal Curve (Water)	0.0 ml (6761-S)	↑50 ml w/DI	0.0 ppb	AccuSTD	6761-S	DP
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
6765-S	7/16/07	7/16/07	ICV (Hg)	4.0 ml (6762-S)	↑50 ml w/DI	4.0 ppb	Absolute	6762-S	DP
6766-S	7/16/07	7/16/07	CRA (Hg)	0.2 ml (6761-S)		0.2 ppb	AccuSTD	6761-S	DP
6767-S	7/16/07	7/16/07	CCV (Hg)	2.0 ml (6761-S)		2.0 ppb	AccuSTD	6761-S	DP
6768-S	7/17/07	7/10/08	ICSB (ICAP)	Stock, Received 100 ml	100 mL	See # 6768-S	High Purity	625441	CT
6769-S	7/18/07	7/18/07	STD50 GFAA	10 ml (6514-S) + 10 ml DI	20 mL	TL-50 ppb	AccuSTD	6514-S	CT
6770-S			STD25	5 ml (6769-S) + 5 ml DI	10	25		6769-S	
6771-S			STD10	2 ml (6769-S) + 8 ml DI	10	10		6769-S	
6772-S			STD2	2 ml (6771-S) + 8 ml DI	10	2		6771-S	
6773-S	7/18/07	4/2/08	ICSAB	20 ml (6479-S)	↑200 mL w/DI	See # 6479-S	High Purity	6479-S	CT
				2 ml (6768-S)		6768-S		6768-S	
				2 ml (6471-S)		6471-S		6471-S	
				+ 10 ml Conc. HCl			Baker	C09074	
				+ 6 ml Conc. HNO_3				E01042	

Reviewed By: _____

Date: _____

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1135

23

6758-5
Received - 7/17/07
Opened - 7/17/07
Expire - 7/10/08 CT 7/17/07

HIGH-PURITY STANDARDS

P.O. Box 41727
Charleston, SC 29423
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FAX: (843) 767-7906

CAT. NO. ANALCS-R

Certificate of Analysis

CLP Analyte Standard-Revised

Lot # 625441

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.99+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Exp Date: JUL 1 0 2008
MSDS ATTACHED

Theodore C. Rains, Ph.D.
President

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
6796-5	7/27/07	7/24/08	QC Spike Solution A	Stock, Received 50mL	500 mL	See # 6996-5	High Purity	0720512	CT
6797-5	7/27/07	7/24/08	QC Spike Solution B			6997-5		0720513	

Reviewed by: _____ Date: _____

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6796-5
Received - 7/27/07
Opened - 7/27/07
Expire - 7/24/08

HIGH-PURITY STANDARDS

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FAX: (843) 767-7906

Certificate of Analysis

SM-108-001 (SPIKE)

Solution A

Lot # 0720512

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.98+%	HNO_3, 2%	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Exp Date: JUL 2 4 2008
MSDS ATTACHED

Theodore C. Rains, Ph.D.
President

SM-108-001 (SPIKE)

Solution A

Element List

(µg/mL)

Aluminum	100
Arsenic	20
Barium	20
Beryllium	20
Boron	50
Cadmium	20
Calcium	1000
Chromium	20
Cobalt	20
Copper	20
Iron	100
Lead	20
Magnesium	1000
Manganese	20
Nickel	20
Potassium	1000
Selenium	20
Sodium	1000
Strontium	20
Thallium	20
Vanadium	20
Zinc	20

6797-S
Received - 7/27/07
Opened - 7/27/07
Expire - 7/24/08

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Certificate of Analysis

SM-108-001 (SPIKE)

Solution B

Lot # 0720513

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals Salts or Oxides	99.99+%	HNO_3, 2% - Tr HF	µg/mL ± 0.5% Antimony 20 Molybdenum 20 Silver 5 Tin 20 Titanium 20

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains

Theodore C. Rains, Ph.D.
President

Exp Date: JUL 2 4 2008
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Life Science Laboratories, Inc. — Standards Prep Logbook — Trace Metals Section

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7014-S	11/8/07	11/8/08	TL - 1 ppm	0.1 mL (6755-S) + 3 mL conc HNO3	→ 100 mL w/ DI	TL - 1 ppm	AccuTTD	6755-S	CT
7015-S	11/8/07	11/8/08	MDL Verl (TL)	0.1 mL (7014-S)	→ 50 mL w/ DI	2 ppb	AccuTTD	7014-S	CT
7016-S	11/8/07	11/8/08	TCLP Spike (ICAP)	1 mL (6372-S) Ag 1 mL (6362-S) Ba 2 mL (6740-S) Cd 1 mL (6367-S) Cr 1 mL (6361-S) As 1 mL (6357-S) Pb 2 mL (6351-S) Se 1 mL (6755-S) Sb 2 mL (6379-S) Zn + 10 mL conc HNO3	→ 100 mL w/ DI	Ag - 10 ppm Ba - 10 A Cd - 20 Cr - 100 As - 100 Pb - 100 Se - 20 Sb - 10 Zn - 20	AccuTTD	6372-S 6362-S 6740-S 6367-S 6361-S 6357-S 6351-S 6755-S 6379-S	CT
7012-S	11/8/07	11/8/08	ICFA	Stock, Received 250 mL + 10 mL conc. HCl	→ 250 mL	See # 7012-S	Baker	E 22031 E 21053	CT
7018-S	11/8/07	N/A	Li_2CO_3	Stock, Received 50 g	→ 50 g	—	High Purity	0727808 0720507	CT

Reviewed By: _____ Date: _____

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7018-S
Received - 11/8/07
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Expire - N/A

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CAT. NO. LI CO-S

Certificate of Analysis

Lithium Carbonate

99.999%

Lot # 0730507

All concentrations are quoted in parts per million by weight, and the analysis technique employed was ICP, unless otherwise noted below. Unless otherwise stated, the specification (total metallic impurities) relates to impurities as detected.

Iron	<1 ppm	Copper	<0.5 ppm
Sodium	<1 ppm	Potassium	<0.5 ppm
Aluminum	<0.5 ppm	Lead	<0.5 ppm
Calcium	<0.5 ppm	Silicon	<0.5 ppm
Chromium	<0.5 ppm	Magnesium	<0.5 ppm

Theodore C. Rains

Theodore C. Rains, Ph.D.
President

MSDS ATTACHED

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7017-S
Received - 11/8/07
Opened - 11/8/07
Expire - 11/2/08

HIGH-PURITY STANDARDS

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Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

CAT. NO. CLP-INF-1

Certificate of Analysis

CLP Interference Check Standard 1

Lot # 0727808

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.98+%	HNO_3, 5%	µg/mL ± 0.5% Aluminum 5000 Calcium 5000 Iron 2000 Magnesium 5000

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains

Theodore C. Rains, Ph.D.
President

Exp Date: NOV 0 2 2008
MSDS ATTACHED

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ENVIRONMENTAL EXPRESS

CAT. NO. HP10M9-1

Certificate of Analysis

Calcium

Lot # 0728836

Source	Source Purity	Matrix	Density g/mL @ 20.7°C	Standard Concentration
Calcium Carbonate	99.999%	HNO_3, 4%	1.034	10.00 ± 0.03 mg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Calcium solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<5	Mg	<0.5	Al	<0.1	Si	<1	K	<1		
Ca	M	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<0.1	Mn	<0.1	Fe	<1	Co	<0.05		
Ni	<0.02	Cu	<0.1	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02		
Sr	<10	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02		
Ag	<0.02	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.02	Te	<0.02	Cs	<0.02	Ba	<0.02		
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02		
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02		
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.05		
Bi	<0.02	Th	<0.02	U	<0.1												

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3109a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
Laboratory Director

Exp. Date JUL 2009
MSDS ATTACHED

7083-5
Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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CAT. NO. HP100012-1

Certificate of Analysis

Chromium

Lot # 0733812

Source	Source Purity	Matrix	Density g/mL @ 22.9°C	Standard Concentration
Chromium Metal	99.999%	HNO_3, 2%	1.007	1000 ± 3 µg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Chromium solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<1	Mg	<0.5	Al	<0.1	Si	<1	K	<1		
Ca	<0.1	Sc	<0.02	Ti	<1	V	<0.05	Cr	M	Mn	<0.1	Fe	<1	Co	<0.05		
Ni	<0.02	Cu	<0.1	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02		
Sr	<0.02	Y	<0.02	Zr	<0.2	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02		
Ag	<5	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.3	Te	<0.02	Cs	<0.02	Ba	<0.02		
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02		
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02		
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.5		
Bi	<0.02	Th	<0.02	U	<0.1												

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3112a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
Laboratory Director

JUL 2009
Exp. Date
MSDS ATTACHED

7084-5
Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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CAT. NO. HP100026-1

Certificate of Analysis

Iron

Lot # 0730428

Source	Source Purity	Matrix	Density g/mL @ 22.4°C	Standard Concentration
Iron Metal	99.995+%	HNO_3, 2%	1.010	1000 ± 3 µg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Iron solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<1	Mg	<0.5	Al	<0.1	Si	<1	K	<1		
Ca	<5	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<10	Mn	<20	Fe	M	Co	<20		
Ni	<10	Cu	<5	Zn	<10	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02		
Sr	<0.02	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02		
Ag	<0.02	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.02	Te	<0.02	Cs	<0.02	Ba	<0.02		
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02		
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02		
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.05		
Bi	<0.02	Th	<0.02	U	<0.1												

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3126a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
Laboratory Director

JUL 2009
Exp. Date
MSDS ATTACHED

7085-5
Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

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CAT. NO. HP10M52-1

Certificate of Analysis

Sodium

Lot # 0732458

Source	Source Purity	Matrix	Density g/mL @ 21.3°C	Standard Concentration
Sodium Carbonate	99.995%	HNO_3, 1%	1.024	10.00 ± 0.03 mg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Sodium solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. **M** = Major element.

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	M	Mg	<30	Al	<0.1	Si	<1	K	<20		
Ca	<70	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<0.1	Mn	<0.1	Fe	<1	Co	<0.05		
Ni	<0.02	Cu	<0.1	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02		
Sr	<0.02	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02		
Ag	<0.02	Cd	<0.02	In	<0.02	Sn	<1	Sb	<0.02	Te	<0.02	Cs	<0.02	Ba	<0.02		
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02		
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02		
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<0.02	Pb	<0.05		
Bi	<0.02	Th	<0.02	U	<0.1												

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3152a.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
Laboratory Director

JUL 2009
Exp. Date
MSDS ATTACHED

7085-5
Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

490 Wando Park Blvd.
Mt. Pleasant, South Carolina 29464
Phone: 1.843.881.6560
Toll Free: 1.800.343.5319
FAX: 1.843.881.3964
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ENVIRONMENTAL EXPRESS

CAT. NO. HP100028-1

Certificate of Analysis

Lead

Lot # 0728504

Source	Source Purity	Matrix	Density g/mL @ 21.1°C	Standard Concentration
Lead Metal	99.999+%	HNO_3, 2%	1.011	1000 ± 3 µg/mL

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

A 1000µg/mL Lead solution was prepared from the source material and scanned by ICP-OES and ICP-MS for trace impurities. The reported values from the 1000µg/mL solution are for reference only. M = Major element

Concentrations as µg/L (ppb)

Li	<0.02	Be	<0.02	B	<1	Na	<1	Mg	<0.5	Al	<0.3	Si	<1	K	<1
Ca	<0.1	Sc	<0.02	Ti	<0.02	V	<0.05	Cr	<0.1	Mn	<0.1	Fe	<1	Co	<0.05
Ni	<0.02	Cu	<0.2	Zn	<0.1	Ga	<0.02	Ge	<0.02	As	<0.05	Se	<0.1	Rb	<0.02
Sr	<0.02	Y	<0.02	Zr	<0.02	Nb	<0.02	Mo	<0.02	Ru	<0.02	Rh	<0.02	Pd	<0.02
Ag	<0.3	Cd	<0.5	In	<0.02	Sn	<1	Sb	<0.5	Te	<0.02	Cs	<0.02	Ba	<0.02
La	<0.02	Ce	<0.02	Pr	<0.02	Nd	<0.02	Sm	<0.02	Eu	<0.02	Gd	<0.02	Tb	<0.02
Dy	<0.02	Ho	<0.02	Er	<0.02	Tm	<0.02	Yb	<0.02	Lu	<0.02	Hf	<0.02	Ta	<0.02
W	<0.02	Re	<0.02	Os	<0.02	Ir	<0.02	Pt	<0.02	Au	<0.02	Tl	<2	Pb	M
Bi	<1	Th	<0.02	U	<0.1										

The standard concentration has been verified by ICP-OES against an independent source, which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3128.

This standard is valid for eighteen months from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Exp. Date JUL 2009

MSDS ATTACHED

Theodore C. Raine

Theodore C. Raine, Ph.D.
Laboratory Director

7087-5

Received - 12/14/07
Opened - 12/17/07
Expire - 7/31/09

490 Wando Park Blvd.
Mt. Pleasant, South Carolina 29464
Phone: 1.843.881.6560
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FAX: 1.843.881.3964
www.environmentalexpress.com

1148

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook — 53

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7082-5	12/12/07	12/12/07	Hg Cal Curve (WATER)	0.0 mL (7087-5) 0.2 0.5 1.0 2.0 5.0 10.0	Stock received 100 mL		↗ 50 mL w/ DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	ACUSTD	7087-5	CT
7084-5	12/14/07	7/31/09	Cr-1000 ppm Fe-1000 ppm Na-10,000 ppm Pb-1000 ppm	Cr-1000 ppm Fe-1000 ppm Na-10,000 ppm Pb-1000 ppm			100 mL	10,000 ppm	Environmental Express	0728504	
7086-5	12/17/07	12/17/07	ICV (ICAP)	1 mL (7082-5) - Ca 1 mL (7084-5) - Cr 2 mL (7087-5) - Fe 1 mL (7086-5) - Na 2 mL (7087-5) - Pb + 6 mL Conc HNO3 + 20 mL (1:1) HCl			↗ 200 mL w/ DI	Ca-50 ppm Cr-5 ppm Fe-10 Na-50 Pb-10	E. Express	7082-5 7084-5 7086-5 7087-5 E26035 2630-R	CT

1149

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook — 59

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7147-5	1/3/08	1/3/09	CCV Hg (CALI)	2.0 ml (7139-5)	↗ 50 ml w/ DI	2.0 ppb	ACUSTD	7139-5	DR
7142-5	1/3/08	1/3/09	Hg CAL STD C (WATER)	0.0 ml (7139-5) 0.2 0.5 1.0 2.0 5.0 10.0	↗ 50 ml w/ DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	ACUSTD	7139-5	DR
7145	1/3/08	1/5/08	CCV Hg (WATER)	4.0 ml (7140-5)	↗ 50 ml w/ DI	40 ppb	ACUSTD	7140-5	DR
7146-5	1/3/08	1/3/08	CRA Hg (WATER)	0.2 ml (7139-5)	↗ 50 ml w/ DI	0.2 ppb	ACUSTD	7139-5	DR
7149-5	1/3/08	1/5/08	CCV Hg	2.0 ml (7139-5)	↗ 50 ml w/ DI	2.0 ppb	ACUSTD	7139-5	DR
7151-5	1/3/08	7/3/08	ICV (ICAP)	2.0 ml (6996-5) 2.0 ml (6997-5) + 6 mL Conc. HNO3 + 20 mL (1:1) HCl	↗ 200 mL w/ DI	See # 6996-5 6997-5 6757-5	High Purity	6996-5 6997-5	CT
7152-5	1/3/08	1/3/09	BLANK/ICB/CCB (ICAP)	100 mL Conc HCl + 60 mL Conc HNO3	↗ 2 L w/ DI	5% 3%	Baker	E26035 2630-R C40643 E27827	CT

1150

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook — 60

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7153-5	1/3/08	1/3/09	STD3 (ICAP)	See prep sheet in metals	certificate book		ACUSTD	–	CT
7154-5	1/3/08	1/3/09	STD2 (ICAP)	0.4 mL (6365-5) Fe 0.4 mL (6365-5) Pb 2 mL (6342-5) Cr 2 mL (6341-5) Ca 2 mL (6373-5) Na + 6 mL Conc HNO3 + 20 mL (1:1) HCl	↗ 200 mL w/ DI	Fe-20 ppm Pb-20 Cr-10 Ca-100 Na-100	ACUSTD	6364-5 6365-5 6342-5 6341-5 6373-5 E26035 2630-R	CT
7155-5	1/3/08	1/2/09	STD1 (ICAP)	1 mL (6370-5) K + 15 mL Conc HNO3 + 50 mL (1:1) HCl	↗ 50 mL w/ DI	K-20 ppm	ACUSTD Baker	6370-5 E26035 2630-R	CT
7156-5	1/3/08	1/3/09	CCVH (ICAP)	5 mL (6341-5) Ca 5 mL (6342-5) Cr 1 mL (6364-5) Fe 5 mL (6373-5) Na 1 mL (6365-5) Pb + 30 mL Conc. HNO3 + 100 mL (1:1) HCl	↗ 100 mL w/ DI	Ca-50 ppm Cr-5 Fe-10 Na-50 Pb-10	ACUSTD Baker	6341-5 6342-5 6364-5 6373-5 6365-5 E26035 2630-R	CT
7157-5	1/10/08	1/10/09	CCV (ICAP)	See prep sheet in metals	certificate book		ACUSTD	–	CT
7158-5	1/10/08	1/10/09	CRI (PAL)	See prep sheet in metals	Certificate book		ACUSTD	–	CT
			100X (ICAP)						

1151

Life Science Laboratories, Inc. — **Trace Metals Section** — **Standards Prep Logbook**

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7157-S	1/10/08	1/10/09	CRI (PQL) (100X)	2 mL (7157-S) + 6 mL Conc. HNO3 + 20 mL (1:1) HCl	↗ 200 mL w/ DI	See # 7157-S	AccuSTD Baker ↓	7157-S E26035 2630-R	CT ↓
7160-S	11/15/08	2/15/08	TCLP Hg	0.5 mL (5487-S)	↗ 50 mL w/ DI	1 ppm	Absolute	5487-S	PR
7161-S	1/16/08	1/16/08	Stk soln	5 ml conc. HNO3					
7162-S	1/16/08	1/16/08	Hg - 50 ppb (Working STD)	0.5 mL (6027-S) + 4 mL Conc. HNO3	↗ 200 mL w/ DI	50 ppb	AccuSTD Baker	6027-S E26035	CT ↓
7163-S	1/16/08	1/16/08	Hg - 50 ppb (ORBF STD)	0.5 mL (5487-S) + 4 mL Conc. HNO3		50 ppb	Absolute Baker	5487-S E26035	
7164-S	1/16/08	1/16/08	ICB / CCB	0.5 mL Conc. HNO3		—	Baker	E26035	
7165-S	1/16/08	1/16/08	Hg Cal Curve (WATER)	0.0 mL (7161-S) 0.2 0.5 1.0 2.0 5.0 10.0	↗ 50 mL w/ DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	AccuSTD	7161-S	CT ↓
7166-S	1/16/08	1/16/08	ICV (Hg)	4.0 mL (7162-S)	↗ 50 mL w/ DI	4.0 ppb	Absolute	7162-S	CT ↓
7167-S	1/16/08	1/16/08	CRA (Hg)	0.2 mL (7161-S)		0.2 ppb	AccuSTD	7161-S	
7168-S	↓	↓	CCV (Hg)	2.0 mL (7161-S)		2.0 ppb	↓	↓	

Reviewed By: _____ Date _____

G:\Logbooks 2006\TM\TM1.StdPrep.met

Multielement Standard Preparation

Name of Standard: STD3 Standard Number: 7153-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	500	0.5	10
Antimony	AccuSTD	B5095031	6335-S	1,000	500	0.5	1
Arsenic	AccuSTD	B5115036	6336-S	1,000	500	0.5	1
Barium	AccuSTD	B5025074	6337-S	1,000	500	0.5	1
Beryllium	AccuSTD	B5115083	6338-S	1,000	500	0.5	1
Boron	AccuSTD	B6085025	6339-S	1,000	500	0.5	1
Cadmium	AccuSTD	B6115069	6340-S	1,000	500	0.5	1
Calcium	AccuSTD	B6065137	6341-S	10,000	500	1.0	20
Chromium	AccuSTD	B6065124	6342-S	1,000	500	0.5	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	500	0.5	1
Copper	AccuSTD	B6095096	6360-S	1,000	500	0.5	1
Iron	AccuSTD	B6035048	6344-S	1,000	500	1.0	2
Lead	AccuSTD	B6075090	6345-S	1,000	500	0.5	1
Magnesium	AccuSTD	B5015118	6346-S	10,000	500	1.0	20
Manganese	AccuSTD	B6065026	6347-S	1,000	500	0.5	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	500	0.5	1
Nickel	AccuSTD	B4065040	6349-S	1,000	500	0.5	1
Selenium	AccuSTD	B6065129	6351-S	1,000	500	0.5	1
Silver	AccuSTD	B6125004	6446-S	500	500	0.5	0.5
Sodium	AccuSTD	B6025117	6353-S	10,000	500	1.0	20
Strontium	AccuSTD	B5035151	6354-S	1,000	500	0.5	1
Thallium	AccuSTD	B6055036	6355-S	1,000	500	0.5	1
Tin	AccuSTD	B6015089	6356-S	1,000	500	0.5	1
Titanium	AccuSTD	B5085113	6357-S	1,000	500	0.5	1
Vanadium	AccuSTD	B7025121	6358-S	1,000	500	0.5	1
Zinc	AccuSTD	B6015140	6359-S	1,000	500	0.5	1
HNO3	J T Baker	E26035	-	Conc.	500	15.0	3%
HCl	J T Baker	2630-R	-	1+1	500	50.0	5%

Comment: _____

Date Prepared: 1/3/08 Date Expires: 1/3/09

Prepared By: Cang Tran Reviewed By: [illegible]

Multielement Standard Preparation

Name of Standard: CCV Standard Number: 7157-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	1,000	0.5	5
Antimony	AccuSTD	B5095031	6335-S	1,000	1,000	0.5	0.5
Arsenic	AccuSTD	B5115036	6336-S	1,000	1,000	0.5	0.5
Barium	AccuSTD	B5025074	6337-S	1,000	1,000	0.5	0.5
Beryllium	AccuSTD	B5115083	6338-S	1,000	1,000	0.5	0.5
Boron	AccuSTD	B6085025	6339-S	1,000	1,000	0.5	0.5
Cadmium	AccuSTD	B6115069	6340-S	1,000	1,000	0.5	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	1,000	1.0	10
Chromium	AccuSTD	B6065124	6342-S	1,000	1,000	0.5	0.5
Cobalt	AccuSTD	B6125064	6343-S	1,000	1,000	0.5	0.5
Copper	AccuSTD	B6095096	6360-S	1,000	1,000	0.5	0.5
Iron	AccuSTD	B6035048	6344-S	1,000	1,000	1.0	1
Lead	AccuSTD	B6075090	6345-S	1,000	1,000	0.5	0.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	1,000	1.0	10
Manganese	AccuSTD	B6065026	6347-S	1,000	1,000	0.5	0.5
Molybdenum	AccuSTD	B6065081	6348-S	1,000	1,000	0.5	0.5
Nickel	AccuSTD	B4065040	6349-S	1,000	1,000	0.5	0.5
Potassium	AccuSTD	B5075123	6350-S	10,000	1,000	1.0	10
Selenium	AccuSTD	B6065129	6351-S	1,000	1,000	0.5	0.5
Silver	AccuSTD	B6125004	6446-S	500	1,000	0.5	0.25
Sodium	AccuSTD	B6025117	6353-S	10,000	1,000	1.0	10
Strontium	AccuSTD	B5035151	6354-S	1,000	1,000	0.5	0.5
Thallium	AccuSTD	B6055036	6355-S	1,000	1,000	0.5	0.5
Tin	AccuSTD	B6015089	6356-S	1,000	1,000	0.5	0.5
Titanium	AccuSTD	B5085113	6357-S	1,000	1,000	0.5	0.5
Vanadium	AccuSTD	B7025121	6358-S	1,000	1,000	0.5	0.5
Zinc	AccuSTD	B6015140	6359-S	1,000	1,000	0.5	0.5
HNO3	J T Baker	E26035	-	Conc.	1,000	30.0	3%
HCl	J T Baker	2630-R	-	1+1	1,000	100.0	5%

Comment: _____

Date Prepared: 1/10/08 Date Expires: 1/10/09

Prepared By: Cang Tran Reviewed By: [illegible]

Multielement Standard Preparation

Name of Standard: CRI(PQL) 100X Standard Number: 7158-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.1	10
Antimony	AccuSTD	B5095031	6335-S	1,000	100	0.6	6
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.1	1
Barium	AccuSTD	B5025074	6337-S	1,000	100	1.0	10
Beryllium	AccuSTD	B5115083	6338-S	1,000	100	0.1	1
Boron	AccuSTD	B6085025	6339-S	1,000	100	0.5	5
Cadmium	AccuSTD	B6115069	6340-S	1,000	100	0.1	1
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.0	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.1	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.5	5
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.1	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.5	5
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.1	1
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.0	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.5	5
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.5	5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.5	5
Potassium	AccuSTD	B5075123	6350-S	10,000	100	5.0	500
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.1	1
Silver	AccuSTD	B6125004	6446-S	500	100	0.2	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.0	100
Strontium	AccuSTD	B5035151	6354-S	1,000	100	0.5	5
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.2	2
Tin	AccuSTD	B6015089	6356-S	1,000	100	0.5	5
Titanium	AccuSTD	B5085113	6357-S	1,000	100	0.5	5
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.5	5
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.2	2
HNO3	J T Baker	E26035	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 1/10/08 Date Expires: 1/10/09

Prepared By: Cang Tran Reviewed By: [illegible]

P.O. Box 41727
Charleston, SC 29423
TEL: (843) 767-7900
FAX: (843) 767-7906

HIGH-PURITY STANDARDS

7186-5
Received - 1/28/08
Opened - 1/28/08
Expire - 1/2/09

CAT.NO. ICP-SSWS-M

Certificate of Analysis

Multi-Element Spiking Solution 1 for Water and Soil Samples-Modified

Lot # 0731305

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.99+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: JAN 0 2 2009
MSDS ATTACHED

www.highpuritystandards.com

Multi-Element Spiking Solution 1 for Water and Soil Samples-Modified

Element List

(µg/mL)

Aluminum	200
Antimony	50
Arsenic	4
Barium	200
Beryllium	5
Cadmium	5
Chromium	20
Cobalt	50
Copper	25
Iron	100
Lead	2
Manganese	50
Nickel	50
Selenium	1
Silver	5
Thallium	5
Vanadium	50
Zinc	50

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HIGH-PURITY STANDARDS

7187-5
Received - 1/28/08
Opened - 1/28/08
Expire - 1/2/09

CAT. NO. CRDL

Certificate of Analysis

CRDL Detection Limit Standard

Lot # 0701208

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.99+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: JAN 0 2 2009
MSDS ATTACHED

www.highpuritystandards.com

CRDL Detection Limit Standard

Element List

(µg/mL)

Antimony	120
Arsenic	20
Beryllium	10
Cadmium	10
Chromium	20
Cobalt	100
Copper	50
Lead	6
Manganese	30
Nickel	80
Selenium	10
Silver	20
Thallium	20
Vanadium	100
Zinc	40

Life Science Laboratories, Inc. — **Trace Metals Section** — **Standards Prep Logbook**

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7179-S	1/24/08	1/24/08	Hg - 50 ppb (REF STD)	0.5 mL (5489-S) + 4 mL Conc. HNO3	↗ 200 mL w/ DI	50 ppb	Absolute	5489-S	CT
7180-S	1/24/08	1/24/08	ICB / CCB	0.5 mL Conc. HNO3	↓	—	Baker	E26025	↓
7181-S	1/24/08	1/24/08	Hg Cal Curve (WATER)	0.0 mL (7178-S)	↗ 50 mL w/ DI	0.0 ppb	AccuSTD	7178-S	CT
				0.2	↓	0.2			↓
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7182-S	1/24/08	1/24/08	ICV (Hg)	4.0 mL (7179-S)	↗ 50 mL w/ DI	4.0 ppb	Absolute	7179-S	CT
7183-S			CRA (Hg)	0.2 mL (7178-S)		0.2 ppb	AccuSTD	7178-S	
7184-S			CCV (Hg)	2.0 mL (7178-S)		2.0 ppb			↓
7185-S			CCV (Hg)	2.0 mL (7178-S)		2.0 ppb			
7186-S	1/28/08	1/28/09	CLP Spike	Stock, Received	100 mL	See #	High	0731305	CT
7187-S	1/28/08	1/28/09	CRDL	↓	↓	7186-S	Purity		↓
						7187-S	↓	0701208	

Reviewed By: _____ Date: _____

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Life Science Laboratories, Inc. — **Trace Metals Section** — **Standards Prep Logbook**

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7308-S	3/24/08	3/24/08	Hg - 50 ppb (WORKING STD)	0.5 mL (7321-S) + 4 mL Conc HNO3	↗ 200 mL w/ DI	50 ppb	AccuSTD	7321-S	CT
7309-S			Hg - 50 ppb (REF STD)	0.5 mL (7322-S) + 4 mL Conc HNO3	↓	50 ppb	Baker	E27427	↓
7310-S			ICB / CCB	0.5 mL Conc. HNO3		—	Absolute	7322-S	CT
							Baker	E27027	
7311-S	3/24/08	3/24/08	Hg Cal Curve (WATER)	0.0 mL (7308-S)	↗ 50 mL w/ DI	0.0 ppb	AccuSTD	7308-S	CT
				0.2 mL	↓	0.2			↓
				0.5 mL		0.5			
				1.0 mL		1.0			
				2.0 mL		2.0			
				5.0 mL		5.0			
				10.0 mL		10.0			
7312-S	3/24/08	3/24/08	ICV (Hg)	4.0 mL (7309-S)	↗ 50 mL w/ DI	4.0 ppb	Absolute	7309-S	CT
7313-S			CRA (Hg)	0.2 mL (7308-S)		0.2 ppb	AccuSTD	7308-S	
7314-S			CCV (Hg)	2.0 mL	↓	2.0	↓		↓
7315-S	3/25/08	3/25/09	Low Level Cal Std.	Soil prep sheet in metals certificate book			AccuSTD	—	CT
7316-S	3/25/08	3/25/09	Low Level Cal Std.	100X	↓				↓
7317-S	3/25/08	3/25/09	Low Level Cal Std.	1 mL (7315-S)	↗ 100 mL	See #	AccuSTD	7315-S	CT
			(1X)	+ 3 mL Conc HNO3	w/ DI	7315-S	Baker	E27027	
				+ 10 mL (1:1) HCl	↓		↓	2670-R	↓

Reviewed By: _____ Date: _____

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Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - S (100X) Standard Number: 7315-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	1.00	10
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.50	5
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.10	1
Beryllium	AccuSTD	B5115083	6338-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.00	100
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.10	1
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.20	2
Iron	AccuSTD	B6035048	6344-S	1,000	100	0.30	3
Lead	AccuSTD	B6075090	6345-S	1,000	100	0.30	3
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6348-S	1,000	100	0.30	3
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	2.00	200
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.60	6
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	E27027	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 3/25/08 Date Expires: 3/25/09

Prepared By: Cang Tran Reviewed By: M Tashandi

Multielement Standard Preparation

Name of Standard: LOW LEVEL CAL STD - W (100X) Standard Number: 7316-S

Element	Manufacturer	Lot #	Std #	Initial Conc. (mg/L)	Final Volume (mL)	Volume Used (mL)	Final Conc. (mg/L)
Aluminum	AccuSTD	B5105043	6334-S	10,000	100	0.20	20
Antimony	AccuSTD	B5095031	6335-S	1,000	100	0.50	5
Arsenic	AccuSTD	B5115036	6336-S	1,000	100	0.30	3
Barium	AccuSTD	B5025074	6337-S	1,000	100	0.50	5
Beryllium	AccuSTD	B5115083	6447-S	100	100	0.40	0.4
Boron	AccuSTD	B6085025	6339-S	1,000	100	0.10	1
Cadmium	AccuSTD	B6115069	6448-S	100	100	0.50	0.5
Calcium	AccuSTD	B6065137	6341-S	10,000	100	1.10	110
Chromium	AccuSTD	B6065124	6342-S	1,000	100	0.10	1
Cobalt	AccuSTD	B6125064	6343-S	1,000	100	0.60	6
Copper	AccuSTD	B6095096	6360-S	1,000	100	0.10	1
Iron	AccuSTD	B6035048	6344-S	1,000	100	2.00	20
Lead	AccuSTD	B6075090	6449-S	100	100	2.50	2.5
Magnesium	AccuSTD	B5015118	6346-S	10,000	100	1.00	100
Manganese	AccuSTD	B6065026	6347-S	1,000	100	0.10	1
Molybdenum	AccuSTD	B6065081	6450-S	100	100	1.50	1.5
Nickel	AccuSTD	B4065040	6349-S	1,000	100	0.20	2
Potassium	AccuSTD	B5075123	6350-S	10,000	100	1.00	100
Selenium	AccuSTD	B6065129	6351-S	1,000	100	0.30	3
Silver	AccuSTD	B6125004	6446-S	500	100	0.20	1
Sodium	AccuSTD	B6025117	6353-S	10,000	100	1.00	100
Thallium	AccuSTD	B6055036	6355-S	1,000	100	0.80	8
Vanadium	AccuSTD	B7025121	6358-S	1,000	100	0.10	1
Zinc	AccuSTD	B6015140	6359-S	1,000	100	0.20	2
HNO3	J T Baker	E27027	-	Conc.	100	6.0	6%

Comment: _____

Date Prepared: 3/25/08 Date Expires: 3/25/09

Prepared By: Cang Tran Reviewed By: M Tashandi

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7318-S	3/25/08	7/25/09	Low Level Cal STD (IX)	1 mL (7316-S) + 3 mL Conc. HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	See # 7316-S	Accustd Baker	7316-S E27027	CT
7319-S	3/27/08	7/27/09	CRI (Low level)	0.1 mL (6349-S) Cu, 0.5 mL (6342-S) Cr, 0.5 mL (6326-S) Cd, 1.0 mL (6349-S) Ni, 0.5 mL (6326-S) As, 0.5 mL (6347-S) Pb, 0.5 mL (6327-S) Se, 1.0 mL (6329-S) Zn + 5 mL Conc. HNO3	100 mL w/ DI	Cu-5 ppm, Cr-5, Cd-5, Ni-10, As-5, Pb-5, Se-5, Zn-10	Accustd Baker	6342-S, 6326-S, 6349-S, 6326-S, 6347-S, 6327-S, 6329-S E27027	CT
7320-S	3/27/08	7/27/09	CRI (Low level) IX	0.1 mL (7319-S) + 3 mL Conc. HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	See # 7319-S	Accustd Baker	7319-S E27027	CT
7321-S	7/27/08	1/2/09	CRI (Zero)	0.1 mL (7319-S) + 3 mL Conc. HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	See # 7319-S	High Purity Baker	7319-S E27027	CT
7322-S	3/25/08	3/25/08	Hg 50 ppb (Ref Std)	0.5 mL (7282-S) + 4 mL HNO3	200 mL w/ DI	50 ppb	Absolute Baker	7282-S E27027	
7323-S	3/25/08	7/10/08	ICPAB	20 mL (7017-S) + 20 mL (6948-S) + 2 mL (6324-S) + 20 mL (1:1) HCl + 6 mL Conc. HNO3	200 mL w/ DI	See # 7017-S, 6948-S, 6324-S	High Purity Accustd Baker	7017-S 6948-S 7324-S 2670-R E27027	CT

Reviewed By: _____ Date: _____

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Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7324-S	3/27/08	3/27/09	ICPB-2 (ICPAB)	5 mL (6329-S) B, 5 mL (6330-S) K, 5 mL (6348-S) Mo, 1.0 mL (6373-S) Na, 5 mL (6326-S) Sn, 5 mL (6324-S) Sr, 5 mL (6327-S) Ti + 3 mL Conc. HNO3 + 10 mL (1:1) HCl	100 mL w/ DI	Accustd Baker	B-50 ppm, K-500, Mo-50, Na-100, Sn-50, Sr-50, Ti-50	6329-S, 6330-S, 6348-S, 6373-S, 6326-S, 6324-S, 6327-S E27027	CT
7325-S	3/27/08	11/2/08	ICPA (ICPAB)	20 mL (7017-S) + 20 mL (1:1) HCl + 6 mL Conc. HNO3	200 mL w/ DI	See # 7017-S	High Purity Baker	7017-S 2670-R E27027	CT
7326-S	3/27/08	3/27/09	50 ppb Hg (Ref Std)	0.5 mL (7282-S) + 4 mL Conc. HNO3	200 mL w/ DI	50 ppb	Accustd Baker	7282-S E27027	DR
7327-S	3/27/08	3/27/09	50 ppb Hg (Ref Std)	0.5 mL (7282-S) + 4 mL Conc. HNO3	200 mL w/ DI	50 ppb	Absolute Baker	7282-S E27027	DR
7328-S	3/27/08	3/27/09	ICB/CCIS	0.5 mL Conc. HNO3	200 mL w/ DI	—	Baker	E27027	DR
7329-S (Jan-Dec)	3/27/08	3/27/09	ICV-Hg Soil	40 mL (7327-S)	50 mL w/ DI	40 ppb	Absolute	(7327-S)	DR
			CRA CCV (Solu)	0.5 mL (7326-S) 2.0 mL	0.2 w/ DI	2.0	Accustd	(7326-S)	

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HIGH-PURITY STANDARDS

Certificate of Analysis

SM-108-001 (Spike)
Solution A
Lot # 0819603

(7556-S)
Received - 7/15/08
Opened - 7/15/08
Expire - 7/14/09

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.95+%	HNO_3, 2%	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Exp Date: JUL 14 2009
MSDS ATTACHED

Theodore C. Rains, Ph.D.
President

www.highpuritystandards.com

(7556-S)
Received - 7/15/08
Opened - 7/15/08
Expire - 7/14/09

SM-108-001 (SPIKE)
Solution A
Element List
(µg/mL)

Aluminum	100
Arsenic	20
Barium	20
Beryllium	20
Boron	50
Cadmium	20
Calcium	1000
Chromium	20
Cobalt	20
Copper	20
Iron	100
Lead	20
Magnesium	1000
Manganese	20
Nickel	20
Potassium	1000
Selenium	20
Sodium	1000
Strontium	20
Thallium	20
Vanadium	20
Zinc	20

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HIGH-PURITY STANDARDS

Certificate of Analysis

7557-5

SM-108-001 (SPIKE)

Received - 7/15/08
Opened - 7/15/08
Expire - 7/14/09

Solution B

Lot # 0819604

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals Salts or Oxides	99.996+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5%
			Antimony 20
			Molybdenum 20
			Silver 5
			Tin 20
			Titanium 20

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date JUL 1 4 2009
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Life Science Laboratories, Inc. — Standards Prep Logbook — Trace Metals Section

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7549-5 7557-5	7-8-08	7-8-08	Jcu Hg	4.0 mL (7595-5)	50 mL w/DI	4.0 ppb	Absolute	(7595-5)	DR
7557-5	7/14/08	7/14/08	ICV (ICAP)	2 mL (6796-5) 2 mL (6797-5) 6 mL conc HNO3 20 mL (1:1) HCl	200 mL w/DI	See # 6796-5 6797-5	High Purity Baker	6796-5 6797-5 E27027 2670-R	CT
7549-5 7557-5	7/15/08	7/15/08	Hg cal. 50 ppb (Working STD)	0.5 mL (7281-5) + 4 mL conc HNO3	200 mL w/DI	50 ppb	Accustd Baker	(7281-5) E27027	DR
7557-5	7/15/08	7/15/08	Hg Reg. 50 ppb (REF STD)	0.5 mL (7282-5) + 4 mL conc HNO3	200 mL w/DI	50 ppb	Absolute Baker	(7282-5) E27027	DR
7549-5	7/15/08	7/15/08	ICB/CCB	0.5 mL (7282-5) + 4 mL conc HNO3	200 ml w/DI	-	Baker	E27027	DR
7549-5 7557-5	7/15/08	7/15/08	Hg, 50 ppb (Working STD)	0.5 mL (7281-5) + 4 mL conc. HNO3	200 mL w/DI	50 ppb	Accustd	7281-5	CT
7557-5	7/15/08	7/15/08	Hg, 50 ppb REF STD	0.5 mL (7282-5) + 4 mL conc. HNO3		50 ppb	Baker Absolute	E27027 7282-5 E27027	
7557-5	7/15/08	7/15/08	ICB/CCB	0.5 mL conc HNO3		-	Baker	E27027	
7557-5	7/15/08	7/15/08	ICV (Hg)	4.0 mL (7595-5)	50 mL w/DI	4 ppb	Absolute	7595-5	CT
7557-5	7/15/08	7/15/08	CRA (Hg)	0.2 mL (7595-5)		0.2 ppb	Accustd	7549-5	
7557-5	7/15/08	7/15/08	ICV (Hg)	2.0 mL (7595-5)		2 ppb			

Reviewed By: ____ Date ____

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Life Science Laboratories, Inc. — Standards Prep Logbook — Trace Metals Section

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7557-5	7/15/08	7/15/08	Hg Cal Curve (Std.)	0.0 mL (7549-5) 0.2 0.5 1.0 2.0 5.0 10.0	50 mL w/DI	0.0 ppb 0.2 0.5 1.0 2.0 5.0 10.0	Accustd	7549-5	CT
7557-5	7/15/08	7/14/09	QC spike Solution A	Stock, Received 500 mL	500 mL	See # 7556-5 7559-5	High Purity	0819603	CT
7556-5	7/15/08	7/14/09	QC spike Solution B					0819604	
7557-5	7/15/08	7/14/09	ICV (ICAP)	2 mL (7556-5) 2 mL (7557-5) 6 mL conc HNO3 20 mL (1:1) HCl	200 mL w/DI	See # 7559-5 7556-5	High Purity Baker	7556-5 7559-5 E27027 2670-R	CT

Reviewed By: ____ Date ____

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HIGH-PURITY STANDARDS

7573-5
Received - 7/23/08
Opened - 7/23/08
Expire - 7/18/09

CAT. NO. ANALCS-R

Certificate of Analysis

CLP Analyte Standard-Revised

Lot # 0728327

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts or Oxides	99.99+%	HNO_3, 2% + Tr HF	µg/mL ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains, Ph.D.
President

Exp Date: JUL 1 8 2009
MSDS ATTACHED

www.highpuritystandards.com

CLP Analyte Standard-Revised

Element List

(µg/mL)

Antimony	60
Arsenic	10
Barium	50
Beryllium	50
Cadmium	100
Chromium	50
Copper	50
Cobalt	50
Lead	5
Manganese	50
Nickel	100
Selenium	5
Silver	20
Thallium	10
Vanadium	50
Zinc	100

7573-5

Received - 7/23/08
Opened - 7/23/08
Expire - 7/18/09

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7570-5	7/21/08	7/21/08	ICV (Hg)	4.0 mL (7569-5)	50 mL (w/ DI)	4.0 ppb	Absolute	7569-5	CT
7571-5			CRA (Hg)	0.2 mL (7566-5)		0.2 ppb	AccuTD	7566-5	
7572-5			CCV (Hg)	2.0 mL (7566-5)		2.0 ppb			
7577-5	7/23/08	7/18/09	ICS8 1	Stock, Received 100 mL	100 mL	See # 7572-5	High Purity	0725227	CT
7574-5	7/23/08	11/2/08	ICAB (ICSAB)	20 mL (7017-5) 2 mL (7324-5)	200 mL (w/ DI)	See # 7017-5	High Purity AccuTD	7017-5	CT
				2 mL (7577-5) + 20 mL (1:1) HCl + 6 mL Conc. HNO3		7324-5	High Purity	7324-5	
						7577-5	Baker	7577-5	
								2630-R	
								E27027	

Reviewed By: _____
Date: _____

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HIGH-PURITY STANDARDS

Certificate of Analysis

7658-5

Received - 9/16/08
Opened - 9/16/08
Expire - 9/10/09

Product Description:

Name:	CLP Interference Check Standard 1
Part number:	**CLP-INF-1**
Lot number:	**0805302**
Matrix:	5% HNO_3
Purity:	99.98% - 99.999%

Certified Values:

Element	(µg/mL)	Element	(µg/mL)	Element	(µg/mL)	Element	(µg/mL)
Al	5000 ± 25	Ca	5000 ± 25	Fe	2000 ± 10	Mg	5000 ± 25

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inducively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval.

Preparation Information:

The highest purity source materials were purchased from qualified vendors per ISO 9001:2000 guidelines and assayed by ICP-OES for conformity prior to use. This standard was prepared using methods developed at NIST for the preparation of SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

a. **Analytical Balance Calibration**: All balances are calibrated weekly by and in-house method using NBS weights Inventory No 20231A. The balances are calibrated yearly and the calibration weights are checked biennially by a qualified metrology company with weights traceable to the primary standards developed by NIST.

b. **Volumetric Device Calibration**: The calibration of all volumetric vessels is checked using the NBS 602 method where all vessels are weighed to five significant figures.

c. **Calibration Standards**: The Calibration Standards are directly traceable to SRM 3100 Series Spectrometric Standard Solutions. The traceability of this standard to NIST is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. A "second source standard" is used when a NIST SRM is not available.

Packaging and Storage Conditions:

The standard solution is guaranteed to be valid for twelve months from the shipping date, provided the solution is kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

Preparation Date:	February 21, 2008
Shipped Date:	SEP 10 2008
Expiration Date:	SEP 10 2009

7658-5

Received - 9/16/08
Opened - 9/16/08
Expire - 9/10/09

Andrew P. Burke, PhD., Inorganic Laboratory Manager

Amy Adams, Quality Manager

Theodore Rains, PhD., President

February 22, 2008
Certificate Issue Date

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7645-5	9-9-08	9-9-08	CCV Hg	2.0 mL (7645-5)	7 50mL w/DI	2.0 ppb	accustd	7645-5	DA
7646-5	9-9-08	9-9-08	ICV Hg (WATER)	4.0 mL (7646-5)	7 50mL w/DI	4.0 ppb	Absolute	7646-5	DA
7647-5	9-16-08	10-16-08	TCLP Hg SPK SOLN	2.5 mL (7292-5) + 5mL 0.0001 HNO3	7 50mL w/DI	1 mg/L	Absolute Baker	7292-5 6470267	DA
7657-5	9/16/08	9/16/09	ICSA	Stock, Received	250mL	Std. # 7657-5	High Purity	0807202	CT

G:\Logbooks 2006\TM\TM1 StdPrep.met

Reviewed By: _____ Date: _____

111

1176

Mercury Data

1177

Analytical Results

1178

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-1*
W Order:	0810083	Collection Date:	10/10/08 9:20
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100	PrepDate:	10/16/08 0:00
ColumnID:		BatchNo:	8277/R15221
Revision:	10/21/08 8:39	FileID:	1-SAMP-
Col Type:			

Sample Size: 0.3 g; %Moisture: 14.4; TestCode: HG7471S

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.083	J	0.12	0.0039	mg/Kg-dry	1	10/17/08 10:14

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Print/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397774 Project Supervisor: Monika Santucci

1179

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-2*
W Order:	0810083	Collection Date:	10/10/08 9:30
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 10/16/08 0:00
ColumnID:		%Moisture: 25.1	BatchNo: 8277/R15221
Revision:	10/21/08 8:39	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.19		0.13	0.0045	mg/Kg-dry	1	10/17/08 10:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397777 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-3*
W Order:	0810083	Collection Date:	10/10/08 9:45
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 10/16/08 0:00
ColumnID:		%Moisture: 20.4	BatchNo: 8277/R15221
Revision:	10/21/08 8:39	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	0.30		0.13	0.0042	mg/Kg-dry	1	10/17/08 10:23

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397778 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-4*
W Order:	0810083	Collection Date:	10/10/08 10:00
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 10/16/08 0:00
ColumnID:		%Moisture: 23.0	BatchNo: 8277/R15221
Revision:	10/21/08 8:39	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	3.8		1.3	0.044	mg/Kg-dry	10	10/17/08 10:58

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397783 Project Supervisor: Monika Santucci

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0810083-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MBSS-FD*
W Order:	0810083	Collection Date:	10/10/08 10:05
Matrix:	SOIL	Date Received:	10/10/08 13:20
Inst. ID:	FIMS 100	Sample Size: 0.3 g	PrepDate: 10/16/08 0:00
ColumnID:		%Moisture: 17.8	BatchNo: 8277/R15221
Revision:	10/21/08 8:39	TestCode: HG7471S	FileID: 1-SAMP-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7471A		(SW7471A)
Mercury	4.0		1.2	0.041	mg/Kg-dry	10	10/17/08 10:58

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/08 12:49 397784 Project Supervisor: Monika Santucci

QC Summary

1184

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICB | SampType: ICB | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 15221
Client ID: ZZZZZ | Batch ID: R15221 | Method: SW7470A | Analysis Date: 10/17/2008 | SeqNo: 397768
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

28-Oct-08

Page 1 of 6

1185

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: ICV | SampType: ICV | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 15221
Client ID: ZZZZZ | Batch ID: R15221 | Method: SW7470A | Analysis Date: 10/17/2008 | SeqNo: 397757
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00400	0.00020	0.004	0	100	90	110				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

28-Oct-08

Page 2 of 6

1186

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: CCV1 | SampType: CCV | TestCode: HG7470W | Units: mg/L | Prep Date: | RunNo: 15221
Client ID: ZZZZZ | Batch ID: R15221 | Method: SW7470A | Analysis Date: 10/17/2008 | SeqNo: 397779
Instrument: | ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00206	0.00020	0.002	0	103	80	120				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

28-Oct-08

Page 3 of 6

1187

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0810083
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site

Sample ID: CCB2 SampType: CCB TestCode: HG7470W Units: mg/L Prep Date: RunNo: 15221
Client ID: ZZZZZ Batch ID: R15221 Method: SW7470A Analysis Date: 10/17/2008 SeqNo: 397789
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

1190 : 28-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0810083
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site

Sample ID: CCB1 SampType: CCB TestCode: HG7470W Units: mg/L Prep Date: RunNo: 15221
Client ID: ZZZZZ Batch ID: R15221 Method: SW7470A Analysis Date: 10/17/2008 SeqNo: 397780
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

1188 : 28-Oct-08

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: Life Science Laboratories, Inc. Contract:
Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083
AA CRDL Standard Source:
ICP CRDL Standard Source:
Concentration Units: ug/L

Analyte	CRDL Standard for AA Initial True	Initial Found	C	CRDL Standard for AA Final True	Final Found	C	CRDL Standard for ICP Initial True	Initial Found	C	CRDL Standard for ICP Final True	Final Found	C
Mercury	0.2	0.20	98.7									

FORM II (Part 2) - IN 11/04/1

1191

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7470A
Work Order: 0810083
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site

Sample ID: CCV2 SampType: CCV TestCode: HG7470W Units: mg/L Prep Date: RunNo: 15221
Client ID: ZZZZZ Batch ID: R15221 Method: SW7470A Analysis Date: 10/17/2008 SeqNo: 397788
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00208	0.00020	0.002	0	104	80	120				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

1189 : 28-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMSD SampType: MSD TestCode: HG7471S Units: mg/Kg-dry Prep Date: 10/16/2008 RunNo: 15221
Client ID: MBSS-1 Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397776
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.436	0.12	0.39	0.083	90	27	153	0.458	4.9	15	

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

1194 28-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8277 SampType: MBLK TestCode: HG7471S Units: mg/Kg Prep Date: 10/16/2008 RunNo: 15221
Client ID: ZZZZZ Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397770
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

1192 28-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-003B SampType: PDS TestCode: HG7471S Units: mg/Kg-dry Prep Date: 10/16/2008 RunNo: 15221
Client ID: MBSS-3 Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397786
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.687	0.13	0.42	0.297	95	85	115				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

1195 28-Oct-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-001BMS SampType: MS TestCode: HG7471S Units: mg/Kg-dry Prep Date: 10/16/2008 RunNo: 15221
Client ID: MBSS-1 Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397775
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.458	0.12	0.39	0.083	96	27	153				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

1193 28-Oct-08

METALS MDL Verification Summary

Instrument ID(s): FIMS-100 — **Verification Date: 4/24/2008**

Analytical Method	Matrix	Analyte	Date of Init MDL	Init MDL (mg/Kg)	RL (mg/Kg)	MDL Ver Conc. #1	MDL Ver Result#1	MDL Ver %Rec	Is Rec 80-140%	Is MDLV 1-3xMDL?	Does MDL Verify?	If 'no' use MDLV#1?	MDL Ver Conc. #2	MDL Ver Result#2	New MDLV %Rec	New MDL mg/Kg	Is New MDL < .5*RL?
7471A	Soil	Mercury	01/03/06	0.00337	0.100	**0.00835**	0.00866	104%	yes	yes	yes					0.00337	yes
245.5	Soil	Mercury	01/03/06	0.00337	0.100	**0.00835**	0.00866	104%	yes	yes	yes					0.00337	yes

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984.

(MDL=(S.Dev) x (t-value))

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8277 SampType: LCS TestCode: HG7471S Units: mg/Kg Prep Date: 10/16/2008 RunNo: 15221
Client ID: ZZZZZ Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397771
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.857	0.10	0.835	0	103	85	115				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

Lab Name: Life Science Laboratories, Inc. Contract:
Lab Code: LSLB Case No.: SAS No.: SDG No.: 0810083
Method: AV

13
PREPARATION LOG

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCS-8277	10/16/2008	0.30	50
MB-8277	10/16/2008	0.30	50
MBSS-1	10/16/2008	0.30	50
MBSS-1S	10/16/2008	0.30	50
MBSS-1SD	10/16/2008	0.30	50
MBSS-2	10/16/2008	0.30	50
MBSS-3	10/16/2008	0.30	50
MBSS-4	10/16/2008	0.30	50
MBSS-FD	10/16/2008	0.30	50

FORM XIII - IN

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW7471A
Work Order: 0810083
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0810083-003B SampType: SD TestCode: HG7471S Units: mg/Kg-dry Prep Date: 10/16/2008 RunNo: 15221
Client ID: MBSS-3 Batch ID: 8277 Method: SW7471A (SW7471A) Analysis Date: 10/17/2008 SeqNo: 397785
Instrument: ColumnID:

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%D	RPDLimit	Qual
Mercury	0.296	0.63						0.297	0.4	10	J

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

14
ANALYSIS RUN LOG

Lab Name: Life Science Laboratories, Inc Contract:

Lab Code: LSLB Case No. SAS No.: SDG No.: 0810083

Instrument ID Number: FIMS 100 Method: AV

Start Date: 10/17/2008 End Date: 10/17/2008

EPA Sample No.	D/F	Time	Analytes																			
			% R	AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0901																X								
S0.2	1.00	0903																X								
S0.5	1.00	0905																X								
S1.0	1.00	0907																X								
S2.0	1.00	0910																X								
S5.0	1.00	0912																X								
S10.0	1.00	0914																X								
ICV	1.00	0959																X								
ICB	1.00	1001																X								
CRA	1.00	1003																X								
MB-8277	1.00	1005																X								
LCS-8277	1.00	1008																X								
MBSS-1	1.00	1014																X								
MBSS-1S	1.00	1016																X								
MBSS-1SD	1.00	1019																X								
MBSS-2	1.00	1021																X								
MBSS-3	1.00	1023																X								
CCV1	1.00	1025																X								
CCB1	1.00	1027																X								
MBSS-4	10.00	1056																X								
MBSS-4D	10.00	1058																X								
MBSS-3L	5.00	1100																X								
MBSS-3A	1.00	1102																X								
CCV2	1.00	1108																X								
CCB2	1.00	1110																X								

FORM XIV - IN ILM04.1

1200

Raw Data

1201

Life Science Laboratories, Inc. Mercury Run Log

Method: 245.1 / 245.5 / 7470A / 7471A / CLP

Lab ID	SampType		Date	Time	Conc.	Units	Dilution	RawConc.	Comments
Blank	ICAL	Hg	10/17/2008	09:01:26	0	µg/L	1	0	
0.2 ppb	ICAL	Hg	10/17/2008	09:03:34	0	µg/L	1	0	
0.5 ppb	ICAL	Hg	10/17/2008	09:05:44	0	µg/L	1	0	
1.0 ppb	ICAL	Hg	10/17/2008	09:07:54	0	µg/L	1	0	
2.0 ppb	ICAL	Hg	10/17/2008	09:10:07	0	µg/L	1	0	
5.0 ppb	ICAL	Hg	10/17/2008	09:12:19	0	µg/L	1	0	
10.0 ppb	ICAL	Hg	10/17/2008	09:14:33	0	µg/L	1	0	
ICV	ICV	Hg	10/17/2008	09:59:28	4.000664	µg/L	1	4.000664	
ICB	ICB	Hg	10/17/2008	10:01:36	0.000259	µg/L	1	0.000259	
CRA	CRA	Hg	10/17/2008	10:03:45	0.197484	µg/L	1	0.197484	
MB-8277	MBLK	Hg	10/17/2008	10:05:55	0.009758	µg/L	1	0.009758	
LCS-8277	LCS	Hg	10/17/2008	10:08:07	5.140325	µg/L	1	5.140325	
0810082-001A		Hg	10/17/2008	10:10:19	8.612858	µg/L	1	8.612858	
0810082-002A		Hg	10/17/2008	10:12:33	72.91709	µg/L	1	72.91709	Over LR, D/RA
0810083-001B		Hg	10/17/2008	10:14:47	0.426338	µg/L	1	0.426338	
0810083-001BMS	MS	Hg	10/17/2008	10:16:58	2.351718	µg/L	1	2.351718	
0810083-001BMSD	MSD	Hg	10/17/2008	10:19:05	2.239114	µg/L	1	2.239114	
0810083-002B		Hg	10/17/2008	10:21:12	0.880357	µg/L	1	0.880357	
0810083-003B		Hg	10/17/2008	10:23:21	1.417526	µg/L	1	1.417526	
CCV1	CCV	Hg	10/17/2008	10:25:30	2.058082	µg/L	1	2.058082	
CCB1	CCB	Hg	10/17/2008	10:27:39	-0.00065	µg/L	1	-0.00065	
0810083-004B		Hg	10/17/2008	10:29:48	15.9243	µg/L	1	15.9243	Over LR, D/RA
0810083-005B		Hg	10/17/2008	10:31:57	17.54596	µg/L	1	17.54596	6
0810082-002A		Hg	10/17/2008	10:54:11	611.0096	µg/L	20	30.55048	
0810083-004B		Hg	10/17/2008	10:56:22	17.43955	µg/L	10	1.743955	
0810083-005B		Hg	10/17/2008	10:58:33	19.52975	µg/L	10	1.952975	
0810083-003B	SD	Hg	10/17/2008	11:00:46	1.417766	µg/L	5	0.282353	Dilution Test
0810083-003B	PDS	Hg	10/17/2008	11:02:59	3.331114	µg/L	1	3.331114	Recovery Test
0810082-002A		Hg	10/17/2008	11:06:29	741.0661	µg/L	100	7.410661	(SA = 2 µg/L)
CCV2	CCV	Hg	10/17/2008	11:08:42	2.082414	µg/L	1	2.082414	
CCB2	CCB	Hg	10/17/2008	11:10:52	-0.00532	µg/L	1	-0.00532	

Analyst: Cantra Reviewer: [illegible]

Date: 10/24/08 Date: 10/23/08

1202

Perkin-Elmer AAWinLab: 10/17/2008, 08:59:33 AM

Method Name: Hg10
Method Description: Hg with SnCl
Element: Hg

Date: 10/17/2008
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: SAMPLE-W.SIF Results Data Set Name: HG101708

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 10/17/2008
Sample ID: Blank,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0007	0.0044	0.0007	09:00:46	No
2			0.0006	0.0040	0.0006	09:01:26	No
Mean:			0.0006				
SD :			0.0000				
%RSD:			0.9016				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 10/17/2008
Sample ID: 0.2 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0041	0.0310	0.0048	09:02:56	No
2			0.0042	0.0303	0.0048	09:03:34	No
Mean:			0.0041				
SD :			0.0001				
%RSD:			1.2521				

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.02070

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 10/17/2008
Sample ID: 0.5 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0102	0.0702	0.0108	09:05:06	No
2			0.0103	0.0684	0.0109	09:05:44	No
Mean:			0.0102				
SD :			0.0001				
%RSD:			0.7954				

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99994 Slope: 0.02049

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 10/17/2008
Sample ID: 1.0 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0208	0.1414	0.0214	09:07:16	No
2			0.0212	0.1381	0.0218	09:07:54	No
Mean:			0.0210				
SD :			0.0003				
%RSD:			1.4641				

[Hg] Standard number 3 applied. [1.000]
Correlation Coefficient: 0.99981 Slope: 0.02087

CT 10/17/08

Page -1-

1203

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 10/17/2008
Sample ID: 2.0 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0415	0.2778	0.0421	09:09:29	No
2			0.0410	0.2638	0.0416	09:10:07	No
Mean:			0.0412				
SD :			0.0004				
%RSD:			0.8770				

[Hg] Standard number 4 applied. [2.000]
Correlation Coefficient: 0.99993 Slope: 0.02068

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 10/17/2008
Sample ID: 5.0 ppb,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1034	0.6900	0.1040	09:11:41	No
2			0.1054	0.6729	0.1061	09:12:19	No
Mean:			0.1044				
SD :			0.0014				
%RSD:			1.3735				

[Hg] Standard number 5 applied. [5.000]
Correlation Coefficient: 0.99998 Slope: 0.02085

Element: Hg Seq. No.: 7 AS Loc.: 7 Date: 10/17/2008
Sample ID: 10.0 ppb,

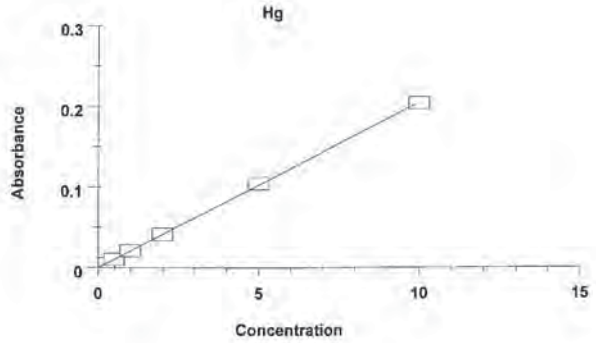
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.2024	1.3523	0.2031	09:13:55	No
2			0.2057	1.3217	0.2063	09:14:33	No
Mean:			0.2040				
SD :			0.0023				
%RSD:			1.1145				

[Hg] Standard number 6 applied. [10.00]
Correlation Coefficient: 0.99992 Slope: 0.02051

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Blank,	0.0006	---	----	----	----
0.2 ppb,	0.0041	0.200	0.202	0.0001	1.3
0.5 ppb,	0.0102	0.500	0.499	0.0001	0.8
1.0 ppb,	0.0210	1.000	1.023	0.0003	1.5
2.0 ppb,	0.0412	2.000	2.011	0.0004	0.9
5.0 ppb,	0.1044	5.000	5.091	0.0014	1.4
10.0 ppb,	0.2040	10.000	9.949	0.0023	1.1

Correlation Coefficient: 0.99992 Slope: 0.02051 ---



Element: Hg Seq. No.: 8 AS Loc.: 9 Date: 10/17/2008
Sample ID: ICV,ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.002	4.002	0.0821	0.5373	0.0827	09:58:50	No
2	4.000	4.000	0.0820	0.5352	0.0827	09:59:26	No
Mean:	4.001	4.001	0.0820				
SD :	0.0013	0.0013	0.0000				
%RSD:							

Element: Hg Seq. No.: 9 AS Loc.: 10 Date: 10/17/2008
Sample ID: ICB,ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0047	0.0007	10:00:58	No
2	0.000	0.000	0.0000	0.0043	0.0006	10:01:36	No
Mean:	0.000	0.000	0.0000				
SD :	0.0009	0.0009	0.0000				
%RSD:	332.6	332.6	332.5765				

Element: Hg Seq. No.: 10 AS Loc.: 11 Date: 10/17/2008
Sample ID: CRA,CRA

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.195	0.195	0.0040	0.0307	0.0046	10:03:07	No
2	0.200	0.200	0.0041	0.0309	0.0048	10:03:45	No
Mean:	0.197	0.197	0.0041				
SD :	0.0037	0.0037	0.0001				
%RSD:	1.9	1.9	1.8805				

Element: Hg Seq. No.: 11 AS Loc.: 12 Date: 10/17/2008
Sample ID: MB-8277,MBLK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0002	0.0058	0.0008	10:05:17	No
2	0.010	0.010	0.0002	0.0062	0.0009	10:05:55	No
Mean:	0.010	0.010	0.0002				
SD :	0.0005	0.0005	0.0000				
%RSD:	5.3	5.3	5.3389				

Element: Hg Seq. No.: 12 AS Loc.: 13 Date: 10/17/2008
Sample ID: LCS-8277,LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.097	5.097	0.1045	0.6921	0.1052	10:07:29	No
2	5.183	5.183	0.1063	0.6829	0.1070	10:08:07	No
Mean:	5.140	5.140	0.1054				
SD :	0.0610	0.0610	0.0013				
%RSD:	1.2	1.2	1.1864				

Element: Hg Seq. No.: 13 AS Loc.: 14 Date: 10/17/2008
Sample ID: 0810082-001A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	8.544	8.544	0.1752	1.1691	0.1759	10:09:41	No
2	8.681	8.681	0.1780	1.1429	0.1787	10:10:19	No
Mean:	8.613	8.613	0.1766				

SD :	0.0969	0.0969	0.0020
%RSD:	1.1	1.1	1.1251

Element: Hg Seq. No.: 14 AS Loc.: 15 Date: 10/17/2008
Sample ID: 0810082-002A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	74.19	74.19	1.5216	18.0176	1.5222	10:11:55	No
Sample absorbance is greater than that of the highest standard.							
2	71.64	71.64	1.4693	17.1433	1.4700	10:12:33	No
Sample absorbance is greater than that of the highest standard.							
Mean:	72.92	72.92	1.4954				
SD :	1.801	1.801	0.0369				
%RSD:	2.5	2.5	2.4702				
Sample absorbance is greater than that of the highest standard.							

Element: Hg Seq. No.: 15 AS Loc.: 16 Date: 10/17/2008
Sample ID: 0810083-001B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.394	0.394	0.0081	0.0372	0.0087	10:14:09	No
2	0.458	0.458	0.0094	0.0553	0.0100	10:14:47	No
Mean:	0.426	0.426	0.0087				
SD :	0.0453	0.0453	0.0009				
%RSD:	10.6	10.6	10.6179				

Element: Hg Seq. No.: 16 AS Loc.: 17 Date: 10/17/2008
Sample ID: 0810083-001BMS,MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.314	2.314	0.0475	0.3134	0.0481	10:16:20	No
2	2.389	2.389	0.0490	0.3115	0.0496	10:16:58	No
Mean:	2.352	2.352	0.0482				
SD :	0.0527	0.0527	0.0011				
%RSD:	2.2	2.2	2.2426				

Element: Hg Seq. No.: 17 AS Loc.: 18 Date: 10/17/2008
Sample ID: 0810083-001BMSD,MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.191	2.191	0.0449	0.2979	0.0456	10:18:27	No
2	2.287	2.287	0.0469	0.2961	0.0475	10:19:05	No
Mean:	2.239	2.239	0.0459				
SD :	0.0676	0.0676	0.0014				
%RSD:	3.0	3.0	3.0176				

Element: Hg Seq. No.: 18 AS Loc.: 19 Date: 10/17/2008
Sample ID: 0810083-002B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.855	0.855	0.0175	0.1174	0.0182	10:20:34	No
2	0.866	0.866	0.0178	0.1190	0.0184	10:21:12	No
Mean:	0.860	0.860	0.0176				
SD :	0.0082	0.0082	0.0002				
%RSD:	1.0	1.0	0.9532				

Perkin-Elmer AAWinLab: 10/17/2008, 10:21:39 AM

Element: Hg Seq. No.: 19 AS Loc.: 20 Date: 10/17/2008
Sample ID: 0810083-003B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.421	1.421	0.0291	0.1924	0.0298	10:22:43	No
2	1.414	1.414	0.0290	0.1934	0.0297	10:23:21	No
Mean:	1.418	1.418	0.0291				
SD :	0.0045	0.0045	0.0001				
%RSD:	0.3	0.3	0.3151				

Element: Hg Seq. No.: 20 AS Loc.: 21 Date: 10/17/2008
Sample ID: CCV1,CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.074	2.074	0.0425	0.2728	0.0432	10:24:52	No
2	2.042	2.042	0.0419	0.2715	0.0425	10:25:30	No
Mean:	2.058	2.058	0.0422				
SD :	0.0230	0.0230	0.0005				
%RSD:	1.1	1.1	1.1184				

Element: Hg Seq. No.: 21 AS Loc.: 22 Date: 10/17/2008
Sample ID: CCB1,CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0044	0.0006	10:27:01	No
2	0.000	0.000	0.0000	0.0041	0.0007	10:27:39	No
Mean:	-0.001	-0.001	0.0000				
SD :	0.0014	0.0014	0.0000				
%RSD:	159.2	159.2	159.2123				

Element: Hg Seq. No.: 22 AS Loc.: 23 Date: 10/17/2008
Sample ID: 0810083-004B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	15.99	15.99	0.3278	2.1639	0.3285	10:29:10	No
Sample absorbance is greater than that of the highest standard.							
2	15.86	15.86	0.3253	2.1632	0.3260	10:29:49	No
Sample absorbance is greater than that of the highest standard.							
Mean:	15.92	15.92	0.3266				
SD :	0.0862	0.0862	0.0018				
%RSD:	0.5	0.5	0.5414				
Sample absorbance is greater than that of the highest standard.							

Element: Hg Seq. No.: 23 AS Loc.: 24 Date: 10/17/2008
Sample ID: 0810083-005B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	17.42	17.42	0.3573	2.4011	0.3580	10:31:19	No
Sample absorbance is greater than that of the highest standard.							
2	17.67	17.67	0.3624	2.3264	0.3630	10:31:57	No
Sample absorbance is greater than that of the highest standard.							
Mean:	17.55	17.55	0.3598				
SD :	0.1740	0.1740	0.0036				
%RSD:	1.0	1.0	0.9918				
Sample absorbance is greater than that of the highest standard.							

1208

Element: Hg Seq. No.: 24 AS Loc.: 25 Date: 10/17/2008
Sample ID: 0810082-002A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	611.9	30.60	0.6275	4.2952	0.6281	10:53:33	No
Sample absorbance is greater than that of the highest standard.							
2	610.1	30.51	0.6256	4.2446	0.6263	10:54:11	No
Sample absorbance is greater than that of the highest standard.							
Mean:	611.0	30.55	0.6266				
SD :	1.281	0.0641	0.0013				
%RSD:	0.2	0.2	0.2097				
Sample absorbance is greater than that of the highest standard.							

Element: Hg Seq. No.: 25 AS Loc.: 26 Date: 10/17/2008
Sample ID: 0810083-004B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	17.19	1.719	0.0353	0.2311	0.0359	10:55:44	No
2	17.69	1.769	0.0363	0.2384	0.0369	10:56:22	No
Mean:	17.44	1.744	0.0358				
SD :	0.3477	0.0348	0.0007				
%RSD:	2.0	2.0	1.9940				

Element: Hg Seq. No.: 26 AS Loc.: 27 Date: 10/17/2008
Sample ID: 0810083-005B,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	19.50	1.950	0.0400	0.2644	0.0406	10:57:55	No
2	19.56	1.956	0.0401	0.2642	0.0408	10:58:33	No
Mean:	19.53	1.953	0.0401				
SD :	0.0406	0.0041	0.0001				
%RSD:	0.2	0.2	0.2080				

Element: Hg Seq. No.: 27 AS Loc.: 28 Date: 10/17/2008
Sample ID: 0810083-003B,SD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.397	0.279	0.0057	0.0404	0.0064	11:00:08	No
2	1.427	0.285	0.0059	0.0396	0.0065	11:00:46	No
Mean:	1.412	0.282	0.0058				
SD :	0.0215	0.0043	0.0001				
%RSD:	1.5	1.5	1.5205				

Element: Hg Seq. No.: 28 AS Loc.: 29 Date: 10/17/2008
Sample ID: 0810083-003B,PDS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.298	3.298	0.0676	0.4477	0.0683	11:02:21	No
2	3.364	3.364	0.0690	0.4357	0.0696	11:02:59	No
Mean:	3.331	3.331	0.0683				
SD :	0.0469	0.0469	0.0010				
%RSD:	1.4	1.4	1.4094				

1209

Element: Hg Seq. No.: 29 AS Loc.: 30 Date: 10/17/2008
Sample ID: 0810082-002A,

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	742.7	7.427	0.1523	0.9923	0.1530	11:05:51	No
2	739.5	7.395	0.1517	0.9938	0.1523	11:06:29	No
Mean:	741.1	7.411	0.1520				
SD :	2.256	0.0226	0.0005				
%RSD:	0.3	0.3	0.3045				

Element: Hg Seq. No.: 30 AS Loc.: 31 Date: 10/17/2008
Sample ID: CCV2,CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.107	2.107	0.0432	0.2761	0.0439	11:08:04	No
2	2.058	2.058	0.0422	0.2728	0.0429	11:08:42	No
Mean:	2.082	2.082	0.0427				
SD :	0.0343	0.0343	0.0007				
%RSD:	1.6	1.6	1.6471				

Element: Hg Seq. No.: 31 AS Loc.: 32 Date: 10/17/2008
Sample ID: CCB2,CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0001	0.0038	0.0006	11:10:14	No
2	-0.006	-0.006	-0.0001	0.0033	0.0005	11:10:52	No
Mean:	-0.005	-0.005	-0.0001				
SD :	0.0008	0.0008	0.0000				
%RSD:	14.8	14.8	14.7642				

1210

Laboratory Worksheets

1211

Life Science Laboratories, Inc.

MERCURY DIGESTION LOGBOOK — QC BATCH # — — Date: 10/16/08

Sample ID	Client ID	Initial Sample Size	Final Volume (mL)	Method	Comments
0.0 ppb STD	—	0.0 mL	50	7471A	7718-5
0.2		0.2			
0.5		0.5			
1.0		1.0			
2.0		2.0			
5.0		5.0			
10.0		10.0			
ICV		4.0			7715-5
ICB		10			7714-5
CRA		0.2			7716-5
CCV		2.0			7717-5
CCB		10			7714-5

CT 10/16/08.

Reagents/stds #:
(A) 50 ppb working std soln # 7712-5
(B) 50 ppb reference std soln # 7713-5
(C) — mL of spike soln # —

HNO_3 # —
H_2SO_4 # —
$K_2S_2O_8$ # —
Aqua Regia # 2911-R
$KMnO_4$ # 2878-R
$NaCl(NH_2OH)$ # 2852-R
Carrier # 2912-R
$SnCl_2$ # 2913-R

Prepared By: Cang Tran
Date: 10/16/08
Reviewed By: M Tran
Date: 10/22/08

Digestion start: 12:00 finish: 12:30 Temperature: 95 °C

G:\Logbooks 2006\TM\TM2 Hg 2006

1 1212

Life Science Laboratories, Inc.

MERCURY DIGESTION LOGBOOK — QC BATCH # 8277 — Date: 10/16/08

Sample ID	Client ID	Initial Sample Size	Final Volume (mL)	Method	Comments
MB-8277	—	0.30g	50	7471A	Teflon chips (2177-R)
LCS-8277					5mL (B)
0810082-001A	[redacted]				
-002A					
0810087-001B	City of Geneva				
-001BMS					2mL (B)
-001BMSD					
-002B					
-003B					
-004B					
-005B					

CT 10/16/08.

Reagents/stds #:
(A) 50 ppb working std soln # 7712-5
(B) 50 ppb reference std soln # 7713-5
(C) — mL of spike soln # —

HNO_3 # —
H_2SO_4 # —
$K_2S_2O_8$ # —
Aqua Regia # 2911-R
$KMnO_4$ # 2878-R
$NaCl(NH_2OH)$ # 2852-R
Carrier # 2912-R
$SnCl_2$ # 2913-R

Prepared By: Cang Tran
Date: 10/16/08
Reviewed By: M Tran
Date: 10-22-08

Digestion start: 12:00 finish: 12:30 Temperature: 95 °C

G:\Logbooks 2006\TM\TM2 Hg 2006

2 1213

Life Science Laboratories, Inc. — **Trace Metals Section** — **Standards Prep Logbook**

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7707-5	10/13/08	10/13/08	Hg - 50 ppb (Working STD)	0.5mL (7281-5) + 4mL Conc. HNO3	50 mL w/ DI	50 ppb	AccuSTD	7281-5	CT
7704-5			Hg - 50 ppb (REF STD)	0.5mL (7282-5) + 4mL Conc. HNO3		50 ppb	Baker	E27027	
7707-5			ICB/CCB	0.5mL Conc. HNO3		—	Absolute	7282-5	
7706-5	10/13/08	10/13/08	ICV (Hg)	4.0mL (7704-5)	50 mL w/ DI	4.0 ppb	Baker	E27027	
7707-5			CRA (Hg)	0.2mL (7707-5)		0.2	Absolute	7704-5	CT
7709-5			CCV (Hg)	2.0mL (7707-5)		2.0	AccuSTD	7707-5	
7710-5	10/13/08	10/13/08	Hg Cal Curve (WATER)	0.0mL (7707-5)		0.0 ppb	AccuSTD	7707-5	CT
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7711-5	10/17/08	10/17/08	TCLP Hg SPK SOLN	2.5mL (7282-5) + 5mL 10% HNO3	50 mL w/ DI	1 ppm	ABSOLUTE BAKER	(7282-5) E27027	DC
7712-5	10/16/08	10/16/08	Hg - 50 ppb (working STD)	0.5mL (7281-5) + 4mL Conc. HNO3	50 mL w/ DI	50 ppb	AccuSTD	7281-5	CT
7713-5			Hg - 50 ppb (REF STD)	0.5mL (7282-5) + 4mL Conc. HNO3		50 ppb	Baker E27027 Absolute	7282-5	
7714-5			ICB/CCB	0.5mL Conc. HNO3		—	Baker	E27027	

Reviewed By: _____ Date: _____

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116

1214

Life Science Laboratories, Inc. — **Trace Metals Section** — **Standards Prep Logbook**

Standard Number	Date Prepared and/or Received	Date Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7715-5	10/16/08	10/16/08	ICV (Hg)	4.0mL (7713-5)	50 mL w/ DI	4.0 ppb	Absolute	7713-5	CT
7716-5			CRA (Hg)	0.2mL (7712-5)		0.2	AccuSTD	7712-5	
7717-5			CCV (Hg)	2.0mL (7712-5)		2.0			
7718-5	10/16/08	10/16/08	Hg Cal Curve (WATER)	0.0mL (7712-5)		0.0 ppb	AccuSTD	7712-5	CT
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			
7719-5	10/16/08	10/16/08	ICV (Hg)	4.0mL (7713-5)	50 mL w/ DI	4.0 ppb	Absolute	7713-5	CT
7720-5			CRA (Hg)	0.2mL (7712-5)		0.2	AccuSTD	7712-5	
7721-5			CCV (Hg)	2.0mL (7712-5)		2.0			
7722-5	10/16/08	10/16/08	Hg Cal Curve (WATER)	0.0mL (7712-5)		0.0 ppb	AccuSTD	7712-5	
				0.2		0.2			
				0.5		0.5			
				1.0		1.0			
				2.0		2.0			
				5.0		5.0			
				10.0		10.0			

Reviewed By: _____ Date: _____

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117

1215

125 Market Street
New Haven, CT 06513 USA

AccuStandard, Inc.

Tel (203)786-5290 Fax (203)786-5287
Web AccuStandard.com

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: TCLP-02-I

Element: TCLP Standard #2 - Mercury **Lot Number:** B8025003

Matrix: 5% HNO3 **Expiration Date:** Feb / 2010

7281-S
Received - 3/12/08
Opened -
Expire - 2/28/10

Actual Lot Analysis

TCLP Standard #2 - Mercury 20µg/mL

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

The concentration of the final solution was verified by ICP against NIST SRM# 3133

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervis

AccuStandard is accredited to ISO/IEC 17025:2005

AccuStandard

1216

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

ISO 9001 QS Registered
ISC 25 Accredited

CERTIFIED WEIGHT REPORT:

Part Number: 52009
Lot Number: 060107
Description: Mercury (Hg) (TCLP) Cold Vapor Standard
Expiration Date: 060110

Lot # P676788 — Solvent(s): Nitric Acid

Nominal Concentration (µg/mL):	20		5E-05	Balance Uncertainty	
Weight(s) shown below were combined and diluted to (mL):	500.04	0.026	Flask Uncertainty		

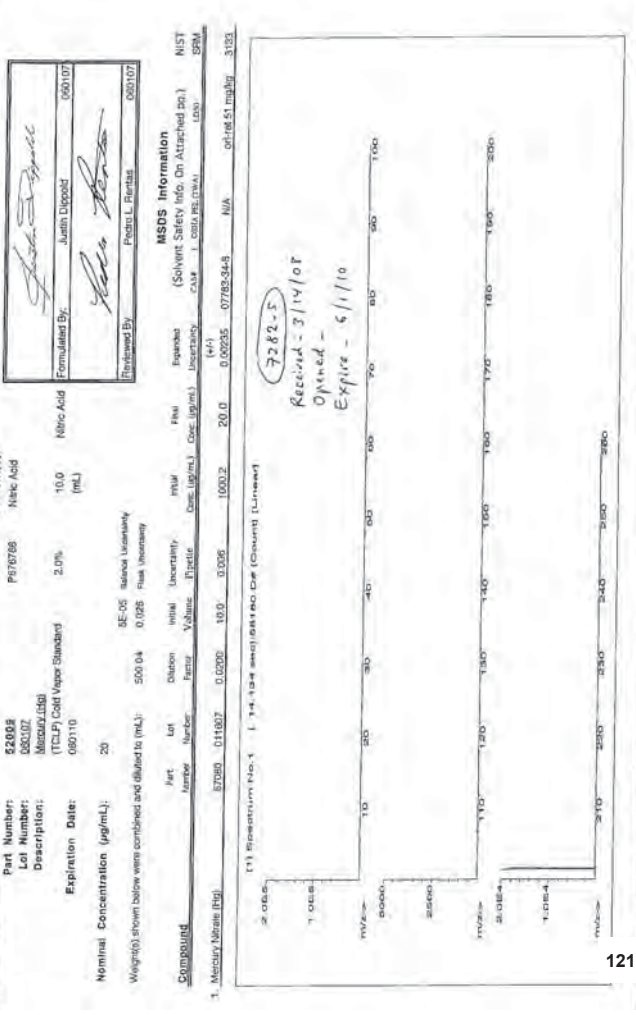
Compound	Part number	Lot number	Dilution Factor	Initial Volume	Initial Uncertainty Pipette	Initial Conc. (µg/mL)	Final Uncertainty (+/-)	Final Conc. (µg/mL)	Expanded Uncertainty	CAS#	Solvent
1. Mercury Nitrate (Hg)	67080	011807	0.0200	10.0	0.006	1000.2	20.0	0.00235	07783-34-8	N/A	0.1M Nitric Acid

Formulated By: Justin Dippold 060107

Reviewed By: Pedro L. Rentas 060107

MSDS Information (Solvent Safety Info. On Attached pg.)

NIST SRM 3133



Part - 52009 Lot # 060107

1 of 2

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1217

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

ISO 9001 QS Registered
ISC 025 Accredited

AbsoluteGrade™ Solution

7282-S
Received - 3/12/08
Opened -
Expire - 6/1/10

Part# 52009
Lot# 060107

Certified Concentration (µg/mL)	Mercury (Hg)
	20.0 (+/-) 0.047

The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise specified.

TRACEABILITY DOCUMENTATION:

A) Classical Chemical Analysis:

Method	Traceability	Concentration (µg/mL)
EDTA Titration	NIST SRM 928 Lead Nitrate	N/A
Gravimetric Analysis	NIST Weights	N/A

B) Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	La	<0.02	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ce	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Pt	<0.02	Se	<0.04	Tc	<0.02	U	<0.02
As	<0.02	Cs	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rb	<0.02	Sr	<0.02	Te	<0.02	V	<0.02
Ba	<0.02	Ca	<0.01	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Re	<0.02	Ag	<0.02	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.1	Hg	<0.2	Pt	<0.02	Rh	<0.02	Na	<0.2	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	Pb	<0.02	Mo	<0.02	K	<0.2	Ru	<0.02	Sr	<0.02	Sn	<0.02	Zn	<0.02
B	<0.01	Cu	<0.02	Au	<0.02	Li	<0.02	Nd	<0.02	Ag	<0.02	Sm	<0.02	Tl	<0.02	Ti	<0.02	Zr	<0.02

(*) = Target Element

C) Physical Characterization:

Analyzed Density of Solution (g/mL):	1.011
Temperature (°C):	21.0

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

We use purified acids, 18 megohm double deionized water, calibrated Class A glassware and the highest purity raw materials available, (typically 99.999%). We meticulously clean our bottles by acid leaching and then triple rinsing with ASTM Type I water prior to use. Our standards are made gravimetrically using balances that are calibrated with weights traceable to NIST. (NIST Test #: 732/245790). We certify that all our standards are (+/-) 0.5% of the stated value unless otherwise stated, assuming that the bottle is kept tightly capped and stored under normal laboratory conditions.

Reference: Taylor, B.N. and Kuyatt, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. government Printing Office, Washington, D.C. (1994).

Part - 52009 Lot # 060107

2 of 2

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1218

Life Science Laboratories, Inc. — Trace Metals Section — Standards Prep Logbook

Standard Number	Date Prepared and/or Received	Expires	Title of Solution	Weight and/or Volume	Final Volume	Final concentration	Manufacturer	Lot # and/or Standard #	Prepared by
7274-S	3/10/08		Hg - 50 ppb	0.5 mL (6037-S)	250 mL	50 ppb	AccuStd	6037-S	CT
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7277-S	3/10/08		Hg - 50 ppb	0.5 mL (7497-S)		50 ppb	Absolute	7497-S	CT
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7276-S	3/10/08		ICB / CCB	0.5 mL Conc. HNO3		—	Baker	E27227	CT
7273-S	3/10/08		Hg Cal Curve	0.0 mL (7274-S)	250 mL	0.0 ppb	AccuStd	7274-S	CT
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7278-S	[illegible]		Cal Hg	0.5		0.5			
7277-S				2.0		2.0			
7276-S				10.0		10.0			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7282-S	3/10/08		Cal (Hg)	2.0 mL (7274-S)	w/ DI	2.0 ppb			CT
7277-S	3/10/08			2.0 mL		2.0 ppb			CT
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7274-S	3/10/08		STD 2	5 mL (7277-S) + 5 mL DI	10	25			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7274-S			STD 2	2 mL (7277-S) + 8 mL DI	10	2		7277-S	

Reviewed By: _____
Date: _____

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1219

Life Science Laboratories - Brittonfield

Percent Moisture DataSheet SM 2540 G

Analysis Date:	October 13, 2008
Batch ID:	R15145
LOQ/RL/PQL	1

Instrument ID:	Denver APX 200

#	LGL ID	Client ID	Sample Type		Dish Wt (g)	Dish Wt + Wet Samp (g)	Dish Wt +Dried Samp (g)		% Moisture	Dish Wt +Ashed Samp @ 550°C (g)		% Volatile Solids	Comments
1	CONTROL				1.3151		1.3156						
2	0810083-001B	OBG-M9	SAMP		1.2997	11.2777	9.8359		14.45				
3	0810083-002B	OBG-M9	SAMP		1.3104	10.5745	8.2447		25.15				
4	0810083-003B	OBG-M9	SAMP		1.3091	10.6605	8.7625		20.37				
5	0810083-004B	OBG-M9	SAMP		1.3053	10.0361	8.0277		23.00				
6	0810083-005B	OBG-M9	SAMP		1.3118	10.8057	9.1182		17.77				
7	0810093-001A	[redacted]	SAMP		1.2994	11.4314	6.9908		43.83				
8	0810093-001ADUP	[redacted]	DUP		1.3121	10.2220	6.2320		44.78				
9													
10													
11													
12													
13													
14													
15													
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25													
26													
27													
28													
29													
30													

	Weight #1
Time on:	17:00
Oven Temp on:	103.0°C
Time Off:	6:40
Oven Temp off:	105.0°C
Oven Date Off:	10/14/08

Prep Start Date:	10/13/08
Prep Start Time:	15:40:00
Prep End Time:	17:00:00
Analyte	PMOIST

Comments:

Analyst: [illegible] 10/14/08

Date: 10/14/08

Reviewed by: [illegible]

Date: 10/14/08

Percent Moisture081013

1222

Wet Chemistry Data

1220

QA Auth | Calc SEQ | Rslts

VAL	SeqNo	SamplID	SampType	Analyte	RawVal	CalcVal	Qual	Tare Wt
✓	396402	0810083-001B	SAMP	Percent Moisture	14.4	14.4		0
✓	396403	0810083-002B	SAMP	Percent Moisture	25.1	25.1		0
✓	396404	0810083-003B	SAMP	Percent Moisture	20.4	20.4		0
✓	396405	0810083-004B	SAMP	Percent Moisture	23	23		0
✓	396406	0810083-005B	SAMP	Percent Moisture	17.8	17.8		0
✓	396407	0810093-001A	SAMP	Percent Moisture	43.8	43.8		0
✓	396408	0810093-001ADUP	DUP	Percent Moisture	44.8	44.8		0

QA 10/14/08

1223

Life Science Laboratories, Inc.

Date: *15-Oct-08*

CLIENT: O'Brien & Gere Engineers, Inc.
Lab Order: 0810083
Project: City of Geneva- Market Basket Site

Sample ID	Lab ID	Units	Date Collected	Date Received	Date Analyzed	Batch ID	Percent Moisture
MBSS-1	0810083-001B	wt%	10/10/2008	10/10/2008	10/13/2008	R15145	14.4
MBSS-2	0810083-002B	wt%	10/10/2008	10/10/2008	10/13/2008	R15145	25.1
MBSS-3	0810083-003B	wt%	10/10/2008	10/10/2008	10/13/2008	R15145	20.4
MBSS-4	0810083-004B	wt%	10/10/2008	10/10/2008	10/13/2008	R15145	23.0
MBSS-FD	0810083-005B	wt%	10/10/2008	10/10/2008	10/13/2008	R15145	17.8

1221

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Wednesday, January 14, 2009

Dave Miexelf
O'Brien & Gere Engineers, Inc.
5000 Brittonfield Parkway
PO Box 4873
Syracuse, NY 13221-4873

TEL:

Project: CITY OF GENEVA- MARKET BASKET SITE
RE: Analytical Result Order No.: 0812108

Dear Dave Miexelf:

Life Science Laboratories, Inc. received 13 sample(s) on 12/12/2008 for the analyses presented in the following report.

Very truly yours,
Life Science Laboratories, Inc.

Anthony Crescenzi
Project Manager

Sample Data Summary Package

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I
SAMPLE IDENTIFICATION AND ANALYTICAL SUMMARY

NYS DEC SAMPLE ID	LABORATORY SAMPLE ID	Type	Analytical Requirements					
			VOA GC/MS Method #	BNA GC/MS Method #	VOA GC Method #	MISC GC Method #	METALS Method #	OTHER Method #
MW-2-121108	0812108-001	SAMP	SW8260B	SW8270C				
MW-4-121108	0812108-002	SAMP	SW8260B	SW8270C				
MW-12-121108	0812108-003	SAMP	SW8260B	SW8270C				
MW-13-121108	0812108-004	SAMP	SW8260B	SW8270C				
MW-11R-121108	0812108-005	MS	SW8260B	SW8270C				
MW-11R-121108	0812108-005	MSD	SW8260B	SW8270C				
MW-11R-121108	0812108-005	SAMP	SW8260B	SW8270C				
MW-8-121108	0812108-006	SAMP	SW8260B	SW8270C				
BD-1-121108	0812108-007	SAMP	SW8260B	SW8270C				
MW-3R-121208	0812108-008	SAMP	SW8260B	SW8270C				
MW-9-121208	0812108-009	SAMP	SW8260B	SW8270C				
MW-5-121208	0812108-010	SAMP	SW8260B	SW8270C				
MW-6-121208	0812108-011	SAMP	SW8260B	SW8270C				
MW-7-121208	0812108-012	SAMP	SW8260B	SW8270C				
Trip Blank	0812108-013	SAMP	SW8260B					

SW8260B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-III
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0812108-001A	Groundwater	SW8260B	NONE	NONE	1X
0812108-002A	Groundwater	SW8260B	NONE	NONE	1X
0812108-003A	Groundwater	SW8260B	NONE	NONE	1X
0812108-003ADL	Groundwater	SW8260B	NONE	NONE	10X
0812108-004A	Groundwater	SW8260B	NONE	NONE	1X
0812108-005A	Groundwater	SW8260B	NONE	NONE	1X
0812108-005AMS	Groundwater	SW8260B	NONE	NONE	1X
0812108-005AMSD	Groundwater	SW8260B	NONE	NONE	1X
0812108-006A	Groundwater	SW8260B	NONE	NONE	1X
0812108-007A	Groundwater	SW8260B	NONE	NONE	1X
0812108-008A	Groundwater	SW8260B	NONE	NONE	1X
0812108-009A	Groundwater	SW8260B	NONE	NONE	1X
0812108-010A	Groundwater	SW8260B	NONE	NONE	1X
0812108-011A	Groundwater	SW8260B	NONE	NONE	1X
0812108-012A	Groundwater	SW8260B	NONE	NONE	1X
0812108-013A	Water Q	SW8260B	NONE	NONE	1X

SW8260B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIb

SAMPLE PREPARATION AND ANALYSIS SUMMARY

VOLATILE (VOA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0812108-001A	Groundwater	12/11/08	12/12/08		12/15/08
0812108-002A	Groundwater	12/11/08	12/12/08		12/15/08
0812108-003A	Groundwater	12/11/08	12/12/08		12/15/08
0812108-003ADL	Groundwater	12/11/08	12/12/08		12/16/08
0812108-004A	Groundwater	12/11/08	12/12/08		12/16/08
0812108-005A	Groundwater	12/11/08	12/12/08		12/16/08
0812108-005AMS	Groundwater	12/11/08	12/12/08		12/16/08
0812108-005AMSD	Groundwater	12/11/08	12/12/08		12/16/08
0812108-006A	Groundwater	12/11/08	12/12/08		12/16/08
0812108-007A	Groundwater	12/11/08	12/12/08		12/16/08
0812108-008A	Groundwater	12/12/08	12/12/08		12/16/08
0812108-009A	Groundwater	12/12/08	12/12/08		12/16/08
0812108-010A	Groundwater	12/12/08	12/12/08		12/16/08
0812108-011A	Groundwater	12/12/08	12/12/08		12/16/08
0812108-012A	Groundwater	12/12/08	12/12/08		12/16/08
0812108-013A	Water Q	12/11/08	12/12/08		12/16/08

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIa

SAMPLE PREPARATION AND ANALYSIS SUMMARY

SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	DATE EXTRACTED	DATE ANALYZED
0812108-001B	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-002B	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-003B	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-004B	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-005B	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-005BMS	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-005BMSD	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-006B	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-007B	Groundwater	12/11/08	12/12/08	12/17/08	12/20/08
0812108-008B	Groundwater	12/12/08	12/12/08	12/17/08	12/20/08
0812108-009B	Groundwater	12/12/08	12/12/08	12/17/08	12/20/08
0812105-010B	Groundwater	12/12/08	12/12/08	12/17/08	12/20/08
0812108-011B	Groundwater	12/12/08	12/12/08	12/17/08	12/20/08
0812108-012B	Groundwater	12/12/08	12/12/08	12/17/08	12/20/08

SW8270C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY

SEMIVOLATILE (BNA) ANALYSES

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
0812108-001B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-002B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-003B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-004B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-005B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-005BMS	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-005BMSD	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-006B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-007B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-008B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-009B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-010B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-011B	Groundwater	SW8270C	SW3520C	NONE	1X
0812108-012B	Groundwater	SW8270C	SW3520C	NONE	1X

NARRATIVE

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from O'Brien & Gere Engineers, Inc. for the City of Geneva – Market Basket project. Immediately following the narratives are the Work Order Sample Summary and Dates Report.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The coolers were received intact. When the coolers were received by the laboratory, the sample custodian(s) opened and inspected the shipments for damage, custody inconsistencies and proper preservation. The chain of custody forms documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

No discrepancies were noted upon receipt. The temperature of the iced cooler was 0.0°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1
Semivolatile Organics	SW8270C	1

1) New York State Department of Environmental Conservation Analytical Services Protocol, June 2000.

QUALITY CONTROL

QA/QC results are summarized in the Laboratory Report Package and are also included in the raw data.

RAW DATA

The raw data is organized in the New York State Department of Environmental Conservation Analytical Services Protocol Category B order of data requirements.

Total # of pages in report: _____

GC/MS Volatile Organics Case Narrative

Client: OBG-MS
Project/Order: City of Geneva- Market Basket Site
Work Order #: 0812108
Methodology: 8260B

Analyzed/Reviewed by (Initials/Date): HS 1/2/09
Supervisor/Reviewed by (Initials/Date): [illegible] 1-8-09
QA/QC Review (Initials/Date): [illegible] 1/13/09

File Name: G:\Narratives\MSVoa\0812108msvnar.doc

GC/MS Volatile Organics
The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 40 m x 0.18 mm ID capillary column (MS01 & MS03), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), and Restek Rtx-VMS, 60 m x 0.25mm ID capillary column (MS04), and a Vocarb 3000 adsorbent trap.

There were no excursions to note. All QC results were within established control limits.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Samples were unpreserved.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
All spike recovery and RPD data met method and/or project specific QC criteria.

Surrogate Standards
All surrogate standard recoveries met method and/or project specific QC criteria.

Internal Standards
All internal standard areas met method and/or project specific QC criteria.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

GC/MS Semi-Volatile Organics Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva-Market Basket Site
Work Order #: 0812108
Methodology: 8270C

Analyzed/Reviewed by (Initials/Date): MA 12/30/08
Supervisor/Reviewed by (Initials/Date): [illegible] 1-8-09
QA/QC Review (Initials/Date): [illegible] 1/13/09

File Name: G:\Narratives\MSSemi\0812108svnar.doc

GC/MS Semi-Volatile Organics
The GC/MS Semi-volatile instruments used a J & W DB-5MS, 30 m x 0.25 mm ID capillary column.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MW-11R-121108	0812108-005BMS/MSD	3,3'-Dichlorobenzidine	X		1

1 The recovery marginally exceeded the lower control limit and was not detected above the PQL/RL in the associated samples. The recovery for this compound in the associated LCS and/or MSB was within acceptance limits. No corrective action was taken.

Surrogate Standards
All surrogate standard recoveries met method and/or project specific QC criteria.

Internal Standards
All internal standard areas met method and/or project specific QC criteria.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Life Science Laboratories, Inc.

Date: *14-Jan-09*

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab Order: 0812108

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0812108-001A	MW-2-121108		12/11/2008	12/12/2008
0812108-001B	MW-2-121108		12/11/2008	12/12/2008
0812108-002A	MW-4-121108		12/11/2008	12/12/2008
0812108-002B	MW-4-121108		12/11/2008	12/12/2008
0812108-003A	MW-12-121108		12/11/2008	12/12/2008
0812108-003B	MW-12-121108		12/11/2008	12/12/2008
0812108-004A	MW-13-121108		12/11/2008	12/12/2008
0812108-004B	MW-13-121108		12/11/2008	12/12/2008
0812108-005A	MW-11R-121108		12/11/2008	12/12/2008
0812108-005B	MW-11R-121108		12/11/2008	12/12/2008
0812108-006A	MW-8-121108		12/11/2008	12/12/2008
0812108-006B	MW-8-121108		12/11/2008	12/12/2008
0812108-007A	BD-1-121108		12/11/2008	12/12/2008
0812108-007B	BD-1-121108		12/11/2008	12/12/2008
0812108-008A	MW-3R-121208		12/12/2008	12/12/2008
0812108-008B	MW-3R-121208		12/12/2008	12/12/2008
0812108-009A	MW-9-121208		12/12/2008	12/12/2008
0812108-009B	MW-9-121208		12/12/2008	12/12/2008
0812108-010A	MW-5-121208		12/12/2008	12/12/2008
0812108-010B	MW-5-121208		12/12/2008	12/12/2008
0812108-011A	MW-6-121208		12/12/2008	12/12/2008
0812108-011B	MW-6-121208		12/12/2008	12/12/2008
0812108-012A	MW-7-121208		12/12/2008	12/12/2008
0812108-012B	MW-7-121208		12/12/2008	12/12/2008
0812108-013A	Trip Blank		12/11/2008	12/12/2008

Life Science Laboratories, Inc.

14-Jan-09

DATES REPORT

Lab Order: 0812108
Client: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Sit

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0812108-001A	MW-2-121108	12/11/2008 10:40:00 AM	Groundwater	Volatile Organic Compounds by GC/MS			12/15/2008
0812108-001B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-002A	MW-4-121108	12/11/2008 11:40:00 AM		Volatile Organic Compounds by GC/MS			12/15/2008
0812108-002B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-003A	MW-12-121108	12/11/2008 12:55:00 PM		Volatile Organic Compounds by GC/MS			12/15/2008
0812108-003B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-004A	MW-13-121108	12/11/2008 1:40:00 PM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-004B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-005A	MW-11R-121108	12/11/2008 1:05:00 PM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-005B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-006A	MW-8-121108	12/11/2008 1:55:00 PM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-006B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-007A	BD-1-121108	12/11/2008		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-007B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-008A	MW-3R-121208	12/12/2008 11:05:00 AM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-008B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-009A	MW-9-121208	12/12/2008 11:55:00 AM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-009B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-010A	MW-5-121208	12/12/2008 12:40:00 PM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-010B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-011A	MW-6-121208	12/12/2008 1:45:00 PM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-011B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-012A	MW-7-121208	12/12/2008 3:50:00 PM		Volatile Organic Compounds by GC/MS			12/16/2008
0812108-012B				Semivolatile Organic Compounds by GC/MS		12/17/2008	12/20/2008
0812108-013A	Trip Blank	12/11/2008 10:40:00 AM	Water Q	Volatile Organic Compounds by GC/MS			12/16/2008

Analytical Results

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-2-121108*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15832
Revision:	12/16/08 13:57	FileID:	1-SAMP-J7844.D
Col Type:			

Sample Size: 10 mL; %Moisture:; TestCode: 8260W7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:20
Chloromethane	0.49	J	1.00	0.33	µg/L	1	12/15/08 21:20
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Bromomethane	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Chloroethane	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:20
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/15/08 21:20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Acetone	ND		10.0	1.00	µg/L	1	12/15/08 21:20
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/15/08 21:20
Methyl acetate	ND		5.00	1.00	µg/L	1	12/15/08 21:20
Methylene chloride	ND		2.00	0.15	µg/L	1	12/15/08 21:20
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/15/08 21:20
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
2-Butanone	ND		10.0	1.00	µg/L	1	12/15/08 21:20
Chloroform	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Cyclohexane	1.78		0.50	0.10	µg/L	1	12/15/08 21:20
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Benzene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Trichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Methylcyclohexane	0.97		0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:20
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/15/08 21:20
Toluene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:20
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412419 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-2-121108*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15832
Revision:	12/16/08 13:57	FileID:	1-SAMP-J7844.D
Col Type:			

Sample Size: 10 mL; %Moisture:; TestCode: 8260W7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/15/08 21:20
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Chlorobenzene	0.15	J	0.50	0.10	µg/L	1	12/15/08 21:20
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/15/08 21:20
Styrene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Bromoform	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Isopropylbenzene	0.36	J	0.50	0.10	µg/L	1	12/15/08 21:20
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,3-Dichlorobenzene	0.40	J	0.50	0.10	µg/L	1	12/15/08 21:20
1,4-Dichlorobenzene	0.27	J	0.50	0.16	µg/L	1	12/15/08 21:20
1,2-Dichlorobenzene	0.30	J	0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/15/08 21:20
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/15/08 21:20
Surr: 1,2-Dichloroethane-d4	105		75-134	0.10	%REC	1	12/15/08 21:20
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/15/08 21:20
Surr: 4-Bromofluorobenzene	110		75-125	0.10	%REC	1	12/15/08 21:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412419 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7844.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 14 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000078-78-4	Butane, 2-methyl-	5.78	2.73	J
2.	unknown (7.88)	7.88	4.49	J
3. 000096-14-0	Pentane, 3-methyl-	8.35	5.05	J
4. 000565-59-3	Pentane, 2,3-dimethyl- (10.75)	10.75	3.07	J
5. 000565-59-3	Pentane, 2,3-dimethyl- (10.753	10.75	3.07	J
6. 000822-50-4	Cyclopentane, 1,2-dimethyl-, t	11.58	4.67	J
7. 000822-50-4	Cyclopentane, 1,2-dimethyl-, t	11.58	4.67	J
8. 004516-69-2	Cyclopentane, 1,1,3-trimethyl-	12.38	3.17	J
9. 004516-69-2	Cyclopentane, 1,1,3-trimethyl-	12.38	3.17	J
10. 000591-47-9	Cyclohexene, 4-methyl-	13.29	3.45	J
11. 002207-04-7	Cyclohexane, 1,4-dimethyl-, tr	13.98	3.86	J
12. 006876-23-9	Cyclohexane, 1,2-dimethyl-, tr	14.53	7.05	J
13.	unknown (14.72)	14.72	6.23	J
14. 002207-01-4	Cyclohexane, 1,2-dimethyl-, ci	15.41	4.23	J

FORM 1 TIC 1 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15832
Revision:	12/16/08 13:57	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7845.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:52
Chloromethane	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Bromomethane	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Chloroethane	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:52
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Acetone	ND		10.0	1.00	µg/L	1	12/15/08 21:52
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/15/08 21:52
Methyl acetate	ND		5.00	1.00	µg/L	1	12/15/08 21:52
Methylene chloride	ND		2.00	0.16	µg/L	1	12/15/08 21:52
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/15/08 21:52
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
2-Butanone	ND		10.0	1.00	µg/L	1	12/15/08 21:52
Chloroform	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Cyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Benzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Trichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/15/08 21:52
Toluene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412420 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15832
Revision:	12/16/08 13:57	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7845.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/15/08 21:52
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/15/08 21:52
Styrene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Bromoform	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/15/08 21:52
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/15/08 21:52
Surr: 1,2-Dichloroethane-d4	105		75-134	0.16	%REC	1	12/15/08 21:52
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/15/08 21:52
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	12/15/08 21:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412420 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-4-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7645.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 2 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15832
Revision:	12/16/08 13:57	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7846.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 22:24
Chloromethane	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Bromomethane	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Chloroethane	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 22:24
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/15/08 22:24
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Acetone	ND		10.0	1.00	µg/L	1	12/15/08 22:24
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/15/08 22:24
Methyl acetate	ND		5.00	1.00	µg/L	1	12/15/08 22:24
Methylene chloride	ND		2.00	0.16	µg/L	1	12/15/08 22:24
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/15/08 22:24
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
cis-1,2-Dichloroethene	0.19	J	0.50	0.10	µg/L	1	12/15/08 22:24
2-Butanone	ND		10.0	1.00	µg/L	1	12/15/08 22:24
Chloroform	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Cyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Benzene	0.72		0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Trichloroethene	0.82		0.50	0.10	µg/L	1	12/15/08 22:24
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 22:24
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/15/08 22:24
Toluene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 22:24
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Tetrachloroethene	0.57		0.50	0.10	µg/L	1	12/15/08 22:24

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412421 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15832
Revision:	12/16/08 13:57	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7846.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/15/08 22:24
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Chlorobenzene	71.6	E	0.50	0.10	µg/L	1	12/15/08 22:24
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/15/08 22:24
Styrene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Bromoform	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,3-Dichlorobenzene	210	E	0.50	0.10	µg/L	1	12/15/08 22:24
1,4-Dichlorobenzene	169	E	0.50	0.16	µg/L	1	12/15/08 22:24
1,2-Dichlorobenzene	173	E	0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/15/08 22:24
1,2,4-Trichlorobenzene	0.42	J	1.00	0.10	µg/L	1	12/15/08 22:24
Surr: 1,2-Dichloroethane-d4	102		75-134	0.16	%REC	1	12/15/08 22:24
Surr: Toluene-d8	97		75-125	0.10	%REC	1	12/15/08 22:24
Surr: 4-Bromofluorobenzene	84		75-125	0.10	%REC	1	12/15/08 22:24

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412421 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-12-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLD Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7846.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-DL-J7858.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		10.0	1.00	µg/L	10	12/16/08 13:13
Chloromethane	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Vinyl chloride	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Bromomethane	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Chloroethane	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Trichlorofluoromethane	ND		10.0	1.00	µg/L	10	12/16/08 13:13
1,1-Dichloroethene	ND		5.00	1.60	µg/L	10	12/16/08 13:13
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Acetone	ND		100	10.0	µg/L	10	12/16/08 13:13
Carbon disulfide	ND		5.00	1.10	µg/L	10	12/16/08 13:13
Methyl acetate	ND		50.0	10.0	µg/L	10	12/16/08 13:13
Methylene chloride	ND		20.0	1.60	µg/L	10	12/16/08 13:13
trans-1,2-Dichloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Methyl tert-butyl ether	ND		10.0	1.50	µg/L	10	12/16/08 13:13
1,1-Dichloroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
cis-1,2-Dichloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
2-Butanone	ND		100	10.0	µg/L	10	12/16/08 13:13
Chloroform	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,1,1-Trichloroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Cyclohexane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Carbon tetrachloride	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Benzene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dichloroethane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Trichloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Methylcyclohexane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dichloropropane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Bromodichloromethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
cis-1,3-Dichloropropene	ND		5.00	1.60	µg/L	10	12/16/08 13:13
4-Methyl-2-pentanone	ND		50.0	10.0	µg/L	10	12/16/08 13:13
Toluene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
trans-1,3-Dichloropropene	ND		5.00	1.60	µg/L	10	12/16/08 13:13
1,1,2-Trichloroethane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Tetrachloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413177 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-DL-J7858.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		50.0	10.0	µg/L	10	12/16/08 13:13
Dibromochloromethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dibromoethane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Chlorobenzene	63.6		5.00	1.00	µg/L	10	12/16/08 13:13
Ethylbenzene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Xylenes (total)	ND		10.0	3.00	µg/L	10	12/16/08 13:13
Styrene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Bromoform	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Isopropylbenzene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,1,2,2-Tetrachloroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,3-Dichlorobenzene	214		5.00	1.00	µg/L	10	12/16/08 13:13
1,4-Dichlorobenzene	155		5.00	1.60	µg/L	10	12/16/08 13:13
1,2-Dichlorobenzene	159		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dibromo-3-chloropropane	ND		50.0	10.0	µg/L	10	12/16/08 13:13
1,2,4-Trichlorobenzene	ND		10.0	1.00	µg/L	10	12/16/08 13:13
Surr: 1,2-Dichloroethane-d4	106		75-134	1.60	%REC	10	12/16/08 13:13
Surr: Toluene-d8	101		75-125	1.00	%REC	10	12/16/08 13:13
Surr: 4-Bromofluorobenzene	96		75-125	1.00	%REC	10	12/16/08 13:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413177 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 13:45
Chloromethane	0.59	J	1.00	0.33	µg/L	1	12/16/08 13:45
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 13:45
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 13:45
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 13:45
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 13:45
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 13:45
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 13:45
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 13:45
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 13:45
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 13:45
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 13:45
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 13:45
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413178 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 13:45
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 13:45
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,3-Dichlorobenzene	0.18	J	0.50	0.10	µg/L	1	12/16/08 13:45
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 13:45
1,2-Dichlorobenzene	0.11	J	0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 13:45
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 13:45
Surr: 1,2-Dichloroethane-d4	104		75-134	0.16	%REC	1	12/16/08 13:45
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 13:45
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	12/16/08 13:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413178 Project Supervisor: Anthony Crescenzi

Form I TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-13-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7859.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 5 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-11R-121108*
W Order:	0812108	Collection Date:	12/11/08 13:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7860.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:17
Chloromethane	1.11		1.00	0.33	µg/L	1	12/16/08 14:17
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:17
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Acetone	1.59	J	10.0	1.00	µg/L	1	12/16/08 14:17
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 14:17
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 14:17
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 14:17
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 14:17
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 14:17
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 14:17
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413179 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-11R-121108*
W Order:	0812108	Collection Date:	12/11/08 13:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7860.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 14:17
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 14:17
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 14:17
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 14:17
Surr: 1,2-Dichloroethane-d4	103		75-134	0.16	%REC	1	12/16/08 14:17
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 14:17
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	12/16/08 14:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413179 Project Supervisor: Anthony Crescenzi

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-11R-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7860.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 8 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-8-121108*
W Order:	0812108	Collection Date:	12/11/08 13:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7861.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:49
Chloromethane	1.09		1.00	0.33	µg/L	1	12/16/08 14:49
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:49
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Acetone	1.24	J	10.0	1.00	µg/L	1	12/16/08 14:49
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 14:49
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 14:49
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 14:49
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 14:49
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 14:49
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 14:49
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413180 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-006A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-8-121108*
W Order:	0812108	Collection Date:	12/11/08 13:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7861.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 14:49
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 14:49
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 14:49
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 14:49
Surr: 1,2-Dichloroethane-d4	102		75-134	0.16	%REC	1	12/16/08 14:49
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 14:49
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 14:49

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413180 Project Supervisor: Anthony Crescenzi

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-8-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7861.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 9 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15857
Revision:	12/18/08 11:45	FileID:	1-SAMP-J7862.D
Col Type:			

Sample Size: 10 mL %Moisture: TestCode: 8260W7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:21
Chloromethane	0.34	J	1.00	0.33	µg/L	1	12/16/08 15:21
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:21
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Acetone	1.56	J	10.0	1.00	µg/L	1	12/16/08 15:21
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 15:21
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 15:21
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 15:21
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 15:21
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 15:21
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 15:21
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413181 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15857
Revision:	12/18/08 11:45	FileID:	1-SAMP-J7862.D
Col Type:			

Sample Size: 10 mL %Moisture: TestCode: 8260W7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 15:21
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 15:21
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 15:21
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 15:21
Surr: 1,2-Dichloroethane-d4	105		75-134	0.16	%REC	1	12/16/08 15:21
Surr: Toluene-d8	98		75-125	0.10	%REC	1	12/16/08 15:21
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 15:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413181 Project Supervisor: Anthony Crescenzi

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BD-1-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7862.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.85	1.14	J

FORM I TIC 10 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-008A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-3R-121208*
W Order:	0812108	Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15857
Revision:	12/18/08 11:45	FileID:	1-SAMP-J7863.D
Col Type:			

Sample Size: 10 mL %Moisture: TestCode: 8260W7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:53
Chloromethane	1.24		1.00	0.33	µg/L	1	12/16/08 15:53
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:53
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Acetone	2.10	J	10.0	1.00	µg/L	1	12/16/08 15:53
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 15:53
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 15:53
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 15:53
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 15:53
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
cis-1,2-Dichloroethene	0.46	J	0.50	0.10	µg/L	1	12/16/08 15:53
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 15:53
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,1,1-Trichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Trichloroethene	9.97		0.50	0.10	µg/L	1	12/16/08 15:53
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 15:53
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Tetrachloroethene	1.06		0.50	0.10	µg/L	1	12/16/08 15:53

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413182 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-008A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-3R-121208*
W Order:	0812108	Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15857
Revision:	12/18/08 11:45	FileID:	1-SAMP-J7863.D
Col Type:			

Sample Size: 10 mL %Moisture: TestCode: 8260W7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 15:53
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 15:53
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 15:53
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 15:53
Surr: 1,2-Dichloroethane-d4	104		75-134	0.16	%REC	1	12/16/08 15:53
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/16/08 15:53
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 15:53

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413182 Project Supervisor: Anthony Crescenzi

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-3R-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBC-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-008A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7863.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 11 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15857
Revision:	12/31/08 15:01	FileID:	1-SAMP-J7864.D
Col Type:			

Sample Size: 10 mL %Moisture: TestCode: 8260W7 OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:24
Chloromethane	0.42	J	1.00	0.33	µg/L	1	12/16/08 16:24
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:24
1,1-Dichloroethene	6.59		0.50	0.16	µg/L	1	12/16/08 16:24
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 16:24
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 16:24
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 16:24
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 16:24
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 16:24
1,1-Dichloroethane	5.02		0.50	0.10	µg/L	1	12/16/08 16:24
cis-1,2-Dichloroethene	7.45		0.50	0.10	µg/L	1	12/16/08 16:24
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 16:24
Chloroform	0.19	J	0.50	0.10	µg/L	1	12/16/08 16:24
1,1,1-Trichloroethane	27.9		0.50	0.10	µg/L	1	12/16/08 16:24
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 16:24
Trichloroethene	28.7		0.50	0.10	µg/L	1	12/16/08 16:24
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 16:24
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:24
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 16:24
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:24
1,1,2-Trichloroethane	0.19	J	0.50	0.16	µg/L	1	12/16/08 16:24
Tetrachloroethene	0.19	J	0.50	0.10	µg/L	1	12/16/08 16:24

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413183 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-009A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-9-121208*
W Order:	0812108	**Collection Date:**	12/12/08 11:55
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:** 10 mL.	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R15857
Revision:	12/31/08 15:01	**TestCode:** 8260W7 OLM42	**FileID:** 1-SAMP-J7864.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 16:24
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 16:24
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 16:24
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 16:24
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 16:24
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 16:24
Surr: 1,2-Dichloroethane-d4	105		75-134	0.16	%REC	1	12/16/08 16:24
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/16/08 16:24
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 16:24

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413183 **Project Supervisor:** Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-9-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7864.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 12 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-010A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-5-121208*
W Order:	0812108	**Collection Date:**	12/12/08 12:40
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:** 10 mL.	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R15857
Revision:	12/31/08 15:01	**TestCode:** 8260W7 OLM42	**FileID:** 1-SAMP-J7865.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:56
Chloromethane	0.52	J	1.00	0.33	µg/L	1	12/16/08 16:56
Vinyl chloride	0.61	J	1.00	0.33	µg/L	1	12/16/08 16:56
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 16:56
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 16:56
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:56
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 16:56
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 16:56
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 16:56
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 16:56
trans-1,2-Dichloroethene	0.25	J	0.50	0.10	µg/L	1	12/16/08 16:56
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 16:56
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
cis-1,2-Dichloroethene	11.0		0.50	0.10	µg/L	1	12/16/08 16:56
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 16:56
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Trichloroethene	12.4		0.50	0.10	µg/L	1	12/16/08 16:56
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 16:56
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Tetrachloroethene	0.15	J	0.50	0.10	µg/L	1	12/16/08 16:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413184 **Project Supervisor:** Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-010A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-5-121208*
W Order:	0812108	**Collection Date:**	12/12/08 12:40
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:** 10 mL.	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R15857
Revision:	12/31/08 15:01	**TestCode:** 8260W7 OLM42	**FileID:** 1-SAMP-J7865.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 16:56
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 16:56
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 16:56
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 16:56
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 16:56
Surr: 1,2-Dichloroethane-d4	108		75-134	0.16	%REC	1	12/16/08 16:56
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 16:56
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	12/16/08 16:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413184 **Project Supervisor:** Anthony Crescenzi

Form I TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-5-121208

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-010A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7865.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 13 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-011A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-6-121208*
W Order:	0812108	**Collection Date:**	12/12/08 13:45
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R15857
Revision:	01/09/09 15:33	**TestCode:** 8260W7 OLM42	**FileID:** 1-SAMP-J7866.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						SW8260B	
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 17:28
Chloromethane	0.55	J	1.00	0.33	µg/L	1	12/16/08 17:28
Vinyl chloride	1.36		1.00	0.33	µg/L	1	12/16/08 17:28
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 17:28
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 17:28
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 17:28
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 17:28
trans-1,2-Dichloroethene	2.98		0.50	0.10	µg/L	1	12/16/08 17:28
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 17:28
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
cis-1,2-Dichloroethene	4.72		0.50	0.10	µg/L	1	12/16/08 17:28
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 17:28
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Benzene	0.11	J	0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Trichloroethene	0.68		0.50	0.10	µg/L	1	12/16/08 17:28
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 17:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 15:34 413185 **Project Supervisor:** Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-011A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-6-121208*
W Order:	0812108	**Collection Date:**	12/12/08 13:45
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R15857
Revision:	01/09/09 15:33	**TestCode:** 8260W7 OLM42	**FileID:** 1-SAMP-J7866.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						SW8260B	
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 17:28
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 17:28
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloroethane-d4	10.6		0.10	0.18	µg/L	1	12/16/08 17:28
Toluene-d8	10.0		0.10	0.10	µg/L	1	12/16/08 17:28
4-Bromofluorobenzene	9.92		0.10	0.10	µg/L	1	12/16/08 17:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 15:34 413185 **Project Supervisor:** Anthony Crescenzi

Form I TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-6-121208

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-011A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7866.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 14 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7867.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 18:00
Chloromethane	0.77	J	1.00	0.33	µg/L	1	12/16/08 18:00
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 18:00
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Acetone	1.09	J	10.0	1.00	µg/L	1	12/16/08 18:00
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 18:00
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 18:00
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 18:00
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 18:00
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
cis-1,2-Dichloroethene	0.41	J	0.50	0.10	µg/L	1	12/16/08 18:00
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 18:00
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Trichloroethene	0.64		0.50	0.10	µg/L	1	12/16/08 18:00
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 18:00
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413186 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7867.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 18:00
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 18:00
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 18:00
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 18:00
Surr: 1,2-Dichlorpethane-d4	106		75-134	0.16	%REC	1	12/16/08 18:00
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 18:00
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	12/16/08 18:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413186 Project Supervisor: Anthony Crescenzi

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds By GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-7-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-012A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7867.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I TIC 15 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-013A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	WATER Q	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7868.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 18:32
Chloromethane	0.78	J	1.00	0.33	µg/L	1	12/16/08 18:32
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 18:32
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 18:32
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 18:32
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 18:32
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 18:32
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 18:32
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 18:32
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 18:32
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 18:32
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 18:32
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 18:32
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413187 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-013A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	WATER.Q	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: I-SAMP-J7868.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 18:32
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 18:32
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 18:32
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 18:32
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 18:32
Surr: 1,2-Dichloroethane-d4	108		75-134	0.16	%REC	1	12/16/08 18:32
Surr: Toluene-d8	98		75-125	0.10	%REC	1	12/16/08 18:32
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	12/16/08 18:32

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413187 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Trip Blank

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-013A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7868.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 16 SW8260B

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-2-121108*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: I-SAMP-K5359.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 0:28
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 0:28
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 0:28
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 0:28
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 0:28
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 0:28
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 0:28
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 0:28
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 0:28
2-Chlorophenol	ND		11	0.13	µg/L	1	12/20/08 0:28
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 0:28
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 0:28
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 0:28
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 0:28
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 0:28
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 0:28
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 0:28
4-Bromophenyl phenyl ether	ND		11	0.16	µg/L	1	12/20/08 0:28
4-Chloro-3-methylphenol	ND		11	0.084	µg/L	1	12/20/08 0:28
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 0:28
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 0:28
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 0:28
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 0:28
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 0:28
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 0:28
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 0:28
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 0:28
Anthracene	ND		11	0.15	µg/L	1	12/20/08 0:28
Atrazine	ND		11	1.3	µg/L	1	12/20/08 0:28
Benzaldehyde	ND		11	0.39	µg/L	1	12/20/08 0:28
Benzo[a]anthracene	ND		11	0.084	µg/L	1	12/20/08 0:28
Benzo[a]pyrene	ND		11	0.16	µg/L	1	12/20/08 0:28
Benzo[b]fluoranthene	ND		11	0.53	µg/L	1	12/20/08 0:28
Benzo[g,h,i]perylene	ND		11	0.11	µg/L	1	12/20/08 0:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416472 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-2-121108*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: I-SAMP-K5359.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		11	0.35	µg/L	1	12/20/08 0:28
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 0:28
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 0:28
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 0:28
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 0:28
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 0:28
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 0:28
Carbazole	ND		11	0.14	µg/L	1	12/20/08 0:28
Chrysene	ND		11	0.084	µg/L	1	12/20/08 0:28
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 0:28
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 0:28
Dibenz[a,h]anthracene	ND		11	0.095	µg/L	1	12/20/08 0:28
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 0:28
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 0:28
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 0:28
Fluoranthene	ND		11	0.063	µg/L	1	12/20/08 0:28
Fluorene	ND		11	0.12	µg/L	1	12/20/08 0:28
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 0:28
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 0:28
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 0:28
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 0:28
Indeno(1,2,3-cd)pyrene	ND		11	0.095	µg/L	1	12/20/08 0:28
Isophorone	ND		11	0.13	µg/L	1	12/20/08 0:28
N-Nitroso-di-n-propylamine	ND		11	0.16	µg/L	1	12/20/08 0:28
N-Nitrosodiphenylamine	ND		11	0.084	µg/L	1	12/20/08 0:28
Naphthalene	ND		11	0.063	µg/L	1	12/20/08 0:28
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 0:28
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 0:28
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 0:28
Phenol	ND		11	0.095	µg/L	1	12/20/08 0:28
Pyrene	ND		11	0.074	µg/L	1	12/20/08 0:28
Surr: 2,4,6-Tribromophenol	97		46-149	0	%REC	1	12/20/08 0:28
Surr: 2-Fluorobiphenyl	81		42-130	0	%REC	1	12/20/08 0:28
Surr: 2-Fluorophenol	81		26-130	0	%REC	1	12/20/08 0:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416472 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-2-121108*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5359.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	85		42-130	0	%REC	1	12/20/08 0:28
Surr: Phenol-d5	85		21-134	0	%REC	1	12/20/08 0:28
Surr: Terphenyl-d14	82		24-147	0	%REC	1	12/20/08 0:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416472 Project Supervisor: Anthony Crescenzi

Form 1 TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-2-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-001B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5359.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.84	12	JB

FORM I TIC 1 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5360.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 1:07
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 1:07
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 1:07
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 1:07
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 1:07
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 1:07
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 1:07
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 1:07
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 1:07
2-Chlorophenol	ND		11	0.13	µg/L	1	12/20/08 1:07
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 1:07
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 1:07
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 1:07
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 1:07
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 1:07
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 1:07
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 1:07
4-Bromophenyl phenyl ether	ND		11	0.16	µg/L	1	12/20/08 1:07
4-Chloro-3-methylphenol	ND		11	0.084	µg/L	1	12/20/08 1:07
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 1:07
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 1:07
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 1:07
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 1:07
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 1:07
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 1:07
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 1:07
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 1:07
Anthracene	ND		11	0.15	µg/L	1	12/20/08 1:07
Atrazine	ND		11	1.3	µg/L	1	12/20/08 1:07
Benzaldehyde	ND		11	0.38	µg/L	1	12/20/08 1:07
Benzo(a)anthracene	ND		11	0.084	µg/L	1	12/20/08 1:07
Benzo(a)pyrene	ND		11	0.16	µg/L	1	12/20/08 1:07
Benzo(b)fluoranthene	ND		11	0.53	µg/L	1	12/20/08 1:07
Benzo(g,h,i)perylene	ND		11	0.11	µg/L	1	12/20/08 1:07

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416473 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5360.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo(k)fluoranthene	ND		11	0.35	µg/L	1	12/20/08 1:07
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 1:07
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 1:07
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 1:07
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 1:07
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 1:07
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 1:07
Carbazole	ND		11	0.14	µg/L	1	12/20/08 1:07
Chrysene	ND		11	0.084	µg/L	1	12/20/08 1:07
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 1:07
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 1:07
Dibenz[a,h]anthracene	ND		11	0.095	µg/L	1	12/20/08 1:07
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 1:07
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 1:07
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 1:07
Fluoranthene	ND		11	0.063	µg/L	1	12/20/08 1:07
Fluorene	ND		11	0.12	µg/L	1	12/20/08 1:07
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 1:07
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 1:07
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 1:07
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 1:07
Indeno(1,2,3-cd)pyrene	ND		11	0.095	µg/L	1	12/20/08 1:07
Isophorone	ND		11	0.13	µg/L	1	12/20/08 1:07
N-Nitroso-di-n-propylamine	ND		11	0.16	µg/L	1	12/20/08 1:07
N-Nitrosodiphenylamine	ND		11	0.084	µg/L	1	12/20/08 1:07
Naphthalene	ND		11	0.063	µg/L	1	12/20/08 1:07
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 1:07
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 1:07
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 1:07
Phenol	ND		11	0.095	µg/L	1	12/20/08 1:07
Pyrene	ND		11	0.074	µg/L	1	12/20/08 1:07
Surr: 2,4,6-Tribromophenol	80		65-149	0	%REC	1	12/20/08 1:07
Surr: 2-Fluorobiphenyl	81		42-130	0	%REC	1	12/20/08 1:07
Surr: 2-Fluorophenol	77		26-130	0	%REC	1	12/20/08 1:07

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416473 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5360.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	83		42-130	0	%REC	1	12/20/08 1:07
Surr: Phenol-d5	82		21-134	0	%REC	1	12/20/08 1:07
Surr: Terphenyl-d14	83		24-147	0	%REC	1	12/20/08 1:07

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416473 Project Supervisor: Anthony Crescenzi

60

Form I TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-4-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-002B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5360.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs Found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	6.5	JB

FORM I TIC 2 SW8270C

61

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5361.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 1:46
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 1:46
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 1:46
2,4-Dichlorophenol	2.3	J	10	0.082	µg/L	1	12/20/08 1:46
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 1:46
2,4-Dinitrophenol	ND		52	19	µg/L	1	12/20/08 1:46
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 1:46
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 1:46
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 1:46
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 1:46
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 1:46
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 1:46
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 1:46
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 1:46
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 1:46
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 1:46
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 1:46
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 1:46
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 1:46
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 1:46
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 1:46
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 1:46
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 1:46
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 1:46
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 1:46
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 1:46
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 1:46
Anthracene	ND		10	0.14	µg/L	1	12/20/08 1:46
Atrazine	ND		10	1.2	µg/L	1	12/20/08 1:46
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 1:46
Benzo(a)anthracene	ND		10	0.082	µg/L	1	12/20/08 1:46
Benzo(a)pyrene	ND		10	0.15	µg/L	1	12/20/08 1:46
Benzo(b)fluoranthene	ND		10	0.52	µg/L	1	12/20/08 1:46
Benzo(g,h,i)perylene	ND		10	0.10	µg/L	1	12/20/08 1:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416474 Project Supervisor: Anthony Crescenzi

62

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5361.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo(k)fluoranthene	ND		10	0.34	µg/L	1	12/20/08 1:46
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 1:46
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 1:46
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 1:46
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 1:46
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 1:46
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 1:46
Carbazole	ND		10	0.13	µg/L	1	12/20/08 1:46
Chrysene	ND		10	0.082	µg/L	1	12/20/08 1:46
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 1:46
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 1:46
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 1:46
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 1:46
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 1:46
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 1:46
Fluoranthene	ND		10	0.062	µg/L	1	12/20/08 1:46
Fluorene	ND		10	0.11	µg/L	1	12/20/08 1:46
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 1:46
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 1:46
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 1:46
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 1:46
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 1:46
Isophorone	ND		10	0.12	µg/L	1	12/20/08 1:46
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 1:46
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 1:46
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 1:46
Nitrobenzene	ND		10	0.13	µg/L	1	12/20/08 1:46
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 1:46
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 1:46
Phenol	ND		10	0.093	µg/L	1	12/20/08 1:46
Pyrene	ND		10	0.072	µg/L	1	12/20/08 1:46
Surr: 2,4,6-Tribromophenol	86		46-149	0	%REC	1	12/20/08 1:46
Surr: 2-Fluorobiphenyl	77		42-130	0	%REC	1	12/20/08 1:46
Surr: 2-Fluorophenol	79		26-130	0	%REC	1	12/20/08 1:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416474 Project Supervisor: Anthony Crescenzi

63

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-003B**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***MW-12-121108***
W Order:	0812108	**Collection Date:**	12/11/08 12:55
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS06 40	**Sample Size:** 970 mL	**PrepDate:** 12/17/08 8:51
ColumnID:	DB-5MS	**%Moisture:**	**BatchNo:** 8644/R15973
Revision:	12/29/08 9:43	**TestCode:** 8270W OLM42	**FileID:** 1-SAMP-K5361.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8270C**		**(SW3520C)**
Surr: Nitrobenzene-d5	80		42-130	0	%REC	1	12/20/08 1:46
Surr: Phenol-d5	84		21-134	0	%REC	1	12/20/08 1:46
Surr: Terphenyl-d14	85		24-147	0	%REC	1	12/20/08 1:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416474 **Project Supervisor:** Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-12-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-003B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5361.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 6 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.83)	6.83	8.2	JB
2. 000108-90-7	Benzene, chloro-	7.41	34	JN
3. 000541-73-1	Benzene, 1,3-dichloro-	10.00	140	JN
4. 000095-50-1	Benzene, 1,2-dichloro-	10.41	76	JN
5. 019064-64-3	Pyridazine, 3,6-dichloro-4-met	14.58	5.7	JN
6.	unknown (14.76)	14.76	9.1	J

FORM I TIC 3 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-004B**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***MW-13-121108***
W Order:	0812108	**Collection Date:**	12/11/08 13:46
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS06 40	**Sample Size:** 970 mL	**PrepDate:** 12/17/08 8:51
ColumnID:	DB-5MS	**%Moisture:**	**BatchNo:** 8644/R15973
Revision:	12/29/08 9:43	**TestCode:** 8270W OLM42	**FileID:** 1-SAMP-K5362.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8270C**		**(SW3520C)**
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 2:25
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 2:25
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 2:25
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 2:25
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 2:25
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 2:25
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 2:25
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 2:25
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 2:25
2-Chlorophenol	ND		10	0.13	µg/L	1	12/20/08 2:25
2-Methylnaphthalene	ND		10	0.082	µg/L	1	12/20/08 2:25
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 2:25
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 2:25
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 2:25
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 2:25
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 2:25
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 2:25
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 2:25
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 2:25
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 2:25
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 2:25
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 2:25
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 2:25
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 2:25
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 2:25
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 2:25
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 2:25
Anthracene	ND		10	0.14	µg/L	1	12/20/08 2:25
Atrazine	ND		10	1.2	µg/L	1	12/20/08 2:25
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 2:25
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 2:25
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 2:25
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 2:25
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 2:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416475 **Project Supervisor:** Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-004B**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***MW-13-121108***
W Order:	0812108	**Collection Date:**	12/11/08 13:46
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS06 40	**Sample Size:** 970 mL	**PrepDate:** 12/17/08 8:51
ColumnID:	DB-5MS	**%Moisture:**	**BatchNo:** 8644/R15973
Revision:	12/29/08 9:43	**TestCode:** 8270W OLM42	**FileID:** 1-SAMP-K5362.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8270C**		**(SW3520C)**
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 2:25
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 2:25
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 2:25
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 2:25
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 2:25
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 2:25
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 2:25
Carbazole	ND		10	0.13	µg/L	1	12/20/08 2:25
Chrysene	ND		10	0.082	µg/L	1	12/20/08 2:25
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 2:25
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 2:25
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 2:25
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 2:25
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 2:25
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 2:25
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 2:25
Fluorene	ND		10	0.11	µg/L	1	12/20/08 2:25
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 2:25
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 2:25
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 2:25
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 2:25
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 2:25
Isophorone	ND		10	0.12	µg/L	1	12/20/08 2:25
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 2:25
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 2:25
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 2:25
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 2:25
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 2:25
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 2:25
Phenol	ND		10	0.093	µg/L	1	12/20/08 2:25
Pyrene	ND		10	0.072	µg/L	1	12/20/08 2:25
Surr: 2,4,6-Tribromophenol	83		46-149	0	%REC	1	12/20/08 2:25
Surr: 2-Fluorobiphenyl	80		42-130	0	%REC	1	12/20/08 2:25
Surr: 2-Fluorophenol	80		26-130	0	%REC	1	12/20/08 2:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416475 **Project Supervisor:** Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5362.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	83		42-130	0	%REC	1	12/20/08 2:25
Surr: Phenol-d5	85		21-134	0	%REC	1	12/20/08 2:25
Surr: Terphenyl-d14	83		24-147	0	%REC	1	12/20/08 2:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416475 Project Supervisor: Anthony Crescenzi

Form I TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-13-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLD Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-004B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5362.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	9.4	JB

FORM I TIC 4 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-11R-121108*
W Order:	0812108	Collection Date:	12/11/08 13:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5363.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 3:04
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 3:04
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 3:04
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 3:04
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 3:04
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 3:04
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 3:04
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 3:04
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 3:04
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 3:04
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 3:04
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 3:04
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 3:04
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 3:04
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 3:04
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 3:04
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 3:04
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 3:04
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 3:04
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 3:04
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 3:04
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 3:04
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 3:04
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 3:04
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 3:04
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 3:04
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 3:04
Anthracene	ND		10	0.14	µg/L	1	12/20/08 3:04
Atrazine	ND		10	1.2	µg/L	1	12/20/08 3:04
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 3:04
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 3:04
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 3:04
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 3:04
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 3:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416476 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-11R-121108*
W Order:	0812108	Collection Date:	12/11/08 13:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5363.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 3:04
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 3:04
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 3:04
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 3:04
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 3:04
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 3:04
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 3:04
Carbazole	ND		10	0.13	µg/L	1	12/20/08 3:04
Chrysene	ND		10	0.082	µg/L	1	12/20/08 3:04
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 3:04
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 3:04
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 3:04
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 3:04
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 3:04
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 3:04
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 3:04
Fluorene	ND		10	0.11	µg/L	1	12/20/08 3:04
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 3:04
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 3:04
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 3:04
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 3:04
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 3:04
Isophorone	ND		10	0.12	µg/L	1	12/20/08 3:04
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 3:04
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 3:04
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 3:04
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 3:04
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 3:04
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 3:04
Phenol	ND		10	0.093	µg/L	1	12/20/08 3:04
Pyrene	ND		10	0.072	µg/L	1	12/20/08 3:04
Surr: 2,4,6-Tribromophenol	57		46-149	0	%REC	1	12/20/08 3:04
Surr: 2-Fluorobiphenyl	84		42-130	0	%REC	1	12/20/08 3:04
Surr: 2-Fluorophenol	66		26-130	0	%REC	1	12/20/08 3:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416476 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-005B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-11R-121108*
W Order:	0812108	Collection Date:	12/11/08 13:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5363.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	86		42-130	0	%REC	1	12/20/08 3:04
Surr: Phenol-d5	69		21-134	0	%REC	1	12/20/08 3:04
Surr: Terphenyl-d14	84		24-147	0	%REC	1	12/20/08 3:04

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416476 Project Supervisor: Anthony Crescenzi

Form 1 TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-11R-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-005B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5363.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 4 CONCENTRATION UNITS: UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		unknown (6.83)	6.83	8.8	JB
2.		unknown (8.58)	8.58	6.4	J
3.		unknown (8.61)	8.61	8.2	J
4.		unknown (18.19)	18.19	4.2	J

FORM I TIC 5 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-8-121108*
W Order:	0812108	Collection Date:	12/11/08 13:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 5:00
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 5:00
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 5:00
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 5:00
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 5:00
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 5:00
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 5:00
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 5:00
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 5:00
2-Chlorophenol	ND		11	0.13	µg/L	1	12/20/08 5:00
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 5:00
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 5:00
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 5:00
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 5:00
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 5:00
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 5:00
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 5:00
4-Bromophenyl phenyl ether	ND		11	0.15	µg/L	1	12/20/08 5:00
4-Chloro-3-methylphenol	ND		11	0.084	µg/L	1	12/20/08 5:00
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 5:00
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 5:00
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 5:00
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 5:00
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 5:00
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 5:00
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 5:00
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 5:00
Anthracene	ND		11	0.15	µg/L	1	12/20/08 5:00
Atrazine	ND		11	1.3	µg/L	1	12/20/08 5:00
Benzaldehyde	ND		11	0.39	µg/L	1	12/20/08 5:00
Benzo[a]anthracene	ND		11	0.084	µg/L	1	12/20/08 5:00
Benzo[a]pyrene	ND		11	0.15	µg/L	1	12/20/08 5:00
Benzo[b]fluoranthene	ND		11	0.53	µg/L	1	12/20/08 5:00
Benzo[g,h,i]perylene	ND		11	0.11	µg/L	1	12/20/08 5:00

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416479 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-8-121108*
W Order:	0812108	Collection Date:	12/11/08 13:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		11	0.35	µg/L	1	12/20/08 5:00
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 5:00
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 5:00
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 5:00
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 5:00
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 5:00
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 5:00
Carbazole	ND		11	0.14	µg/L	1	12/20/08 5:00
Chrysene	ND		11	0.084	µg/L	1	12/20/08 5:00
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 5:00
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 5:00
Dibenz[a,h]anthracene	ND		11	0.095	µg/L	1	12/20/08 5:00
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 5:00
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 5:00
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 5:00
Fluoranthene	ND		11	0.063	µg/L	1	12/20/08 5:00
Fluorene	ND		11	0.12	µg/L	1	12/20/08 5:00
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 5:00
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 5:00
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 5:00
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 5:00
Indeno[1,2,3-cd]pyrene	ND		11	0.095	µg/L	1	12/20/08 5:00
Isophorone	ND		11	0.13	µg/L	1	12/20/08 5:00
N-Nitroso-di-n-propylamine	ND		11	0.19	µg/L	1	12/20/08 5:00
N-Nitrosodiphenylamine	ND		11	0.084	µg/L	1	12/20/08 5:00
Naphthalene	ND		11	0.063	µg/L	1	12/20/08 5:00
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 5:00
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 5:00
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 5:00
Phenol	ND		11	0.095	µg/L	1	12/20/08 5:00
Pyrene	ND		11	0.074	µg/L	1	12/20/08 5:00
Surr: 2,4,6-Tribromophenol	85		46-149	0	%REC	1	12/20/08 5:00
Surr: 2-Fluorobiphenyl	82		42-130	0	%REC	1	12/20/08 5:00
Surr: 2-Fluorophenol	79		28-130	0	%REC	1	12/20/08 5:00

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416479 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-8-121108*
W Order:	0812108	Collection Date:	12/11/08 13:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	82		42-130	0	%REC	1	12/20/08 5:00
Surr: Phenol-d5	92		21-134	0	%REC	1	12/20/08 5:00
Surr: Terphenyl-d14	88		24-147	0	%REC	1	12/20/08 5:00

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416479 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-006B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5366.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.82	4.4	JB

FORM I TIC 8 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 990 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5367.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.38	µg/L	1	12/20/08 5:38
2,4,5-Trichlorophenol	ND		51	0.14	µg/L	1	12/20/08 5:38
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 5:38
2,4-Dichlorophenol	ND		10	0.081	µg/L	1	12/20/08 5:38
2,4-Dimethylphenol	ND		10	2.0	µg/L	1	12/20/08 5:38
2,4-Dinitrophenol	ND		51	10	µg/L	1	12/20/08 5:38
2,4-Dinitrotoluene	ND		10	0.40	µg/L	1	12/20/08 5:38
2,6-Dinitrotoluene	ND		10	0.40	µg/L	1	12/20/08 5:38
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 5:38
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 5:38
2-Methylnaphthalene	ND		10	0.051	µg/L	1	12/20/08 5:38
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 5:38
2-Nitroaniline	ND		51	0.40	µg/L	1	12/20/08 5:38
2-Nitrophenol	ND		10	0.071	µg/L	1	12/20/08 5:38
3,3'-Dichlorobenzidine	ND		20	1.2	µg/L	1	12/20/08 5:38
3-Nitroaniline	ND		51	1.2	µg/L	1	12/20/08 5:38
4,6-Dinitro-2-methylphenol	ND		10	2.0	µg/L	1	12/20/08 5:38
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 5:38
4-Chloro-3-methylphenol	ND		10	0.081	µg/L	1	12/20/08 5:38
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 5:38
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 5:38
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 5:38
4-Nitroaniline	ND		51	1.2	µg/L	1	12/20/08 5:38
4-Nitrophenol	ND		51	2.0	µg/L	1	12/20/08 5:38
Acenaphthene	ND		10	0.081	µg/L	1	12/20/08 5:38
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 5:38
Acetophenone	ND		10	0.37	µg/L	1	12/20/08 5:38
Anthracene	ND		10	0.14	µg/L	1	12/20/08 5:38
Atrazine	ND		10	1.2	µg/L	1	12/20/08 5:38
Benzaldehyde	ND		10	0.37	µg/L	1	12/20/08 5:38
Benzo[a]anthracene	ND		10	0.081	µg/L	1	12/20/08 5:38
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 5:38
Benzo[b]fluoranthene	ND		10	0.51	µg/L	1	12/20/08 5:38
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 5:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416480 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 990 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5367.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.33	µg/L	1	12/20/08 5:38
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 5:38
bis(2-chloroethyl)ether	ND		10	0.040	µg/L	1	12/20/08 5:38
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 5:38
bis(2-Ethylhexyl)phthalate	ND		10	0.45	µg/L	1	12/20/08 5:38
Butyl benzyl phthalate	ND		10	0.18	µg/L	1	12/20/08 5:38
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 5:38
Carbazole	ND		10	0.13	µg/L	1	12/20/08 5:38
Chrysene	ND		10	0.081	µg/L	1	12/20/08 5:38
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 5:38
Di-n-octyl phthalate	ND		10	0.18	µg/L	1	12/20/08 5:38
Dibenz[a,h]anthracene	ND		10	0.091	µg/L	1	12/20/08 5:38
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 5:38
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 5:38
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 5:38
Fluoranthene	ND		10	0.061	µg/L	1	12/20/08 5:38
Fluorene	ND		10	0.11	µg/L	1	12/20/08 5:38
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 5:38
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 5:38
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 5:38
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 5:38
Indeno[1,2,3-cd]pyrene	ND		10	0.091	µg/L	1	12/20/08 5:38
Isophorone	ND		10	0.12	µg/L	1	12/20/08 5:38
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 5:38
N-Nitrosodiphenylamine	ND		10	0.081	µg/L	1	12/20/08 5:38
Naphthalene	ND		10	0.061	µg/L	1	12/20/08 5:38
Nitrobenzene	ND		10	0.42	µg/L	1	12/20/08 5:38
Pentachlorophenol	ND		51	5.1	µg/L	1	12/20/08 5:38
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 5:38
Phenol	ND		10	0.091	µg/L	1	12/20/08 5:38
Pyrene	ND		10	0.071	µg/L	1	12/20/08 5:38
Surr: 2,4,6-Tribromophenol	80		46-149	0	%REC	1	12/20/08 5:38
Surr: 2-Fluorobiphenyl	77		42-130	0	%REC	1	12/20/08 5:38
Surr: 2-Fluorophenol	76		26-130	0	%REC	1	12/20/08 5:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416480 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 990 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5367.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	78		42-130	0	%REC	1	12/20/08 5:38
Surr: Phenol-d5	79		21-134	0	%REC	1	12/20/08 5:38
Surr: Terphenyl-d14	80		24-147	0	%REC	1	12/20/08 5:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416480 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

BD-1-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-007B

Sample wt/vol: 990 (g/mL) mL Lab File ID: K5367.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		unknown	6.82	7.5	JB

FORM I TIC 9 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-3R-121208*
W Order:	0812108	Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5368.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 6:17
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 6:17
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 6:17
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 6:17
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 6:17
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 6:17
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:17
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:17
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 6:17
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 6:17
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 6:17
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:17
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 6:17
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 6:17
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 6:17
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:17
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 6:17
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 6:17
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 6:17
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 6:17
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 6:17
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:17
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:17
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 6:17
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 6:17
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 6:17
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 6:17
Anthracene	ND		10	0.14	µg/L	1	12/20/08 6:17
Atrazine	ND		10	1.2	µg/L	1	12/20/08 6:17
Benzaldehyde	ND		10	0.36	µg/L	1	12/20/08 6:17
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 6:17
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 6:17
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 6:17
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 6:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416481 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-3R-121208*
W Order:	0812108	Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5368.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 6:17
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 6:17
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 6:17
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 6:17
bis(2-Ethylhexyl)phthalate	ND		10	0.48	µg/L	1	12/20/08 6:17
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 6:17
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 6:17
Carbazole	ND		10	0.13	µg/L	1	12/20/08 6:17
Chrysene	ND		10	0.082	µg/L	1	12/20/08 6:17
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 6:17
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 6:17
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 6:17
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 6:17
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 6:17
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 6:17
Fluoranthene	ND		10	0.062	µg/L	1	12/20/08 6:17
Fluorene	ND		10	0.11	µg/L	1	12/20/08 6:17
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 6:17
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 6:17
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 6:17
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 6:17
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 6:17
Isophorone	ND		10	0.12	µg/L	1	12/20/08 6:17
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 6:17
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 6:17
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 6:17
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 6:17
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 6:17
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 6:17
Phenol	ND		10	0.093	µg/L	1	12/20/08 6:17
Pyrene	ND		10	0.072	µg/L	1	12/20/08 6:17
Surr: 2,4,6-Tribromophenol	79		46-149	0	%REC	1	12/20/08 6:17
Surr: 2-Fluorobiphenyl	81		42-130	0	%REC	1	12/20/08 6:17
Surr: 2-Fluorophenol	73		26-130	0	%REC	1	12/20/08 6:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416481 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-008B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-3R-121208*
W Order:	0812108	Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5368.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	80		42-130	0	%REC	1	12/20/08 6:17
Surr: Phenol-d5	75		21-134	0	%REC	1	12/20/08 6:17
Surr: Terphenyl-d14	84		24-147	0	%REC	1	12/20/08 6:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416481 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-3R-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-008B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5368.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.82	8.5	JB

FORM I TIC 10 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5369.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 6:56
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 6:56
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 6:56
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 6:56
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 6:56
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 6:56
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:56
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:56
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 6:56
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 6:56
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 6:56
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:56
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 6:56
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 6:56
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 6:56
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:56
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 6:56
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 6:56
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 6:56
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 6:56
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 6:56
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:56
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:56
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 6:56
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 6:56
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 6:56
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 6:56
Anthracene	ND		10	0.14	µg/L	1	12/20/08 6:56
Atrazine	ND		10	1.2	µg/L	1	12/20/08 6:56
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 6:56
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 6:56
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 6:56
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 6:56
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 6:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416482 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5369.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 6:56
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 6:56
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 6:56
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 6:56
bis(2-Ethylhexyl)phthalate	ND		10	0.48	µg/L	1	12/20/08 6:56
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 6:56
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 6:56
Carbazole	ND		10	0.13	µg/L	1	12/20/08 6:56
Chrysene	ND		10	0.082	µg/L	1	12/20/08 6:56
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 6:56
Di-n-octyl phthalate	ND		10	0.18	µg/L	1	12/20/08 6:56
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 6:56
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 6:56
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 6:56
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 6:56
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 6:56
Fluorene	ND		10	0.11	µg/L	1	12/20/08 6:56
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 6:56
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 6:56
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 6:56
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 6:56
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 6:56
Isophorone	ND		10	0.12	µg/L	1	12/20/08 6:56
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 6:56
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 6:56
Naphthalene	ND		10	0.082	µg/L	1	12/20/08 6:56
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 6:56
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 6:56
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 6:56
Phenol	ND		10	0.093	µg/L	1	12/20/08 6:56
Pyrene	ND		10	0.072	µg/L	1	12/20/08 6:56
Surr: 2,4,6-Tribromophenol	84		46-149	0	%REC	1	12/20/08 6:56
Surr: 2-Fluorobiphenyl	82		42-130	0	%REC	1	12/20/08 6:56
Surr: 2-Fluorophenol	81		36-130	0	%REC	1	12/20/08 6:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416482 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5369.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	84		42-130	0	%REC	1	12/20/08 6:56
Surr: Phenol-d5	85		21-134	0	%REC	1	12/20/08 6:56
Surr: Terphenyl-d14	87		24-147	0	%REC	1	12/20/08 6:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416483 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-9-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-009B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5369.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 3 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000079-01-6	Trichloroethylene	4.65	4.3	JN
2.	unknown (6.83)	6.83	9.3	JB
3.	unknown (22.07)	22.07	4.8	J

FORM 1 TIC 11 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-010B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-5-121208*
W Order:	0812108	Collection Date:	12/12/08 12:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5370.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 7:35
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 7:35
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 7:35
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 7:35
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 7:35
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 7:35
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 7:35
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 7:35
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 7:35
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 7:35
2-Methylnaphthalene	ND		10	0.092	µg/L	1	12/20/08 7:35
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 7:35
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 7:35
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 7:35
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 7:35
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 7:35
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 7:35
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 7:35
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 7:35
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 7:35
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 7:35
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 7:35
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 7:35
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 7:35
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 7:35
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 7:35
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 7:35
Anthracene	ND		10	0.14	µg/L	1	12/20/08 7:35
Atrazine	ND		10	1.2	µg/L	1	12/20/08 7:35
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 7:35
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 7:35
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 7:35
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 7:35
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 7:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416483 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-010B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-5-121208*
W Order:	0812108	Collection Date:	12/12/08 12:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5370.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 7:35
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 7:35
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 7:35
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 7:35
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 7:35
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 7:35
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 7:35
Carbazole	ND		10	0.13	µg/L	1	12/20/08 7:35
Chrysene	ND		10	0.082	µg/L	1	12/20/08 7:35
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 7:35
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 7:35
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 7:35
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 7:35
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 7:35
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 7:35
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 7:35
Fluorene	ND		10	0.11	µg/L	1	12/20/08 7:35
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 7:35
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 7:35
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 7:35
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 7:35
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 7:35
Isophorone	ND		10	0.12	µg/L	1	12/20/08 7:35
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 7:35
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 7:35
Naphthalene	ND		10	0.092	µg/L	1	12/20/08 7:35
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 7:35
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 7:35
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 7:35
Phenol	ND		10	0.093	µg/L	1	12/20/08 7:35
Pyrene	ND		10	0.072	µg/L	1	12/20/08 7:35
Surr: 2,4,6-Tribromophenol	73		46-149	0	%REC	1	12/20/08 7:35
Surr: 2-Fluorobiphenyl	81		42-130	0	%REC	1	12/20/08 7:35
Surr: 2-Fluorophenol	78		26-130	0	%REC	1	12/20/08 7:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416483 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-010B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-5-121208*
W Order:	0812108	Collection Date:	12/12/08 12:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5370.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	83		42-130	0	%REC	1	12/20/08 7:35
Surr: Phenol-d5	82		21-134	0	%REC	1	12/20/08 7:35
Surr: Terphenyl-d14	81		24-147	0	%REC	1	12/20/08 7:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416483 Project Supervisor: Anthony Crescenzi

Form I TIC CLIENT SAMPLE NO.
Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-5-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____
Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0812108
Matrix: (soil/water) WATER Lab Sample ID: 0812108-010B
Sample wt/vol: 970 (g/mL) mL Lab File ID: K5370.D
Level: LOW Date Received: 12/12/2008
% Moisture: not dec. Date Analyzed: 12/20/2008
GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00
Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.83	6.9	JB

FORM I TIC 12 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5371.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.35	µg/L	1	12/20/08 8:13
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 8:13
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 8:13
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 8:13
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 8:13
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 8:13
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 8:13
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 8:13
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 8:13
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 8:13
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 8:13
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 8:13
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 8:13
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 8:13
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 8:13
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 8:13
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 8:13
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 8:13
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 8:13
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 8:13
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 8:13
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 8:13
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 8:13
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 8:13
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 8:13
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 8:13
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 8:13
Anthracene	ND		10	0.14	µg/L	1	12/20/08 8:13
Atrazine	ND		10	1.2	µg/L	1	12/20/08 8:13
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 8:13
Benzo(a)anthracene	ND		10	0.082	µg/L	1	12/20/08 8:13
Benzo(a)pyrene	ND		10	0.15	µg/L	1	12/20/08 8:13
Benzo(b)fluoranthene	ND		10	0.52	µg/L	1	12/20/08 8:13
Benzo(g,h,i)perylene	ND		10	0.10	µg/L	1	12/20/08 8:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416484 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5371.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo(k)fluoranthene	ND		10	0.34	µg/L	1	12/20/08 8:13
bis(2-Chloroethoxy)methane	ND		10	0.16	µg/L	1	12/20/08 8:13
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 8:13
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 8:13
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 8:13
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 8:13
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 8:13
Carbazole	ND		10	0.13	µg/L	1	12/20/08 8:13
Chrysene	ND		10	0.082	µg/L	1	12/20/08 8:13
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 8:13
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 8:13
Dibenz(a,h)anthracene	ND		10	0.093	µg/L	1	12/20/08 8:13
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 8:13
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 8:13
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 8:13
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 8:13
Fluorene	ND		10	0.11	µg/L	1	12/20/08 8:13
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 8:13
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 8:13
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 8:13
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 8:13
Indeno(1,2,3-cd)pyrene	ND		10	0.093	µg/L	1	12/20/08 8:13
Isophorone	ND		10	0.12	µg/L	1	12/20/08 8:13
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 8:13
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 8:13
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 8:13
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 8:13
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 8:13
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 8:13
Phenol	ND		10	0.093	µg/L	1	12/20/08 8:13
Pyrene	ND		10	0.072	µg/L	1	12/20/08 8:13
Surr: 2,4,6-Tribromophenol	76		46-149	0	%REC	1	12/20/08 8:13
Surr: 2-Fluorobiphenyl	82		42-130	0	%REC	1	12/20/08 8:13
Surr: 2-Fluorophenol	78		26-130	0	%REC	1	12/20/08 8:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416484 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5371.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	84		42-130	0	%REC	1	12/20/08 8:13
Surr: Phenol-d5	83		21-134	0	%REC	1	12/20/08 8:13
Surr: Terphenyl-d14	84		24-147	0	%REC	1	12/20/08 8:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416484 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-6-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-011B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5371.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	8.8	JB

FORM I TIC 13 SW8270C

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5372.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 8:52
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 8:52
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 8:52
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 8:52
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 8:52
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 8:52
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 8:52
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 8:52
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 8:52
2-Chlorophenol	ND		11	0.13	µg/L	1	12/20/08 8:52
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 8:52
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 8:52
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 8:52
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 8:52
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 8:52
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 8:52
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 8:52
4-Bromophenyl phenyl ether	ND		11	0.16	µg/L	1	12/20/08 8:52
4-Chloro-3-methylphenol	ND		11	0.064	µg/L	1	12/20/08 8:52
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 8:52
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 8:52
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 8:52
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 8:52
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 8:52
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 8:52
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 8:52
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 8:52
Anthracene	ND		11	0.15	µg/L	1	12/20/08 8:52
Atrazine	ND		11	1.3	µg/L	1	12/20/08 8:52
Benzaldehyde	ND		11	0.39	µg/L	1	12/20/08 8:52
Benzo[a]anthracene	ND		11	0.084	µg/L	1	12/20/08 8:52
Benzo[a]pyrene	ND		11	0.16	µg/L	1	12/20/08 8:52
Benzo[b]fluoranthene	ND		11	0.53	µg/L	1	12/20/08 8:52
Benzo[g,h,i]perylene	ND		11	0.11	µg/L	1	12/20/08 8:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. columns %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416485 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5372.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		11	0.35	µg/L	1	12/20/08 8:52
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 8:52
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 8:52
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 8:52
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 8:52
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 8:52
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 8:52
Carbazole	ND		11	0.14	µg/L	1	12/20/08 8:52
Chrysene	ND		11	0.084	µg/L	1	12/20/08 8:52
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 8:52
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 8:52
Dibenz[a,h]anthracene	ND		11	0.095	µg/L	1	12/20/08 8:52
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 8:52
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 8:52
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 8:52
Fluoranthene	ND		11	0.063	µg/L	1	12/20/08 8:52
Fluorene	ND		11	0.12	µg/L	1	12/20/08 8:52
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 8:52
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 8:52
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 8:52
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 8:52
Indeno[1,2,3-cd]pyrene	ND		11	0.095	µg/L	1	12/20/08 8:52
Isophorone	ND		11	0.13	µg/L	1	12/20/08 8:52
N-Nitroso-di-n-propylamine	ND		11	0.16	µg/L	1	12/20/08 8:52
N-Nitrosodiphenylamine	ND		11	0.064	µg/L	1	12/20/08 8:52
Naphthalene	ND		11	0.063	µg/L	1	12/20/08 8:52
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 8:52
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 8:52
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 8:52
Phenol	ND		11	0.095	µg/L	1	12/20/08 8:52
Pyrene	ND		11	0.074	µg/L	1	12/20/08 8:52
Surr: 2,4,6-Tribromophenol	73		46-149	0	%REC	1	12/20/08 8:52
Surr: 2-Fluorobiphenyl	83		42-130	0	%REC	1	12/20/08 8:52
Surr: 2-Fluorophenol	76		26-130	0	%REC	1	12/20/08 8:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. columns %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416485 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5372.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	85		42-130	0	%REC	1	12/20/08 8:52
Surr: Phenol-d5	80		21-134	0	%REC	1	12/20/08 8:52
Surr: Terphenyl-d14	85		24-147	0	%REC	1	12/20/08 8:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Pri/Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416485 Project Supervisor: Anthony Crescenzi

Form I TIC CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-7-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-012B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5372.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	6.4	JB

FORM I TIC 14 SW8270C

Quality Control Results

GC/MS Volatile Organics Data

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLI Case No.: CMC-MS SAS No.: _____ SDG No.: 0812108

EPA SAMPLE NO.	Lab. ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #	TOT OUT
01LCS-15832	LCS-15832	96	103	98	0
02LCSD-15832	LCSD-15832	95	102	97	0
03MB-15832	MB-15832	96	100	98	0
04SMW-2-121108	0812108-001A	105	100	110	0
05SMW-4-121108	0812108-002A	105	99	99	0
06SMW-12-121108	0812108-003A	102	97	84	0
07LCS-15857	LCS-15857	99	99	94	0
08MB-15857	MBS-15857	99	98	96	0
09SMW-11R-121108	0812108-005AMS	99	101	95	0
10SMW-11R-121108MSD	0812108-005AMSD	100	98	96	0
11MB-15857	MBS-15857	104	101	100	0
12SMW-1r-121108DL	0812108-005ADL	106	101	96	0
13SMW-13-121108	0812108-004A	104	99	97	0
14SMW-11R-121108	0812108-005A	103	99	98	0
15SMW-8-121108	0812108-006A	102	99	99	0
16SMW-1-121108	0812108-007A	105	98	99	0
17SMW-3R-121208	0812108-008A	104	100	99	0
18SMW-9-121208	0812108-009A	105	100	99	0
19SMW-5-121208	0812108-010A	108	99	96	0
20SMW-6-121208	0812108-011A	109	100	99	0
21SMW-7-121208	0812108-012A	106	99	97	0
22Trip Blank	0812108-013A	108	98	97	0

		QC Limit
SMC1 (DCE) 1 = 1,2-Dichloroethane-d4		75-134
SMC2 (TOL) 1 = Toluene-d8		75-125
SMC3 (BFB) 1 = 4-Bromofluorobenzene		75-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 1 of 1 FORM II VOA-1 SW8260B

104

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS | SampType: MS | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15857
Client ID: MW-11R-121108 | Batch ID: R15857 | Method: SW8260B | Analysis Date: 12/16/08 | SeqNo: 413174
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.29	0.500	10	0	93	70	130				
4-Methyl-2-pentanone	19.0	5.00	20	0	95	44	150				
Toluene	9.84	0.500	10	0	98	70	130				
trans-1,3-Dichloropropene	9.30	0.500	10	0	93	58	132				
1,1,2-Trichloroethane	9.69	0.500	10	0	97	68	133				
Tetrachloroethene	9.39	0.500	10	0	94	70	136				
2-Hexanone	17.0	5.00	20	0	85	25	155				
Dibromochloromethane	8.75	0.500	10	0	88	70	130				
1,2-Dibromoethane	9.38	0.500	10	0	94	70	130				
Chlorobenzene	9.56	0.500	10	0	96	89	130				
Ethylbenzene	9.88	0.500	10	0	99	70	130				
Xylenes (total)	29.3	1.00	30	0	98	65	132				
Styrene	8.84	0.500	10	0	88	57	133				
Bromoform	8.19	1.00	10	0	82	70	130				
Isopropylbenzene	9.53	0.500	10	0	95	70	130				
1,1,2,2-Tetrachloroethane	9.67	0.500	10	0	97	68	136				
1,3-Dichlorobenzene	9.60	0.500	10	0	96	70	130				
1,4-Dichlorobenzene	9.53	0.500	10	0	95	70	130				
1,2-Dichlorobenzene	9.44	0.500	10	0	94	70	130				
1,2-Dibromo-3-chloropropane	7.53	5.00	10	0	75	55	149				
1,2,4-Trichlorobenzene	8.49	1.00	10	0	85	68	130				
Surr: 1,2-Dichloroethane-d4	9.86	0.100	10	0	99	75	134				
Surr: Toluene-d8	10.1	0.100	10	0	101	75	125				
Surr: 4-Bromofluorobenzene	9.49	0.100	10	0	95	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

106

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMSD | SampType: MSD | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15857
Client ID: MW-11R-121108 | Batch ID: R15857 | Method: SW8260B | Analysis Date: 12/16/08 | SeqNo: 413175
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	68	134	11	4.3	30	
Chloromethane	10.8	1.00	10	1.11	97	58	135	11.2	3.6	20	
Vinyl chloride	10.9	1.00	10	0	109	70	130	11.2	2.5	20	
Bromomethane	8.70	1.00	10	0	87	29	155	8.57	1.5	24	
Chloroethane	10.5	1.00	10	0	106	70	130	10.9	3.1	20	
Trichlorofluoromethane	10.3	1.00	10	0	103	70	131	10.8	4.4	20	
1,1-Dichloroethene	9.15	0.500	10	0	92	70	135	9.48	3.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.2	0.500	10	0	102	70	130	10.5	3.2	20	
Acetone	18.0	10.0	20	1.59	82	25	150	17.5	3.0	50	
Carbon disulfide	10.2	0.500	10	0	102	66	130	10.7	5.0	20	
Methyl acetate	10.5	5.00	10	0	105	63	132	10.5	0.5	20	
Methylene chloride	8.94	2.00	10	0	89	70	130	9.14	2.2	20	
trans-1,2-Dichloroethene	9.37	0.500	10	0	94	70	130	9.48	1.2	20	
Methyl tert-butyl ether	9.04	1.00	10	0	90	70	130	9.08	0.4	20	
1,1-Dichloroethane	9.58	0.500	10	0	96	70	130	9.86	2.9	20	
cis-1,2-Dichloroethene	9.59	0.500	10	0	96	48	151	9.86	2.8	20	
2-Butanone	18.4	10.0	20	0	92	25	150	17.9	2.9	50	
Chloroform	9.44	0.500	10	0	94	70	130	9.7	2.7	20	
1,1,1-Trichloroethane	9.36	0.500	10	0	94	70	130	9.58	2.3	20	
Cyclohexane	10.2	0.500	10	0	102	70	130	10.6	3.1	20	
Carbon tetrachloride	9.79	0.500	10	0	98	70	140	10	2.6	20	
Benzene	9.60	0.500	10	0	96	70	132	9.8	2.1	20	
1,2-Dichloroethane	9.62	0.500	10	0	96	70	130	9.77	1.5	20	
Trichloroethene	9.08	0.500	10	0	91	42	167	9.36	3.0	20	
Methylcyclohexane	9.62	0.500	10	0	96	62	130	10.2	5.6	20	
1,2-Dichloropropane	9.80	0.500	10	0	98	70	130	10	2.1	20	
Bromodichloromethane	9.57	0.500	10	0	96	70	130	9.68	1.1	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

107

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS | SampType: MS | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15857
Client ID: MW-11R-121108 | Batch ID: R15857 | Method: SW8260B | Analysis Date: 12/16/08 | SeqNo: 413174
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	11.0	1.00	10	0	110	68	134				
Chloromethane	11.2	1.00	10	1.11	101	58	135				
Vinyl chloride	11.2	1.00	10	0	112	70	130				
Bromomethane	8.57	1.00	10	0	86	29	155				
Chloroethane	10.9	1.00	10	0	109	70	130				
Trichlorofluoromethane	10.8	1.00	10	0	108	70	131				
1,1-Dichloroethene	9.48	0.500	10	0	95	70	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.5	0.500	10	0	105	70	130				
Acetone	17.5	10.0	20	1.59	80	25	150				
Carbon disulfide	10.7	0.500	10	0	107	66	130				
Methyl acetate	10.5	5.00	10	0	105	63	132				
Methylene chloride	9.14	2.00	10	0	91	70	130				
trans-1,2-Dichloroethene	9.60	0.500	10	0	96	70	130				
Methyl tert-butyl ether	9.08	1.00	10	0	91	70	130				
1,1-Dichloroethane	9.86	0.500	10	0	99	70	130				
cis-1,2-Dichloroethene	9.86	0.500	10	0	99	48	151				
2-Butanone	17.9	10.0	20	0	89	25	150				
Chloroform	9.70	0.500	10	0	97	70	130				
1,1,1-Trichloroethane	9.58	0.500	10	0	96	70	130				
Cyclohexane	10.6	0.500	10	0	106	70	130				
Carbon tetrachloride	10.0	0.500	10	0	101	70	140				
Benzene	9.80	0.500	10	0	98	70	132				
1,2-Dichloroethane	9.77	0.500	10	0	98	70	130				
Trichloroethene	9.36	0.500	10	0	94	42	167				
Methylcyclohexane	10.2	0.500	10	0	102	62	130				
1,2-Dichloropropane	10.0	0.500	10	0	100	70	130				
Bromodichloromethane	9.68	0.500	10	0	97	70	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

105

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15857 SampType: MSB TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 417913
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.32	0.500	10	0	93	70	130				
4-Methyl-2-pentanone	19.4	5.00	20	0	97	44	150				
Toluene	9.45	0.500	10	0	94	70	130				
trans-1,3-Dichloropropene	9.17	0.500	10	0	92	58	132				
1,1,2-Trichloroethane	9.92	0.500	10	0	98	68	133				
Tetrachloroethene	9.26	0.500	10	0	93	70	130				
2-Hexanone	19.0	5.00	20	0	95	25	155				
Dibromochloromethane	8.73	0.500	10	0	87	70	130				
1,2-Dibromoethane	9.49	0.500	10	0	95	70	130				
Chlorobenzene	9.45	0.500	10	0	94	69	130				
Ethylbenzene	9.63	0.500	10	0	96	70	130				
Xylenes (total)	29.0	1.00	30	0	97	65	132				
Styrene	8.76	0.500	10	0	88	57	133				
Bromoform	8.31	1.00	10	0	83	70	130				
Isopropylbenzene	9.48	0.500	10	0	95	70	130				
1,1,2,2-Tetrachloroethane	9.87	0.500	10	0	99	68	136				
1,3-Dichlorobenzene	9.50	0.500	10	0	95	70	130				
1,4-Dichlorobenzene	9.37	0.500	10	0	94	70	130				
1,2-Dichlorobenzene	9.41	0.500	10	0	94	70	130				
1,2-Dibromo-3-chloropropane	7.77	5.00	10	0	78	55	149				
1,2,4-Trichlorobenzene	8.90	1.00	10	0	89	68	130				
Surr: 1,2-Dichloroethane-d4	9.87	0.100	10	0	99	75	134				
Surr: Toluene-d8	9.94	0.100	10	0	99	75	125				
Surr: 4-Bromofluorobenzene	9.58	0.100	10	0	96	75	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMSD SampType: MSD TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413175
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.18	0.500	10	0	92	70	130	9.29	1.2	20	
4-Methyl-2-pentanone	19.2	5.00	20	0	96	44	150	19	0.7	50	
Toluene	9.67	0.500	10	0	97	70	130	9.84	1.7	20	
trans-1,3-Dichloropropene	9.10	0.500	10	0	91	58	132	9.3	2.2	25	
1,1,2-Trichloroethane	9.69	0.500	10	0	97	68	133	9.69	0	20	
Tetrachloroethene	9.06	0.500	10	0	91	70	130	9.39	3.6	20	
2-Hexanone	17.5	5.00	20	0	88	25	155	17	2.9	50	
Dibromochloromethane	8.38	0.500	10	0	84	70	130	8.75	4.3	20	
1,2-Dibromoethane	9.28	0.500	10	0	93	70	130	9.38	1.1	20	
Chlorobenzene	9.16	0.500	10	0	92	69	130	9.56	4.3	20	
Ethylbenzene	9.48	0.500	10	0	95	70	130	9.88	4.1	20	
Xylenes (total)	28.4	1.00	30	0	95	65	132	29.3	3.2	20	
Styrene	8.38	0.500	10	0	84	57	133	8.84	5.3	20	
Bromoform	7.94	1.00	10	0	79	70	130	8.19	3.1	20	
Isopropylbenzene	9.39	0.500	10	0	94	70	130	9.53	1.5	20	
1,1,2,2-Tetrachloroethane	9.64	0.500	10	0	96	68	136	9.67	0.3	20	
1,3-Dichlorobenzene	9.39	0.500	10	0	94	70	130	9.6	2.2	20	
1,4-Dichlorobenzene	9.28	0.500	10	0	93	70	130	9.53	2.7	20	
1,2-Dichlorobenzene	9.28	0.500	10	0	93	70	130	9.44	1.7	20	
1,2-Dibromo-3-chloropropane	7.52	5.00	10	0	75	55	149	7.53	0.1	20	
1,2,4-Trichlorobenzene	8.65	1.00	10	0	86	68	130	8.49	1.9	20	
Surr: 1,2-Dichloroethane-d4	9.96	0.100	10	0	100	75	134	0		0	
Surr: Toluene-d8	9.82	0.100	10	0	98	75	125	0		0	
Surr: 4-Bromofluorobenzene	9.64	0.100	10	0	96	75	125	0		0	

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15832 SampType: LCS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412416
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	83	139				
Chloromethane	9.03	1.00	10	0	90	59	133				
Vinyl chloride	9.87	1.00	10	0	99	75	125				
Bromomethane	8.12	1.00	10	0	81	42	156				
Chloroethane	10.6	1.00	10	0	106	75	124				
Trichlorofluoromethane	10.6	1.00	10	0	106	73	132				
1,1-Dichloroethene	9.59	0.500	10	0	99	77	126				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.6	0.500	10	0	106	80	120				
Acetone	20.6	10.0	20	0	103	37	163				
Carbon disulfide	10.6	0.500	10	0	106	76	122				
Methyl acetate	11.0	5.00	10	0	110	67	136				
Methylene chloride	9.49	2.00	10	0	95	78	120				
trans-1,2-Dichloroethene	9.95	0.500	10	0	100	80	120				
Methyl tert-butyl ether	10.1	1.00	10	0	101	76	122				
1,1-Dichloroethane	10.0	0.500	10	0	100	80	120				
cis-1,2-Dichloroethene	10.3	0.500	10	0	103	80	120				
2-Butanone	20.3	10.0	20	0	102	49	153				
Chloroform	9.88	0.500	10	0	99	80	120				
1,1,1-Trichloroethane	9.88	0.500	10	0	99	80	127				
Cyclohexane	10.7	0.500	10	0	107	78	124				
Carbon tetrachloride	10.3	0.500	10	0	103	74	137				
Benzene	10.2	0.500	10	0	102	80	120				
1,2-Dichloroethane	9.79	0.500	10	0	98	73	126				
Trichloroethene	10.0	0.500	10	0	100	80	120				
Methylcyclohexane	10.3	0.500	10	0	103	75	126				
1,2-Dichloropropane	10.3	0.500	10	0	103	80	120				
Bromodichloromethane	10.1	0.500	10	0	101	78	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15857 SampType: MSB TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 417913
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	68	134				
Chloromethane	9.80	1.00	10	0	98	58	135				
Vinyl chloride	11.1	1.00	10	0	111	70	130				
Bromomethane	8.23	1.00	10	0	82	29	156				
Chloroethane	10.5	1.00	10	0	105	70	130				
Trichlorofluoromethane	10.5	1.00	10	0	105	70	131				
1,1-Dichloroethene	9.20	0.500	10	0	92	70	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.3	0.500	10	0	103	70	130				
Acetone	20.0	10.0	20	0	103	25	150				
Carbon disulfide	10.1	0.500	10	0	101	66	130				
Methyl acetate	11.0	5.00	10	0	110	63	132				
Methylene chloride	9.03	2.00	10	0	90	70	130				
trans-1,2-Dichloroethene	9.38	0.500	10	0	94	70	130				
Methyl tert-butyl ether	9.05	1.00	10	0	90	70	130				
1,1-Dichloroethane	9.83	0.500	10	0	98	70	130				
cis-1,2-Dichloroethene	9.61	0.500	10	0	96	48	151				
2-Butanone	19.5	10.0	20	0	98	25	150				
Chloroform	9.56	0.500	10	0	96	70	130				
1,1,1-Trichloroethane	9.29	0.500	10	0	93	70	130				
Cyclohexane	10.1	0.500	10	0	101	70	130				
Carbon tetrachloride	9.70	0.500	10	0	97	70	140				
Benzene	9.55	0.500	10	0	96	70	132				
1,2-Dichloroethane	9.41	0.500	10	0	94	70	130				
Trichloroethene	9.03	0.500	10	0	90	42	167				
Methylcyclohexane	9.69	0.500	10	0	97	62	130				
1,2-Dichloropropane	9.75	0.500	10	0	98	70	130				
Bromodichloromethane	9.66	0.500	10	0	96	70	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-15832 SampType: LCSD TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412417
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	10.2	0.500	10	0	102	80	120	10	2.1	20	
4-Methyl-2-pentanone	20.6	5.00	20	0	103	50	150	20.6	0.1	50	
Toluene	10.5	0.500	10	0	105	80	120	10.2	2.1	20	
trans-1,3-Dichloropropene	10.2	0.500	10	0	102	73	121	9.84	3.3	25	
1,1,2-Trichloroethane	10.4	0.500	10	0	104	80	120	10.2	1.7	20	
Tetrachloroethene	10.4	0.500	10	0	104	80	120	10.3	1.2	20	
2-Hexanone	20.7	5.00	20	0	103	44	152	20	3.1	50	
Dibromochloromethane	9.71	0.500	10	0	97	75	123	9.5	2.2	20	
1,2-Dibromoethane	10.4	0.500	10	0	104	80	120	10.3	1.2	20	
Chlorobenzene	10.4	0.500	10	0	104	80	120	10.2	1.5	20	
Ethylbenzene	10.6	0.500	10	0	106	80	120	10.3	2.3	20	
Xylenes (total)	32.0	1.00	30	0	107	80	120	31.3	2.3	20	
Styrene	9.63	0.500	10	0	96	79	120	9.45	1.9	20	
Bromoform	9.26	1.00	10	0	93	72	126	9.18	0.9	20	
Isopropylbenzene	10.4	0.500	10	0	104	80	121	10.3	1	20	
1,1,2,2-Tetrachloroethane	10.3	0.500	10	0	103	73	122	10.1	1.6	20	
1,3-Dichlorobenzene	10.4	0.500	10	0	104	80	120	10.2	1.2	20	
1,4-Dichlorobenzene	10.2	0.500	10	0	102	80	120	10.2	0.3	20	
1,2-Dichlorobenzene	10.2	0.500	10	0	102	80	120	10.2	0.8	20	
1,2-Dibromo-3-chloropropane	8.47	5.00	10	0	85	71	124	8.58	1.3	20	
1,2,4-Trichlorobenzene	9.89	1.00	10	0	99	73	123	9.67	2.2	20	
Surr: 1,2-Dichloroethane-d4	9.46	0.100	10	0	95	75	134	0		0	
Surr: Toluene-d8	10.2	0.100	10	0	102	75	125	0		0	
Surr: 4-Bromofluorobenzene	9.67	0.100	10	0	97	75	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

114

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15832 SampType: LCS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412416
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	10.0	0.500	10	0	100	80	120				
4-Methyl-2-pentanone	20.6	5.00	20	0	103	50	150				
Toluene	10.2	0.500	10	0	103	80	120				
trans-1,3-Dichloropropene	9.84	0.500	10	0	98	73	121				
1,1,2-Trichloroethane	10.2	0.500	10	0	102	80	120				
Tetrachloroethene	10.3	0.500	10	0	103	80	120				
2-Hexanone	20.0	5.00	20	0	100	44	152				
Dibromochloromethane	9.50	0.500	10	0	95	75	123				
1,2-Dibromoethane	10.3	0.500	10	0	103	80	120				
Chlorobenzene	10.2	0.500	10	0	102	80	120				
Ethylbenzene	10.3	0.500	10	0	103	80	120				
Xylenes (total)	31.3	1.00	30	0	104	80	120				
Styrene	9.45	0.500	10	0	94	79	120				
Bromoform	9.18	1.00	10	0	92	72	126				
Isopropylbenzene	10.3	0.500	10	0	103	80	121				
1,1,2,2-Tetrachloroethane	10.1	0.500	10	0	101	73	122				
1,3-Dichlorobenzene	10.2	0.500	10	0	103	80	120				
1,4-Dichlorobenzene	10.2	0.500	10	0	102	80	120				
1,2-Dichlorobenzene	10.2	0.500	10	0	102	80	120				
1,2-Dibromo-3-chloropropane	8.58	5.00	10	0	86	71	124				
1,2,4-Trichlorobenzene	9.67	1.00	10	0	97	73	123				
Surr: 1,2-Dichloroethane-d4	9.58	0.100	10	0	96	75	134				
Surr: Toluene-d8	10.2	0.100	10	0	102	75	125				
Surr: 4-Bromofluorobenzene	9.78	0.100	10	0	98	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

112

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15857 SampType: LCS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413173
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	63	139				
Chloromethane	9.80	1.00	10	0	98	59	133				
Vinyl chloride	11.1	1.00	10	0	111	75	125				
Bromomethane	8.23	1.00	10	0	82	42	156				
Chloroethane	10.5	1.00	10	0	105	75	124				
Trichlorofluoromethane	10.5	1.00	10	0	105	73	132				
1,1-Dichloroethene	9.20	0.500	10	0	92	77	126				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.3	0.500	10	0	103	80	120				
Acetone	20.6	10.0	20	0	103	37	163				
Carbon disulfide	10.1	0.500	10	0	101	76	122				
Methyl acetate	11.0	5.00	10	0	110	67	136				
Methylene chloride	9.03	2.00	10	0	90	78	120				
trans-1,2-Dichloroethene	9.38	0.500	10	0	94	80	120				
Methyl tert-butyl ether	9.05	1.00	10	0	90	76	122				
1,1-Dichloroethane	9.62	0.500	10	0	96	80	120				
cis-1,2-Dichloroethene	9.61	0.500	10	0	96	80	120				
2-Butanone	19.5	10.0	20	0	98	49	153				
Chloroform	9.56	0.500	10	0	96	80	120				
1,1,1-Trichloroethane	9.29	0.500	10	0	93	80	127				
Cyclohexane	10.1	0.500	10	0	101	78	124				
Carbon tetrachloride	9.70	0.500	10	0	97	74	137				
Benzene	9.55	0.500	10	0	96	80	120				
1,2-Dichloroethane	9.41	0.500	10	0	94	73	126				
Trichloroethene	9.03	0.500	10	0	90	80	120				
Methylcyclohexane	9.69	0.500	10	0	97	75	126				
1,2-Dichloropropane	9.75	0.500	10	0	98	80	120				
Bromodichloromethane	9.56	0.500	10	0	96	78	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

115

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-15832 SampType: LCSD TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412417
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.6	1.00	10	0	106	63	139	10.5	1.1	20	
Chloromethane	9.39	1.00	10	0	94	59	133	9.03	3.9	20	
Vinyl chloride	10.2	1.00	10	0	102	75	125	9.87	3.7	20	
Bromomethane	8.89	1.00	10	0	89	42	156	8.12	9.1	24	
Chloroethane	10.7	1.00	10	0	107	75	124	10.6	1.0	20	
Trichlorofluoromethane	10.7	1.00	10	0	107	73	132	10.6	0.7	20	
1,1-Dichloroethene	10.0	0.500	10	0	100	77	126	9.89	1.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.9	0.500	10	0	109	80	120	10.6	2.7	20	
Acetone	20.8	10.0	20	0	104	37	163	20.6	0.7	50	
Carbon disulfide	10.9	0.500	10	0	109	76	122	10.6	3.4	20	
Methyl acetate	11.0	5.00	10	0	110	67	136	11	0.1	20	
Methylene chloride	9.69	2.00	10	0	97	78	120	9.49	2.1	20	
trans-1,2-Dichloroethene	10.3	0.500	10	0	103	80	120	9.95	3.2	20	
Methyl tert-butyl ether	10.2	1.00	10	0	102	76	122	10.1	1.2	20	
1,1-Dichloroethane	9.95	0.500	10	0	100	80	120	10	0.8	20	
cis-1,2-Dichloroethene	10.5	0.500	10	0	105	80	120	10.3	1.4	20	
2-Butanone	20.9	10.0	20	0	104	49	153	20.3	2.7	50	
Chloroform	10.1	0.500	10	0	101	80	120	9.88	1.8	20	
1,1,1-Trichloroethane	10.2	0.500	10	0	102	80	127	9.88	3.2	20	
Cyclohexane	11.0	0.500	10	0	110	78	124	10.7	2.8	20	
Carbon tetrachloride	10.6	0.500	10	0	106	74	137	10.3	2.8	20	
Benzene	10.3	0.500	10	0	103	80	120	10.2	0.9	20	
1,2-Dichloroethane	9.98	0.500	10	0	100	73	126	9.79	1.9	20	
Trichloroethene	10.3	0.500	10	0	103	80	120	10	2.9	20	
Methylcyclohexane	10.9	0.500	10	0	109	75	126	10.3	5.3	20	
1,2-Dichloropropane	10.4	0.500	10	0	104	80	120	10.3	1.5	20	
Bromodichloromethane	10.3	0.500	10	0	103	78	125	10.1	2.4	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

113

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15832 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412418
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.00									
Chloromethane	ND	1.00									
Vinyl chloride	ND	1.00									
Bromomethane	ND	1.00									
Chloroethane	ND	1.00									
Trichlorofluoromethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.500									
Acetone	ND	10.0									
Carbon disulfide	ND	0.500									
Methyl acetate	ND	5.00									
Methylene chloride	ND	2.00									
trans-1,2-Dichloroethene	ND	0.500									
Methyl tert-butyl ether	ND	1.00									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									
2-Butanone	ND	10.0									
Chloroform	ND	0.500									
1,1,1-Trichloroethane	ND	0.500									
Cyclohexane	ND	0.500									
Carbon tetrachloride	ND	0.500									
Benzene	ND	0.500									
1,2-Dichloroethane	ND	0.500									
Trichloroethene	ND	0.500									
Methylcyclohexane	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

16-Dec-08

118

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15857 SampType: LCS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413173
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.32	0.500	10	0	93	80	120				
4-Methyl-2-pentanone	19.4	5.00	20	0	97	50	150				
Toluene	9.45	0.500	10	0	94	80	120				
trans-1,3-Dichloropropene	9.17	0.500	10	0	92	73	121				
1,1,2-Trichloroethane	9.82	0.500	10	0	98	80	120				
Tetrachloroethene	9.26	0.500	10	0	93	80	120				
2-Hexanone	19.0	5.00	20	0	95	44	152				
Dibromochloromethane	8.73	0.500	10	0	87	75	123				
1,2-Dibromoethane	9.49	0.500	10	0	95	80	120				
Chlorobenzene	9.45	0.500	10	0	94	80	120				
Ethylbenzene	9.63	0.500	10	0	96	80	120				
Xylenes (total)	29.0	1.00	30	0	97	80	120				
Styrene	8.78	0.500	10	0	88	79	120				
Bromoform	8.31	1.00	10	0	83	72	126				
Isopropylbenzene	9.48	0.500	10	0	95	80	121				
1,1,2,2-Tetrachloroethane	9.87	0.500	10	0	99	73	122				
1,3-Dichlorobenzene	9.50	0.500	10	0	95	80	120				
1,4-Dichlorobenzene	9.37	0.500	10	0	94	80	120				
1,2-Dichlorobenzene	9.41	0.500	10	0	94	80	120				
1,2-Dibromo-3-chloropropane	7.77	5.00	10	0	78	71	124				
1,2,4-Trichlorobenzene	8.90	1.00	10	0	89	73	123				
Surr: 1,2-Dichloroethane-d4	9.87	0.100	10	0	99	75	134				
Surr: Toluene-d8	9.94	0.100	10	0	99	75	125				
Surr: 4-Bromofluorobenzene	9.58	0.100	10	0	96	75	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

09-Jan-09

116

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15832 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412418
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.500									
4-Methyl-2-pentanone	ND	5.00									
Toluene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
1,1,2-Trichloroethane	ND	0.500									
Tetrachloroethene	ND	0.500									
2-Hexanone	ND	5.00									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane	ND	0.500									
Chlorobenzene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes (total)	ND	1.00									
Styrene	ND	0.500									
Bromoform	ND	1.00									
Isopropylbenzene	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	5.00									
1,2,4-Trichlorobenzene	ND	1.00									
Surr: 1,2-Dichloroethane-d4	9.60	0.100	10	0	96	75	134				
Surr: Toluene-d8	10.0	0.100	10	0	100	75	125				
Surr: 4-Bromofluorobenzene	9.83	0.100	10	0	98	75	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

16-Dec-08

119

4A
VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.
MB-15832

Lab Name: Life Science Laboratorie Contract: _____
Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108
Lab File ID: J7930.D Lab Sample ID: MB-15832
Date Analyzed: 12/15/2008 Time Analyzed: 13:52
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-15832	LCS-15832	J7827.D	12:15
02	LCSD-15832	LCSD-15832	J7828.D	12:48
03	MW-2-121108	0812108-001A	J7844.D	21:20
04	MW-4-121108	0812108-002A	J7845.D	21:52
05	MW-12-121108	0812108-003A	J7846.D	22:24

Page 1 of 2

CO0062572

FORM IV

8260W7_OCM2

117

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MB-15832

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: MB-15832

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7830.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 19 SW8260B

4A

SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

MB-15857

Lab Name: Life Science Laboratorie Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Lab File ID: J7857.D Lab Sample ID: MB-15857

Date Analyzed: 12/16/2008 Time Analyzed: 12:41

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MS03 10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MSB-15857	MSB-15857	J7853.D	10:24
02	LCS-15857	LCS-15857	J7853.D	10:24
03	MW-11R-121108MS	0812108-005AMS	J7854.D	11:05
04	MW-11R-121108MSD	0812108-005AMSD	J7855.D	11:37
05	MW-12-121108DL	0812108-003ADL	J7858.D	13:13
06	MW-13-121108	0812108-004A	J7859.D	13:45
07	MW-11R-121108	0812108-005A	J7860.D	14:17
08	MW-8-121108	0812108-006A	J7861.D	14:49
09	BO-1-121108	0812108-007A	J7862.D	15:21
10	MW-3R-121208	0812108-008A	J7863.D	15:53
11	MW-9-121208	0812108-009A	J7864.D	16:24
12	MW-5-121208	0812108-010A	J7865.D	16:56
13	MW-6-121208	0812108-011A	J7866.D	17:28
14	MW-7-121208	0812108-012A	J7867.D	18:00
15	Trip Blank	0812108-013A	J7868.D	18:32

COMMENTS:

page 2 of 2

FORM IV 8260W7_OLM42

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15857 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413176
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.00									
Chloromethane	ND	1.00									
Vinyl chloride	ND	1.00									
Bromomethane	ND	1.00									
Chloroethane	ND	1.00									
Trichlorofluoromethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.500									
Acetone	ND	10.0									
Carbon disulfide	ND	0.500									
Methyl acetate	ND	5.00									
Methylene chloride	ND	2.00									
trans-1,2-Dichloroethene	ND	0.500									
Methyl tert-butyl ether	ND	1.00									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									
2-Butanone	ND	10.0									
Chloroform	ND	0.500									
1,1,1-Trichloroethane	ND	0.500									
Cyclohexane	ND	0.500									
Carbon tetrachloride	ND	0.500									
Benzene	ND	0.500									
1,2-Dichloroethane	ND	0.500									
Trichloroethene	ND	0.500									
Methylcyclohexane	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limits
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

18-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15857 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413176
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.500									
4-Methyl-2-pentanone	ND	5.00									
Toluene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
1,1,2-Trichloroethane	ND	0.500									
Tetrachloroethene	ND	0.500									
2-Hexanone	ND	5.00									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane	ND	0.500									
Chlorobenzene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes (total)	ND	1.00									
Styrene	ND	0.500									
Bromoform	ND	1.00									
Isopropylbenzene	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	5.00									
1,2,4-Trichlorobenzene	ND	1.00									
Surr: 1,2-Dichloroethane-d4	10.4	0.100	10	0	104	75	134				
Surr: Toluene-d8	10.0	0.100	10	0	101	75	125				
Surr: 4-Bromofluorobenzene	10.0	0.100	10	0	100	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

18-Dec-08

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-15857

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: ORG-MS SAS No.: SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: MB-15857

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7857.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 21 SW8260B

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): J7852.D Date Analyzed: 12/16/2008

Instrument ID: MS03_10 Time Analyzed: 9:52

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1730650	11.95	645110	16.47	492728	20.07
UPPER LIMIT	3461300	12.45	1290220	16.97	985456	20.57
LOWER LIMIT	865325	11.45	322555	15.97	246364	19.57
SAMPLE NO.						
01 LCS-15857 (LCS-15857)	1847460	11.95	675841	16.48	506913	20.07
02 MW-11R-121108MS (0812108-005AMS)	1933713	11.95	707088	16.47	533371	20.07
03 MW-11R-121108MSD (0812108-005AMSD)	1963641	11.95	732137	16.47	539462	20.07
04 MB-15857 (MB-15857)	1728139	11.95	623013	16.48	404531	20.07
05 MW-12-121108DL (0812108-003ADL)	1709845	11.95	623621	16.47	440329	20.07
06 MW-13-121108 (0812108-004A)	1730096	11.95	633378	16.48	412778	20.07
07 MW-11R-121108 (0812108-005A)	1746039	11.94	643396	16.48	412566	20.07
08 MW-8-121108 (0812108-006A)	1715113	11.95	624198	16.47	399581	20.07
09 BD-1-121108 (0812108-007A)	1730680	11.95	631297	16.48	400814	20.07
10 MW-3R-121208 (0812108-008A)	1723348	11.95	627974	16.47	403332	20.07
11 MW-9-121208 (0812108-009A)	1763549	11.94	645596	16.48	416845	20.07
12 MW-5-121208 (0812108-010A)	1658183	11.95	609244	16.48	397299	20.07
13 MW-6-121208 (0812108-011A)	1637214	11.95	594715	16.48	384510	20.07
14 MW-7-121208 (0812108-012A)	1569734	11.95	575079	16.48	372418	20.07
15 Trip Blank (0812108-013A)	1640754	11.95	604537	16.48	387595	20.07

IS1* = Fluorobenzene IS3 = 1,4-Dichlorobenzene-d4

IS2 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits

12/31/08 14:32 FORM VIII Page 3 of 4 SW8260B

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): J7852.D Date Analyzed: 12/16/2008

Instrument ID: MS03_10 Time Analyzed: 9:52

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1730650	11.95	645110	16.47	492728	20.07
UPPER LIMIT	3461300	12.45	1290220	16.97	985456	20.57
LOWER LIMIT	865325	11.45	322555	15.97	246364	19.57
SAMPLE NO.						
01 LCS-15857 (LCS-15857)	1847460	11.95	675841	16.48	506913	20.07
02 MSB-15857 (MSB-15857)	1847460	11.95	675841	16.48	506913	20.07
03 MW-11R-121108MS (0812108-005AMS)	1933713	11.95	707088	16.47	533371	20.07
04 MW-11R-121108MSD (0812108-005AMSD)	1963641	11.95	732137	16.47	539462	20.07
05 MB-15857 (MB-15857)	1728139	11.95	623013	16.48	404531	20.07
06 MW-12-121108DL (0812108-003ADL)	1709845	11.95	623621	16.47	440329	20.07
07 MW-13-121108 (0812108-004A)	1730096	11.95	633378	16.48	412778	20.07
08 MW-11R-121108 (0812108-005A)	1746039	11.94	643396	16.48	412566	20.07
09 MW-8-121108 (0812108-006A)	1715113	11.95	624198	16.47	399581	20.07
10 BD-1-121108 (0812108-007A)	1730680	11.95	631297	16.48	400814	20.07
11 MW-3R-121208 (0812108-008A)	1723348	11.95	627974	16.47	403332	20.07
12 MW-9-121208 (0812108-009A)	1763549	11.94	645596	16.48	416845	20.07
13 MW-5-121208 (0812108-010A)	1658183	11.95	609244	16.48	397299	20.07
14 MW-6-121208 (0812108-011A)	1637214	11.95	594715	16.48	384510	20.07
15 MW-7-121208 (0812108-012A)	1569734	11.95	575079	16.48	372418	20.07
16 Trip Blank (0812108-013A)	1640754	11.95	604537	16.48	387595	20.07

IS1 = Fluorobenzene IS3 = 1,4-Dichlorobenzene-d4

IS2 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

12/31/08 15:26 FORM VIII Page 3 of 4 SW8260B

GC/MS Semivolatile Organics Data

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No. _____ SDG No.: 0812108

	EPA SAMPLE NO.	LSL ID	S1 (2FP) 1 #	S2 (FBP) 1 #	S3 (NBZ) 1 #	S4 (PHL) 1 #	S5 (TBP) 1 #	S6 (TPH) 1 #	TOT OUT
01	MB-8644	MB-8644	77	81	83	81	79	85	0
02	LCS-8644	LCS-8644	84	81	84	86	86	86	0
03	MSB-8644	MSB-8644	82	79	82	85	85	85	0
04	MW-2-121108	0812108-001B	81	81	85	85	87	82	0
05	MW-4-121108	0812108-002B	77	81	83	82	80	83	0
06	MW-12-121108	0812108-003B	79	77	80	84	86	85	0
07	MW-13-121108	0812108-004B	80	80	83	85	83	83	0
08	MW-11R-121108	0812108-005B	66	84	86	69	57	84	0
09	MW-11R-121108MS	0812108-005BMS	76	82	85	80	67	83	0
10	MW-11R-121108MSD	0812108-005BMSD	79	82	87	83	68	87	0
11	MW-8-121108	0812108-006B	79	82	82	82	85	88	0
12	BD-1-121108	0812108-007B	76	77	78	79	80	80	0
13	MW-3R-121208	0812108-008B	73	81	80	75	75	84	0
14	MW-9-121208	0812108-009B	81	82	84	85	84	87	0
15	MW-5-121208	0812108-010B	78	81	83	82	73	81	0
16	MW-6-121208	0812108-011B	78	82	84	83	76	84	0
17	MW-7-121208	0812108-012B	76	83	85	80	73	85	0

		QC Limit
S1	(2FP) 1 = 2-Fluorophenol	26-130
S2	(FBP) 1 = 2-Fluorobiphenyl	42-130
S3	(NBZ) 1 = Nitrobenzene-d5	42-130
S4	(PHL) 1 = Phenol-d5	21-134
S5	(TBP) 1 = 2,4,6-Tribromophenol	46-149
S6	(TPH) 1 = Terphenyl-d14	24-147

Column to be used to flag recovery values

* Values outside of contract required QC limits

Page 1 of 1 FORM II SV-1 SW8270C

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 16973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	41.2	10	51.5	0	80	50	130				
Atrazine	41.8	10	51.5	0	81	30	130				
Benzaldehyde	40.7	10	51.5	0	79	30	130				
Benzo(a)anthracene	46.4	10	51.5	0	90	42	134				
Benzo(a)pyrene	46.2	10	51.5	0	90	36	139				
Benzo(b)fluoranthene	46.7	10	51.5	0	91	30	153				
Benzo(g,h,i)perylene	45.4	10	51.5	0	88	23	136				
Benzo(k)fluoranthene	48.7	10	51.5	0	94	21	168				
bis(2-Chloroethoxy)methane	46.6	10	51.5	0	90	33	130				
Benzoic acid	48.3	10	51.5	0	94	18	153				
bis(2-chloroethyl)ether	51.4	10	51.5	0	100	28	130				
bis(2-chloroisopropyl)ether	50.5	10	51.5	0	98	49	153				
bis(2-Ethylhexyl)phthalate	49.3	10	51.5	0	96	28	157				
Butyl benzyl phthalate	59.1	10	51.5	0	115	30	130				
Carbazole	40.9	10	51.5	0	79	38	175				
Chrysene	46.0	10	51.5	0	89	43	132				
Di-n-butyl phthalate	49.1	10	51.5	0	95	37	152				
Di-n-octyl phthalate	49.8	10	51.5	0	95	50	148				
Dibenz(a,h)anthracene	46.3	10	51.5	0	90	27	149				
Dibenzofuran	46.2	10	51.5	0	90	50	130				
Diethyl phthalate	50.4	10	51.5	0	98	18	169				
Dimethyl phthalate	51.3	10	51.5	0	100	19	161				
Fluoranthene	47.7	10	51.5	0	93	50	130				
Fluorene	46.2	10	51.5	0	90	30	130				
Hexachlorobenzene	46.0	10	51.5	0	89	45	134				
Hexachlorobutadiene	31.2	10	51.5	0	60	20	130				
Hexachlorocyclopentadiene	31.8	10	51.5	0	62	10	130				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 16973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	32.7	10	51.5	0	63	32	130				
Indeno(1,2,3-cd)pyrene	45.1	10	51.5	0	88	27	138				
Isophorone	50.5	10	51.5	0	98	49	130				
N-Nitroso-di-n-propylamine	52.1	10	51.5	0	101	30	148				
N-Nitrosodiphenylamine	26.5	10	51.5	0	51	19	157				
Naphthalene	37.8	10	51.5	0	73	33	130				
Nitrobenzene	49.0	10	51.5	0	95	38	145				
Pentachlorophenol	38.7	52	51.5	0	75	50	145				
Phenanthrene	47.0	10	51.5	0	91	50	130				
Phenol	43.6	10	51.5	0	85	20	141				
Pyrene	45.6	10	51.5	0	89	47	133				
Surr: 2,4,6-Tribromophenol	104	0.10	155	0	67	46	149				
Surr: 2-Fluorobiphenyl	84.8	0.10	103	0	82	42	130				
Surr: 2-Fluorophenol	118	0.10	155	0	76	26	130				
Surr: Nitrobenzene-d5	87.2	0.10	103	0	85	42	130				
Surr: Phenol-d5	124	0.10	155	0	80	21	134				
Surr: Terphenyl-d14	85.6	0.10	103	0	83	24	147				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 16973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	47.7	10	51.5	0	93	30	130				
2,4,5-Trichlorophenol	43.7	52	51.5	0	85	50	134				J
2,4,6-Trichlorophenol	39.6	10	51.5	0	77	50	130				
2,4-Dichlorophenol	40.2	10	51.5	0	78	50	130				
2,4-Dimethylphenol	31.9	10	51.5	0	62	38	130				
2,4-Dinitrophenol	48.1	52	51.5	0	93	45	130				J
2,4-Dinitrotoluene	49.2	10	51.5	0	96	50	130				
2,6-Dinitrotoluene	51.1	10	51.5	0	99	50	130				
2-Chloronaphthalene	43.8	10	51.5	0	85	50	130				
2-Chlorophenol	43.9	10	51.5	0	85	35	130				
2-Methylnaphthalene	39.9	10	51.5	0	77	36	130				
2-Methylphenol	38.4	10	51.5	0	74	34	138				
2-Nitroaniline	47.5	52	51.5	0	92	10	173				J
2-Nitrophenol	46.4	10	51.5	0	90	46	130				
3,3'-Dichlorobenzidine	4.44	21	51.5	0	9	10	151				JS
3-Nitroaniline	43.6	52	51.5	0	85	10	161				J
4,6-Dinitro-2-methylphenol	51.2	10	51.5	0	99	50	130				
4-Bromophenyl phenyl ether	49.0	10	51.5	0	95	50	130				
4-Chloro-3-methylphenol	40.7	10	51.5	0	79	48	135				
4-Chloroaniline	29.3	10	51.5	0	57	14	133				
4-Chlorophenyl phenyl ether	49.2	10	51.5	0	96	50	130				
4-Methylphenol	37.4	10	51.5	0	73	48	130				
4-Nitroaniline	46.9	52	51.5	0	91	10	175				J
4-Nitrophenol	45.6	52	51.5	0	89	50	164				J
Acenaphthene	41.5	10	51.5	0	80	50	130				
Acenaphthylene	45.7	10	51.5	0	89	50	130				
Acetophenone	45.6	10	51.5	0	89	30	130				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	32.9	10	51.5	0	64	32	130	32.7	0.7	60	
Indeno(1,2,3-cd)pyrene	43.4	10	51.5	0	84	27	138	45.1	3.9	52	
Isophorone	52.0	10	51.5	0	101	49	130	50.5	2.9	39	
N-Nitroso-di-n-propylamine	52.5	10	51.5	0	102	30	145	52.1	0.8	60	
N-Nitrosodiphenylamine	28.2	10	51.5	0	55	19	157	26.5	6.5	60	
Naphthalene	39.4	10	51.5	0	76	33	130	37.8	4.2	60	
Nitrobenzene	50.9	10	51.5	0	99	38	145	49	3.8	60	
Pentachlorophenol	41.9	52	51.5	0	81	50	145	38.7	7.9	30	J
Phenanthrene	45.6	10	51.5	0	90	50	130	47	0.8	32	
Phenol	45.0	10	51.5	0	87	20	141	43.6	3.2	60	
Pyrene	46.5	10	51.5	0	90	47	133	45.8	1.5	48	
Surr: 2,4,6-Tribromophenol	106	0.10	155	0	68	46	149	0		0	
Surr: 2-Fluorobiphenyl	84.2	0.10	103	0	82	42	130	0		0	
Surr: 2-Fluorophenol	122	0.10	155	0	79	25	130	0		0	
Surr: Nitrobenzene-d5	89.4	0.10	103	0	87	42	130	0		0	
Surr: Phenol-d5	128	0.10	155	0	83	21	134	0		0	
Surr: Terphenyl-d14	89.4	0.10	103	0	87	24	147	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

134

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	47.9	10	51.5	0	93	30	130	47.7	0.5	60	
2,4,5-Trichlorophenol	46.0	52	51.5	0	89	50	124	43.7	5.3	30	J
2,4,6-Trichlorophenol	41.0	10	51.5	0	79	50	130	39.6	3.3	30	
2,4-Dichlorophenol	42.2	10	51.5	0	82	50	130	40.2	5.0	30	
2,4-Dimethylphenol	29.7	10	51.5	0	58	39	130	31.9	7.2	31	
2,4-Dinitrophenol	50.8	52	51.5	0	99	45	130	48.1	5.5	30	J
2,4-Dinitrotoluene	50.6	10	51.5	0	98	50	130	49.2	2.7	30	
2,6-Dinitrotoluene	52.7	10	51.5	0	102	50	130	51.1	3.1	30	
2-Chloronaphthalene	42.4	10	51.5	0	82	50	130	43.8	3.0	30	
2-Chlorophenol	45.1	10	51.5	0	88	35	130	43.9	2.8	60	
2-Methylnaphthalene	39.4	10	51.5	0	76	36	130	38.9	1.4	40	
2-Methylphenol	39.1	10	51.5	0	76	34	138	38.4	1.9	60	
2-Nitroaniline	49.7	52	51.5	0	96	10	173	47.5	4.6	60	J
2-Nitrophenol	47.8	10	51.5	0	93	46	130	46.4	3.1	36	
3,3'-Dichlorobenzidine	4.43	21	51.5	0	9	10	151	4.44	0.2	60	JS
3-Nitroaniline	45.7	52	51.5	0	89	10	161	43.6	4.5	60	J
4,6-Dinitro-2-methylphenol	53.4	10	51.5	0	104	50	130	51.2	4.3	30	
4-Bromophenyl phenyl ether	47.9	10	51.5	0	93	50	130	49	2.4	37	
4-Chloro-3-methylphenol	42.0	10	51.5	0	82	48	135	40.7	3.2	60	
4-Chloroaniline	33.3	10	51.5	0	65	14	133	29.3	13	60	
4-Chlorophenyl phenyl ether	48.7	10	51.5	0	95	50	130	49.2	1.0	34	
4-Methylphenol	38.1	10	51.5	0	74	48	130	37.4	1.9	42	
4-Nitroaniline	49.2	52	51.5	0	96	10	175	46.9	4.8	60	J
4-Nitrophenol	47.5	52	51.5	0	92	50	154	45.6	4.2	42	J
Acenaphthene	42.0	10	51.5	0	82	50	130	41.5	1.3	41	
Acenaphthylene	45.7	10	51.5	0	89	50	130	45.7	0.1	30	
Acetophenone	46.5	10	51.5	0	90	30	130	45.6	1.9	60	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

132

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	44.6	10	50	0	89	30	130				
2,4,5-Trichlorophenol	44.9	50	50	0	90	50	134				J
2,4,6-Trichlorophenol	45.3	10	50	0	91	50	130				
2,4-Dichlorophenol	43.5	10	50	0	87	50	130				
2,4-Dimethylphenol	40.6	10	50	0	81	39	130				
2,4-Dinitrophenol	39.8	50	50	0	80	45	130				J
2,4-Dinitrotoluene	48.0	10	50	0	96	50	130				
2,6-Dinitrotoluene	49.1	10	50	0	98	50	130				
2-Chloronaphthalene	38.4	10	50	0	77	50	130				
2-Chlorophenol	45.2	10	50	0	90	35	130				
2-Methylnaphthalene	35.4	10	50	0	71	36	130				
2-Methylphenol	46.1	10	50	0	92	34	138				
2-Nitroaniline	47.5	50	50	0	95	10	173				J
2-Nitrophenol	43.8	10	50	0	88	46	130				
3,3'-Dichlorobenzidine	24.7	20	50	0	49	10	151				
3-Nitroaniline	48.2	50	50	0	96	10	161				J
4,6-Dinitro-2-methylphenol	47.7	10	50	0	95	50	130				
4-Bromophenyl phenyl ether	44.6	10	50	0	89	50	130				
4-Chloro-3-methylphenol	44.6	10	50	0	89	48	135				
4-Chloroaniline	44.5	10	50	0	89	14	133				
4-Chlorophenyl phenyl ether	44.6	10	50	0	89	50	130				
4-Methylphenol	45.6	10	50	0	91	48	130				
4-Nitroaniline	47.9	50	50	0	96	10	175				J
4-Nitrophenol	44.5	50	50	0	89	50	154				J
Acenaphthene	41.9	10	50	0	84	50	130				
Acenaphthylene	41.9	10	50	0	84	50	130				
Acetophenone	43.1	10	50	0	86	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

135

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	40.6	10	51.5	0	79	50	130	41.2	1.5	34	
Atrazine	43.5	10	51.5	0	84	30	130	41.8	4.1	60	
Benzaldehyde	42.5	10	51.5	0	82	30	130	40.7	4.3	60	
Benzo[a]anthracene	47.0	10	51.5	0	91	42	134	46.4	1.3	54	
Benzo[a]pyrene	46.0	10	51.5	0	89	36	130	45.2	0.4	58	
Benzo[b]fluoranthene	45.6	10	51.5	0	88	30	153	46.7	2.5	59	
Benzo[g,h,i]perylene	44.0	10	51.5	0	85	23	136	45.4	3.3	57	
Benzo[k]fluoranthene	49.2	10	51.5	0	96	21	166	48.7	1.1	60	
bis(2-Chloroethoxy)methane	46.5	10	51.5	0	94	35	130	48.5	4.3	60	
bis(2-chloroethyl)ether	49.9	10	51.5	0	97	18	153	48.3	3.2	60	
bis(2-chloroisopropyl)ether	53.4	10	51.5	0	104	28	130	51.4	3.8	60	
bis(2-Ethylhexyl)phthalate	51.1	10	51.5	0	99	49	153	50.5	1.1	59	
Butyl benzyl phthalate	49.6	10	51.5	0	96	28	157	49.3	0.6	48	
Caprolactam	60.1	10	51.5	0	117	30	130	59.1	1.6	60	
Carbazole	42.2	10	51.5	0	82	38	175	40.9	3.1	40	
Chrysene	46.4	10	51.5	0	90	43	132	46	0.7	57	
Di-n-butyl phthalate	49.2	10	51.5	0	96	37	152	49.1	0.2	32	
Di-n-octyl phthalate	49.2	10	51.5	0	95	50	146	48.8	0.8	56	
Dibenz[a,h]anthracene	45.1	10	51.5	0	88	27	149	46.3	2.7	52	
Dibenzofuran	45.3	10	51.5	0	88	50	130	46.2	2.0	30	
Diethyl phthalate	51.5	10	51.5	0	100	18	159	50.4	2.0	30	
Dimethyl phthalate	51.3	10	51.5	0	100	19	161	51.3	0	30	
Fluoranthene	47.3	10	51.5	0	92	50	130	47.7	1	45	
Fluorene	45.8	10	51.5	0	89	50	130	46.2	0.8	30	
Hexachlorobenzene	45.3	10	51.5	0	88	45	134	46	1.5	48	
Hexachlorobutadiene	31.1	10	51.5	0	60	20	130	31.2	0.3	60	
Hexachlorocyclopentadiene	30.2	10	51.5	0	59	10	130	31.8	5.1	31	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

133

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8644 SampType: LCS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416470
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Biphenyl	43.2	10	50	0	90	30	130				
2,4,5-Trichlorophenol	46.5	50	50	0	93	60	125				J
2,4,6-Trichlorophenol	46.7	10	50	0	93	60	125				
2,4-Dichlorophenol	44.3	10	50	0	89	60	125				
2,4-Dimethylphenol	41.5	10	50	0	83	42	125				
2,4-Dinitrophenol	44.6	50	50	0	89	25	138				J
2,4-Dinitrotoluene	49.0	10	50	0	98	60	129				
2,6-Dinitrotoluene	50.3	10	50	0	101	60	127				
2-Chloronaphthalene	39.5	10	50	0	79	53	125				
2-Chlorophenol	45.7	10	50	0	91	53	125				
2-Methylnaphthalene	35.6	10	50	0	71	42	125				
2-Methylphenol	47.2	10	50	0	94	56	125				
2-Nitroaniline	48.4	50	50	0	97	60	138				J
2-Nitrophenol	44.6	10	50	0	89	57	125				
3,3'-Dichlorobenzidine	22.3	20	50	0	45	26	128				
3-Nitroaniline	48.1	50	50	0	96	55	144				J
4,6-Dinitro-2-methylphenol	50.0	10	50	0	100	57	125				
4-Bromophenyl phenyl ether	46.0	10	50	0	92	57	135				
4-Chloro-3-methylphenol	45.8	10	50	0	92	60	125				
4-Chloroaniline	45.5	10	50	0	91	39	139				
4-Chlorophenyl phenyl ether	45.1	10	50	0	90	54	126				
4-Methylphenol	46.4	10	50	0	93	51	125				
4-Nitroaniline	47.5	50	50	0	95	52	150				J
4-Nitrophenol	46.1	50	50	0	92	55	144				J
Acenaphthene	42.8	10	50	0	86	58	125				
Acenaphthylene	43.4	10	50	0	87	57	125				
Acetophenone	43.1	10	50	0	86	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

138

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	43.6	10	50	0	87	50	130				
Atrazine	41.0	10	50	0	82	30	130				
Benzaldehyde	45.7	10	50	0	91	30	130				
Benzo[a]anthracene	44.8	10	50	0	90	42	134				
Benzo[a]pyrene	43.9	10	50	0	88	36	139				
Benzo[b]fluoranthene	44.5	10	50	0	89	30	153				
Benzo[g,h,i]perylene	45.2	10	50	0	90	23	136				
Benzo[k]fluoranthene	45.0	10	50	0	90	21	168				
bis(2-Chloroethoxy)methane	44.6	10	50	0	89	35	130				
bis(2-chloroethyl)ether	45.6	10	50	0	91	18	153				
bis(2-chloroisopropyl)ether	48.2	10	50	0	96	28	130				
bis(2-Ethylhexyl)phthalate	47.5	10	50	0	95	49	153				
Butyl benzyl phthalate	46.4	10	50	0	93	28	157				
Caprolactam	56.9	10	50	0	114	30	130				
Carbazole	46.1	10	50	0	92	38	175				
Chrysene	44.4	10	50	0	89	43	132				
Di-n-butyl phthalate	46.4	10	50	0	93	37	152				
Di-n-octyl phthalate	46.3	10	50	0	93	50	149				
Dibenz[a,h]anthracene	45.2	10	50	0	90	27	149				
Dibenzofuran	41.6	10	50	0	83	50	130				
Diethyl phthalate	48.4	10	50	0	97	18	168				
Dimethyl phthalate	49.2	10	50	0	98	19	161				
Fluoranthene	45.3	10	50	0	91	50	130				
Fluorene	42.8	10	50	0	86	50	130				
Hexachlorobenzene	43.0	10	50	0	86	45	134				
Hexachlorobutadiene	27.9	10	50	0	56	20	130				
Hexachlorocyclopentadiene	21.7	10	50	0	43	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

136

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8644 SampType: LCS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416470
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	44.8	10	50	0	90	60	125				
Atrazine	42.7	10	50	0	85	30	130				
Benzaldehyde	46.0	10	50	0	92	30	130				
Benzo[a]anthracene	45.9	10	50	0	92	60	125				
Benzo[a]pyrene	44.9	10	50	0	90	58	131				
Benzo[b]fluoranthene	44.8	10	50	0	90	56	134				
Benzo[g,h,i]perylene	46.7	10	50	0	93	44	144				
Benzo[k]fluoranthene	46.3	10	50	0	93	56	133				
bis(2-Chloroethoxy)methane	45.3	10	50	0	91	58	125				
bis(2-chloroethyl)ether	46.0	10	50	0	92	48	126				
bis(2-chloroisopropyl)ether	50.4	10	50	0	101	33	131				
bis(2-Ethylhexyl)phthalate	48.2	10	50	0	96	60	148				
Butyl benzyl phthalate	47.4	10	50	0	95	58	146				
Caprolactam	57.6	10	50	0	115	30	130				
Carbazole	46.7	10	50	0	93	57	146				
Chrysene	44.9	10	50	0	90	59	128				
Di-n-butyl phthalate	47.4	10	50	0	95	58	146				
Di-n-octyl phthalate	47.6	10	50	0	95	58	149				
Dibenz[a,h]anthracene	46.0	10	50	0	92	44	150				
Dibenzofuran	42.5	10	50	0	85	50	126				
Diethyl phthalate	49.4	10	50	0	99	56	147				
Dimethyl phthalate	50.0	10	50	0	100	60	129				
Fluoranthene	46.1	10	50	0	92	60	128				
Fluorene	43.8	10	50	0	88	59	125				
Hexachlorobenzene	43.4	10	50	0	87	60	134				
Hexachlorobutadiene	27.4	10	50	0	55	25	125				
Hexachlorocyclopentadiene	22.5	10	50	0	45	25	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

139

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	30.7	10	50	0	61	32	130				
Indeno[1,2,3-cd]pyrene	45.4	10	50	0	91	27	138				
Isophorone	47.7	10	50	0	95	49	130				
N-Nitroso-di-n-propylamine	48.0	10	50	0	96	30	145				
N-Nitrosodiphenylamine	45.2	10	50	0	90	19	157				
Naphthalene	36.3	10	50	0	73	33	130				
Nitrobenzene	45.7	10	50	0	91	38	145				
Pentachlorophenol	41.8	50	50	0	84	50	145				J
Phenanthrene	43.7	10	50	0	87	50	130				
Phenol	44.7	10	50	0	89	20	141				
Pyrene	45.6	10	50	0	91	47	133				
Surr: 2,4,6-Tribromophenol	127	0.10	150	0	85	48	149				
Surr: 2-Fluorobiphenyl	79.0	0.10	100	0	79	42	130				
Surr: 2-Fluorophenol	123	0.10	150	0	82	26	130				
Surr: Nitrobenzene-d5	82.4	0.10	100	0	82	42	130				
Surr: Phenol-d5	128	0.10	150	0	85	21	134				
Surr: Terphenyl-d14	84.8	0.10	100	0	85	24	147				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

137

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8644 | SampType: MBLK | TestCode: 8270W_OLM | Units: µg/L | Prep Date: 12/17/2008 | RunNo: 15973
Client ID: ZZZZZ | Batch ID: 8644 | Method: SW8270C (SW3520C) | Analysis Date: 12/19/2008 | SeqNo: 416469
Instrument: MS06_40 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	10									
2,4,5-Trichlorophenol	ND	50									
2,4,6-Trichlorophenol	ND	10									
2,4-Dichlorophenol	ND	10									
2,4-Dimethylphenol	ND	10									
2,4-Dinitrophenol	ND	50									
2,4-Dinitrotoluene	ND	10									
2,6-Dinitrotoluene	ND	10									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
2-Methylnaphthalene	ND	10									
2-Methylphenol	ND	10									
2-Nitroaniline	ND	50									
2-Nitrophenol	ND	10									
3,3'-Dichlorobenzidine	ND	20									
3-Nitroaniline	ND	50									
4,6-Dinitro-2-methylphenol	ND	10									
4-Bromophenyl phenyl ether	ND	10									
4-Chloro-3-methylphenol	ND	10									
4-Chloroaniline	ND	10									
4-Chlorophenyl phenyl ether	ND	10									
4-Methylphenol	ND	10									
4-Nitroaniline	ND	50									
4-Nitrophenol	ND	50									
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Acetophenone	ND	10									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8644 | SampType: LCS | TestCode: 8270W_OLM | Units: µg/L | Prep Date: 12/17/2008 | RunNo: 15973
Client ID: ZZZZZ | Batch ID: 8644 | Method: SW8270C (SW3520C) | Analysis Date: 12/19/2008 | SeqNo: 416470
Instrument: MS06_40 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	30.4	10	50	0	61	25	125				
Indeno(1,2,3-cd)pyrene	47.5	10	50	0	95	48	141				
Isophorone	49.1	10	50	0	98	60	125				
N-Nitroso-di-n-propylamine	49.4	10	50	0	99	55	134				
N-Nitrosodiphenylamine	46.5	10	50	0	93	54	136				
Naphthalene	37.0	10	50	0	74	48	125				
Nitrobenzene	47.2	10	50	0	94	60	125				
Pentachlorophenol	43.5	50	50	0	87	44	128				
Phenanthrene	44.6	10	50	0	89	60	125				
Phenol	44.9	10	50	0	90	51	125				
Pyrene	46.3	10	50	0	93	59	130				
Surr: 2,4,6-Tribromophenol	129	0.10	150	0	86	46	149				
Surr: 2-Fluorobiphenyl	81.2	0.10	100	0	81	42	130				
Surr: 2-Fluorophenol	126	0.10	150	0	84	26	130				
Surr: Nitrobenzene-d5	84.1	0.10	100	0	84	42	130				
Surr: Phenol-d5	129	0.10	150	0	86	21	134				
Surr: Terphenyl-d14	86.6	0.10	100	0	86	24	147				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8644 | SampType: MBLK | TestCode: 8270W_OLM | Units: µg/L | Prep Date: 12/17/2008 | RunNo: 15973
Client ID: ZZZZZ | Batch ID: 8644 | Method: SW8270C (SW3520C) | Analysis Date: 12/19/2008 | SeqNo: 416469
Instrument: MS06_40 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	10									
Atrazine	ND	10									
Benzaldehyde	ND	10									
Benzo[a]anthracene	ND	10									
Benzo[a]pyrene	ND	10									
Benzo[b]fluoranthene	ND	10									
Benzo[g,h,i]perylene	ND	10									
Benzo[k]fluoranthene	ND	10									
bis(2-Chloroethoxy)methane	ND	10									
bis(2-chloroethyl)ether	ND	10									
bis(2-chloroisopropyl)ether	ND	10									
bis(2-Ethylhexyl)phthalate	ND	10									
Butyl benzyl phthalate	ND	10									
Caprolactam	ND	10									
Carbazole	ND	10									
Chrysene	ND	10									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	ND	10									
Dibenz[a,h]anthracene	ND	10									
Dibenzofuran	ND	10									
Diethyl phthalate	ND	10									
Dimethyl phthalate	ND	10									
Fluoranthene	ND	10									
Fluorene	ND	10									
Hexachlorobenzene	ND	10									
Hexachlorobutadiene	ND	10									
Hexachlorocyclopentadiene	ND	10									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

EPA SOURCE NO.
MB-8644

Lab Name: Life Science Laboratories Contract: Life Science
Lab Code: LSLB Case No.: ONG-MS SAS No.: SDG No.: 0812108
Lab File ID: MS336.D Lab Sample ID: MB-8644
Instrument ID: MS06_40 Date Extracted: 12/17/2008
Matrix: (soil/water) WATER Date Analyzed: 12/19/2008
Level: (low/med) Time Analyzed: 22:32

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

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-8644	LCS-8644	MS357.D	23:11
02	MSB-8644	MSB-8644	MS358.D	23:50
03	MW-2-121108	0812108-001B	MS359.D	0:28
04	MW-4-121108	0812108-002B	MS360.D	1:07
05	MW-12-121108	0812108-003B	MS361.D	1:46
06	MW-13-121108	0812108-004B	MS362.D	2:25
07	MW-11R-121108	0812108-005B	MS363.D	3:04
08	MW-11R-121108MS	0812108-005BMS	MS364.D	3:42
09	MW-11R-121108MSD	0812108-005BMSD	MS365.D	4:21
10	MW-6-121108	0812108-006B	MS366.D	5:00
11	BG-1-121108	0812108-007B	MS367.D	5:38
12	MW-3R-121208	0812108-008B	MS368.D	6:17
13	MW-9-121208	0812108-009B	MS369.D	6:56
14	MW-5-121208	0812108-010B	MS370.D	7:35
15	MW-8-121208	0812108-011B	MS371.D	8:13
16	MW-7-121208	0812108-012B	MS372.D	8:52

COMMENTS:

FORM I OLM

8270W_OLM4

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8644 | SampType: MBLK | TestCode: 8270W_OLM | Units: µg/L | Prep Date: 12/17/2008 | RunNo: 15973
Client ID: ZZZZZ | Batch ID: 8644 | Method: SW8270C (SW3520C) | Analysis Date: 12/19/2008 | SeqNo: 416469
Instrument: MS06_40 | ColumnID: DB-5MS | ZB-5, 0.5 dt

Analyte	QC Sample Result	POL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	10									
Indeno(1,2,3-cd)pyrene	ND	10									
Isophorone	ND	10									
N-Nitroso-di-n-propylamine	ND	10									
N-Nitrosodiphenylamine	ND	10									
Naphthalene	ND	10									
Nitrobenzene	ND	10									
Pentachlorophenol	ND	50									
Phenanthrene	ND	10									
Phenol	ND	10									
Pyrene	ND	10									
Surr: 2,4,6-Tribromophenol	118	0.10	150	0	79	46	149				
Surr: 2-Fluorobiphenyl	81.1	0.10	100	0	81	42	130				
Surr: 2-Fluorophenol	116	0.10	150	0	77	28	130				
Surr: Nitrobenzene-d5	83.3	0.10	100	0	83	42	130				
Surr: Phenol-d5	121	0.10	150	0	81	21	134				
Surr: Terphenyl-d14	84.7	0.10	100	0	85	24	147				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (POL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the POL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Page 3 of 15

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MB-8644

Lab Name: Life Science Laboratories, Inc. Contract:
Lab Code: LSLB Case No.: ORG-MS SAS No.: SDG No.: 0812108
Matrix: (soil/water) WATER Lab Sample ID: MB-8644
Sample wt/vol: 1000 (g/mL) mL Lab File ID: K5356.D
Level: LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/19/2008
GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00
Extract Volume: 1000 (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	8.0	J

FORM I TIC 15 SW8270C

6
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No: 0812108
Lab Code: LSLB
Lab File ID (Standard): K5354.D Date Analyzed: 12/19/2008
Instrument ID: MS06_40 Time Analyzed: 21:15
GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	140392	10.11	524735	12.47	310061	15.82	528164	18.68
UPPER LIMIT	280784	10.61	1049470	12.97	620122	16.32	1056328	19.18
LOWER LIMIT	70196	9.61	262368	11.97	155031	15.32	264082	18.18
SAMPLE NO.								
01 CC12190886 OLM (CC12190886 OLM)	145004	10.10	542842	12.46	310392	15.81	515259	18.67
02 MB-8644 (MB-8644)	133238	10.10	501767	12.46	290878	15.81	496312	18.67
03 LCS-8644 (LCS-8644)	159501	10.11	606299	12.47	353498	15.82	616864	18.67
04 MSB-8644 (MSB-8644)	151078	10.10	577289	12.46	338647	15.82	585369	18.68
05 MW-2-121108 (0812108-001B)	157035	10.10	602223	12.46	349845	15.81	586595	18.67
06 MW-4-121108 (0812108-002B)	152847	10.09	603835	12.46	344818	15.81	587776	18.67
07 MW-12-121108 (0812108-003B)	141170	10.10	554650	12.45	316347	15.80	534396	18.67
08 MW-13-121108 (0812108-004B)	149284	10.09	579527	12.46	332899	15.80	555189	18.66
09 MW-11R-121108 (0812108-005B)	152146	10.10	586402	12.45	340565	15.80	578905	18.66
10 MW-11R-121108MS (0812108-005BMS)	124070	10.10	479429	12.46	284842	15.80	481684	18.67
11 MW-11R-121108MSD (0812108-005BMSD)	147290	10.10	560899	12.46	321731	15.81	576243	18.67
12 MW-8-121108 (0812108-006B)	117412	10.09	452635	12.45	259830	15.80	444339	18.66
13 BG-1-121108 (0812108-007B)	131631	10.09	513015	12.45	291480	15.80	497853	18.66
14 MW-3R-121208 (0812108-008B)	133071	10.08	511606	12.45	285887	15.80	491671	18.66
15 MW-9-121208 (0812108-009B)	154923	10.09	607175	12.45	340377	15.80	577231	18.66
16 MW-5-121208 (0812108-010B)	161622	10.09	641308	12.45	358352	15.80	611566	18.66
17 MW-6-121208 (0812108-011B)	155866	10.08	607591	12.45	346299	15.80	583661	18.66
18 MW-7-121208 (0812108-012B)	158309	10.08	610454	12.45	341109	15.80	570796	18.66

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

12/29/08 11:22 FORM VIII Page 1 of 4 SW8270C

6
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No: 0812108
Lab Code: LSLB
Lab File ID (Standard): K5354.D Date Analyzed: 12/19/2008
Instrument ID: MS06_40 Time Analyzed: 21:15
GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	457953	23.75	422711	26.89
UPPER LIMIT	915906	24.25	845422	27.39
LOWER LIMIT	228977	23.25	211356	26.39
SAMPLE NO.				
01 CC12190886 OLM (CC12190886 OLM)	489495	23.74	434834	26.88
02 MB-8644 (MB-8644)	466147	23.74	412685	26.87
03 LCS-8644 (LCS-8644)	563020	23.76	523231	26.89
04 MSB-8644 (MSB-8644)	516112	23.76	481267	26.89
05 MW-2-121108 (0812108-001B)	539978	23.74	472985	26.88
06 MW-4-121108 (0812108-002B)	561143	23.73	488951	26.87
07 MW-12-121108 (0812108-003B)	488322	23.73	422700	26.86
08 MW-13-121108 (0812108-004B)	520016	23.73	455769	26.87
09 MW-11R-121108 (0812108-005B)	542489	23.73	468293	26.87
10 MW-11R-121108MS (0812108-005BMS)	432434	23.74	367124	26.87
11 MW-11R-121108MSD (0812108-005BMSD)	498787	23.74	443646	26.88
12 MW-8-121108 (0812108-006B)	402135	23.73	336878	26.86
13 BG-1-121108 (0812108-007B)	464718	23.73	408350	26.88
14 MW-3R-121208 (0812108-008B)	470302	23.72	411019	26.86
15 MW-9-121208 (0812108-009B)	532315	23.72	464157	26.86
16 MW-5-121208 (0812108-010B)	572781	23.73	508241	26.87
17 MW-6-121208 (0812108-011B)	534156	23.72	456107	26.86
18 MW-7-121208 (0812108-012B)	525103	23.73	453582	26.88

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

12/29/08 11:22 FORM VIII Page 3 of 4 SW8270C

Sample Data Package

NARRATIVE

INTRODUCTION/ANALYTICAL RESULTS
This report summarizes the laboratory results for samples from O'Brien & Gere Engineers, Inc. for the City of Geneva – Market Basket project. Immediately following the narratives are the Work Order Sample Summary and Dates Report.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY
The coolers were received intact. When the coolers were received by the laboratory, the sample custodian(s) opened and inspected the shipments for damage, custody inconsistencies and proper preservation. The chain of custody forms documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

No discrepancies were noted upon receipt. The temperature of the iced cooler was 0.0°C.

METHODOLOGY
The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1
Semivolatile Organics	SW8270C	1

1) New York State Department of Environmental Conservation Analytical Services Protocol, June 2000.

QUALITY CONTROL
QA/QC results are summarized in the Laboratory Report Package and are also included in the raw data.

RAW DATA
The raw data is organized in the New York State Department of Environmental Conservation Analytical Services Protocol Category B order of data requirements.

Total # of pages in report: _____

GC/MS Volatile Organics Case Narrative

Client: OBG-MS
Project/Order: City of Geneva- Market Basket Site
Work Order #: 0812108
Methodology: 8260B

Analyzed/Reviewed by (Initials/Date): 1/2/09
Supervisor/Reviewed by (Initials/Date): 1-8-09
QA/QC Review (Initials/Date): 1/13/09

File Name: G:\Narratives\MSVoa\0812108msvnar.doc

GC/MS Volatile Organics
The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 40 m x 0.18 mm ID capillary column (MS01 & MS03), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), and Restek Rtx-VMS, 60 m x 0.25mm ID capillary column (MS04), and a Vocarb 3000 adsorbent trap.

There were no excursions to note. All QC results were within established control limits.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Samples were unpreserved.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
All spike recovery and RPD data met method and/or project specific QC criteria.

Surrogate Standards
All surrogate standard recoveries met method and/or project specific QC criteria.

Internal Standards
All internal standard areas met method and/or project specific QC criteria.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

GC/MS Semi-Volatile Organics Case Narrative

Client ID: OBG-MS
Project/Order: City of Geneva-Market Basket Site
Work Order #: 0812108
Methodology: 8270C

Analyzed/Reviewed by (Initials/Date): 12/30/08
Supervisor/Reviewed by (Initials/Date): 1-8-09
QA/QC Review (Initials/Date): 1/13/09

File Name: G:\Narratives\MSSemi\0812108svnar.doc

GC/MS Semi-Volatile Organics
The GC/MS Semi-volatile instruments used a J & W DB-5MS, 30 m x 0.25 mm ID capillary column.

Holding Times and Sample Preservation
All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Sample
All spike recoveries met method and/or project specific QC criteria.

MS/MSD/MSB
The following compound(s) did not meet matrix spike/matrix spike duplicate percent recovery and/or RPD criteria:

Sample Description	Sample #	Compound	% REC	RPD	Corrective Action
MW-11R-121108	0812108-005BMS/MSD	3,3'-Dichlorobenzidine	X		1

1 The recovery marginally exceeded the lower control limit and was not detected above the PQL/RL in the associated samples. The recovery for this compound in the associated LCS and/or MSB was within acceptance limits. No corrective action was taken.

Surrogate Standards
All surrogate standard recoveries met method and/or project specific QC criteria.

Internal Standards
All internal standard areas met method and/or project specific QC criteria.

Calibrations
All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks
All preparation blanks met method and/or project specific QC criteria.

Life Science Laboratories, Inc. Date: *14-Jan-09*

CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Lab Order: 0812108

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0812108-001A	MW-2-121108		12/11/2008	12/12/2008
0812108-001B	MW-2-121108		12/11/2008	12/12/2008
0812108-002A	MW-4-121108		12/11/2008	12/12/2008
0812108-002B	MW-4-121108		12/11/2008	12/12/2008
0812108-003A	MW-12-121108		12/11/2008	12/12/2008
0812108-003B	MW-12-121108		12/11/2008	12/12/2008
0812108-004A	MW-13-121108		12/11/2008	12/12/2008
0812108-004B	MW-13-121108		12/11/2008	12/12/2008
0812108-005A	MW-11R-121108		12/11/2008	12/12/2008
0812108-005B	MW-11R-121108		12/11/2008	12/12/2008
0812108-006A	MW-8-121108		12/11/2008	12/12/2008
0812108-006B	MW-8-121108		12/11/2008	12/12/2008
0812108-007A	BD-1-121108		12/11/2008	12/12/2008
0812108-007B	BD-1-121108		12/11/2008	12/12/2008
0812108-008A	MW-3R-121208		12/12/2008	12/12/2008
0812108-008B	MW-3R-121208		12/12/2008	12/12/2008
0812108-009A	MW-9-121208		12/12/2008	12/12/2008
0812108-009B	MW-9-121208		12/12/2008	12/12/2008
0812108-010A	MW-5-121208		12/12/2008	12/12/2008
0812108-010B	MW-5-121208		12/12/2008	12/12/2008
0812108-011A	MW-6-121208		12/12/2008	12/12/2008
0812108-011B	MW-6-121208		12/12/2008	12/12/2008
0812108-012A	MW-7-121208		12/12/2008	12/12/2008
0812108-012B	MW-7-121208		12/12/2008	12/12/2008
0812108-013A	Trip Blank		12/11/2008	12/12/2008

Page 1 of 1

Chain of Custody

External Chain of Custody

Life Science Laboratories, Inc.
Brittonfield Lab

5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: O'BRIEN & GERE INC
Project: Market Basket
Sampled by: CYU
Client Contact: Dave Maskell Phone # 437-6100

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp or Grab	No. of Containers	VOCs (8260)	SVOCs (8270)	Comments
MW-2-121108	12-11-08	1040	GW	Grab	3	X	X	
MW-4-121108		1140						
MW-12-121108		1255						
MW-13-121108		1346						
MW-11R-121108 (MS/MSD)		1305			9			
MW-8-121108		1355			3			
BD-1-121108		-						
MW-3R-121208	12-12-08	1105						
MW-9-121208		1155						
MW-5-121208		1240						
MW-6-121208		1340						
MW-7-121208		1550						

Analysis/Method

Relinquished by: C. Yu Yuiz	Date: 12-12-08	Time: 1320	Received by:	Date: Time:
Relinquished by:	Date:	Time:	Received by:	Date: Time:
Relinquished by:	Date:	Time:	Received by Lab: Stefania Yulla	Date: 12/12/08 Time: 17:42
Shipment Method:			Airbill Number:	

Turnaround Time Required: ✓ Routine ___ Rush (Specify): ___

Comments:

Temperature: 0°C Received Ice

Original - Laboratory
Copy - Client

Client/Project City of Geneva 08/2/08

Sample Control Record

Sample ID	Frac	Client Sample ID	Removed By	Date and Time Removed	Analysis	Date and Time Returned
0812408 - 001 → 013	A		JK	12/15/08 16:07	8260	NR
0812408-001→012	B		CFR	12/17/08 12:35	8270W	NR

A:\QAQC\forms\GeneralLaboratory\Sign out.xls

LSL Life Science Laboratories, Inc.
Brittonfield Lab

5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: O'BRIEN & GERE INC
Project: Market Basket
Sampled by: CYV
Client Contact: Dave McIxell Phone # 437-6100

Analysis/Method: VOCs (8260)

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	VOCs (8260)	Comments
Trip blank	–	–	Water	–	2	X	
Temp. blank	–	–	↓	–	1		

Relinquished by: C. Yuri Vecia	Date: 12-12-08	Time: 1710	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by Lab: Donna Kibler	Date: 12/12/08	Time: 17:42
Shipment Method:			Airbill Number:		

Turnaround Time Required: ✓ Routine
Rush (Specify)
Temperature: 0°C (wet on ice)

Comments:

Original - Laboratory
Copy - Client

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: OBG-MS
Work Order Number: 0812108
Date and Time Received: 12/12/2008 5:42:00 PM
Received by: R
Checklist completed by (print): Date: 12-15-08
Reviewed by (print): Date: 12-15-08
Matrix: Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Comments:

Corrective Action:

Internal Chain of Custody

GC/MS SEMIVOLATILE ORGANICS SAMPLE CONTROL LOG

QC Batch #: 81644 Date Extracted: 12-17-08

Client/Job Number	Laboratory Sample Number Range	Date/Time Stored in Refrigerator	Relinquished By	Laboratory Sample Number Removed	Date/Time Removed	By	Method Analyzed For	Date/Time Returned	By
OBG-MS City of Geneva	0812108-001B ↓ 012B	12/19/08 12:30	CFA	0812108-001B ↓ 012B	12/19/08 1230	MAF	8270	12/20/08 8:00	AG

Reviewed by: 1-8-09 Date:

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32

160

Raw Data

161

GC/MS Volatile Organics Data

162

QC Summary

163

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Life Science Laboratories, Inc Contract: ________

Lab Code: LSLB Case No.: OBG-MS SAS No. ________ SDG No.: 0812109

	EPA SAMPLE NO.	LSL ID	SMC1 (DCE) 1 #	SMC2 (TOL) 1 #	SMC3 (BFB) 1 #				TOT OUT
01	LCS-15832	LCS-15832	96	102	98				0
02	LCSD-15832	LCSD-15832	95	102	97				0
03	MB-15832	MB-15832	96	100	98				0
04	MW-2-121108	0812108-001A	105	100	110				0
05	MW-4-121108	0812108-002A	105	99	98				0
06	MW-12-121108	0812108-003A	102	97	84				0
07	LCS-15857	LCS-15857	99	99	96				0
08	MSB-15857	MSB-15857	99	99	96				0
09	MW-11R-121108MS	0812108-005AMS	99	101	95				0
10	MW-11R-121108MSD	0812108-005AMSD	100	98	96				0
11	MB-15857	MB-15857	104	101	100				0
12	MW-12-121108DL	0812108-003ADL	106	101	96				0
13	MW-13-121108	0812108-004A	104	99	97				0
14	MW-11R-121108	0812108-005A	103	99	98				0
15	MW-8-121108	0812108-006A	102	99	99				0
16	BD-1-121108	0812108-007A	105	98	99				0
17	MW-3R-121208	0812108-008A	104	100	99				0
18	MW-9-121208	0812108-009A	105	100	99				0
19	MW-5-121208	0812108-010A	108	99	96				0
20	MW-6-121208	0812108-011A	108	100	99				0
21	MW-7-121208	0812108-012A	106	99	97				0
22	Trip Blank	0812108-013A	108	98	97				0

		QC Limit
SMC1 (DCE) 1	= 1,2-Dichloroethane-d4	75-134
SMC2 (TOL) 1	= Toluene-d8	75-125
SMC3 (BFB) 1	= 4-Bromofluorobenzene	75-125

Column to be used to flag recovery values

* Values outside of contract required QC limits

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS SampType: MS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413174
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	11.0	1.00	10	0	110	68	134				
Chloromethane	11.2	1.00	10	1.11	101	58	135				
Vinyl chloride	11.2	1.00	10	0	112	70	130				
Bromomethane	8.57	1.00	10	0	86	29	156				
Chloroethane	10.9	1.00	10	0	109	70	130				
Trichlorofluoromethane	10.8	1.00	10	0	108	70	131				
1,1-Dichloroethene	9.48	0.500	10	0	95	70	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.5	0.500	10	0	105	70	130				
Acetone	17.5	10.0	20	1.59	80	25	150				
Carbon disulfide	10.7	0.500	10	0	107	66	130				
Methyl acetate	10.5	5.00	10	0	105	63	132				
Methylene chloride	9.14	2.00	10	0	91	70	130				
trans-1,2-Dichloroethene	9.60	0.500	10	0	96	70	130				
Methyl tert-butyl ether	9.08	1.00	10	0	91	70	130				
1,1-Dichloroethane	9.86	0.500	10	0	99	70	130				
cis-1,2-Dichloroethene	9.86	0.500	10	0	99	48	151				
2-Butanone	17.9	10.0	20	0	89	25	150				
Chloroform	9.70	0.500	10	0	97	70	130				
1,1,1-Trichloroethane	9.58	0.500	10	0	96	70	130				
Cyclohexane	10.6	0.500	10	0	106	70	130				
Carbon tetrachloride	10.0	0.500	10	0	101	70	140				
Benzene	9.80	0.500	10	0	98	70	132				
1,2-Dichloroethane	9.77	0.500	10	0	98	70	130				
Trichloroethene	9.36	0.500	10	0	94	42	167				
Methylcyclohexane	10.2	0.500	10	0	102	62	130				
1,2-Dichloropropane	10.0	0.500	10	0	100	70	130				
Bromodichloromethane	9.66	0.500	10	0	97	70	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS SampType: MS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413174
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.29	0.500	10	0	93	70	130				
4-Methyl-2-pentanone	19.0	5.00	20	0	95	44	150				
Toluene	9.84	0.500	10	0	98	70	130				
trans-1,3-Dichloropropene	9.30	0.500	10	0	93	58	132				
1,1,2-Trichloroethane	9.69	0.500	10	0	97	68	133				
Tetrachloroethene	9.39	0.500	10	0	94	70	130				
2-Hexanone	17.0	5.00	20	0	85	25	155				
Dibromochloromethane	8.75	0.500	10	0	88	70	130				
1,2-Dibromoethane	9.38	0.500	10	0	94	70	130				
Chlorobenzene	9.56	0.500	10	0	96	69	130				
Ethylbenzene	9.88	0.500	10	0	99	70	130				
Xylenes (total)	29.3	1.00	30	0	98	65	132				
Styrene	8.84	0.500	10	0	88	57	133				
Bromoform	8.19	1.00	10	0	82	70	130				
Isopropylbenzene	9.53	0.500	10	0	95	70	130				
1,1,2,2-Tetrachloroethane	9.67	0.500	10	0	97	68	136				
1,3-Dichlorobenzene	9.60	0.500	10	0	96	70	130				
1,4-Dichlorobenzene	9.53	0.500	10	0	95	70	130				
1,2-Dichlorobenzene	9.44	0.500	10	0	94	70	130				
1,2-Dibromo-3-chloropropane	7.53	5.00	10	0	75	55	149				
1,2,4-Trichlorobenzene	8.49	1.00	10	0	85	66	130				
Surr: 1,2-Dichloroethane-d4	9.86	0.100	10	0	99	75	134				
Surr: Toluene-d8	10.1	0.100	10	0	101	75	125				
Surr: 4-Bromofluorobenzene	9.49	0.100	10	0	95	75	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMSD SampType: MSD TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413175
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	68	134	11	4.3	20	
Chloromethane	10.8	1.00	10	1.11	97	58	135	11.2	3.6	20	
Vinyl chloride	10.9	1.00	10	0	109	70	130	11.2	2.5	20	
Bromomethane	8.70	1.00	10	0	87	29	156	8.57	1.5	24	
Chloroethane	10.6	1.00	10	0	106	70	130	10.9	3.1	20	
Trichlorofluoromethane	10.3	1.00	10	0	103	70	131	10.8	4.4	20	
1,1-Dichloroethene	9.15	0.500	10	0	92	70	135	9.48	3.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.2	0.500	10	0	102	70	130	10.5	3.2	20	
Acetone	18.0	10.0	20	1.59	82	25	150	17.5	3.0	50	
Carbon disulfide	10.2	0.500	10	0	102	66	130	10.7	5.0	20	
Methyl acetate	10.5	5.00	10	0	105	63	132	10.5	0.5	20	
Methylene chloride	8.94	2.00	10	0	89	70	130	9.14	2.2	20	
trans-1,2-Dichloroethene	9.37	0.500	10	0	94	70	130	9.48	1.2	20	
Methyl tert-butyl ether	9.04	1.00	10	0	90	70	130	9.08	0.4	20	
1,1-Dichloroethane	9.58	0.500	10	0	96	70	130	9.86	2.9	20	
cis-1,2-Dichloroethene	9.59	0.500	10	0	96	48	151	9.86	2.8	20	
2-Butanone	18.4	10.0	20	0	92	25	150	17.9	2.9	50	
Chloroform	9.44	0.500	10	0	94	70	130	9.7	2.7	20	
1,1,1-Trichloroethane	9.36	0.500	10	0	94	70	130	9.58	2.3	20	
Cyclohexane	10.2	0.500	10	0	102	70	130	10.6	3.1	20	
Carbon tetrachloride	9.79	0.500	10	0	98	70	140	10	2.6	20	
Benzene	9.60	0.500	10	0	96	70	132	9.8	2.1	20	
1,2-Dichloroethane	9.62	0.500	10	0	96	70	130	9.77	1.5	20	
Trichloroethene	9.08	0.500	10	0	91	42	167	9.36	3.0	20	
Methylcyclohexane	9.62	0.500	10	0	96	62	130	10.2	5.8	20	
1,2-Dichloropropane	9.80	0.500	10	0	98	70	130	10	2.1	20	
Bromodichloromethane	9.57	0.500	10	0	96	70	130	9.68	1.1	20	

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: MSB-15857 SampType: MSB TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 417913
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.32	0.500	10	0	93	70	130				
4-Methyl-2-pentanone	19.4	5.00	20	0	97	44	150				
Toluene	9.45	0.500	10	0	94	70	130				
trans-1,3-Dichloropropene	9.17	0.500	10	0	92	58	132				
1,1,2-Trichloroethane	9.82	0.500	10	0	98	68	133				
Tetrachloroethene	9.26	0.500	10	0	93	70	130				
2-Hexanone	19.0	5.00	20	0	95	25	155				
Dibromochloromethane	8.73	0.500	10	0	87	70	130				
1,2-Dibromoethane	9.49	0.500	10	0	95	70	130				
Chlorobenzene	9.45	0.500	10	0	94	69	130				
Ethylbenzene	9.63	0.500	10	0	96	70	130				
Xylenes (total)	29.0	1.00	30	0	97	65	132				
Styrene	8.78	0.500	10	0	88	57	133				
Bromoform	8.31	1.00	10	0	83	70	130				
Isopropylbenzene	9.48	0.500	10	0	95	70	130				
1,1,2,2-Tetrachloroethane	9.87	0.500	10	0	99	68	136				
1,3-Dichlorobenzene	9.50	0.500	10	0	95	70	130				
1,4-Dichlorobenzene	9.37	0.500	10	0	94	70	130				
1,2-Dichlorobenzene	9.41	0.500	10	0	94	70	130				
1,2-Dibromo-3-chloropropane	7.77	5.00	10	0	78	55	149				
1,2,4-Trichlorobenzene	8.90	1.00	10	0	89	68	130				
Surr: 1,2-Dichloroethane-d4	9.87	0.100	10	0	99	75	134				
Surr: Toluene-d8	9.94	0.100	10	0	99	75	125				
Surr: 4-Bromofluorobenzene	9.58	0.100	10	0	96	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

170

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: 0812108-005AMSD SampType: MSD TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413175
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.18	0.500	10	0	92	70	130	9.29	1.2	20	
4-Methyl-2-pentanone	19.2	5.00	20	0	96	44	150	19	0.7	50	
Toluene	9.67	0.500	10	0	97	70	130	9.84	1.7	20	
trans-1,3-Dichloropropene	9.10	0.500	10	0	91	58	132	9.3	2.2	25	
1,1,2-Trichloroethane	9.69	0.500	10	0	97	68	133	9.69	0	20	
Tetrachloroethene	9.06	0.500	10	0	91	70	130	9.39	3.6	20	
2-Hexanone	17.5	5.00	20	0	88	25	155	17	2.9	50	
Dibromochloromethane	8.38	0.500	10	0	84	70	130	8.75	4.3	20	
1,2-Dibromoethane	9.28	0.500	10	0	93	70	130	9.38	1.1	20	
Chlorobenzene	9.16	0.500	10	0	92	69	130	9.56	4.3	20	
Ethylbenzene	9.48	0.500	10	0	95	70	130	9.88	4.1	20	
Xylenes (total)	28.4	1.00	30	0	95	65	132	29.3	3.2	20	
Styrene	8.38	0.500	10	0	84	57	133	8.84	5.3	20	
Bromoform	7.94	1.00	10	0	79	70	130	8.19	3.1	20	
Isopropylbenzene	9.39	0.500	10	0	94	70	130	9.53	1.5	20	
1,1,2,2-Tetrachloroethane	9.64	0.500	10	0	96	68	136	9.67	0.3	20	
1,3-Dichlorobenzene	9.39	0.500	10	0	94	70	130	9.6	2.2	20	
1,4-Dichlorobenzene	9.28	0.500	10	0	93	70	130	9.53	2.7	20	
1,2-Dichlorobenzene	9.28	0.500	10	0	93	70	130	9.44	1.7	20	
1,2-Dibromo-3-chloropropane	7.52	5.00	10	0	75	55	149	7.53	0.1	20	
1,2,4-Trichlorobenzene	8.65	1.00	10	0	86	68	130	8.49	1.9	20	
Surr: 1,2-Dichloroethane-d4	9.96	0.100	10	0	100	75	134	0		0	
Surr: Toluene-d8	9.82	0.100	10	0	98	75	125	0		0	
Surr: 4-Bromofluorobenzene	9.64	0.100	10	0	96	75	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

168

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: LCS-15832 SampType: LCS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 412416
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	63	139				
Chloromethane	9.03	1.00	10	0	90	59	133				
Vinyl chloride	9.87	1.00	10	0	99	75	125				
Bromomethane	8.12	1.00	10	0	81	42	156				
Chloroethane	10.6	1.00	10	0	106	76	124				
Trichlorofluoromethane	10.6	1.00	10	0	106	73	132				
1,1-Dichloroethene	9.99	0.500	10	0	99	77	126				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.6	0.500	10	0	106	80	120				
Acetone	20.6	10.0	20	0	103	37	163				
Carbon disulfide	10.6	0.500	10	0	106	76	122				
Methyl acetate	11.0	5.00	10	0	110	67	136				
Methylene chloride	9.49	2.00	10	0	95	78	120				
trans-1,2-Dichloroethene	9.95	0.500	10	0	100	80	120				
Methyl tert-butyl ether	10.1	1.00	10	0	101	76	122				
1,1-Dichloroethane	10.0	0.500	10	0	100	80	120				
cis-1,2-Dichloroethene	10.3	0.500	10	0	103	80	120				
2-Butanone	20.3	10.0	20	0	102	49	153				
Chloroform	9.88	0.500	10	0	99	80	120				
1,1,1-Trichloroethane	9.88	0.500	10	0	99	80	127				
Cyclohexane	10.7	0.500	10	0	107	76	124				
Carbon tetrachloride	10.3	0.500	10	0	103	74	137				
Benzene	10.2	0.500	10	0	102	80	120				
1,2-Dichloroethane	9.79	0.500	10	0	98	73	126				
Trichloroethene	10.0	0.500	10	0	100	80	120				
Methylcyclohexane	10.3	0.500	10	0	103	75	126				
1,2-Dichloropropane	10.3	0.500	10	0	103	80	120				
Bromodichloromethane	10.1	0.500	10	0	101	78	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

171

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
CLIENT: O'Brien & Gere Engineers, Inc. **Project:** City of Geneva- Market Basket Site

Sample ID: MSB-15857 SampType: MSB TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 417913
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	68	134				
Chloromethane	9.80	1.00	10	0	98	58	135				
Vinyl chloride	11.1	1.00	10	0	111	70	130				
Bromomethane	8.23	1.00	10	0	82	29	156				
Chloroethane	10.5	1.00	10	0	105	70	130				
Trichlorofluoromethane	10.5	1.00	10	0	105	70	131				
1,1-Dichloroethene	9.20	0.500	10	0	92	70	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.3	0.500	10	0	103	70	130				
Acetone	20.6	10.0	20	0	103	25	150				
Carbon disulfide	10.1	0.500	10	0	101	66	130				
Methyl acetate	11.0	5.00	10	0	110	63	132				
Methylene chloride	9.03	2.00	10	0	90	70	130				
trans-1,2-Dichloroethene	9.38	0.500	10	0	94	70	130				
Methyl tert-butyl ether	9.05	1.00	10	0	90	70	130				
1,1-Dichloroethane	9.63	0.500	10	0	96	70	130				
cis-1,2-Dichloroethene	9.61	0.500	10	0	96	48	151				
2-Butanone	19.5	10.0	20	0	98	25	150				
Chloroform	9.56	0.500	10	0	96	70	130				
1,1,1-Trichloroethane	9.29	0.500	10	0	93	70	130				
Cyclohexane	10.1	0.500	10	0	101	70	130				
Carbon tetrachloride	9.70	0.500	10	0	97	70	140				
Benzene	9.55	0.500	10	0	96	70	132				
1,2-Dichloroethane	9.41	0.500	10	0	94	70	130				
Trichloroethene	9.03	0.500	10	0	90	42	167				
Methylcyclohexane	9.69	0.500	10	0	97	62	130				
1,2-Dichloropropane	9.75	0.500	10	0	98	70	130				
Bromodichloromethane	9.58	0.500	10	0	96	70	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

169

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-15832 | SampType: LCSD | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15832
Client ID: ZZZZZ | Batch ID: R15832 | Method: SW8260B | Analysis Date: 12/15/08 | SeqNo: 412417
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	10.2	0.500	10	0	102	80	120	10	2.1	20	
4-Methyl-2-pentanone	20.8	5.00	20	0	103	50	150	20.6	0.1	50	
Toluene	10.5	0.500	10	0	105	80	120	10.2	2.1	20	
trans-1,3-Dichloropropene	10.2	0.500	10	0	102	73	121	9.84	3.3	25	
1,1,2-Trichloroethane	10.4	0.500	10	0	104	80	120	10.2	1.7	20	
Tetrachloroethene	10.4	0.500	10	0	104	80	120	10.3	1.2	20	
2-Hexanone	20.7	5.00	20	0	103	44	152	20	3.1	50	
Dibromochloromethane	9.71	0.500	10	0	97	75	123	9.5	2.2	20	
1,2-Dibromoethane	10.4	0.500	10	0	104	80	120	10.3	1.2	20	
Chlorobenzene	10.4	0.500	10	0	104	80	120	10.2	1.5	20	
Ethylbenzene	10.6	0.500	10	0	106	80	120	10.3	2.3	20	
Xylenes (total)	32.0	1.00	30	0	107	80	120	31.3	2.3	20	
Styrene	9.63	0.500	10	0	96	79	120	9.45	1.9	20	
Bromoform	9.26	1.00	10	0	93	72	128	9.18	0.9	20	
Isopropylbenzene	10.4	0.500	10	0	104	80	121	10.3	1	20	
1,1,2,2-Tetrachloroethane	10.3	0.500	10	0	103	73	122	10.1	1.6	20	
1,3-Dichlorobenzene	10.4	0.500	10	0	104	80	120	10.2	1.2	20	
1,4-Dichlorobenzene	10.2	0.500	10	0	102	80	120	10.2	0.3	20	
1,2-Dichlorobenzene	10.2	0.500	10	0	102	80	120	10.2	0.8	20	
1,2-Dibromo-3-chloropropane	8.47	5.00	10	0	85	71	124	8.58	1.3	20	
1,2,4-Trichlorobenzene	9.89	1.00	10	0	99	73	123	9.67	2.2	20	
Surr: 1,2-Dichloroethane-d4	9.46	0.100	10	0	95	75	134	0		0	
Surr: Toluene-d8	10.2	0.100	10	0	102	75	125	0		0	
Surr: 4-Bromofluorobenzene	9.67	0.100	10	0	97	75	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

174

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
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ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15832 | SampType: LCS | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15832
Client ID: ZZZZZ | Batch ID: R15832 | Method: SW8260B | Analysis Date: 12/15/08 | SeqNo: 412416
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	10.0	0.500	10	0	100	80	120				
4-Methyl-2-pentanone	20.6	5.00	20	0	103	50	150				
Toluene	10.2	0.500	10	0	103	80	120				
trans-1,3-Dichloropropene	9.84	0.500	10	0	98	73	121				
1,1,2-Trichloroethane	10.2	0.500	10	0	102	80	120				
Tetrachloroethene	10.3	0.500	10	0	103	80	120				
2-Hexanone	20.0	5.00	20	0	100	44	152				
Dibromochloromethane	9.50	0.500	10	0	95	75	123				
1,2-Dibromoethane	10.3	0.500	10	0	103	80	120				
Chlorobenzene	10.2	0.500	10	0	102	80	120				
Ethylbenzene	10.3	0.500	10	0	103	80	120				
Xylenes (total)	31.3	1.00	30	0	104	80	120				
Styrene	9.45	0.500	10	0	94	79	120				
Bromoform	9.18	1.00	10	0	92	72	128				
Isopropylbenzene	10.3	0.500	10	0	103	80	121				
1,1,2,2-Tetrachloroethane	10.1	0.500	10	0	101	73	122				
1,3-Dichlorobenzene	10.2	0.500	10	0	103	80	120				
1,4-Dichlorobenzene	10.2	0.500	10	0	102	80	120				
1,2-Dichlorobenzene	10.2	0.500	10	0	102	80	120				
1,2-Dibromo-3-chloropropane	8.58	5.00	10	0	86	71	124				
1,2,4-Trichlorobenzene	9.67	1.00	10	0	97	73	123				
Surr: 1,2-Dichloroethane-d4	9.59	0.100	10	0	96	75	134				
Surr: Toluene-d8	10.2	0.100	10	0	102	75	125				
Surr: 4-Bromofluorobenzene	9.78	0.100	10	0	98	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

172

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15857 | SampType: LCS | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15857
Client ID: ZZZZZ | Batch ID: R15857 | Method: SW8260B | Analysis Date: 12/16/08 | SeqNo: 413173
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	63	139				
Chloromethane	9.80	1.00	10	0	98	59	133				
Vinyl chloride	11.1	1.00	10	0	111	75	125				
Bromomethane	8.23	1.00	10	0	82	42	156				
Chloroethane	10.5	1.00	10	0	105	75	124				
Trichlorofluoromethane	10.5	1.00	10	0	105	73	132				
1,1-Dichloroethene	9.20	0.500	10	0	92	77	126				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.3	0.500	10	0	103	80	120				
Acetone	20.6	10.0	20	0	103	37	163				
Carbon disulfide	10.1	0.500	10	0	101	76	122				
Methyl acetate	11.0	5.00	10	0	110	67	136				
Methylene chloride	9.03	2.00	10	0	90	78	120				
trans-1,2-Dichloroethene	9.38	0.500	10	0	94	80	120				
Methyl tert-butyl ether	9.05	1.00	10	0	90	76	122				
1,1-Dichloroethane	9.63	0.500	10	0	96	80	120				
cis-1,2-Dichloroethene	9.61	0.500	10	0	96	80	120				
2-Butanone	19.5	10.0	20	0	98	49	153				
Chloroform	9.58	0.500	10	0	96	80	120				
1,1,1-Trichloroethane	9.29	0.500	10	0	93	80	127				
Cyclohexane	10.1	0.500	10	0	101	76	124				
Carbon tetrachloride	9.70	0.500	10	0	97	74	137				
Benzene	9.55	0.500	10	0	96	80	120				
1,2-Dichloroethane	9.41	0.500	10	0	94	73	126				
Trichloroethene	9.03	0.500	10	0	90	80	120				
Methylcyclohexane	9.69	0.500	10	0	97	75	126				
1,2-Dichloropropane	9.75	0.500	10	0	98	80	120				
Bromodichloromethane	9.56	0.500	10	0	96	78	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

175

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-15832 | SampType: LCSD | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15832
Client ID: ZZZZZ | Batch ID: R15832 | Method: SW8260B | Analysis Date: 12/15/08 | SeqNo: 412417
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.6	1.00	10	0	106	63	139	10.5	1.1	20	
Chloromethane	9.39	1.00	10	0	94	59	133	9.03	3.9	20	
Vinyl chloride	10.2	1.00	10	0	102	75	125	9.87	3.7	20	
Bromomethane	8.89	1.00	10	0	89	42	156	8.12	9.1	24	
Chloroethane	10.7	1.00	10	0	107	75	124	10.6	1.0	20	
Trichlorofluoromethane	10.7	1.00	10	0	107	73	132	10.6	0.7	20	
1,1-Dichloroethene	10.0	0.500	10	0	100	77	126	9.89	1.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.9	0.500	10	0	109	80	120	10.6	2.7	20	
Acetone	20.8	10.0	20	0	104	37	163	20.6	0.7	50	
Carbon disulfide	10.9	0.500	10	0	109	76	122	10.6	3.4	20	
Methyl acetate	11.0	5.00	10	0	110	67	136	11	0.1	20	
Methylene chloride	9.68	2.00	10	0	97	78	120	9.49	2.1	20	
trans-1,2-Dichloroethene	10.3	0.500	10	0	103	80	120	9.95	3.2	20	
Methyl tert-butyl ether	10.2	1.00	10	0	102	76	122	10.1	1.2	20	
1,1-Dichloroethane	9.95	0.500	10	0	100	80	120	10	0.8	20	
cis-1,2-Dichloroethene	10.5	0.500	10	0	105	80	120	10.3	1.4	20	
2-Butanone	20.9	10.0	20	0	104	49	153	20.3	2.7	50	
Chloroform	10.1	0.500	10	0	101	80	120	9.88	1.8	20	
1,1,1-Trichloroethane	10.2	0.500	10	0	102	80	127	9.88	3.2	20	
Cyclohexane	11.0	0.500	10	0	110	76	124	10.7	2.8	20	
Carbon tetrachloride	10.6	0.500	10	0	106	74	137	10.3	2.8	20	
Benzene	10.3	0.500	10	0	103	80	120	10.2	0.9	20	
1,2-Dichloroethane	9.98	0.500	10	0	100	73	126	9.79	1.9	20	
Trichloroethene	10.3	0.500	10	0	103	80	120	10	2.9	20	
Methylcyclohexane	10.9	0.500	10	0	109	75	126	10.3	5.3	20	
1,2-Dichloropropane	10.4	0.500	10	0	104	80	120	10.3	1.5	20	
Bromodichloromethane	10.3	0.500	10	0	103	78	125	10.1	2.4	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

173

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15857 | SampType: LCS | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15857
Client ID: ZZZZZ | Batch ID: R15857 | Method: SW8260B | Analysis Date: 12/16/08 | SeqNo: 413173
Instrument: MS03_10 | ColumnID: Rtx-VM5 | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.32	0.500	10	0	93	80	120				
4-Methyl-2-pentanone	19.4	5.00	20	0	97	50	150				
Toluene	9.45	0.500	10	0	94	80	120				
trans-1,3-Dichloropropene	9.17	0.500	10	0	92	73	121				
1,1,2-Trichloroethane	9.82	0.500	10	0	98	80	120				
Tetrachloroethene	9.26	0.500	10	0	93	80	120				
2-Hexanone	19.0	5.00	20	0	95	44	152				
Dibromochloromethane	8.73	0.500	10	0	87	75	123				
1,2-Dibromoethane	9.49	0.500	10	0	95	80	120				
Chlorobenzene	9.45	0.500	10	0	94	80	120				
Ethylbenzene	9.63	0.500	10	0	96	80	120				
Xylenes (total)	29.0	1.00	30	0	97	80	120				
Styrene	8.76	0.500	10	0	88	79	120				
Bromoform	8.31	1.00	10	0	83	72	126				
Isopropylbenzene	9.48	0.500	10	0	95	80	121				
1,1,2,2-Tetrachloroethane	9.87	0.500	10	0	99	73	122				
1,3-Dichlorobenzene	9.50	0.500	10	0	95	80	120				
1,4-Dichlorobenzene	9.37	0.500	10	0	94	80	120				
1,2-Dichlorobenzene	9.41	0.500	10	0	94	80	120				
1,2-Dibromo-3-chloropropane	7.77	5.00	10	0	78	71	124				
1,2,4-Trichlorobenzene	8.90	1.00	10	0	89	73	123				
Surr: 1,2-Dichloroethane-d4	9.87	0.100	10	0	99	75	134				
Surr: Toluene-d8	9.94	0.100	10	0	99	75	125				
Surr: 4-Bromofluorobenzene	9.58	0.100	10	0	96	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Life Science Laboratories Contract: _____ SAMPLE NO.
Lab Code: LSLB Case No.: CBC-MS SAS No.: _____ SDG No.: 0812108 MB-15832
Lab File ID: J7827.D Lab Sample ID: MB-15832
Date Analyzed: 12/15/2008 Time Analyzed: 13:53
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-15832	J7827.D	1213	
02	LCSD-15832	J7828.D	1248	
03	MW-2-121108	J7844.D	2130	
04	MW-4-121108	J7845.D	2152	
05	MW-12-121108	J7846.D	2224	

FORM IV

826047_OLM42

COMMENTS:

page 2 of 2

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Life Science Laboratories Contract: _____ SAMPLE NO.
Lab Code: LSLB Case No.: CBC-MS SAS No.: _____ SDG No.: 0812108 MB-15857
Lab File ID: J7857.D Lab Sample ID: MB-15857
Date Analyzed: 12/16/2008 Time Analyzed: 12:41
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N
Instrument ID: MS03_10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MSB-15857	MSB-15857	J7853.D	1024
02	LCS-15857	LCS-15857	J7853.D	1024
03	MW-11R-121108MS	0812108-005AMS	J7854.D	1105
04	MW-11R-121108MSD	0812108-005AMSD	J7855.D	1137
05	MW-12-121108DL	0812108-003ADL	J7858.D	1313
06	MW-13-121108	0812108-004A	J7859.D	1345
07	MW-11R-121108	0812108-005A	J7860.D	1417
08	MW-8-121108	0812108-006A	J7861.D	1449
09	BD-1-121108	0812108-007A	J7862.D	1521
10	MW-3R-121208	0812108-008A	J7863.D	1553
11	MW-9-121208	0812108-009A	J7864.D	1624
12	MW-5-121208	0812108-010A	J7865.D	1656
13	MW-6-121208	0812108-011A	J7866.D	1728
14	MW-7-121208	0812108-012A	J7867.D	1800
15	Trip Blank	0812108-013A	J7868.D	1832

FORM IV

826047_OLM42

COMMENTS:

page 2 of 2

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories Contract: _____
Lab Code: LSLB Case No.: CBC-MS SAS No.: _____ SDG No.: 0812108
Lab File ID: TAU7795.D BFB Injection Date: 12/5/2008
Instrument ID: MS03_10 BFB Injection Time: 9:15
GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.9
75	30.0 - 66.0% of mass 95	55.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)
174	50.0 - 120.0% of mass 95	60.3
175	4.0 - 9.0% of mass 174	5.0 (8.3)1
176	93.0 - 101.0% of mass 174	60.2 (99.8)1
177	5.0 - 9.0% of mass 176	4.4 (7.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		ICAL 0.5 ppb	J7706.D	120508	1052
02		ICAL 1.0 ppb	J7707.D	120508	1124
03		ICAL 2.0 ppb	J7708.D	120508	1156
04		ICAL 10 ppb	J7709.D	120508	1228
05		ICAL 20 ppb	J7710.D	120508	1300
06		ICAL 30 ppb	J7711.D	120508	1332
07		ICAL 40 ppb	J7712.D	120508	1403
08		25RC-15758	J7713.D	120508	1535

FORM V VOA

SW8260B

page 1 of 1

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Lab File ID: TA\J7826.D BFB Injection Date: 12/15/2008

Instrument ID: MS03 10 BFB Injection Time: 11:41

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.8
75	30.0 - 66.0% of mass 95	43.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 120.0% of mass 95	77.4
175	4.0 - 9.0% of mass 174	5.6 (7.2)1
176	93.0 - 101.0% of mass 174	74.3 (96.0)1
177	5.0 - 9.0% of mass 176	5.2 (6.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-15832	CCV-15832	J7826.D	12/15/08	11:41
02	LCS-15832	LCS-15832	J7827.D	12/15/08	12:13
03	LCSD-15832	LCSD-15832	J7828.D	12/15/08	12:48
04	MB-15832	MB-15832	J7830.D	12/15/08	13:53
05	MW-2-121108	0812108-001A	J7844.D	12/15/08	21:20
06	MW-4-121108	0812108-002A	J7845.D	12/15/08	21:52
07	MW-12-121108	0812108-003A	J7846.D	12/15/08	22:24

FORM V VOA BFB_Tune

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Life Science Laboratories, Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Lab File ID: TA\J7851.D BFB Injection Date: 12/16/2008

Instrument ID: MS03 10 BFB Injection Time: 9:20

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.7
75	30.0 - 66.0% of mass 95	47.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	50.0 - 120.0% of mass 95	81.1
175	4.0 - 9.0% of mass 174	5.9 (7.3)1
176	93.0 - 101.0% of mass 174	79.8 (98.4)1
177	5.0 - 9.0% of mass 176	5.6 (7.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV-15857	CCV-15857	J7852.D	12/16/08	9:52
02	LCS-15857	LCS-15857	J7853.D	12/16/08	10:24
03	MSB-15857	MSB-15857	J7853.D	12/16/08	10:24
04	MW-11R-121108MS	0812108-005AMS	J7854.D	12/16/08	11:05
05	MW-11R-121108MSD	0812108-005AMSD	J7855.D	12/16/08	11:37
06	MB-15857	MB-15857	J7857.D	12/16/08	12:41
07	MW-12-121108DL	0812108-003ADL	J7858.D	12/16/08	13:13
08	MW-13-121108	0812108-004A	J7859.D	12/16/08	13:45
09	MW-11R-121108	0812108-005A	J7860.D	12/16/08	14:17
10	MW-8-121108	0812108-006A	J7861.D	12/16/08	14:49
11	BD-1-121108	0812108-007A	J7862.D	12/16/08	15:21
12	MW-3R-121208	0812108-008A	J7863.D	12/16/08	15:53
13	MW-9-121208	0812108-009A	J7864.D	12/16/08	16:24
14	MW-5-121208	0812108-010A	J7865.D	12/16/08	16:56
15	MW-6-121208	0812108-011A	J7866.D	12/16/08	17:28
16	MW-7-121208	0812108-012A	J7867.D	12/16/08	18:00
17	Trip Blank	0812108-013A	J7868.D	12/16/08	18:32

FORM V VOA BFB_Tune

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): J7852.D Date Analyzed: 12/16/2008

Instrument ID: MS03 10 Time Analyzed: 9:52

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1730650	11.95	645110	16.47	492728	20.07
UPPER LIMIT	3461300	12.45	1290220	16.97	985456	20.57
LOWER LIMIT	865325	11.45	322555	15.97	246364	19.57
SAMPLE NO.						
01 LCS-15857 (LCS-15857)	1847480	11.95	675841	16.48	506913	20.07
02 MW-11R-121108MS (0812108-005AMS)	1933713	11.95	707088	16.47	533371	20.07
03 MW-11R-121108MSD (0812108-005AMSD)	1963641	11.95	732137	16.47	539492	20.07
04 MB-15857 (MB-15857)	1728139	11.95	623013	16.48	404531	20.07
05 MW-12-121108DL (0812108-003ADL)	1709845	11.95	623621	16.47	440329	20.07
06 MW-13-121108 (0812108-004A)	1730096	11.95	633378	16.48	412778	20.07
07 MW-11R-121108 (0812108-005A)	1746039	11.94	643398	16.48	412566	20.07
08 MW-8-121108 (0812108-006A)	1715113	11.95	624188	16.47	399581	20.07
09 BD-1-121108 (0812108-007A)	1730650	11.95	631297	16.48	400614	20.07
10 MW-3R-121208 (0812108-008A)	1723348	11.95	627974	16.47	403332	20.07
11 MW-9-121208 (0812108-009A)	1763549	11.94	645596	16.48	416845	20.07
12 MW-5-121208 (0812108-010A)	1656183	11.95	609244	16.48	397299	20.07
13 MW-6-121208 (0812108-011A)	1637214	11.95	594715	16.48	384510	20.07
14 MW-7-121208 (0812108-012A)	1569734	11.95	575079	16.48	372418	20.07
15 Trip Blank (0812108-013A)	1640754	11.95	604537	16.48	387595	20.07

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

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

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

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): J7852.D Date Analyzed: 12/16/2008

Instrument ID: MS03 10 Time Analyzed: 9:52

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1730650	11.95	645110	16.47	492728	20.07
UPPER LIMIT	3461300	12.45	1290220	16.97	985456	20.57
LOWER LIMIT	865325	11.45	322555	15.97	246364	19.57
SAMPLE NO.						
01 LCS-15857 (LCS-15857)	1847480	11.95	675841	16.48	506913	20.07
02 MSB-15857 (MSB-15857)	1847480	11.95	675841	16.48	506913	20.07
03 MW-11R-121108MS (0812108-005AMS)	1933713	11.95	707088	16.47	533371	20.07
04 MW-11R-121108MSD (0812108-005AMSD)	1963641	11.95	732137	16.47	539492	20.07
05 MB-15857 (MB-15857)	1728139	11.95	623013	16.48	404531	20.07
06 MW-12-121108DL (0812108-003ADL)	1709845	11.95	623621	16.47	440329	20.07
07 MW-13-121108 (0812108-004A)	1730096	11.95	633378	16.48	412778	20.07
08 MW-11R-121108 (0812108-005A)	1746039	11.94	643398	16.48	412566	20.07
09 MW-8-121108 (0812108-006A)	1715113	11.95	624188	16.47	399581	20.07
10 BD-1-121108 (0812108-007A)	1730650	11.95	631297	16.48	400614	20.07
11 MW-3R-121208 (0812108-008A)	1723348	11.95	627974	16.47	403332	20.07
12 MW-9-121208 (0812108-009A)	1763549	11.94	645596	16.48	416845	20.07
13 MW-5-121208 (0812108-010A)	1656183	11.95	609244	16.48	397299	20.07
14 MW-6-121208 (0812108-011A)	1637214	11.95	594715	16.48	384510	20.07
15 MW-7-121208 (0812108-012A)	1569734	11.95	575079	16.48	372418	20.07
16 Trip Blank (0812108-013A)	1640754	11.95	604537	16.48	387595	20.07

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

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

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

GC/MS Volatile Combined MDL Study Summary

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/L)	Std Dev	MDL (ug/L)	MDL (ug/L)	MDL VER
8260B/624/524.2	5030B	Water	2-Chlorotoluene	01/30/08	111.47	108.29	97.57	105.38	99.28	113.12	100.30	150.00	6.175	19.41	0.019	0.10
8260B/624/524.2	5030B	Water	4-Chlorotoluene	01/25/06	33.22	31.01	30.84	33.96	35.47	22.58	21.58	50.00	5.531	17.39	0.017	0.10
8260B/624/524.2	5030B	Water	1,3,5-Trimethylbenzene	01/24/06	30.63	27.96	36.71	25.61	24.17	31.58	30.94	50.00	4.216	13.25	0.013	0.10
8260B/624/524.2	5030B	Water	tert-Butylbenzene	01/25/06	28.97	22.53	30.03	23.18	38.01	26.24	33.57	50.00	5.059	15.90	0.016	0.10
8260B/624/524.2	5030B	Water	1,2,4-Trimethylbenzene	01/30/08	71.43	74.20	68.15	72.16	64.02	62.47	66.49	150.00	4.262	13.39	0.013	0.10
8260B/624/524.2	5030B	Water	sec-Butylbenzene	01/25/06	109.56	113.11	113.82	112.30	104.70	92.56	104.76	150.00	5.372	16.88	0.017	0.10
8260B/624/524.2	5030B	Water	1,3-Dichlorobenzene	01/25/06	56.83	44.51	52.46	56.00	54.15	42.77	45.27	50.00	6.321	19.87	0.020	0.10
8260B/624/524.2	5030B	Water	p-Isopropyltoluene	01/30/08	156.61	155.44	177.32	133.08	140.78	143.56	143.46	450.00	14.492	45.55	0.046	0.10
8260B/624/524.2	5030B	Water	1,4-Dichlorobenzene	01/30/08	131.85	134.65	126.03	130.03	134.49	130.03	118.15	150.00	6.395	19.79	0.020	0.10
8260B/624/524.2	5030B	Water	n-Butylbenzene	01/30/08	56.94	67.33	51.25	56.67	56.05	57.54	57.88	150.00	4.877	15.33	0.015	0.10
8260B/624/524.2	5030B	Water	1,2-Dichlorobenzene	01/30/08	327.73	339.08	358.84	328.32	345.68	321.38	332.60	450.00	12.759	40.10	0.040	0.10
8260B/624/524.2	5030B	Water	1,2-Dibromo-3-chloropropane	02/02/06	1775.89	1781.33	1849.51	1743.60	1759.14	1849.17	1883.15	2000.00	83.005	260.84	0.261	1.00
8260B/624/524.2	5030B	Water	1,2,4-Trichlorobenzene	01/30/08	75.26	81.97	74.94	77.11	99.47	74.07	82.14	150.00	8.903	27.98	0.028	0.10
8260B/624/524.2	5030B	Water	Hexachlorobutadiene	01/27/06	173.34	143.90	192.35	165.64	162.69	174.09	142.02	150.00	19.401	60.98	0.061	0.10
8260B/624/524.2	5030B	Water	Naphthalene	01/30/08	102.29	103.55	97.64	94.20	105.70	82.86	82.50	150.00	9.609	30.20	0.030	0.10
8260B/624/524.2	5030B	Water	1,2,3-Trichlorobenzene	01/30/08	67.18	65.58	70.42	61.85	77.92	59.28	55.10	150.00	7.582	23.83	0.024	0.10

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984.

MDL=(S.Dev) x (t-value)

The GC/MS instrument minimum threshold quantitation level is set to 0.1 ug/L.

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

MDL Verifications: * not verified, surrogate no longer utilized.

MS1: 8/12/08

MS2: 8/21/08

MS3: 8/12/08

MS4:8/12/08

GC/MS Volatile Combined MDL Study Summary

Instrument ID(s): MS1,3,4/HP5973,MS2/HP5970 Column ID(s): Rtx-VMS, 0.18(or 0.25)mm x 40 (60) , 1.0(1.4) df, Rtx-502.2, 0.53 mm x 105m, 3.0 df MDL Sample Size = 10 & 25 mL

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/L)	Std Dev	MDL (ug/L)	MDL (ug/L)	MDL VER
8260B/624/524.2	5030B	Water	Dichlorodifluoromethane	01/25/06	68.67	22.53	33.90	47.24	48.96	37.05	56.51	50.00	21.185	66.58	0.067	0.10
8260B/624/524.2	5030B	Water	Chloromethane	01/30/08	415.10	454.51	537.19	422.72	331.27	407.41	440.66	500.00	46.087	151.07	0.151	0.33
8260B/624/524.2	5030B	Water	Vinyl chloride	01/30/08	282.82	285.24	384.29	287.86	273.40	269.44	290.44	500.00	32.274	101.44	0.101	0.33
8260B/624/524.2	5030B	Water	Bromomethane	01/30/08	466.20	411.61	539.84	368.53	478.24	471.04	385.12	500.00	60.063	188.77	0.189	0.33
8260B/624/524.2	5030B	Water	Chloroethane	02/02/06	1334.01	1435.58	1450.68	1413.36	1401.82	1412.77	1411.37	2000.00	36.889	115.88	0.116	0.33
8260B/624/524.2	5030B	Water	Trichlorofluoromethane	01/30/08	190.93	206.62	238.94	206.38	176.84	185.66	206.62	500.00	18.753	58.94	0.059	0.10
8260B/624/524.2	5030B	Water	Acetone	02/02/06	3622.29	4110.57	4398.53	4315.36	4158.47	4219.44	3927.93	4000.00	261.586	823.42	0.823	1.00
8260B/624/524.2	5030B	Water	Acrolein	02/02/06	13444.17	15063.64	15687.09	15045.86	18431.19	18324.60	15365.64	25000.00	742.192	2332.71	2.333	2.33
8260B/624/524.2	5030B	Water	1,1-Dichloroethene	01/30/08	74.23	96.53	86.42	73.39	83.68	47.35	21.50	150.00	25.995	81.70	0.082	0.16
8260B/624/524.2	5030B	Water	Methyl iodide	01/30/08	117.26	136.20	169.83	138.11	130.91	127.46	115.75	450.00	18.121	56.95	0.057	1.00
8260B/624/524.2	5030B	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	01/25/06	117.60	110.28	117.98	108.44	109.38	79.28	94.71	150.00	13.733	43.16	0.043	0.10
8260B/624/524.2	5030B	Water	Methyl acetate	02/02/06	1763.96	1774.21	2022.26	1831.82	1842.17	1966.77	1907.58	2000.00	97.093	305.18	0.305	1.00
8260B/624/524.2	5030B	Water	Acrylonitrile	02/02/06	8086.78	8539.66	8880.54	8378.57	8180.94	8233.37	8550.16	10000.00	266.793	838.53	0.839	1.00
8260B/624/524.2	5030B	Water	Methylene chloride	01/30/08	632.44	598.58	554.75	634.15	606.79	564.86	526.71	450.00	32.184	101.16	0.101	0.16
8260B/624/524.2	5030B	Water	Carbon disulfide	01/30/08	320.35	323.78	401.76	333.89	291.77	299.80	313.50	450.00	35.175	113.70	0.114	0.11
8260B/624/524.2	5030B	Water	trans-1,2-Dichloroethene	03/24/06	30.31	28.04	9.13	9.80	8.75	10.66	16.80	50.00	8.653	27.20	0.027	0.10
8260B/624/524.2	5030B	Water	Methyl tert-Butyl ether	01/25/06	105.61	108.25	104.36	87.94	91.43	105.73	96.76	150.00	8.166	25.48	0.025	0.16
8260B/624/524.2	5030B	Water	1,1-Dichloroethane	01/25/06	110.03	108.86	124.41	116.71	122.89	111.93	116.17	150.00	6.080	19.11	0.019	0.10
8260B/624/524.2	5030B	Water	Vinyl acetate	02/02/06	1122.90	890.72	1074.91	1020.14	922.71	719.67	967.82	2000.00	133.345	419.10	0.419	1.00
8260B/624/524.2	5030B	Water	2-Butanone	02/02/06	3112.51	3775.98	3327.32	3456.07	3542.45	3471.31	3333.68	4000.00	208.600	649.34	0.649	1.00
8260B/624/524.2	5030B	Water	cis-1,2-Dichloroethene	01/30/08	117.16	108.34	124.63	120.43	91.85	92.37	115.27	150.00	13.196	41.48	0.041	0.10
8260B/624/524.2	5030B	Water	Bromochloromethane	01/25/06	36.59	40.21	64.75	49.87	69.08	12.92	46.56	50.00	16.776	59.01	0.059	0.10
8260B/624/524.2	5030B	Water	Chloroform	01/25/06	77.91	93.45	81.36	96.87	104.85	86.45	94.66	50.00	9.180	28.85	0.029	0.10
8260B/624/524.2	5030B	Water	2,2-Dichloropropane	01/25/06	111.59	103.71	66.32	64.97	55.55	50.10	45.67	150.00	26.055	81.89	0.082	0.33
8260B/624/524.2	5030B	Water	Cyclohexane	01/25/06	114.25	107.59	90.92	92.43	93.87	58.72	79.81	150.00	16.221	57.27	0.057	0.10
8260B/624/524.2	5030B	Water	Dibromofluoromethane	01/25/06	74.18	69.91	58.38	51.55	80.73	77.19	67.79	50.00	8.120	25.52	0.026	-
8260B/624/524.2	5030B	Water	1,2-Dichloroethane-d4	01/25/06	93.21	91.50	92.62	72.75	62.23	84.71	85.54	50.00	11.951	38.62	0.037	0.16
8260B/624/524.2	5030B	Water	1,2-Dichloroethane	01/25/06	50.54	59.35	56.37	58.15	67.75	73.60	58.47	50.00	7.646	24.04	0.024	0.16
8260B/624/524.2	5030B	Water	1,1,1-Trichloroethane	01/30/08	233.33	253.78	263.28	245.56	234.12	230.60	241.48	450.00	18.272	57.43	0.057	0.10
8260B/624/524.2	5030B	Water	1,1-Dichloropropene	01/04/06	42.89	50.93	44.16	58.42	60.67	46.80	50.93	50.00	7.649	24.04	0.024	0.10
8260B/624/524.2	5030B	Water	Carbon tetrachloride	01/25/06	93.74	85.94	110.61	92.32	92.63	77.70	87.88	150.00	10.056	31.61	0.032	0.10

Sample Data

GC/MS Volatile Combined MDL Study Summary

Analytical Method	Purge Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/L)	Std Dev	MDL (ug/L)	MDL (ug/L)	MDL VER
8260B/624/524.2	5030B	Water	Benzene	01/30/08	111.85	109.98	115.47	115.79	109.51	115.19	103.19	150.00	4.842	15.22	0.015	0.10
8260B/624/524.2	5030B	Water	Trichloroethene	01/30/08	99.35	91.33	120.54	110.51	95.28	98.09	111.19	150.00	10.491	32.97	0.033	0.10
8260B/624/524.2	5030B	Water	Dibromomethane	01/30/08	126.40	123.97	105.88	125.79	119.27	87.23	101.59	150.00	14.987	47.10	0.047	0.16
8260B/624/524.2	5030B	Water	Methylcyclohexane	01/25/06	98.21	80.48	80.37	87.75	85.38	62.19	82.24	150.00	10.830	34.04	0.034	0.10
8260B/624/524.2	5030B	Water	1,2-Dichloropropane	01/25/06	102.32	80.06	82.49	96.58	94.89	99.83	97.65	150.00	8.411	26.44	0.026	0.16
8260B/624/524.2	5030B	Water	Bromodichloromethane	01/30/08	384.84	391.73	396.59	380.08	391.17	346.22	381.14	450.00	16.751	52.65	0.053	0.10
8260B/624/524.2	5030B	Water	2-Chloroethylvinyl ether	02/02/06	2410.17	2886.41	2902.47	3004.78	3050.47	2842.45	3018.27	2000.00	219.340	689.39	0.689	2.50
8260B/624/524.2	5030B	Water	4-Methyl-2-pentanone	02/02/06	3072.77	3394.51	3381.65	3308.72	3298.16	3263.77	3431.02	4000.00	119.342	375.09	0.375	1.00
8260B/624/524.2	5030B	Water	cis-1,3-Dichloropropene	01/30/08	101.69	100.57	104.00	106.74	92.04	85.36	83.66	150.00	9.357	29.41	0.029	0.16
8260B/624/524.2	5030B	Water	Toluene-d8	01/24/06	56.34	52.51	48.28	47.46	53.24	44.15	52.29	50.00	3.920	12.35	0.012	0.10
8260B/624/524.2	5030B	Water	Toluene	01/25/06	36.36	33.60	35.63	24.80	28.99	40.74	31.24	50.00	5.629	17.69	0.018	0.10
8260B/624/524.2	5030B	Water	trans-1,3-Dichloropropene	01/25/06	30.30	48.86	32.58	32.98	45.88	33.01	22.40	50.00	9.157	28.76	0.029	0.16
8260B/624/524.2	5030B	Water	1,1,2-Trichloroethane	01/30/08	111.86	128.71	148.83	113.70	109.55	101.59	98.35	150.00	17.428	54.78	0.055	0.16
8260B/624/524.2	5030B	Water	2-Hexanone	02/02/06	2496.97	2892.23	3038.73	2673.97	2804.55	2977.37	2790.37	4000.00	184.386	579.52	0.580	1.00
8260B/624/524.2	5030B	Water	1,2-Dibromoethane	01/25/06	108.85	93.59	98.33	89.43	95.46	109.03	77.66	150.00	11.000	34.57	0.035	0.16
8260B/624/524.2	5030B	Water	1,3-Dichloropropane	01/25/06	110.55	107.95	109.61	88.91	105.59	107.17	101.33	150.00	7.398	23.25	0.023	0.10
8260B/624/524.2	5030B	Water	Dibromochloromethane	01/25/06	39.88	77.64	73.94	56.94	65.23	56.09	68.01	50.00	12.986	40.78	0.041	0.10
8260B/624/524.2	5030B	Water	Tetrachloroethene	01/25/06	82.06	81.78	78.32	59.51	78.33	81.78	78.81	50.00	9.400	29.55	0.030	0.10
8260B/624/524.2	5030B	Water	1-Chlorohexane	01/25/06	106.83	97.49	104.89	90.44	90.99	93.56	90.45	150.00	14.983	47.08	0.047	0.16
8260B/624/524.2	5030B	Water	1,1,1,2-Tetrachloroethane	01/30/08	117.93	131.60	144.15	94.98	89.38	111.58	103.11	150.00	19.681	61.86	0.062	0.16
8260B/624/524.2	5030B	Water	Chlorobenzene	01/24/06	40.53	37.21	39.17	44.54	39.90	33.39	39.66	50.00	3.384	10.64	0.011	0.10
8260B/624/524.2	5030B	Water	Ethylbenzene	01/30/08	313.54	308.52	342.92	367.40	317.58	286.55	306.87	450.00	14.451	45.42	0.045	0.10
8260B/624/524.2	5030B	Water	(m+p)-Xylene	01/30/08	489.74	497.06	530.30	475.06	492.83	474.71	477.37	900.00	19.438	61.09	0.061	0.20
8260B/624/524.2	5030B	Water	o-Xylene	01/30/08	87.33	76.39	83.88	77.75	76.86	70.05	81.20	150.00	5.692	17.89	0.018	0.10
8260B/624/524.2	5030B	Water	Styrene	01/25/06	25.81	23.40	34.65	26.68	12.72	24.65	25.54	50.00	6.446	20.26	0.020	0.10
8260B/624/524.2	5030B	Water	Bromoform	01/27/06	164.36	157.47	168.08	189.50	179.09	163.41	198.69	150.00	14.987	47.11	0.047	0.33
8260B/624/524.2	5030B	Water	Bromofluorobenzene	01/25/06	74.85	79.79	50.53	65.68	66.53	82.02	62.08	50.00	10.985	34.53	0.035	0.10
8260B/624/524.2	5030B	Water	trans-1,4-Dichloro-2-butene	02/07/06	1375.94	1270.01	1174.42	1244.06	1060.29	809.85	1192.92	1000.00	182.405	573.30	0.573	2.50
8260B/624/524.2	5030B	Water	1,1,2,2-Tetrachloroethane	01/25/06	113.79	113.22	71.69	71.15	47.87	87.54	59.69	150.00	25.692	80.75	0.081	0.10
8260B/624/524.2	5030B	Water	Isopropylbenzene	01/25/06	32.07	33.15	19.98	36.45	40.51	30.69	36.48	50.00	6.562	20.62	0.021	0.10
8260B/624/524.2	5030B	Water	1,2,3-Trichloropropane	01/25/06	80.61	48.41	74.81	94.05	69.11	56.85	74.00	50.00	14.762	46.40	0.046	0.33
8260B/624/524.2	5030B	Water	Bromobenzene	01/25/06	24.28	39.94	19.46	30.07	33.32	35.33	45.63	50.00	8.939	28.09	0.028	0.10
8260B/624/524.2	5030B	Water	n-Propylbenzene	01/24/06	50.73	45.79	45.54	50.47	43.33	47.61	44.47	50.00	2.878	9.04	0.009	0.10

Life Science Laboratories, Inc. — Analytical Results

LSL Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
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StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0812108-001A
Project:	City of Geneva- Market Basket Site			Client Sample ID:	MW-2-121108
W Order:	0812108			Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER			Date Received:	12/12/08 17:42
Inst. ID:	MS03_10	Sample Size:	10 mL	PrepDate:	
ColumnID:	Rtx-VMS	%Moisture:		BatchNo:	R15832
Revision:	12/16/08 13:57	TestCode:	8260W7_OLM42	FileID:	1-SAMP-J7844.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:20
Chloromethane	0.49	J	1.00	0.33	µg/L	1	12/15/08 21:20
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Bromomethane	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Chloroethane	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:20
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/15/08 21:20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Acetone	ND		10.0	1.00	µg/L	1	12/15/08 21:20
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/15/08 21:20
Methyl acetate	ND		5.00	1.00	µg/L	1	12/15/08 21:20
Methylene chloride	ND		2.00	0.16	µg/L	1	12/15/08 21:20
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Methyl tert-butyl ether	ND		1.00	0.18	µg/L	1	12/15/08 21:20
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
2-Butanone	ND		10.0	1.00	µg/L	1	12/15/08 21:20
Chloroform	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Cyclohexane	1.78		0.50	0.10	µg/L	1	12/15/08 21:20
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Benzene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Trichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Methylcyclohexane	0.97		0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:20
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/15/08 21:20
Toluene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:20
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412419 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — Analytical Results

LSL Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0812108-001A
Project:	City of Geneva- Market Basket Site			Client Sample ID:	MW-2-121108
W Order:	0812108			Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER			Date Received:	12/12/08 17:42
Inst. ID:	MS03_10	Sample Size:	10 mL	PrepDate:	
ColumnID:	Rtx-VMS	%Moisture:		BatchNo:	R15832
Revision:	12/16/08 13:57	TestCode:	8260W7_OLM42	FileID:	1-SAMP-J7844.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/15/08 21:20
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/15/08 21:20
Chlorobenzene	0.15	J	0.50	0.10	µg/L	1	12/15/08 21:20
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Xylenes (total)	ND		1.00	0.20	µg/L	1	12/15/08 21:20
Styrene	ND		0.50	0.10	µg/L	1	12/15/08 21:20
Bromoform	ND		1.00	0.33	µg/L	1	12/15/08 21:20
Isopropylbenzene	0.36	J	0.50	0.10	µg/L	1	12/15/08 21:20
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:20
1,3-Dichlorobenzene	0.40	J	0.50	0.10	µg/L	1	12/15/08 21:20
1,4-Dichlorobenzene	0.27	J	0.50	0.16	µg/L	1	12/15/08 21:20
1,2-Dichlorobenzene	0.30	J	0.50	0.10	µg/L	1	12/15/08 21:20
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/15/08 21:20
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/15/08 21:20
Surr: 1,2-Dichloroethane-d4	105		75-134	0.16	%REC	1	12/15/08 21:20
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/15/08 21:20
Surr: 4-Bromofluorobenzene	110		75-125	0.10	%REC	1	12/15/08 21:20

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412419 Project Supervisor: Anthony Crescenzi


```
                    Quantitation Report    (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7844.D                   Vial: 55
Acq On    : 15 Dec 2008   21:20                    Operator: JK
Sample    : 0812108-001A                           Inst     : #3MS10
Misc      : SAMP,8260W7_OLM42,                     Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 16 13:54 2008          Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards                 R.T. QIon  Response  Conc Units Dev(Min)
-----------------------------------------------------------------------------
  1) Fluorobenzene                 11.95   96  1843159    10.00 ug/L    0.00
 36) Chlorobenzene-d5              16.47   82   697269    10.00 ug/L    0.00
 47) 1,4-Dichlorobenzene-d4        20.07  152   455308    10.00 ug/L    0.00

 System Monitoring Compounds
 24) 1,2-Dichloroethane-d4         11.47   65   458122    10.47 ug/L    0.00
  Spiked Amount     10.000                    Recovery   =  104.70%
 37) Toluene-d8                    14.25   98  1768991    10.04 ug/L    0.00
  Spiked Amount     10.000                    Recovery   =  100.40%
 49) Bromofluorobenzene            18.26   95   582211    10.99 ug/L    0.00
  Spiked Amount     10.000                    Recovery   =  109.90%

 Target Compounds                                                   Qvalue
  3) Chloromethane                  4.59   50    33197m    0.49 ug/L
 18) Cyclohexane                   11.14   56   139302m    1.78 ug/L
 26) Methylcyclohexane             12.67   83    70999m    0.97 ug/L
 41) Chlorobenzene                 16.54  112    20992     0.15 ug/L #    66
 43) (m+p)-Xylene                  16.69  106    13169     0.14 ug/L      99
 48) Isopropylbenzene              17.86  105    61071     0.36 ug/L      98
 51) 1,3-Dichlorobenzene           19.98  146    31872     0.40 ug/L      94
 52) 1,4-Dichlorobenzene           20.12  146    20799     0.27 ug/L      98
 53) 1,2-Dichlorobenzene           20.71  146    22050     0.30 ug/L     100

-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J7844.D  JD05NTCL.M      Tue Dec 16 13:57:21 2008                      P
```



```
                    Quantitation Report    (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7844.D                   Vial: 55
Acq On    : 15 Dec 2008   21:20                    Operator: JK
Sample    : 0812108-001A                           Inst     : #3MS10
Misc      : SAMP,8260W7_OLM42,                     Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 29  5:52 2008          Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Dec 29 05:51:50 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards                 R.T. QIon  Response  Conc Units Dev(Min)
-----------------------------------------------------------------------------
  1) Fluorobenzene                 11.95   96  1843159    10.00 ug/L    0.00

 Target Compounds                                                   Qvalue

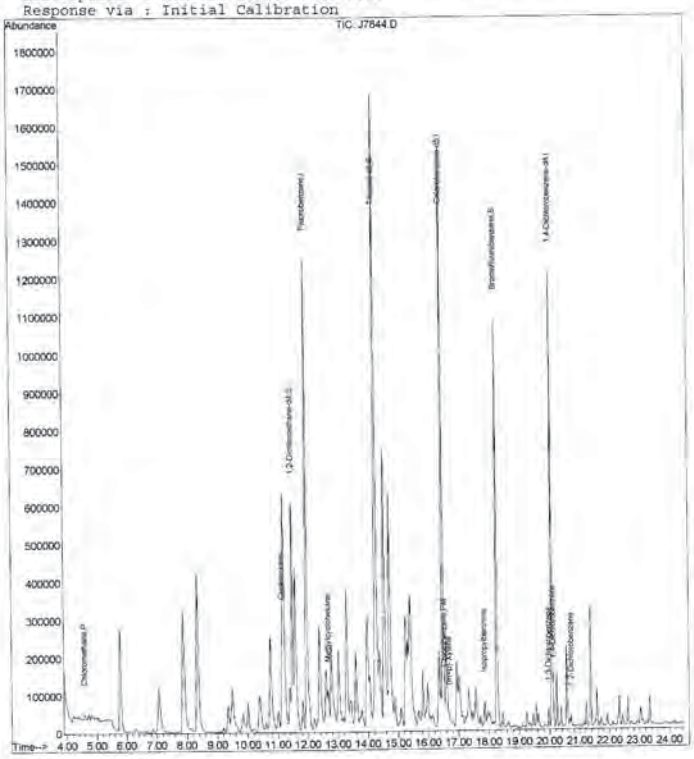
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J7844.D  JD05T12W.M      Mon Dec 29 05:57:56 2008                      P
```

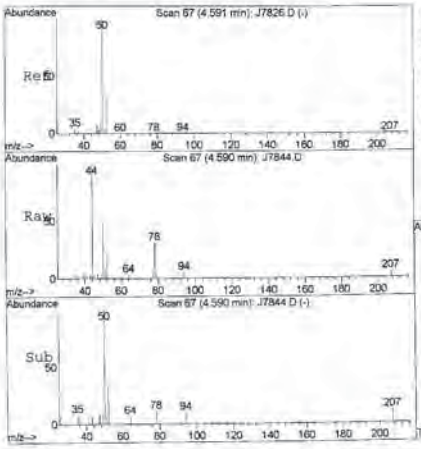
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7844.D
Acq On : 15 Dec 2008 21:20
Sample : 0812108-001A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:54 2008

Vial: 55
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration

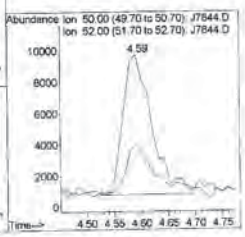


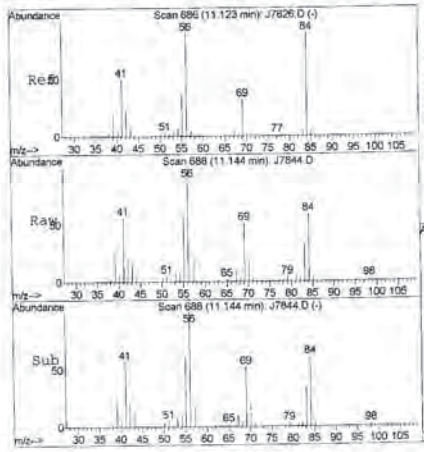


#3
Chloromethane
Concen: 0.49 ug/L m
RT: 4.59 min Scan# 67
Delta R.T. -0.00 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion: 50 Resp: 33197

Ion	Ratio	Lower	Upper
50	100		
52	33.3	3.3	63.3

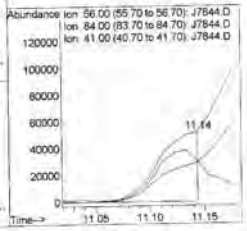


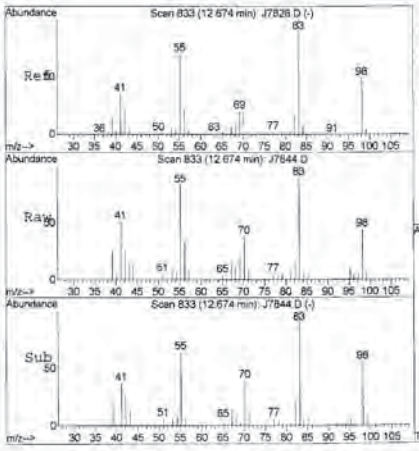


#18
Cyclohexane
Concen: 1.78 ug/L m
RT: 11.14 min Scan# 686
Delta R.T. 0.02 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion: 56 Resp: 139302

Ion	Ratio	Lower	Upper
56	100		
84	0.0	62.9	122.9#
41	232.7	22.0	82.0#

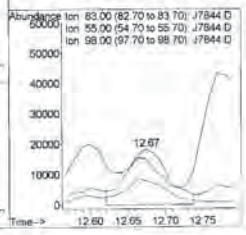


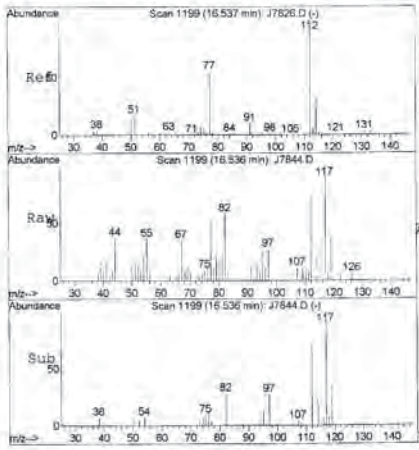


#26
Methylcyclohexane
Concen: 0.97 ug/L m
RT: 12.67 min Scan# 833
Delta R.T. -0.00 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion: 83 Resp: 70999

Ion	Ratio	Lower	Upper
83	100		
55	48.0	41.0	101.0
98	53.4	18.2	78.2

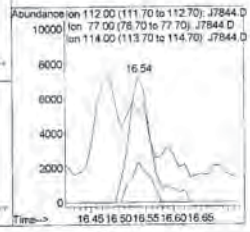


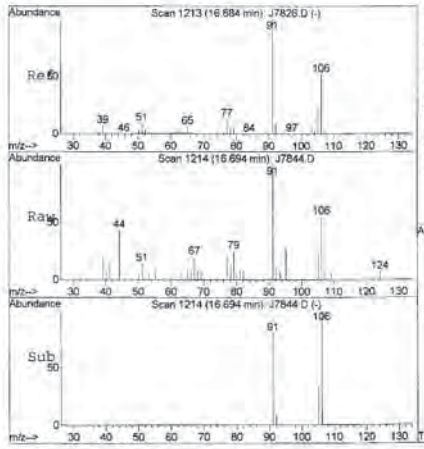


#41
Chlorobenzene
Concen: 0.15 ug/L
RT: 16.54 min Scan# 1199
Delta R.T. -0.00 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion:112 Resp: 20992

Ion	Ratio	Lower	Upper
112	100		
77	32.7	40.5	100.5#
114	26.7	1.6	61.6

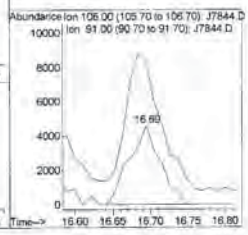


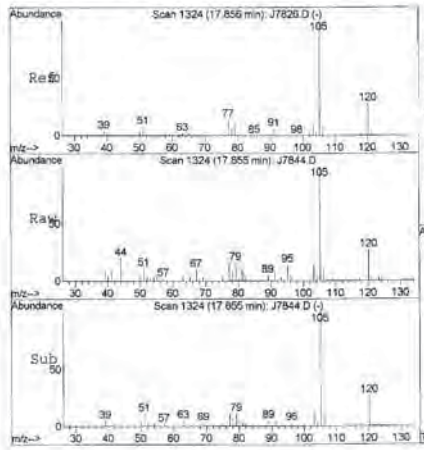


#43
(m+p)-Xylene
Concen: 0.14 ug/L
RT: 16.69 min Scan# 1214
Delta R.T. 0.01 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion:106 Resp: 33169

Ion	Ratio	Lower	Upper
106	100		
91	194.4	163.0	223.0

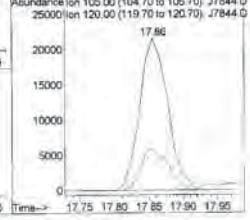


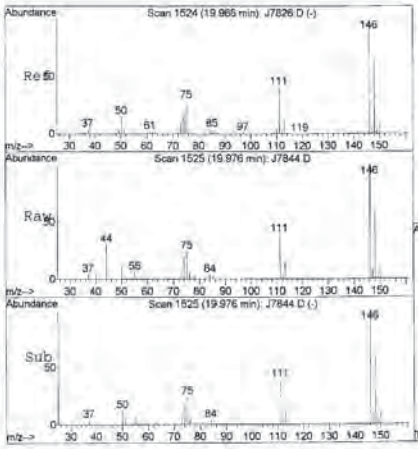


#48
Isopropylbenzene
Concen: 0.36 ug/L
RT: 17.86 min Scan# 1324
Delta R.T. -0.00 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion:105 Resp: 61071

Ion	Ratio	Lower	Upper
105	100		
120	26.6	0.0	57.4

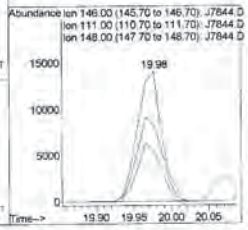


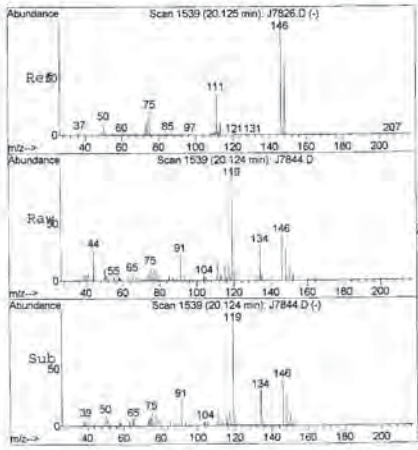


#51
1,3-Dichlorobenzene
Concen: 0.40 ug/L
RT: 19.98 min Scan# 1525
Delta R.T. 0.01 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion:146 Resp: 31872

Ion	Ratio	Lower	Upper
146	100		
111	44.8	10.0	70.0
148	66.7	33.4	93.4

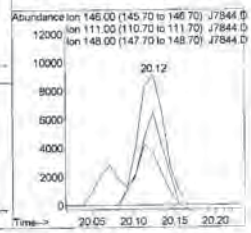


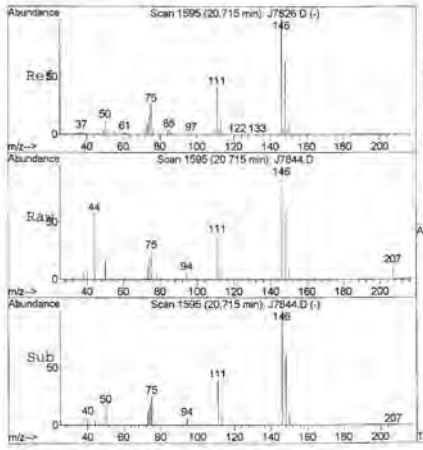


#52
1,4-Dichlorobenzene
Concen: 0.27 ug/L
RT: 20.12 min Scan# 1539
Delta R.T. -0.00 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion:146 Resp: 20799

Ion	Ratio	Lower	Upper
146	100		
111	39.9	8.8	68.8
148	62.6	33.6	93.6

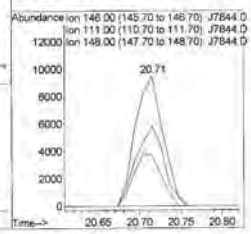




#53
1,2-Dichlorobenzene
Concen: 0.30 ug/L
RT: 20.71 min Scan# 1595
Delta R.T. -0.00 min
Lab File: J7844.D
Acq: 15 Dec 2008 21:20

Tgt Ion:146 Resp: 22050

Ion	Ratio	Lower	Upper
146	100		
111	40.5	10.2	70.2
148	62.4	32.6	92.6



Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-2-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7844.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 14 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000078-78-4	Butane, 2-methyl-	5.78	2.73	J
2.	unknown (7.88)	7.88	4.49	J
3. 000096-14-0	Pentane, 3-methyl-	8.35	5.05	J
4. 000565-59-3	Pentane, 2,3-dimethyl- (10.75)	10.75	3.07	J
5. 000565-59-3	Pentane, 2,3-dimethyl- (10.75)	10.75	3.07	J
6. 000822-50-4	Cyclopentane, 1,2-dimethyl-, t	11.58	4.67	J
7. 000822-50-4	Cyclopentane, 1,2-dimethyl-, t	11.58	4.67	J
8. 004516-69-2	Cyclopentane, 1,1,3-trimethyl-	12.38	3.17	J
9. 004516-69-2	Cyclopentane, 1,1,3-trimethyl-	12.38	3.17	J
10. 000591-47-9	Cyclohexene, 4-methyl-	13.29	3.45	J
11. 002207-04-7	Cyclohexane, 1,4-dimethyl-, tr	13.98	3.86	J
12. 006876-23-9	Cyclohexene, 1,2-dimethyl-, tr	14.53	7.05	J
13.	unknown (14.72)	14.72	6.23	J
14. 002207-01-4	Cyclohexane, 1,2-dimethyl-, ci	15.41	4.23	J

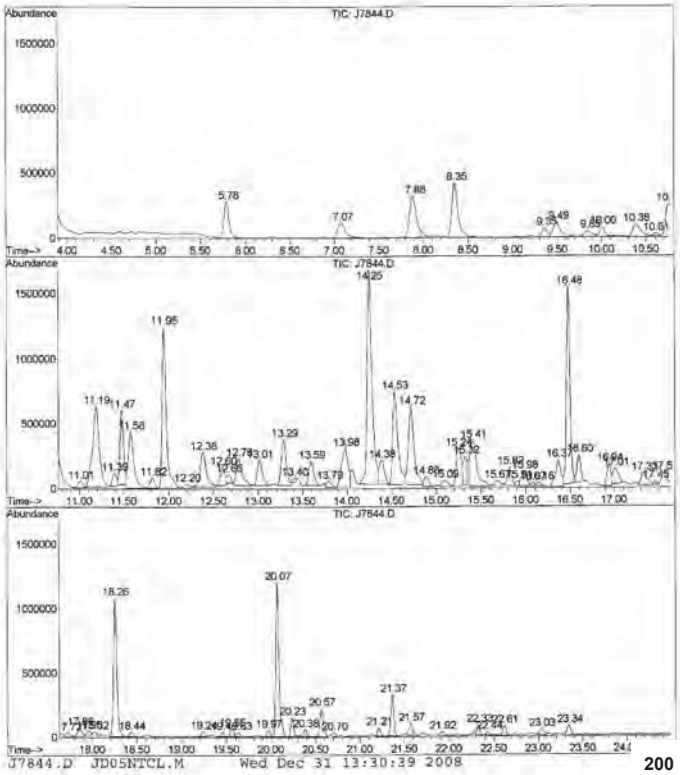
Tentatively Identified Compound (LSC) summary

Operator ID: JK Date Acquired: 15 Dec 2008 21:20
Data File: C:\HPCHEM\1\DATA\J7844.D
Name: 0812108-001A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Butane, 2,3-dimethyl	7.88	4.5	ug/L	1789950	ISTD01	11.95	3987130	10.0
Pentane, 3-methyl-	8.35	5.0	ug/L	2012160	ISTD01	11.95	3987130	10.0
Pentane, 2,3-dimethy	10.75	3.1	ug/L	1223320	ISTD01	11.95	3987130	10.0
Cyclopentane, 1,2-di	11.58	4.7	ug/L	1863920	ISTD01	11.95	3987130	10.0
Cyclopentane, 1,1,3-	12.38	3.2	ug/L	1263570	ISTD01	11.95	3987130	10.0
Cyclohexene, 4-methy	13.29	3.5	ug/L	1375640	ISTD01	11.95	3987130	10.0
Cyclohexane, 1,4-dim	13.98	3.9	ug/L	1539850	ISTD01	11.95	3987130	10.0
Cyclohexane, 1,2-dim	14.53	7.0	ug/L	2980020	ISTD02	16.47	4229160	10.0
1,3-Dimethyl-1-cyclo	14.72	6.2	ug/L	2635030	ISTD02	16.47	4229160	10.0
Cyclohexane, 1,2-dim	15.41	4.2	ug/L	1787530	ISTD02	16.47	4229160	10.0

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7844.D
Operator : JK
Acquired : 15 Dec 2008 21:20 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-001A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 55
Quant File :JD05NTCL.RES (RTE Integrator)



Library Search Compound Report

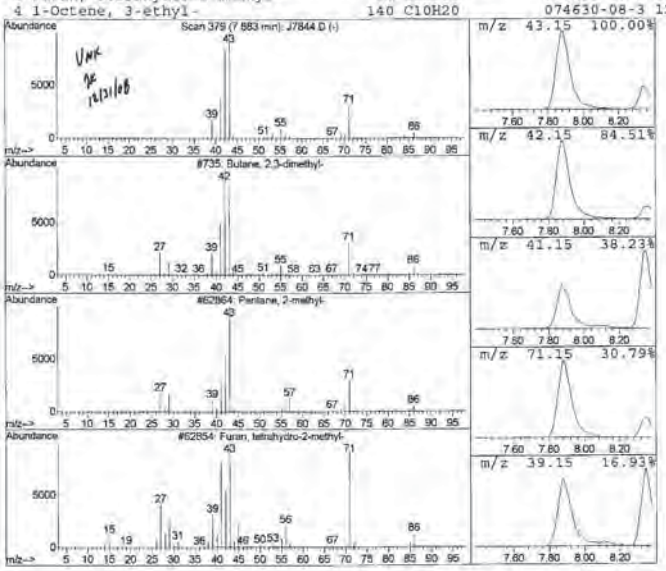
Data File : C:\HPCHEM\1\DATA\J7844.D Vial: 55
Acq On : 15 Dec 2008 21:20 Operator: JK
Sample : 0812108-001A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Butane, 2,3-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.88	4.49 ug/L	1789950	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	80
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	50
3	Furan, tetrahydro-2-methyl-	86	C5H10O	000096-47-9	14
4	1-Octene, 3-ethyl-	140	C10H20	074630-08-3	12



J7844.D JD05NTCL.M Wed Dec 31 13:30:39 2008 P

Library Search Compound Report

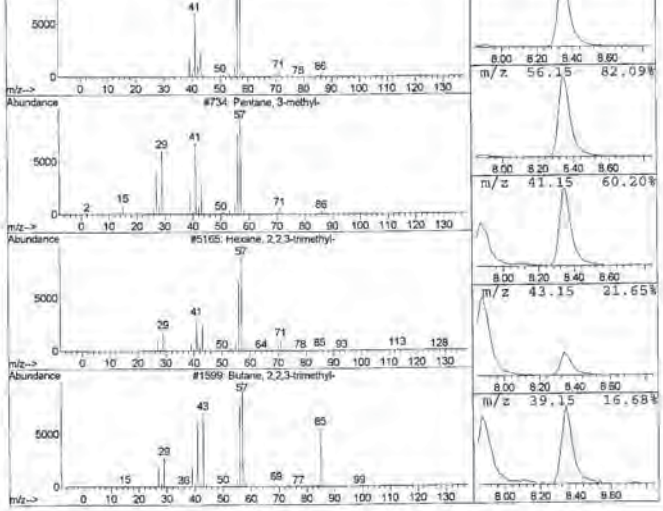
Data File : C:\HPCHEM\1\DATA\J7844.D Vial: 55
Acq On : 15 Dec 2008 21:20 Operator: JK
Sample : 0812108-001A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Pentane, 3-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.35	5.05 ug/L	2012160	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
2	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	78
3	Butane, 2,2,3-trimethyl-	100	C7H16	000464-06-2	72
4	1-Butanol, 2-methyl-	88	C5H12O	000137-32-6	64



J7844.D JD05NTCL.M Wed Dec 31 13:30:40 2008 P

Library Search Compound Report

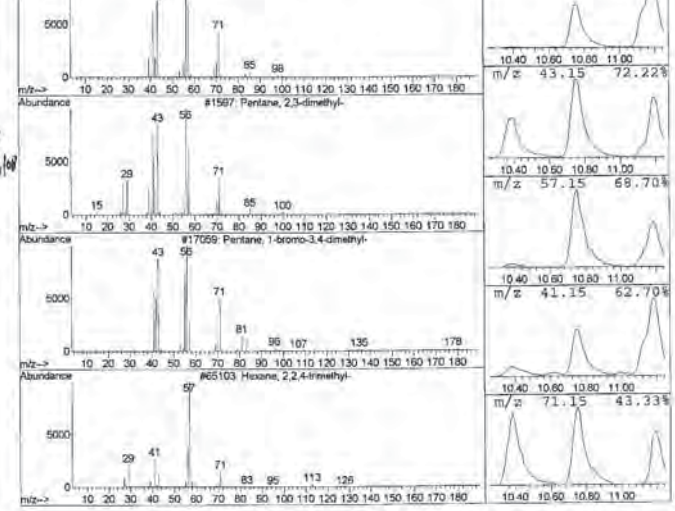
Data File : C:\HPCHEM\1\DATA\J7844.D Vial: 55
Acq On : 15 Dec 2008 21:20 Operator: JK
Sample : 0812108-001A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 Pentane, 2,3-dimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.75	3.07 ug/L	1223320	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	81
2	Pentane, 1-bromo-3,4-dimethyl-	178	C7H15Br	006570-92-9	50
3	Hexane, 2,2,4-trimethyl-	128	C9H20	016747-26-5	50
4	1-Pentene, 2,4-dimethyl-	98	C7H14	002213-32-3	47



J7844.D JD05NTCL.M Wed Dec 31 13:30:40 2008 P

Library Search Compound Report

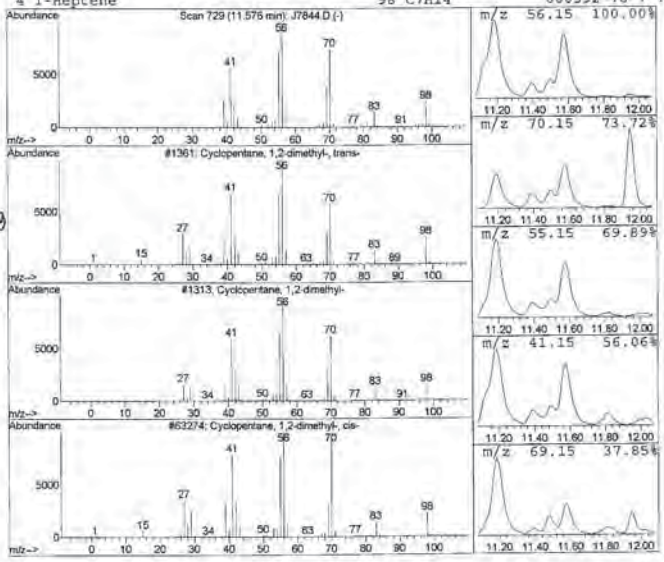
Data File : C:\HPCHEM\1\DATA\J7844.D — Vial: 55
Acq On : 15 Dec 2008 21:20 — Operator: JK
Sample : 0812108-001A — Inst : #3MS10
Misc : SAMP,8260W7_OLM42, — Multiplr: 1.00
MS Integration Parame: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 Cyclopentane, 1,2-dimethyl-, t Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.58	4.67 ug/L	1863920	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Cyclopentane, 1,2-dimethyl-, trans-	98	C7H14	000822-50-4	91
2	Cyclopentane, 1,2-dimethyl-	98	C7H14	002452-99-5	90
3	Cyclopentane, 1,2-dimethyl-, cis-	98	C7H14	001192-18-3	86
4	1-Heptene	98	C7H14	000592-76-7	72



J7844.D JD05NTCL.M Wed Dec 31 13:30:40 2008 p

Library Search Compound Report

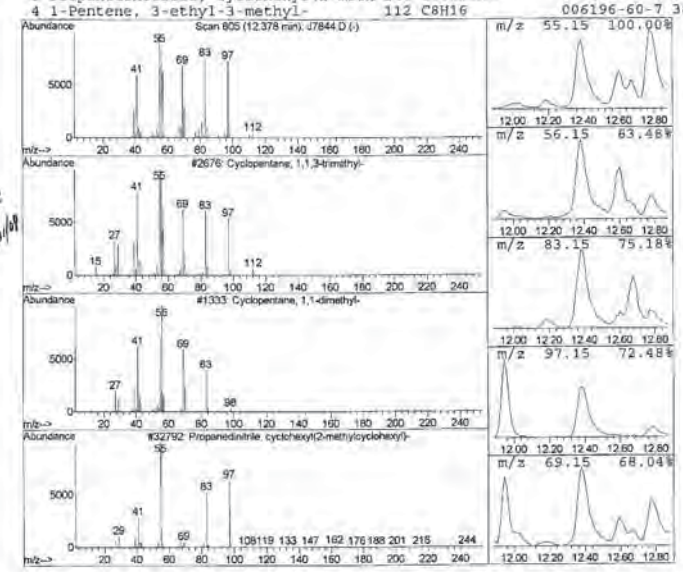
Data File : C:\HPCHEM\1\DATA\J7844.D — Vial: 55
Acq On : 15 Dec 2008 21:20 — Operator: JK
Sample : 0812108-001A — Inst : #3MS10
Misc : SAMP,8260W7_OLM42, — Multiplr: 1.00
MS Integration Parame: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 5 Cyclopentane, 1,1,3-trimethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.38	3.17 ug/L	1263570	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Cyclopentane, 1,1,3-trimethyl-	112	C8H16	004516-69-2	76
2	Cyclopentane, 1,1-dimethyl-	98	C7H14	001638-26-2	64
3	Propanedinitrile, cyclohexyl(2-meth	244	C16H24N2	074764-55-9	43
4	1-Pentene, 3-ethyl-3-methyl-	112	C8H16	006196-60-7	38



J7844.D JD05NTCL.M Wed Dec 31 13:30:41 2008 p

Library Search Compound Report

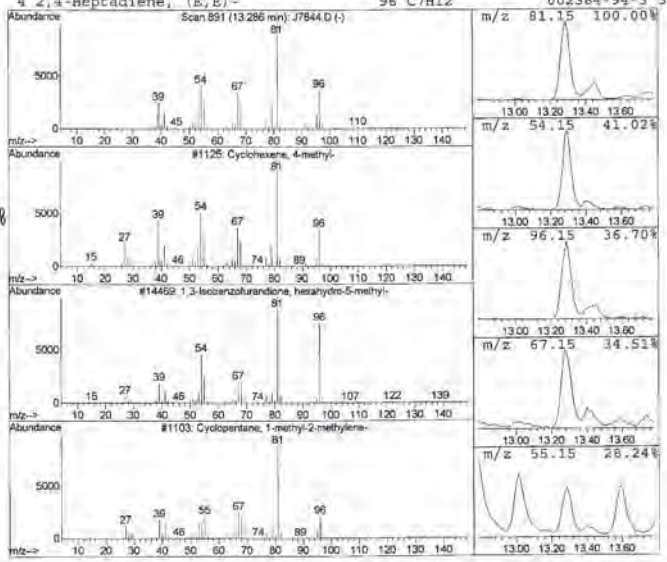
Data File : C:\HPCHEM\1\DATA\J7844.D — Vial: 55
Acq On : 15 Dec 2008 21:20 — Operator: JK
Sample : 0812108-001A — Inst : #3MS10
Misc : SAMP,8260W7_OLM42, — Multiplr: 1.00
MS Integration Parame: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 6 Cyclohexene, 4-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.29	3.45 ug/L	1375640	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Cyclohexene, 4-methyl-	96	C7H12	000591-47-9	91
2	1,3-Isobenzofurandione, hexahydro-5	168	C9H12O3	019438-60-9	86
3	Cyclopentane, 1-methyl-2-methylene-	96	C7H12	041158-41-2	72
4	2,4-Heptadiene, (E,E)-	96	C7H12	002384-94-3	58



J7844.D JD05NTCL.M Wed Dec 31 13:30:41 2008 p

Library Search Compound Report

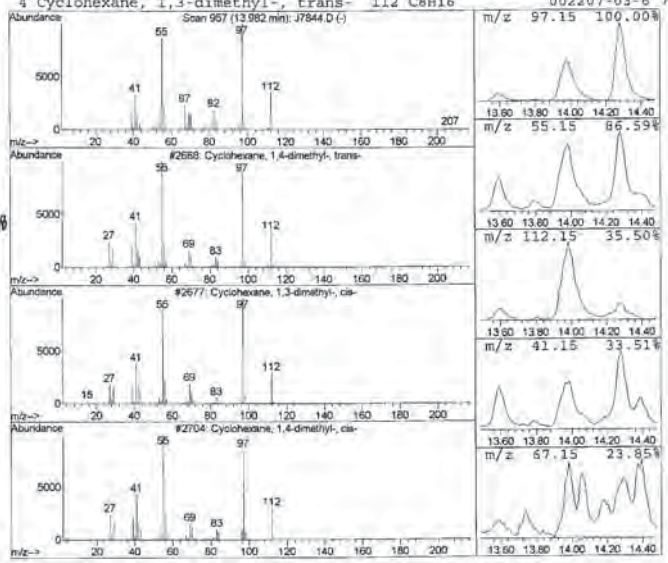
Data File : C:\HPCHEM\1\DATA\J7844.D — Vial: 55
Acq On : 15 Dec 2008 21:20 — Operator: JK
Sample : 0812108-001A — Inst : #3MS10
Misc : SAMP,8260W7_OLM42, — Multiplr: 1.00
MS Integration Parame: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 7 Cyclohexane, 1,4-dimethyl-, tr Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.98	3.86 ug/L	1539850	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Cyclohexane, 1,4-dimethyl-, trans-	112	C8H16	002207-04-7	93
2	Cyclohexane, 1,3-dimethyl-, cis-	112	C8H16	000638-04-0	81
3	Cyclohexane, 1,4-dimethyl-, cis-	112	C8H16	000624-29-3	76
4	Cyclohexane, 1,3-dimethyl-, trans-	112	C8H16	002207-03-6	76



J7844.D JD05NTCL.M Wed Dec 31 13:30:41 2008 p

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7844.D
Acq On : 15 Dec 2008 21:20
Sample : 0812108-001A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: LSCINT.P

Vial: 55
Operator: JK
Inst : #3MS10
Multiplr: 1.00

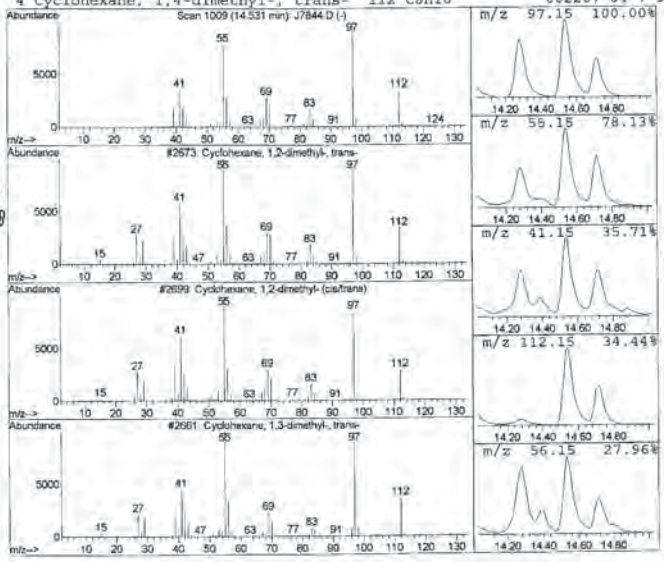
Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Cyclohexane, 1,2-dimethyl-, tr Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.53	7.05 ug/L	2980020	Chlorobenzene-d5	16.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,2-dimethyl-, trans-	112	C8H16	006876-23-9	94
2	Cyclohexane, 1,2-dimethyl- (cis/tra	112	C8H16	000583-57-3	91
3	Cyclohexane, 1,3-dimethyl-, trans-	112	C8H16	002207-03-6	90
4	Cyclohexane, 1,4-dimethyl-, trans-	112	C8H16	002207-04-7	90



J7844.D JD05NTCL.M Wed Dec 31 13:30:42 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7844.D
Acq On : 15 Dec 2008 21:20
Sample : 0812108-001A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: LSCINT.P

Vial: 55
Operator: JK
Inst : #3MS10
Multiplr: 1.00

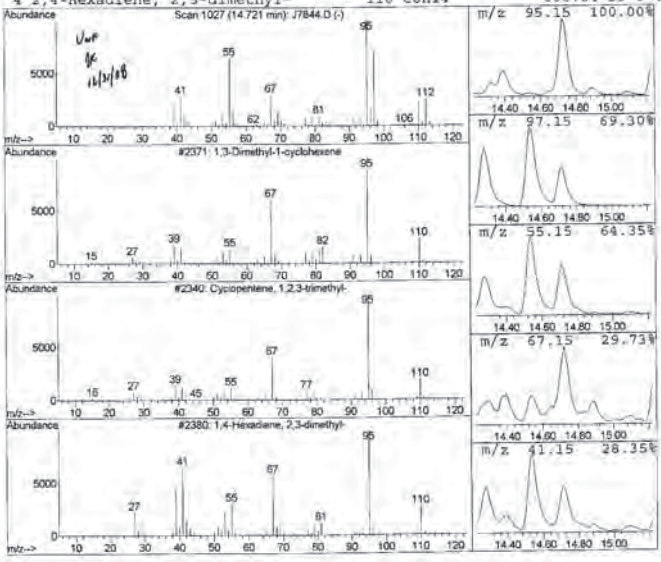
Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 9 1,3-Dimethyl-1-cyclohexene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.72	6.23 ug/L	2635030	Chlorobenzene-d5	16.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Dimethyl-1-cyclohexene	110	C8H14	002808-76-6	58
2	Cyclopentene, 1,2,3-trimethyl-	110	C8H14	000473-91-6	53
3	1,4-Hexadiene, 2,3-dimethyl-	110	C8H14	018669-52-8	49
4	2,4-Hexadiene, 2,5-dimethyl-	110	C8H14	000764-13-6	42



J7844.D JD05NTCL.M Wed Dec 31 13:30:42 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\J7844.D
Acq On : 15 Dec 2008 21:20
Sample : 0812108-001A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: LSCINT.P

Vial: 55
Operator: JK
Inst : #3MS10
Multiplr: 1.00

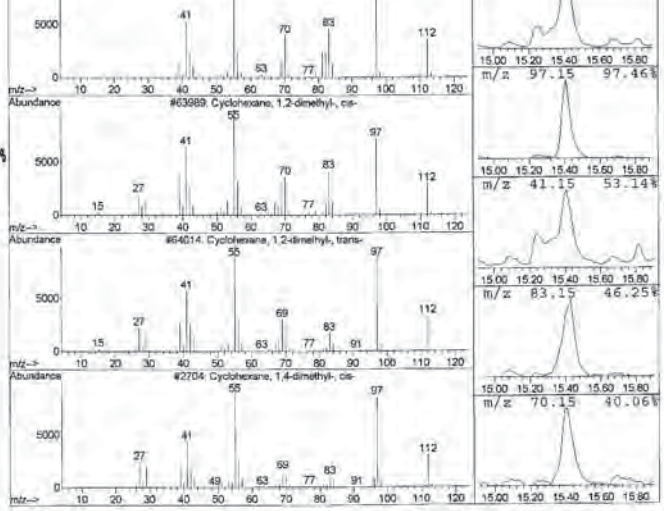
Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Cyclohexane, 1,2-dimethyl-, ci Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.41	4.23 ug/L	1787530	Chlorobenzene-d5	16.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,2-dimethyl-, cis-	112	C8H16	002207-01-4	87
2	Cyclohexane, 1,2-dimethyl-, trans-	112	C8H16	006876-23-9	64
3	Cyclohexane, 1,4-dimethyl-, cis-	112	C8H16	000624-29-3	62
4	Cyclohexane, 1,4-dimethyl-, trans-	112	C8H16	002207-04-7	62



J7844.D JD05NTCL.M Wed Dec 31 13:30:42 2008

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:02
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15832
Revision:	12/16/08 13:57	FileID:	1-SAMP-J7845.D
Col Type:			

Sample Size: 10 mL
%Moisture:
TestCode: 8260W7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:52
Chloromethane	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Bromomethane	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Chloroethane	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 21:52
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Acetone	ND		10.0	1.00	µg/L	1	12/15/08 21:52
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/15/08 21:52
Methyl acetate	ND		5.00	1.00	µg/L	1	12/15/08 21:52
Methylene chloride	ND		2.00	0.16	µg/L	1	12/15/08 21:52
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/15/08 21:52
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
2-Butanone	ND		10.0	1.00	µg/L	1	12/15/08 21:52
Chloroform	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Cyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Benzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Trichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/15/08 21:52
Toluene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/15/08 21:52

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412420 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-002A**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***MW-4-121108***
W Order:	0812108	**Collection Date:**	12/11/08 11:40
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:** 10 ml.	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R15832
Revision:	12/16/08 13:57	**TestCode:** 8260W7 OLM42	**FileID:** 1-SAMP-J7845.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260B**		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/15/08 21:52
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/15/08 21:52
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/15/08 21:52
Styrene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
Bromoform	ND		1.00	0.33	µg/L	1	12/15/08 21:52
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/15/08 21:52
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/15/08 21:52
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/15/08 21:52
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/15/08 21:52
Surr: 1,2-Dichloroethane-d4	105		75-134	0.16	%REC	1	12/15/08 21:52
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/15/08 21:52
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	12/15/08 21:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 412420 **Project Supervisor:** Anthony Crescenzi

212

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7845.D Vial: 56
Acq On : 15 Dec 2008 21:52 Operator: JK
Sample : 0812108-002A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:55 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1793801	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	656268	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	434973	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	445367	10.46 ug/L	0.00
Spiked Amount 10.000				Recovery = 104.60%	
37) Toluene-d8	14.25	98	1638708	9.88 ug/L	0.00
Spiked Amount 10.000				Recovery = 98.80%	
49) Bromofluorobenzene	18.26	95	494889	9.78 ug/L	0.00
Spiked Amount 10.000				Recovery = 97.80%	
Target Compounds					Qvalue
31) Chloromethane	4.59	50	18350m	0.28 ug/L	

(#) = qualifier out of range (m) = manual integration
J7845.D JD05NTCL.M Tue Dec 16 13:57:29 2008

213

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7845.D Vial: 56
Acq On : 15 Dec 2008 21:52 Operator: JK
Sample : 0812108-002A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 29 5:52 2008 Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 05:51:50 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1793801	10.00 ug/L	0.00

Target Compounds Qvalue

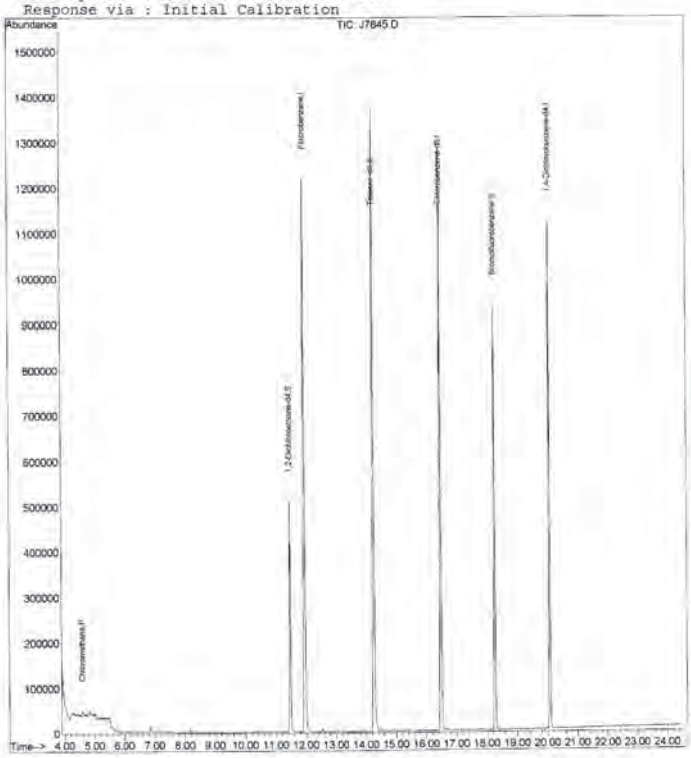
(#) = qualifier out of range (m) = manual integration
J7845.D JD05T12W.M Mon Dec 29 05:57:57 2008

214

Quantitation Report

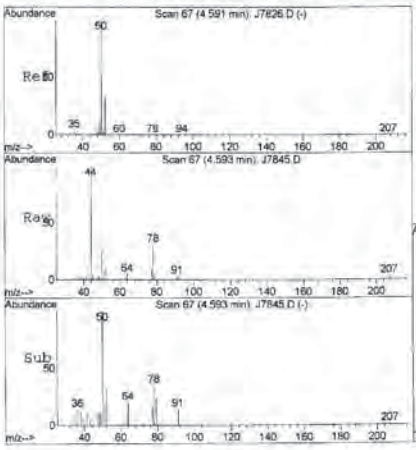
Data File : C:\HPCHEM\1\DATA\J7845.D Vial: 56
Acq On : 15 Dec 2008 21:52 Operator: JK
Sample : 0812108-002A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:55 2008 Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration



J7845.D JD05NTCL.M Tue Dec 16 13:57:29 2008

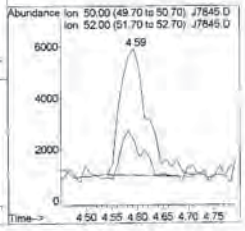
215



#3
Chloromethane
Concen: 0.28 ug/L m
RT: 4.59 min Scan# 67
Delta R.T. 0.00 min
Lab File: J7845.D
Acq: 15 Dec 2008 21:52

Tgt Ion: 50 Resp: 18350

Ion	Ratio	Lower	Upper
50	100		
52	35.5	3.3	63.3



J7845.D JD05NTCL.M Tue Dec 16 13:57:30 2008

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-4-121108

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7845.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 2 SW8260B

Tentatively Identified Compound (LSC) summary

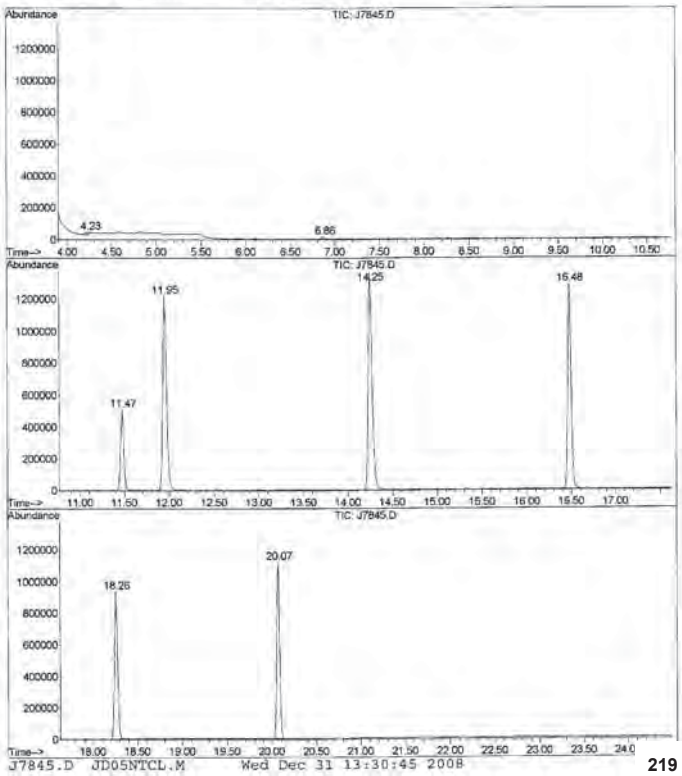
Operator ID: JK Date Acquired: 15 Dec 2008 21:52
Data File: C:\HPCHEM\1\DATA\J7845.D
Name: 0812108-002A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC	Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7845.D JD05NTCL.M Wed Dec 31 13:30:45 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7845.D
Operator : JK
Acquired : 15 Dec 2008 21:52 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-002A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 56
Quant File :JD05NTCL.RES (RTE Integrator)



J7845.D JD05NTCL.M Wed Dec 31 13:30:45 2008

LSL Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			**Lab ID:**	0812108-003A
Project:	City of Geneva- Market Basket Site			**Client Sample ID:**	*MW-12-121108*
W Order:	0812108			**Collection Date:**	12/11/08 12:55
Matrix:	GROUNDWATER			**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R15832
Revision:	12/16/08 13:57	**TestCode:**	8260W7 OLM42	**FileID:**	1-SAMP-J7846.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 22:24
Chloromethane	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Bromomethane	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Chloroethane	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/15/08 22:24
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/15/08 22:24
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Acetone	ND		10.0	1.00	µg/L	1	12/15/08 22:24
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/15/08 22:24
Methyl acetate	ND		5.00	1.00	µg/L	1	12/15/08 22:24
Methylene chloride	ND		2.00	0.16	µg/L	1	12/15/08 22:24
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/15/08 22:24
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
cis-1,2-Dichloroethene	0.19	J	0.50	0.10	µg/L	1	12/15/08 22:24
2-Butanone	ND		10.0	1.00	µg/L	1	12/15/08 22:24
Chloroform	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Cyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Benzene	0.72		0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Trichloroethene	0.82		0.50	0.10	µg/L	1	12/15/08 22:24
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 22:24
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/15/08 22:24
Toluene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/15/08 22:24
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Tetrachloroethene	0.57		0.50	0.10	µg/L	1	12/15/08 22:24

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

LSL Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			**Lab ID:**	0812108-003A
Project:	City of Geneva- Market Basket Site			**Client Sample ID:**	*MW-12-121108*
W Order:	0812108			**Collection Date:**	12/11/08 12:55
Matrix:	GROUNDWATER			**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R15832
Revision:	12/16/08 13:57	**TestCode:**	8260W7 OLM42	**FileID:**	1-SAMP-J7846.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/15/08 22:24
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/15/08 22:24
Chlorobenzene	71.8	E	0.50	0.10	µg/L	1	12/15/08 22:24
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/15/08 22:24
Styrene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
Bromoform	ND		1.00	0.33	µg/L	1	12/15/08 22:24
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/15/08 22:24
1,3-Dichlorobenzene	210	E	0.50	0.10	µg/L	1	12/15/08 22:24
1,4-Dichlorobenzene	169	E	0.50	0.16	µg/L	1	12/15/08 22:24
1,2-Dichlorobenzene	173	E	0.50	0.10	µg/L	1	12/15/08 22:24
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/15/08 22:24
1,2,4-Trichlorobenzene	0.42	J	1.00	0.10	µg/L	1	12/15/08 22:24
Surr: 1,2-Dichloroethane-d4	102		75-134	0.16	%REC	1	12/15/08 22:24
Surr: Toluene-d8	97		75-125	0.10	%REC	1	12/15/08 22:24
Surr: 4-Bromofluorobenzene	84		75-125	0.10	%REC	1	12/15/08 22:24

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits


```
                         Quantitation Report    (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7846.D                        Vial: 57
Acq On    : 15 Dec 2008  22:24                          Operator: JK
Sample    : 0812108-003A                                Inst     : #3MS10
Misc      : SAMP,8260W7_OLM42,                          Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 16 13:55 2008                  Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards                  R.T. QIon  Response  Conc Units Dev(Min)
------------------------------------------------------------------------------
  1) Fluorobenzene                  11.95   96  1801322    10.00 ug/L    0.00
 36) Chlorobenzene-d5               16.47   82   679446    10.00 ug/L    0.00
 47) 1,4-Dichlorobenzene-d4         20.07  152   564616    10.00 ug/L    0.00

 System Monitoring Compounds
 24) 1,2-Dichloroethane-d4          11.47   65   433931    10.15 ug/L    0.00
  Spiked Amount      10.000                    Recovery  =   101.50%
 37) Toluene-d8                     14.25   98  1666442     9.70 ug/L    0.00
  Spiked Amount      10.000                    Recovery  =    97.00%
 49) Bromofluorobenzene             18.26   95   553887     8.43 ug/L    0.00
  Spiked Amount      10.000                    Recovery  =    84.30%

 Target Compounds                                                     Qvalue
  3) Chloromethane                   4.58   50    16733m JK  0.25 ug/L
 17) cis-1,2-Dichloroethene         10.21   96    10286      0.19 ug/L     94
 23) Benzene                        11.68   78   151093      0.72 ug/L    100
 27) Trichloroethene                12.54  130    41919      0.82 ug/L     99
 38) Tetrachloroethene              15.33  166    28208      0.57 ug/L     98
 41) Chlorobenzene                  16.54  112  9776850     71.75 ug/L     89
 51) 1,3-Dichlorobenzene            19.97  146 20861704    209.86 ug/L     80
 52) 1,4-Dichlorobenzene            20.12  146 16035257    169.24 ug/L     90
 53) 1,2-Dichlorobenzene            20.71  146 15989084    173.27 ug/L     89
 55) 1,2,4-Trichlorobenzene         23.33  180    18146      0.42 ug/L     99

------------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J7846.D  JD05NTCL.M        Tue Dec 16 13:57:36 2008                        P
```



```
                         Quantitation Report    (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7846.D                        Vial: 57
Acq On    : 15 Dec 2008  22:24                          Operator: JK
Sample    : 0812108-003A                                Inst     : #3MS10
Misc      : SAMP,8260W7_OLM42,                          Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 29  5:52 2008                  Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Dec 29 05:51:50 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards                  R.T. QIon  Response  Conc Units Dev(Min)
------------------------------------------------------------------------------
  1) Fluorobenzene                  11.95   96  1801322    10.00 ug/L    0.00

 Target Compounds                                                     Qvalue

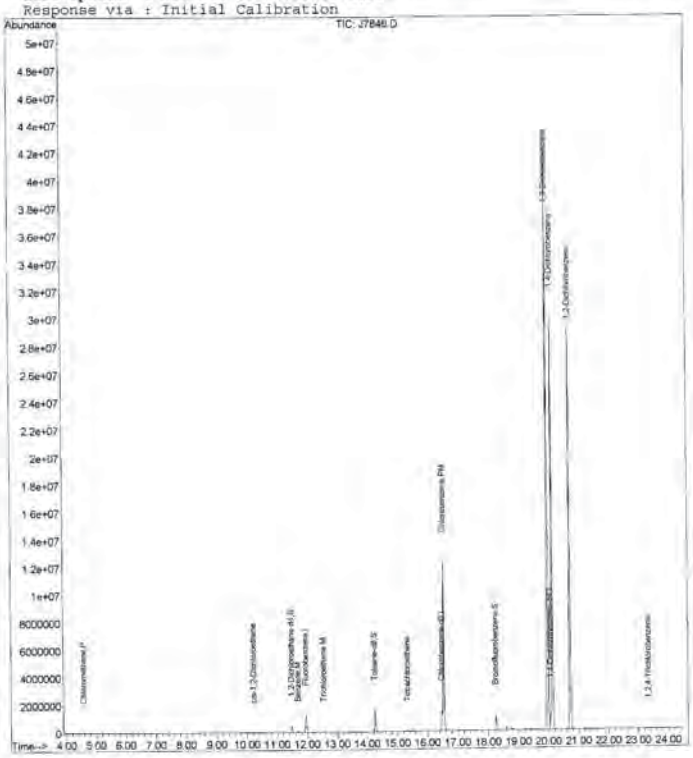
------------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J7846.D  JD05T12W.M        Mon Dec 29 05:57:57 2008                        P
```

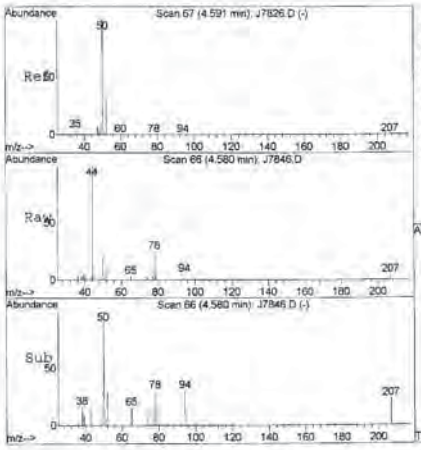
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7846.D
Acq On : 15 Dec 2008 22:24
Sample : 0812108-003A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:55 2008

Vial: 57
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration

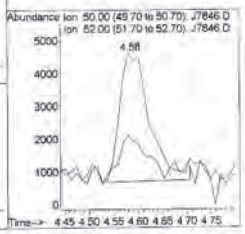


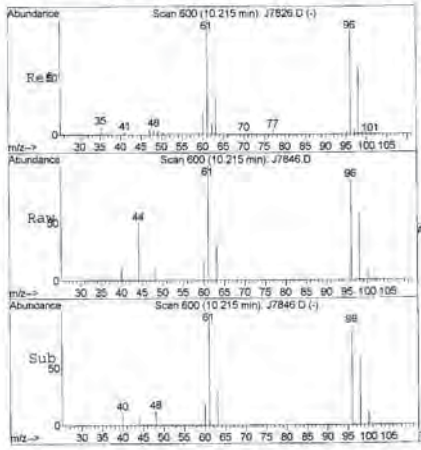


#3
Chloromethane
Concen: 0.25 ug/L m
RT: 4.58 min Scan# 66
Delta R.T. -0.01 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion: 50 Resp: 16733

Ion	Ratio	Lower	Upper
50	100		
52	37.5	3.3	63.3

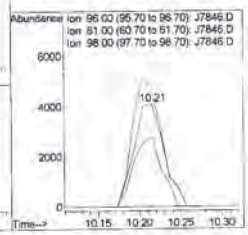


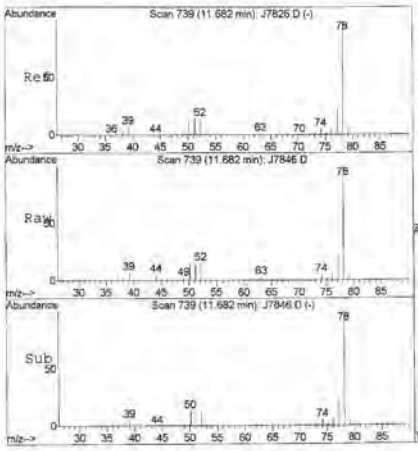


#17
cis-1,2-Dichloroethene
Concen: 0.19 ug/L
RT: 10.21 min Scan# 600
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion: 96 Resp: 10286

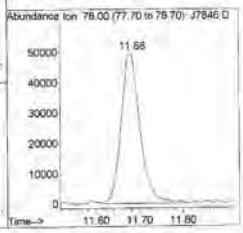
Ion	Ratio	Lower	Upper
96	100		
61	121.7	102.4	162.4
98	63.3	34.2	94.2

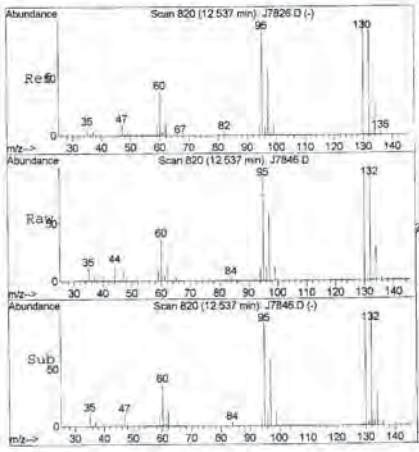




#23
Benzene
Concen: 0.72 ug/L
RT: 11.68 min Scan# 739
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion: 78 Resp: 151093

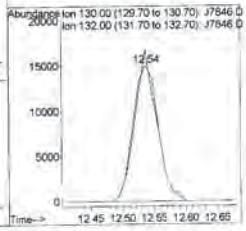


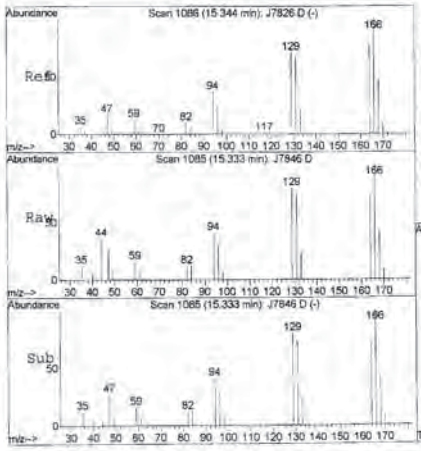


#27
Trichloroethene
Concen: 0.82 ug/L
RT: 12.54 min Scan# 820
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion:130 Resp: 41919

Ion	Ratio	Lower	Upper
130	100		
132	95.1	65.6	125.6

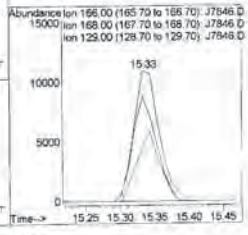


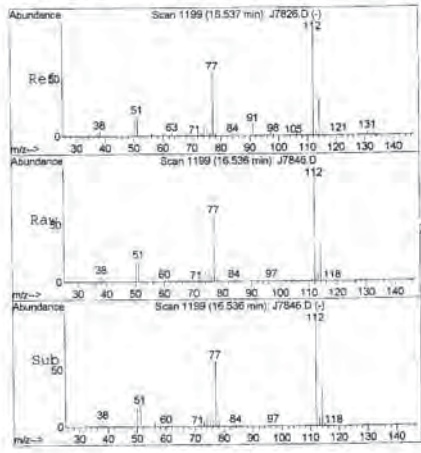


#38
Tetrachloroethene
Concen: 0.57 ug/L
RT: 15.33 min Scan# 1085
Delta R.T. -0.01 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion:166 Resp: 28208

Ion	Ratio	Lower	Upper
166	100		
168	47.8	16.5	76.5
129	74.6	43.6	103.6

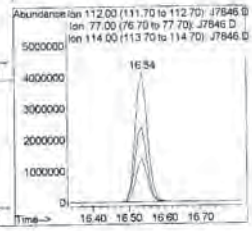


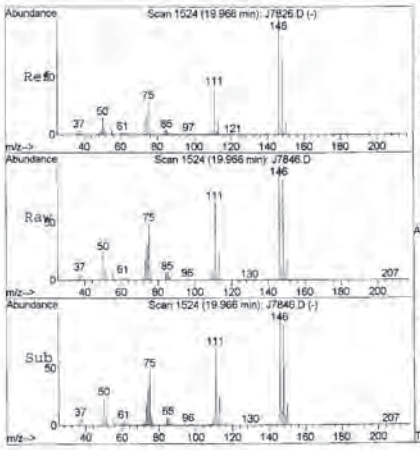


#41
Chlorobenzene
Concen: 71.75 ug/L
RT: 16.54 min Scan# 1199
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion:112 Resp: 9776850

Ion	Ratio	Lower	Upper
112	100		
77	57.7	40.5	100.5
114	32.5	1.6	61.6

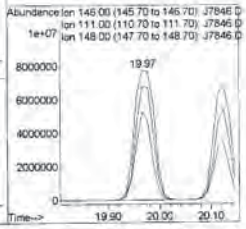


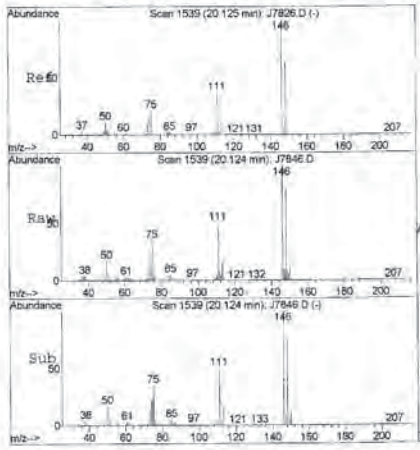


#51
1,3-Dichlorobenzene
Concen: 209.86 ug/L
RT: 19.97 min Scan# 1524
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion:146 Resp:20861704

Ion	Ratio	Lower	Upper
146	100		
111	54.2	10.0	70.0
148	78.0	33.4	93.4

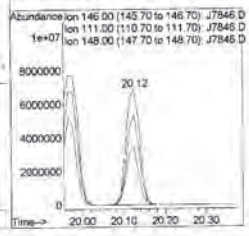




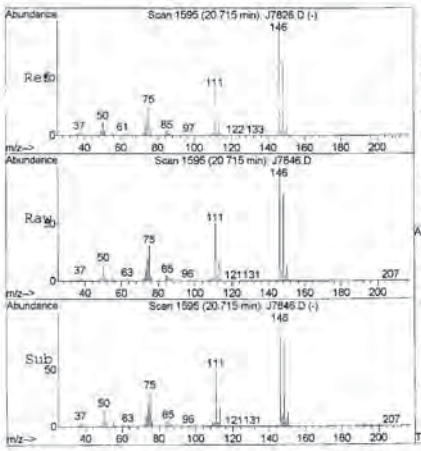
#52
1,4-Dichlorobenzene
Concen: 169.24 ug/L
RT: 20.12 min Scan# 1539
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion:146 Resp:16035257

Ion	Ratio	Lower	Upper
146	100		
111	44.9	8.8	68.8
148	71.1	33.6	93.6



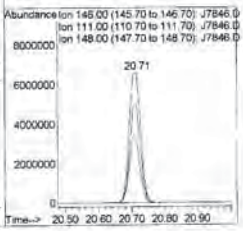
J7846.D JD05NTCL.M Tue Dec 16 13:57:38 2008 Pi

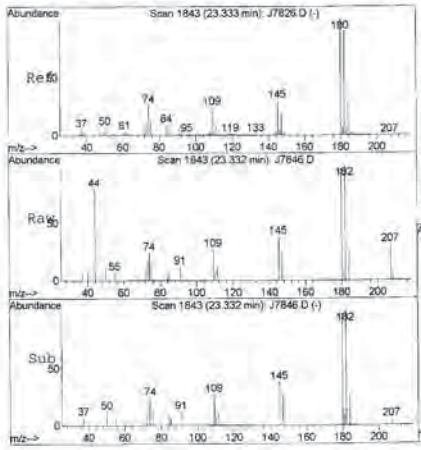


#53
1,2-Dichlorobenzene
Concen: 173.27 ug/L
RT: 20.71 min Scan# 1595
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion:146 Resp:15989084

Ion	Ratio	Lower	Upper
146	100		
111	47.3	10.2	70.2
148	70.3	32.6	92.6

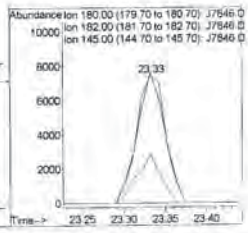




#55
1,2,4-Trichlorobenzene
Concen: 0.42 ug/L
RT: 23.33 min Scan# 1843
Delta R.T. -0.00 min
Lab File: J7846.D
Acq: 15 Dec 2008 22:24

Tgt Ion:180 Resp: 18146

Ion	Ratio	Lower	Upper
180	100		
182	96.9	67.6	127.6
145	32.2	1.0	61.0



J7846.D JD05NTCL.M Tue Dec 16 13:57:38 2008 Pi

Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-12-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7846.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 3 SW8260B

Tentatively Identified Compound (LSC) summary

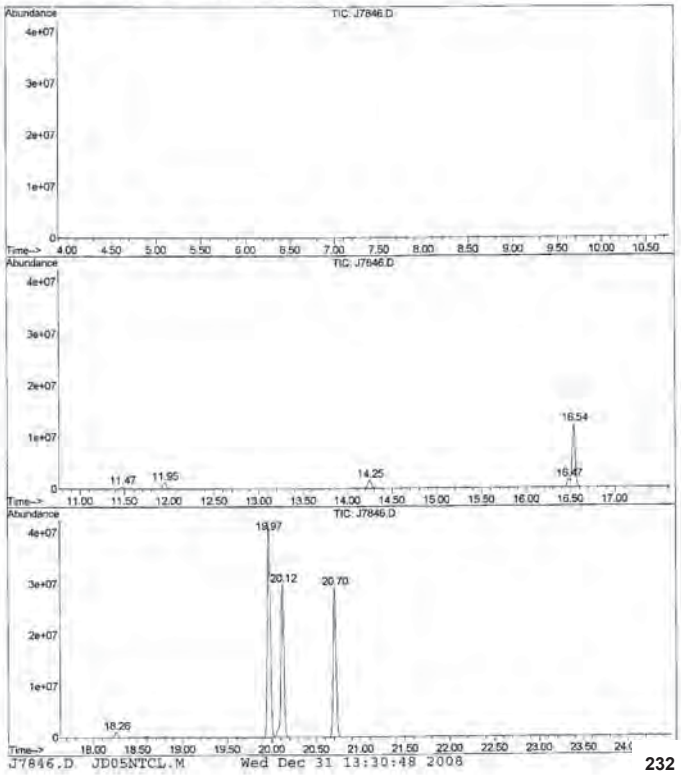
Operator ID: JK Date Acquired: 15 Dec 2008 22:24
Data File: C:\HPCHEM\1\DATA\J7846.D
Name: 0812108-003A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7846.D JD05NTCL.M Wed Dec 31 13:30:48 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J7846.D
Operator    : JK
Acquired    : 15 Dec 2008  22:24      using AcqMethod JD05VOCW
Instrument  :  #3MS10
Sample Name: 0812108-003A
Misc Info   : SAMP,8260W7_OLM42,
Vial Number: 57
Quant File :JD05NTCL.RES (RTE Integrator)
```



J7846.D JD05NTCL.M Wed Dec 31 13:30:48 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	10 mL	BatchNo:	R15857
ColumnID:	Rtx-VMS	%Moisture:	
Revision:	12/18/08 11:45	TestCode:	8260W7 OLM42
FileID:	1-DL-J7858.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		10.0	1.00	µg/L	10	12/16/08 13:13
Chloromethane	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Vinyl chloride	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Bromomethane	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Chloroethane	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Trichlorofluoromethane	ND		10.0	1.60	µg/L	10	12/16/08 13:13
1,1-Dichloroethene	ND		5.00	1.60	µg/L	10	12/16/08 13:13
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Acetone	ND		100	10.0	µg/L	10	12/16/08 13:13
Carbon disulfide	ND		5.00	1.10	µg/L	10	12/16/08 13:13
Methyl acetate	ND		50.0	10.0	µg/L	10	12/16/08 13:13
Methylene chloride	ND		20.0	1.60	µg/L	10	12/16/08 13:13
trans-1,2-Dichloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Methyl tert-butyl ether	ND		10.0	1.60	µg/L	10	12/16/08 13:13
1,1-Dichloroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
cis-1,2-Dichloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
2-Butanone	ND		100	10.0	µg/L	10	12/16/08 13:13
Chloroform	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,1,1-Trichloroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Cyclohexane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Carbon tetrachloride	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Benzene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dichloroethane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Trichloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Methylcyclohexane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dichloropropane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Bromodichloromethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
cis-1,3-Dichloropropene	ND		5.00	1.60	µg/L	10	12/16/08 13:13
4-Methyl-2-pentanone	ND		50.0	10.0	µg/L	10	12/16/08 13:13
Toluene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
trans-1,3-Dichloropropene	ND		5.00	1.60	µg/L	10	12/16/08 13:13
1,1,2-Trichloroethane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Tetrachloroethene	ND		5.00	1.00	µg/L	10	12/16/08 13:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413177 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-003ADL
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-12-121108*
W Order:	0812108	Collection Date:	12/11/08 12:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	10 mL	BatchNo:	R15857
ColumnID:	Rtx-VMS	%Moisture:	
Revision:	12/18/08 11:45	TestCode:	8260W7 OLM42
FileID:	1-DL-J7858.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		50.0	10.0	µg/L	10	12/16/08 13:13
Dibromochloromethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dibromoethane	ND		5.00	1.60	µg/L	10	12/16/08 13:13
Chlorobenzene	63.6		5.00	1.00	µg/L	10	12/16/08 13:13
Ethylbenzene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Xylenes (total)	ND		10.0	3.00	µg/L	10	12/16/08 13:13
Styrene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
Bromoform	ND		10.0	3.30	µg/L	10	12/16/08 13:13
Isopropylbenzene	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,1,2,2-Tetrachloroethane	ND		5.00	1.00	µg/L	10	12/16/08 13:13
1,3-Dichlorobenzene	214		5.00	1.00	µg/L	10	12/16/08 13:13
1,4-Dichlorobenzene	155		5.00	1.60	µg/L	10	12/16/08 13:13
1,2-Dichlorobenzene	155		5.00	1.00	µg/L	10	12/16/08 13:13
1,2-Dibromo-3-chloropropane	ND		50.0	10.0	µg/L	10	12/16/08 13:13
1,2,4-Trichlorobenzene	ND		10.0	1.00	µg/L	10	12/16/08 13:13
Surr: 1,2-Dichloroethane-d4	106		75-134	1.60	%REC	10	12/16/08 13:13
Surr: Toluene-d8	101		75-125	1.00	%REC	10	12/16/08 13:13
Surr: 4-Bromofluorobenzene	96		75-125	1.00	%REC	10	12/16/08 13:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413177 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7858.D                    Vial: 8
Acq On    : 16 Dec 2008  13:13                        Operator: JK
Sample    : 0812108-003A                              Inst    : #3MS10
Misc      : DL  ,8260W7_OLM42, 10X                    Multiplr: 10.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 18 11:19 2008                  Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards                    R.T.  QIon  Response   Conc Units Dev(Min)
 ----------------------------------------------------------------------------------
  1) Fluorobenzene                     11.95   96  1709845   10.00 ug/L    0.00
 36) Chlorobenzene-d5                  16.47   82   623621   10.00 ug/L    0.00
 47) 1,4-Dichlorobenzene-d4            20.07  152   440329   10.00 ug/L    0.00

 System Monitoring Compounds
 24) 1,2-Dichloroethane-d4             11.47   65   429854   10.59 ug/L    0.00
  Spiked Amount      10.000                        Recovery    =  105.90%
 37) Toluene-d8                        14.25   98  1586909   10.07 ug/L    0.00
  Spiked Amount      10.000                        Recovery    =  100.70%
 49) Bromofluorobenzene                18.26   95   490599    9.58 ug/L    0.00
  Spiked Amount      10.000                        Recovery    =   95.80%

 Target Compounds                                                        Qvalue
  5) Bromomethane                       5.70   94     7127    0.18 ug/L      69
 12) Acetone                            7.15   43    5526m    0.70 ug/L
 41) Chlorobenzene                     16.54  112   794901    6.36 ug/L      90
 51) 1,3-Dichlorobenzene               19.97  146  1655981   21.36 ug/L      99
 52) 1,4-Dichlorobenzene               20.12  146  1143761   15.48 ug/L     100
 53) 1,2-Dichlorobenzene               20.72  146  1115231   15.50 ug/L      98
```

(#) = qualifier out of range (m) = manual integration
J7858.D JD05NTCL.M Thu Dec 18 11:27:25 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7858.D
Acq On : 16 Dec 2008 13:13
Sample : 0812108-003A
Misc : DL ,8260W7_OLM42, 10X
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 10.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1709845	10.00 ug/L	0.00

Target Compounds Qvalue

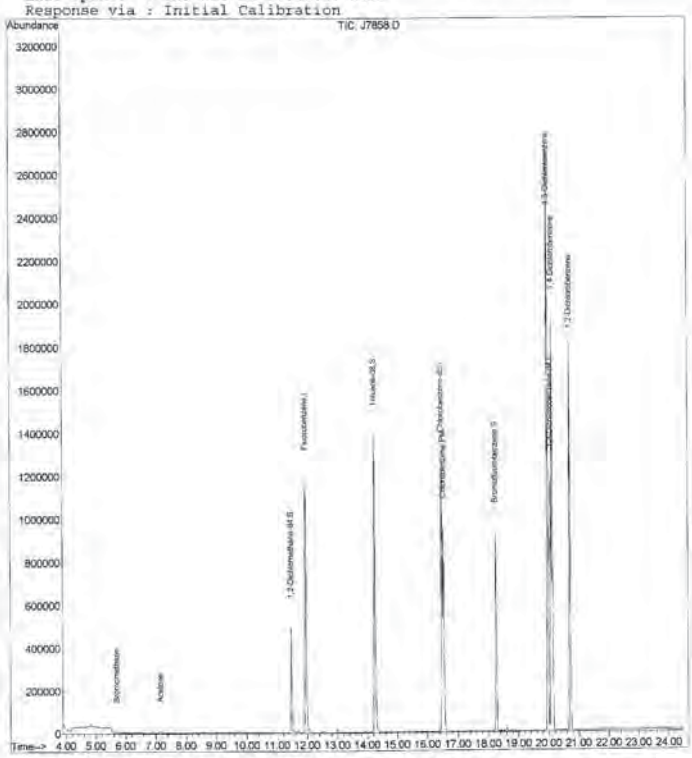
(#) = qualifier out of range (m) = manual integration
J7858.D JD05T12W.M Mon Dec 29 06:08:42 2008

Quantitation Report

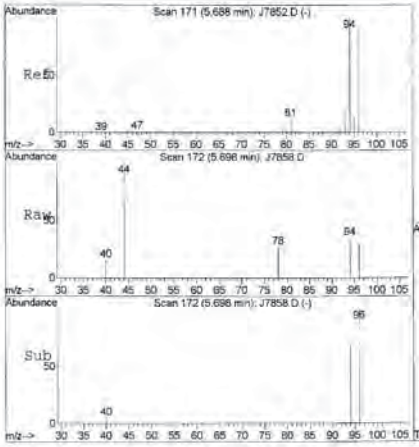
Data File : C:\HPCHEM\1\DATA\J7858.D
Acq On : 16 Dec 2008 13:13
Sample : 0812108-003A
Misc : DL ,8260W7_OLM42, 10X
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:19 2008

Vial: 8
Operator: JK
Inst : #3MS10
Multiplr: 10.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



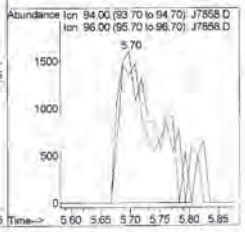
J7858.D JD05NTCL.M Thu Dec 18 11:27:26 2008

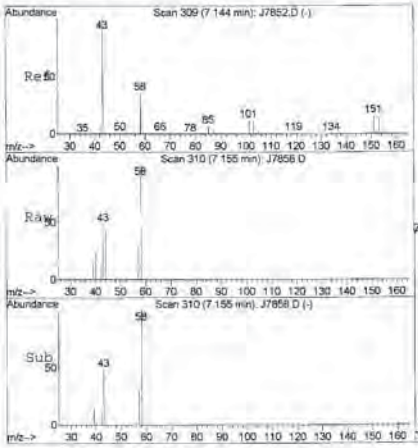


#5
Bromomethane
Concen: 0.18 ug/L
RT: 5.70 min Scan# 172
Delta R.T. 0.01 min
Lab File: J7858.D
Acq: 16 Dec 2008 13:13

Tgt Ion: 94 Resp: 7127

Ion	Ratio	Lower	Upper
94	100		
96	63.0	62.5	122.5

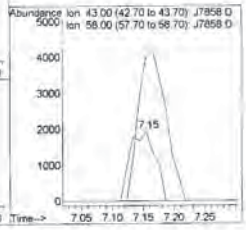




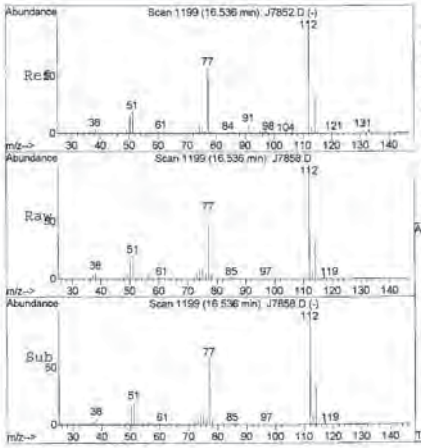
#12
Acetone
Concen: 0.70 ug/L m
RT: 7.15 min Scan# 310
Delta R.T. 0.01 min
Lab File: J7858.D
Acq: 16 Dec 2008 13:13

Tgt Ion: 43 Resp: 5526

Ion	Ratio	Lower	Upper
43	100		
58	233.4	2.3	62.3#



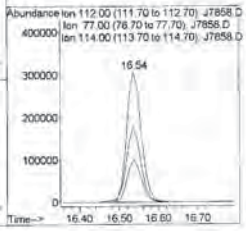
J7858.D JD05NTCL.M Thu Dec 18 11:27:26 2008

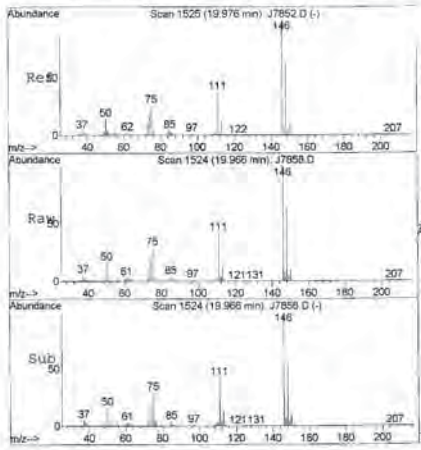


#41
Chlorobenzene
Concen: 6.36 ug/L
RT: 16.54 min Scan# 1199
Delta R.T. 0.00 min
Lab File: J7858.D
Acq: 16 Dec 2008 13:13

Tgt Ion:112 Resp: 794901

Ion	Ratio	Lower	Upper
112	100		
77	58.4	40.5	100.5
114	32.1	1.6	61.6

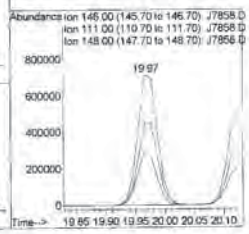




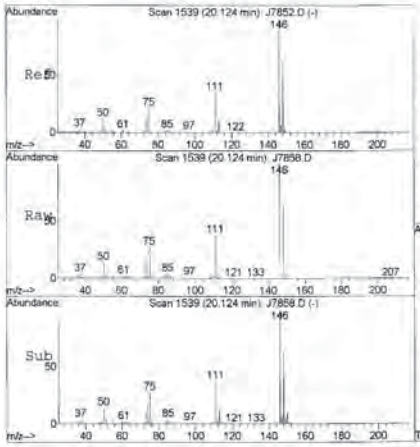
#51
1,3-Dichlorobenzene
Concen: 21.36 ug/L
RT: 19.97 min Scan# 1524
Delta R.T. -0.01 min
Lab File: J7858.D
Acq: 16 Dec 2008 13:13

Tgt Ion:146 Resp: 1655981

Ion	Ratio	Lower	Upper
146	100		
111	40.4	10.0	70.0
148	64.0	33.4	93.4



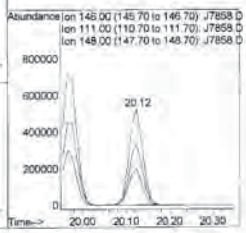
J7858.D JD05NTCL.M Thu Dec 18 11:27:27 2008

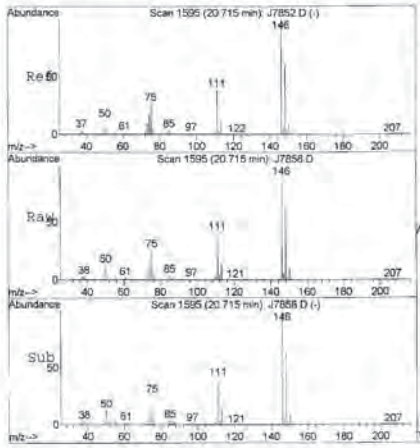


#52
1,4-Dichlorobenzene
Concen: 15.48 ug/L
RT: 20.12 min Scan# 1539
Delta R.T. 0.00 min
Lab File: J7858.D
Acq: 16 Dec 2008 13:13

Tgt Ion:146 Resp: 1143761

Ion	Ratio	Lower	Upper
146	100		
111	38.9	8.8	68.8
148	63.5	33.6	93.6

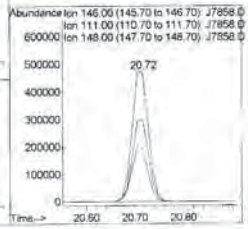




#53
1,2-Dichlorobenzene
Concen: 15.50 ug/L
RT: 20.72 min Scan# 1595
Delta R.T. 0.00 min
Lab File: J7858.D
Acq: 16 Dec 2008 13:13

Tgt Ion:146 Resp: 1115231

Ion	Ratio	Lower	Upper
146	100		
111	42.1	10.2	70.2
148	63.1	32.6	92.6



Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL.	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 13:45
Chloromethane	0.59	J	1.00	0.33	µg/L	1	12/16/08 13:45
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 13:45
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 13:45
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 13:45
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 13:45
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 13:45
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 13:45
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 13:45
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 13:45
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 13:45
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 13:45
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 13:45
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 13:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413178 Project Supervisor: Anthony Crescenzi

241

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7859.D Vial: 9
Acq On : 16 Dec 2008 13:45 Operator: JK
Sample : 0812108-004A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:20 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1730096	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	633378	10.00 ug/L	0.01
47) 1,4-Dichlorobenzene-d4	20.07	152	412778	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	425734	10.37 ug/L	0.00
Spiked Amount 10.000			Recovery	= 103.70%	
37) Toluene-d8	14.25	98	1588050	9.92 ug/L	0.00
Spiked Amount 10.000			Recovery	= 99.20%	
49) Bromofluorobenzene	18.26	95	464377	9.67 ug/L	0.00
Spiked Amount 10.000			Recovery	= 96.70%	
Target Compounds					Qvalue
3) Chloromethane	4.58	50	37640	0.59 ug/L	89
5) Bromomethane	5.69	94	7539	0.19 ug/L	69
12) Acetone	7.14	43	7385m BL	0.92 ug/L	
51) 1,3-Dichlorobenzene	19.97	146	12878	0.18 ug/L	96
52) 1,4-Dichlorobenzene	20.12	146	10343	0.15 ug/L	82
53) 1,2-Dichlorobenzene	20.71	146	7278	0.11 ug/L	90

(#) = qualifier out of range (m) = manual integration
J7859.D JD05NTCL.M Thu Dec 18 11:27:29 2008 Pa 243

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL.	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7859.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 13:45
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 13:45
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Xylenes (total)	ND		1.00	0.50	µg/L	1	12/16/08 13:45
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 13:45
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 13:45
1,3-Dichlorobenzene	0.16	J	0.50	0.10	µg/L	1	12/16/08 13:45
1,4-Dichlorobenzene	ND		0.50	0.18	µg/L	1	12/16/08 13:45
1,2-Dichlorobenzene	0.11	J	0.50	0.10	µg/L	1	12/16/08 13:45
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 13:45
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 13:45
Surr: 1,2-Dichloroethane-d4	104		75-134	0.16	%REC	1	12/16/08 13:45
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 13:45
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	12/16/08 13:45

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413178 Project Supervisor: Anthony Crescenzi

242

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7859.D
Acq On : 16 Dec 2008 13:45
Sample : 0812108-004A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 9
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1730096	10.00 ug/L	0.00

Target Compounds Qvalue

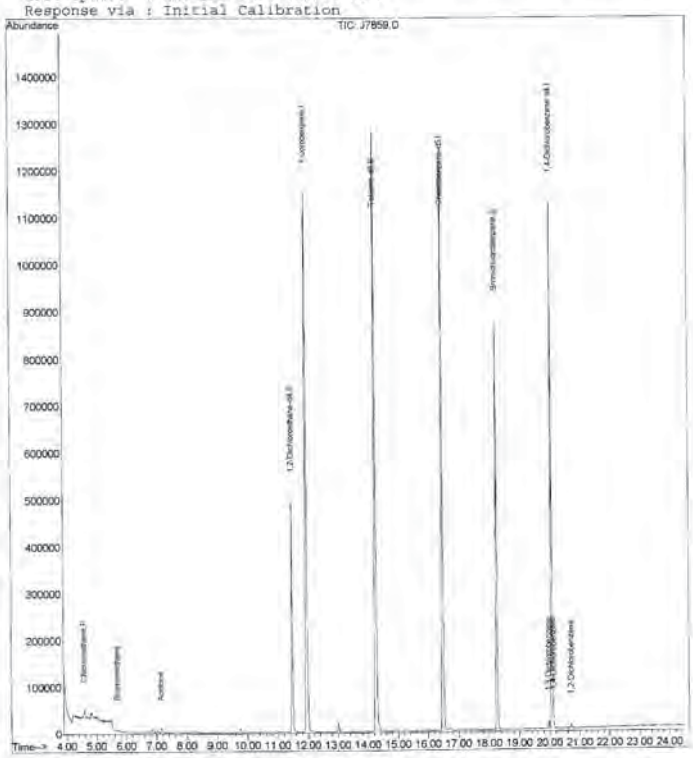
(#) = qualifier out of range (m) = manual integration
J7859.D JD05T12W.M Mon Dec 29 06:08:43 2008

Quantitation Report

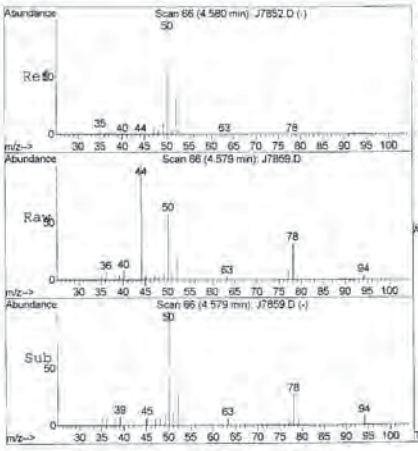
Data File : C:\HPCHEM\1\DATA\J7859.D
Acq On : 16 Dec 2008 13:45
Sample : 0812108-004A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:20 2008

Vial: 9
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



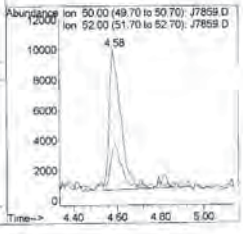
J7859.D JD05NTCL.M Thu Dec 18 11:27:30 2008

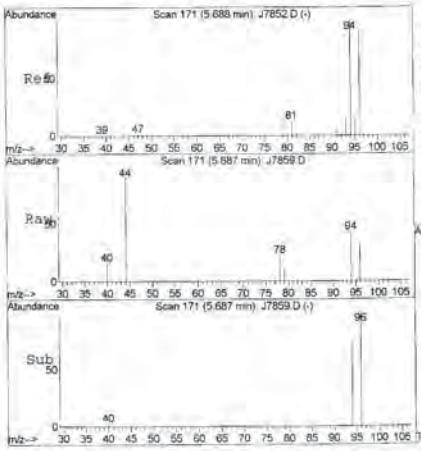


#3
Chloromethane
Concen: 0.59 ug/L
RT: 4.58 min Scan# 66
Delta R.T. -0.00 min
Lab File: J7859.D
Acq: 16 Dec 2008 13:45

Tgt Ion: 50 Resp: 37640

Ion	Ratio	Lower	Upper
50	100		
52	27.2	3.3	63.3

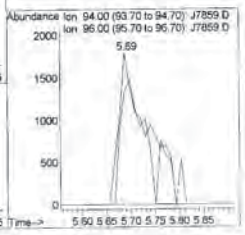




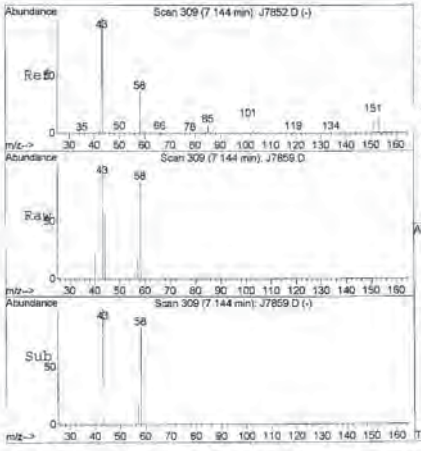
#5
Bromomethane
Concen: 0.19 ug/L
RT: 5.69 min Scan# 171
Delta R.T. -0.00 min
Lab File: J7859.D
Acq: 16 Dec 2008 13:45

Tgt Ion: 94 Resp: 7539

Ion	Ratio	Lower	Upper
94	100		
96	62.7	62.5	122.5



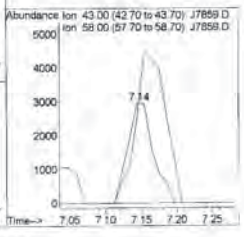
J7859.D JD05NTCL.M Thu Dec 18 11:27:30 2008

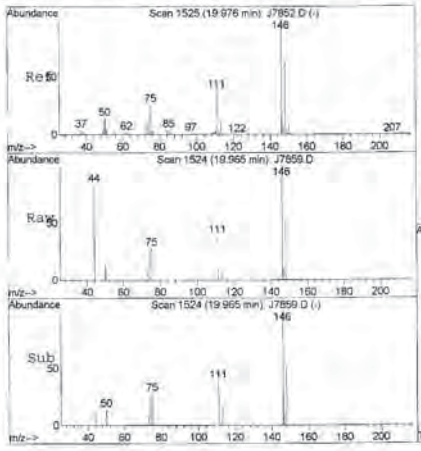


#12
Acetone
Concen: 0.92 ug/L m
RT: 7.14 min Scan# 309
Delta R.T. -0.00 min
Lab File: J7859.D
Acq: 16 Dec 2008 13:45

Tgt Ion: 43 Resp: 7385

Ion	Ratio	Lower	Upper
43	100		
58	178.0	2.3	62.3#

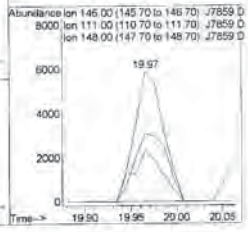




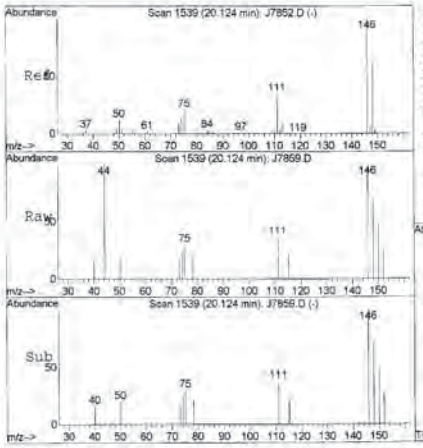
#51
1,3-Dichlorobenzene
Concen: 0.18 ug/L
RT: 19.97 min Scan# 1524
Delta R.T. -0.01 min
Lab File: J7859.D
Acq: 16 Dec 2008 13:45

Tgt Ion:146 Resp: 12878

Ion	Ratio	Lower	Upper
146	100		
111	41.0	10.0	70.0
148	59.8	33.4	93.4



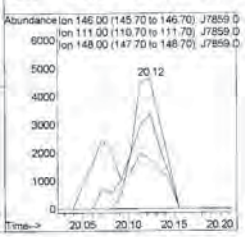
J7859.D JD05NTCL.M Thu Dec 18 11:27:31 2008

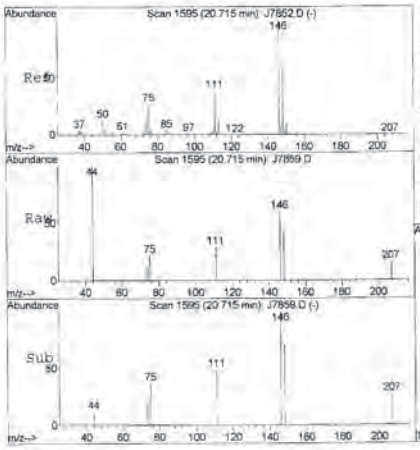


#52
1,4-Dichlorobenzene
Concen: 0.15 ug/L
RT: 20.12 min Scan# 1539
Delta R.T. -0.00 min
Lab File: J7859.D
Acq: 16 Dec 2008 13:45

Tgt Ion:146 Resp: 10343

Ion	Ratio	Lower	Upper
146	100		
111	37.1	8.8	68.8
148	85.3	33.6	93.6

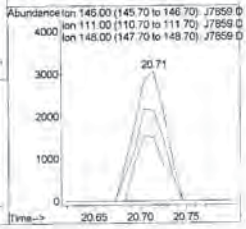




#53
1,2-Dichlorobenzene
Concen: 0.11 ug/L
RT: 20.71 min Scan# 1595
Delta R.T. -0.00 min
Lab File: J7859.D
Acq: 16 Dec 2008 13:45

Tgt Ion:146 Resp: 7278

Ion	Ratio	Lower	Upper
146	100		
111	46.0	10.2	70.2
148	70.2	32.6	92.6



J7859.D JD05NTCL.M Thu Dec 18 11:27:31 2008

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-13-121108

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7859.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 5 SW8260B

Tentatively Identified Compound (LSC) summary

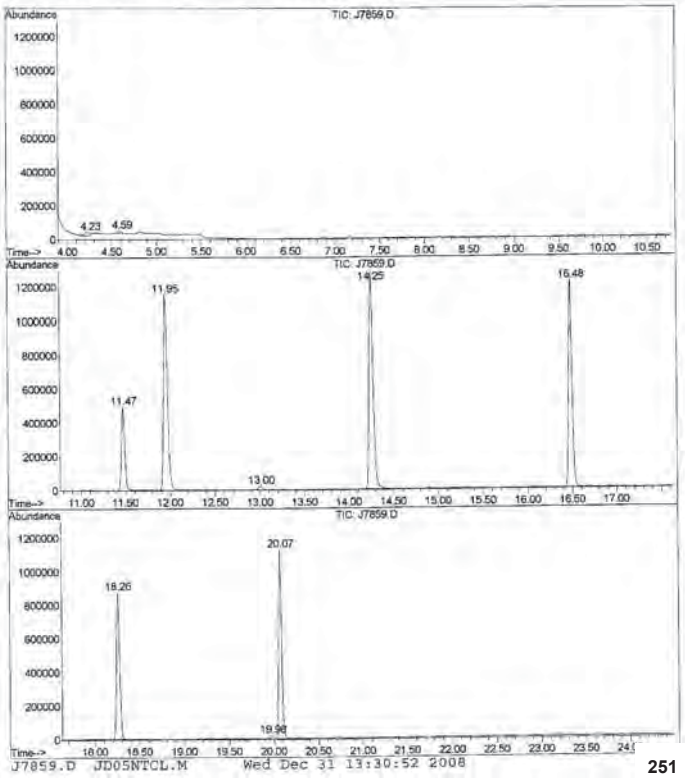
Operator ID: JK Date Acquired: 16 Dec 2008 13:45
Data File: C:\HPCHEM\1\DATA\J7859.D
Name: 0812108-004A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7859.D JD05NTCL.M Wed Dec 31 13:30:52 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7859.D
Operator : JK
Acquired : 16 Dec 2008 13:45 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-004A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 9
Quant File :JD05NTCL.RES (RTE Integrator)



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-11R-121108*
W Order:	0812108	Collection Date:	12/11/08 13:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7860.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:17
Chloromethane	1.11		1.00	0.33	µg/L	1	12/16/08 14:17
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:17
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Acetone	1.59	J	10.0	1.00	µg/L	1	12/16/08 14:17
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 14:17
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 14:17
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 14:17
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 14:17
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 14:17
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 14:17
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:17

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413179 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-005A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-11R-121108*
W Order:	0812108	Collection Date:	12/11/08 13:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7860.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 14:17
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 14:17
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 14:17
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 14:17
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 14:17
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:17
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 14:17
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 14:17
Surr: 1,2-Dichloroethane-d4	103		75-134	0.16	%REC	1	12/16/08 14:17
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 14:17
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	12/16/08 14:17

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413179 Project Supervisor: Anthony Crescenzi


```
                    Quantitation Report     (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7860.D                    Vial: 10
Acq On    : 16 Dec 2008  14:17                       Operator: JK
Sample    : 0812108-005A                             Inst    : #3MS10
Misc      : SAMP,8260W7_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 18 11:20 2008                 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards                R.T. QIon  Response   Conc Units Dev(Min)
 ------------------------------------------------------------------------------
  1) Fluorobenzene                 11.94   96  1746039   10.00 ug/L    0.00
 36) Chlorobenzene-d5              16.48   82   643396   10.00 ug/L    0.01
 47) 1,4-Dichlorobenzene-d4        20.07  152   412666   10.00 ug/L    0.00

 System Monitoring Compounds
 24) 1,2-Dichloroethane-d4         11.47   65   426581   10.29 ug/L    0.00
  Spiked Amount      10.000                     Recovery    =  102.90%
 37) Toluene-d8                    14.25   98  1604942    9.87 ug/L    0.00
  Spiked Amount      10.000                     Recovery    =   98.70%
 49) Bromofluorobenzene            18.26   95   472859    9.85 ug/L    0.00
  Spiked Amount      10.000                     Recovery    =   98.50%

 Target Compounds                                                  Qvalue
  3) Chloromethane                  4.58   50    71006    1.11 ug/L      95
  5) Bromomethane                   5.69   94     7554    0.19 ug/L      87
 12) Acetone                        7.14   43    12879m   1.59 ug/L
```

(#) = qualifier out of range (m) = manual integration
J7860.D JD05NTCL.M Thu Dec 18 11:27:33 2008


```
                    Quantitation Report     (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7860.D                    Vial: 10
Acq On    : 16 Dec 2008  14:17                       Operator: JK
Sample    : 0812108-005A                             Inst    : #3MS10
Misc      : SAMP,8260W7_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 29  6:03 2008                 Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards                R.T. QIon  Response   Conc Units Dev(Min)
 ------------------------------------------------------------------------------
  1) Fluorobenzene                 11.94   96  1746039   10.00 ug/L    0.00

 Target Compounds                                                  Qvalue
```

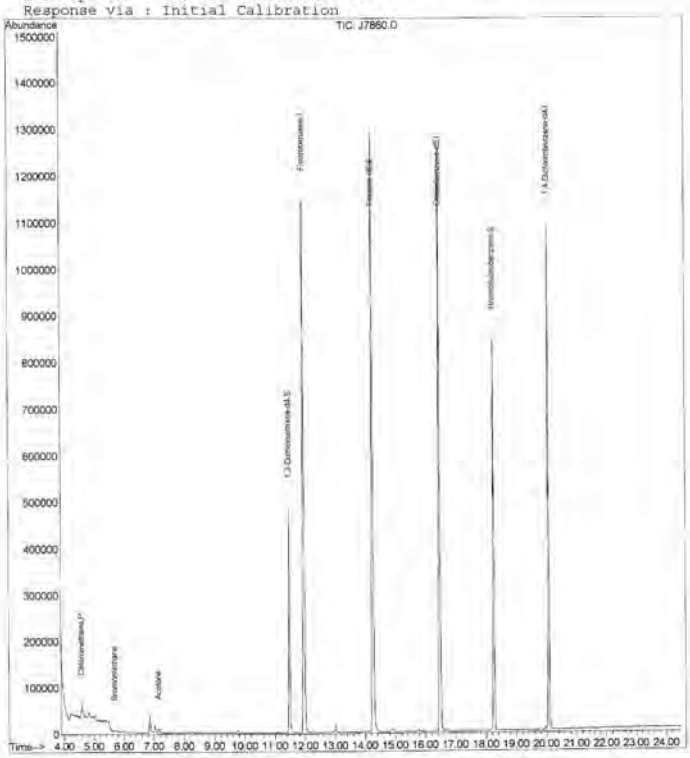
(#) = qualifier out of range (m) = manual integration
J7860.D JD05T12W.M Mon Dec 29 06:08:43 2008

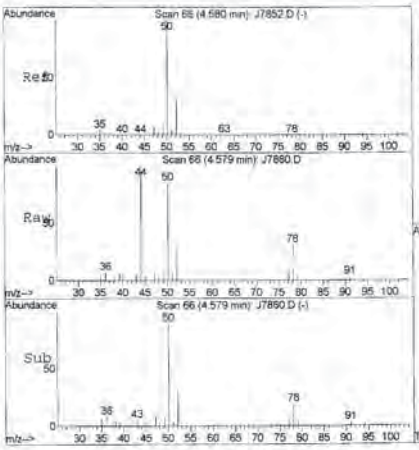
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7860.D
Acq On : 16 Dec 2008 14:17
Sample : 0812108-005A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:20 2008

Vial: 10
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration

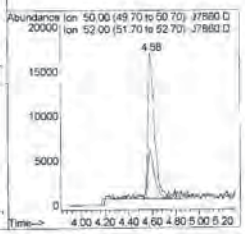


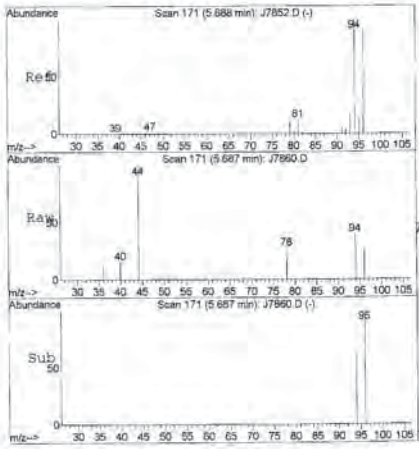


#3
Chloromethane
Concen: 1.11 ug/L
RT: 4.58 min Scan# 66
Delta R.T. -0.00 min
Lab File: J7860.D
Acq: 16 Dec 2008 14:17

Tgt Ion: 50 Resp: 71006

Ion	Ratio	Lower	Upper
50	100		
52	30.7	3.3	63.3

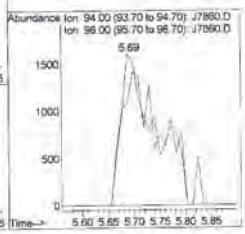


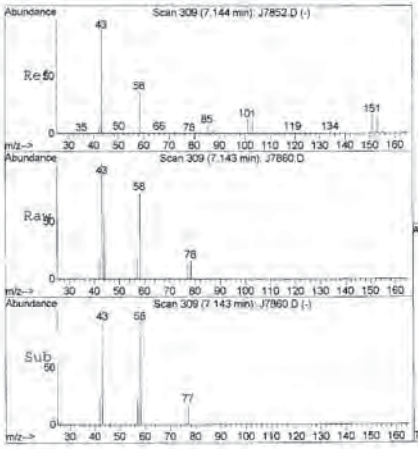


#5
Bromomethane
Concen: 0.19 ug/L
RT: 5.69 min Scan# 171
Delta R.T. -0.00 min
Lab File: J7860.D
Acq: 16 Dec 2008 14:17

Tgt Ion: 94 Resp: 7554

Ion	Ratio	Lower	Upper
94	100		
96	80.2	62.5	122.5

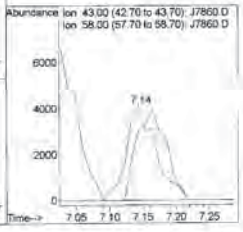




#12
Acetone
Concen: 1.59 ug/L m
RT: 7.14 min Scan# 309
Delta R.T. -0.00 min
Lab File: J7860.D
Acq: 16 Dec 2008 14:17

Tgt Ion: 43 Resp: 12879

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	62.3#



Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-11R-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7860.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Tentatively Identified Compound (LSC) Summary

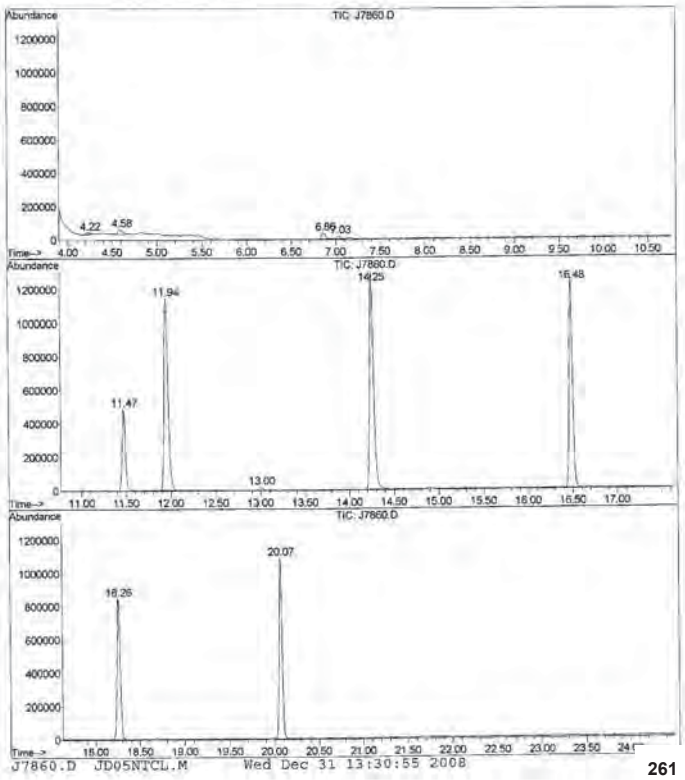
Operator ID: JK Date Acquired: 16 Dec 2008 14:17
Data File: C:\HPCHEM\1\DATA\J7860.D
Name: 0812108-005A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7860.D JD05NTCL.M Wed Dec 31 13:30:55 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7860.D
Operator : JK
Acquired : 16 Dec 2008 14:17 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-005A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 10
Quant File :JD05NTCL.RES (RTE Integrator)



J7860.D JD05NTCL.M Wed Dec 31 13:30:55 2008

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-006A
Project: City of Geneva- Market Basket Site Client Sample ID: *MW-8-121108*
W Order: 0812108 Collection Date: 12/11/08 13:55
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS03 10 Sample Size: 10 mL PrepDate:
ColumnID: Rtx-VMS %Moisture: BatchNo: R15857
Revision: 12/18/08 11:45 TestCode: 8260W7 OLM42 FileID: 1-SAMP-J7861.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:49
Chloromethane	1.09		1.00	0.33	µg/L	1	12/16/08 14:49
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 14:49
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Acetone	1.24	J	10.0	1.00	µg/L	1	12/16/08 14:49
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 14:49
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 14:49
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 14:49
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 14:49
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 14:49
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 14:49
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 14:49

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413180 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-006A
Project: City of Geneva- Market Basket Site Client Sample ID: *MW-8-121108*
W Order: 0812108 Collection Date: 12/11/08 13:55
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS03 10 Sample Size: 10 mL PrepDate:
ColumnID: Rtx-VMS %Moisture: BatchNo: R15857
Revision: 12/18/08 11:45 TestCode: 8260W7 OLM42 FileID: 1-SAMP-J7861.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 14:49
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 14:49
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 14:49
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 14:49
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 14:49
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 14:49
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 14:49
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 14:49
Surr: 1,2-Dichloroethane-d4	102		75-134	0.16	%REC	1	12/16/08 14:49
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 14:49
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 14:49

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413180 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7861.D
Acq On : 16 Dec 2008 14:49
Sample : 0812108-006A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:20 2008

Vial: 11
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1715113	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.47	82	624198	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	399581	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	415327	10.20 ug/L	0.00
Spiked Amount 10.000			Recovery	= 102.00%	
37) Toluene-d8	14.25	98	1556444	9.86 ug/L	0.00
Spiked Amount 10.000			Recovery	= 98.60%	
49) Bromofluorobenzene	18.26	95	459197	9.88 ug/L	0.00
Spiked Amount 10.000			Recovery	= 98.80%	
Target Compounds					Qvalue
3) Chloromethane	4.58	50	68806	1.09 ug/L	99
5) Bromomethane	5.70	94	7394	0.19 ug/L	76
12) Acetone	7.14	43	9865m	1.24 ug/L	

(#) = qualifier out of range (m) = manual integration
J7861.D JD05NTCL.M Thu Dec 18 11:27:37 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7861.D
Acq On : 16 Dec 2008 14:49
Sample : 0812108-006A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 11
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1715113	10.00 ug/L	0.00
Target Compounds					Qvalue

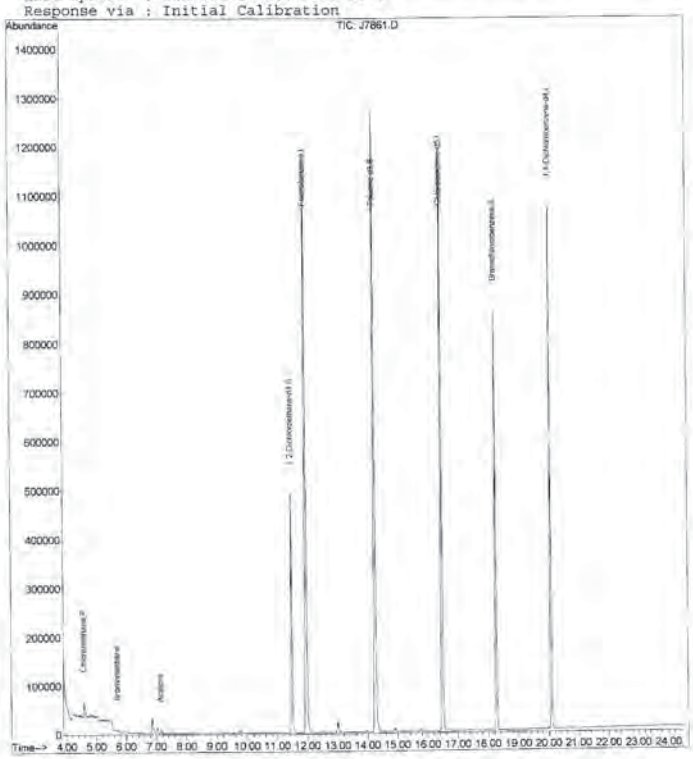
(#) = qualifier out of range (m) = manual integration
J7861.D JD05T12W.M Mon Dec 29 06:08:44 2008

Quantitation Report

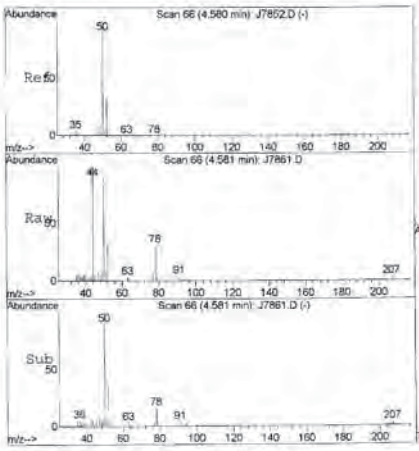
Data File : C:\HPCHEM\1\DATA\J7861.D
Acq On : 16 Dec 2008 14:49
Sample : 0812108-006A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:20 2008

Vial: 11
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



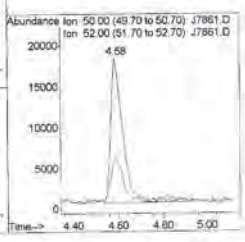
J7861.D JD05NTCL.M Thu Dec 18 11:27:37 2008

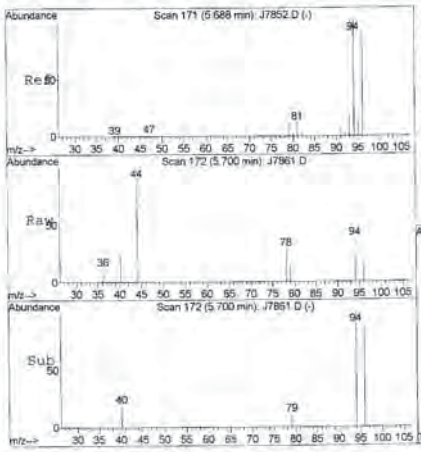


#3
Chloromethane
Concen: 1.09 ug/L
RT: 4.58 min Scan# 66
Delta R.T. 0.00 min
Lab File: J7861.D
Acq: 16 Dec 2008 14:49

Tgt Ion: 50 Resp: 68806

Ion	Ratio	Lower	Upper
50	100		
52	32.7	3.3	63.3

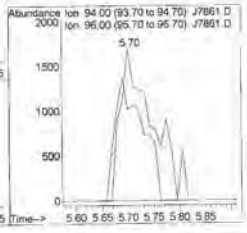




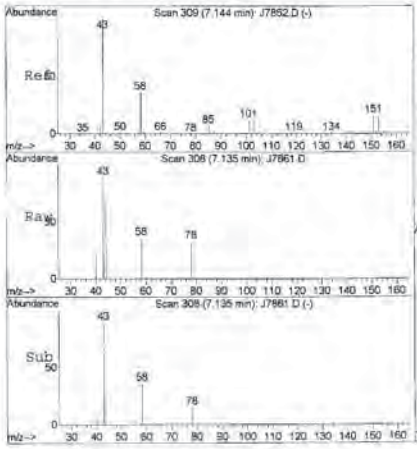
#5
Bromomethane
Concen: 0.19 ug/L
RT: 5.70 min Scan# 172
Delta R.T. 0.01 min
Lab File: J7861.D
Acq: 16 Dec 2008 14:49

Tgt Ion: 94 Resp: 7394

Ion	Ratio	Lower	Upper
94	100		
96	69.6	62.5	122.5



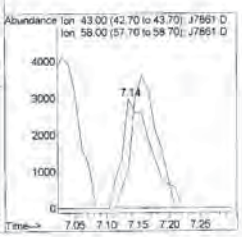
J7861.D JD05NTCL.M Thu Dec 18 11:27:38 2008



#12
Acetone
Concen: 1.24 ug/L m
RT: 7.14 min Scan# 308
Delta R.T. -0.01 min
Lab File: J7861.D
Acq: 16 Dec 2008 14:49

Tgt Ion: 43 Resp: 9865

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	62.3#



J7861.D JD05NTCL.M Thu Dec 18 11:27:38 2008

Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-8-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 081210B

Matrix: (soil/water) WATER Lab Sample ID: 0812108-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7861.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 9 SW8260B

Tentatively Identified Compound (LSC) summary

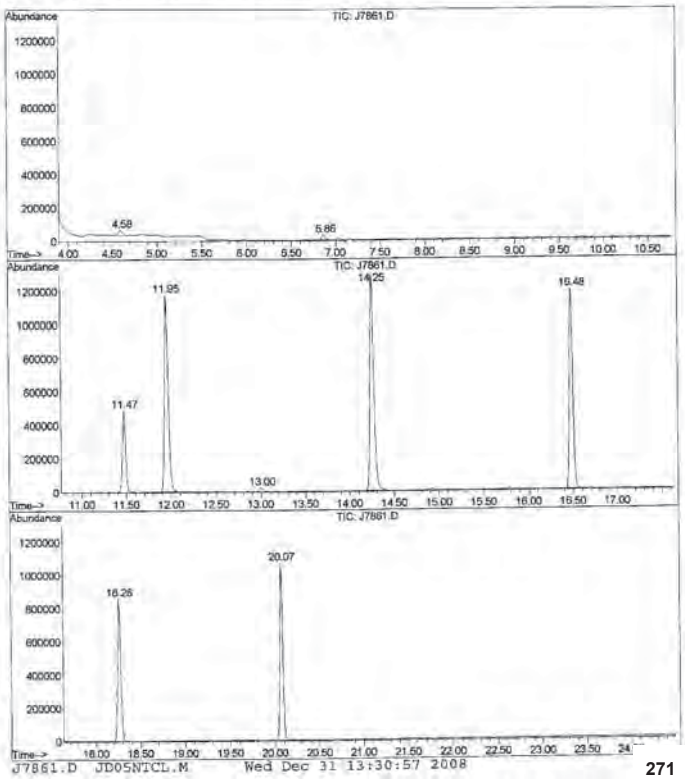
Operator ID: JK Date Acquired: 16 Dec 2008 14:49
Data File: C:\HPCHEM\1\DATA\J7861.D
Name: 0812108-006A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC	Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7861.D JD05NTCL.M Wed Dec 31 13:30:57 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7861.D
Operator : JK
Acquired : 16 Dec 2008 14:49 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-006A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 11
Quant File :JD05NTCL.RES (RTE Integrator)



J7861.D JD05NTCL.M Wed Dec 31 13:30:57 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL.	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7862.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:21
Chloromethane	0.34	J	1.00	0.33	µg/L	1	12/16/08 15:21
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:21
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Acetone	1.56	J	10.0	1.00	µg/L	1	12/16/08 15:21
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 15:21
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 15:21
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 15:21
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 15:21
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 15:21
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 15:21
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413181 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL.	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7862.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 15:21
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 15:21
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 15:21
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 15:21
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 15:21
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:21
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 15:21
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 15:21
Surr: 1,2-Dichloroethane-d4	105		75-134	0.16	%REC	1	12/16/08 15:21
Surr: Toluene-d8	98		75-125	0.10	%REC	1	12/16/08 15:21
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 15:21

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413181 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7862.D Vial: 12
Acq On : 16 Dec 2008 15:21 Operator: JK
Sample : 0812108-007A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:18 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1730680	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	631297	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	400814	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	432715	10.53 ug/L	0.00
Spiked Amount 10.000			Recovery	= 105.30%	
37) Toluene-d8	14.26	98	1570293	9.84 ug/L	0.00
Spiked Amount 10.000			Recovery	= 98.40%	
49) Bromofluorobenzene	18.25	95	462204	9.91 ug/L	0.00
Spiked Amount 10.000			Recovery	= 99.10%	
Target Compounds					Qvalue
3) Chloromethane	4.58	50	21720	0.34 ug/L	84
5) Bromomethane	5.69	94	5862	0.15 ug/L #	3
12) Acetone	7.14	43	12480	1.56 ug/L #	1

(#) = qualifier out of range (m) = manual integration
J7862.D JD05NTCL.M Thu Dec 18 11:27:40 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7862.D Vial: 12
Acq On : 16 Dec 2008 15:21 Operator: JK
Sample : 0812108-007A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008 Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1730680	10.00 ug/L	0.00
Target Compounds					Qvalue

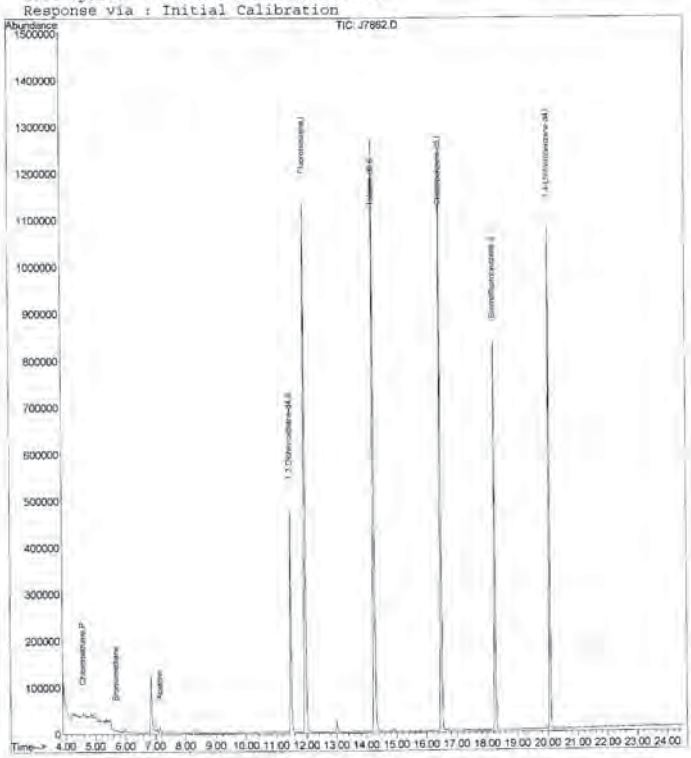
(#) = qualifier out of range (m) = manual integration
J7862.D JD05T12W.M Mon Dec 29 06:08:45 2008

Quantitation Report

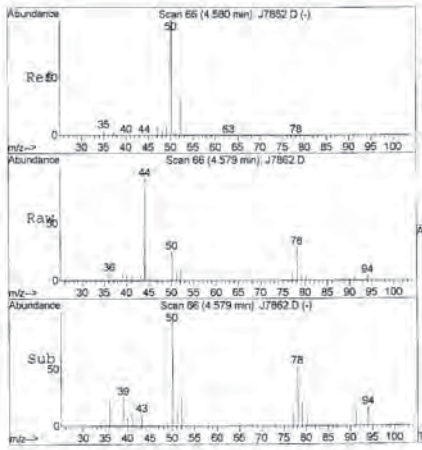
Data File : C:\HPCHEM\1\DATA\J7862.D
Acq On : 16 Dec 2008 15:21
Sample : 0812108-007A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:18 2008

Vial: 12
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



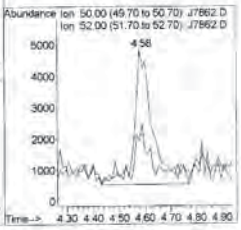
J7862.D JD05NTCL.M Thu Dec 18 11:27:41 2008

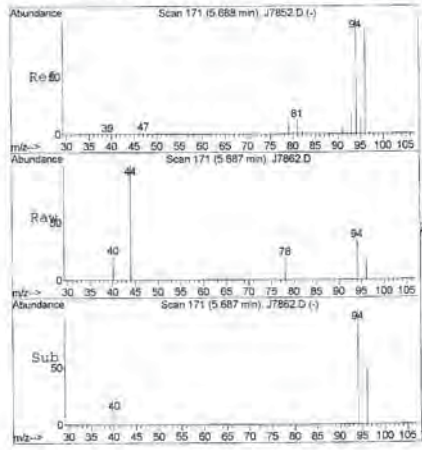


#3
Chloromethane
Concen: 0.34 ug/L
RT: 4.58 min Scan# 66
Delta R.T. -0.00 min
Lab File: J7862.D
Acq: 16 Dec 2008 15:21

Tgt Ion: 50 Resp: 21720

Ion	Ratio	Lower	Upper
50	100		
52	24.0	3.3	63.3

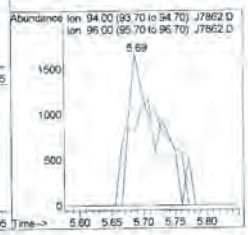




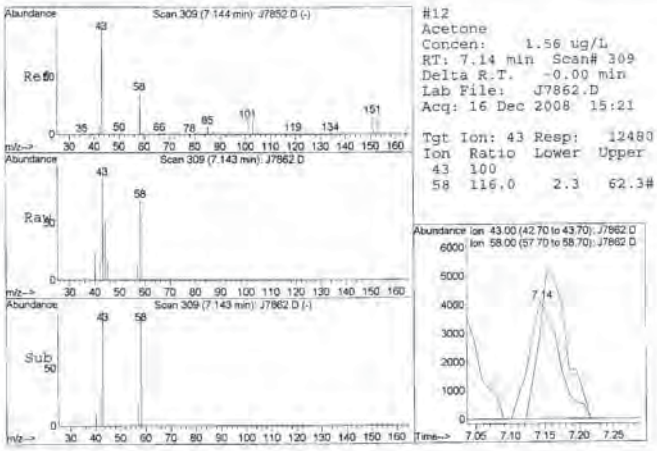
#5
Bromomethane
Concen: 0.15 ug/L
RT: 5.69 min Scan# 171
Delta R.T. -0.00 min
Lab File: J7862.D
Acq: 16 Dec 2008 15:21

Tgt Ion: 94 Resp: 5862

Ion	Ratio	Lower	Upper
94	100		
96	0.0	62.5	122.5#



J7862.D JD05NTCL.M Thu Dec 18 11:27:41 2008



#12
Acetone
Concen: 1.56 ug/L
RT: 7.14 min Scan# 309
Delta R.T. -0.00 min
Lab File: J7862.D
Acq: 16 Dec 2008 15:21

Tgt Ion: 43 Resp: 12480

Ion	Ratio	Lower	Upper
43	100		
58	116.0	2.3	62.3#

J7862.D JD05NTCL.M Thu Dec 18 11:27:42 2008

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
SD-1-121108

Lab Name: Life Science Laboratories, Inc. Contract:
Lab Code: LSLB Case No.: 08G-MS SAS No.: SDG No.: 0812108
Matrix: (soil/water) WATER Lab Sample ID: 0812108-007A
Sample wt/vol: 5 (g/mL) ML Lab File ID: J7862.D
Level: LOW Date Received: 12/12/08
% Moisture: not dec. Date Analyzed: 12/16/08
GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00
Extract Volume: (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.86	1.14	J

FORM I TIC 10 SW8260B

Tentatively Identified Compound (LSC) summary

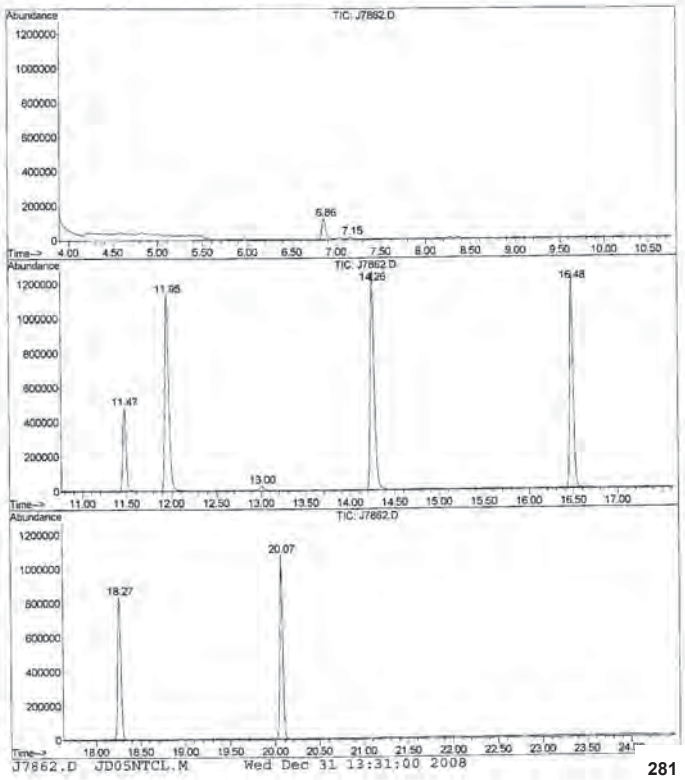
Operator ID: JK Date Acquired: 16 Dec 2008 15:21
Data File: C:\HPCHEM\1\DATA\J7862.D
Name: 0812108-007A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Isopropyl Alcohol	6.86	1.1	ug/L	393417	ISTD01	11.95	3458700	10.0

J7862.D JD05NTCL.M Wed Dec 31 13:31:00 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7862.D
Operator : JK
Acquired : 16 Dec 2008 15:21 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-007A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 12
Quant File :JD05NTCL.RES (RTE Integrator)



J7862.D JD05NTCL.M Wed Dec 31 13:31:00 2008

Library Search Compound Report

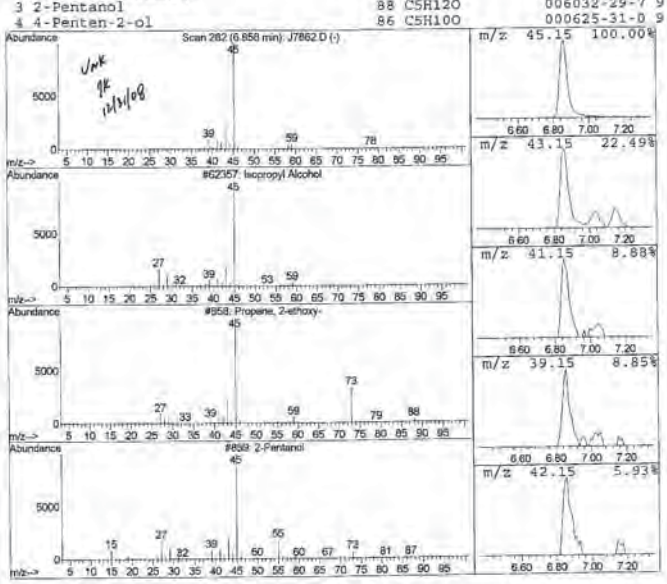
Data File : C:\HPCHEM\1\DATA\J7862.D Vial: 12
Acq On : 16 Dec 2008 15:21 Operator: JK
Sample : 0812108-007A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Isopropyl Alcohol Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.86	1.14 ug/L	393417	Fluorobenzene	11.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isopropyl Alcohol	60	C3H8O	000067-63-0	74
2	Propane, 2-ethoxy-	88	C5H12O	000625-54-7	43
3	2-Pentanol	88	C5H12O	006032-29-7	9
4	4-Penten-2-ol	86	C5H10O	000625-31-0	9



J7862.D JD05NTCL.M Wed Dec 31 13:31:00 2008

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-008A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-3R-121208*
W Order:	0812108	Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7863.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:53
Chloromethane	1.24		1.00	0.33	µg/L	1	12/16/08 15:53
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 15:53
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Acetone	2.10	J	10.0	1.00	µg/L	1	12/16/08 15:53
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 15:53
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 15:53
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 15:53
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 15:53
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
cis-1,2-Dichloroethene	0.46	J	0.50	0.10	µg/L	1	12/16/08 15:53
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 15:53
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Trichloroethene	9.97		0.50	0.10	µg/L	1	12/16/08 15:53
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 15:53
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Tetrachloroethene	1.06		0.50	0.10	µg/L	1	12/16/08 15:53

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim /Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413182 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	0812108-008A
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-3R-121208*
W Order:	0812108	**Collection Date:**	12/12/08 11:05
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS03 10	**Sample Size:** 10 mL	**PrepDate:**
ColomnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R15857
Revision:	12/18/08 11:45	**TestCode:** 8260W7 OLM42	**FileID:** I-SAMP-J7863.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 15:53
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 15:53
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 15:53
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 15:53
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 15:53
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 15:53
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 15:53
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 15:53
Surr: 1,2-Dichloroethane-d4	104		75-134	0.16	%REC	1	12/16/08 15:53
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/16/08 15:53
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 15:53

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413182 **Project Supervisor:** Anthony Crescenzi

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7863.D
Acq On : 16 Dec 2008 15:53
Sample : 0812108-008A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:21 2008

Vial: 13
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1723348	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.47	82	627974	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	403332	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	425628	10.40 ug/L	0.00
Spiked Amount 10.000				Recovery = 104.00%	
37) Toluene-d8	14.25	98	1587954	10.00 ug/L	0.00
Spiked Amount 10.000				Recovery = 100.00%	
49) Bromofluorobenzene	18.26	95	465777	9.93 ug/L	0.00
Spiked Amount 10.000				Recovery = 99.30%	
Target Compounds					Qvalue
3) Chloromethane	4.59	50	78131	1.24 ug/L	91
5) Bromomethane	5.70	94	6092	0.15 ug/L	95
12) Acetone	7.16	43	16766	2.10 ug/L #	1
17) cis-1,2-Dichloroethene	10.22	96	23447	0.46 ug/L	89
27) Trichloroethene	12.54	130	490000	9.97 ug/L	99
38) Tetrachloroethene	15.35	166	48704	1.06 ug/L	93

(#) = qualifier out of range (m) = manual integration
J7863.D JD05NTCL.M Thu Dec 18 11:27:44 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7863.D
Acq On : 16 Dec 2008 15:53
Sample : 0812108-008A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 13
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1723348	10.00 ug/L	0.00
Target Compounds					Qvalue

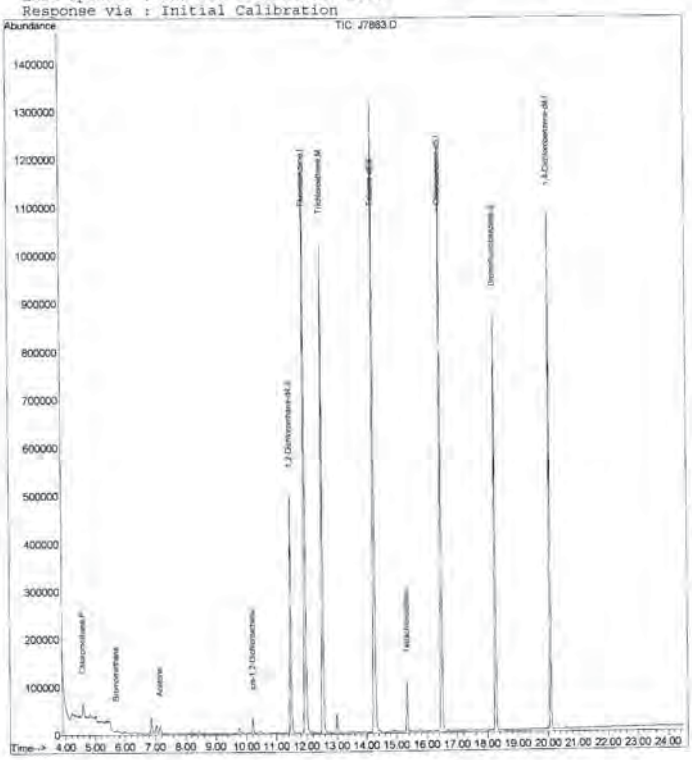
(#) = qualifier out of range (m) = manual integration
J7863.D JD05T12W.M Mon Dec 29 06:08:45 2008 P

Quantitation Report

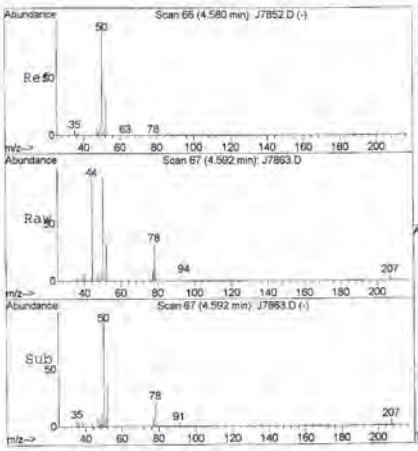
Data File : C:\HPCHEM\1\DATA\J7863.D
Acq On : 16 Dec 2008 15:53
Sample : 0812108-008A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:21 2008

Vial: 13
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



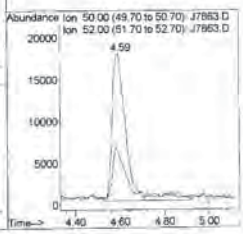
J7863.D JD05NTCL.M Thu Dec 18 11:27:45 2008 P

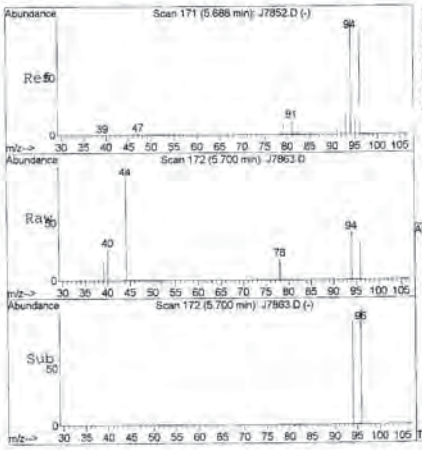


#3
Chloromethane
Concen: 1.24 ug/L
RT: 4.59 min Scan# 67
Delta R.T. 0.01 min
Lab File: J7863.D
Acq: 16 Dec 2008 15:53

Tgt Ion: 50 Resp: 78131

Ion	Ratio	Lower	Upper
50	100		
52	31.5	3.3	63.3

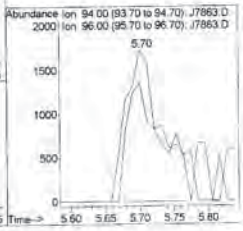


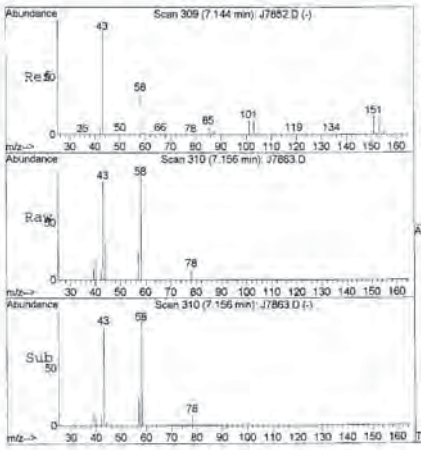


#5
Bromomethane
Concen: 0.15 ug/L
RT: 5.70 min Scan# 172
Delta R.T. 0.01 min
Lab File: J7863.D
Acq: 16 Dec 2008 15:53

Tgt Ion: 94 Resp: 6092

Ion	Ratio	Lower	Upper
94	100		
96	87.2	62.5	122.5

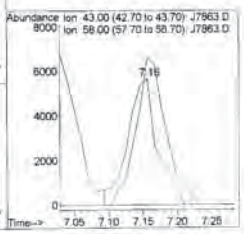


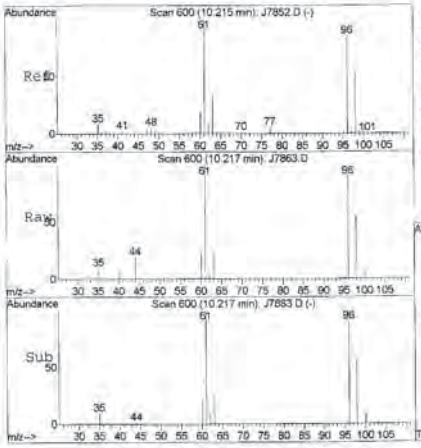


#12
Acetone
Concen: 2.10 ug/L
RT: 7.16 min Scan# 310
Delta R.T. 0.01 min
Lab File: J7863.D
Acq: 16 Dec 2008 15:53

Tgt Ion: 43 Resp: 16766

Ion	Ratio	Lower	Upper
43	100		
58	119.6	2.3	62.3#

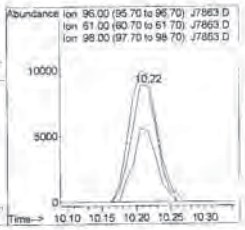


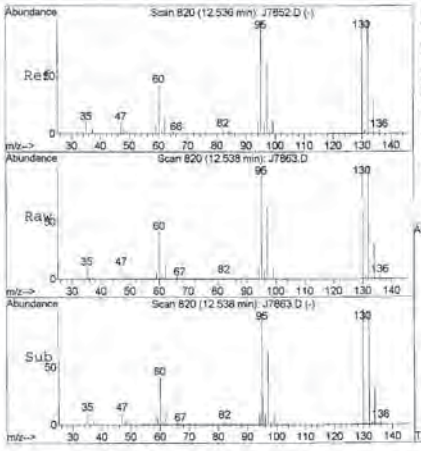


#17
cis-1,2-Dichloroethene
Concen: 0.46 ug/L
RT: 10.22 min Scan# 600
Delta R.T. 0.00 min
Lab File: J7863.D
Acq: 16 Dec 2008 15:53

Tgt Ion: 96 Resp: 23447

Ion	Ratio	Lower	Upper
96	100		
61	119.3	102.4	162.4
98	56.9	34.2	94.2

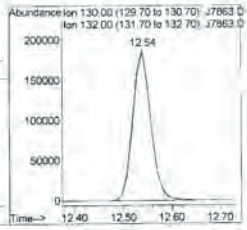


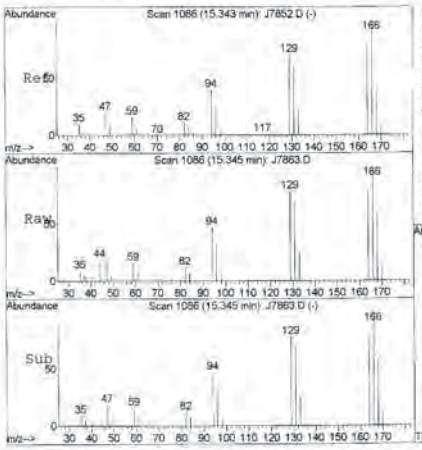


#27
Trichloroethene
Concen: 9.97 ug/L
RT: 12.54 min Scan# 820
Delta R.T. 0.00 min
Lab File: J7863.D
Acq: 16 Dec 2008 15:53

Tgt Ion:130 Resp: 490000

Ion	Ratio	Lower	Upper
130	100		
132	96.7	65.6	125.6

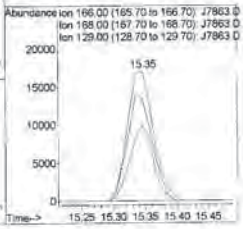




#38
Tetrachloroethene
Concen: 1.06 ug/L
RT: 15.35 min Scan# 1086
Delta R.T. 0.00 min
Lab File: J7863.D
Acq: 16 Dec 2008 15:53

Tgt Ion:166 Resp: 48704

Ion	Ratio	Lower	Upper
166	100		
168	52.2	16.5	76.5
129	79.2	43.6	103.6



Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-3R-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OSG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-008A

Sample wt/vol: 5 (g/mL) ML Lab file ID: J7863.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Tentatively Identified Compound (LSC) summary

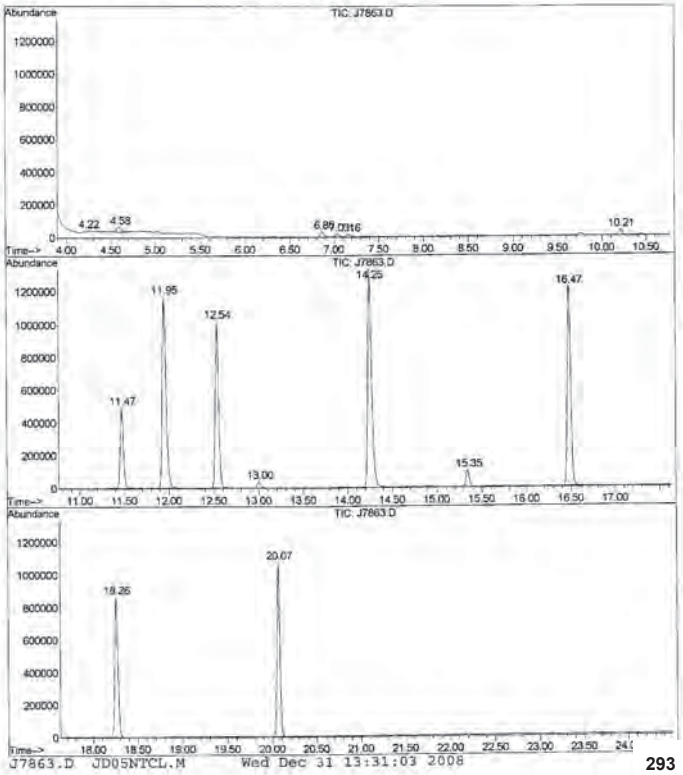
Operator ID: JK Date Acquired: 16 Dec 2008 15:53
Data File: C:\HPCHEM\1\DATA\J7863.D
Name: 0812108-008A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7863.D JD05NTCL.M Wed Dec 31 13:31:03 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7863.D
Operator : JK
Acquired : 16 Dec 2008 15:53 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-008A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 13
Quant File :JD05NTCL.RES (RTE Integrator)



J7863.D JD05NTCL.M Wed Dec 31 13:31:03 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/31/08 15:01	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7864.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:24
Chloromethane	0.42	J	1.00	0.33	µg/L	1	12/16/08 16:24
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:24
1,1-Dichloroethene	8.58		0.50	0.16	µg/L	1	12/16/08 16:24
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 16:24
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 16:24
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 16:24
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 16:24
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 16:24
1,1-Dichloroethane	5.02		0.50	0.10	µg/L	1	12/16/08 16:24
cis-1,2-Dichloroethene	7.45		0.50	0.10	µg/L	1	12/16/08 16:24
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 16:24
Chloroform	0.19	J	0.50	0.10	µg/L	1	12/16/08 16:24
1,1,1-Trichloroethane	27.9		0.50	0.10	µg/L	1	12/16/08 16:24
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 16:24
Trichloroethene	28.7		0.50	0.10	µg/L	1	12/16/08 16:24
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 16:24
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:24
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 16:24
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:24
1,1,2-Trichloroethane	0.19	J	0.50	0.16	µg/L	1	12/16/08 16:24
Tetrachloroethene	0.19	J	0.50	0.10	µg/L	1	12/16/08 16:24

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413183 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/31/08 15:01	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7864.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 16:24
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 16:24
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 16:24
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 16:24
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 16:24
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:24
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 16:24
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 16:24
Surr: 1,2-Dichloroethane-d4	106		75-134	0.16	%REC	1	12/16/08 16:24
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/16/08 16:24
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 16:24

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413183 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7864.D
Acq On : 16 Dec 2008 16:24
Sample : 0812108-009A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:23 2008

Vial: 14
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.94	96	1763549	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	645596	10.00 ug/L	0.01
47) 1,4-Dichlorobenzene-d4	20.07	152	416845	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	439138	10.49 ug/L	0.00
Spiked Amount 10.000			Recovery	= 104.90%	
37) Toluene-d8	14.25	98	1627739	9.97 ug/L	0.00
Spiked Amount 10.000			Recovery	= 99.70%	
49) Bromofluorobenzene	18.27	95	481212	9.92 ug/L	0.01
Spiked Amount 10.000			Recovery	= 99.20%	

Target Compounds					Qvalue
3) Chloromethane	4.59	50	27127	0.42 ug/L	98
5) Bromomethane	5.69	94	4256	0.10 ug/L	90
8) 1,1-Dichloroethene R.T. JK	7.40	96	363829	8.59 ug/L	97
12) Acetone	7.14	43	4228	0.52 ug/L #	42
~~13) trans-1,2-Dichloroethene~~	~~7.40~~	~~96~~	~~363829~~	~~8.59 ug/L~~	~~98~~
16) 1,1-Dichloroethane	9.30	63	393597	5.02 ug/L	100
17) cis-1,2-Dichloroethene	10.21	96	385716	7.45 ug/L	93
19) Chloroform	10.45	83	14526	0.19 ug/L	99
21) 1,1,1-Trichloroethane	11.06	97	1895987	27.91 ug/L	100
27) Trichloroethene	12.54	130	1443975	28.72 ug/L	99
34) 1,1,2-Trichloroethane	14.79	83	5621	0.19 ug/L	92
38) Tetrachloroethene L.R. JK	15.34	166	8942	0.19 ug/L	96
~~39) Dibromochloromethane~~	~~15.63~~	~~129~~	~~1525~~	~~0.65 ug/L~~	~~86~~

(#) = qualifier out of range (m) = manual integration
J7864.D JD05NTCL.M Thu Dec 18 11:27:48 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7864.D
Acq On : 16 Dec 2008 16:24
Sample : 0812108-009A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 14
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.94	96	1763549	10.00 ug/L	0.00

Target Compounds	Qvalue

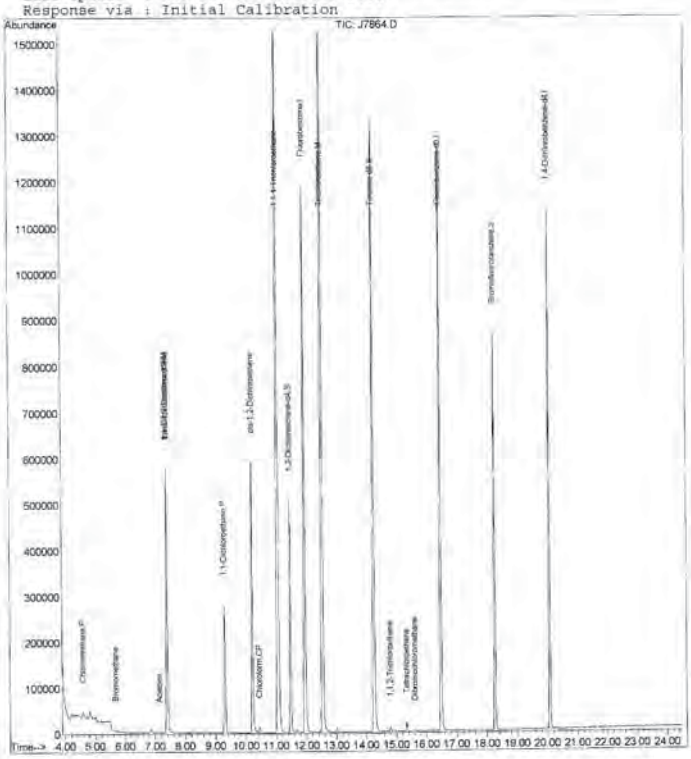
(#) = qualifier out of range (m) = manual integration
J7864.D JD05T12W.M Mon Dec 29 06:08:46 2008

Quantitation Report

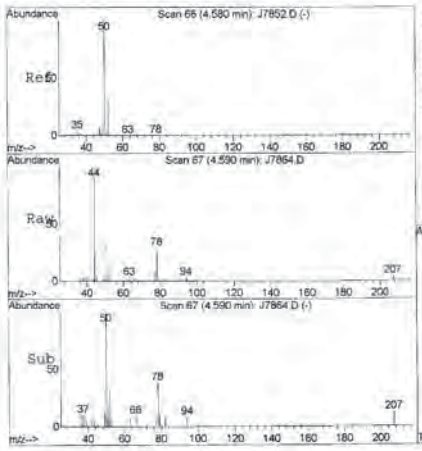
Data File : C:\HPCHEM\1\DATA\J7864.D
Acq On : 16 Dec 2008 16:24
Sample : 0812108-009A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:23 2008

Vial: 14
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



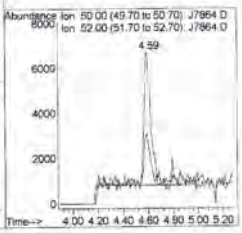
J7864.D JD05NTCL.M Thu Dec 18 11:27:49 2008

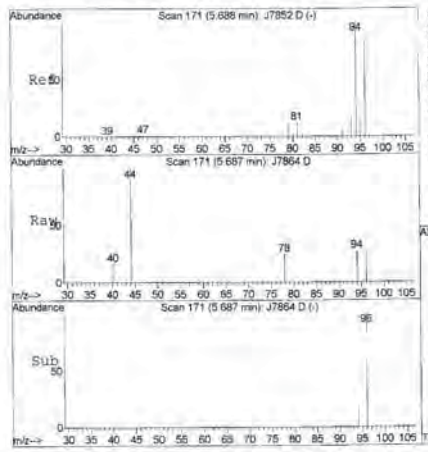


#3
Chloromethane
Concen: 0.42 ug/L
RT: 4.59 min Scan# 67
Delta R.T. 0.01 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 50 Resp: 27127

Ion	Ratio	Lower	Upper
50	100		
52	32.4	3.3	63.3

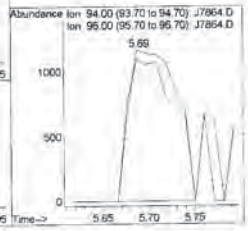




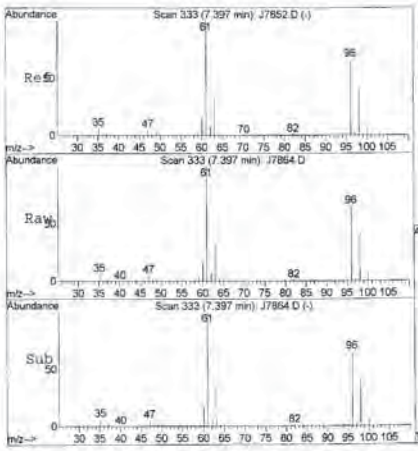
#5
Bromomethane
Concen: 0.10 ug/L
RT: 5.69 min Scan# 171
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 94 Resp: 4256

Ion	Ratio	Lower	Upper
94	100		
96	101.7	62.5	122.5



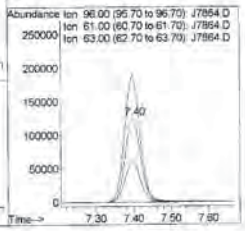
J7864.D JD05NTCL.M Thu Dec 18 11:27:49 2008

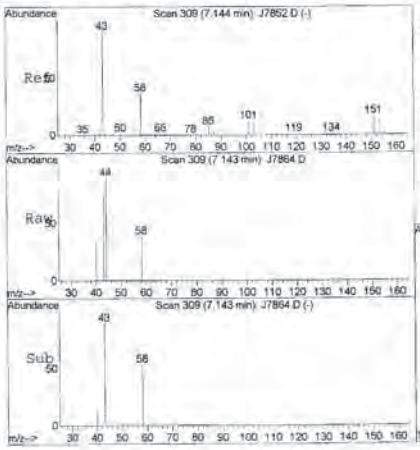


#8
1,1-Dichloroethene
Concen: 8.59 ug/L
RT: 7.40 min Scan# 333
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 96 Resp: 363829

Ion	Ratio	Lower	Upper
96	100		
61	151.9	118.5	178.5
63	49.1	17.7	77.7

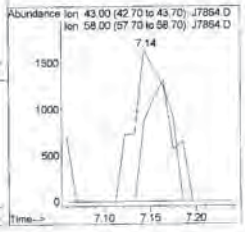


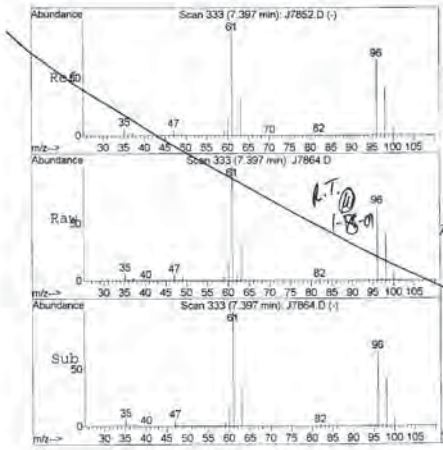


#12
Acetone
Concen: 0.52 ug/L
RT: 7.14 min Scan# 309
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 43 Resp: 4228

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	62.3#

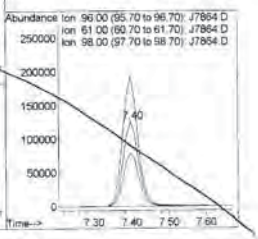


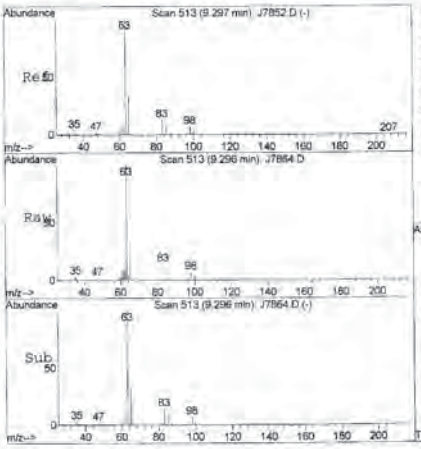


#13
trans-1,2-Dichloroethene
Concen: 8.59 ug/L
RT: 7.40 min Scan# 333
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 96 Resp: 363829

Ion	Ratio	Lower	Upper
96	100		
61	151.9	118.5	178.5
98	64.0	34.3	94.3

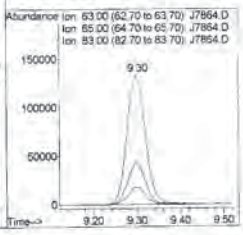


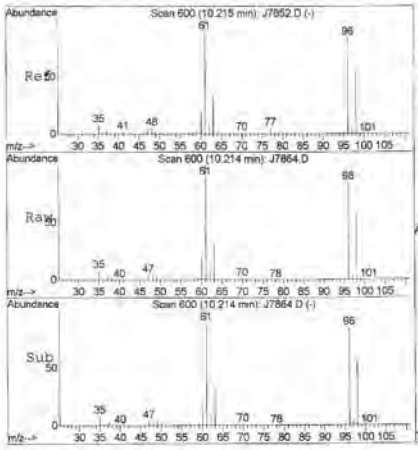


#16
1,1-Dichloroethane
Concen: 5.02 ug/L
RT: 9.30 min Scan# 513
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 63 Resp: 393597

Ion	Ratio	Lower	Upper
63	100		
65	31.4	1.9	61.5
83	13.0	0.0	43.3

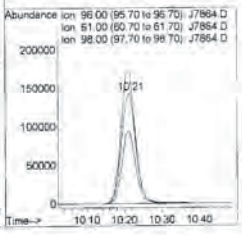


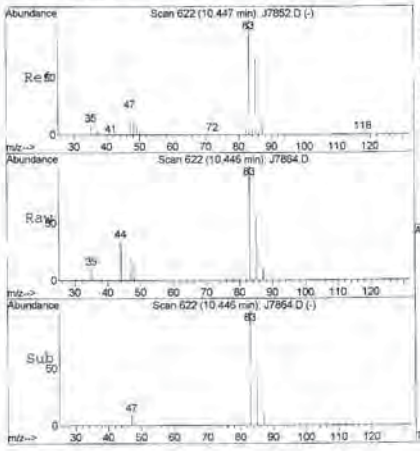


#17
cis-1,2-Dichloroethene
Concen: 7.45 ug/L
RT: 10.21 min Scan# 600
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 96 Resp: 385716

Ion	Ratio	Lower	Upper
96	100		
61	119.7	102.4	162.4
98	63.7	34.2	94.2

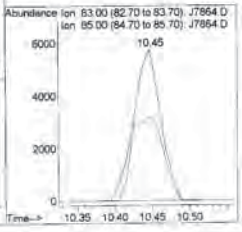


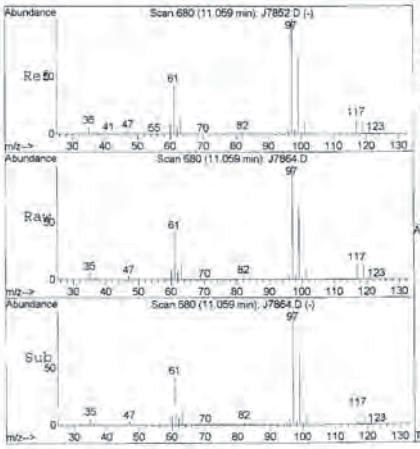


#19
Chloroform
Concen: 0.19 ug/L
RT: 10.45 min Scan# 622
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 83 Resp: 14526

Ion	Ratio	Lower	Upper
83	100		
85	64.2	35.4	95.4

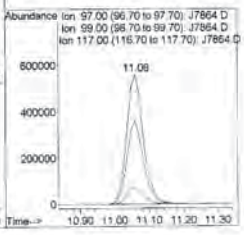


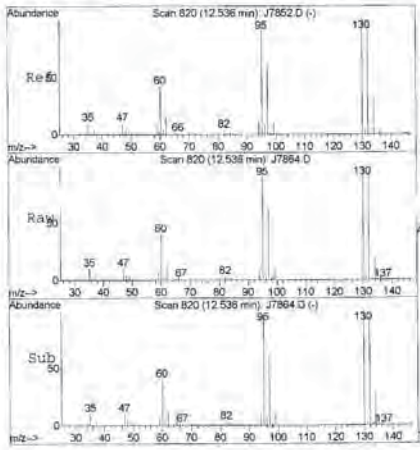


#21
1,1,1-Trichloroethane
Concen: 27.91 ug/L
RT: 11.06 min Scan# 680
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 97 Resp: 1895987

Ion	Ratio	Lower	Upper
97	100		
99	64.2	34.4	94.4
117	13.5	0.0	43.3

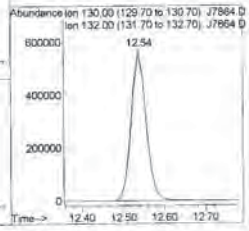


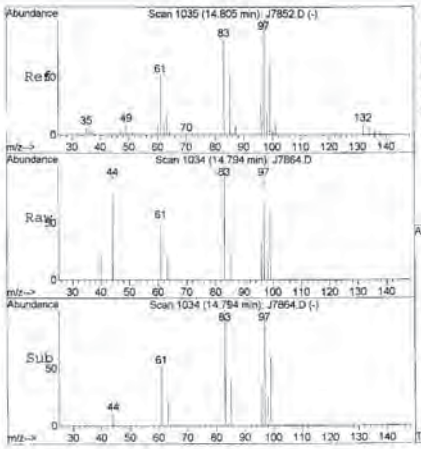


#27
Trichloroethene
Concen: 28.72 ug/L
RT: 12.54 min Scan# 820
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion:130 Resp: 1443975

Ion	Ratio	Lower	Upper
130	100		
132	96.2	65.6	125.6

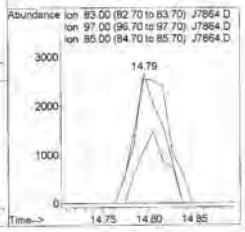


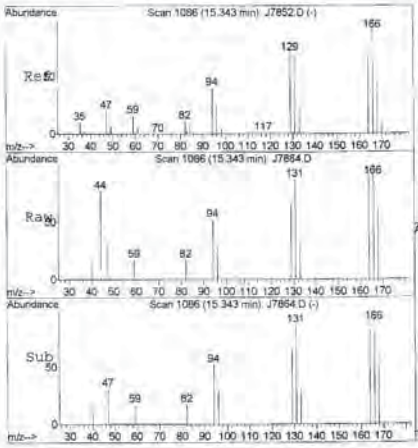


#34
1,1,2-Trichloroethane
Concen: 0.19 ug/L
RT: 14.79 min Scan# 1034
Delta R.T. -0.01 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion: 83 Resp: 5521

Ion	Ratio	Lower	Upper
83	100		
97	124.2	89.3	149.3
85	53.5	34.6	94.6

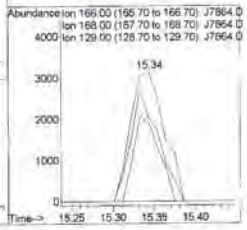


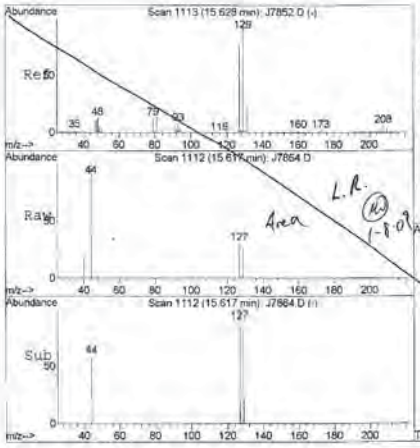


#38
Tetrachloroethene
Concen: 0.19 ug/L
RT: 15.34 min Scan# 1086
Delta R.T. -0.00 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion:166 Resp: 8942

Ion	Ratio	Lower	Upper
166	100		
168	49.4	16.5	76.5
129	70.9	43.6	103.6



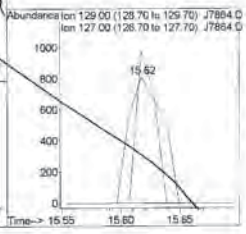


#39
Dibromochloromethane
Concen: 0.65 ug/L
RT: 15.62 min Scan# 1112
Delta R.T. -0.01 min
Lab File: J7864.D
Acq: 16 Dec 2008 16:24

Tgt Ion:129 Resp: 1625

Ion	Ratio	Lower	Upper
129	100		
127	65.4	47.8	107.8

L.R.
Area
1-8-09



Form 1 TIC

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-9-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7864.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Tentatively Identified Compound (LSC) summary

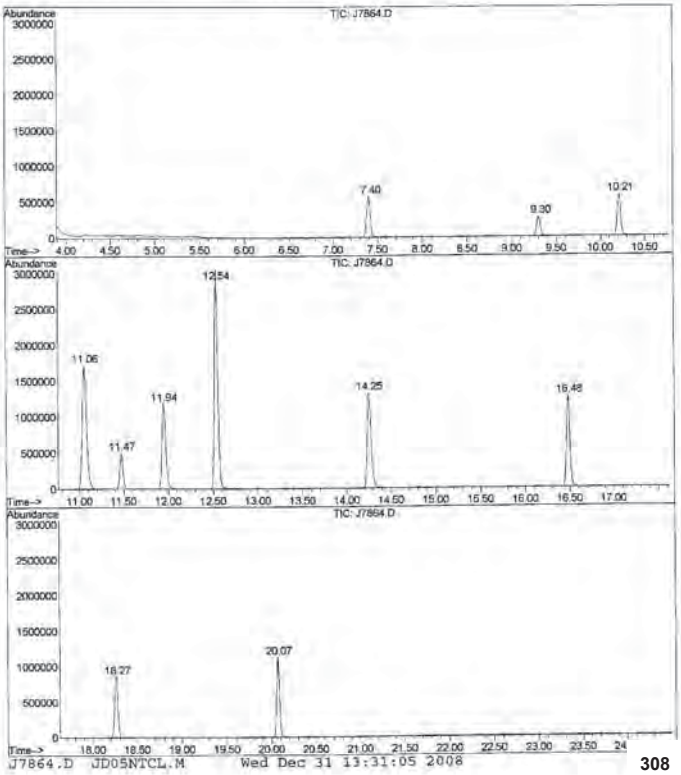
Operator ID: JK Date Acquired: 16 Dec 2008 16:24
Data File: C:\HPCHEM\1\DATA\J7864.D
Name: 0812108-009A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC	Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7864.D JD05NTCL.M Wed Dec 31 13:31:05 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J7864.D
Operator    : JK
Acquired    : 16 Dec 2008  16:24      using AcqMethod JD05VOCW
Instrument  :   #3MS10
Sample Name: 0812108-009A
Misc Info   : SAMP,8260W7_OLM42,
Vial Number: 14
Quant File :JD05NTCL.RES (RTE Integrator)
```



J7864.D JD05NTCL.M Wed Dec 31 13:31:05 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-010A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-5-121208*
W Order:	0812108	Collection Date:	12/12/08 12:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/31/08 15:01	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7865.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:56
Chloromethane	0.52	J	1.00	0.33	µg/L	1	12/16/08 16:56
Vinyl chloride	0.61	J	1.00	0.33	µg/L	1	12/16/08 16:56
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 16:56
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 16:56
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 16:56
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 16:56
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 16:56
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 16:56
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 16:56
trans-1,2-Dichloroethene	0.25	J	0.50	0.10	µg/L	1	12/16/08 16:56
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 16:56
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
cis-1,2-Dichloroethene	11.0		0.50	0.10	µg/L	1	12/16/08 16:56
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 16:56
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Trichloroethene	12.4		0.50	0.10	µg/L	1	12/16/08 16:56
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 16:56
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Tetrachloroethene	0.15	J	0.50	0.10	µg/L	1	12/16/08 16:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413184 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-010A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-5-121208*
W Order:	0812108	Collection Date:	12/12/08 12:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/31/08 15:01	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7865.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 16:56
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 16:56
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 16:56
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 16:56
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 16:56
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 16:56
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 16:56
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 16:56
Surr: 1,2-Dichloroethane-d4	108		75-134	0.16	%REC	1	12/16/08 16:56
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 16:56
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	12/16/08 16:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 10:39 413184 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7865.D                    Vial: 15
Acq On    : 16 Dec 2008  16:56                        Operator: JK
Sample    : 0812108-010A                              Inst    : #3MS10
Misc      : SAMP,8260W7_OLM42,                        Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Jan  9 10:29 2009                  Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW
```

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1656183	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	609244	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	397299	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	423543	10.77 ug/L	0.00
Spiked Amount 10.000			Recovery	= 107.70%	
37) Toluene-d8	14.25	98	1520286	9.87 ug/L	0.00
Spiked Amount 10.000			Recovery	= 98.70%	
49) Bromofluorobenzene	18.26	95	445257	9.63 ug/L	0.00
Spiked Amount 10.000			Recovery	= 96.30%	
Target Compounds					Qvalue
3) Chloromethane	4.59	50	31311m	0.52 ug/L	
4) Vinyl chloride	4.80	62	23020	0.61 ug/L	96
5) Bromomethane	5.69	94	5115	0.13 ug/L	76
8) 1,1-Dichloroethene	7.39	96	5054	0.13 ug/L	89
12) Acetone	7.15	43	6800	0.89 ug/L	97
17) cis-1,2-Dichloroethene	10.21	96	535388	11.01 ug/L	93
27) Trichloroethene	12.54	130	585153	12.39 ug/L	100
38) Tetrachloroethene	15.34	166	6675	0.15 ug/L	97

(#) = qualifier out of range (m) = manual integration
J7865.D JD05NTCL.M Fri Jan 09 10:29:58 2009

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7865.D
Acq On : 16 Dec 2008 16:56
Sample : 0812108-010A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 15
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1656183	10.00 ug/L	0.00
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.66	96	10582	0.25 ug/L	89

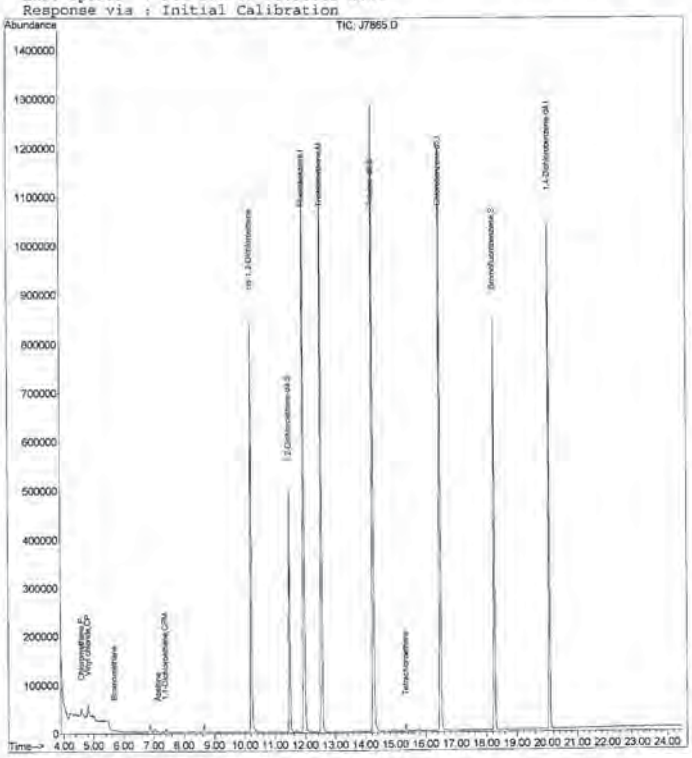
(#) = qualifier out of range (m) = manual integration
J7865.D JD05T12W.M Mon Dec 29 06:08:46 2008

Quantitation Report

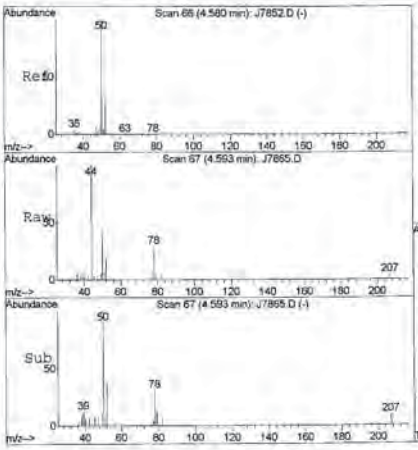
Data File : C:\HPCHEM\1\DATA\J7865.D
Acq On : 16 Dec 2008 16:56
Sample : 0812108-010A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Jan 9 10:29 2009

Vial: 15
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Jan 09 10:26:55 2009
Response via : Initial Calibration



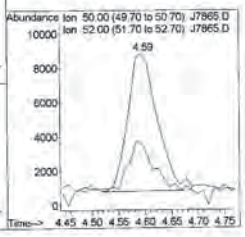
J7865.D JD05NTCL.M Fri Jan 09 10:29:59 2009

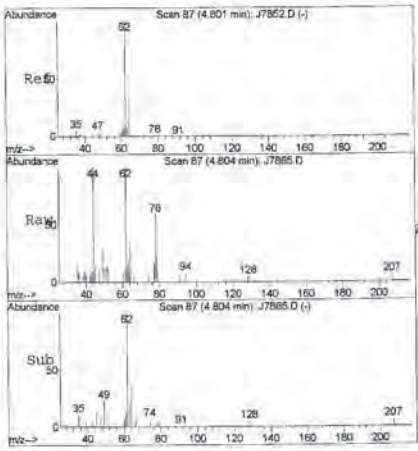


#3
Chloromethane
Concen: 0.52 ug/L m
RT: 4.59 min Scan# 67
Delta R.T. 0.01 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion: 50 Resp: 31311

Ion	Ratio	Lower	Upper
50	100		
52	59.5	3.3	63.3

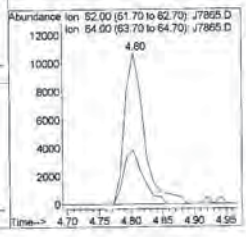




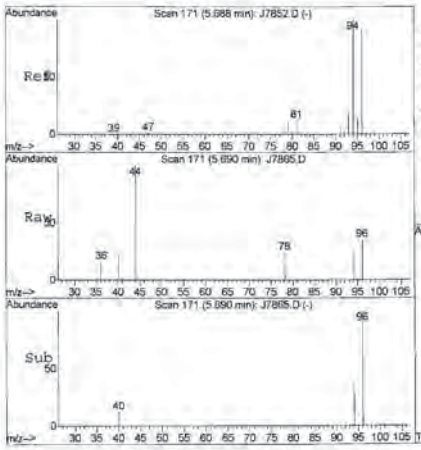
#4
Vinyl chloride
Concen: 0.61 ug/L
RT: 4.80 min Scan# 87
Delta R.T. 0.00 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion: 62 Resp: 23020

Ion	Ratio	Lower	Upper
62	100		
64	36.0	3.8	63.8



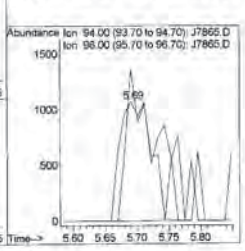
J7865.D JD05NTCL.M Fri Jan 09 10:30:00 2009

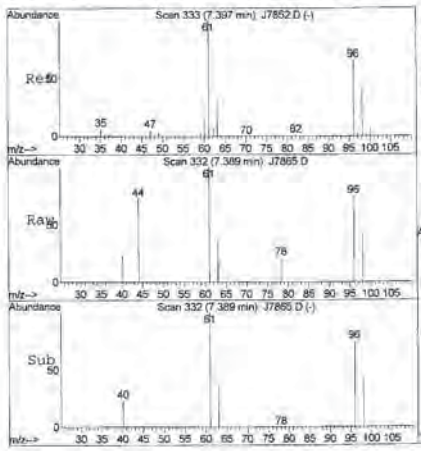


#5
Bromomethane
Concen: 0.13 ug/L
RT: 5.69 min Scan# 171
Delta R.T. 0.00 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion: 94 Resp: 5115

Ion	Ratio	Lower	Upper
94	100		
96	69.6	62.5	122.5

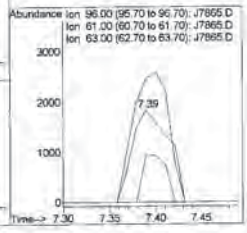




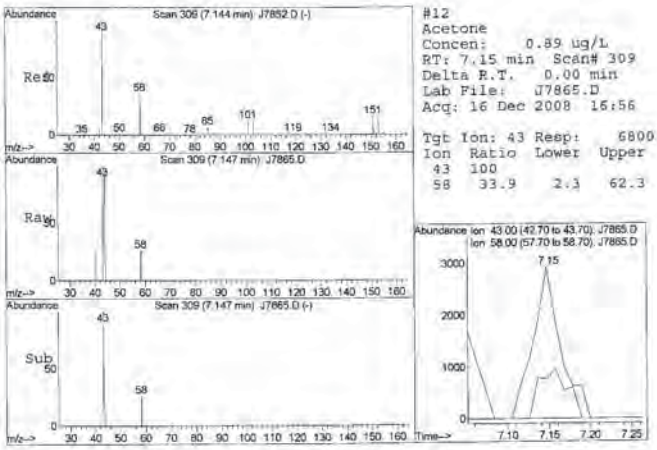
#8
1,1-Dichloroethene
Concen: 0.13 ug/L
RT: 7.39 min Scan# 332
Delta R.T. -0.01 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion: 96 Resp: 5054

Ion	Ratio	Lower	Upper
96	100		
61	138.7	118.5	178.5
63	32.9	17.7	77.7



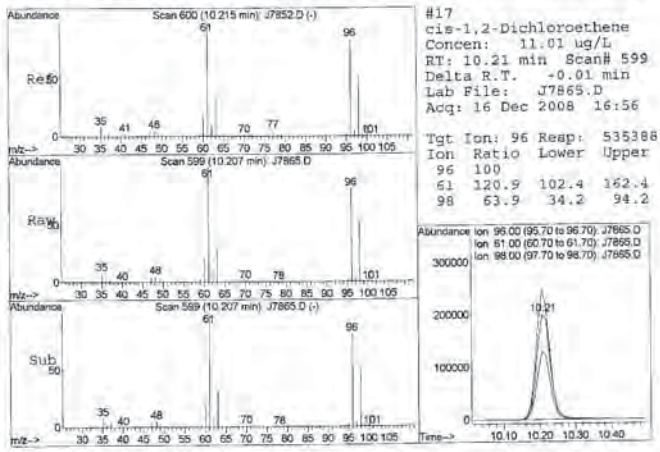
J7865.D JD05NTCL.M Fri Jan 09 10:30:00 2009



#12
Acetone
Concen: 0.89 ug/L
RT: 7.15 min Scan# 309
Delta R.T. 0.00 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion: 43 Resp: 6800

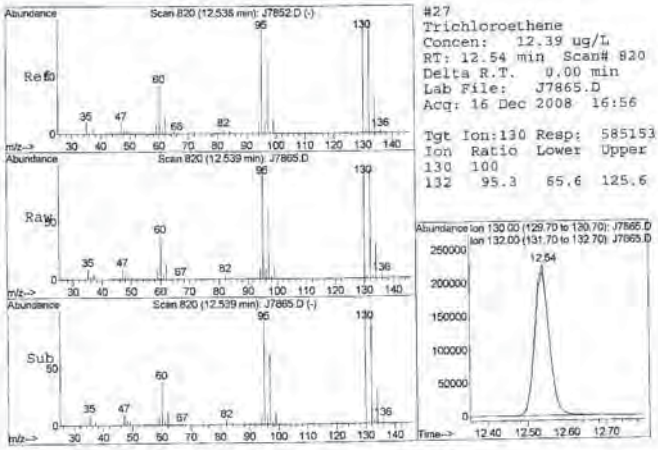
Ion	Ratio	Lower	Upper
43	100		
58	33.9	2.3	62.3



#17
cis-1,2-Dichloroethene
Concen: 11.01 ug/L
RT: 10.21 min Scan# 599
Delta R.T. -0.01 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion: 96 Resp: 535388

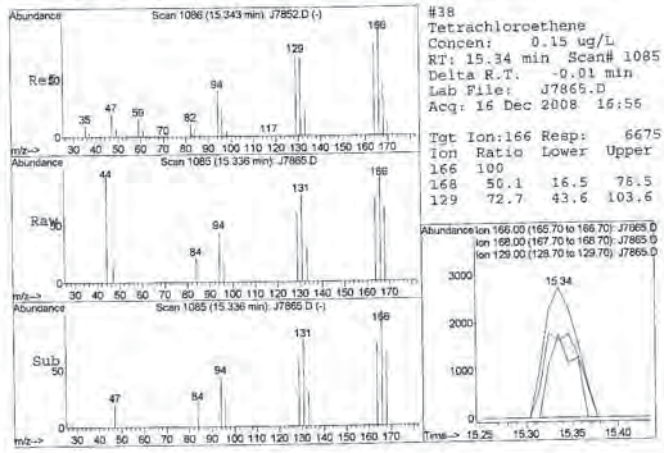
Ion	Ratio	Lower	Upper
96	100		
61	120.9	102.4	162.4
98	63.9	34.2	94.2



#27
Trichloroethene
Concen: 12.39 ug/L
RT: 12.54 min Scan# 820
Delta R.T. 0.00 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion:130 Resp: 585153

Ion	Ratio	Lower	Upper
130	100		
132	95.3	65.6	125.6



#38
Tetrachloroethene
Concen: 0.15 ug/L
RT: 15.34 min Scan# 1085
Delta R.T. -0.01 min
Lab File: J7865.D
Acq: 16 Dec 2008 16:56

Tgt Ion:166 Resp: 6675

Ion	Ratio	Lower	Upper
166	100		
168	50.1	16.5	78.5
129	72.7	43.6	103.6

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-5-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-010A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7865.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 13 SW8260B

Tentatively Identified Compound (LSC) summary

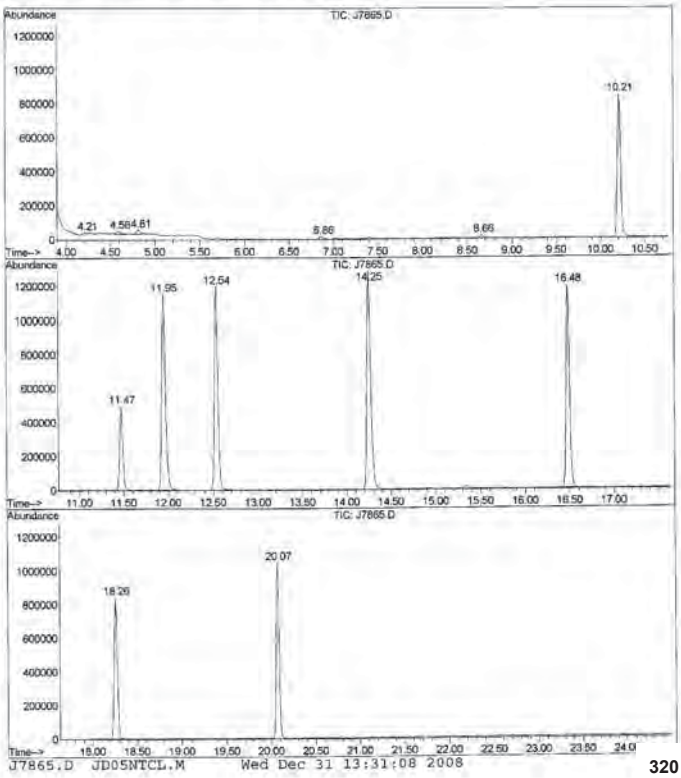
Operator ID: JK Date Acquired: 16 Dec 2008 16:56
Data File: C:\HPCHEM\1\DATA\J7865.D
Name: 0812108-010A
Misc: SAMP,8260W7 OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7865.D JD05NTCL.M Wed Dec 31 13:31:08 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J7865.D
Operator    : JK
Acquired    : 16 Dec 2008  16:56     using AcqMethod JD05VOCW
Instrument  :   #3MS10
Sample Name: 0812108-010A
Misc Info   : SAMP,8260W7_OLM42,
Vial Number: 15
Quant File :JD05NTCL.RES (RTE Integrator)
```



Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7866.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 17:28
Chloromethane	0.55	J	1.00	0.33	µg/L	1	12/16/08 17:28
Vinyl chloride	1.36		1.00	0.33	µg/L	1	12/16/08 17:28
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 17:28
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 17:28
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 17:28
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 17:28
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 17:28
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
cis-1,2-Dichloroethene	4.72		0.50	0.10	µg/L	1	12/16/08 17:28
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 17:28
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Benzene	0.11	J	0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Trichloroethene	0.66		0.50	0.10	µg/L	1	12/16/08 17:28
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 17:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413185 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	12/18/08 11:45	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7866.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 17:28
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 17:28
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 17:28
Surr: 1,2-Dichloroethane-d4	108		75-134	0.16	%REC	1	12/16/08 17:28
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/16/08 17:28
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/16/08 17:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413185 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	Sample Size: 10 mL	PrepDate:
ColumnID:	Rtx-VMS	%Moisture:	BatchNo: R15857
Revision:	01/09/09 15:33	TestCode: 8260W7 OLM42	FileID: 1-SAMP-J7866.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 17:28
Chloromethane	0.55	J	1.00	0.33	µg/L	1	12/16/08 17:28
Vinyl chloride	1.36		1.00	0.33	µg/L	1	12/16/08 17:28
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 17:28
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 17:28
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 17:28
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 17:28
trans-1,2-Dichloroethene	2.68		0.50	0.10	µg/L	1	12/16/08 17:28
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 17:28
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
cis-1,2-Dichloroethene	4.72		0.50	0.10	µg/L	1	12/16/08 17:28
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 17:28
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Benzene	0.11	J	0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Trichloroethene	0.66		0.50	0.10	µg/L	1	12/16/08 17:28
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 17:28
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 17:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 15:34 413185 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc	Lab ID:	0812108-011A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
ColumnID:	Rtx-VMS	BatchNo:	R15857
Revision:	01/09/09 15:33	FileID:	1-SAMP-J7866.D
Col Type:			

Sample Size: 10 mL
%Moisture:
TestCode: 8260W7_OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 17:28
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dibromoethane	ND		0.50	0.18	µg/L	1	12/16/08 17:28
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 17:28
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 17:28
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 17:28
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 17:28
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 17:28
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 17:28
1,2-Dichloroethane-d4	10.8		0.10	0.16	µg/L	1	12/16/08 17:28
Toluene-d8	10.0		0.10	0.10	µg/L	1	12/16/08 17:28
4-Bromofluorobenzene	9.92		0.10	0.10	µg/L	1	12/16/08 17:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 01/09/09 15:34 413185 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT/LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\J7866.D Vial: 16
Acq On : 16 Dec 2008 17:28 Operator: JK
Sample : 0812108-011A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 9 15:31 2009 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.95	96	1637214	10.00	ug/L	0.00
36) Chlorobenzene-d5	16.48	82	594715	10.00	ug/L	0.01
47) 1,4-Dichlorobenzene-d4	20.07	152	384510	10.00	ug/L	0.00
System Monitoring Compounds						
24) 1,2-Dichloroethane-d4	11.47	65	419038	10.78	ug/L	0.00
Spiked Amount 10.000			Recovery = 107.80%			
37) Toluene-d8	14.25	98	1509263	10.04	ug/L	0.00
Spiked Amount 10.000			Recovery = 100.40%			
49) Bromofluorobenzene	18.26	95	443580	9.92	ug/L	0.00
Spiked Amount 10.000			Recovery = 99.20%			
Target Compounds						Qvalue
3) Chloromethane	4.59	50	32905m	0.55	ug/L	
4) Vinyl chloride	4.80	62	51118	1.36	ug/L	96
12) Acetone	7.16	43	5826	0.77	ug/L #	42
17) cis-1,2-Dichloroethene	10.22	96	226761	4.72	ug/L	93
23) Benzene	11.67	78	20052	0.11	ug/L	100
27) Trichloroethene	12.54	130	30683	0.66	ug/L	94

(#) = qualifier out of range (m) = manual integration
J7866.D JD05NTCL.M Fri Jan 09 15:32:13 2009 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7866.D Vial: 16
Acq On : 16 Dec 2008 17:28 Operator: JK
Sample : 0812108-011A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008 Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

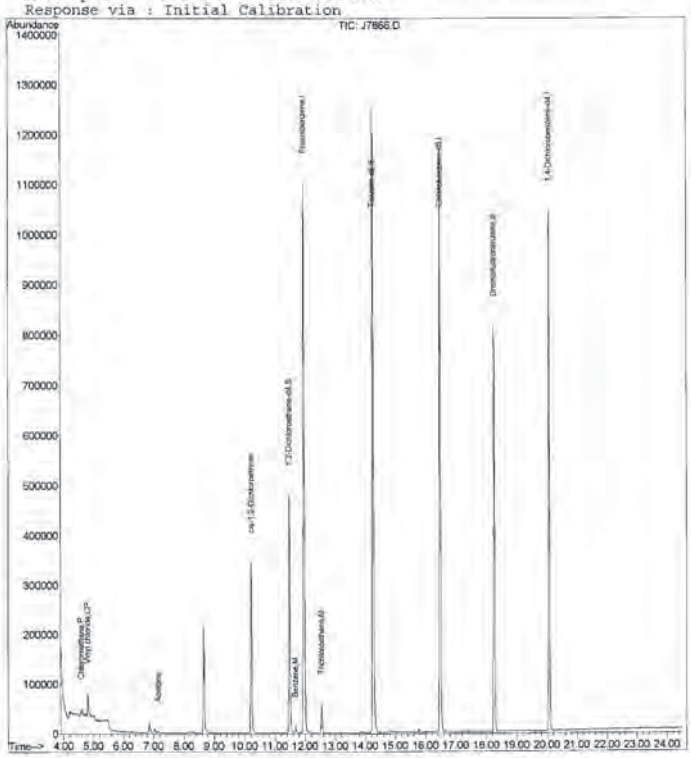
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.95	96	1637214	10.00	ug/L	0.00
Target Compounds						Qvalue
2) trans-1,2-Dichloroethene	8.65	96	126176	2.98	ug/L	92

(#) = qualifier out of range (m) = manual integration
J7866.D JD05T12W.M Mon Dec 29 06:08:47 2008 Pa

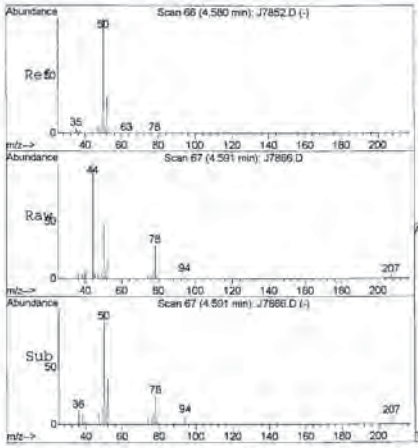
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7866.D Vial: 16
Acq On : 16 Dec 2008 17:28 Operator: JK
Sample : 0812108-011A Inst : #3MS10
Misc : SAMP,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 9 15:31 2009 Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Jan 09 10:28:55 2009
Response via : Initial Calibration



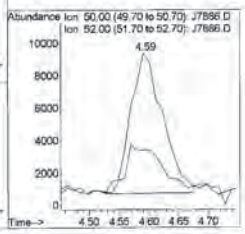
J7866.D JD05NTCL.M Fri Jan 09 15:32:14 2009 Pa

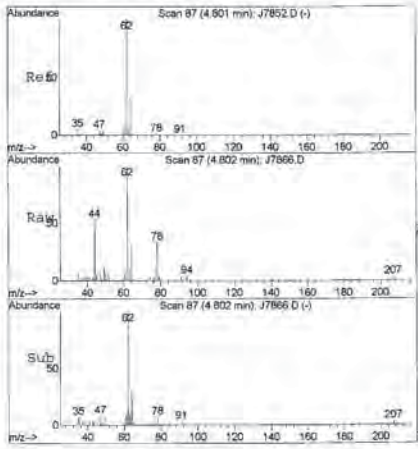


#3
Chloromethane
Concen: 0.55 ug/L m
RT: 4.59 min Scan# 67
Delta R.T. 0.01 min
Lab File: J7866.D
Acq: 16 Dec 2008 17:28

Tgt Ion: 50 Resp: 32905

Ion	Ratio	Lower	Upper
50	100		
52	0.0	3.3	63.3#

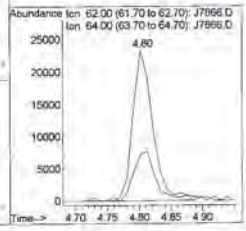


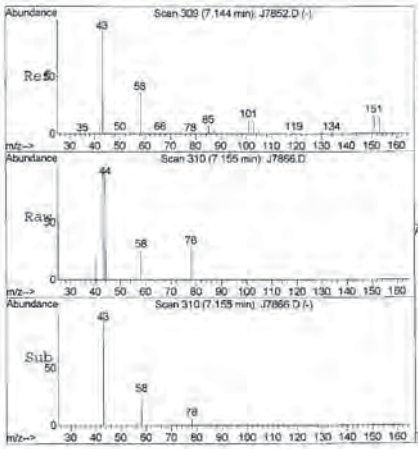


#4
Vinyl chloride
Concen: 1.36 ug/L
RT: 4.80 min Scan# 87
Delta R.T. 0.00 min
Lab File: J7866.D
Acq: 16 Dec 2008 17:28

Tgt Ion: 62 Resp: 51118

Ion	Ratio	Lower	Upper
62	100		
64	36.0	3.8	63.8

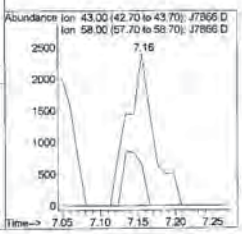


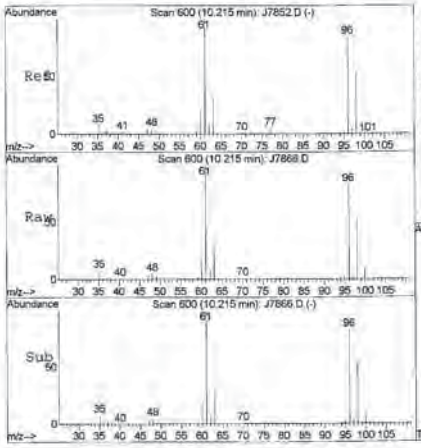


#12
Acetone
Concen: 0.77 ug/L
RT: 7.16 min Scan# 310
Delta R.T. 0.01 min
Lab File: J7866.D
Acq: 16 Dec 2008 17:28

Tgt Ion: 43 Resp: 5826

Ion	Ratio	Lower	Upper
43	100		
58	0.0	2.3	62.3#

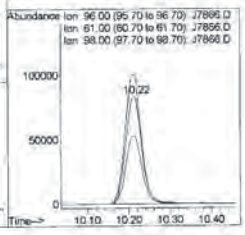


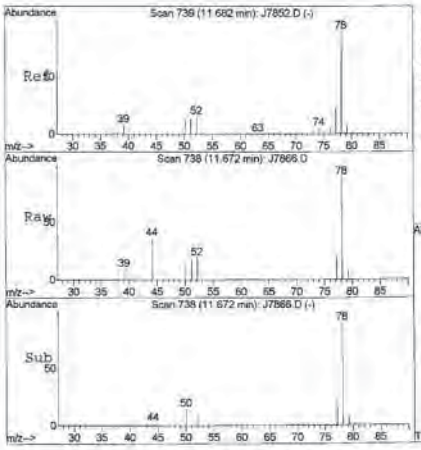


#17
cis-1,2-Dichloroethene
Concen: 4.72 ug/L
RT: 10.22 min Scan# 600
Delta R.T. 0.00 min
Lab File: J7866.D
Acq: 16 Dec 2008 17:28

Tgt Ion: 96 Resp: 226761

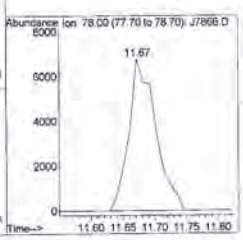
Ion	Ratio	Lower	Upper
96	100		
61	121.0	102.4	162.4
98	64.1	34.2	94.2

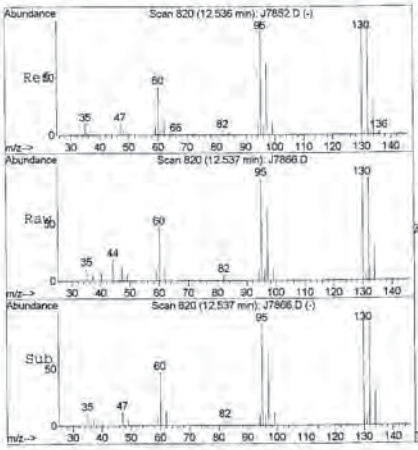




#23
Benzene
Concen: 0.11 ug/L
RT: 11.67 min Scan# 738
Delta R.T. -0.01 min
Lab File: J7866.D
Acq: 16 Dec 2008 17:28

Tgt Ion: 78 Resp: 20052

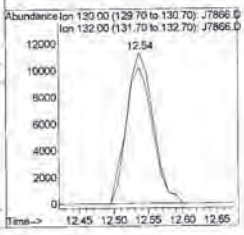




#27
Trichloroethene
Concen: 0.66 ug/L
RT: 12.54 min Scan# 820
Delta R.T. 0.00 min
Lab File: J7866.D
Acq: 16 Dec 2008 17:28

Tgt Ion:130 Resp: 30683

Ion	Ratio	Lower	Upper
130	100		
132	89.4	65.6	125.6



Form 1 TIC CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-6-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-011A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7866.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Tentatively Identified Compound (LSC) summary

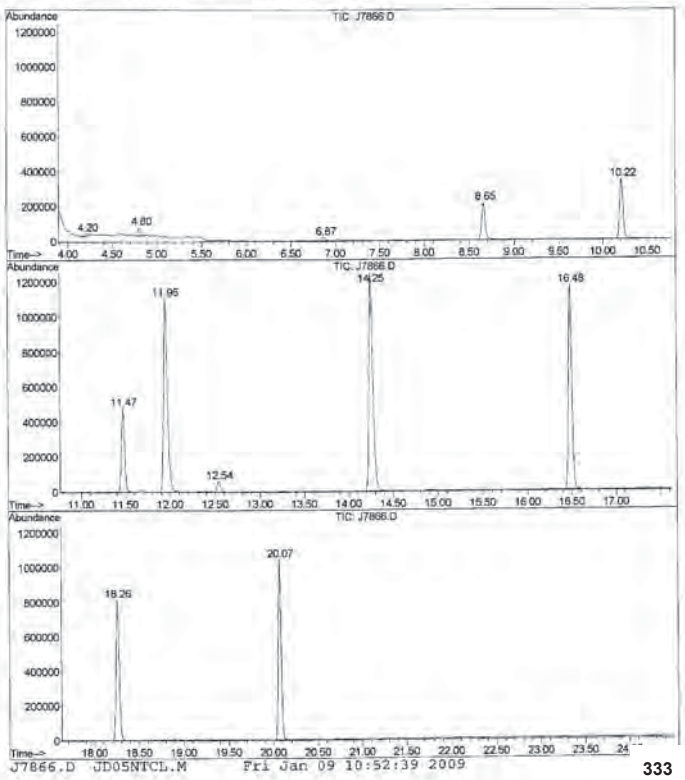
Operator ID: JK Date Acquired: 16 Dec 2008 17:28
Data File: C:\HPCHEM\1\DATA\J7866.D
Name: 0812108-011A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's W/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea ISConc

J7866.D JD05NTCL.M Fri Jan 09 10:52:39 2009

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7866.D
Operator : JK
Acquired : 16 Dec 2008 17:28 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-011A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 16
Quant File :JD05NTCL.RES (RTE Integrator)



J7866.D JD05NTCL.M Fri Jan 09 10:52:39 2009

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-012A
Project: City of Geneva- Market Basket Site Client Sample ID: *MW-7-121208*
W Order: 0812108 Collection Date: 12/12/08 15:50
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS03 10 Sample Size: 10 mL PrepDate:
ColumnID: Rtx-VMS %Moisture: BatchNo: R15857
Revision: 12/18/08 11:45 TestCode: 8260W7 OLM42 FileID: 1-SAMP-J7867.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 18:00
Chloromethane	0.77	J	1.00	0.33	µg/L	1	12/16/08 18:00
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 18:00
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Acetone	1.09	J	10.0	1.00	µg/L	1	12/16/08 18:00
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 18:00
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 18:00
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 18:00
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Methyl tert-butyl ether	ND		1.00	0.16	µg/L	1	12/16/08 18:00
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
cis-1,2-Dichloroethene	0.41	J	0.50	0.10	µg/L	1	12/16/08 18:00
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 18:00
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Trichloroethene	0.64		0.50	0.10	µg/L	1	12/16/08 18:00
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 18:00
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
trans-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413186 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-012A
Project: City of Geneva- Market Basket Site Client Sample ID: *MW-7-121208*
W Order: 0812108 Collection Date: 12/12/08 15:50
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS03 10 Sample Size: 10 mL PrepDate:
ColumnID: Rtx-VMS %Moisture: BatchNo: R15857
Revision: 12/18/08 11:45 TestCode: 8260W7 OLM42 FileID: 1-SAMP-J7867.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 18:00
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 18:00
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 18:00
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 18:00
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 18:00
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:00
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 18:00
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 18:00
Surr: 1,2-Dichloroethane-d4	108		75-134	0.16	%REC	1	12/16/08 18:00
Surr: Toluene-d8	99		75-125	0.10	%REC	1	12/16/08 18:00
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	12/16/08 18:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413186 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7867.D
Acq On : 16 Dec 2008 18:00
Sample : 0812108-012A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:53 2008

Vial: 17
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1569734	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	575079	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	372418	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	395235	10.61 ug/L	0.00
Spiked Amount 10.000			Recovery	= 106.10%	
37) Toluene-d8	14.25	98	1434850	9.87 ug/L	0.00
Spiked Amount 10.000			Recovery	= 98.70%	
49) Bromofluorobenzene	18.26	95	421810	9.74 ug/L	0.00
Spiked Amount 10.000			Recovery	= 97.40%	
Target Compounds					Qvalue
3) Chloromethane	4.59	50	44433	0.77 ug/L	88
5) Bromomethane	5.69	94	6472	0.18 ug/L #	48
12) Acetone	7.15	43	7945	1.09 ug/L	91
17) cis-1,2-Dichloroethene	10.21	96	18682	0.41 ug/L	92
27) Trichloroethene	12.54	130	28667	0.64 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7867.D JD05NTCL.M Thu Dec 18 11:28:02 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7867.D
Acq On : 16 Dec 2008 18:00
Sample : 0812108-012A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 17
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1569734	10.00 ug/L	0.00
Target Compounds					Qvalue

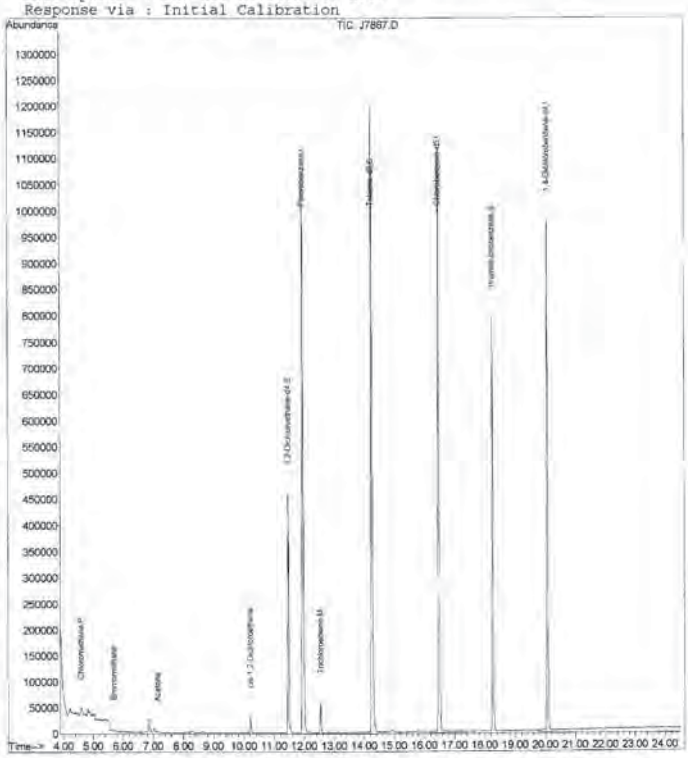
(#) = qualifier out of range (m) = manual integration
J7867.D JD05T12W.M Mon Dec 29 06:08:47 2008

Quantitation Report

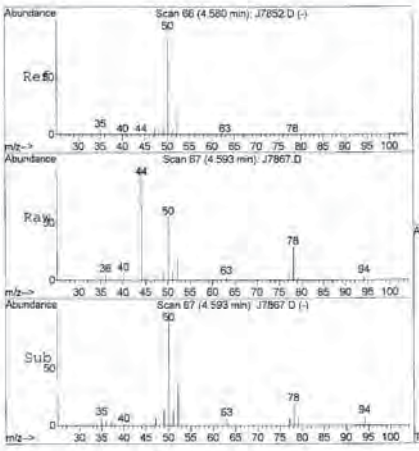
Data File : C:\HPCHEM\1\DATA\J7867.D
Acq On : 16 Dec 2008 18:00
Sample : 0812108-012A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:53 2008

Vial: 17
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



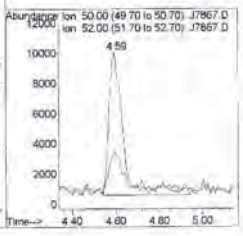
J7867.D JD05NTCL.M Thu Dec 18 11:28:03 2008

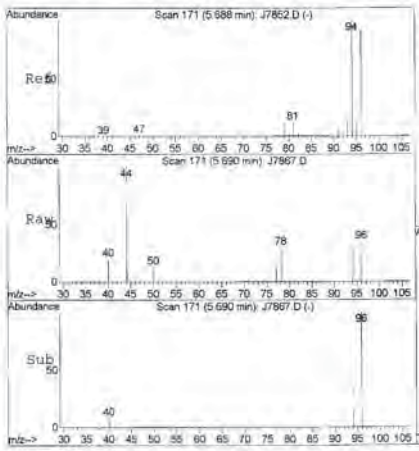


#3
Chloromethane
Concen: 0.77 ug/L
RT: 4.59 min Scan# 67
Delta R.T. 0.01 min
Lab File: J7867.D
Acq: 16 Dec 2008 18:00

Tgt Ion: 50 Resp: 44433

Ion	Ratio	Lower	Upper
50	100		
52	26.6	3.3	63.3

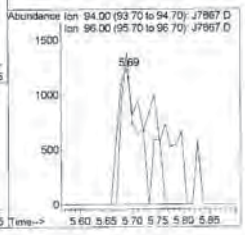




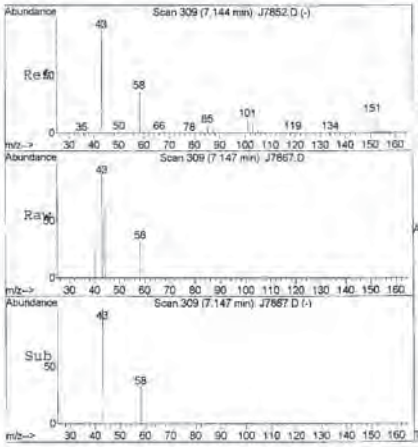
#5
Bromomethane
Concen: 0.18 ug/L
RT: 5.69 min Scan# 171
Delta R.T. 0.00 min
Lab File: J7867.D
Acq: 16 Dec 2008 18:00

Tgt Ion: 94 Resp: 6472

Ion	Ratio	Lower	Upper
94	100		
96	42.7	62.5	122.5#



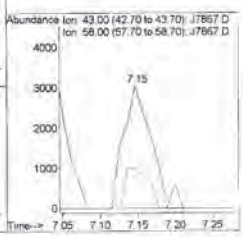
J7867.D JD05NTCL.M Thu Dec 18 11:28:03 2008

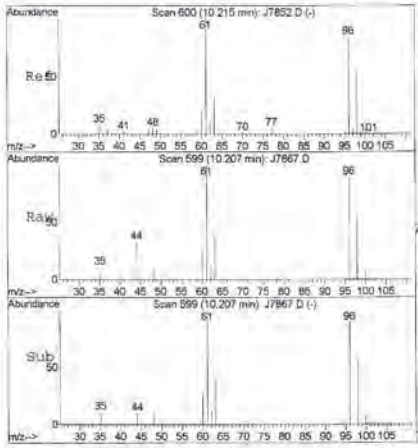


#12
Acetone
Concen: 1.09 ug/L
RT: 7.15 min Scan# 309
Delta R.T. 0.00 min
Lab File: J7867.D
Acq: 16 Dec 2008 18:00

Tgt Ion: 43 Resp: 7945

Ion	Ratio	Lower	Upper
43	100		
58	27.4	2.3	62.3

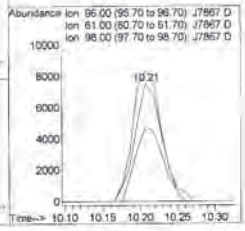


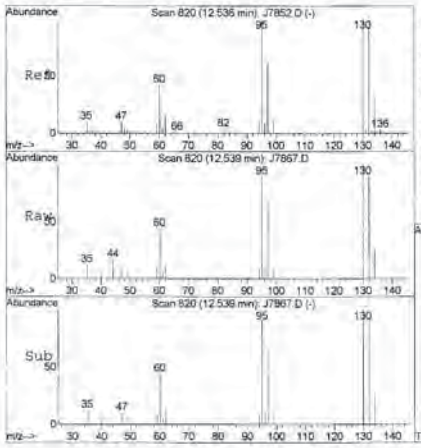


#17
cis-1,2-Dichloroethene
Concen: 0.41 ug/L
RT: 10.21 min Scan# 599
Delta R.T. -0.01 min
Lab File: J7867.D
Acq: 16 Dec 2008 18:00

Tgt Ion: 96 Resp: 18682

Ion	Ratio	Lower	Upper
96	100		
61	120.0	102.4	162.4
98	65.5	34.2	94.2

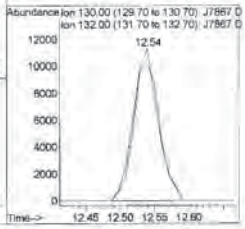




#27
Trichloroethene
Concen: 0.64 ug/L
RT: 12.54 min Scan# 820
Delta R.T. 0.00 min
Lab File: J7867.D
Acq: 16 Dec 2008 18:00

Tgt Ion:130 Resp: 28667

Ion	Ratio	Lower	Upper
130	100		
132	95.1	65.6	125.6



Form 1 TIC

Volatile Organic Compounds By GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-7-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OSG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-012A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7867.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 15 SW8260B

Tentatively Identified Compound (LSC) summary

Operator ID: JK Date Acquired: 16 Dec 2008 18:00
Data File: C:\HPCHEM\1\DATA\J7867.D
Name: 0812108-012A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7867.D JD05NTCL.M Wed Dec 31 13:31:13 2008

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\J7867.D
Operator    : JK
Acquired    : 16 Dec 2008  18:00     using AcqMethod JD05VOCW
Instrument  :   #3MS10
Sample Name: 0812108-012A
Misc Info   : SAMP,8260W7_OLM42,
Vial Number: 17
Quant File :JD05NTCL.RES (RTE Integrator)
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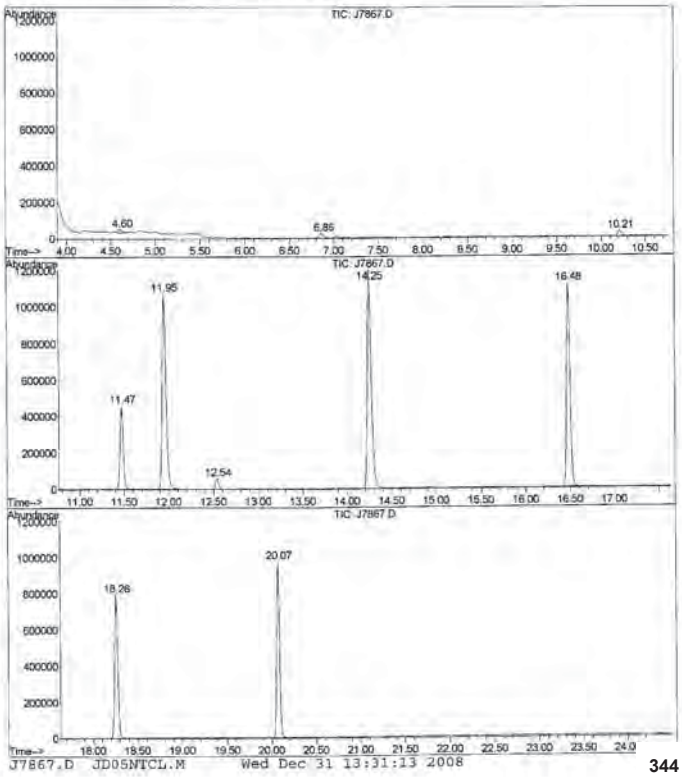

J7867.D JD05NTCL.M Wed Dec 31 13:31:13 2008

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-013A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	WATER Q	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	10 mL		
ColumnID:	Rtx-VMS	%Moisture:	
BatchNo:	R15857		
Revision:	12/18/08 11:45	TestCode:	8260W7 OLM42
FileID:	1-SAMP-J7868.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
Dichlorodifluoromethane	ND		1.00	0.16	µg/L	1	12/16/08 18:32
Chloromethane	0.79	J	1.00	0.33	µg/L	1	12/16/08 18:32
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Bromomethane	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Chloroethane	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Trichlorofluoromethane	ND		1.00	0.10	µg/L	1	12/16/08 18:32
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/16/08 18:32
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Acetone	ND		10.0	1.00	µg/L	1	12/16/08 18:32
Carbon disulfide	ND		0.50	0.11	µg/L	1	12/16/08 18:32
Methyl acetate	ND		5.00	1.00	µg/L	1	12/16/08 18:32
Methylene chloride	ND		2.00	0.16	µg/L	1	12/16/08 18:32
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Methyl tert-butyl ether	ND		1.00	0.18	µg/L	1	12/16/08 18:32
1,1-Dichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
2-Butanone	ND		10.0	1.00	µg/L	1	12/16/08 18:32
Chloroform	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Cyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Carbon tetrachloride	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Benzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Trichloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Methylcyclohexane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dichloropropane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Bromodichloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
cis-1,3-Dichloropropene	ND		0.50	0.16	µg/L	1	12/16/08 18:32
4-Methyl-2-pentanone	ND		5.00	1.00	µg/L	1	12/16/08 18:32
Toluene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
trans-1,3-Dichloropropene	ND		0.50	0.18	µg/L	1	12/16/08 18:32
1,1,2-Trichloroethane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/16/08 18:32

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413187 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-013A
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*Trip Blank*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	WATER Q	Date Received:	12/12/08 17:42
Inst. ID:	MS03 10	PrepDate:	
Sample Size:	10 mL		
ColumnID:	Rtx-VMS	%Moisture:	
BatchNo:	R15857		
Revision:	12/18/08 11:45	TestCode:	8260W7 OLM42
FileID:	1-SAMP-J7868.D		
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260B		
2-Hexanone	ND		5.00	1.00	µg/L	1	12/16/08 18:32
Dibromochloromethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dibromoethane	ND		0.50	0.16	µg/L	1	12/16/08 18:32
Chlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Ethylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Xylenes (total)	ND		1.00	0.30	µg/L	1	12/16/08 18:32
Styrene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
Bromoform	ND		1.00	0.33	µg/L	1	12/16/08 18:32
Isopropylbenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,3-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,4-Dichlorobenzene	ND		0.50	0.16	µg/L	1	12/16/08 18:32
1,2-Dichlorobenzene	ND		0.50	0.10	µg/L	1	12/16/08 18:32
1,2-Dibromo-3-chloropropane	ND		5.00	1.00	µg/L	1	12/16/08 18:32
1,2,4-Trichlorobenzene	ND		1.00	0.10	µg/L	1	12/16/08 18:32
Surr: 1,2-Dichloroethane-d4	108		75-134	0.16	%REC	1	12/16/08 18:32
Surr: Toluene-d8	98		75-125	0.10	%REC	1	12/16/08 18:32
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	12/16/08 18:32

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/18/08 11:46 413187 Project Supervisor: Anthony Crescenzi

Quantitation Report (QT Reviewed)

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Data File : C:\HPCHEM\1\DATA\J7868.D                    Vial: 18
Acq On    : 16 Dec 2008  18:32                       Operator: JK
Sample    : 0812108-013A                             Inst    : #3MS10
Misc      : SAMP,8260W7_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
 Quant Time: Dec 18 11:26 2008                 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW
```

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1640754	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	604537	10.00 ug/L	0.01
47) 1,4-Dichlorobenzene-d4	20.07	152	387595	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	421070	10.81 ug/L	0.00
Spiked Amount 10.000			Recovery	= 108.10%	
37) Toluene-d8	14.25	98	1494116	9.78 ug/L	0.00
Spiked Amount 10.000			Recovery	= 97.80%	
49) Bromofluorobenzene	18.26	95	435901	9.67 ug/L	0.00
Spiked Amount 10.000			Recovery	= 96.70%	
Target Compounds					Qvalue
3) Chloromethane	4.59	50	46775	0.78 ug/L	97
~~5) Bromomethane~~	~~5.69~~	~~94~~	~~5882~~	~~0.16 ug/L #~~	~~97~~
11) Methylene chloride	8.16	84	5678	0.13 ug/L	97

(#) = qualifier out of range (m) = manual integration
J7868.D JD05NTCL.M Thu Dec 18 11:28:06 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7868.D
Acq On : 16 Dec 2008 18:32
Sample : 0812108-013A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 18
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1640754	10.00 ug/L	0.00

Target Compounds Qvalue

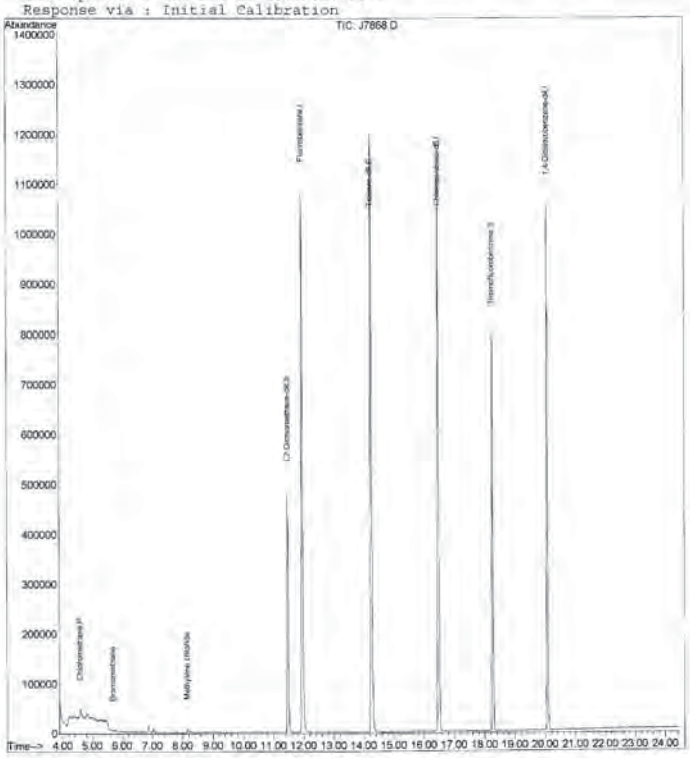
(#) = qualifier out of range (m) = manual integration
J7868.D JD05T12W.M Mon Dec 29 06:08:48 2008

Quantitation Report

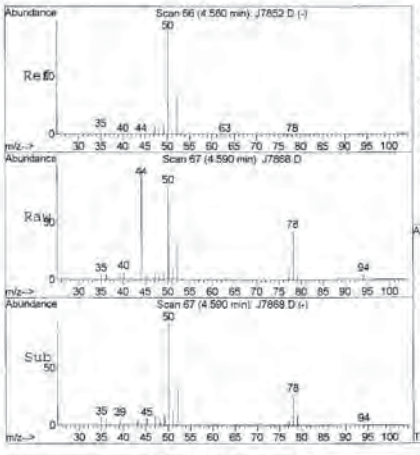
Data File : C:\HPCHEM\1\DATA\J7868.D
Acq On : 16 Dec 2008 18:32
Sample : 0812108-013A
Misc : SAMP,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:26 2008

Vial: 18
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



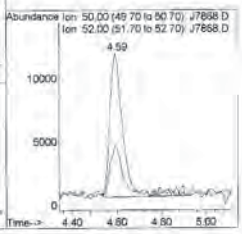
J7868.D JD05NTCL.M Thu Dec 18 11:28:07 2008

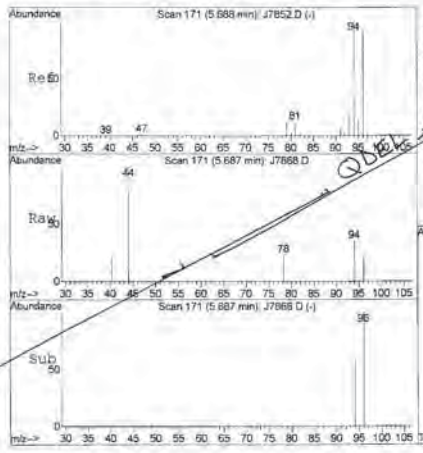


#3
Chloromethane
Concen: 0.78 ug/L
RT: 4.59 min Scan# 67
Delta R.T. 0.01 min
Lab File: J7868.D
Acq: 16 Dec 2008 18:32

Tgt Ion: 50 Resp: 46775

Ion	Ratio	Lower	Upper
50	100		
52	34.9	3.3	63.3

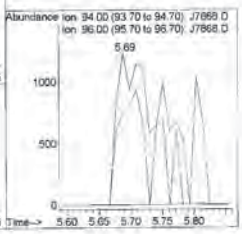




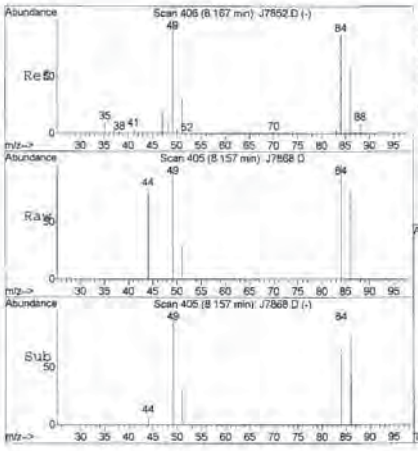
#5
Bromomethane
Concen: 0.16 ug/L
RT: 5.69 min Scan# 171
Delta R.T. -0.00 min
Lab File: J7868.D
Acq: 16 Dec 2008 18:32

Tgt Ion: 94 Resp: 5882

Ion	Ratio	Lower	Upper
94	100		
96	0.0	62.5	122.5#



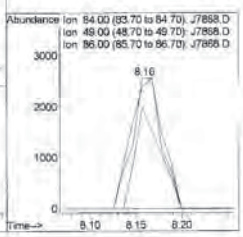
J7868.D JD05NTCL.M Thu Dec 18 11:28:07 2008



#11
Methylene chloride
Concen: 0.13 ug/L
RT: 8.16 min Scan# 405
Delta R.T. -0.01 min
Lab File: J7868.D
Acq: 16 Dec 2008 18:32

Tgt Ion: 84 Resp: 5678

Ion	Ratio	Lower	Upper
84	100		
49	109.7	83.3	143.3
86	66.7	34.4	94.4



J7868.D JD05NTCL.M Thu Dec 18 11:28:08 2008

Form I TIC

CLIENT SAMPLE NO.

Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Trip Blank

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-013A

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7868.D

Level: LOW Date Received: 12/12/08

% Moisture: not dec. Date Analyzed: 12/16/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 16 SW8260B

Tentatively Identified Compound (LSC) summary

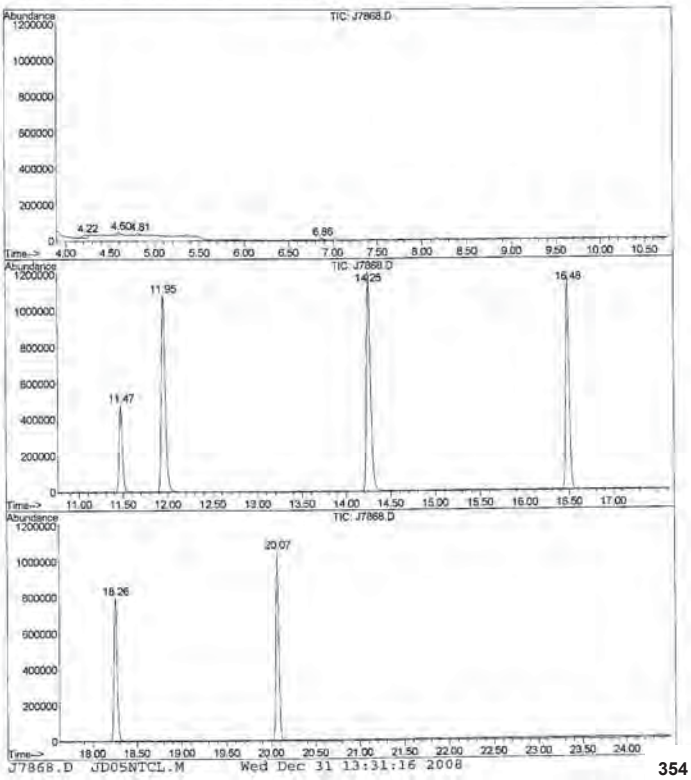
Operator ID: JK Date Acquired: 16 Dec 2008 18:32
Data File: C:\HPCHEM\1\DATA\J7868.D
Name: 0812108-013A
Misc: SAMP,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7868.D JD05NTCL.M Wed Dec 31 13:31:16 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7868.D
Operator : JK
Acquired : 16 Dec 2008 18:32 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: 0812108-013A
Misc Info : SAMP,8260W7_OLM42,
Vial Number: 18
Quant File :JD05NTCL.RES (RTE Integrator)



J7868.D JD05NTCL.M Wed Dec 31 13:31:16 2008

Calibration Data

Response Factor Report #SMS10

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 10:11:08 2008
Response via : Initial Calibration

ICAL 1442

Calibration Files
0.5 =J7706.D 1.0 =J7707.D 2.0 =J7708.D
10 =J7709.D 20 =J7711.D 30 =J7712.D

		Compound	0.5	1.0	2.0	10	20	30	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------							
2)		Dichlorodifluoromet	0.344	0.319	0.320	0.374	0.408	0.401	0.367	10.60
3)	P	Chloromethane	0.357	0.370	0.373	0.379	0.380	0.364	0.367	3.26
4)	CP	Vinyl chloride	0.224	0.231	0.215	0.233	0.237	0.235	0.229	3.28
5)		Bromomethane		0.269	0.234	0.212	0.222	0.221	0.231	8.75
6)		Chloroethane	0.173	0.178	0.180	0.189	0.193	0.190	0.185	4.16
7)		Trichlorofluorometh	0.353	0.356	0.361	0.386	0.388	0.385	0.373	4.12
8)	CPM	1,1-Dichloroethene	0.242	0.229	0.224	0.243	0.249	0.249	0.240	4.18
9)		Carbon disulfide	0.726	0.670	0.676	0.752	0.762	0.760	0.729	5.54
10)		1,1,2-Trichloro-1,2	0.242	0.258	0.250	0.266	0.268	0.267	0.259	3.85
11)		Methyl iodide	0.143	0.168	0.216	0.327	0.340	0.340	0.268	33.11
12)		Acrolein	0.030	0.027	0.029	0.031	0.032	0.031	0.030	6.06
13)		Methylene chloride	0.323	0.278	0.272	0.269	0.268	0.265	0.277	7.74
14)		Acetone	0.053	0.051	0.044	0.046	0.045	0.044	0.046	9.03
15)		trans-1,2-Dichloroe	0.264	0.253	0.243	0.261	0.264	0.265	0.259	3.13
16)		Methyl acetate	0.127	0.125	0.123	0.128	0.129	0.126	0.126	1.81
7)		Methyl tert-Butyl e	0.579	0.561	0.580	0.610	0.617	0.618	0.596	3.74
18)	P	1,1-Dichloroethane	0.445	0.438	0.424	0.451	0.453	0.452	0.445	2.36
19)		Acrylonitrile	0.049	0.053	0.057	0.062	0.063	0.063	0.058	9.46
20)		Vinyl acetate	0.296	0.288	0.295	0.314	0.311	0.324	0.309	5.52
21)		cis-1,2-Dichloroeth	0.274	0.282	0.281	0.302	0.306	0.308	0.294	4.86
22)		2,2-Dichloropropane	0.404	0.364	0.356	0.377	0.382	0.387	0.379	4.19
23)		Bromochloromethane	0.117	0.116	0.120	0.128	0.128	0.128	0.123	4.37
24)		Cyclohexane	0.417	0.394	0.395	0.430	0.443	0.443	0.423	5.20
25)	CP	Chloroform	0.460	0.431	0.430	0.449	0.448	0.445	0.443	2.39
26)		Carbon tetrachlorid	0.262	0.269	0.274	0.312	0.326	0.328	0.300	10.11
27)		1,1,1-Trichloroetha	0.379	0.365	0.366	0.393	0.398	0.398	0.385	3.88
28)		2-Butanone	0.068	0.066	0.067	0.071	0.070	0.069	0.068	2.71
29)		1,1-Dichloropropene	0.319	0.328	0.325	0.353	0.359	0.358	0.343	5.22
30)	M	Benzene	1.113	1.132	1.132	1.188	1.202	1.198	1.163	3.10
31)	S	1,2-Dichloroethane-	0.231	0.232	0.235	0.247	0.242	0.240	0.237	2.40
32)		1,2-Dichloroethane	0.272	0.278	0.281	0.294	0.293	0.289	0.284	2.79
33)		Methylcyclohexane	0.383	0.377	0.372	0.407	0.412	0.415	0.397	4.78
34)	M	Trichloroethene	0.288	0.278	0.267	0.289	0.293	0.290	0.285	3.30
35)		Dibromomethane	0.126	0.134	0.133	0.144	0.143	0.142	0.137	4.59
36)	CP	1,2-Dichloropropane	0.239	0.247	0.251	0.263	0.259	0.260	0.254	3.37
37)		Bromodichloromethan	0.278	0.272	0.279	0.311	0.322	0.325	0.301	7.98
38)		2-Chloroethylvinyl	0.057	0.064	0.069	0.075	0.068	0.061	0.064	10.60
39)		cis-1,3-Dichloropro	0.347	0.351	0.362	0.403	0.412	0.416	0.387	8.23
40)	CPM	Toluene	0.659	0.671	0.671	0.736	0.746	0.754	0.712	5.91
41)		4-Methyl-2-pentanon		0.106	0.124	0.144	0.136	0.138	0.130	10.39
42)		trans-1,3-Dichlorop	0.271	0.277	0.287	0.327	0.337	0.344	0.312	10.30
43)		1,1,2-Trichloroetha	0.155	0.162	0.164	0.175	0.176	0.176	0.169	4.99

OK @ 12-26-08

(#) = Out of Range ### Number of calibration levels exceeded format
JD05VOCW.M Fri Dec 26 11:16:25 2008

12-26-08

Response Factor Report #SMS10

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 10:11:08 2008
Response via : Initial Calibration

Calibration Files
0.5 =J7706.D 1.0 =J7707.D 2.0 =J7708.D
10 =J7709.D 20 =J7711.D 30 =J7712.D

		Compound	0.5	1.0	2.0	10	20	30	Avg	%RSD
44)		2-Hexanone	0.094	0.073	0.081	0.099	0.105	0.105	0.094	13.17
45)	I	Chlorobenzene-d5	----------ISTD----------							
46)	S	Toluene-d8	2.420	2.430	2.373	2.573	2.613	2.622	2.528	4.61
47)		Tetrachloroethene	0.709	0.695	0.706	0.733	0.748	0.749	0.730	3.73
48)		Dibromochloromethan	0.435	0.476	0.479	0.574	0.618	0.636	0.554	16.07
49)		1,3-Dichloropropane	0.909	0.901	0.900	0.949	0.955	0.954	0.932	2.90
50)		1,2-Dibromoethane	0.427	0.465	0.470	0.526	0.529	0.530	0.497	8.58
51)		1-Chlorohexane	0.772	0.788	0.779	0.878	0.917	0.944	0.864	9.61
52)	PM	Chlorobenzene	1.949	1.914	1.884	2.027	2.059	2.075	2.005	4.56
53)	CP	Ethylbenzene	3.161	3.096	3.023	3.478	3.665	3.730	3.411	9.22
54)		1,1,1,2-Tetrachloro	0.517	0.543	0.537	0.622	0.655	0.677	0.607	12.27
55)		(m+p)-Xylene	1.212	1.211	1.207	1.410	1.473	1.497	1.361	10.71
56)		o-Xylene	1.069	1.121	1.145	1.346	1.409	1.437	1.283	12.90
57)		Styrene	1.454	1.476	1.551	1.994	2.148	2.219	1.872	19.51
58)	P	Bromoform	0.232	0.226	0.232	0.300	0.326	0.340	0.287	19.48
9)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
60)		Isopropylbenzene	3.594	3.591	3.543	3.867	3.887	3.913	3.761	4.66
61)	S	Bromofluorobenzene	1.182	1.229	1.186	1.162	1.123	1.126	1.163	3.34
62)		Bromobenzene	0.991	1.039	1.039	1.034	1.006	0.997	1.017	1.99
63)		n-Propylbenzene	4.121	3.953	3.957	4.302	4.415	4.498	4.248	5.60
64)	P	1,1,2,2-Tetrachloro	0.726	0.832	0.828	0.858	0.815	0.804	0.810	5.11
65)		2-Chlorotoluene	2.759	2.850	2.788	2.904	2.987	2.954	2.886	3.08
66)		1,3,5-Trimethylbenz	2.829	2.755	2.788	2.991	3.062	3.137	2.965	5.95
67)		1,2,3-Trichloroprop	0.625	0.616	0.616	0.622	0.645	0.624	0.624	1.60
68)		trans-1,4-Dichloro-		0.089	0.094	0.130	0.137	0.142	0.122	19.77
69)		4-Chlorotoluene	2.766	2.655	2.708	2.909	2.785	2.847	2.791	3.24
70)		tert-Butylbenzene	2.475	2.407	2.245	2.211	2.309	2.357	2.349	4.23
71)		1,2,4-Trimethylbenz	2.688	2.699	2.702	2.767	2.841	2.919	2.801	4.28
72)		sec-Butylbenzene	3.312	3.159	3.048	2.998	3.121	3.247	3.177	4.18
73)		p-Isopropyltoluene	2.705	2.654	2.572	2.478	2.528	2.659	2.623	3.63
74)		1,3-Dichlorobenzene	1.653	1.671	1.712	1.802	1.812	1.813	1.761	4.58
75)		1,4-Dichlorobenzene	1.672	1.634	1.594	1.692	1.700	1.715	1.678	2.97
76)		n-Butylbenzene	2.463	2.137	2.149	1.992	1.926	1.978	2.100	8.56
77)		1,2-Dichlorobenzene	1.512	1.559	1.586	1.690	1.676	1.698	1.634	4.93
78)		1,2-Dibromo-3-chlor	0.110	0.108	0.104	0.101	0.103	0.109	0.106	3.37
79)		Hexachlorobutadiene	0.279	0.265	0.276	0.254	0.240	0.250	0.259	5.57
80)		1,2,4-Trichlorobenz	0.791	0.740	0.751	0.769	0.771	0.779	0.772	2.74
81)		Naphthalene	1.403	1.281	1.485	1.820	1.771	1.748	1.610	13.37
82)		1,2,3-Trichlorobenz	0.570	0.537	0.592	0.659	0.638	0.648	0.616	8.17

(#) = Out of Range ### Number of calibration levels exceeded format
JD05VOCW.M Fri Dec 26 11:16:27 2008

Response Factor Report #SMS10

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 11:18:01 2008
Response via : Initial Calibration

Calibration Files
40 =J7713.D = =
= = =

		Compound	40	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------		
2)		Dichlorodifluoromet	0.401		
3)	P	Chloromethane	0.347		
4)	CP	Vinyl chloride	0.228		
5)		Bromomethane	0.226		
6)		Chloroethane	0.191		
7)		Trichlorofluorometh	0.381		
8)	CPM	1,1-Dichloroethene	0.247		
9)		Carbon disulfide	0.758		
10)		1,1,2-Trichloro-1,2	0.265		
11)		Methyl iodide	0.339		
12)		Acrolein	0.032		
13)		Methylene chloride	0.260		
14)		Acetone	0.042		
15)		trans-1,2-Dichloroe	0.261		
16)		Methyl acetate	0.124		
7)		Methyl tert-Butyl e	0.605		
18)	P	1,1-Dichloroethane	0.449		
19)		Acrylonitrile	0.062		
20)		Vinyl acetate	0.335		
21)		cis-1,2-Dichloroeth	0.304		
22)		2,2-Dichloropropane	0.387		
23)		Bromochloromethane	0.126		
24)		Cyclohexane	0.442		
25)	CP	Chloroform	0.440		
26)		Carbon tetrachlorid	0.329		
27)		1,1,1-Trichloroetha	0.397		
28)		2-Butanone	0.067		
29)		1,1-Dichloropropene	0.357		
30)	M	Benzene	1.173		
31)	S	1,2-Dichloroethane-	0.235		
32)		1,2-Dichloroethane	0.283		
33)		Methylcyclohexane	0.414		
34)	M	Trichloroethene	0.289		
35)		Dibromomethane	0.139		
36)	CP	1,2-Dichloropropane	0.259		
37)		Bromodichloromethan	0.323		
38)		2-Chloroethylvinyl	0.056		
39)		cis-1,3-Dichloropro	0.416		
40)	CPM	Toluene	0.743		
41)		4-Methyl-2-pentanon	0.134		
42)		trans-1,3-Dichlorop	0.341		
43)		1,1,2-Trichloroetha	0.172		

(#) = Out of Range ### Number of calibration levels exceeded format ###
JD05VOCW.M Fri Dec 26 11:18:09 2008

Response Factor Report #SMS10

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 11:18:01 2008
Response via : Initial Calibration

Calibration Files
40 =J7713.D = =
= = =

		Compound	40	Avg	%RSD
44)		2-Hexanone	0.102		
45)	I	Chlorobenzene-d5	----------ISTD----------		
46)	S	Toluene-d8	2.663		
47)		Tetrachloroethene	0.769		
48)		Dibromochloromethan	0.657		
49)		1,3-Dichloropropane	0.955		
50)		1,2-Dibromoethane	0.534		
51)		1-Chlorohexane	0.967		
52)	PM	Chlorobenzene	2.131		
53)	CP	Ethylbenzene	3.734		
54)		1,1,1,2-Tetrachloro	0.701		
55)		(m+p)-Xylene	1.521		
56)		o-Xylene	1.456		
57)		Styrene	2.265		
58)	P	Bromoform	0.354		
9)	I	1,4-Dichlorobenzene-d	----------ISTD----------		
0)		Isopropylbenzene	3.933		
61)	S	Bromofluorobenzene	1.134		
62)		Bromobenzene	1.011		
63)		n-Propylbenzene	4.489		
64)	P	1,1,2,2-Tetrachloro	0.810		
65)		2-Chlorotoluene	2.958		
66)		1,3,5-Trimethylbenz	3.195		
67)		1,2,3-Trichloroprop	0.620		
68)		trans-1,4-Dichloro-	0.141		
69)		4-Chlorotoluene	2.867		
70)		tert-Butylbenzene	2.442		
71)		1,2,4-Trimethylbenz	2.993		
72)		sec-Butylbenzene	3.351		
73)		p-Isopropyltoluene	2.761		
74)		1,3-Dichlorobenzene	1.861		
75)		1,4-Dichlorobenzene	1.739		
76)		n-Butylbenzene	2.058		
77)		1,2-Dichlorobenzene	1.720		
78)		1,2-Dibromo-3-chlor	0.108		
79)		Hexachlorobutadiene	0.251		
80)		1,2,4-Trichlorobenz	0.800		
81)		Naphthalene	1.761		
82)		1,2,3-Trichlorobenz	0.670		

(#) = Out of Range ### Number of calibration levels exceeded format ###
JD05VOCW.M Fri Dec 26 11:18:11 2008

Compound List Report #3MRT0

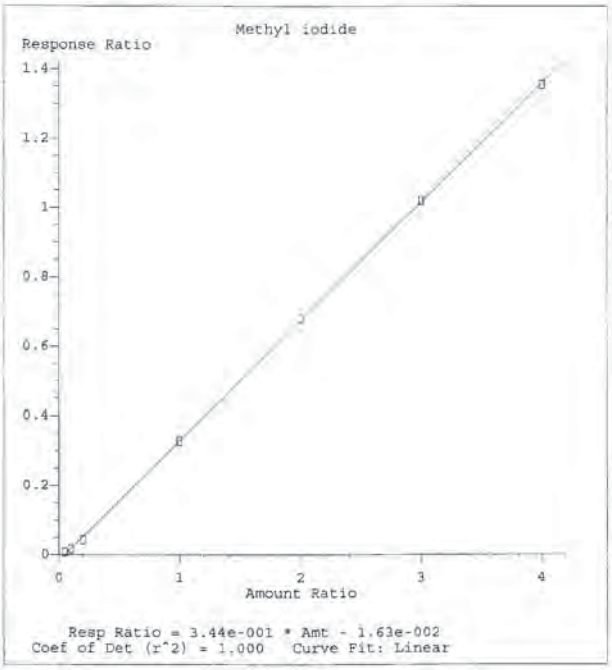
Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 10:11:08 2008
Response via : Initial Calibration
Total Cpnds : 82

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Fluorobenzene	96	11.94	1.000	A	1	A	B
2		Dichlorodifluoromethane	85	4.07	0.341	A	1	A	R
3	P	Chloromethane	50	4.59	0.384	A	1	A	R
4	CP	Vinyl chloride	62	4.80	0.402	A	1	A	R
5		Bromomethane	94	5.69	0.476	A	1	A	R
6		Chloroethane	64	5.82	0.488	A	1	A	R
7		Trichlorofluoromethane	101	6.32	0.529	A	1	A	R
8	CPM	1,1-Dichloroethene	96	7.40	0.619	A	2	A	R
9		Carbon disulfide	76	8.27	0.693	A	1	A	R
10		1,1,2-Trichloro-1,2,2-trifluor	101	7.08	0.593	A	2	A	R
11		Methyl iodide	142	7.92	0.663	L	1	A	R
12		Acrolein	56	7.03	0.588	A	2	A	R
13		Methylene chloride	84	8.17	0.684	A	2	A	R
14		Acetone	43	7.14	0.598	A	1	A	R
15		trans-1,2-Dichloroethene	96	8.65	0.724	A	2	A	R
16		Methyl acetate	43	7.89	0.661	A	2	A	R
17		Methyl tert-Butyl ether	73	8.42	0.705	A	2	A	R
18	P	1,1-Dichloroethane	63	9.30	0.778	A	2	A	R
19		Acrylonitrile	53	8.31	0.696	A	2	A	R
20		Vinyl acetate	43	9.23	0.773	A	1	A	R
21		cis-1,2-Dichloroethene	96	10.21	0.855	A	2	A	R
		2,2-Dichloropropane	77	10.15	0.850	A	1	A	R
23		Bromochloromethane	128	10.70	0.896	A	2	A	R
24		Cyclohexane	56	11.12	0.931	A	2	A	R
25	CP	Chloroform	83	10.45	0.875	A	1	A	R
26		Carbon tetrachloride	117	11.45	0.958	A	2	A	R
27		1,1,1-Trichloroethane	97	11.06	0.926	A	2	A	R
28		2-Butanone	43	9.89	0.828	A	1	A	R
29		1,1-Dichloropropene	75	11.27	0.943	A	2	A	R
30	M	Benzene	78	11.68	0.978	A	0	A	R
31	S	1,2-Dichloroethane-d4	65	11.47	0.960	A	1	A	R
32		1,2-Dichloroethane	62	11.61	0.972	A	1	A	R
33		Methylcyclohexane	83	12.67	1.061	A	2	A	R
34	M	Trichloroethene	130	12.54	1.049	A	1	A	R
35		Dibromomethane	93	13.21	1.106	A	2	A	R
36	CP	1,2-Dichloropropane	63	12.77	1.069	A	1	A	R
37		Bromodichloromethane	83	13.12	1.098	A	2	A	R
38		2-Chloroethylvinyl ether	63	13.44	1.125	A	2	A	R
39		cis-1,3-Dichloropropene	75	13.84	1.159	A	2	A	R
40	CPM	Toluene	92	14.36	1.202	A	1	A	R
41		4-Methyl-2-pentanone	43	13.50	1.130	A	2	A	R
42		trans-1,3-Dichloropropene	75	14.54	1.217	A	2	A	R
43		1,1,2-Trichloroethane	83	14.80	1.239	A	2	A	R
44		2-Hexanone	43	14.74	1.234	A	2	A	R
45	I	Chlorobenzene-d5	82	16.47	1.000	A	2	A	R
46	S	Toluene-d8	98	14.25	0.865	A	0	A	R
		Tetrachloroethene	166	15.34	0.931	A	2	A	R
48		Dibromochloromethane	129	15.63	0.949	L	1	A	R
49		1,3-Dichloropropane	76	15.16	0.921	A	1	A	R
50		1,2-Dibromoethane	107	15.93	0.967	A	2	A	
51		1-Chlorohexane	91	16.05	0.974	A	2	A	
52	PM	Chlorobenzene	112	16.54	1.004	A	2	A	

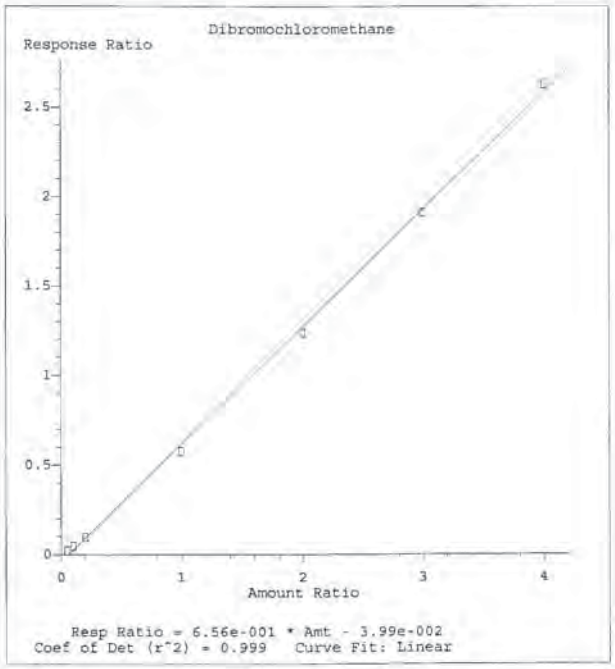
PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
53	CP	Ethylbenzene	91	16.38	1.000	A	1	A	R
54		1,1,1,2-Tetrachloroethane	131	16.57	1.006	A	2	A	R
55		(m+p)-Xylene	106	16.68	1.013	A	1	A	R
56		o-Xylene	106	17.35	1.053	A	1	A	R
57		Styrene	104	17.39	1.056	L	1	A	R
58	P	Bromoform	173	17.96	1.090	L	2	A	R
59	I	1,4-Dichlorobenzene-d4	152	20.07	1.000	A	2	A	R
60		Isopropylbenzene	105	17.85	0.890	A	1	A	R
61	S	Bromofluorobenzene	95	18.26	0.910	A	2	A	R
62		Bromobenzene	156	18.60	0.927	A	2	A	R
63		n-Propylbenzene	91	18.46	0.920	A	1	A	R
64	P	1,1,2,2-Tetrachloroethane	83	18.09	0.901	A	2	A	R
65		2-Chlorotoluene	91	18.78	0.936	A	1	A	R
66		1,3,5-Trimethylbenzene	105	18.68	0.931	A	1	A	R
67		1,2,3-Trichloropropane	75	18.32	0.913	A	1	A	R
68		trans-1,4-Dichloro-2-butene	89	18.36	0.915	L	2	A	R
69		4-Chlorotoluene	91	18.84	0.938	A	1	A	R
70		tert-Butylbenzene	119	19.24	0.958	A	2	A	R
71		1,2,4-Trimethylbenzene	105	19.30	0.962	A	1	A	R
72		sec-Butylbenzene	105	19.56	0.975	A	1	A	R
73		p-Isopropyltoluene	119	19.74	0.984	A	2	A	R
74		1,3-Dichlorobenzene	146	19.98	0.995	A	2	A	R
75		1,4-Dichlorobenzene	146	20.12	1.003	A	2	A	R
76		n-Butylbenzene	91	20.37	1.015	A	2	A	R
77		1,2-Dichlorobenzene	146	20.71	1.032	A	2	A	R
78		1,2-Dibromo-3-chloropropane	75	21.87	1.090	A	2	A	R
79		Hexachlorobutadiene	225	23.55	1.174	A	2	A	R
80		1,2,4-Trichlorobenzene	180	23.33	1.162	A	2	A	R
81		Naphthalene	128	23.84	1.188	A	0	A	R
82		1,2,3-Trichlorobenzene	180	24.29	1.210	A	2	A	R

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

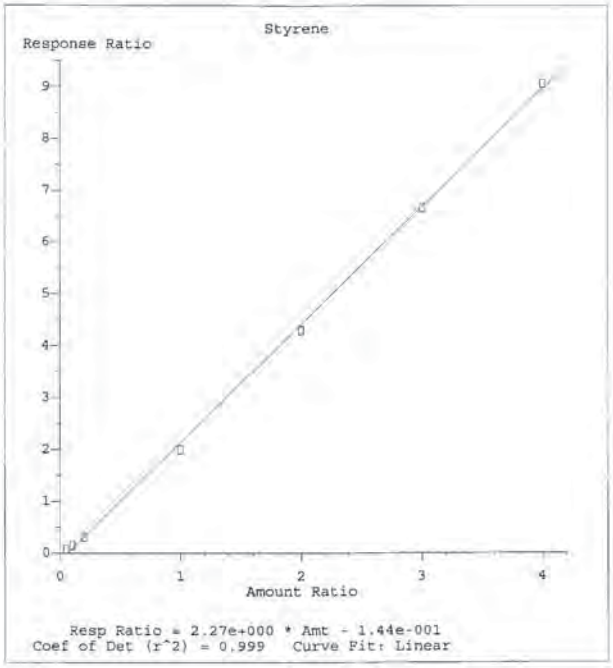
JD05VOCW.M Mon Dec 29 08:06:34 2008



Method Name: C:\HPCHEM\1\METHODS\JD05VOCW.M
Calibration Table Last Updated: Mon Dec 08 13:09:54 2008



Method Name: C:\HPCHEM\1\METHODS\JD05VOCW.M
Calibration Table Last Updated: Mon Dec 08 13:09:54 2008



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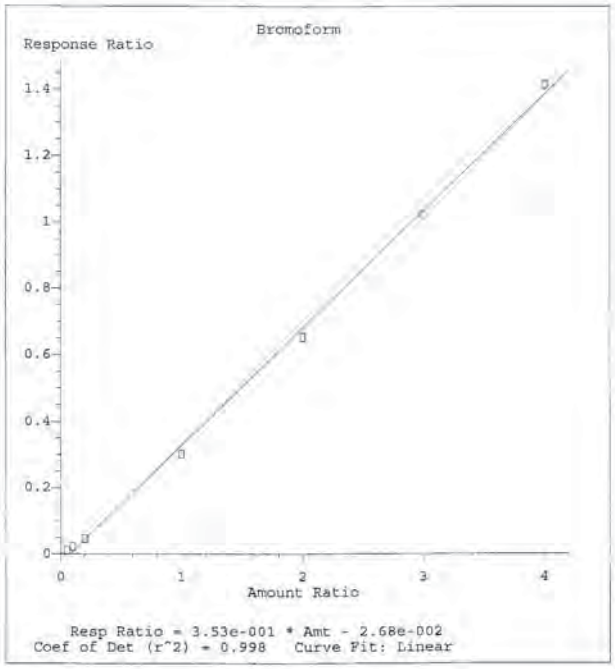
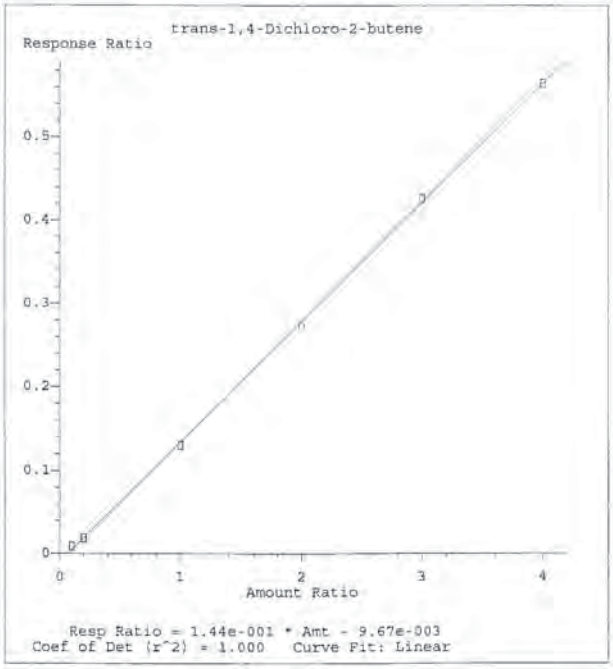
Calibration Table Last Updated: Mon Dec 08 13:09:54 2008



Method Name: C:\HPCHEM\1\METHODS\JD05VOCW.M
Calibration Table Last Updated: Mon Dec 08 13:09:54 2008



Method Name: C:\HPCHEM\1\METHODS\JD05VOCW.M
Calibration Table Last Updated: Mon Dec 08 13:09:54 2008

Data File : C:\HPCHEM\1\DATA\J7706.D
Acq On : 5 Dec 2008 10:52
Sample : ICAL 0.5 ppb
Misc : ICAL,8260W_CAL,
IntFile : RTEINT.P
Quant Time: Dec 26 9:51 2008

Vial: 37
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2051599	10.00 ug/L	0.00
45) Chlorobenzene-d5	16.49	82	734110	10.00 ug/L	0.01
59) 1,4-Dichlorobenzene-d4	20.07	152	491843	10.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	11.47	65	23721	0.47 ug/L	0.00
Spiked Amount 10.000			Recovery	= 4.70%	
46) Toluene-d8	14.25	98	88820	0.47 ug/L	0.00
Spiked Amount 10.000			Recovery	= 4.70%	
61) Bromofluorobenzene	18.26	95	29071	0.51 ug/L	0.00
Spiked Amount 10.000			Recovery	= 5.10%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.08	85	35273m	0.46 ug/L	
3) Chloromethane	4.58	50	36906m	0.47 ug/L	
4) Vinyl chloride	4.80	62	22992	0.48 ug/L	95
5) Bromomethane	5.69	94	32635	0.75 ug/L	90
6) Chloroethane	5.83	64	17726	0.46 ug/L	91
7) Trichlorofluoromethane	6.31	101	36249	0.46 ug/L	98
8) 1,1-Dichloroethene	7.40	96	24784	0.50 ug/L	95
9) Carbon disulfide	8.28	76	74486	0.48 ug/L	93
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	24817	0.45 ug/L	98
11) Methyl iodide	7.93	142	14649	0.22 ug/L	86
12) Acrolein	7.03	56	15511	2.42 ug/L #	100
13) Methylene chloride	8.16	84	33174	0.60 ug/L	98
14) Acetone	7.15	43	10857	1.16 ug/L	97
15) trans-1,2-Dichloroethene	8.66	96	27097	0.51 ug/L	84
16) Methyl acetate	7.90	43	12995	0.49 ug/L	94
17) Methyl tert-Butyl ether	8.42	73	59349	0.47 ug/L	95
18) 1,1-Dichloroethane	9.30	63	45602	0.49 ug/L	96
19) Acrylonitrile	8.32	53	25341	1.99 ug/L	93
20) Vinyl acetate	9.25	43	30383	0.47 ug/L	94
21) cis-1,2-Dichloroethene	10.22	96	28093	0.45 ug/L	95
22) 2,2-Dichloropropane	10.15	77	41400	0.54 ug/L	96
23) Bromochloromethane	10.69	128	12020	0.46 ug/L	96
24) Cyclohexane	11.12	56	42750	0.48 ug/L	99
25) Chloroform	10.45	83	47215	0.51 ug/L	100
26) Carbon tetrachloride	11.45	117	26885	0.42 ug/L	97
27) 1,1,1-Trichloroethane	11.05	97	38914	0.48 ug/L	96
28) 2-Butanone	9.90	43	13892	0.95 ug/L	97
29) 1,1-Dichloropropene	11.27	75	32723	0.45 ug/L	93
30) Benzene	11.67	78	114216	0.47 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7706.D JD05VOCW.M Fri Dec 26 09:52:14 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7706.D
Acq On : 5 Dec 2008 10:52
Sample : ICAL 0.5 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:51 2008

Vial: 37
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	11.61	62	27951	0.46 ug/L	95
33) Methylcyclohexane	12.68	83	39327	0.47 ug/L	99
34) Trichloroethene	12.54	130	29594	0.50 ug/L	95
35) Dibromomethane	13.20	93	12975	0.44 ug/L	95
36) 1,2-Dichloropropane	12.78	63	24538	0.45 ug/L #	86
37) Bromodichloromethane	13.12	83	28506	0.45 ug/L	95
38) 2-Chloroethylvinyl ether	13.45	63	29022	1.90 ug/L	96
39) cis-1,3-Dichloropropene	13.85	75	35636	0.43 ug/L	94
40) Toluene	14.36	92	67620	0.45 ug/L	99
41) 4-Methyl-2-pentanone	13.51	43	18291	0.62 ug/L	91
42) trans-1,3-Dichloropropene	14.54	75	27785	0.41 ug/L	99
43) 1,1,2-Trichloroethane	14.80	83	15890	0.44 ug/L	93
44) 2-Hexanone	14.76	43	19292	0.95 ug/L	87
47) Tetrachloroethene	15.35	166	26035	0.48 ug/L	97
48) Dibromochloromethane	15.63	129	15978	0.38 ug/L	96
49) 1,3-Dichloropropane	15.17	76	33361	0.48 ug/L	83
50) 1,2-Dibromoethane	15.93	107	15685	0.41 ug/L #	98
51) 1-Chlorohexane	16.05	91	28336	0.44 ug/L	97
52) Chlorobenzene	16.54	112	71528	0.48 ug/L	86
53) Ethylbenzene	16.58	91	116042	0.45 ug/L	99
54) 1,1,1,2-Tetrachloroethane	16.57	131	18995	0.42 ug/L #	64
55) (m+p)-Xylene	16.69	106	88979	0.86 ug/L	97
56) o-Xylene	17.35	106	39252	0.40 ug/L	92
57) Styrene	17.39	104	53381	0.36 ug/L	86
58) Bromoform	17.96	173	8517	0.39 ug/L #	88
60) Isopropylbenzene	17.86	105	88382	0.46 ug/L	99
62) Bromobenzene	18.61	156	24379	0.48 ug/L	92
63) n-Propylbenzene	18.46	91	101342	0.48 ug/L	100
64) 1,1,2,2-Tetrachloroethane	18.09	83	17842	0.42 ug/L	93
65) 2-Chlorotoluene	18.79	91	67851	0.48 ug/L	93
66) 1,3,5-Trimethylbenzene	18.68	105	69565	0.47 ug/L	99
67) 1,2,3-Trichloropropane	18.32	75	15381m	0.50 ug/L	
68) trans-1,4-Dichloro-2-buten	18.37	89	1968	0.31 ug/L #	99
69) 4-Chlorotoluene	18.84	91	68023	0.48 ug/L	96
70) tert-Butylbenzene	19.24	119	60856	0.56 ug/L	99
71) 1,2,4-Trimethylbenzene	19.29	105	66101	0.49 ug/L	100
72) sec-Butylbenzene	19.56	105	81449	0.55 ug/L	99
73) p-Isopropyltoluene	19.75	119	66527	0.55 ug/L	97
74) 1,3-Dichlorobenzene	19.97	146	40661	0.46 ug/L	99
75) 1,4-Dichlorobenzene	20.13	146	41126	0.49 ug/L	90
76) n-Butylbenzene	20.37	91	60563	0.62 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7706.D JD05VOCW.M Fri Dec 26 09:52:14 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7706.D
Acq On : 5 Dec 2008 10:52
Sample : ICAL 0.5 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:51 2008

Vial: 37
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.72	146	37195	0.45 ug/L	99
78) 1,2-Dibromo-3-chloropropan	21.89	75	2712	0.55 ug/L #	77
79) Hexachlorobutadiene	23.56	225	6864	0.55 ug/L	97
80) 1,2,4-Trichlorobenzene	23.33	180	19456	0.51 ug/L	98
81) Naphthalene	23.84	128	34512	0.39 ug/L	100
82) 1,2,3-Trichlorobenzene	24.29	180	14027	0.43 ug/L	92

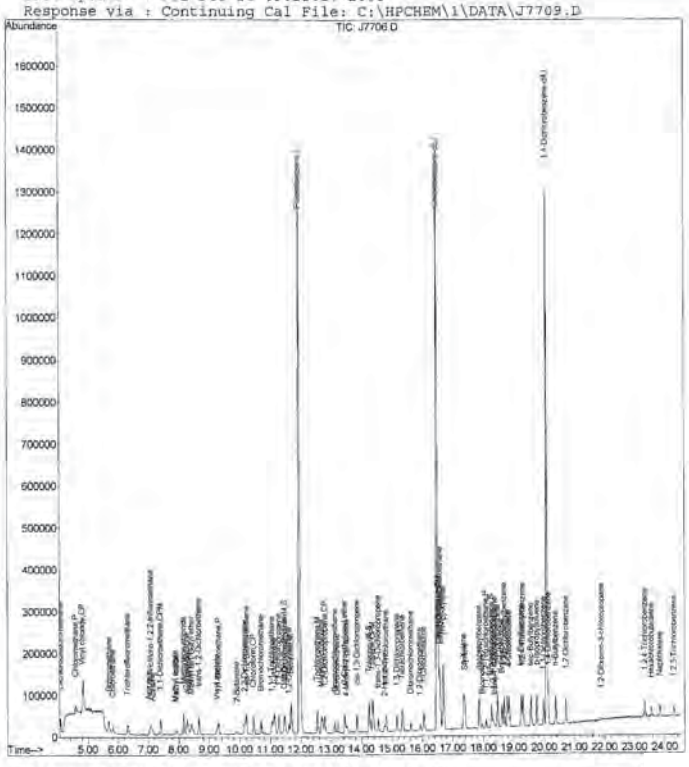
(#) = qualifier out of range (m) = manual integration
J7706.D JD05VOCW.M Fri Dec 26 09:52:14 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7706.D
Acq On : 5 Dec 2008 10:52
Sample : ICAL 0.5 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:51 2008

Vial: 37
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D



J7706.D JD05VOCW.M Fri Dec 26 09:52:17 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7707.D
Acq On : 5 Dec 2008 11:24
Sample : ICAL 1.0 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:54 2008

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2028684	10.00 ug/L	0.00
45) Chlorobenzene-d5	16.48	82	741745	10.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	20.07	152	495172	10.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	11.47	65	46979	0.94 ug/L	0.00
Spiked Amount 10.000			Recovery	= 9.40%	
46) Toluene-d8	14.25	98	180247	0.94 ug/L	0.00
Spiked Amount 10.000			Recovery	= 9.40%	
61) Bromofluorobenzene	18.26	95	60859	1.06 ug/L	0.00
Spiked Amount 10.000			Recovery	= 10.60%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.08	85	64720m	0.85 ug/L	
3) Chloromethane	4.59	50	74860m	0.97 ug/L	
4) Vinyl chloride	4.79	62	46910	0.99 ug/L	98
5) Bromomethane	5.69	94	54669	1.27 ug/L	96
6) Chloroethane	5.83	64	36121	0.94 ug/L	98
7) Trichlorofluoromethane	6.32	101	72275	0.92 ug/L	97
8) 1,1-Dichloroethene	7.39	96	46385	0.94 ug/L	97
9) Carbon disulfide	8.28	76	135924	0.89 ug/L	96
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	52406	0.97 ug/L	98
11) Methyl iodide	7.93	142	34159	0.51 ug/L	96
12) Acrolein	7.03	56	27336	4.32 ug/L #	94
13) Methylene chloride	8.16	84	56489	1.04 ug/L	97
14) Acetone	7.15	43	20883	2.26 ug/L	87
15) trans-1,2-Dichloroethene	8.66	96	51241	0.97 ug/L	84
16) Methyl acetate	7.90	43	25291	0.97 ug/L	97
17) Methyl tert-Butyl ether	8.42	73	113810	0.92 ug/L	97
18) 1,1-Dichloroethane	9.30	63	88789	0.97 ug/L	98
19) Acrylonitrile	8.32	53	53255	4.23 ug/L	96
20) Vinyl acetate	9.24	43	58364	0.92 ug/L	96
21) cis-1,2-Dichloroethene	10.21	96	57214	0.93 ug/L	97
22) 2,2-Dichloropropane	10.16	77	73814	0.96 ug/L	98
23) Bromochloromethane	10.69	128	23518	0.91 ug/L	96
24) Cyclohexane	11.13	56	79898	0.92 ug/L	97
25) Chloroform	10.44	83	87507	0.96 ug/L	100
26) Carbon tetrachloride	11.45	117	54525	0.86 ug/L	98
27) 1,1,1-Trichloroethane	11.05	97	73966	0.93 ug/L	98
28) 2-Butanone	9.90	43	26696	1.85 ug/L	96
29) 1,1-Dichloropropene	11.27	75	66582	0.93 ug/L	97
30) Benzene	11.67	78	229710	0.95 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7707.D JD05VOCW.M Fri Dec 26 09:54:37 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7707.D
Acq On : 5 Dec 2008 11:24
Sample : ICAL 1.0 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:54 2008

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	11.61	62	56370	0.95 ug/L	99
33) Methylcyclohexane	12.68	83	76391	0.93 ug/L	99
34) Trichloroethene	12.54	130	56385	0.96 ug/L	100
35) Dibromomethane	13.22	93	27263	0.93 ug/L	98
36) 1,2-Dichloropropane	12.77	63	50201	0.94 ug/L	96
37) Bromodichloromethane	13.11	83	55094	0.87 ug/L	99
38) 2-Chloroethylvinyl ether	13.44	63	65017	4.30 ug/L	98
39) cis-1,3-Dichloropropene	13.85	75	71263	0.87 ug/L	96
40) Toluene	14.37	92	136202	0.91 ug/L	99
41) 4-Methyl-2-pentanone	13.51	43	43051	1.48 ug/L	98
42) trans-1,3-Dichloropropene	14.55	75	56233	0.85 ug/L	96
43) 1,1,2-Trichloroethane	14.80	83	32867	0.92 ug/L	98
44) 2-Hexanone	14.75	43	29625	1.47 ug/L	96
47) Tetrachloroethene	15.35	166	51569	0.95 ug/L	98
48) Dibromochloromethane	15.62	129	35313	0.83 ug/L	100
49) 1,3-Dichloropropane	15.17	76	66805	0.95 ug/L	84
50) 1,2-Dibromoethane	15.93	107	34484	0.88 ug/L #	97
51) 1-Chlorohexane	16.05	91	58462	0.90 ug/L	99
52) Chlorobenzene	16.54	112	141993	0.94 ug/L	93
53) Ethylbenzene	16.57	91	228909	0.89 ug/L	99
54) 1,1,1,2-Tetrachloroethane	16.57	131	40275	0.87 ug/L	94
55) (m+p)-Xylene	16.69	106	179601	1.72 ug/L	98
56) o-Xylene	17.35	106	83131	0.83 ug/L	97
57) Styrene	17.38	104	109463	0.74 ug/L	90
58) Bromoform	17.95	173	16730	0.75 ug/L	93
60) Isopropylbenzene	17.86	105	177809	0.93 ug/L	100
62) Bromobenzene	18.61	156	51444	1.00 ug/L	99
63) n-Propylbenzene	18.46	91	195752	0.92 ug/L	98
64) 1,1,2,2-Tetrachloroethane	18.09	83	41214	0.97 ug/L	100
65) 2-Chlorotoluene	18.79	91	141113	0.98 ug/L	93
66) 1,3,5-Trimethylbenzene	18.68	105	136432	0.92 ug/L	100
67) 1,2,3-Trichloropropane	18.32	75	30508m	0.99 ug/L	
68) trans-1,4-Dichloro-2-buten	18.37	89	4411	0.68 ug/L #	78
69) 4-Chlorotoluene	18.84	91	131484	0.91 ug/L	94
70) tert-Butylbenzene	19.23	119	119165	1.09 ug/L	99
71) 1,2,4-Trimethylbenzene	19.29	105	133648	0.98 ug/L	99
72) sec-Butylbenzene	19.56	105	156421	1.05 ug/L	99
73) p-Isopropyltoluene	19.75	119	131430	1.07 ug/L	99
74) 1,3-Dichlorobenzene	19.97	146	82758	0.93 ug/L	100
75) 1,4-Dichlorobenzene	20.13	146	80896	0.97 ug/L	93
76) n-Butylbenzene	20.37	91	105828	1.07 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7707.D JD05VOCW.M Fri Dec 26 09:54:38 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7707.D
Acq On : 5 Dec 2008 11:24
Sample : ICAL 1.0 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:54 2008

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.71	146	77207	0.92 ug/L	99
78) 1,2-Dibromo-3-chloropropan	21.89	75	5331	1.07 ug/L	79
79) Hexachlorobutadiene	23.56	225	13100	1.04 ug/L	98
80) 1,2,4-Trichlorobenzene	23.34	180	36626	0.96 ug/L	93
81) Naphthalene	23.84	128	63455	0.70 ug/L	100
82) 1,2,3-Trichlorobenzene	24.29	180	26589	0.81 ug/L	99

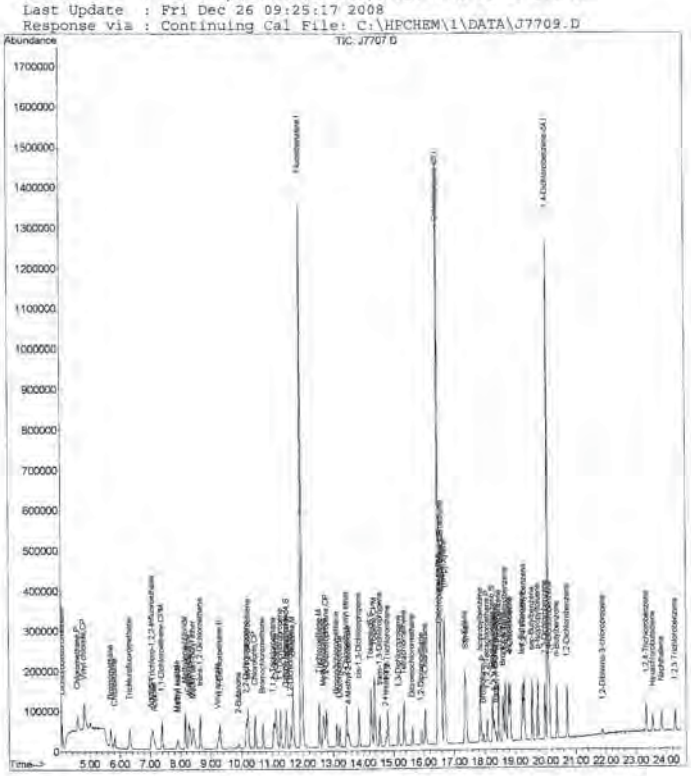
(#) = qualifier out of range (m) = manual integration
J7707.D JD05VOCW.M Fri Dec 26 09:54:38 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7707.D
Acq On : 5 Dec 2008 11:24
Sample : ICAL 1.0 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:54 2008

Vial: 38
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D



J7707.D JD05VOCW.M Fri Dec 26 09:54:40 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7708.D
Acq On : 5 Dec 2008 11:56
Sample : ICAL 2.0 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:55 2008

Vial: 39
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2021238	10.00 ug/L	0.00
45) Chlorobenzene-d5	16.47	82	740164	10.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	20.07	152	499389	10.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	11.47	65	94988	1.90 ug/L	0.00
Spiked Amount 10.000			Recovery	= 19.00%	
46) Toluene-d8	14.25	98	351336	1.85 ug/L	0.00
Spiked Amount 10.000			Recovery	= 18.50%	
61) Bromofluorobenzene	18.26	95	118504	2.04 ug/L	0.00
Spiked Amount 10.000			Recovery	= 20.40%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.08	85	129409m	1.71 ug/L	
3) Chloromethane	4.58	50	150650	1.96 ug/L	99
4) Vinyl chloride	4.80	62	86953	1.84 ug/L	98
5) Bromomethane	5.69	94	94494	2.20 ug/L	97
6) Chloroethane	5.83	64	72770	1.91 ug/L	99
7) Trichlorofluoromethane	6.32	101	145745	1.87 ug/L	99
8) 1,1-Dichloroethene	7.40	96	90466	1.85 ug/L	100
9) Carbon disulfide	8.28	76	273101	1.80 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	7.09	101	101057	1.88 ug/L	99
11) Methyl iodide	7.93	142	87431	1.32 ug/L	99
12) Acrolein	7.03	56	57638	9.14 ug/L #	97
13) Methylene chloride	8.16	84	109869	2.02 ug/L	98
14) Acetone	7.15	43	35222	3.82 ug/L	95
15) trans-1,2-Dichloroethene	8.66	96	98128	1.86 ug/L	89
16) Methyl acetate	7.90	43	49629	1.92 ug/L	99
17) Methyl tert-Butyl ether	8.42	73	234577	1.90 ug/L	98
18) 1,1-Dichloroethane	9.30	63	171558	1.88 ug/L	98
19) Acrylonitrile	8.32	53	114673	9.14 ug/L	98
20) Vinyl acetate	9.24	43	119334	1.88 ug/L	100
21) cis-1,2-Dichloroethene	10.21	96	113431	1.86 ug/L	98
22) 2,2-Dichloropropane	10.15	77	143784	1.89 ug/L	99
23) Bromochloromethane	10.69	128	48665	1.88 ug/L	98
24) Cyclohexane	11.12	56	159660	1.84 ug/L	99
25) Chloroform	10.44	83	173793	1.92 ug/L	100
26) Carbon tetrachloride	11.45	117	110899	1.76 ug/L	99
27) 1,1,1-Trichloroethane	11.06	97	148070	1.86 ug/L	97
28) 2-Butanone	9.89	43	54301	3.78 ug/L	95
29) 1,1-Dichloropropene	11.27	75	131183	1.84 ug/L	98
30) Benzene	11.67	78	457755	1.91 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7708.D JD05VOCW.M Fri Dec 26 09:56:04 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7708.D Vial: 39
Acq On : 5 Dec 2008 11:56 Operator: MSV
Sample : ICAL 2.0 ppb Inst : #3MS10
isc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:55 2008 Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	11.61	62	113636	1.91 ug/L	99
33) Methylcyclohexane	12.68	83	150432	1.83 ug/L	99
34) Trichloroethene	12.54	130	107836	1.85 ug/L	100
35) Dibromomethane	13.21	93	53753	1.85 ug/L	97
36) 1,2-Dichloropropane	12.77	63	101516	1.91 ug/L	100
37) Bromodichloromethane	13.12	83	112832	1.79 ug/L	96
38) 2-Chloroethylvinyl ether	13.44	63	140356	9.31 ug/L	99
39) cis-1,3-Dichloropropene	13.85	75	146215	1.79 ug/L	99
40) Toluene	14.36	92	271199	1.82 ug/L	99
41) 4-Methyl-2-pentanone	13.51	43	100157	3.45 ug/L	97
42) trans-1,3-Dichloropropene	14.54	75	116113	1.76 ug/L	99
43) 1,1,2-Trichloroethane	14.81	83	66159	1.87 ug/L	96
44) 2-Hexanone	14.74	43	65803	3.27 ug/L	96
47) Tetrachloroethene	15.35	166	104538	1.93 ug/L	99
48) Dibromochloromethane	15.62	129	70972	1.67 ug/L	99
49) 1,3-Dichloropropane	15.16	76	133182	1.90 ug/L	96
50) 1,2-Dibromoethane	15.94	107	69649	1.79 ug/L	99
51) 1-Chlorohexane	16.05	91	115387	1.78 ug/L	97
52) Chlorobenzene	16.54	112	278881	1.86 ug/L	98
53) Ethylbenzene	16.57	91	447432	1.74 ug/L	99
54) 1,1,1,2-Tetrachloroethane	16.57	131	79430	1.73 ug/L	99
55) (m+p)-Xylene	16.69	106	357286	3.42 ug/L	97
56) o-Xylene	17.35	106	169511	1.70 ug/L	98
57) Styrene	17.39	104	229562	1.56 ug/L	94
58) Bromoform	17.96	173	34380	1.55 ug/L	98
60) Isopropylbenzene	17.86	105	353873	1.83 ug/L	100
62) Bromobenzene	18.61	156	103752	2.01 ug/L	99
63) n-Propylbenzene	18.46	91	395176	1.84 ug/L	100
64) 1,1,2,2-Tetrachloroethane	18.09	83	82652	1.93 ug/L	98
65) 2-Chlorotoluene	18.79	91	278423	1.92 ug/L	94
66) 1,3,5-Trimethylbenzene	18.68	105	278439	1.86 ug/L	100
67) 1,2,3-Trichloropropane	18.32	75	61572m	1.98 ug/L	
68) trans-1,4-Dichloro-2-buten	18.36	89	9387	1.44 ug/L #	81
69) 4-Chlorotoluene	18.84	91	270437	1.86 ug/L	94
70) tert-Butylbenzene	19.24	119	224264	2.03 ug/L	99
71) 1,2,4-Trimethylbenzene	19.30	105	269829	1.95 ug/L	89
72) sec-Butylbenzene	19.56	105	304477	2.03 ug/L	100
73) p-Isopropyltoluene	19.75	119	256934	2.08 ug/L	99
74) 1,3-Dichlorobenzene	19.97	146	171014	1.90 ug/L	98
75) 1,4-Dichlorobenzene	20.13	146	159205	1.88 ug/L	97
76) n-Butylbenzene	20.37	91	214595	2.16 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7708.D JD05VOCW.M Fri Dec 26 09:56:05 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7708.D Vial: 39
Acq On : 5 Dec 2008 11:56 Operator: MSV
Sample : ICAL 2.0 ppb Inst : #3MS10
isc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:55 2008 Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

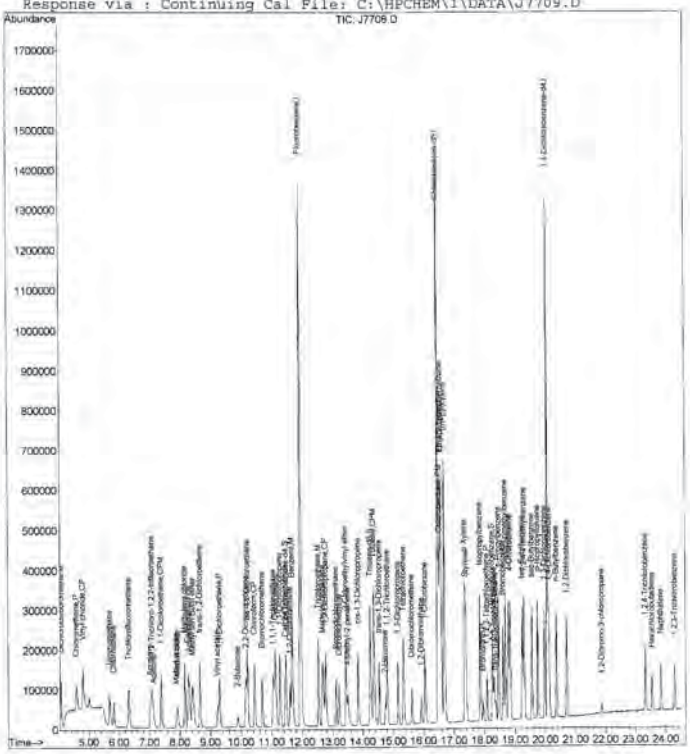
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.72	146	158430	1.88 ug/L	99
78) 1,2-Dibromo-3-chloropropan	21.88	75	10367	2.06 ug/L	85
79) Hexachlorobutadiene	23.56	225	27555	2.17 ug/L	98
80) 1,2,4-Trichlorobenzene	23.33	180	75013	1.95 ug/L	99
81) Naphthalene	23.84	128	148318	1.63 ug/L	100
82) 1,2,3-Trichlorobenzene	24.29	180	59090	1.79 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7708.D JD05VOCW.M Fri Dec 26 09:56:05 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7708.D Vial: 39
Acq On : 5 Dec 2008 11:56 Operator: MSV
Sample : ICAL 2.0 ppb Inst : #3MS10
Misc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:55 2008 Quant Results File: JD05VOCW.RES

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D



J7708.D JD05VOCW.M Fri Dec 26 09:56:07 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7709.D Vial: 40
Acq On : 5 Dec 2008 12:28 Operator: MSV
Sample : ICAL 10 ppb Inst : #3MS10
isc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:24 2008 Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:13:48 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.94	96	2013778	10.00 ug/L	0.00
45) Chlorobenzene-d5	16.47	82	746564	10.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	20.07	152	557658	10.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	11.47	65	497105	10.00 ug/L	0.00
Spiked Amount 10.000			Recovery	= 100.00%	
46) Toluene-d8	14.25	98	1920628	10.00 ug/L	0.00
Spiked Amount 10.000			Recovery	= 100.00%	
61) Bromofluorobenzene	18.26	95	647832	10.00 ug/L	0.00
Spiked Amount 10.000			Recovery	= 100.00%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.07	85	752453	10.00 ug/L	100
3) Chloromethane	4.59	50	763908	10.00 ug/L	100
4) Vinyl chloride	4.80	62	469772	10.00 ug/L	100
5) Bromomethane	5.69	94	427623	10.00 ug/L	100
6) Chloroethane	5.82	64	380048	10.00 ug/L	100
7) Trichlorofluoromethane	6.32	101	776739	10.00 ug/L	100
8) 1,1-Dichloroethene	7.40	96	488454	10.00 ug/L	100
9) Carbon disulfide	8.27	76	1514905	10.00 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	535909	10.00 ug/L	100
11) Methyl iodide	7.92	142	658845	10.00 ug/L	100
12) Acrolein	7.03	56	314020	50.00 ug/L	100
13) Methylene chloride	8.17	84	541128	10.00 ug/L	100
14) Acetone	7.14	43	183702	20.00 ug/L	100
15) trans-1,2-Dichloroethene	8.65	96	526127	10.00 ug/L	89
16) Methyl acetate	7.89	43	258128	10.00 ug/L	100
17) Methyl tert-Butyl ether	8.42	73	1228108	10.00 ug/L	100
18) 1,1-Dichloroethane	9.30	63	908935	10.00 ug/L	100
19) Acrylonitrile	8.31	53	624973	50.00 ug/L	100
20) Vinyl acetate	9.23	43	632111	10.00 ug/L	100
21) cis-1,2-Dichloroethene	10.21	96	608155	10.00 ug/L	100
22) 2,2-Dichloropropane	10.15	77	759470	10.00 ug/L	100
23) Bromochloromethane	10.70	128	257403	10.00 ug/L	100
24) Cyclohexane	11.12	56	865979	10.00 ug/L	100
25) Chloroform	10.45	83	903386	10.00 ug/L	100
26) Carbon tetrachloride	11.45	117	627793	10.00 ug/L	100
27) 1,1,1-Trichloroethane	11.06	97	792121	10.00 ug/L	100
28) 2-Butanone	9.89	43	286423	20.00 ug/L	100
29) 1,1-Dichloropropene	11.27	75	710176	10.00 ug/L	100
30) Benzene	11.68	78	2391394	10.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7709.D JD05VOCW.M Fri Dec 26 09:57:40 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7709.D
Acq On : 5 Dec 2008 12:28
Sample : ICAL 10 ppb
isc : ICAL,8260W_CAL,
.S Integration Params: RTEINT.P
Quant Time: Dec 26 9:24 2008

Vial: 40
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:13:48 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	1,2-Dichloroethane	11.61	62	592001	10.00 ug/L	100
33)	Methylcyclohexane	12.67	83	818697	10.00 ug/L	100
34)	Trichloroethene	12.54	130	581949	10.00 ug/L	100
35)	Dibromomethane	13.21	93	289483	10.00 ug/L	100
36)	1,2-Dichloropropane	12.77	63	529448	10.00 ug/L	100
37)	Bromodichloromethane	13.12	83	626856	10.00 ug/L	100
38)	2-Chloroethylvinyl ether	13.44	63	750725	50.00 ug/L	100
39)	cis-1,3-Dichloropropene	13.84	75	811617	10.00 ug/L	100
40)	Toluene	14.36	92	1481936	10.00 ug/L	100
41)	4-Methyl-2-pentanone	13.50	43	578081	20.00 ug/L	100
42)	trans-1,3-Dichloropropene	14.54	75	658350	10.00 ug/L	100
43)	1,1,2-Trichloroethane	14.80	83	353406	10.00 ug/L	100
44)	2-Hexanone	14.74	43	400693	20.00 ug/L	100
47)	Tetrachloroethene	15.34	166	547568	10.00 ug/L	100
48)	Dibromochloromethane	15.63	129	428881	10.00 ug/L	100
49)	1,3-Dichloropropane	15.16	76	708373	10.00 ug/L	100
50)	1,2-Dibromoethane	15.93	107	392822	10.00 ug/L	100
51)	1-Chlorohexane	16.05	91	655281	10.00 ug/L	100
52)	Chlorobenzene	16.54	112	1513139	10.00 ug/L	100
53)	Ethylbenzene	16.58	91	2596423	10.00 ug/L	100
54)	1,1,1,2-Tetrachloroethane	16.57	131	464145	10.00 ug/L	100
55)	(m+p)-Xylene	16.68	106	2104613	20.00 ug/L	100
56)	o-Xylene	17.35	106	1004717	10.00 ug/L	100
57)	Styrene	17.39	104	1488864	10.00 ug/L	100
58)	Bromoform	17.96	173	224206	10.00 ug/L	100
60)	Isopropylbenzene	17.85	105	2156572	10.00 ug/L	100
62)	Bromobenzene	18.60	156	576524	10.00 ug/L	100
63)	n-Propylbenzene	18.46	91	2398891	10.00 ug/L	100
64)	1,1,2,2-Tetrachloroethane	18.09	83	478304	10.00 ug/L	100
65)	2-Chlorotoluene	18.78	91	1619517	10.00 ug/L	100
66)	1,3,5-Trimethylbenzene	18.68	105	1667804	10.00 ug/L	100
67)	1,2,3-Trichloropropane	18.32	75	346833m	14.47 ug/L	
68)	trans-1,4-Dichloro-2-buten	18.36	89	72639	10.00 ug/L #	100
69)	4-Chlorotoluene	18.84	91	1622462	10.00 ug/L	100
70)	tert-Butylbenzene	19.24	119	1233148	10.00 ug/L	100
71)	1,2,4-Trimethylbenzene	19.30	105	1543171	10.00 ug/L	100
72)	sec-Butylbenzene	19.56	105	1671595	10.00 ug/L	100
73)	p-Isopropyltoluene	19.74	119	1382063	10.00 ug/L	100
74)	1,3-Dichlorobenzene	19.98	146	1004854	10.00 ug/L	100
75)	1,4-Dichlorobenzene	20.12	146	943558	10.00 ug/L	100
76)	n-Butylbenzene	20.37	91	1110919	10.00 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7709.D JD05VOCW.M Fri Dec 26 09:57:40 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7709.D
Acq On : 5 Dec 2008 12:28
Sample : ICAL 10 ppb
isc : ICAL,8260W_CAL,
.S Integration Params: RTEINT.P
Quant Time: Dec 26 9:24 2008

Vial: 40
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:13:48 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	1,2-Dichlorobenzene	20.71	146	942244	10.00 ug/L	100
78)	1,2-Dibromo-3-chloropropan	21.87	75	56089	10.00 ug/L	100
79)	Hexachlorobutadiene	23.55	225	141614	10.00 ug/L	100
80)	1,2,4-Trichlorobenzene	23.33	180	428802	10.00 ug/L	100
81)	Naphthalene	23.84	128	1014864	10.00 ug/L	100
82)	1,2,3-Trichlorobenzene	24.29	180	367682	10.00 ug/L	100

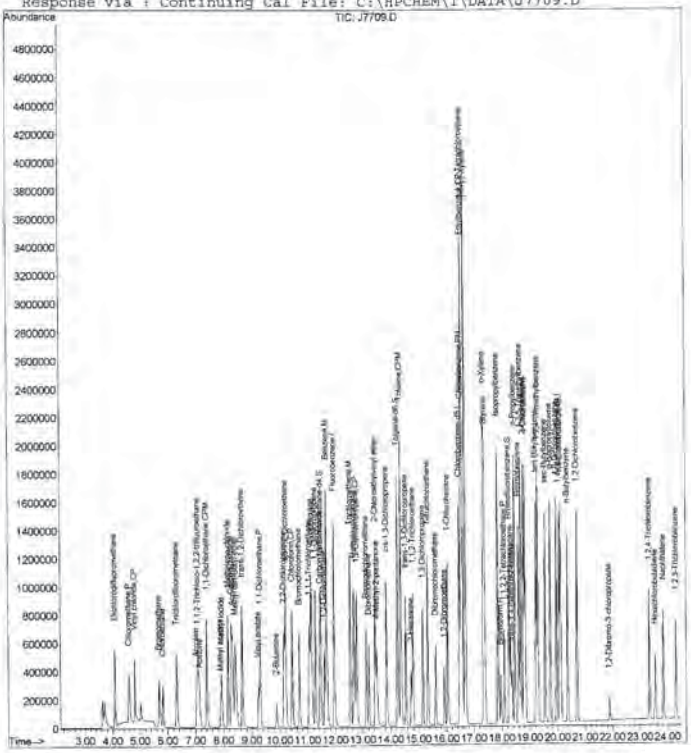
(#) = qualifier out of range (m) = manual integration
J7709.D JD05VOCW.M Fri Dec 26 09:57:41 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7709.D
Acq On : 5 Dec 2008 12:28
Sample : ICAL 10 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:24 2008

Vial: 40
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D



J7709.D JD05VOCW.M Fri Dec 26 09:57:43 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7711.D
Acq On : 5 Dec 2008 13:00
Sample : ICAL 20 ppb
isc : ICAL,8260W_CAL,
.S Integration Params: RTEINT.P
Quant Time: Dec 26 9:58 2008

Vial: 42
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2083987	10.00 ug/L	0.00
45) Chlorobenzene-d5	16.48	82	771853	10.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	20.07	152	612099	10.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	11.47	65	1007459	19.58 ug/L	0.00
Spiked Amount 10.000			Recovery	= 195.80%	
46) Toluene-d8	14.25	98	4032936	20.31 ug/L	0.00
Spiked Amount 10.000			Recovery	= 203.10%	
61) Bromofluorobenzene	18.26	95	1375378	19.34 ug/L	0.00
Spiked Amount 10.000			Recovery	= 193.40%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.08	85	1700940	21.84 ug/L	99
3) Chloromethane	4.58	50	1582216	20.01 ug/L	99
4) Vinyl chloride	4.80	62	988521	20.33 ug/L	99
5) Bromomethane	5.69	94	926562	20.94 ug/L	100
6) Chloroethane	5.83	64	803620	20.43 ug/L	100
7) Trichlorofluoromethane	6.32	101	1618778	20.14 ug/L	100
8) 1,1-Dichloroethene	7.40	96	1037645	20.53 ug/L	98
9) Carbon disulfide	8.28	76	3177529	20.27 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	1115466	20.11 ug/L	99
11) Methyl iodide	7.93	142	1416487	20.78 ug/L	100
12) Acrolein	7.03	56	659918	101.54 ug/L	99
13) Methylene chloride	8.16	84	1116126	19.93 ug/L	100
14) Acetone	7.14	43	376364	39.60 ug/L	100
15) trans-1,2-Dichloroethene	8.66	96	1099435	20.19 ug/L	90
16) Methyl acetate	7.89	43	537188	20.11 ug/L	99
17) Methyl tert-Butyl ether	8.41	73	2572006	20.24 ug/L	99
18) 1,1-Dichloroethane	9.30	63	1889263	20.09 ug/L	100
19) Acrylonitrile	8.32	53	1309893	101.27 ug/L	99
20) Vinyl acetate	9.24	43	1298178	19.85 ug/L	100
21) cis-1,2-Dichloroethene	10.21	96	1274614	20.25 ug/L	100
22) 2,2-Dichloropropane	10.15	77	1593132	20.27 ug/L	99
23) Bromochloromethane	10.69	128	534815	20.08 ug/L	98
24) Cyclohexane	11.13	56	1847501	20.62 ug/L	100
25) Chloroform	10.44	83	1869114	19.99 ug/L	99
26) Carbon tetrachloride	11.45	117	1358721	20.91 ug/L	99
27) 1,1,1-Trichloroethane	11.05	97	1658339	20.23 ug/L	100
28) 2-Butanone	9.88	43	581672	39.25 ug/L	99
29) 1,1-Dichloropropene	11.27	75	1497462	20.38 ug/L	99
30) Benzene	11.67	78	5011478	20.25 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7711.D JD05VOCW.M Fri Dec 26 09:58:50 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7711.D Vial: 42
Acq On : 5 Dec 2008 13:00 Operator: MSV
Sample : ICAL 20 ppb Inst : #3MS10
Misc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:58 2008 Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	11.61	62	1220442	19.92 ug/L	99
33) Methylcyclohexane	12.67	83	1716863	20.26 ug/L	100
34) Trichloroethene	12.54	130	1222735	20.30 ug/L	99
35) Dibromomethane	13.21	93	594016	19.83 ug/L	100
36) 1,2-Dichloropropane	12.77	63	1081007	19.73 ug/L	100
37) Bromodichloromethane	13.11	83	1340925	20.67 ug/L	99
38) 2-Chloroethylvinyl ether	13.44	63	1410492	90.78 ug/L	99
39) cis-1,3-Dichloropropene	13.85	75	1716038	20.43 ug/L	99
40) Toluene	14.37	92	3110575	20.28 ug/L	99
41) 4-Methyl-2-pentanone	13.49	43	1137037	38.01 ug/L	97
42) trans-1,3-Dichloropropene	14.54	75	1403481	20.60 ug/L	99
43) 1,1,2-Trichloroethane	14.80	83	732343	20.02 ug/L	99
44) 2-Hexanone	14.73	43	872335	42.07 ug/L	99
47) Tetrachloroethene	15.34	166	1155463	20.41 ug/L	99
48) Dibromochloromethane	15.62	129	954104	21.52 ug/L	99
49) 1,3-Dichloropropane	15.16	76	1474544	20.13 ug/L	99
50) 1,2-Dibromoethane	15.93	107	817141	20.12 ug/L	100
51) 1-Chlorohexane	16.05	91	1415625	20.90 ug/L	99
52) Chlorobenzene	16.54	112	3178795	20.32 ug/L	99
53) Ethylbenzene	16.57	91	5657493	21.08 ug/L	99
54) 1,1,1,2-Tetrachloroethane	16.57	131	1011830	21.09 ug/L	99
55) (m+p)-Xylene	16.69	106	4547565	41.80 ug/L	98
56) o-Xylene	17.35	106	2174865	20.94 ug/L	98
57) Styrene	17.38	104	3316134	21.54 ug/L	98
58) Bromoform	17.96	173	502873	21.69 ug/L	100
60) Isopropylbenzene	17.86	105	4759063	20.10 ug/L	100
62) Bromobenzene	18.61	156	1231334	19.46 ug/L	99
63) n-Propylbenzene	18.46	91	5404652	20.53 ug/L	100
64) 1,1,2,2-Tetrachloroethane	18.09	83	998004	19.01 ug/L	100
65) 2-Chlorotoluene	18.78	91	3657158	20.57 ug/L	93
66) 1,3,5-Trimethylbenzene	18.68	105	3748821	20.48 ug/L	100
67) 1,2,3-Trichloropropane	18.31	75	790060m	20.75 ug/L	
68) trans-1,4-Dichloro-2-buten	18.36	89	167135	20.96 ug/L #	95
69) 4-Chlorotoluene	18.84	91	3409895	19.15 ug/L	93
70) tert-Butylbenzene	19.24	119	2826225	20.88 ug/L	98
71) 1,2,4-Trimethylbenzene	19.29	105	3478355	20.54 ug/L	98
72) sec-Butylbenzene	19.56	105	3821025	20.83 ug/L	99
73) p-Isopropyltoluene	19.75	119	3094478	20.40 ug/L	100
74) 1,3-Dichlorobenzene	19.97	146	2218448	20.11 ug/L	99
75) 1,4-Dichlorobenzene	20.13	146	2081223	20.10 ug/L	99
76) n-Butylbenzene	20.37	91	2357260	19.33 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7711.D JD05VOCW.M Fri Dec 26 09:58:50 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7711.D Vial: 42
Acq On : 5 Dec 2008 13:00 Operator: MSV
Sample : ICAL 20 ppb Inst : #3MS10
Misc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:58 2008 Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

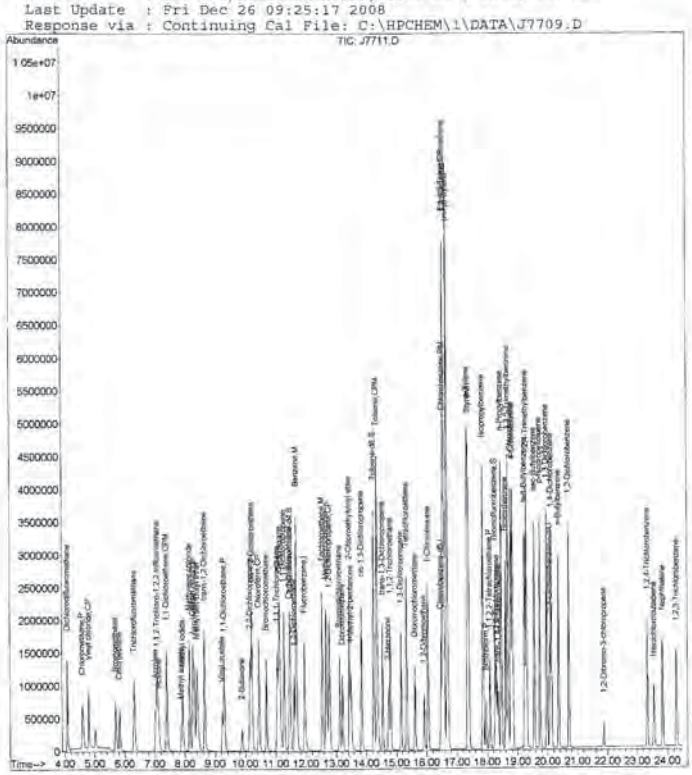
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.71	146	2051609	19.84 ug/L	99
78) 1,2-Dibromo-3-chloropropan	21.88	75	126435	20.54 ug/L	98
79) Hexachlorobutadiene	23.56	225	293545	18.88 ug/L	96
80) 1,2,4-Trichlorobenzene	23.34	180	944064	20.06 ug/L	97
81) Naphthalene	23.84	128	2168502	19.47 ug/L	100
82) 1,2,3-Trichlorobenzene	24.30	180	780587	19.34 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7711.D JD05VOCW.M Fri Dec 26 09:58:50 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7711.D Vial: 42
Acq On : 5 Dec 2008 13:00 Operator: MSV
Sample : ICAL 20 ppb Inst : #3MS10
Misc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:58 2008 Quant Results File: JD05VOCW.RES

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D



J7711.D JD05VOCW.M Fri Dec 26 09:58:53 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7712.D Vial: 43
Acq On : 5 Dec 2008 13:32 Operator: MSV
Sample : ICAL 30 ppb Inst : #3MS10
Misc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:59 2008 Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2138301	10.00 ug/L	0.00
45) Chlorobenzene-d5	16.47	82	793515	10.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	20.07	152	642812	10.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	11.47	65	1538688	29.15 ug/L	0.00
Spiked Amount 10.000			Recovery	= 291.50%	
46) Toluene-d8	14.25	98	6242171	30.58 ug/L	0.00
Spiked Amount 10.000			Recovery	= 305.80%	
61) Bromofluorobenzene	18.26	95	2171214	29.08 ug/L	0.00
Spiked Amount 10.000			Recovery	= 290.80%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.07	85	2569683	32.16 ug/L	100
3) Chloromethane	4.59	50	2335304	28.79 ug/L	99
4) Vinyl chloride	4.80	62	1504560	30.16 ug/L	94
5) Bromomethane	5.69	94	1417193	31.21 ug/L	100
6) Chloroethane	5.83	64	1219987	30.23 ug/L	100
7) Trichlorofluoromethane	6.32	101	2467591	29.92 ug/L	100
8) 1,1-Dichloroethene	7.40	96	1594780	30.75 ug/L	99
9) Carbon disulfide	8.27	76	4875708	30.31 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	1713134	30.11 ug/L	99
11) Methyl iodide	7.93	142	2180069	31.16 ug/L	100
12) Acrolein	7.03	56	1010034	151.46 ug/L	97
13) Methylene chloride	8.16	84	1701216	29.61 ug/L	100
14) Acetone	7.14	43	558551	57.27 ug/L	97
15) trans-1,2-Dichloroethene	8.65	96	1696859	30.37 ug/L	89
16) Methyl acetate	7.88	43	811174	29.60 ug/L	99
17) Methyl tert-Butyl ether	8.41	73	3963984	30.40 ug/L	99
18) 1,1-Dichloroethane	9.30	63	2901455	30.06 ug/L	100
19) Acrylonitrile	8.32	53	2014478	151.78 ug/L	99
20) Vinyl acetate	9.24	43	2076740	30.94 ug/L	100
21) cis-1,2-Dichloroethene	10.21	96	1973963	30.57 ug/L	100
22) 2,2-Dichloropropane	10.15	77	2481180	30.77 ug/L	99
23) Bromochloromethane	10.69	128	821396	30.05 ug/L	98
24) Cyclohexane	11.12	56	2842411	30.91 ug/L	99
25) Chloroform	10.44	83	2856184	29.78 ug/L	99
26) Carbon tetrachloride	11.45	117	2104620	31.57 ug/L	100
27) 1,1,1-Trichloroethane	11.05	97	2553227	30.36 ug/L	100
28) 2-Butanone	9.88	43	890843	58.58 ug/L	100
29) 1,1-Dichloropropene	11.27	75	2294956	30.43 ug/L	100
30) Benzene	11.67	78	7685700	30.27 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7712.D JD05VOCW.M Fri Dec 26 09:59:52 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7712.D
Acq On : 5 Dec 2008 13:32
Sample : ICAL 30 ppb
isc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:59 2008

Vial: 43
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	11.61	62	1852151	29.46 ug/L	100
33) Methylcyclohexane	12.66	83	2665283	30.66 ug/L	100
34) Trichloroethene	12.54	130	1863155	30.15 ug/L	100
35) Dibromomethane	13.21	93	911736	29.66 ug/L	100
36) 1,2-Dichloropropane	12.77	63	1669061	29.69 ug/L	100
37) Bromodichloromethane	13.12	83	2082016	31.28 ug/L	99
38) 2-Chloroethylvinyl ether	13.44	63	1965753	123.30 ug/L	99
39) cis-1,3-Dichloropropene	13.85	75	2671510	31.00 ug/L	98
40) Toluene	14.36	92	4839241	30.75 ug/L	100
41) 4-Methyl-2-pentanone	13.49	43	1773076	57.77 ug/L	98
42) trans-1,3-Dichloropropene	14.54	75	2203789	31.53 ug/L	98
43) 1,1,2-Trichloroethane	14.80	83	1131023	30.14 ug/L	99
44) 2-Hexanone	14.73	43	1345788	63.26 ug/L	99
47) Tetrachloroethene	15.33	166	1783312	30.64 ug/L	99
48) Dibromochloromethane	15.62	129	1514424	33.22 ug/L	100
49) 1,3-Dichloropropane	15.16	76	2271137	30.16 ug/L	98
50) 1,2-Dibromoethane	15.93	107	1261982	30.23 ug/L	98
51) 1-Chlorohexane	16.05	91	2246221	32.25 ug/L	98
52) Chlorobenzene	16.54	112	4938660	30.71 ug/L	100
53) Ethylbenzene	16.57	91	8879455	32.18 ug/L	99
54) 1,1,1,2-Tetrachloroethane	16.57	131	1612322	32.68 ug/L	99
55) (m+p)-Xylene	16.69	106	7127729	63.73 ug/L	96
56) o-Xylene	17.35	106	3420362	32.03 ug/L	100
57) Styrene	17.38	104	5283192	33.39 ug/L	98
58) Bromoform	17.96	173	810377	34.01 ug/L	100
60) Isopropylbenzene	17.86	105	7546263	30.36 ug/L	100
62) Bromobenzene	18.61	156	1922299	28.93 ug/L	99
63) n-Propylbenzene	18.46	91	8673292	31.37 ug/L	100
64) 1,1,2,2-Tetrachloroethane	18.09	83	1550953	28.13 ug/L	100
65) 2-Chlorotoluene	18.78	91	5697056	30.52 ug/L	93
66) 1,3,5-Trimethylbenzene	18.68	105	6050180	31.47 ug/L	99
67) 1,2,3-Trichloropropane	18.31	75	1202502m	30.08 ug/L	
68) trans-1,4-Dichloro-2-buten	18.36	89	274003	32.72 ug/L #	91
69) 4-Chlorotoluene	18.84	91	5491178	29.36 ug/L	94
70) tert-Butylbenzene	19.24	119	4545946	31.98 ug/L	99
71) 1,2,4-Trimethylbenzene	19.29	105	5628298	31.64 ug/L	99
72) sec-Butylbenzene	19.56	105	6261782	32.50 ug/L	100
73) p-Isopropyltoluene	19.75	119	5128248	32.19 ug/L	100
74) 1,3-Dichlorobenzene	19.97	146	3495367	30.18 ug/L	100
75) 1,4-Dichlorobenzene	20.13	146	3307467	30.41 ug/L	100
76) n-Butylbenzene	20.37	91	3815364	29.79 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7712.D JD05VOCW.M Fri Dec 26 09:59:52 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7712.D
Acq On : 5 Dec 2008 13:32
Sample : ICAL 30 ppb
isc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:59 2008

Vial: 43
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.71	146	3273966	30.14 ug/L	99
78) 1,2-Dibromo-3-chloropropan	21.88	75	210940	32.63 ug/L	98
79) Hexachlorobutadiene	23.56	225	482553	29.56 ug/L	99
80) 1,2,4-Trichlorobenzene	23.33	180	1502204	30.39 ug/L	98
81) Naphthalene	23.84	128	3370428	28.81 ug/L	100
82) 1,2,3-Trichlorobenzene	24.29	180	1249888	29.49 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7712.D JD05VOCW.M Fri Dec 26 09:59:53 2008

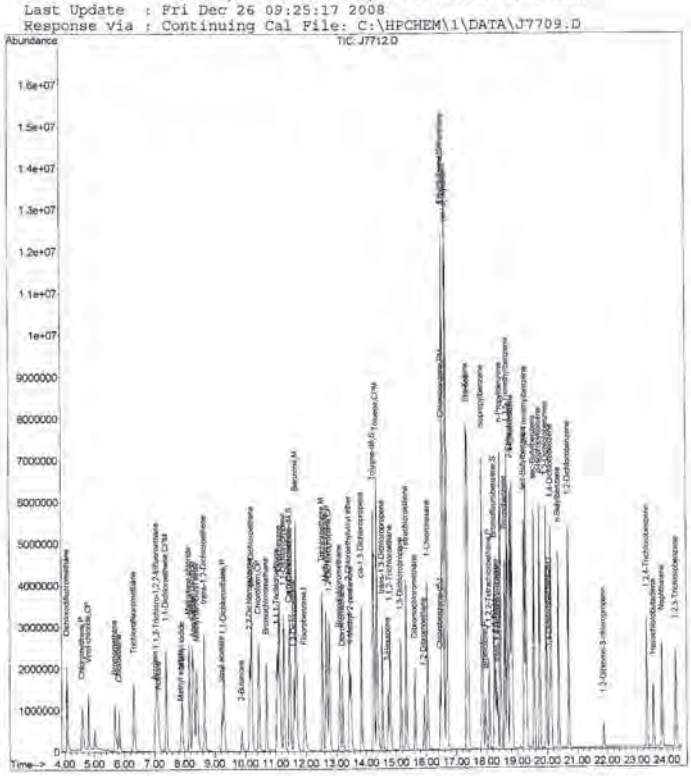
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7712.D
Acq On : 5 Dec 2008 13:32
Sample : ICAL 30 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 9:59 2008

Vial: 43
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: JD05VOCW.RES

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D



J7712.D JD05VOCW.M Fri Dec 26 09:59:55 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7713.D
Acq On : 5 Dec 2008 14:03
Sample : ICAL 40 ppb
isc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 10:00 2008

Vial: 44
Operator: MSV
Inst : #3MS10
Multiplr: 1.00

Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2229276	10.00 ug/L	0.00
45) Chlorobenzene-d5	16.47	82	802284	10.00 ug/L	0.00
59) 1,4-Dichlorobenzene-d4	20.07	152	652841	10.00 ug/L	0.00
System Monitoring Compounds					
31) 1,2-Dichloroethane-d4	11.47	65	2099659	36.15 ug/L	0.00
Spiked Amount 10.000				Recovery = 361.50%	
46) Toluene-d8	14.25	98	8546272	41.41 ug/L	0.00
Spiked Amount 10.000				Recovery = 414.10%	
61) Bromofluorobenzene	18.26	95	2361485	39.05 ug/L	0.00
Spiked Amount 10.000				Recovery = 390.50%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.07	85	3576563	42.94 ug/L	99
3) Chloromethane	4.59	50	3092421	36.57 ug/L	99
4) Vinyl chloride	4.80	62	2034486	39.12 ug/L	99
5) Bromomethane	5.69	94	2016058	42.59 ug/L	99
6) Chloroethane	5.83	64	1699238	40.39 ug/L	100
7) Trichlorofluoromethane	6.32	101	3395359	39.49 ug/L	99
8) 1,1-Dichloroethene	7.40	96	2203592	40.75 ug/L	98
9) Carbon disulfide	8.27	76	6758372	40.30 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	2362383	39.82 ug/L	99
11) Methyl iodide	7.93	142	3021109	41.42 ug/L	99
12) Acrolein	7.03	56	1408622	202.61 ug/L	100
13) Methylene chloride	8.16	84	2322257	38.77 ug/L	99
14) Acetone	7.13	43	750767	73.84 ug/L	100
15) trans-1,2-Dichloroethene	8.65	96	2328690	39.98 ug/L	89
16) Methyl acetate	7.88	43	1103414	38.61 ug/L	99
17) Methyl tert-Butyl ether	8.41	73	5394535	39.68 ug/L	99
18) 1,1-Dichloroethane	9.30	63	4007917	39.83 ug/L	100
19) Acrylonitrile	8.32	53	2755427	199.13 ug/L	99
20) Vinyl acetate	9.23	43	2990182	42.73 ug/L	100
21) cis-1,2-Dichloroethene	10.20	96	2711563	40.28 ug/L	99
22) 2,2-Dichloropropane	10.15	77	3451386	41.05 ug/L	99
23) Bromochloromethane	10.70	128	1120318	39.32 ug/L	98
24) Cyclohexane	11.12	56	3944507	41.15 ug/L	99
25) Chloroform	10.45	83	3927256	39.27 ug/L	99
26) Carbon tetrachloride	11.45	117	2935250	42.24 ug/L	99
27) 1,1,1-Trichloroethane	11.06	97	3537597	40.34 ug/L	100
28) 2-Butanone	9.88	43	1198018	75.57 ug/L	100
29) 1,1-Dichloropropene	11.27	75	3186778	40.54 ug/L	99
30) Benzene	11.68	78	10455924	39.50 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7713.D JD05VOCW.M Fri Dec 26 10:01:18 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7713.D
Acq On : 5 Dec 2008 14:03
Sample : ICAL 40 ppb
isc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 10:00 2008

Vial: 44
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 1,2-Dichloroethane	11.61	62	2523416	38.50 ug/L	99
33) Methylcyclohexane	12.67	83	3689878	40.71 ug/L	100
34) Trichloroethene	12.54	130	2580355	40.05 ug/L	100
35) Dibromomethane	13.21	93	1237192	38.61 ug/L	99
36) 1,2-Dichloropropane	12.77	63	2307539	39.37 ug/L	100
37) Bromodichloromethane	13.12	83	2884037	41.56 ug/L	99
38) 2-Chloroethylvinyl ether	13.43	63	2503266	150.61 ug/L	100
39) cis-1,3-Dichloropropene	13.85	75	3712879	41.32 ug/L	98
40) Toluene	14.36	92	6622896	40.37 ug/L	98
41) 4-Methyl-2-pentanone	13.49	43	2395970	74.68 ug/L	97
42) trans-1,3-Dichloropropene	14.54	75	3040847	41.72 ug/L	98
43) 1,1,2-Trichloroethane	14.81	83	1533517	39.20 ug/L	99
44) 2-Hexanone	14.73	43	1816630	81.91 ug/L	99
47) Tetrachloroethene	15.34	166	2467942	41.94 ug/L	100
48) Dibromochloromethane	15.62	129	2107013	45.72 ug/L	99
49) 1,3-Dichloropropane	15.16	76	3065604	40.27 ug/L	99
50) 1,2-Dibromoethane	15.92	107	1712565	40.57 ug/L	100
51) 1-Chlorohexane	16.05	91	3102932	44.06 ug/L	97
52) Chlorobenzene	16.54	112	6838088	42.05 ug/L	99
53) Ethylbenzene	16.57	91	11981422	42.94 ug/L	99
54) 1,1,1,2-Tetrachloroethane	16.57	131	2248405	45.08 ug/L	99
55) (m+p)-Xylene	16.68	106	9759708	86.30 ug/L	90
56) o-Xylene	17.35	106	4673224	43.28 ug/L	99
57) Styrene	17.38	104	7267112	45.42 ug/L	98
58) Bromoform	17.96	173	1134815	47.10 ug/L	100
60) Isopropylbenzene	17.86	105	10270900	40.68 ug/L	99
62) Bromobenzene	18.61	156	2641317	39.13 ug/L	98
63) n-Propylbenzene	18.46	91	11723477	41.75 ug/L	98
64) 1,1,2,2-Tetrachloroethane	18.09	83	2115916	37.79 ug/L	99
65) 2-Chlorotoluene	18.77	91	7724128	40.74 ug/L	93
66) 1,3,5-Trimethylbenzene	18.68	105	8343348	42.73 ug/L	100
67) 1,2,3-Trichloropropane	18.31	75	1619367m	39.88 ug/L	
68) trans-1,4-Dichloro-2-buten	18.36	89	368447	43.33 ug/L #	91
69) 4-Chlorotoluene	18.84	91	7486385	39.41 ug/L	93
70) tert-Butylbenzene	19.24	119	6377242	44.18 ug/L	99
71) 1,2,4-Trimethylbenzene	19.30	105	7814530	43.26 ug/L	99
72) sec-Butylbenzene	19.55	105	8750849	44.72 ug/L	100
73) p-Isopropyltoluene	19.74	119	7209602	44.56 ug/L	99
74) 1,3-Dichlorobenzene	19.97	146	4859774	41.31 ug/L	99
75) 1,4-Dichlorobenzene	20.12	146	4542078	41.12 ug/L	100
76) n-Butylbenzene	20.37	91	5374038	41.32 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7713.D JD05VOCW.M Fri Dec 26 10:01:19 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7713.D
Acq On : 5 Dec 2008 14:03
Sample : ICAL 40 ppb
isc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 10:00 2008

Vial: 44
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) 1,2-Dichlorobenzene	20.72	146	4490548	40.71 ug/L	99
78) 1,2-Dibromo-3-chloropropan	21.88	75	281059	42.80 ug/L	96
79) Hexachlorobutadiene	23.55	225	655974	39.57 ug/L	99
80) 1,2,4-Trichlorobenzene	23.33	180	2088650	41.61 ug/L	98
81) Naphthalene	23.84	128	4598660	38.71 ug/L	100
82) 1,2,3-Trichlorobenzene	24.29	180	1749999	40.66 ug/L	99

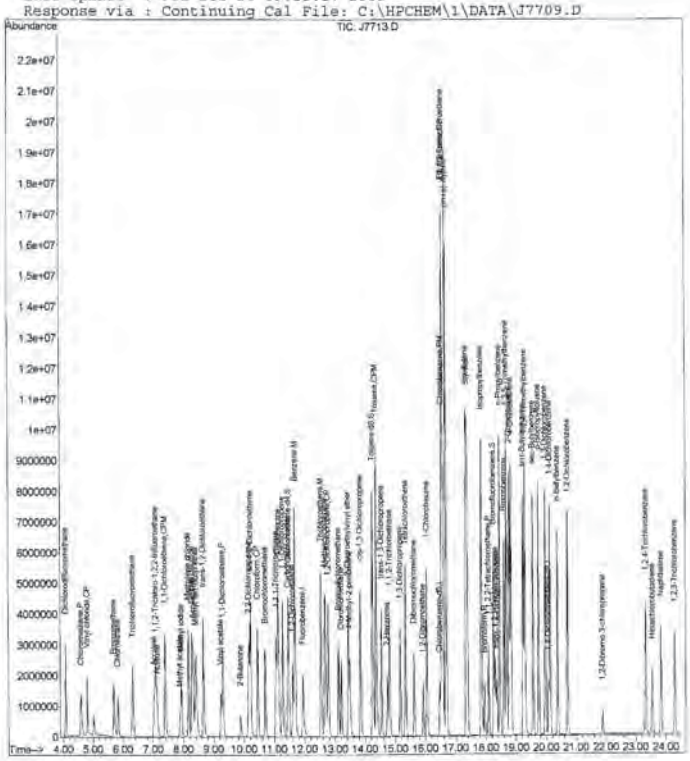
(#) = qualifier out of range (m) = manual integration
J7713.D JD05VOCW.M Fri Dec 26 10:01:19 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7713.D
Acq On : 5 Dec 2008 14:03
Sample : ICAL 40 ppb
Misc : ICAL,8260W_CAL,
MS Integration Params: RTEINT.P
Quant Time: Dec 26 10:00 2008

Vial: 44
Operator: MSV
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05VOCW.RES

Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 09:25:17 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\J7709.D



J7713.D JD05VOCW.M Fri Dec 26 10:01:21 2008

Data File : C:\HPCHEM\1\DATA\J7826.D
Acq On : 15 Dec 2008 11:41
Sample : CCV-15832
Misc : CCV ,8260W7_OLM42,
MS Integration Params: RTEINT.P

Vial: 37
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	127	0.00
2		Dichlorodifluoromethane	0.367	0.351	4.4	119	0.00
3	P	Chloromethane	0.367	0.317	13.6	106	0.00
4	CP	Vinyl chloride	0.229	0.213	7.0	116	0.00
5		Bromomethane	0.231	0.169	26.8#	101	0.00
6		Chloroethane	0.185	0.188	-1.6	126	0.00
7		Trichlorofluoromethane	0.373	0.373	0.0	123	0.00
8	CPM	1,1-Dichloroethene	0.240	0.246	-2.5	129	0.00
9		Carbon disulfide	0.729	0.732	-0.4	123	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.259	0.263	-1.5	126	0.00
11		Methylene chloride	0.277	0.263	5.1	124	0.00
12		Acetone	0.046	0.041	10.9	115	0.00
~~13~~		~~trans-1,2-Dichloroethene~~	~~0.240~~	~~0.246~~	~~-2.5~~	~~129~~	~~0.00~~
14		Methyl acetate	0.126	0.127	-0.8	125	0.00
		Methyl tert-Butyl ether	0.596	0.576	3.4	120	0.00
16	P	1,1-Dichloroethane	0.445	0.436	2.0	122	0.00
17		cis-1,2-Dichloroethene	0.294	0.301	-2.4	126	0.00
18		Cyclohexane	0.423	0.428	-1.2	126	0.00
19	CP	Chloroform	0.443	0.428	3.4	121	0.00
20		Carbon tetrachloride	0.300	0.304	-1.3	124	0.00
21		1,1,1-Trichloroethane	0.385	0.377	2.1	122	0.00
22		2-Butanone	0.068	0.062	8.8	111	0.00
23	M	Benzene	1.163	1.158	0.4	124	0.00
24	S	1,2-Dichloroethane-d4	0.237	0.221	6.8	113	0.00
25		1,2-Dichloroethane	0.284	0.270	4.9	117	0.00
26		Methylcyclohexane	0.397	0.405	-2.0	126	0.00
27	M	Trichloroethene	0.285	0.285	0.0	125	0.00
28	CP	1,2-Dichloropropane	0.254	0.252	0.8	122	0.00
29		Bromodichloromethane	0.301	0.295	2.0	120	0.00
30		cis-1,3-Dichloropropene	0.387	0.373	3.6	117	0.00
31	CPM	Toluene	0.712	0.712	0.0	123	0.00
32		4-Methyl-2-pentanone	0.130	0.126	3.1	111	0.00
33		trans-1,3-Dichloropropene	0.312	0.296	5.1	115	0.00
34		1,1,2-Trichloroethane	0.169	0.167	1.2	121	0.00
35		2-Hexanone	0.094	0.086	8.5	110	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	123	0.00
37	S	Toluene-d8	2.528	2.590	-2.5	124	0.00
38		Tetrachloroethene	0.730	0.757	-3.7	127	0.00
39		Dibromochloromethane	0.554	0.573	-3.4	123	0.00
		1,2-Dibromoethane	0.497	0.499	-0.4	117	0.00

(#) = Out of Range
J7826.D JD05NTCL.M Tue Dec 16 13:56:37 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7826.D Vial: 37
Acq On : 15 Dec 2008 11:41 Operator: JK
Sample : CCV-15832 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	2.005	2.003	0.1	122	0.00
42	CP	Ethylbenzene	3.411	3.452	-1.2	122	0.00
43		(m+p)-Xylene	1.361	1.391	-2.2	122	0.00
44		o-Xylene	1.283	1.334	-4.0	122	0.00
45		Styrene	1.872	1.965	-5.0	122	0.00
46	P	Bromoform	0.287	0.289	-0.7	119	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	126	0.00
48		Isopropylbenzene	3.761	3.765	-0.1	123	0.00
49	S	Bromofluorobenzene	1.163	1.126	3.2	123	0.00
50	P	1,1,2,2-Tetrachloroethane	0.810	0.784	3.2	116	0.00
51		1,3-Dichlorobenzene	1.761	1.770	-0.5	124	0.00
52		1,4-Dichlorobenzene	1.678	1.656	1.3	124	0.00
53		1,2-Dichlorobenzene	1.634	1.607	1.7	120	0.00
		1,2-Dibromo-3-chloropropane	0.106	0.085	19.8	107	0.00
55		1,2,4-Trichlorobenzene	0.772	0.732	5.2	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7826.D JD05NTCL.M Tue Dec 16 13:56:38 2008 P: 396

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7826.D Vial: 37
Acq On : 15 Dec 2008 11:41 Operator: JK
Sample : CCV-15832 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	10.000	10.000	0.0	127	0.00
2		Dichlorodifluoromethane	10.000	9.572	4.3	119	0.00
3	P	Chloromethane	10.000	8.629	13.7	106	0.00
4	CP	Vinyl chloride	10.000	9.319	6.8	116	0.00
5		Bromomethane	10.000	7.342	26.6#	101	0.00
6		Chloroethane	10.000	10.180	-1.8	126	0.00
7		Trichlorofluoromethane	10.000	10.005	-0.1	123	0.00
8	CPM	1,1-Dichloroethene	10.000	10.252	-2.5	129	0.00
9		Carbon disulfide	10.000	10.044	-0.4	123	0.00
10		1,1,2-Trichloro-1,2,2-trifl	10.000	10.153	-1.5	126	0.00
11		Methylene chloride	10.000	9.511	4.9	124	0.00
12		Acetone	20.000	17.788	11.1	115	0.00
~~13~~		~~trans-1,2-Dichloroethene~~	~~10.000~~	~~10.252~~	~~-2.5~~	~~129~~	~~0.00~~
14		Methyl acetate	10.000	10.061	-0.6	125	0.00
		Methyl tert-Butyl ether	10.000	9.665	3.4	120	0.00
16	P	1,1-Dichloroethane	10.000	9.800	2.0	122	0.00
17		cis-1,2-Dichloroethene	10.000	10.241	-2.4	126	0.00
18		Cyclohexane	10.000	10.105	-1.1	126	0.00
19	CP	Chloroform	10.000	9.648	3.5	121	0.00
20		Carbon tetrachloride	10.000	10.141	-1.4	124	0.00
21		1,1,1-Trichloroethane	10.000	9.792	2.1	122	0.00
22		2-Butanone	20.000	18.208	9.0	111	0.00
23	M	Benzene	10.000	9.960	0.4	124	0.00
24	S	1,2-Dichloroethane-d4	10.000	9.298	7.0	113	0.00
25		1,2-Dichloroethane	10.000	9.503	5.0	117	0.00
26		Methylcyclohexane	10.000	10.193	-1.9	126	0.00
27	M	Trichloroethene	10.000	9.994	0.1	125	0.00
28	CP	1,2-Dichloropropane	10.000	9.915	0.9	122	0.00
29		Bromodichloromethane	10.000	9.782	2.2	120	0.00
30		cis-1,3-Dichloropropene	10.000	9.638	3.6	117	0.00
31	CPM	Toluene	10.000	10.007	-0.1	123	0.00
32		4-Methyl-2-pentanone	20.000	19.299	3.5	111	0.00
33		trans-1,3-Dichloropropene	10.000	9.502	5.0	115	0.00
34		1,1,2-Trichloroethane	10.000	9.894	1.1	121	0.00
35		2-Hexanone	20.000	18.320	8.4	110	0.00
36	I	Chlorobenzene-d5	10.000	10.000	0.0	123	0.00
37	S	Toluene-d8	10.000	10.248	-2.5	124	0.00
38		Tetrachloroethene	10.000	10.374	-3.7	127	0.00
39		Dibromochloromethane	10.000	9.348	6.5	123	0.00
		1,2-Dibromoethane	10.000	10.026	-0.3	117	0.00

(#) = Out of Range
J7826.D JD05NTCL.M Tue Dec 16 13:56:43 2008 P 397

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7826.D Vial: 37
Acq On : 15 Dec 2008 11:41 Operator: JK
Sample : CCV-15832 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	10.000	9.989	0.1	122	0.00
42	CP	Ethylbenzene	10.000	10.120	-1.2	122	0.00
43		(m+p)-Xylene	20.000	20.441	-2.2	122	0.00
44		o-Xylene	10.000	10.398	-4.0	122	0.00
45		Styrene	10.000	9.272	7.3	122	0.00
46	P	Bromoform	10.000	8.935	10.6	119	0.00
47	I	1,4-Dichlorobenzene-d4	10.000	10.000	0.0	126	0.00
48		Isopropylbenzene	10.000	10.009	-0.1	123	0.00
49	S	Bromofluorobenzene	10.000	9.677	3.2	123	0.00
50	P	1,1,2,2-Tetrachloroethane	10.000	9.679	3.2	116	0.00
51		1,3-Dichlorobenzene	10.000	10.054	-0.5	124	0.00
52		1,4-Dichlorobenzene	10.000	9.868	1.3	124	0.00
53		1,2-Dichlorobenzene	10.000	9.830	1.7	120	0.00
		1,2-Dibromo-3-chloropropane	10.000	8.035	19.6	107	0.00
55		1,2,4-Trichlorobenzene	10.000	9.484	5.2	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7826.D JD05NTCL.M Tue Dec 16 13:56:44 2008 P 398

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7826.D Vial: 37
Acq On : 15 Dec 2008 11:41 Operator: JK
Sample : CCV-15832, 15831 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 11:53:45 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	127	0.00
2		trans-1,2-Dichloroethene	0.259	0.260	-0.4	126	0.00

12-29-08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7826.D JD05T12W.M Mon Dec 29 05:51:48 2008 Pa 399

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7826.D
Acq On : 15 Dec 2008 11:41
Sample : CCV-15832
Misc : CCV ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008

Vial: 37
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2553783	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.47	82	920934	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	705324	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	563674	9.30 ug/L	0.00
Spiked Amount 10.000			Recovery = 93.00%		
37) Toluene-d8	14.25	98	2385592	10.25 ug/L	0.00
Spiked Amount 10.000			Recovery = 102.50%		
49) Bromofluorobenzene	18.26	95	794006	9.68 ug/L	0.00
Spiked Amount 10.000			Recovery = 96.80%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.07	85	896260	9.57 ug/L	99
3) Chloromethane	4.59	50	808809	8.63 ug/L	100
4) Vinyl chloride	4.80	62	545215	9.32 ug/L	98
5) Bromomethane	5.69	94	432787	7.34 ug/L	98
6) Chloroethane	5.83	64	480266	10.18 ug/L	98
7) Trichlorofluoromethane	6.32	101	952600	10.01 ug/L	99
8) 1,1-Dichloroethene	7.40	96	628858	10.25 ug/L	96
9) Carbon disulfide	8.27	76	1870437	10.04 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	7.09	101	672676	10.15 ug/L	98
11) Methylene chloride	8.16	84	671700	9.51 ug/L	97
12) Acetone	7.13	43	210482	17.79 ug/L	(#) 96
~~13) trans-1,2-Dichloroethene~~	~~7.40~~	~~96~~	~~628858~~	~~10.25 ug/L~~	~~96~~
14) Methyl acetate	7.89	43	323511	10.06 ug/L 1-9-09	99
15) Methyl tert-Butyl ether	8.42	73	1470223	9.66 ug/L	98
16) 1,1-Dichloroethane	9.30	63	1113007	9.80 ug/L	100
17) cis-1,2-Dichloroethene	10.22	96	768161	10.24 ug/L	98
18) Cyclohexane	11.12	56	1092799	10.10 ug/L	99
19) Chloroform	10.45	83	1092603	9.65 ug/L	99
20) Carbon tetrachloride	11.45	117	777040	10.14 ug/L	99
21) 1,1,1-Trichloroethane	11.06	97	963199	9.79 ug/L	99
22) 2-Butanone	9.69	43	317638	18.21 ug/L	98
23) Benzene	11.68	78	2957175	9.96 ug/L	100
25) 1,2-Dichloroethane	11.61	62	689907	9.50 ug/L	99
26) Methylcyclohexane	12.67	83	1033714	10.19 ug/L	99
27) Trichloroethene	12.54	130	727510	9.99 ug/L	99
28) 1,2-Dichloropropane	12.77	63	643546	9.92 ug/L	99
29) Bromodichloromethane	13.12	83	752847	9.78 ug/L	100
30) cis-1,3-Dichloropropene	13.85	75	952175	9.64 ug/L	97
31) Toluene	14.36	92	1818447	10.01 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7826.D JD05NTCL.M Tue Dec 16 13:56:48 2008

Data File : C:\HPCHEM\1\DATA\J7826.D
Acq On : 15 Dec 2008 11:41
Sample : CCV-15832
Misc : CCV ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008

Vial: 37
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	642724	19.30 ug/L	99
33) trans-1,3-Dichloropropene	14.54	75	756916	9.50 ug/L	98
34) 1,1,2-Trichloroethane	14.81	83	425944	9.89 ug/L	100
35) 2-Hexanone	14.74	43	440673	18.32 ug/L	98
38) Tetrachloroethene	15.34	166	697534	10.37 ug/L	99
39) Dibromochloromethane	15.63	129	528041	9.35 ug/L	99
40) 1,2-Dibromoethane	15.94	107	459309	10.03 ug/L	100
41) Chlorobenzene	16.54	112	1844909	9.99 ug/L	99
42) Ethylbenzene	16.58	91	3178813	10.12 ug/L	99
43) (m+p)-Xylene	16.68	106	2562729	20.44 ug/L	100
44) o-Xylene	17.35	106	1228791	10.40 ug/L	99
45) Styrene	17.39	104	1809929	9.27 ug/L	98
46) Bromoform	17.96	173	265969	8.93 ug/L	99
48) Isopropylbenzene	17.86	105	2655211	10.01 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.09	83	553243	9.68 ug/L	99
51) 1,3-Dichlorobenzene	19.97	146	1248504	10.05 ug/L	99
52) 1,4-Dichlorobenzene	20.12	146	1167944	9.87 ug/L	99
53) 1,2-Dichlorobenzene	20.72	146	1133138	9.83 ug/L	99
54) 1,2-Dibromo-3-chloropropan	21.88	75	60121	8.03 ug/L	100
55) 1,2,4-Trichlorobenzene	23.33	180	516130	9.48 ug/L	97

(#) = qualifier out of range (m) = manual integration
J7826.D JD05NTCL.M Tue Dec 16 13:56:48 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7826.D
Acq On : 15 Dec 2008 11:41
Sample : CCV-15832, 15831 JK 12/29/08
Misc : CCV ,8260W7_OLM42,
S Integration Params: RTEINT.P
Quant Time: Dec 29 5:51 2008

Vial: 37
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Fri Dec 26 11:53:45 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2553783	10.00 ug/L	0.00
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.65	96	664088	10.06 ug/L	88

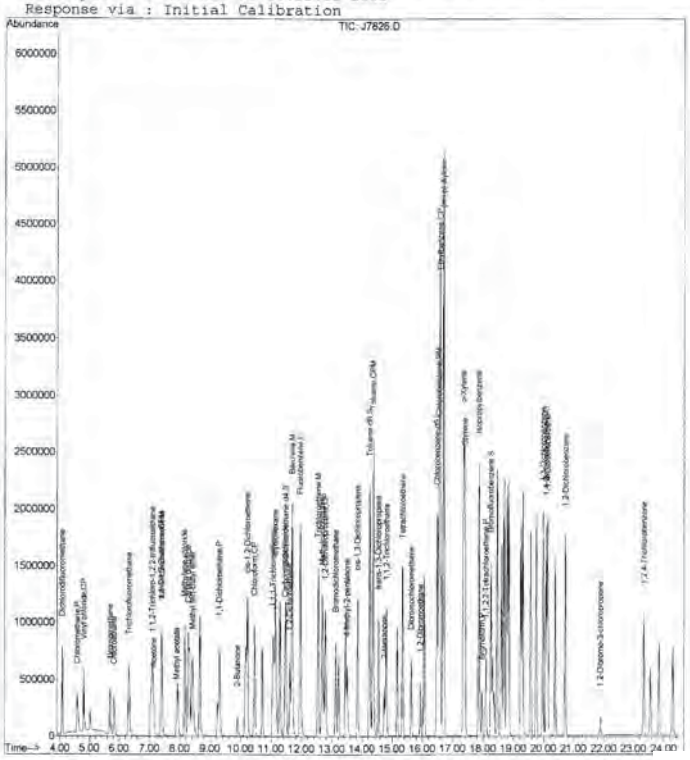
(#) = qualifier out of range (m) = manual integration
J7826.D JD05T12W.M Mon Dec 29 05:51:43 2008

Quantitative Report

Data File : C:\HPCHEM\1\DATA\J7826.D
Acq On : 15 Dec 2008 11:41
Sample : CCV-15832
Misc : CCV ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008

Vial: 37
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration



J7826.D JD05NTCL.M Tue Dec 16 13:56:50 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15857 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	86	0.00
2		Dichlorodifluoromethane	0.367	0.378	-3.0	87	0.00
3	P	Chloromethane	0.367	0.373	-1.6	85	0.00
4	CP	Vinyl chloride	0.229	0.252	-10.0	93	0.00
5		Bromomethane	0.231	0.183	20.8#	74	0.00
6		Chloroethane	0.185	0.197	-6.5	90	0.00
7		Trichlorofluoromethane	0.373	0.393	-5.4	88	0.00
8	CPM	1,1-Dichloroethene	0.240	0.233	2.9	83	0.00
9		Carbon disulfide	0.729	0.746	-2.3	85	0.00
10		1,1,2-Trichloro-1,2,2-trifl	0.259	0.270	-4.2	87	0.00
11		Methylene chloride	0.277	0.261	5.8	84	0.00
12		Acetone	0.046	0.042	8.7	80	0.00
~~13~~		~~trans-1,2-Dichloroethene~~	~~0.240~~	~~0.233~~	~~2.9~~	~~83~~	~~0.00~~
14		Methyl acetate	0.126	0.129	-2.4	87	0.00
		Methyl tert-Butyl ether	0.596	0.545	8.6	77	0.00
16	P	1,1-Dichloroethane	0.445	0.444	0.2	84	0.00
17		cis-1,2-Dichloroethene	0.294	0.291	1.0	83	0.00
18		Cyclohexane	0.423	0.427	-0.9	85	0.00
19	CP	Chloroform	0.443	0.433	2.3	83	0.00
20		Carbon tetrachloride	0.300	0.302	-0.7	83	0.00
21		1,1,1-Trichloroethane	0.385	0.368	4.4	80	0.00
22		2-Butanone	0.068	0.062	8.8	75	0.00
23	M	Benzene	1.163	1.160	0.3	84	0.00
24	S	1,2-Dichloroethane-d4	0.237	0.233	1.7	81	0.00
25		1,2-Dichloroethane	0.284	0.279	1.8	82	0.00
26		Methylcyclohexane	0.397	0.391	1.5	83	0.00
27	M	Trichloroethene	0.285	0.269	5.6	80	0.00
28	CP	1,2-Dichloropropane	0.254	0.257	-1.2	84	0.00
29		Bromodichloromethane	0.301	0.297	1.3	82	0.00
30		cis-1,3-Dichloropropene	0.387	0.364	5.9	78	0.00
31	CPM	Toluene	0.712	0.709	0.4	83	0.00
32		4-Methyl-2-pentanone	0.130	0.127	2.3	76	0.00
33		trans-1,3-Dichloropropene	0.312	0.293	6.1	77	0.00
34		1,1,2-Trichloroethane	0.169	0.169	0.0	83	0.00
35		2-Hexanone	0.094	0.082	12.8	71	0.00
36	I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00
37	S	Toluene-d8	2.528	2.465	2.5	83	0.00
38		Tetrachloroethene	0.730	0.697	4.5	82	0.00
9		Dibromochloromethane	0.554	0.532	4.0	80	0.00
J		1,2-Dibromoethane	0.497	0.474	4.6	78	0.00

(W) 1-9-09

(#) = Out of Range
J7852.D JD05NTCL.M Thu Dec 18 11:03:17 2008

Giselle Stallock 12/18/08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15857 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	2.005	1.922	4.1	82	0.00
42	CP	Ethylbenzene	3.411	3.346	1.9	83	0.00
43		(m+p)-Xylene	1.361	1.342	1.4	82	0.00
44		o-Xylene	1.283	1.250	2.6	80	0.00
45		Styrene	1.872	1.865	0.4	81	0.00
46	P	Bromoform	0.287	0.264	8.0	76	0.00
47	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	88	0.00
48		Isopropylbenzene	3.761	3.531	6.1	81	0.00
49	S	Bromofluorobenzene	1.163	1.075	7.6	82	0.00
50	P	1,1,2,2-Tetrachloroethane	0.810	0.779	3.8	80	0.00
51		1,3-Dichlorobenzene	1.761	1.690	4.0	83	0.00
52		1,4-Dichlorobenzene	1.678	1.592	5.1	83	0.00
53		1,2-Dichlorobenzene	1.634	1.554	4.9	81	0.00
		1,2-Dibromo-3-chloropropane	0.106	0.076	28.3#	67	0.00
55		1,2,4-Trichlorobenzene	0.772	0.654	15.3	75	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7852.D JD05NTCL.M Thu Dec 18 11:03:18 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15857 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	10.000	10.000	0.0	86	0.00
2		Dichlorodifluoromethane	10.000	10.304	-3.0	87	0.00
3	P	Chloromethane	10.000	10.163	-1.6	85	0.00
4	CP	Vinyl chloride	10.000	11.019	-10.2	93	0.00
5		Bromomethane	10.000	7.939	20.6#	74	0.00
6		Chloroethane	10.000	10.668	-6.7	90	0.00
7		Trichlorofluoromethane	10.000	10.552	-5.5	88	0.00
8	CPM	1,1-Dichloroethene	10.000	9.697	3.0	83	0.00
9		Carbon disulfide	10.000	10.237	-2.4	85	0.00
10		1,1,2-Trichloro-1,2,2-trifl	10.000	10.411	-4.1	87	0.00
11		Methylene chloride	10.000	9.452	5.5	84	0.00
12		Acetone	20.000	18.285	8.6	80	0.00
~~13~~		~~trans-1,2-Dichloroethene~~	~~10.000~~	~~9.697~~	~~3.0~~	~~83~~	~~0.00~~
14		Methyl acetate	10.000	10.270	-2.7	87	0.00
		Methyl tert-Butyl ether	10.000	9.142	8.6	77	0.00
16	P	1,1-Dichloroethane	10.000	9.975	0.3	84	0.00
17		cis-1,2-Dichloroethene	10.000	9.907	0.9	83	0.00
18		Cyclohexane	10.000	10.078	-0.8	85	0.00
19	CP	Chloroform	10.000	9.770	2.3	83	0.00
20		Carbon tetrachloride	10.000	10.062	-0.6	83	0.00
21		1,1,1-Trichloroethane	10.000	9.556	4.4	80	0.00
22		2-Butanone	20.000	18.107	9.5	75	0.00
23	M	Benzene	10.000	9.978	0.2	84	0.00
24	S	1,2-Dichloroethane-d4	10.000	9.822	1.8	81	0.00
25		1,2-Dichloroethane	10.000	9.822	1.8	82	0.00
26		Methylcyclohexane	10.000	9.838	1.6	83	0.00
27	M	Trichloroethene	10.000	9.448	5.5	80	0.00
28	CP	1,2-Dichloropropane	10.000	10.095	-1.0	84	0.00
29		Bromodichloromethane	10.000	9.850	1.5	82	0.00
30		cis-1,3-Dichloropropene	10.000	9.415	5.9	78	0.00
31	CPM	Toluene	10.000	9.968	0.3	83	0.00
32		4-Methyl-2-pentanone	20.000	19.459	2.7	76	0.00
33		trans-1,3-Dichloropropene	10.000	9.396	6.0	77	0.00
34		1,1,2-Trichloroethane	10.000	10.012	-0.1	83	0.00
35		2-Hexanone	20.000	17.442	12.8	71	0.00
36	I	Chlorobenzene-d5	10.000	10.000	0.0	86	0.00
37	S	Toluene-d8	10.000	9.751	2.5	83	0.00
38		Tetrachloroethene	10.000	9.547	4.5	82	0.00
9		Dibromochloromethane	10.000	8.716	12.8	80	0.00
J		1,2-Dibromoethane	10.000	9.526	4.7	78	0.00

(W) 1-9-09

(#) = Out of Range
J7852.D JD05NTCL.M Thu Dec 18 11:02:59 2008

Giselle Stallock 12/18/08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15857 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	PM	Chlorobenzene	10.000	9.584	4.2	82	0.00
42	CP	Ethylbenzene	10.000	9.811	1.9	83	0.00
43		(m+p)-Xylene	20.000	19.722	1.4	82	0.00
44		o-Xylene	10.000	9.743	2.6	80	0.00
45		Styrene	10.000	8.832	11.7	81	0.00
46	P	Bromoform	10.000	8.219	17.8	76	0.00
47	I	1,4-Dichlorobenzene-d4	10.000	10.000	0.0	88	0.00
48		Isopropylbenzene	10.000	9.388	6.1	81	0.00
49	S	Bromofluorobenzene	10.000	9.238	7.6	82	0.00
50	P	1,1,2,2-Tetrachloroethane	10.000	9.610	3.9	80	0.00
51		1,3-Dichlorobenzene	10.000	9.597	4.0	83	0.00
52		1,4-Dichlorobenzene	10.000	9.488	5.1	83	0.00
53		1,2-Dichlorobenzene	10.000	9.505	4.9	81	0.00
		1,2-Dibromo-3-chloropropane	10.000	7.158	28.4#	67	0.00
55		1,2,4-Trichlorobenzene	10.000	8.478	15.2	75	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7852.D JD05NTCL.M Thu Dec 18 11:02:59 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15860, 15857, 15859 JK 12/29/08 Inst : #3MS10
Misc : CCV ,624W, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 05:51:50 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	86	0.00
2	trans-1,2-Dichloroethene	0.259	0.252	2.7	83	0.00

12-29-08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J7852.D JD05T12W.M Mon Dec 29 06:01:44 2008 Pag

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15857 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:49 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1730650	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.47	82	645110	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	492728	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	403506	9.82 ug/L	0.00
Spiked Amount 10.000			Recovery	= 98.20%	
37) Toluene-d8	14.25	98	1590074	9.75 ug/L	0.00
Spiked Amount 10.000			Recovery	= 97.50%	
49) Bromofluorobenzene	18.26	95	529513	9.24 ug/L	0.00
Spiked Amount 10.000			Recovery	= 92.40%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.08	85	653790	10.30 ug/L	99
3) Chloromethane	4.58	50	645577	10.16 ug/L	98
4) Vinyl chloride	4.80	62	436889	11.02 ug/L	96
5) Bromomethane	5.69	94	317118	7.94 ug/L	99
6) Chloroethane	5.84	64	341061	10.67 ug/L	99
7) Trichlorofluoromethane	6.32	101	680853	10.55 ug/L	98
8) 1,1-Dichloroethene	7.40	96	403068	9.70 ug/L	98
9) Carbon disulfide	8.27	76	1291885	10.24 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	7.09	101	467447	10.41 ug/L	99
11) Methylene chloride	8.17	84	452378	9.45 ug/L	97
12) Acetone	7.14	43	146631	18.29 ug/L	89
~~13) trans-1,2-Dichloroethene~~	~~7.40~~	~~96~~	~~403068~~	~~9.70 ug/L~~	~~97~~
14) Methyl acetate	7.89	43	223790	10.27 ug/L	99
15) Methyl tert-Butyl ether	8.42	73	942450	9.14 ug/L	100
16) 1,1-Dichloroethane	9.30	63	767706	9.97 ug/L	99
17) cis-1,2-Dichloroethene	10.21	96	503635	9.91 ug/L	98
18) Cyclohexane	11.12	56	738580	10.08 ug/L	97
19) Chloroform	10.45	83	749802	9.77 ug/L	100
20) Carbon tetrachloride	11.45	117	522453	10.06 ug/L	98
21) 1,1,1-Trichloroethane	11.06	97	637008	9.56 ug/L	99
22) 2-Butanone	9.89	43	214061	18.11 ug/L	96
23) Benzene	11.68	78	2007666	9.98 ug/L	100
25) 1,2-Dichloroethane	11.61	62	483248	9.82 ug/L	99
26) Methylcyclohexane	12.67	83	676122	9.84 ug/L	98
27) Trichloroethene	12.54	130	466084	9.45 ug/L	97
28) 1,2-Dichloropropane	12.78	63	444028	10.10 ug/L	99
29) Bromodichloromethane	13.12	83	513744	9.85 ug/L	99
30) cis-1,3-Dichloropropene	13.84	75	630306	9.41 ug/L	99
31) Toluene	14.36	92	1227486	9.97 ug/L	100

1-9-09

(#) = qualifier out of range (m) = manual integration
J7852.D JD05NTCL.M Thu Dec 18 11:01:00 2008 Pa

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15857 Inst : #3MS10
Misc : CCV ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:49 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	439181	19.46 ug/L	97
33) trans-1,3-Dichloropropene	14.54	75	507251	9.40 ug/L	98
34) 1,1,2-Trichloroethane	14.81	83	292092	10.01 ug/L	96
35) 2-Hexanone	14.74	43	284319	17.44 ug/L	98
38) Tetrachloroethene	15.34	166	449678	9.55 ug/L	99
39) Dibromochloromethane	15.63	129	343155	8.72 ug/L	99
40) 1,2-Dibromoethane	15.93	107	305692	9.53 ug/L	98
41) Chlorobenzene	16.54	112	1239995	9.58 ug/L	99
42) Ethylbenzene	16.58	91	2158772	9.81 ug/L	99
43) (m+p)-Xylene	16.68	106	1732105	19.72 ug/L	98
44) o-Xylene	17.35	106	806584	9.74 ug/L	99
45) Styrene	17.39	104	1203234	8.83 ug/L	100
46) Bromoform	17.96	173	170003	8.22 ug/L	99
48) Isopropylbenzene	17.85	105	1739802	9.39 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.09	83	383730	9.61 ug/L	99
51) 1,3-Dichlorobenzene	19.98	146	832548	9.60 ug/L	99
52) 1,4-Dichlorobenzene	20.12	146	784508	9.49 ug/L	99
53) 1,2-Dichlorobenzene	20.71	146	765466	9.51 ug/L	100
54) 1,2-Dibromo-3-chloropropan	21.89	75	37417	7.16 ug/L	97
55) 1,2,4-Trichlorobenzene	23.33	180	322309	8.48 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7852.D JD05NTCL.M Thu Dec 18 11:01:01 2008 Pa

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15860, 15857, 15859 JK 12/29/08 Inst : #3MS10
Misc : CCV ,624W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:01 2008 Quant Results File: JD05T12W.RES

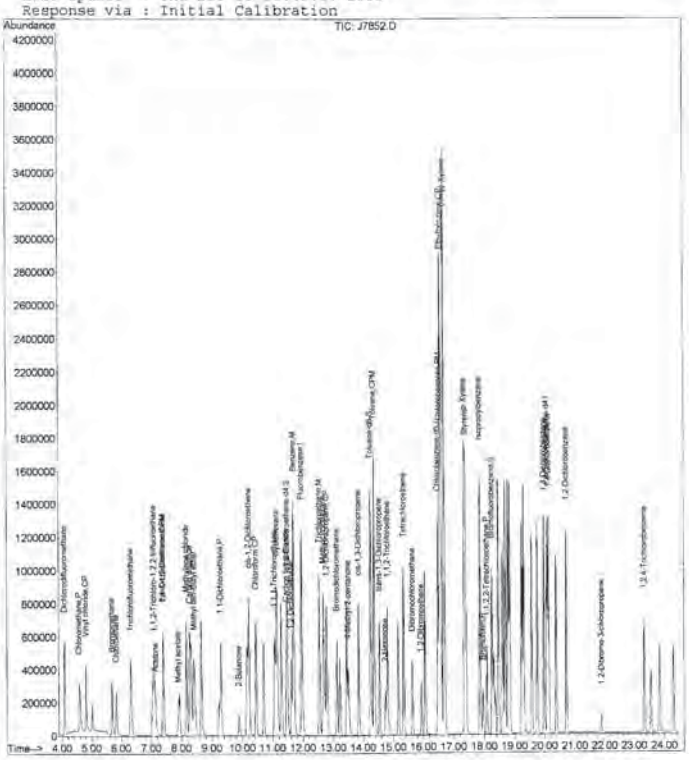
Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 05:51:50 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1730650	10.00 ug/L	0.00
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.66	96	436132	9.75 ug/L	90

(#) = qualifier out of range (m) = manual integration
J7852.D JD05T12W.M Mon Dec 29 06:01:40 2008 Pag

Data File : C:\HPCHEM\1\DATA\J7852.D Vial: 2
Acq On : 16 Dec 2008 9:52 Operator: JK
Sample : CCV-15857 Inst : #3MS10
Misc : CCV ,9260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:49 2008 Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



J7852.D JD05NTCL.M Thu Dec 18 11:01:02 2008 Pa

Internal Standards

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): J7852.D Date Analyzed: 12/16/2008

Instrument ID: MS03_10 Time Analyzed: 9:52

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1730650	11.95	645110	16.47	492728	20.07
UPPER LIMIT	3461300	12.45	1290220	16.97	985456	20.57
LOWER LIMIT	865325	11.45	322555	15.97	246364	19.57
SAMPLE NO.						
01 LCS-15857 (LCS-15857)	1847480	11.95	675841	16.48	506913	20.07
02 MW-11R-121108MS (0812108-005AMS)	1933713	11.95	707088	16.47	533371	20.07
03 MW-11R-121108MSD (0812108-005AMSD)	1963641	11.95	732137	16.47	539492	20.07
04 MB-15857 (MB-15857)	1729139	11.95	623013	16.48	404531	20.07
05 MW-12-121108DL (0812108-003ADL)	1709845	11.95	623621	16.47	440329	20.07
06 MW-13-121108 (0812108-004A)	1730096	11.95	633378	16.48	412778	20.07
07 MW-11R-121108 (0812108-005A)	1746039	11.94	643396	16.48	412666	20.07
08 MW-8-121108 (0812108-006A)	1715113	11.95	624198	16.47	399581	20.07
09 BD-1-121108 (0812108-007A)	1730680	11.95	631297	16.48	400814	20.07
10 MW-3R-121208 (0812108-008A)	1723348	11.95	627974	16.47	403332	20.07
11 MW-9-121208 (0812108-009A)	1763549	11.94	645596	16.48	416845	20.07
12 MW-5-121208 (0812108-010A)	1658183	11.95	609244	16.48	397299	20.07
13 MW-6-121208 (0812108-011A)	1637214	11.95	594715	16.48	384510	20.07
14 MW-7-121208 (0812108-012A)	1569734	11.95	575079	16.48	372416	20.07
15 Trip Blank (0812108-013A)	1640754	11.95	604537	16.48	387595	20.07

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

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

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

12/01/08 14:32 FORM VIII Page 3 of 4 SW8260B

8

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): J7852.D Date Analyzed: 12/16/2008

Instrument ID: MS03_10 Time Analyzed: 9:52

GC Column: Rtx-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1730650	11.95	645110	16.47	492728	20.07
UPPER LIMIT	3461300	12.45	1290220	16.97	985456	20.57
LOWER LIMIT	865325	11.45	322555	15.97	246364	19.57
SAMPLE NO.						
01 LCS-15857 (LCS-15857)	1847480	11.95	675841	16.48	506913	20.07
02 MSB-15857 (MSB-15857)	1847480	11.95	675841	16.48	506913	20.07
03 MW-11R-121108MS (0812108-005AMS)	1933713	11.95	707088	16.47	533371	20.07
04 MW-11R-121108MSD (0812108-005AMSD)	1963641	11.95	732137	16.47	539492	20.07
05 MB-15857 (MB-15857)	1729139	11.95	623013	16.48	404531	20.07
06 MW-12-121108DL (0812108-003ADL)	1709845	11.95	623621	16.47	440329	20.07
07 MW-13-121108 (0812108-004A)	1730096	11.95	633378	16.48	412778	20.07
08 MW-11R-121108 (0812108-005A)	1746039	11.94	643396	16.48	412666	20.07
09 MW-8-121108 (0812108-006A)	1715113	11.95	624198	16.47	399581	20.07
10 BD-1-121108 (0812108-007A)	1730680	11.95	631297	16.48	400814	20.07
11 MW-3R-121208 (0812108-008A)	1723348	11.95	627974	16.47	403332	20.07
12 MW-9-121208 (0812108-009A)	1763549	11.94	645596	16.48	416845	20.07
13 MW-5-121208 (0812108-010A)	1658183	11.95	609244	16.48	397299	20.07
14 MW-6-121208 (0812108-011A)	1637214	11.95	594715	16.48	384510	20.07
15 MW-7-121208 (0812108-012A)	1569734	11.95	575079	16.48	372416	20.07
16 Trip Blank (0812108-013A)	1640754	11.95	604537	16.48	387595	20.07

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

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

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

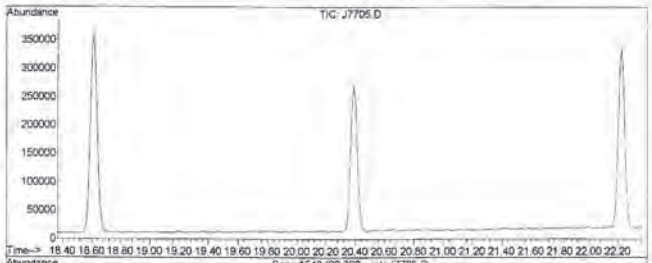
12/01/08 15:26 FORM VIII Page 3 of 4 SW8260B

Raw QC Data

Tune Raw Data

BFB

Data File : C:\HPCHEM\1\DATA\J7705.D Vial: 40
Acq On : 5 Dec 2008 9:15 Operator: MSV
Sample : TB120508A3 Inst : #3MS10
Misc : ICAL,8260W_CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df



Spectrum Information: Scan 1548

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	6259	PASS
75	95	30	60	55.1	16504	PASS
95	95	100	100	100.0	29936	PASS
96	95	5	9	7.5	2231	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	60.3	18048	PASS
175	174	5	9	8.3	1506	PASS
176	174	95	101	99.8	18008	PASS
177	176	5	9	7.4	1328	PASS

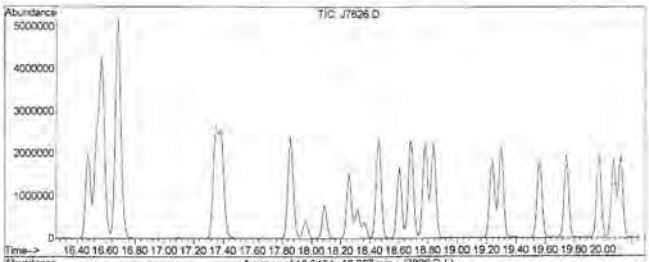
J7705.D JD05VOCW.M Mon Dec 08 14:30:03 2008 12-8-

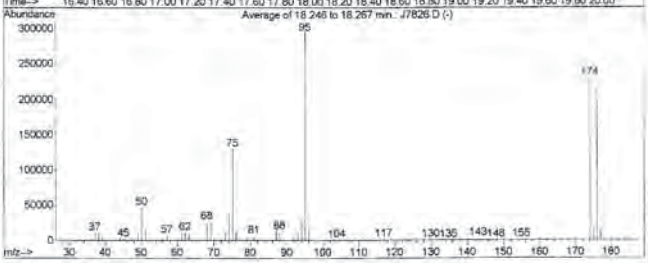
Scan 1548 (20.368 min): J7705.D
TB120508A3

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.15	530	57.05	1211	78.05	671	175.05	1506
37.15	1937	60.15	652	79.05	1200	175.95	18008
38.15	1658	61.05	2077	80.95	826	176.95	1328
39.15	777	62.15	1535	87.05	1040	207.15	713
44.15	13316	63.15	1552	88.05	993		
45.05	784	68.15	3381	92.15	1184		
47.15	696	69.05	3751	93.05	1301		
49.15	1360	73.05	1602	94.05	3899		
50.15	6259	74.05	5796	95.05	29936		
51.15	2266	75.15	16504	96.05	2231		
56.15	621	75.95	1626	173.95	18048		

BFB

Data File : C:\HPCHEM\1\DATA\J7826.D Vial: 37
Acq On : 15 Dec 2008 11:41 Operator: JK
Sample : TB121508A3 Inst : #3MS10
Misc : CCV ,9260WAF 40CAL, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\JD05P360.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df





AutoFind: Scans 1361, 1362, 1363; Background Corrected with Scan 1355

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.8	46904	PASS
75	95	30	60	43.9	130149	PASS
95	95	100	100	100.0	296235	PASS
96	95	5	9	6.8	20243	PASS
173	174	0.00	2	0.2	513	PASS
174	95	50	100	77.4	229163	PASS
175	174	5	9	7.2	16534	PASS
176	174	95	101	96.0	220032	PASS
177	176	5	9	6.9	15288	PASS

J7826.D JD05P360.M Tue Dec 16 13:23:29 2008 12/16/08

Average of 18.246 to 18.267 min.: J7826.D
TB121508A3
Modified:subtracted

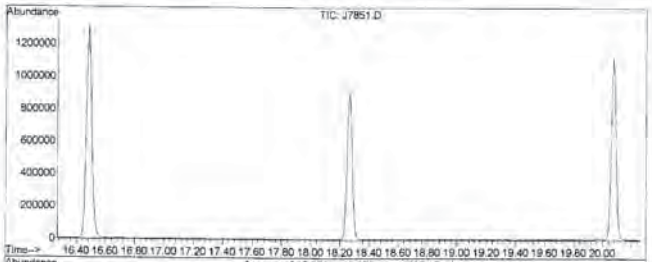
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	2278	50.15	46904	63.15	8168	77.05	1733
37.15	10638	51.15	15468	64.10	796	78.10	1605
38.15	10059	52.10	435	67.20	438	79.00	5253
39.15	3812	54.95	179	68.10	26243	80.00	1687
40.05	124	55.10	399	69.10	25539	81.05	6278
44.15	1793	56.10	3763	70.10	1862	82.05	1285
45.15	1958	57.15	6810	72.10	1359	86.15	190
47.10	3316	58.15	185	73.10	10952	87.05	12423
47.95	744	60.10	1960	74.10	42307	88.05	12551
48.25	719	61.10	10565	75.15	130149	91.10	962
49.10	9337	62.10	11021	76.10	11618	92.05	7074

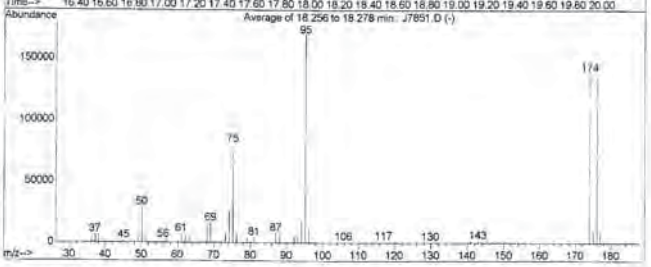
Average of 18.246 to 18.267 min.: J7826.D
TB121508A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.05	11215	119.00	1253	173.05	513		
94.10	30784	128.00	647	174.05	229163		
95.10	296235	128.95	208	175.05	16534		
96.10	20243	130.00	887	176.05	220032		
97.10	876	134.90	406	177.00	15288		
103.95	1065	137.05	192	177.95	211		
104.95	185	141.00	2289				
105.95	913	143.05	2323				
116.00	744	147.95	447				
117.00	1420	154.95	501				
118.00	783	156.95	186				

BFB

Data File : C:\HPCHEM\1\DATA\J7851.D Vial: 1
Acq On : 16 Dec 2008 9:20 Operator: JK
Sample : TB121608A3 Inst : #3MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\JD05VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df





AutoFind: Scans 1362, 1363, 1364; Background Corrected with Scan 1355

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	28443	PASS
75	95	30	60	47.0	79997	PASS
95	95	100	100	100.0	170283	PASS
96	95	5	9	6.9	11736	PASS
173	174	0.00	2	0.5	685	PASS
174	95	50	100	81.1	138144	PASS
175	174	5	9	7.3	10023	PASS
176	174	95	101	98.4	135904	PASS
177	176	5	9	7.0	9553	PASS

J7851.D JD05VOCW.M Wed Dec 17 15:02:56 2008 Gisella Stallock 12/17/08

Average of 18.256 to 18.278 min.: J7851.D
TB121608A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.15	1451	51.10	9532	68.10	14952	80.05	1358
37.15	6304	52.15	457	69.10	15960	81.00	4335
38.15	6099	55.15	169	70.05	1438	81.90	768
39.15	2829	56.15	2280	72.00	806	87.05	7890
40.10	713	57.05	4590	73.15	6884	88.05	7651
44.10	419	60.10	1274	74.15	25992	91.00	727
45.10	1514	61.05	6967	75.15	79997	92.10	4649
47.15	2070	62.10	6964	76.15	7173	93.05	6799
48.10	967	63.10	5256	77.15	1179	94.10	19121
49.15	6030	64.15	588	78.10	1140	95.10	170283
50.15	28443	67.05	174	79.00	3904	96.15	11736

Average of 18.256 to 18.278 min.: J7851.D
TB121608A3
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.15	208	128.15	265				
103.95	519	129.90	490				
104.15	190	141.00	1335				
105.90	520	143.00	1557				
106.10	407	172.25	189				
116.05	361	173.05	685				
117.00	1027	174.00	138144				
117.95	247	175.00	10023				
118.85	190	176.05	135904				
119.05	503	177.00	9553				
127.95	175	178.05	179				

Method Blank Data

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS SampType: MS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413174
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.29	0.500	10	0	93	70	130				
4-Methyl-2-pentanone	19.0	5.00	20	0	95	44	150				
Toluene	9.84	0.500	10	0	98	70	130				
trans-1,3-Dichloropropene	9.30	0.500	10	0	93	58	132				
1,1,2-Trichloroethane	9.69	0.500	10	0	97	66	133				
Tetrachloroethene	9.39	0.500	10	0	94	70	130				
2-Hexanone	17.0	5.00	20	0	85	25	155				
Dibromochloromethane	8.75	0.500	10	0	88	70	130				
1,2-Dibromoethane	9.38	0.500	10	0	94	70	130				
Chlorobenzene	9.56	0.500	10	0	96	69	130				
Ethylbenzene	9.88	0.500	10	0	99	70	130				
Xylenes (total)	29.3	1.00	30	0	96	65	132				
Styrene	8.84	0.500	10	0	88	57	133				
Bromoform	8.19	1.00	10	0	82	70	130				
Isopropylbenzene	9.53	0.500	10	0	95	70	130				
1,1,2,2-Tetrachloroethane	9.67	0.500	10	0	97	68	136				
1,3-Dichlorobenzene	9.60	0.500	10	0	96	70	130				
1,4-Dichlorobenzene	9.53	0.500	10	0	95	70	130				
1,2-Dichlorobenzene	9.44	0.500	10	0	94	70	130				
1,2-Dibromo-3-chloropropane	7.53	5.00	10	0	75	55	149				
1,2,4-Trichlorobenzene	8.49	1.00	10	0	85	68	130				
Surr: 1,2-Dichloroethane-d4	9.86	0.100	10	0	99	75	134				
Surr: Toluene-d8	10.1	0.100	10	0	101	75	125				
Surr: 4-Bromofluorobenzene	9.49	0.100	10	0	95	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7854.D Vial: 4
Acq On : 16 Dec 2008 11:05 Operator: JK
Sample : 0812108-005AMS Inst : #3MS10
Misc : MS , 8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Bestek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards

	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1933713	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.47	82	707088	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	533371	10.00 ug/L	0.00

System Monitoring Compounds

24) 1,2-Dichloroethane-d4	11.47	65	452663	9.86 ug/L	0.00
Spiked Amount 10.000			Recovery =	98.60%	
37) Toluene-d8	14.25	98	1799998	10.07 ug/L	0.00
Spiked Amount 10.000			Recovery =	100.70%	
49) Bromofluorobenzene	18.26	95	588842	9.49 ug/L	0.00
Spiked Amount 10.000			Recovery =	94.90%	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.08	85	776849	10.96 ug/L	98
3) Chloromethane	4.59	50	793357	11.18 ug/L	98
4) Vinyl chloride	4.80	62	497766	11.22 ug/L	97
5) Bromomethane	5.69	94	382335	8.57 ug/L	98
6) Chloroethane	5.82	64	390426	10.93 ug/L	98
7) Trichlorofluoromethane	6.32	101	779654	10.81 ug/L	100
8) 1,1-Dichloroethene	7.49	96	440228	9.48 ug/L	99
9) Carbon disulfide	8.27	76	1513231	10.73 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	7.09	101	526813	10.50 ug/L	100
11) Methylene chloride	8.17	84	489938	9.14 ug/L	97
12) Acetone	7.14	43	156702	17.49 ug/L	85
13) trans-1,2-Dichloroethene	7.40	96	440208	9.40 ug/L	90
14) Methyl acetate	7.89	43	256531	10.54 ug/L	99
15) Methyl tert-Butyl ether	8.41	73	1046074	9.08 ug/L	99
16) 1,1-Dichloroethane	9.30	63	848156	9.95 ug/L	100
17) cis-1,2-Dichloroethene	10.21	96	559871	9.86 ug/L	99
18) Cyclohexane	11.12	56	863811	10.55 ug/L	97
19) Chloroform	10.45	83	832023	9.70 ug/L	99
20) Carbon tetrachloride	11.45	117	583331	10.05 ug/L	100
21) 1,1,1-Trichloroethane	11.06	97	713585	9.58 ug/L	100
22) 2-Butanone	9.89	43	235965	17.86 ug/L	99
23) Benzene	11.68	78	2203546	9.80 ug/L	100
25) 1,2-Dichloroethane	11.67	62	536685	9.77 ug/L	99
26) Methylcyclohexane	12.57	83	780836	10.17 ug/L	99
27) Trichloroethene	12.54	130	516441	9.36 ug/L	99
28) 1,2-Dichloropropane	12.77	63	491167	10.01 ug/L	99
29) Bromodichloromethane	13.12	83	564076	9.68 ug/L	99
30) cis-1,3-Dichloropropene	13.84	75	694753	9.29 ug/L	100
31) Toluene	14.36	92	1354203	9.84 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7854.D JD05NTCL.M Thu Dec 18 11:01:07 2008

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS SampType: MS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413174
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	11.0	1.00	10	0	110	68	134				
Chloromethane	11.2	1.00	10	1.11	101	58	135				
Vinyl chloride	11.2	1.00	10	0	112	70	130				
Bromomethane	8.57	1.00	10	0	86	29	156				
Chloroethane	10.9	1.00	10	0	109	70	130				
Trichlorofluoromethane	10.8	1.00	10	0	108	70	131				
1,1-Dichloroethene	9.46	0.500	10	0	95	70	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.5	0.500	10	0	105	70	130				
Acetone	17.5	10.0	20	1.59	80	25	150				
Carbon disulfide	10.7	0.500	10	0	107	66	130				
Methyl acetate	10.5	5.00	10	0	105	63	132				
Methylene chloride	9.14	2.00	10	0	91	70	130				
trans-1,2-Dichloroethene	9.60	0.500	10	0	96	70	130				
Methyl tert-butyl ether	9.08	1.00	10	0	91	70	130				
1,1-Dichloroethane	9.86	0.500	10	0	99	70	130				
cis-1,2-Dichloroethene	9.86	0.500	10	0	99	48	151				
2-Butanone	17.9	10.0	20	0	89	25	150				
Chloroform	9.70	0.500	10	0	97	70	130				
1,1,1-Trichloroethane	9.58	0.500	10	0	96	70	130				
Cyclohexane	10.6	0.500	10	0	106	70	130				
Carbon tetrachloride	10.0	0.500	10	0	101	70	140				
Benzene	9.80	0.500	10	0	98	70	132				
1,2-Dichloroethane	9.77	0.500	10	0	98	70	130				
Trichloroethene	9.36	0.500	10	0	94	42	167				
Methylcyclohexane	10.2	0.500	10	0	102	62	130				
1,2-Dichloropropane	10.0	0.500	10	0	100	70	130				
Bromodichloromethane	9.68	0.500	10	0	97	70	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7854.D
Acq On : 16 Dec 2008 11:05
Sample : 0812108-005AMS
Misc : MS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	480115	19.04 ug/L	93
33) trans-1,3-Dichloropropene	14.54	75	560691	9.30 ug/L	100
34) 1,1,2-Trichloroethane	14.81	83	315756	9.69 ug/L	99
35) 2-Hexanone	14.74	43	310442	17.04 ug/L	99
38) Tetrachloroethene	15.34	166	484850	9.39 ug/L	98
39) Dibromochloromethane	15.63	129	377863	8.75 ug/L	99
40) 1,2-Dibromoethane	15.93	107	329919	9.38 ug/L	99
41) Chlorobenzene	16.54	112	1355990	9.56 ug/L	99
42) Ethylbenzene	16.58	91	2382383	9.88 ug/L	98
43) (m+p)-Xylene	16.68	106	1880870	19.54 ug/L	97
44) o-Xylene	17.35	106	888330	9.79 ug/L	100
45) Styrene	17.39	104	1320630	8.84 ug/L	100
46) Bromoform	17.96	173	185728	8.19 ug/L	99
48) Isopropylbenzene	17.85	105	1910920	9.53 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.09	83	418140	9.67 ug/L	100
51) 1,3-Dichlorobenzene	18.97	146	901759	9.60 ug/L	100
52) 1,4-Dichlorobenzene	20.12	146	852550	9.53 ug/L	99
53) 1,2-Dichlorobenzene	20.71	146	822645	9.44 ug/L	98
54) 1,2-Dibromo-3-chloropropan	21.88	75	42603	7.53 ug/L	93
55) 1,2,4-Trichlorobenzene	23.33	180	349463	8.49 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7854.D JD05NTCL.M Thu Dec 18 11:01:08 2008

428

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7854.D
Acq On : 16 Dec 2008 11:05
Sample : 0812108-005AMS
Misc : MS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1933713	10.00 ug/L	0.00
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.65	96	480145	9.60 ug/L	90

(#) = qualifier out of range (m) = manual integration
J7854.D JD05T12W.M Mon Dec 29 06:08:41 2008

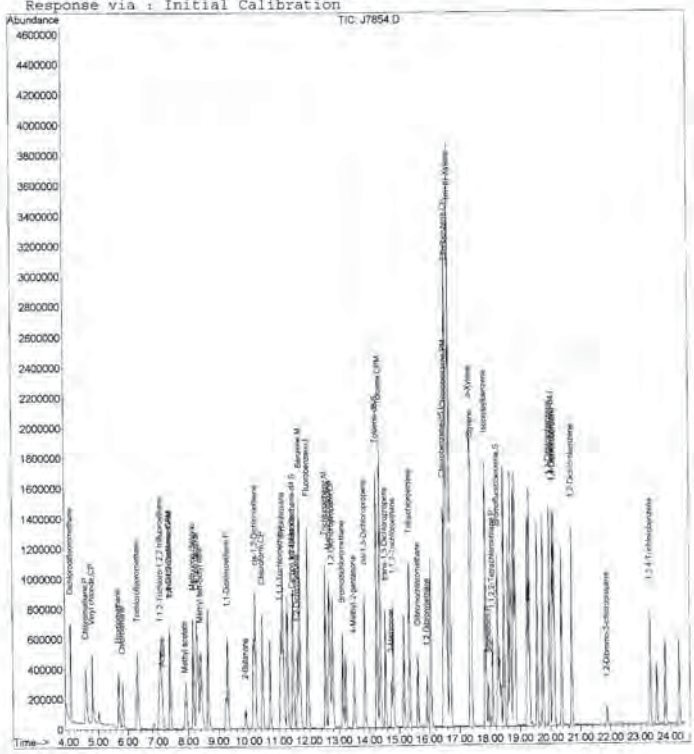
429

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7854.D
Acq On : 16 Dec 2008 11:05
Sample : 0812108-005AMS
Misc : MS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008

Vial: 4
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



J7854.D JD05NTCL.M Thu Dec 18 11:01:09 2008

430

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMSD	SampType: MSD	TestCode: 8260W7_OL	Units: ug/L	Prep Date:	RunNo: 13857
Client ID: MW-119-121108	Batch ID: R15857	Method: SW8260B		Analysis Date: 12/16/08	SeqNo: 413175
Instrument: MSD3_10	Column(s): Rtx-VMS	Rtx-VMS, 1.0 df			

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	68	134	11	4.3	20	
Chloromethane	10.8	1.00	10	1.11	97	58	135	11.2	3.6	20	
Vinyl chloride	10.9	1.00	10	0	109	70	130	11.2	2.5	20	
Bromomethane	8.70	1.00	10	0	87	29	166	8.57	1.5	24	
Chloroethane	10.6	1.00	10	0	106	70	130	10.9	3.1	20	
Trichlorofluoromethane	10.3	1.00	10	0	103	70	131	10.6	4.4	20	
1,1-Dichloroethene	9.15	0.500	10	0	92	70	135	9.49	3.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.2	0.500	10	0	102	70	130	10.5	3.2	20	
Acetone	18.0	10.0	20	1.59	82	25	150	17.5	3.0	50	
Carbon disulfide	10.2	0.500	10	0	102	66	130	10.7	5.0	20	
Methyl acetate	10.5	8.00	10	0	105	63	132	10.5	0.5	20	
Methylene chloride	8.94	2.00	10	0	89	70	130	8.14	2.2	20	
trans-1,2-Dichloroethene	9.37	0.500	10	0	94	70	130	9.48	1.2	20	
Methyl tert-butyl ether	9.04	1.00	10	0	90	70	130	9.08	0.4	20	
1,1-Dichloroethane	9.35	0.500	10	0	94	70	130	9.08	2.9	20	
cis-1,2-Dichloroethene	9.59	0.500	10	0	96	70	130	9.86	2.8	20	
2-Butanone	18.4	10.0	20	0	92	25	150	17.9	2.9	50	
Chloroform	9.44	0.500	10	0	94	70	130	9.7	2.7	20	
1,1,1-Trichloroethane	9.36	0.500	10	0	94	70	130	9.58	2.3	20	
Cyclohexane	10.2	0.500	10	0	102	70	130	10.6	3.1	20	
Carbon tetrachloride	9.79	0.500	10	0	98	70	140	10	2.6	20	
Benzene	9.69	0.500	10	0	96	70	132	9.8	2.1	20	
1,2-Dichloroethane	9.62	0.500	10	0	96	70	130	9.77	1.5	20	
Trichloroethene	9.06	0.500	10	0	91	42	167	9.36	3.0	20	
Methylcyclohexane	9.62	0.500	10	0	96	62	130	10.2	5.6	20	
1,2-Dichloropropane	9.60	0.500	10	0	96	70	130	10	2.1	20	
Bromodichloromethane	9.57	0.500	10	0	96	70	130	9.66	1.1	20	

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or ND.
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limits
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

Page 11 of 14

431

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

Sample ID: 0812108-005AMSD SampType: MSD TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413175
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.18	0.500	10	0	92	70	130	9.29	1.2	20	
4-Methyl-2-pentanone	19.2	5.00	20	0	96	44	150	19	0.7	50	
Toluene	9.67	0.500	10	0	97	70	130	9.84	1.7	20	
trans-1,3-Dichloropropene	9.10	0.500	10	0	91	58	132	9.3	2.2	25	
1,1,2-Trichloroethane	9.69	0.500	10	0	97	68	133	9.69	0	20	
Tetrachloroethene	9.06	0.500	10	0	91	70	130	9.39	3.6	20	
2-Hexanone	17.5	5.00	20	0	88	25	155	17	2.9	50	
Dibromochloromethane	8.38	0.500	10	0	84	70	130	8.75	4.3	20	
1,2-Dibromoethane	9.28	0.500	10	0	93	70	130	9.38	1.1	20	
Chlorobenzene	9.16	0.500	10	0	92	69	130	9.56	4.3	20	
Ethylbenzene	9.48	0.500	10	0	95	70	130	9.88	4.1	20	
Xylenes (total)	28.4	1.00	30	0	95	65	132	29.3	3.2	20	
Styrene	8.38	0.500	10	0	84	57	133	8.84	5.3	20	
Bromoform	7.94	1.00	10	0	79	70	130	8.19	3.1	20	
Isopropylbenzene	9.39	0.500	10	0	94	70	130	9.53	1.5	20	
1,1,2,2-Tetrachloroethane	9.64	0.500	10	0	96	68	136	9.67	0.3	20	
1,3-Dichlorobenzene	9.39	0.500	10	0	94	70	130	9.6	2.2	20	
1,4-Dichlorobenzene	9.28	0.500	10	0	93	70	130	9.53	2.7	20	
1,2-Dichlorobenzene	9.28	0.500	10	0	93	70	130	9.44	1.7	20	
1,2-Dibromo-3-chloropropane	7.52	5.00	10	0	75	55	149	7.53	0.1	20	
1,2,4-Trichlorobenzene	8.65	1.00	10	0	86	88	130	8.49	1.9	20	
Surr: 1,2-Dichloroethane-d4	9.96	0.100	10	0	100	75	134	0		0	
Surr: Toluene-d8	9.82	0.100	10	0	98	75	125	0		0	
Surr: 4-Bromofluorobenzene	9.64	0.100	10	0	96	75	125	0		0	

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

Sample ID: MB-15832 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412418
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.00									
Chloromethane	ND	1.00									
Vinyl chloride	ND	1.00									
Bromomethane	ND	1.00									
Chloroethane	ND	1.00									
Trichlorofluoromethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.500									
Acetone	ND	10.0									
Carbon disulfide	ND	0.500									
Methyl acetate	ND	5.00									
Methylene chloride	ND	2.00									
trans-1,2-Dichloroethene	ND	0.500									
Methyl tert-butyl ether	ND	1.00									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									
2-Butanone	ND	10.0									
Chloroform	ND	0.500									
1,1,1-Trichloroethane	ND	0.500									
Cyclohexane	ND	0.500									
Carbon tetrachloride	ND	0.500									
Benzene	ND	0.500									
1,2-Dichloroethane	ND	0.500									
Trichloroethene	ND	0.500									
Methylcyclohexane	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

16-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

Sample ID: MB-15832 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15832
Client ID: ZZZZZ Batch ID: R15832 Method: SW8260B Analysis Date: 12/15/08 SeqNo: 412418
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.500									
4-Methyl-2-pentanone	ND	5.00									
Toluene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
1,1,2-Trichloroethane	ND	0.500									
Tetrachloroethene	ND	0.500									
2-Hexanone	ND	5.00									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane	ND	0.500									
Chlorobenzene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes (total)	ND	1.00									
Styrene	ND	0.500									
Bromoform	ND	1.00									
Isopropylbenzene	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	5.00									
1,2,4-Trichlorobenzene	ND	1.00									
Surr: 1,2-Dichloroethane-d4	9.60	0.100	10	0	96	75	134				
Surr: Toluene-d8	10.0	0.100	10	0	100	75	125				
Surr: 4-Bromofluorobenzene	9.83	0.100	10	0	98	75	125				

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

16-Dec-08


```
                    Quantitation Report    (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7830.D                   Vial: 41
Acq On    : 15 Dec 2008  13:53                     Operator: JK
Sample    : MB-15832                                   Inst   : #3MS10
Misc      : MBLK,8260W7_OLM42,                     Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:50 2008                Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

 Internal Standards               R.T. QIon  Response  Conc Units Dev(Min)
-----------------------------------------------------------------------------
  1) Fluorobenzene               11.96    96   2473550   10.00 ug/L    0.00
 36) Chlorobenzene-d5            16.48    82    897330   10.00 ug/L    0.00
 47) 1,4-Dichlorobenzene-d4      20.07   152    613638   10.00 ug/L    0.00

 System Monitoring Compounds
 24) 1,2-Dichloroethane-d4       11.47    65    563428    9.60 ug/L    0.00
  Spiked Amount    10.000                   Recovery   =    96.00%
 37) Toluene-d8                  14.26    98   2270464   10.01 ug/L    0.00
  Spiked Amount    10.000                   Recovery   =   100.10%
 49) Bromofluorobenzene          18.26    95    701885    9.83 ug/L    0.00
  Spiked Amount    10.000                   Recovery   =    98.30%

 Target Compounds                                                    Qvalue
```

```
-----------------------------------------------------------------------------
(#) = qualifier out of range (m) = manual integration
J7830.D  JD05NTCL.M      Tue Dec 16 13:57:12 2008                        P
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7830.D Vial: 41
Acq On : 15 Dec 2008 13:53 Operator: JK
Sample : MB-15832, 15832 JK 12/22/08 Inst : #3MS10
Misc : MBLK,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 29 5:52 2008 Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 05:51:50 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.96	96	2473550	10.00 ug/L	0.00

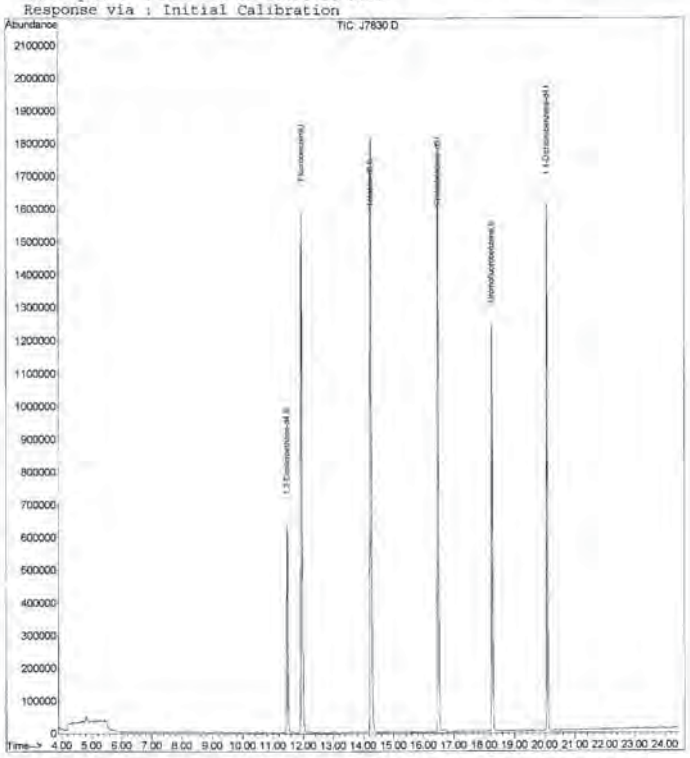
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
J7830.D JD05T12W.M Mon Dec 29 05:54:37 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7830.D Vial: 41
Acq On : 15 Dec 2008 13:53 Operator: JK
Sample : MB-15832 Inst : #3MS10
Misc : MBLK,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:50 2008 Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration



J7830.D JD05NTCL.M Tue Dec 16 13:57:13 2008 P

Form I TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MB-15832

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: MB-15832

Sample wt/vol: 5 (g/mL) ML Lab File ID: J7830.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/15/08

GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00

Extract Volume: _____ (µl)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM I TIC 15 SW8260B

Tentatively Identified Compound (LSC) summary

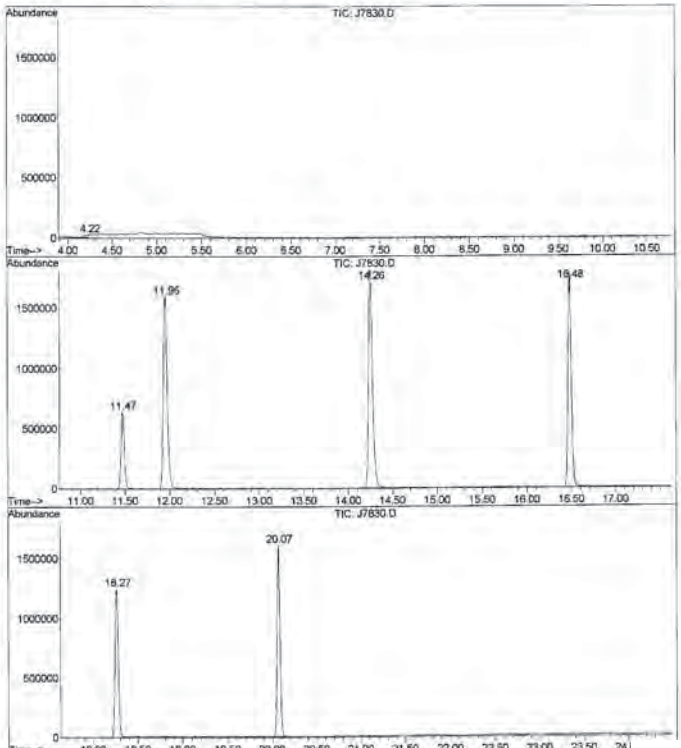
Operator ID: JK Date Acquired: 15 Dec 2008 13:53
Data File: C:\HPCHEM\1\DATA\J7830.D
Name: MB-15832
Misc: MBLK,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7830.D JD05NTCL.M Wed Dec 31 13:30:32 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7630.D
Operator : JK
Acquired : 15 Dec 2008 13:53 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: MB-15832
Misc Info : MBLK,8260W7_OLM42,
Vial Number: 41
Quant File :JD05NTCL.RES (RTE Integrator)



ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15857 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413178
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.500									
4-Methyl-2-pentanone	ND	5.00									
Toluene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
1,1,2-Trichloroethane	ND	0.500									
Tetrachloroethene	ND	0.500									
2-Hexanone	ND	5.00									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane	ND	0.500									
Chlorobenzene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes (total)	ND	1.00									
Styrene	ND	0.500									
Bromoform	ND	1.00									
Isopropylbenzene	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	5.00									
1,2,4-Trichlorobenzene	ND	1.00									
Surr: 1,2-Dichloroethane-d4	10.4	0.100	10	0	104	75	134				
Surr: Toluene-d8	10.0	0.100	10	0	101	75	125				
Surr: 4-Bromofluorobenzene	10.0	0.100	10	0	100	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

18-Dec-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-15857 SampType: MBLK TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413178
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.00									
Chloromethane	ND	1.00									
Vinyl chloride	ND	1.00									
Bromomethane	ND	1.00									
Chloroethane	ND	1.00									
Trichlorofluoromethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.500									
Acetone	ND	10.0									
Carbon disulfide	ND	0.500									
Methyl acetate	ND	5.00									
Methylene chloride	ND	2.00									
trans-1,2-Dichloroethene	ND	0.500									
Methyl tert-butyl ether	ND	1.00									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									
2-Butanone	ND	10.0									
Chloroform	ND	0.500									
1,1,1-Trichloroethane	ND	0.500									
Cyclohexane	ND	0.500									
Carbon tetrachloride	ND	0.500									
Benzene	ND	0.500									
1,2-Dichloroethane	ND	0.500									
Trichloroethene	ND	0.500									
Methylcyclohexane	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

18-Dec-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7857.D Vial: 7
Acq On : 16 Dec 2008 12:41 Operator: JK
Sample : MB-15857 Inst : #3MS10
Misc : MBLK,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:40 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1728139	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	623013	10.00 ug/L	0.01
47) 1,4-Dichlorobenzene-d4	20.07	152	404531	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	425090	10.36 ug/L	0.00
Spiked Amount 10.000			Recovery	= 103.60%	
37) Toluene-d8	14.25	98	1583273	10.05 ug/L	0.00
Spiked Amount 10.000			Recovery	= 100.50%	
49) Bromofluorobenzene	18.26	95	471864	10.03 ug/L	0.00
Spiked Amount 10.000			Recovery	= 100.30%	
Target Compounds					Qvalue
5) Bromomethane	5.69	94	7079	0.18 ug/L	91

(#) = qualifier out of range (m) = manual integration
J7857.D JD05NTCL.M Thu Dec 18 11:40:32 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7857.D
Acq On : 16 Dec 2008 12:41
Sample : MB-15860, 15857, 15859 JK 12/29/08
Misc : MBLK,624W,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1728139	10.00 ug/L	0.00

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
J7857.D JD05T12W.M Mon Dec 29 06:08:42 2008

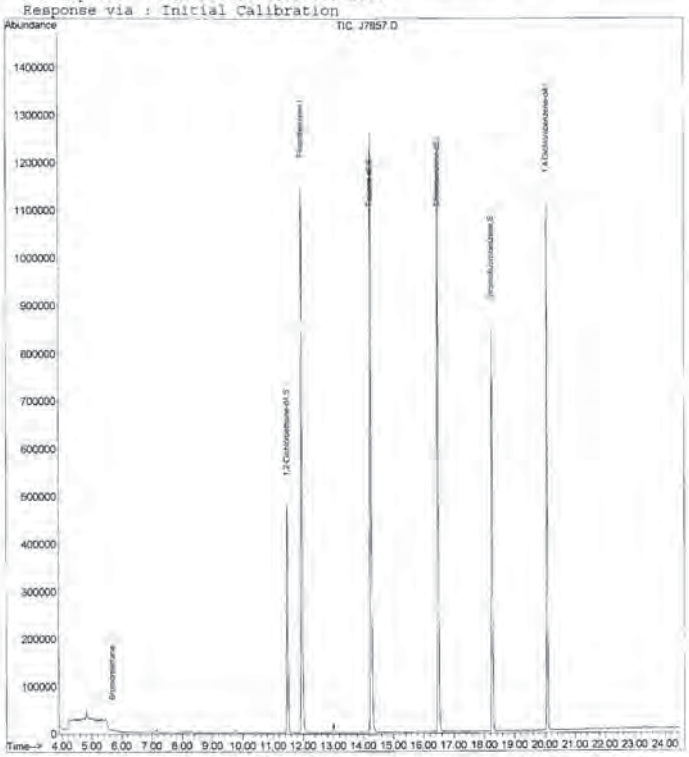
Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7857.D
Acq On : 16 Dec 2008 12:41
Sample : MB-15857
Misc : MBLK,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 11:40 2008

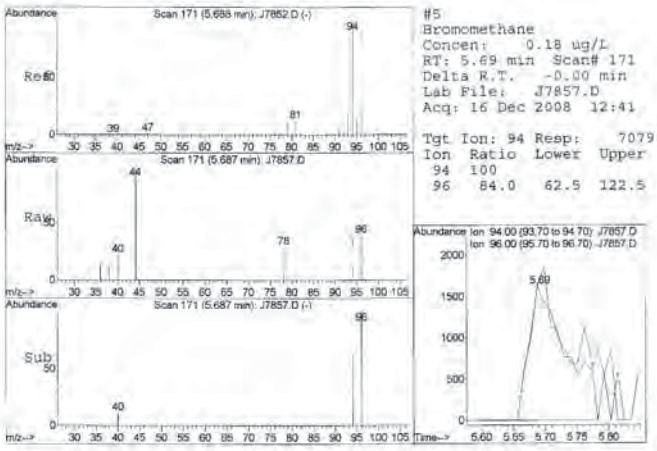
Vial: 7
Operator: JK
Inst : #3MS10
Multiplr: 1.00

Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration



J7857.D JD05NTCL.M Thu Dec 18 11:40:32 2008



#5
Bromomethane
Concen: 0.18 ug/L
RT: 5.69 min Scan# 171
Delta R.T. -0.00 min
Lab File: J7857.D
Acq: 16 Dec 2008 12:41

Tgt Ion: 94 Resp: 7079

Ion	Ratio	Lower	Upper
94	100		
96	84.0	62.5	122.5

J7857.D JD05NTCL.M Thu Dec 18 11:40:33 2008

Form 1 TIC
Volatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MB-15857

Lab Name: Life Science Laboratories, Inc. Contract: _____
Lab Code: LSLB Case No.: CBG-MS SAS No.: _____ SDG No.: 0812108
Matrix: (soil/water) WATER Lab Sample ID: MB-15857
Sample wt/vol: 5 (g/mL) ML Lab File ID: J7857.D
Level: LOW Date Received:
% Moisture: not dec. Date Analyzed: 12/16/08
GC Column: Rtx-VMS ID: 0.18 (mm) Dilution Factor: 1.00
Extract Volume: _____ (ul)

Number TICs found: 0 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

FORM 1 TIC 21 SW8260B

Tentatively Identified Compound (LSC) summary

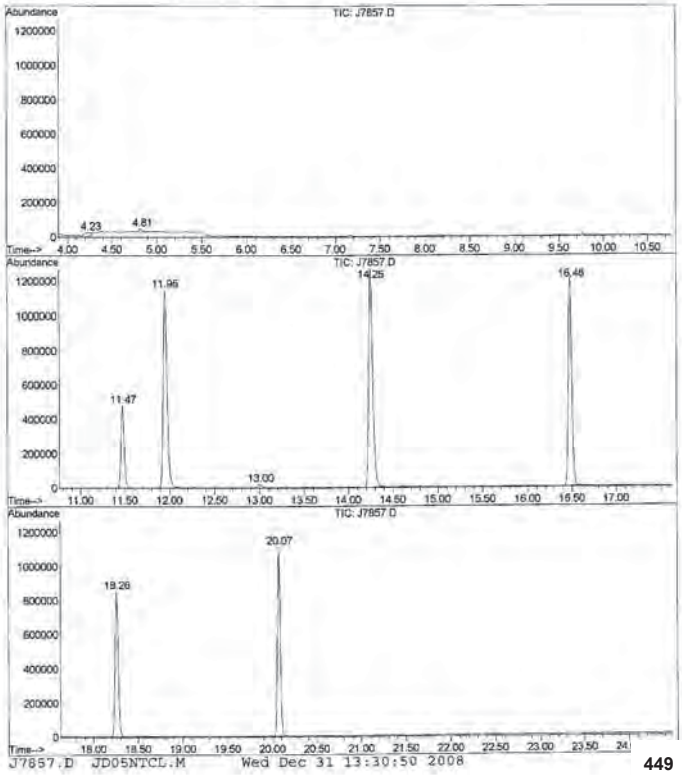
Operator ID: JK Date Acquired: 16 Dec 2008 12:41
Data File: C:\HPCHEM\1\DATA\J7857.D
Name: MB-15857
Misc: MBLK,8260W7_OLM42,
Method: C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title: VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

J7857.D JD05NTCL.M Wed Dec 31 13:30:50 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\J7857.D
Operator : JK
Acquired : 16 Dec 2008 12:41 using AcqMethod JD05VOCW
Instrument : #3MS10
Sample Name: MB-15857
Misc Info : MBLK,8260W7_OLM42,
Vial Number: 7
Quant File :JD05NTCL.RES (RTE Integrator)



Matrix Spike

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS SampType: MS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413174
Instrument: MS03_10 ColumnID: Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	11.0	1.00	10	0	110	68	134				
Chloromethane	11.2	1.00	10	1.11	101	58	136				
Vinyl chloride	11.2	1.00	10	0	112	70	130				
Bromomethane	8.57	1.00	10	0	86	28	156				
Chloroethane	10.9	1.00	10	0	109	70	130				
Trichlorofluoromethane	10.8	1.00	10	0	108	70	131				
1,1-Dichloroethene	9.48	0.500	10	0	95	70	135				
1,1,2-Trichloro-1,2,2-trifluoromethane	10.5	0.500	10	0	105	70	130				
Acetone	17.5	10.0	20	1.59	80	25	160				
Carbon disulfide	10.7	0.500	10	0	107	66	130				
Methyl acetate	10.5	5.00	10	0	105	65	132				
Methylene chloride	9.14	2.00	10	0	91	70	130				
trans-1,2-Dichloroethene	9.48	0.500	10	0	95	70	130				
Methyl tert-butyl ether	9.08	1.00	10	0	91	70	130				
1,1-Dichloroethane	9.86	0.500	10	0	99	70	130				
cis-1,2-Dichloroethene	9.86	0.500	10	0	99	48	151				
2-Butanone	17.9	10.0	20	0	89	25	150				
Chloroform	9.70	0.500	10	0	97	70	130				
1,1,1-Trichloroethane	9.58	0.500	10	0	96	70	130				
Cyclohexane	10.6	0.500	10	0	106	70	130				
Carbon tetrachloride	10.0	0.500	10	0	101	70	140				
Benzene	9.80	0.500	10	0	98	70	132				
1,2-Dichloroethane	9.77	0.500	10	0	98	70	130				
Trichloroethene	9.36	0.500	10	0	94	42	167				
Methylcyclohexane	10.2	0.500	10	0	102	62	130				
1,2-Dichloropropane	10.0	0.500	10	0	100	70	130				
Bromodichloromethane	9.68	0.500	10	0	97	70	130				

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

18-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva: Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005AMS SampType: MS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: MW-11R-121108 Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413174
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.29	0.500	10	0	93	70	130				
4-Methyl-2-pentanone	19.0	5.00	20	0	95	44	150				
Toluene	9.84	0.500	10	0	98	70	130				
trans-1,3-Dichloropropene	9.30	0.500	10	0	93	58	132				
1,1,2-Trichloroethane	9.69	0.500	10	0	97	68	133				
Tetrachloroethene	9.39	0.500	10	0	94	70	130				
2-Hexanone	17.0	5.00	20	0	85	25	158				
Dibromochloromethane	8.75	0.500	10	0	88	70	130				
1,2-Dibromoethane	9.38	0.500	10	0	94	70	130				
Chlorobenzene	9.56	0.500	10	0	96	69	130				
Ethylbenzene	9.88	0.500	10	0	99	70	130				
Xylenes (total)	29.3	1.00	30	0	98	65	132				
Styrene	8.84	0.500	10	0	88	57	133				
Bromoform	8.19	1.00	10	0	82	70	130				
Isopropylbenzene	9.53	0.500	10	0	95	70	130				
1,1,2,2-Tetrachloroethane	9.67	0.500	10	0	97	68	136				
1,3-Dichlorobenzene	9.60	0.500	10	0	96	70	130				
1,4-Dichlorobenzene	9.53	0.500	10	0	95	70	130				
1,2-Dichlorobenzene	9.44	0.500	10	0	94	70	130				
1,2-Dibromo-3-chloropropane	7.53	5.00	10	0	75	55	148				
1,2,4-Trichlorobenzene	8.49	1.00	10	0	85	68	130				
Surr: 1,2-Dichloroethane-d4	9.86	0.100	10	0	99	75	134				
Surr: Toluene-d8	10.1	0.100	10	0	101	75	125				
Surr: 4-Bromofluorobenzene	9.49	0.100	10	0	95	75	125				

Qualifiers:
B: Analyte detected in the associated Method Blank
ND: Not Detected at the Practical Quantitation Limit (PQL)
U: Not Detected at the MDC or RL
E: Value exceeds the instrument calibration range
R: RPD exceeds accepted precision limit
J: Analyte detected below the PQL
S: Spike Recovery outside accepted recovery limits

JK-Dec-08

Page 10 of 14

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7855.D Vial: 5
Acq On : 16 Dec 2008 11:37 Operator: JK
Sample : 0812108-005AMSD Inst : #3MS10
Misc : MSD ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1963641	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.47	82	732137	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	539492	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	464462	9.96 ug/L	0.00
Spiked Amount 10.000				Recovery = 99.60%	
37) Toluene-d8	14.25	98	1818139	9.82 ug/L	0.00
Spiked Amount 10.000				Recovery = 98.20%	
49) Bromofluorobenzene	18.26	95	605140	9.64 ug/L	0.00
Spiked Amount 10.000				Recovery = 96.40%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.07	85	756223	10.50 ug/L	98
3) Chloromethane	4.58	50	777926	10.79 ug/L	100
4) Vinyl chloride	4.80	62	491927	10.94 ug/L	96
5) Bromomethane	5.69	94	394224	8.70 ug/L	98
6) Chloroethane	5.83	64	384421	10.60 ug/L	99
7) Trichlorofluoromethane	6.32	101	757226	10.34 ug/L	99
8) 1,1-Dichloroethene	7.40	96	431644	9.15 ug/L	98
9) Carbon disulfide	8.27	76	1461785	10.21 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	7.09	101	518139	10.17 ug/L	99
11) Methylene chloride	8.16	84	485585	8.94 ug/L	98
12) Acetone	7.13	43	163978	18.02 ug/L	87
~~13) trans-1,2-Dichloroethene~~	~~7.40~~	~~96~~	~~431644~~	~~9.15 ug/L~~	~~98~~
14) Methyl acetate	7.89	43	259389	10.49 ug/L	99
15) Methyl tert-Butyl ether	8.41	73	1057484	9.04 ug/L	99
16) 1,1-Dichloroethane	9.30	63	836622	9.58 ug/L	100
17) cis-1,2-Dichloroethene	10.22	96	552945	9.59 ug/L	98
18) Cyclohexane	11.12	56	850438	10.23 ug/L	98
19) Chloroform	10.45	83	822435	9.44 ug/L	98
20) Carbon tetrachloride	11.45	117	577066	9.79 ug/L	99
21) 1,1,1-Trichloroethane	11.06	97	708148	9.36 ug/L	99
22) 2-Butanone	9.89	43	246540	18.38 ug/L	97
23) Benzene	11.68	78	2191939	9.60 ug/L	100
25) 1,2-Dichloroethane	11.61	62	536915	9.62 ug/L	100
26) Methylcyclohexane	12.67	83	750051	9.62 ug/L	98
27) Trichloroethene	12.54	130	508069	9.08 ug/L	99
28) 1,2-Dichloropropane	12.77	63	489260	9.80 ug/L	99
29) Bromodichloromethane	13.12	83	566593	9.57 ug/L	99
30) cis-1,3-Dichloropropene	13.85	75	696995	9.18 ug/L	99
31) Toluene	14.36	92	1351617	9.67 ug/L	100

JJ 12/31/08

(#) = qualifier out of range (m) = manual integration
J7855.D JD05NTCL.M Thu Dec 18 11:01:11 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7855.D Vial: 5
Acq On : 16 Dec 2008 11:37 Operator: JK
Sample : 0812108-005AMSD Inst : #3MS10
Misc : MSD ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	491281	19.18 ug/L	94
33) trans-1,3-Dichloropropene	14.54	75	557358	9.10 ug/L	99
34) 1,1,2-Trichloroethane	14.81	83	320803	9.69 ug/L	94
35) 2-Hexanone	14.74	43	324456	17.54 ug/L	98
38) Tetrachloroethene	15.33	166	484226	9.06 ug/L	99
39) Dibromochloromethane	15.62	129	373516	8.38 ug/L	99
40) 1,2-Dibromoethane	15.92	107	337911	9.28 ug/L	97
41) Chlorobenzene	16.54	112	1344924	9.16 ug/L	98
42) Ethylbenzene	16.57	91	2366783	9.48 ug/L	99
43) (m+p)-Xylene	16.68	106	1882072	18.88 ug/L	98
44) o-Xylene	17.35	106	894543	9.52 ug/L	99
45) Styrene	17.39	104	1289725	8.38 ug/L	99
46) Bromoform	17.96	173	185710	7.94 ug/L	99
48) Isopropylbenzene	17.66	105	1904989	9.39 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.09	83	421538	9.64 ug/L	99
51) 1,3-Dichlorobenzene	19.97	146	891479	9.39 ug/L	99
52) 1,4-Dichlorobenzene	20.12	146	839930	9.28 ug/L	99
53) 1,2-Dichlorobenzene	20.72	146	817904	9.28 ug/L	99
54) 1,2-Dibromo-3-chloropropan	21.88	75	43051	7.52 ug/L	95
55) 1,2,4-Trichlorobenzene	23.33	180	359875	8.65 ug/L	97

(#) = qualifier out of range (m) = manual integration
J7855.D JD05NTCL.M Thu Dec 18 11:01:11 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7855.D Vial: 5
Acq On : 16 Dec 2008 11:37 Operator: JK
Sample : 0812108-005AMSD Inst : #3MS10
Misc : MSD ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008 Quant Results File: JD05T12W.RES

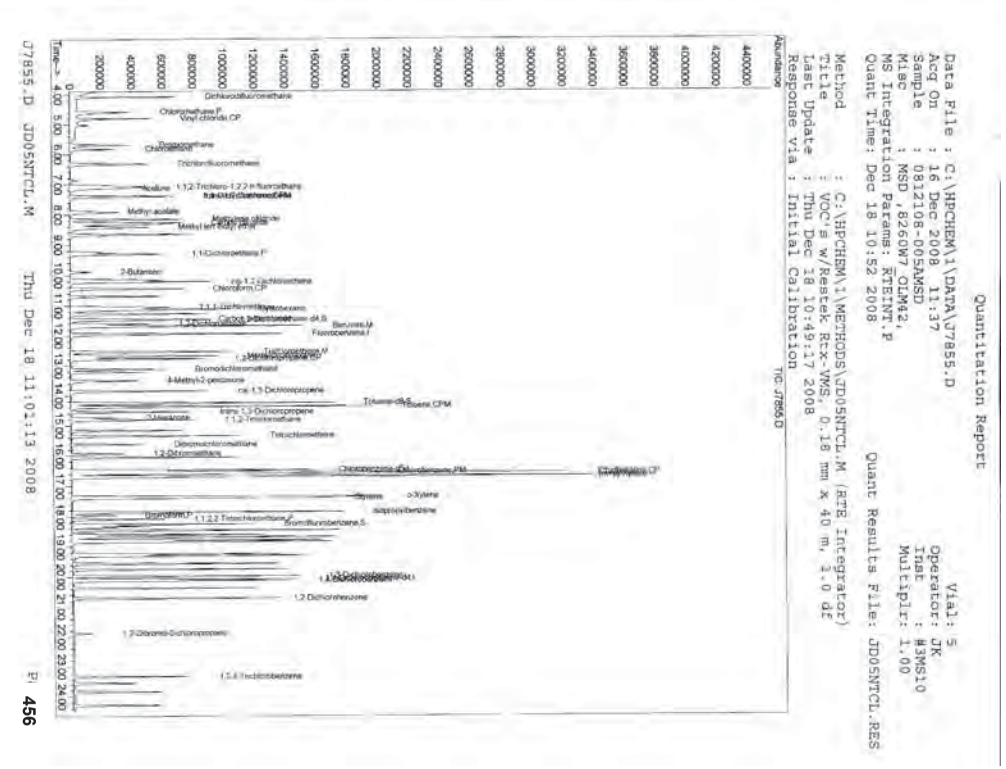
Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1963641	10.00 ug/L	0.00
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.65	96	475721	9.37 ug/L	91

(#) = qualifier out of range (m) = manual integration
J7855.D JD05T12W.M Mon Dec 29 06:08:41 2008

Matrix Spike Blank

457



456

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15857 SampType: MSB TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 417913
Instrument: M503_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	68	134				
Chloromethane	9.80	1.00	10	0	98	58	135				
Vinyl chloride	11.1	1.00	10	0	111	70	130				
Bromomethane	8.23	1.00	10	0	82	29	156				
Chloroethane	10.5	1.00	10	0	105	70	130				
Trichlorofluoromethane	10.5	1.00	10	0	105	70	131				
1,1-Dichloroethene	9.20	0.500	10	0	92	70	135				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.3	0.500	10	0	103	70	130				
Acetone	20.6	10.0	20	0	103	25	150				
Carbon disulfide	10.1	0.500	10	0	101	66	130				
Methyl acetate	11.0	5.00	10	0	110	63	132				
Methylene chloride	9.03	2.00	10	0	90	70	130				
trans-1,2-Dichloroethene	9.38	0.500	10	0	94	70	130				
Methyl tert-butyl ether	9.05	1.00	10	0	90	70	130				
1,1-Dichloroethane	9.63	0.500	10	0	96	70	130				
cis-1,2-Dichloroethene	9.61	0.500	10	0	96	48	151				
2-Butanone	19.5	10.0	20	0	98	25	150				
Chloroform	9.56	0.500	10	0	96	70	130				
1,1,1-Trichloroethane	9.29	0.500	10	0	93	70	130				
Cyclohexane	10.1	0.500	10	0	101	70	130				
Carbon tetrachloride	9.70	0.500	10	0	97	70	140				
Benzene	9.55	0.500	10	0	96	70	132				
1,2-Dichloroethane	9.41	0.500	10	0	94	70	130				
Trichloroethene	9.03	0.500	10	0	90	42	167				
Methylcyclohexane	9.69	0.500	10	0	97	62	130				
1,2-Dichloropropane	9.75	0.500	10	0	98	70	130				
Bromodichloromethane	9.56	0.500	10	0	96	70	130				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

09-Jan-09

Page 1 of 5

458

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-15857 SampType: MSB TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 417913
Instrument: M503_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.32	0.500	10	0	93	70	130				
4-Methyl-2-pentanone	19.4	5.00	20	0	97	44	150				
Toluene	9.45	0.500	10	0	94	70	130				
trans-1,3-Dichloropropene	9.17	0.500	10	0	92	58	132				
1,1,2-Trichloroethane	9.82	0.500	10	0	98	68	133				
Tetrachloroethene	9.26	0.500	10	0	93	70	130				
2-Hexanone	19.0	5.00	20	0	95	25	155				
Dibromochloromethane	8.73	0.500	10	0	87	70	130				
1,2-Dibromoethane	9.49	0.500	10	0	95	70	130				
Chlorobenzene	9.45	0.500	10	0	94	69	130				
Ethylbenzene	9.63	0.500	10	0	96	70	130				
Xylenes (total)	29.0	1.00	30	0	97	65	132				
Styrene	8.76	0.500	10	0	88	57	133				
Bromoform	8.31	1.00	10	0	83	70	130				
Isopropylbenzene	9.48	0.500	10	0	95	70	130				
1,1,2,2-Tetrachloroethane	9.87	0.500	10	0	99	68	136				
1,3-Dichlorobenzene	9.50	0.500	10	0	95	70	130				
1,4-Dichlorobenzene	9.37	0.500	10	0	94	70	130				
1,2-Dichlorobenzene	9.41	0.500	10	0	94	70	130				
1,2-Dibromo-3-chloropropane	7.77	5.00	10	0	78	55	149				
1,2,4-Trichlorobenzene	8.90	1.00	10	0	89	68	130				
Surr: 1,2-Dichloroethane-d4	9.87	0.100	10	0	99	75	134				
Surr: Toluene-d8	9.94	0.100	10	0	99	75	125				
Surr: 4-Bromofluorobenzene	9.58	0.100	10	0	96	75	125				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

09-Jan-09

Page 2 of 5

459

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7853.D Vial: 3
Acq On : 16 Dec 2008 10:24 Operator: JK
Sample : MSB-15857 Inst : #3MS10
Misc : MSB ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1847480	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	675841	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	506913	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	432948	9.87 ug/L	0.00
Spiked Amount 10.000			Recovery	= 98.70%	
37) Toluene-d8	14.25	98	1698465	9.94 ug/L	0.00
Spiked Amount 10.000			Recovery	= 99.40%	
49) Bromofluorobenzene	18.26	95	564750	9.58 ug/L	0.00
Spiked Amount 10.000			Recovery	= 95.80%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.08	85	710887	10.50 ug/L	99
3) Chloromethane	4.58	50	664716	9.80 ug/L	98
4) Vinyl chloride	4.80	62	468789	11.08 ug/L	97
5) Bromomethane	5.69	94	351136	8.23 ug/L	99
6) Chloroethane	5.83	64	359021	10.52 ug/L	99
7) Trichlorofluoromethane	6.32	101	721595	10.48 ug/L	99
8) 1,1-Dichloroethene	7.40	96	408440	9.20 ug/L	99
9) Carbon disulfide	8.28	76	1362682	10.12 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	493252	10.29 ug/L	100
11) Methylene chloride	8.16	84	461272	9.03 ug/L	98
12) Acetone	7.14	43	176198	20.58 ug/L	86
~~13) trans-1,2-Dichloroethene~~	~~7.40~~	~~96~~	~~408440~~	~~9.20 ug/L~~	~~98~~
14) Methyl acetate	7.89	43	256838	11.04 ug/L	98
15) Methyl tert-Butyl ether	8.41	73	995531	9.05 ug/L	100
16) 1,1-Dichloroethane	9.30	63	791496	9.63 ug/L	100
17) cis-1,2-Dichloroethene	10.21	96	521482	9.61 ug/L	99
18) Cyclohexane	11.12	56	790591	10.11 ug/L	97
19) Chloroform	10.44	83	783297	9.56 ug/L	98
20) Carbon tetrachloride	11.45	117	537697	9.70 ug/L	99
21) 1,1,1-Trichloroethane	11.06	97	661156	9.29 ug/L	99
22) 2-Butanone	9.89	43	246418	19.53 ug/L	98
23) Benzene	11.67	78	2051913	9.55 ug/L	100
25) 1,2-Dichloroethane	11.61	62	494382	9.41 ug/L	99
26) Methylcyclohexane	12.68	83	710738	9.69 ug/L	97
27) Trichloroethene	12.54	130	475294	9.03 ug/L	97
28) 1,2-Dichloropropane	12.77	63	457676	9.75 ug/L	100
29) Bromodichloromethane	13.12	83	532010	9.56 ug/L	99
30) cis-1,3-Dichloropropene	13.85	75	666043	9.32 ug/L	99
31) Toluene	14.36	92	1242736	9.45 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7853.D JD05NTCL.M Wed Dec 31 14:57:18 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7853.D Vial: 3
Acq On : 16 Dec 2008 10:24 Operator: JK
Sample : MSB-15857 Inst : #3MS10
Misc : MSB ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	468095	19.43 ug/L	99
33) trans-1,3-Dichloropropene	14.54	75	528266	9.17 ug/L	99
34) 1,1,2-Trichloroethane	14.80	83	305881	9.82 ug/L	99
35) 2-Hexanone	14.73	43	331136	19.03 ug/L	99
38) Tetrachloroethene	15.34	166	456718	9.26 ug/L	98
39) Dibromochloromethane	15.62	129	360007	8.73 ug/L	99
40) 1,2-Dibromoethane	15.93	107	318872	9.49 ug/L	99
41) Chlorobenzene	16.54	112	1281455	9.45 ug/L	100
42) Ethylbenzene	16.57	91	2219820	9.63 ug/L	98
43) (m+p)-Xylene	16.69	106	1789442	19.45 ug/L	99
44) o-Xylene	17.35	106	830800	9.58 ug/L	97
45) Styrene	17.38	104	1249957	8.76 ug/L	100
46) Bromoform	17.96	173	180282	8.31 ug/L	100
48) Isopropylbenzene	17.86	105	1806811	9.48 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.09	83	405552	9.87 ug/L	99
51) 1,3-Dichlorobenzene	19.97	146	848163	9.50 ug/L	99
52) 1,4-Dichlorobenzene	20.13	146	797392	9.37 ug/L	99
53) 1,2-Dichlorobenzene	20.71	146	779800	9.41 ug/L	99
54) 1,2-Dibromo-3-chloropropan	21.88	75	41810	7.77 ug/L	94
55) 1,2,4-Trichlorobenzene	23.33	180	347897	8.90 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7853.D JD05NTCL.M Wed Dec 31 14:57:18 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7853.D Vial: 3
Acq On : 16 Dec 2008 10:24 Operator: JK
Sample : MSB-15857 Inst : #3MS10
Misc : MSB ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008 Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1847480	10.00 ug/L	0.00

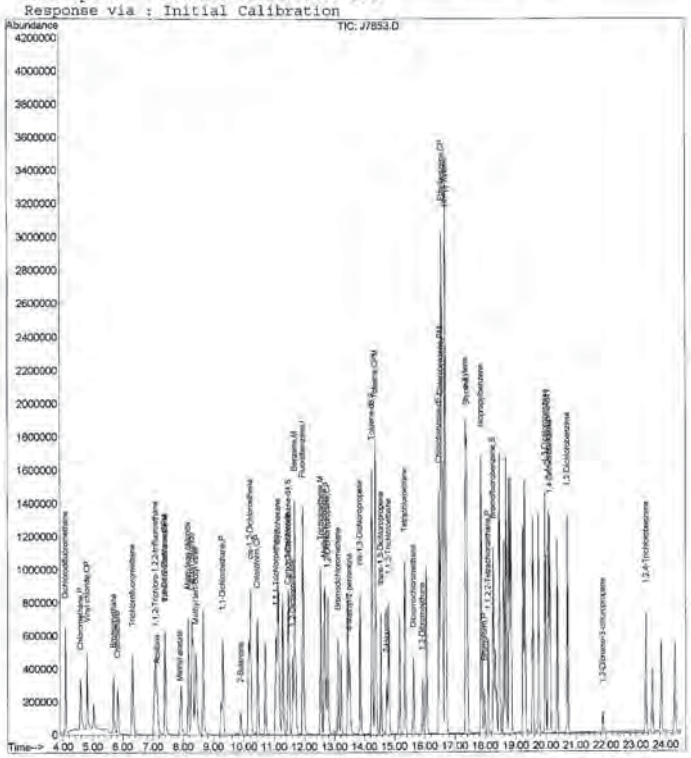
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.66	96	448204	9.38 ug/L	90

(#) = qualifier out of range (m) = manual integration
J7853.D JD05T12W.M Wed Dec 31 14:58:23 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7853.D Vial: 3
Acq On : 16 Dec 2008 10:24 Operator: JK
Sample : MSB-15857 Inst : #3MS10
Misc : MSB ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008 Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Wed Dec 31 14:57:03 2008
Response via : Initial Calibration



J7853.D JD05NTCL.M Wed Dec 31 14:57:20 2008 P

Laboratory Control Sample

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15832 | SampType: LCS | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15832
Client ID: ZZZZZ | Batch ID: R15832 | Method: SW8260B | Analysis Date: 12/15/08 | SeqNo: 412416
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	10.0	0.500	10	0	100	80	120				
4-Methyl-2-pentanone	20.6	5.00	20	0	103	50	150				
Toluene	10.2	0.500	10	0	103	80	120				
trans-1,3-Dichloropropene	9.84	0.500	10	0	98	73	121				
1,1,2-Trichloroethane	10.2	0.500	10	0	102	80	120				
Tetrachloroethene	10.3	0.500	10	0	103	80	120				
2-Hexanone	20.0	5.00	20	0	100	44	152				
Dibromochloromethane	9.50	0.500	10	0	95	75	123				
1,2-Dibromoethane	10.3	0.500	10	0	103	80	120				
Chlorobenzene	10.2	0.500	10	0	102	80	120				
Ethylbenzene	10.3	0.500	10	0	103	80	120				
Xylenes (total)	31.3	1.00	30	0	104	80	120				
Styrene	9.45	0.500	10	0	94	79	120				
Bromoform	9.18	1.00	10	0	92	72	126				
Isopropylbenzene	10.3	0.500	10	0	103	80	121				
1,1,2,2-Tetrachloroethane	10.1	0.500	10	0	101	73	122				
1,3-Dichlorobenzene	10.2	0.500	10	0	103	80	120				
1,4-Dichlorobenzene	10.2	0.500	10	0	102	80	120				
1,2-Dichlorobenzene	10.2	0.500	10	0	102	80	120				
1,2-Dibromo-3-chloropropane	8.58	5.00	10	0	86	71	124				
1,2,4-Trichlorobenzene	9.67	1.00	10	0	97	73	123				
Surr: 1,2-Dichloroethane-d4	9.58	0.100	10	0	96	75	134				
Surr: Toluene-d8	10.2	0.100	10	0	102	75	125				
Surr: 4-Bromofluorobenzene	9.78	0.100	10	0	98	75	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15832 | SampType: LCS | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15832
Client ID: ZZZZZ | Batch ID: R15832 | Method: SW8260B | Analysis Date: 12/15/08 | SeqNo: 412416
Instrument: MS03_10 | ColumnID: Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	63	139				
Chloromethane	9.03	1.00	10	0	90	59	133				
Vinyl chloride	9.87	1.00	10	0	99	75	125				
Bromomethane	8.12	1.00	10	0	81	42	156				
Chloroethane	10.6	1.00	10	0	106	75	124				
Trichlorofluoromethane	10.6	1.00	10	0	106	73	132				
1,1-Dichloroethene	9.89	0.500	10	0	99	77	126				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.6	0.500	10	0	106	80	120				
Acetone	20.6	10.0	20	0	103	37	153				
Carbon disulfide	10.6	0.500	10	0	106	76	122				
Methyl acetate	11.0	5.00	10	0	110	67	136				
Methylene chloride	9.49	2.00	10	0	95	78	120				
trans-1,2-Dichloroethene	9.95	0.500	10	0	100	80	120				
Methyl tert-butyl ether	10.1	1.00	10	0	101	76	122				
1,1-Dichloroethane	10.0	0.500	10	0	100	80	120				
cis-1,2-Dichloroethene	10.3	0.500	10	0	103	80	120				
2-Butanone	20.3	10.0	20	0	102	49	153				
Chloroform	9.88	0.500	10	0	99	80	120				
1,1,1-Trichloroethane	9.88	0.500	10	0	99	80	127				
Cyclohexane	10.7	0.500	10	0	107	78	124				
Carbon tetrachloride	10.3	0.500	10	0	103	74	137				
Benzene	10.2	0.500	10	0	102	80	120				
1,2-Dichloroethane	9.79	0.500	10	0	98	73	126				
Trichloroethene	10.0	0.500	10	0	100	80	120				
Methylcyclohexane	10.3	0.500	10	0	103	75	126				
1,2-Dichloropropane	10.3	0.500	10	0	103	80	120				
Bromodichloromethane	10.1	0.500	10	0	101	78	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\J7827.D                                  Vial: 38
Acq On    : 15 Dec 2008  12:13                                        Operator: JK
Sample    : LCS-15832                                                 Inst: HPMS10
Misc      : LCS ,8260W7_OLM42,                                        Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008                     Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title        : VOC's w/Restek Rtx-VMS 0.18 mm x 40 m, 1.0 df
Last Update  : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW
```

Internal Standards

	R.T.	Qlon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2461625	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.47	82	895343	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	678129	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	559631	9.58 ug/L	0.00
Spiked Amount 10.000			Recovery =	95.80%	
37) Toluene-d8	14.25	98	2296874	10.15 ug/L	0.00
Spiked Amount 10.000			Recovery =	101.50%	
49) Bromofluorobenzene	18.26	95	771776	9.78 ug/L	0.00
Spiked Amount 10.000			Recovery =	97.80%	

Target Compounds

	R.T.	Qlon	Response	Conc Units	Qvalue
2) Dichlorodifluoromethane	4.07	85	947241	10.50 ug/L	99
3) Chloromethane	4.59	50	816150	9.03 ug/L	98
4) Vinyl chloride	4.80	62	556400	9.87 ug/L	96
5) Bromomethane	5.59	94	461264	8.12 ug/L	97
6) Chloroethane	5.82	64	482541	10.61 ug/L	99
7) Trichlorofluoromethane	5.32	101	975638	10.63 ug/L	99
8) 1,1-Dichloroethene	7.40	96	585011	9.89 ug/L	98
9) Carbon disulfide	8.27	76	1822829	10.55 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	7.09	101	679227	10.64 ug/L	98
11) Methylene chloride	8.17	84	646332	9.49 ug/L	98
12) Acetone	7.14	43	235144	20.62 ug/L	94
13) trans-1,2-Dichloroethene	7.40	96	595011	9.95 ug/L	98
14) Methyl acetate	7.89	43	341482	11.02 ug/L	99
15) Methyl tert-butyl ether	8.42	73	1479755	10.05 ug/L	98
16) 1,1-Dichloroethane	9.30	63	1038404	10.03 ug/L	100
17) cis-1,2-Dichloroethene	10.23	96	786211	10.32 ug/L	99
18) Cyclohexane	11.12	56	1115224	10.70 ug/L	99
19) Chloroform	10.45	83	1078058	9.88 ug/L	99
20) Carbon tetrachloride	11.45	117	763551	10.34 ug/L	98
21) 1,1,1-Trichloroethane	11.06	97	937084	9.88 ug/L	99
22) 2-Butanone	9.89	43	341976	20.34 ug/L	99
23) Benzene	11.68	78	2917057	10.19 ug/L	100
25) 1,2-Dichloroethane	11.61	62	685010	9.79 ug/L	98
26) Methylcyclohexane	12.67	83	1006766	10.30 ug/L	99
27) Trichloroethene	12.54	130	703149	10.02 ug/L	98
28) 1,2-Dichloropropane	12.78	63	642949	10.28 ug/L	99
29) Bromodichloromethane	13.12	83	746581	10.06 ug/L	100
30) cis-1,3-Dichloropropene	13.85	75	951664	10.00 ug/L	97
31) Toluene	14.36	92	1794470	10.25 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7827.D JD05NTCL.M Tue Dec 16 13:56:57 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7827.D
Acq On : 15 Dec 2008 12:13
Sample : LCS-15832
Misc : LCS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008

Vial: 38
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	662373	20.63 ug/L	99
33) trans-1,3-Dichloropropene	14.54	75	755557	9.84 ug/L	98
34) 1,1,2-Trichloroethane	14.81	83	423696	10.21 ug/L	100
35) 2-Hexanone	14.74	43	464207	20.02 ug/L	98
38) Tetrachloroethene	15.34	166	672085	10.28 ug/L	99
39) Dibromochloromethane	15.63	129	522424	9.50 ug/L	98
40) 1,2-Dibromoethane	15.93	107	459625	10.32 ug/L	98
41) Chlorobenzene	16.54	112	1833522	10.21 ug/L	99
42) Ethylbenzene	16.58	91	3148156	10.31 ug/L	99
43) (m+p)-Xylene	16.68	106	2529268	20.75 ug/L	100
44) o-Xylene	17.35	106	1212600	10.55 ug/L	99
45) Styrene	17.39	104	1796283	9.45 ug/L	98
46) Bromoform	17.96	173	266389	9.18 ug/L	99
48) Isopropylbenzene	17.66	105	2617542	10.26 ug/L	100
50) 1,1,2,2-Tetrachloroethane	18.09	83	557395	10.14 ug/L	99
51) 1,3-Dichlorobenzene	19.98	146	1223882	10.25 ug/L	99
52) 1,4-Dichlorobenzene	20.12	146	1162640	10.22 ug/L	99
53) 1,2-Dichlorobenzene	20.71	146	1124548	10.15 ug/L	100
54) 1,2-Dibromo-3-chloropropan	21.88	75	61696	8.58 ug/L	98
55) 1,2,4-Trichlorobenzene	23.33	180	506000	9.67 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7827.D JD05NTCL.M Tue Dec 16 13:56:57 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7827.D
Acq On : 15 Dec 2008 12:13
Sample : LCS-15832, 15831 JK 12/29/08
Misc : LCS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 5:52 2008

Vial: 38
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 05:51:50 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2461625	10.00 ug/L	0.00
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.66	96	633386	9.95 ug/L	88

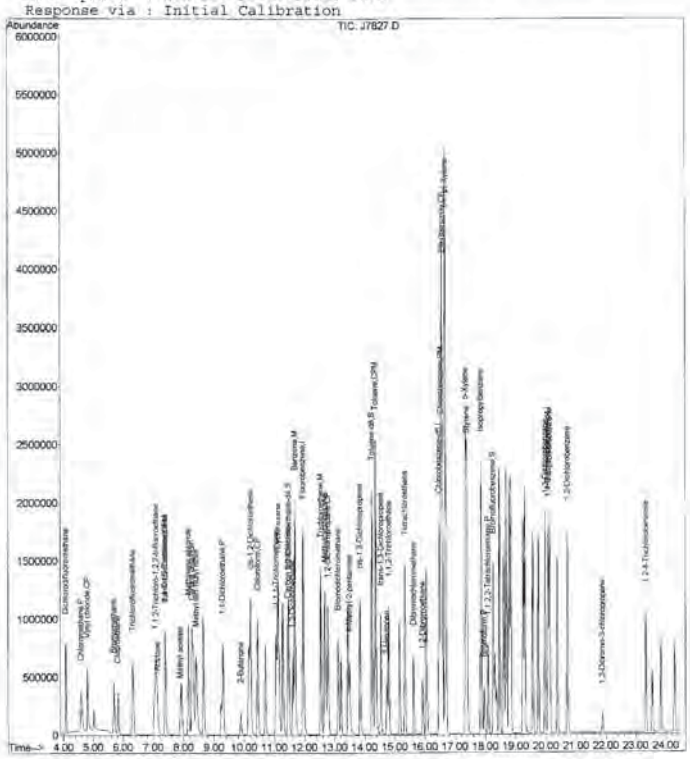
(#) = qualifier out of range (m) = manual integration
J7827.D JD05T12W.M Mon Dec 29 05:53:38 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7827.D
Acq On : 15 Dec 2008 12:13
Sample : LCS-15832
Misc : LCS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008

Vial: 38
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration



J7827.D JD05NTCL.M Tue Dec 16 13:56:59 2008

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

Sample ID: LCSD-15832	SampleType: LCSD	TestCode: 8260W7_OL	Units: µg/L	Prep Date		RunNo: 15832					
Client ID: ZZZZZ	Batch ID: R15832	Method: SW8260B		Analysis Date: 12/15/08		SeqNo: 412417					
Instrument: MS03_10	ColumnID: Rtx-VMS	Rtx-VMS, 1.0 df									

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.6	1.00	10	0	106	63	139	10.5	1.1	20	
Chloromethane	9.39	1.00	10	0	94	59	133	9.03	3.9	20	
Vinyl chloride	10.2	1.00	10	0	102	75	125	9.87	3.7	20	
Bromomethane	8.89	1.00	10	0	89	42	156	8.12	9.1	24	
Chloroethane	10.7	1.00	10	0	107	75	124	10.6	1.0	20	
Trichlorofluoromethane	10.7	1.00	10	0	107	73	132	10.6	0.7	20	
1,1-Dichloroethene	10.0	0.500	10	0	100	77	128	9.89	1.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	0.500	10	0	100	80	120	10.6	2.7	20	
Acetone	20.8	10.0	20	0	104	37	163	20.6	0.7	50	
Carbon disulfide	10.9	0.500	10	0	109	76	122	10.6	3.4	20	
Methyl acetate	11.0	5.00	10	0	110	57	136	11	0.1	20	
Methylene chloride	9.69	2.00	10	0	97	78	120	9.49	2.1	20	
trans-1,2-Dichloroethene	10.3	0.500	10	0	103	80	120	9.95	3.2	20	
Methyl tert-butyl ether	10.2	1.00	10	0	102	76	122	10.1	1.2	20	
1,1-Dichloroethane	9.95	0.500	10	0	100	80	120	10	0.8	20	
cis-1,2-Dichloroethene	10.5	0.500	10	0	105	80	120	10.3	1.4	20	
2-Butanone	20.9	10.0	20	0	104	49	153	20.3	2.7	50	
Chloroform	10.1	0.500	10	0	101	80	120	9.88	1.8	20	
1,1,1-Trichloroethane	10.2	0.500	10	0	102	80	127	9.88	3.2	20	
Cyclohexane	11.0	0.500	10	0	110	78	124	10.7	2.8	20	
Carbon tetrachloride	10.6	0.500	10	0	106	74	137	10.3	2.8	20	
Benzene	10.3	0.500	10	0	103	80	120	10.2	0.9	20	
1,2-Dichloroethane	9.98	0.500	10	0	100	73	126	9.79	1.9	20	
Trichloroethene	10.3	0.500	10	0	103	80	120	10	2.9	20	
Methylcyclohexane	10.9	0.500	10	0	109	75	126	10.3	5.3	20	
1,2-Dichloropropane	10.4	0.500	10	0	104	80	120	10.3	1.5	20	
Bromodichloromethane	10.3	0.500	10	0	103	78	125	10.1	2.4	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCSD-15832 | SampType: LCSD | TestCode: 8260W7_OL | Units: µg/L | Prep Date: | RunNo: 15832
Client ID: ZZZZZ | Batch ID: R15832 | Method: SW8260B | Analysis Date: 12/15/08 | SeqNo: 412417
Instrument: MS03_10 | Column(I): Rtx-VMS | Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	10.2	0.500	10	0	102	80	120	10	2.1	20	
4-Methyl-2-pentanone	20.8	5.00	20	0	103	50	150	20.6	0.1	50	
Toluene	10.6	0.500	10	0	106	80	120	10.2	2.1	20	
trans-1,3-Dichloropropene	10.2	0.500	10	0	102	73	121	9.84	3.3	25	
1,1,2-Trichloroethane	10.4	0.500	10	0	104	80	120	10.2	1.7	20	
Tetrachloroethene	10.4	0.500	10	0	104	82	120	10.3	1.2	20	
2-Hexanone	20.7	5.00	20	0	103	44	152	20	3.1	50	
Dibromochloromethane	9.71	0.500	10	0	97	75	123	9.5	2.2	20	
1,2-Dibromoethane	10.4	0.500	10	0	104	80	120	10.3	1.2	20	
Chlorobenzene	10.4	0.500	10	0	104	80	120	10.2	1.5	20	
Ethylbenzene	10.6	0.500	10	0	106	80	120	10.3	2.3	20	
Xylenes (total)	32.0	1.00	30	0	107	80	120	31.3	2.3	20	
Styrene	9.63	0.500	10	0	96	79	120	9.45	1.9	20	
Bromoform	9.26	1.00	10	0	93	72	126	9.16	0.9	20	
Isopropylbenzene	10.4	0.500	10	0	104	80	121	10.3	1	20	
1,1,2,2-Tetrachloroethane	10.3	0.500	10	0	103	73	122	10.1	1.5	20	
1,3-Dichlorobenzene	10.4	0.500	10	0	104	80	120	10.2	1.2	20	
1,4-Dichlorobenzene	10.2	0.500	10	0	102	80	120	10.2	0.3	20	
1,2-Dichlorobenzene	10.2	0.500	10	0	102	80	120	10.2	0.8	20	
1,2-Dibromo-3-chloropropane	8.47	5.00	10	0	85	71	124	8.58	1.3	20	
1,2,4-Trichlorobenzene	9.89	1.00	10	0	99	73	123	9.67	2.2	20	
Surr: 1,2-Dichloroethane-d4	9.46	0.100	10	0	95	75	134	0		0	
Surr: Toluene-d8	10.2	0.100	10	0	102	75	125	0		0	
Surr: 4-Bromofluorobenzene	9.67	0.100	10	0	97	75	125	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

09-Jan-09

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7828.D
Acq On : 15 Dec 2008 12:48
Sample : LCSD-15832
Misc : LCSD,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008

Vial: 39
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2422006	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	881962	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	671992	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	543912	9.46 ug/L	0.00
Spiked Amount 10.000				Recovery = 94.60%	
37) Toluene-d8	14.25	98	2267400	10.17 ug/L	0.00
Spiked Amount 10.000				Recovery = 101.70%	
49) Bromofluorobenzene	18.26	95	756103	9.67 ug/L	0.00
Spiked Amount 10.000				Recovery = 96.70%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.08	85	943308	10.62 ug/L	100
3) Chloromethane	4.59	50	834725	9.39 ug/L	99
4) Vinyl chloride	4.80	62	568187	10.24 ug/L	94
5) Bromomethane	5.69	94	496770	8.89 ug/L	98
6) Chloroethane	5.83	64	479863	10.72 ug/L	100
7) Trichlorofluoromethane	6.32	101	965996	10.70 ug/L	99
8) 1,1-Dichloroethene	7.40	96	584109	10.04 ug/L	97
9) Carbon disulfide	8.28	76	1926642	10.91 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	7.09	101	686901	10.93 ug/L	98
11) Methylene chloride	8.16	84	648695	9.69 ug/L	97
12) Acetone	7.14	43	232924	20.76 ug/L	91
~~13) trans-1,2-Dichloroethene~~	~~7.48~~	~~96~~	~~584109~~	~~10.04 ug/L~~	~~97~~
14) Methyl acetate	7.89	43	335847	11.01 ug/L	98
15) Methyl tert-Butyl ether	8.41	73	1473342	10.21 ug/L	98
16) 1,1-Dichloroethane	9.30	63	1071842	9.95 ug/L	99
17) cis-1,2-Dichloroethene	10.22	96	745119	10.47 ug/L	99
18) Cyclohexane	11.13	56	1127757	11.00 ug/L	99
19) Chloroform	10.45	83	1080265	10.06 ug/L	99
20) Carbon tetrachloride	11.45	117	772325	10.63 ug/L	99
21) 1,1,1-Trichloroethane	11.06	97	951724	10.20 ug/L	99
22) 2-Butanone	9.89	43	345734	20.90 ug/L	100
23) Benzene	11.68	78	2895849	10.28 ug/L	100
25) 1,2-Dichloroethane	11.61	62	687015	9.98 ug/L	98
26) Methylcyclohexane	12.68	83	1044327	10.86 ug/L	99
27) Trichloroethene	12.54	130	712375	10.32 ug/L	99
28) 1,2-Dichloropropane	12.77	63	642681	10.44 ug/L	99
29) Bromodichloromethane	13.12	83	752047	10.30 ug/L	98
30) cis-1,3-Dichloropropene	13.85	75	956502	10.21 ug/L	97
31) Toluene	14.36	92	1804530	10.47 ug/L	100

(#) = qualifier out of range (m) = manual integration
J7828.D JD05NTCL.M Tue Dec 16 13:57:03 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7828.D
Acq On : 15 Dec 2008 12:48
Sample : LCSD-15832
Misc : LCSD,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008

Vial: 39
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	651825	20.64 ug/L	99
33) trans-1,3-Dichloropropene	14.54	75	768327	10.17 ug/L	97
34) 1,1,2-Trichloroethane	14.80	83	424282	10.39 ug/L	99
35) 2-Hexanone	14.73	43	471363	20.66 ug/L	97
38) Tetrachloroethene	15.34	166	669894	10.40 ug/L	98
39) Dibromochloromethane	15.62	129	526447	9.71 ug/L	98
40) 1,2-Dibromoethane	15.93	107	458102	10.44 ug/L	99
41) Chlorobenzene	16.54	112	1832649	10.36 ug/L	99
42) Ethylbenzene	16.57	91	3174872	10.55 ug/L	99
43) (m+p)-Xylene	16.69	106	2547986	21.22 ug/L	100
44) o-Xylene	17.35	106	1223519	10.81 ug/L	99
45) Styrene	17.38	104	1604322	9.63 ug/L	97
46) Bromoform	17.96	173	264965	9.26 ug/L	99
48) Isopropylbenzene	17.86	105	2618473	10.36 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.09	83	561046	10.30 ug/L	99
51) 1,3-Dichlorobenzene	19.97	146	1227290	10.37 ug/L	100
52) 1,4-Dichlorobenzene	20.13	146	1149506	10.19 ug/L	99
53) 1,2-Dichlorobenzene	20.71	146	1123468	10.23 ug/L	99
54) 1,2-Dibromo-3-chloropropan	21.88	75	60406	8.47 ug/L	99
55) 1,2,4-Trichlorobenzene	23.33	180	512957	9.89 ug/L	99

(#) = qualifier out of range (m) = manual integration
J7828.D JD05NTCL.M Tue Dec 16 13:57:04 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7828.D
Acq On : 15 Dec 2008 12:48
Sample : LCSD-15832 , 15831 12/29/08
Misc : LCSD,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 5:52 2008

Vial: 39
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 05:51:50 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

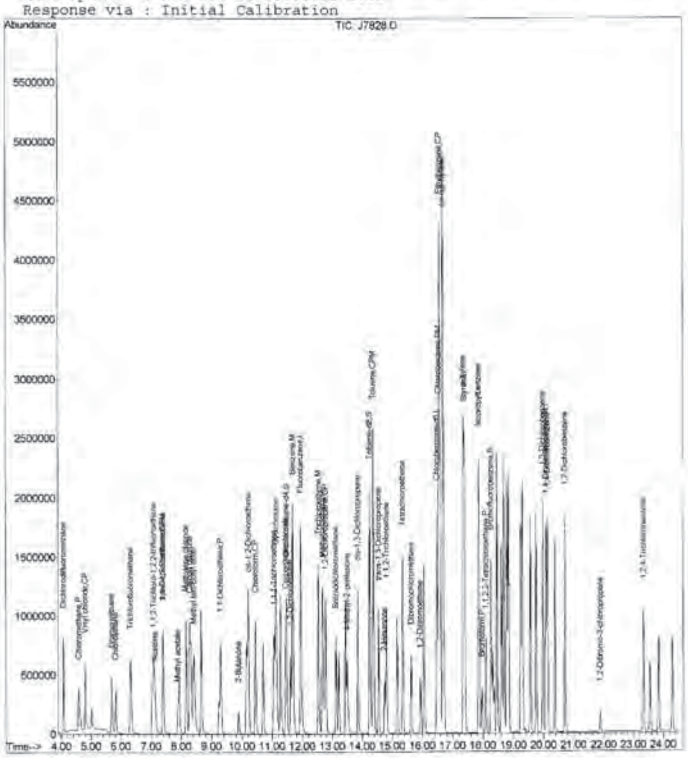
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	2422006	10.00 ug/L	0.00
Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.66	96	643317	10.27 ug/L	88

(#) = qualifier out of range (m) = manual integration
J7828.D JD05T12W.M Mon Dec 29 05:53:56 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7828.D Vial: 39
Acq On : 15 Dec 2008 12:48 Operator: JK
Sample : LCSD-15832 Inst : #3MS10
Misc : LCSD,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 16 13:29 2008 Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 15 16:33:55 2008
Response via : Initial Calibration



J7828.D JD05NTCL.M Tue Dec 16 13:57:05 2008 Pa

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15857 SampType: LCS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413173
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	10.5	1.00	10	0	105	63	139				
Chloromethane	9.80	1.00	10	0	98	59	133				
Vinyl chloride	11.1	1.00	10	0	111	75	125				
Bromomethane	8.23	1.00	10	0	82	42	156				
Chloroethane	10.5	1.00	10	0	105	75	124				
Trichlorofluoromethane	10.5	1.00	10	0	105	73	132				
1,1-Dichloroethene	9.20	0.500	10	0	92	77	126				
1,1,2-Trichloro-1,2,2-trifluoroethane	10.3	0.500	10	0	103	80	120				
Acetone	20.6	10.0	20	0	103	37	163				
Carbon disulfide	10.1	0.500	10	0	101	78	122				
Methyl acetate	11.0	5.00	10	0	110	87	136				
Methylene chloride	9.03	2.00	10	0	90	78	120				
trans-1,2-Dichloroethene	9.38	0.500	10	0	94	80	120				
Methyl tert-butyl ether	9.05	1.00	10	0	90	76	122				
1,1-Dichloroethane	9.63	0.500	10	0	96	80	120				
cis-1,2-Dichloroethene	9.61	0.500	10	0	96	80	120				
2-Butanone	19.5	10.0	20	0	98	49	153				
Chloroform	9.56	0.500	10	0	96	80	120				
1,1,1-Trichloroethane	9.29	0.500	10	0	93	80	127				
Cyclohexane	10.1	0.500	10	0	101	78	124				
Carbon tetrachloride	9.70	0.500	10	0	97	74	137				
Benzene	9.55	0.500	10	0	96	80	120				
1,2-Dichloroethane	9.41	0.500	10	0	94	73	126				
Trichloroethene	9.03	0.500	10	0	90	80	120				
Methylcyclohexane	9.69	0.500	10	0	97	75	126				
1,2-Dichloropropane	9.75	0.500	10	0	98	80	120				
Bromodichloromethane	9.56	0.500	10	0	96	78	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8260B
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-15857 SampType: LCS TestCode: 8260W7_OL Units: µg/L Prep Date: RunNo: 15857
Client ID: ZZZZZ Batch ID: R15857 Method: SW8260B Analysis Date: 12/16/08 SeqNo: 413173
Instrument: MS03_10 ColumnID: Rtx-VMS Rtx-VMS, 1.0 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	9.32	0.500	10	0	93	80	120				
4-Methyl-2-pentanone	19.4	5.00	20	0	97	50	150				
Toluene	9.45	0.500	10	0	94	80	120				
trans-1,3-Dichloropropene	9.17	0.500	10	0	92	73	121				
1,1,2-Trichloroethane	9.82	0.500	10	0	98	80	120				
Tetrachloroethene	9.28	0.500	10	0	93	80	120				
2-Hexanone	19.0	5.00	20	0	95	44	152				
Dibromochloromethane	8.73	0.500	10	0	87	75	123				
1,2-Dibromoethane	9.49	0.500	10	0	95	80	120				
Chlorobenzene	9.45	0.500	10	0	94	60	120				
Ethylbenzene	9.63	0.500	10	0	96	60	120				
Xylenes (total)	29.0	1.00	30	0	97	80	120				
Styrene	8.76	0.500	10	0	88	79	120				
Bromoform	8.31	1.00	10	0	83	72	126				
Isopropylbenzene	9.48	0.500	10	0	95	80	121				
1,1,2,2-Tetrachloroethane	9.87	0.500	10	0	99	73	122				
1,3-Dichlorobenzene	9.50	0.500	10	0	95	80	120				
1,4-Dichlorobenzene	9.37	0.500	10	0	94	80	120				
1,2-Dichlorobenzene	9.41	0.500	10	0	94	80	120				
1,2-Dibromo-3-chloropropane	7.77	5.00	10	0	78	71	124				
1,2,4-Trichlorobenzene	8.90	1.00	10	0	89	73	123				
Surr: 1,2-Dichloroethane-d4	9.87	0.100	10	0	99	75	154				
Surr: Toluene-d8	9.94	0.100	10	0	99	75	125				
Surr: 4-Bromofluorobenzene	9.58	0.100	10	0	96	75	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL

09-Jan-09

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7853.D Vial: 3
Acq On : 16 Dec 2008 10:24 Operator: JK
Sample : LCS-15857 Inst : #3MS10
Misc : LCS ,8260W7_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008 Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1847480	10.00 ug/L	0.00
36) Chlorobenzene-d5	16.48	82	675841	10.00 ug/L	0.00
47) 1,4-Dichlorobenzene-d4	20.07	152	506913	10.00 ug/L	0.00
System Monitoring Compounds					
24) 1,2-Dichloroethane-d4	11.47	65	432948	9.87 ug/L	0.00
Spiked Amount 10.000			Recovery =	98.70%	
37) Toluene-d8	14.25	98	1698465	9.94 ug/L	0.00
Spiked Amount 10.000			Recovery =	99.40%	
49) Bromofluorobenzene	18.26	95	564750	9.58 ug/L	0.00
Spiked Amount 10.000			Recovery =	95.80%	

Target Compounds	R.T.	QIon	Response	Conc Units	Qvalue
2) Dichlorodifluoromethane	4.08	85	710887	10.50 ug/L	99
3) Chloromethane	4.58	50	664716	9.80 ug/L	98
4) Vinyl chloride	4.80	62	468789	11.08 ug/L	97
5) Bromomethane	5.69	94	351136	8.23 ug/L	99
6) Chloroethane	5.83	64	359021	10.52 ug/L	99
7) Trichlorofluoromethane	6.32	101	721595	10.48 ug/L	99
8) 1,1-Dichloroethene	7.40	96	408440	9.20 ug/L	99
9) Carbon disulfide	8.28	76	1362682	10.12 ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	7.08	101	493252	10.29 ug/L	100
11) Methylene chloride	8.16	84	461272	9.03 ug/L	98
12) Acetone	7.14	43	176198	20.58 ug/L	86
~~13) trans-1,2-Dichloroethene~~	~~7.40~~	~~96~~	~~408440~~	~~9.20 ug/L~~	~~96~~ 12/31/08
14) Methyl acetate	7.89	43	256838	11.04 ug/L	98
15) Methyl tert-Butyl ether	8.41	73	995531	9.05 ug/L	100
16) 1,1-Dichloroethane	9.30	63	791496	9.63 ug/L	100
17) cis-1,2-Dichloroethene	10.21	96	521462	9.61 ug/L	99
18) Cyclohexane	11.12	56	790591	10.11 ug/L	97
19) Chloroform	10.44	83	783297	9.56 ug/L	98
20) Carbon tetrachloride	11.45	117	637697	9.70 ug/L	99
21) 1,1,1-Trichloroethane	11.06	97	661156	9.29 ug/L	99
22) 2-Butanone	9.89	43	246418	19.53 ug/L	98
23) Benzene	11.67	78	2051913	9.55 ug/L	100
25) 1,2-Dichloroethane	11.61	62	494382	9.41 ug/L	99
26) Methylcyclohexane	12.68	83	710738	9.69 ug/L	97
27) Trichloroethene	12.54	130	475294	9.03 ug/L	97
28) 1,2-Dichloropropane	12.77	63	457676	9.75 ug/L	100
29) Bromodichloromethane	13.12	83	532010	9.56 ug/L	99
30) cis-1,3-Dichloropropene	13.85	75	666043	9.32 ug/L	99
31) Toluene	14.36	92	1242736	9.45 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7853.D JD05NTCL.M Thu Dec 18 11:01:04 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7853.D
Acq On : 16 Dec 2008 10:24
Sample : LCS-15857
Misc : LCS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) 4-Methyl-2-pentanone	13.50	43	468095	19.43 ug/L	99
33) trans-1,3-Dichloropropene	14.54	75	528266	9.17 ug/L	99
34) 1,1,2-Trichloroethane	14.80	83	305881	9.82 ug/L	99
35) 2-Hexanone	14.73	43	331136	19.03 ug/L	99
38) Tetrachloroethene	15.34	166	456718	9.26 ug/L	98
39) Dibromochloromethane	15.62	129	360007	8.73 ug/L	99
40) 1,2-Dibromoethane	15.93	107	318872	9.49 ug/L	99
41) Chlorobenzene	16.54	112	1281455	9.45 ug/L	100
42) Ethylbenzene	16.57	91	2219820	9.63 ug/L	98
43) (m+p)-Xylene	16.69	106	1789442	19.45 ug/L	99
44) o-Xylene	17.35	106	830800	9.58 ug/L	97
45) Styrene	17.38	104	1249957	8.76 ug/L	100
46) Bromoform	17.96	173	180282	8.31 ug/L	100
48) Isopropylbenzene	17.86	105	1806811	9.48 ug/L	99
50) 1,1,2,2-Tetrachloroethane	18.09	83	405552	9.87 ug/L	99
51) 1,3-Dichlorobenzene	19.97	146	848163	9.50 ug/L	99
52) 1,4-Dichlorobenzene	20.13	146	797392	9.37 ug/L	99
53) 1,2-Dichlorobenzene	20.71	146	779800	9.41 ug/L	99
54) 1,2-Dibromo-3-chloropropan	21.88	75	41810	7.77 ug/L	94
55) 1,2,4-Trichlorobenzene	23.33	180	347897	8.90 ug/L	98

(#) = qualifier out of range (m) = manual integration
J7853.D JD05NTCL.M Thu Dec 18 11:01:04 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\J7853.D
Acq On : 16 Dec 2008 10:24
Sample : LCS-15860, 15857, 15859 JK 12/29/08
Misc : LCS ,624W,
MS Integration Params: RTEINT.P
Quant Time: Dec 29 6:03 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05T12W.RES

Quant Method : C:\HPCHEM\1\METHODS\JD05T12W.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Mon Dec 29 06:01:46 2008
Response via : Initial Calibration
DataAcq Meth : JD05VOCW

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.95	96	1847480	10.00 ug/L	0.00

Target Compounds					Qvalue
2) trans-1,2-Dichloroethene	8.66	96	448204	9.38 ug/L	90

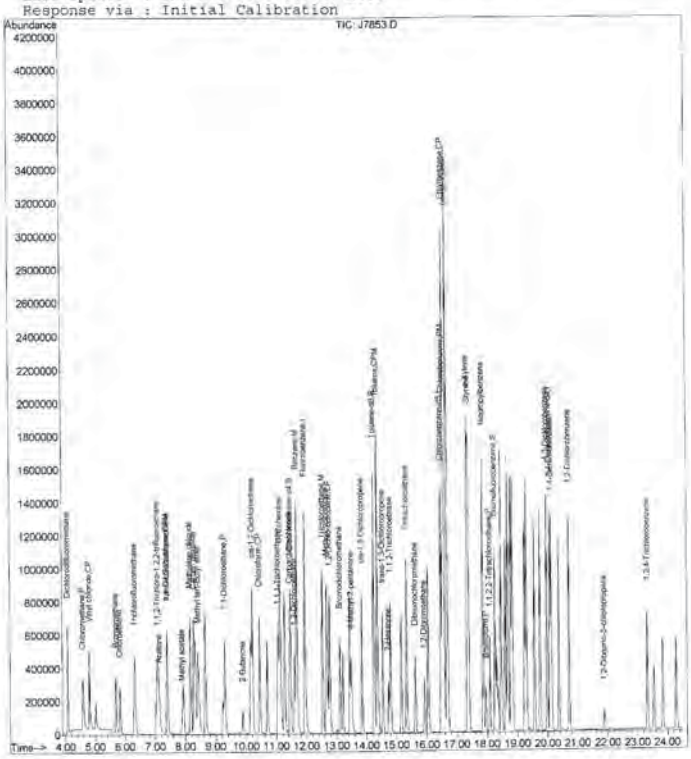
(#) = qualifier out of range (m) = manual integration
J7853.D JD05T12W.M Mon Dec 29 06:08:40 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\J7853.D
Acq On : 16 Dec 2008 10:24
Sample : LCS-15857
Misc : LCS ,8260W7_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 18 10:52 2008

Vial: 3
Operator: JK
Inst : #3MS10
Multiplr: 1.00
Quant Results File: JD05NTCL.RES

Method : C:\HPCHEM\1\METHODS\JD05NTCL.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.18 mm x 40 m, 1.0 df
Last Update : Thu Dec 18 10:49:17 2008
Response via : Initial Calibration



J7853.D JD05NTCL.M Thu Dec 18 11:01:06 2008

Laboratory Worksheets

Copy of Calculations

GC/MS WATER SAMPLE CALCULATIONS

1. Relative Response Factors for GC/MS Volatiles and Semivolatiles

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where:
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specific internal standard
C_{is} = Concentration of the internal standard (µg/mL)
C_x = Concentration of the compound to be measured (µg/mL).

2. Relative Standard Deviation

$$\% RSD = \frac{SD}{\bar{X}} \times 100$$

Where:
RSD = Relative Standard Deviation
SD = Standard Deviation of initial relative response factors (per compound)
$\bar{X}$ = Mean of initial relative response factors (per compound)

3. %Deviation for Continuing Calibration (for quantitation from RF only)

$$\% \text{ Deviation}_{(SOP)} = \frac{RRF_c - \overline{RRF_i}}{RRF_i} \times 100$$

$$\% \text{ Deviation}_{(software)} = \frac{\overline{RRF_i} - RRF_c}{\overline{RRF_i}} \times 100$$

Where:
RRF_c = Relative response factor from continuing calibration standard
$\overline{RRF_i}$ = Mean relative response factor from most recent initial calibration meeting technical acceptance criteria

4. %Drift for Continuing Calibration (for quantitation from Curve)

$$\% \text{ Drift}_{(SOP)} = \frac{C_c - C_i}{C_i} \times 100$$

$$\% \text{ Drift}_{(software)} = \frac{C_i - C_c}{C_i} \times 100$$

Where:
C_i = Calibration check std concentration (theoretical)
C_c = Measured concentration

5. RRT Deviation

$$\Delta \text{ RRT} = RRT_x - RRT_c \;,\; RRT = \frac{RT_t}{RT_i}$$

Where:
RRT_x = Relative RT of target compound in sample
RRT_c = RRT of target in continuing calibration standard
RT_t = RT of target compound
RT_i = RT of internal standard

GC/MS WATER SAMPLE CALCULATIONS

6. Final Concentration for GC/MS Volatiles

$$\text{Concentration } (\mu g/L) = \frac{(A_X)(I_{is})Df}{(A_{is})(RRF)(V_o)}$$

Where:
A_X = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specified internal standard
I_{is} = Amount of internal standard added in nanograms
V_o = Volume of water purged (5 to 25 mL)
RRF = Response factor for compound to be measured (average or single point) *
Df = Dilution factor, if applicable

* For compounds calculated using a regression equation for initial calibration, the terms of the equation replace the RRF.

7. Final Concentration for GC/MS Semivolatiles

$$\text{Concentration } (\mu g/L) = \frac{(A_x)(I_{is})(V_T)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)}$$

Where:
RRF, A_x, A_{is}, I_{is} = Same as above
V_o = Volume of water extracted (mL)
V_i = Volume of extract injected (µL)
V_T = Volume of concentrated extract (µL)
Df = Dilution factor
The factor of 2.0 is used to account for the splitting of extracts for the acid and base neutral portions. If only one extraction is performed, this factor is not used.

8. Matrix Spike Recovery for Volatiles and Semivolatiles

$$\text{Recovery } (\%) = \frac{(SSR) - (SR)}{(SA)} \times 100$$

Where:
SSR = Spike sample result
SR = Sample result
SA = Spike added

9. % RPD of Matrix Spike and Matrix Spike Duplicate

$$\%RPD = 100 \times \frac{|S - D|}{((S + D)/2)}$$

Where:
S = First Sample Value (Original)
D = Second Sample Value (Duplicate)

10. The Recovery of Reference Sample (LCS) and Surrogate

$$\text{Recovery } (\%) = \frac{SR}{SA} \times 100$$

Where:
SR = Sample results
SA = Sample spike added

11. The calculation of Library Search compounds (TICs) is similar to target compounds except a RRF of 1.0 is assumed.

Injection Logs

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: WATER
Heated Purge: Y (N)

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		ICAL #1442
3		
4		

	ALS No.	Client No.	Sample ID (Work Order - Sample#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Date	Time	Diln. Factor
1			TB120508A3	1D05VOCW	—	8260	—	J7705	12-5-08	0915	—
2			ICAL-0.5ppb		10mL		VOC	J7706		1052	1X
3			1.0					J7707		1124	
4			2.0					J7708		1156	
5			10					J7709 (20ppb)		1228	
6			20					J7710 (30ppb)		1300	
7			30					J7712		1332	
8			40					J7713		1403	
9			IBLK-					J7714		1436	
10			2SRC-15738					J7715		1528	
11			-					J			
12			-					J			
13			-					J			
14			-					J			
15			-					J			
16			-					J			
17			-					J			
18			-					J			
19			-					J			
20			-					J			
21			-					J			
22			-					J			
23			-					J			
24			-					J			
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP-AF.8002
(1) 524.2	EPA-600 Series Supp.II, Rev. 4.1	10/95	-51
(2) 624	Fed Register, Vol. 49, No. 209	10/29/84	-63
(3) TCLP	40CFR at 1311 (AP #100-01)	12/96	-27A/100-01
(4) 8260B	USEPA SW846, Upd.III	12/96	-27A
(5) EPA-CLP	USEPA CLP SOW OLM04.3	8/03	-38
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/03	-38

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or uL med. extract added to 4dmL vial)

Supervisor Review: 1-8-09

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

Log Page No. 77

G:\Logbooks 2008\Organics\MSV3p1.XLS

488

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (% of CCV/ICAL Area)

			Upper Limit
			Lower Limit

Pre-run maintenance
- Replace Septa
- Replace trap, Lot
- X Replace Helium
- See Maint. log
- X Other: New column *

Internal Standard Area Counts			Matrix							
Int. Std. #1	Int. Std. #2	Int. Std. #3	Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—	—	—	—		V8425			1
2051599	734110	491843	X			R15738	V8413,14,15,16		8.4, 4.2 ml	2
2028684	741745	495172	X						8.4, 8.4 ml	3
2021238	740164	499299	X						8.4, 16.8, 16.8 ml	4
2013778	746564	557658	X				V8412,14,15,16		8.4, 4.2, 4.2, 4.2 ml	5
2083867	771853	612099	X						8.4, 8.4, 8.4, 8.4 ml	6
2224276	802284	652841	X						8.4, 12.6, 12.6, 12.6 ml	7
2128301	793515	642812	X						8.4, 16.8, 16.8, 16.8 ml	8
2196886	800073	552389	X				V8425		ok 5 ml	9
2118212	772239	571114	X				V8421,22,23,24		8.4, 4.2, 4.2, 4.2 ml	10
										11
										12
										13
										14
									* Rtx-502.2	15
									60m x 0.25mm, 1.4df	16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review: 1-8-09

MSV3p2.XLS

Log Page No. 78

489

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: Water
Heated Purge: Y (N)

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		✓ [redacted]
3		✓ BBC - Corr to General
4		

	ALS No.	Client No.	Sample ID (Work Order - Sample#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Data File Number	Date	Time	Diln. Factor
1		1	TB121508A3					J7826	12/15/08	11:41	—
2			CCV-15831,32	J1D05A360,NTCL	10ml	8260	VOC	J			1X
3			LCS					J7827		12:13	
4			LCSD					J7828		12:48	
5			IBLK					J7829		13:21	
6			MB					J7830		13:53	
7		2	08120B6-010A	J1D05A360				J7831		14:24	
8			08120B5-007I		2ml			J7832		14:56	5X
9			-009I		0.4ml			J7833		15:28	25X
10			-001I		10ml			J7834		16:00	1X
11			-002I					J7835		16:32	
12			-003I					J7836		17:04	
13			-004I					J7837		17:36	
14			-005I					J7838		18:08	
15			-006I					J7839		18:40	
16			-008I					J7840		19:12	
17			-010I					J7841		19:44	
18			-011A					J7842		20:16	
19			-012A					J7843		20:48	
20		3	08120B8-001A	J1D05NTCL				J7844		21:20	
21			-002A					J7845		21:52	
22			-003A					J7846		22:24	
23			-004A					J7847		22:56	
24			-005A					J7848		23:27	
25			-					J			
26			-					J			
27			-					J			
28			-					J			
29			-					J			

Comments:

Method	Source	Date	SOP-AF.8002
(1) 524.2	EPA-600 Series Supp.II, Rev. 4.1	10/95	-51
(2) 624	Fed Register, Vol. 49, No. 209	10/29/84	-63
(3) TCLP	40CFR at 1311 (AP #100-01)	12/96	-27A/100-01
(4) 8260B	USEPA SW846, Upd.III	12/96	-27A
(5) EPA-CLP	USEPA CLP SOW OLM04.3	8/03	-38
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/03	-38

Samples Set By:

* = Volume(mL)/weight(g) of original sample purged (or uL med. extract added to 4dmL vial)

Supervisor Review: 1-8-09

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

Log Page No. 89

G:\Logbooks 2008\Organics\MSV3p1.XLS

490

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (% of CCV/ICAL Area)

			Upper Limit
			Lower Limit

Pre-run maintenance
- Replace Septa
- Replace trap, Lot
- Replace Helium
- See Maint. log
- Other:

Internal Standard Area Counts			Matrix							
Int. Std. #1	Int. Std. #2	Int. Std. #3	Water Low	Soil Low	Soil Med	Batch No.	Standard No.	pH <2	Comments	
—	—	—					V8413,14,15,16		8.4, 4.2, 4.2, 4.2 ml	1
2557783	920934	705324	X			R15831,32				2
2461625	895343	678129	X				V8412,22,23,24			3
2432006	881962	671992	X							4
2585552	931515	641242	X				V8411		ok 8.4 ml	5
2473550	897330	613638	X							6
2172361	785150	537312	X			R15821		ok		7
2162554	753338	517702	X							8
2074026	746819	502933	X							9
2094203	742063	497620	X							10
2063123	735879	501114	X							11
1944136	684981	469973	X							12
1934613	695116	462129	X							13
1953002	688520	465371	X							14
1933249	704796	478778	X							15
1846954	661241	448711	X							16
1837277	666817	447657	X							17
1796778	647847	437464	X							18
1788249	644912	432546	X							19
1843159	697269	455300	X			R15832				20
1797801	656268	434923	X							21
1801322	679446	564616	X						R10R	22
1786418	651086	427370	X						N R12 5/6	23
1768016	644727	408169	X						N R8	24
										25
										26
										27
										28
										29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by:

Supervisor Review: 1-08-09

MSV3p2.XLS

Log Page No. 90

491

Instrument: MS3/HP5973 (10)
GC Column: Rtx-VMS
0.18 mm x 40 m, 1.0 df
Conc. Trap: VOCARB 3000
Conc. Mtd: Water
Heated Purge: Y N

Volatile GC/MS Injection Log (Page 1of 2)

	Client No.	Client Name
1		QA/QC
2		√Geneva
3		√[redacted]
4		√

ALS No.	Client No.	Sample ID (Work Order - Sample#)	Method /ID File	Inj. Vol.*	Method Ref.	Target List	Date File Number	Date	Time	Diln. Factor
1	1	TB121608A3					J7851	12/16/08	9:20	—
2		CCV - 15857/01 60	JD05VOCW/NTCH/ FPMS/STAR		8260	VOC	J7852		9:52	1X
3	↓	LCS/MSB ↓					J7853		10:24	
4	2	081208-005AMS	JD05NTCL				J7854		11:04	
5	↓	↓ -005AMSD	↓				J7855		11:37	
6	1	TBLK -					J7856		12:09	
7	↓	MB - 15857/01 60	JD05VOCW/NTCH/ FPMS/STAR				J7857		12:41	↓
8	2	081208-005A(DL)	JD05NTCL				J7858		13:13	10X
9		-004A					J7859		13:45	1X
10		-005A					J7860		14:17	
11		-006A					J7861		14:49	
12		-007A					J7862		15:21	
13		-008A					J7863		15:53	
14		-009A					J7864		16:24	
15		-010A					J7865		16:56	
16		-011A					J7866		17:28	
17		-012A					J7867		18:00	
18	↓	↓ -013A	↓				J7868		18:32	
19	3	081208-001A	JD05FPMS				J7869		19:04	
20	4	081208-003A	JD05STAR				J7870		19:36	
21		-005A					J7871		20:08	↓
22		-005A(DL)					J7872		20:40	50X
23	↓	↓ -007A(DL)	↓				J7873		21:12	50X
24	—	BLANK-					J7874		21:44	1X
25	—	BLANK-			↓		J7875		22:16	
26	5	081210-002A	JD05VOCW		6024		J7876		22:48	
27		081211-002A					J7877		23:20	
28		081212-001A					J7878	↓	23:52	
29	↓	↓ -002A	↓		↓	↓	J7879	12/17/08	00:24	↓

Comments: (5) [redacted] (DL)

Method	Source	Date	SOP & MP #/REV
(1) 524.2	EPA-600 Series Rpg(s), Rev. 4.1	10/89	-01
(2) 624	Fed Register, Vol. 49, No. 209	10/26/84	-03
(3) TCLP	EPA SW 1311 (MP #100-01)	12/96	-27A/100-01
(4) 8260B	USEPA SW846, Upd. III	12/96	-27A
(5) EPA CLP	USEPA CLP SOW OLM04.3	8/03	-58
(6) DEC ASP	USEPA CLP SOW OLM04.3	8/03	-59

Samples Set By: [signature]

* ml (volumetric) / weight(g) of original sample purged (for ul. mod. extract added to 4.0mL mod)

(DD) 1-8-09
Supervisor Review

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, E.Syracuse NY, 13057

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Log Page No. 91

Volatile GC/MS Injection Log (page 2 of 2)

Internal Std Limits (% of CCV/ICAL Area)

		Upper Limit
		Lower Limit

Pre-run maintenance
___ Replace Septa
___ Replace trap, Lot ___
___ Replace Helium
___ See Maint. log
___ Other:

Int. Std. #1	Int. Std. #2	Int. Std. #3	Internal Standard Area Counts: Upper	Low	Matrix: Soil	Low	Bmb	Batch No.	Standard No.	pH <2	Comments	
—	—	—						15857/59/60			✱Y	1
1730650	1645110	1492728	X								Y	2
1847480	1675841	1506913	X					↓			Y	3
1933713	1707088	1533371	X					15857		7	Y	4
1963641	1732137	1534492	X					↓		↓	Y	5
1810295	1656908	1216529	X								ok	6
1728139	1623013	1204531	X					15857/59/60			Y	7
1709845	1623621	1490729	X					15857		7	Y	8
1730096	1633378	1412778	X								Y	9
1776039	1643596	1412666	X								Y	10
1715113	1624198	1399581	X								Y	11
1730680	1631297	1400814	X								Y	12
1723348	1627974	1403332	X								Y	13
1763549	1645596	1416845	X								Y	14
1656183	1609244	1397299	X								Y	15
1637214	1594715	1384510	X								Y	16
1569734	1535029	1372418	X								Y	17
1640754	1604537	1387595	X					↓		↓	Y	18
1611835	1590545	1382445	X					15859		42	Y	19
1601815	1592700	1382298	X					15860			Y	20
1592748	1589774	1382149	X								Y	21
1643164	1608767	1442990	X					↓			Y	22
1820300	1648098	1566391	X							↓	N R 100X	23
1739930	1647598	1481652	X								ok	24
1693328	1624612	1479932	X								ok	25
1650037	1607458	1394899	X					15860		42	Y	26
1609863	1599683	1385125	X								Y	27
1523718	1556184	1357306	X								Y	28
1574441	1580452	1365344	X					↓		↓	Y	29

I.S. #1= Fluorobenzene/Bromochloromethane(CLP)
I.S. #2= Chlorobenzene-d5/1,4-Difluorobenzene(CLP)
I.S. #3= 1,4-Dichlorobenzene-d4/Chlorobenzene-d5(CLP)

Analyzed by: [signature]

(DD) 1-8-09
Supervisor Review

MSV3p2.XLS

Log Page No. 92

Standards Logs

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	ID No.	Parent / Source Conc (ppm)	Exp Date	Prep'd By
V-8236	6/13/08	7/13/08	8260 Mix - Ref	—	MeOH/Lot 19	2 ml	100	V-8085	19,200	7/13/08	—
			Vinyl Acetate - Ref	19.6 ul			500	V-8086	11,050		JK
			2-Chlor - Ref	98.5 ul			100	V-8087	19,870		
			CS2 - Ref	19.7 ul			500	V-8088	19,840		
			Methylene Chloride - Ref	98.2 ul				V-8089	19,870		
			Methylcyclohexane - Ref	98.6 ul			100	V-8232	1000	8/13/08	
			Gases - Ref	200 ul							
V8237	6-13-08	10-13-08	8260 Internal Std 7 MSI	570 ul	MeOH/Lot	25 mL	45.5	V8226	2000	11-12-08	NV
			8260 Surrogate Std. 3 Aq Lab	570 ul			45.5	V8221	2000	9-30-08	
V8238	7/8/08	10/13/08	TS/SURR for MS2 (STDMI)	570 ul	CV519		—	—	—	—	
			8260-TS	950 ul	MeOH CV520	20 mL	57	V-8236	2000	10/13/08	
			8260-SURR	580 ul				V-8238	2000	11/8/08	
V-8239	7/8/08	11/8/08	8260 Surrogates	Cracked	MeOH	1.2 ml	2000	V-8207	2000	4/4/2010	
V-8240	7/14/08	11/14/08	Methyl Acetate - Calc	19.8025 - 19.7228 0.1537	MeOH CV520	10 ml	18,370	V-8056	99.5%	7/10	JK
V-8241	7/14/08	11/14/08	1-1,2-DC - 28 - Calc	19.8524 - 19.8524 0.1006	MeOH CV520	10 ml	19,060	V-7879	99.1%	5/09	JK
V-8242	7/14/08	11/14/09	MTBE - Calc	51.0549 - 51.0516 0.1033	MeOH CV520	10 ml	10,330	V-8055	99.5%	7/10	JK
V-8243	7/14/08	11/14/09	1-Chlorohexane - Calc	19.7125 - 19.7052 0.1073	MeOH CV520	10 ml	19,730	V-7331	98%	9/11	JK

Supervisor Review: ___

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6

GC/MS ~~SEM~~IVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8260	7/14/08	11/14/09	Vinyl Acetate - Cal	51.9322 - 51.8235	MeOH/CV200	10ml	11,030	V-6564	99.5%	9/08	JK
				0.1107							
V-8261	7/14/08	11/14/09	2-CEVE - Cal	51.5635 - 51.4551	MeOH/CV200	10ml	10,840	V-7858	98.2%	9/10	JK
				0.1084							
V-8262	7/14/08	11/14/09	CS2 - Cal	51.1350 - 51.0128	MeOH/CV200	10ml	12,220	V-7299	99.5%	10/08	JK
				0.1222							
V-8263	7/14/08	11/14/09	Acrylonitrile - Cal	52.3369 - 52.2369	MeOH/CV200	10ml	10,030	V-7746	99.5%	10/10	JK
				0.1003							
V-8264	7/14/08	11/14/09	Acrolein - Cal	51.8826 - 51.7881	MeOH/CV200	10ml	9,910	V-8225	96.1%	3/09	JK
				0.0991							
V-8265	7/14/08	11/14/09	Vinyl Acetate - Ref	50.7683 - 50.6694	MeOH/CV200	10ml	9,890	V-6564	99.5%	9/08	JK
				0.0989							
V-8266	7/14/08	11/14/09	2-CEVE - Ref	51.4446 - 51.3419	MeOH/CV200	10ml	10,270	V-7858	98.2%	9/10	JK
				0.1027							
V-8267	7/14/08	11/14/09	CS2 - Ref	51.9040 - 51.7865	MeOH/CV200	10ml	11,750	V-7299	99.5%	10/08	JK
				0.1175							
V-8268	7/14/08	11/14/09	Acrylonitrile - Ref	51.9460 - 51.8427	MeOH/CV200	10ml	10,330	V-7746	99.5%	10/10	JK
				0.1033							
V-8269	7/14/08	11/14/09	Acrolein - Ref	51.9318 - 51.8232	MeOH/CV200	10ml	10,860	V-8225	96.1%	3/09	JK
				0.1086							
V-8270	7/14/08	11/14/08	8260 - IS	Cracked	MeOH	1.2ml	2000	V-8206	2000	12/15/10	JK
V-8271	7/14/08	11/14/08	8260 - Surr	Cracked	MeOH	1.2ml	2000	V-8207	2000	2/2/10	JK

Supervisor Review: _____

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GC/MS ~~SEM~~IVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8244	7/14/08	11/14/08	Stock 1 - Cal	—	—	—	—		—		—
			Methyl Iodide	217.7ul	MeOH/CV200	2ml	2000	V-8240	18,370	11/14/09	JK
			t-1,4-DC-2B	397.6ul				V-8241	10,060		
			MTBE	387.2ul				V-8242	10,330		
			1-Chlorohexane	372.8ul				V-8243	10,730		
V-8245	7/14/08	11/14/09	Methyl Cyclohexane - Cal	50.3611 - 50.3506	MeOH/CV200	10ml	10,150	V-7300	99.5%	2/10	JK
				0.1105							
V-8246	7/14/08	11/14/09	Methyl Acetate - Cal	50.6380 - 50.5338	MeOH/CV200	10ml	10,460	V-7747	99.5%	7/11	JK
				0.1046							
V-8247	7/14/08	11/14/09	Cyclohexane - Cal	99.6684 - 99.5644	MeOH/CV200	10ml	10,400	V-7563	99.5%	4/12	JK
				0.1040							
V-8248	7/14/08	11/14/09	1,1,2-TCTFE - Cal	51.3326 - 51.1214	MeOH/CV200	10ml	11,120	V-7744	99.5%	11/12	JK
				0.1112							
V-8249	7/14/08	11/14/08	Stock 2 - Cal	—	—	—	—		—		—
			Methyl Cyclohexane	394.1ul	MeOH/CV200	2ml	2000	V-8245	10,150	11/14/09	JK
			Methyl Acetate	382.4ul				V-8246	10,460		
			Cyclohexane	384.6ul				V-8247	10,400		
			1,1,2-TCTFE	359.7ul				V-8248	11,120		
V-8250	7/14/08	11/14/09	Methyl Iodide - Ref	50.7330 - 50.6549	MeOH/CV200	10ml	9,810	V-8056	99.5%	7/10	JK
				0.0981							
V-8251	7/14/08	11/14/09	t-1,4-DC-2B - Ref	51.6831 - 51.5805	MeOH/CV200	10ml	10,260	V-7679	99.1%	5/09	JK
				0.1026							

Supervisor Review: _____

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GC/MS ~~SEM~~IVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8272	7/14/08	11/14/08	524/8260 MM - Cal	Cracked	MeOH	1.2ml	2000	V-7747	2000	5/22/09	JK
V-8273	7/14/08	10/14/08	Ketones - Cal	Cracked	MeOH	1.2ml	2000	V-7716	2000	2/2/09	JK
V-8274	7/14/08	9/14/08	Gases - Cal	Cracked	MeOH	1.2ml	2000	V-8157	1000	9/10	JK
V-8275	7/14/08	9/14/08	8260 - IS	50ml	MeOH/CV200	2ml	50	V-8270	2000	11/14/08	JK
V-8276	7/14/08	9/14/08	8260 Cal w/o Ketones	—	—	—	—		—		—
			Stock 1 - Cal	100ml	MeOH/CV200	2ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal					V-8249			
			524/8260 MM - Cal					V-8272			
			Surr - Cal					V-8271			
V-8277	7/14/08	9/14/08	Ketones - Cal	200ml	MeOH/CV200	2ml	200	V-8273	2000	10/14/08	JK
V-8278	7/14/08	8/14/08	8260 MSSC - Cal	—	—	—	—		—		—
			Vinyl Acetate - Cal	18.1ul	MeOH/CV200	2ml	100	V-8260	11,030	11/14/09	JK
			2-CEVE - Cal	92.2ul			500	V-8261	10,840		
			CS2 - Cal	16.4ul			100	V-8262	11,220		
			Acrylonitrile - Cal	99.7ul			500	V-8263	10,030		
			Acrolein - Cal	100.9ul				V-8264	9,910		
			Gases - Cal	200ul			100	V-8274	1000	9/14/08	
V-8279	7/15/08	11/15/08	524/8260 MM - Ref	Cracked	MeOH	1.2ml	2000	V-8005	2000	5/22/09	JK
V-8280	7/15/08	10/15/08	Ketones - Ref	Cracked	MeOH	1.2ml	2000	V-8130	2000	12/15/09	JK
V-8281	7/15/08	9/15/08	Gases - Ref	Cracked	MeOH	1.2ml	1000	V-8208	1000	9/30/10	JK

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GC/MS ~~SEM~~IVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8256	7/14/08	11/14/08	MTBE - Ref	51.3320 - 51.6218	MeOH/CV200	10ml	10,020	V-8055	99.5%	2/10	JK
				0.1002							
V-8253	7/14/08	11/14/09	1-Chlorohexane - Ref	51.6942 - 51.3796	MeOH/CV200	10ml	11,460	V-7231	98%	9/11	JK
				0.1146							
V-8254	7/14/08	11/14/08	Stock 1 - Ref	—	—	—	—		—		—
			Methyl Iodide	407.7ul	MeOH/CV200	2ml	2000	V-8250	9,810	11/14/09	JK
			t-1,4-DC-2B	389.9ul				V-8251	10,260		
			MTBE	389.2ul				V-8252	10,020		
			1-Chlorohexane	349.0ul				V-8253	11,460		
V-8255	7/14/08	11/14/09	Methyl Cyclohexane - Ref	51.9782 - 51.8762	MeOH/CV200	10ml	10,200	V-7300	99.5%	2/10	JK
				0.1020							
V-8256	7/14/08	11/14/09	Methyl Acetate - Ref	51.0939 - 51.9948	MeOH/CV200	10ml	9,910	V-7747	99.5%	7/11	JK
				0.0991							
V-8257	7/14/08	11/14/09	Cyclohexane - Ref	50.2687 - 50.1614	MeOH/CV200	10ml	10,730	V-7563	99.5%	4/12	JK
				0.1073							
V-8258	7/14/08	11/14/09	1,1,2-TCTFE - Ref	53.2476 - 53.0405	MeOH/CV200	10ml	10,710	V-7744	99.5%	11/21	JK
V-8259	7/14/08	11/14/08	Stock 2 - Ref	0.1071	—	—	—		—		—
			Methyl Cyclohexane	392.2ul	MeOH/CV200	2ml	2000	V-8255	10,200	11/14/09	JK
			Methyl Acetate	403.6ul				V-8256	9,910		
			Cyclohexane	372.8ul				V-8257	10,730		
			1,1,2-TCTFE	373.5ul				V-8258	10,710		

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8293	8/18/08	10/18/08	8260 REF w/o Ketones	—	—	—	—				—
			Stock 1 - REF	100ml	MeOH/CV200	2ml	100ml	V-8254	2000	11/14/08	JK
			Stock 2 - REF					V-8259			
			524/8260 MM - REF					V-8279		11/15/08	
V-8294	8/18/08	10/15/08	8260 Ketones - REF	200ml	MeOH/CV200	2ml	200	V-8280	2000	10/15/08	JK
V-8295	8/18/08	9/15/08	8260 MESC REF	—	—	—	—				—
			Vinyl Acetate - REF	20.2ml	MeOH/CV200	2ml	100	V-8265	9,890	11/14/09	JK
			2-CEVE - REF	97.4ml			500	V-8266	10,270		
			CS2 - REF	17.2ml			100	V-8267	11,750		
			Acrylonitrile - REF	96.8ml			500	V-8268	10,330		
			Acrolein - REF	92.1ml				V-8269	10,860		
			Gases - REF	200ml			100	V-8281	1000	9/15/08	
V-8296	8/18/08	2/2/10	8260 - Surr	3x1.2ml	MeOH	1.2ml	2000	ECS Lot # V05020		2/2/10	JK
V-8297	8/18/08	9/30/10	8260 Gases - REF	3x1.2ml	MeOH	1.2ml	1000	ECS Lot # VGM019		9/30/10	JK
V-8298	8/18/09	11/15/09	8260 Ketones - REF	3x1.2ml	MeOH	1.2ml	2000	ECS Lot # KTM1555		11/15/09	JK
V-8299	8/18/08	9/21/08	BFB	150ul	MeOH/CV200	2ml	150	V-8219	2000	9/21/08	JK
V-8300	9/5/08	12/10/10	8260 ~~[illegible]~~ JS Mix 9/10/08	3x1.2ml	MeOH	3x1.2ml	2000	ECS Lot # V13806	2000	12/5/10	MJ
V-8301	9/9/08	5/31/10	BFB	4x1.2ml	MeOH	4x1.2ml	2000	Hitra Lot # CC-1055	2000	5/31/10	MJ
V-8302	9/10/08	1/10/09	8260-IS	Spiking 2000 50 ul	MeOH/CV200	2ml	~~50~~ 2000	V-8300	2000	12/10/10	MJ
V-8303	9/10/08	11/10/08	8260-IS	50ul	MeOH/CV200	2ml	50	V-8302	2000	11/10/09	MJ

*MJ 9/10/08

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

502

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8281 A,B,C	7/15/08	9/15/08	8260 - IS/SURR	—	—	—	—				—
			8260 - IS	50ml	MeOH/CV200	2ml	50	V-8270	2000	11/14/08	JK
			8260 - SURR	50ml				V-8271	2000		
V-8282	7/15/08	9/15/08	8260 REF w/o Ketones	—	—	—	—				—
			Stock 1 - REF	100ml	MeOH/CV200	2ml	100	V-8254	2000	11/14/08	JK
			Stock 2 - REF					V-8259			
			524/8260 MM - REF					V-8279		10/15/08	
V-8283	7/15/08	9/15/08	8260 Ketones - REF	200ml	MeOH/CV200	2ml	200	V-8280	2000	10/15/08	JK
V-8284	7/15/08	8/15/08	8260 MESC - REF	—	—	—	—				—
			Vinyl Acetate - REF	20.2ml	MeOH/CV200	2ml	100	V-8265	9,890	11/14/09	JK
			2-CEVE - REF	97.4ml			500	V-8266	10,270		
			CS2 - REF	17.2ml			100	V-8267	11,750		
			Acrylonitrile - REF	96.8ml			500	V-8268	10,330		
			Acrolein - REF	92.1ml				V-8269	10,860		
			Gases - REF	200ml			100	V-8281	1000	9/15/08	
V-8285	7/15/08	8/19/09	TCLP Extraction Sol'n	—	—	—	—				
			1N NaOH	140ml	DI H2O	2L	pH 4.96	V-8213	1N	5/19/09	
			Acetic Acid, Glacial	11.4ml				V-8109		2/6/11	
V-8286	8/4/08	8/19/09	TCLP Extraction Sol'n	—	—	—	—				
			1N NaOH	140ml	DI H2O	2L	pH 4.99	V-8213	1N	5/19/09	
			Acetic Acid, Glacial	11.4ml				V-8109		2/6/11	

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G:/Logbooks 2008/Organics/GCMSSVStandard Prep

500

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8304	9/10/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—				MJ
			1 N NaOH	140ml	DI H2O	2L	pH 1.99	V-8213	1N	5/19/09	
			Acetic Acid, Glacial	11.4ml				V-8109		2/6/11	
V-8305	9/10/08	3/10/09	2-CEVE - Cal	51.1350 - 50.6334 = 0.5016	MeOH/CV200	10ml	50,160	V-7958	98.2%	9/10	JK
V-8306	9/10/08	3/10/09	Acrylonitrile - Cal	50.4033 - 49.8992 = 0.5040	MeOH/CV200	10ml	50,400	V-7946	99.5%	10/10	JK
V-8307	9/10/08	3/10/09	Acrolein - Cal	51.1328 - 50.6296 = 0.5032	MeOH/CV200	10ml	50,320	V-8225	96.1%	3/09	JK
V-8308	9/10/08	11/10/09	8260 - Surr	Cracked	MeOH	1.2ml	2000	V-8296	2000	2/2/10	JK
—	—	—	—	—	—	—	—				—
V-8309	9/10/08	1/10/09	524/8260 MM - Cal	Cracked	MeOH	1.2ml	2000	V-8224	2000	11/14/08	JK
V-8310	9/10/08	12/10/08	Ketones - Cal	Cracked	MeOH	1.2ml	2000	V-7916	2000	2/2/09	JK
V-8311	9/10/08	11/10/08	Gases - Cal	Cracked	MeOH	1.2ml	1000	V-8110	1000	09/10	JK
V-8312	9/10/08	11/10/08	MESC Cal w/o Gases	—	—	—	—				—
			Vinyl Acetate - Cal	363ml	MeOH/CV200	2ml	2000	V-8260	11,030	11/14/09	JK
			2-CEVE - Cal	399ml			10,000	V-8305	50,160	3/10/09	
			CS2 - Cal	327ml			2,000	V-8262	12,220	11/14/09	
			Acrylonitrile - Cal	397ml			10,000	V-8306	50,400	3/10/09	
			Acrolein - Cal	397ml			10,000	V-8307	50,320		
V-8313	9/10/08	1/10/09	524/8260 MM - REF	Cracked	MeOH	1.2ml	2000	V-8005	2000	5/26/09	JK
V-8314	9/10/08	12/10/08	Ketones - REF	Cracked	MeOH	1.2ml	2000	V-8298	2000	12/15/09	JK

Supervisor Review: _____

GCMS V Standard Prep

503

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V8287	8-13-08	12-13-08	8260 IS/Surr Solatek M53	—	—	—	—				(MJ)
			8260 Internal Std.	735ul	MeOH	25 mL	58.8 ppm	V8270	2000 ppm	11-14-08	
			8260 Surrogate Std.	735ul	/CV200		58.8 ppm	V8271	2000 ppm	11-14-08	
V8288	8/18/08	10/18/08	8260 - IS	50ml	MeOH/CV200	2ml	50	V-8270	2000	11/14/08	JK
V8289	8/18/08	10/18/08	8260 Cal w/o Ketones	—	—	—	—				—
			Stock 1 - Cal	100ml	MeOH/CV200	2ml	100	V-8254	2000	11/14/08	JK
			Stock 2 - Cal					V-8259			
			524/8260 MM - Cal					V-8272			
			8260 Surr					V-8271			
V8290	8/18/08	10/14/08	Ketones - Cal	200ml	MeOH/CV200	2ml	200	V-8273	2000	10/14/08	JK
V-8291	8/18/08	9/14/08	8260 MESC - Cal	—	—	—	—				—
			Vinyl Acetate - Cal	18.1ml	MeOH/CV200	2ml	100	V-8260	11,030	11/14/09	JK
			2-CEVE - Cal	92.2ml			500	V-8261	10,840		
			CS2 - Cal	16.4ml			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7ml			500	V-8263	10,030		
			Acrolein - Cal	100.9ml				V-8264	9,910		
			Gases - Cal	200ml			100	V-8274	1000	9/14/08	
V-8292 A,B,C	8/18/08	10/18/08	8260 - IS/SURR	—	—	—	—				—
			8260 - IS	50ml	MeOH/CV200	2ml	50	V-8270	2000	11/14/08	JK
			8260 - SURR	50ml				V-8271	2000		
											JK
											8/18/08

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

501

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V8328	9-16-08	1-10-09	8260 IS/Surr Solatek MS3:	—	—	—	—	—	—	—	(illegible)
↓	↓	↓	Std { 8260 Internal Standard	823 µl	MeOH/	25 mL	65.8	V8302	2000	1/10/09	↓
			#2 } 8260 Surrogate Standard	823 µl	CV200	↓	65.8	V8308	2000	1/10/09	↓
V8329	9-19-08	1-10-09	8260 IS/Surr Archon MS4:	—	—	—	—	—	—	—	(illegible)
↓	↓	↓	Std { 8260 Internal Std	625 µl	MeOH/	5 mL	250	V8302	2000	1/10/09	
			#1 } 8260 Surrogate Std	625 µl	CV200	↓	↓	V8308	2000	1/10/09	↓
V8330	9-19-08	1-10-09	8260 IS/Surr Standard Action MS4	—	—	—	—	—	—	—	(illegible)
↓	↓	↓	Std { 8260 Internal Standard	250 µl	MeOH/	5 mL	100	V8302	2000	1/10/09	
			#2 } 8260 Surrogate Standard	250 µl	CV200	↓	↓	V8308	2000	1/10/09	↓
V8331	9-22-08	1-22-09	8260 Surrogate	Cracked	MeOH	~1.8 mL	2000	V8296	2000	2/2/10	(illegible)
V-8332	9/24/08	1/24/09	BFB Stock Sol'n	Cracked	MeOH	1.2 ml	2000	V-7854	2000	5/31/10	(illegible)
V-8333	9/24/08	12/24/08	BFB Sol'n	150 µl	MeOH/CV200	2 ml	150	V-8332	2000	1/24/09	(illegible)
V-8334	9/24/08	1/24/09	IS stock	Cracked	MeOH	1.2 ml	2000	V-8300	2000	12/15/10	(illegible)
V-8335	9/24/08	11/24/08	8260-IS	50 µl	MeOH/CV200	2 ml	50	V-8334	2000	1/24/09	(illegible)
V-8336	9/24/08	11/24/08	8260 CAL w/o Ketones	—	—	—	—	—	—		—
↓	↓	↓	Stock 1-Cal	100 µl	MeOH/CV200	2 ml	100	V-8244	2000	11/14/08	(illegible)
			Stock 2-Cal					V-8249		↓	
			524/8260 MM-Cal					V-8309		1/10/09	
			8260-Surr					V-8331		1/22/09	
V-8337	9/24/08	11/24/08	Ketones-Cal	200 µl	MeOH/CV200	2 ml	200	V-8310	2000	12/10/08	(illegible)
9/24/08											

Supervisor Review: _____

GCMS V Standard Prep

506

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8315	9/10/08	11/10/08	Gases-Ref	Cracked	MeOH	1.2 ml	1000	V-8277	1000	9/30/10	JK
V-8316	9/10/08	11/10/08	8260 Cal w/o Ketones	—	—	—	—		—		—
↓	↓	↓	Stock 1-Cal	100 µl	MeOH/CV200	2 ml	100	V-8244	2000	11/14/08	JK
			Stock 2-Cal					V-8249		↓	
			524/8260 MM-Cal					V-8309		1/10/09	
			8260-Surr					V-8308		↓	
V-8317	9/10/08	11/10/08	Ketones-Cal	200 µl	MeOH/CV200	2 ml	200	V-8310	2000	12/10/08	JK
V-8318	9/10/08	10/10/08	8260 Misc-Cal	—	—	—	—		—		
↓	↓	↓	Vinyl Acetate-Cal	18.1 µl	MeOH/CV200	2 ml	100	V-8260	11,030	1/14/09	JK
			2-CEVE-Cal	92.2 µl			500	V-8261	10,840		
			CS2-Cal	16.4 µl			100	V-8262	12,220		
			Acrylonitrile-Cal	99.7 µl			500	V-8263	10,030		
			Acrolein-Cal	100.9 µl			↓	V-8264	9,910		
			Gases-Cal	200 µl			100	V-8311	1000	11/10/08	
V-8319	9/10/08	11/10/08	8260-IS/Surr	—	—	—	—		—		—
↓	↓	↓	8260-IS	50 µl	MeOH/CV200	2 ml	50	V-8302	2000	1/10/09	JK
			8260-Surr	50 µl	↓	↓	↓	V-8308	↓	↓	↓
V-8320	9/10/08	11/10/08	8260 Ref w/o Ketones	—	—	—	—		—		—
↓	↓	↓	Stock 1-Ref	100 µl	MeOH/CV200	2 ml	100	V-8254	2000	11/14/08	JK
			Stock 2-Ref					V-8259		↓	
			524/8260 MM-Ref					V-8313		1/10/09	
V-8321	9/10/08	11/10/08	8260 Ketones-Ref	200 µl	MeOH/CV200	2 ml	200	V-8314	2000	12/10/08	JK

Supervisor Review: _____

GCMS V Standard Prep

504

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8322	9/10/08	10/10/08	8260 Misc Ref	—	—	—	—		—		—
↓	↓	↓	Vinyl Acetate-Ref	20.2 ml	MeOH/CV200	2 ml	100	V-8265	9,890	1/14/09	JK
			2-CEVE-Ref	97.4 µl			500	V-8266	10,270		
			CS2-Ref	17.2 µl			100	V-8267	11,750		
			Acrylonitrile-Ref	96.8 µl			500	V-8268	10,330		
			Acrolein-Ref	92.1 µl			↓	V-8269	10,860		
			Gases-Ref	200 µl			100	V-8315	1000	11/10/08	
V-8323	9/10/08	9/10/08	8260 VOC MIX	—	—	—	—		—		—
↓	↓	↓	524/8260 MM-Cal	100 µl	MeOH/CV200	1 ml	10	V-8316	100	11/10/08	JK
			Ketones-Cal				20	V-8317	200	↓	
			8260 Misc-Cal				10/50	V-8318	100/500	10/10/08	
V-8324	9/15/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—		—		(illegible)
↓	↓	↓	1 N NaOH	140 ml	DI H2O	2 L	pH 4.96	V-8213	1N	5/19/09	
			Glacial Acetic Acid	11.4 ml	↓	↓	↓	V-8109		3/10/11	↓
V-8325	9/11/08	12/11/08	TCLP Spike Sol'n	Cracked	MeOH	1.2 ml	1000	V-8111	1000	10/31/09	JK
V8326	9/11/08	1/10/09	8260 IS/Surr Solatek MS3:	—	—	—	—	—	—	—	(illegible)
↓	↓	↓	Std { 8260 Internal Standard	263 µl	MeOH/	25 mL	21.04	V8302	2000	1/10/09	
			#3 } 8260 Surrogate Standard	263 µl	CV200	↓	↓	V8308	2000	1/10/09	↓
V8327	9/18/08	1/10/09	8260 IS/Surr Solatek MS2	~~798 µl~~ 798 µl	—	—	—	—	—	—	(illegible)
↓	↓	↓	Std { 8260 Internal Standard	798 µl	MeOH/	25 mL	63.8	V8302	2000	1/10/09	
			#1 } 8260 Surrogate Standard	798 µl	CV200	↓	↓	V8308	2000	1/10/09	↓

Supervisor Review: _____

GCMS V Standard Prep

505

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
V-8338	9/24/08	10/24/08	8260 MISC-Cal	—	—	—	—		—		—
↓	↓	↓	Vinyl Acetate-Cal	18.1 µl	MeOH/CV200	2 ml	100	V-8260	11,030	1/14/09	(illegible)
			2-CEVE-Cal	92.2 µl			500	V-8261	10,840		
			CS2-Cal	16.4 µl			100	V-8262	12,220		
			Acrylonitrile-Cal	99.7 µl			500	V-8263	10,030		
			Acrolein-Cal	100.9 µl			↓	V-8264	9,910		
			Gases-Cal	200 µl			100	V-8311	1000	11/10/08	
V-8339	9/24/08	10/24/08	8260 VOC MIX	—	—	—	—		—		—
↓	↓	↓	524/8260 MM-Cal	100 µl	MeOH/CV200	1 ml	10	V-8336	100	11/14/08	(illegible)
			Ketones-Cal				20	V-8337	200	11/24/08 ~~10/24/08~~	
			8260 Misc-Cal				10/50	V-8338	100/500	10/24/08	
V-8340	9/24/08	10/24/08	8260 Misc-Ref	—	—	—	—		—		—
↓	↓	↓	Vinyl Acetate-Ref	20.2 µl	MeOH/CV200	2 ml	100	V-8265	9,890	1/14/09	(illegible)
			2-CEVE-Ref	97.4 µl			500	V-8266	10,270		
			CS2-Ref	17.2 µl			100	V-8267	11,750		
			Acrylonitrile-Ref	96.8 µl			500	V-8268	10,330		
			Acrolein-Ref	92.1 µl			↓	V-8269	10,860		
			Gases-Ref	200 µl			100	V-8315	1000	11/10/08	
V-8341	9/25/08	5/19/09	TCLP Extraction Sol'n	—	—	—	—		—		—
↓	↓	↓	1N NaOH	140 ml	DI H2O	2 L	pH 4.94	V-8213	1N	5/19/09	(illegible)
			Glacial Acetic Acid	11.4 ml	↓	↓	↓	V-8109		3/10/11	↓
V-8342	10/9/08	12/9/08	Gases-Cal	Cracked	MeOH	1.2 ml	1000	V-8110	1000	9/10	JK

Supervisor Review: _____

GCMS V Standard Prep

507

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8355	10/27/08	11/14/09	Stock 1 - Ref	—	—	—	—				—
			Methyl Iodide	407.7ul	MeOH/CV200	2ml	2000	V-8250	9,810	11/14/09	JK
			t-1,4-DC-2B	389.9ul				V-8251	10,260		
			MTBE	399.2ul				V-8252	10,020		
			1-Chlorohexane	349.0ul				V-8253	11,460		
V-8356	10/27/08	11/14/09	Stock 2 - Ref	—	—	—	—				—
			Methyl Cyclohexane	392.2ul	MeOH/CV200	2ml	2000	V-8255	10,200	11/14/09	JK
			Methyl Acetate	403.6ul				V-8256	9,910		
			Cyclohexane	372.8ul				V-8257	10,730		
			1,1,2-TCTFE	373.5ul				V-8258	10,710		
V-8357	10/27/08	12/27/08	8260 Cal w/o Ketones								JK
			Stock								10/27/08
V-8357	10/27/08	12/27/08	8260 - IS	50ul	MeOH/CV200	2ml	50	V-8334	2000	1/24/09	JK
V-8358	10/27/08	12/27/08	8260 Cal w/o Ketones	—	—	—	—				—
			Stock 1 - Cal	100ul	MeOH/CV200	2ml	100	V-8353	2000	11/14/09	JK
			Stock 2 - Cal					V-8354			
			524/8260 MM - Cal					V-8309		1/10/09	
			Surr - 8260					V-8331		1/22/09	
V-8359	10/27/08	12/10/08	Ketones - Cal	200ul	MeOH/CV200	2ml	200	V-8318	2000	12/10/08	JK
											JK 10/27/08

Supervisor Review: _____

GCMS V Standard Prep

510

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8343	10/9/08	12/9/08	8260 - IS	50ul	MeOH/CV200	2ml	50	V-8324	2000	1/24/09	JK
V-8344	10/9/08	11/14/08	8260 Cal w/o Ketones	—	—	—	—				—
			Stock 1 - Cal	100ul	MeOH/CV200	2ml	100	V-8244	2000	11/14/08	JK
			Stock 2 - Cal					V-8249			
			524/8260 MM - Cal					V-8309		1/10/09	
			8260 Surr					V-8331		1/22/09	
V-8345	10/9/08	12/9/08	Ketones - Cal	200ul	MeOH/CV200	2ml	200	V-8310	2000	12/10/08	JK
V-8346	10/9/08	11/9/08	Misc - Cal	—	—	—	—				—
			Vinyl Acetate - Cal	18.1ul	MeOH/CV200	2ml	100	V-8260	11,030	1/14/09	JK
			2-CEVE - Cal	92.2ul			500	V-8261	10,840		
			CS2 - Cal	16.4ul			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7ul			500	V-8263	10,030		
			Acrolein - Cal	100.9ul			↓	V-8264	9,910		
			Gases - Cal	200ul			100	V-8342	1000	12/9/08	
V-8347	10/9/08	10/16/08	8260 VOC Mix - Cal	—	—	—	—				—
			8260 Cal w/o Ketones - Cal	50ul	MeOH/CV200	1ml	5	V-8344	100	11/14/08	JK
			Ketones - Cal				10	V-8345	200	12/9/08	
			8260 Misc - Cal				10/9/08 ~~5~~ 5/25	V-8346	100/500	11/9/08	
V-8348	10/9/08	12/9/08	Gases - Ref	cracked	MeOH	1.2ml	1000	V-8208	1000	9/30/10	HA
V-8349	10/9/08	12/9/08	IS - Surr	—	—	—	—				HA
			8260 - IS	50ul	MeOH CV200	2ml	50	V-8334	2000	1/24/09	
			8260 - Surr	50ul	↓	↓	↓	V-8331	2000	1/22/09	

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GCMS V Standard Prep

508

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8360	10/27/08	11/27/08	8260 Misc - Cal	—	—	—	—				—
			Vinyl Acetate - Cal	18.1ul	MeOH/CV200	2ml	100	V-8260	11,030	1/14/09	JK
			2-CEVE - Cal	92.2ul			500	V-8261	10,840		
			CS2 - Cal	16.4ul			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7ul			500	V-8263	10,030		
			Acrolein - Cal	100.9ul			↓	V-8264	9,910		
			Gases - Cal	200ul			100	V-8342	1000	12/9/08	
V-8361	10/30/08	11/8/08	8260 VOC Mix - Cal	—	—	9/30/08	—				—
			8260 Cal w/o Ketones	100ul	MeOH/CV200	2ml	10	V-8358	100	12/27/08	JK
			8260 Ketones - Cal				20	V-8359	200	12/10/08	
			8260 Misc Cal				10/50	V-8360	100/500	11/27/08	
V-8362	10/30/08	12/30/08	8260 IS/Surr	—	—	—	—				—
			8260 - IS	50ul	MeOH/CV200	2ml	50	V-8334	2000	1/24/09	JK
			8260 Surr					V-8331		1/22/09	
V-8363	10/30/08	12/30/08	8260 Ref w/o Ketones	—	—	—	—				—
			Stock 1 - Ref	100ul	MeOH/CV200	2ml	100	V-8355	2000	1/14/09	JK
			Stock 2 - Ref					V-8356			
			524/8260 MM Ref					V-8313		1/10/09	
V-8364	10/30/08	12/10/08	8260 Ketones - Ref	200ul	MeOH/CV200	2ml	200	V-8314	2000	12/10/08	JK
											JK 10/30/08

Supervisor Review: _____

GCMS V Standard Prep

511

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
V-8350	10/9/08	11/19/08	8260 Ref w/o Ketones	—	—	—	—				—
			Stock 1 - Ref	100ul	MeOH CV200	2ml	100	V-8254	2000	11/14/08	HA
			Stock 2 - Ref					V-8255	2000	11/14/08	
			524/8260 MM - Ref					V-8318	2000	1/10/09	
V-8351	10/9/08	12/9/08	8260 Ketones - Ref	200ul	MeOH CV200	2ml	200	V-8314	2000	12/10/08	HA
V-8352	10/9/08	11/9/08	8260 Misc - Ref	—	—	—	—				—
			Vinyl Acetate - Ref	20.2ul	MeOH CV200	10/20 2ml	100	V-8265	9,890	1/14/09	HA
			2-CEVE - Ref	97.4ul		500	500	V-8266	10,270		
			CS2 - Ref	17.2ul		100	100	V-8267	11,750		
			Acrylonitrile - Ref	96.8ul		500	500	V-8268	10,330		
			Acrolein - Ref	92.1ul		500	500	V-8269	10,560		
			Gases - Ref	200ul		100	100	V-8343	1000	12/9/08	
8353	10/27/08	1/14/09	Stock 1 - Cal	—	—	—	—				—
			Methyl Iodide	217.7ul	MeOH/CV200	2ml	2000	V-8240	10,370	1/14/09	JK
			t-1,4-DC-2B	397.6ul				V-8241	10,660		
			MTBE	387.2ul				V-8242	10,330		
			1-Chlorohexane	372.8ul				V-8243	10,730		
8354	10/27/08	1/14/09	Stock 2 - Cal	—	—	—	—				—
			Methyl Cyclohexane	384.1ul	MeOH/CV200	2ml	2000	V-8245	10,150	1/14/09	JK
			Methyl Acetate	382.4ul				V-8246	10,460		
			Cyclohexane	384.6ul				V-8247	10,400		
			1,1,2-TCTFE	359.7ul				V-8248	11,120		

Supervisor Review: _____

GCMS V Standard Prep

509

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8377	12/3/08	1/10/09	8260 Ref % Ketones	—		—	—		—		—
			Stock 1 - Ref	100	MeOH/CV200	2ml	100	V-8355	2000	1/14/09	JK
			Stock 2 - Ref					V-8356			
			524/8260 MM - Ref					V-8313		1/14/09	
8378	12/3/08	6/3/09	Methyl Iodide - Cal	50.6375 - 50.5163 0.1112	MeOH/CV200	10ml	11,120	V-8056	99.5%	7/10	JK
8379	12/3/08	5/21/09	t-1,4-DC-2B - Cal	49.8159 - 49.6941 0.1218	MeOH/CV200	10ml	12,180	V-7679	99.1%	5/09	JK
8380	12/3/08	6/3/09	MTBE - Cal	49.7023 - 49.5920 0.1063	MeOH/CV200	10ml	10,630	V-8055	99.5%	7/10	JK
8381	12/3/08	6/3/09	1-Chlorohexane - Cal	52.6573 - 52.5558 0.1015	MeOH/CV200	10ml	10,150	V-7231	98%	9/11	JK
8382	12/3/08	4/3/09	Stock 1 - Cal	—		—	—		—		—
			Methyl Iodide - Cal	359.7ul	MeOH/CV200	2ml	2000	V-8378	11,120	6/3/09	JK
			t-1,4-DC-2B - Cal	328.4ul				V-8379	12,180	5/21/09	
			MTBE - Cal	376.3ul				V-8380	10,630	6/3/09	
			1-Chlorohexane - Cal	394.1ul				V-8381	10,150		
8383	12/3/08	6/3/09	Methyl Cyclohexane	51.8893 - 51.7887 0.1006	MeOH/CV200	10ml	10,060	V-7300	99.6%	2/10	JK
8384	12/3/08	6/3/09	Methyl Acetate	51.5160 - 51.4155 0.1005	MeOH/CV200	10ml	10,050	V-7247	99.5%	7/11	JK
8385	12/3/08	6/3/09	Cyclohexane	53.8310 - 53.7274 0.1036	MeOH/CV200	10ml	10,360	V-7563	99.5%	4/12	JK

514

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8365	12/30/08	11/30/08	8260 MSSC - Ref	—		—	—		—		—
			Vinyl Acetate - Ref	20.2ul	MeOH/CV200	2ml	100	V-8265	9,890	11/14/09	JK
			2-CEVE - Ref	97.4ul			500	V-8266	10,270		
			CS2 - Ref	17.2ml			100	V-8267	11,750		
			Acrylonitrile - Ref	96.8ul			500	V-8268	10,330		
			Acrolein - Ref	92.1ul				V-8269	10,800		
			Gases - Ref	200ul			100	V-8348	1000	12/9/08	
8366	11/5/08	3/5/09 1/22/09	8260 IS/Surr Archon MS4:	—	—	—	—		—		—
	(11) 11-5-08		Std 8260 Internal Std	545ul	MeOH	10mL	109 ppm	V8334	2000	1-24-09	
			#2 8260 Surrogate Std	545ul	/CV200		109 ppm	V8331	2000	1-22-09	
8367	11/12/08	2/12/10	8260 - Surr	3 x 1.2ml	MeOH	3 x 1.2ml	2000	EGS Lot # V058218		2/12/10	JK
8368	11/12/08	11/11/10	524/8260 MM - Ref	3 x 1.2ml	MeOH	3 x 1.2ml	2000	EGS Lot # 524MM18255		11/11/10	JK
8369	11/12/08	10/31/11	Carbon Disulfide	5 x 1.2ml	MeOH	5 x 1.2ml	Neat	Chem Service Lot # 390-97A	99.5%	10/11	JK
8370	11/12/08	9/30/13	Vinyl Acetate	10g	MeOH	10g	Neat	Chem Service Lot # 410-21B	99.5%	9/13	JK
8371	11/18/08	5/18/09	TCLP Extraction Sol'n	—	—	—	—		—	# 11/18/08	—
			1N NaOH	180ml	DI H2O	2L	pH = 4.96	V-8213	1N	5/19/09	JK
			Glacial Acetic Acid	11.4ml				V-8127		2/4/11	
8372	11/17/08	11/24/08	VOC Mix	—	—	—	—		—		—
			8260 Cal % Ketones	5ul	MeOH/CV200	1ml	0.5	V-8358	100	12/27/08	JK
			8260 Cal Ketones				1.0	V-8359	200	12/10/08	
			8260 MSSC Cal				0.5/2.5	V-8360	100/500	11/27/08	
							# 11/18/08				

512

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8386	12/3/08	6/3/09	1,1,2-TCTFE	52.8449 - 52.7200 0.1249	MeOH/CV200	10ml	12,490	V-7244	99.5%	11/12	JK
8387	12/3/08	4/3/09	Stock 2 - Cal	—		—	—		—		—
			Methyl Cyclohexane - Cal	397.6ul	MeOH/CV200	2ml	2000	V-8383	10,060	6/3/09	JK
			Methyl Acetate - Cal	398.0ul				V-8384	10,050		
			Cyclohexane - Cal	386.1ul				V-8385	10,360		
			1,1,2-TCTFE - Cal	320.2ul				V-8386	12,490		
8388	12/3/08	6/3/09	Methyl Iodide - Ref	50.7489 - 50.6321 0.1168	MeOH/CV200	10ml	11,680	V-8056	99.5%	7/10	JK
8389	12/3/08	5/21/09	t-1,4-DC-2B - Ref	51.7789 - 51.6664 0.1125	MeOH/CV200	10ml	11,250	V-7679	99.1%	5/09	JK
8390	12/3/08	6/3/09	MTBE - Ref	52.1799 - 52.0741 0.1058	MeOH/CV200	10ml	10,580	V-8055	99.5%	7/10	JK
8391	12/3/08	6/3/09	1-Chlorohexane - Ref	52.1610 - 52.0539 0.1101	MeOH/CV200	10ml	11,010	V-7231	98%	9/11	JK
8392	12/3/08	4/3/09	Stock 1 - Ref	—		—	—		—		—
			Methyl Iodide - Ref	342.5ul	MeOH/CV200	2ml	2000	V-8388	11,680	6/3/09	JK
			t-1,4-DC-2B - Ref	355.6ul				V-8389	11,250	5/21/09	
			MTBE - Ref	378.1ul				V-8390	10,580	6/3/09	
			1-Chlorohexane - Ref	363.3ul				V-8391	11,010		
~~8393~~	~~12/3/08~~		~~Methyl Cyclohexane - Ref~~	~~51.8893 - 51.7887 0.1006~~	~~MeOH/CV200~~	~~10ml~~	~~10,060~~			JK	12/3/08

515

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8373	11/20/08	12/9/08	8260 MSSC - Cal	—	—	—	—		—		—
			Vinyl Acetate - Cal	18.1	MeOH/CV200	2ml	100	V-8260	11,030	1/14/09	JK
			2-CEVE - Cal	97.2			500	V-8261	10,840		
			CS2 - Cal	16.4			100	V-8262	12,220		
			Acrylonitrile - Cal	99.7			500	V-8263	10,030		
			Acrolein - Cal	100.9ul				V-8264	9,910		
			Gases - Cal	200ul			100	V-8342	1000	12/9/08	
8374 ~~8374~~	11/21/08	12/9/08	8260 MSSC - Ref		—	—	—		—		—
			Vinyl Acetate - Ref	20.2ul	MeOH/CV200	2ml	100	V-8265	9,890	1/14/09	JK
			2-CEVE - Ref	97.4ul			500	V-8266	10,270		
			CS2 - Ref	17.2ml			100	V-8267	11,750		
			Acrylonitrile - Ref	96.8ul			500	V-8268	10,330		
			Acrolein - Ref	92.1ul				V-829	10,800		
			Gases - Ref	200ul			100	V-8348	1000	12/9/08	
8375	12-1-08	1-22-09	8260 IS/Surr Agritek MS1:	—	—	—	—		—		MSV
			Water 8260 Internal Std.	235ul	MeOH/	10 mL	50.7	V8334	2000	1-24-09	
			Std 8260 Surrogate Std.	235ul	CV200		50.7	V8331	2000	1-22-09	
8376	12/2/08	1/10/09	8260 Cal % Ketones	—	—	—	—		—		—
			Stock 1 - Cal	100ul	MeOH/CV200	2ml	100	V-8353	2000	1/14/09	JK
			Stock 2 - Cal					V-8354			
			524/8260 MM - Cal					V-8309		1/10/09	
			Surr - 8260					V-8331		1/22/09	

513

GCMS V Standard Prep

Supervisor Review: _____

GC/MS VOLATILE STANDARDS PREP LOG

No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8414	12/4/08	2/4/09	8260 Col w/o Ketones	—	—	—	—		—		—
			Stock 1 - Col	100 ul	MeOH/CV200	2 ml	100	V-8382	2000	4/3/09	JK
			Stock 2 - Col					V-8387			
			524/8260 MM - Col					V-8410			
			Surr - 8260					V-8409			
8415	12/4/08	2/4/09	8260 Ketones - Col	200 ul	MeOH/CV200	2 ml	200	V-8411	2000	3/2/09	JK
8416	12/4/08	1/4/09	8260 MISC - Col	—	—	—	—		—		—
			Vinyl Acetate - Col	19.1 ul	MeOH/CV200	2 ml	100	V-8398	10,490	6/3/09	JK
			2-Clve - Col	99.3 ul			500	V-8399	10,070		
			CS2 - Col	19.6 ul			100	V-8400	10,200		
			Acrylonitrile - Col	92.0 ul			500	V-8401	10,870		
			Acrolein - Col	84.0 ul				V-8402	11,900	3/31/09	
			Gases - Col	200 ul			100	V-8412	1000	2/3/09	
8417	12/4/08	12/11/08	8260 VOC Mix - Col	—	—	—	—		—		—
			8260 Col w/o Ketones	50 ul	MeOH/CV200	1 ml	5	V-8414	100	2/4/09	JK
			8260 Ketones - Col				10	V-8415	200		
			8260 Misc Col				5/25	V-8416	100/500	1/4/09	
8418	12/4/08	4/4/09	524/8260 MM Ref	Checked	MeOH	1.2 ml	2000	V-8205	2000	5/22/09	JK
8419	12/4/08	3/4/09	8260 Ketones - Ref	Checked	MeOH	1.2 ml	2000	V-8130	2000	12/15/09	JK
8420	12/4/08	2/4/09	8260 Gases - Ref	Checked	MeOH	1.2 ml	1000	V-8228	1000	9/30/10	JK
										JK 12/4/08	

Supervisor Review: _____

GCMS V Standard Prep

518

GC/MS VOLATILE STANDARDS PREP LOG

No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
~~8392~~	~~12/2/08~~		~~Methyl Cyclohexane~~							JK 12/3/08	
8393	12/3/08	6/3/09	Methyl Cyclohexane - Ref	51.5209 - 51.4158 0.1051	MeOH/CV200	10 ml	10,510	V-7300	99.5%	2/10	JK
8394	12/3/08	6/3/09	Methyl Acetate - Ref	49.9921 - 49.8915 0.1066	MeOH/CV200	10 ml	10,660	V-7297	99.5%	2/11	JK
8395	12/3/08	6/3/09	Cyclohexane - Ref	53.2936 - 53.1919 0.1017	MeOH/CV200	10 ml	10,170	V-7363	99.5%	4/12	JK
8396	12/3/08	6/3/09	1,1,2-TCTFE - Ref	52.1520 - 52.0302 0.1218	MeOH/CV200	10 ml	12,180	V-7244	99.5%	11/12	JK
8397	12/3/08	4/3/09	Stock 2 - Ref	—	—	—	—		—		—
			Methyl Cyclohexane - Ref	380.6 ul	MeOH/CV200	2 ml	2000	V-8393	10,510	6/3/09	JK
			Methyl Acetate - Ref	375.2 ul				V-8394	10,660		
			Cyclohexane - Ref	393.3 ul				V-8395	10,170		
			1,1,2-TCTFE - Ref	328.4 ul				V-8396	12,180		
8398	12/3/08	6/3/09	Vinyl Acetate - Cal	51.2338 - 51.6284 0.1049	MeOH/CV200	10 ml	10,490	V-8370	99.5%	9/13	JK
8399	12/3/08	6/3/09	2-Clve - Cal	52.6184 - 52.1177 0.1007	MeOH/CV200	10 ml	10,070	V-7858	98.2%	9/10	JK
8400	12/3/08	6/3/09	CS2 - Cal	51.9848 - 51.8818 0.1030	MeOH/CV200	10 ml	10,200	V-8369	99.5%	10/11	JK
8401	12/3/08	6/3/09	Acrylonitrile - Cal	51.8930 - 51.7843 0.1087	MeOH/CV200	10 ml	10,870	V-7246	99.5%	11/10	JK

Supervisor Review: _____

GCMS V Standard Prep

516

GC/MS VOLATILE STANDARDS PREP LOG

No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8421 A,B,C	12/4/08	2/4/09	8260 - IS/Surr	—	—	—	—		—		—
			8260 - IS	50 ul	MeOH/CV200	2 ml	50	V-8188	2000	4/3/09	JK
			8260 - Surr					V-8409			
8422	12/4/08	2/4/09	8260 Ref w/o Ketones	—	—	—	—		—		—
			Stock 1 - Ref	100 ul	MeOH/CV200	2 ml	100	V-8392	2000	4/3/09	JK
			Stock 2 - Ref					V-8397			
			524/8260 MM - Ref					V-8418		4/4/09	
8423	12/4/08	2/4/09	8260 Ketones - Ref	200 ul	MeOH/CV200	2 ml	200	V-8419	2000	3/4/09	JK
8424	12/4/08	1/4/09	8260 MISC Ref	—	—	—	—		—		—
			Vinyl Acetate - Ref	19.1 ul	MeOH/CV200	2 ml	100	V-8403	19,460	6/3/09	JK
			2-Clve - Ref	95.2 ul			500	V-8404	10,500		
			CS2 - Ref	19.3 ul			100	V-8405	10,360		
			Acrylonitrile - Ref	97.6 ml			500	V-8406	10,250		
			Acrolein - Ref	81.3 ul				V-8407	12,300	3/31/09	
			Gases - Ref	200 ul			100	V-8420	1000	2/4/09	
25	12/5/08	~~4/5/08~~ 4/3/09	8260 IS/Surr MS3	—	—	—	—	—	—	—	—
	(20) 12-8-08	4/3/09	Std (8260 Internal Std. #3 Surr)	263 ul	MeOH/CV200	25 mL	65.8	V8408	2000	4/3/09	NSV
			8260 Surrogate Std.	263 ul			65.8	V8409	2000		
26	12/8/08	4/3/09	8260 IS/Surr MS3	—	—	—	—	—	—	—	—
			Std (8260 Internal Std. #2 Surr)	329 ul	MeOH/CV200	10 mL	21.0	V8408	2000	4/3/09	NSV
			8260 Surrogate Std	329 ul			21.0	V8409	2000		

Supervisor Review: _____

GCMS V Standard Prep

519

GC/MS VOLATILE STANDARDS PREP LOG

No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8402	12/3/08	3/31/09	Acrolein - Cal	7.1945 - 7.1826 0.0119	MeOH/CV200	1 ml	11,900	V-8225	96.1%	3/09	JK
8403	12/3/08	6/3/09	Vinyl Acetate - Ref	51.3208 - 51.3162 0.1046	MeOH/CV200	10 ml	10,460	V-8370	99.5%	9/13	JK
8404	12/3/08	6/3/09	2-Clve - Ref	53.1050 - 53.0000 0.1050	MeOH/CV200	10 ml	10,500	V-7858	98.2%	9/10	JK
8405	12/3/08	6/3/09	CS2 - Ref	51.9494 - 51.8458 0.1036	MeOH/CV200	10 ml	10,360	V-8369	99.5%	10/11	JK
8406	12/3/08	6/3/09	Acrylonitrile - Ref	50.8502 - 50.7477 0.1025	MeOH/CV200	10 ml	10,250	V-7246	99.5%	10/10	JK
8407	12/3/08	3/31/09	Acrolein - Ref	7.3314 - 7.3191 0.0123	MeOH/CV200	1 ml	12,300	V-8225	96.1%	3/09	JK
			JK 12/3/08	~~0.1230~~							
8408	12/3/08	4/3/09	8260 - IS	Checked	MeOH	1.2 ml	2000	V-8206	2000	12/15/10	JK
8409	12/3/08	4/3/09	8260 - Surr	Checked	MeOH	1.2 ml	2000	V-8295	2000	2/2/10	JK
8410	12/3/08	4/3/09	524/8260 MM - Cal	Checked	MeOH	1.2 ml	2000	V-8224	2000	11/11/10	JK
8411	12/3/08	3/3/09	8260 Ketones - Cal	Checked	MeOH	1.2 ml	2000	V-8329	2000	12/15/09	JK
8412	12/3/08	2/3/09	8260 Gases - Cal	Checked	MeOH	1.2 ml	1000	V-8157	1000	9/10	JK
8413	12/4/08	2/4/09	8260 - IS	50 ul	MeOH/CV200	2 ml	50	V-8408	2000	4/3/09	JK

Supervisor Review: _____

GCMS V Standard Prep

517

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
8427	12/8/08	12/15/08	8260 VOC MEK - Cal	—	—	—	—				—
			8260 Cal w/o Ketones	50ul	MeOH/CV200	1ml	5	V-8414	100	2/4/09	JR
			8260 Ketones - Cal				10	V-8415	200		
			8260 MEK - Cal				5/25	V-8416	100/500	1/4/09	
8428	12/11/08	4/8/09	8260 IS/SUR for MS2	—	MeOH/CV200	10 ml					JR
			8260 IS	319 ul			63.8	V-8408	2000	4/3/09	
			8260 Surrogate	319 ul				V-8409	2000	4/3/09	
29	12/9/08	4/8/09	8260 IS/Sur Std MS1:	—	—	—	—	—	—	—	—
			8260 Internal Std.	235 ul	MeOH	10mL	50.7	V8408	2000	4/3/09	(a)
			8260 Surrogate Std	235 ul	CV200		50.7	V8409	2000	4/3/09	(a)
8430	12/10/08	12/11/09	TCLP EXTRACTION SOL'N	—	—	—	—		—		—
			1N NaOH	140ml	DI H_2O	2L	pH=4.97	V-8213	1N	5/18/09	JR
			Glacial Acetic	11.4ml				V-8107		2/6/11	
431	12/16/08	12/16/09	1N NaOH	80g	DI H_2O	2L	1 N	Mallinckrodt (Gallon) 7708 X 26587			Jd
432	12/17/08	12/29/15	t-Butanol (from Control)	1mL	MeOH	1mL	2000 ppm	AccuStandard lot #B512078			(LN)
			rec'd 7/31/08 VCTBA-58	—	—	—	—	—	—	—	—
433	12/17/08	6/17/09	t-Butanol	Cracked	MeOH	1mL	2000 ppm	V8432	2000	12/29/15	(LN)
434	12/17/08	3/17/09	t-Butanol (Cal)	1mL	MeOH/CV200	10mL	200 ppm	V8433	2000	6/17/09	(LN)
435	12/17/08	6/17/09	t-Butanol (Ref)	52.6469 52.4485 0.1984g	MeOH/CV200	10mL	19,840	V7444	99.5%	08/10	(LN)
436	12/17/08	12/17/08	t-Butanol (Ref)	80.6 ul	MeOH/CV200	2.0mL	800 ppm	V8435	19,840	6/17/09	(LN)

Supervisor Review: _____

GCMS V Standard Prep

GC/MS VOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
437	12-22-08	2-22-09	Ketones Ref 8260	200 ul	MeOH/CV200	2.0mL	200	V8419	2000	3/4/09	(LN)
438	12-18-08	4-18-09	8260 IS/Surr Archon MS4:	—		—	—	—	—	—	—
			#2 Internal Std Mix	625 ul	MeOH	5mL	250	V8439	2000	4/18/09	(LN)
			#3 Surrogate Std Mix	625 ul	CV200			V8440	2000	4/18/09	
439	12-18-08	4-18-09	8260 Internal Std.	cracked	MeOH	~1.2mL	2000	V8300	2000	12/5/10	(LN)
440	12-18-08	4-18-09	8260 Surrogat Std.	cracked	MeOH	~1.2mL	2000	V8367	2000	2/2/10	(LN)

Supervisor Review: _____

GCMS V Standard Prep

GC/MS Semivolatile Organics Data

QC Summary

524

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	47.7	10	51.5	0	93	30	130				
2,4,5-Trichlorophenol	43.7	52	51.5	0	85	50	134				J
2,4,6-Trichlorophenol	39.8	10	51.5	0	77	50	130				
2,4-Dichlorophenol	40.2	10	51.5	0	78	50	130				
2,4-Dimethylphenol	31.9	10	51.5	0	62	39	130				
2,4-Dinitrophenol	48.1	52	51.5	0	93	45	130				J
2,4-Dinitrotoluene	49.2	10	51.5	0	95	50	130				
2,6-Dinitrotoluene	51.1	10	51.5	0	99	50	130				
2-Chloronaphthalene	43.8	10	51.5	0	85	50	130				
2-Chlorophenol	43.9	10	51.5	0	85	35	130				
2-Methylnaphthalene	39.9	10	51.5	0	77	36	130				
2-Methylphenol	38.4	10	51.5	0	74	34	138				
2-Nitroaniline	47.5	52	51.5	0	92	10	173				J
2-Nitrophenol	46.4	10	51.5	0	90	46	130				
3,3'-Dichlorobenzidine	4.44	21	51.5	0	9	10	151				JS
3-Nitroaniline	43.8	52	51.5	0	85	10	161				J
4,6-Dinitro-2-methylphenol	51.2	10	51.5	0	99	50	130				
4-Bromophenyl phenyl ether	49.0	10	51.5	0	95	50	130				
4-Chloro-3-methylphenol	40.7	10	51.5	0	79	48	136				
4-Chloroaniline	29.3	10	51.5	0	57	14	133				
4-Chlorophenyl phenyl ether	49.2	10	51.5	0	96	50	130				
4-Methylphenol	37.4	10	51.5	0	72	48	130				
4-Nitroaniline	46.9	52	51.5	0	91	10	175				J
4-Nitrophenol	45.6	52	51.5	0	88	50	154				J
Acenaphthene	41.5	10	51.5	0	80	50	130				
Acenaphthylene	45.7	10	51.5	0	89	50	130				
Acetophenone	45.6	10	51.5	0	89	20	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

526

29-Dec-08

525

Lab Name: Life Science Laboratories, Inc Contract: _____

Lab Code: LSLB Case No.: GMG-SMS SAS No. _____ SDG No.: 0812108

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

EPA SAMPLE NO.	Lab. ID	S1 (2FP) 1 #	S2 (NB2) 1 #	S3 (NB3) 1 #	S4 (TBP) 1 #	S5 (TPH) 1 #	S6 (TPH) 1 #	TOT OUT
01MW-8644	MB-8644	77	81	83	81	79	85	0
02LCS-8644	LCS-8644	84	81	84	86	86	96	0
03MSB-8644	MSB-8644	82	79	82	85	85	85	0
04MW-2-121108	0812108-001B	81	81	85	85	87	82	0
05MW-4-121108	0812108-002B	77	81	83	82	90	83	0
06MW-12-121108	0812108-003B	79	77	80	84	96	85	0
07MW-13-121108	0812108-004B	80	80	83	85	83	83	0
08MW-11R-121108	0812108-005B	66	84	86	69	57	84	0
09MW-11R-121108MS	0812108-005BMS	76	82	85	80	67	83	0
10MW-11R-121108MSD	0812108-005BMSD	79	82	87	83	66	87	0
11MW-8-121108	0812108-006B	79	82	82	82	85	88	0
12EU-1-121108	0812108-007B	76	77	78	79	80	80	0
13MW-3R-121208	0812108-008B	73	81	80	75	79	84	0
14MW-9-121208	0812108-009B	61	62	84	85	84	87	0
15MW-5-121208	0812108-010B	78	81	83	82	73	81	0
16MW-6-121208	0812108-011B	79	82	84	83	76	84	0
17MW-7-121208	0812108-012B	76	83	85	80	73	85	0

S1 (2FP) 1 = 2-Fluorophenol QC Limit
S2 (FBP) 1 = 2-Fluorobiphenyl 26-130
S3 (NB2) 1 = Nitrobenzene-d5 42-130
S4 (NB3) 1 = Phenol-d5 21-134
S5 (TBP) 1 = 2,4,6-Tribromophenol 46-149
S6 (TPH) 1 = Terphenyl-d14 24-147

Column to be used to flag recovery values
* Values outside of contract required QC limits

Page 1 of 1 FORM II 8W-1 SW8270C

526

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	41.2	10	51.5	0	80	50	130				
Atrazine	41.9	10	51.5	0	81	30	130				
Benzaldehyde	40.7	10	51.5	0	79	30	130				
Benzo[a]anthracene	46.4	10	51.5	0	90	42	134				
Benzo[a]pyrene	46.2	10	51.5	0	90	38	139				
Benzo[b]fluoranthene	46.7	10	51.5	0	91	30	153				
Benzo[g,h,i]perylene	45.4	10	51.5	0	88	23	136				
Benzo[k]fluoranthene	48.7	10	51.5	0	94	21	156				
bis(2-Chloroethoxy)methane	46.5	10	51.5	0	90	35	130				
bis(2-chloroethyl)ether	48.3	10	51.5	0	94	18	153				
bis(2-chloroisopropyl)ether	51.4	10	51.5	0	100	28	130				
bis(2-Ethylhexyl)phthalate	50.5	10	51.5	0	98	49	153				
Butyl benzyl phthalate	49.3	10	51.5	0	96	28	157				
Caprolactam	59.1	10	51.5	0	115	30	130				
Carbazole	40.9	10	51.5	0	79	38	175				
Chrysene	46.0	10	51.5	0	89	43	132				
Di-n-butyl phthalate	49.1	10	51.5	0	95	37	152				
Di-n-octyl phthalate	48.8	10	51.5	0	95	50	146				
Dibenz[a,h]anthracene	46.3	10	51.5	0	90	27	149				
Dibenzofuran	46.2	10	51.5	0	90	50	130				
Diethyl phthalate	50.4	10	51.5	0	98	18	169				
Dimethyl phthalate	51.3	10	51.5	0	100	19	161				
Fluoranthene	47.7	10	51.5	0	93	50	130				
Fluorene	46.2	10	51.5	0	90	50	130				
Hexachlorobenzene	46.0	10	51.5	0	89	45	134				
Hexachlorobutadiene	31.2	10	51.5	0	60	20	130				
Hexachlorocyclopentadiene	31.8	10	51.5	0	62	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

527

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	40.6	10	51.5	0	79	50	130	41.2	1.5	34	
Atrazine	43.5	10	51.5	0	84	30	130	41.8	4.1	50	
Benzaldehyde	42.5	10	51.5	0	82	30	130	40.7	4.3	60	
Benzo(a)anthracene	47.0	10	51.5	0	91	42	134	46.4	1.3	54	
Benzo(a)pyrene	46.0	10	51.5	0	89	36	139	46.2	0.4	58	
Benzo(b)fluoranthene	45.8	10	51.5	0	89	30	153	46.7	2.5	59	
Benzo(g,h,i)perylene	44.0	10	51.5	0	85	23	136	45.4	3.3	57	
Benzo(k)fluoranthene	49.2	10	51.5	0	96	21	166	48.7	1.1	60	
bis(2-Chloroethoxy)methane	48.5	10	51.5	0	94	35	130	46.5	4.3	60	
bis(2-chloroethyl)ether	49.9	10	51.5	0	97	18	153	48.3	3.2	60	
bis(2-chloroisopropyl)ether	53.4	10	51.5	0	104	28	130	51.4	3.8	60	
bis(2-Ethylhexyl)phthalate	51.1	10	51.5	0	99	49	153	50.5	1.1	59	
Butyl benzyl phthalate	49.6	10	51.5	0	96	28	157	49.3	0.6	46	
Caprolactam	60.1	10	51.5	0	117	30	130	59.1	1.6	60	
Carbazole	42.2	10	51.5	0	82	38	175	40.9	3.1	40	
Chrysene	46.4	10	51.5	0	90	43	132	46	0.7	57	
Di-n-butyl phthalate	49.2	10	51.5	0	96	37	152	49.1	0.2	32	
Di-n-octyl phthalate	49.2	10	51.5	0	95	50	146	48.8	0.8	58	
Dibenz[a,h]anthracene	45.1	10	51.5	0	88	27	149	46.3	2.7	52	
Dibenzofuran	45.3	10	51.5	0	88	50	130	46.2	2.0	30	
Diethyl phthalate	51.5	10	51.5	0	100	18	169	50.4	2.0	30	
Dimethyl phthalate	51.3	10	51.5	0	100	19	161	51.3	0	30	
Fluoranthene	47.3	10	51.5	0	92	50	130	47.7	1	45	
Fluorene	45.8	10	51.5	0	89	50	130	46.2	0.8	30	
Hexachlorobenzene	45.3	10	51.5	0	88	45	134	46	1.5	48	
Hexachlorobutadiene	31.1	10	51.5	0	60	20	130	31.2	0.3	60	
Hexachlorocyclopentadiene	30.2	10	51.5	0	59	10	130	31.8	5.1	31	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

530 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	32.7	10	51.5	0	63	32	130				
Indeno[1,2,3-cd]pyrene	45.1	10	51.5	0	88	27	138				
Isophorone	50.5	10	51.5	0	98	49	130				
N-Nitroso-di-n-propylamine	52.1	10	51.5	0	101	30	145				
N-Nitrosodiphenylamine	26.5	10	51.5	0	51	19	157				
Naphthalene	37.8	10	51.5	0	73	33	130				
Nitrobenzene	49.0	10	51.5	0	95	38	145				
Pentachlorophenol	38.7	52	51.5	0	75	50	145				J
Phenanthrene	47.0	10	51.5	0	91	50	130				
Phenol	43.6	10	51.5	0	85	20	141				
Pyrene	45.8	10	51.5	0	89	47	133				
Surr: 2,4,6-Tribromophenol	104	0.10	155	0	67	46	149				
Surr: 2-Fluorobiphenyl	84.8	0.10	103	0	82	42	130				
Surr: 2-Fluorophenol	118	0.10	155	0	76	26	130				
Surr: Nitrobenzene-d5	87.2	0.10	103	0	85	42	130				
Surr: Phenol-d5	124	0.10	155	0	80	21	134				
Surr: Terphenyl-d14	85.6	0.10	103	0	83	24	147				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

528 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	32.9	10	51.5	0	64	32	130	32.7	0.7	60	
Indeno[1,2,3-cd]pyrene	43.4	10	51.5	0	84	27	138	45.1	3.9	52	
Isophorone	52.0	10	51.5	0	101	49	130	50.5	2.9	39	
N-Nitroso-di-n-propylamine	52.5	10	51.5	0	102	30	145	52.1	0.8	60	
N-Nitrosodiphenylamine	28.2	10	51.5	0	55	19	157	26.5	6.5	60	
Naphthalene	39.4	10	51.5	0	76	33	130	37.8	4.2	60	
Nitrobenzene	50.9	10	51.5	0	99	38	145	49	3.8	60	
Pentachlorophenol	41.9	52	51.5	0	81	50	145	38.7	7.9	30	J
Phenanthrene	46.6	10	51.5	0	90	50	130	47	0.8	32	
Phenol	45.0	10	51.5	0	87	20	141	43.6	3.2	60	
Pyrene	46.5	10	51.5	0	90	47	133	45.8	1.5	46	
Surr: 2,4,6-Tribromophenol	106	0.10	156	0	68	46	149	0		0	
Surr: 2-Fluorobiphenyl	84.2	0.10	103	0	82	42	130	0		0	
Surr: 2-Fluorophenol	122	0.10	155	0	79	26	130	0		0	
Surr: Nitrobenzene-d5	89.4	0.10	103	0	87	42	130	0		0	
Surr: Phenol-d5	128	0.10	155	0	83	21	134	0		0	
Surr: Terphenyl-d14	89.4	0.10	103	0	87	24	147	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

531 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	47.9	10	51.5	0	93	30	130	47.7	0.5	60	
2,4,5-Trichlorophenol	46.0	52	51.5	0	89	50	134	43.7	5.3	30	J
2,4,6-Trichlorophenol	41.0	10	51.5	0	79	50	130	39.6	3.3	30	
2,4-Dichlorophenol	42.2	10	51.5	0	82	50	130	40.2	5.0	30	
2,4-Dimethylphenol	29.7	10	51.5	0	58	39	130	31.9	7.2	31	
2,4-Dinitrophenol	50.8	52	51.5	0	99	45	130	48.1	5.6	30	J
2,4-Dinitrotoluene	50.6	10	51.5	0	98	50	130	49.2	2.7	30	
2,6-Dinitrotoluene	52.7	10	51.5	0	102	50	130	51.1	3.1	30	
2-Chloronaphthalene	42.4	10	51.5	0	82	50	130	43.8	3.0	30	
2-Chlorophenol	45.1	10	51.5	0	88	35	130	43.9	2.8	60	
2-Methylnaphthalene	39.4	10	51.5	0	76	36	130	39.9	1.4	40	
2-Methylphenol	39.1	10	51.5	0	76	34	138	38.4	1.9	60	
2-Nitroaniline	49.7	52	51.5	0	96	10	173	47.5	4.6	60	J
2-Nitrophenol	47.8	10	51.5	0	93	46	130	46.4	3.1	36	
3,3'-Dichlorobenzidine	4.43	21	51.5	0	9	10	151	4.44	0.2	60	JS
3-Nitroaniline	45.7	52	51.5	0	89	10	161	43.6	4.5	60	J
4,6-Dinitro-2-methylphenol	53.4	10	51.5	0	104	50	130	51.2	4.3	30	
4-Bromophenyl phenyl ether	47.9	10	51.5	0	93	50	130	49	2.4	37	
4-Chloro-3-methylphenol	42.0	10	51.5	0	82	48	135	40.7	3.2	60	
4-Chloroaniline	33.3	10	51.5	0	65	14	133	29.3	13	60	
4-Chlorophenyl phenyl ether	48.7	10	51.5	0	95	50	130	49.2	1.0	34	
4-Methylphenol	38.1	10	51.5	0	74	48	130	37.4	1.9	42	
4-Nitroaniline	49.2	52	51.5	0	96	10	175	46.9	4.8	60	J
4-Nitrophenol	47.5	52	51.5	0	92	50	154	45.6	4.2	42	J
Acenaphthene	42.0	10	51.5	0	82	50	130	41.5	1.3	41	
Acenaphthylene	45.7	10	51.5	0	89	50	130	45.7	0.1	30	
Acetophenone	48.5	10	51.5	0	90	30	130	45.6	1.9	60	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

529 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	30.7	10	50	0	61	32	130				
Indeno(1,2,3-cd)pyrene	45.4	10	50	0	91	27	138				
Isophorone	47.7	10	50	0	95	49	130				
N-Nitroso-di-n-propylamine	48.0	10	50	0	96	30	145				
N-Nitrosodiphenylamine	45.2	10	50	0	90	19	157				
Naphthalene	36.3	10	50	0	73	33	130				
Nitrobenzene	45.7	10	50	0	91	35	145				
Pentachlorophenol	41.9	50	50	0	84	50	145				J
Phenanthrene	43.7	10	50	0	87	50	130				
Phenol	44.7	10	50	0	89	20	141				
Pyrene	45.6	10	50	0	91	47	133				
Surr: 2,4,6-Tribromophenol	127	0.10	150	0	85	46	149				
Surr: 2-Fluorobiphenyl	79.0	0.10	100	0	79	42	130				
Surr: 2-Fluorophenol	123	0.10	150	0	82	26	130				
Surr: Nitrobenzene-d5	62.4	0.10	100	0	62	42	130				
Surr: Phenol-d5	128	0.10	150	0	85	21	134				
Surr: Terphenyl-d14	84.8	0.10	100	0	85	24	147				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

534 :: 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	44.6	10	50	0	89	30	130				
2,4,5-Trichlorophenol	44.9	50	50	0	90	50	134				J
2,4,6-Trichlorophenol	45.3	10	50	0	91	50	130				
2,4-Dichlorophenol	43.5	10	50	0	87	50	130				
2,4-Dimethylphenol	40.6	10	50	0	81	39	130				
2,4-Dinitrophenol	39.8	50	50	0	80	45	130				J
2,4-Dinitrotoluene	48.0	10	50	0	88	50	130				
2,6-Dinitrotoluene	49.1	10	50	0	98	50	130				
2-Chloronaphthalene	38.4	10	50	0	77	50	130				
2-Chlorophenol	45.2	10	50	0	90	36	130				
2-Methylnaphthalene	35.4	10	50	0	71	36	130				
2-Methylphenol	46.1	10	50	0	92	34	138				
2-Nitroaniline	47.5	50	50	0	95	10	173				J
2-Nitrophenol	43.8	10	50	0	88	46	130				
3,3'-Dichlorobenzidine	24.7	20	50	0	49	10	151				
3-Nitroaniline	48.2	50	50	0	96	10	161				J
4,6-Dinitro-2-methylphenol	47.7	10	50	0	95	50	130				
4-Bromophenyl phenyl ether	44.6	10	50	0	89	50	130				
4-Chloro-3-methylphenol	44.6	10	50	0	89	46	135				
4-Chloroaniline	44.5	10	50	0	89	14	133				
4-Chlorophenyl phenyl ether	44.6	10	50	0	89	50	130				
4-Methylphenol	45.6	10	50	0	91	48	130				
4-Nitroaniline	47.9	50	50	0	96	10	175				J
4-Nitrophenol	44.5	50	50	0	89	50	154				J
Acenaphthene	41.8	10	50	0	84	50	130				
Acenaphthylene	41.8	10	50	0	84	50	130				
Acetophenone	43.1	10	50	0	86	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

532 :: 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8644 SampType: LCS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416470
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	45.2	10	50	0	90	30	130				
2,4,5-Trichlorophenol	46.5	50	50	0	93	60	125				J
2,4,6-Trichlorophenol	46.7	10	50	0	93	60	125				
2,4-Dichlorophenol	44.3	10	50	0	89	60	125				
2,4-Dimethylphenol	41.5	10	50	0	83	42	125				
2,4-Dinitrophenol	44.8	50	50	0	89	25	138				J
2,4-Dinitrotoluene	49.0	10	50	0	98	60	129				
2,6-Dinitrotoluene	50.3	10	50	0	101	60	127				
2-Chloronaphthalene	39.5	10	50	0	79	53	125				
2-Chlorophenol	45.7	10	50	0	91	53	125				
2-Methylnaphthalene	35.6	10	50	0	71	42	125				
2-Methylphenol	47.2	10	50	0	94	56	125				
2-Nitroaniline	48.4	50	50	0	97	60	138				J
2-Nitrophenol	44.6	10	50	0	89	57	125				
3,3'-Dichlorobenzidine	22.3	20	50	0	45	25	128				
3-Nitroaniline	48.1	50	50	0	96	55	144				J
4,6-Dinitro-2-methylphenol	50.0	10	50	0	100	57	125				
4-Bromophenyl phenyl ether	46.0	10	50	0	92	57	135				
4-Chloro-3-methylphenol	45.8	10	50	0	92	60	125				
4-Chloroaniline	45.5	10	50	0	91	39	139				
4-Chlorophenyl phenyl ether	45.1	10	50	0	90	54	128				
4-Methylphenol	46.4	10	50	0	93	51	125				
4-Nitroaniline	47.6	50	50	0	95	52	150				J
4-Nitrophenol	48.1	50	50	0	97	55	144				J
Acenaphthene	42.8	10	50	0	86	58	125				
Acenaphthylene	43.4	10	50	0	87	57	125				
Acetophenone	43.1	10	50	0	86	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

535 :: 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	43.6	10	50	0	87	50	130				
Atrazine	41.0	10	50	0	82	30	130				
Benzaldehyde	45.7	10	50	0	91	30	130				
Benzo[a]anthracene	44.8	10	50	0	90	42	134				
Benzo[a]pyrene	43.9	10	50	0	88	36	139				
Benzo[b]fluoranthene	44.6	10	50	0	89	30	153				
Benzo[g,h,i]perylene	45.2	10	50	0	90	23	136				
Benzo[k]fluoranthene	45.0	10	50	0	90	21	166				
bis(2-Chloroethoxy)methane	44.6	10	50	0	89	35	130				
bis(2-chloroethyl)ether	45.6	10	50	0	91	16	153				
bis(2-chloroisopropyl)ether	48.2	10	50	0	96	28	150				
bis(2-Ethylhexyl)phthalate	47.5	10	50	0	95	49	153				
Butyl benzyl phthalate	46.4	10	50	0	93	28	157				
Caprolactam	56.9	10	50	0	114	30	130				
Carbazole	46.1	10	50	0	92	38	175				
Chrysene	44.4	10	50	0	89	43	132				
Di-n-butyl phthalate	46.4	10	50	0	93	37	152				
Di-n-octyl phthalate	46.3	10	50	0	93	50	148				
Dibenz[a,h]anthracene	45.2	10	50	0	90	27	148				
Dibenzofuran	41.6	10	50	0	83	50	130				
Diethyl phthalate	48.4	10	50	0	97	18	169				
Dimethyl phthalate	49.2	10	50	0	98	19	161				
Fluoranthene	45.3	10	50	0	91	50	130				
Fluorene	42.8	10	50	0	86	50	130				
Hexachlorobenzene	43.0	10	50	0	86	45	134				
Hexachlorobutadiene	27.9	10	50	0	56	20	130				
Hexachlorocyclopentadiene	21.7	10	50	0	43	10	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

533 :: 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8644 | SampType: LCS | TestCode: 8270W_OLM | Units: µg/L | Prep Date: 12/17/2008 | RunNo: 15973
Client ID: ZZZZZ | Batch ID: 8644 | Method: SW8270C (SW3520C) | Analysis Date: 12/19/2008 | SeqNo: 416470
Instrument: MS06_40 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	44.8	10	50	0	90	60	125				
Atrazine	42.7	10	50	0	85	30	130				
Benzaldehyde	46.0	10	50	0	92	30	130				
Benzo[a]anthracene	45.9	10	50	0	92	60	125				
Benzo[a]pyrene	44.9	10	50	0	90	56	131				
Benzo[b]fluoranthene	44.8	10	50	0	90	56	134				
Benzo[g,h,i]perylene	46.7	10	50	0	93	44	144				
Benzo[k]fluoranthene	46.3	10	50	0	93	56	133				
bis(2-Chloroethoxy)methane	45.3	10	50	0	91	56	125				
bis(2-chloroethyl)ether	46.0	10	50	0	92	46	126				
bis(2-chloroisopropyl)ether	50.4	10	50	0	101	33	131				
bis(2-Ethylhexyl)phthalate	48.2	10	50	0	96	60	148				
Butyl benzyl phthalate	47.4	10	50	0	95	58	146				
Caprolactam	57.6	10	50	0	115	30	130				
Carbazole	46.7	10	50	0	93	57	146				
Chrysene	44.9	10	50	0	90	59	128				
Di-n-butyl phthalate	47.4	10	50	0	95	58	146				
Di-n-octyl phthalate	47.6	10	50	0	95	58	149				
Dibenz[a,h]anthracene	46.0	10	50	0	92	44	150				
Dibenzofuran	42.5	10	50	0	85	50	126				
Diethyl phthalate	49.4	10	50	0	99	56	147				
Dimethyl phthalate	50.0	10	50	0	100	60	129				
Fluoranthene	46.1	10	50	0	92	60	128				
Fluorene	43.8	10	50	0	88	59	125				
Hexachlorobenzene	43.4	10	50	0	87	60	134				
Hexachlorobutadiene	27.4	10	50	0	55	25	125				
Hexachlorocyclopentadiene	22.5	10	50	0	45	25	125				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8644 | SampType: LCS | TestCode: 8270W_OLM | Units: µg/L | Prep Date: 12/17/2008 | RunNo: 15973
Client ID: ZZZZZ | Batch ID: 8644 | Method: SW8270C (SW3520C) | Analysis Date: 12/19/2008 | SeqNo: 416470
Instrument: MS06_40 | ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	30.4	10	50	0	61	25	125				
Indeno[1,2,3-cd]pyrene	47.5	10	50	0	95	46	141				
Isophorone	49.1	10	50	0	98	60	125				
N-Nitroso-di-n-propylamine	49.4	10	50	0	99	55	134				
N-Nitrosodiphenylamine	46.5	10	50	0	93	54	136				
Naphthalene	37.0	10	50	0	74	48	125				
Nitrobenzene	47.2	10	50	0	94	50	125				
Pentachlorophenol	43.5	50	50	0	87	44	128				
Phenanthrene	44.6	10	50	0	89	60	125				
Phenol	44.9	10	50	0	90	51	125				
Pyrene	46.3	10	50	0	93	59	130				
Surr: 2,4,6-Tribromophenol	129	0.10	150	0	86	46	149				
Surr: 2-Fluorobiphenyl	81.2	0.10	100	0	81	42	130				
Surr: 2-Fluorophenol	126	0.10	150	0	84	26	130				
Surr: Nitrobenzene-d5	84.1	0.10	100	0	84	42	130				
Surr: Phenol-d5	129	0.10	150	0	86	21	134				
Surr: Terphenyl-d14	85.5	0.10	100	0	86	24	147				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Lab Name: Life Science Laboratories, Contract: _____ SW
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0812108
Lab File ID: TA\E3333.D DFTPP Injection Date: 12/19/2008
Instrument ID: MS06.40 DFTPP Injection Time: 8:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	39.2
68	Less than 2.0% of mass 69	0.0 (0.0)
69	Mass 69 relative abundance	49.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	44.1
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	21.5
365	Greater than 0.75% of mass 198	2.7
441	Present, but less than mass 443	9.6
442	40.0 - 110.0% of mass 198	57.0
443	15.0 - 24.0% of mass 442	17.7 (29.5)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SST01SSPPM	SST01SSPPM	K5334.D	12/19/08	8:48
02	SST01SSPPM	SST01SSPPM	K5335.D	12/19/08	9:24
03	SST02SSPPM	SST02SSPPM	K5336.D	12/19/08	10:07
04	SST03SSPPM	SST03SSPPM	K5337.D	12/19/08	10:41
05	SST05SSPPM	SST05SSPPM	K5338.D	12/19/08	11:19
06	SST01SSPPM	SST01SSPPM	K5339.D	12/19/08	11:58
07	SST02SSPPM	SST02SSPPM	K5340.D	12/19/08	12:36
08	SST03SSPPM	SST03SSPPM	K5341.D	12/19/08	13:15
09	SST05SSPPM	SST05SSPPM	K5342.D	12/19/08	13:53
10	SST06SSPPM	SST06SSPPM	K5343.D	12/19/08	14:32
11	KCV-121908	KCV-121908	K5344.D	12/19/08	15:10
12	SST06SSPPM OLM	SST06SSPPM OLM	K5345.D	12/19/08	15:49
13	SST01SSPPM OLM	SST01SSPPM OLM	K5346.D	12/19/08	16:27
14	SST06SSPPM OLM	SST06SSPPM OLM	K5347.D	12/19/08	17:06
15	SST02SSPPM OLM	SST02SSPPM OLM	K5348.D	12/19/08	17:44
16	SST03SSPPM OLM	SST03SSPPM OLM	K5350.D	12/19/08	18:23
17	SST02SSPPM OLM	SST02SSPPM OLM	K5351.D	12/19/08	19:02
18	SST01SSPPM OLM	SST01SSPPM OLM	K5352.D	12/19/08	19:40
19	SST05SSPPM OLM	SST05SSPPM OLM	K5353.D	12/19/08	20:19

Page 1 of 4

FORM V SV

SW8270C

Lab Name: Life Science Laboratories Contract: _____ EPA SAMPLE NO.
MB-8644

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0812108
Lab File ID: K5356.D Lab Sample ID: MB-8644
Instrument ID: MS06.40 Date Extracted: 12/17/2008
Matrix: (soil/water) WATER Date Analyzed: 12/19/2008
Level: (low/med) Time Analyzed: 22:32

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-8644	LCS-8644	K5357.D	23:11
02	MSB-8644	MSB-8644	K5358.D	23:50
03	MW-2-121108	0812108-001B	K5359.D	0:28
04	MW-4-121108	0812108-002B	K5360.D	1:07
05	MW-13-121108	0812108-003B	K5361.D	1:46
06	MW-119-121108	0812108-004B	K5362.D	2:25
07	MW-118-121108MS	0812108-005BMS	K5363.D	3:04
08	MW-118-121108MSD	0812108-005BMSD	K5364.D	3:42
09	MW-1R-121108MSD	0812108-006BMSD	K5365.D	4:21
10	MW-8-121108	0812108-006B	K5366.D	5:00
11	BD-1-121108	0812108-007B	K5367.D	5:38
12	MW-5R-121208	0812108-008B	K5368.D	6:17
13	MW-9-121208	0812108-009B	K5369.D	6:56
14	MW-5-121208	0812108-010B	K5370.D	7:35
15	MW-6-121208	0812108-011B	K5371.D	8:13
16	MW-7-121208	0812108-012B	K5372.D	8:52

COMMENTS:

Page 1 of 1

FORM IV

SV8270W_OLM42

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Life Science Laboratories, Contract: ______

Lab Code: LSLB Case No.: OBG-MS SAS No.: ______ SDG No.: 0812108

Lab File ID: TA\K5353.D DFTPP Injection Date: 12/19/2008

Instrument ID: MS06 40 DFTPP Injection Time: 20:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	39.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	49.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	43.7
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	21.0
365	Greater than 0.75% of mass 198	2.6
441	Present, but less than mass 443	2.8
442	40.0 - 110.0% of mass 198	54.1
443	15.0 - 24.0% of mass 442	10.5 (19.3)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC121908A8	CC121908A8	K5354.D	12/19/08	21:15
02	CC121908B8 OLM	CC121908B8 OLM	K5355.D	12/19/08	21:53
03	MB-8644	MB-8644	K5356.D	12/19/08	22:32
04	LCS-8644	LCS-8644	K5357.D	12/19/08	23:11
05	MSB-8644	MSB-8644	K5358.D	12/19/08	23:50
06	MW-2-121108	0812108-001B	K5359.D	12/20/08	0:28
07	MW-4-121108	0812108-002B	K5360.D	12/20/08	1:07
08	MW-12-121108	0812108-003B	K5361.D	12/20/08	1:46
09	MW-13-121108	0812108-004B	K5362.D	12/20/08	2:25
10	MW-11R-121108	0812108-005B	K5363.D	12/20/08	3:04
11	MW-11R-121108MS	0812108-005BMS	K5364.D	12/20/08	3:42
12	MW-11R-121108MSD	0812108-005BMSD	K5365.D	12/20/08	4:21
13	MW-8-121108	0812108-006B	K5366.D	12/20/08	5:00
14	BD-1-121108	0812108-007B	K5367.D	12/20/08	5:38
15	MW-3R-121208	0812108-008B	K5368.D	12/20/08	6:17
16	MW-9-121208	0812108-009B	K5369.D	12/20/08	6:56
17	MW-5-121208	0812108-010B	K5370.D	12/20/08	7:35
18	MW-6-121208	0812108-011B	K5371.D	12/20/08	8:13
19	MW-7-121208	0812108-012B	K5372.D	12/20/08	8:52

page 3 of 4

FORM V SV SW8270C

540

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): K5354.D Date Analyzed: 12/19/2008

Instrument ID: MS06_40 Time Analyzed: 21:15

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	140392	10.11	524735	12.47	310061	15.82	528164	18.68
UPPER LIMIT	280784	10.61	1049470	12.97	620122	16.32	1056328	19.18
LOWER LIMIT	70196	9.61	262368	11.97	155031	15.32	264082	18.18
SAMPLE NO.								
01 CC121908B8 OLM (CC121908B8 OLM)	143004	10.10	542842	12.46	310392	15.81	516259	18.67
02 MB-8644 (MB-8644)	133236	10.10	501767	12.46	290678	15.81	496312	18.67
03 LCS-8644 (LCS-8644)	159501	10.11	606099	12.47	353498	15.82	616664	18.67
04 MSB-8644 (MSB-8644)	151078	10.10	577269	12.46	336647	15.82	565369	18.68
05 MW-2-121108 (0812108-001B)	157035	10.10	602223	12.46	345645	15.81	565595	18.67
06 MW-4-121108 (0812108-002B)	152847	10.09	603036	12.46	344618	15.81	587779	18.67
07 MW-12-121108 (0812108-003B)	141170	10.10	554600	12.45	316347	15.80	534396	18.67
08 MW-13-121108 (0812108-004B)	149284	10.09	579627	12.46	332899	15.80	555189	18.66
09 MW-11R-121108 (0812108-005B)	152146	10.10	598402	12.45	340665	15.80	578905	18.66
10 MW-11R-121108MS (0812108-005BMS)	124075	10.10	479429	12.46	284642	15.80	491684	18.67
11 MW-11R-121108MSD (0812108-005BMSD)	147290	10.10	568899	12.46	331731	15.81	576243	18.67
12 MW-8-121108 (0812108-006B)	117412	10.09	452635	12.45	259630	15.80	444339	18.66
13 BD-1-121108 (0812108-007B)	131631	10.09	513916	12.45	291480	15.80	497853	18.66
14 MW-3R-121208 (0812108-008B)	133071	10.08	511606	12.45	285887	15.80	491871	18.66
15 MW-9-121208 (0812108-009B)	154923	10.09	607175	12.45	340377	15.80	577231	18.66
16 MW-5-121208 (0812108-010B)	161622	10.09	641508	12.45	358352	15.80	611560	18.66
17 MW-6-121208 (0812108-011B)	155666	10.09	607891	12.45	346299	15.80	583061	18.66
18 MW-7-121208 (0812108-012B)	158369	10.09	610454	12.45	341109	15.80	570796	18.66

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

12/22/08 11:22 FORM VIII Page 1 of 4 SW8270C

541

8
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): K5354.D Date Analyzed: 12/19/2008

Instrument ID: MS06_40 Time Analyzed: 21:15

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	457953	23.75	422711	26.89
UPPER LIMIT	915906	24.25	845422	27.39
LOWER LIMIT	228977	23.25	211356	26.39
SAMPLE NO.				
01 CC121908B8 OLM (CC121908B8 OLM)	499495	23.74	434834	26.88
02 MB-8644 (MB-8644)	466147	23.74	412685	26.87
03 LCS-8644 (LCS-8644)	553020	23.76	523231	26.89
04 MSB-8644 (MSB-8644)	516112	23.75	481267	26.89
05 MW-2-121108 (0812108-001B)	529975	23.74	472955	26.88
06 MW-4-121108 (0812108-002B)	551143	23.73	488951	26.87
07 MW-12-121108 (0812108-003B)	486322	23.73	422700	26.88
08 MW-13-121108 (0812108-004B)	520016	23.73	455769	26.87
09 MW-11R-121108 (0812108-005B)	542489	23.73	468282	26.87
10 MW-11R-121108MS (0812108-005BMS)	432434	23.74	387124	26.87
11 MW-11R-121108MSD (0812108-005BMSD)	496787	23.74	443648	26.88
12 MW-8-121108 (0812108-006B)	402135	23.73	356678	26.86
13 BD-1-121108 (0812108-007B)	484719	23.73	408350	26.86
14 MW-3R-121208 (0812108-008B)	470302	23.72	411019	26.86
15 MW-9-121208 (0812108-009B)	532315	23.72	464157	26.86
16 MW-5-121208 (0812108-010B)	572761	23.73	506241	26.87
17 MW-6-121208 (0812108-011B)	534156	23.72	456107	26.86
18 MW-7-121208 (0812108-012B)	525103	23.73	453562	26.86

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

12/22/08 11:22 FORM VIII Page 3 of 4 SW8270C

542

GC/MS Semi-Volatile Combined MDL Study Summary

Instrument ID(s): MS5,MS6 Column ID(s): DB-5MS, 0.25 mm x 30m, 0.5 df MDL Sample Size = 1000 mL (EV = 1 mL)

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc (ug/mL)	Std Dev	MDL (ug/L)	MDL VER (ug/L)
8270C/625	3520C	Water	1,4-Dioxane	02/25/06	1.35	1.51	1.43	1.46	1.54	1.34	1.63	2.00	0.082	0.26	1.20
8270C/625	3520C	Water	N-nitrosodimethylamine	03/10/06	0.40	0.31	0.29	0.19	0.17	0.20	0.33	0.60	0.085	0.27	1.20
8270C/625	3520C	Water	Pyridine	03/10/06	0.39	0.29	0.37	0.32	0.17	0.29	0.37	0.80	0.075	0.24	0.40
8270C/625	3520C	Water	2-Fluorophenol	03/10/06	0.57	0.64	0.61	0.59	0.64	0.59	0.63	0.80	0.028	0.09	
8270C/625	3520C	Water	Phenol-d5	03/10/06	0.67	0.71	0.63	0.62	0.57	0.60	0.67	0.80	0.038	0.12	
8270C/625	3520C	Water	Phenol	02/20/06	0.32	0.31	0.36	0.27	0.31	0.30	0.28	0.40	0.029	0.09	
8270C/625	3520C	Water	Aniline	02/25/06	0.26	0.26	0.26	0.24	0.26	0.27	0.30	0.40	0.018	0.06	1.20
8270C/625	3520C	Water	bis(2-Chloroethyl)ether	02/20/06	0.32	0.34	0.32	0.30	0.32	0.34	0.32	0.40	0.014	0.04	
8270C/625	3520C	Water	2-Chlorophenol-d4	03/10/06	0.64	0.62	0.67	0.61	0.65	0.66	0.61	0.80	0.024	0.08	
8270C/625	3520C	Water	2-Chlorophenol	03/10/06	0.70	0.72	0.67	0.62	0.72	0.65	0.67	0.80	0.037	0.12	
8270C/625	3520C	Water	1,3-Dichlorobenzene	02/25/06	0.25	0.29	0.23	0.26	0.26	0.26	0.28	0.40	0.020	0.06	1.20
8270C/625	3520C	Water	1,4-Dichlorobenzene	02/24/06	0.27	0.29	0.30	0.27	0.26	0.32	0.30	0.40	0.021	0.07	1.20
8270C/625	3520C	Water	Benzyl alcohol	02/25/06	0.24	0.21	0.18	0.14	0.20	0.19	0.15	0.40	0.035	0.11	
8270C/625	3520C	Water	1,2-Dichlorobenzene-d4	03/10/06	0.72	0.63	0.66	0.62	0.65	0.70	0.65	0.80	0.036	0.11	
8270C/625	3520C	Water	1,2-Dichlorobenzene	02/24/06	0.27	0.29	0.28	0.33	0.28	0.32	0.28	0.40	0.023	0.07	1.20
8270C/625	3520C	Water	2-Methylphenol	02/20/06	0.25	0.25	0.23	0.24	0.23	0.28	0.21	0.40	0.022	0.07	1.20
8270C/625	3520C	Water	2,2'-oxybis(1-chloropropane)	03/10/06	0.73	0.80	0.70	0.71	0.70	0.71	0.79	0.80	0.043	0.13	1.20
8270C/625	3520C	Water	bis(2-Chloroisopropyl)ether	03/10/06	0.73	0.80	0.70	0.71	0.70	0.71	0.79	0.80	0.043	0.13	1.20
8270C/625	3520C	Water	4-Methylphenol	03/10/06	0.61	0.68	0.59	0.68	0.63	0.63	0.63	0.80	0.034	0.11	1.20
8270C/625	3520C	Water	(3+4)-Methylphenol	03/10/06	0.61	0.68	0.59	0.68	0.63	0.63	0.63	0.80	0.034	0.11	1.20
8270C/625	3520C	Water	N-Nitroso-di-n-propylamine	03/10/06	0.78	0.74	0.64	0.66	0.72	0.67	0.70	0.80	0.049	0.15	
8270C/625	3520C	Water	Hexachloroethane	02/24/06	0.16	0.19	0.18	0.15	0.17	0.22	0.15	0.40	0.024	0.08	1.20
8270C/625	3520C	Water	Nitrobenzene-d5	03/10/06	0.74	0.69	0.69	0.69	0.69	0.67	0.66	0.80	0.025	0.08	
8270C/625	3520C	Water	Nitrobenzene	03/10/06	0.71	0.88	0.65	0.60	0.65	0.71	0.67	0.80	0.039	0.12	
8270C/625	3520C	Water	Isophorone	03/10/06	0.76	0.70	0.71	0.72	0.69	0.68	0.64	0.80	0.037	0.12	
8270C/625	3520C	Water	2-Nitrophenol	02/24/06	0.20	0.14	0.18	0.19	0.15	0.15	0.18	0.40	0.023	0.07	
8270C/625	3520C	Water	2,4-Dimethylphenol	03/10/06	0.81	0.76	0.75	0.61	0.73	0.66	0.60	0.80	0.080	0.25	2.00
8270C/625	3520C	Water	Benzoic acid	02/24/06	5.84	7.25	7.81	9.73	10.57	9.09	7.21	50.00	1.651	5.19	20.00
8270C/625	3520C	Water	bis(2-Chloroethoxy)methane	03/10/06	0.75	0.71	0.68	0.72	0.78	0.72	0.70	0.80	0.033	0.10	
8270C/625	3520C	Water	2,4-Dichlorophenol	02/24/06	0.25	0.22	0.22	0.27	0.25	0.27	0.21	0.40	0.025	0.08	
8270C/625	3520C	Water	1,2,4-Trichlorobenzene	02/25/06	0.24	0.30	0.25	0.28	0.24	0.24	0.32	0.40	0.033	0.10	
8270C/625	3520C	Water	Naphthalene	03/10/06	0.72	0.75	0.72	0.71	0.72	0.75	0.70	0.80	0.019	0.06	
8270C/625	3520C	Water	4-Chloroaniline	03/10/06	0.81	0.76	0.74	0.75	0.71	0.76	0.72	0.80	0.033	0.10	

4-14-08

CMS0310827000W.mdc.xls Life Science Laboratories, Inc Page 1 of 3 4/14/2008 REV 0

543

GC/MS Semi-Volatile Combined MDL Study Summary

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/L)	VER (ug/L)
8270C/625	3520C	Water	Hexachlorobutadiene	02/25/06	0.21	0.16	0.20	0.22	0.21	0.29	0.26	0.40	0.042	0.12	1.20
8270C/625	3520C	Water	4-Chloro-3-methylphenol	02/25/06	0.19	0.21	0.23	0.24	0.25	0.24	0.19	0.40	0.025	0.08	
8270C/625	3520C	Water	2-Methylnaphthalene	02/24/06	0.28	0.29	0.31	0.27	0.29	0.31	0.31	0.40	0.016	0.05	
8270C/625	3520C	Water	Hexachlorocyclopentadiene	02/20/06	2.50	2.29	2.28	1.88	1.73	2.72	2.04	5.00	0.347	1.09	10.00
8270C/625	3520C	Water	2,4,6-Trichlorophenol	02/20/06	0.23	0.26	0.27	0.22	0.21	0.25	0.17	0.40	0.033	0.10	1.20
8270C/625	3520C	Water	2,4,5-Trichlorophenol	02/24/06	0.22	0.22	0.21	0.22	0.11	0.26	0.21	0.40	0.046	0.14	
8270C/625	3520C	Water	2-Fluorobiphenyl	03/10/06	0.73	0.74	0.69	0.67	0.74	0.68	0.76	0.80	0.033	0.10	
8270C/625	3520C	Water	2-Chloronaphthalene	02/20/06	0.31	0.33	0.34	0.32	0.31	0.41	0.32	0.40	0.035	0.11	
8270C/625	3520C	Water	2-Nitroaniline	03/10/06	0.68	0.56	0.62	0.54	0.48	0.55	0.60	0.80	0.065	0.20	0.40
8270C/625	3520C	Water	Dimethyl phthalate	02/20/06	0.32	0.30	0.31	0.31	0.29	0.30	0.28	0.40	0.033	0.10	
8270C/625	3520C	Water	2,6-Dinitrotoluene	03/10/06	0.68	0.55	0.57	0.57	0.61	0.47	0.59	0.80	0.063	0.20	0.40
8270C/625	3520C	Water	Acenaphthylene	03/10/06	0.72	0.70	0.70	0.69	0.70	0.63	0.68	0.80	0.030	0.10	
8270C/625	3520C	Water	3-Nitroaniline	02/24/06	0.27	0.26	0.28	0.29	0.21	0.26	0.25	0.60	0.026	0.08	1.20
8270C/625	3520C	Water	Acenaphthene	02/20/06	0.33	0.31	0.27	0.27	0.28	0.33	0.30	0.40	0.026	0.08	
8270C/625	3520C	Water	2,4-Dinitrophenol	02/20/06	0.90	0.94	0.97	0.94	0.97	1.15	0.91	5.00	0.084	0.27	10.00
8270C/625	3520C	Water	4-Nitrophenol	02/20/06	0.41	0.36	0.37	0.31	0.42	0.56	0.26	1.60	0.128	0.40	2.00
8270C/625	3520C	Water	2,4-Dinitrotoluene	02/20/06	0.23	0.16	0.20	0.13	0.10	0.21	0.16	0.40	0.046	0.14	0.40
8270C/625	3520C	Water	Dibenzofuran	02/20/06	0.33	0.34	0.33	0.31	0.28	0.42	0.36	0.40	0.044	0.14	
8270C/625	3520C	Water	Diethyl phthalate	03/10/06	0.86	0.90	0.80	0.90	0.90	0.84	0.64	0.80	0.040	0.13	
8270C/625	3520C	Water	4-Chlorophenyl phenyl ether	02/20/06	0.31	0.29	0.30	0.27	0.26	0.38	0.30	0.40	0.039	0.12	
8270C/625	3520C	Water	Fluorene	03/10/06	0.79	0.77	0.88	0.75	0.74	0.76	0.76	0.80	0.035	0.11	
8270C/625	3520C	Water	4-Nitroaniline	03/10/06	0.78	0.86	0.80	0.70	0.67	0.65	0.62	0.80	0.059	0.19	1.20
8270C/625	3520C	Water	1,2-Diphenylhydrazine	02/24/06	0.29	0.27	0.30	0.31	0.29	0.29	0.28	0.40	0.013	0.04	0.40
8270C/625	3520C	Water	2,4,6-Tribromophenol	03/10/06	0.63	0.49	0.50	0.58	0.48	0.48	0.58	0.80	0.064	0.20	1.20
8270C/625	3520C	Water	4,6-Dinitro-2-methylphenol	02/20/06	1.18	1.23	1.23	1.08	1.12	1.40	1.08	4.00	0.113	0.35	2.00
8270C/625	3520C	Water	n-Nitrosodiphenylamine	02/24/06	0.30	0.31	0.29	0.31	0.24	0.30	0.30	0.40	0.024	0.08	
8270C/625	3520C	Water	4-Bromophenyl phenyl ether	02/25/06	0.23	0.17	0.21	0.31	0.21	0.26	0.27	0.40	0.046	0.15	
8270C/625	3520C	Water	Hexachlorobenzene	02/25/06	0.19	0.23	0.24	0.24	0.27	0.21	0.16	0.40	0.037	0.11	
8270C/625	3520C	Water	Pentachlorophenol	02/20/06	0.63	0.69	0.73	0.58	0.55	0.61	0.53	2.00	0.073	0.23	5.00
8270C/625	3520C	Water	Phenanthrene	03/10/06	0.89	0.83	0.82	0.83	0.83	0.78	0.83	0.80	0.032	0.10	
8270C/625	3520C	Water	Anthracene	03/10/06	0.88	0.80	0.75	0.79	0.79	0.78	0.75	0.80	0.044	0.14	
8270C/625	3520C	Water	Carbazole	03/10/06	1.03	1.00	0.91	0.97	0.96	0.94	0.94	0.80	0.040	0.13	
8270C/625	3520C	Water	Di-n-butyl phthalate	03/10/06	1.04	2.31	1.07	1.06	0.94	1.48	0.69	0.80	0.502	1.58	

GC/MS Semi-Volatile Combined MDL Study Summary

Analytical Method	Prep. Method	Matrix	Analyte	Date Analyzed	MDL #1	MDL #2	MDL #3	MDL #4	MDL #5	MDL #6	MDL #7	Test Conc. (ug/mL)	Std Dev	MDL (ug/L)	VER (ug/L)
8270C/625	3520C	Water	Fluoranthene	02/24/06	0.30	0.34	0.20	0.33	0.32	0.29	0.32	0.40	0.020	0.06	
8270C/625	3520C	Water	Benzidine	02/24/06	109.42	119.58	112.53	121.28	112.06	110.11	113.52	50.00	4.585	14.41	10.00
8270C/625	3520C	Water	Pyrene	02/20/06	0.25	0.29	0.27	0.28	0.31	0.25	0.28	0.40	0.021	0.07	
8270C/625	3520C	Water	Terphenyl-d14	03/10/06	0.87	0.82	0.84	0.88	0.83	0.83	0.85	0.80	0.022	0.07	
8270C/625	3520C	Water	Butyl benzyl phthalate	02/24/06	0.25	0.26	0.35	0.24	0.20	0.23	0.21	0.40	0.049	0.16	
8270C/625	3520C	Water	3,3'-Dichlorobenzidine	03/10/06	1.06	0.84	0.90	0.87	0.58	0.69	0.69	0.80	0.162	0.51	1.20
8270C/625	3520C	Water	Benzo[a]anthracene	02/26/06	0.33	0.34	0.35	0.35	0.32	0.33	0.28	0.40	0.024	0.08	
8270C/625	3520C	Water	bis(2-Ethylhexyl)phthalate	02/20/06	0.34	0.52	0.27	0.32	0.19	0.23	0.56	0.40	0.142	0.45	
8270C/625	3520C	Water	Chrysene	02/20/06	0.27	0.33	0.34	0.30	0.34	0.34	0.31	0.40	0.027	0.08	
8270C/625	3520C	Water	Di-n-octyl phthalate	02/24/06	0.17	0.16	0.30	0.16	0.17	0.15	0.13	0.40	0.057	0.18	
8270C/625	3520C	Water	Indeno[1,2,3-cd]pyrene	03/10/06	0.82	0.78	0.73	0.78	0.75	0.76	0.77	0.80	0.028	0.09	
8270C/625	3520C	Water	Benzo[b]fluoranthene	02/20/06	0.38	0.37	0.44	0.34	0.27	0.75	0.31	0.40	0.160	0.50	
8270C/625	3520C	Water	Benzo[k]fluoranthene	02/20/06	0.34	0.36	0.45	0.31	0.26	0.58	0.34	0.40	0.106	0.33	
8270C/625	3520C	Water	Benzo[a]pyrene	02/20/06	0.15	0.16	0.21	0.19	0.16	0.27	0.13	0.40	0.047	0.15	
8270C/625	3520C	Water	Dibenz[a,h]anthracene	03/10/06	0.77	0.76	0.76	0.77	0.71	0.70	0.74	0.80	0.029	0.09	
8270C/625	3520C	Water	Benzo[g,h,i]perylene	03/10/06	0.80	0.80	0.81	0.80	0.78	0.72	0.77	0.80	0.031	0.10	
8270C/625	3520C	Water	Benzaldehyde	02/25/06	0.98	1.30	1.32	1.29	1.24	1.20	1.18	2.00	0.116	0.37	
8270C/625	3520C	Water	Acetophenone	02/25/06	1.08	1.36	1.34	1.47	1.32	1.31	1.35	2.00	0.118	0.37	
8270C/625	3520C	Water	N-Nitrosopyrrolidine	02/25/06	0.85	0.95	0.94	0.90	0.84	0.85	0.94	2.00	0.049	0.15	*
8270C/625	3520C	Water	Caprolactam	02/25/06	1.05	1.23	0.94	1.06	0.99	0.82	0.70	2.00	0.151	0.48	1.20
8270C/625	3520C	Water	1,1'-Biphenyl	02/25/06	1.13	1.41	1.46	1.42	1.40	1.47	1.47	2.00	0.120	0.38	
8270C/625	3520C	Water	1,2,4,5-Tetrachlorobenzene	02/25/06	1.12	1.41	1.32	1.39	1.41	1.40	1.38	2.00	0.105	0.33	*
8270C/625	3520C	Water	2-Naphthylamine	02/25/06	0.24	1.03	1.21	1.15	1.18	1.04	1.08	2.00	0.338	1.06	*
8270C/625	3520C	Water	Atrazine	02/25/06	0.98	1.20	1.11	1.16	1.10	1.06	1.16	2.00	0.074	0.23	1.20

MDLs are calculated using the method in Appendix B, Part 136, Revision 1.11 of the Federal Register, Volume 49, No. 209, October 1984

MDL=(S.Dev) x (t-value)

The MDL is a statistical measurement which defines the theoretical minimum concentration of a substance which can be measured and reported with 99% confidence that the analyte concentration is greater than zero

The GC/MS instrument minimum threshold quantitation level is set to 0.5 (or 1.0 ug/mL) ug/mL of extract (dependant on the initial calibration low standard concentration)

MDL verified (MS/MS6): 2-15-06 * analyte not verified

Sample Data

LSL Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	MW-2-121108
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5359.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 0:28
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 0:28
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 0:28
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 0:28
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 0:28
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 0:28
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 0:28
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 0:28
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 0:28
2-Chlorophenol	ND		11	0.13	µg/L	1	12/20/08 0:28
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 0:28
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 0:28
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 0:28
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 0:28
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 0:28
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 0:28
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 0:28
4-Bromophenyl phenyl ether	ND		11	0.16	µg/L	1	12/20/08 0:28
4-Chloro-3-methylphenol	ND		11	0.084	µg/L	1	12/20/08 0:28
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 0:28
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 0:28
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 0:28
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 0:28
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 0:28
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 0:28
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 0:28
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 0:28
Anthracene	ND		11	0.15	µg/L	1	12/20/08 0:28
Atrazine	ND		11	1.3	µg/L	1	12/20/08 0:28
Benzaldehyde	ND		11	0.39	µg/L	1	12/20/08 0:28
Benzo[a]anthracene	ND		11	0.084	µg/L	1	12/20/08 0:28
Benzo[a]pyrene	ND		11	0.16	µg/L	1	12/20/08 0:28
Benzo[b]fluoranthene	ND		11	0.53	µg/L	1	12/20/08 0:28
Benzo[g,h,i]perylene	ND		11	0.11	µg/L	1	12/20/08 0:28

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416472 **Project Supervisor:** Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-2-121108*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS	BatchNo:	8644/R15973
Revision:	12/29/08 9:43	FileID:	1-SAMP-K5359.D
Col Type:			

Sample Size: 950 mL; %Moisture:; TestCode: 8270W OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo(k)fluoranthene	ND		11	0.35	µg/L	1	12/20/08 0:28
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 0:28
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 0:28
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 0:28
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 0:28
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 0:28
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 0:28
Carbazole	ND		11	0.14	µg/L	1	12/20/08 0:28
Chrysene	ND		11	0.084	µg/L	1	12/20/08 0:28
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 0:28
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 0:28
Dibenz(a,h)anthracene	ND		11	0.095	µg/L	1	12/20/08 0:28
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 0:28
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 0:28
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 0:28
Fluoranthene	ND		11	0.063	µg/L	1	12/20/08 0:28
Fluorene	ND		11	0.12	µg/L	1	12/20/08 0:28
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 0:28
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 0:28
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 0:28
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 0:28
Indeno(1,2,3-cd)pyrene	ND		11	0.095	µg/L	1	12/20/08 0:28
Isophorone	ND		11	0.13	µg/L	1	12/20/08 0:28
N-Nitroso-di-n-propylamine	ND		11	0.16	µg/L	1	12/20/08 0:28
N-Nitrosodiphenylamine	ND		11	0.084	µg/L	1	12/20/08 0:28
Naphthalene	ND		11	0.063	µg/L	1	12/20/08 0:28
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 0:28
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 0:28
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 0:28
Phenol	ND		11	0.095	µg/L	1	12/20/08 0:28
Pyrene	ND		11	0.074	µg/L	1	12/20/08 0:28
Surr: 2,4,6-Tribromophenol	87		46-149	0	%REC	1	12/20/08 0:28
Surr: 2-Fluorobiphenyl	81		42-130	0	%REC	1	12/20/08 0:28
Surr: 2-Fluorophenol	81		26-130	0	%REC	1	12/20/08 0:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- F Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416472 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-001B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-2-121108*
W Order:	0812108	Collection Date:	12/11/08 10:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS	BatchNo:	8644/R15973
Revision:	12/29/08 9:43	FileID:	1-SAMP-K5359.D
Col Type:			

Sample Size: 950 mL; %Moisture:; TestCode: 8270W OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	85		42-130	0	%REC	1	12/20/08 0:28
Surr: Phenol-d5	85		21-134	0	%REC	1	12/20/08 0:28
Surr: Terphenyl-d14	82		24-147	0	%REC	1	12/20/08 0:28

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- F Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416472 Project Supervisor: Anthony Crescenzi

Form I TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-2-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: ORG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-001B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5359.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.84	12	JB

FORM I TIC 1 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5359.D Vial: 81
Acq On : 20 Dec 2008 00:28 Operator: MEG
Sample : 0812108-001B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:56 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	157035	40.00	ug/mL	0.00
13) Naphthalene-d8	12.46	136	602223	40.00	ug/mL	0.00
26) Acenaphthene-d10	15.81	164	345845	40.00	ug/mL	0.00
47) Phenanthrene-d10	18.67	188	586595	40.00	ug/mL	0.00
58) Chrysene-d12	23.74	240	539978	40.00	ug/mL	-0.02
68) Perylene-d12	26.88	264	472985	40.00	ug/mL	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	7.77	112	638583	121.84	ug/mL	0.00
Spiked Amount 150.000			Recovery = 81.23%			
3) Phenol-d5	9.36	99	802697	128.23	ug/mL	0.00
Spiked Amount 150.000			Recovery = 85.49%			
14) Nitrobenzene-d5	11.11	82	533829	84.69	ug/mL	0.00
Spiked Amount 100.000			Recovery = 84.69%			
30) 2-Fluorobiphenyl	14.49	172	922195	80.70	ug/mL	0.00
Spiked Amount 100.000			Recovery = 80.70%			
46) 2,4,6-Tribromophenol	17.32	330	243774	131.13	ug/mL	0.00
Spiked Amount 150.000			Recovery = 87.42%			
60) Terphenyl-d14	21.69	244	953167	82.19	ug/mL	0.00
Spiked Amount 100.000			Recovery = 82.19%			

Target Compounds Qvalue

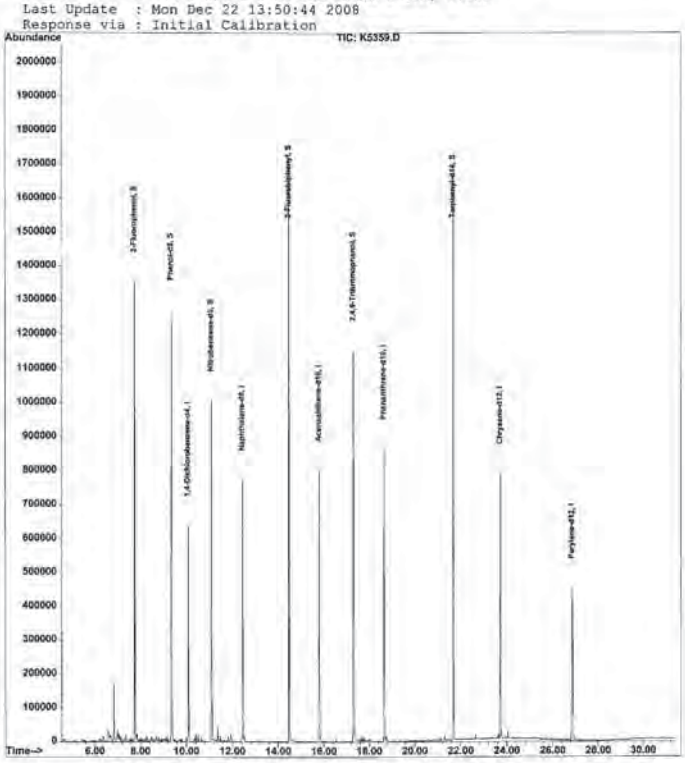
(#) = qualifier out of range (m) = manual integration
K5359.D KD19OL42.M Mon Dec 22 14:02:02 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5359.D
Acq On : 20 Dec 2008 00:28
Sample : 0812108-001B
Misc : SAMP,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:56 2008

Vial: 81
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5359.D KD19OL42.M Mon Dec 22 14:02:04 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5359.D
Acq On : 20 Dec 2008 00:28
Sample : 0812108-001B
Misc : SAMP,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008

Vial: 81
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	157035	40.00 ug/mL	0.00
5) Naphthalene-d8	12.46	136	601928	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.81	164	345845	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	586595	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	539978	40.00 ug/mL	0.00
15) Perylene-d12	26.88	264	473186	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

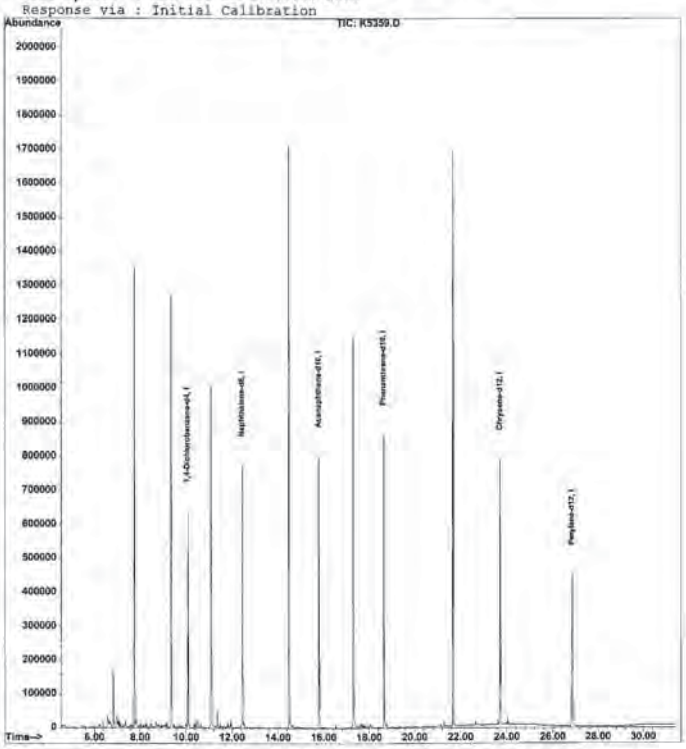
(#) = qualifier out of range (m) = manual integration
K5359.D KD19OLM.M Mon Dec 22 14:18:19 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5359.D
Acq On : 20 Dec 2008 00:28
Sample : 0812108-001B
Misc : SAMP,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008

Vial: 81
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5359.D KD19OLM.M Mon Dec 22 14:18:19 2008 Pa

Tentatively Identified Compound (LSC) summary

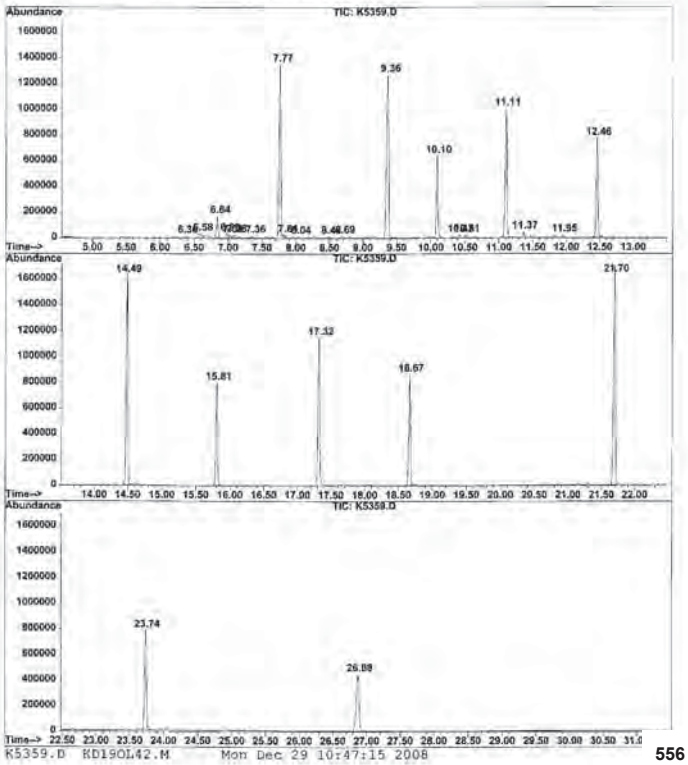
Operator ID: MEG Date Acquired: 20 Dec 2008 00:28
Data File: C:\HPCHEM\1\DATA\K5359.D
Name: 0812108-001B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
tert-Butyl Hydropero	6.84	11.8	ug/mL	301864	ISTD01	10.10	1019250	40.0

K5359.D KD19OL42.M Mon Dec 29 10:47:16 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5359.D
Operator : MEG
Acquired : 20 Dec 2008 00:28 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-001B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 81
Quant File :KD19OL42.RES (RTE Integrator)



K5359.D KD19OL42.M Mon Dec 29 10:47:15 2008

Library Search Compound Report

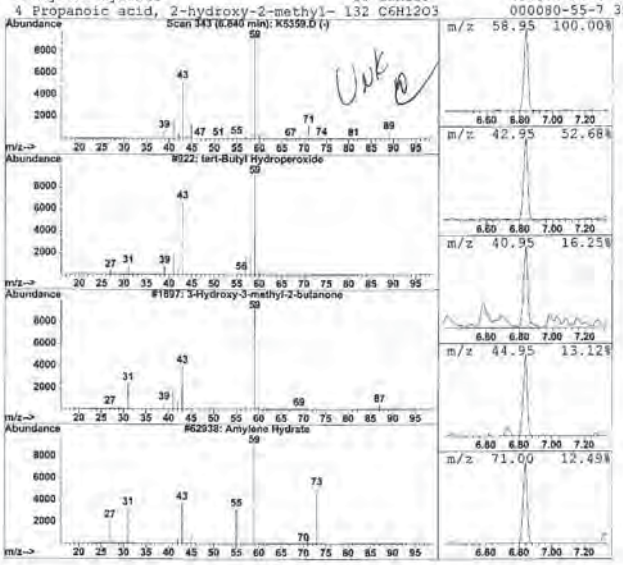
Data File : C:\HPCHEM\1\DATA\K5359.D Vial: 81
Acq On : 20 Dec 2008 00:28 Operator: MEG
Sample : 0812108-001B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 tert-Butyl Hydroperoxide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.84	11.85 ug/mL	301864	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
2	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	42
3	Amylene Hydrate	88	C5H12O	000075-85-4	40
4	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	39



K5359.D KD19OL42.M Mon Dec 29 10:47:16 2008 Pag

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5360.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8270C			(SW3520C)
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 1:07
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 1:07
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 1:07
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 1:07
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 1:07
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 1:07
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 1:07
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 1:07
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 1:07
2-Chlorophenol	ND		11	0.13	µg/L	1	12/20/08 1:07
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 1:07
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 1:07
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 1:07
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 1:07
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 1:07
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 1:07
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 1:07
4-Bromophenyl phenyl ether	ND		11	0.16	µg/L	1	12/20/08 1:07
4-Chloro-3-methylphenol	ND		11	0.084	µg/L	1	12/20/08 1:07
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 1:07
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 1:07
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 1:07
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 1:07
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 1:07
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 1:07
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 1:07
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 1:07
Anthracene	ND		11	0.15	µg/L	1	12/20/08 1:07
Atrazine	ND		11	1.3	µg/L	1	12/20/08 1:07
Benzaldehyde	ND		11	0.39	µg/L	1	12/20/08 1:07
Benzo[a]anthracene	ND		11	0.084	µg/L	1	12/20/08 1:07
Benzo[a]pyrene	ND		11	0.16	µg/L	1	12/20/08 1:07
Benzo[b]fluoranthene	ND		11	0.53	µg/L	1	12/20/08 1:07
Benzo[g,h,i]perylene	ND		11	0.11	µg/L	1	12/20/08 1:07

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416473 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5360.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8270C			(SW3520C)
Benzo[k]fluoranthene	ND		11	0.35	µg/L	1	12/20/08 1:07
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 1:07
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 1:07
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 1:07
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 1:07
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 1:07
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 1:07
Carbazole	ND		11	0.14	µg/L	1	12/20/08 1:07
Chrysene	ND		11	0.064	µg/L	1	12/20/08 1:07
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 1:07
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 1:07
Dibenz[a,h]anthracene	ND		11	0.095	µg/L	1	12/20/08 1:07
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 1:07
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 1:07
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 1:07
Fluoranthene	ND		11	0.063	µg/L	1	12/20/08 1:07
Fluorene	ND		11	0.12	µg/L	1	12/20/08 1:07
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 1:07
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 1:07
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 1:07
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 1:07
Indeno[1,2,3-cd]pyrene	ND		11	0.095	µg/L	1	12/20/08 1:07
Isophorone	ND		11	0.13	µg/L	1	12/20/08 1:07
N-Nitroso-di-n-propylamine	ND		11	0.16	µg/L	1	12/20/08 1:07
N-Nitrosodiphenylamine	ND		11	0.064	µg/L	1	12/20/08 1:07
Naphthalene	ND		11	0.053	µg/L	1	12/20/08 1:07
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 1:07
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 1:07
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 1:07
Phenol	ND		11	0.095	µg/L	1	12/20/08 1:07
Pyrene	ND		11	0.074	µg/L	1	12/20/08 1:07
Surr: 2,4,6-Tribromophenol	80		46-149	0	%REC	1	12/20/08 1:07
Surr: 2-Fluorobiphenyl	81		42-130	0	%REC	1	12/20/08 1:07
Surr: 2-Fluorophenol	77		26-130	0	%REC	1	12/20/08 1:07

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416473 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-002B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-4-121108*
W Order:	0812108	Collection Date:	12/11/08 11:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/K15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5360.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	83		42-130	0	%REC	1	12/20/08 1:07
Surr: Phenol-d5	82		21-134	0	%REC	1	12/20/08 1:07
Surr: Terphenyl-d14	83		24-147	0	%REC	1	12/20/08 1:07

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416473 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-4-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-002B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5360.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	8.5	JB

FORM 1 TIC 2 SW8270C

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K5360.D                    Vial: 82
Acq On    : 20 Dec 2008  1:07                     Operator: MEG
Sample    : 0812108-002B                          Inst    : #6MS40
Misc      : SAMP,8270W_OLM42,                     Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008              Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL
```

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	152847	40.00 ug/mL	-0.01
13) Naphthalene-d8	12.46	136	603836	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.81	164	344818	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.67	188	587776	40.00 ug/mL	0.00
58) Chrysene-d12	23.73	240	551143	40.00 ug/mL	-0.02
68) Perylene-d12	26.87	264	488951	40.00 ug/mL	-0.01
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	592514	116.14 ug/mL	0.00
Spiked Amount 150.000			Recovery =	77.43%	
3) Phenol-d5	9.36	99	748121	122.79 ug/mL	0.00
Spiked Amount 150.000			Recovery =	81.86%	
14) Nitrobenzene-d5	11.11	82	523505	82.84 ug/mL	0.00
Spiked Amount 100.000			Recovery =	82.84%	
30) 2-Fluorobiphenyl	14.48	172	925574	81.24 ug/mL	0.00
Spiked Amount 100.000			Recovery =	81.24%	
46) 2,4,6-Tribromophenol	17.32	330	222656	120.13 ug/mL	0.00
Spiked Amount 150.000			Recovery =	80.09%	
60) Terphenyl-d14	21.70	244	976974	82.54 ug/mL	0.00
Spiked Amount 100.000			Recovery =	82.54%	

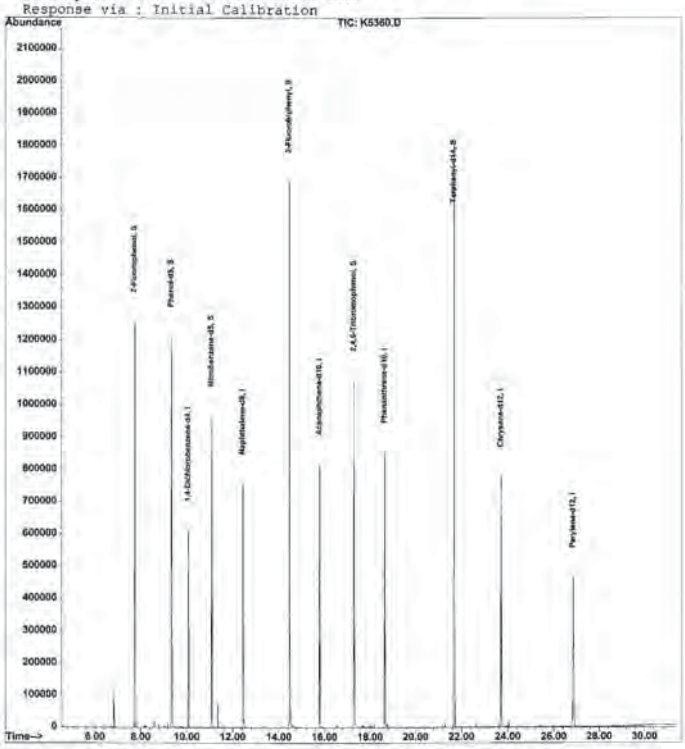
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5360.D KD190L42.M Mon Dec 22 14:02:09 2008 Pag

Quantitation Report

```
Data File : C:\HPCHEM\1\DATA\K5360.D                    Vial: 82
Acq On    : 20 Dec 2008  1:07                     Operator: MEG
Sample    : 0812108-002B                          Inst    : #6MS40
Misc      : SAMP,8270W_OLM42,                     Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008              Quant Results File: KD190L42.RES

Method       : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
```



K5360.D KD190L42.M Mon Dec 22 14:02:10 2008 Pag

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5360.D Vial: 82
Acq On : 20 Dec 2008 1:07 Operator: MEG
Sample : 0812108-002B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	152847	40.00 ug/mL	-0.01
5) Naphthalene-d8	12.46	136	603581	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.81	164	344818	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	587776	40.00 ug/mL	0.00
14) Chrysene-d12	23.73	240	551003	40.00 ug/mL	0.00
15) Perylene-d12	26.87	264	489179	40.00 ug/mL	0.00

System Monitoring Compounds

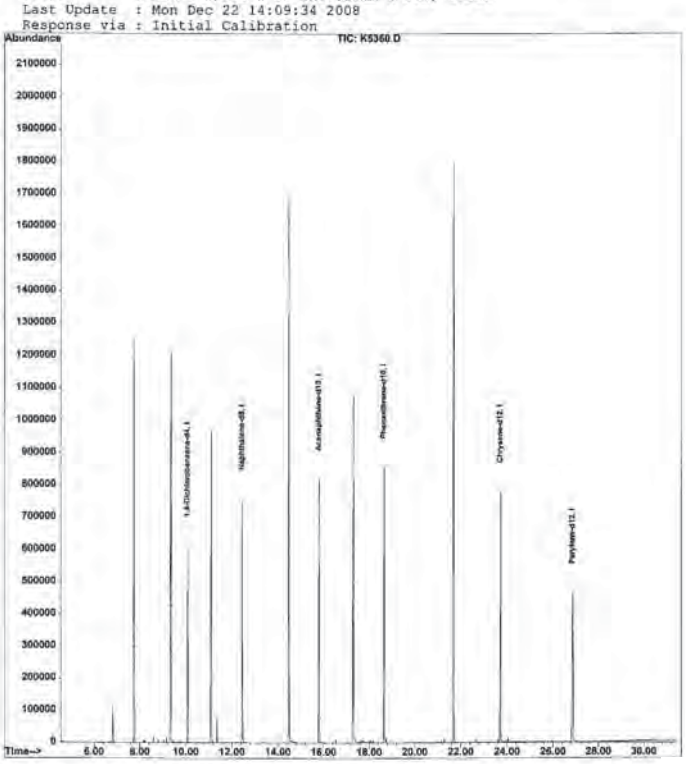
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5360.D KD19OLM.M Mon Dec 22 14:18:22 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5360.D Vial: 82
Acq On : 20 Dec 2008 1:07 Operator: MEG
Sample : 0812108-002B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5360.D KD19OLM.M Mon Dec 22 14:18:22 2008 Pag

Tentatively Identified Compound (LSC) summary

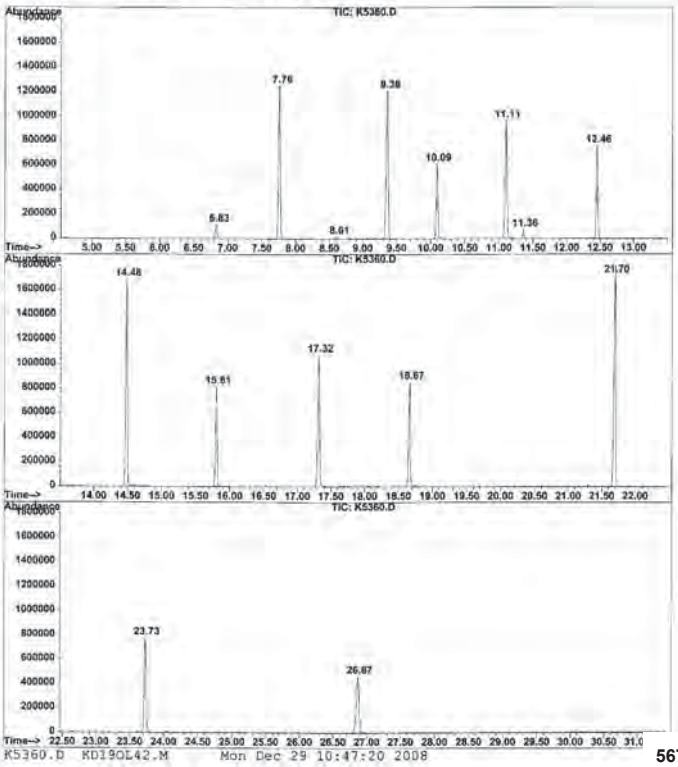
Operator ID: MEG Date Acquired: 20 Dec 2008 1:07
Data File: C:\HPCHEM\1\DATA\K5360.D
Name: 0812108-002B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.83	8.1	ug/mL	198746	ISTD01	10.09	987226	40.0

K5360.D KD19OL42.M Mon Dec 29 10:47:22 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5360.D
Operator : MEG
Acquired : 20 Dec 2008 1:07 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-002B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 82
Quant File :KD19OL42.RES (RTE Integrator)



K5360.D KD19OL42.M Mon Dec 29 10:47:20 2008

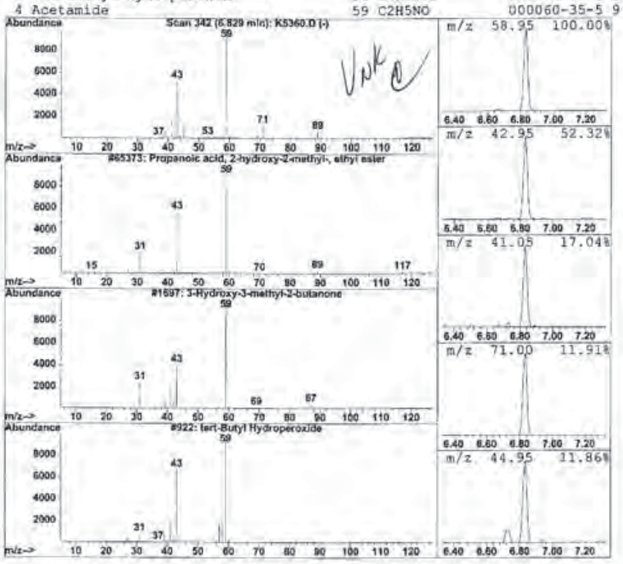
Library Search Compound Report

```
Data File : C:\HPCHEM\1\DATA\K5360.D                Vial: 82
Acq On    : 20 Dec 2008   1:07                  Operator: MEG
Sample    : 0812108-002B                        Inst    : #6MS40
Misc      : SAMP,8270W_OLM42,                   Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library      : C:\DATABASE\NBS75K.L
*******************************************************************
Peak Number  1  Propanoic acid, 2-hydroxy-2-me  Concentration Rank  1

 R.T.   EstConc          Area       Relative to ISTD        R.T.
-------------------------------------------------------------------
 6.83    8.05 ug/mL     198746   1,4-Dichlorobenzene-d4    10.09

Hit# of  5    Tentative ID                   MW  MolForm      CAS#       Qual
-------------------------------------------------------------------
1 Propanoic acid, 2-hydroxy-2-methyl-  132 C6H12O3      000080-55-7 38
2 3-Hydroxy-3-methyl-2-butanone        102 C5H10O2      000115-22-0 36
3 tert-Butyl Hydroperoxide              90 C4H10O2      000075-91-2 36
4 Acetamide                             59 C2H5NO       000060-35-5 9
```



Life Science Laboratories, Inc. — Analytical Results

LSL 5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057   (315) 437-0200   StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	0812108-003B
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-12-121108*
W Order:	0812108	**Collection Date:**	12/11/08 12:55
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS06 40 **Sample Size:** 970 mL	**PrepDate:**	12/17/08 8:51
ColumnID:	DB-5MS **%Moisture:**	**BatchNo:**	8644/R15973
Revision:	12/29/08 9:43 **TestCode:** 8270W OLM42	**FileID:**	1-SAMP-K5361.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 1:46
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 1:46
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 1:46
2,4-Dichlorophenol	2.3	J	10	0.082	µg/L	1	12/20/08 1:46
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 1:46
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 1:46
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 1:46
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 1:46
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 1:46
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 1:46
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 1:46
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 1:46
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 1:46
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 1:46
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 1:46
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 1:46
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 1:46
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 1:46
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 1:46
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 1:46
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 1:46
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 1:46
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 1:46
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 1:46
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 1:46
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 1:46
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 1:46
Anthracene	ND		10	0.14	µg/L	1	12/20/08 1:46
Atrazine	ND		10	1.2	µg/L	1	12/20/08 1:46
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 1:46
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 1:46
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 1:46
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 1:46
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 1:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44   416474   **Project Supervisor:** Anthony Crescenzi

Life Science Laboratories, Inc. — Analytical Results

LSL 5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057   (315) 437-0200   StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	0812108-003B
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-12-121108*
W Order:	0812108	**Collection Date:**	12/11/08 12:55
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS06 40 **Sample Size:** 970 mL	**PrepDate:**	12/17/08 8:51
ColumnID:	DB-5MS **%Moisture:**	**BatchNo:**	8644/R15973
Revision:	12/29/08 9:43 **TestCode:** 8270W OLM42	**FileID:**	1-SAMP-K5361.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 1:46
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 1:46
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 1:46
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 1:46
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 1:46
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 1:46
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 1:46
Carbazole	ND		10	0.13	µg/L	1	12/20/08 1:46
Chrysene	ND		10	0.082	µg/L	1	12/20/08 1:46
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 1:46
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 1:46
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 1:46
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 1:46
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 1:46
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 1:46
Fluoranthene	ND		10	0.062	µg/L	1	12/20/08 1:46
Fluorene	ND		10	0.11	µg/L	1	12/20/08 1:46
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 1:46
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 1:46
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 1:46
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 1:46
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 1:46
Isophorone	ND		10	0.12	µg/L	1	12/20/08 1:46
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 1:46
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 1:46
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 1:46
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 1:46
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 1:46
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 1:46
Phenol	ND		10	0.093	µg/L	1	12/20/08 1:46
Pyrene	ND		10	0.072	µg/L	1	12/20/08 1:46
Surr: 2,4,6-Tribromophenol	86		46-149	0	%REC	1	12/20/08 1:46
Surr: 2-Fluorobiphenyl	77		42-130	0	%REC	1	12/20/08 1:46
Surr: 2-Fluorophenol	79		26-130	0	%REC	1	12/20/08 1:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44   416474   **Project Supervisor:** Anthony Crescenzi

Life Science Laboratories, Inc. — Analytical Results

LSL 5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057   (315) 437-0200   StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	0812108-003B
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	*MW-12-121108*
W Order:	0812108	**Collection Date:**	12/11/08 12:55
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS06 40 **Sample Size:** 970 mL	**PrepDate:**	12/17/08 8:51
ColumnID:	DB-5MS **%Moisture:**	**BatchNo:**	8644/R15973
Revision:	12/29/08 9:43 **TestCode:** 8270W OLM42	**FileID:**	1-SAMP-K5361.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	80		42-130	0	%REC	1	12/20/08 1:46
Surr: Phenol-d5	84		21-134	0	%REC	1	12/20/08 1:46
Surr: Terphenyl-d14	85		24-147	0	%REC	1	12/20/08 1:46

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44   416474   **Project Supervisor:** Anthony Crescenzi

Form 1 TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-12-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-003B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5361.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 6 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.83)	6.83	8.2	JB
2. 000108-90-7	Benzene, chloro-	7.41	34	JN
3. 000541-73-1	Benzene, 1,3-dichloro-	10.00	140	JN
4. 000095-50-1	Benzene, 1,2-dichloro-	10.41	76	JN
5. 019064-64-3	Pyridazine, 3,6-dichloro-4-met	14.58	5.7	JN
6.	unknown (14.76)	14.76	9.1	J

FORM I TIC 3 SM8270C

572

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5361.D Vial: 83
Acq On : 20 Dec 2008 1:46 Operator: MEG
Sample : 0812108-003B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response Via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	141170	40.00 ug/mL	-0.01
13) Naphthalene-d8	12.45	136	554600	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	316347	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.67	188	534396	40.00 ug/mL	-0.01
58) Chrysene-d12	23.73	240	486322	40.00 ug/mL	-0.02
68) Perylene-d12	26.86	264	422700	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	555900	117.98 ug/mL	0.00
Spiked Amount 150.000			Recovery = 78.65%		
3) Phenol-d5	9.36	99	710399	126.24 ug/mL	0.00
Spiked Amount 150.000			Recovery = 84.16%		
14) Nitrobenzene-d5	11.10	82	461488	79.50 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 79.50%		
30) 2-Fluorobiphenyl	14.48	172	802974	76.82 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 76.82%		
46) 2,4,6-Tribromophenol	17.32	330	218139	128.28 ug/mL	-0.01
Spiked Amount 150.000			Recovery = 85.52%		
60) Terphenyl-d14	21.69	244	885272	84.76 ug/mL	0.00
Spiked Amount 100.000			Recovery = 84.76%		
Target Compounds					Qvalue
20) 2,4-Dichlorophenol	12.15	162	10623	2.25 ug/mL	80

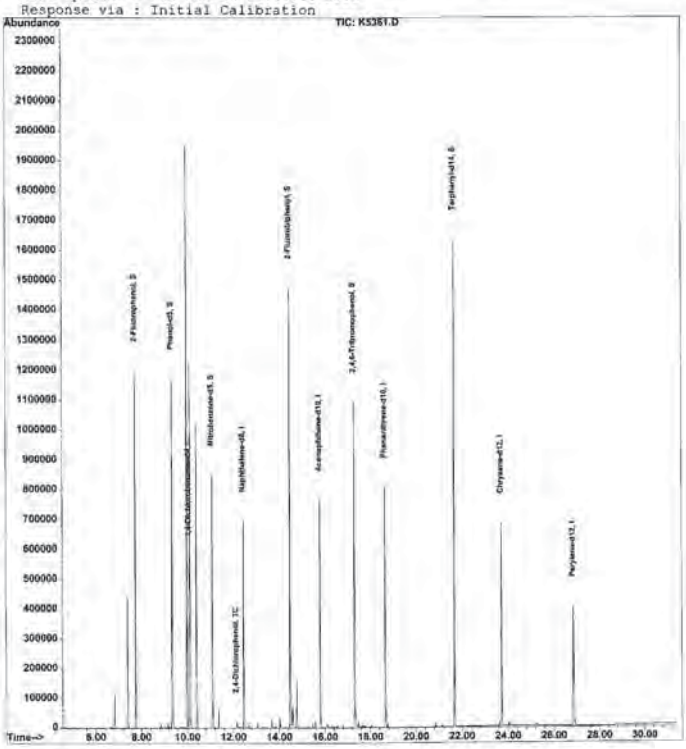
(#) = qualifier out of range (m) = manual integration
K5361.D KD190L42.M Mon Dec 22 14:02:16 2008 Pa

573

Quantitation Report

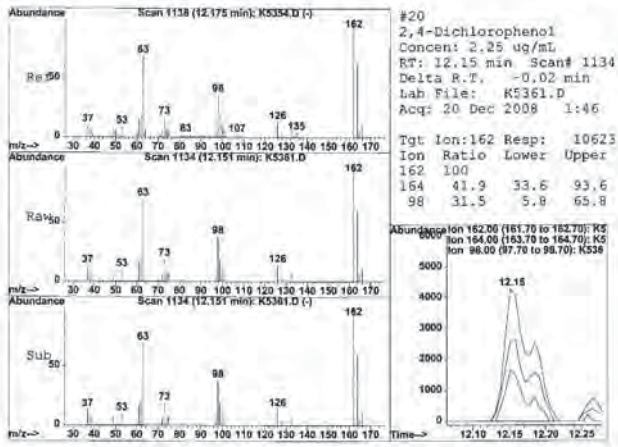
Data File : C:\HPCHEM\1\DATA\K5361.D Vial: 83
Acq On : 20 Dec 2008 1:46 Operator: MEG
Sample : 0812108-003B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5361.D KD190L42.M Mon Dec 22 14:02:17 2008 Pa

574



#20
2,4-Dichlorophenol
Concen: 2.25 ug/mL
RT: 12.15 min Scan# 1134
Delta R.T. -0.02 min
Lab File: K5361.D
Acq: 20 Dec 2008 1:46

Tgt Ion:162 Resp: 10623

Ion	Ratio	Lower	Upper
162	100		
164	41.9	33.6	93.6
98	31.5	5.8	65.8

K5361.D KD190L42.M Mon Dec 22 14:02:19 2008 Pa

575

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5361.D Vial: 83
Acq On : 20 Dec 2008 1:46 Operator: MEG
Sample : 0812108-003B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	141170	40.00 ug/mL	0.00
5) Naphthalene-d8	12.45	136	554600	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.80	164	316347	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	534396	40.00 ug/mL	0.00
14) Chrysene-d12	23.73	240	486073	40.00 ug/mL	0.00
15) Perylene-d12	26.86	264	422700	40.00 ug/mL	-0.01

System Monitoring Compounds

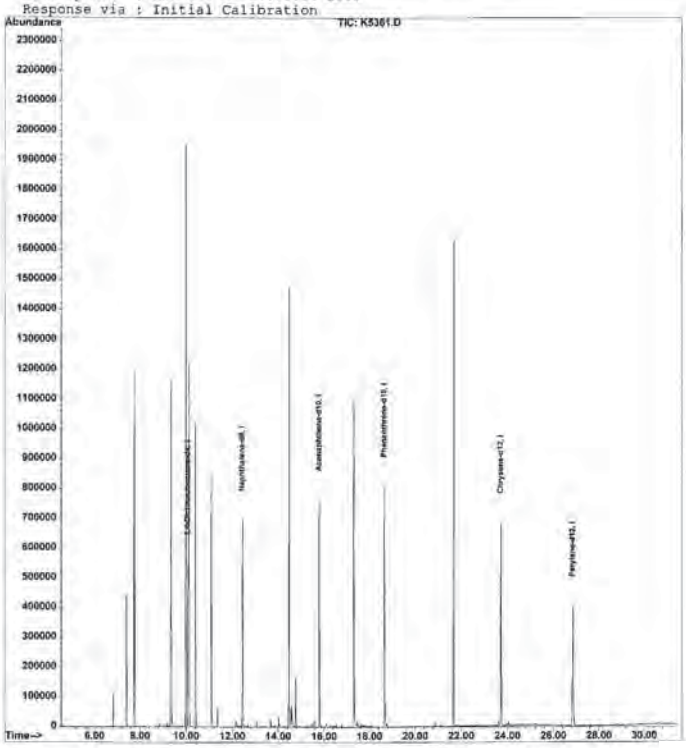
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5361.D KD19OLM.M Mon Dec 22 14:18:25 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5361.D Vial: 83
Acq On : 20 Dec 2008 1:46 Operator: MEG
Sample : 0812108-003B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5361.D KD19OLM.M Mon Dec 22 14:18:25 2008 Pa

Tentatively Identified Compound (LSC) summary

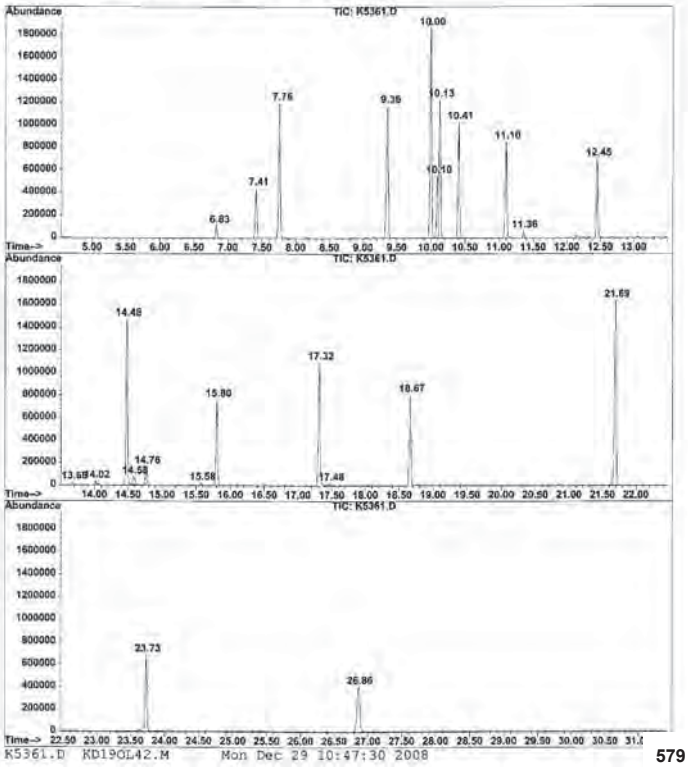
Operator ID: MEG Date Acquired: 20 Dec 2008 1:46
Data File: C:\HPCHEM\1\DATA\K5361.D
Name: 0812108-003B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.83	7.9	ug/mL	187082	ISTD01	10.10	944915	40.0
Benzene, chloro-	7.41	33.3	ug/mL	786733	ISTD01	10.10	944915	40.0
Benzene, 1,4-dichlor	10.00	138.5	ug/mL	3271840	ISTD01	10.10	944915	40.0
Benzene, 1,3-dichlor	10.41	73.6	ug/mL	1739810	ISTD01	10.10	944915	40.0
Pyridazine, 3,6-dich	14.58	5.5	ug/mL	173506	ISTD03	15.80	1265420	40.0
1H-Pyrrole-2-carboxa	14.76	8.9	ug/mL	280605	ISTD03	15.80	1265420	40.0

K5361.D KD19OL42.M Mon Dec 29 10:47:34 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5361.D
Operator : MEG
Acquired : 20 Dec 2008 1:46 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-003B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 83
Quant File :KD19OL42.RES (RTE Integrator)



K5361.D KD19OL42.M Mon Dec 29 10:47:30 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5361.D — Vial: 83
Acq On : 20 Dec 2008 1:46 — Operator: MEG
Sample : 0812108-003B — Inst : #6MS40
Misc : SAMP,8270W_OLM42, — Multiplr: 1.00
MS Integration Params: LSCINT.P

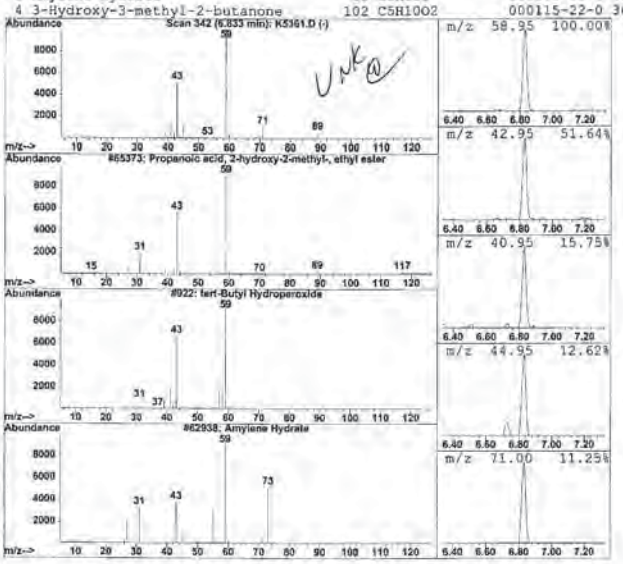
Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Propanoic acid, 2-hydroxy-2-me Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	7.92 ug/mL	187082	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
2	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
3	Amylene Hydrate	88	C5H12O	000075-85-4	40
4	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	36



UNK

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5361.D — Vial: 83
Acq On : 20 Dec 2008 1:46 — Operator: MEG
Sample : 0812108-003B — Inst : #6MS40
Misc : SAMP,8270W_OLM42, — Multiplr: 1.00
MS Integration Params: LSCINT.P

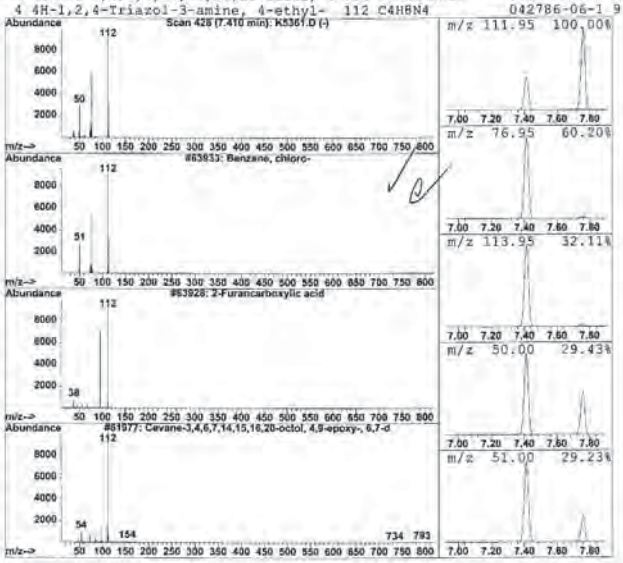
Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Benzene, chloro- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.41	33.30 ug/mL	786733	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	96
2	2-Furancarboxylic acid	112	C5H4O3	000088-14-2	16
3	Cevane-3,4,6,7,14,15,16,20-octol, 4	793	C41H63NO14	000143-57-7	12
4	4H-1,2,4-Triazol-3-amine, 4-ethyl-	112	C4H8N4	042786-06-1	9



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5361.D — Vial: 83
Acq On : 20 Dec 2008 1:46 — Operator: MEG
Sample : 0812108-003B — Inst : #6MS40
Misc : SAMP,8270W_OLM42, — Multiplr: 1.00
MS Integration Params: LSCINT.P

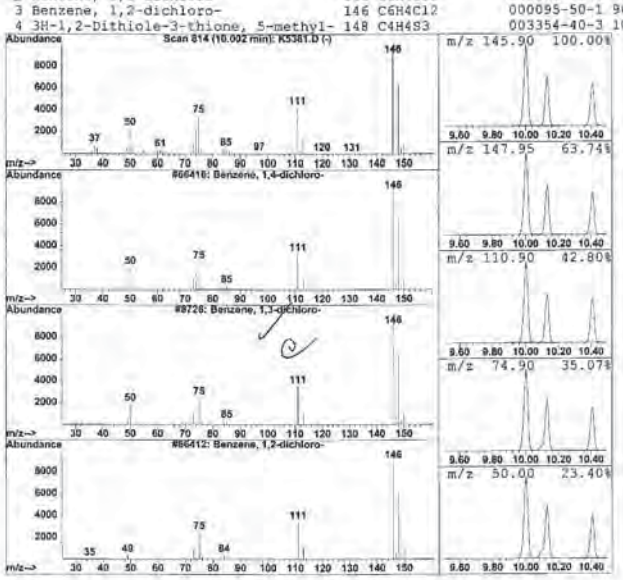
Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Benzene, 1,4-dichloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.00	138.50 ug/mL	3271840	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,4-dichloro-	146	C6H4Cl2	000106-46-7	97
2	Benzene, 1,3-dichloro-	146	C6H4Cl2	000541-73-1	97
3	Benzene, 1,2-dichloro-	146	C6H4Cl2	000095-50-1	96
4	3H-1,2-Dithiole-3-thione, 5-methyl-	148	C4H4S3	003354-40-3	10



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5361.D — Vial: 83
Acq On : 20 Dec 2008 1:46 — Operator: MEG
Sample : 0812108-003B — Inst : #6MS40
Misc : SAMP,8270W_OLM42, — Multiplr: 1.00
MS Integration Params: LSCINT.P

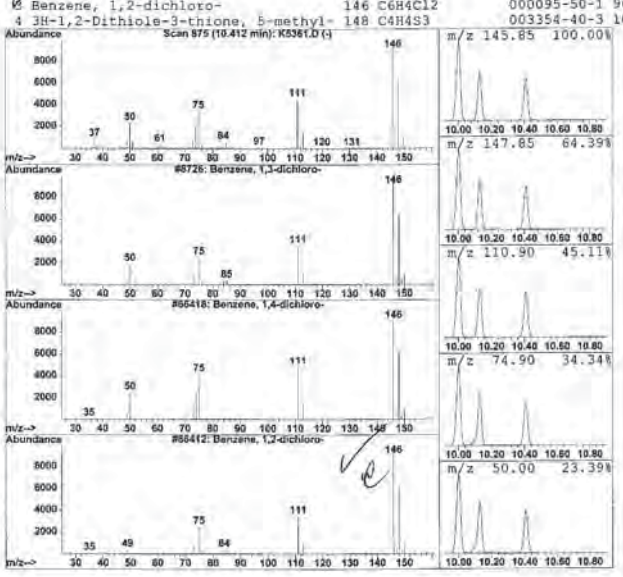
Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Benzene, 1,3-dichloro- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.41	73.65 ug/mL	1739810	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-dichloro-	146	C6H4Cl2	000541-73-1	97
2	Benzene, 1,4-dichloro-	146	C6H4Cl2	000106-46-7	96
3	Benzene, 1,2-dichloro-	146	C6H4Cl2	000095-50-1	96
4	3H-1,2-Dithiole-3-thione, 5-methyl-	148	C4H4S3	003354-40-3	10



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5361.D Vial: 83
Acq On : 20 Dec 2008 1:46 Operator: MEG
Sample : 0812108-003B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

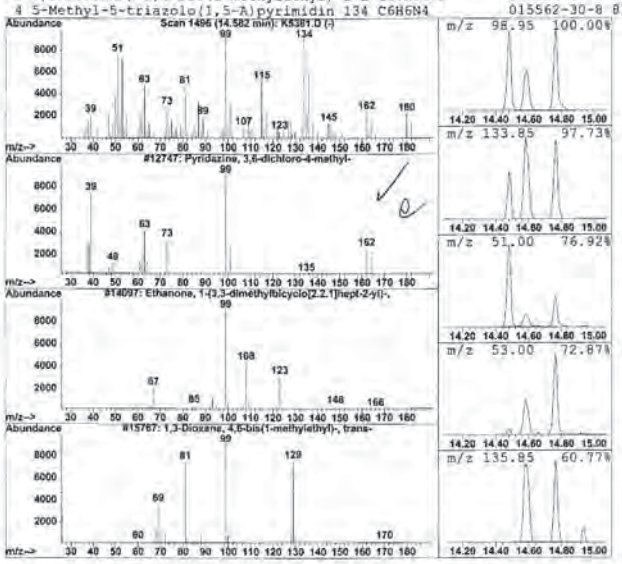
Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Pyridazine, 3,6-dichloro-4-met Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.58	5.48 ug/mL	173506	Acenaphthene-d10	15.80

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyridazine, 3,6-dichloro-4-methyl-	162	C5H4Cl2N2	019064-64-3	90
2	Ethanone, 1-(3,3-dimethylbicyclo[2.	166	C11H18O	015820-33-4	83
3	1,3-Dioxane, 4,6-bis(1-methylethyl)	172	C10H20O2	016731-94-5	83
4	5-Methyl-5-triazolo(1,5-A)pyrimidin	134	C6H6N4	015562-30-8	83



K5361.D KD19OL42.M Mon Dec 29 10:47:33 2008 Pa

584

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5361.D Vial: 83
Acq On : 20 Dec 2008 1:46 Operator: MEG
Sample : 0812108-003B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

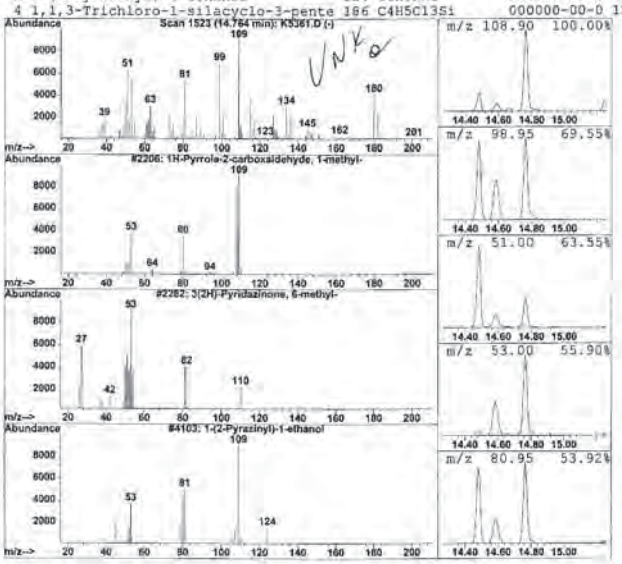
Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 1H-Pyrrole-2-carboxaldehyde, 1 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.76	8.87 ug/mL	280605	Acenaphthene-d10	15.80

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Pyrrole-2-carboxaldehyde, 1-meth	109	C6H7NO	001192-58-1	43
2	3(2H)-Pyridazinone, 6-methyl-	110	C5H6N2O	013327-27-0	27
3	1-(2-Pyrazinyl)-1-ethanol	124	C6H8N2O	000000-00-0	23
4	1,1,3-Trichloro-1-silacyclo-3-pente	186	C4H5Cl3Si	000000-00-0	12



K5361.D KD19OL42.M Mon Dec 29 10:47:34 2008 Pa

585

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5362.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 2:25
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 2:25
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 2:25
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 2:25
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 2:25
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 2:25
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 2:25
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 2:25
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 2:25
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 2:25
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 2:25
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 2:25
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 2:25
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 2:25
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 2:25
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 2:25
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 2:25
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 2:25
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 2:25
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 2:25
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 2:25
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 2:25
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 2:25
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 2:25
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 2:25
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 2:25
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 2:25
Anthracene	ND		10	0.14	µg/L	1	12/20/08 2:25
Atrazine	ND		10	1.2	µg/L	1	12/20/08 2:25
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 2:25
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 2:25
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 2:25
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 2:25
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 2:25

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416475 Project Supervisor: Anthony Crescenzi

586

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5362.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 2:25
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 2:25
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 2:25
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 2:25
bis(2-Ethylhexyl)phthalate	ND		10	0.48	µg/L	1	12/20/08 2:25
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 2:25
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 2:25
Carbazole	ND		10	0.13	µg/L	1	12/20/08 2:25
Chrysene	ND		10	0.082	µg/L	1	12/20/08 2:25
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 2:25
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 2:25
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 2:25
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 2:25
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 2:25
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 2:25
Fluoranthene	ND		10	0.062	µg/L	1	12/20/08 2:25
Fluorene	ND		10	0.11	µg/L	1	12/20/08 2:25
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 2:25
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 2:25
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 2:25
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 2:25
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 2:25
Isophorone	ND		10	0.12	µg/L	1	12/20/08 2:25
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 2:25
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 2:25
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 2:25
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 2:25
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 2:25
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 2:25
Phenol	ND		10	0.093	µg/L	1	12/20/08 2:25
Pyrene	ND		10	0.072	µg/L	1	12/20/08 2:25
Surr: 2,4,6-Tribromophenol	83		46-149	0	%REC	1	12/20/08 2:25
Surr: 2-Fluorobiphenyl	80		42-130	0	%REC	1	12/20/08 2:25
Surr: 2-Fluorophenol	80		26-130	0	%REC	1	12/20/08 2:25

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416475 Project Supervisor: Anthony Crescenzi

587

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-004B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-13-121108*
W Order:	0812108	Collection Date:	12/11/08 13:46
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS	BatchNo:	8644/R15973
Revision:	12/29/08 9:43	FileID:	1-SAMP-K5362.D
Col Type:			

Sample Size: 970 mL; %Moisture:; TestCode: 8270W OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	83		42-130	0	%REC	1	12/20/08 2:25
Surr: Phenol-d5	89		21-134	0	%REC	1	12/20/08 2:25
Surr: Terphenyl-d14	83		24-147	0	%REC	1	12/20/08 2:25

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416475 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-13-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-004B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5362.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	9.4	JB

FORM I TIC 4 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5362.D Vial: 84
Acq On : 20 Dec 2008 2:25 Operator: MEG
Sample : 0812108-004B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	149284	40.00 ug/mL	-0.01
13) Naphthalene-d8	12.46	136	579527	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.80	164	332899	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	555189	40.00 ug/mL	-0.01
58) Chrysene-d12	23.73	240	520016	40.00 ug/mL	-0.02
68) Perylene-d12	26.87	264	455769	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	601003	120.62 ug/mL	0.00
Spiked Amount 150.000			Recovery =	80.41%	
3) Phenol-d5	9.36	99	754249	126.75 ug/mL	0.00
Spiked Amount 150.000			Recovery =	84.50%	
14) Nitrobenzene-d5	11.11	82	503407	83.00 ug/mL	0.00
Spiked Amount 100.000			Recovery =	83.00%	
30) 2-Fluorobiphenyl	14.48	172	879196	79.93 ug/mL	0.00
Spiked Amount 100.000			Recovery =	79.93%	
46) 2,4,6-Tribromophenol	17.32	330	222165	124.15 ug/mL	0.00
Spiked Amount 150.000			Recovery =	82.77%	
60) Terphenyl-d14	21.70	244	932458	83.49 ug/mL	0.00
Spiked Amount 100.000			Recovery =	83.49%	

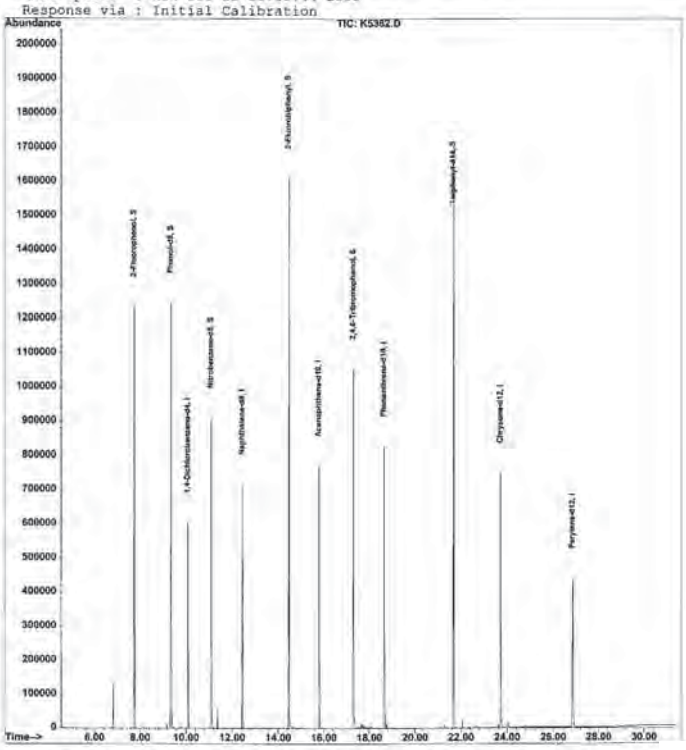
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5362.D KD190L42.M Mon Dec 22 14:02:23 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5362.D Vial: 84
Acq On : 20 Dec 2008 2:25 Operator: MEG
Sample : 0812108-004B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5362.D KD190L42.M Mon Dec 22 14:02:25 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5362.D Vial: 84
Acq On : 20 Dec 2008 2:25 Operator: MEG
Sample : 0812108-004B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	149284	40.00 ug/mL	-0.01
5) Naphthalene-d8	12.46	136	579266	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.80	164	332899	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.66	188	555189	40.00 ug/mL	-0.01
14) Chrysene-d12	23.73	240	519741	40.00 ug/mL	0.00
15) Perylene-d12	26.87	264	455769	40.00 ug/mL	-0.01

System Monitoring Compounds

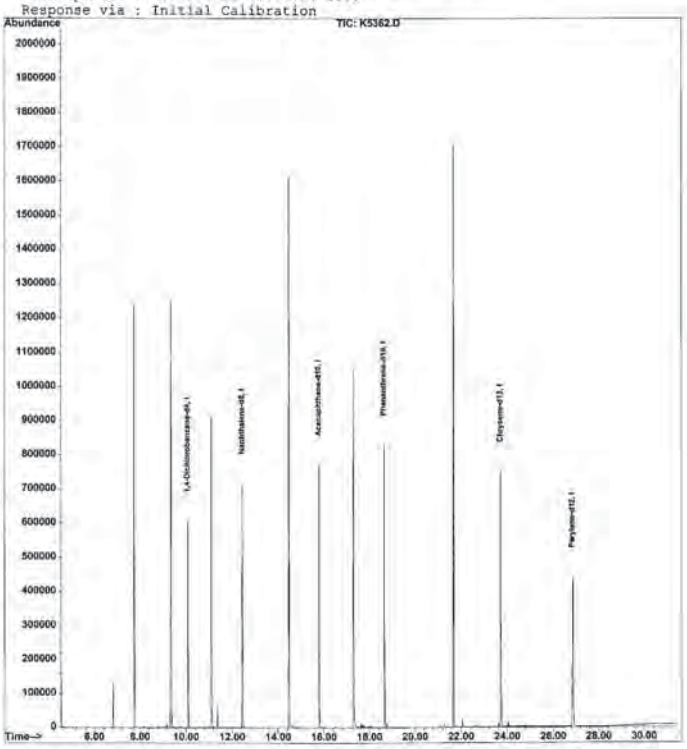
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5362.D KD19OLM.M Mon Dec 22 14:18:28 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5362.D Vial: 84
Acq On : 20 Dec 2008 2:25 Operator: MEG
Sample : 0812108-004B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5362.D KD19OLM.M Mon Dec 22 14:18:29 2008 Pa

Tentatively Identified Compound (LSC) summary

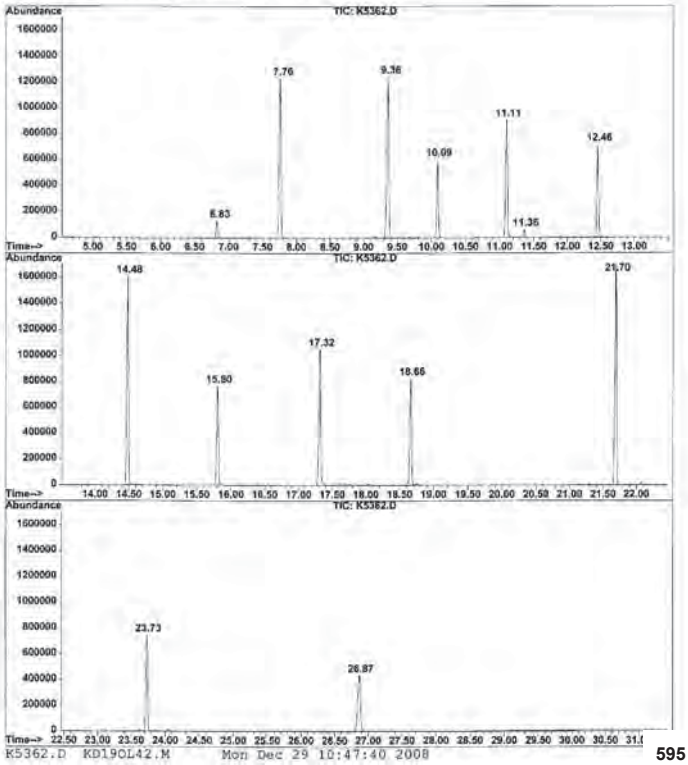
Operator ID: MEG Date Acquired: 20 Dec 2008 2:25
Data File: C:\HPCHEM\1\DATA\K5362.D
Name: 0812108-004B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea	ISConc
1,2-Butanediol	6.83	9.1 ug/mL	218917	ISTD01	10.09	965215	40.0

K5362.D KD19OL42.M Mon Dec 29 10:47:41 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5362.D
Operator : MEG
Acquired : 20 Dec 2008 2:25 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-004B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 84
Quant File :KD19OL42.RES (RTE Integrator)



K5362.D KD19OL42.M Mon Dec 29 10:47:40 2008

Library Search Compound Report

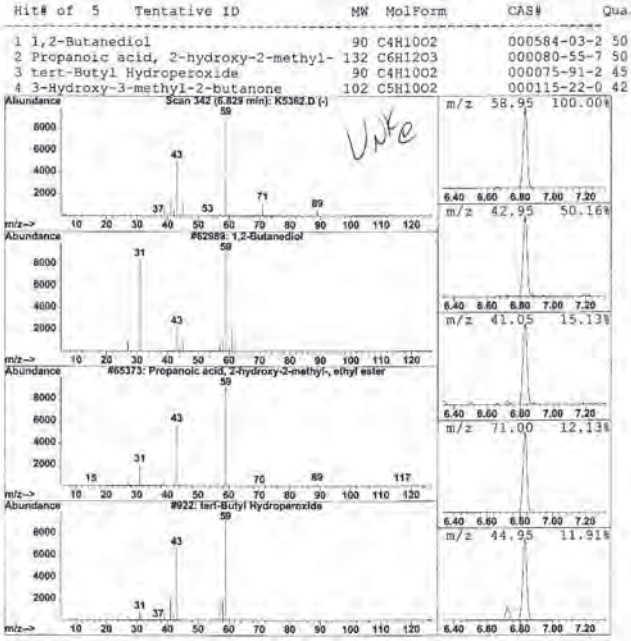
Data File : C:\HPCHEM\1\DATA\K5362.D Vial: 84
Acq On : 20 Dec 2008 2:25 Operator: MEG
Sample : 0812108-004B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 1,2-Butanediol Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	9.07 ug/mL	218917	1,4-Dichlorobenzene-d4	10.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Butanediol	90	C4H10O2	000584-03-2	50
2	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
3	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
4	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	42



Vite

K5362.D KD190L42.M Mon Dec 29 10:47:41 2008 Pag

596

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-005B
Project: City of Geneva- Market Basket Site Client Sample ID: *MW-11R-121108*
W Order: 0812108 Collection Date: 12/11/08 13:05
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS06 40 Sample Size: 970 mL. PrepDate: 12/17/08 8:51
ColumnID: DB-5MS %Moisture: BatchNo: 8644/R15973
Revision: 12/29/08 9:43 TestCode: 8270W OLM42 FileID: 1-SAMP-K5363.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 3:04
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 3:04
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 3:04
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 3:04
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 3:04
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 3:04
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 3:04
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 3:04
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 3:04
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 3:04
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 3:04
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 3:04
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 3:04
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 3:04
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 3:04
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 3:04
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 3:04
4-Bromophenyl phenyl ether	ND		10	0.16	µg/L	1	12/20/08 3:04
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 3:04
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 3:04
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 3:04
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 3:04
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 3:04
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 3:04
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 3:04
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 3:04
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 3:04
Anthracene	ND		10	0.14	µg/L	1	12/20/08 3:04
Atrazine	ND		10	1.2	µg/L	1	12/20/08 3:04
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 3:04
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 3:04
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 3:04
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 3:04
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 3:04

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416476 Project Supervisor: Anthony Crescenzi

597

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-005B
Project: City of Geneva- Market Basket Site Client Sample ID: *MW-11R-121108*
W Order: 0812108 Collection Date: 12/11/08 13:05
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS06 40 Sample Size: 970 mL. PrepDate: 12/17/08 8:51
ColumnID: DB-5MS %Moisture: BatchNo: 8644/R15973
Revision: 12/29/08 9:43 TestCode: 8270W OLM42 FileID: 1-SAMP-K5363.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 3:04
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 3:04
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 3:04
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 3:04
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 3:04
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 3:04
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 3:04
Carbazole	ND		10	0.13	µg/L	1	12/20/08 3:04
Chrysene	ND		10	0.082	µg/L	1	12/20/08 3:04
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 3:04
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 3:04
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 3:04
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 3:04
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 3:04
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 3:04
Fluoranthene	ND		10	0.062	µg/L	1	12/20/08 3:04
Fluorene	ND		10	0.11	µg/L	1	12/20/08 3:04
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 3:04
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 3:04
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 3:04
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 3:04
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 3:04
Isophorone	ND		10	0.12	µg/L	1	12/20/08 3:04
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 3:04
N-Nitrosodiphenylamine	ND		10	0.062	µg/L	1	12/20/08 3:04
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 3:04
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 3:04
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 3:04
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 3:04
Phenol	ND		10	0.093	µg/L	1	12/20/08 3:04
Pyrene	ND		10	0.072	µg/L	1	12/20/08 3:04
Surr: 2,4,6-Tribromophenol	57		46-149	0	%REC	1	12/20/08 3:04
Surr: 2-Fluorobiphenyl	84		42-130	0	%REC	1	12/20/08 3:04
Surr: 2-Fluorophenol	66		25-130	0	%REC	1	12/20/08 3:04

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416476 Project Supervisor: Anthony Crescenzi

598

Life Science Laboratories, Inc. — **Analytical Results**
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-005B
Project: City of Geneva- Market Basket Site Client Sample ID: *MW-11R-121108*
W Order: 0812108 Collection Date: 12/11/08 13:05
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS06 40 Sample Size: 970 mL. PrepDate: 12/17/08 8:51
ColumnID: DB-5MS %Moisture: BatchNo: 8644/R15973
Revision: 12/29/08 9:43 TestCode: 8270W OLM42 FileID: 1-SAMP-K5363.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	86		42-130	0	%REC	1	12/20/08 3:04
Surr: Phenol-d5	69		21-134	0	%REC	1	12/20/08 3:04
Surr: Terphenyl-d14	84		24-147	0	%REC	1	12/20/08 3:04

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416476 Project Supervisor: Anthony Crescenzi

599

Form 1 TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-11R-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBC-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-005B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5363.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 4 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown (6.83)	6.83	8.8	JB
2.	unknown (8.58)	8.58	6.4	J
3.	unknown (8.61)	8.61	8.2	J
4.	unknown (18.19)	18.19	4.2	J

FORM 1 TIC 5 SW8270C

600

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:57 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	152146	40.00 ug/mL	-0.01
13) Naphthalene-d8	12.45	136	598402	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	340665	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	578905	40.00 ug/mL	-0.01
58) Chrysene-d12	23.73	240	542489	40.00 ug/mL	-0.02
68) Perylene-d12	26.87	264	468282	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	504074	99.26 ug/mL	0.00
Spiked Amount 150.000			Recovery = 66.17%		
3) Phenol-d5	9.36	99	629704	103.83 ug/mL	0.00
Spiked Amount 150.000			Recovery = 69.22%		
14) Nitrobenzene-d5	11.11	82	537003	85.74 ug/mL	0.00
Spiked Amount 100.000			Recovery = 85.74%		
30) 2-Fluorobiphenyl	14.49	172	944436	83.90 ug/mL	0.00
Spiked Amount 100.000			Recovery = 83.90%		
46) 2,4,6-Tribromophenol	17.31	330	156640	85.54 ug/mL	-0.01
Spiked Amount 150.000			Recovery = 57.03%		
60) Terphenyl-d14	21.69	244	976558	83.82 ug/mL	0.00
Spiked Amount 100.000			Recovery = 83.82%		

Target Compounds Qvalue

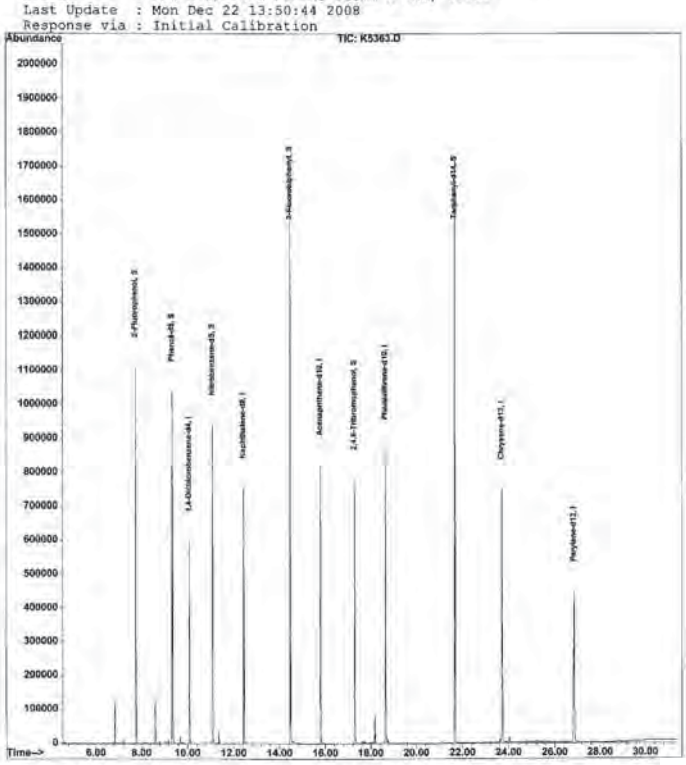
(#) = qualifier out of range (m) = manual integration
K5363.D KD19OL42.M Mon Dec 22 14:02:30 2008 Pa

601

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:57 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5363.D KD19OL42.M Mon Dec 22 14:02:31 2008 Pa

602

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	152146	40.00 ug/mL	0.00
5) Naphthalene-d8	12.45	136	598402	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.80	164	340665	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.66	188	578905	40.00 ug/mL	0.00
14) Chrysene-d12	23.73	240	542345	40.00 ug/mL	0.00
15) Perylene-d12	26.87	264	468517	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

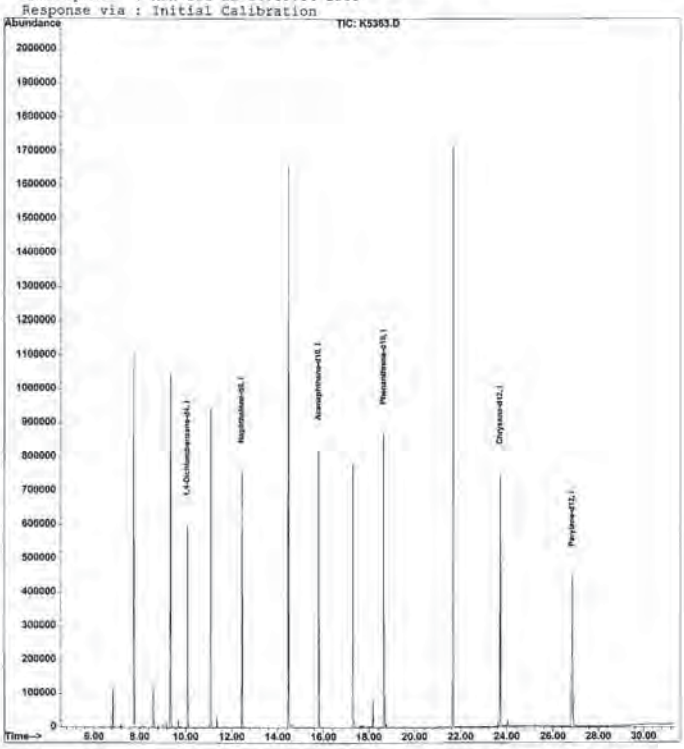
(#) = qualifier out of range (m) = manual integration
K5363.D KD19OLM.M Mon Dec 22 14:18:33 2008 Pa

603

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5363.D KD19OLM.M Mon Dec 22 14:18:34 2008 Pag

604

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 20 Dec 2008 3:04
Data File: C:\HPCHEM\1\DATA\K5363.D
Name: 0812108-005B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

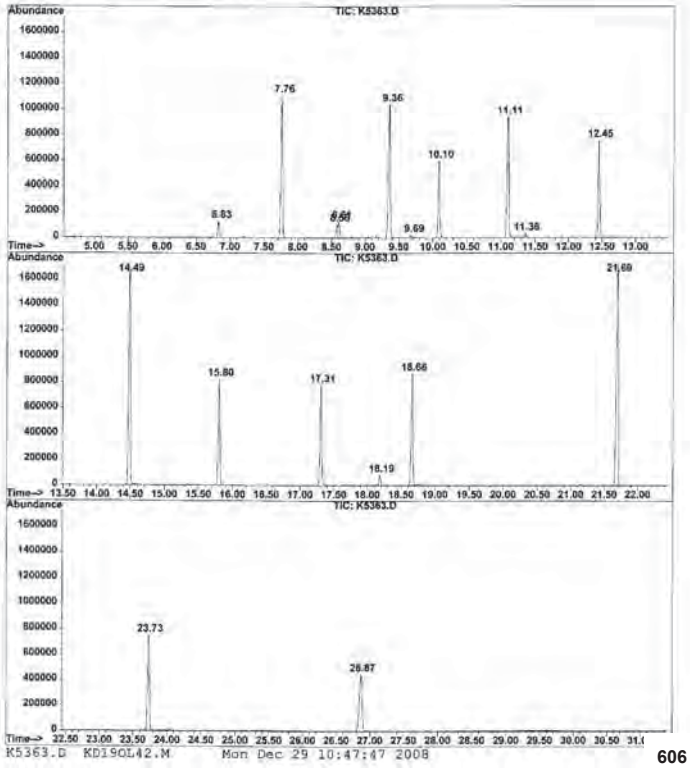
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.83	8.5	ug/mL	210644	ISTD01	10.10	991387	40.0
.delta.2-Tetrazaboro	8.58	6.2	ug/mL	153425	ISTD01	10.10	991387	40.0
5-Imidazolic acid	8.61	8.0	ug/mL	198264	ISTD01	10.10	991387	40.0
1,1,3-Trichloro-1-si	18.19	4.1	ug/mL	150350	ISTD04	18.66	1480220	40.0

K5363.D KD19OL42.M Mon Dec 29 10:47:49 2008

605

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5363.D
Operator : MEG
Acquired : 20 Dec 2008 3:04 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-005B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 85
Quant File :KD19OL42.RES (RTE Integrator)



K5363.D KD19OL42.M Mon Dec 29 10:47:47 2008

606

Library Search Compound Report

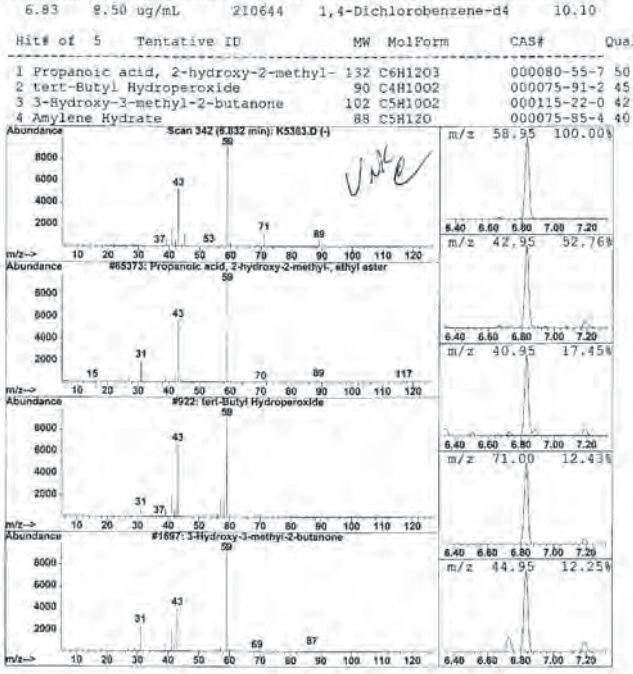
Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Propanoic acid, 2-hydroxy-2-me Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	8.50 ug/mL	210644	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
2	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
3	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	42
4	Amylene Hydrate	88	C5H12O	000075-85-4	40



K5363.D KD19OL42.M Mon Dec 29 10:47:48 2008 Pag

607

Library Search Compound Report

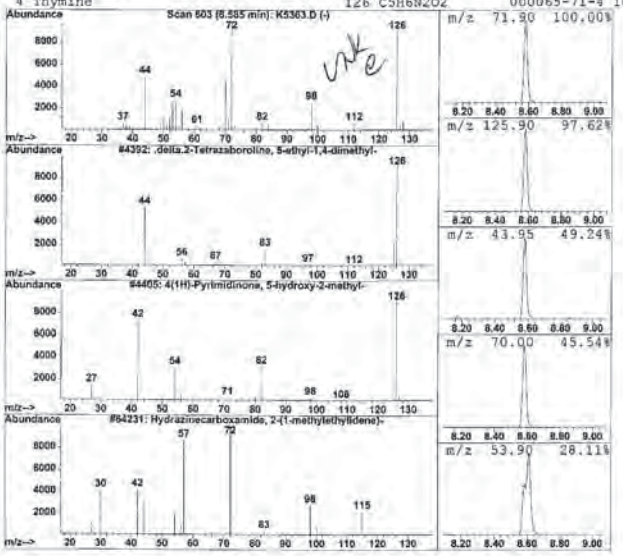
Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 .delta.2-Tetrazaboroline, 5-et Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.58	6.19 ug/mL	153425	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.delta.2-Tetrazaboroline, 5-ethyl-1	126	C4H11BN4	020534-01-4	22
2	4(1H)-Pyrimidinone, 5-hydroxy-2-met	126	C5H6N2O2	024614-14-0	14
3	Hydrazinecarboxamide, 2-(1-methylet	115	C4H9N3O	000110-20-3	12
4	Thymine	126	C5H6N2O2	000065-71-4	10



K5363.D KD190L42.M Mon Dec 29 10:47:49 2008 Pag

608

Library Search Compound Report

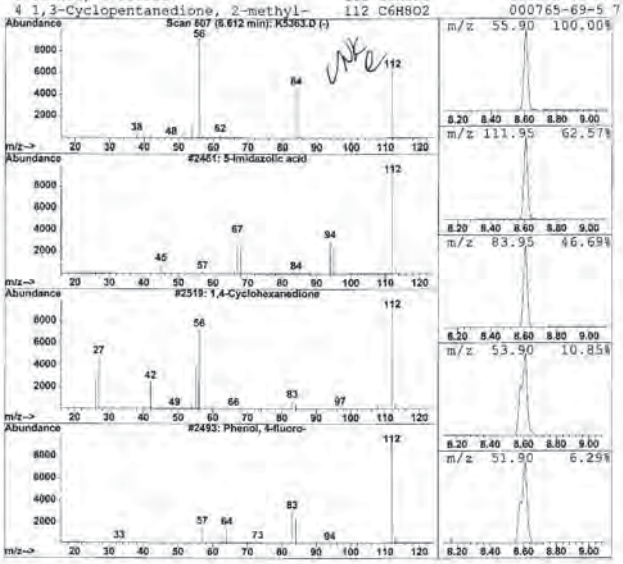
Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 3 5-Imidazolic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.61	8.00 ug/mL	198264	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Imidazolic acid	112	C4H4N2O2	000000-00-0	9
2	1,4-Cyclohexanedione	112	C6H8O2	000637-68-7	7
3	Phenol, 4-fluoro-	112	C6H5FO	000371-41-5	7
4	1,3-Cyclopentanedione, 2-methyl-	112	C6H8O2	000765-69-5	7



K5363.D KD190L42.M Mon Dec 29 10:47:49 2008 Pag

609

Library Search Compound Report

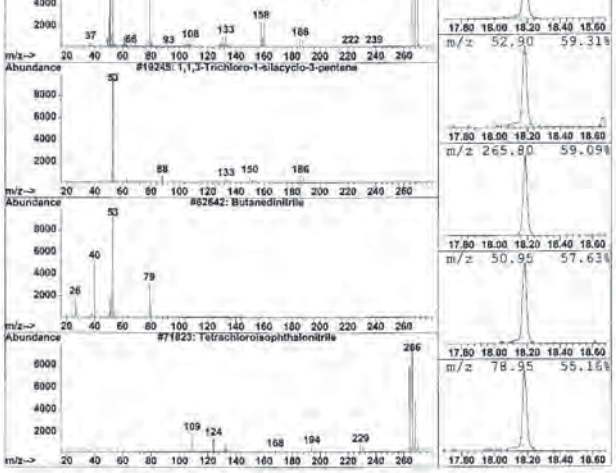
Data File : C:\HPCHEM\1\DATA\K5363.D Vial: 85
Acq On : 20 Dec 2008 3:04 Operator: MEG
Sample : 0812108-005B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 4 1,1,3-Trichloro-1-silacyclo-3- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.19	4.06 ug/mL	150350	Phenanthrene-d10	18.66

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1,3-Trichloro-1-silacyclo-3-pente	186	C4H5Cl3Si	000000-00-0	25
2	Butanedinitrile	80	C4H4N2	000110-61-2	12
3	Tetrachloroisophthalonitrile	264	C8Cl4N2	001897-45-6	10
4	4'-Hydroxy-6-methoxyaurone	268	C16H12O4	077764-93-3	9



K5363.D KD190L42.M Mon Dec 29 10:47:49 2008 Pa

610

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	**Lab ID:**	**0812108-006B**
Project:	City of Geneva- Market Basket Site	**Client Sample ID:**	***MW-8-121108***
W Order:	0812108	**Collection Date:**	12/11/08 13:55
Matrix:	GROUNDWATER	**Date Received:**	12/12/08 17:42
Inst. ID:	MS06 40	**Sample Size:** 950 mL	**PrepDate:** 12/17/08 8:51
ColumnID:	DB-5MS	**%Moisture:**	**BatchNo:** 8644/R15973
Revision:	12/29/08 9:43	**TestCode:** 8270W OLM42	**FileID:** I-SAMP-K5366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8270C**		**(SW3520C)**
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 5:00
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 5:00
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 5:00
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 5:00
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 5:00
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 5:00
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 5:00
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 5:00
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 5:00
2-Chlorophenol	ND		11	0.13	µg/L	1	12/20/08 5:00
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 5:00
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 5:00
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 5:00
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 5:00
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 5:00
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 5:00
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 5:00
4-Bromophenyl phenyl ether	ND		11	0.15	µg/L	1	12/20/08 5:00
4-Chloro-3-methylphenol	ND		11	0.084	µg/L	1	12/20/08 5:00
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 5:00
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 5:00
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 5:00
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 5:00
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 5:00
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 5:00
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 5:00
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 5:00
Anthracene	ND		11	0.15	µg/L	1	12/20/08 5:00
Atrazine	ND		11	1.3	µg/L	1	12/20/08 5:00
Benzaldehyde	ND		11	0.39	µg/L	1	12/20/08 5:00
Benzo[a]anthracene	ND		11	0.084	µg/L	1	12/20/08 5:00
Benzo[a]pyrene	ND		11	0.16	µg/L	1	12/20/08 5:00
Benzo[b]fluoranthene	ND		11	0.53	µg/L	1	12/20/08 5:00
Benzo[g,h,i]perylene	ND		11	0.11	µg/L	1	12/20/08 5:00

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416479 **Project Supervisor:** Anthony Crescenzi

611

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-8-121108*
W Order:	0812108	Collection Date:	12/11/08 13:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo(k)fluoranthene	ND		11	0.35	µg/L	1	12/20/08 5:00
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 5:00
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 5:00
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 5:00
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 5:00
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 5:00
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 5:00
Carbazole	ND		11	0.14	µg/L	1	12/20/08 5:00
Chrysene	ND		11	0.084	µg/L	1	12/20/08 5:00
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 5:00
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 5:00
Dibenz(a,h)anthracene	ND		11	0.095	µg/L	1	12/20/08 5:00
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 5:00
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 5:00
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 5:00
Fluoranthene	ND		11	0.062	µg/L	1	12/20/08 5:00
Fluorene	ND		11	0.12	µg/L	1	12/20/08 5:00
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 5:00
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 5:00
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 5:00
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 5:00
Indeno(1,2,3-cd)pyrene	ND		11	0.095	µg/L	1	12/20/08 5:00
Isophorone	ND		11	0.13	µg/L	1	12/20/08 5:00
N-Nitroso-di-n-propylamine	ND		11	0.16	µg/L	1	12/20/08 5:00
N-Nitrosodiphenylamine	ND		11	0.084	µg/L	1	12/20/08 5:00
Naphthalene	ND		11	0.063	µg/L	1	12/20/08 5:00
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 5:00
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 5:00
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 5:00
Phenol	ND		11	0.095	µg/L	1	12/20/08 5:00
Pyrene	ND		11	0.074	µg/L	1	12/20/08 5:00
Surr: 2,4,6-Tribromophenol	85		45-149	0	%REC	1	12/20/08 5:00
Surr: 2-Fluorobiphenyl	82		42-130	0	%REC	1	12/20/08 5:00
Surr: 2-Fluorophenol	79		26-130	0	%REC	1	12/20/08 5:00

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416479 Project Supervisor: Anthony Crescenzi

612

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-006B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-8-121108*
W Order:	0812108	Collection Date:	12/11/08 13:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 950 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5366.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	82		42-130	0	%REC	1	12/20/08 5:00
Surr: Phenol-d5	82		21-134	0	%REC	1	12/20/08 5:00
Surr: Terphenyl-d14	88		24-147	0	%REC	1	12/20/08 5:00

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416479 Project Supervisor: Anthony Crescenzi

613

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-8-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-006B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5366.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.82	4.4	JB

FORM I TIC 0 SW8270C

614

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5366.D Vial: 88
Acq On : 20 Dec 2008 5:00 Operator: MEG
Sample : 0812108-006B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	117412	40.00 ug/mL	-0.02
13) Naphthalene-d8	12.45	136	452635	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	259630	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	444339	40.00 ug/mL	-0.02
58) Chrysene-d12	23.73	240	402135	40.00 ug/mL	-0.02
68) Perylene-d12	26.86	264	336878	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.75	112	462239	117.95 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	78.63%	
3) Phenol-d5	9.36	99	574945	122.84 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	81.89%	
14) Nitrobenzene-d5	11.10	82	390438	82.42 ug/mL	-0.02
Spiked Amount 100.000			Recovery =	82.42%	
30) 2-Fluorobiphenyl	14.48	172	699197	81.50 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	81.50%	
46) 2,4,6-Tribromophenol	17.31	330	177752	127.37 ug/mL	-0.02
Spiked Amount 150.000			Recovery =	84.91%	
60) Terphenyl-d14	21.69	244	763488	88.40 ug/mL	0.00
Spiked Amount 100.000			Recovery =	88.40%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5366.D KD19OL42.M Mon Dec 22 14:02:37 2008 Pa

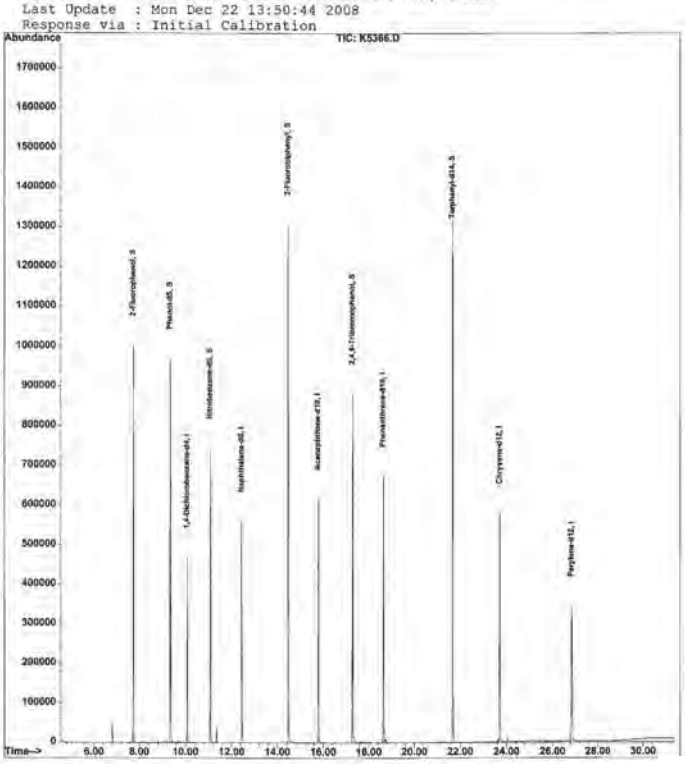
615

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5366.D
Acq On : 20 Dec 2008 5:00
Sample : 0812108-006B
Misc : SAMP,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008

Vial: 88
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD190L42.RES

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5366.D KD190L42.M Mon Dec 22 14:02:38 2008 Pa 616

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5366.D
Acq On : 20 Dec 2008 5:00
Sample : 0812108-006B
Misc : SAMP,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008

Vial: 88
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD190LM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190LM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	117412	40.00 ug/mL	-0.01
5) Naphthalene-d8	12.45	136	452415	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.80	164	259630	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.66	188	444339	40.00 ug/mL	-0.01
14) Chrysene-d12	23.73	240	402135	40.00 ug/mL	0.00
15) Perylene-d12	26.86	264	336878	40.00 ug/mL	-0.02

System Monitoring Compounds

Target Compounds Qvalue

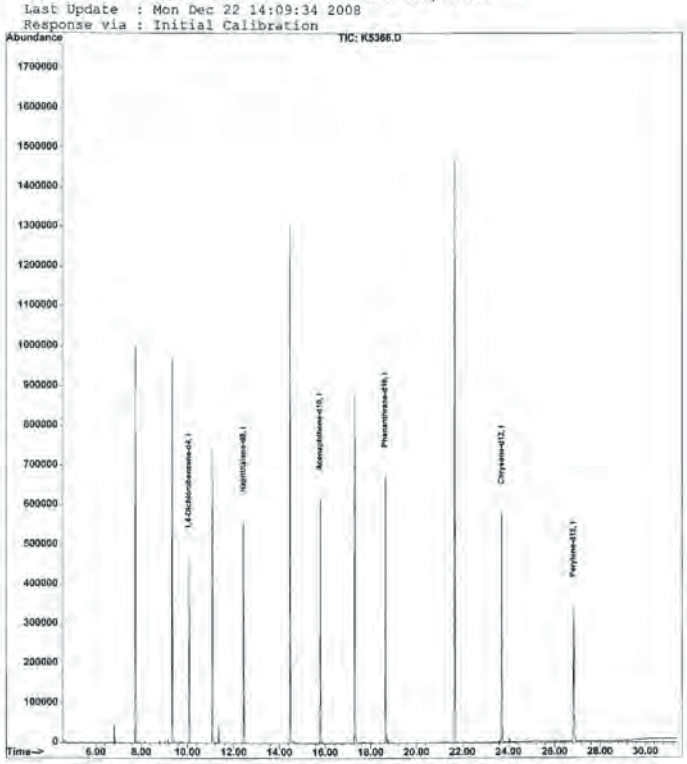
(#) = qualifier out of range (m) = manual integration
K5366.D KD190LM.M Mon Dec 22 14:18:39 2008 Pa 617

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5366.D
Acq On : 20 Dec 2008 5:00
Sample : 0812108-006B
Misc : SAMP,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008

Vial: 88
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD190LM.RES

Method : C:\HPCHEM\1\METHODS\KD190LM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5366.D KD190LM.M Mon Dec 22 14:18:41 2008 Pa 618

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 20 Dec 2008 5:00
Data File: C:\HPCHEM\1\DATA\K5366.D
Name: 0812108-006B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.82	4.2	ug/mL	78665	ISTD01	10.09	745270	40.0

K5366.D KD190L42.M Mon Dec 29 10:47:54 2008

619

LSC Report - Integrated Chromatogram

```
File        : C:\HPCHEM\1\DATA\K5366.D
Operator    : MEG
Acquired    : 20 Dec 2008   5:00     using AcqMethod KD08FULL
Instrument  :   #6MS40
Sample Name: 0812108-006B
Misc Info   : SAMP,8270W_OLM42,
Vial Number: 88
Quant File :KD19OL42.RES (RTE Integrator)
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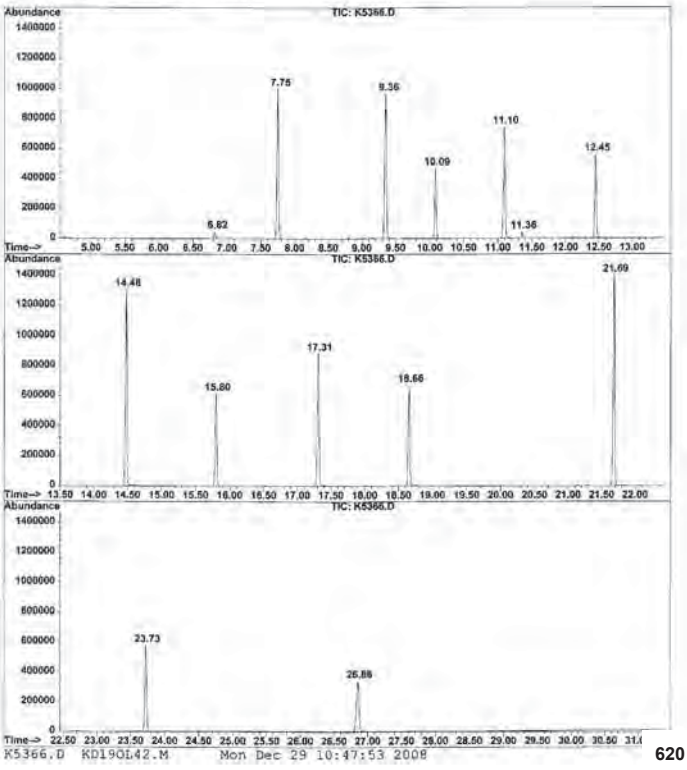


620

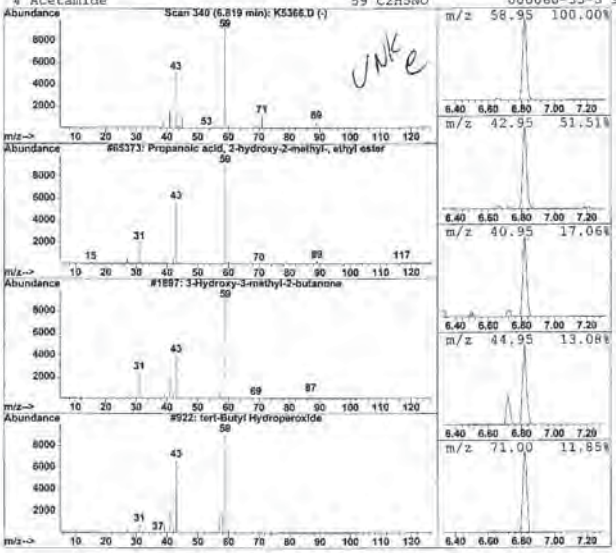
Library Search Compound Report

```
Data File : C:\HPCHEM\1\DATA\K5366.D                    Vial: 88
Acq On    : 20 Dec 2008   5:00                      Operator: MEG
Sample    : 0812108-006B                            Inst    : #6MS40
Misc      : SAMP,8270W_OLM42,                       Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library      : C:\DATABASE\NBS75K.L
*****************************************************************
Peak Number  1  Propanoic acid, 2-hydroxy-2-me  Concentration Rank  1
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.82	4.22 ug/mL	78665	1,4-Dichlorobenzene-d4	10.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	38
2	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	38
3	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	36
4	Acetamide	59	C2H5NO	000060-35-5	9



621

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	PrepDate:	12/17/08 8:51
Sample Size:	990 mL	BatchNo:	8644/R15973
ColumnID:	DB-5MS	%Moisture:	
Revision:	12/29/08 9:43	FileID:	1-SAMP-K5367.D
Col Type:		TestCode:	8270W OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.38	µg/L	1	12/20/08 5:38
2,4,5-Trichlorophenol	ND		51	0.14	µg/L	1	12/20/08 5:38
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 5:38
2,4-Dichlorophenol	ND		10	0.081	µg/L	1	12/20/08 5:38
2,4-Dimethylphenol	ND		10	2.0	µg/L	1	12/20/08 5:38
2,4-Dinitrophenol	ND		51	10	µg/L	1	12/20/08 5:38
2,4-Dinitrotoluene	ND		10	0.40	µg/L	1	12/20/08 5:38
2,6-Dinitrotoluene	ND		10	0.40	µg/L	1	12/20/08 5:38
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 5:38
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 5:38
2-Methylnaphthalene	ND		10	0.051	µg/L	1	12/20/08 5:38
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 5:38
2-Nitroaniline	ND		51	0.40	µg/L	1	12/20/08 5:38
2-Nitrophenol	ND		10	0.071	µg/L	1	12/20/08 5:38
3,3'-Dichlorobenzidine	ND		20	1.2	µg/L	1	12/20/08 5:38
3-Nitroaniline	ND		51	1.2	µg/L	1	12/20/08 5:38
4,6-Dinitro-2-methylphenol	ND		10	2.0	µg/L	1	12/20/08 5:38
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 5:38
4-Chloro-3-methylphenol	ND		10	0.081	µg/L	1	12/20/08 5:38
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 5:38
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 5:38
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 5:38
4-Nitroaniline	ND		51	1.2	µg/L	1	12/20/08 5:38
4-Nitrophenol	ND		51	2.0	µg/L	1	12/20/08 5:38
Acenaphthene	ND		10	0.081	µg/L	1	12/20/08 5:38
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 5:38
Acetophenone	ND		10	0.37	µg/L	1	12/20/08 5:38
Anthracene	ND		10	0.14	µg/L	1	12/20/08 5:38
Atrazine	ND		10	1.2	µg/L	1	12/20/08 5:38
Benzaldehyde	ND		10	0.37	µg/L	1	12/20/08 5:38
Benzo[a]anthracene	ND		10	0.081	µg/L	1	12/20/08 5:38
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 5:38
Benzo[b]fluoranthene	ND		10	0.51	µg/L	1	12/20/08 5:38
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 5:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416480 Project Supervisor: Anthony Crescenzi

622

LSL Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	PrepDate:	12/17/08 8:51
Sample Size:	990 mL	BatchNo:	8644/R15973
ColumnID:	DB-5MS	%Moisture:	
Revision:	12/29/08 9:43	FileID:	1-SAMP-K5367.D
Col Type:		TestCode:	8270W OLM42

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo(k)fluoranthene	ND		10	0.53	µg/L	1	12/20/08 5:38
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 5:38
bis(2-chloroethyl)ether	ND		10	0.040	µg/L	1	12/20/08 5:38
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 5:38
bis(2-Ethylhexyl)phthalate	ND		10	0.45	µg/L	1	12/20/08 5:38
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 5:38
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 5:38
Carbazole	ND		10	0.13	µg/L	1	12/20/08 5:38
Chrysene	ND		10	0.081	µg/L	1	12/20/08 5:38
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 5:38
Di-n-octyl phthalate	ND		10	0.18	µg/L	1	12/20/08 5:38
Dibenz[a,h]anthracene	ND		10	0.091	µg/L	1	12/20/08 5:38
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 5:38
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 5:38
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 5:38
Fluoranthene	ND		10	0.081	µg/L	1	12/20/08 5:38
Fluorene	ND		10	0.11	µg/L	1	12/20/08 5:38
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 5:38
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 5:38
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 5:38
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 5:38
Indeno[1,2,3-cd]pyrene	ND		10	0.091	µg/L	1	12/20/08 5:38
Isophorone	ND		10	0.12	µg/L	1	12/20/08 5:38
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 5:38
N-Nitrosodiphenylamine	ND		10	0.081	µg/L	1	12/20/08 5:38
Naphthalene	ND		10	0.081	µg/L	1	12/20/08 5:38
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 5:38
Pentachlorophenol	ND		51	5.1	µg/L	1	12/20/08 5:38
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 5:38
Phenol	ND		10	0.091	µg/L	1	12/20/08 5:38
Pyrene	ND		10	0.071	µg/L	1	12/20/08 5:38
Surr: 2,4,6-Tribromophenol	80		46-149	0	%REC	1	12/20/08 5:38
Surr: 2-Fluorobiphenyl	77		42-130	0	%REC	1	12/20/08 5:38
Surr: 2-Fluorophenol	76		26-130	0	%REC	1	12/20/08 5:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416480 Project Supervisor: Anthony Crescenzi

623

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-007B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*BD-1-121108*
W Order:	0812108	Collection Date:	12/11/08 0:00
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 990 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5367.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	78		42-130	0	%REC	1	12/20/08 5:38
Surr: Phenol-d5	79		21-134	0	%REC	1	12/20/08 5:38
Surr: Terphenyl-d14	80		24-147	0	%REC	1	12/20/08 5:38

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column (%D) or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416480 Project Supervisor: Anthony Crescenzi

Form 1 TIC CLIENT SAMPLE NO.
Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BD-1-121108

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-007B

Sample wt/vol: 990 (g/mL) mL Lab File ID: K5367.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.82	7.5	JB

FORM I TIC 9 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5367.D Vial: 89
Acq On : 20 Dec 2008 5:38 Operator: MEG
Sample : 0812108-007B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	131631	40.00 ug/mL	-0.02
13) Naphthalene-d8	12.45	136	513916	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	291480	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	497853	40.00 ug/mL	-0.02
58) Chrysene-d12	23.73	240	464718	40.00 ug/mL	-0.02
68) Perylene-d12	26.66	264	408350	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.75	112	500518	113.92 ug/mL	0.00
Spiked Amount 150.000			Recovery =	75.95%	
3) Phenol-d5	9.35	99	622713	118.68 ug/mL	-0.02
Spiked Amount 150.000			Recovery =	79.12%	
14) Nitrobenzene-d5	11.10	82	417136	77.55 ug/mL	-0.02
Spiked Amount 100.000			Recovery =	77.55%	
30) 2-Fluorobiphenyl	14.48	172	744433	77.29 ug/mL	0.00
Spiked Amount 100.000			Recovery =	77.29%	
46) 2,4,6-Tribromophenol	17.31	330	187822	119.87 ug/mL	-0.02
Spiked Amount 150.000			Recovery =	79.91%	
60) Terphenyl-d14	21.69	244	801205	80.27 ug/mL	0.00
Spiked Amount 100.000			Recovery =	80.27%	

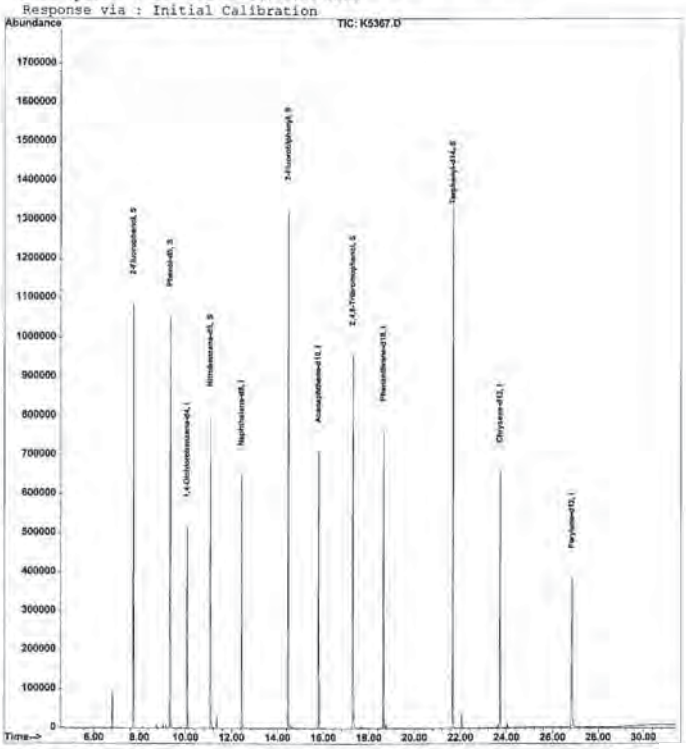
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5367.D KD19OL42.M Mon Dec 22 14:02:44 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5367.D Vial: 89
Acq On : 20 Dec 2008 5:38 Operator: MEG
Sample : 0812108-007B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5367.D KD19OL42.M Mon Dec 22 14:02:45 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5367.D Vial: 89
Acq On : 20 Dec 2008 5:38 Operator: MEG
Sample : 0812108-007B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	131631	40.00 ug/mL	-0.01
5) Naphthalene-d8	12.45	136	513681	40.00 ug/mL	-0.01
7) Acenaphthene-d10	15.80	164	291480	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.66	188	497853	40.00 ug/mL	-0.01
14) Chrysene-d12	23.73	240	464470	40.00 ug/mL	0.00
15) Perylene-d12	26.86	264	408650	40.00 ug/mL	-0.02

System Monitoring Compounds

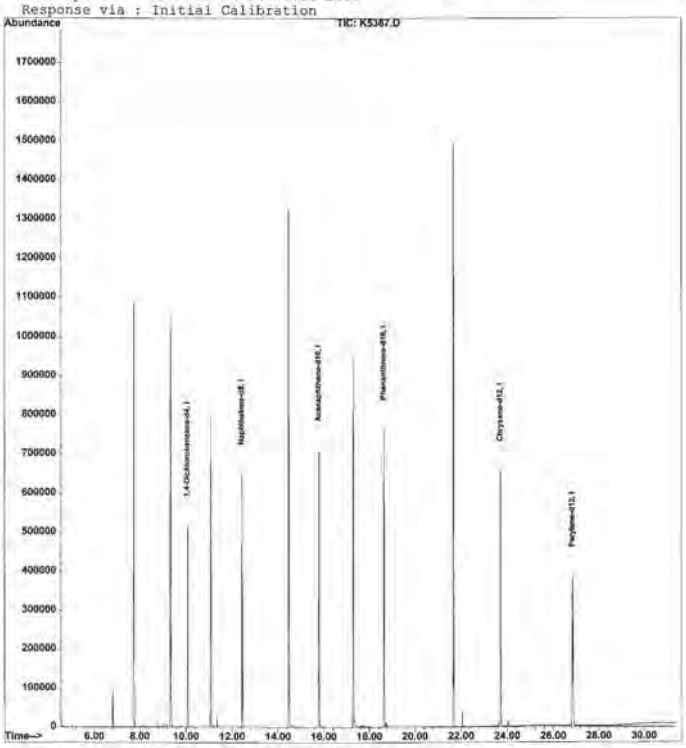
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5367.D KD19OLM.M Mon Dec 22 14:18:46 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5367.D Vial: 89
Acq On : 20 Dec 2008 5:38 Operator: MEG
Sample : 0812108-007B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5367.D KD19OLM.M Mon Dec 22 14:18:48 2008 Pa

Tentatively Identified Compound (LSC) summary

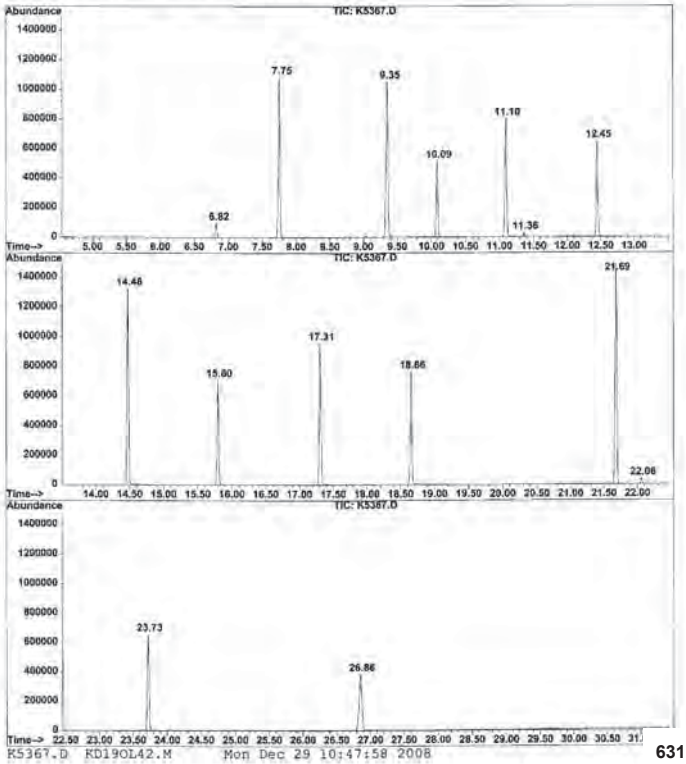
Operator ID: MEG Date Acquired: 20 Dec 2008 5:38
Data File: C:\HPCHEM\1\DATA\K5367.D
Name: 0812108-007B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
3-Hydroxy-3-methyl-2	6.82	7.4	ug/mL	157537	ISTD01	10.09	851818	40.0

K5367.D KD19OL42.M Mon Dec 29 10:47:58 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5367.D
Operator : MEG
Acquired : 20 Dec 2008 5:38 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-007B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 89
Quant File :KD19OL42.RES (RTE Integrator)



K5367.D KD19OL42.M Mon Dec 29 10:47:58 2008

Library Search Compound Report

```
Data File : C:\HPCHEM\1\DATA\K5367.D                    Vial: 89
Acq On    : 20 Dec 2008    5:38                       Operator: MEG
Sample    : 0812108-007B                              Inst     : #6MS40
Misc      : SAMP,8270W_OLM42,                         Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library      : C:\DATABASE\NBS75K.L
*************************************************************************
Peak Number  1  3-Hydroxy-3-methyl-2-butanone   Concentration Rank  1

 R.T.   EstConc          Area       Relative to ISTD          R.T.
-------------------------------------------------------------------------
 6.82    7.40 ug/mL      157537    1,4-Dichlorobenzene-d4      10.09

 Hit# of  5    Tentative ID                      MW  MolForm      CAS#        Qual
-------------------------------------------------------------------------
 1 3-Hydroxy-3-methyl-2-butanone             102 C5H10O2     000115-22-0 42
 2 Amylene Hydrate                            88 C5H12O      000075-85-4 40
 3 Propanoic acid, 2-hydroxy-2-methyl-       104 C4H8O3      000594-61-6 40
 4 1,2-Butanediol                             90 C4H10O2     000584-03-2 39
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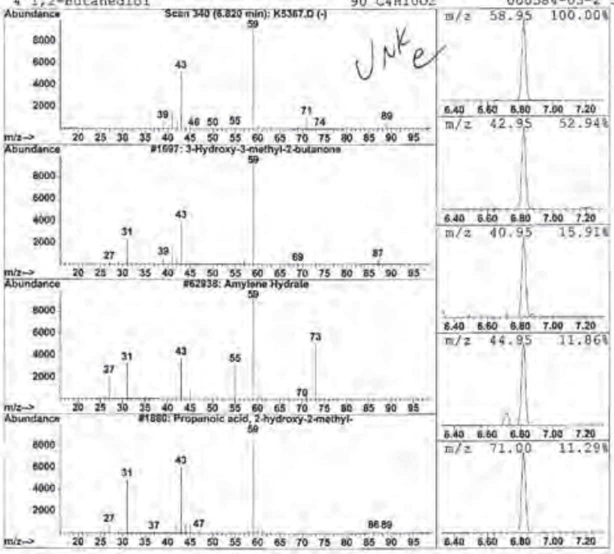

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0812108-008B
Project:	City of Geneva- Market Basket Site			Client Sample ID:	*MW-3R-121208*
W Order:	0812108			Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER			Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size:	970 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:		BatchNo:	8644/R15973
Revision:	12/29/08 9:43	TestCode:	8270W OLM42	FileID:	1-SAMP-K5368.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 6:17
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 6:17
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 6:17
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 6:17
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 6:17
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 6:17
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:17
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:17
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 6:17
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 6:17
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 6:17
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:17
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 6:17
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 6:17
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 6:17
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:17
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 6:17
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 6:17
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 6:17
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 6:17
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 6:17
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:17
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:17
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 6:17
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 6:17
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 6:17
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 6:17
Anthracene	ND		10	0.14	µg/L	1	12/20/08 6:17
Atrazine	ND		10	1.2	µg/L	1	12/20/08 6:17
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 6:17
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 6:17
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 6:17
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 6:17
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 6:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0812108-008B
Project:	City of Geneva- Market Basket Site			Client Sample ID:	*MW-3R-121208*
W Order:	0812108			Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER			Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size:	970 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:		BatchNo:	8644/R15973
Revision:	12/29/08 9:43	TestCode:	8270W OLM42	FileID:	1-SAMP-K5368.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 6:17
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 6:17
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 6:17
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 6:17
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 6:17
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 6:17
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 6:17
Carbazole	ND		10	0.13	µg/L	1	12/20/08 6:17
Chrysene	ND		10	0.082	µg/L	1	12/20/08 6:17
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 6:17
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 6:17
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 6:17
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 6:17
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 6:17
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 6:17
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 6:17
Fluorene	ND		10	0.11	µg/L	1	12/20/08 6:17
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 6:17
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 6:17
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 6:17
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 6:17
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 6:17
Isophorone	ND		10	0.12	µg/L	1	12/20/08 6:17
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 6:17
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 6:17
Naphthalene	ND		10	0.082	µg/L	1	12/20/08 6:17
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 6:17
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 6:17
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 6:17
Phenol	ND		10	0.093	µg/L	1	12/20/08 6:17
Pyrene	ND		10	0.072	µg/L	1	12/20/08 6:17
Surr: 2,4,6-Tribromophenol	79		46-149	0	%REC	1	12/20/08 6:17
Surr: 2-Fluorobiphenyl	81		42-130	0	%REC	1	12/20/08 6:17
Surr: 2-Fluorophenol	73		26-130	0	%REC	1	12/20/08 6:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
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Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.			Lab ID:	0812108-008B
Project:	City of Geneva- Market Basket Site			Client Sample ID:	*MW-3R-121208*
W Order:	0812108			Collection Date:	12/12/08 11:05
Matrix:	GROUNDWATER			Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size:	970 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:		BatchNo:	8644/R15973
Revision:	12/29/08 9:43	TestCode:	8270W OLM42	FileID:	1-SAMP-K5368.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	80		42-130	0	%REC	1	12/20/08 6:17
Surr: Phenol-d5	75		21-134	0	%REC	1	12/20/08 6:17
Surr: Terphenyl-d14	84		24-147	0	%REC	1	12/20/08 6:17

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Form 1 TIC

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-3R-121208

Lab Name: Life Science Laboratories, Inc. Contract:

Lab Code: LSLB Case No.: OBG-MS SAS No.: SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-008B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5368.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.82	8.5	JB

FORM I TIC 10 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5368.D Vial: 90
Acq On : 20 Dec 2008 6:17 Operator: MEG
Sample : 0812108-008B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:59 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	133071	40.00 ug/mL	-0.02
13) Naphthalene-d8	12.45	136	511608	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	285887	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	491871	40.00 ug/mL	-0.02
58) Chrysene-d12	23.72	240	470302	40.00 ug/mL	-0.03
68) Perylene-d12	26.86	264	411019	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.75	112	483859	108.94 ug/mL	0.00
Spiked Amount 150.000			Recovery = 72.63%		
3) Phenol-d5	9.35	99	598728	112.87 ug/mL	-0.02
Spiked Amount 150.000			Recovery = 75.25%		
14) Nitrobenzene-d5	11.10	82	429681	80.25 ug/mL	-0.02
Spiked Amount 100.000			Recovery = 80.25%		
30) 2-Fluorobiphenyl	14.48	172	763314	80.80 ug/mL	-0.02
Spiked Amount 100.000			Recovery = 80.80%		
46) 2,4,6-Tribromophenol	17.31	330	182520	118.77 ug/mL	-0.02
Spiked Amount 150.000			Recovery = 79.18%		
60) Terphenyl-d14	21.69	244	846928	83.85 ug/mL	0.00
Spiked Amount 100.000			Recovery = 83.85%		

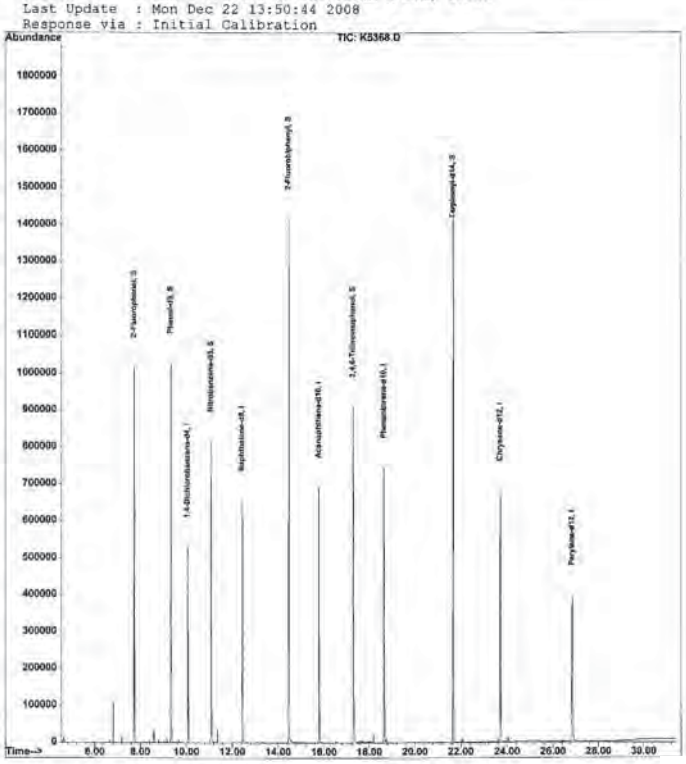
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5368.D KD19OL42.M Mon Dec 22 14:02:51 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5368.D Vial: 90
Acq On : 20 Dec 2008 6:17 Operator: MEG
Sample : 0812108-008B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:59 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5368.D KD19OL42.M Mon Dec 22 14:02:52 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5368.D Vial: 90
Acq On : 20 Dec 2008 6:17 Operator: MEG
Sample : 0812108-008B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	133071	40.00 ug/mL	-0.02
5) Naphthalene-d8	12.45	136	511608	40.00 ug/mL	-0.01
7) Acenaphthene-d10	15.80	164	285887	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.66	188	491871	40.00 ug/mL	-0.01
14) Chrysene-d12	23.72	240	470302	40.00 ug/mL	-0.01
15) Perylene-d12	26.86	264	411384	40.00 ug/mL	-0.02

System Monitoring Compounds

Target Compounds Qvalue

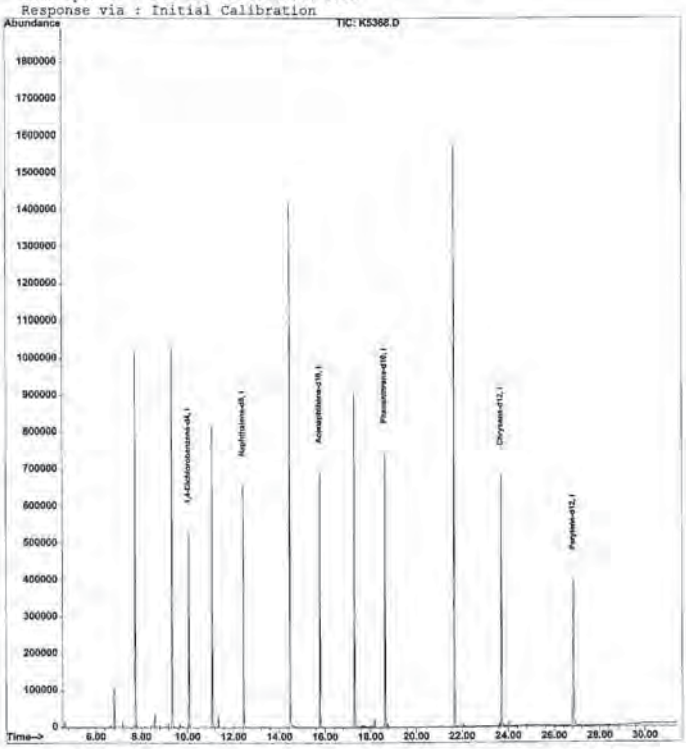
(#) = qualifier out of range (m) = manual integration
K5368.D KD19OLM.M Mon Dec 22 14:18:51 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5368.D
Acq On : 20 Dec 2008 6:17
Sample : 0812108-008B
Misc : SAMP,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008

Vial: 90
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5368.D KD19OLM.M Mon Dec 22 14:18:52 2008 Pa

640

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 20 Dec 2008 6:17
Data File: C:\HPCHEM\1\DATA\K5368.D
Name: 0812108-008B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

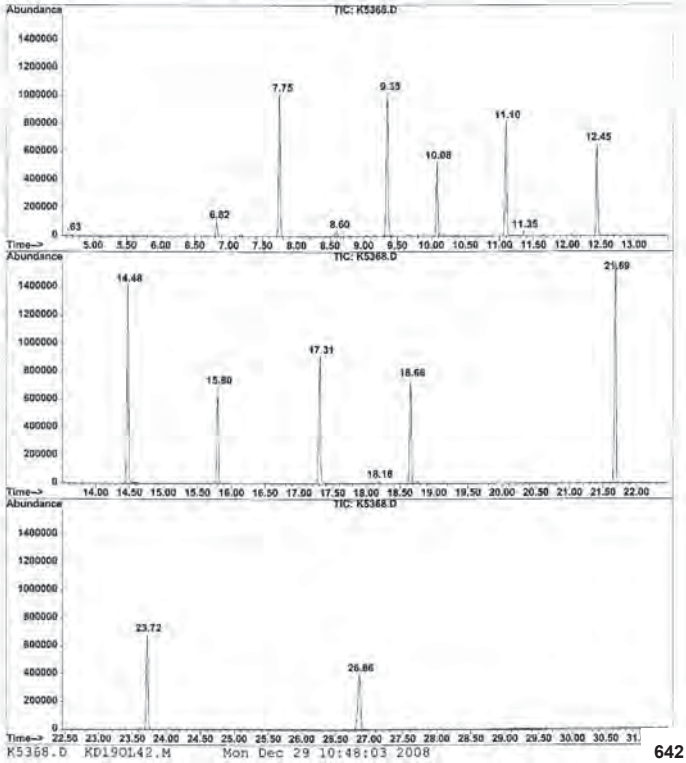
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.82	8.3	ug/mL	178175	ISTD01	10.08	863605	40.0

K5368.D KD19OL42.M Mon Dec 29 10:48:03 2008

641

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5368.D
Operator : MEG
Acquired : 20 Dec 2008 6:17 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-008B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 90
Quant File :KD19OL42.RES (RTE Integrator)



K5368.D KD19OL42.M Mon Dec 29 10:48:03 2008

642

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5368.D
Acq On : 20 Dec 2008 6:17
Sample : 0812108-008B
Misc : SAMP,8270W_OLM42,
MS Integration Params: LSCINT.P

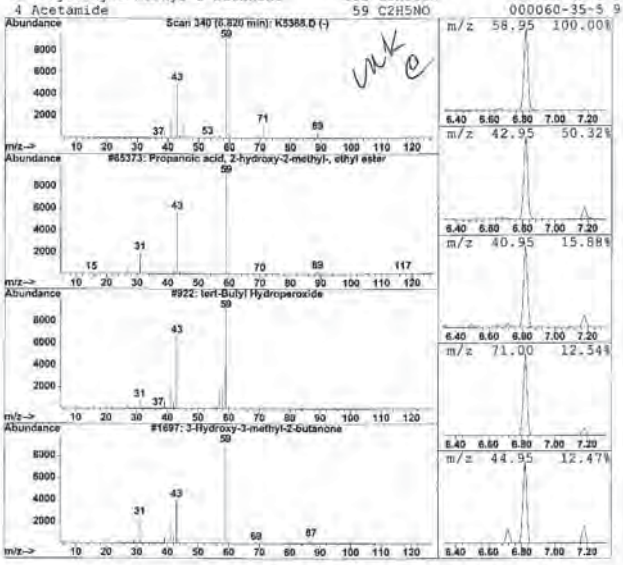
Vial: 90
Operator: MEG
Inst : #6MS40
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Propanoic acid, 2-hydroxy-2-me Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.82	8.25 ug/mL	178175	1,4-Dichlorobenzene-d4	10.08

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	38
2	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	36
3	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	36
4	Acetamide	59	C2H5NO	000060-35-5	9



m/z 58.95 100.00%
m/z 42.95 50.32%
m/z 40.95 15.88%
m/z 71.00 12.54%
m/z 44.95 12.47%

K5368.D KD19OL42.M Mon Dec 29 10:48:03 2008 Pa

643

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5369.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 6:56
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 6:56
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 6:56
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 6:56
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 6:56
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 6:56
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:56
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 6:56
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 6:56
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 6:56
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 6:56
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:56
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 6:56
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 6:56
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 6:56
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:56
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 6:56
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 6:56
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 6:56
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 6:56
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 6:56
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 6:56
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 6:56
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 6:56
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 6:56
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 6:56
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 6:56
Anthracene	ND		10	0.14	µg/L	1	12/20/08 6:56
Atrazine	ND		10	1.2	µg/L	1	12/20/08 6:56
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 6:56
Benzo(a)anthracene	ND		10	0.082	µg/L	1	12/20/08 6:56
Benzo(a)pyrene	ND		10	0.15	µg/L	1	12/20/08 6:56
Benzo(b)fluoranthene	ND		10	0.52	µg/L	1	12/20/08 6:56
Benzo(g,h,i)perylene	ND		10	0.10	µg/L	1	12/20/08 6:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416482 Project Supervisor: Anthony Crescenzi

644

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5369.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo(k)fluoranthene	ND		10	0.34	µg/L	1	12/20/08 6:56
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 6:56
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 6:56
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 6:56
bis(2-Ethylhexyl)phthalate	ND		10	0.46	µg/L	1	12/20/08 6:56
Butyl benzyl phthalate	ND		10	0.16	µg/L	1	12/20/08 6:56
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 6:56
Carbazole	ND		10	0.13	µg/L	1	12/20/08 6:56
Chrysene	ND		10	0.082	µg/L	1	12/20/08 6:56
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 6:56
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 6:56
Dibenz(a,h)anthracene	ND		10	0.093	µg/L	1	12/20/08 6:56
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 6:56
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 6:56
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 6:56
Fluoranthene	ND		10	0.062	µg/L	1	12/20/08 6:56
Fluorene	ND		10	0.11	µg/L	1	12/20/08 6:56
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 6:56
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 6:56
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 6:56
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 6:56
Indeno(1,2,3-cd)pyrene	ND		10	0.093	µg/L	1	12/20/08 6:56
Isophorone	ND		10	0.12	µg/L	1	12/20/08 6:56
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 6:56
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 6:56
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 6:56
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 6:56
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 6:56
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 6:56
Phenol	ND		10	0.093	µg/L	1	12/20/08 6:56
Pyrene	ND		10	0.072	µg/L	1	12/20/08 6:56
Surr: 2,4,6-Tribromophenol	84		46-149	0	%REC	1	12/20/08 6:56
Surr: 2-Fluorobiphenyl	82		42-130	0	%REC	1	12/20/08 6:56
Surr: 2-Fluorophenol	81		26-130	0	%REC	1	12/20/08 6:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416482 Project Supervisor: Anthony Crescenzi

645

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-009B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-9-121208*
W Order:	0812108	Collection Date:	12/12/08 11:55
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 970 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5369.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	84		42-130	0	%REC	1	12/20/08 6:56
Surr: Phenol-d5	85		21-134	0	%REC	1	12/20/08 6:56
Surr: Terphenyl-d14	87		24-147	0	%REC	1	12/20/08 6:56

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416482 Project Supervisor: Anthony Crescenzi

646

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-9-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-009B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5369.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 3 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000079-01-6	Trichloroethylene	4.65	4.3	JN
2.	unknown (6.83)	6.83	9.3	JB
3.	unknown (22.07)	22.07	4.8	J

FORM I TIC 11 SW8270C

647

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5369.D Vial: 91
Acq On : 20 Dec 2008 6:56 Operator: MEG
Sample : 0812108-009B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	154923	40.00 ug/mL	-0.02
13) Naphthalene-d8	12.45	136	607175	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	340377	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	577231	40.00 ug/mL	-0.01
58) Chrysene-d12	23.72	240	532315	40.00 ug/mL	-0.03
68) Perylene-d12	26.86	264	464157	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	624765	120.82 ug/mL	0.00
Spiked Amount 150.000			Recovery = 80.55%		
3) Phenol-d5	9.36	99	783306	126.84 ug/mL	0.00
Spiked Amount 150.000			Recovery = 84.56%		
14) Nitrobenzene-d5	11.10	82	535265	84.23 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 84.23%		
30) 2-Fluorobiphenyl	14.48	172	917847	81.61 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 81.61%		
46) 2,4,6-Tribromophenol	17.31	330	229637	125.51 ug/mL	-0.01
Spiked Amount 150.000			Recovery = 83.67%		
60) Terphenyl-d14	21.69	244	991594	86.73 ug/mL	0.00
Spiked Amount 100.000			Recovery = 86.73%		

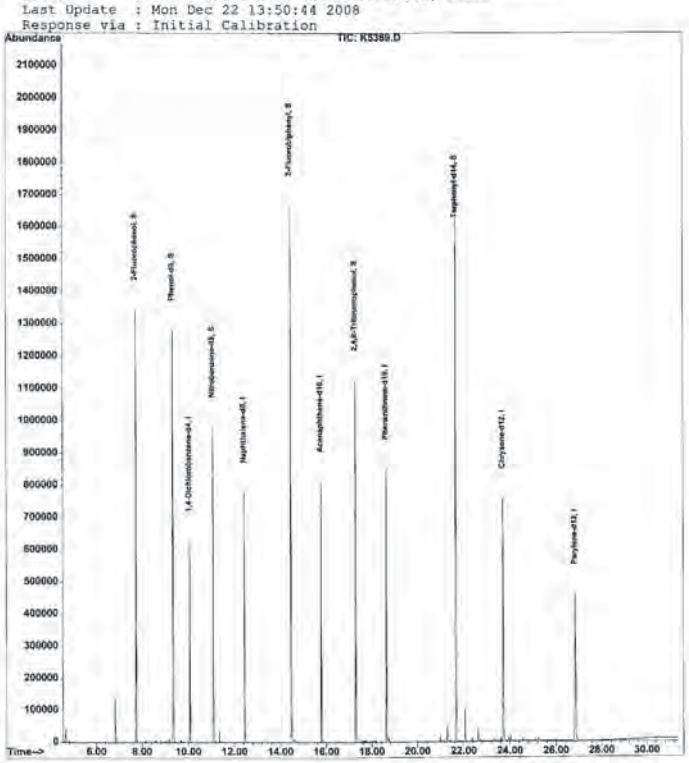
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5369.D KD19OL42.M Mon Dec 22 14:02:57 2008 Pa 648

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5369.D Vial: 91
Acq On : 20 Dec 2008 6:56 Operator: MEG
Sample : 0812108-009B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5369.D KD19OL42.M Mon Dec 22 14:02:58 2008 Pa 649

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5369.D Vial: 91
Acq On : 20 Dec 2008 6:56 Operator: MEG
Sample : 0812108-009B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	154923	40.00 ug/mL	-0.02
5) Naphthalene-d8	12.45	136	606850	40.00 ug/mL	-0.01
7) Acenaphthene-d10	15.80	164	340377	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.66	188	577231	40.00 ug/mL	-0.01
14) Chrysene-d12	23.72	240	531985	40.00 ug/mL	-0.01
15) Perylene-d12	26.86	264	464390	40.00 ug/mL	-0.02

System Monitoring Compounds

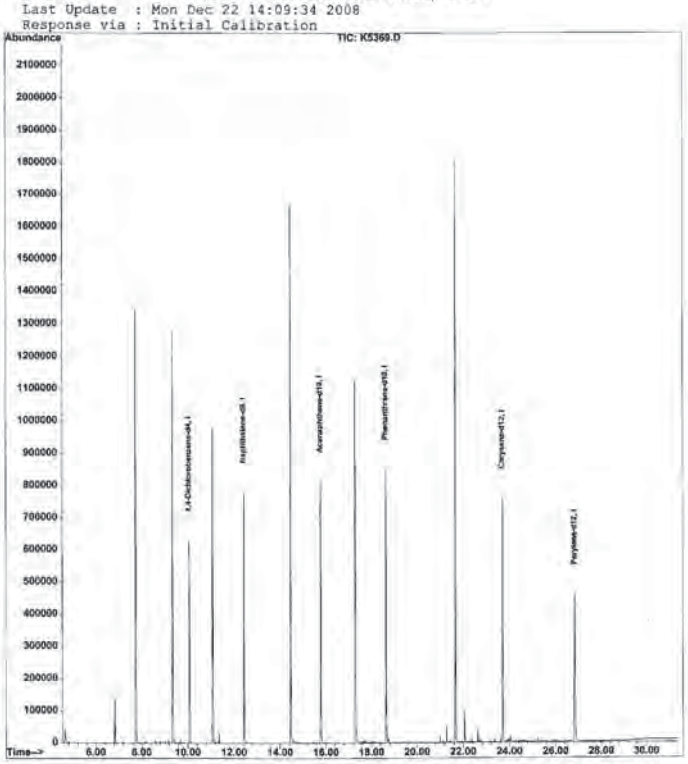
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5369.D KD19OLM.M Mon Dec 22 14:18:54 2008 Pa 650

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5369.D Vial: 91
Acq On : 20 Dec 2008 6:56 Operator: MEG
Sample : 0812108-009B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5369.D KD19OLM.M Mon Dec 22 14:18:55 2008 Pa 651

Tentatively Identified Compound (LSC) summary

Operator ID: MEG Date Acquired: 20 Dec 2008 6:56
Data File: C:\HPCHEM\1\DATA\K5369.D
Name: 0812108-009B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

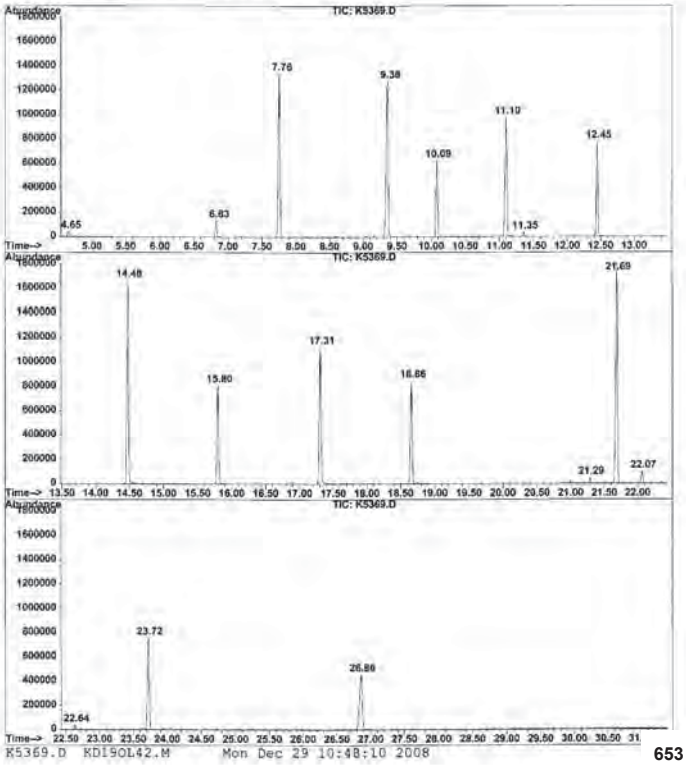
TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Trichloroethylene	4.65	4.2	ug/mL	104289	ISTD01	10.09	1002640	40.0
Propanoic acid, 2-hy	6.83	9.0	ug/mL	225204	ISTD01	10.09	1002640	40.0
1,3-Cyclopentanedion	22.07	4.7	ug/mL	161565	ISTD05	23.72	1374120	40.0

K5369.D KD19OL42.M Mon Dec 29 10:48:11 2008

652

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5369.D
Operator : MEG
Acquired : 20 Dec 2008 6:56 Using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-009B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 91
Quant File :KD19OL42.RES (RTE Integrator)



K5369.D KD19OL42.M Mon Dec 29 10:48:10 2008

653

Library Search Compound Report

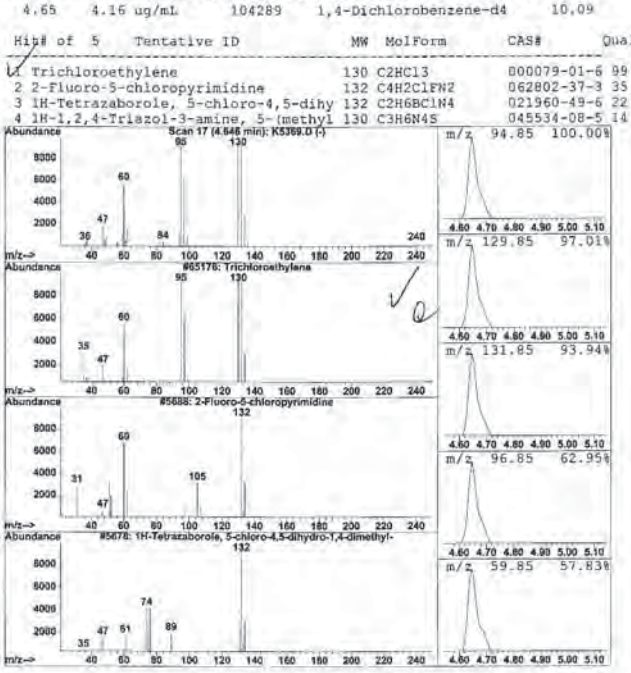
Data File : C:\HPCHEM\1\DATA\K5369.D Vial: 91
Acq On : 20 Dec 2008 6:56 Operator: MEG
Sample : 0812108-009B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Trichloroethylene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.65	4.16 ug/mL	104289	1,4-Dichlorobenzene-d4	10.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trichloroethylene	130	C2HCl3	000079-01-6	99
2	2-Fluoro-5-chloropyrimidine	132	C4H2ClFN2	062802-37-3	35
3	1H-Tetrazaborole, 5-chloro-4,5-dihy	132	C2H6BClN4	021960-49-6	22
4	1H-1,2,4-Triazol-3-amine, 5-(methyl	130	C3H6N4S	045534-08-5	14



K5369.D KD19OL42.M Mon Dec 29 10:48:10 2008 Pa

654

Library Search Compound Report

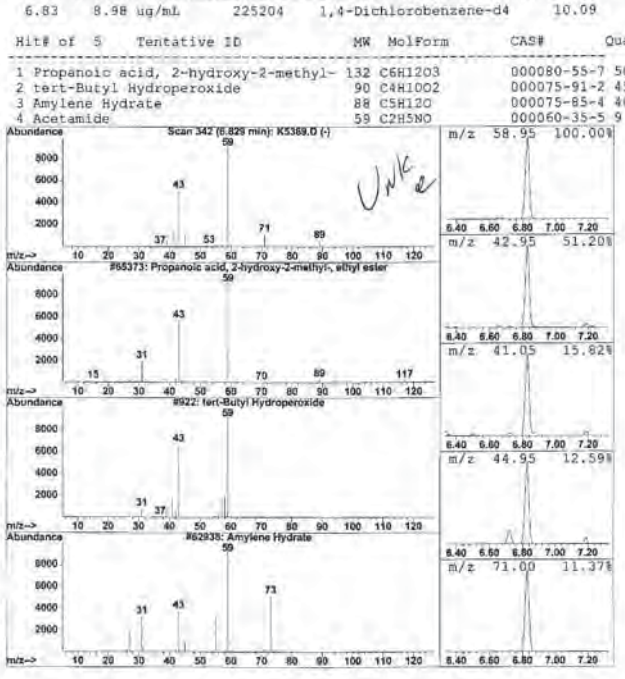
Data File : C:\HPCHEM\1\DATA\K5369.D Vial: 91
Acq On : 20 Dec 2008 6:56 Operator: MEG
Sample : 0812108-009B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 2 Propanoic acid, 2-hydroxy-2-me Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	8.98 ug/mL	225204	1,4-Dichlorobenzene-d4	10.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
2	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
3	Amylene Hydrate	88	C5H12O	000075-85-4	40
4	Acetamide	59	C2H5NO	000060-35-5	9



K5369.D KD19OL42.M Mon Dec 29 10:48:11 2008 Pa

655

Library Search Compound Report

```
Data File : C:\HPCHEM\1\DATA\K5369.D                    Vial: 91
Acq On    : 20 Dec 2008   6:56                       Operator: MEG
Sample    : 0812108-009B                             Inst    : #6MS40
Misc      : SAMP,8270W_OLM42,                        Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library      : C:\DATABASE\NBS75K.L
*************************************************************************
Peak Number  3  1,3-Cyclopentanedione, 2-ethyl  Concentration Rank  2

 R.T.   EstConc          Area      Relative to ISTD             R.T.
-------------------------------------------------------------------------
22.07    4.70 ug/mL      161565    Chrysene-d12                 23.72

Hit# of  5    Tentative ID                  MW  MolForm       CAS#      Qual
-------------------------------------------------------------------------
 1 1,3-Cyclopentanedione, 2-ethyl-2-me 140 C8H12O2       025112-87-2 30
 2 3-Pentyl-2-hydroxycyclopent-2-en-1- 168 C10H16O2      000000-00-0 22
 3 3H-Pyrazol-3-one, 2,4-dihydro-2,5-d 112 C5H8N2O       002749-59-9 18
 4 1-Aziridineacetic acid, 2-methyl-3- 185 C10H19NO2     055669-84-6 16
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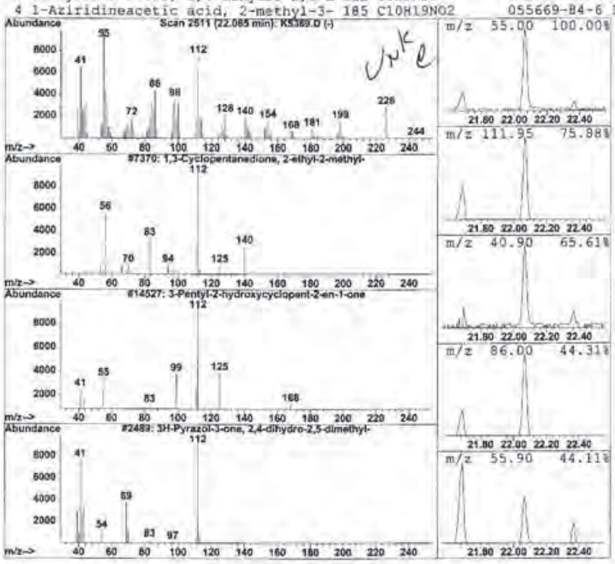


K5369.D KD19OL42.M Mon Dec 29 10:48:11 2008 Pag

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-010B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-5-121208*
W Order:	0812108	Collection Date:	12/12/08 12:40
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 970 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5370.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 7:35
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 7:35
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 7:35
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 7:35
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 7:35
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 7:35
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 7:35
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 7:35
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 7:35
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 7:35
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 7:35
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 7:35
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 7:35
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 7:35
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 7:35
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 7:35
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 7:35
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 7:35
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 7:35
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 7:35
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 7:35
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 7:35
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 7:35
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 7:35
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 7:35
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 7:35
Acetophenone	ND		10	0.38	µg/L	1	12/20/08 7:35
Anthracene	ND		10	0.14	µg/L	1	12/20/08 7:35
Atrazine	ND		10	1.2	µg/L	1	12/20/08 7:35
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 7:35
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 7:35
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 7:35
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 7:35
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 7:35

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416483 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
Analytical Results
StateCertNo: 10155
CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-010B
Project: City of Geneva- Market Basket Site Client Sample ID: MW-5-121208
W Order: 0812108 Collection Date: 12/12/08 12:40
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS06 40 Sample Size: 970 mL PrepDate: 12/17/08 8:51
ColumnID: DB-5MS %Moisture: BatchNo: 8644/R15973
Revision: 12/29/08 9:43 TestCode: 8270W OLM42 FileID: 1-SAMP-K5370.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 7:35
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 7:35
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 7:35
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 7:35
bis(2-Ethylhexyl)phthalate	ND		10	0.45	µg/L	1	12/20/08 7:35
Butyl benzyl phthalate	ND		10	0.18	µg/L	1	12/20/08 7:35
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 7:35
Carbazole	ND		10	0.13	µg/L	1	12/20/08 7:35
Chrysene	ND		10	0.082	µg/L	1	12/20/08 7:35
Di-n-butyl phthalate	ND		10	1.8	µg/L	1	12/20/08 7:35
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 7:35
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 7:35
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 7:35
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 7:35
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 7:35
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 7:35
Fluorene	ND		10	0.11	µg/L	1	12/20/08 7:35
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 7:35
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 7:35
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 7:35
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 7:35
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 7:35
Isophorone	ND		10	0.12	µg/L	1	12/20/08 7:35
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 7:35
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 7:35
Naphthalene	ND		10	0.082	µg/L	1	12/20/08 7:35
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 7:35
Pentachlorophenol	ND		52	5.7	µg/L	1	12/20/08 7:35
Phenanthrene	ND		10	0.10	µg/L	1	12/20/08 7:35
Phenol	ND		10	0.093	µg/L	1	12/20/08 7:35
Pyrene	ND		10	0.072	µg/L	1	12/20/08 7:35
Surr: 2,4,6-Tribromophenol	73		45-149	0	%REC	1	12/20/08 7:35
Surr: 2-Fluorobiphenyl	61		42-130	0	%REC	1	12/20/08 7:35
Surr: 2-Fluorophenol	78		26-130	0	%REC	1	12/20/08 7:35

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits
Print Date: 12/29/08 9:44 416483 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
Analytical Results
StateCertNo: 10155
CLIENT: O'Brien & Gere Engineers, Inc. Lab ID: 0812108-010B
Project: City of Geneva- Market Basket Site Client Sample ID: MW-5-121208
W Order: 0812108 Collection Date: 12/12/08 12:40
Matrix: GROUNDWATER Date Received: 12/12/08 17:42
Inst. ID: MS06 40 Sample Size: 970 mL PrepDate: 12/17/08 8:51
ColumnID: DB-5MS %Moisture: BatchNo: 8644/R15973
Revision: 12/29/08 9:43 TestCode: 8270W OLM42 FileID: 1-SAMP-K5370.D
Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	83		42-130	0	%REC	1	12/20/08 7:35
Surr: Phenol-d5	82		21-134	0	%REC	1	12/20/08 7:35
Surr: Terphenyl-d14	81		24-147	0	%REC	1	12/20/08 7:35

Qualifiers:
* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits
Print Date: 12/29/08 9:44 416483 Project Supervisor: Anthony Crescenzi

Form 1 TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-5-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-010B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5370.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	6.8	JB

FORM 1 TIC 12 SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5370.D Vial: 92
Acq On : 20 Dec 2008 7:35 Operator: MEG
Sample : 0812108-010B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:00 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	161622	40.00 ug/mL	-0.02
13) Naphthalene-d8	12.45	136	641308	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	358352	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	611566	40.00 ug/mL	-0.01
58) Chrysene-d12	23.73	240	572761	40.00 ug/mL	-0.02
68) Perylene-d12	26.87	264	508241	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	627942	116.40 ug/mL	0.00
Spiked Amount 150.000			Recovery =	77.60%	
3) Phenol-d5	9.36	99	790308	122.67 ug/mL	0.00
Spiked Amount 150.000			Recovery =	81.78%	
14) Nitrobenzene-d5	11.10	82	554906	82.67 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	82.67%	
30) 2-Fluorobiphenyl	14.48	172	956144	80.75 ug/mL	0.00
Spiked Amount 100.000			Recovery =	80.75%	
46) 2,4,6-Tribromophenol	17.31	330	210465	109.26 ug/mL	-0.01
Spiked Amount 150.000			Recovery =	72.84%	
60) Terphenyl-d14	21.69	244	1000597	81.34 ug/mL	0.00
Spiked Amount 100.000			Recovery =	81.34%	

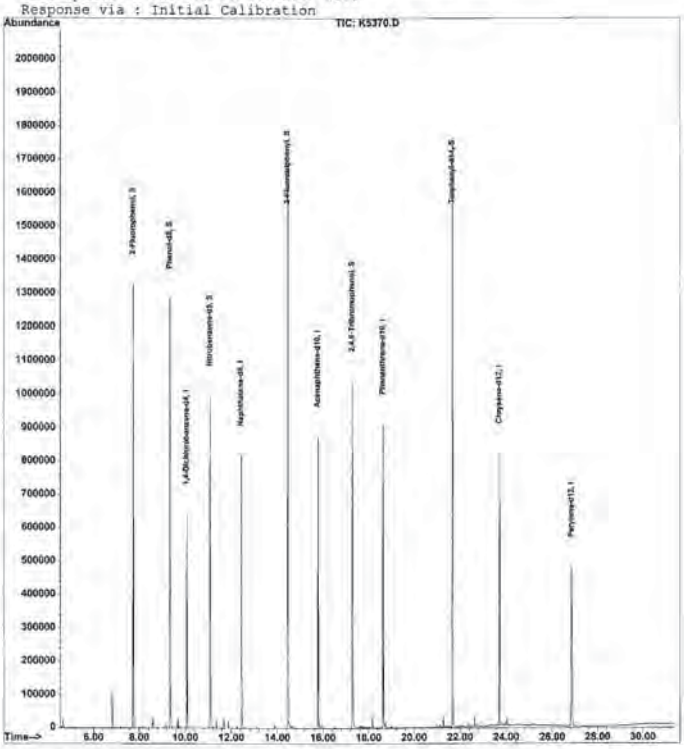
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5370.D KD19OL42.M Mon Dec 22 14:03:04 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5370.D Vial: 92
Acq On : 20 Dec 2008 7:35 Operator: MEG
Sample : 0812108-010B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:00 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5370.D KD19OL42.M Mon Dec 22 14:03:05 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5370.D Vial: 92
Acq On : 20 Dec 2008 7:35 Operator: MEG
Sample : 0812108-010B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	161622	40.00 ug/mL	-0.02
5) Naphthalene-d8	12.45	136	641308	40.00 ug/mL	-0.01
7) Acenaphthene-d10	15.80	164	358352	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.66	188	611566	40.00 ug/mL	-0.01
14) Chrysene-d12	23.73	240	572597	40.00 ug/mL	0.00
15) Perylene-d12	26.87	264	508555	40.00 ug/mL	-0.01

System Monitoring Compounds

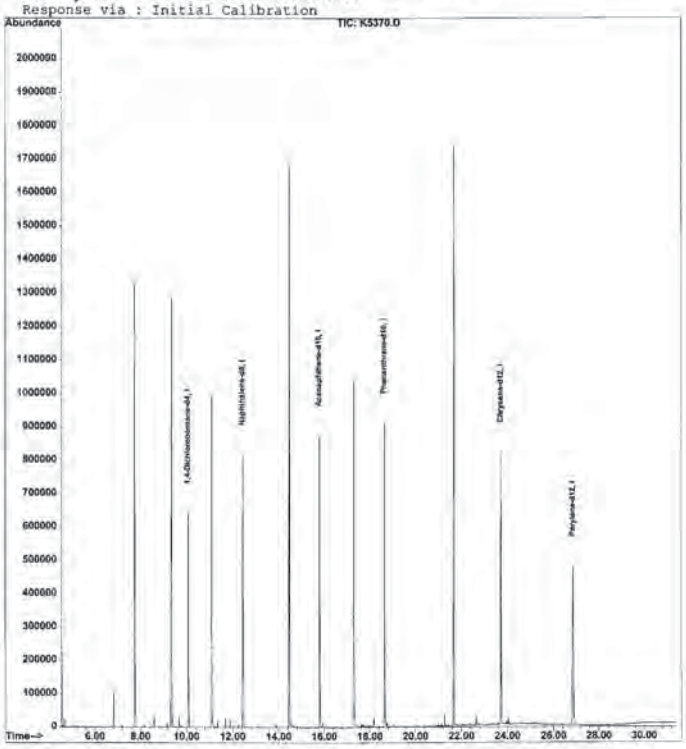
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5370.D KD19OLM.M Mon Dec 22 14:18:57 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5370.D Vial: 92
Acq On : 20 Dec 2008 7:35 Operator: MEG
Sample : 0812108-010B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5370.D KD19OLM.M Mon Dec 22 14:18:57 2008 Pa

Tentatively Identified Compound (LSC) summary

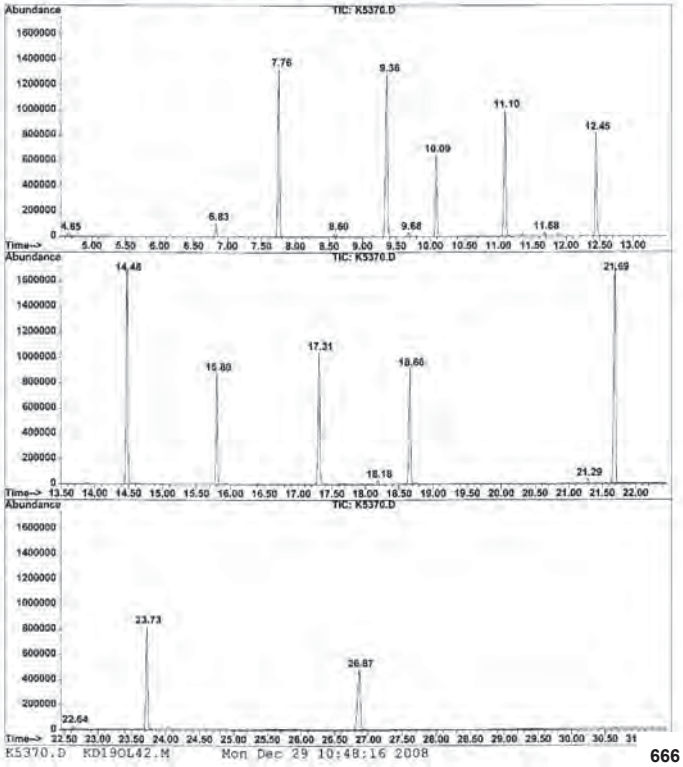
Operator ID: MEG Date Acquired: 20 Dec 2008 7:35
Data File: C:\HPCHEM\1\DATA\K5370.D
Name: 0812108-010B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.83	6.6	ug/mL	174441	ISTD01	10.09	1055120	40.0

K5370.D KD19OL42.M Mon Dec 29 10:48:17 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5370.D
Operator : MEG
Acquired : 20 Dec 2008 7:35 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-010B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 92
Quant File :KD19OL42.RES (RTE Integrator)



K5370.D KD19OL42.M Mon Dec 29 10:48:16 2008

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\K5370.D Vial: 92
Acq On : 20 Dec 2008 7:35 Operator: MEG
Sample : 0812108-010B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

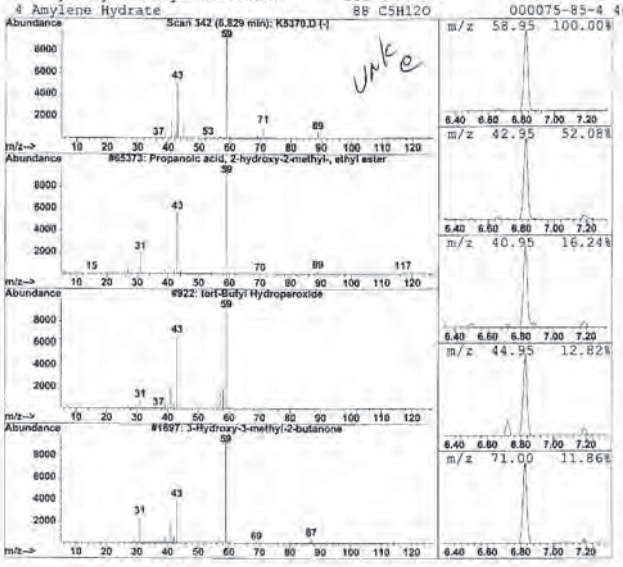
Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Propanoic acid, 2-hydroxy-2-me Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	6.61 ug/mL	174441	1,4-Dichlorobenzene-d4	10.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
2	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
3	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	42
4	Amylene Hydrate	88	C5H12O	000075-85-4	40



K5370.D KD19OL42.M Mon Dec 29 10:48:17 2008 Pag

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 970 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5371.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		10	0.39	µg/L	1	12/20/08 8:13
2,4,5-Trichlorophenol	ND		52	0.14	µg/L	1	12/20/08 8:13
2,4,6-Trichlorophenol	ND		10	1.2	µg/L	1	12/20/08 8:13
2,4-Dichlorophenol	ND		10	0.082	µg/L	1	12/20/08 8:13
2,4-Dimethylphenol	ND		10	2.1	µg/L	1	12/20/08 8:13
2,4-Dinitrophenol	ND		52	10	µg/L	1	12/20/08 8:13
2,4-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 8:13
2,6-Dinitrotoluene	ND		10	0.41	µg/L	1	12/20/08 8:13
2-Chloronaphthalene	ND		10	0.11	µg/L	1	12/20/08 8:13
2-Chlorophenol	ND		10	0.12	µg/L	1	12/20/08 8:13
2-Methylnaphthalene	ND		10	0.052	µg/L	1	12/20/08 8:13
2-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 8:13
2-Nitroaniline	ND		52	0.41	µg/L	1	12/20/08 8:13
2-Nitrophenol	ND		10	0.072	µg/L	1	12/20/08 8:13
3,3'-Dichlorobenzidine	ND		21	1.2	µg/L	1	12/20/08 8:13
3-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 8:13
4,6-Dinitro-2-methylphenol	ND		10	2.1	µg/L	1	12/20/08 8:13
4-Bromophenyl phenyl ether	ND		10	0.15	µg/L	1	12/20/08 8:13
4-Chloro-3-methylphenol	ND		10	0.082	µg/L	1	12/20/08 8:13
4-Chloroaniline	ND		10	0.10	µg/L	1	12/20/08 8:13
4-Chlorophenyl phenyl ether	ND		10	0.12	µg/L	1	12/20/08 8:13
4-Methylphenol	ND		10	1.2	µg/L	1	12/20/08 8:13
4-Nitroaniline	ND		52	1.2	µg/L	1	12/20/08 8:13
4-Nitrophenol	ND		52	2.1	µg/L	1	12/20/08 8:13
Acenaphthene	ND		10	0.082	µg/L	1	12/20/08 8:13
Acenaphthylene	ND		10	0.10	µg/L	1	12/20/08 8:13
Acetophenone	ND		10	0.39	µg/L	1	12/20/08 8:13
Anthracene	ND		10	0.14	µg/L	1	12/20/08 8:13
Atrazine	ND		10	1.2	µg/L	1	12/20/08 8:13
Benzaldehyde	ND		10	0.38	µg/L	1	12/20/08 8:13
Benzo[a]anthracene	ND		10	0.082	µg/L	1	12/20/08 8:13
Benzo[a]pyrene	ND		10	0.15	µg/L	1	12/20/08 8:13
Benzo[b]fluoranthene	ND		10	0.52	µg/L	1	12/20/08 8:13
Benzo[g,h,i]perylene	ND		10	0.10	µg/L	1	12/20/08 8:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416484 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 970 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5371.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		10	0.34	µg/L	1	12/20/08 8:13
bis(2-Chloroethoxy)methane	ND		10	0.10	µg/L	1	12/20/08 8:13
bis(2-chloroethyl)ether	ND		10	0.041	µg/L	1	12/20/08 8:13
bis(2-chloroisopropyl)ether	ND		10	1.2	µg/L	1	12/20/08 8:13
bis(2-Ethylhexyl)phthalate	ND		10	0.48	µg/L	1	12/20/08 8:13
Butyl benzyl phthalate	ND		10	0.18	µg/L	1	12/20/08 8:13
Caprolactam	ND		10	1.2	µg/L	1	12/20/08 8:13
Carbazole	ND		10	0.13	µg/L	1	12/20/08 8:13
Chrysene	ND		10	0.082	µg/L	1	12/20/08 8:13
Di-n-butyl phthalate	ND		10	1.6	µg/L	1	12/20/08 8:13
Di-n-octyl phthalate	ND		10	0.19	µg/L	1	12/20/08 8:13
Dibenz[a,h]anthracene	ND		10	0.093	µg/L	1	12/20/08 8:13
Dibenzofuran	ND		10	0.14	µg/L	1	12/20/08 8:13
Diethyl phthalate	ND		10	0.13	µg/L	1	12/20/08 8:13
Dimethyl phthalate	ND		10	0.10	µg/L	1	12/20/08 8:13
Fluoranthene	ND		10	0.082	µg/L	1	12/20/08 8:13
Fluorene	ND		10	0.11	µg/L	1	12/20/08 8:13
Hexachlorobenzene	ND		10	0.11	µg/L	1	12/20/08 8:13
Hexachlorobutadiene	ND		10	1.2	µg/L	1	12/20/08 8:13
Hexachlorocyclopentadiene	ND		10	10	µg/L	1	12/20/08 8:13
Hexachloroethane	ND		10	1.2	µg/L	1	12/20/08 8:13
Indeno[1,2,3-cd]pyrene	ND		10	0.093	µg/L	1	12/20/08 8:13
Isophorone	ND		10	0.12	µg/L	1	12/20/08 8:13
N-Nitroso-di-n-propylamine	ND		10	0.15	µg/L	1	12/20/08 8:13
N-Nitrosodiphenylamine	ND		10	0.082	µg/L	1	12/20/08 8:13
Naphthalene	ND		10	0.062	µg/L	1	12/20/08 8:13
Nitrobenzene	ND		10	0.12	µg/L	1	12/20/08 8:13
Pentachlorophenol	ND		52	5.2	µg/L	1	12/20/08 8:13
Phenanthrene	ND		10	0.19	µg/L	1	12/20/08 8:13
Phenol	ND		10	0.093	µg/L	1	12/20/08 8:13
Pyrene	ND		10	0.072	µg/L	1	12/20/08 8:13
Surr: 2,4,6-Tribromophenol	76		46-149	0	%REC	1	12/20/08 8:13
Surr: 2-Fluorobiphenyl	82		42-130	0	%REC	1	12/20/08 8:13
Surr: 2-Fluorophenol	78		26-130	0	%REC	1	12/20/08 8:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
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Print Date: 12/29/08 9:44 416484 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-011B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-6-121208*
W Order:	0812108	Collection Date:	12/12/08 13:45
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40 Sample Size: 970 mL	PrepDate:	12/17/08 8:51
ColumnID:	DB-5MS %Moisture:	BatchNo:	8644/R15973
Revision:	12/29/08 9:43 TestCode: 8270W OLM42	FileID:	1-SAMP-K5371.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	84		42-120	0	%REC	1	12/20/08 8:13
Surr: Phenol-d5	83		21-134	0	%REC	1	12/20/08 8:13
Surr: Terphenyl-d14	84		24-147	0	%REC	1	12/20/08 8:13

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416484 Project Supervisor: Anthony Crescenzi

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-6-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-011B

Sample wt/vol: 970 (g/mL) mL Lab File ID: K5371.D

Level: LOW Date Received: 12/12/2008

% Moisture: Not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.83	8.8	JB

FORM I TIC (1) SW8270C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5371.D Vial: 93
Acq On : 20 Dec 2008 8:13 Operator: MEG
Sample : 0812108-011B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:00 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	155666	40.00 ug/mL	-0.02
13) Naphthalene-d8	12.45	136	607691	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	346299	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.65	188	583661	40.00 ug/mL	-0.02
58) Chrysene-d12	23.72	240	534156	40.00 ug/mL	-0.03
68) Perylene-d12	26.86	264	456107	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.75	112	609170	117.25 ug/mL	0.00
Spiked Amount 150.000			Recovery = 78.17%		
3) Phenol-d5	9.36	99	772979	124.57 ug/mL	0.00
Spiked Amount 150.000			Recovery = 83.05%		
14) Nitrobenzene-d5	11.10	82	535822	84.25 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 84.25%		
30) 2-Fluorobiphenyl	14.48	172	933413	81.57 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 81.57%		
46) 2,4,6-Tribromophenol	17.31	330	212970	114.41 ug/mL	-0.02
Spiked Amount 150.000			Recovery = 76.27%		
60) Terphenyl-d14	21.69	244	963558	83.99 ug/mL	0.00
Spiked Amount 100.000			Recovery = 83.99%		

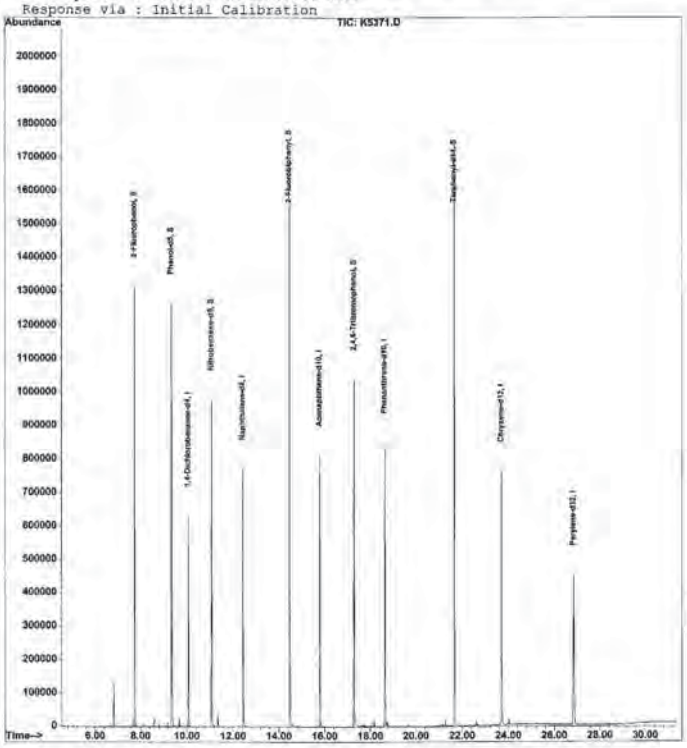
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5371.D KD19OL42.M Mon Dec 22 14:03:11 2008 Pa 672

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5371.D Vial: 93
Acq On : 20 Dec 2008 9:13 Operator: MEG
Sample : 0812108-011B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:00 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5371.D KD19OL42.M Mon Dec 22 14:03:12 2008 Pa 673

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5371.D Vial: 93
Acq On : 20 Dec 2008 8:13 Operator: MEG
Sample : 0812108-011B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	155666	40.00 ug/mL	-0.02
5) Naphthalene-d8	12.45	136	606986	40.00 ug/mL	-0.01
7) Acenaphthene-d10	15.80	164	346299	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.65	188	583661	40.00 ug/mL	-0.02
14) Chrysene-d12	23.72	240	533978	40.00 ug/mL	-0.01
15) Perylene-d12	26.86	264	456107	40.00 ug/mL	-0.02
System Monitoring Compounds					

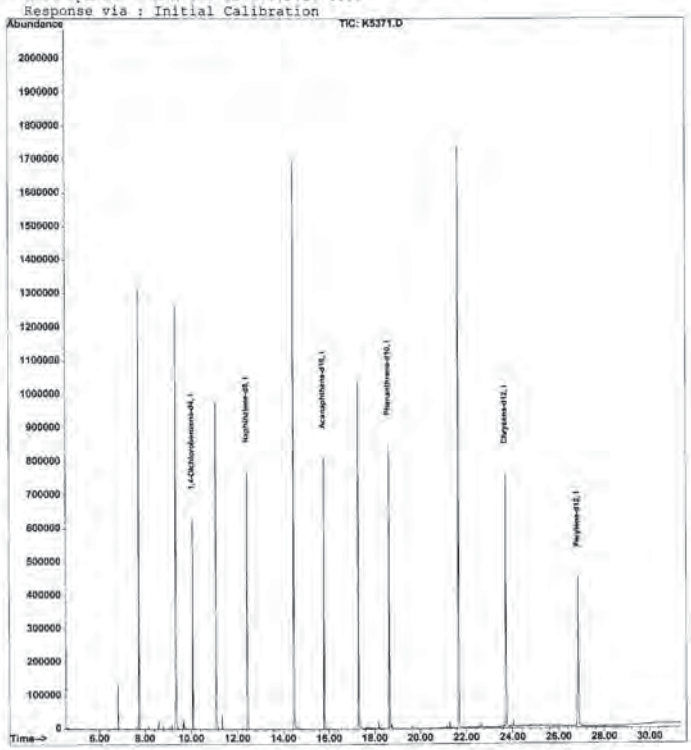
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5371.D KD19OLM.M Mon Dec 22 14:18:59 2008 Pa 674

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5371.D Vial: 93
Acq On : 20 Dec 2008 8:13 Operator: MEG
Sample : 0812108-011B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5371.D KD19OLM.M Mon Dec 22 14:19:00 2008 Pa 675

Tentatively Identified Compound (LSC) summary

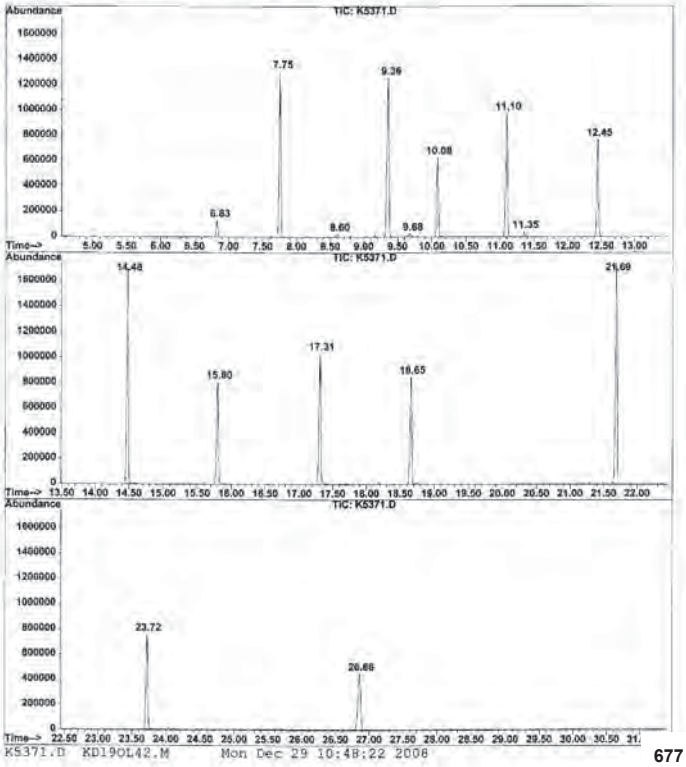
Operator ID: MEG Date Acquired: 20 Dec 2008 8:13
Data File: C:\HPCHEM\1\DATA\K5371.D
Name: 0812108-011B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.83	8.6	ug/mL	215275	ISTD01	10.09	1007030	40.0

K5371.D KD190L42.M Mon Dec 29 10:48:23 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5371.D
Operator : MEG
Acquired : 20 Dec 2008 8:13 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-011B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 93
Quant File :KD190L42.RES (RTE Integrator)



Library Search Compound Report

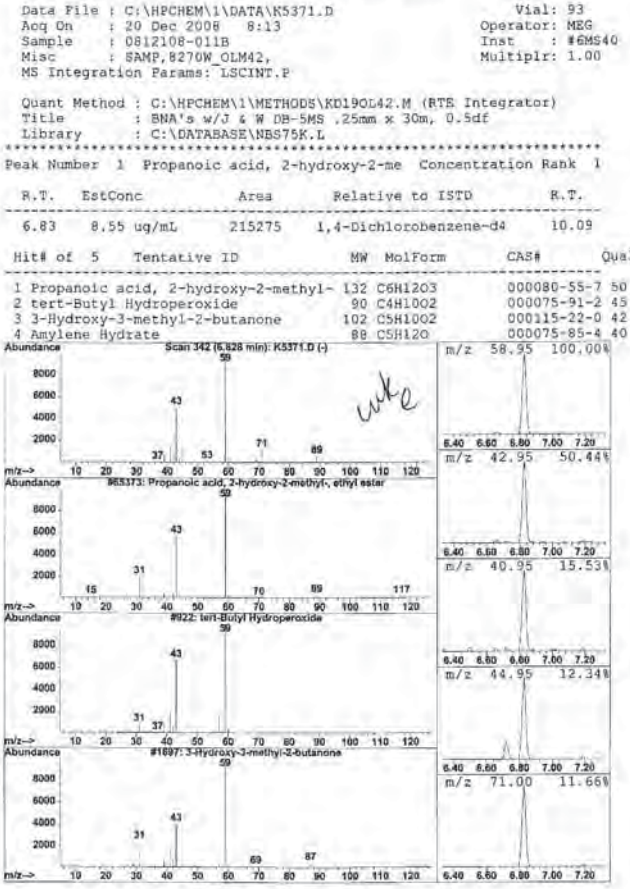
Data File : C:\HPCHEM\1\DATA\K5371.D Vial: 93
Acq On : 20 Dec 2008 8:13 Operator: MEG
Sample : 0812108-011B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Propanoic acid, 2-hydroxy-2-me Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	8.55 ug/mL	215275	1,4-Dichlorobenzene-d4	10.09

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
2	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
3	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	42
4	Amylene Hydrate	88	C5H12O	000075-85-4	40



K5371.D KD190L42.M Mon Dec 29 10:48:23 2008 Pag

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R13973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5372.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
1,1'-Biphenyl	ND		11	0.40	µg/L	1	12/20/08 8:52
2,4,5-Trichlorophenol	ND		53	0.15	µg/L	1	12/20/08 8:52
2,4,6-Trichlorophenol	ND		11	1.3	µg/L	1	12/20/08 8:52
2,4-Dichlorophenol	ND		11	0.084	µg/L	1	12/20/08 8:52
2,4-Dimethylphenol	ND		11	2.1	µg/L	1	12/20/08 8:52
2,4-Dinitrophenol	ND		53	11	µg/L	1	12/20/08 8:52
2,4-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 8:52
2,6-Dinitrotoluene	ND		11	0.42	µg/L	1	12/20/08 8:52
2-Chloronaphthalene	ND		11	0.12	µg/L	1	12/20/08 8:52
2-Chlorophenol	ND		11	0.43	µg/L	1	12/20/08 8:52
2-Methylnaphthalene	ND		11	0.053	µg/L	1	12/20/08 8:52
2-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 8:52
2-Nitroaniline	ND		53	0.42	µg/L	1	12/20/08 8:52
2-Nitrophenol	ND		11	0.074	µg/L	1	12/20/08 8:52
3,3'-Dichlorobenzidine	ND		21	1.3	µg/L	1	12/20/08 8:52
3-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 8:52
4,6-Dinitro-2-methylphenol	ND		11	2.1	µg/L	1	12/20/08 8:52
4-Bromophenyl phenyl ether	ND		11	0.16	µg/L	1	12/20/08 8:52
4-Chloro-3-methylphenol	ND		11	0.084	µg/L	1	12/20/08 8:52
4-Chloroaniline	ND		11	0.11	µg/L	1	12/20/08 8:52
4-Chlorophenyl phenyl ether	ND		11	0.13	µg/L	1	12/20/08 8:52
4-Methylphenol	ND		11	1.3	µg/L	1	12/20/08 8:52
4-Nitroaniline	ND		53	1.3	µg/L	1	12/20/08 8:52
4-Nitrophenol	ND		53	2.1	µg/L	1	12/20/08 8:52
Acenaphthene	ND		11	0.084	µg/L	1	12/20/08 8:52
Acenaphthylene	ND		11	0.11	µg/L	1	12/20/08 8:52
Acetophenone	ND		11	0.39	µg/L	1	12/20/08 8:52
Anthracene	ND		11	0.15	µg/L	1	12/20/08 8:52
Atrazine	ND		11	1.3	µg/L	1	12/20/08 8:52
Benzaldehyde	ND		11	0.39	µg/L	1	12/20/08 8:52
Benzo(a)anthracene	ND		11	0.084	µg/L	1	12/20/08 8:52
Benzo(a)pyrene	ND		11	0.16	µg/L	1	12/20/08 8:52
Benzo(b)fluoranthene	ND		11	0.53	µg/L	1	12/20/08 8:52
Benzo(g,h,i)perylene	ND		11	0.11	µg/L	1	12/20/08 8:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value exceeds the instrument calibration range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below the PQL
- ND Not Detected at the Practical Quantitation Limit (PQL)
- P Prim./Conf. column %D or RPD exceeds limit
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416485 Project Supervisor: Anthony Crescenzi

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5372.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Benzo[k]fluoranthene	ND		11	0.55	µg/L	1	12/20/08 8:52
bis(2-Chloroethoxy)methane	ND		11	0.11	µg/L	1	12/20/08 8:52
bis(2-chloroethyl)ether	ND		11	0.042	µg/L	1	12/20/08 8:52
bis(2-chloroisopropyl)ether	ND		11	1.3	µg/L	1	12/20/08 8:52
bis(2-Ethylhexyl)phthalate	ND		11	0.47	µg/L	1	12/20/08 8:52
Butyl benzyl phthalate	ND		11	0.17	µg/L	1	12/20/08 8:52
Caprolactam	ND		11	1.3	µg/L	1	12/20/08 8:52
Carbazole	ND		11	0.14	µg/L	1	12/20/08 8:52
Chrysene	ND		11	0.084	µg/L	1	12/20/08 8:52
Di-n-butyl phthalate	ND		11	1.7	µg/L	1	12/20/08 8:52
Di-n-octyl phthalate	ND		11	0.19	µg/L	1	12/20/08 8:52
Dibenz[a,h]anthracene	ND		11	0.095	µg/L	1	12/20/08 8:52
Dibenzofuran	ND		11	0.15	µg/L	1	12/20/08 8:52
Diethyl phthalate	ND		11	0.14	µg/L	1	12/20/08 8:52
Dimethyl phthalate	ND		11	0.11	µg/L	1	12/20/08 8:52
Fluoranthene	ND		11	0.063	µg/L	1	12/20/08 8:52
Fluorene	ND		11	0.12	µg/L	1	12/20/08 8:52
Hexachlorobenzene	ND		11	0.12	µg/L	1	12/20/08 8:52
Hexachlorobutadiene	ND		11	1.3	µg/L	1	12/20/08 8:52
Hexachlorocyclopentadiene	ND		11	11	µg/L	1	12/20/08 8:52
Hexachloroethane	ND		11	1.3	µg/L	1	12/20/08 8:52
Indeno[1,2,3-cd]pyrene	ND		11	0.095	µg/L	1	12/20/08 8:52
Isophorone	ND		11	0.13	µg/L	1	12/20/08 8:52
N-Nitroso-di-n-propylamine	ND		11	0.16	µg/L	1	12/20/08 8:52
N-Nitrosodiphenylamine	ND		11	0.084	µg/L	1	12/20/08 8:52
Naphthalene	ND		11	0.063	µg/L	1	12/20/08 8:52
Nitrobenzene	ND		11	0.13	µg/L	1	12/20/08 8:52
Pentachlorophenol	ND		53	5.3	µg/L	1	12/20/08 8:52
Phenanthrene	ND		11	0.11	µg/L	1	12/20/08 8:52
Phenol	ND		11	0.095	µg/L	1	12/20/08 8:52
Pyrene	ND		11	0.074	µg/L	1	12/20/08 8:52
Surr: 2,4,6-Tribromophenol	73		46-149	0	%REC	1	12/20/08 8:52
Surr: 2-Fluorobiphenyl	83		42-130	0	%REC	1	12/20/08 8:52
Surr: 2-Fluorophenol	76		28-130	0	%REC	1	12/20/08 8:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416485 Project Supervisor: Anthony Crescenzi

680

Life Science Laboratories, Inc. — **Analytical Results**

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200 StateCertNo: 10155

CLIENT:	O'Brien & Gere Engineers, Inc.	Lab ID:	0812108-012B
Project:	City of Geneva- Market Basket Site	Client Sample ID:	*MW-7-121208*
W Order:	0812108	Collection Date:	12/12/08 15:50
Matrix:	GROUNDWATER	Date Received:	12/12/08 17:42
Inst. ID:	MS06 40	Sample Size: 950 mL	PrepDate: 12/17/08 8:51
ColumnID:	DB-5MS	%Moisture:	BatchNo: 8644/R15973
Revision:	12/29/08 9:43	TestCode: 8270W OLM42	FileID: 1-SAMP-K5372.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8270C		(SW3520C)
Surr: Nitrobenzene-d5	85		42-130	0	%REC	1	12/20/08 8:52
Surr: Phenol-d5	80		21-134	0	%REC	1	12/20/08 8:52
Surr: Terphenyl-d14	85		24-147	0	%REC	1	12/20/08 8:52

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 12/29/08 9:44 416485 Project Supervisor: Anthony Crescenzi

681

Form 1 TIC — CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MW-7-121208

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: 0812108-012B

Sample wt/vol: 950 (g/mL) mL Lab File ID: K5372.D

Level: LOW Date Received: 12/12/2008

% Moisture: not dec. Date Analyzed: 12/20/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (µl)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	6.4	JB

FORM I TIC 14 SW8270C

682

Quantitation Report (QT/LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\K5372.D Vial: 94
Acq On : 20 Dec 2008 8:52 Operator: MEG
Sample : 0812108-012B Inst : #BMS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 30 10:30 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	158369	40.00 ug/mL	-0.02
13) Naphthalene-d8	12.45	136	610454	40.00 ug/mL	-0.02
26) Acenaphthene-d10	15.80	164	341109	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.66	188	570796	40.00 ug/mL	-0.02
58) Chrysene-d12	23.73	240	525103	40.00 ug/mL	-0.02
68) Perylene-d12	26.86	264	453562	40.00 ug/mL	-0.03
System Monitoring Compounds					
2) 2-Fluorophenol	7.75	112	605143	114.48 ug/mL	0.00
Spiked Amount 150.000			Recovery =	76.32%	
3) Phenol-d5	9.36	99	756568	119.84 ug/mL	0.00
Spiked Amount 150.000			Recovery =	79.89%	
14) Nitrobenzene-d5	11.10	82	540005	84.52 ug/mL	-0.02
Spiked Amount 100.000			Recovery =	84.52%	
30) 2-Fluorobiphenyl	14.48	172	930405	82.55 ug/mL	0.00
Spiked Amount 100.000			Recovery =	82.55%	
46) 2,4,6-Tribromophenol	17.31	330	201226	109.74 ug/mL	-0.02
Spiked Amount 150.000			Recovery =	73.16%	
60) Terphenyl-d14	21.69	244	956023	84.77 ug/mL	0.00
Spiked Amount 100.000			Recovery =	84.77%	

Target Compounds Qvalue

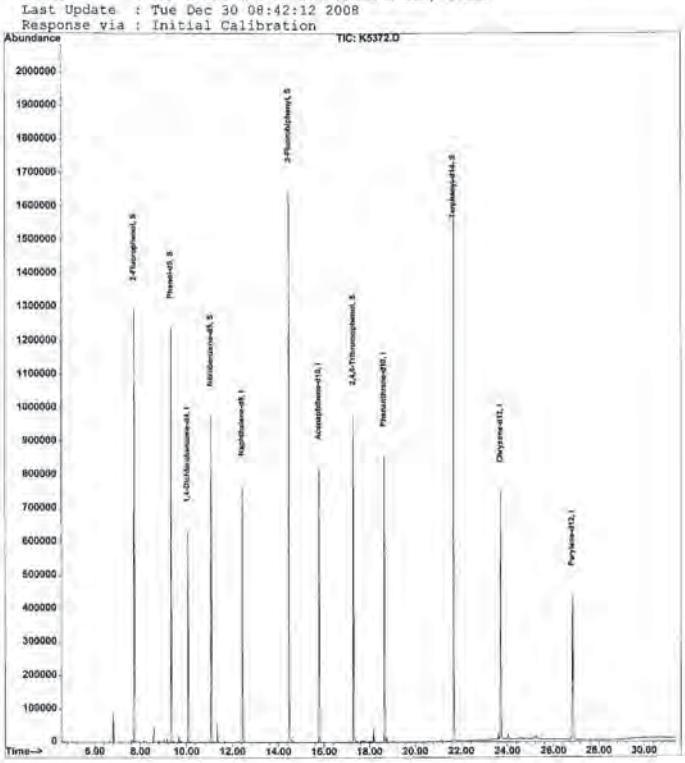
(#) = qualifier out of range (m) = manual integration
K5372.D KD19OL42.M Tue Dec 30 10:30:49 2008 Pa

683

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5372.D Vial: 94
Acq On : 20 Dec 2008 8:52 Operator: MEG
Sample : 0812108-012B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 30 10:30 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Tue Dec 30 08:42:12 2008
Response via : Initial Calibration



K5372.D KD19OL42.M Tue Dec 30 10:30:50 2008 Pa 684

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5372.D Vial: 94
Acq On : 20 Dec 2008 8:52 Operator: MEG
Sample : 0812108-012B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	158369	40.00 ug/mL	-0.02
5) Naphthalene-d8	12.45	136	610454	40.00 ug/mL	-0.01
7) Acenaphthene-d10	15.80	164	341556	40.00 ug/mL	-0.01
11) Phenanthrene-d10	18.66	188	570796	40.00 ug/mL	-0.01
14) Chrysene-d12	23.73	240	524742	40.00 ug/mL	0.00
15) Perylene-d12	26.86	264	453562	40.00 ug/mL	-0.02

System Monitoring Compounds

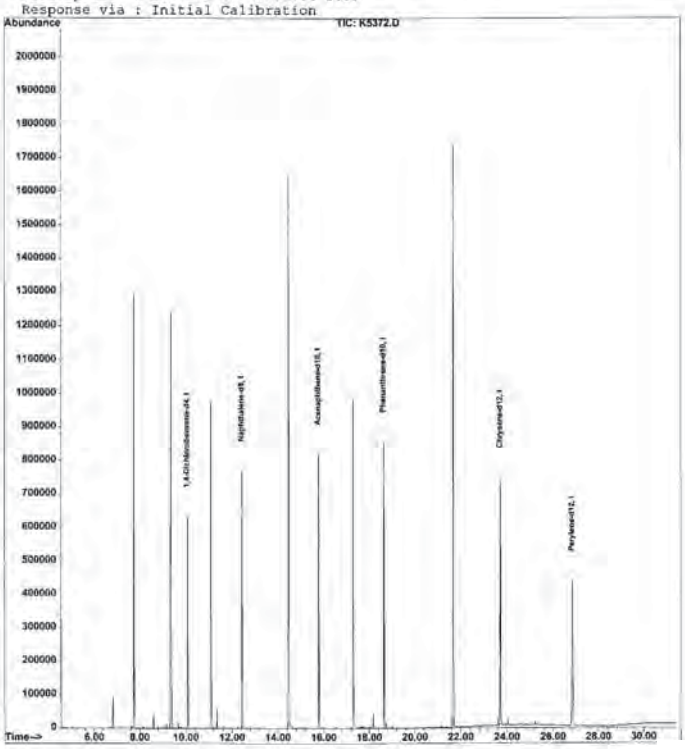
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
K5372.D KD19OLM.M Mon Dec 22 14:19:02 2008 Pa 685

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5372.D Vial: 94
Acq On : 20 Dec 2008 8:52 Operator: MEG
Sample : 0812108-012B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:10 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5372.D KD19OLM.M Mon Dec 22 14:19:03 2008 Pa 686

Tentatively Identified Compound (LSC) summary

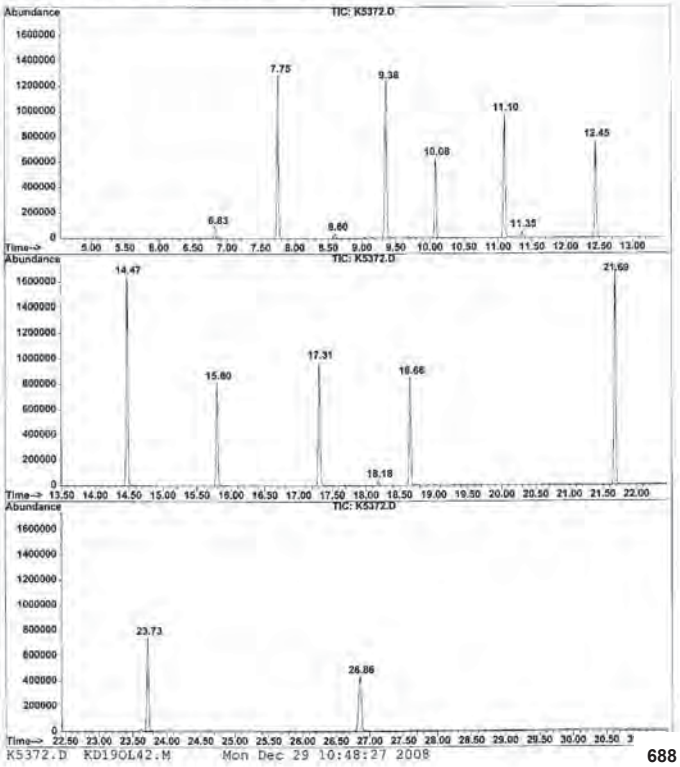
Operator ID: MEG Date Acquired: 20 Dec 2008 8:52
Data File: C:\HPCHEM\1\DATA\K5372.D
Name: 0812108-012B
Misc: SAMP,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.83	6.1 ug/mL	156492	ISTD01	10.08	1027090	40.0

K5372.D KD19OL42.M Mon Dec 29 10:48:27 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5372.D
Operator : MEG
Acquired : 20 Dec 2008 8:52 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: 0812108-012B
Misc Info : SAMP,8270W_OLM42,
Vial Number: 94
Quant File :KD19OL42.RES (RTE Integrator)



K5372.D KD19OL42.M Mon Dec 29 10:48:27 2008

Library Search Compound Report

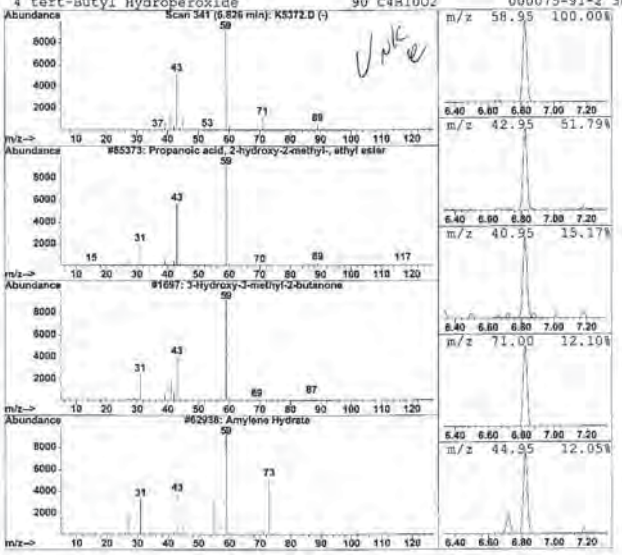
Data File : C:\HPCHEM\1\DATA\K5372.D Vial: 94
Acq On : 20 Dec 2008 8:52 Operator: MEG
Sample : 0812108-012B Inst : #6MS40
Misc : SAMP,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Propanoic acid, 2-hydroxy-2-me Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	6.09 ug/mL	156492	1,4-Dichlorobenzene-d4	10.08

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
2	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	45
3	Amylene Hydrate	88	C5H12O	000075-85-4	40
4	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	38



K5372.D KD19OL42.M Mon Dec 29 10:48:27 2008

Standards Data

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator) / 1460
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:06:08 2008
Response via : Initial Calibration

Calibration Files
160 =K5334.D 120 =K5335.D 80 =K5336.D
60 =K5337.D 50 =K5338.D 40 =K5339.D

		Compound	160	120	80	60	50	40	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	T	1,4-Dioxane	0.694	0.533	0.466	0.522	0.531	0.528	0.545	11.20
3)	T	N-nitrosodimethylam	0.748	0.661	0.661	0.642	0.660	0.650	0.659	5.42
4)	T	Pyridine	1.309	1.181	1.187	1.166	1.175	1.184	1.184	4.13
5)	S	2-Fluorophenol	1.331	1.319	1.337	1.337	1.338	1.352	1.335	1.41
6)	S	Phenol-d5	1.575	1.564	1.601	1.597	1.598	1.610	1.594	1.12
7)	MC	Phenol	1.592	1.601	1.639	1.652	1.665	1.685	1.655	2.40
8)	T	Aniline	1.871	1.890	1.909	1.927	1.716	1.956	1.895	3.80
9)	T	bis(2-Chloroethyl)e	1.230	1.239	1.270	1.290	1.305	1.342	1.306	4.07
10)	S	2-Chlorophenol-d4							0.000#	-1.00
11)	M	2-Chlorophenol	1.417	1.440	1.466	1.471	1.483	1.506	1.471	1.88
12)	T	1,3-Dichlorobenzene	1.525	1.552	1.559	1.572	1.599	1.621	1.592	2.62
13)	MC	1,4-Dichlorobenzene	1.486	1.532	1.545	1.565	1.560	1.590	1.572	3.03
14)	T	Benzyl alcohol	0.911	0.911	0.925	0.927	0.934	0.950	0.930	1.44
15)	S	1,2-Dichlorobenzene							0.000#	-1.00
16)	T	1,2-Dichlorobenzene	1.346	1.382	1.412	1.408	1.415	1.446	1.427	3.47
)	T	2-Methylphenol	1.158	1.195	1.214	1.229	1.220	1.276	1.234	3.43
18)	T	2,2'-oxybis(1-chlor	1.669	1.703	1.737	1.760	1.779	1.806	1.788	4.64
19)	T	bis(2-Chloroisoprop	1.669	1.703	1.737	1.760	1.779	1.806	1.788	4.64
20)	T	(3+4)-Methylphenol	1.304	1.328	1.338	1.352	1.344	1.371	1.348	1.87
21)	T	4-Methylphenol	1.304	1.328	1.338	1.352	1.344	1.371	1.348	1.87
22)	MP	N-Nitroso-di-n-prop	1.005	1.035	1.054	1.051	1.049	1.067	1.051	2.01
23)	T	Hexachloroethane	0.633	0.658	0.677	0.689	0.694	0.707	0.684	3.56
24)	I	Naphthalene-d8	ISTD							
25)	S	Nitrobenzene-d5	0.404	0.416	0.418	0.420	0.418	0.426	0.419	1.76
26)	T	Nitrobenzene	0.399	0.408	0.416	0.420	0.423	0.427	0.419	2.54
27)	T	Isophorone	0.714	0.719	0.723	0.720	0.721	0.733	0.721	0.86
28)	TC	2-Nitrophenol	0.226	0.235	0.237	0.237	0.239	0.241	0.234	3.34
29)	T	2,4-Dimethylphenol	0.383	0.411	0.421	0.426	0.363	0.433	0.411	5.63
30)	T	Benzoic acid	0.265	0.239	0.228	0.205	0.197	0.178	0.205	22.22
31)	T	bis(2-Chloroethoxy)	0.404	0.418	0.423	0.426	0.424	0.438	0.429	3.21
32)	TC	2,4-Dichlorophenol	0.329	0.338	0.343	0.344	0.346	0.352	0.341	2.53
33)	M	1,2,4-Trichlorobenz	0.351	0.369	0.379	0.383	0.383	0.394	0.382	3.94
34)	T	Naphthalene	0.985	1.007	1.021	1.030	1.028	1.059	1.040	3.33
35)	T	4-Chloroaniline	0.440	0.457	0.461	0.468	0.452	0.476	0.465	2.85
36)	TC	Hexachlorobutadiene	0.211	0.225	0.231	0.234	0.233	0.240	0.232	4.20
37)	MC	4-Chloro-3-methylph	0.369	0.384	0.390	0.391	0.389	0.405	0.387	3.06
38)	T	2-Methylnaphthalene	0.697	0.715	0.722	0.726	0.730	0.746	0.730	2.41
39)	I	Acenaphthene-d10	ISTD							
‘0)	T	1,2,4,5-Tetrachloro							0.000#	-1.00
,)	TP	Hexachlorocyclopent	0.338	0.382	0.387	0.372	0.360	0.351	0.346	12.20

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19FULL.M Mon Dec 22 10:09:19 2008

Mark Lowe 12/22/08

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:06:08 2008
Response via : Initial Calibration

Calibration Files
160 =K5334.D 120 =K5335.D 80 =K5336.D
60 =K5337.D 50 =K5338.D 40 =K5339.D

		Compound	160	120	80	60	50	40	Avg	%RSD
42)	TC	2,4,6-Trichlorophen	0.403	0.419	0.424	0.428	0.423	0.426	0.416	3.49
43)	T	2,4,5-Trichlorophen	0.416	0.437	0.450	0.451	0.451	0.455	0.446	3.15
44)	S	2-Fluorobiphenyl	1.176	1.251	1.284	1.324	1.322	1.351	1.322	5.68
45)	T	2-Chloronaphthalene	1.056	1.113	1.141	1.156	1.159	1.173	1.156	4.21
46)	T	2-Nitroaniline	0.418	0.434	0.441	0.442	0.440	0.453	0.436	3.28
47)	T	Dimethyl phthalate	1.363	1.432	1.462	1.474	1.476	1.507	1.477	3.68
48)	T	2,6-Dinitrotoluene	0.358	0.379	0.381	0.387	0.381	0.393	0.379	3.06
49)	T	Acenaphthylene	1.628	1.722	1.750	1.776	1.753	1.795	1.768	3.76
50)	T	3-Nitroaniline	0.365	0.383	0.386	0.386	0.385	0.393	0.382	2.65
51)	TCM	Acenaphthene	0.943	0.983	1.006	1.042	1.035	1.054	1.040	5.30
52)	TP	2,4-Dinitrophenol	0.241	0.243	0.233	0.209	0.204	0.186	0.209	16.13
53)	MP	4-Nitrophenol	0.266	0.279	0.276	0.274	0.265	0.265	0.267	4.16
54)	M	2,4-Dinitrotoluene	0.481	0.510	0.521	0.522	0.519	0.527	0.511	3.33
55)	T	Dibenzofuran	1.488	1.587	1.627	1.661	1.652	1.714	1.669	5.69
56)	T	Diethyl phthalate	1.391	1.491	1.518	1.550	1.536	1.589	1.536	4.24
57)	T	4-Chlorophenyl phen	0.595	0.650	0.677	0.697	0.692	0.716	0.691	6.56
58)	T	Fluorene	1.125	1.203	1.232	1.256	1.251	1.283	1.263	5.69
[illegible])	T	4-Nitroaniline	0.358	0.380	0.385	0.389	0.384	0.388	0.380	2.67
60)	T	1,2-Diphenylhydrazi	1.267	1.342	1.369	1.391	1.390	1.443	1.407	5.40
61)	S	2,4,6-Tribromopheno	0.200	0.217	0.224	0.228	0.225	0.228	0.215	7.35
62)	I	Phenanthrene-d10	----------ISTD----------							
63)	T	4,6-Dinitro-2-methy	0.206	0.210	0.209	0.202	0.206	0.196	0.193	12.92
64)	TC	n-Nitrosodiphenylam	0.516	0.536	0.553	0.555	0.558	0.567	0.560	4.37
65)	T	4-Bromophenyl pheny	0.215	0.222	0.228	0.231	0.233	0.236	0.232	4.02
66)	T	Hexachlorobenzene	0.239	0.252	0.266	0.270	0.272	0.277	0.271	6.43
67)	MC	Pentachlorophenol	0.153	0.152	0.152	0.140	0.140	0.131	0.140	10.96
68)	T	Phenanthrene	0.982	1.031	1.065	1.074	1.092	1.116	1.096	6.06
69)	T	Anthracene	0.980	1.026	1.069	1.084	1.096	1.132	1.106	6.93
70)	T	Carbazole	0.933	0.957	0.988	0.989	0.996	1.012	1.001	4.08
71)	T	Di-n-butyl phthalat	1.369	1.432	1.471	1.466	1.488	1.527	1.485	3.95
72)	TC	Fluoranthene	1.063	1.121	1.156	1.162	1.186	1.209	1.183	5.48
73)	I	Chrysene-d12	----------ISTD----------							
74)	T	Benzidine	0.463	0.588	0.593	0.622	0.249	0.614	0.518	25.70
75)	M	Pyrene	1.291	1.307	1.327	1.334	1.347	1.364	1.350	2.89
76)	S	Terphenyl-d14	0.806	0.824	0.847	0.855	0.864	0.877	0.859	3.39
77)	T	Butyl benzyl phthal	0.745	0.754	0.763	0.765	0.768	0.772	0.761	1.55
78)	T	3,3'-Dichlorobenzid	0.473	0.471	0.473	0.461	0.490	0.450	0.476	4.50
79)	T	Benzo[a]anthracene	1.106	1.114	1.126	1.136	1.129	1.154	1.141	2.11
80)	T	bis(2-Ethylhexyl)ph	0.949	0.968	0.979	0.998	0.995	1.010	0.994	2.64
81)	T	Chrysene	1.023	1.040	1.064	1.066	1.066	1.072	1.072	2.78
[illegible])	TC	Di-n-octyl phthalat	1.802	1.838	1.839	1.832	1.830	1.848	1.809	3.06
[illegible])	T	Indeno[1,2,3-cd]pyr	1.110	1.148	1.176	1.157	1.177	1.173	1.136	4.39

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19FULL.M Mon Dec 22 10:09:24 2008 Pa

692

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:06:08 2008
Response via : Initial Calibration

Calibration Files
160 =K5334.D 120 =K5335.D 80 =K5336.D
60 =K5337.D 50 =K5338.D 40 =K5339.D

		Compound	160	120	80	60	50	40	Avg	%RSD
84)	I	Perylene-d12	----------ISTD----------							
85)	T	Benzo[b]fluoranthen	1.430	1.314	1.259	1.258	1.258	1.268	1.289	4.33
86)	T	Benzo[k]fluoranthen	0.932	1.111	1.200	1.216	1.216	1.249	1.190	9.09
87)	TC	Benzo[a]pyrene	1.146	1.187	1.194	1.183	1.167	1.189	1.181	1.58
88)	T	Dibenz[a,h]anthrace	0.989	1.028	1.056	1.053	1.077	1.078	1.043	3.80
89)	T	Benzo[g,h,i]perylen	1.019	1.066	1.088	1.080	1.087	1.090	1.065	3.16

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19FULL.M Mon Dec 22 10:09:24 2008 Pa

693

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator) /1460
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:12:03 2008
Response via : Initial Calibration

Calibration Files
20 =K5340.D 10 =K5341.D 5.0 =K5342.D
1.0 =K5343.D = =

		Compound	20	10	5.0	1.0	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------					
2)	T	1,4-Dioxane	0.546	0.531	0.552			
3)	T	N-nitrosodimethylam	0.641	0.643	0.623			
4)	T	Pyridine	1.161	1.155	1.142			
5)	S	2-Fluorophenol	1.361	1.345	1.296			
6)	S	Phenol-d5	1.607	1.618	1.580			
7)	MC	Phenol	1.683	1.715	1.661			
8)	T	Aniline	1.913	1.925	1.947			
9)	T	bis(2-Chloroethyl)e	1.347	1.358	1.377			
10)	S	2-Chlorophenol-d4						
11)	M	2-Chlorophenol	1.481	1.482	1.496			
12)	T	1,3-Dichlorobenzene	1.627	1.633	1.643			
13)	MC	1,4-Dichlorobenzene	1.611	1.633	1.624			
14)	T	Benzyl alcohol	0.942	0.933	0.940			
15)	S	1,2-Dichlorobenzene						
[illegible])	T	1,2-Dichlorobenzene	1.447	1.479	1.510			
[illegible])	T	2-Methylphenol	1.268	1.276	1.276			
18)	T	2,2'-oxybis(1-chlor	1.822	1.904	1.911			
19)	T	bis(2-Chloroisoprop	1.822	1.904	1.911			
20)	T	(3+4)-Methylphenol	1.376	1.383	1.339			
21)	T	4-Methylphenol	1.376	1.383	1.339			
22)	MP	N-Nitroso-di-n-prop	1.052	1.074	1.071			
23)	T	Hexachloroethane	0.703	0.704	0.692			
24)	I	Naphthalene-d8	----------ISTD----------					
25)	S	Nitrobenzene-d5	0.430	0.420	0.416			
26)	T	Nitrobenzene	0.435	0.425	0.420			
27)	T	Isophorone	0.728	0.720	0.715			
28)	TC	2-Nitrophenol	0.239	0.233	0.216			
29)	T	2,4-Dimethylphenol	0.418	0.426	0.424			
30)	T	Benzoic acid	0.125					
31)	T	bis(2-Chloroethoxy)	0.443	0.443	0.445			
32)	TC	2,4-Dichlorophenol	0.348	0.345	0.326			
33)	M	1,2,4-Trichlorobenz	0.397	0.397	0.391			
34)	T	Naphthalene	1.068	1.083	1.083			
35)	T	4-Chloroaniline	0.475	0.480	0.473			
36)	TC	Hexachlorobutadiene	0.242	0.241	0.232			
37)	MC	4-Chloro-3-methylph	0.399	0.384	0.370			
38)	T	2-Methylnaphthalene	0.747	0.741	0.751			
39)	I	Acenaphthene-d10	----------ISTD----------					
[illegible]	T	1,2,4,5-Tetrachloro						
41)	TP	Hexachlorocyclopent	0.320	0.258				

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19FULL.M Mon Dec 22 10:12:10 2008

694

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:12:03 2008
Response via : Initial Calibration

Calibration Files
20 =K5340.D 10 =K5341.D 5.0 =K5342.D
1.0 =K5343.D = =

		Compound	20	10	5.0	1.0	Avg	%RSD
42)	TC	2,4,6-Trichlorophen	0.425	0.415	0.383			
43)	T	2,4,5-Trichlorophen	0.462	0.443				
44)	S	2-Fluorobiphenyl	1.394	1.400	1.394			
45)	T	2-Chloronaphthalene	1.215	1.206	1.183			
46)	T	2-Nitroaniline	0.450	0.437	0.409			
47)	T	Dimethyl phthalate	1.539	1.527	1.511			
48)	T	2,6-Dinitrotoluene	0.390	0.376	0.364			
49)	T	Acenaphthylene	1.857	1.817	1.811			
50)	T	3-Nitroaniline	0.393	0.385	0.367			
51)	TCM	Acenaphthene	1.094	1.093	1.107			
52)	TP	2,4-Dinitrophenol	0.149					
53)	MP	4-Nitrophenol	0.246					
54)	M	2,4-Dinitrotoluene	0.526	0.505	0.487			
55)	T	Dibenzofuran	1.759	1.753	1.784			
56)	T	Diethyl phthalate	1.596	1.589	1.568			
57)	T	4-Chlorophenyl phen	0.737	0.731	0.721			
[illegible])	T	Fluorene	1.325	1.334	1.354			
[illegible])	T	4-Nitroaniline	0.378	0.386	0.369			
60)	T	1,2-Diphenylhydrazi	1.489	1.491	1.480			
61)	S	2,4,6-Tribromopheno	0.225	0.206	0.182			
62)	I	Phenanthrene-d10	----------ISTD----------					
63)	T	4,6-Dinitro-2-methy	0.176	0.138				
64)	TC	n-Nitrosodiphenylam	0.586	0.591	0.581			
65)	T	4-Bromophenyl pheny	0.241	0.243	0.239			
66)	T	Hexachlorobenzene	0.288	0.288	0.291			
67)	MC	Pentachlorophenol	0.110					
68)	T	Phenanthrene	1.149	1.177	1.179			
69)	T	Anthracene	1.168	1.199	1.204			
70)	T	Carbazole	1.030	1.065	1.038			
71)	T	Di-n-butyl phthalat	1.544	1.549	1.522			
72)	TC	Fluoranthene	1.244	1.263	1.241			
73)	I	Chrysene-d12	----------ISTD----------					
74)	T	Benzidine	0.497					
75)	M	Pyrene	1.399	1.398	1.386			
76)	S	Terphenyl-d14	0.890	0.890	0.879			
77)	T	Butyl benzyl phthal	0.778	0.768	0.743			
78)	T	3,3'-Dichlorobenzid	0.449	0.509	0.503			
79)	T	Benzo[a]anthracene	1.170	1.170	1.161			
80)	T	bis(2-Ethylhexyl)ph	1.036	1.018	0.992			
81)	T	Chrysene	1.104	1.102	1.111			
[illegible])	TC	Di-n-octyl phthalat	1.845	1.777	1.675			
[illegible])	T	Indeno[1,2,3-cd]pyr	1.160	1.088	1.030			

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19FULL.M Mon Dec 22 10:12:15 2008 Pag

695

Response Factor Report #6MS40

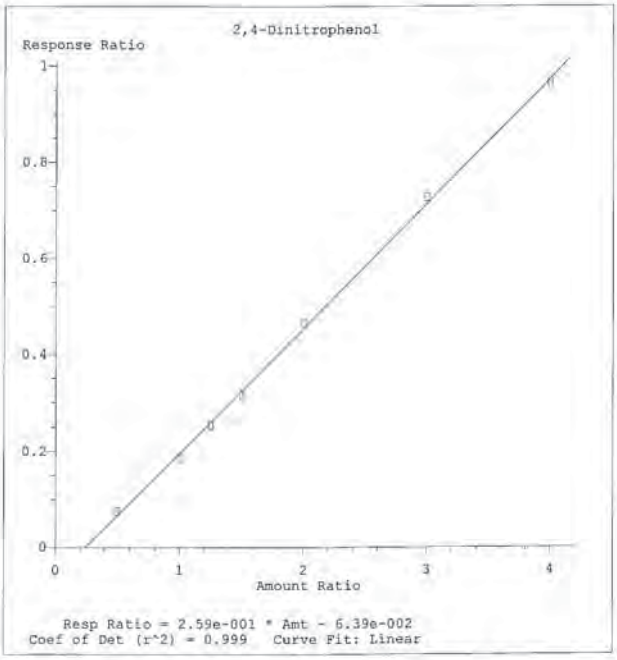
Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:12:03 2008
Response via : Initial Calibration

Calibration Files
20 =K5340.D 10 =K5341.D 5.0 =K5342.D
1.0 =K5343.D = =

		Compound	20	10	5.0	1.0	Avg	%RSD
84)	I	Perylene-d12	----------ISTD----------					
85)	T	Benzo[b]fluoranthen	1.274	1.282	1.259			
86)	T	Benzo[k]fluoranthen	1.276	1.252	1.260			
87)	TC	Benzo[a]pyrene	1.208	1.192	1.164			
88)	T	Dibenz[a,h]anthrace	1.093	1.039	0.978			
89)	T	Benzo[g,h,i]perylen	1.094	1.056	1.001			

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19FULL.M Mon Dec 22 10:12:15 2008 Pag

696



Method Name: C:\HPCHEM\1\METHODS\KD19FULL.M
Calibration Table Last Updated: Mon Dec 22 10:08:43 2008

697

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5334.D Vial: 2
Acq On : 19 Dec 2008 8:45 Operator: MEG
Sample : SSTD160PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:57 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 09:54:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	129250	40.00 ug/mL	0.00
24) Naphthalene-d8	12.47	136	463978	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.81	164	282750	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	467706	40.00 ug/mL	0.00
73) Chrysene-d12	23.76	240	387616	40.00 ug/mL	0.01
84) Perylene-d12	26.89	264	365963	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.76	112	688038	159.17 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 106.11%	
6) Phenol-d5	9.39	99	814205	157.68 ug/mL	0.03
Spiked Amount 150.000			Recovery	= 105.12%	
10) 2-Chlorophenol-d4	9.71	132	883	497.23 ul/mL	0.00
Spiked Amount 150.000			Recovery	= 331.49%	
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	11.12	82	749280	154.56 ug/mL	0.02
Spiked Amount 100.000			Recovery	= 154.56%	
44) 2-Fluorobiphenyl	14.50	172	1329858	142.34 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 142.34%	
61) 2,4,6-Tribromophenol	17.34	330	225800	142.04 ug/mL	0.01
Spiked Amount 150.000			Recovery	= 94.69%	
76) Terphenyl-d14	21.70	244	1250222	149.27 ug/mL	0.01
Spiked Amount 100.000			Recovery	= 149.27%	

Target Compounds					Qvalue
2) 1,4-Dioxane	4.79	88	143477	83.57 ug/mL	97
3) N-nitrosodimethylamine	5.40	74	306832	181.34 ug/mL	94
4) Pyridine	5.46	79	676632	178.18 ug/mL	99
7) Phenol	9.42	94	822895	152.98 ug/mL	98
8) Aniline	9.51	93	967075	174.36 ug/mL	88
9) bis(2-Chloroethyl)ether	9.61	93	635656	150.80 ug/mL	100
11) 2-Chlorophenol	9.72	128	732517	152.88 ug/mL	99
12) 1,3-Dichlorobenzene	10.00	146	788282	152.60 ug/mL	99
13) 1,4-Dichlorobenzene	10.13	146	768190	152.36 ug/mL	98
14) Benzyl alcohol	10.35	108	470830	155.93 ug/mL	99
16) 1,2-Dichlorobenzene	10.41	146	696072	152.23 ug/mL	99
17) 2-Methylphenol	10.50	108	598575	151.79 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.56	45	862784	150.09 ug/mL	98
19) bis(2-Chloroisopropyl)ethe	10.56	45	862784	150.09 ug/mL	98
20) (3+4)-Methylphenol	10.80	108	674375	155.29 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5334.D KD19FULL.M Mon Dec 22 10:15:53 2008 Pa

698

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5334.D Vial: 2
Acq On : 19 Dec 2008 8:45 Operator: MEG
Sample : SSTD160PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:57 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 09:54:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.80	108	674375	155.29 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.86	70	519679	153.28 ug/mL	99
23) Hexachloroethane	11.04	117	327321	145.96 ug/mL	100
26) Nitrobenzene	11.16	77	739700	150.89 ug/mL	100
27) Isophorone	11.63	82	1324718	158.38 ug/mL	100
28) 2-Nitrophenol	11.74	139	420084	151.26 ug/mL	92
29) 2,4-Dimethylphenol	11.78	107	711462	169.12 ug/mL	99
30) Benzoic acid	12.09	105	491208m	214.98 ug/mL	
31) bis(2-Chloroethoxy)methane	11.96	93	750689	152.56 ug/mL	98
32) 2,4-Dichlorophenol	12.19	162	610172	151.98 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.35	180	651119	146.73 ug/mL	99
34) Naphthalene	12.51	128	1827393	153.24 ug/mL	97
35) 4-Chloroaniline	12.59	127	815817	155.63 ug/mL	100
36) Hexachlorobutadiene	12.71	225	390923	144.34 ug/mL	100
37) 4-Chloro-3-methylphenol	13.45	107	684733	151.60 ug/mL	98
38) 2-Methylnaphthalene	13.82	142	1293208	152.81 ug/mL	100
41) Hexachlorocyclopentadiene	14.09	237	381881	150.01 ug/mL	99
42) 2,4,6-Trichlorophenol	14.33	196	455973	152.54 ug/mL	100
43) 2,4,5-Trichlorophenol	14.40	196	470779	147.64 ug/mL	99
45) 2-Chloronaphthalene	14.76	162	1194890	145.85 ug/mL	99
46) 2-Nitroaniline	14.94	65	472977	151.96 ug/mL	99
47) Dimethyl phthalate	15.26	163	1541488	147.70 ug/mL	100
48) 2,6-Dinitrotoluene	15.40	165	404696	150.41 ug/mL	100
49) Acenaphthylene	15.56	152	1841435	148.58 ug/mL	100
50) 3-Nitroaniline	15.74	138	412768	151.83 ug/mL	99
51) Acenaphthene	15.89	153	1066328	145.81 ug/mL	97
52) 2,4-Dinitrophenol	15.93	184	272314	189.04 ug/mL#	67
53) 4-Nitrophenol	16.02	109	300436	160.40 ug/mL	97
54) 2,4-Dinitrotoluene	16.18	165	544078	148.43 ug/mL	97
55) Dibenzofuran	16.22	168	1682884	144.11 ug/mL	99
56) Diethyl phthalate	16.61	149	1572720	144.86 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.85	204	673066	137.51 ug/mL	99
58) Fluorene	16.88	166	1272677	143.87 ug/mL	98
59) 4-Nitroaniline	16.96	138	405213	149.39 ug/mL	94
60) 1,2-Diphenylhydrazine	17.16	77	1433375	145.85 ug/mL	98
63) 4,6-Dinitro-2-methylphenol	16.99	198	386026	160.58 ug/mL	95
64) n-Nitrosodiphenylamine	17.09	169	964640	147.82 ug/mL	98
65) 4-Bromophenyl phenyl ether	17.79	248	402113	147.40 ug/mL	99
66) Hexachlorobenzene	17.93	284	447179	140.58 ug/mL	97
67) Pentachlorophenol	18.29	266	285330	173.96 ug/mL	100
68) Phenanthrene	18.73	178	1837277	143.87 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5334.D KD19FULL.M Mon Dec 22 10:15:54 2008 Pa

699

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5334.D Vial: 2
Acq On : 19 Dec 2008 8:45 Operator: MEG
Sample : SSTD160PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:57 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 09:54:12 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.84	178	1833439	143.03 ug/mL	100
70) Carbazole	19.12	167	1745178	149.81 ug/mL	100
71) Di-n-butyl phthalate	19.71	149	2561352	147.22 ug/mL	100
72) Fluoranthene	21.02	202	1989303	143.49 ug/mL	98
74) Benzidine	21.22	184	717581	297.29 ug/mL	98
75) Pyrene	21.47	202	2001989	153.40 ug/mL	98
77) Butyl benzyl phthalate	22.59	149	1155301	155.67 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.67	252	733530	154.38 ug/mL	99
79) Benzo[a]anthracene	23.74	228	1715084	156.76 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.65	149	1471390	152.54 ug/mL	98
81) Chrysene	23.83	228	1586123	153.53 ug/mL	100
82) Di-n-octyl phthalate	24.88	149	2794695	157.63 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.77	276	1721307	150.95 ug/mL	96
85) Benzo[b]fluoranthene	25.97	252	2093691	181.87 ug/mL	98
86) Benzo[k]fluoranthene	26.04	252	1364944m	122.66 ug/mL	
87) Benzo[a]pyrene	26.79	252	1678210	157.23 ug/mL	100
88) Dibenz[a,h]anthracene	29.79	278	1447057	146.87 ug/mL	98
89) Benzo[g,h,i]perylene	30.44	276	1491085	149.96 ug/mL	100

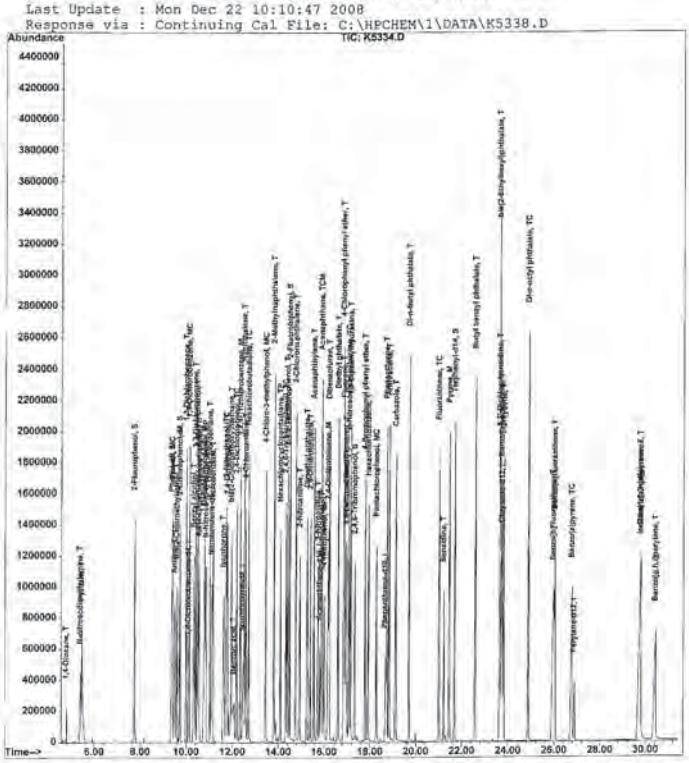
(#) = qualifier out of range (m) = manual integration
K5334.D KD19FULL.M Mon Dec 22 10:15:54 2008 Pa

700

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5334.D Vial: 2
Acq On : 19 Dec 2008 8:45 Operator: MEG
Sample : SSTD160PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:57 2008 Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5334.D KD19FULL.M Mon Dec 22 10:15:57 2008 Pa

701

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5335.D Vial: 3
Acq On : 19 Dec 2008 9:24 Operator: MEG
Sample : SSTD120PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	120288	40.00 ug/mL	0.00
24) Naphthalene-d8	12.47	136	436467	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.81	164	265064	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	454594	40.00 ug/mL	0.00
73) Chrysene-d12	23.75	240	390354	40.00 ug/mL	0.00
84) Perylene-d12	26.88	264	365043	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.75	112	475871	118.29 ug/mL	0.00
Spiked Amount 150.000			Recovery = 78.86%		
6) Phenol-d5	9.38	99	564361	117.44 ug/mL	0.02
Spiked Amount 150.000			Recovery = 78.29%		
10) 2-Chlorophenol-d4	9.71	132	661	399.95 ul/mL	0.00
Spiked Amount 150.000			Recovery = 266.63%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.12	82	544675	119.43 ug/mL	0.01
Spiked Amount 100.000			Recovery = 119.43%		
44) 2-Fluorobiphenyl	14.49	172	994799	113.58 ug/mL	0.00
Spiked Amount 100.000			Recovery = 113.58%		
61) 2,4,6-Tribromophenol	17.33	330	172474	115.73 ug/mL	0.00
Spiked Amount 150.000			Recovery = 77.15%		
76) Terphenyl-d14	21.69	244	965280	114.44 ug/mL	0.00
Spiked Amount 100.000			Recovery = 114.44%		
Target Compounds					Qvalue
2) 1,4-Dioxane	4.78	88	76966	48.17 ug/mL	99
3) N-nitrosodimethylamine	5.39	74	238588	120.18 ug/mL	98
4) Pyridine	5.45	79	426166	120.58 ug/mL	100
7) Phenol	9.40	94	577787	115.42 ug/mL	99
8) Aniline	9.51	93	681885	132.10 ug/mL	99
9) bis(2-Chloroethyl)ether	9.59	93	447094	113.97 ug/mL	100
11) 2-Chlorophenol	9.72	128	519711	116.55 ug/mL	100
12) 1,3-Dichlorobenzene	10.00	146	560176	116.52 ug/mL	100
13) 1,4-Dichlorobenzene	10.13	146	552869	117.83 ug/mL	98
14) Benzyl alcohol	10.33	108	328730	116.98 ug/mL	99
16) 1,2-Dichlorobenzene	10.41	146	498555	117.16 ug/mL	100
17) 2-Methylphenol	10.49	108	431084	117.46 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.55	45	614612	114.88 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.55	45	614612	114.88 ug/mL	99
20) (3+4)-Methylphenol	10.79	108	479167	118.56 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5335.D KD19FULL.M Mon Dec 22 10:16:01 2008 Pa

702

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5335.D Vial: 3
Acq On : 19 Dec 2008 9:24 Operator: MEG
Sample : SSTD120PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.79	108	479167	118.56 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.84	70	373342	118.32 ug/mL	100
23) Hexachloroethane	11.03	117	237532	113.82 ug/mL	98
26) Nitrobenzene	11.16	77	534580	115.92 ug/mL	100
27) Isophorone	11.61	82	940834	119.57 ug/mL	100
28) 2-Nitrophenol	11.73	139	307171	117.58 ug/mL	94
29) 2,4-Dimethylphenol	11.77	107	538429	136.06 ug/mL	100
30) Benzoic acid	12.04	105	313580	145.89 ug/mL	96
31) bis(2-Chloroethoxy)methane	11.96	93	547874	118.36 ug/mL	99
32) 2,4-Dichlorophenol	12.18	162	442397	117.13 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.35	180	482757	115.64 ug/mL	100
34) Naphthalene	12.51	128	1319200	117.60 ug/mL	99
35) 4-Chloroaniline	12.58	127	598378	121.34 ug/mL	100
36) Hexachlorobutadiene	12.71	225	294488	115.58 ug/mL	100
37) 4-Chloro-3-methylphenol	13.45	107	502265	118.21 ug/mL	99
38) 2-Methylnaphthalene	13.81	142	936513	117.64 ug/mL	99
41) Hexachlorocyclopentadiene	14.09	237	303618	127.23 ug/mL	99
42) 2,4,6-Trichlorophenol	14.33	196	333392	118.97 ug/mL	100
43) 2,4,5-Trichlorophenol	14.40	196	347787	116.34 ug/mL	100
45) 2-Chloronaphthalene	14.75	162	885272	115.27 ug/mL	99
46) 2-Nitroaniline	14.93	65	344942	118.22 ug/mL	99
47) Dimethyl phthalate	15.25	163	1138829	116.40 ug/mL	99
48) 2,6-Dinitrotoluene	15.39	165	301567	119.56 ug/mL	100
49) Acenaphthylene	15.56	152	1369228	117.85 ug/mL	100
50) 3-Nitroaniline	15.73	138	304235	119.38 ug/mL	98
51) Acenaphthene	15.88	153	781282	113.96 ug/mL	97
52) 2,4-Dinitrophenol	15.91	184	192840	142.80 ug/mL#	72
53) 4-Nitrophenol	16.00	109	221696	126.26 ug/mL	96
54) 2,4-Dinitrotoluene	16.17	165	405314	117.95 ug/mL	99
55) Dibenzofuran	16.21	168	1261774	115.26 ug/mL	99
56) Diethyl phthalate	16.60	149	1185411	116.47 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.84	204	516657	112.59 ug/mL	99
58) Fluorene	16.87	166	956277	115.32 ug/mL	99
59) 4-Nitroaniline	16.94	138	302129	118.82 ug/mL	93
60) 1,2-Diphenylhydrazine	17.15	77	1066753	115.79 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.97	198	286887	122.78 ug/mL	94
64) n-Nitrosodiphenylamine	17.07	169	730310	115.14 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.78	248	302216	113.98 ug/mL	100
66) Hexachlorobenzene	17.93	284	343587	111.13 ug/mL	98
67) Pentachlorophenol	18.28	266	206988	129.84 ug/mL	100
68) Phenanthrene	18.72	178	1406386	113.31 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5335.D KD19FULL.M Mon Dec 22 10:16:02 2008 Pa

703

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5335.D Vial: 3
Acq On : 19 Dec 2008 9:24 Operator: MEG
Sample : SSTD120PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.83	178	1399075	112.30 ug/mL	100
70) Carbazole	19.11	167	1305781	115.33 ug/mL	100
71) Di-n-butyl phthalate	19.71	149	1952455	115.46 ug/mL	100
72) Fluoranthene	21.01	202	1528300	113.42 ug/mL	99
74) Benzidine	21.22	184	688875	283.40 ug/mL	98
75) Pyrene	21.46	202	1531057	116.49 ug/mL	99
77) Butyl benzyl phthalate	22.59	149	883008	118.15 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.66	252	552087	115.38 ug/mL	99
79) Benzo[a]anthracene	23.73	228	1304242	118.37 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	23.64	149	1133950	116.73 ug/mL	98
81) Chrysene	23.81	228	1217439	117.02 ug/mL	100
82) Di-n-octyl phthalate	24.88	149	2151917	120.53 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.74	276	1344428	117.08 ug/mL	98
85) Benzo[b]fluoranthene	25.95	252	1438648	125.28 ug/mL	100
86) Benzo[k]fluoranthene	26.02	252	1216430	109.59 ug/mL	100
87) Benzo[a]pyrene	26.77	252	1300285	122.13 ug/mL	100
88) Dibenz[a,h]anthracene	29.78	278	1125823	114.55 ug/mL	98
89) Benzo[g,h,i]perylene	30.43	276	1167860	117.75 ug/mL	100

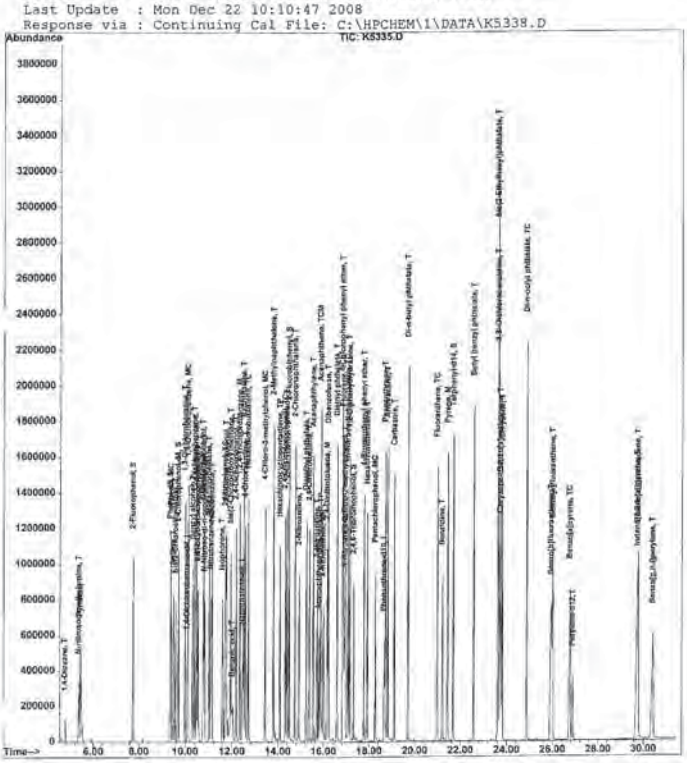
(#) = qualifier out of range (m) = manual integration
K5335.D KD19FULL.M Mon Dec 22 10:16:02 2008

704

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5335.D Vial: 3
Acq On : 19 Dec 2008 9:24 Operator: MEG
Sample : SSTD120PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5335.D KD19FULL.M Mon Dec 22 10:16:06 2008

705

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5336.D Vial: 4
Acq On : 19 Dec 2008 10:02 Operator: MEG
Sample : SSTD080PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	127792	40.00 ug/mL	0.00
24) Naphthalene-d8	12.46	136	465842	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.81	164	282831	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	481431	40.00 ug/mL	0.00
73) Chrysene-d12	23.75	240	419093	40.00 ug/mL	0.00
84) Perylene-d12	26.89	264	393828	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.76	112	341840	79.98 ug/mL	0.00
Spiked Amount 150.000			Recovery = 53.32%		
6) Phenol-d5	9.37	99	409304	80.17 ug/mL	0.00
Spiked Amount 150.000			Recovery = 53.45%		
10) 2-Chlorophenol-d4	9.72	132	374	213.01 ul/mL	0.00
Spiked Amount 150.000			Recovery = 142.01%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.11	82	389515	80.02 ug/mL	0.00
Spiked Amount 100.000			Recovery = 80.02%		
44) 2-Fluorobiphenyl	14.48	172	726304	77.72 ug/mL	0.00
Spiked Amount 100.000			Recovery = 77.72%		
61) 2,4,6-Tribromophenol	17.33	330	126531	79.57 ug/mL	0.00
Spiked Amount 150.000			Recovery = 53.05%		
76) Terphenyl-d14	21.69	244	709855	78.39 ug/mL	0.00
Spiked Amount 100.000			Recovery = 78.39%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.79	88	53578	31.57 ug/mL	99
3) N-nitrosodimethylamine	5.39	74	168821	80.04 ug/mL	97
4) Pyridine	5.45	79	303498	80.83 ug/mL	100
7) Phenol	9.39	94	418913	78.77 ug/mL	100
8) Aniline	9.50	93	487691	88.93 ug/mL	100
9) bis(2-Chloroethyl)ether	9.59	93	324589	77.88 ug/mL	100
11) 2-Chlorophenol	9.72	128	374708	79.09 ug/mL	100
12) 1,3-Dichlorobenzene	10.00	146	398547	78.03 ug/mL	99
13) 1,4-Dichlorobenzene	10.13	146	394989	79.24 ug/mL	99
14) Benzyl alcohol	10.32	108	236479	79.21 ug/mL	99
16) 1,2-Dichlorobenzene	10.41	146	360873	79.82 ug/mL	100
17) 2-Methylphenol	10.48	108	310185	79.55 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.55	45	443870	78.10 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.55	45	443870	78.10 ug/mL	99
20) (3+4)-Methylphenol	10.77	108	342004	79.65 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5336.D KD19FULL.M Mon Dec 22 10:16:10 2008

706

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5336.D Vial: 4
Acq On : 19 Dec 2008 10:02 Operator: MEG
Sample : SSTD080PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.77	108	342004	79.65 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.82	70	369304	80.34 ug/mL	100
23) Hexachloroethane	11.03	117	173025	78.04 ug/mL	99
26) Nitrobenzene	11.15	77	387150	78.66 ug/mL	100
27) Isophorone	11.60	82	673702	80.22 ug/mL	100
28) 2-Nitrophenol	11.73	139	221114	79.30 ug/mL	97
29) 2,4-Dimethylphenol	11.76	107	391845	92.77 ug/mL	99
30) Benzoic acid	12.00	105	212649	92.69 ug/mL	98
31) bis(2-Chloroethoxy)methane	11.95	93	393714	79.70 ug/mL	100
32) 2,4-Dichlorophenol	12.17	162	319683	79.30 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.34	180	352747	79.17 ug/mL	100
34) Naphthalene	12.51	128	950989	79.43 ug/mL	97
35) 4-Chloroaniline	12.58	127	429552	81.61 ug/mL	99
36) Hexachlorobutadiene	12.71	225	215146	79.12 ug/mL	100
37) 4-Chloro-3-methylphenol	13.44	107	363773	80.22 ug/mL	99
38) 2-Methylnaphthalene	13.81	142	672722	79.18 ug/mL	100
41) Hexachlorocyclopentadiene	14.09	237	218787	85.92 ug/mL	100
42) 2,4,6-Trichlorophenol	14.32	196	239955	80.25 ug/mL	100
43) 2,4,5-Trichlorophenol	14.39	196	254557	79.81 ug/mL	99
45) 2-Chloronaphthalene	14.75	162	645605	78.78 ug/mL	100
46) 2-Nitroaniline	14.92	65	249686	80.20 ug/mL	100
47) Dimethyl phthalate	15.24	163	827269	79.24 ug/mL	100
48) 2,6-Dinitrotoluene	15.38	165	215295	80.00 ug/mL	99
49) Acenaphthylene	15.55	152	989634	79.83 ug/mL	100
50) 3-Nitroaniline	15.71	138	218167	80.23 ug/mL	98
51) Acenaphthene	15.88	153	569117	77.80 ug/mL	98
52) 2,4-Dinitrophenol	15.90	184	131693	91.39 ug/mL#	78
53) 4-Nitrophenol	15.99	109	156180	83.36 ug/mL	97
54) 2,4-Dinitrotoluene	16.16	165	294770	80.39 ug/mL	99
55) Dibenzofuran	16.21	168	920191	78.78 ug/mL	99
56) Diethyl phthalate	16.59	149	858495	79.05 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.83	204	382855	78.19 ug/mL	100
58) Fluorene	16.87	166	697048	78.78 ug/mL	99
59) 4-Nitroaniline	16.91	138	218055	80.37 ug/mL	93
60) 1,2-Diphenylhydrazine	17.15	77	774142	78.75 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.95	198	200958	81.21 ug/mL	95
64) n-Nitrosodiphenylamine	17.06	169	532612	79.29 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.78	248	219249	78.08 ug/mL	99
66) Hexachlorobenzene	17.92	284	255745	78.10 ug/mL	99
67) Pentachlorophenol	18.28	266	146415	86.72 ug/mL	99
68) Phenanthrene	18.72	178	1024983	77.98 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5336.D KD19FULL.M Mon Dec 22 10:16:11 2008

707

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5336.D Vial: 4
Acq On : 19 Dec 2008 10:02 Operator: MEG
Sample : SSTD080PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.82	178	1029634	78.04 ug/mL	100
70) Carbazole	19.10	167	950950	79.31 ug/mL	99
71) Di-n-butyl phthalate	19.70	149	1416692	79.11 ug/mL	100
72) Fluoranthene	21.00	202	1112908	77.99 ug/mL	100
74) Benzidine	21.21	184	497328	190.57 ug/mL	99
75) Pyrene	21.45	202	1112407	78.83 ug/mL	99
77) Butyl benzyl phthalate	22.58	149	639211	79.66 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.65	252	396693	77.22 ug/mL	99
79) Benzo[a]anthracene	23.72	228	944141	79.81 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.64	149	820720	78.69 ug/mL	99
81) Chrysene	23.81	228	891676	79.83 ug/mL	100
82) Di-n-octyl phthalate	24.88	149	1541076	80.39 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.72	276	985618	79.94 ug/mL	99
85) Benzo[b]fluoranthene	25.93	252	991831	80.06 ug/mL	100
86) Benzo[k]fluoranthene	26.01	252	945408	78.94 ug/mL	100
87) Benzo[a]pyrene	26.76	252	940435	81.88 ug/mL	100
88) Dibenz[a,h]anthracene	29.75	278	831558	78.43 ug/mL	99
89) Benzo[g,h,i]perylene	30.41	276	857044	80.09 ug/mL	100

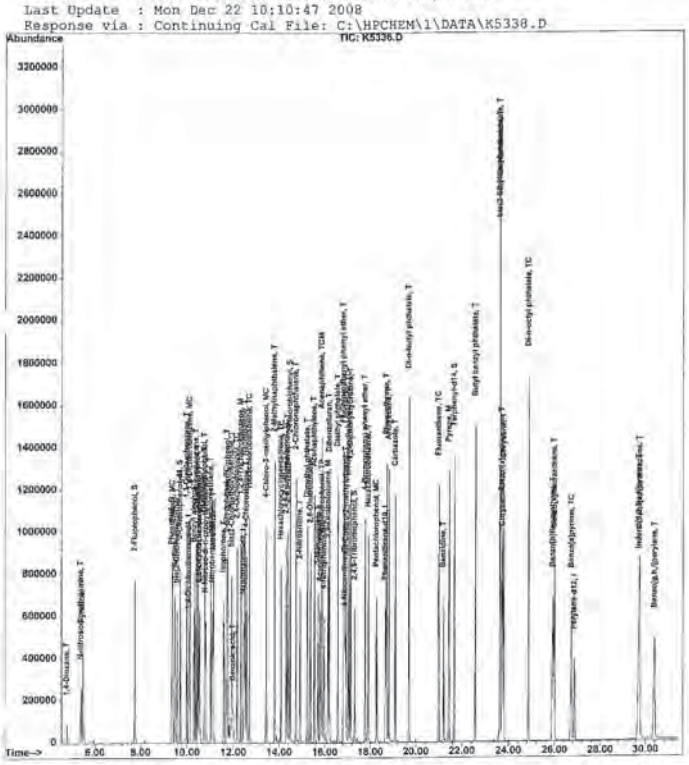
(#) = qualifier out of range (m) = manual integration
K5336.D KD19FULL.M Mon Dec 22 10:16:11 2008 Pa

708

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5336.D Vial: 4
Acq On : 19 Dec 2008 10:02 Operator: MEG
Sample : SSTD080PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5336.D KD19FULL.M Mon Dec 22 10:16:14 2008 P

709

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5337.D Vial: 5
Acq On : 19 Dec 2008 10:41 Operator: MEG
Sample : SSTD060PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.09	152	119843	40.00 ug/mL	0.00
24) Naphthalene-d8	12.46	136	437335	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.81	164	265351	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	458955	40.00 ug/mL	0.00
73) Chrysene-d12	23.75	240	401357	40.00 ug/mL	0.00
84) Perylene-d12	26.88	264	372994	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.76	112	240418	59.98 ug/mL	0.00
Spiked Amount 150.000			Recovery = 39.99%		
6) Phenol-d5	9.36	99	287021	59.95 ug/mL	0.00
Spiked Amount 150.000			Recovery = 39.97%		
10) 2-Chlorophenol-d4	9.71	132	88	53.44 ul/mL	0.00
Spiked Amount 150.000			Recovery = 35.63%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.11	82	275454	60.28 ug/mL	0.00
Spiked Amount 100.000			Recovery = 60.28%		
44) 2-Fluorobiphenyl	14.48	172	527019	60.11 ug/mL	0.00
Spiked Amount 100.000			Recovery = 60.11%		
61) 2,4,6-Tribromophenol	17.32	330	90629	60.75 ug/mL	0.00
Spiked Amount 150.000			Recovery = 40.50%		
76) Terphenyl-d14	21.69	244	514586	59.33 ug/mL	0.00
Spiked Amount 100.000			Recovery = 59.33%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.79	88	37553	23.59 ug/mL	99
3) N-nitrosodimethylamine	5.37	74	115378	58.33 ug/mL	97
4) Pyridine	5.45	79	209534	59.51 ug/mL	99
7) Phenol	9.39	94	296913	58.53 ug/mL	99
8) Aniline	9.50	93	346354	67.35 ug/mL	99
9) bis(2-Chloroethyl)ether	9.58	93	231957	59.35 ug/mL	99
11) 2-Chlorophenol	9.71	128	264359	59.50 ug/mL	99
12) 1,3-Dichlorobenzene	10.00	146	282585	59.00 ug/mL	99
13) 1,4-Dichlorobenzene	10.13	146	281361	60.19 ug/mL	99
14) Benzyl alcohol	10.31	108	166665	59.53 ug/mL	100
16) 1,2-Dichlorobenzene	10.41	146	253086	58.70 ug/mL	100
17) 2-Methylphenol	10.48	108	220922	60.42 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.55	45	316401	59.36 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.55	45	316401	59.36 ug/mL	99
20) (3+4)-Methylphenol	10.76	108	243057	60.36 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5337.D KD19FULL.M Mon Dec 22 10:16:18 2008 Pa

710

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5337.D Vial: 5
Acq On : 19 Dec 2008 10:41 Operator: MEG
Sample : SSTD060PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.76	108	243057	60.36 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.80	70	188924	60.10 ug/mL	100
23) Hexachloroethane	11.03	117	123862	59.57 ug/mL	99
26) Nitrobenzene	11.15	77	275551	59.63 ug/mL	100
27) Isophorone	11.58	82	472287	59.93 ug/mL	100
28) 2-Nitrophenol	11.72	139	155325	59.34 ug/mL	97
29) 2,4-Dimethylphenol	11.76	107	279411	70.46 ug/mL	99
30) Benzoic acid	11.97	105	134220	62.32 ug/mL	99
31) bis(2-Chloroethoxy)methane	11.95	93	279304	60.22 ug/mL	99
32) 2,4-Dichlorophenol	12.17	162	225947	59.71 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.34	180	251364	60.09 ug/mL	100
34) Naphthalene	12.50	128	675357	60.08 ug/mL	97
35) 4-Chloroaniline	12.57	127	306748	62.08 ug/mL	100
36) Hexachlorobutadiene	12.71	225	153449	60.11 ug/mL	99
37) 4-Chloro-3-methylphenol	13.44	107	256253	60.19 ug/mL	100
38) 2-Methylnaphthalene	13.81	142	476475	59.73 ug/mL	100
41) Hexachlorocyclopentadiene	14.09	237	148238	62.05 ug/mL	100
42) 2,4,6-Trichlorophenol	14.32	196	170372	60.73 ug/mL	99
43) 2,4,5-Trichlorophenol	14.39	196	179498	59.98 ug/mL	99
45) 2-Chloronaphthalene	14.75	162	460055	59.84 ug/mL	100
46) 2-Nitroaniline	14.92	65	176061	60.28 ug/mL	100
47) Dimethyl phthalate	15.24	163	586577	59.89 ug/mL	99
48) 2,6-Dinitrotoluene	15.37	165	154083	61.02 ug/mL	99
49) Acenaphthylene	15.55	152	706735	60.76 ug/mL	100
50) 3-Nitroaniline	15.71	138	153598	60.20 ug/mL	99
51) Acenaphthene	15.88	153	414821	60.44 ug/mL	100
52) 2,4-Dinitrophenol	15.89	184	83356	61.66 ug/mL	97
53) 4-Nitrophenol	15.98	109	109125	62.08 ug/mL	97
54) 2,4-Dinitrotoluene	16.15	165	207888	60.43 ug/mL	99
55) Dibenzofuran	16.20	168	660949	60.31 ug/mL	100
56) Diethyl phthalate	16.58	149	616855	60.54 ug/mL	100
57) 4-Chlorophenyl phenyl othe	16.83	204	277275	60.36 ug/mL	99
58) Fluorene	16.86	166	499814	60.21 ug/mL	99
59) 4-Nitroaniline	16.90	138	154785	60.81 ug/mL	99
60) 1,2-Diphenylhydrazine	17.14	77	553708	60.03 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.94	198	139330	59.07 ug/mL	99
64) n-Nitrosodiphenylamine	17.06	169	382385	59.71 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.78	248	159203	59.47 ug/mL	100
66) Hexachlorobenzene	17.92	284	185643	59.47 ug/mL	99
67) Pentachlorophenol	18.28	266	96700	60.08 ug/mL	99
68) Phenanthrene	18.72	178	739343	59.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5337.D KD19FULL.M Mon Dec 22 10:16:19 2008 Pa

711

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5337.D
Acq On : 19 Dec 2008 10:41
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.82	178	746336	59.33 ug/mL	100
70) Carbazole	19.10	167	680554	59.54 ug/mL	100
71) Di-n-butyl phthalate	19.70	149	1009137	59.11 ug/mL	100
72) Fluoranthene	21.01	202	799650	58.78 ug/mL	100
74) Benzidine	21.21	184	374171	149.71 ug/mL	99
75) Pyrene	21.45	202	803270	59.44 ug/mL	100
77) Butyl benzyl phthalate	22.58	149	460408	59.91 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.64	252	277826	56.47 ug/mL	99
79) Benzo[a]anthracene	23.72	228	683962	60.37 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.64	149	600691	60.14 ug/mL	100
81) Chrysene	23.81	228	641829	60.00 ug/mL	100
82) Di-n-octyl phthalate	24.87	149	1102759	60.07 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.71	276	696352	58.98 ug/mL	100
85) Benzo[b]fluoranthene	25.93	252	703961	60.00 ug/mL	100
86) Benzo[k]fluoranthene	25.99	252	680191	59.97 ug/mL	100
87) Benzo[a]pyrene	26.75	252	662155	60.87 ug/mL	100
88) Dibenz[a,h]anthracene	29.73	278	589089	58.66 ug/mL	100
89) Benzo[g,h,i]perylene	30.39	276	604189	59.62 ug/mL	100

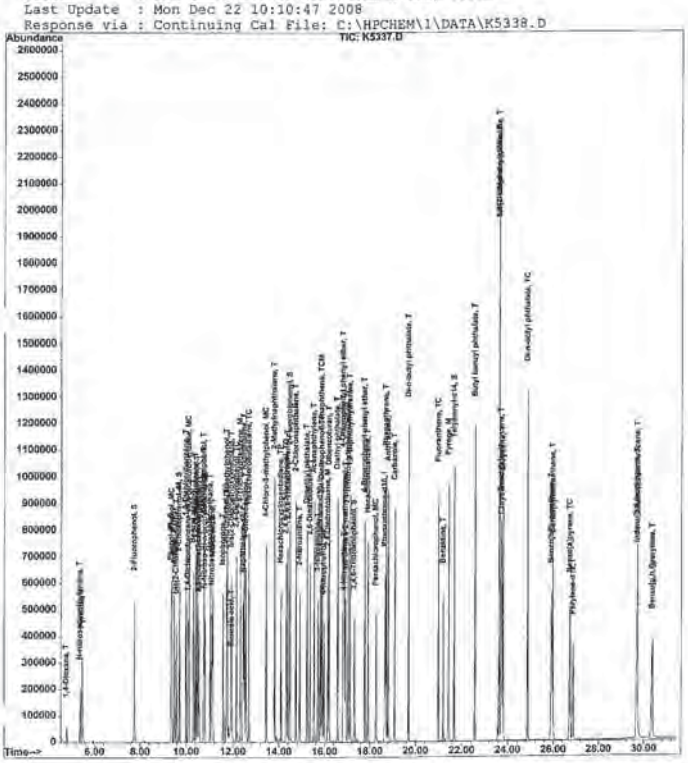
(#) = qualifier out of range (m) = manual integration
K5337.D KD19FULL.M Mon Dec 22 10:16:20 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5337.D
Acq On : 19 Dec 2008 10:41
Sample : SSTD060PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:54 2008

Vial: 5
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5337.D KD19FULL.M Mon Dec 22 10:16:23 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5338.D
Acq On : 19 Dec 2008 11:19
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:53 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 09:52:44 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	128098	40.00 ug/mL	0.00
24) Naphthalene-d8	12.46	136	469900	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.81	164	285623	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	484555	40.00 ug/mL	0.00
73) Chrysene-d12	23.75	240	429960	40.00 ug/mL	0.00
84) Perylene-d12	26.83	264	400935	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.76	112	214207	50.00 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 33.33%	
6) Phenol-d5	9.36	99	255878	50.00 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 33.33%	
10) 2-Chlorophenol-d4	9.71	132	88	50.00 ul/mL	0.00
Spiked Amount 150.000			Recovery	= 33.33%	
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	11.11	82	245492	50.00 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 50.00%	
44) 2-Fluorobiphenyl	14.49	172	471897	50.00 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 50.00%	
61) 2,4,6-Tribromophenol	17.32	330	80295	50.00 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 33.33%	
76) Terphenyl-d14	21.69	244	454533	50.00 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 50.00%	

Target Compounds					Qvalue
2) 1,4-Dioxane	4.79	88	34029	20.00 ug/mL	100
3) N-nitrosodimethylamine	5.38	74	105709	50.00 ug/mL	100
4) Pyridine	5.45	79	188186	50.00 ug/mL	100
7) Phenol	9.39	94	266554	50.00 ug/mL	100
8) Aniline	9.49	93	274846	50.00 ug/mL	100
9) bis(2-Chloroethyl)ether	9.59	93	208886	50.00 ug/mL	100
11) 2-Chlorophenol	9.72	128	237442	50.00 ug/mL	100
12) 1,3-Dichlorobenzene	10.00	146	255987	50.00 ug/mL	100
13) 1,4-Dichlorobenzene	10.13	146	249844	50.00 ug/mL	100
14) Benzyl alcohol	10.31	108	149631	50.00 ug/mL	100
16) 1,2-Dichlorobenzene	10.41	146	226583	50.00 ug/mL	100
17) 2-Methylphenol	10.48	108	195419	50.00 ug/mL	100
18) 2,2'-oxybis(1-chloropropan	10.56	45	284864	50.00 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.56	45	284864	50.00 ug/mL	100
20) (3+4)-Methylphenol	10.76	108	215197	50.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5338.D KD19FULL.M Mon Dec 22 10:16:27 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5338.D
Acq On : 19 Dec 2008 11:19
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:53 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 09:52:44 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.76	108	215197	50.00 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.80	70	168012	50.00 ug/mL	100
23) Hexachloroethane	11.04	117	111124	50.00 ug/mL	100
26) Nitrobenzene	11.15	77	248247	50.00 ug/mL	100
27) Isophorone	11.58	82	423546	50.00 ug/mL	100
28) 2-Nitrophenol	11.73	139	140633	50.00 ug/mL	100
29) 2,4-Dimethylphenol	11.76	107	213027	50.00 ug/mL	100
30) Benzoic acid	11.96	105	115704	50.00 ug/mL	100
31) bis(2-Chloroethoxy)methane	11.95	93	249164	50.00 ug/mL	100
32) 2,4-Dichlorophenol	12.17	162	203309	50.00 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.34	180	224716	50.00 ug/mL	100
34) Naphthalene	12.51	128	603850	50.00 ug/mL	100
35) 4-Chloroaniline	12.58	127	265452	50.00 ug/mL	100
36) Hexachlorobutadiene	12.70	225	137149	50.00 ug/mL	100
37) 4-Chloro-3-methylphenol	13.44	107	228716	50.00 ug/mL	100
38) 2-Methylnaphthalene	13.81	142	428533	50.00 ug/mL	100
41) Hexachlorocyclopentadiene	14.09	237	128577	50.00 ug/mL	100
42) 2,4,6-Trichlorophenol	14.32	196	150982	50.00 ug/mL	100
43) 2,4,5-Trichlorophenol	14.39	196	161059	50.00 ug/mL	100
45) 2-Chloronaphthalene	14.75	162	413790	50.00 ug/mL	100
46) 2-Nitroaniline	14.92	65	157203	50.00 ug/mL	100
47) Dimethyl phthalate	15.24	163	527129	50.00 ug/mL	100
48) 2,6-Dinitrotoluene	15.38	165	135894	50.00 ug/mL	100
49) Acenaphthylene	15.55	152	625966	50.00 ug/mL	100
50) 3-Nitroaniline	15.71	138	137310	50.00 ug/mL	100
51) Acenaphthene	15.88	153	369381	50.00 ug/mL	100
52) 2,4-Dinitrophenol	15.90	184	72758	50.00 ug/mL	100
53) 4-Nitrophenol	15.97	109	94605	50.00 ug/mL	100
54) 2,4-Dinitrotoluene	16.15	165	185144	50.00 ug/mL	100
55) Dibenzofuran	16.21	168	589803	50.00 ug/mL	100
56) Diethyl phthalate	16.59	149	548349	50.00 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.83	204	247227	50.00 ug/mL	100
58) Fluorene	16.87	166	446795	50.00 ug/mL	100
59) 4-Nitroaniline	16.89	138	136999	50.00 ug/mL	100
60) 1,2-Diphenylhydrazine	17.14	77	496388	50.00 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.93	198	124525	50.00 ug/mL	100
64) n-Nitrosodiphenylamine	17.06	169	338044	50.00 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.78	248	141315	50.00 ug/mL	100
66) Hexachlorobenzene	17.92	284	164782	50.00 ug/mL	100
67) Pentachlorophenol	18.28	266	84963	50.00 ug/mL	100
68) Phenanthrene	18.72	178	661513	50.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5338.D KD19FULL.M Mon Dec 22 10:16:28 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5338.D
Acq On : 19 Dec 2008 11:19
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:53 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 09:52:44 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.82	178	664000	50.00 ug/mL	100
70) Carbazole	19.10	167	603438	50.00 ug/mL	100
71) Di-n-butyl phthalate	19.70	149	901235	50.00 ug/mL	100
72) Fluoranthene	21.00	202	718163	50.00 ug/mL	100
74) Benzidine	21.21	184	133869	50.00 ug/mL	100
75) Pyrene	21.45	202	723830	50.00 ug/mL	100
77) Butyl benzyl phthalate	22.58	149	411606	50.00 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.64	252	263528	50.00 ug/mL	100
79) Benzo[a]anthracene	23.72	228	606806	50.00 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.64	149	534997	50.00 ug/mL	100
81) Chrysene	23.80	228	572972	50.00 ug/mL	100
82) Di-n-octyl phthalate	24.87	149	983296	50.00 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.70	276	632427	50.00 ug/mL	100
85) Benzo[b]fluoranthene	25.93	252	630623	50.00 ug/mL	100
86) Benzo[k]fluoranthene	25.99	252	609582	50.00 ug/mL	100
87) Benzo[a]pyrene	26.75	252	584673	50.00 ug/mL	100
88) Dibenz[a,h]anthracene	29.73	278	539706	50.00 ug/mL	100
89) Benzo[g,h,i]perylene	30.39	276	544673	50.00 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5338.D KD19FULL.M Mon Dec 22 10:16:29 2008

Pa

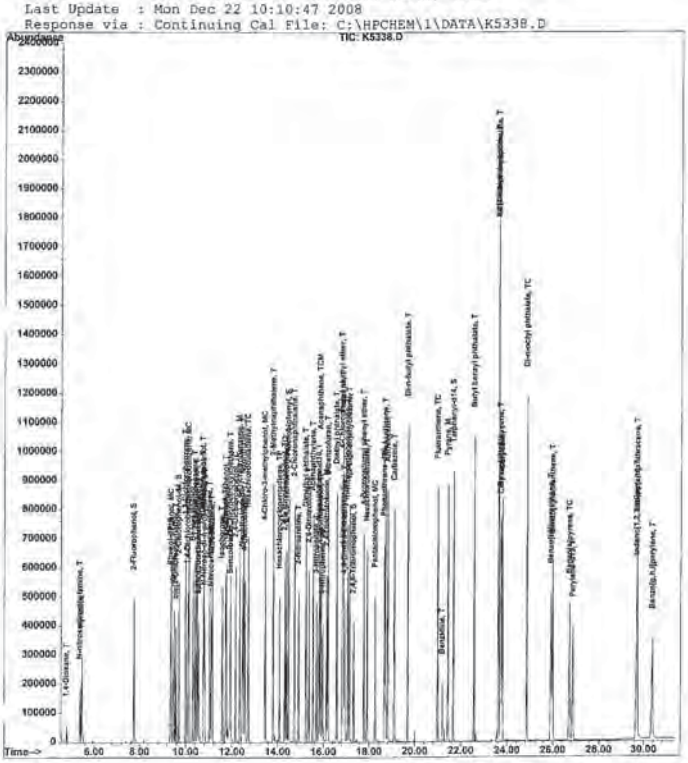
716

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5338.D
Acq On : 19 Dec 2008 11:19
Sample : SSTD050PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:53 2008

Vial: 6
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5338.D KD19FULL.M Mon Dec 22 10:16:32 2008

Pa

717

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5339.D
Acq On : 19 Dec 2008 11:58
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008

Vial: 7
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	120602	40.00 ug/mL	0.00
24) Naphthalene-d8	12.46	136	439852	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.81	164	270783	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	467310	40.00 ug/mL	0.00
73) Chrysene-d12	23.75	240	419709	40.00 ug/mL	0.00
84) Perylene-d12	26.88	264	388650	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.75	112	163049	40.42 ug/mL	0.00
Spiked Amount 150.000			Recovery = 26.95%		
6) Phenol-d5	9.36	99	194176	40.30 ug/mL	0.00
Spiked Amount 150.000			Recovery = 26.87%		
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery = 0.00%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.10	82	187352	40.77 ug/mL	0.00
Spiked Amount 100.000			Recovery = 40.77%		
44) 2-Fluorobiphenyl	14.49	172	365796	40.88 ug/mL	0.00
Spiked Amount 100.000			Recovery = 40.88%		
61) 2,4,6-Tribromophenol	17.32	330	61765	40.57 ug/mL	0.00
Spiked Amount 150.000			Recovery = 27.05%		
76) Terphenyl-d14	21.69	244	368050	40.58 ug/mL	0.00
Spiked Amount 100.000			Recovery = 40.58%		
Target Compounds					Qvalue
2) 1,4-Dioxane	4.79	88	25465	15.90 ug/mL	100
3) N-nitrosodimethylamine	5.37	74	78416	39.40 ug/mL	97
4) Pyridine	5.44	79	142842	40.31 ug/mL	99
7) Phenol	9.39	94	203217	40.49 ug/mL	98
8) Aniline	9.49	93	235928	45.59 ug/mL	99
9) bis(2-Chloroethyl)ether	9.58	93	161816	41.14 ug/mL	99
11) 2-Chlorophenol	9.71	128	181616	40.62 ug/mL	99
12) 1,3-Dichlorobenzene	10.00	146	195547	40.57 ug/mL	100
13) 1,4-Dichlorobenzene	10.13	146	191730	40.75 ug/mL	99
14) Benzyl alcohol	10.31	108	114536	40.65 ug/mL	98
16) 1,2-Dichlorobenzene	10.41	146	174351	40.87 ug/mL	100
17) 2-Methylphenol	10.48	108	153857	41.01 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.55	45	217782	40.60 ug/mL	100
19) bis(2-Chloroisopropyl)ethe	10.55	45	217782	40.60 ug/mL	100
20) (3+4)-Methylphenol	10.76	108	165316	40.80 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5339.D KD19FULL.M Mon Dec 22 10:16:36 2008

Pa

718

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5339.D
Acq On : 19 Dec 2008 11:58
Sample : SSTD040PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008

Vial: 7
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.76	108	165316	40.80 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.80	70	128725	40.69 ug/mL	99
23) Hexachloroethane	11.04	117	85214	40.72 ug/mL	100
26) Nitrobenzene	11.14	77	187867	40.42 ug/mL	100
27) Isophorone	11.57	82	322493	40.67 ug/mL	100
28) 2-Nitrophenol	11.73	139	105997	40.26 ug/mL	96
29) 2,4-Dimethylphenol	11.76	107	190248	47.70 ug/mL	99
30) Benzoic acid	11.93	105	78201	36.10 ug/mL	97
31) bis(2-Chloroethoxy)methane	11.94	93	192813	41.34 ug/mL	100
32) 2,4-Dichlorophenol	12.17	162	154698	40.64 ug/mL	100
33) 1,2,4-Trichlorobenzene	12.34	180	173125	41.15 ug/mL	99
34) Naphthalene	12.51	128	465971	41.22 ug/mL	99
35) 4-Chloroaniline	12.57	127	209524	42.16 ug/mL	99
36) Hexachlorobutadiene	12.70	225	105770	41.19 ug/mL	98
37) 4-Chloro-3-methylphenol	13.44	107	178083	41.59 ug/mL	98
38) 2-Methylnaphthalene	13.81	142	328049	40.89 ug/mL	100
41) Hexachlorocyclopentadiene	14.09	237	95122	39.02 ug/mL	99
42) 2,4,6-Trichlorophenol	14.32	196	115261	40.26 ug/mL	100
43) 2,4,5-Trichlorophenol	14.39	196	123156	40.33 ug/mL	99
45) 2-Chloronaphthalene	14.74	162	317739	40.50 ug/mL	99
46) 2-Nitroaniline	14.92	65	122532	41.11 ug/mL	100
47) Dimethyl phthalate	15.23	163	407949	40.82 ug/mL	100
48) 2,6-Dinitrotoluene	15.37	165	106424	41.30 ug/mL	99
49) Acenaphthylene	15.55	152	486118	40.96 ug/mL	100
50) 3-Nitroaniline	15.70	138	106514	40.91 ug/mL	100
51) Acenaphthene	15.88	153	285442	40.76 ug/mL	99
52) 2,4-Dinitrophenol	15.89	184	50488	36.60 ug/mL#	84
53) 4-Nitrophenol	15.97	109	71840	40.05 ug/mL	97
54) 2,4-Dinitrotoluene	16.15	165	142708	40.65 ug/mL	99
55) Dibenzofuran	16.21	168	464086	41.50 ug/mL	99
56) Diethyl phthalate	16.58	149	430254	41.38 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.83	204	193791	41.34 ug/mL	100
58) Fluorene	16.87	166	347424	41.01 ug/mL	99
59) 4-Nitroaniline	16.88	138	105062	40.45 ug/mL	89
60) 1,2-Diphenylhydrazine	17.14	77	390649	41.51 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.93	198	91565	38.12 ug/mL	99
64) n-Nitrosodiphenylamine	17.05	169	264879	40.62 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.78	248	110126	40.40 ug/mL	99
66) Hexachlorobenzene	17.92	284	129651	40.79 ug/mL	99
67) Pentachlorophenol	18.28	266	61357	37.44 ug/mL	98
68) Phenanthrene	18.72	178	521724	40.89 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5339.D KD19FULL.M Mon Dec 22 10:16:37 2008

Pa

719

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5339.D Vial: 7
Acq On : 19 Dec 2008 11:58 Operator: MEG
Sample : SSTD040PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.82	178	528776	41.29 ug/mL	100
70) Carbazole	19.10	167	472720	40.61 ug/mL	100
71) Di-n-butyl phthalate	19.70	149	713746	41.06 ug/mL	100
72) Fluoranthene	21.00	202	564958	40.79 ug/mL	100
74) Benzidine	21.21	184	257844	98.66 ug/mL	100
75) Pyrene	21.45	202	572372	40.50 ug/mL	100
77) Butyl benzyl phthalate	22.59	149	323884	40.30 ug/mL	100
78) 3,3'-Dichlorobenzidine	23.63	252	188908	36.72 ug/mL	99
79) Benzo[a]anthracene	23.72	228	484482	40.90 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.64	149	423783	40.57 ug/mL	100
81) Chrysene	23.80	228	449850	40.21 ug/mL	100
82) Di-n-octyl phthalate	24.87	149	775506	40.40 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.71	276	492471	39.89 ug/mL	99
85) Benzo[b]fluoranthene	25.92	252	492929	40.32 ug/mL	100
86) Benzo[k]fluoranthene	25.99	252	485276	41.06 ug/mL	100
87) Benzo[a]pyrene	26.74	252	461938	40.75 ug/mL	99
88) Dibenz[a,h]anthracene	29.73	278	418855	40.03 ug/mL	100
89) Benzo[g,h,i]perylene	30.38	276	423744	40.13 ug/mL	100

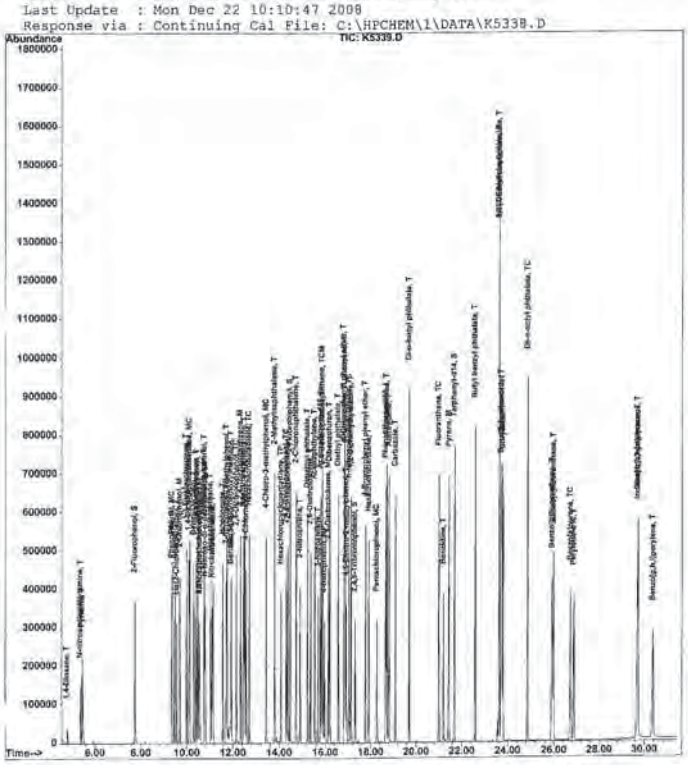
(#) = qualifier out of range (m) = manual integration
K5339.D KD19FULL.M Mon Dec 22 10:16:37 2008 P

720

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5339.D Vial: 7
Acq On : 19 Dec 2008 11:58 Operator: MEG
Sample : SSTD040PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5339.D KD19FULL.M Mon Dec 22 10:16:40 2008 P

721

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5340.D Vial: 8
Acq On : 19 Dec 2008 12:36 Operator: MEG
Sample : SSTD020PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	134637	40.00 ug/mL	0.00
24) Naphthalene-d8	12.47	136	487339	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.82	164	290369	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	497693	40.00 ug/mL	0.00
73) Chrysene-d12	23.75	240	452155	40.00 ug/mL	0.00
84) Perylene-d12	26.89	264	414306	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.78	112	91607	20.34 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 13.56%	
6) Phenol-d5	9.35	99	108170	20.11 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 13.41%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery	= 0.00%	
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	11.10	82	104888	20.60 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 20.60%	
44) 2-Fluorobiphenyl	14.49	172	202328	21.09 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 21.09%	
61) 2,4,6-Tribromophenol	17.32	330	32605	19.97 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 13.31%	
76) Terphenyl-d14	21.69	244	201151	20.59 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 20.59%	

Target Compounds					Qvalue
2) 1,4-Dioxane	4.80	88	14713	8.23 ug/mL	98
3) N-nitrosodimethylamine	5.37	74	43125	19.41 ug/mL	100
4) Pyridine	5.45	79	78132	19.75 ug/mL	100
7) Phenol	9.38	94	113264	20.21 ug/mL	98
8) Aniline	9.49	93	128800	22.29 ug/mL	100
9) bis(2-Chloroethyl)ether	9.58	93	90694	20.65 ug/mL	98
11) 2-Chlorophenol	9.71	128	99716	19.98 ug/mL	98
12) 1,3-Dichlorobenzene	10.00	146	109503	20.35 ug/mL	100
13) 1,4-Dichlorobenzene	10.13	146	108475	20.65 ug/mL	98
14) Benzyl alcohol	10.31	108	63425	20.16 ug/mL	100
16) 1,2-Dichlorobenzene	10.41	146	97425	20.45 ug/mL	100
17) 2-Methylphenol	10.48	108	85351	20.78 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.55	45	122632	20.48 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.55	45	122632	20.48 ug/mL	99
20) (3+4)-Methylphenol	10.75	108	92650	20.48 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5340.D KD19FULL.M Mon Dec 22 10:16:44 2008 P

722

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5340.D Vial: 8
Acq On : 19 Dec 2008 12:36 Operator: MEG
Sample : SSTD020PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.75	108	92650	20.48 ug/mL	100
22) N-Nitroso-di-n-propylamine	10.79	70	70831	20.06 ug/mL	100
23) Hexachloroethane	11.04	117	47318	20.26 ug/mL	99
26) Nitrobenzene	11.14	77	105896	20.57 ug/mL	100
27) Isophorone	11.57	82	177486	20.20 ug/mL	100
28) 2-Nitrophenol	11.73	139	58187	19.95 ug/mL	97
29) 2,4-Dimethylphenol	11.76	107	101739	23.02 ug/mL	99
30) Benzoic acid	11.90	105	30475	12.70 ug/mL	96
31) bis(2-Chloroethoxy)methane	11.94	93	108030	20.90 ug/mL	98
32) 2,4-Dichlorophenol	12.16	162	84829	20.12 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.34	180	96696	20.75 ug/mL	100
34) Naphthalene	12.51	128	260287	20.78 ug/mL	97
35) 4-Chloroaniline	12.57	127	115718	21.02 ug/mL	100
36) Hexachlorobutadiene	12.71	225	58994	20.74 ug/mL	99
37) 4-Chloro-3-methylphenol	13.44	107	97169	20.48 ug/mL	98
38) 2-Methylnaphthalene	13.81	142	181988	20.47 ug/mL	99
41) Hexachlorocyclopentadiene	14.09	237	46425	17.76 ug/mL	100
42) 2,4,6-Trichlorophenol	14.32	196	61634	20.08 ug/mL	100
43) 2,4,5-Trichlorophenol	14.39	196	67123	20.50 ug/mL	99
45) 2-Chloronaphthalene	14.74	162	176401	20.97 ug/mL	100
46) 2-Nitroaniline	14.91	65	65351	20.45 ug/mL	100
47) Dimethyl phthalate	15.23	163	223432	20.85 ug/mL	100
48) 2,6-Dinitrotoluene	15.37	165	56667	20.51 ug/mL	99
49) Acenaphthylene	15.55	152	269666	21.19 ug/mL	100
50) 3-Nitroaniline	15.70	138	57109	20.46 ug/mL	100
51) Acenaphthene	15.88	153	158865	21.15 ug/mL	96
52) 2,4-Dinitrophenol	15.89	184	21634	14.62 ug/mL#	39
53) 4-Nitrophenol	15.97	109	35647	18.53 ug/mL	98
54) 2,4-Dinitrotoluene	16.14	165	76424	20.30 ug/mL	98
55) Dibenzofuran	16.20	168	255387	21.30 ug/mL	99
56) Diethyl phthalate	16.56	149	231714	20.78 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.83	204	107070	21.30 ug/mL	99
58) Fluorene	16.87	166	192299	21.17 ug/mL	99
59) 4-Nitroaniline	16.87	138	54819	19.68 ug/mL	92
60) 1,2-Diphenylhydrazine	17.14	77	216136	21.42 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.93	198	43819	17.13 ug/mL	99
64) n-Nitrosodiphenylamine	17.05	169	145853	21.00 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.78	248	60058	20.69 ug/mL	100
66) Hexachlorobenzene	17.92	284	71587	21.15 ug/mL	99
67) Pentachlorophenol	18.28	266	27404	15.70 ug/mL	98
68) Phenanthrene	18.72	178	285895	21.04 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5340.D KD19FULL.M Mon Dec 22 10:16:45 2008 P

723

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5340.D Vial: 8
Acq On : 19 Dec 2008 12:36 Operator: MEG
Sample : SSTD020PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

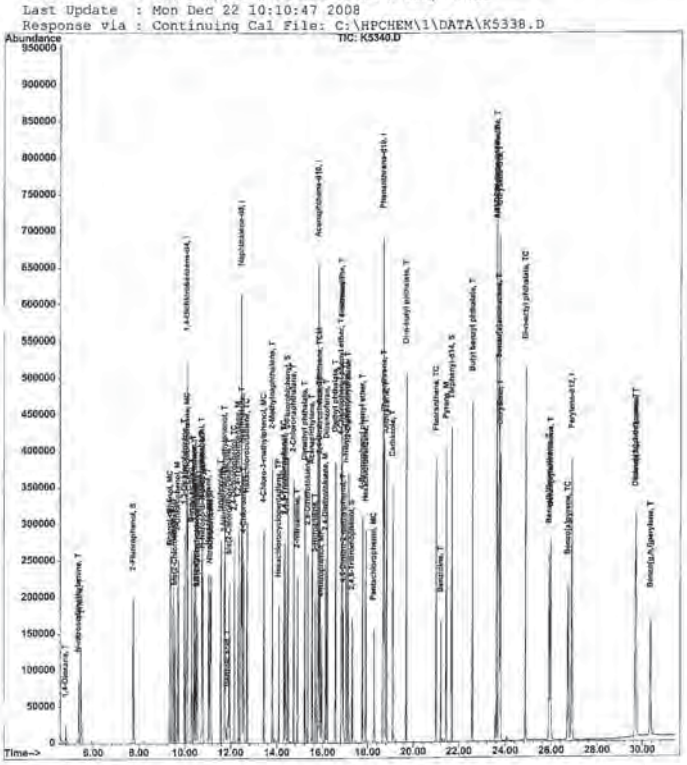
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.82	178	290600	21.30 ug/mL	99
70) Carbazole	19.10	167	256294	20.68 ug/mL	99
71) Di-n-butyl phthalate	19.70	149	384198	20.75 ug/mL	100
72) Fluoranthene	21.00	202	309545	20.98 ug/mL	99
74) Benzidine	21.21	184	112443	39.94 ug/mL	99
75) Pyrene	21.44	202	316176	20.77 ug/mL	99
77) Butyl benzyl phthalate	22.59	149	175900	20.32 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.63	252	101520	18.32 ug/mL	99
79) Benzo[a]anthracene	23.72	228	264579	20.73 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	23.64	149	234221	20.82 ug/mL	99
81) Chrysene	23.80	228	249581	20.71 ug/mL	100
82) Di-n-octyl phthalate	24.87	149	417184	20.17 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.69	276	262306	19.72 ug/mL	98
85) Benzo[b]fluoranthene	25.91	252	263978	20.25 ug/mL	100
86) Benzo[k]fluoranthene	25.98	252	264286	20.98 ug/mL	100
87) Benzo[a]pyrene	26.74	252	250258	20.71 ug/mL	100
88) Dibenz[a,h]anthracene	29.71	278	226460	20.30 ug/mL	99
89) Benzo[g,h,i]perylene	30.36	276	226653	20.13 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5340.D KD19FULL.M Mon Dec 22 10:16:46 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5340.D Vial: 8
Acq On : 19 Dec 2008 12:36 Operator: MEG
Sample : SSTD020PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5340.D KD19FULL.M Mon Dec 22 10:16:49 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5341.D Vial: 9
Acq On : 19 Dec 2008 13:15 Operator: MEG
Sample : SSTD010PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	134804	40.00 ug/mL	0.00
24) Naphthalene-d8	12.47	136	492292	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.81	164	294073	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	495364	40.00 ug/mL	0.00
73) Chrysene-d12	23.74	240	454877	40.00 ug/mL	0.00
84) Perylene-d12	26.89	264	411974	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.76	112	45311	10.05 ug/mL	0.00
Spiked Amount 150.000			Recovery = 6.70%		
6) Phenol-d5	9.35	99	54540	10.13 ug/mL	0.00
Spiked Amount 150.000			Recovery = 6.75%		
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery = 0.00%		
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery = 0.00%		
25) Nitrobenzene-d5	11.10	82	51713	10.05 ug/mL	0.00
Spiked Amount 100.000			Recovery = 10.05%		
44) 2-Fluorobiphenyl	14.48	172	102954	10.60 ug/mL	0.00
Spiked Amount 100.000			Recovery = 10.60%		
61) 2,4,6-Tribromophenol	17.32	330	15290	9.25 ug/mL	0.00
Spiked Amount 150.000			Recovery = 6.17%		
76) Terphenyl-d14	21.68	244	101183	10.29 ug/mL	0.00
Spiked Amount 100.000			Recovery = 10.29%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.80	88	7155	4.00 ug/mL	98
3) N-nitrosodimethylamine	5.37	74	21679	9.74 ug/mL	98
4) Pyridine	5.45	79	38917	9.83 ug/mL	99
7) Phenol	9.37	94	57813	10.31 ug/mL	97
8) Aniline	9.50	93	64881	11.22 ug/mL	99
9) bis(2-Chloroethyl)ether	9.58	93	45777	10.41 ug/mL	100
11) 2-Chlorophenol	9.72	128	49960	10.00 ug/mL	99
12) 1,3-Dichlorobenzene	10.01	146	55027	10.21 ug/mL	98
13) 1,4-Dichlorobenzene	10.13	146	55017	10.46 ug/mL	95
14) Benzyl alcohol	10.31	108	31434	9.98 ug/mL	99
16) 1,2-Dichlorobenzene	10.42	146	49830	10.45 ug/mL	100
17) 2-Methylphenol	10.48	108	43000	10.45 ug/mL	99
18) 2,2'-oxybis(1-chloropropan	10.55	45	64183	10.71 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.55	45	64183	10.71 ug/mL	99
20) (3+4)-Methylphenol	10.75	108	46619	10.29 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5341.D KD19FULL.M Mon Dec 22 10:16:51 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5341.D Vial: 9
Acq On : 19 Dec 2008 13:15 Operator: MEG
Sample : SSTD010PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.75	108	46619	10.29 ug/mL	99
22) N-Nitroso-di-n-propylamine	10.78	70	36195	10.24 ug/mL	97
23) Hexachloroethane	11.04	117	23721	10.14 ug/mL	100
26) Nitrobenzene	11.14	77	52319	10.06 ug/mL	99
27) Isophorone	11.56	82	88654	9.99 ug/mL	100
28) 2-Nitrophenol	11.72	139	28644	9.72 ug/mL	96
29) 2,4-Dimethylphenol	11.75	107	52375	11.73 ug/mL	99
30) Benzoic acid	11.87	105	9147	3.77 ug/mL	94
31) bis(2-Chloroethoxy)methane	11.94	93	54494	10.44 ug/mL	97
32) 2,4-Dichlorophenol	12.17	162	42427	9.96 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.34	180	48870	10.38 ug/mL	99
34) Naphthalene	12.50	128	133265	10.53 ug/mL	97
35) 4-Chloroaniline	12.57	127	59026	10.61 ug/mL	100
36) Hexachlorobutadiene	12.71	225	29615	10.31 ug/mL	99
37) 4-Chloro-3-methylphenol	13.44	107	47257	9.86 ug/mL	99
38) 2-Methylnaphthalene	13.81	142	91146	10.15 ug/mL	100
41) Hexachlorocyclopentadiene	14.10	237	18931	7.15 ug/mL	99
42) 2,4,6-Trichlorophenol	14.32	196	30495	9.81 ug/mL	99
43) 2,4,5-Trichlorophenol	14.39	196	32542	9.81 ug/mL	99
45) 2-Chloronaphthalene	14.75	162	88670	10.41 ug/mL	99
46) 2-Nitroaniline	14.91	65	32155	9.93 ug/mL	98
47) Dimethyl phthalate	15.23	163	112283	10.34 ug/mL	100
48) 2,6-Dinitrotoluene	15.36	165	27641	9.88 ug/mL	100
49) Acenaphthylene	15.55	152	133592	10.36 ug/mL	100
50) 3-Nitroaniline	15.69	138	28272	10.00 ug/mL	98
51) Acenaphthene	15.87	153	80334	10.56 ug/mL	95
52) 2,4-Dinitrophenol	15.89	184	5945	3.97 ug/mL#	1
53) 4-Nitrophenol	15.96	109	15794	8.11 ug/mL	98
54) 2,4-Dinitrotoluene	16.14	165	37139	9.74 ug/mL	99
55) Dibenzofuran	16.20	168	128908	10.61 ug/mL	99
56) Diethyl phthalate	16.57	149	116789	10.34 ug/mL	100
57) 4-Chlorophenyl phenyl ethe	16.83	204	53753	10.56 ug/mL	99
58) Fluorene	16.86	166	98055	10.66 ug/mL	100
59) 4-Nitroaniline	16.86	138	28408	10.07 ug/mL	91
60) 1,2-Diphenylhydrazine	17.14	77	109610	10.72 ug/mL	99
63) 4,6-Dinitro-2-methylphenol	16.92	198	17029	6.69 ug/mL	97
64) n-Nitrosodiphenylamine	17.05	169	73245	10.60 ug/mL	100
65) 4-Bromophenyl phenyl ether	17.77	248	30102	10.42 ug/mL	99
66) Hexachlorobenzene	17.92	284	35646	10.58 ug/mL	100
67) Pentachlorophenol	18.28	266	9599	5.53 ug/mL	98
68) Phenanthrene	18.72	178	145739	10.78 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5341.D KD19FULL.M Mon Dec 22 10:16:52 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5341.D Vial: 9
Acq On : 19 Dec 2008 13:15 Operator: MEG
Sample : SSTD010PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

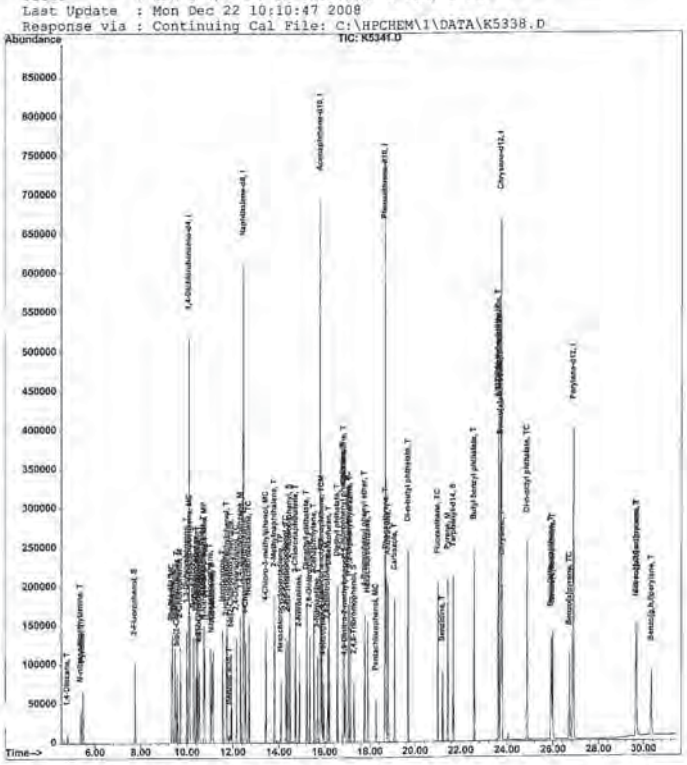
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69) Anthracene	18.82	178	148471	10.94 ug/mL	99
70) Carbazole	19.10	167	131923	10.69 ug/mL	99
71) Di-n-butyl phthalate	19.70	149	191808	10.41 ug/mL	100
72) Fluoranthene	21.00	202	156471	10.66 ug/mL	99
74) Benzidine	21.21	184	62803	22.17 ug/mL	98
75) Pyrene	21.44	202	158926	10.38 ug/mL	98
77) Butyl benzyl phthalate	22.58	149	87292	10.02 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.62	252	57886	10.38 ug/mL	99
79) Benzo[a]anthracene	23.72	228	133067	10.36 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	23.64	149	115759	10.23 ug/mL	98
81) Chrysene	23.79	228	125368	10.34 ug/mL	99
82) Di-n-octyl phthalate	24.87	149	202037	9.71 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.67	276	123779	9.25 ug/mL	99
85) Benzo[b]fluoranthene	25.91	252	132011	10.19 ug/mL	99
86) Benzo[k]fluoranthene	25.97	252	128961	10.29 ug/mL	100
87) Benzo[a]pyrene	26.73	252	122720	10.21 ug/mL	99
88) Dibenz[a,h]anthracene	29.69	278	107021	9.65 ug/mL	99
89) Benzo[g,h,i]perylene	30.35	276	108793	9.72 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5341.D KD19FULL.M Mon Dec 22 10:16:53 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5341.D Vial: 9
Acq On : 19 Dec 2008 13:15 Operator: MEG
Sample : SSTD010PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5341.D KD19FULL.M Mon Dec 22 10:16:56 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5342.D Vial: 10
Acq On : 19 Dec 2008 13:53 Operator: MEG
Sample : SSTD005PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	126539	40.00 ug/mL	0.00
24) Naphthalene-d8	12.47	136	468791	40.00 ug/mL	0.00
39) Acenaphthene-d10	15.82	164	284568	40.00 ug/mL	0.00
62) Phenanthrene-d10	18.67	188	483631	40.00 ug/mL	0.00
73) Chrysene-d12	23.74	240	450822	40.00 ug/mL	0.00
84) Perylene-d12	26.88	264	398843	40.00 ug/mL	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	7.76	112	20504	4.84 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 3.23%	
6) Phenol-d5	9.35	99	24994	4.94 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 3.29%	
10) 2-Chlorophenol-d4	0.00	132	0	0.00 ul/mL	
Spiked Amount 150.000			Recovery	= 0.00%	
15) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00 ul/mL	
Spiked Amount 100.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	11.10	82	24355	4.97 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 4.97%	
44) 2-Fluorobiphenyl	14.48	172	49581	5.27 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 5.27%	
61) 2,4,6-Tribromophenol	17.31	330	6462	4.04 ug/mL	0.00
Spiked Amount 150.000			Recovery	= 2.69%	
76) Terphenyl-d14	21.69	244	49521	5.08 ug/mL	0.00
Spiked Amount 100.000			Recovery	= 5.08%	
Target Compounds					Qvalue
2) 1,4-Dioxane	4.80	88	3492	2.08 ug/mL	96
3) N-nitrosodimethylamine	5.37	74	9858	4.72 ug/mL	96
4) Pyridine	5.46	79	18069	4.86 ug/mL	100
7) Phenol	9.37	94	26280	4.99 ug/mL	95
8) Aniline	9.49	93	30803	5.67 ug/mL	100
9) bis(2-Chloroethyl)ether	9.58	93	21782	5.28 ug/mL	98
11) 2-Chlorophenol	9.71	128	23667	5.05 ug/mL	98
12) 1,3-Dichlorobenzene	10.00	146	25989	5.14 ug/mL	99
13) 1,4-Dichlorobenzene	10.13	146	25688	5.20 ug/mL	98
14) Benzyl alcohol	10.30	108	14872	5.03 ug/mL	93
16) 1,2-Dichlorobenzene	10.41	146	23881	5.33 ug/mL	98
17) 2-Methylphenol	10.48	108	20176	5.23 ug/mL	98
18) 2,2'-oxybis(1-chloropropan	10.55	45	30228	5.37 ug/mL	99
19) bis(2-Chloroisopropyl)ethe	10.55	45	30228	5.37 ug/mL	99
20) (3+4)-Methylphenol	10.75	108	21184	4.98 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K5342.D KD19FULL.M Mon Dec 22 10:17:00 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5342.D Vial: 10
Acq On : 19 Dec 2008 13:53 Operator: MEG
Sample : SSTD005PPM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008 Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
21) 4-Methylphenol	10.75	108	21184	4.98 ug/mL	98
22) N-Nitroso-di-n-propylamine	10.78	70	16938	5.10 ug/mL	97
23) Hexachloroethane	11.04	117	10947	4.99 ug/mL	99
26) Nitrobenzene	11.14	77	24593	4.97 ug/mL	99
27) Isophorone	11.56	82	41874	4.95 ug/mL	99
28) 2-Nitrophenol	11.73	139	12685	4.52 ug/mL	94
29) 2,4-Dimethylphenol	11.75	107	24823	5.84 ug/mL	99
31) bis(2-Chloroethoxy)methane	11.94	93	26073	5.24 ug/mL	97
32) 2,4-Dichlorophenol	12.16	162	19121	4.71 ug/mL	99
33) 1,2,4-Trichlorobenzene	12.34	180	22894	5.11 ug/mL	99
34) Naphthalene	12.51	128	63446	5.27 ug/mL	87
35) 4-Chloroaniline	12.57	127	27693	5.23 ug/mL	98
36) Hexachlorobutadiene	12.71	225	13588	4.97 ug/mL	99
37) 4-Chloro-3-methylphenol	13.44	107	21686	4.75 ug/mL	99
38) 2-Methylnaphthalene	13.81	142	44002	5.15 ug/mL	100
41) Hexachlorocyclopentadiene	14.09	237	6450	2.52 ug/mL	97
42) 2,4,6-Trichlorophenol	14.32	196	13624	4.53 ug/mL	98
43) 2,4,5-Trichlorophenol	14.39	196	15215	4.74 ug/mL	99
45) 2-Chloronaphthalene	14.74	162	42081	5.10 ug/mL	99
46) 2-Nitroaniline	14.91	65	14535	4.64 ug/mL	99
47) Dimethyl phthalate	15.23	163	53734	5.12 ug/mL	99
48) 2,6-Dinitrotoluene	15.36	165	12954	4.78 ug/mL	98
49) Acenaphthylene	15.54	152	64423	5.16 ug/mL	100
50) 3-Nitroaniline	15.69	138	13045	4.77 ug/mL	99
51) Acenaphthene	15.87	153	39370	5.35 ug/mL	93
53) 4-Nitrophenol	15.95	109	5674	3.01 ug/mL	94
54) 2,4-Dinitrotoluene	16.13	165	17307	4.69 ug/mL	99
55) Dibenzofuran	16.20	168	63452	5.40 ug/mL	97
56) Diethyl phthalate	16.57	149	55787	5.11 ug/mL	99
57) 4-Chlorophenyl phenyl ethe	16.83	204	25639	5.20 ug/mL	98
58) Fluorene	16.86	166	48176	5.41 ug/mL	99
59) 4-Nitroaniline	16.85	138	13131	4.81 ug/mL	89
60) 1,2-Diphenylhydrazine	17.13	77	52644	5.32 ug/mL	100
63) 4,6-Dinitro-2-methylphenol	16.92	198	4948	1.99 ug/mL	93
64) n-Nitrosodiphenylamine	17.05	169	35114	5.20 ug/mL	99
65) 4-Bromophenyl phenyl ether	17.77	248	14458	5.13 ug/mL	100
66) Hexachlorobenzene	17.91	284	17617	5.36 ug/mL	99
67) Pentachlorophenol	18.28	266	2616	1.54 ug/mL	85
68) Phenanthrene	18.72	178	71286	5.40 ug/mL	99
69) Anthracene	18.81	178	72812	5.49 ug/mL	100
70) Carbazole	19.09	167	62752	5.21 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5342.D KD19FULL.M Mon Dec 22 10:17:01 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5342.D
Acq On : 19 Dec 2008 13:53
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Thu Dec 18 09:06:57 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
71) Di-n-butyl phthalate	19.70	149	92005	5.11 ug/mL	99
72) Fluoranthene	20.99	202	75018	5.23 ug/mL	98
74) Benzidine	21.21	184	29812	10.62 ug/mL	99
75) Pyrene	21.44	202	78116	5.15 ug/mL	97
77) Butyl benzyl phthalate	22.58	149	41872	4.85 ug/mL	99
78) 3,3'-Dichlorobenzidine	23.62	252	28343	5.13 ug/mL	100
79) Benzo[a]anthracene	23.71	228	65452	5.14 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	23.63	149	55890	4.98 ug/mL	98
81) Chrysene	23.79	228	62627	5.21 ug/mL	99
82) Di-n-octyl phthalate	24.87	149	94400	4.58 ug/mL	100
83) Indeno[1,2,3-cd]pyrene	29.67	276	58069	4.38 ug/mL	99
85) Benzo[b]fluoranthene	25.90	252	62771	5.00 ug/mL	99
86) Benzo[k]fluoranthene	25.97	252	62829	5.18 ug/mL	99
87) Benzo[a]pyrene	26.72	252	58039	4.99 ug/mL	99
88) Dibenz[a,h]anthracene	29.69	278	48750	4.54 ug/mL	98
89) Benzo[g,h,i]perylene	30.34	276	49910	4.61 ug/mL	99

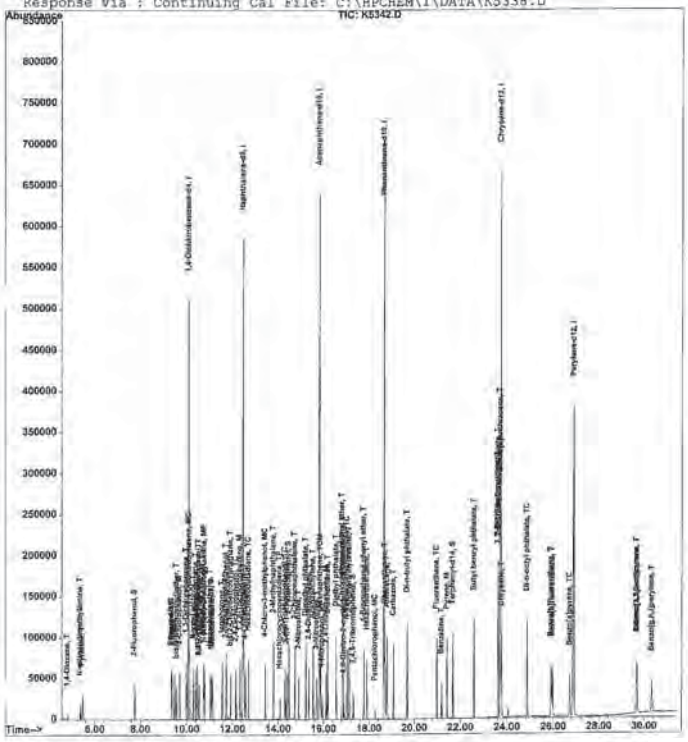
(#) = qualifier out of range (m) = manual integration
K5342.D KD19FULL.M Mon Dec 22 10:17:02 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5342.D
Acq On : 19 Dec 2008 13:53
Sample : SSTD005PPM
Misc : ICAL,8270W,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 9:55 2008

Vial: 10
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19FULL.RES

Method : C:\HPCHEM\1\METHODS\KD19FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5338.D



K5342.D KD19FULL.M Mon Dec 22 10:17:04 2008

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Initial Calibration

Calibration Files
160 =K5345.D 120 =K5346.D 80 =K5347.D
50 =K5348.D 40 =K5349.D 20 =K5350.D

	Compound	160	120	80	50	40	20	Avg	%RSD
1) I	1,4-Dichlorobenzene-d	ISTD							
2) T	Benzaldehyde	1.100	1.115	1.143	1.147	1.175	1.191	1.147	2.71
3) T	2-Octanol							0.000#	-1.00
4) T	Acetophenone	1.867	1.918	1.968	2.013	2.047	2.113	2.011	4.45
5) I	Naphthalene-d8	ISTD							
6) T	Caprolactam	0.143	0.144	0.145	0.149	0.147	0.146	0.142	4.69
7) I	Acenaphthene-d10	ISTD							
8) T	1,1'-Biphenyl	1.226	1.281	1.297	1.321	1.346	1.389	1.330	4.51
9)	1-Phenyl-1-[4-methy	0.732	0.797	0.817	0.838	0.853	0.886	0.838	6.70
10)	1-Phenyl-1-[2,4-dim	0.860	0.948	0.974	1.030	1.037	1.091	1.020	8.60
11) I	Phenanthrene-d10	ISTD							
12) T	Atrazine	0.226	0.232	0.236	0.237	0.242	0.246	0.237	2.90
13) T	2-Ethylanthraquinon							0.000#	-1.00
14) I	Chrysene-d12	ISTD							
15) I	Perylene-d12	ISTD							

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19OLM.M Mon Dec 22 10:29:34 2008

12/22/10

Response Factor Report #6MS40

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:24:47 2008
Response via : Initial Calibration

Calibration Files
10 =K5351.D 5. =K5352.D =
= = =

	Compound	10	5.	Avg	%RSD
1) I	1,4-Dichlorobenzene-d	ISTD			
2) T	Benzaldehyde	1.174	1.135		
3) T	2-Octanol				
4) T	Acetophenone	2.121	2.045		
5) I	Naphthalene-d8	ISTD			
6) T	Caprolactam	0.138	0.128		
7) I	Acenaphthene-d10	ISTD			
8) T	1,1'-Biphenyl	1.396	1.383		
9)	1-Phenyl-1-[4-methy	0.905	0.879		
10)	1-Phenyl-1-[2,4-dim	1.120	1.096		
11) I	Phenanthrene-d10	ISTD			
12) T	Atrazine	0.243	0.232		
13) T	2-Ethylanthraquinon				
14) I	Chrysene-d12	ISTD			
15) I	Perylene-d12	ISTD			

(#) = Out of Range ### Number of calibration levels exceeded format ###
KD19OLM.M Mon Dec 22 10:46:59 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5345.D Vial: 13
Acq On : 19 Dec 2008 15:49 Operator: MEG
Sample : SSTD160PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:24:47 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	171808	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	662061	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	376020	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.68	188	626429	40.00 ug/mL	0.00
14) Chrysene-d12	23.75	240	621078	40.00 ug/mL	0.00
15) Perylene-d12	26.90	264	557284	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.35	77	756187	153.44 ug/mL	99
4) Acetophenone	10.84	105	1283227	148.42 ug/mL	99
6) Caprolactam	13.29	55	378171	153.83 ug/mL	99
8) 1,1'-Biphenyl	14.72	154	1844721	148.55 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.79	181	1100245	139.61 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.54	195	1294107	133.60 ug/mL	98
12) Atrazine	18.09	200	565921	152.18 ug/mL	100

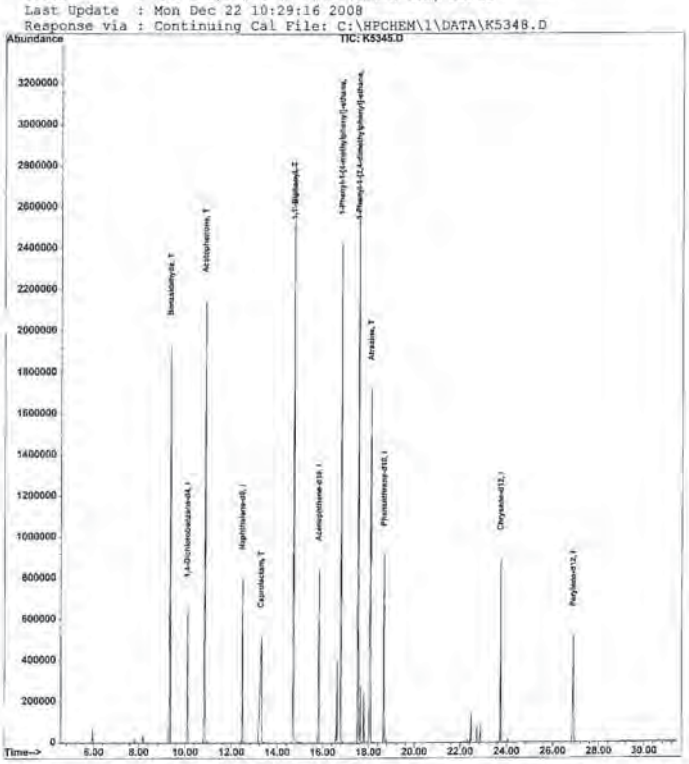
(#) = qualifier out of range (m) = manual integration
K5345.D KD19OLM.M Mon Dec 22 10:47:42 2008 P

736

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5345.D Vial: 13
Acq On : 19 Dec 2008 15:49 Operator: MEG
Sample : SSTD160PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5345.D KD19OLM.M Mon Dec 22 10:47:43 2008 P

737

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5346.D Vial: 14
Acq On : 19 Dec 2008 16:27 Operator: MEG
Sample : SSTD120PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Tue Dec 09 08:58:59 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	133972	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	508285	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	290887	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	490550	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	482012	40.00 ug/mL	0.00
15) Perylene-d12	26.89	264	429602	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.34	77	448044	116.59 ug/mL	99
4) Acetophenone	10.83	105	770965	114.35 ug/mL	100
6) Caprolactam	13.26	55	220232	116.69 ug/mL	99
8) 1,1'-Biphenyl	14.71	154	1117900	116.37 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.78	181	695511	114.08 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.53	195	827716	110.46 ug/mL	99
12) Atrazine	18.08	200	341257	117.18 ug/mL	100

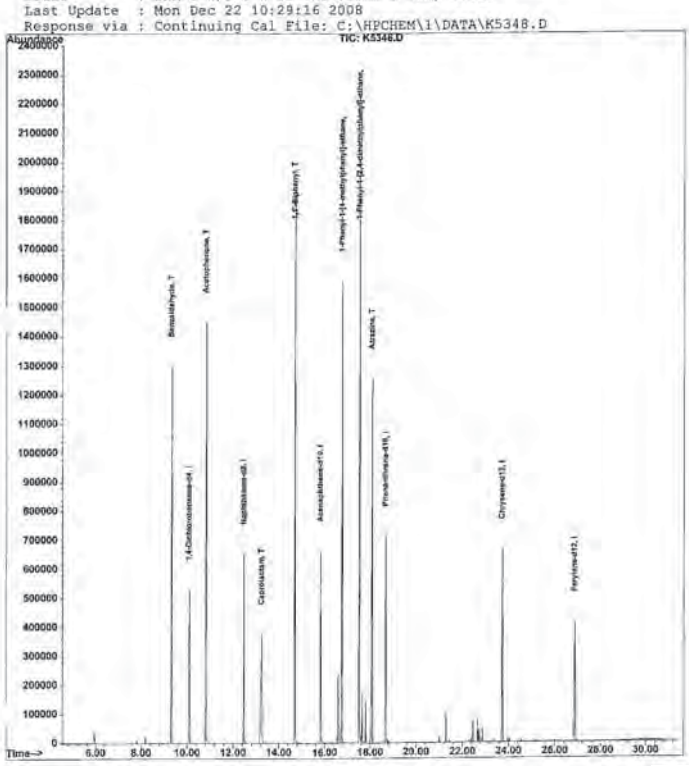
(#) = qualifier out of range (m) = manual integration
K5346.D KD19OLM.M Mon Dec 22 10:47:45 2008 P

738

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5346.D Vial: 14
Acq On : 19 Dec 2008 16:27 Operator: MEG
Sample : SSTD120PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5346.D KD19OLM.M Mon Dec 22 10:47:46 2008 P

739

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5347.D Vial: 15
Acq On : 19 Dec 2008 17:06 Operator: MEG
Sample : SSTD080PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Tue Dec 09 08:58:59 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	164069	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	626559	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	358379	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.68	188	598400	40.00 ug/mL	0.00
14) Chrysene-d12	23.75	240	590759	40.00 ug/mL	0.00
15) Perylene-d12	26.89	264	528079	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.34	77	374929	79.67 ug/mL	99
4) Acetophenone	10.83	105	645749	78.21 ug/mL	100
6) Caprolactam	13.24	55	181376	77.96 ug/mL	100
8) 1,1'-Biphenyl	14.70	154	929320	78.52 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.78	181	585693	77.97 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.53	195	698250	75.63 ug/mL	99
12) Atrazine	18.07	200	282564	79.54 ug/mL	99

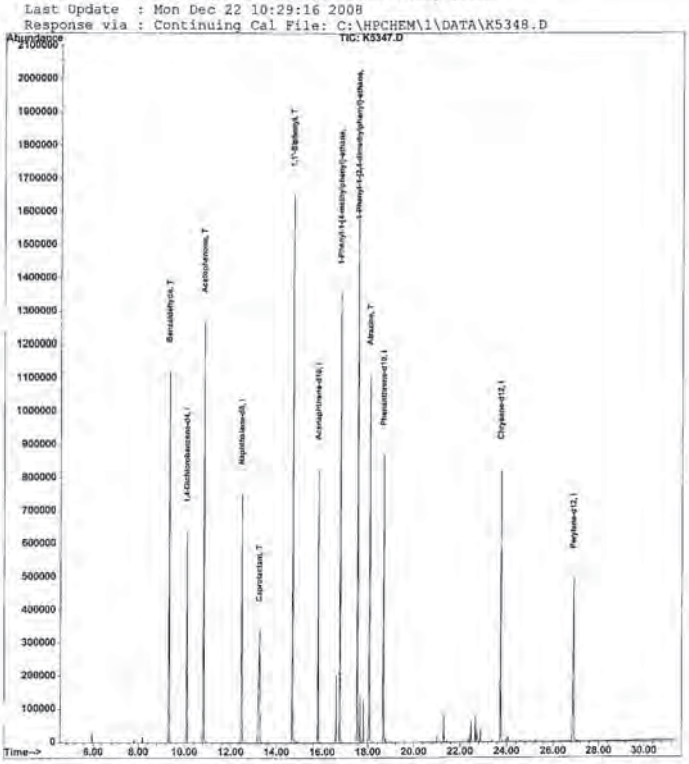
(#) = qualifier out of range (m) = manual integration
K5347.D KD19OLM.M Mon Dec 22 10:47:48 2008 P

740

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5347.D Vial: 15
Acq On : 19 Dec 2008 17:06 Operator: MEG
Sample : SSTD080PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5347.D KD19OLM.M Mon Dec 22 10:47:49 2008 P

741

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5348.D Vial: 16
Acq On : 19 Dec 2008 17:44 Operator: MEG
Sample : SSTD050PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:24 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:24:31 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	171780	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	656500	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	381187	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.68	188	639991	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	617117	40.00 ug/mL	0.00
15) Perylene-d12	26.89	264	560733	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.33	77	246368	50.00 ug/mL	100
4) Acetophenone	10.82	105	432230	50.00 ug/mL	100
6) Caprolactam	13.22	55	121884	50.00 ug/mL	100
8) 1,1'-Biphenyl	14.69	154	629436	50.00 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.77	181	399470	50.00 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.53	195	490984	50.00 ug/mL	100
12) Atrazine	18.06	200	189967	50.00 ug/mL	100

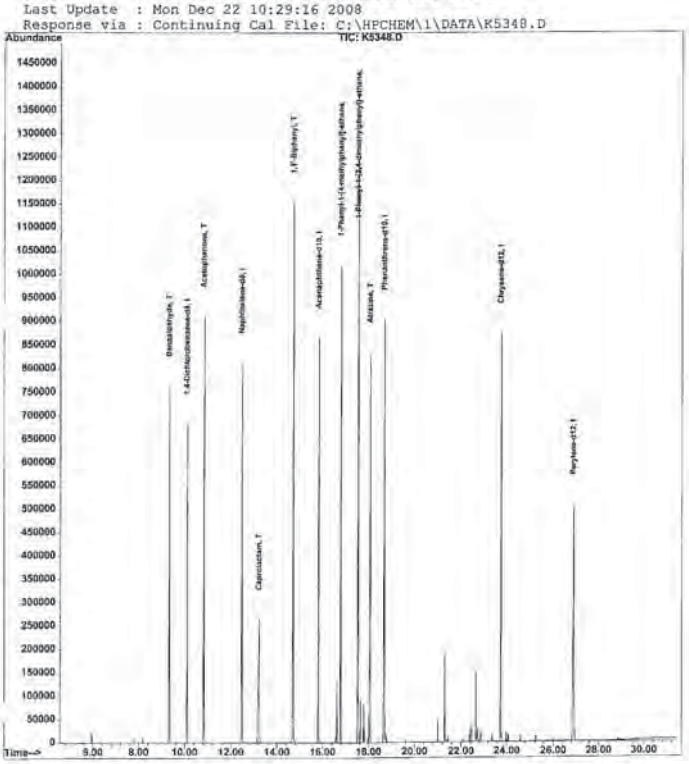
(#) = qualifier out of range (m) = manual integration
K5348.D KD19OLM.M Mon Dec 22 10:47:51 2008 P

742

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5348.D Vial: 16
Acq On : 19 Dec 2008 17:44 Operator: MEG
Sample : SSTD050PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:24 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5348.D KD19OLM.M Mon Dec 22 10:47:52 2008 P

743

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5349.D Vial: 17
Acq On : 19 Dec 2008 18:23 Operator: MEG
Sample : SSTD040PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Tue Dec 09 08:58:59 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	185105	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	712214	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	408259	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.68	188	680648	40.00 ug/mL	0.00
14) Chrysene-d12	23.75	240	632844	40.00 ug/mL	0.00
15) Perylene-d12	26.89	264	573444	40.00 ug/mL	0.00

System Monitoring Compounds

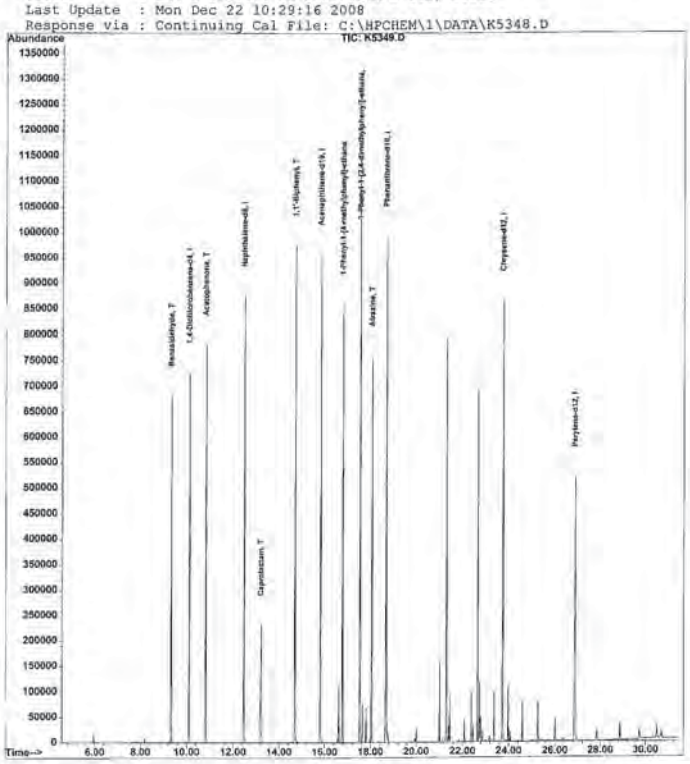
Target Compounds					Qvalue
2) Benzaldehyde	9.32	77	217433	40.95 ug/mL	99
4) Acetophenone	10.81	105	378823	40.67 ug/mL	100
6) Caprolactam	13.21	55	104691	39.59 ug/mL	99
8) 1,1'-Biphenyl	14.70	154	549434	40.75 ug/mL	100
9) 1-Phenyl-1-[4-methylphenyl	16.78	181	348083	40.68 ug/mL	100
10) 1-Phenyl-1-[2,4-dimethylph	17.52	195	423246	40.24 ug/mL	99
12) Atrazine	18.06	200	164920	40.81 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5349.D KD19OLM.M Mon Dec 22 10:47:54 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5349.D Vial: 17
Acq On : 19 Dec 2008 18:23 Operator: MEG
Sample : SSTD040PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5349.D KD19OLM.M Mon Dec 22 10:47:55 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5350.D Vial: 18
Acq On : 19 Dec 2008 19:02 Operator: MEG
Sample : SSTD020PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Tue Dec 09 08:58:59 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	226186	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	877006	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	498317	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.68	188	825072	40.00 ug/mL	0.00
14) Chrysene-d12	23.75	240	779373	40.00 ug/mL	0.00
15) Perylene-d12	26.90	264	710827	40.00 ug/mL	0.00

System Monitoring Compounds

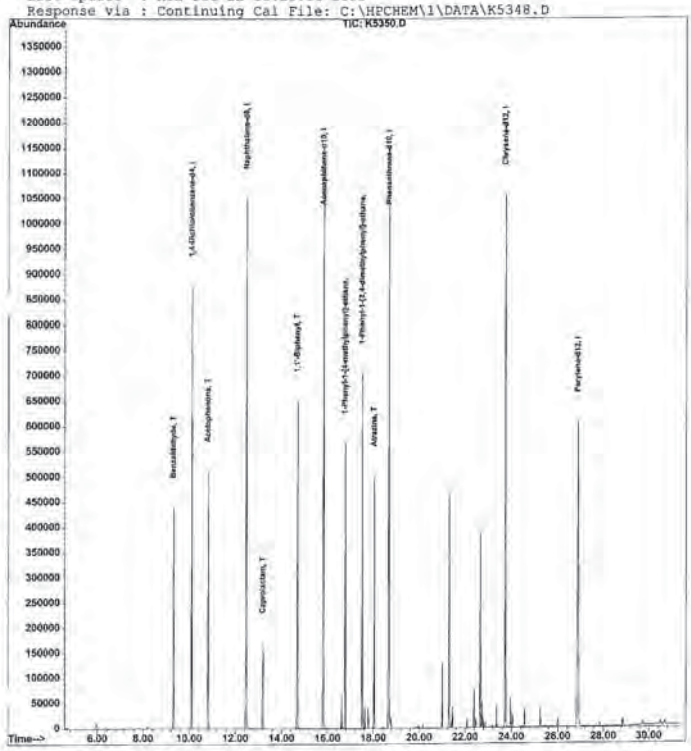
Target Compounds					Qvalue
2) Benzaldehyde	9.32	77	134658	20.76 ug/mL	99
4) Acetophenone	10.81	105	238939	20.99 ug/mL	99
6) Caprolactam	13.20	55	64107	19.69 ug/mL	99
8) 1,1'-Biphenyl	14.69	154	346141	21.03 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.77	181	220684	21.13 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.52	195	271886	21.18 ug/mL	100
12) Atrazine	18.05	200	101477	20.72 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5350.D KD19OLM.M Mon Dec 22 10:47:56 2008 P

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5350.D Vial: 18
Acq On : 19 Dec 2008 19:02 Operator: MEG
Sample : SSTD020PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5350.D KD19OLM.M Mon Dec 22 10:47:58 2008 P

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5351.D Vial: 19
Acq On : 19 Dec 2008 19:40 Operator: MEG
Sample : SSTD010PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Tue Dec 09 08:58:59 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	169819	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	652838	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.81	164	378608	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	635492	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	599280	40.00 ug/mL	0.00
15) Perylene-d12	26.89	264	534155	40.00 ug/mL	0.00

System Monitoring Compounds

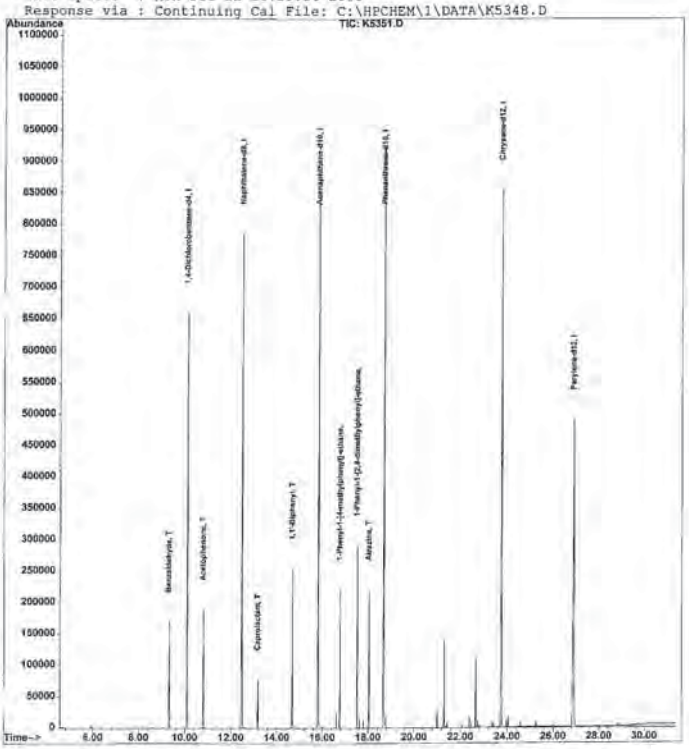
Target Compounds					Qvalue
2) Benzaldehyde	9.32	77	49852	10.23 ug/mL	99
4) Acetophenone	10.81	105	90038	10.54 ug/mL	97
6) Caprolactam	13.18	55	22578	9.31 ug/mL	99
8) 1,1'-Biphenyl	14.69	154	132109	10.57 ug/mL	98
9) 1-Phenyl-1-[4-methylphenyl	16.77	181	85630	10.79 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.51	195	105989	10.87 ug/mL	99
12) Atrazine	18.04	200	38678	10.25 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5351.D KD19OLM.M Mon Dec 22 10:48:00 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5351.D Vial: 19
Acq On : 19 Dec 2008 19:40 Operator: MEG
Sample : SSTD010PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5351.D KD19OLM.M Mon Dec 22 10:48:01 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5352.D Vial: 20
Acq On : 19 Dec 2008 20:19 Operator: MEG
Sample : SSTD005PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Tue Dec 09 08:58:59 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	147015	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	565172	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.81	164	328127	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	549884	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	522959	40.00 ug/mL	0.00
15) Perylene-d12	26.88	264	459316	40.00 ug/mL	0.00

System Monitoring Compounds

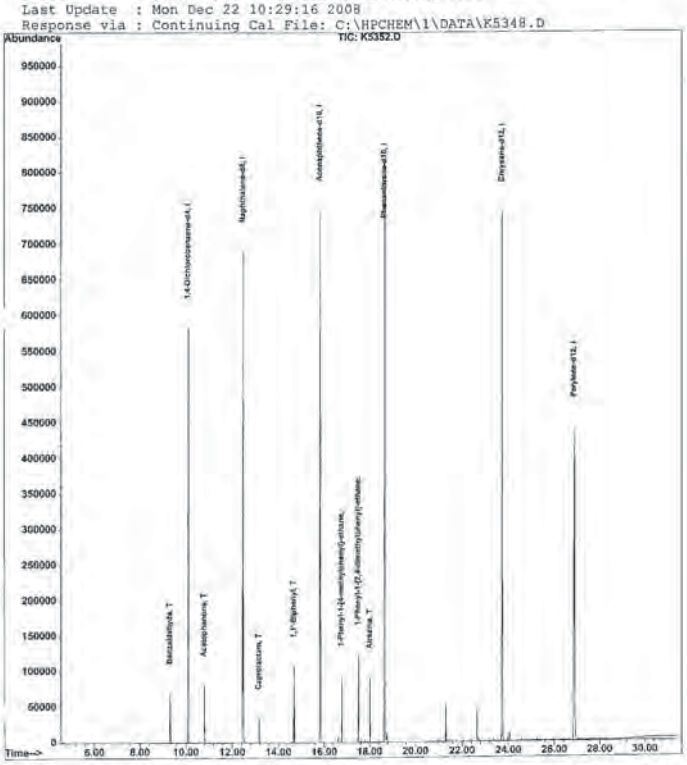
Target Compounds					Qvalue
2) Benzaldehyde	9.32	77	20863	4.95 ug/mL	99
4) Acetophenone	10.81	105	37587	5.08 ug/mL	98
6) Caprolactam	13.17	55	9027	4.30 ug/mL	98
8) 1,1'-Biphenyl	14.68	154	56727	5.23 ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.77	181	36058	5.24 ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.51	195	44957	5.32 ug/mL	99
12) Atrazine	18.03	200	15919	4.88 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5352.D KD19OLM.M Mon Dec 22 10:48:03 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5352.D Vial: 20
Acq On : 19 Dec 2008 20:19 Operator: MEG
Sample : SSTD005PPM OLM Inst : #6MS40
Misc : ICAL,8270W, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:25 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\K5348.D



K5352.D KD19OLM.M Mon Dec 22 10:48:04 2008 Pa

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
2	S	2-Fluorophenol	1.335	1.394	-4.4	114	0.00
3	S	Phenol-d5	1.594	1.647	-3.3	113	0.02
4	MC	Phenol	1.655	1.741	-5.2	115	0.02
5	T	bis(2-Chloroethyl)ether	1.306	1.344	-2.9	113	0.01
6	M	2-Chlorophenol	1.471	1.510	-2.7	112	0.01
7	T	2-Methylphenol	1.234	1.246	-1.0	112	0.01
8	T	2,2'-oxybis(1-chloropropane	1.788	1.926	-7.7	119	0.01
9	T	bis(2-Chloroisopropyl)ether	1.788	1.926	-7.7	119	0.01
10	T	4-Methylphenol	1.348	1.379	-2.3	112	0.02
11	MP	N-Nitroso-di-n-propylamine	1.051	1.083	-3.0	113	0.03
12	T	Hexachloroethane	0.684	0.684	0.0	108	0.00
	I	Naphthalene-d8	1.000	1.000	0.0	112	0.00
14	S	Nitrobenzene-d5	0.419	0.408	2.6	109	0.01
15	T	Nitrobenzene	0.419	0.407	2.9	108	0.02
16	T	Isophorone	0.721	0.733	-1.7	114	0.02
17	TC	2-Nitrophenol	0.234	0.231	1.3	108	0.01
18	T	2,4-Dimethylphenol	0.411	0.352	14.4	108	0.02
19	T	bis(2-Chloroethoxy)methane	0.429	0.429	0.0	113	0.01
20	TC	2,4-Dichlorophenol	0.341	0.335	1.8	108	0.01
21	T	Naphthalene	1.040	1.031	0.9	112	0.00
22	T	4-Chloroaniline	0.465	0.459	1.3	113	0.00
23	TC	Hexachlorobutadiene	0.232	0.222	4.3	106	0.00
24	MC	4-Chloro-3-methylphenol	0.387	0.389	-0.5	112	0.00
25	T	2-Methylnaphthalene	0.730	0.722	1.1	110	0.00
26	I	Acenaphthene-d10	1.000	1.000	0.0	109	0.00
27	TP	Hexachlorocyclopentadiene	0.346	0.344	0.6	104	0.00
28	TC	2,4,6-Trichlorophenol	0.416	0.422	-1.4	108	0.00
29	T	2,4,5-Trichlorophenol	0.446	0.448	-0.4	108	0.00
30	S	2-Fluorobiphenyl	1.322	1.310	0.9	108	0.00
31	T	2-Chloronaphthalene	1.156	1.150	0.5	108	0.01
32	T	2-Nitroaniline	0.436	0.450	-3.2	111	0.01
33	T	Dimethyl phthalate	1.477	1.469	0.5	108	0.02
34	T	2,6-Dinitrotoluene	0.379	0.384	-1.3	109	0.02
35	T	Acenaphthylene	1.768	1.784	-0.9	110	0.00
36	T	3-Nitroaniline	0.382	0.400	-4.7	113	0.02
37	TCM	Acenaphthene	1.040	1.046	-0.6	110	0.00
	TP	2,4-Dinitrophenol	0.209	0.181	13.4	96	0.01
39	MP	4-Nitrophenol	0.267	0.242	9.4	99	0.01

(#) = Out of Range
K5354.D KD190L42.M Mon Dec 22 13:50:17 2008

Mahchorda 12/22/08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	0.511	0.517	-1.2	108	0.02
41	T	Dibenzofuran	1.669	1.655	0.8	109	0.01
42	T	Diethyl phthalate	1.536	1.541	-0.3	109	0.02
43	T	4-Chlorophenyl phenyl ether	0.691	0.697	-0.9	109	0.00
44	T	Fluorene	1.263	1.259	0.3	109	0.01
45	T	4-Nitroaniline	0.380	0.396	-4.2	112	0.04
46	S	2,4,6-Tribromophenol	0.215	0.215	0.0	104	0.00
47	I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00
48	T	4,6-Dinitro-2-methylphenol	0.193	0.198	-2.6	105	0.02
49	TC	n-Nitrosodiphenylamine	0.560	0.566	-1.1	111	0.02
50	T	4-Bromophenyl phenyl ether	0.232	0.230	0.9	108	0.00
51	T	Hexachlorobenzene	0.271	0.262	3.3	105	0.01
	MC	Pentachlorophenol	0.140	0.124	11.4	97	0.01
53	T	Phenanthrene	1.096	1.091	0.5	109	0.01
54	T	Anthracene	1.106	1.076	2.7	107	0.01
55	T	Carbazole	1.001	0.994	0.7	109	0.01
56	T	Di-n-butyl phthalate	1.485	1.483	0.1	109	0.00
57	TC	Fluoranthene	1.183	1.193	-0.8	110	0.01
58	I	Chrysene-d12	1.000	1.000	0.0	107	0.01
59	M	Pyrene	1.350	1.380	-2.2	109	0.02
60	S	Terphenyl-d14	0.859	0.866	-0.8	107	0.00
61	T	Butyl benzyl phthalate	0.761	0.780	-2.5	108	0.01
62	T	3,3'-Dichlorobenzidine	0.476	0.504	-5.9	109	0.02
63	T	Benzo[a]anthracene	1.141	1.149	-0.7	108	0.01
64	T	bis(2-Ethylhexyl)phthalate	0.994	0.993	0.1	106	0.00
65	T	Chrysene	1.072	1.082	-0.9	108	0.02
66	TC	Di-n-octyl phthalate	1.809	1.852	-2.4	108	0.01
67	T	Indeno[1,2,3-cd]pyrene	1.136	1.154	-1.6	104	0.04
68	I	Perylene-d12	1.000	1.000	0.0	105	0.00
69	T	Benzo[b]fluoranthene	1.289	1.292	-0.2	108	0.03
70	T	Benzo[k]fluoranthene	1.190	1.222	-2.7	106	0.04
71	TC	Benzo[a]pyrene	1.181	1.178	0.3	106	0.04
72	T	Dibenz[a,h]anthracene	1.043	1.056	-1.2	103	0.05
73	T	Benzo[g,h,i]perylene	1.065	1.077	-1.1	104	0.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K5354.D KD190L42.M Mon Dec 22 13:50:21 2008

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	110	0.00
2	S	2-Fluorophenol	50.000	52.188	-4.4	114	0.00
3	S	Phenol-d5	50.000	51.655	-3.3	113	0.02
4	MC	Phenol	50.000	52.611	-5.2	115	0.02
5	T	bis(2-Chloroethyl)ether	50.000	51.424	-2.8	113	0.01
6	M	2-Chlorophenol	50.000	51.299	-2.6	112	0.01
7	T	2-Methylphenol	50.000	50.468	-0.9	112	0.01
8	T	2,2'-oxybis(1-chloropropane	50.000	53.860	-7.7	119	0.01
9	T	bis(2-Chloroisopropyl)ether	50.000	53.860	-7.7	119	0.01
10	T	4-Methylphenol	50.000	51.122	-2.2	112	0.02
11	MP	N-Nitroso-di-n-propylamine	50.000	51.515	-3.0	113	0.03
12	T	Hexachloroethane	50.000	50.000	0.0	108	0.00
	I	Naphthalene-d8	40.000	40.000	0.0	112	0.00
14	S	Nitrobenzene-d5	50.000	48.727	2.5	109	0.01
15	T	Nitrobenzene	50.000	48.619	2.8	108	0.02
16	T	Isophorone	50.000	50.806	-1.6	114	0.02
17	TC	2-Nitrophenol	50.000	49.453	1.1	108	0.01
18	T	2,4-Dimethylphenol	50.000	42.787	14.4	108	0.02
19	T	bis(2-Chloroethoxy)methane	50.000	49.895	0.2	113	0.01
20	TC	2,4-Dichlorophenol	50.000	49.099	1.8	108	0.01
21	T	Naphthalene	50.000	49.542	0.9	112	0.00
22	T	4-Chloroaniline	50.000	49.371	1.3	113	0.00
23	TC	Hexachlorobutadiene	50.000	47.881	4.2	106	0.00
24	MC	4-Chloro-3-methylphenol	50.000	50.334	-0.7	112	0.00
25	T	2-Methylnaphthalene	50.000	49.414	1.2	110	0.00
26	I	Acenaphthene-d10	40.000	40.000	0.0	109	0.00
27	TP	Hexachlorocyclopentadiene	50.000	49.729	0.5	104	0.00
28	TC	2,4,6-Trichlorophenol	50.000	50.710	-1.4	108	0.00
29	T	2,4,5-Trichlorophenol	50.000	50.304	-0.6	108	0.00
30	S	2-Fluorobiphenyl	50.000	49.576	0.8	108	0.00
31	T	2-Chloronaphthalene	50.000	49.743	0.5	108	0.01
32	T	2-Nitroaniline	50.000	51.575	-3.2	111	0.01
33	T	Dimethyl phthalate	50.000	49.752	0.5	108	0.02
34	T	2,6-Dinitrotoluene	50.000	50.655	-1.3	109	0.02
35	T	Acenaphthylene	50.000	50.463	-0.9	110	0.00
36	T	3-Nitroaniline	50.000	52.274	-4.5	113	0.02
37	TCM	Acenaphthene	50.000	50.289	-0.6	110	0.00
	TP	2,4-Dinitrophenol	50.000	44.771	10.5	96	0.01
39	MP	4-Nitrophenol	50.000	45.289	9.4	99	0.01

(#) = Out of Range
K5354.D KD190L42.M Mon Dec 22 13:50:31 2008

Mah 12/22/08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:10:47 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	M	2,4-Dinitrotoluene	50.000	50.622	-1.2	108	0.02
41	T	Dibenzofuran	50.000	49.569	0.9	109	0.01
42	T	Diethyl phthalate	50.000	50.143	-0.3	109	0.02
43	T	4-Chlorophenyl phenyl ether	50.000	50.470	-0.9	109	0.00
44	T	Fluorene	50.000	49.853	0.3	109	0.01
45	T	4-Nitroaniline	50.000	52.117	-4.2	112	0.04
46	S	2,4,6-Tribromophenol	50.000	49.963	0.1	104	0.00
47	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00
48	T	4,6-Dinitro-2-methylphenol	50.000	51.251	-2.5	105	0.02
49	TC	n-Nitrosodiphenylamine	50.000	50.536	-1.1	111	0.02
50	T	4-Bromophenyl phenyl ether	50.000	49.650	0.7	108	0.00
51	T	Hexachlorobenzene	50.000	48.292	3.4	105	0.01
	MC	Pentachlorophenol	50.000	44.463	11.1	97	0.01
53	T	Phenanthrene	50.000	49.774	0.5	109	0.01
54	T	Anthracene	50.000	48.609	2.8	107	0.01
55	T	Carbazole	50.000	49.659	0.7	109	0.01
56	T	Di-n-butyl phthalate	50.000	49.910	0.2	109	0.00
57	TC	Fluoranthene	50.000	50.432	-0.9	110	0.01
58	I	Chrysene-d12	40.000	40.000	0.0	107	0.01
59	M	Pyrene	50.000	51.105	-2.2	109	0.02
60	S	Terphenyl-d14	50.000	50.400	-0.8	107	0.00
61	T	Butyl benzyl phthalate	50.000	51.194	-2.4	108	0.01
62	T	3,3'-Dichlorobenzidine	50.000	52.977	-6.0	109	0.02
63	T	Benzo[a]anthracene	50.000	50.360	-0.7	108	0.01
64	T	bis(2-Ethylhexyl)phthalate	50.000	49.934	0.1	106	0.00
65	T	Chrysene	50.000	50.473	-0.9	108	0.02
66	TC	Di-n-octyl phthalate	50.000	51.189	-2.4	108	0.01
67	T	Indeno[1,2,3-cd]pyrene	50.000	50.826	-1.7	104	0.04
68	I	Perylene-d12	40.000	40.000	0.0	105	0.00
69	T	Benzo[b]fluoranthene	50.000	50.094	-0.2	108	0.03
70	T	Benzo[k]fluoranthene	50.000	51.322	-2.6	106	0.04
71	TC	Benzo[a]pyrene	50.000	49.856	0.3	106	0.04
72	T	Dibenz[a,h]anthracene	50.000	50.588	-1.2	103	0.05
73	T	Benzo[g,h,i]perylene	50.000	50.573	-1.1	104	0.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K5354.D KD190L42.M Mon Dec 22 13:50:32 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:49 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:08:43 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	140392	40.00 ug/mL	0.00
13) Naphthalene-d8	12.47	136	524735	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.82	164	310061	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.68	188	528164	40.00 ug/mL	0.00
58) Chrysene-d12	23.75	240	457953	40.00 ug/mL	0.01
68) Perylene-d12	26.89	264	422711	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	244546	52.19 ug/mL	0.00
Spiked Amount 150.000			Recovery = 34.79%		
3) Phenol-d5	9.37	99	289078	51.66 ug/mL	0.02
Spiked Amount 150.000			Recovery = 34.44%		
14) Nitrobenzene-d5	11.11	82	267605	48.73 ug/mL	0.01
Spiked Amount 100.000			Recovery = 48.73%		
30) 2-Fluorobiphenyl	14.49	172	507915	49.58 ug/mL	0.00
Spiked Amount 100.000			Recovery = 49.58%		
46) 2,4,6-Tribromophenol	17.33	330	83273	49.96 ug/mL	0.00
Spiked Amount 150.000			Recovery = 33.31%		
60) Terphenyl-d14	21.69	244	495710	50.40 ug/mL	0.00
Spiked Amount 100.000			Recovery = 50.40%		

Target Compounds					Qvalue
4) Phenol	9.39	94	305552	52.61 ug/mL	96
5) bis(2-Chloroethyl)ether	9.59	93	235791	51.42 ug/mL	98
6) 2-Chlorophenol	9.72	128	264920	51.30 ug/mL	99
7) 2-Methylphenol	10.49	108	218671	50.47 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	10.56	45	337977	53.86 ug/mL	97
9) bis(2-Chloroisopropyl)ethe	10.56	45	337977	53.86 ug/mL	97
10) 4-Methylphenol	10.77	108	241951	51.12 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.81	70	190008	51.51 ug/mL	98
12) Hexachloroethane	11.04	117	120051	50.00 ug/mL	99
15) Nitrobenzene	11.15	77	267277	48.62 ug/mL	98
16) Isophorone	11.58	82	480829	50.81 ug/mL	99
17) 2-Nitrophenol	11.74	139	151623	49.45 ug/mL	98
18) 2,4-Dimethylphenol	11.77	107	230938	42.79 ug/mL	97
19) bis(2-Chloroethoxy)methane	11.95	93	281081	49.90 ug/mL	99
20) 2,4-Dichlorophenol	12.17	162	219794	49.10 ug/mL	100
21) Naphthalene	12.51	128	676162	49.54 ug/mL	97
22) 4-Chloroaniline	12.58	127	300848	49.37 ug/mL	100
23) Hexachlorobutadiene	12.71	225	145792	47.88 ug/mL	99
24) 4-Chloro-3-methylphenol	13.45	107	255367	50.33 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5354.D KD190L42.M Mon Dec 22 13:50:37 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:49 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:08:43 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.81	142	473512	49.41 ug/mL	100
27) Hexachlorocyclopentadiene	14.10	237	133342	49.73 ug/mL	99
28) 2,4,6-Trichlorophenol	14.33	196	163588	50.71 ug/mL	99
29) 2,4,5-Trichlorophenol	14.40	196	173789	50.30 ug/mL	99
31) 2-Chloronaphthalene	14.75	162	445714	49.74 ug/mL	100
32) 2-Nitroaniline	14.92	65	174336	51.58 ug/mL	99
33) Dimethyl phthalate	15.24	163	569528	49.75 ug/mL	99
34) 2,6-Dinitrotoluene	15.38	165	148725	50.66 ug/mL	98
35) Acenaphthylene	15.55	152	691460	50.46 ug/mL	100
36) 3-Nitroaniline	15.71	138	154955	52.27 ug/mL	98
37) Acenaphthene	15.88	153	405239	50.29 ug/mL	98
38) 2,4-Dinitrophenol	15.90	184	70118	44.77 ug/mL#	82
39) 4-Nitrophenol	15.98	109	93808	45.29 ug/mL	95
40) 2,4-Dinitrotoluene	16.15	165	200464	50.62 ug/mL	99
41) Dibenzofuran	16.21	168	641417	49.57 ug/mL	98
42) Diethyl phthalate	16.59	149	597123	50.14 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.84	204	270194	50.47 ug/mL	99
44) Fluorene	16.87	166	487892	49.85 ug/mL	99
45) 4-Nitroaniline	16.90	138	153400	52.12 ug/mL	96
48) 4,6-Dinitro-2-methylphenol	16.94	198	130516	51.25 ug/mL	98
49) n-Nitrosodiphenylamine	17.06	169	373907	50.54 ug/mL	100
50) 4-Bromophenyl phenyl ether	17.78	248	152099	49.65 ug/mL	100
51) Hexachlorobenzene	17.92	284	173064	48.29 ug/mL	99
52) Pentachlorophenol	18.29	266	82068	44.46 ug/mL	99
53) Phenanthrene	18.73	178	720411	49.77 ug/mL	100
54) Anthracene	18.82	178	710176	48.61 ug/mL	100
55) Carbazole	19.10	167	656246	49.66 ug/mL	99
56) Di-n-butyl phthalate	19.70	149	978851	49.91 ug/mL	100
57) Fluoranthene	21.01	202	787577	50.43 ug/mL	98
59) Pyrene	21.46	202	790063	51.11 ug/mL	98
61) Butyl benzyl phthalate	22.59	149	446279	51.19 ug/mL	100
62) 3,3'-Dichlorobenzidine	23.64	252	288485	52.98 ug/mL	99
63) Benzo[a]anthracene	23.72	228	657775	50.36 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.64	149	568200	49.93 ug/mL	100
65) Chrysene	23.81	228	619473	50.47 ug/mL	99
66) Di-n-octyl phthalate	24.87	149	1060425	51.19 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.71	276	660780	50.83 ug/mL	96
69) Benzo[b]fluoranthene	25.93	252	682493	50.09 ug/mL	99
70) Benzo[k]fluoranthene	26.00	252	645544m	51.32 ug/mL	
71) Benzo[a]pyrene	26.75	252	622305	49.86 ug/mL	99
72) Dibenz[a,h]anthracene	29.73	278	557768	50.59 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K5354.D KD190L42.M Mon Dec 22 13:50:38 2008 Pa

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:49 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:08:43 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

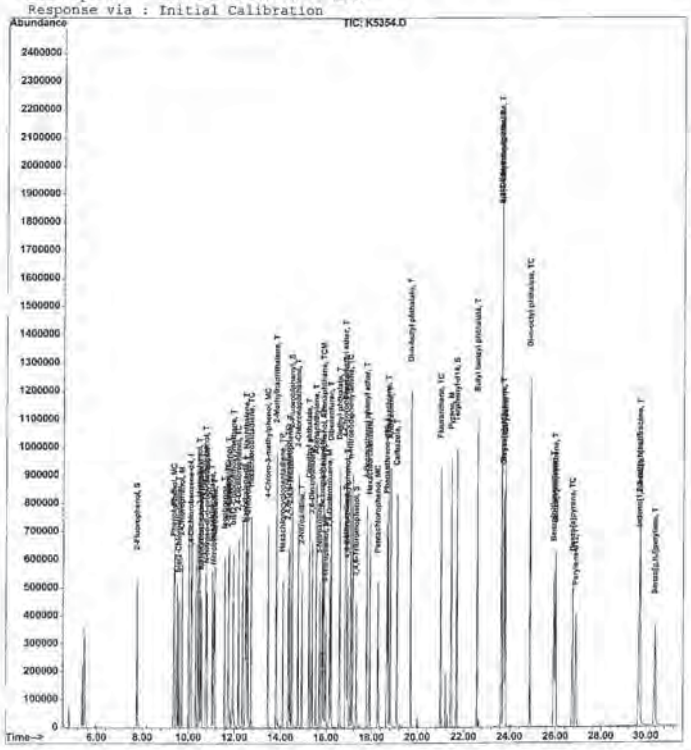
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.39	276	568982	50.57 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K5354.D KD190L42.M Mon Dec 22 13:50:39 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5354.D Vial: 77
Acq On : 19 Dec 2008 21:15 Operator: MEG
Sample : CC121908A6 Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:49 2008 Quant Results File: KD190L42.RES

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:08:43 2008
Response via : Initial Calibration



K5354.D KD190L42.M Mon Dec 22 13:50:41 2008 Pa

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\K5355.D Vial: 16
Acq On : 19 Dec 2008 21:53 Operator: MEG
Sample : CC121908B6 OLM Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:29:16 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00
2	T	Benzaldehyde	1.147	1.136	1.0	82	0.00
3	T	2-Octanol	0.000	0.000#	0.0	0#	-10.35#
4	T	Acetophenone	2.011	1.991	1.0	82	0.00
5	I	Naphthalene-d8	1.000	1.000	0.0	83	0.00
6	T	Caprolactam	0.142	0.144	-1.4	80	0.04
7	I	Acenaphthene-d10	1.000	1.000	0.0	81	0.00
8	T	1,1'-Biphenyl	1.330	1.330	0.0	82	0.00
9		1-Phenyl-1-[4-methylphenyl]	0.838	0.847	-1.1	82	0.00
10		1-Phenyl-1-[2,4-dimethylphe	1.020	1.042	-2.2	82	0.00
	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00
12	T	Atrazine	0.237	0.237	0.0	81	0.02
13	T	2-Ethylanthraquinone	0.000	0.000#	0.0	0#	-22.93#
14	I	Chrysene-d12	1.000	1.000	0.0	79	0.00
15	I	Perylene-d12	1.000	1.000	0.0	78	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
K5355.D KD19OLM.M Mon Dec 22 14:09:25 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5355.D Vial: 16
Acq On : 19 Dec 2008 21:53 Operator: MEG
Sample : CC121908B6 OLM Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:08 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:24:47 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	143004	40.00	ug/mL	0.00
5) Naphthalene-d8	12.46	136	542842	40.00	ug/mL	0.00
7) Acenaphthene-d10	15.81	164	310392	40.00	ug/mL	0.00
11) Phenanthrene-d10	18.67	188	516259	40.00	ug/mL	0.00
14) Chrysene-d12	23.74	240	489495	40.00	ug/mL	0.00
15) Perylene-d12	26.88	264	434834	40.00	ug/mL	0.00

System Monitoring Compounds

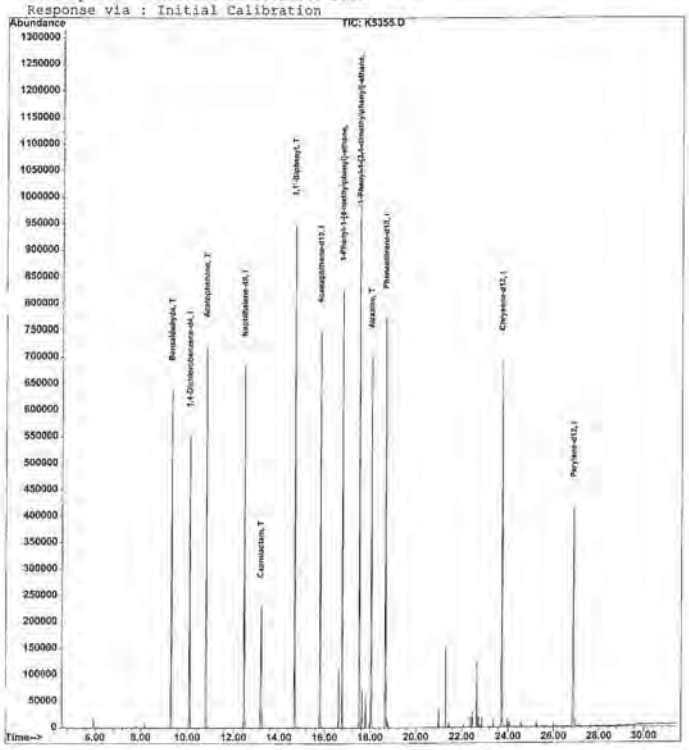
Target Compounds						Qvalue
2) Benzaldehyde	9.32	77	203017	49.49	ug/mL	99
4) Acetophenone	10.82	105	355979	49.50	ug/mL	99
6) Caprolactam	13.21	55	97617	50.49	ug/mL	99
8) 1,1'-Biphenyl	14.69	154	516193	50.02	ug/mL	99
9) 1-Phenyl-1-[4-methylphenyl	16.77	181	328721	50.54	ug/mL	99
10) 1-Phenyl-1-[2,4-dimethylph	17.52	195	404204	51.09	ug/mL	100
12) Atrazine	18.05	200	153100	50.09	ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5355.D KD19OLM.M Mon Dec 22 14:09:30 2008 Pa

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5355.D Vial: 16
Acq On : 19 Dec 2008 21:53 Operator: MEG
Sample : CC121908B6 OLM Inst : #6MS40
Misc : CCV ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:08 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 10:24:47 2008
Response via : Initial Calibration



K5355.D KD19OLM.M Mon Dec 22 14:09:31 2008 Pa

Internal Standards

9

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): K5354.D Date Analyzed: 12/19/2008

Instrument ID: MS06_40 Time Analyzed: 21:15

GC Column: DB-5MS ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	IS4 (PHN) AREA #	RT #
12 HOUR STD	140392	10.11	524735	12.47	310061	15.82	528184	18.68
UPPER LIMIT	280784	10.51	1049470	12.97	620122	16.32	1056368	19.18
LOWER LIMIT	70196	9.61	262368	11.97	155031	15.32	264092	18.18
SAMPLE NO.								
01 CC121908B6 OLM (CC121908B6 OLM)	143004	10.10	542842	12.46	310262	15.81	518259	18.67
02 MB-8644 (MB-8644)	133236	10.10	501757	12.46	298878	15.81	496312	18.67
03 LCS-8644 (LCS-8644)	159501	10.11	605099	12.47	353498	15.82	516664	18.67
04 MSB-8644 (MSB-8644)	151078	10.10	577269	12.46	338647	15.82	585348	18.68
05 MW-2-121108 (0812108-001B)	157035	10.10	582223	12.46	345845	15.81	580595	18.67
06 MW-4-121108 (0812108-002B)	152847	10.09	603835	12.46	344818	15.81	587776	18.67
07 MW-12-121108 (0812108-003B)	141170	10.10	554600	12.45	316347	15.80	534306	18.67
08 MW-13-121108 (0812108-004B)	149284	10.09	578527	12.45	332869	15.80	555169	18.66
09 MW-11R-121108 (0812108-005B)	152146	10.10	598402	12.45	349665	15.80	578999	18.66
10 MW-11R-121108MS (0812108-005BMS)	124070	10.10	479429	12.46	284642	15.80	491664	18.67
11 MW-11R-121108MSD (0812108-005BMSD)	147290	10.10	560869	12.46	331731	15.81	576243	18.67
12 MW-8-121108 (0812108-006B)	117412	10.09	452635	12.45	259830	15.80	444339	18.66
13 BD-1-121108 (0812108-007B)	131631	10.09	512916	12.46	291480	15.80	497853	18.66
14 MW-3R-121208 (0812108-008B)	133071	10.08	511608	12.46	285887	15.80	491871	18.66
15 MW-9-121208 (0812108-009B)	154923	10.09	607175	12.45	340377	15.80	577231	18.66
16 MW-5-121208 (0812108-010B)	161622	10.09	541308	12.45	353352	15.80	611586	18.66
17 MW-6-121208 (0812108-011B)	155866	10.08	607691	12.45	346299	15.80	583661	18.66
18 MW-7-121208 (0812108-012B)	158389	10.08	610454	12.45	341109	15.80	570798	18.66

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10

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

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

9

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Life Science Laboratories, Inc. SDG No.: 0812108

Lab Code: LSLB

Lab File ID (Standard): K5354.D Date Analyzed: 12/19/2008

Instrument ID: MS06_40 Time Analyzed: 21:15

GC Column: DB-5MS ID: 0.25 (mm)

	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #				
12 HOUR STD	457953	23.75	422711	26.89				
UPPER LIMIT	915906	24.25	845422	27.39				
LOWER LIMIT	228977	23.25	211356	26.39				
SAMPLE NO.								
01 CC121908B6 OLM (CC121908B6 OLM)	489495	23.74	454834	26.88				
02 MB-8644 (MB-8644)	486147	23.74	412665	26.87				
03 LCS-8644 (LCS-8644)	553020	23.76	523231	26.89				
04 MSB-8644 (MSB-8644)	518112	23.75	481267	26.88				
05 MW-2-121108 (0812108-001B)	539978	23.74	472985	26.88				
06 MW-4-121108 (0812108-002B)	551143	23.73	488951	26.87				
07 MW-12-121108 (0812108-003B)	486322	23.73	422700	26.88				
08 MW-13-121108 (0812108-004B)	520016	23.73	455769	26.87				
09 MW-11R-121108 (0812108-005B)	542489	23.73	468282	26.87				
10 MW-11R-121108MS (0812108-005BMS)	432434	23.74	387134	26.87				
11 MW-11R-121108MSD (0812108-005BMSD)	496787	23.74	443946	26.88				
12 MW-8-121108 (0812108-006B)	402135	23.73	336676	26.86				
13 BD-1-121108 (0812108-007B)	464718	23.73	408360	26.86				
14 MW-3R-121208 (0812108-008B)	470302	23.72	411019	26.86				
15 MW-9-121208 (0812108-009B)	532315	23.72	464157	26.86				
16 MW-5-121208 (0812108-010B)	572791	23.73	508241	26.87				
17 MW-6-121208 (0812108-011B)	534156	23.72	458197	26.86				
18 MW-7-121208 (0812108-012B)	525103	23.73	453562	26.86				

IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

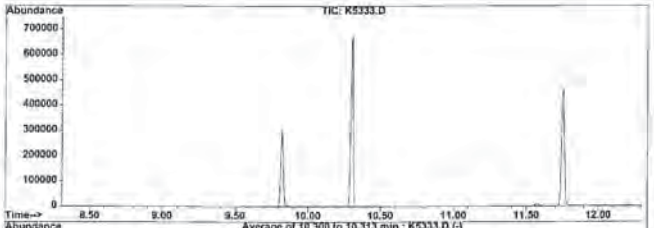
AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Raw QC Data

Tune Raw Data

DFTPP

Data File : C:\HPCHEM\1\DATA\K5333.D Vial: 1
Acq On : 19 Dec 2008 8:25 Operator: MEG
Sample : TD121908A6 Inst : #6MS40
Misc : TUNE,DFTPP, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\KD08FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df



AutoFind: Scans 896, 897, 898; Background Corrected with Scan 890

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.2	26828	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.6	33990	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	44.1	30214	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	68467	PASS
199	198	5	9	6.6	4505	PASS
275	198	10	30	21.5	14722	PASS
365	198	1	100	2.7	1852	PASS
441	443	0.01	100	86.4	6575	PASS
442	198	40	100	57.0	39019	PASS
443	442	17	23	19.5	7610	PASS

K5333.D KD08FULL.M Fri Dec 19 15:14:48 2008

Mark Gordon

Average of 10.300 to 10.313 min.: K5333.D
TD121908A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	115	62.95	1141	80.90	2216	98.90	1910
37.90	417	63.95	157	81.90	589	99.80	148
38.90	2274	64.90	517	82.90	393	100.85	1170
50.00	8078	68.90	33990	84.90	325	102.90	512
51.00	26828	72.80	81	85.90	681	103.90	742
52.00	1419	73.90	3149	86.95	264	104.90	816
54.90	160	74.90	4418	90.90	484	106.90	8855
55.90	894	76.95	25494	91.95	498	107.90	1343
56.90	1832	78.00	1756	92.90	3844	109.90	17700
60.90	381	78.95	2425	93.90	233	110.90	2512
61.95	505	79.95	1715	97.95	3050	111.95	326

Average of 10.300 to 10.313 min.: K5333.D
TD121908A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.95	8378	133.95	517	148.90	356	161.75	163
117.90	638	134.90	1144	150.95	159	164.90	719
121.95	815	135.90	484	152.95	607	165.95	275
122.90	1069	136.95	561	153.95	364	166.95	3041
123.90	501	140.00	89	154.90	915	167.90	1411
124.90	438	140.90	1843	155.90	1208	168.90	203
126.90	30214	141.90	588	156.90	209	170.85	72
128.00	2644	142.85	345	157.85	265	171.85	291
128.90	14224	146.00	282	158.85	201	172.90	280
129.95	1127	146.95	935	159.90	550	173.95	617
130.95	171	147.95	2016	160.90	759	174.90	1077

Average of 10.300 to 10.313 min.: K5333.D
TD121908A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.90	319	188.90	608	203.95	2264	223.95	8116
176.90	669	190.90	230	205.00	3723	224.95	1950
177.90	201	191.85	785	205.95	14956	226.90	3937
178.90	2510	192.90	793	206.95	2046	227.95	619
179.95	1519	194.00	93	207.95	555	228.90	706
180.90	712	195.90	1730	208.95	167	230.90	256
183.90	163	197.90	68467	210.95	567	233.95	229
184.95	238	198.90	4505	214.90	91	234.90	205
185.95	8173	199.90	276	216.85	4333	235.80	79
186.95	2377	201.45	233	217.90	548	236.95	222
187.95	194	202.95	503	220.95	2759	238.95	74

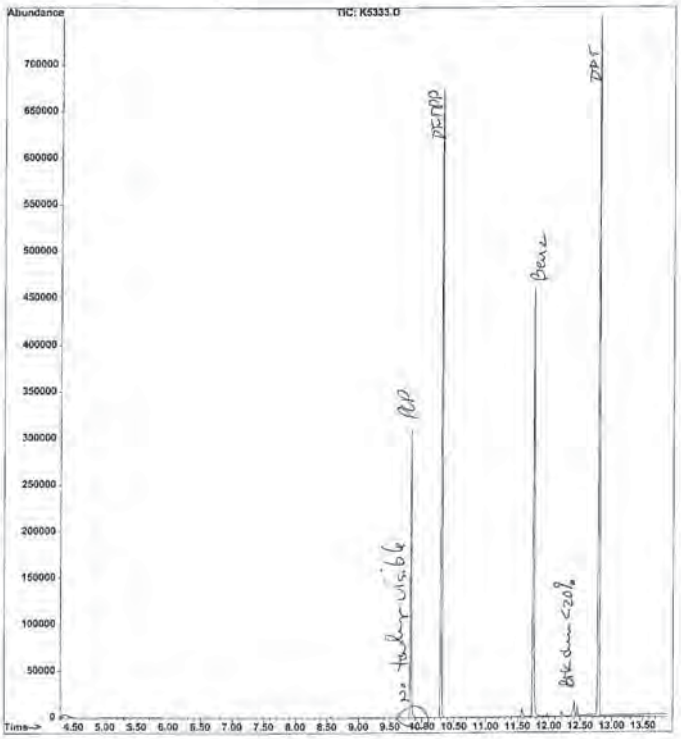
Average of 10.300 to 10.313 min.: K5333.D
TD121908A6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
240.95	170	256.95	375	282.90	70	326.95	239
241.95	450	257.95	1881	285.00	92	333.90	860
242.85	103	258.90	244	292.95	301	335.00	185
243.95	6454	264.95	789	295.95	4077	345.95	204
244.95	814	265.90	164	296.90	566	351.95	388
245.90	1335	273.00	956	303.00	501	352.95	279
246.95	245	274.05	2743	314.00	180	354.00	399
248.90	185	274.95	14722	314.95	466	364.95	1852
252.90	71	275.95	1928	315.95	212	365.90	309
254.95	31152	276.95	1293	323.00	1398	372.00	641
255.95	4477	277.90	203	323.95	257	373.00	78

Average of 10.300 to 10.313 min.: K5333.D
TD121908A6
Modified:subtracted

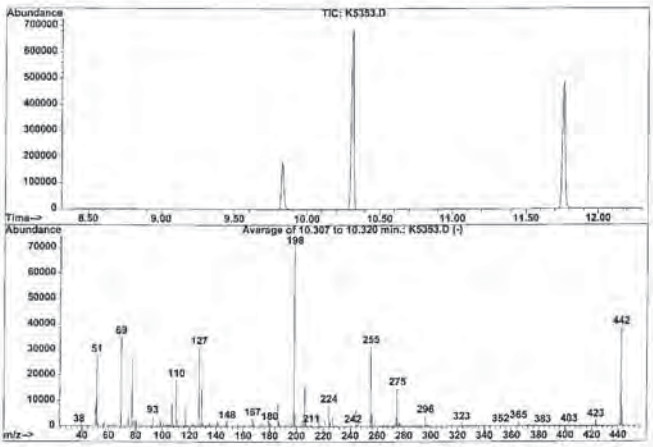
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
382.90	146	444.05	741				
401.95	259						
402.95	341						
403.95	81						
420.95	328						
422.00	256						
423.00	2236						
424.00	522						
441.10	6575						
442.05	39019						
443.00	7610						

File : C:\HPCHEM\1\DATA\K5333.D
Operator : MEG
Acquired : 19 Dec 2008 8:25 using AcqMethod DFTPP1UL
Instrument : #6MS40
Sample Name: TD121908A6
Misc Info : TUNE,DFTPP,
Vial Number: 1



DFTPP

Data File : C:\HPCHEM\1\DATA\K5353.D Vial: 76
Acq On : 19 Dec 2008 20:54 Operator: MEG
Sample : TD121908B6 Inst : #6MS40
Misc : TUNE,DFTPP, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\KD08FULL.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df



AutoFind: Scans 697, 898, 899; Background Corrected with Scan 891

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.2	27904	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.2	35023	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.7	31095	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	71125	PASS
199	198	5	9	6.6	4684	PASS
275	198	10	30	21.0	14903	PASS
365	198	1	100	2.6	1835	PASS
441	443	0.01	100	26.6	1979	PASS
442	198	40	100	54.1	38480	PASS
443	442	17	23	19.3	7438	PASS

K5353.D KD08FULL.M Sun Dec 21 10:15:53 2008

Average of 10.307 to 10.320 min.: K5353.D
TD121908B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	164	62.95	1254	80.95	2257	95.85	81
37.90	456	63.95	74	81.90	482	97.95	2939
38.95	2545	64.95	591	82.95	406	98.95	2088
50.00	8084	68.90	35023	84.85	357	99.85	98
51.00	27904	72.90	230	85.90	664	100.90	1083
51.95	1668	73.90	3228	86.90	258	102.90	487
54.95	174	74.90	4566	87.80	69	103.90	816
55.90	981	76.95	26394	90.90	542	104.90	751
56.90	1892	77.95	1841	91.95	366	106.90	8845
60.95	298	78.95	2500	92.90	4038	107.90	1464
61.95	374	79.95	1801	93.85	224	109.90	18253

Average of 10.307 to 10.320 min.: K5353.D
TD121908B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
110.90	2710	128.90	14537	142.70	144	156.95	221
111.90	408	129.95	1356	142.90	160	157.90	246
116.95	8488	130.95	203	145.85	277	158.85	163
117.85	648	133.90	389	146.95	854	159.90	520
119.75	84	134.85	1089	147.95	1976	160.95	804
121.95	753	135.90	380	148.85	371	161.90	210
122.90	1020	136.95	426	151.00	197	164.90	657
123.90	499	137.85	148	152.90	546	165.95	480
124.90	356	139.95	208	153.85	316	166.95	3111
126.90	31095	140.90	1798	154.95	831	167.95	1222
128.00	1422	141.95	563	155.85	1181	168.95	229

Average of 10.307 to 10.320 min.: K5353.D
TD121908B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
171.90	217	185.95	8477	199.90	296	211.00	645
172.85	446	186.95	2369	201.45	298	214.90	170
173.90	659	187.95	95	202.85	497	216.90	4390
174.95	1171	188.85	645	203.95	2166	217.90	517
175.95	376	190.90	297	205.05	3926	220.95	2828
176.90	620	191.85	714	205.95	15192	223.95	8297
178.90	2448	193.00	821	206.95	2108	224.95	1987
179.90	1508	193.80	85	207.90	705	226.90	3854
180.90	691	195.90	1732	208.85	80	228.00	501
183.95	181	197.90	71125	210.00	119	228.90	726
184.95	223	198.90	4684	210.40	185	230.95	343

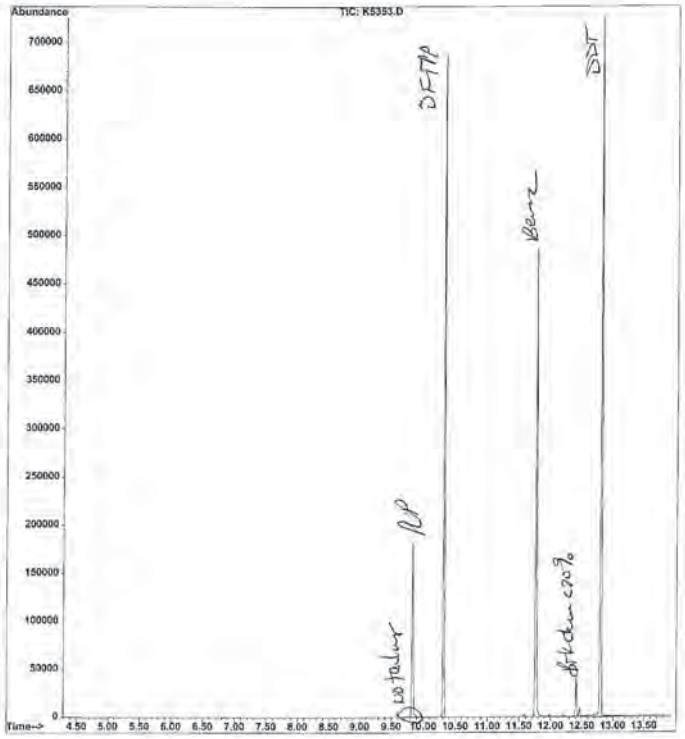
Average of 10.307 to 10.320 min.: K5353.D
TD121908B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
233.90	203	248.90	192	276.95	1229	321.00	71
234.90	193	254.95	31544	277.90	164	323.00	1412
236.00	68	255.95	4645	282.90	67	323.90	176
236.95	223	257.00	293	284.90	183	326.90	183
240.90	176	257.95	2052	292.90	321	332.95	68
241.95	428	258.85	349	295.95	4156	333.95	946
243.95	6301	264.90	785	296.95	643	334.90	175
244.95	835	273.00	924	302.90	439	340.90	71
246.00	1381	274.05	2928	314.05	110	345.95	252
246.80	87	274.95	14903	314.85	514	351.95	424
247.00	134	275.95	1833	315.95	190	353.00	291

Average of 10.307 to 10.320 min.: K5353.D
TD121908B6
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.00	418	424.00	498				
64.95	1835	441.15	1979				
365.95	199	442.10	38480				
372.00	666	443.00	7438				
382.95	172	444.05	705				
401.95	215						
402.95	347						
403.95	69						
421.00	331						
422.10	183						
432.95	2283						

File : C:\HPCHEM\1\DATA\K5353.D
Operator : MEG
Acquired : 19 Dec 2008 20:54 using AcqMethod DFTPP1UL
Instrument : #6MS40
Sample Name: TD121908B6
Misc Info : TUNE,DFTPP,
Vial Number: 76



Preparation Blanks

776

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8644 SampType: MBLK TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 16973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416469
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	10									
Atrazine	ND	10									
Benzaldehyde	ND	10									
Benzo[a]anthracene	ND	10									
Benzo[a]pyrene	ND	10									
Benzo[b]fluoranthene	ND	10									
Benzo[g,h,i]perylene	ND	10									
Benzo[k]fluoranthene	ND	10									
bis(2-Chloroethoxy)methane	ND	10									
bis(2-chloroethyl)ether	ND	10									
bis(2-chloroisopropyl)ether	ND	10									
bis(2-Ethylhexyl)phthalate	ND	10									
Butyl benzyl phthalate	ND	10									
Caprolactam	ND	10									
Carbazole	ND	10									
Chrysene	ND	10									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	ND	10									
Dibenz[a,h]anthracene	ND	10									
Dibenzofuran	ND	10									
Diethyl phthalate	ND	10									
Dimethyl phthalate	ND	10									
Fluoranthene	ND	10									
Fluorene	ND	10									
Hexachlorobenzene	ND	10									
Hexachlorobutadiene	ND	10									
Hexachlorocyclopentadiene	ND	10									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

778 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8644 SampType: MBLK TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 16973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416469
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	10									
Indeno[1,2,3-cd]pyrene	ND	10									
Isophorone	ND	10									
N-Nitroso-di-n-propylamine	ND	10									
N-Nitrosodiphenylamine	ND	10									
Naphthalene	ND	10									
Nitrobenzene	ND	10									
Pentachlorophenol	ND	50									
Phenanthrene	ND	10									
Phenol	ND	10									
Pyrene	ND	10									
Surr: 2,4,6-Tribromophenol	115	0.10	150	0	79	46	149				
Surr: 2-Fluorobiphenyl	61.1	0.10	100	0	61	42	130				
Surr: 2-Fluorophenol	116	0.10	150	0	77	26	130				
Surr: Nitrobenzene-d5	63.3	0.10	100	0	63	42	130				
Surr: Phenol-d5	121	0.10	150	0	81	21	134				
Surr: Terphenyl-d14	84.7	0.10	100	0	85	24	147				

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

779 29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MB-8644 SampType: MBLK TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 16973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416469
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	ND	10									
2,4,5-Trichlorophenol	ND	50									
2,4,6-Trichlorophenol	ND	10									
2,4-Dichlorophenol	ND	10									
2,4-Dimethylphenol	ND	10									
2,4-Dinitrophenol	ND	50									
2,4-Dinitrotoluene	ND	10									
2,6-Dinitrotoluene	ND	10									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
2-Methylnaphthalene	ND	10									
2-Methylphenol	ND	10									
2-Nitroaniline	ND	50									
2-Nitrophenol	ND	10									
3,3'-Dichlorobenzidine	ND	20									
3-Nitroaniline	ND	50									
4,6-Dinitro-2-methylphenol	ND	10									
4-Bromophenyl phenyl ether	ND	10									
4-Chloro-3-methylphenol	ND	10									
4-Chloroaniline	ND	10									
4-Chlorophenyl phenyl ether	ND	10									
4-Methylphenol	ND	10									
4-Nitroaniline	ND	50									
4-Nitrophenol	ND	50									
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Acetophenone	ND	10									

Qualifiers: B Analyte detected in the associated Method Blank; ND Not Detected at the Practical Quantitation Limit (PQL); U Not Detected at the MDC or RL; E Value exceeds the instrument calibration range; R RPD exceeds accepted precision limit; J Analyte detected below the PQL; S Spike Recovery outside accepted recovery limits

777 29-Dec-08

Form 1 TIC

CLIENT SAMPLE NO.

Semivolatile Organic Compounds by GC/MS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

MB-8644

Lab Name: Life Science Laboratories, Inc. Contract: _____

Lab Code: LSLB Case No.: OBG-MS SAS No.: _____ SDG No.: 0812108

Matrix: (soil/water) WATER Lab Sample ID: MB-8644

Sample wt/vol: 1000 (g/mL) mL Lab File ID: K5356.D

Level: LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/19/2008

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 1000 (ul)

Number TICs found: 1 CONCENTRATION UNITS: UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	6.83	8.0	J

FORM I TIC 15 SW8270C

780

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5356.D Vial: 78
Acq On : 19 Dec 2008 22:32 Operator: MEG
Sample : MB-8644 Inst : #6MS40
Misc : MBLK,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	133236	40.00 ug/mL	0.00
13) Naphthalene-d8	12.46	136	501767	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.81	164	290878	40.00 ug/mL	-0.01
47) Phenanthrene-d10	18.67	188	496312	40.00 ug/mL	0.00
58) Chrysene-d12	23.74	240	466147	40.00 ug/mL	-0.01
68) Perylene-d12	26.87	264	412685	40.00 ug/mL	-0.01
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	514338	115.66 ug/mL	0.00
Spiked Amount 150.000			Recovery = 77.11%		
3) Phenol-d5	9.36	99	644732	121.39 ug/mL	0.00
Spiked Amount 150.000			Recovery = 80.93%		
14) Nitrobenzene-d5	11.11	82	437603	83.33 ug/mL	0.00
Spiked Amount 100.000			Recovery = 83.33%		
30) 2-Fluorobiphenyl	14.49	172	779057	81.06 ug/mL	0.00
Spiked Amount 100.000			Recovery = 81.06%		
46) 2,4,6-Tribromophenol	17.32	330	184259	117.84 ug/mL	0.00
Spiked Amount 150.000			Recovery = 78.56%		
60) Terphenyl-d14	21.70	244	847685	84.67 ug/mL	0.00
Spiked Amount 100.000			Recovery = 84.67%		

Target Compounds Qvalue

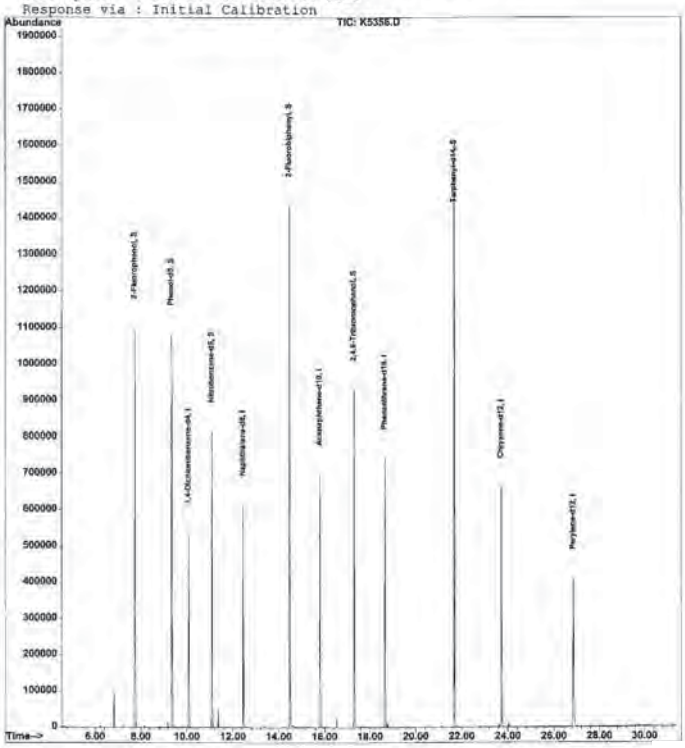
(#) = qualifier out of range (m) = manual integration
K5356.D KD19OL42.M Mon Dec 22 14:01:56 2008 P

781

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5356.D Vial: 78
Acq On : 19 Dec 2008 22:32 Operator: MEG
Sample : MB-8644 Inst : #6MS40
Misc : MBLK,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5356.D KD19OL42.M Mon Dec 22 14:01:57 2008 P

782

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5356.D Vial: 78
Acq On : 19 Dec 2008 22:32 Operator: MEG
Sample : MB-8644 Inst : #6MS40
Misc : MBLK,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:09 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	133236	40.00 ug/mL	0.00
5) Naphthalene-d8	12.46	136	501170	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.81	164	290878	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	496312	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	465914	40.00 ug/mL	0.00
15) Perylene-d12	26.87	264	412685	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds Qvalue

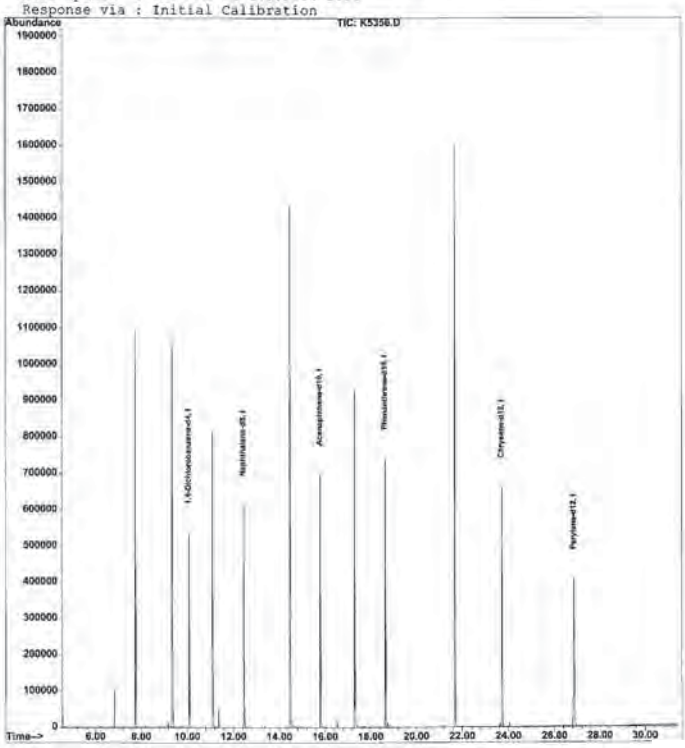
(#) = qualifier out of range (m) = manual integration
K5356.D KD19OLM.M Mon Dec 22 14:18:15 2008 P

783

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5356.D Vial: 78
Acq On : 19 Dec 2008 22:32 Operator: MEG
Sample : MB-8644 Inst : #6MS40
Misc : MBLK,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:09 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5356.D KD19OLM.M Mon Dec 22 14:18:16 2008 Pa

Tentatively Identified Compound (LSC) summary

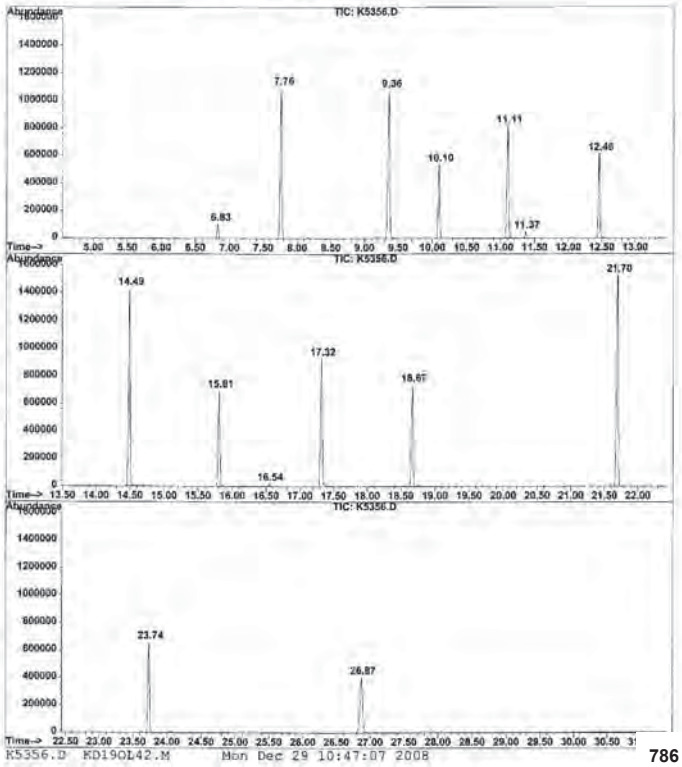
Operator ID: MEG Date Acquired: 19 Dec 2008 22:32
Data File: C:\HPCHEM\1\DATA\K5356.D
Name: MB-8644
Misc: MBLK,8270W_OLM42,
Method: C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title: BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Propanoic acid, 2-hy	6.83	8.0	ug/mL	170375	ISTD01	10.10	850438	40.0

K5356.D KD19OL42.M Mon Dec 29 10:47:08 2008

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\K5356.D
Operator : MEG
Acquired : 19 Dec 2008 22:32 using AcqMethod KD08FULL
Instrument : #6MS40
Sample Name: MB-8644
Misc Info : MBLK,8270W_OLM42,
Vial Number: 78
Quant File :KD19OL42.RES (RTE Integrator)



K5356.D KD19OL42.M Mon Dec 29 10:47:07 2008

Library Search Compound Report

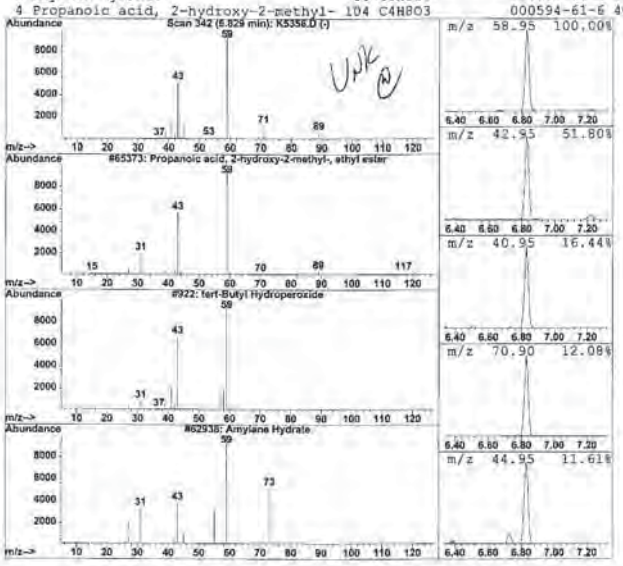
Data File : C:\HPCHEM\1\DATA\K5356.D Vial: 78
Acq On : 19 Dec 2008 22:32 Operator: MEG
Sample : MB-8644 Inst : #6MS40
Misc : MBLK,8270W_OLM42, Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Library : C:\DATABASE\NBS75K.L

Peak Number 1 Propanoic acid, 2-hydroxy-2-me Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.83	8.01 ug/mL	170375	1,4-Dichlorobenzene-d4	10.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-hydroxy-2-methyl-	132	C6H12O3	000080-55-7	50
2	tert-Butyl Hydroperoxide	90	C4H10O2	000075-91-2	45
3	Amylene Hydrate	88	C5H12O	000075-85-4	40
4	Propanoic acid, 2-hydroxy-2-methyl-	104	C4H8O3	000594-61-6	40



K5356.D KD19OL42.M Mon Dec 29 10:47:08 2008 Pa

P

Laboratory Control Sample

788

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: LCS-8644 SampType: LCS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416470
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	44.8	10	50	0	90	60	125				
Atrazine	42.7	10	50	0	85	30	130				
Benzaldehyde	46.0	10	50	0	92	30	130				
Benzo[a]anthracene	45.9	10	50	0	92	60	125				
Benzo[a]pyrene	44.9	10	50	0	90	56	131				
Benzo[b]fluoranthene	44.8	10	50	0	90	56	134				
Benzo[g,h,i]perylene	46.7	10	50	0	93	44	144				
Benzo[k]fluoranthene	46.3	10	50	0	93	56	133				
bis(2-Chloroethoxy)methane	45.3	10	50	0	91	58	125				
bis(2-chloroethyl)ether	46.0	10	50	0	92	48	126				
bis(2-chloroisopropyl)ether	50.4	10	50	0	101	33	131				
bis(2-Ethylhexyl)phthalate	48.2	10	50	0	96	60	148				
Butyl benzyl phthalate	47.4	10	50	0	95	58	146				
Caprolactam	57.6	10	50	0	115	30	130				
Carbazole	46.7	10	50	0	93	57	148				
Chrysene	44.8	10	50	0	90	59	128				
Di-n-butyl phthalate	47.4	10	50	0	95	58	148				
Di-n-octyl phthalate	47.6	10	50	0	95	58	149				
Dibenz[a,h]anthracene	46.0	10	50	0	92	44	150				
Dibenzofuran	42.5	10	50	0	85	50	126				
Diethyl phthalate	49.4	10	50	0	99	58	147				
Dimethyl phthalate	50.0	10	50	0	100	60	129				
Fluoranthene	46.1	10	50	0	92	60	128				
Fluorene	43.8	10	50	0	88	59	125				
Hexachlorobenzene	43.4	10	50	0	87	60	134				
Hexachlorobutadiene	27.4	10	50	0	55	25	125				
Hexachlorocyclopentadiene	22.5	10	50	0	45	25	125				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

790 29-Dec-08

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
ANALYTICAL QC SUMMARY REPORT
Method: SW8270C
Work Order: 0812108
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Sample ID: LCS-8644 SampType: LCS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416470
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	30.4	10	50	0	61	25	125				
Indeno[1,2,3-cd]pyrene	47.5	10	50	0	95	48	141				
Isophorone	49.1	10	50	0	98	60	125				
N-Nitroso-di-n-propylamine	49.4	10	50	0	99	35	134				
N-Nitrosodiphenylamine	46.5	10	50	0	93	54	136				
Naphthalene	37.0	10	50	0	74	48	125				
Nitrobenzene	47.2	10	50	0	94	60	125				
Pentachlorophenol	43.5	50	50	0	87	44	128				J
Phenanthrene	44.6	10	50	0	89	50	125				
Phenol	44.9	10	50	0	90	51	125				
Pyrene	46.3	10	50	0	93	59	130				
Surr: 2,4,6-Tribromophenol	129	0.10	150	0	86	46	149				
Surr: 2-Fluorobiphenyl	81.2	0.10	100	0	81	42	130				
Surr: 2-Fluorophenol	126	0.10	150	0	84	26	130				
Surr: Nitrobenzene-d5	84.1	0.10	100	0	84	42	130				
Surr: Phenol-d5	129	0.10	150	0	86	21	134				
Surr: Terphenyl-d14	85.5	0.10	100	0	86	24	147				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

791 29-Dec-08

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200
ANALYTICAL QC SUMMARY REPORT
Method: SW8270C
Work Order: 0812108
CLIENT: O'Brien & Gere Engineers, Inc.
Project: City of Geneva- Market Basket Site
Sample ID: LCS-8644 SampType: LCS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416470
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	45.2	10	50	0	90	30	130				
2,4,5-Trichlorophenol	46.5	50	50	0	93	60	125				J
2,4,6-Trichlorophenol	46.7	10	50	0	93	60	125				
2,4-Dichlorophenol	44.3	10	50	0	89	60	125				
2,4-Dimethylphenol	41.5	10	50	0	83	42	125				
2,4-Dinitrophenol	44.6	50	50	0	89	25	138				J
2,4-Dinitrotoluene	49.0	10	50	0	98	60	129				
2,6-Dinitrotoluene	50.3	10	50	0	101	60	127				
2-Chloronaphthalene	39.5	10	50	0	79	53	125				
2-Chlorophenol	45.7	10	50	0	91	53	125				
2-Methylnaphthalene	35.5	10	50	0	71	42	125				
2-Methylphenol	47.2	10	50	0	94	56	125				
2-Nitroaniline	48.4	50	50	0	97	60	138				J
2-Nitrophenol	44.6	10	50	0	89	57	125				
3,3'-Dichlorobenzidine	22.3	20	50	0	45	26	128				
3-Nitroaniline	48.1	50	50	0	96	55	144				J
4,6-Dinitro-2-methylphenol	50.0	10	50	0	100	57	125				
4-Bromophenyl phenyl ether	46.0	10	50	0	92	57	135				
4-Chloro-3-methylphenol	45.8	10	50	0	92	60	125				
4-Chloroaniline	45.5	10	50	0	91	39	139				
4-Chlorophenyl phenyl ether	45.1	10	50	0	90	54	128				
4-Methylphenol	46.4	10	50	0	93	51	125				
4-Nitroaniline	47.5	50	50	0	95	52	150				J
4-Nitrophenol	46.1	50	50	0	92	35	144				J
Acenaphthene	42.8	10	50	0	86	58	125				
Acenaphthylene	43.4	10	50	0	87	57	125				
Acetophenone	43.1	10	50	0	86	30	130				

Qualifiers: B Analyte detected in the associated Method Blank; E Value exceeds the instrument calibration range; J Analyte detected below the PQL; ND Not Detected at the Practical Quantitation Limit (PQL); R RPD exceeds accepted precision limit; S Spike Recovery outside accepted recovery limits; U Not Detected at the MDC or RL.

789 29-Dec-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5357.D Vial: 79
Acq On : 19 Dec 2008 23:11 Operator: MEG
Sample : LCS-8644 Inst : #6MS40
Misc : LCS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	159501	40.00 ug/mL	0.00
13) Naphthalene-d8	12.47	136	606099	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.82	164	353498	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.67	188	616864	40.00 ug/mL	0.00
58) Chrysene-d12	23.76	240	553020	40.00 ug/mL	0.00
68) Perylene-d12	26.89	264	523231	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.77	112	670330	125.91 ug/mL	0.00
Spiked Amount 150.000			Recovery =	83.94%	
3) Phenol-d5	9.38	99	821445	129.20 ug/mL	0.01
Spiked Amount 150.000			Recovery =	86.13%	
14) Nitrobenzene-d5	11.12	82	533255	84.06 ug/mL	0.00
Spiked Amount 100.000			Recovery =	84.06%	
30) 2-Fluorobiphenyl	14.50	172	949056	81.25 ug/mL	0.00
Spiked Amount 100.000			Recovery =	81.25%	
46) 2,4,6-Tribromophenol	17.34	330	245949	129.43 ug/mL	0.01
Spiked Amount 150.000			Recovery =	86.29%	
60) Terphenyl-d14	21.70	244	1015529	85.50 ug/mL	0.01
Spiked Amount 100.000			Recovery =	85.50%	

Target Compounds					Qvalue
4) Phenol	9.40	94	296303	44.91 ug/mL	92
5) bis(2-Chloroethyl)ether	9.60	93	239556	45.99 ug/mL	99
6) 2-Chlorophenol	9.72	128	268219	45.72 ug/mL	99
7) 2-Methylphenol	10.49	108	232559	47.24 ug/mL	98
8) 2,2'-oxybis(1-chloropropan	10.56	45	359500	50.43 ug/mL	97
9) bis(2-Chloroisopropyl)ethe	10.56	45	359500	50.43 ug/mL	97
10) 4-Methylphenol	10.78	108	249554	46.41 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.81	70	207043	49.41 ug/mL	99
12) Hexachloroethane	11.04	117	82841	30.37 ug/mL	98
15) Nitrobenzene	11.16	77	299696	47.20 ug/mL	99
16) Isophorone	11.58	82	536889	49.11 ug/mL	100
17) 2-Nitrophenol	11.74	139	157914	44.59 ug/mL	98
18) 2,4-Dimethylphenol	11.76	107	258839	41.52 ug/mL	98
19) bis(2-Chloroethoxy)methane	11.95	93	294748	45.30 ug/mL	98
20) 2,4-Dichlorophenol	12.17	162	229070	44.30 ug/mL	100
21) Naphthalene	12.51	128	583345	37.00 ug/mL	97
22) 4-Chloroaniline	12.58	127	319994	45.46 ug/mL	100
23) Hexachlorobutadiene	12.71	225	96493	27.44 ug/mL	99
24) 4-Chloro-3-methylphenol	13.47	107	268695	45.85 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5357.D KD19OL42.M Mon Dec 22 14:01:06 2008 P 792

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5357.D Vial: 79
Acq On : 19 Dec 2008 23:11 Operator: MEG
Sample : LCS-8644 Inst : #6MS40
Misc : LCS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.81	142	393503	35.55 ug/mL	100
27) Hexachlorocyclopentadiene	14.09	237	68755	22.49 ug/mL	100
28) 2,4,6-Trichlorophenol	14.33	196	171607	46.66 ug/mL	100
29) 2,4,5-Trichlorophenol	14.41	196	183072	46.48 ug/mL	99
31) 2-Chloronaphthalene	14.75	162	403347	39.48 ug/mL	100
32) 2-Nitroaniline	14.93	65	186362	48.36 ug/mL	99
33) Dimethyl phthalate	15.24	163	652202	49.97 ug/mL	100
34) 2,6-Dinitrotoluene	15.38	165	168349	50.29 ug/mL	99
35) Acenaphthylene	15.55	152	677725	43.38 ug/mL	100
36) 3-Nitroaniline	15.71	138	162657	48.13 ug/mL	98
37) Acenaphthene	15.88	153	392815	42.76 ug/mL	99
38) 2,4-Dinitrophenol	15.90	184	79593	44.62 ug/mL	95
39) 4-Nitrophenol	15.98	109	108878	46.11 ug/mL	97
40) 2,4-Dinitrotoluene	16.16	165	221428	49.04 ug/mL	99
41) Dibenzofuran	16.21	168	627297	42.52 ug/mL	99
42) Diethyl phthalate	16.59	149	671336	49.45 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.84	204	275263	45.10 ug/mL	99
44) Fluorene	16.87	166	489317	43.85 ug/mL	98
45) 4-Nitroaniline	16.90	138	159613	47.56 ug/mL	97
48) 4,6-Dinitro-2-methylphenol	16.95	198	148637	49.97 ug/mL	100
49) n-Nitrosodiphenylamine	17.07	169	401851	46.50 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.78	248	164570	46.00 ug/mL	100
51) Hexachlorobenzene	17.92	284	181756	43.42 ug/mL	98
52) Pentachlorophenol	18.28	266	93815	43.52 ug/mL	100
53) Phenanthrene	18.73	178	753775	44.59 ug/mL	100
54) Anthracene	18.83	178	765218	44.85 ug/mL	100
55) Carbazole	19.11	167	721422	46.74 ug/mL	99
56) Di-n-butyl phthalate	19.70	149	1086088	47.42 ug/mL	100
57) Fluoranthene	21.01	202	840807	46.10 ug/mL	98
59) Pyrene	21.45	202	864513	46.31 ug/mL	98
61) Butyl benzyl phthalate	22.59	149	498905	47.39 ug/mL	100
62) 3,3'-Dichlorobenzidine	23.64	252	146852	22.33 ug/mL	100
63) Benzo[a]anthracene	23.73	228	723274	45.86 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.64	149	661704	48.15 ug/mL	100
65) Chrysene	23.80	228	665086	44.87 ug/mL	100
66) Di-n-octyl phthalate	24.88	149	1189766	47.56 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.71	276	746138	47.53 ug/mL	95
69) Benzo[b]fluoranthene	25.93	252	756435	44.88 ug/mL	99
70) Benzo[k]fluoranthene	26.00	252	720583	46.28 ug/mL	99
71) Benzo[a]pyrene	26.75	252	693315	44.87 ug/mL	99
72) Dibenz[a,h]anthracene	29.74	278	627155	45.95 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K5357.D KD19OL42.M Mon Dec 22 14:01:07 2008 P 793

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5357.D Vial: 79
Acq On : 19 Dec 2008 23:11 Operator: MEG
Sample : LCS-8644 Inst : #6MS40
Misc : LCS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

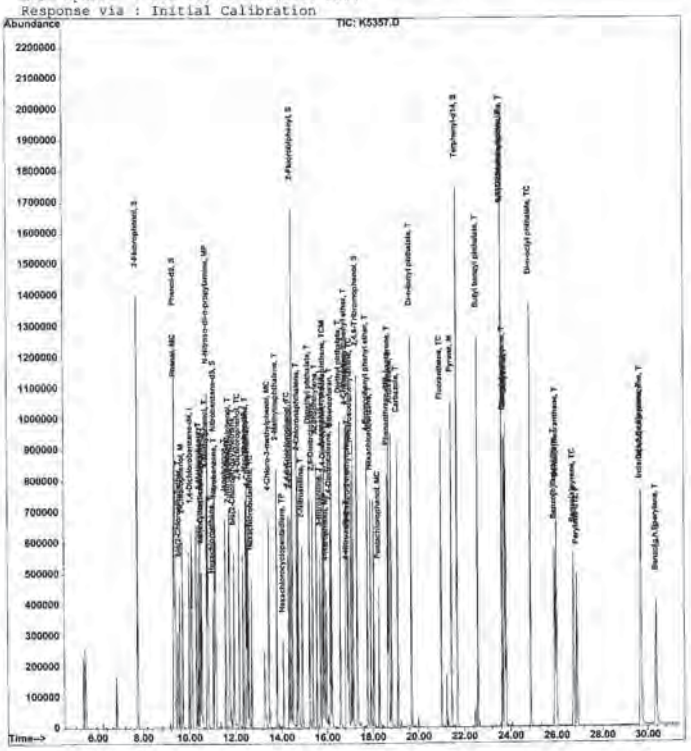
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.40	276	650468	46.71 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K5357.D KD19OL42.M Mon Dec 22 14:01:07 2008 P 794

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5357.D Vial: 79
Acq On : 19 Dec 2008 23:11 Operator: MEG
Sample : LCS-8644 Inst : #6MS40
Misc : LCS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008 Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5357.D KD19OL42.M Mon Dec 22 14:01:09 2008 P 795

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5357.D Vial: 79
Acq On : 19 Dec 2008 23:11 Operator: MEG
Sample : LCS-8644 Inst : #6MS40
Misc : LCS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:16 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	159501	40.00 ug/mL	0.00
5) Naphthalene-d8	12.47	136	606099	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	353498	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	616864	40.00 ug/mL	0.00
14) Chrysene-d12	23.76	240	552916	40.00 ug/mL	0.02
15) Perylene-d12	26.89	264	523231	40.00 ug/mL	0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.33	77	210353	45.97 ug/mL	100
4) Acetophenone	10.82	105	345875	43.12 ug/mL	99
6) Caprolactam	13.28	55	124363m	57.61 ug/mL	
8) 1,1'-Biphenyl	14.69	154	531294	45.21 ug/mL	100
12) Atrazine	18.06	200	156076	42.73 ug/mL	100

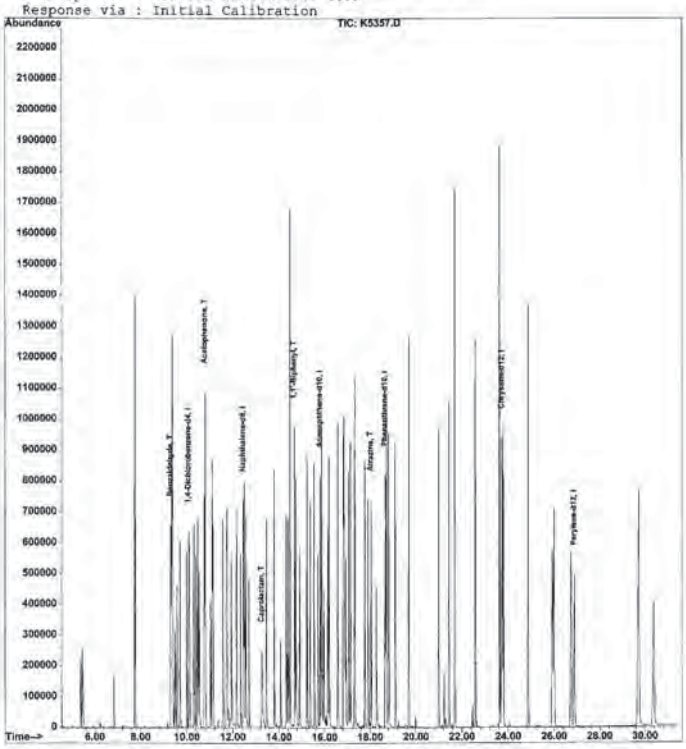
(#) = qualifier out of range (m) = manual integration
K5357.D KD19OLM.M Mon Dec 22 14:17:23 2008 Pa

796

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5357.D Vial: 79
Acq On : 19 Dec 2008 23:11 Operator: MEG
Sample : LCS-8644 Inst : #6MS40
Misc : LCS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:16 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5357.D KD19OLM.M Mon Dec 22 14:17:24 2008 Pa

797

Matrix Spike Blanks

798

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 419471
Instrument: M3O6_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	44.6	10	50	0	89	30	130				
2,4,5-Trichlorophenol	44.9	50	50	0	90	50	154				J
2,4,6-Trichlorophenol	45.3	10	50	0	91	50	130				
2,4-Dichlorophenol	43.5	10	50	0	87	50	130				
2,4-Dimethylphenol	40.6	10	50	0	81	39	130				
2,4-Dinitrophenol	39.8	50	50	0	80	45	130				J
2,4-Dinitrotoluene	48.0	10	50	0	96	50	130				
2,6-Dinitrotoluene	49.1	10	50	0	98	50	130				
2-Chloronaphthalene	38.4	10	50	0	77	50	130				
2-Chlorophenol	45.2	10	50	0	90	36	130				
2-Methylnaphthalene	35.4	10	50	0	71	38	130				
2-Methylphenol	46.1	10	50	0	92	34	138				
2-Nitroaniline	47.5	50	50	0	95	10	173				J
2-Nitrophenol	43.8	10	50	0	88	46	130				
3,3'-Dichlorobenzidine	24.7	20	50	0	49	10	151				
3-Nitroaniline	46.2	50	50	0	92	10	161				J
4,6-Dinitro-2-methylphenol	47.7	10	50	0	95	58	130				
4-Bromophenyl phenyl ether	44.8	10	50	0	89	50	130				
4-Chloro-3-methylphenol	44.6	10	50	0	89	48	135				
4-Chloroaniline	44.6	10	50	0	89	14	133				
4-Chlorophenyl phenyl ether	44.6	10	50	0	89	50	130				
4-Methylphenol	45.6	10	50	0	91	48	130				
4-Nitroaniline	47.9	50	50	0	96	10	175				J
4-Nitrophenol	44.5	50	50	0	89	50	154				J
Acenaphthene	41.9	10	50	0	84	50	130				
Acenaphthylene	41.9	10	50	0	84	50	130				
Acetophenone	43.1	10	50	0	86	30	130				

Qualifiers: B Analyte detected in the associated Method Blank E Value exceeds the instrument calibration range J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL) R RPD exceeds accepted precision limit S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

29-Dec-08

799

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	43.6	10	50	0	87	50	130				
Atrazine	41.0	10	50	0	82	30	130				
Benzaldehyde	45.7	10	50	0	91	30	130				
Benzo[a]anthracene	44.8	10	50	0	90	42	134				
Benzo[a]pyrene	43.9	10	50	0	88	36	139				
Benzo[b]fluoranthene	44.6	10	50	0	89	30	153				
Benzo[g,h,i]perylene	45.2	10	50	0	90	23	136				
Benzo[k]fluoranthene	45.0	10	50	0	90	21	166				
bis(2-Chloroethoxy)methane	44.6	10	50	0	89	35	130				
bis(2-chloroethyl)ether	45.6	10	50	0	91	18	153				
bis(2-chloroisopropyl)ether	48.2	10	50	0	96	28	130				
bis(2-Ethylhexyl)phthalate	47.5	10	50	0	95	49	153				
Butyl benzyl phthalate	46.4	10	50	0	93	28	157				
Caprolactam	56.9	10	50	0	114	30	130				
Carbazole	46.1	10	50	0	92	38	175				
Chrysene	44.4	10	50	0	89	43	132				
Di-n-butyl phthalate	46.4	10	50	0	93	37	152				
Di-n-octyl phthalate	46.3	10	50	0	93	50	148				
Dibenz[a,h]anthracene	45.2	10	50	0	90	27	149				
Dibenzofuran	41.6	10	50	0	83	50	130				
Diethyl phthalate	48.4	10	50	0	97	18	169				
Dimethyl phthalate	49.2	10	50	0	98	19	161				
Fluoranthene	45.3	10	50	0	91	50	130				
Fluorene	42.8	10	50	0	86	50	130				
Hexachlorobenzene	43.0	10	50	0	86	45	134				
Hexachlorobutadiene	27.9	10	50	0	56	20	130				
Hexachlorocyclopentadiene	21.7	10	50	0	43	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL)
R RPD exceeds accepted precision limit
S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

CLIENT: O'Brien & Gere Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

Sample ID: MSB-8644 SampType: MSB TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: ZZZZZ Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/19/2008 SeqNo: 416471
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	30.7	10	50	0	61	32	130				
Indeno[1,2,3-cd]pyrene	45.4	10	50	0	91	27	138				
Isophorone	47.7	10	50	0	95	49	130				
N-Nitroso-di-n-propylamine	48.0	10	50	0	96	30	145				
N-Nitrosodiphenylamine	45.2	10	50	0	90	19	157				
Naphthalene	36.3	10	50	0	73	33	130				
Nitrobenzene	45.7	10	50	0	91	38	145				
Pentachlorophenol	41.9	50	50	0	84	50	145				J
Phenanthrene	43.7	10	50	0	87	50	130				
Phenol	44.7	10	50	0	89	20	141				
Pyrene	45.6	10	50	0	91	47	133				
Surr: 2,4,6-Tribromophenol	127	0.10	150	0	85	46	149				
Surr: 2-Fluorobiphenyl	79.0	0.10	100	0	79	42	130				
Surr: 2-Fluorophenol	123	0.10	150	0	82	26	130				
Surr: Nitrobenzene-d5	82.4	0.10	100	0	82	42	130				
Surr: Phenol-d5	128	0.10	150	0	85	21	134				
Surr: Terphenyl-d14	84.8	0.10	100	0	85	24	147				

Qualifiers:
B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL)
R RPD exceeds accepted precision limit
S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K5358.D                    Vial: 80
Acq On    : 19 Dec 2008  23:50                      Operator: MEG
Sample    : LCSD-8644/MSB                           Inst    : #6MS40
Misc      : LCSD,8270W_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008          Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL
```

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	151078	40.00 ug/mL	0.00
13) Naphthalene-d8	12.46	136	577269	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.82	164	336647	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.66	188	585369	40.00 ug/mL	0.00
58) Chrysene-d12	23.75	240	516112	40.00 ug/mL	0.00
68) Perylene-d12	26.89	264	481267	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.77	112	621473	123.25 ug/mL	0.00
Spiked Amount 150.000			Recovery =	82.17%	
3) Phenol-d5	9.38	99	768556	127.62 ug/mL	0.00
Spiked Amount 150.000			Recovery =	85.08%	
14) Nitrobenzene-d5	11.12	82	498006	82.43 ug/mL	0.00
Spiked Amount 100.000			Recovery =	82.43%	
30) 2-Fluorobiphenyl	14.49	172	878708	78.99 ug/mL	0.00
Spiked Amount 100.000			Recovery =	78.99%	
46) 2,4,6-Tribromophenol	17.33	330	229893	127.04 ug/mL	0.00
Spiked Amount 150.000			Recovery =	84.69%	
60) Terphenyl-d14	21.70	244	939576	84.76 ug/mL	0.00
Spiked Amount 100.000			Recovery =	84.76%	
Target Compounds					Qvalue
4) Phenol	9.40	94	279113	44.66 ug/mL	93
5) bis(2-Chloroethyl)ether	9.60	93	224805	45.56 ug/mL	98
6) 2-Chlorophenol	9.72	128	251483	45.25 ug/mL	99
7) 2-Methylphenol	10.48	108	215000	46.11 ug/mL	99
8) 2,2'-oxybis(1-chloropropan	10.56	45	325277	48.17 ug/mL	99
9) bis(2-Chloroisopropyl)ethe	10.56	45	325277	48.17 ug/mL	99
10) 4-Methylphenol	10.77	108	232040	45.56 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.81	70	190376	47.96 ug/mL	99
12) Hexachloroethane	11.04	117	79291	30.69 ug/mL	99
15) Nitrobenzene	11.15	77	276599	45.74 ug/mL	99
16) Isophorone	11.58	82	496972	47.73 ug/mL	100
17) 2-Nitrophenol	11.73	139	147879	43.84 ug/mL	98
18) 2,4-Dimethylphenol	11.76	107	241143	40.61 ug/mL	98
19) bis(2-Chloroethoxy)methane	11.95	93	276407	44.60 ug/mL	98
20) 2,4-Dichlorophenol	12.18	162	214370	43.53 ug/mL	100
21) Naphthalene	12.51	128	545374	36.32 ug/mL	99
22) 4-Chloroaniline	12.57	127	298780	44.57 ug/mL	99
23) Hexachlorobutadiene	12.71	225	93406	27.88 ug/mL	98
24) 4-Chloro-3-methylphenol	13.46	107	249085	44.63 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5358.D KD19OL42.M Mon Dec 22 14:01:13 2008

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\K5358.D                    Vial: 80
Acq On    : 19 Dec 2008  23:50                      Operator: MEG
Sample    : LCSD-8644/MSB                           Inst    : #6MS40
Misc      : LCSD,8270W_OLM42,                       Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008          Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title        : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update  : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL
```

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.81	142	372934	35.38 ug/mL	100
27) Hexachlorocyclopentadiene	14.10	237	63274	21.73 ug/mL	100
28) 2,4,6-Trichlorophenol	14.33	196	158725	45.32 ug/mL	99
29) 2,4,5-Trichlorophenol	14.40	196	168527	44.93 ug/mL	99
31) 2-Chloronaphthalene	14.75	162	373420	38.38 ug/mL	99
32) 2-Nitroaniline	14.92	65	174288	47.49 ug/mL	99
33) Dimethyl phthalate	15.24	163	611571	49.21 ug/mL	100
34) 2,6-Dinitrotoluene	15.38	165	156575	49.12 ug/mL	99
35) Acenaphthylene	15.55	152	622734	41.86 ug/mL	100
36) 3-Nitroaniline	15.71	138	155117	48.20 ug/mL	98
37) Acenaphthene	15.88	153	366518	41.89 ug/mL	98
38) 2,4-Dinitrophenol	15.90	184	65221	39.77 ug/mL#	87
39) 4-Nitrophenol	15.98	109	100026	44.48 ug/mL	97
40) 2,4-Dinitrotoluene	16.15	165	206551	48.04 ug/mL	99
41) Dibenzofuran	16.20	168	583945	41.56 ug/mL	99
42) Diethyl phthalate	16.59	149	626265	48.44 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.84	204	259232	44.60 ug/mL	98
44) Fluorene	16.86	166	454266	42.75 ug/mL	99
45) 4-Nitroaniline	16.90	138	153156	47.92 ug/mL	96
48) 4,6-Dinitro-2-methylphenol	16.94	198	134582	47.68 ug/mL	99
49) n-Nitrosodiphenylamine	17.06	169	371055	45.25 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.78	248	151351	44.58 ug/mL	99
51) Hexachlorobenzene	17.92	284	170700	42.98 ug/mL	99
52) Pentachlorophenol	18.28	266	85713	41.90 ug/mL	99
53) Phenanthrene	18.72	178	701324	43.72 ug/mL	100
54) Anthracene	18.82	178	705919	43.60 ug/mL	100
55) Carbazole	19.11	167	674887	46.08 ug/mL	100
56) Di-n-butyl phthalate	19.70	149	1008360	46.39 ug/mL	100
57) Fluoranthene	21.01	202	784332	45.32 ug/mL	99
59) Pyrene	21.45	202	793965	45.57 ug/mL	97
61) Butyl benzyl phthalate	22.58	149	455993	46.41 ug/mL	100
62) 3,3'-Dichlorobenzidine	23.63	252	151505	24.69 ug/mL	100
63) Benzo[a]anthracene	23.72	228	660106	44.84 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.64	149	609369	47.52 ug/mL	100
65) Chrysene	23.80	228	614040	44.39 ug/mL	100
66) Di-n-octyl phthalate	24.87	149	1081660	46.33 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.70	276	664689	45.37 ug/mL	95
69) Benzo[b]fluoranthene	25.92	252	691294	44.57 ug/mL	99
70) Benzo[k]fluoranthene	26.00	252	645193	45.05 ug/mL	99
71) Benzo[a]pyrene	26.75	252	623267	43.86 ug/mL	99
72) Dibenz[a,h]anthracene	29.73	278	566745	45.15 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5358.D KD19OL42.M Mon Dec 22 14:01:14 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5358.D
Acq On : 19 Dec 2008 23:50
Sample : LCSD-8644 /MSD
Misc : LCSD,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008

Vial: 80
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo(g,h,i)perylene	30.39	276	578555	45.17 ug/mL	98

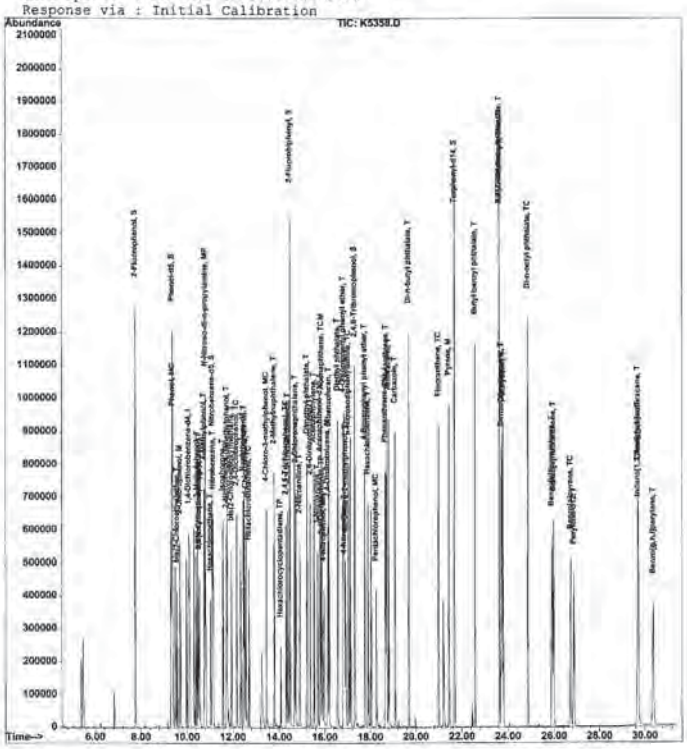
(#) = qualifier out of range (m) = manual integration
K5358.D KD19OL42.M Mon Dec 22 14:01:14 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5358.D
Acq On : 19 Dec 2008 23:50
Sample : LCSD-8644 /MSD
Misc : LCSD,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:51 2008

Vial: 80
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OL42.RES

Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5358.D KD19OL42.M Mon Dec 22 14:01:17 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5358.D
Acq On : 19 Dec 2008 23:50
Sample : LCSD-8644 /MSD
Misc : LCSD,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:16 2008

Vial: 80
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	151078	40.00 ug/mL	0.00
5) Naphthalene-d8	12.46	136	576972	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.82	164	336647	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.68	188	585369	40.00 ug/mL	0.00
14) Chrysene-d12	23.75	240	516112	40.00 ug/mL	0.02
15) Perylene-d12	26.89	264	481357	40.00 ug/mL	0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.32	77	198161	45.72 ug/mL	100
4) Acetophenone	10.83	105	327252	43.08 ug/mL	98
6) Caprolactam	13.26	55	116874m	56.87 ug/mL	
8) 1,1'-Biphenyl	14.69	154	498620	44.55 ug/mL	100
12) Atrazine	18.06	200	141998	40.97 ug/mL	100

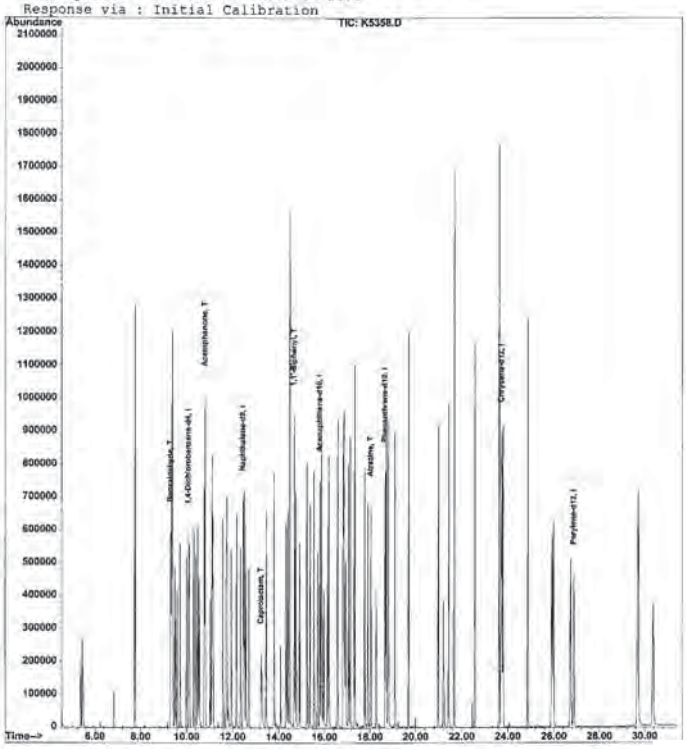
(#) = qualifier out of range (m) = manual integration
K5358.D KD19OLM.M Mon Dec 22 14:17:27 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5358.D
Acq On : 19 Dec 2008 23:50
Sample : LCSD-8644 /MSD
Misc : LCSD,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:16 2008

Vial: 80
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5358.D KD19OLM.M Mon Dec 22 14:17:28 2008

Matrix Spikes

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	41.2	10	51.5	0	80	50	130				
Atrazine	41.8	10	51.5	0	81	30	130				
Benzaldehyde	40.7	10	51.5	0	79	30	130				
Benzo[a]anthracene	46.4	10	51.5	0	90	42	134				
Benzo[a]pyrene	46.2	10	51.5	0	90	36	139				
Benzo[b]fluoranthene	46.7	10	51.5	0	91	30	153				
Benzo[g,h,i]perylene	45.4	10	51.5	0	88	23	136				
Benzo[k]fluoranthene	48.7	10	51.5	0	94	21	166				
bis(2-Chloroethoxy)methane	46.5	10	51.5	0	90	35	130				
bis(2-chloroethyl)ether	48.3	10	51.5	0	94	18	153				
bis(2-chloroisopropyl)ether	51.4	10	51.5	0	100	28	130				
bis(2-Ethylhexyl)phthalate	50.5	10	51.5	0	98	49	153				
Butyl benzyl phthalate	49.3	10	51.5	0	96	28	157				
Caprolactam	59.1	10	51.5	0	115	30	130				
Carbazole	40.9	10	51.5	0	79	38	175				
Chrysene	46.0	10	51.5	0	89	43	132				
Di-n-butyl phthalate	49.1	10	51.5	0	95	37	152				
Di-n-octyl phthalate	48.8	10	51.5	0	95	50	148				
Dibenz[a,h]anthracene	46.3	10	51.5	0	90	27	149				
Dibenzofuran	46.2	10	51.5	0	90	50	130				
Diethyl phthalate	50.4	10	51.5	0	98	18	168				
Dimethyl phthalate	51.3	10	51.5	0	100	19	161				
Fluoranthene	47.7	10	51.5	0	93	50	130				
Fluorene	46.2	10	51.5	0	90	50	130				
Hexachlorobenzene	46.0	10	51.5	0	89	45	134				
Hexachlorobutadiene	31.2	10	51.5	0	60	20	130				
Hexachlorocyclopentadiene	31.8	10	51.5	0	62	10	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	32.7	10	51.5	0	63	32	130				
Indeno[1,2,3-cd]pyrene	45.1	10	51.5	0	88	27	138				
Isophorone	50.5	10	51.5	0	98	49	130				
N-Nitroso-di-n-propylamine	52.1	10	51.5	0	101	30	145				
N-Nitrosodiphenylamine	26.5	10	51.5	0	51	19	157				
Naphthalene	37.8	10	51.5	0	73	33	130				
Nitrobenzene	49.0	10	51.5	0	95	38	145				
Pentachlorophenol	38.7	52	51.5	0	75	50	145				J
Phenanthrene	47.0	10	51.5	0	91	50	130				
Phenol	43.6	10	51.5	0	85	20	141				
Pyrene	45.8	10	51.5	0	89	47	133				
Surr: 2,4,6-Tribromophenol	104	0.10	155	0	67	48	149				
Surr: 2-Fluorobiphenyl	84.8	0.10	103	0	82	42	130				
Surr: 2-Fluorophenol	118	0.10	155	0	76	26	130				
Surr: Nitrobenzene-d5	87.2	0.10	103	0	85	42	130				
Surr: Phenol-d5	124	0.10	155	0	80	21	134				
Surr: Terphenyl-d14	95.8	0.10	103	0	93	24	147				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMS SampType: MS TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416477
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	47.7	10	51.5	0	93	30	130				
2,4,5-Trichlorophenol	43.7	52	51.5	0	85	50	134				J
2,4,6-Trichlorophenol	39.6	10	51.5	0	77	50	130				
2,4-Dichlorophenol	40.2	10	51.5	0	78	50	130				
2,4-Dimethylphenol	31.9	10	51.5	0	62	39	130				
2,4-Dinitrophenol	48.1	52	51.5	0	93	45	130				J
2,4-Dinitrotoluene	49.2	10	51.5	0	96	50	130				
2,6-Dinitrotoluene	51.1	10	51.5	0	99	50	130				
2-Chloronaphthalene	43.8	10	51.5	0	85	50	130				
2-Chlorophenol	43.8	10	51.5	0	85	35	130				
2-Methylnaphthalene	39.9	10	51.5	0	77	36	130				
2-Methylphenol	38.4	10	51.5	0	74	34	138				
2-Nitroaniline	47.5	52	51.5	0	92	10	173				J
2-Nitrophenol	46.4	10	51.5	0	90	46	130				
3,3'-Dichlorobenzidine	4.44	21	51.5	0	9	10	151				JS
3-Nitroaniline	43.6	52	51.5	0	85	10	161				J
4,6-Dinitro-2-methylphenol	51.2	10	51.5	0	99	50	130				
4-Bromophenyl phenyl ether	49.0	10	51.5	0	95	50	130				
4-Chloro-3-methylphenol	40.7	10	51.5	0	79	48	135				
4-Chloroaniline	29.3	10	51.5	0	57	14	133				
4-Chlorophenyl phenyl ether	49.2	10	51.5	0	96	50	130				
4-Methylphenol	37.4	10	51.5	0	72	48	130				
4-Nitroaniline	46.9	52	51.5	0	91	10	175				J
4-Nitrophenol	45.6	52	51.5	0	88	50	154				J
Acenaphthene	41.5	10	51.5	0	80	50	130				
Acenaphthylene	45.7	10	51.5	0	89	50	130				
Acetophenone	45.6	10	51.5	0	89	30	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or RL
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5364.D Vial: 86
Acq On : 20 Dec 2008 3:42 Operator: MEG
Sample : 0812108-005BMS Inst : #6MS40
Misc : MS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	124070	40.00 ug/mL	-0.01
13) Naphthalene-d8	12.46	136	479429	40.00 ug/mL	-0.01
26) Acenaphthene-d10	15.80	164	284642	40.00 ug/mL	-0.02
47) Phenanthrene-d10	18.67	188	491684	40.00 ug/mL	-0.01
58) Chrysene-d12	23.74	240	432434	40.00 ug/mL	-0.01
68) Perylene-d12	26.87	264	387124	40.00 ug/mL	-0.02
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	473279	114.29 ug/mL	0.00
Spiked Amount 150.000			Recovery = 76.19%		
3) Phenol-d5	9.36	99	593717	120.05 ug/mL	0.00
Spiked Amount 150.000			Recovery = 80.03%		
14) Nitrobenzene-d5	11.11	82	424568	84.61 ug/mL	0.00
Spiked Amount 100.000			Recovery = 84.61%		
30) 2-Fluorobiphenyl	14.49	172	773705	82.26 ug/mL	0.00
Spiked Amount 100.000			Recovery = 82.26%		
46) 2,4,6-Tribromophenol	17.32	330	154876	101.22 ug/mL	0.00
Spiked Amount 150.000			Recovery = 67.48%		
60) Terphenyl-d14	21.69	244	770867	83.00 ug/mL	0.00
Spiked Amount 100.000			Recovery = 83.00%		

Target Compounds					Qvalue
4) Phenol	9.39	94	216923	42.26 ug/mL	93
5) bis(2-Chloroethyl)ether	9.58	93	189729	46.82 ug/mL	98
6) 2-Chlorophenol	9.71	128	194188	42.55 ug/mL	99
7) 2-Methylphenol	10.48	108	142585	37.24 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	10.55	45	276263	49.82 ug/mL	97
9) bis(2-Chloroisopropyl)ethe	10.55	45	276263	49.82 ug/mL	97
10) 4-Methylphenol	10.76	108	151529	36.23 ug/mL	99
11) N-Nitroso-di-n-propylamine	10.79	70	164608	50.50 ug/mL	99
12) Hexachloroethane	11.03	117	67354	31.74 ug/mL	100
15) Nitrobenzene	11.14	77	238885	47.56 ug/mL	100
16) Isophorone	11.57	82	423584	48.99 ug/mL	99
17) 2-Nitrophenol	11.72	139	126032	44.99 ug/mL	95
18) 2,4-Dimethylphenol	11.75	107	152733	30.97 ug/mL	97
19) bis(2-Chloroethoxy)methane	11.94	93	231940	45.06 ug/mL	85
20) 2,4-Dichlorophenol	12.16	162	159435	38.98 ug/mL	99
21) Naphthalene	12.50	128	457143	36.66 ug/mL	97
22) 4-Chloroaniline	12.56	127	158000	28.38 ug/mL	99
23) Hexachlorobutadiene	12.70	225	84092	30.23 ug/mL	99
24) 4-Chloro-3-methylphenol	13.45	107	182908	39.46 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5364.D KD190L42.M Mon Dec 22 14:01:21 2008 P 812

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5364.D Vial: 86
Acq On : 20 Dec 2008 3:42 Operator: MEG
Sample : 0812108-005BMS Inst : #6MS40
Misc : MS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.80	142	339150	38.74 ug/mL	99
27) Hexachlorocyclopentadiene	14.09	237	76009	30.88 ug/mL	99
28) 2,4,6-Trichlorophenol	14.32	196	113802	38.43 ug/mL	99
29) 2,4,5-Trichlorophenol	14.40	196	134334	42.36 ug/mL	99
31) 2-Chloronaphthalene	14.74	162	349130	42.44 ug/mL	99
32) 2-Nitroaniline	14.91	65	142832	46.03 ug/mL	99
33) Dimethyl phthalate	15.23	163	523083	49.78 ug/mL	100
34) 2,6-Dinitrotoluene	15.37	165	133649	49.59 ug/mL	100
35) Acenaphthylene	15.54	152	557478	44.32 ug/mL	100
36) 3-Nitroaniline	15.70	138	115215	42.34 ug/mL	99
37) Acenaphthene	15.87	153	297743	40.25 ug/mL	99
38) 2,4-Dinitrophenol	15.89	184	67783	46.62 ug/mL#	77
39) 4-Nitrophenol	15.97	109	84078	44.22 ug/mL	94
40) 2,4-Dinitrotoluene	16.14	165	173661	47.77 ug/mL	99
41) Dibenzofuran	16.20	168	532374	44.82 ug/mL	99
42) Diethyl phthalate	16.58	149	534795	48.92 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.83	204	234658	47.75 ug/mL	99
44) Fluorene	16.86	166	402602	44.81 ug/mL	99
45) 4-Nitroaniline	16.88	138	122992	45.52 ug/mL	95
48) 4,6-Dinitro-2-methylphenol	16.93	198	117642	49.62 ug/mL	99
49) n-Nitrosodiphenylamine	17.05	169	176870	25.68 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.77	248	135573	47.54 ug/mL	99
51) Hexachlorobenzene	17.91	284	148867	44.62 ug/mL	98
52) Pentachlorophenol	18.28	266	64573	37.58 ug/mL	99
53) Phenanthrene	18.72	178	614000	45.57 ug/mL	99
54) Anthracene	18.81	178	543746	39.98 ug/mL	100
55) Carbazole	19.09	167	487782	39.65 ug/mL	100
56) Di-n-butyl phthalate	19.69	149	870090	47.66 ug/mL	100
57) Fluoranthene	21.00	202	673280	46.31 ug/mL	98
59) Pyrene	21.45	202	648540	44.43 ug/mL	97
61) Butyl benzyl phthalate	22.58	149	393753	47.83 ug/mL	99
62) 3,3'-Dichlorobenzidine	23.62	252	22172	4.31 ug/mL	97
63) Benzo[a]anthracene	23.71	228	555661	45.05 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.63	149	526699	49.02 ug/mL	99
65) Chrysene	23.79	228	517491	44.65 ug/mL	100
66) Di-n-octyl phthalate	24.86	149	925773	47.33 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.69	276	537205	43.76 ug/mL	96
69) Benzo[b]fluoranthene	25.92	252	565588	45.33 ug/mL	99
70) Benzo[k]fluoranthene	25.98	252	544063	47.23 ug/mL	99
71) Benzo[a]pyrene	26.74	252	512048	44.79 ug/mL	99
72) Dibenz[a,h]anthracene	29.71	278	453778	44.94 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5364.D KD190L42.M Mon Dec 22 14:01:22 2008 P 813

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5364.D Vial: 86
Acq On : 20 Dec 2008 3:42 Operator: MEG
Sample : 0812108-005BMS Inst : #6MS40
Misc : MS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

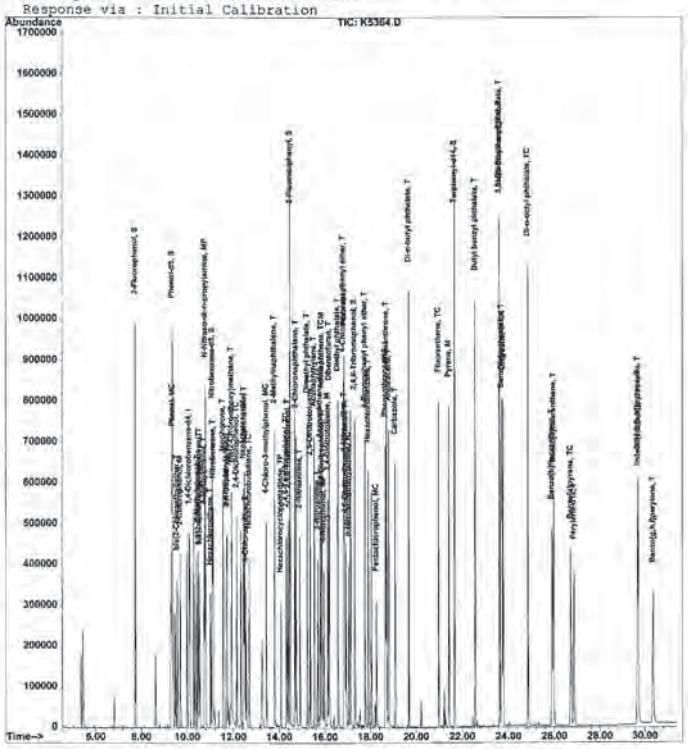
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.37	276	453940	44.06 ug/mL	97

(#) = qualifier out of range (m) = manual integration
K5364.D KD190L42.M Mon Dec 22 14:01:22 2008 P 814

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5364.D Vial: 86
Acq On : 20 Dec 2008 3:42 Operator: MEG
Sample : 0812108-005BMS Inst : #6MS40
Misc : MS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD190L42.RES

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5364.D KD190L42.M Mon Dec 22 14:01:25 2008 P 815

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5364.D Vial: 86
Acq On : 20 Dec 2008 3:42 Operator: MEG
Sample : 0812108-005BMS Inst : #6MS40
Misc : MS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:16 2008 Quant Results File: KD19OLM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	124070	40.00 ug/mL	0.00
5) Naphthalene-d8	12.46	136	479429	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.80	164	284642	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	491684	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	432348	40.00 ug/mL	0.00
15) Perylene-d12	26.87	264	387124	40.00 ug/mL	0.00

System Monitoring Compounds

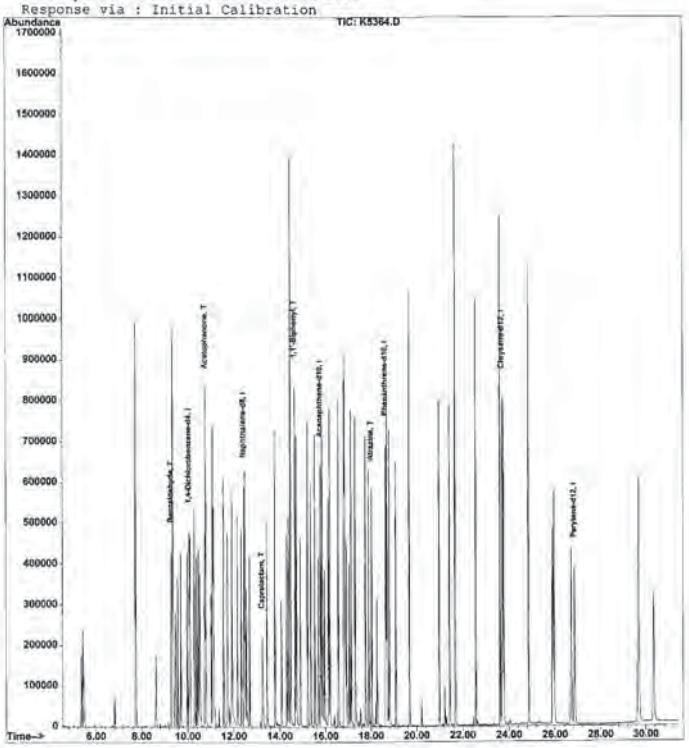
Target Compounds					Qvalue
2) Benzaldehyde	9.31	77	140400	39.45 ug/mL	99
4) Acetophenone	10.82	105	276290	44.28 ug/mL	99
6) Caprolactam	13.26	55	97922m	57.34 ug/mL	
8) 1,1'-Biphenyl	14.68	154	438039	46.29 ug/mL	99
12) Atrazine	18.05	200	117967	40.52 ug/mL	100

(#) = qualifier out of range (m) = manual integration
K5364.D KD19OLM.M Mon Dec 22 14:17:29 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5364.D Vial: 86
Acq On : 20 Dec 2008 3:42 Operator: MEG
Sample : 0812108-005BMS Inst : #6MS40
Misc : MS ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:16 2008 Quant Results File: KD19OLM.RES

Method : C:\HPCHEM\1\METHODS\KD19OLM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5364.D KD19OLM.M Mon Dec 22 14:17:30 2008

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Biphenyl	47.9	10	51.5	0	93	30	130	47.7	0.5	60	
2,4,5-Trichlorophenol	46.0	52	51.5	0	89	50	134	43.7	5.3	30	J
2,4,6-Trichlorophenol	41.0	10	51.5	0	79	50	130	39.6	3.3	30	
2,4-Dichlorophenol	42.2	10	51.5	0	82	50	130	40.2	5.0	30	
2,4-Dimethylphenol	29.7	10	51.5	0	58	39	130	31.9	7.2	31	
2,4-Dinitrophenol	50.8	52	51.5	0	99	45	130	48.1	5.6	30	J
2,4-Dinitrotoluene	50.6	10	51.5	0	98	50	130	49.2	2.7	30	
2,6-Dinitrotoluene	52.7	10	51.5	0	102	50	130	51.1	3.1	30	
2-Chloronaphthalene	42.4	10	51.5	0	82	50	130	43.8	3.0	30	
2-Chlorophenol	45.1	10	51.5	0	88	35	130	43.9	2.8	60	
2-Methylnaphthalene	39.4	10	51.5	0	76	36	130	39.9	1.4	40	
2-Methylphenol	39.1	10	51.5	0	76	34	136	38.4	1.9	60	
2-Nitroaniline	49.7	52	51.5	0	96	10	173	47.5	4.6	60	J
2-Nitrophenol	47.8	10	51.5	0	93	45	130	46.4	3.1	36	
3,3'-Dichlorobenzidine	4.43	21	51.5	0	9	10	151	4.44	0.2	60	J9
3-Nitroaniline	45.7	52	51.5	0	89	10	161	43.6	4.5	60	J
4,6-Dinitro-2-methylphenol	53.4	10	51.5	0	104	50	130	51.2	4.3	30	
4-Bromophenyl phenyl ether	47.9	10	51.5	0	93	50	130	49	2.4	37	
4-Chloro-3-methylphenol	42.0	10	51.5	0	82	48	135	40.7	3.2	60	
4-Chloroaniline	33.3	10	51.5	0	65	14	133	28.3	13	60	
4-Chlorophenyl phenyl ether	48.7	10	51.5	0	95	50	130	49.2	1.0	34	
4-Methylphenol	38.1	10	51.5	0	74	48	130	37.4	1.9	42	
4-Nitroaniline	49.2	52	51.5	0	96	10	175	46.9	4.6	60	J
4-Nitrophenol	47.6	52	51.5	0	92	50	154	45.5	4.2	42	J
Acenaphthene	42.0	10	51.5	0	82	50	130	41.5	1.3	41	
Acenaphthylene	45.7	10	51.5	0	89	50	130	45.7	0.1	30	
Acetophenone	46.5	10	51.5	0	90	30	130	45.6	1.9	60	

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or ML
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

ANALYTICAL QC SUMMARY REPORT

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD SampType: MSD TestCode: 8270W_OLM Units: µg/L Prep Date: 12/17/2008 RunNo: 15973
Client ID: MW-11R-121108 Batch ID: 8644 Method: SW8270C (SW3520C) Analysis Date: 12/20/2008 SeqNo: 416478
Instrument: MS06_40 ColumnID: DB-5MS ZB-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	40.6	10	51.5	0	79	50	130	41.2	1.5	34	
Atrazine	43.5	10	51.5	0	84	36	130	41.8	4.1	60	
Benzaldehyde	42.5	10	51.5	0	82	30	130	40.7	4.3	60	
Benzo(a)anthracene	47.0	10	51.5	0	91	42	134	46.4	1.3	54	
Benzo(a)pyrene	46.0	10	51.5	0	89	36	139	46.2	0.4	54	
Benzo(b)fluoranthene	45.6	10	51.5	0	88	30	153	45.7	2.5	59	
Benzo(g,h,i)perylene	44.0	10	51.5	0	85	23	138	45.4	3.3	57	
Benzo(k)fluoranthene	49.2	10	51.5	0	96	21	168	48.7	1.1	60	
bis(2-Chloroethoxy)methane	46.5	10	51.5	0	94	35	130	46.5	4.3	60	
bis(2-chloroethyl)ether	49.9	10	51.5	0	97	18	153	48.3	3.2	60	
bis(2-chloroisopropyl)ether	53.4	10	51.5	0	104	28	130	51.4	3.8	60	
bis(2-Ethylhexyl)phthalate	51.1	10	51.5	0	99	49	153	50.5	1.1	59	
Butyl benzyl phthalate	49.6	10	51.5	0	96	28	157	49.3	0.6	46	
Caprolactam	58.1	10	51.5	0	117	30	130	58.1	1.6	60	
Carbazole	42.2	10	51.5	0	82	38	173	40.9	3.1	40	
Chrysene	46.4	10	51.5	0	90	43	132	46	0.7	57	
Di-n-butyl phthalate	49.2	10	51.5	0	96	37	157	49.1	0.2	32	
Di-n-octyl phthalate	49.2	10	51.5	0	95	50	148	48.8	0.8	58	
Dibenz(a,h)anthracene	45.1	10	51.5	0	88	27	140	46.3	2.7	52	
Dibenzofuran	45.3	10	51.5	0	88	50	130	46.2	2.0	30	
Diethyl phthalate	51.5	10	51.5	0	100	18	158	50.4	2.0	30	
Dimethyl phthalate	51.3	10	51.5	0	100	19	181	51.3	0	30	
Fluoranthene	47.3	10	51.5	0	92	50	130	47.7	1	45	
Fluorene	46.8	10	51.5	0	89	50	136	46.2	0.8	50	
Hexachlorobenzene	45.3	10	51.5	0	88	45	134	46	1.5	48	
Hexachlorocyclopentadiene	31.1	10	51.5	0	60	20	130	31.2	0.3	60	
Hexachlorocyclopentadiene	30.2	10	51.5	0	59	10	130	31.8	5.1	31	

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Practical Quantitation Limit (PQL)
U Not Detected at the MDC or ML
E Value exceeds the instrument calibration range
R RPD exceeds accepted precision limit
J Analyte detected below the PQL
S Spike Recovery outside accepted recovery limits

29-Dec-08

ANALYTICAL QC SUMMARY REPORT

Life Science Laboratories, Inc.
5000 Brittonfield Parkway, Suite 200
East Syracuse, NY 13057 (315) 437-0200

Method: SW8270C
Work Order: 0812108
Project: City of Geneva- Market Basket Site

CLIENT: O'Brien & Gere Engineers, Inc.

Sample ID: 0812108-005BMSD | SampType: MSD | TestCode: 8270W_OLM | Units: ug/L | Prep Date: 12/17/2008 | RunNo: 15973
Client ID: MW-11R-121108 | Batch ID: 8644 | Method: SW8270C (SW3520C) | Analysis Date: 12/20/2008 | SeqNo: 416478
Instrument: MS06_40 | ColumnID: DB-5MS | 2B-5, 0.5 df

Analyte	QC Sample Result	PQL	SPK Added	Parent Sample Result	%REC	LowLimit	HighLimit	RPD Ref Val.	%RPD	RPDLimit	Qual
Hexachloroethane	32.9	10	51.5	0	64	32	130	32.7	0.7	50	
Indeno[1,2,3-cd]pyrene	43.4	10	51.5	0	84	27	138	45.1	3.9	52	
Isophorone	52.0	10	51.5	0	101	49	130	50.5	2.9	39	
N-Nitroso-di-n-propylamine	52.5	10	51.5	0	102	30	145	52.1	0.8	60	
N-Nitrosodiphenylamine	28.2	10	51.5	0	55	19	157	26.5	6.5	60	
Naphthalene	39.4	10	51.5	0	76	33	130	37.8	4.2	60	
Nitrobenzene	50.9	10	51.5	0	99	30	145	49	3.8	60	
Pentachlorophenol	41.9	52	51.5	0	81	50	145	39.7	7.9	30	J
Phenanthrene	46.6	10	51.5	0	90	50	130	47	0.8	32	
Phenol	45.0	10	51.5	0	87	20	141	43.6	3.2	60	
Pyrene	46.5	10	51.5	0	90	47	133	45.8	1.5	40	
Surr: 2,4,6-Tribromophenol	106	0.10	155	0	68	46	149	0		0	
Surr: 2-Fluorobiphenyl	84.2	0.10	103	0	82	42	130	0		0	
Surr: 2-Fluorophenol	122	0.10	155	0	79	26	130	0		0	
Surr: Nitrobenzene-d5	99.4	0.10	103	0	97	42	130	0		0	
Surr: Phenol-d5	128	0.10	155	0	83	21	134	0		0	
Surr: Terphenyl-d14	89.4	0.10	103	0	87	24	147	0		0	

Qualifiers:
B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
ND Not Detected at the Practical Quantitation Limit (PQL)
R RPD exceeds accepted precision limit
S Spike Recovery outside accepted recovery limits
U Not Detected at the MDC or RL

29-Dec-08

Page 15 of 15

820

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\R5365.D Vial: 87
Acq On : 20 Dec 2008 4:21 Operator: MEG
Sample : 0812108-005BMSD Inst : #6MS40
Misc : MSD ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:52:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	147290	40.00 ug/mL	0.00
13) Naphthalene-d8	12.46	136	560899	40.00 ug/mL	0.00
26) Acenaphthene-d10	15.81	164	331731	40.00 ug/mL	0.00
47) Phenanthrene-d10	18.67	188	576243	40.00 ug/mL	0.00
58) Chrysene-d12	23.74	240	496787	40.00 ug/mL	0.00
68) Perylene-d12	26.88	264	443946	40.00 ug/mL	0.00
System Monitoring Compounds					
2) 2-Fluorophenol	7.76	112	579483	117.87 ug/mL	0.00
Spiked Amount 150.000			Recovery =	78.58%	
3) Phenol-d5	9.37	99	729864	124.31 ug/mL	0.00
Spiked Amount 150.000			Recovery =	82.87%	
14) Nitrobenzene-d5	11.11	82	509270	86.75 ug/mL	0.00
Spiked Amount 100.000			Recovery =	86.75%	
30) 2-Fluorobiphenyl	14.49	172	895598	81.71 ug/mL	0.00
Spiked Amount 100.000			Recovery =	81.71%	
46) 2,4,6-Tribromophenol	17.32	330	182517	102.35 ug/mL	0.00
Spiked Amount 150.000			Recovery =	68.23%	
60) Terphenyl-d14	21.69	244	925515	86.74 ug/mL	0.00
Spiked Amount 100.000			Recovery =	86.74%	

Target Compounds					Qvalue
4) Phenol	9.39	94	265881	43.64 ug/mL	93
5) bis(2-Chloroethyl)ether	9.59	93	232634	48.36 ug/mL	99
6) 2-Chlorophenol	9.71	128	237219	43.78 ug/mL	99
7) 2-Methylphenol	10.48	108	172482	37.94 ug/mL	100
8) 2,2'-oxybis(1-chloropropan	10.55	45	340794	51.77 ug/mL	98
9) bis(2-Chloroisopropyl)ethe	10.55	45	340794	51.77 ug/mL	98
10) 4-Methylphenol	10.76	108	183330	36.92 ug/mL	100
11) N-Nitroso-di-n-propylamine	10.80	70	196967	50.90 ug/mL	99
12) Hexachloroethane	11.03	117	80513	31.96 ug/mL	99
15) Nitrobenzene	11.14	77	290164	49.38 ug/mL	100
16) Isophorone	11.57	82	509979	50.41 ug/mL	99
17) 2-Nitrophenol	11.73	139	152058	46.40 ug/mL	95
18) 2,4-Dimethylphenol	11.75	107	166204	28.81 ug/mL	96
19) bis(2-Chloroethoxy)methane	11.94	93	283119	47.02 ug/mL	86
20) 2,4-Dichlorophenol	12.17	162	195983	40.96 ug/mL	99
21) Naphthalene	12.50	128	557553	38.22 ug/mL	97
22) 4-Chloroaniline	12.57	127	210549	32.32 ug/mL	100
23) Hexachlorobutadiene	12.70	225	98095	30.14 ug/mL	99
24) 4-Chloro-3-methylphenol	13.45	107	221011	40.75 ug/mL	99

(#) = qualifier out of range (m) = manual integration
K5365.D KD19OL42.M Mon Dec 22 14:01:29 2008 P

821

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5365.D Vial: 87
Acq On : 20 Dec 2008 4:21 Operator: MEG
Sample : 0812108-005BMSD Inst : #6MS40
Misc : MSD ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25) 2-Methylnaphthalene	13.80	142	391248	38.20 ug/mL	99
27) Hexachlorocyclopentadiene	14.09	237	84184	29.34 ug/mL	100
28) 2,4,6-Trichlorophenol	14.32	196	137140	39.73 ug/mL	99
29) 2,4,5-Trichlorophenol	14.40	196	165082	44.66 ug/mL	100
31) 2-Chloronaphthalene	14.74	162	394680	41.17 ug/mL	100
32) 2-Nitroaniline	14.92	65	174382	48.22 ug/mL	100
33) Dimethyl phthalate	15.23	163	609407	49.76 ug/mL	100
34) 2,6-Dinitrotoluene	15.37	165	160665	51.15 ug/mL	98
35) Acenaphthylene	15.54	152	649290	44.29 ug/mL	100
36) 3-Nitroaniline	15.70	138	140464	44.29 ug/mL	97
37) Acenaphthene	15.87	153	351449	40.76 ug/mL	99
38) 2,4-Dinitrophenol	15.89	184	84760	49.30 ug/mL#	72
39) 4-Nitrophenol	15.98	109	102178	46.11 ug/mL	94
40) 2,4-Dinitrotoluene	16.14	165	208028	49.10 ug/mL	99
41) Dibenzofuran	16.20	168	608200	43.93 ug/mL	98
42) Diethyl phthalate	16.58	149	635893	49.91 ug/mL	100
43) 4-Chlorophenyl phenyl ethe	16.83	204	270688	47.26 ug/mL	98
44) Fluorene	16.86	166	465645	44.47 ug/mL	100
45) 4-Nitroaniline	16.89	138	150418	47.77 ug/mL	95
48) 4,6-Dinitro-2-methylphenol	16.93	198	143952	51.81 ug/mL	99
49) n-Nitrosodiphenylamine	17.05	169	221182	27.40 ug/mL	99
50) 4-Bromophenyl phenyl ether	17.77	248	155167	46.43 ug/mL	99
51) Hexachlorobenzene	17.91	284	171821	43.95 ug/mL	98
52) Pentachlorophenol	18.28	266	81936	40.69 ug/mL	99
53) Phenanthrene	18.72	178	713965	45.21 ug/mL	100
54) Anthracene	18.81	178	627739	39.38 ug/mL	100
55) Carbazole	19.10	167	589829	40.91 ug/mL	100
56) Di-n-butyl phthalate	19.70	149	1021926	47.76 ug/mL	100
57) Fluoranthene	21.00	202	781130	45.85 ug/mL	98
59) Pyrene	21.45	202	756288	45.10 ug/mL	97
61) Butyl benzyl phthalate	22.58	149	455177	48.13 ug/mL	100
62) 3,3'-Dichlorobenzidine	23.62	252	25393	4.30 ug/mL	100
63) Benzo[a]anthracene	23.72	228	646393	45.62 ug/mL	100
64) bis(2-Ethylhexyl)phthalate	23.63	149	611621	49.55 ug/mL	99
65) Chrysene	23.80	228	598597	44.96 ug/mL	100
66) Di-n-octyl phthalate	24.86	149	1072474	47.72 ug/mL	100
67) Indeno[1,2,3-cd]pyrene	29.70	276	593274	42.07 ug/mL	96
69) Benzo[b]fluoranthene	25.92	252	632363	44.19 ug/mL	99
70) Benzo[k]fluoranthene	25.98	252	630753	47.75 ug/mL	99
71) Benzo[a]pyrene	26.74	252	584688	44.60 ug/mL	99
72) Dibenz[a,h]anthracene	29.72	278	506610	43.75 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K5365.D KD19OL42.M Mon Dec 22 14:01:30 2008 P

822

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5365.D Vial: 87
Acq On : 20 Dec 2008 4:21 Operator: MEG
Sample : 0812108-005BMSD Inst : #6MS40
Misc : MSD ,8270W_OLM42, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008 Quant Results File: KD19OL42.RES

Quant Method : C:\HPCHEM\1\METHODS\KD19OL42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) Benzo[g,h,i]perylene	30.38	276	503930	42.65 ug/mL	98

(#) = qualifier out of range (m) = manual integration
K5365.D KD19OL42.M Mon Dec 22 14:01:30 2008 P

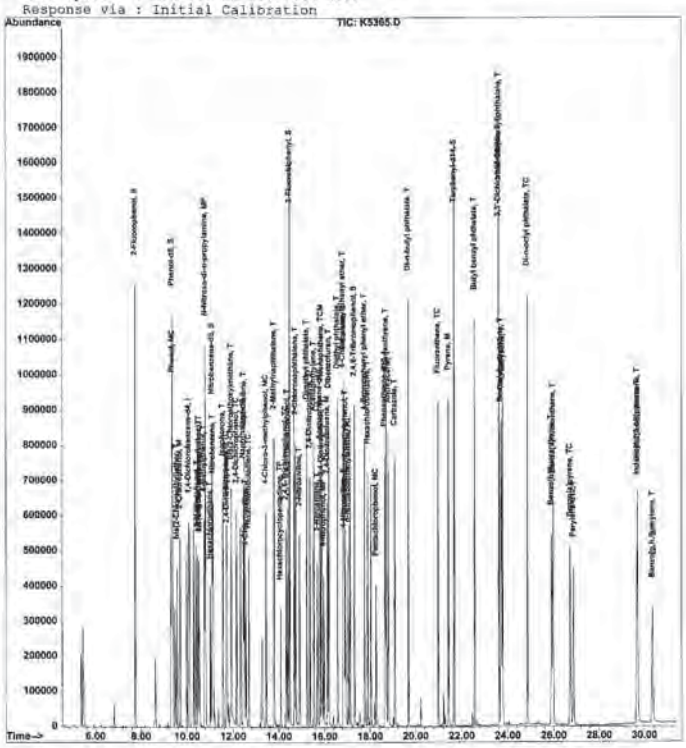
823

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5365.D
Acq On : 20 Dec 2008 4:21
Sample : 0812108-005BMSD
Misc : MSD ,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 13:52 2008

Vial: 87
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD190L42.RES

Method : C:\HPCHEM\1\METHODS\KD190L42.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 13:50:44 2008
Response via : Initial Calibration



K5365.D KD190L42.M Mon Dec 22 14:01:33 2008

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\K5365.D
Acq On : 20 Dec 2008 4:21
Sample : 0812108-005BMSD
Misc : MSD ,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:13 2008

Vial: 87
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD190LM.RES

Quant Method : C:\HPCHEM\1\METHODS\KD190LM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration
DataAcq Meth : KD08FULL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.10	152	147290	40.00 ug/mL	0.00
5) Naphthalene-d8	12.46	136	560341	40.00 ug/mL	0.00
7) Acenaphthene-d10	15.81	164	331731	40.00 ug/mL	0.00
11) Phenanthrene-d10	18.67	188	576243	40.00 ug/mL	0.00
14) Chrysene-d12	23.74	240	496787	40.00 ug/mL	0.00
15) Perylene-d12	26.88	264	443946	40.00 ug/mL	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Benzaldehyde	9.32	77	174048	41.19 ug/mL	99
4) Acetophenone	10.82	105	334127	45.11 ug/mL	99
6) Caprolactam	13.27	55	116307m	58.27 ug/mL	
8) 1,1'-Biphenyl	14.68	154	512892	46.50 ug/mL	100
12) Atrazine	18.05	200	144060	42.22 ug/mL	99

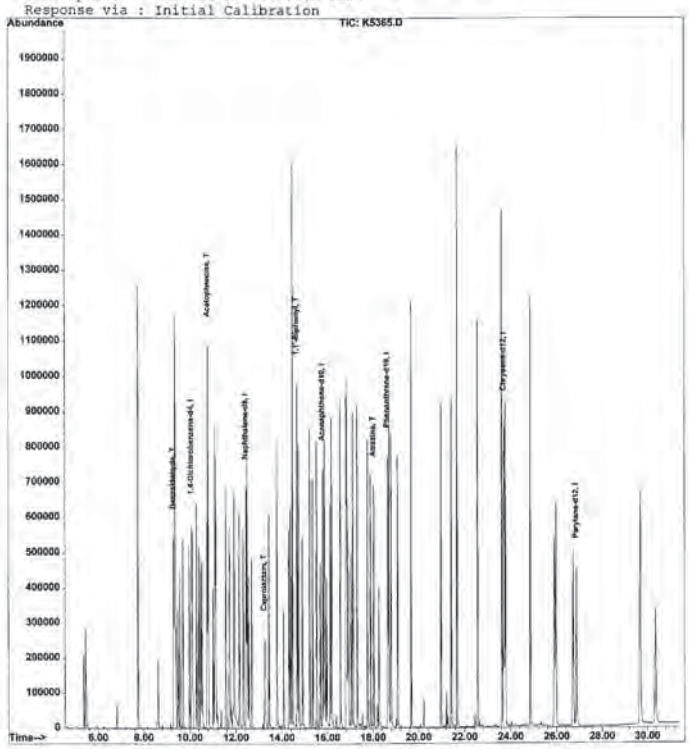
(#) = qualifier out of range (m) = manual integration
K5365.D KD190LM.M Mon Dec 22 14:17:33 2008

Quantitation Report

Data File : C:\HPCHEM\1\DATA\K5365.D
Acq On : 20 Dec 2008 4:21
Sample : 0812108-005BMSD
Misc : MSD ,8270W_OLM42,
MS Integration Params: RTEINT.P
Quant Time: Dec 22 14:13 2008

Vial: 87
Operator: MEG
Inst : #6MS40
Multiplr: 1.00
Quant Results File: KD190LM.RES

Method : C:\HPCHEM\1\METHODS\KD190LM.M (RTE Integrator)
Title : BNA's w/J & W DB-5MS .25mm x 30m, 0.5df
Last Update : Mon Dec 22 14:09:34 2008
Response via : Initial Calibration



K5365.D KD190LM.M Mon Dec 22 14:17:34 2008

Laboratory Worksheets

Copy of Calculations

GC/MS WATER SAMPLE CALCULATIONS

1. Relative Response Factors for GC/MS Volatiles and Semivolatiles

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where:
A_x = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specific internal standard
C_{is} = Concentration of the internal standard (µg/mL)
C_x = Concentration of the compound to be measured (µg/mL).

2. Relative Standard Deviation

$$\% RSD = \frac{SD}{\bar{X}} \times 100$$

Where:
RSD = Relative Standard Deviation
SD = Standard Deviation of initial relative response factors (per compound)
$\bar{X}$ = Mean of initial relative response factors (per compound)

3. %Deviation for Continuing Calibration (for quantitation from RF only)

$$\% \text{ Deviation}_{(\text{manual})} = \frac{RRF_c - \overline{RRF_i}}{RRF_i} \times 100$$

$$\% \text{ Deviation}_{(\text{software})} = \frac{\overline{RRF_i} - RRF_c}{\overline{RRF_i}} \times 100$$

Where:
RRF_c = Relative response factor from continuing calibration standard
$\overline{RRF_i}$ = Mean relative response factor from most recent initial calibration meeting technical acceptance criteria

4. %Drift for Continuing Calibration (for quantitation from Curve)

$$\% \text{ Drift}_{(\text{manual})} = \frac{C_c - C_t}{C_t} \times 100$$

$$\% \text{ Drift}_{(\text{software})} = \frac{C_t - C_c}{C_t} \times 100$$

Where:
C_t = Calibration check std concentration (theoretical)
C_c = Measured concentration

5. RRT Deviation

$$\Delta \text{ RRT} = RRT_s - RRT_c \quad , \quad RRT = \frac{RT_t}{RT_i}$$

Where:
RRT_s = Relative RT of target compound in sample
RRT_c = RRT of target in continuing calibration standard
RT_t = RT of target compound
RT_i = RT of internal standard

GC/MS WATER SAMPLE CALCULATIONS

6. Final Concentration for GC/MS Volatiles

$$\text{Concentration } (\mu g/L) = \frac{(A_X)(I_{is})Df}{(A_{is})(RRF)(V_o)}$$

Where:
A_X = Area of the characteristic ion for the compound to be measured
A_{is} = Area of the characteristic ion for the specified internal standard
I_{is} = Amount of internal standard added in nanograms
V_o = Volume of water purged (5 to 25 mL)
RRF = Response factor for compound to be measured (average or single point) *
Df = Dilution factor, if applicable

* For compounds calculated using a regression equation for initial calibration, the terms of the equation replace the RRF.

7. Final Concentration for GC/MS Semivolatiles

$$\text{Concentration } (\mu g/L) = \frac{(A_x)(I_{is})(V_T)(Df)(2.0)}{(A_{is})(RRF)(V_o)(V_i)}$$

Where:
RRF, A_x, A_{is}, I_{is} = Same as above
V_o = Volume of water extracted (mL)
V_i = Volume of extract injected (µL)
V_T = Volume of concentrated extract (µL)
Df = Dilution factor
The factor of 2.0 is used to account for the splitting of extracts for the acid and base neutral portions. If only one extraction is performed, this factor is not used.

8. Matrix Spike Recovery for Volatiles and Semivolatiles

$$\text{Recovery } (\%) = \frac{(SSR) - (SR)}{(SA)} \times 100$$

Where:
SSR = Spike sample result
SR = Sample result
SA = Spike added

9. % RPD of Matrix Spike and Matrix Spike Duplicate

$$\%RPD = 100 \times \frac{|S - D|}{((S + D)/2)}$$

Where:
S = First Sample Value (Original)
D = Second Sample Value (Duplicate)

10. The Recovery of Reference Sample (LCS) and Surrogate

$$\text{Recovery } (\%) = \frac{SR}{SA} \times 100$$

Where:
SR = Sample results
SA = Sample spike added

11. The calculation of Library Search compounds (TICs) is similar to target compounds except a RRF of 1.0 is assumed.

Extraction Logs

GCMS Semivolatile Sample Extraction Log - Water by continuous Method SW3520

Date Extracted: 12-17-08 QC Batch #: 8644 Log Review By/Date: MA 12/19/08

Client Name/Project	Sample ID	Test Code	QC Level	Init pH	Sample Size (ml)	pH AE	pH BN	Target E.V. mL	Final Extract Vol (ml)	Pyr Clean-up	Comments
—	MB- 81644	8270W	—	7	1000	12	>11	1.0	1.0	1.0	1)
	LCS-										
	MSD/LCSD										2)
[redacted]	0812078-001D			7	970						
	-002D			6	950						
	-003D			6	950						
	-004D			7	970						
	-005D			7	970						
	-006D				990						
	-007D				970						
	-008D				950						
OPG-MS	0812108-001B	8270W-OLm	6	8	950						
	-002B				950						
	-003B				970						
	-004B				970						
	-005B				970						
	-005BMS										2)
	-005BMSD										
	-006B				950						
	-007B			8	990						
	-008B			8	970						
	-009B			7	970						
	-010B			8	970						
	-011B				970						
	-012B				950						

Extracted By/Date: C. Ruf 12-17-08 Extracts in Fridge # 6A By/Date: C. Ruf 12-19-08

Concentrated By/Date: C. Ruf 12-19-08 Supervisor Review/Date: (DD) 1-8-09 Page

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834

Life Science Laboratories, Inc.

PREP BATCH REPORT

Page: 1 of 2

Prep Start Date: 12/17/2008 8:51:15
Prep End Date: 12/19/2008 7:45:00

Prep Factor Units: mL / mL

Prep Batch 8644 Prep Code: 3520W_8270W Technician: Cassondra L. Renf

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0812078-001D	Water	7	970	0	0	1	0.001	12/17/2008	12/19/2008
0812078-002D	Water	6	950	0	0	1	0.001	12/17/2008	12/19/2008
0812078-003D	Water	6	950	0	0	1	0.001	12/17/2008	12/19/2008
0812078-004D	Water	7	970	0	0	1	0.001	12/17/2008	12/19/2008
0812078-005D	Water	7	970	0	0	1	0.001	12/17/2008	12/19/2008
0812078-006D	Water	7	990	0	0	1	0.001	12/17/2008	12/19/2008
0812078-007D	Water	7	970	0	0	1	0.001	12/17/2008	12/19/2008
0812078-008D	Water	7	950	0	0	1	0.001	12/17/2008	12/19/2008
0812108-001B	Groundwater	8	950	0	0	1	0.001	12/17/2008	12/19/2008
0812108-002B	Groundwater	8	950	0	0	1	0.001	12/17/2008	12/19/2008
0812108-003B	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-004B	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-005B	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-005BMS	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-005BMSD	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-006B	Groundwater	8	950	0	0	1	0.001	12/17/2008	12/19/2008
0812108-007B	Groundwater	8	990	0	0	1	0.001	12/17/2008	12/19/2008
0812108-008B	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-009B	Groundwater	7	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-010B	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-011B	Groundwater	8	970	0	0	1	0.001	12/17/2008	12/19/2008
0812108-012B	Groundwater	8	950	0	0	1	0.001	12/17/2008	12/19/2008

832

SOP # 300-15 QC Batch #: 81644

Reagents Used	
$NaSO_4$	620609
1:1 H_2SO_4	0814058C
10N NaOH	111808 B

Solvent	Lot/ID#
$MeCl_2$	633403
—	—
—	—
—	—

Comments:

1) Surrogate: 1000 uL of 109/150 ug/mL of BNA surrogate standard # 2125

2) Spike: 500 ul of 100 ug/ml of LCS Soln # 2088
500 ul of 100 ppm OLm 4.2 Soln # 2113

Surrogate/Spike by CR witnessed by MM

3) Cleanups:

4)

5)

6)

Continuous Extractor
Time On: 16:00
Time Off: 10:00
Time On: 13:45
Time Off: 7:45

Log Review By/Date: MA 12/19/08

Supervisor Review/Date: (DD) 1-8-09

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122

835

Life Science Laboratories, Inc.

PREP BATCH REPORT

Page: 2 of 2

Prep Start Date: 12/17/2008 8:51:15
Prep End Date: 12/19/2008 7:45:00

Prep Factor Units: mL / mL

Prep Batch 8644 Prep Code: 3520W_8270W Technician: Cassondra L. Renf

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
LCS-8644	Aqueous	7	1000	0	0	1	0.001	12/17/2008	12/19/2008
MSB-8644	Aqueous	7	1000	0	0	1	0.001	12/17/2008	12/19/2008
MB-8644	Aqueous	7	1000	0	0	1	0.001	12/17/2008	12/19/2008

833

Injection Logs

Semi-Volatile GC/MS Injection Log

(Page 1 of 2)

Instrument: MS6/ HP5972 (40)
GC Column: ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 12-19-08
+Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2		
3		
4		
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol	Method	List	Data File Number	Date	Time	Dil. Factor	I.S. No.
1		TD 1219 0846	DETFULL	1uL	8270	–	K 5332	12/19/08	0825	–	
2		SSTD 160 ppm	KD19FULL			FULL	K 5334		0845		2084
3		120					K 5335		0924		
4		080					K 5336		1002		
5		060					K 5337		1041		
6		050					K 5338		1119		
7		040					K 5339		1158		
8		020					K 5340		1236		
9		010					K 5341		1315		
10		005					K 5342		1353		
11		001					K 5343		1432		
12		ICV - 121908					K 5344		1510		
13		SSTD 160 ppm 0.5uL				1,2	K 5345		1549		
14		120					K 5346		1627		
15		080					K 5347		1706		
16		050					K 5348		1744		
17		040					K 5349		1823		
18		020					K 5350		1906		
19		010					K 5351		1946		
20		005					K 5352		2019		
21		-					K				
22		-					K				
23		-					K				
24		-					K				
25		-					K				
26		-					K				
27		-					K				
28		-					K				
29		-					K				

Comments:

Method	Source	Date	SOP + AP #/Ed
(1) 625	Fed Register, Vol. 49, No. 209	10/26/84	–32
(2) TCLP	8270C w/ DI/TLP (4/98-29)	12/96	– 12/4/98-29
(4) 8270C	USEPA SW846, Upd. III	12/96	–12/A
(5) EPA CLP	USEPA CLP SOW OLM04.3	9/93	–41
(6) DEC ASP	USEPA CLP SOW OLM04.3	9/93	–41

Samples Set By: [signature]

1-8-09
Supervisor Review

Life Science Laboratories, Inc.
MSSV2 p1 2006

Semi-Volatile GC/MS Injection Log

(Page 2 of 2)

Internal Std Limits | % of CCV / ICAL area)

					Upper Limit
					Lower Limit

Pre-run maintenance
- Replace septa
- Replace insert, seal
- Prune column
- Replace Helium
- See Maint. log
- Other:

Internal Standard Area Counts

Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments	
–	–	–	–	–	–				Y (686) 2127	1
129850	463878	282750	467706	387616	365863				Y 2083	2
120288	426463	265869	454594	390384	365043				Y 2084	3
127992	282831	481931	481921	490083	393828				Y 2085	4
119843	437335	265351	458855	461357	392894				Y 2086	5
128098	469900	285623	484535	489863	400935				Y 2087	6
120602	439852	290783	462310	419709	388650				Y 2088	7
134637	487339	290368	497683	452135	414806				Y 2089	8
134804	492282	284073	485364	458377	411924				Y 2100	9
126539	468791	284508	483631	450822	388843				Y 2101	10
131156	531817	315331	541568	579394	458398				Y 2102	11
127014	470204	283775	494029	440959	408900				Y 2103	12
171808	662061	376000	626929	621078	557284				Y 2104	13
133872	508285	290887	490550	482012	428602				Y 2105	14
164069	626359	358879	578400	580759	528079				Y 2106	15
171980	656520	381187	639991	617117	560733				Y 2107	16
185105	712214	408259	680608	632844	573444				Y 2108	17
226186	877006	498317	825002	779373	710827				Y 2109	18
169819	652838	378608	635492	589210	534155				Y 2110	19
147015	525172	328127	547884	522959	459346				Y 2111	20
										21
										22
										23
										24
										25
										26
										27
										28
										29

I.S. #1 = 1,4-Dichlorobenzene-d4
I.S. #2 = Naphthalene-d8
I.S. #3 = Acenaphthene-d10
I.S. #4 = Phenanthrene-d10
I.S. #5 = Chrysene-d12
I.S. #6 = Perylene-d12

Data Processed by: [signature]

1-8-09
Supervisor Review

Life Science Laboratories, Inc.
MSSV2 p2 2006

Log Page No.

Semi-Volatile GC/MS Injection Log

(Page 1 of 2)

Instrument: MS6/ HP5972 (40)
GC Column: ZB-5 or DB-5MS
0.25 x 30 m, 0.5 df
(or equivalent)
* Init Cal Date 1: 12-19-08
+Init Cal Date 2:

	Client No.	Client Name
1		QA/QC
2	City of Geneva	[redacted] 005 - µS
3	[redacted]	
4		
5		

	Client No.	Sample ID (Work Order-Samp#)	Method/ID File	Inj. Vol	Method	List	Data File Number	Date	Time	Dil. Factor	I.S. No.
1	1)	TD 1219 0846	DETFULL	1uL	8270		K 5353	12/19/08	2054	–	
2		CC 1219 0846	KD19FULL				K 5354		2115	–	2084
3		CC 1219 0846 0.5uL	KD19 0.5uL				K 5355		2153	–	
4	2)	MB 8644	KD19 0.5uL				K 5356		2232	1X	2085
5		LCS - 8644					K 5357		2311		
6		LCSD - 8644 / MSB					K 5358		2350		
7		0812108-001B					K 5359	12/20/08	0028		
8		- 002B					K 5360		0107		
9		- 003B					K 5361		0146		
10		- 004B					K 5362		0225		
11		- 005B					K 5363		0304		
12		- 005B MS					K 5364		0342		
13		- 005B MSD					K 5365		0421		
14		- 006B					K 5366		0500		
15		- 007B					K 5367		0538		
16		- 008B					K 5368		0617		
17		- 009B					K 5369		0656		
18		- 010B					K 5370		0735		
19		- 011B					K 5371		0813		
20		- 012B					K 5372		0852		
21	3)	MB - 8647	KDAFULL		625	1625	K 5373		0931		
22		LCS - 8647					K 5374		1010		
23		LCSD - 8647					K 5375		1049		
24		0812123-001B					K 5376		1127		
25		0812123-001B					K 5377		1206		
26		-					K				
27		-					K				
28		-					K				
29		-					K				

Comments:

Method	Source	Date	SOP + AP #/Ed
(1) 625	Fed Register, Vol. 49, No. 209	10/26/84	–32
(2) TCLP	8270C w/ DI/TLP (4/98-29)	12/96	–12/4/98-29
(4) 8270C	USEPA SW846, Upd. III	12/96	–12/A
(5) EPA CLP	USEPA CLP SOW OLM04.3	9/93	–41
(6) DEC ASP	USEPA CLP SOW OLM04.3	9/93	–41

Samples Set By: [signature]

1-8-09
Supervisor Review

Life Science Laboratories, Inc.

Semi-Volatile GC/MS Injection Log (Page 1 of 2)

Pre-run maintenance
- ___ Replace septa
- ___ Replace insert, seal
- ___ Prune column
- ___ Replace Helium
- ___ See Maint. log
- ___ Other:

Internal Std Limits (% of CCV / ICAL area)

						Upper Limit
						Lower Limit

Internal Standard Area Counts

Int. Std. #1	Int. Std. #2	Int. Std. #3	Int. Std. #4	Int. Std. #5	Int. Std. #6	Matrix Water	Matrix Soil	Batch No.	Comments	
—	—	—	—	—	—				Y (71k) 2127	1
140392	525263	309865	528164	458289	422708				Y 2097	2
143004	543097	310392	516259	489495	434582				Y 2107	3
133286	502004	290878	496812	466147	412685	✓		8644	Y	4
159501	606889	353498	616889	553020	523231	✓			Y	5
151678	577541	336422	585369	576112	481267	✓			Y	6
157635	602488	345345	586595	539878	492785	✓			Y	7
152847	604103	344818	587776	571143	488851	✓			Y	8
141170	534600	315802	534396	486322	422700	✓			Y	9
149284	579527	332725	585189	520016	455769	✓			Y	10
152146	598943	340261	578905	542489	468782	✓			Y	11
124070	478429	284682	491684	432431	387019	✓			Y	12
149290	560899	331731	576203	486257	443860	✓			Y	13
117412	452635	255344	444339	402135	336898	✓			Y	14
131631	513916	291303	497853	464605	408150	✓			Y	15
133071	512139	285587	491871	490302	411019	✓			Y	16
159923	609084	340377	577231	533235	464157	✓			Y	17
161622	641952	358352	611566	572761	508241	✓			Y	18
155666	607983	346299	583661	534156	456107	✓			Y	19
158369	611060	341109	576496	524742	453582	✓		↓	Y	20
133470	576201	288977	492262	459318	390155	✓		8647	Y	21
127530	466069	282251	490936	437605	397830	✓			Y	22
119150	450772	257460	468461	396208	353705	✓			Y	23
131711	510171	282686	476569	436706	372570	✓			Y	24
122341	475934	265059	444098	402375	340478	✓		↓	Y	25
										26
										27
										28
										29

I.S. #1= 1,4-Dichlorobenzene-d4
I.S. #2= Naphthalene-d8
I.S. #3= Acenapthene-d10
I.S. #4= Phenanthrene-d10
I.S. #5= Chrysene-d12
I.S. #6= Perylene-d12

Data Processed by: [signature]

(W) 1-8-09
Supervisor Review

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Log Page No.

Standards Log

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	ID No.	Parent / Source Conc. (ppm)	Exp. Date	Prep'd By
1804	3-27-08	4-27-08	SSTD 1600 ppm OLM	1000 µl	DCM EH0170	1 mL	1600 ppm	1803	1600 ppm	5-22-08	MG
1805			1200 ppm	750 µl			120				
1806			800 ppm	500 µl			80	1804		4-27-08	
1807			80	32 µl			40	1803		5-22-08	
1808			40	500 µl			20	1806	800 ppm	4-27-08	
1809			20				10	1808	400 ppm		
1810			10				5	1809	200 ppm		
1811			5					1810	100 ppm		
1812	3-31-08	4-30-08	OLM 42	—	methylene chloride	50 mL					
			Acetophenone	500 µl			100 ppm	1739	10000 ppm	4-30-08	
			Aniline	610 µl				1738	8200 ppm	1-22-09	
			Benzaldehyde	427 µl				1732	11700 ppm	4-30-08	
			Biphenyl	641 µl				1734	7700 ppm	9-4-08	
			Caprolactam	526 µl				1629	5200 ppm	12-2-08	
1813	4-2-08	10-2-08	LCS Sol'n	—	methylene chloride	50 mL					
			Phenols Mix	2500 µl			100 ppm	1627	2000 ppm	12-16-09	
			Acid/Base Mix	2500 µl				1628	2000 ppm	12-16-09	
			625 Base/Neutral Mix	2500 µl				1629	2000 ppm	12-16-09	
			8270 Add-ons	2500 µl				1630	2000 ppm	12-16-09	
			PAHs	2500 µl				1631	2000 ppm	12-16-09	
								4-2-08			

Supervisor Review: ___

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	ID No.	Parent / Source Conc. (ppm)	Exp. Date	Prep'd By
1814	4-2-08	4-2-09	p-Terphenyl d14	2.103	DCM EH0170	10 mL	5200 ppm	1632	26400	5-11	
				2.845							
				.058							
1815	4-4-08	5-12-08	Sim. Cal. STD								
			PAH Stock	400 µl	DCM EH0170	5 mL	16000 ppm	1726	12000 ppm	12-16-09	MG
			2-Methylnaphthalene	101 µl				1521	7500 ppm	8-27-08	
			2-Chloronaphthalene	53 µl				1523	15,500 ppm		
			Dibenzofuran	78 µl				1522	10,300 ppm		
			Terphenyl-d14	137 µl				1814	5200 ppm	4-2-09	
			Para Fluorobiphenyl	51 µl				1520	15,100 ppm	8-27-08	
1816	4-4-08	5-14-08	STD 800 ppm SVOA	500 µl	DCM EH0170	1 mL	800 ppm	1815	1600 ppm	5-12-08	MG
1817				375 µl			600 ppm				
1818				500 µl			400 ppm	1816	800 ppm	5-14-08	
1819							200 ppm	1818	400 ppm		
1820							100 ppm	1819	200 ppm		
1821				100 µl			100 ppm	1820	100 ppm		
1822				200 µl			200 ppm	1821	100 ppm		
1823				500 µl			500 ppm	1822	1000 ppm		
1824							1000 ppm	1823	2000 ppm		

4-4-08

Supervisor Review: ___

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GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1845	5/15/08	5/15/09	1,1'-Biphenyl	43.286	DCM E40400	10 mL	10,700 ppm	1343	neat	10/11	MG
				43.129							
				.107g							
1846	5/15/08	5/15/09	Acetophenone	48.728	DCM E40400	10 mL	9,200 ppm	1332	neat	10/10	MG
				48.636							
				.092g							
1847	5/15/08	11/15/08	BNA CAL surrogate		DCM E40400						
			Nitrobenzene	459 uL		5 mL	800 ppm	1644	8710 ppm	11/30/08	MG
			2-Fluorobiphenyl	333 uL				1643	12,010 ppm		
			Terphenyl-d14	690 uL				1514	5,800 ppm	4/2/09	
			2-Fluorophenol	320 uL				1656	12,490 ppm	12/11/08	
			2,4,6-Tribromophenol	478 uL				1645	8,370 ppm	11/30/08	
			phenol-d6	207 uL				1343	19,300 ppm	5/15/09	
1848	5/15/08	11/15/08	BNA CAL STD								
			cal std	1000 uL	DCM E40400	5 mL	160 ppm	1847	800 ppm	11/15/08	MG
			phenols	400 uL				1722	2000 ppm	12/16/08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH					1726			
			1,4-Dioxane	30.1 uL			64 ppm	1752	10,600 ppm	8/10	
										5/15/08	

846

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1825	4-4-07	5-4-07	ICV-040408 SIM		DCM E40400	1 mL	10 ppm				MG
			PAH Solns	5 uL				1631	2000 ppm	12-16-09	
			2-Methylnaphthalene	1.0 uL				1559	10,000 ppm	9-17-08	
			2-chloronaphthalene	0.54 uL				1558	18,500 ppm	9-17-08	
			Dibenzofuran	1.06 uL				1560	9400 ppm	9-17-08	
1826	4-7-08	5-7-08	ICV 040708		DCM E40400	1 mL	50 ppm				MG
			Phenols	25 uL				1627	2000 ppm	12-16-09	
			Benzidines					1628			
			625's					1629			
			8270's					1630			
			PAHS					1631			
1827	4-14-08	4-14-09	Int STD	cracked	SVE021	1 mL	4000 ppm	1642	4000 ppm	x 6 (24)	MG
1828											
1829											
1830	4-21-08	10-21-08	BNA Surr.	—	neat	200 uL					
			2-Fluorobiphenyl	1665 uL			100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene	2296 uL				1644	8710 ppm	11-30-08	
			Terphenyl-d14	3448 uL				1814	5800 ppm	4-2-09	
			Phenol-d6	2077 uL			150 ppm	1648	19,300 ppm	12-3-08	
			2-Fluorophenol	2402 uL				1656	12,490 ppm	12-11-08	
			2,4,6-Tribromophenol	3584 uL				1645	8370 ppm	11-30-08	
							4-21-08				

844

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1849	5/15/08	11/15/08	OLM CAL STD		DCM E40400	5 mL	160 ppm				MG
			1,1'-Biphenyl	75 uL				1845	10,700 ppm	5/15/09	
			Caprolactam	70 uL				1844	11,400 ppm		
			Acetophenone	87 uL				1846	9,200 ppm		
			Benzaldehyde	102 uL				1727	7,800 ppm	10/31/08	
			Atrazine	78 uL				1663	10,200 ppm	12/3/08	
			PTE	68 uL				1046	11,700 ppm	11/14/08	
			PXE	72 uL				1043	11,100 ppm	11/16/08	
1850	5/19/08	5/19/09	Acetophenone	43.248 g	DCM: E42400	10 mL	12300 ppm	1332	neat	10-10	
				43.125							
				.123 g							
1851	5/19/08	19-4-08 ~~5/19/09~~	Benzaldehyde	43.214 g	DCM: E42400	10 mL	8600 ppm	1283	neat	10-08	
				43.128							
				.086g							
1852	5-19-08	9-4-08 ~~10-21-08~~	OLM 4.2	—	MeOH: C38201	50 mL					
			Acetophenone	407 uL			100 ppm	1850	12300 ppm	5-19-09	
			Atrazine	610 uL				1738	8300 ppm	1-23-09	
			Benzaldehyde	581 uL				1851	8600 ppm	10-21-08	
			Biphenyl	641 uL				1534	7800 ppm	9-4-08	
			Caprolactam	526 uL				1650	9500 ppm	12-3-08	
										5/24/08	

847

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1831	4/22/08	5/22/08	DFTPP 1uL	50 uL	DCM E40400	1 mL	50 ppm	1494	1000 ppm	6-23-08	MG
1832	4/30/08	5/30/08	50 ppm STD	312 uL	DCM E40400	1 mL	50 ppm	1364	1600 ppm	6/12/08	MG
1833	4/30/08	5/30/08	50 ppm OLM STD	312 uL	DCM E40400	1 mL	50 ppm	1832	1600 ppm	5/22/08	MG
1834	4/30/08	4/30/09	DFTPP stock soln	cracked	—	1x1 mL	1000 ppm	1431	1000 ppm	7/09	MG
1835	4/30/08	5/30/08	DFTPP 1uL	50 uL	DCM E40400	1 mL	50 uL	1834	1000 ppm	4/30/09	MG
1836	4/30/08	5/22/08	Misc 625 STD								MG
			Octadecane	167 uL	DCM E40400	5 mL	160 ppm	1381	4,800 ppm	5/22/08	
			N-Decane	89 uL				1382	9,000 ppm	5/22/08	
1837	4/30/08	5/22/08	160 ppm STD 625 misc	1000 uL	DCM E40400	1 mL	160 ppm	1836	160 ppm	5/22/08	MG
1838			50 ppm	312 uL			50 ppm				MG
1839			10 ppm	100 uL		50 uL	10 ppm	1838	50 ppm	5/22/08	MG
1840	5/6/08	5/6/09	1,4-Dioxane	50.234	DCM E40400	10 mL	10,200 ppm	1686	neat	8/10	
1841	5/6/08	11/6/08	1,4-Dioxane (Rep)	50.132							
				.102g							
				98 uL	MeOH C38201	10 mL	100 ppm	1840	10,200 ppm	5/6/09	MG
1842	5/9/08	5/9/09	Int standard	Received	SVE022	1x5 mL	4000 ppm	ECS	4000 ppm	12/2010	MG
1843	5/15/08	5/15/09	phenol-d6	28.863 g	DCM E40400	10 mL	19,300 ppm	Chemus 1375	neat	4/10	MG
				3.056							
				.193g							
1844	5/15/08	5/15/09	Caprolactam (CAL)	43.242	DCM E40400	10 mL	11,400 ppm	1341	neat	1/12	MG
				43.128							
				.114g							

845

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1875	6/2/08	12/2/08	BNA 1LS Sol'n		MeOH C3H6O						MG
			Phenols	2500 µl		50 mL	100 ppm	1627	2000 ppm	12-16-09	
			Benzidines					1628			
			1625's					1629			
			8270's					1630			
			PAH's					1631			
1876	6/2/08	11/09	Benzaldehyde	Received	-	5g	neat	chemserv	neat	11/09	MG
1877	6/4/08	8/27/08	Sim Surrogate		MeOH C3H6O	10 mL					MG
			Decafluorobiphenyl	64 µl			100 ppm	1520	15,600 ppm	8/27/08	
			Terphenyl-d14	172 µl				1814	5,800 ppm	4/2/09	
1878	6/10/08	11/30/08	BNA Surrogate (Prep)		MeOH C3H6O						
			Nitrobenzene-d5	1,148 µl		100 mL	100 ppm	1644	8710 ppm	11-30-09	MG
			2-Fluorobiphenyl	832 µl				1643	12,000 ppm		
			Terphenyl-d14	1,724 µl				1814	5800 ppm	4-2-09	
			2-Fluorophenol	1,201 µl			150 µM	1656	12,490 ppm	12-11-09	
			Phenol-d6	777 µl				1843	19,300 ppm	5-15-09	
			2,4,6-Tribromophenol	1,792 µl				1645	8370 ppm	11-30-08	
1879	6/11/08	4/2011	Phenol-d6	received	-	-	neat	chemsv	neat	321-328	MG

6/18/08

Supervisor Review: _____

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850

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1853	5/20/08	6/20/08	SSTD 160 ppm	1000 µl	DCM E42400	1.0 mL	160 ppm	1848	160 ppm	11/15/08	MG
1854			120	750 µl			120	1848			
1855			080	500 µl			80	1853	160 ppm	6/20/08	
1856			060				60	1854	120 ppm		
1857			050	312 µl			50	1848	160 ppm	11/15/08	
1858			040	500 µl			40	1855	80 ppm	6/20/08	
1859			020				20	1858	40 ppm		
1860			010				10	1859	20 ppm		
1861			005				5	1860	10 ppm		
1862			001	100 µl		500 µl	1	1861	5 ppm		
1863	5/20/08	6/20/08	ICV-2SRC								
			PAH's	25 µl	DCM E42400	1.0 mL	50 ppm	1631	2000 ppm	12/16/09	MG
			Phenols					1627			
			Benzidines					1628			
			1625's					1629			
			8270's					1630			

7/20/08

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

848

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1880	6/13/08	7/6/08	SSTD 080 ppm SIM	500 µl	DCM E42400	1 mL	80 ppm	1815	160 ppm	8/27/08	MG
1881			060	375 µl			60 ppm				
1882			040	500 µl			40	1880	80 ppm	7/6/08	
1883			020				20	1882	40 ppm		
1884			010				10	1883	20 ppm		
1885			001	100 µl			1.0	1884	10 ppm		
1886			0002	500 µl			0.2	1885	1.0 ppm		
1887			0001				0.1	1886	0.2		
1888			00005				0.05	1887	0.1		
1889	6/16/08	7/6/08	SIMS ICV								
			~~phenols~~					~~1700~~	~~2000 ppm~~	~~12-16-09~~	7/2
			~~Benzidines~~					~~1701~~			6/16/08
			~~1625's~~					~~1702~~			
			~~8270's~~					~~1703~~			
			PAH's	5 µl				1704			
			2-chloronaphthalene	0.54 µl				1558	18,500 ppm	9/17/08	
			2-methylnaphthalene	1.0 µl				1559	19,000 ppm		
			Dibenzofuran	1.06 µl				1560	9,400 ppm		
1890	6/23/08	7/23/08	50 ppm STD	312 µl	DCM E42400	1 mL	50 ppm	1848	160 ppm	11/15/08	MG
1891	6/23/08	7/23/08	5 ppm STD OLM	312 µl				1849	160 ppm	11/15/08	MG

6/23/08

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851

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1864	5/20/08	6/20/08	SSTD 160 ppm OLM	1000 µl	DCM E42400	1.0 mL	160 ppm	1849	160 ppm	11/15/08	MG
1865			120	750 µl			120				
1866			080	500 µl			80	1864	160 ppm	6/20/08	
1867			060	312 µl			60	1849		11/15/08	
1868			040	500 µl			40	1866	80 ppm	6/20/08	
1869			020				20	1868	40 ppm		
1870			010				10	1869	20 ppm		
1871			005				5	1870	10 ppm		
1872	5/22/08	11/22/08	BNA Surrogate (Prep)		MeOH	100 mL					MG
			Nitrobenzene-d5	1,148 µl			100 ppm	1644	8710 ppm	11/30/08	
			2-Fluorobiphenyl	832 µl				1643	12,010 ppm	11/30/08	
			terphenyl-d14	1,724 µl				1814	5800 ppm	4-2-09	
			2-Fluorophenol	1,201.0			150 ppm	1656	12,490 ppm	12-11-09	
			Phenol-d6	777 µl				1843	19,300 ppm	5-15-09	
			2,4,6-Tribromophenol	1,792 µl				1645	8370 ppm	11/30/08	
1873	5/28/08	4/2011	Phenol-d6	received	-	-	Neat	chems	neat	321-328	MG
1874	6/2/08	7/2/08	DFTPP 1uL	50 µl	DCM E42400	1 mL	50 ppm	1834	1000 ppm	4/30/09	MG

6/2/08

Supervisor Review: _____

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849

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1916	8/7/08	8/7/08	SSTD 160 ppm OVM	1000 µl	DCM E42400	1 mL	160 ppm	1849	160 ppm	11/15/08	MG
1917			120 ppm	750 µl			120				
1918			080	500 µl			80	1916		8/7/08	
1919			050	312 µl			50	1849		11/15/08	
1920			040	500 µl			40	1918	80 ppm	8/7/08	
1921			020				20	1920	40 ppm		
1922			010				10	1920	20 ppm		
1923			005				5	1922	10 ppm		
1924	7/9/08	12/2010	INT STD	Received	–	5 mL	4000 ppm	ECS	5V10022	12/2010	MG
1925	7/11/08	11/11/08	PTE/PXE LCS' Soln		MeOH	10 mL	100 ppm				MG
			PTE	105 µl	C38E01			1199	9,500	11-16-08	
			PXE	94 µl				1241	19,600		
1926	7/14/08	~~11/14/08~~ 11/14/08	BNA Surrogate			100 mL					MG
			2-Fluorobiphenyl	832	MeOH		100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene-d5	1,148 µl	C38E01			1644	8,710 ppm	11-30-08	
			p-Terphenyl-d14	1,887				1897	5300	6-26-09	
			2-Fluorophenol	1,201 µl			150 ppm	1646	12,490 ppm	12-11-08	
			2,4,6-Tribromophenol	1,792				1645	8370 ppm	11-30-08	
			Phenol-d6	774 µl				1843	19,300 ppm	5/15/09	
1927	7/16/08	1/2/09	2,4 dimethylphenol	243 uL	MeOH C38E01	25 mL	100 ppm	1684	10300 ppm	1/2/09	MK
1928	7/28/08	8/28/08	DFTPP LCC	50 µl	DCM E42400	1 mL	50 ppm	1834	1000 ppm	x 4/30/09	MG
1929	7/31/08	8/27/08	SSTD 010 ppm SIM	62.5 µl	DCM E42400	1 mL	10 ppm	1815	160 ppm	x 8/27/08	MG

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854

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1892	6/23/08	6/23/09	IS A	–	–	1 mL	4000 ppm	1842	1000 ppm	12/2010	MG
1893			IS B	–	–						
1894			IS C	–	–						
1895	6/24/08	7/24/08	DFTPP LC	50 µl	DCM E42400	1 mL	50 ppm	1834	1000 ppm	4/20/09	MG
1896	6/24/08	11/16/09	PTE/PXE LCS Soln			10 mL					MG
			PTE	105 µl	MeOH		100 ppm	1199	9,500 ppm	11-16-08	
			PXE	94 µl	C38E01			1241	10,600 ppm		
1897	6/26/08	6/26/09	p-Terphenyl d14	2.9820	DCM E42400	10 mL	5300 ppm	1632	neat	5-11	
				2.936							
				0.053							
1898	6/27/08	6/25/2011	8270 PAH ISTD/SS Mix	1 x 5 mL	–	5 mL	2000 ppm	ECS	2000 ppm	6-25-2011	MG
1899	6/27/08	12/16/09	Phenols Mix	1 x 5 mL	–	5 mL	2000 ppm	ECS	2000 ppm	12-16-09	
1900	6/27/08		Benzidines								
1901	6/27/08		625's								
1902	6/27/08		8270's								
1903	6/27/08		PAHS								
1904	6/30/08	11-30-08	BNA Surrogate Sol'n		MeOH C38E01	100 mL					
			2-Fluorophenol	1,201 µl			150 ppm	1646	12,490 ppm	12-11-08	MG
			2,4,6-Tribromophenol	1,792 µl				1645	8,370 ppm	11-30-08	
			Phenol-d6	774 µl				1843	19,300 ppm	5-15-09	
			Nitrobenzene-d5	1,148 µl			100 ppm	1644	8,710 ppm	11-30-08	
			2-Fluorobiphenyl	833 µl				1643	12,010 ppm		
			Terphenyl-d14	1,887 µl				1897	5,300 ppm	6-26-09	

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852

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1933 & 1930	7/30/08	7/30/09	IS SIM	Cracked	–	1 mL	2000 ppm	1898	2000 ppm	6/25/11	MG
1931											
1932											
1933	8/8/08	9/8/08	50 ppm STD	312 µl	DCM E42400	7 ml	50 ppm	1848	160 ppm	11/15/08	MG
1934	8/10/08	2/10/09	LCS Soln								
			Phenols Mix	2700 mL	MeOH	50 mL	100 ppm	1700	2000 ppm	12/16/09	Cm
			Benzidine Mix					1701			
			625 Base/Neutral Mix					1702			
			8270 BNA Add-ons					1703			
			PAHs					1704			
1935	8/10/08	11/30/08	BNA Surr Soln								
			2-Fluorophenol	400	MeOH	50 mL	100 ppm	1646	12,490 ppm	12/11/08	
			2,4,6-Tribromophenol	597				1645	8370 ppm	11/30/08	
			phenol-d6	259				1843	19300 ppm	5/15/09	
			2-Fluoro-biphenyl	624			150 ppm	1643	12010 ppm	11/30/08	
			Nitrobenzene	561				1644	8710 ppm	11/30/08	
			Terphenyl	1415				1897	5300 ppm	6/26/09	
1936	8/11/08	8/11/09	Benzaldehyde (CAS)	51.011	DCM E42400	10 mL	12,300 ppm	1876	Neat	11-31-09	MG
				50.888							
				.123 g							
			8/11/08								

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855

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1905	7/7/08	8/7/08	SSTD 160 ppm	1000 µl	DCM E42400	1 mL	160 ppm	1848	160 ppm	11/15/08	MG
1906			120	750 µl			120				
1907			080	500 µl			80	1905		8/7/08	
1908			060				60	1906	120 ppm		
1909			050	312 µl			50	1848	160 ppm	11/15/08	
1910			040	500 µl			40	1907	80 ppm	8/7/08	
1911			020				20	1910	40 ppm		
1912			010				10	1911	20 ppm		
1913			005				5	1912	10 ppm		
1914			001	100 µl			1	1913	5 ppm		
1915	7/7/08	8/7/08	ICV 2SEC 070708								MG
			Phenols	25 µl	DCM E42400	1 mL	50 ppm	1700	2000 ppm	12/16/09	
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAH's					1704			
			SSTD 160 ppm OVM								
			120								
			080								
			050								
			040								
			020								

7/7/08

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G:/Logbooks 2008/Organics/GCMSSVStandard Prep

853

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1953	8/13/08	9/13/08	SSTD 160 ppm OLM	1000 µl	DCM EH2400	1mL	160 ppm	1940	160 ppm	12-13-08	MG
1954			120	750 µl			120				
1955			080	500 µl			80	1953	do	9-13-08	
1956			060 030	312 µl			60	1940	160 ppm	12-13-08	
1957			040	500 µl			40	1955	80 ppm	9-13-08	
1958			020				20	1957	40 ppm		
1959			010				10	1958	20 ppm		
1960			005				5	1959	10 ppm		
1961	8/13/08	2/13/09	625 misc cal std	200 µl ~~1000 µl~~	DCM EH2400	~~5 mL~~ 10 mL	160 ppm	1937	7,700 ppm	8/6/09	MG
			n-Decane	123 µl				1938	12,000 ppm	8/6/09	
			Octadecane			1mL	160 ppm	1961	160 ppm	2/13/09	
1962	8/14/08	9/14/08	SSTD 160 ppm 625M	1000 µl	DCM EH2400						
1963			50 ppm 625M	312 µl			50 ppm				
1964			10 ppm 625MS	100 µl		5 mL	10 ppm	1963	50 ppm	9/14/08	
1965	8/14/08	2/14/09	BNA Surr Solin		Meoh C8E01	~~100 mL~~ 100 mL	100 ppm	1644	8710 ppm	11-30-08	MG
			Nitrobenzene-d5	~~1,534 µl~~	1148 µl			1643	12010 ppm		
			2-Fluorobiphenyl	~~1,416 µl~~	816 µl			1897	5300 ppm	6/26/09	
			Terphenyl-d14	~~943 µl~~	1887 µl		150 ppm	1843	19,300 ppm	5/15/09	
			Phenol-d6	~~288 µl~~	777 µl			1656	12,490 ppm	12/1/08	
			2-Fluorophenol	~~600 µl~~	1200 µl			1645	8370 ppm	11/30/08	
			2,4,6-Tribromophenol	~~896 µl~~	1792 µl			1645	8370 ppm	11/30/08	

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

858

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1937	8/6/08	8/6/09	n-Decane	52.350	DCM EH2400	10mL	7,700	6077	Neat	—	
				52.273							
				.077							
1938	8/6/08	8/6/09	Octadecane	43.270	DCM	10mL	12,000	6074	Neat	—	
				43.140	EH2400						
				.130							
1939	8/6/08	11/5/08	BNA CAL STD		DCM EH2400	5mL					
			Cal SUPR	1000 µl			160 ppm	~~1644~~ 1847	8000 ppm	11-15-08	MG
			Phenols	400 µl				1722	20000 ppm	10/16/08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH's					1726			
			1,4-Dioxane	30.1 µl			64 ppm	1752	10,000 ppm	8/7/09	
1940	8/6/08	12/6/08	OLM CAL STD		EH2400	5mL					
			1,1'-Biphenyl	75 µl			160 ppm	1845	10,700	8/15/09	
			Caprolactam	70 µl				1844	11,400		
			Acetophenone	87 µl				1846	9,200		
			Benzaldehyde	~~102 µl~~ 65 µl				1936	12,300	8/11/09	
			Atrazine	78 µl				1663	10,200 ppm	12/13/08	
			PTE	68 µl				1646	11,700	11/16/08	
			PXE	72 µl				1643	11,100 ppm		

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

856

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1966	8/27/08	2/27/09	BNA SURR SOLN		Meoh C8E01	100mL					MG
			Nitrobenzene-d5	1148 µl			100 ppm	1644	8710 ppm	11-30-08	
			2-Fluorobiphenyl	~~816 µl~~ (832 µl)				1643	12010 ppm		
			Terphenyl-d14	1887 µl				1897	5300 ppm	6/26/09	
			Phenol-d6	777 µl			150 ppm	1843	19,300 ppm	5/15/09	
			2-Fluorophenol	1200 µl				1656	12,490 ppm	12/1/08	
			2,4,6-Tribromophenol	1792 µl				1645	8370 ppm	11/30/08	
1967	8/27/08	8/27/09	Terphenyl-d14	2.891	DCM EH2400	10mL		1556	Neat	5/12/11	MG
				2.839 g							
				.052 g			5,200 ppm				
1968	8/8/08	8/8/09	INT STANDARD	1mL	—	1mL	4000 ppm	1924	4000 ppm	12/3/2010	MG
1969					—						
1970					—						
1971	9/1/08	11/30/08	BNA Surrogate								MG
			2-Fluorobiphenyl	833 µl	Meoh	100mL	100 ppm	1643	12010 ppm	11-30-08	
			Nitrobenzene-d5	1148 µl	C8E01			1644	8710 ppm		
			Terphenyl-d14	1,923 µl			150 ppm	1967	5,200 ppm	5-27-09	
			2-Fluorophenol	1,200 µl				1656	12,490 ppm	12-1-08	
			2,4,6-Tribromophenol	1,792 µl				1645	8370 ppm	11-30-08	
			Phenol-d6	777 µl				1843	19,300 ppm	5/15/09	
1972	9/12/08	9/12/09	Diphenyl	45.850							
				~~45.677~~	DCM	10mL	17,300 ppm	1743	Neat	10/2011	
				~~1.723~~							

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

859

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
1941	8/12/08	9/12/08	DFTPP INL	50 µl	DCM EH2400	1mL	50 ppm	1834	1000 ppm	4/30/09	MG
1942	8/12/08	9/12/08	SSTD 160 ppm	1000 µl			160 ppm	1939	160 ppm	11-15-08	MG
1943			120	750 µl			120				
1944			080	500 µl			80	1942		9/12/08	
1945			060				60	1943	120 ppm		
1946			050	312 µl			50	1939	160 ppm	11-15-08	
1947			040	500 µl			40	1944	80 ppm	9/12/08	
1948			020				20	1947	40 ppm		
1949			010				10	1948	20 ppm		
1950			005				5	1949	10 ppm		
1951			001	100 µl				1950	5 ppm		
1952	8/12/08	9/12/08	2 SRC-08120 8		DCM EH2400	1mL	50 ppm				
			Phenols	25 µl				1700	2000 ppm	12/4/09	MG
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAH's					1704			

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

857

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1973	9/12/08	10/31/08	OLM 4.2		MeOH	25 mL					CPR
			Acetophenone	203 ul	C38E01		100ppm	1850	12,300ppm	5/19/09	
			Atrazine	305 ul				1736	8200ppm	1/22/09	
			Benzaldehyde	291 ul				1851	8600ppm	10/31/08	
			Biphenyl	144 ul				1972	17,300ppm	9/12/09	
			Caprolactam	263 ul				1650	9500ppm	12/3/08	
1974	9/15/08	10/15/08	DFTPP/ul	50 ul	DCM E42400	1 mL	50ppm	1834	1000ppm	11/20/08	MG
1975	9/15/08	10/15/08	50 ppm STD	312 ul	DCM E42400	1 mL	50 ppm	1939	160ppm	11/15/08	MG
1976	9/15/08	10/15/08	50 ppm OLM STD	312 ul	DCM E42400	1 mL	50 ppm	1940	160ppm	12/3/08	MG
1977	9/15/08	10/15/08	BNA CAL STD		DCM E42400	5 mL	160ppm				MG
			cal sver	1000 ul				1847	800ppm	11-15-08	
			Phenols	400 ul				1722	20000ppm	12-16-08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH's					1726			
			1,4-Dioxane	301 ul			104ppm	1752	10,600ppm	1/30/09	
1978	9/16/08	10/16/08	SSTD 160 ppm	1000 ul	DCM E42400	1 mL	160ppm	1977	160ppm	12-16-08	MG
1979			120	750 ul			120	1978		10/16/08	
1980			080	500 ul			80	1979	120ppm		
1981			060				60	1977	160ppm	12-16-08	
1982			050	312 ul			50				

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

860

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1974	9/15/08	10/15/08	DFTPP/ul	50 ul	DCM E42400	1 mL	50ppm	1834	1000ppm	11/20/08	MG
1975	9/15/08	10/15/08	50 ppm STD	312 ul	DCM E42400	1 mL	50 ppm	1939	160ppm	11/15/08	MG
1976	9/15/08	10/15/08	50 ppm OLM STD	312 ul	DCM E42400	1 mL	50 ppm	1940	160ppm	12/3/08	MG
1977	9/15/08	10/15/08	BNA CAL STD		DCM E42400	5 mL	160ppm				MG
			cal sver	1000 ul				1847	800ppm	11-15-08	
			Phenols	400 ul				1722	20000ppm	12-16-08	
			Benzidines					1723			
			625's					1724			
			8270's					1725			
			PAH's					1726			
			1,4-Dioxane	301 ul			104ppm	1752	10,600ppm	1/30/09	
1978	9/16/08	10/16/08	SSTD 160 ppm	1000 ul	DCM E42400	1 mL	160ppm	1977	160ppm	12-16-08	MG
1979			120	750 ul			120	1978		10/16/08	
1980			080	500 ul			80	1979	120ppm		
1981			060				60	1977	160ppm	12-16-08	
1982			050	312 ul			50				

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

861

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1983	9/16/08	10/16/08	SSTD 040 ppm	500 ul	DCM E42400	40ppm ⇔ 1 mL		1889	80ppm	10-16-08	MG
1984			020			20		1983	40ppm		
1985			010			10		1984	20ppm		
1986			005			5		1985	10ppm		
1987			001	100 ul		1.0		1986	5ppm		
1988	9/16/08	12/13/08	OLM CAL STD								
			Atrazine	78 ul	DCM E42400	5 mL	160ppm	1663	10,200ppm	12/26/08	MG
			Benzaldehyde	65 ul				1836	12,300ppm	8/1/08	
			1,1'-Biphenyl	75 ul				1845	10,700ppm	5/15/08	
			Acetophenone	87 ul				1846	9,200ppm	5/15/08	
			Caprolactam	70 ul				1844	8,400ppm		
			PKE	72 ul				1043	11,100ppm	11-16-08	
			PTE	68 ul				1046	11,700ppm	11-16-08	
1989	9/16/08	10/16/08	SSTD 160 ppm OLM	1000 ul	Solvent	1 mL	160ppm	1988	160ppm	12/13/08	MG
1990			120	750 ul	DCM E42400		120ppm				
1991			080	500 ul			80	1989		10/16/08	
1992			060	312 ul			60	1983	160ppm	12/13/08	
1993			040	500 ul			40	1991	80ppm	10/16/08	
1994			020			20		1993	40ppm		
1995			010			10		1994	20ppm		
1996			005			5		1995	10ppm		
1997											

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

862

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
1997	9/16/08	10/16/08	2Sec-291608		DCM E42400	1 mL					
			Phenols	25 ul			50ppm	Pre	2000ppm	12-16-08	MG
			Benzidines					1721			
			625's					1722			
			8270's					1723			
			PAH's					1724			
1998	9/16/08	9/2012	Terphenyl-d14	received	-	2X 50mg	-	chems	neat	9/2012	MG
1999	9/17/08	11/16/08	PTE/PKE LCS Sol'n		MeOH	10 mL					MG
			PTE	105 ul	C38E01		100ppm	1199	9,500	11-16-08	
			PKE	94 ul				1241	10,600		
2000	9/25/08	9/25/09	2-Methylnaphthalene	48.2488	DCM E42400	10 mL	12,100ppm	984	neat	5/2011	MG
				48.127							
				.121							
2001	9/25/08	9/25/09	2-chloronaphthalene	43.305	DCM E42400	10 mL	7,200ppm	1557	neat	12/2010	MG
				43.133							
				.072							
2002	9/25/08	9/25/09	Dibenzofuran	43.270	DCM E42400	10 mL	13,200ppm	983	neat	8/2010	MG
				43.138							
				.132							
2003	9/25/08	3/24/09	SIM Surrogate		MeOH	10 mL					MG
			Decafluorobiphenyl	86 ul	C38E01		100ppm	1787	11,600ppm	3-24-09	
			Terphenyl-d14	192 ul				1968	5,200ppm	8-27-09	

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

863

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2004	9/25/08	3/25/09	SIM LCS Soln		MeOH	10 mL	100ppm				MG
			PAH	500 ul	C38E01			1704	2000ppm	12-16-09	
			2-Methylnaphthalene	83 ul				2000	12,100ppm	9/25/09	
			2-chloronaphthalene	139 ul				2001	7,200ppm	9/25/09	
			Dibenzofuran	75 ul				2002	13,200ppm	9/25/09	
2005	9/29/08	9/29/09	2-Chloronaphthalene	43.216	DCM	10 mL	8,000ppm	1557	neat	12-2010	MG
				43.136	E42400						
				.080							
2006	9/29/08	9/29/09	2-Methyl naphthalene	43.215	DCM	10 mL	7,800ppm	984	neat	5-2011	MG
				43.136	E42400						
				.079							
2007	9/29/08	9/29/09	Dibenzofuran	43.226	DCM	10 mL	9,500ppm	983	neat	8-2010	MG
				43.131	E42400						
				.095							
2008	9/29/08	9/29/09	Decafluorobiphenyl	43.314	DCM	10 mL	17,300ppm	1345	neat	2-2011	MG
				43.131	E42400						
				.183							
2009	9/29/08										

Supervisor Review: _____

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2015	10/1/08	10/8/09	Benzaldehyde Prep	51.300	Meoh	10	11,200 ppm	1856	Neat	11/2009	MG
				51.188	DCM E224400						
				.112							
2016	10/1/08	10/3/08	DCM 4.2 LCS SOLN		MeOH	25 mL					MG
			Acetophenone	203 µl	C38E01		100 ppm	1858	12,300 ppm	5/1/2009	
			Aniline	305 µl				1738	8200 ppm	11/22/09	
			11-Biphenyl	141 µl				1972	17,300 ppm	9/12/09	
			Benzaldehyde	223 µl				2015	11,200 ppm	10/9/09	
			Caprolactam	263 µl				1658	9500 ppm	12/2/08	
2017	10/1/08	11/10/08	SSTD 080 ppm SIM	500 µl	DCM E224400	1.0 mL	80 ppm	2009	160 ppm	3-28-09	MG
2018			060	375 µl			60				
2019			040	500 µl			40	2017	80 ppm	11/10/08	
2020			020				20	2019	40 ppm		
2021			010				10	2020	20 ppm		
2022			001	100 µl			1.0	2021	10 ppm		
2023			.0002	200 µl			0.2	2022	1 ppm		
2024			.0001	500 µl			0.1	2023	0.2 ppm		
2025			.00005				0.05	2024	0.1 ppm		
										10/10/08	

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2009	9/29/08	3/9/08	Sim Cal STD		DCM	5 mL					
			PAH SOLN	400 µl	E224400		160 ppm				
			2-Methylnaphthalene	101 µl				2006	7,900 ppm	9-29-09	
			2-chloronaphthalene	100 µl				2005	8,000 ppm		
			Dibenzofuran	84 µl				2007	9500 ppm		
			Terphenyl-d14	154 µl				1967	5,200 ppm	8-27-09	
			Decafluorobiphenyl	44 µl				2008	18,300 ppm	9-23-09	
2010	9/29/08	10/29/08	MDLV SIM SOLN		C38E01	10 mL	0.06 ppm	2009	160 ppm	10-28-08	MG
			SIM CAL STD	38 µl	Meoh						

9/29/08

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2026	10/1/08	11/1/08	ICV 10,000 SIM		DCM E224400	1 mL					MG
			PAH	5 µl			10 ppm	1704	2000 ppm	12/16/09	
			2-Methylnaphthalene	0.83 µl				2020	12,100 ppm	9/25/09	
			2-chloronaphthalene	1.38 µl				2021	7,200 ppm		
			Dibenzofuran	0.76 µl				2002	13,200 ppm		
2027	10/1/08	11/1/08	DFTPP IC	50 µl	DCM E224400	1 mL	50 ppm	1834	1000 ppm	4/30/09	MG
2028	10/1/08	11/1/08	STD 160 ppm	1000 µl	DCM E224400	1 mL	160 ppm	1977	160 ppm	10-16-08	MG
2029			120	750 µl			120				
2030			080	500.0			80	2028		11/10/08	
2031			060				60	2029	120 ppm		
2032			050	312 µl			50	1977	160 ppm	12-16-08	
2033			040	500 µl			40	2030	80 ppm	11/10/08	
2034			020				20	2033	40 ppm		
2035			010				10	2034	20 ppm		
2036			005				5	2035	10 ppm		
2037			001	100 µl			1	2036	5 ppm		
2038	10/1/08	11/1/09	2SBC - 101408		DCM E224400	1 mL					MG
			Phenols	25 µl			50 ppm	1701	2000 ppm	12-16-09	
			Benzidines					1702			
			625's					1703			
			8270's					1704			
			PAH					1705			

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2011	9/29/08	12/10/08	BNA Surrogate		Meoh	100 mL					MG
			2-Fluorobiphenyl	833 µl	C38E01		100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene-d5	1148 µl				1644	8710		
			Terphenyl-d14	1823 µl				1967	5200	8-27-09	
			2-Fluorophenol	1200 µl			150 ppm	1656	12,490	12-11-08	
			2,4,6-Tribromophenol	1792 µl				1645	8370	11-30-08	
			Phenol-d6	777 µl				1843	19,300	5/15/09	
2012	10/7/08	7/2011	Internal STANDARD	Received	–	1 x 5 mL	400 ppm	ECS1	400 ppm	SV5023	MG
2013	10/9/08	12/16/08	BNA Surrogate		Meoh	100 mL					MG
			2-Fluorobiphenyl	833 µl	C38E01		100 ppm	1643	12,010 ppm	11-30-08	
			Nitrobenzene-d5	1148 µl				1644	8710 ppm		
			Terphenyl-d14	1823 µl				1967	5200	8-27-08	
			2-Fluorophenol	1200 µl			150 ppm	1656	12490	12-11-08	
			2,4,6-Tribromophenol	1792 µl				1645	8370	11-30-08	
			Phenol-d6	777 µl				1843	19,300	5/15/08	
2014	10/9/08	4/9/09	BNA LCS Soln		Meoh	50 mL	100 ppm				MG
			Phenols	2,500 µl	C38E01			1700	2000 ppm	12/16/09	
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAHs					1704			
2015											

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2059	11/3/08	5/3/09	BNA CAL SUB		DCM E8240	5 mL	800	2053	12,480	10/31/09	MG
			2-Fluorophenol	320 µl				2054	11,450		
			Nitrobenzene-d5	349 µl				2055	12,040		
			2-Fluorobiphenyl	332 µl				2056	13,410		
			2,4,6-Tribromophenol	298 µl				2057	5,200		
			Terphenyl-d14	769 µl				2058	20,500		
			phenol-d6	195 µl							MG
2060	11/3/08	5/3/09	BNA CAL STD		DCM E8240	5 mL	160 ppm	2048	2000 ppm	12-16-09	
			625's	400 µl				2049			
			8270's					2050			
			benzidines					2051			
			Phenols					2052			
			PAHs				64 ppm	1752	10,600 ppm	1-30-09	
			1,4-Dioxane	30.1 µl			160 ppm	2059	800 ppm	5-3-09	
			BNA CAL SUB	1000 µl			50 ppm	1834	1000 ppm	11-30-09	MG
2061	11/3/08	11/3/08	DFTPP 1 uL	50 µl	DCM E8240	1 mL	50 ppm	2060	160 ppm	5/3/09	
2062	11/3/08	12/3/08	STD 160 ppm	1000 µl	DCM E8240	1 mL	160 ppm				
2063			120	750 µl			120 ppm	2062		12/3/08	
2064			080	500 µl			80 ppm	2063	120		
2065			060				60 ppm	2060	160 ppm	5/3/09	
2066			050	312 µl			50 ppm	2064	80 ppm	12/3/08	
2067			040	500 µl			40 ppm				

Supervisor Review: _____

870

96

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2039	10/14/08	11/14/08	STD 160 ppm 020 ppm	1000 µl	DCM E8240	1 mL	160 ppm	1988	160 ppm	12-13-08	MG
2040			120	750 µl			120				
2041			080	500 µl			80	2039	160 ppm	11/14/08	
2042			060	312 µl			60	1988		12-13-08	
2043			040	500 µl			40	2041	80 ppm	11/14/08	
2044			020				20	2043	40 ppm		
2045			010				10	2044	20 ppm		
2046			005				5	2045	10 ppm		MG
2047	10/21/08	12/11/08	BNA Surrogate		Acetone	100 mL					
			2-Fluorobiphenyl	835 µl	C8E01		100 ppm	1643	12010 ppm	11-30-08	
			Nitrobenzene-d5	1148 µl				1644	8710 ppm		
			Terphenyl-d14	1923 µl				1867	5200 ppm	8-27-09	
			2-Fluorophenol	1200 µl			150 ppm	1656	12,480 ppm	12-11-08	
			2,4,6-Tribromophenol	1782 µl				1645	8370	11-30-08	
			Phenol-d6	777 µl				1843	19,300	12/15/09	
2048	10/22/08	12/16/09	625 BN Mix #1	Refined	625BN18	5 mL	2000 ppm	ECS	2000 ppm	12/16/09	MG
2049			8270 Semi add ons		8270A17						
2050			Benzidines Mix		BZD026						
2051			phenols Mix		PHN023						
2052			PAH Mix		PAH16						
										10/31/08	

Supervisor Review: _____

868

94

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2068	11/3/08	12/3/08	STD 020 ppm	500 µl	DCM E8240	1 mL	20 ppm	2067	40 ppm	12-3-08	MG
2069			010				10 ppm	2068	20 ppm		
2070			005				5 ppm	2068	10 ppm		
2071			001	100 µl		500 µl	1 ppm	2070	5 ppm		
2072	11/3/08	12/3/08	2 SRC-110308		DCM E8240						
			Phenols	25 µl		1 mL	50 ppm	1701	2000 ppm	12-16-09	MG
			Benzidines					1702			
			625's					1703			
			8270's					1704			
			PAH's					1705			
2073	11/5/08	11/5/09	Atrazine	43.256	DCM E8240	10 mL	11,710 ppm	1655	neat	10/10	MG
				43.139							
				.117 g							
2074	11/5/08	5/5/09	OLM CAL STD		DCM E8240	5 mL					MG
			Atrazine	68 µl			160 ppm	2073	11,700 ppm	11/5/09	
			Benzaldehyde	65 µl				1836	12,300 ppm	8/11/09	
			1,1'-Biphenyl	75 µl				1845	10,700 ppm	5-1-09	
			Acetophenone	87 µl				1846	9,200 ppm	<1-5-09	
			Caprolactam	70 µl				1844	11,400 ppm		
			PKE	72 µl				1043	11,100 ppm	11-16-09	
			MTE	68 µl				1046	11,700	11-16-09	
										11/5/08	

Supervisor Review: _____

871

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Conc (ppm)	Exp Date	Prep'd By
2053	10/31/08	10/31/09	2-Fluorophenol	4.090	DCM E8240	12,480	12,480	~~1652~~	~~neat~~	~~307-43-4~~	MG
				2.842		100		1652	neat	307-43-4	
				1.248						8/10/10	
2054	10/31/08	10/31/09	Nitrobenzene-d5	~~88.458~~ 88.452	DCM E8240	100	11,450	1653	neat	366-93-8	MG
				88.337							
				1.145							
2055	10/31/08	10/31/09	2-Fluorobiphenyl	25.213	DCM E8240	100	~~1,204~~ 12,040	1652	neat	307-43-4	MG
				24.009						9/10	
				1.204							
2056	10/31/08	10/31/09	2,4,6-Tribromophenol	67.145	DCM E8240	100	~~1,341~~ 13,410	1082	neat	366-88-1	MG
				65.804						11/11	
				1.341							
2057	10/31/08	10/31/09	Terphenyl-d14	2.885	DCM E8240	10	5,200 ppm	1998	neat	410-138-2	MG
				2.833						9/12	
				.052							
2058	10/31/08	10/31/09	phenol-d6	3.084	DCM E8240	10	20,500	1873	neat	381-308-4	MG
				2.879						11/11	
				.205							
										11/31/08	

Supervisor Review: _____

869

G:/Logbooks 2008/Organics/GCMSSVStandard Prep

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
2093	10/5/08	11/5/09	SSTD 160ppm	1000 µl	DCM 629404	1.0 mL	160 ppm	2060	160 ppm	5/2/09	MG
2094			120	750 µl			120 ppm	↓			
2095			080	500 µl			80 ppm	2093	↓	11/5/09	
2096			060	↓			60 ppm	2094	120 ppm	↓	
2097			050	312 µl			50 ppm	2060	160 ppm	5/2/09	
2098			040	500 µl			40 ppm	2095	80 ppm	11/5/09	
2099			020	↓			20 ppm	2095	40 ppm	↓	
2100			010				10 ppm	2099	20 ppm		
2101			005	↓	↓	↓	5 ppm	2100	10 ppm		
2102	↓	↓	001	100 µl		0.5 mL	1 ppm	2101	5 ppm	↓	↓
2103	12/5/08	1/5/09	ICV - 120508		DCM 629404	1 mL		1701	2000 ppm	12-16-09	MG
			Phenols	25 µl	629404		50 ppm	1702			
			Benzidines	↓				1703			
			625's					1704			
			8270's					1705			
			PAH's	↓			↓	1706	↓		
2104			SSTD 160ppm								
			120		2nd	12/5/08		New Book			
			080								
			050								
			040								
			020								

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

874

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
2075	11/5/08	12/5/09	SSTD 160ppm DCM	1000 µl	DCM 629404	1 mL	160	2074	160 ppm	5/5/09	MG
2076			120	750 µl			120	↓			
2077			080	500 µl			80	2075	↓	12/5/08	
2078			050	312 µl			50	2074	↓	5/5/09	
2079			040	500 µl			40	2077	80 ppm	12/5/08	
2080			020				20	2079	40 ppm		
2081			010				10	2080	20 ppm		
2082			005				5	2081	10 ppm		
2083	11/7/08	11/7/09	internal STD	cracked	—	4000 ppm		2012	ECS	7/2011	MG
2084						—					
2085						—					MG
2086	11/12/08	5/10/09	BNA Surrogate		DCM Meoh	100 mL					
			2-Fluorobiphenyl	830 µl	G05E25		100 ppm	2055	12040		
			Nitrobenzene-d5	873 µl				2054	11450		
			Terphenyl-d14	1,923 µl				2057	5200		
			2-Fluorophenol	1,202 µl			150 ppm	2053	12,480	10-2009	
			2,4,6-Tribromophenol	1,118 µl				2056	13410		
			phenol-d6	732 µl				2058	20500		
						2nd	11/24/08				

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

872

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
2104	12/5/08	1/5/09	SSTD 160ppm DCM	1000 µl	DCM 629404	1 mL	160	2074	160 ppm	5/5/09	MG
2105			120	750 µl			120	↓			
2106			80	500 µl			80	2104	160 ppm	11/5/09	
2107			50	312 µl			50	2074	↓	5/5/09	
2108			40	500 µl			40	2106	80 ppm	11/5/09	
2109			20	↓			20	2108	40 ppm		
2110			10				10	2109	20 ppm		
2111	↓	↓	5	↓			5	2110	10 ppm		
2112	12/7/08	12/7/09	Caprolactam	529 mg 12/7/08 50.633 mg 12/7/08	DCM 629404	10 ml	10,200	1391	neat	01/12	MG
				50.633 mg 12/7/08							
				0.102							MG
2113	12/7/08	12/22/09	DCM 4.2 LCS Sol'n	—	MeOH: G05E25	25 µl	100 ppm	1850	12,300	5/19/09	
			Acetophenone	203 µl				1738	8200	1/22/09	
			Atrazine	305 µl				1972	17,300	9/2/09	
			1,1-Biphenyl	144 µl				2015	11,200	10/9/09	
			Benzaldehyde	223 µl				2112	10,200	12/7/09	
			Caprolactam	245 µl				ECS	SV1023	7/11	MG
2114	12/12/08	7/12/11	Internal standard	1x 5 mL	SV1023	Received	4000 ppm				
						2nd	12/12/08				

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

875

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
2087	11/24/08	5/24/09	BNA Surrogate		Meoh	100 mL					MG
			2-Fluorobiphenyl	830 µl	G05E25		100 ppm	2055	12040	10-2009	
			Nitrobenzene-d5	873 µl				2054	11450		
			Terphenyl-d14	1,923 µl				2057	5200		
			2-Fluorophenol	1,202 µl			150 ppm	2053	12480		
			2,4,6-Tribromophenol	1,118 µl				2056	13410		
			Phenol-d6	732 µl				2058	20500		MG
2088	11/25/08	5/25/09	BNA LCS Soln		Meoh	50 mL	100 ppm	1700	2000 ppm	12-16-09	
			phenols	2,500 µl	G05E25			1701	2000 ppm		
			Benzidines					1702			
			625's					1703			
			8270's					1704			
			PAH's	↓							
2089	12/3/08	1/3/09	DFTPP IC	50 µl	DCM 629404	1 mL	50 ppm	1834	1000 ppm	4-30-09	MG
2090	12/4/08	12/4/09	2,4-Dimethylphenol (Prep)	48.2185	DCM 629404	10 mL	7,600 ppm	1161	neat	1/11	MG
				48.139							
				.076							
2091	12/4/08	6/4/09	2,4-Dimethylphenol LCS	327 µl	Meoh	25 mL	1000 ppm	2090	7600 ppm	12/4/09	MG
					G05E25						
2092	12/4/08	11/4/09	50 ppm STD	312 µl	DCM 629404	1 mL	50 ppm	2060	160 ppm	5/2/09	MG
						2nd	12/5/08				

Supervisor Review: _____

G:/Logbooks 2006/Organics/GCMSSVStandard Prep

873

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
2115	12/12/08	1/12/09	5STD ~~1ml~~ 080 ppm SIM	500.0	DCM G28404	1mL	80 ppm	2009	160 ppm	3-28-09	MG
2116			060	375.0			60				
2117			040	500.0			40	2115	80 ppm	1/12/09	
2118			020				20	2117	40 ppm		
2119			010				10	2118	20		
2120			001	100.0			1.0	2119	10		
2121			002	200.0			0.2	2120	1.0		
2122			001	500.0			0.1	2121	0.2		
2123			00005				0.05	2122	0.1		
2124	12/12/08	1/12/09	ICV-121208SIM		DCM G28404	1 mL	10 ppm	1704	2000 ppm	12-16-08	MG
			PAH	5 mL				2000	12,100 ppm	7/25/09	
			2-Methylnaphthalene	0.83.0				2001	7,200 ppm		
			2-chloronaphthalene	1.38.0				2002	13,200 ppm		
			Dibenzofuran	0.76.0							
2125	12/12/08	6/12/09	BNA Surrogate		DCM	100 mL					
			2-Fluorobiphenyl	830.0	MeOH		100 ppm	7035	12040	10-31-08	MG
			Nitrobenzene d5	873.0	G05E25			2054	11,450		
			Terphenyl-d14	1,903.0				2057	5200		
			2-Fluorophenol	1,202.0			150 ppm	2053	12480		
			2,4,6-Tribromophenol	1,118.0				7056	13410		
			Phenol d6	732.0				2058	20500		
2126	12/15/08	11/2012	Terphenyl-d14	2x50 mg	Received	Neat	–	Chem	415-250	11/12	MG

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G:/Logbooks 2009/Organics/GCMSSVStandard Prep

2

876

GC/MS SEMIVOLATILE STANDARDS PREP LOG

ID No.	Prep Date	Exp. Date	Description / Parameters	Weights (g)/ Volumes (uL)	Solvent & Lot No.	Final Vol. (mL)	Final Conc. (ppm)	Parent / Source ID No.	Parent / Source Conc (ppm)	Parent / Source Exp Date	Prep'd By
2127	12/12/08	1/12/09	DFTPPUL	50.0	DCM G28404	1mL	50 ppm	1834	1000 ppm	4-30-09	MG
2128	12/18/08	6/18/09	BNA LCS 5010		MeOH	50 mL	100 ppm				
			Phenols	2,500.0	G05E25			1700	2000 ppm	12-16-08	MG
			Benzidines					1701			
			625's					1702			
			8270's					1703			
			PAH's					1704			
2129	12/22/08	6/22/09	BNA Surrogate		MeOH	100 mL					MG
			2-Fluorobiphenyl	830.0	G05E25		100 ppm	2055	12040	10-31-08	
			Nitrobenzene d5	873.0				2054	11450		
			Terphenyl-d14	1,923.0				2057	5200		
			2-Fluorophenol	1,202.0			150 ppm	2053	12480		
			2,4,6-Tribromophenol	1,118.0				2056	13410		
			Phenol d6	732.0				2058	20500		

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G:/Logbooks 2009/Organics/GCMSSVStandard Prep

3

877

SGS ACCUTEST
New England

09/23/16

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e-Hardcopy 2.0
Automated Report

Technical Report for

Plumley Engineering, P.C.

Market Basket, 63 Gates Avenue, Geneva, NY

2016018

SGS Accutest Job Number: MC47774

Sampling Date: 09/12/16

Report to:

Plumley Engineering, P.C.
8232 Loop Road
Baldwinsville, NY 13027
dmeixell@plumleyeng.com; dhudson@plumleyeng.com

ATTN: Dave Meixell

Total number of pages in report: **1595**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Sections: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Table of Contents

-1-

Section 1: Sample Summary 4
Section 2: Case Narrative/Conformance Summary 5
Section 3: Summary of Hits 7
Section 4: Sample Results 10
4.1: MC47774-1: BOTTOM 11
4.2: MC47774-2: NORTH 17
4.3: MC47774-3: SOUTH 23
4.4: MC47774-4: WEST 29
4.5: MC47774-5: EAST 35
4.6: MC47774-6: LARGE PILE 41
4.7: MC47774-7: SMALL PILE 49
4.8: MC47774-8: FIELD DUPE 57
Section 5: Misc. Forms 63
5.1: Chain of Custody 64
5.2: Sample Tracking Chronicle 67
5.3: Internal Chain of Custody 69
Section 6: GC/MS Volatiles - QC Data Summaries 72
6.1: Method Blank Summary 73
6.2: Blank Spike Summary 77
6.3: Matrix Spike/Matrix Spike Duplicate Summary 81
6.4: Instrument Performance Checks (BFB) 85
6.5: Internal Standard Area Summaries 90
6.6: Surrogate Recovery Summaries 93
6.7: Initial and Continuing Calibration Summaries 94
Section 7: GC/MS Volatiles - Raw Data 115
7.1: Samples 116
7.2: Method Blanks 205
7.3: Blank Spikes 222
7.4: Matrix Spike/Matrix Spike Duplicates 296
7.5: Instrument Performance Checks (BFB) 438
7.6: Initial and Continuing Calibrations 460
7.7: Instrument Run Logs 730
Section 8: GC/MS Semi-volatiles - QC Data Summaries 758
8.1: Method Blank Summary 759
8.2: Blank Spike Summary 762
8.3: Matrix Spike/Matrix Spike Duplicate Summary 765
8.4: Instrument Performance Checks (DFTPP) 768
8.5: Internal Standard Area Summaries 771
8.6: Surrogate Recovery Summaries 773
8.7: Initial and Continuing Calibration Summaries 774
Section 9: GC/MS Semi-volatiles - Raw Data 794
9.1: Samples 795

Sections: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Table of Contents

-2-

9.2: Method Blanks 910
9.3: Blank Spikes 919
9.4: Matrix Spike/Matrix Spike Duplicates 965
9.5: Instrument Performance Checks (DFTPP) 1062
9.6: Initial and Continuing Calibrations 1074
9.7: Instrument Run Logs 1166
9.8: Prep Logs 1195
Section 10: GC Semi-volatiles - QC Data Summaries 1196
10.1: Method Blank Summary 1197
10.2: Blank Spike Summary 1198
10.3: Matrix Spike/Matrix Spike Duplicate Summary 1199
10.4: Surrogate Recovery Summaries 1200
10.5: GC Surrogate Retention Time Summaries 1201
10.6: Initial and Continuing Calibration Summaries 1203
Section 11: GC Semi-volatiles - Raw Data 1220
11.1: Samples 1221
11.2: Method Blanks 1253
11.3: Blank Spikes 1256
11.4: Matrix Spike/Matrix Spike Duplicates 1265
11.5: Initial and Continuing Calibrations 1285
11.6: Instrument Run Logs 1454
11.7: Prep Logs 1456
Section 12: Metals Analysis - QC Data Summaries 1457
12.1: Inst QC MA19462: As,Ba,Cd,Cr,Pb,Se,Ag 1458
12.2: Inst QC MA19466: As,Ba,Cd,Cr,Pb,Se,Ag 1480
12.3: Inst QC MA19470: Hg 1500
12.4: Prep QC MP26772: As,Ba,Cd,Cr,Pb,Se,Ag 1507
12.5: Prep QC MP26773: Hg 1517
Section 13: Metals Analysis - Raw Data 1521
13.1: Raw Data MA19462 1522
13.2: Raw Data MA19466 1548
13.3: Raw Data MA19470 1584
13.4: Prep Logs 1587
Section 14: General Chemistry - QC Data Summaries 1590
14.1: Duplicate Results Summary 1591
14.2: Percent Solids Raw Data Summary 1592
Section 15: General Chemistry - Raw Data 1594
15.1: Raw Data GN54841: Ignitability (Flashpoint) 1595

SGS Accutest

Sample Summary

Plumley Engineering, P.C.

Market Basket, 63 Gates Avenue, Geneva, NY
Project No: 2016018

Job No: MC47774

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC47774-1	09/12/16	09:15 DM	09/14/16	SO	Soil	BOTTOM
MC47774-2	09/12/16	09:35 DM	09/14/16	SO	Soil	NORTH
MC47774-3	09/12/16	09:45 DM	09/14/16	SO	Soil	SOUTH
MC47774-4	09/12/16	09:55 DM	09/14/16	SO	Soil	WEST
MC47774-5	09/12/16	10:10 DM	09/14/16	SO	Soil	EAST
MC47774-6	09/12/16	10:45 DM	09/14/16	SO	Soil	LARGE PILE
MC47774-7	09/12/16	10:55 DM	09/14/16	SO	Soil	SMALL PILE
MC47774-8	09/12/16	09:35 DM	09/14/16	SO	Soil	FIELD DUPE

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Plumley Engineering, P.C. **Job No** MC47774

Site: Market Basket, 63 Gates Avenue, Geneva, NY **Report Date** 9/23/2016 5:04:22 PM

8 Sample(s) were collected on 09/12/2016 and were received at SGS Accutest New England on 09/14/2016 properly preserved, at 2.3 Deg. C and intact. These Samples received a job number of MC47774. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: SO **Batch ID:** MSM2895

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC47774-2MS, MC47774-2MSD were used as the QC samples indicated.
- Initial Calibration Verification MSM2881-ICV2881 for Acetone, 2-butanone exceed 30% difference (biased high). Associated sample result may be biased high or non-detect for this compound.
- RPD(s) for MSD for Acetone are outside control limits for sample MC47774-2MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- Continuing calibration check standard MSM2895-CC2881 for bromomethane, carbon disulfide exceed 20% Difference (biased high). Associated samples are non-detect for this compound.
- Sample(s) MC47774-2,5,7,8 has compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- MC47774-7, MC47774-2MS, MC47774-2MSD has internal standard outside control limits due to possible matrix interference. Confirmed by reanalysis.

Matrix: SO **Batch ID:** MSV1838

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC47776-1MS, MC47776-1MSD were used as the QC samples indicated.
- Sample(s) MC47774-1, MC47774-3, MC47774-4, MC47774-6 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- RPD(s) for MSD for 1,1,2,2-Tetrachloroethane, Chlorobenzene, Ethylbenzene, Methylene chloride, Tetrachloroethene, Xylene (total) are outside control limits for sample MC47776-1MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- MC47774-7: Confirmation run for internal standard areas.
- MC47774-7 for 4-Bromofluorobenzene: Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- Continuing Calibration MSV1838-CC1837 for Chloroethane exceed 20% Difference (biased low). Reporting Limit response verified by low-level standard.
- MC47774-7 has internal standard outside control limits due to possible matrix interference. Confirmed by reanalysis.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP48710

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC47774-2MS, MC47774-2MSD were used as the QC samples indicated.
- Sample(s) MC47774-1, MC47774-7 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- MC47774-7: Elevated RL due to dilution required for matrix interference.

Extractables by GC By Method SW846 8082A

Matrix: SO **Batch ID:** OP48709

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC47774-2MS, MC47774-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010C

Matrix: LEACHATE **Batch ID:** MP26772

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC47788-1MS, MC47788-1MSD, MC47788-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Cadmium are outside control limits for sample MP26772-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 7470A

Matrix: LEACHATE **Batch ID:** MP26773

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC47788-1MS, MC47788-1MSD were used as the QC samples for metals.

Wet Chemistry By Method SM 2540G-97 MOD

Matrix: SO **Batch ID:** GN54842

- Sample(s) MC47774-2DUP were used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN54843

- Sample(s) MC47775-2DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 1020

Matrix: SO **Batch ID:** GN54841

- Sample(s) MC47774-6DUP were used as the QC samples for Ignitability (Flashpoint).

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC47774).

Summary of Hits

Job Number: MC47774
Account: Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Collected: 09/12/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC47774-1	**BOTTOM**					
Acetone		0.0050 JB	0.012	0.0038	mg/kg	SW846 8260C
Carbon disulfide		0.0014 JB	0.0058	0.00047	mg/kg	SW846 8260C
cis-1,2-Dichloroethene		0.0015 J	0.0023	0.00042	mg/kg	SW846 8260C
Methylene chloride		0.0025	0.0023	0.00048	mg/kg	SW846 8260C
Toluene		0.0018 JB	0.0058	0.00046	mg/kg	SW846 8260C
Trichloroethene		0.0190	0.0023	0.00035	mg/kg	SW846 8260C
Di-n-butyl phthalate		0.0376 JB	0.30	0.013	mg/kg	SW846 8270D
bis(2-Ethylhexyl)phthalate		0.100 J	0.30	0.012	mg/kg	SW846 8270D
MC47774-2	**NORTH**					
Acetone [a]		0.0054 J	0.011	0.0035	mg/kg	SW846 8260C
Methylene chloride		0.0021	0.0021	0.00044	mg/kg	SW846 8260C
Toluene		0.0020 JB	0.0053	0.00042	mg/kg	SW846 8260C
Trichloroethene		0.0026	0.0021	0.00033	mg/kg	SW846 8260C
Total TIC, Semi-Volatile		0.36 J			mg/kg	
MC47774-3	**SOUTH**					
Acetone		0.0049 JB	0.011	0.0037	mg/kg	SW846 8260C
Methylene chloride		0.0012 J	0.0022	0.00047	mg/kg	SW846 8260C
Toluene		0.0029 JB	0.0056	0.00044	mg/kg	SW846 8260C
bis(2-Ethylhexyl)phthalate		0.0838 J	0.29	0.012	mg/kg	SW846 8270D
MC47774-4	**WEST**					
Acetone		0.0061 JB	0.012	0.0041	mg/kg	SW846 8260C
Carbon disulfide		0.00094 JB	0.0062	0.00051	mg/kg	SW846 8260C
Methylene chloride		0.0033	0.0025	0.00052	mg/kg	SW846 8260C
Toluene		0.0022 JB	0.0062	0.00050	mg/kg	SW846 8260C
Trichloroethene		0.0097	0.0025	0.00038	mg/kg	SW846 8260C
MC47774-5	**EAST**					
Methylene chloride		0.0023	0.0023	0.00047	mg/kg	SW846 8260C
Toluene		0.0018 JB	0.0057	0.00045	mg/kg	SW846 8260C
Total TIC, Volatile		0.03 J			mg/kg	
MC47774-6	**LARGE PILE**					
Acetone		0.0096 JB	0.012	0.0039	mg/kg	SW846 8260C
Methylene chloride		0.0024	0.0024	0.00050	mg/kg	SW846 8260C
Toluene		0.0023 JB	0.0060	0.00048	mg/kg	SW846 8260C

Summary of Hits

Job Number: MC47774
Account: Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Collected: 09/12/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Trichloroethene		0.00091 J	0.0024	0.00037	mg/kg	SW846 8260C
Acenaphthene		0.0947 J	0.12	0.0085	mg/kg	SW846 8270D
Acenaphthylene		0.915	0.12	0.0098	mg/kg	SW846 8270D
Anthracene		1.87	0.12	0.0099	mg/kg	SW846 8270D
Benzo(a)anthracene		6.42	0.12	0.012	mg/kg	SW846 8270D
Benzo(a)pyrene		5.54	0.31	0.011	mg/kg	SW846 8270D
Benzo(b)fluoranthene		4.68	0.12	0.014	mg/kg	SW846 8270D
Benzo(g,h,i)perylene		3.99	0.12	0.012	mg/kg	SW846 8270D
Benzo(k)fluoranthene		3.83	0.12	0.017	mg/kg	SW846 8270D
Carbazole		0.109 J	0.12	0.011	mg/kg	SW846 8270D
Chrysene		4.51	0.12	0.0096	mg/kg	SW846 8270D
Dibenzo(a,h)anthracene		0.997	0.12	0.010	mg/kg	SW846 8270D
Dibenzofuran		0.184	0.12	0.0097	mg/kg	SW846 8270D
Fluoranthene		15.8	2.5	0.23	mg/kg	SW846 8270D
Fluorene		0.495	0.12	0.014	mg/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		4.46	0.31	0.034	mg/kg	SW846 8270D
2-Methylnaphthalene		0.0468 J	0.12	0.015	mg/kg	SW846 8270D
Naphthalene		0.214	0.12	0.010	mg/kg	SW846 8270D
Phenanthrene		4.57	0.12	0.0092	mg/kg	SW846 8270D
Pyrene		11.8	2.5	0.24	mg/kg	SW846 8270D
Total TIC, Semi-Volatile		27.57 J			mg/kg	
Ignitability (Flashpoint)		> 230			Deg. F	SW846 1020
Barium		0.59	0.50	0.00057	mg/l	SW846 6010C
Cadmium		0.0018 B	0.0040	0.00030	mg/l	SW846 6010C
Lead		6.6	0.010	0.0011	mg/l	SW846 6010C
MC47774-7	**SMALL PILE**					
Methylene chloride		0.0012 J	0.0023	0.00049	mg/kg	SW846 8260C
Toluene		0.00079 JB	0.0058	0.00047	mg/kg	SW846 8260C
Total TIC, Volatile		0.5856 J			mg/kg	
Benzo(a)anthracene [b]		0.785 J	5.8	0.57	mg/kg	SW846 8270D
Benzo(a)pyrene [b]		4.81 J	15	0.49	mg/kg	SW846 8270D
Benzo(b)fluoranthene [b]		3.26 J	5.8	0.66	mg/kg	SW846 8270D
Benzo(k)fluoranthene [b]		3.92 J	5.8	0.79	mg/kg	SW846 8270D
Chrysene [b]		0.708 J	5.8	0.45	mg/kg	SW846 8270D
Di-n-butyl phthalate [b]		1.15 JB	15	0.62	mg/kg	SW846 8270D
Fluoranthene [b]		1.66 J	5.8	0.53	mg/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene [b]		4.08 J	15	1.6	mg/kg	SW846 8270D
Phenanthrene [b]		0.726 J	5.8	0.43	mg/kg	SW846 8270D
Pyrene [b]		1.56 J	5.8	0.56	mg/kg	SW846 8270D
Total TIC, Semi-Volatile		61 J			mg/kg	
Ignitability (Flashpoint)		> 230			Deg. F	SW846 1020
Barium		0.66	0.50	0.00057	mg/l	SW846 6010C
Cadmium		0.0032 B	0.0040	0.00030	mg/l	SW846 6010C

Summary of Hits

Job Number: MC47774
Account: Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Collected: 09/12/16

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chromium		0.0013 B	0.010	0.0011	mg/l	SW846 6010C
Lead		0.59	0.010	0.0011	mg/l	SW846 6010C
MC47774-8	**FIELD DUPE**					
Acetone [a]		0.0042 J	0.012	0.0038	mg/kg	SW846 8260C
Methylene chloride		0.00086 J	0.0023	0.00048	mg/kg	SW846 8260C
Toluene		0.0032 JB	0.0058	0.00046	mg/kg	SW846 8260C
Total TIC, Volatile		0.549 J			mg/kg	
Total TIC, Semi-Volatile		0.49 J			mg/kg	

(a) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased high.
(b) Elevated RL due to dilution required for matrix interference.

SGS ACCUTEST New England

Section 4

4

Sample Results

Report of Analysis

Raw Data: V49913.D

SGS Accutest

Report of Analysis

4.1 4

Client Sample ID: BOTTOM
Lab Sample ID: MC47774-1
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 82.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V49913.D	1	09/20/16	KP	n/a	n/a	MSV1838
Run #2							

	Initial Weight	Final Volume
Run #1	5.27 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0050	0.012	0.0038	mg/kg	JB
71-43-2	Benzene	ND	0.0012	0.00043	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0023	0.00049	mg/kg	
75-25-2	Bromoform	ND	0.0023	0.00055	mg/kg	
74-83-9	Bromomethane	ND	0.012	0.0019	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.012	0.0039	mg/kg	
75-15-0	Carbon disulfide	0.0014	0.0058	0.00047	mg/kg	JB
56-23-5	Carbon tetrachloride	ND	0.0023	0.00047	mg/kg	
108-90-7	Chlorobenzene	ND	0.0023	0.0011	mg/kg	
75-00-3	Chloroethane [a]	ND	0.012	0.0024	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00058	mg/kg	
74-87-3	Chloromethane	ND	0.0058	0.00086	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0058	0.0012	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0023	0.00046	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0023	0.00042	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0023	0.00079	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0015	0.0023	0.00042	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0023	0.00046	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0023	0.00050	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0023	0.0014	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0023	0.0015	mg/kg	
100-41-4	Ethylbenzene	ND	0.0023	0.00044	mg/kg	
591-78-6	2-Hexanone	ND	0.0058	0.00078	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0058	0.00075	mg/kg	
75-09-2	Methylene chloride	0.0025	0.0023	0.00048	mg/kg	
100-42-5	Styrene	ND	0.0058	0.00036	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0058	0.0022	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0023	0.00034	mg/kg	
108-88-3	Toluene	0.0018	0.0058	0.00046	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00040	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0023	0.0016	mg/kg	
79-01-6	Trichloroethene	0.0190	0.0023	0.00035	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.1 4

Client Sample ID: BOTTOM
Lab Sample ID: MC47774-1
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 82.5

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.012	0.0039	mg/kg	
1330-20-7	Xylene (total)	ND	0.0023	0.00040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		65-141%
2037-26-5	Toluene-D8	97%		65-129%
460-00-4	4-Bromofluorobenzene	129%		63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: X12656.D

SGS Accutest

Report of Analysis

4.1 4

Client Sample ID:	BOTTOM		
Lab Sample ID:	MC47774-1	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.5
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X12656.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.30	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.60	0.013	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.60	0.032	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.60	0.25	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.60	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.60	0.060	mg/kg	
95-48-7	2-Methylphenol	ND	0.60	0.064	mg/kg	
	3&4-Methylphenol	ND	0.60	0.052	mg/kg	
88-75-5	2-Nitrophenol	ND	0.60	0.047	mg/kg	
100-02-7	4-Nitrophenol	ND	0.60	0.070	mg/kg	
87-86-5	Pentachlorophenol	ND	0.60	0.068	mg/kg	
108-95-2	Phenol	ND	0.30	0.013	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.60	0.018	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.60	0.011	mg/kg	
83-32-9	Acenaphthene	ND	0.12	0.0082	mg/kg	
208-96-8	Acenaphthylene	ND	0.12	0.0095	mg/kg	
120-12-7	Anthracene	ND	0.12	0.0097	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.12	0.012	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.30	0.010	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.12	0.014	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.012	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.016	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.30	0.012	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.30	0.016	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.30	0.012	mg/kg	
106-47-8	4-Chloroaniline	ND	0.60	0.014	mg/kg	
86-74-8	Carbazole	ND	0.12	0.010	mg/kg	
218-01-9	Chrysene	ND	0.12	0.0093	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.30	0.012	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.30	0.011	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.30	0.015	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.30	0.014	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.1 4

Client Sample ID:	BOTTOM		
Lab Sample ID:	MC47774-1	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.5
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.30	0.010	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.30	0.0089	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.30	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.60	0.015	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.60	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.60	0.040	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.0099	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.0094	mg/kg	
84-74-2	Di-n-butyl phthalate	0.0376	0.30	0.013	mg/kg	JB
117-84-0	Di-n-octyl phthalate	ND	0.30	0.010	mg/kg	
84-66-2	Diethyl phthalate	ND	0.30	0.0096	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.30	0.0095	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	0.100	0.30	0.012	mg/kg	J
206-44-0	Fluoranthene	ND	0.12	0.011	mg/kg	
86-73-7	Fluorene	ND	0.12	0.013	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.30	0.016	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.30	0.012	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.60	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.30	0.028	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.30	0.033	mg/kg	
78-59-1	Isophorone	ND	0.30	0.021	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.12	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.60	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.60	0.014	mg/kg	
100-01-6	4-Nitroaniline	ND	0.60	0.014	mg/kg	
91-20-3	Naphthalene	ND	0.12	0.010	mg/kg	
98-95-3	Nitrobenzene	ND	0.30	0.033	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.30	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.30	0.040	mg/kg	
85-01-8	Phenanthrene	ND	0.12	0.0090	mg/kg	
129-00-0	Pyrene	ND	0.12	0.012	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.30	0.015	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	89%		25-109%
4165-62-2	Phenol-d5	89%		29-113%
118-79-6	2,4,6-Tribromophenol	87%		20-141%
4165-60-0	Nitrobenzene-d5	84%		27-115%
321-60-8	2-Fluorobiphenyl	90%		34-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.1 4

Client Sample ID:	BOTTOM		
Lab Sample ID:	MC47774-1	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.5
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	103%		42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: BK61734.D

SGS Accutest

Report of Analysis

4.1 4

Client Sample ID:	BOTTOM		
Lab Sample ID:	MC47774-1	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	82.5
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61734.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.039	0.0040	mg/kg	
11104-28-2	Aroclor 1221	ND	0.039	0.017	mg/kg	
11141-16-5	Aroclor 1232	ND	0.039	0.012	mg/kg	
53469-21-9	Aroclor 1242	ND	0.039	0.0089	mg/kg	
12672-29-6	Aroclor 1248	ND	0.039	0.0067	mg/kg	
11097-69-1	Aroclor 1254	ND	0.039	0.017	mg/kg	
11096-82-5	Aroclor 1260	ND	0.039	0.0035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		25-145%
877-09-8	Tetrachloro-m-xylene	87%		25-145%
2051-24-3	Decachlorobiphenyl	101%		25-179%
2051-24-3	Decachlorobiphenyl	102%		25-179%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: M80822.D

SGS Accutest

Report of Analysis

4.2 4

Client Sample ID: NORTH
Lab Sample ID: MC47774-2
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 81.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M80822.D	1	09/16/16	KP	n/a	n/a	MSM2895
Run #2							

	Initial Weight	Final Volume
Run #1	5.80 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	0.0054	0.011	0.0035	mg/kg	J
71-43-2	Benzene	ND	0.0011	0.00040	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0021	0.00045	mg/kg	
75-25-2	Bromoform	ND	0.0021	0.00051	mg/kg	
74-83-9	Bromomethane	ND	0.011	0.0017	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.011	0.0036	mg/kg	
75-15-0	Carbon disulfide	ND	0.0053	0.00043	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0021	0.00044	mg/kg	
108-90-7	Chlorobenzene	ND	0.0021	0.0010	mg/kg	
75-00-3	Chloroethane	ND	0.011	0.0022	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00053	mg/kg	
74-87-3	Chloromethane	ND	0.0053	0.00080	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0053	0.0011	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0021	0.00042	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0021	0.00039	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0021	0.00073	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0021	0.00038	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0021	0.00043	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0021	0.00046	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0021	0.0013	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0021	0.0014	mg/kg	
100-41-4	Ethylbenzene	ND	0.0021	0.00040	mg/kg	
591-78-6	2-Hexanone	ND	0.0053	0.00072	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0053	0.00069	mg/kg	
75-09-2	Methylene chloride	0.0021	0.0021	0.00044	mg/kg	
100-42-5	Styrene	ND	0.0053	0.00033	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0053	0.0020	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00031	mg/kg	
108-88-3	Toluene	0.0020	0.0053	0.00042	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00037	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0021	0.0015	mg/kg	
79-01-6	Trichloroethene	0.0026	0.0021	0.00033	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.2 4

Client Sample ID: NORTH
Lab Sample ID: MC47774-2
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 81.1

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.011	0.0036	mg/kg	
1330-20-7	Xylene (total)	ND	0.0021	0.00037	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		65-141%
2037-26-5	Toluene-D8	100%		65-129%
460-00-4	4-Bromofluorobenzene	114%		63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: X12657.D

SGS Accutest

Report of Analysis

4.2 4

Client Sample ID: NORTH
Lab Sample ID: MC47774-2
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 81.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X12657.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2							

	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.30	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.59	0.013	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.59	0.032	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.59	0.24	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.59	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.59	0.059	mg/kg	
95-48-7	2-Methylphenol	ND	0.59	0.063	mg/kg	
	3&4-Methylphenol	ND	0.59	0.052	mg/kg	
88-75-5	2-Nitrophenol	ND	0.59	0.046	mg/kg	
100-02-7	4-Nitrophenol	ND	0.59	0.068	mg/kg	
87-86-5	Pentachlorophenol	ND	0.59	0.067	mg/kg	
108-95-2	Phenol	ND	0.30	0.013	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.59	0.018	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.59	0.011	mg/kg	
83-32-9	Acenaphthene	ND	0.12	0.0081	mg/kg	
208-96-8	Acenaphthylene	ND	0.12	0.0094	mg/kg	
120-12-7	Anthracene	ND	0.12	0.0095	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.12	0.012	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.30	0.010	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.12	0.014	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.011	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.016	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.30	0.012	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.30	0.015	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.30	0.012	mg/kg	
106-47-8	4-Chloroaniline	ND	0.59	0.014	mg/kg	
86-74-8	Carbazole	ND	0.12	0.010	mg/kg	
218-01-9	Chrysene	ND	0.12	0.0092	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.30	0.012	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.30	0.011	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.30	0.014	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.30	0.014	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.2 4

Client Sample ID: NORTH
Lab Sample ID: MC47774-2
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 81.1

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.30	0.010	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.30	0.0088	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.30	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.59	0.015	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.59	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.59	0.039	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.0097	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.0092	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.30	0.013	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.30	0.010	mg/kg	
84-66-2	Diethyl phthalate	ND	0.30	0.0094	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.30	0.0094	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.30	0.012	mg/kg	
206-44-0	Fluoranthene	ND	0.12	0.011	mg/kg	
86-73-7	Fluorene	ND	0.12	0.013	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.30	0.016	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.30	0.011	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.59	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.30	0.028	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.30	0.033	mg/kg	
78-59-1	Isophorone	ND	0.30	0.021	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.12	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.59	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.59	0.014	mg/kg	
100-01-6	4-Nitroaniline	ND	0.59	0.014	mg/kg	
91-20-3	Naphthalene	ND	0.12	0.010	mg/kg	
98-95-3	Nitrobenzene	ND	0.30	0.033	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.30	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.30	0.039	mg/kg	
85-01-8	Phenanthrene	ND	0.12	0.0088	mg/kg	
129-00-0	Pyrene	ND	0.12	0.011	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.30	0.015	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	90%		25-109%
4165-62-2	Phenol-d5	91%		29-113%
118-79-6	2,4,6-Tribromophenol	95%		20-141%
4165-60-0	Nitrobenzene-d5	86%		27-115%
321-60-8	2-Fluorobiphenyl	92%		34-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.2 4

Client Sample ID:	NORTH		
Lab Sample ID:	MC47774-2	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.1
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	112%		42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.88	.36	mg/kg	JN
	Total TIC, Semi-Volatile		.36	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: BK61735.D

Report of Analysis

4.2 4

Client Sample ID:	NORTH		
Lab Sample ID:	MC47774-2	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	81.1
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61735.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.040	0.0040	mg/kg	
11104-28-2	Aroclor 1221	ND	0.040	0.017	mg/kg	
11141-16-5	Aroclor 1232	ND	0.040	0.012	mg/kg	
53469-21-9	Aroclor 1242	ND	0.040	0.0091	mg/kg	
12672-29-6	Aroclor 1248	ND	0.040	0.0068	mg/kg	
11097-69-1	Aroclor 1254	ND	0.040	0.017	mg/kg	
11096-82-5	Aroclor 1260	ND	0.040	0.0036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		25-145%
877-09-8	Tetrachloro-m-xylene	86%		25-145%
2051-24-3	Decachlorobiphenyl	106%		25-179%
2051-24-3	Decachlorobiphenyl	107%		25-179%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: V49914.D

Report of Analysis

4.3 4

Client Sample ID:	SOUTH		
Lab Sample ID:	MC47774-3	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8260C	**Percent Solids:**	82.2
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V49914.D	1	09/20/16	KP	n/a	n/a	MSV1838
Run #2							

	Initial Weight	Final Volume
Run #1	5.46 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0049	0.011	0.0037	mg/kg	JB
71-43-2	Benzene	ND	0.0011	0.00042	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0022	0.00048	mg/kg	
75-25-2	Bromoform	ND	0.0022	0.00053	mg/kg	
74-83-9	Bromomethane	ND	0.011	0.0018	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.011	0.0037	mg/kg	
75-15-0	Carbon disulfide	ND	0.0056	0.00046	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0022	0.00046	mg/kg	
108-90-7	Chlorobenzene	ND	0.0022	0.0010	mg/kg	
75-00-3	Chloroethane [a]	ND	0.011	0.0023	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00056	mg/kg	
74-87-3	Chloromethane	ND	0.0056	0.00084	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0056	0.0012	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0022	0.00044	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0022	0.00041	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0022	0.00076	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0022	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0022	0.00045	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0022	0.00049	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0022	0.0014	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0022	0.0015	mg/kg	
100-41-4	Ethylbenzene	ND	0.0022	0.00042	mg/kg	
591-78-6	2-Hexanone	ND	0.0056	0.00075	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0056	0.00073	mg/kg	
75-09-2	Methylene chloride	0.0012	0.0022	0.00047	mg/kg	J
100-42-5	Styrene	ND	0.0056	0.00035	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0056	0.0021	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0022	0.00033	mg/kg	
108-88-3	Toluene	0.0029	0.0056	0.00044	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00039	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0022	0.0015	mg/kg	
79-01-6	Trichloroethene	ND	0.0022	0.00034	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.3 4

Client Sample ID:	SOUTH		
Lab Sample ID:	MC47774-3	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8260C	**Percent Solids:**	82.2
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.011	0.0038	mg/kg	
1330-20-7	Xylene (total)	ND	0.0022	0.00039	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		65-141%
2037-26-5	Toluene-D8	100%		65-129%
460-00-4	4-Bromofluorobenzene	104%		63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: X12658.D

SGS Accutest

Report of Analysis

4.3 4

Client Sample ID:	SOUTH		
Lab Sample ID:	MC47774-3	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.2
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X12658.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2							

	Initial Weight	Final Volume
Run #1	21.0 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.29	0.013	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.58	0.013	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.58	0.031	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.58	0.24	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.58	0.12	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.58	0.058	mg/kg	
95-48-7	2-Methylphenol	ND	0.58	0.062	mg/kg	
	3&4-Methylphenol	ND	0.58	0.051	mg/kg	
88-75-5	2-Nitrophenol	ND	0.58	0.045	mg/kg	
100-02-7	4-Nitrophenol	ND	0.58	0.067	mg/kg	
87-86-5	Pentachlorophenol	ND	0.58	0.066	mg/kg	
108-95-2	Phenol	ND	0.29	0.013	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.58	0.017	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.58	0.011	mg/kg	
83-32-9	Acenaphthene	ND	0.12	0.0080	mg/kg	
208-96-8	Acenaphthylene	ND	0.12	0.0092	mg/kg	
120-12-7	Anthracene	ND	0.12	0.0093	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.12	0.011	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.29	0.0099	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.12	0.013	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.011	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.016	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.29	0.012	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.29	0.015	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.29	0.012	mg/kg	
106-47-8	4-Chloroaniline	ND	0.58	0.013	mg/kg	
86-74-8	Carbazole	ND	0.12	0.010	mg/kg	
218-01-9	Chrysene	ND	0.12	0.0090	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.29	0.011	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.29	0.011	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.29	0.014	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.29	0.014	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.3 4

Client Sample ID:	SOUTH		
Lab Sample ID:	MC47774-3	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.2
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.29	0.0099	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.29	0.0086	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.29	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.58	0.014	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.58	0.013	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.58	0.038	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.0095	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.0091	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.29	0.012	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.29	0.0099	mg/kg	
84-66-2	Diethyl phthalate	ND	0.29	0.0092	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.29	0.0092	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	0.0838	0.29	0.012	mg/kg	J
206-44-0	Fluoranthene	ND	0.12	0.011	mg/kg	
86-73-7	Fluorene	ND	0.12	0.013	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.29	0.015	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.29	0.011	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.58	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.29	0.028	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.29	0.032	mg/kg	
78-59-1	Isophorone	ND	0.29	0.021	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.12	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.58	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.58	0.014	mg/kg	
100-01-6	4-Nitroaniline	ND	0.58	0.014	mg/kg	
91-20-3	Naphthalene	ND	0.12	0.0098	mg/kg	
98-95-3	Nitrobenzene	ND	0.29	0.032	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.29	0.016	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.29	0.038	mg/kg	
85-01-8	Phenanthrene	ND	0.12	0.0087	mg/kg	
129-00-0	Pyrene	ND	0.12	0.011	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.29	0.015	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%		25-109%
4165-62-2	Phenol-d5	78%		29-113%
118-79-6	2,4,6-Tribromophenol	84%		20-141%
4165-60-0	Nitrobenzene-d5	72%		27-115%
321-60-8	2-Fluorobiphenyl	78%		34-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.3 4

Client Sample ID:	SOUTH		
Lab Sample ID:	MC47774-3	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.2
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	101%		42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: BK61736.D

SGS Accutest

Report of Analysis

4.3 4

Client Sample ID:	SOUTH		
Lab Sample ID:	MC47774-3	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	82.2
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61736.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.039	0.0040	mg/kg	
11104-28-2	Aroclor 1221	ND	0.039	0.017	mg/kg	
11141-16-5	Aroclor 1232	ND	0.039	0.012	mg/kg	
53469-21-9	Aroclor 1242	ND	0.039	0.0089	mg/kg	
12672-29-6	Aroclor 1248	ND	0.039	0.0067	mg/kg	
11097-69-1	Aroclor 1254	ND	0.039	0.017	mg/kg	
11096-82-5	Aroclor 1260	ND	0.039	0.0035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		25-145%
877-09-8	Tetrachloro-m-xylene	86%		25-145%
2051-24-3	Decachlorobiphenyl	95%		25-179%
2051-24-3	Decachlorobiphenyl	96%		25-179%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: V49915.D

SGS Accutest

Report of Analysis

Client Sample ID: WEST
Lab Sample ID: MC47774-4
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 79.9

4.4 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V49915.D	1	09/20/16	KP	n/a	n/a	MSV1838
Run #2							

	Initial Weight	Final Volume
Run #1	5.02 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0061	0.012	0.0041	mg/kg	JB
71-43-2	Benzene	ND	0.0012	0.00047	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0025	0.00053	mg/kg	
75-25-2	Bromoform	ND	0.0025	0.00059	mg/kg	
74-83-9	Bromomethane	ND	0.012	0.0020	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.012	0.0042	mg/kg	
75-15-0	Carbon disulfide	0.00094	0.0062	0.00051	mg/kg	JB
56-23-5	Carbon tetrachloride	ND	0.0025	0.00051	mg/kg	
108-90-7	Chlorobenzene	ND	0.0025	0.0012	mg/kg	
75-00-3	Chloroethane [a]	ND	0.012	0.0026	mg/kg	
67-66-3	Chloroform	ND	0.0025	0.00063	mg/kg	
74-87-3	Chloromethane	ND	0.0062	0.00094	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0062	0.0013	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0025	0.00050	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0025	0.00046	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0025	0.00085	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0025	0.00045	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0025	0.00050	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0025	0.00054	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0025	0.0015	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0025	0.0016	mg/kg	
100-41-4	Ethylbenzene	ND	0.0025	0.00047	mg/kg	
591-78-6	2-Hexanone	ND	0.0062	0.00084	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0062	0.00081	mg/kg	
75-09-2	Methylene chloride	0.0033	0.0025	0.00052	mg/kg	
100-42-5	Styrene	ND	0.0062	0.00039	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0062	0.0024	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0025	0.00037	mg/kg	
108-88-3	Toluene	0.0022	0.0062	0.00050	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0025	0.00043	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0025	0.0017	mg/kg	
79-01-6	Trichloroethene	0.0097	0.0025	0.00038	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: WEST
Lab Sample ID: MC47774-4
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 79.9

4.4 4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.012	0.0042	mg/kg	
1330-20-7	Xylene (total)	ND	0.0025	0.00043	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		65-141%
2037-26-5	Toluene-D8	100%		65-129%
460-00-4	4-Bromofluorobenzene	110%		63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: X12659.D

SGS Accutest

Report of Analysis

Client Sample ID: WEST
Lab Sample ID: MC47774-4
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 79.9

4.4 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X12659.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2							

	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.31	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.63	0.014	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.63	0.034	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.63	0.26	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.63	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.63	0.062	mg/kg	
95-48-7	2-Methylphenol	ND	0.63	0.067	mg/kg	
	3&4-Methylphenol	ND	0.63	0.055	mg/kg	
88-75-5	2-Nitrophenol	ND	0.63	0.049	mg/kg	
100-02-7	4-Nitrophenol	ND	0.63	0.072	mg/kg	
87-86-5	Pentachlorophenol	ND	0.63	0.071	mg/kg	
108-95-2	Phenol	ND	0.31	0.014	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.63	0.019	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.63	0.011	mg/kg	
83-32-9	Acenaphthene	ND	0.13	0.0086	mg/kg	
208-96-8	Acenaphthylene	ND	0.13	0.0099	mg/kg	
120-12-7	Anthracene	ND	0.13	0.010	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.13	0.012	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.31	0.011	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.13	0.014	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.13	0.012	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.13	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.31	0.013	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.31	0.016	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.31	0.012	mg/kg	
106-47-8	4-Chloroaniline	ND	0.63	0.014	mg/kg	
86-74-8	Carbazole	ND	0.13	0.011	mg/kg	
218-01-9	Chrysene	ND	0.13	0.0097	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.31	0.012	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.31	0.011	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.31	0.015	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.31	0.015	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: WEST
Lab Sample ID: MC47774-4
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 79.9

4.4 4

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.31	0.011	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.31	0.0093	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.31	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.63	0.015	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.63	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.63	0.041	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.13	0.010	mg/kg	
132-64-9	Dibenzofuran	ND	0.13	0.0098	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.31	0.013	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.31	0.011	mg/kg	
84-66-2	Diethyl phthalate	ND	0.31	0.010	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.31	0.0099	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.31	0.012	mg/kg	
206-44-0	Fluoranthene	ND	0.13	0.011	mg/kg	
86-73-7	Fluorene	ND	0.13	0.014	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.31	0.016	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.31	0.012	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.63	0.015	mg/kg	
67-72-1	Hexachloroethane	ND	0.31	0.030	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.31	0.035	mg/kg	
78-59-1	Isophorone	ND	0.31	0.022	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.13	0.015	mg/kg	
88-74-4	2-Nitroaniline	ND	0.63	0.015	mg/kg	
99-09-2	3-Nitroaniline	ND	0.63	0.015	mg/kg	
100-01-6	4-Nitroaniline	ND	0.63	0.015	mg/kg	
91-20-3	Naphthalene	ND	0.13	0.011	mg/kg	
98-95-3	Nitrobenzene	ND	0.31	0.035	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.31	0.018	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.31	0.041	mg/kg	
85-01-8	Phenanthrene	ND	0.13	0.0093	mg/kg	
129-00-0	Pyrene	ND	0.13	0.012	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.31	0.016	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	79%		25-109%
4165-62-2	Phenol-d5	82%		29-113%
118-79-6	2,4,6-Tribromophenol	93%		20-141%
4165-60-0	Nitrobenzene-d5	76%		27-115%
321-60-8	2-Fluorobiphenyl	87%		34-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.4 4

Client Sample ID:	WEST		
Lab Sample ID:	MC47774-4	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.9
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	111%		42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: BK61739.D

SGS Accutest

Report of Analysis

4.4 4

Client Sample ID:	WEST		
Lab Sample ID:	MC47774-4	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	79.9
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61739.D	1	09/21/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.040	0.0040	mg/kg	
11104-28-2	Aroclor 1221	ND	0.040	0.017	mg/kg	
11141-16-5	Aroclor 1232	ND	0.040	0.012	mg/kg	
53469-21-9	Aroclor 1242	ND	0.040	0.0091	mg/kg	
12672-29-6	Aroclor 1248	ND	0.040	0.0068	mg/kg	
11097-69-1	Aroclor 1254	ND	0.040	0.017	mg/kg	
11096-82-5	Aroclor 1260	ND	0.040	0.0036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		25-145%
877-09-8	Tetrachloro-m-xylene	88%		25-145%
2051-24-3	Decachlorobiphenyl	104%		25-179%
2051-24-3	Decachlorobiphenyl	105%		25-179%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: M80825.D

SGS Accutest

Report of Analysis

4.5 4

Client Sample ID:	EAST		
Lab Sample ID:	MC47774-5	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8260C	**Percent Solids:**	80.6
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M80825.D	1	09/16/16	KP	n/a	n/a	MSM2895
Run #2							

	Initial Weight	Final Volume
Run #1	5.48 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.011	0.0037	mg/kg	
71-43-2	Benzene	ND	0.0011	0.00042	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0023	0.00048	mg/kg	
75-25-2	Bromoform	ND	0.0023	0.00054	mg/kg	
74-83-9	Bromomethane	ND	0.011	0.0018	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.011	0.0038	mg/kg	
75-15-0	Carbon disulfide	ND	0.0057	0.00046	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0023	0.00046	mg/kg	
108-90-7	Chlorobenzene	ND	0.0023	0.0011	mg/kg	
75-00-3	Chloroethane	ND	0.011	0.0023	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00057	mg/kg	
74-87-3	Chloromethane	ND	0.0057	0.00085	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0057	0.0012	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0023	0.00045	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0023	0.00042	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0023	0.00077	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0023	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0023	0.00046	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0023	0.00049	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0023	0.0014	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0023	0.0015	mg/kg	
100-41-4	Ethylbenzene	ND	0.0023	0.00043	mg/kg	
591-78-6	2-Hexanone	ND	0.0057	0.00076	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0057	0.00074	mg/kg	
75-09-2	Methylene chloride	0.0023	0.0023	0.00047	mg/kg	
100-42-5	Styrene	ND	0.0057	0.00035	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0057	0.0022	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0023	0.00033	mg/kg	
108-88-3	Toluene	0.0018	0.0057	0.00045	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00039	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0023	0.0016	mg/kg	
79-01-6	Trichloroethene	ND	0.0023	0.00035	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.5 4

Client Sample ID:	EAST		
Lab Sample ID:	MC47774-5	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8260C	**Percent Solids:**	80.6
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.011	0.0038	mg/kg	
1330-20-7	Xylene (total)	ND	0.0023	0.00039	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		65-141%
2037-26-5	Toluene-D8	104%		65-129%
460-00-4	4-Bromofluorobenzene	107%		63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
107-01-7	2-Butene	4.99	.03	mg/kg	JN
	Total TIC, Volatile		.03	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: X12660.D

SGS Accutest

Report of Analysis

4.5 4

Client Sample ID:	EAST		
Lab Sample ID:	MC47774-5	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	80.6
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X12660.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.30	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.60	0.013	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.60	0.032	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.60	0.25	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.60	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.60	0.060	mg/kg	
95-48-7	2-Methylphenol	ND	0.60	0.064	mg/kg	
	3&4-Methylphenol	ND	0.60	0.052	mg/kg	
88-75-5	2-Nitrophenol	ND	0.60	0.047	mg/kg	
100-02-7	4-Nitrophenol	ND	0.60	0.069	mg/kg	
87-86-5	Pentachlorophenol	ND	0.60	0.068	mg/kg	
108-95-2	Phenol	ND	0.30	0.013	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.60	0.018	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.60	0.011	mg/kg	
83-32-9	Acenaphthene	ND	0.12	0.0082	mg/kg	
208-96-8	Acenaphthylene	ND	0.12	0.0095	mg/kg	
120-12-7	Anthracene	ND	0.12	0.0096	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.12	0.012	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.30	0.010	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.12	0.014	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.012	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.016	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.30	0.012	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.30	0.016	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.30	0.012	mg/kg	
106-47-8	4-Chloroaniline	ND	0.60	0.014	mg/kg	
86-74-8	Carbazole	ND	0.12	0.010	mg/kg	
218-01-9	Chrysene	ND	0.12	0.0093	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.30	0.012	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.30	0.011	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.30	0.015	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.30	0.014	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.5 4

Client Sample ID:	EAST		
Lab Sample ID:	MC47774-5	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	80.6
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.30	0.010	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.30	0.0089	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.30	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.60	0.015	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.60	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.60	0.040	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.0098	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.0094	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.30	0.013	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.30	0.010	mg/kg	
84-66-2	Diethyl phthalate	ND	0.30	0.0095	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.30	0.0095	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.30	0.012	mg/kg	
206-44-0	Fluoranthene	ND	0.12	0.011	mg/kg	
86-73-7	Fluorene	ND	0.12	0.013	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.30	0.016	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.30	0.012	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.60	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.30	0.028	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.30	0.033	mg/kg	
78-59-1	Isophorone	ND	0.30	0.021	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.12	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.60	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.60	0.014	mg/kg	
100-01-6	4-Nitroaniline	ND	0.60	0.014	mg/kg	
91-20-3	Naphthalene	ND	0.12	0.010	mg/kg	
98-95-3	Nitrobenzene	ND	0.30	0.033	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.30	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.30	0.040	mg/kg	
85-01-8	Phenanthrene	ND	0.12	0.0089	mg/kg	
129-00-0	Pyrene	ND	0.12	0.012	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.30	0.015	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	77%		25-109%
4165-62-2	Phenol-d5	79%		29-113%
118-79-6	2,4,6-Tribromophenol	83%		20-141%
4165-60-0	Nitrobenzene-d5	75%		27-115%
321-60-8	2-Fluorobiphenyl	83%		34-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.5 4

Client Sample ID:	EAST		
Lab Sample ID:	MC47774-5	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	80.6
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	100%		42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: BK61740.D

SGS Accutest

Report of Analysis

4.5 4

Client Sample ID:	EAST		
Lab Sample ID:	MC47774-5	**Date Sampled:**	09/12/16
Matrix:	SO - Soil	**Date Received:**	09/14/16
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	80.6
Project:	Market Basket, 63 Gates Avenue, Geneva, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61740.D	1	09/21/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.041	0.0042	mg/kg	
11104-28-2	Aroclor 1221	ND	0.041	0.018	mg/kg	
11141-16-5	Aroclor 1232	ND	0.041	0.013	mg/kg	
53469-21-9	Aroclor 1242	ND	0.041	0.0095	mg/kg	
12672-29-6	Aroclor 1248	ND	0.041	0.0071	mg/kg	
11097-69-1	Aroclor 1254	ND	0.041	0.018	mg/kg	
11096-82-5	Aroclor 1260	ND	0.041	0.0038	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		25-145%
877-09-8	Tetrachloro-m-xylene	107%		25-145%
2051-24-3	Decachlorobiphenyl	120%		25-179%
2051-24-3	Decachlorobiphenyl	123%		25-179%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: V49916.D

SGS Accutest

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V49916.D	1	09/20/16	KP	n/a	n/a	MSV1838
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0096	0.012	0.0039	mg/kg	JB
71-43-2	Benzene	ND	0.0012	0.00045	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0024	0.00051	mg/kg	
75-25-2	Bromoform	ND	0.0024	0.00057	mg/kg	
74-83-9	Bromomethane	ND	0.012	0.0019	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.012	0.0040	mg/kg	
75-15-0	Carbon disulfide	ND	0.0060	0.00049	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0024	0.00049	mg/kg	
108-90-7	Chlorobenzene	ND	0.0024	0.0011	mg/kg	
75-00-3	Chloroethane [a]	ND	0.012	0.0025	mg/kg	
67-66-3	Chloroform	ND	0.0024	0.00060	mg/kg	
74-87-3	Chloromethane	ND	0.0060	0.00090	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0060	0.0013	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0024	0.00048	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0024	0.00044	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0024	0.00082	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0024	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0024	0.00048	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0024	0.00052	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0024	0.0015	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0024	0.0016	mg/kg	
100-41-4	Ethylbenzene	ND	0.0024	0.00045	mg/kg	
591-78-6	2-Hexanone	ND	0.0060	0.00081	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0060	0.00078	mg/kg	
75-09-2	Methylene chloride	0.0024	0.0024	0.00050	mg/kg	
100-42-5	Styrene	ND	0.0060	0.00037	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0060	0.0023	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0024	0.00035	mg/kg	
108-88-3	Toluene	0.0023	0.0060	0.00048	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0024	0.00042	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0024	0.0017	mg/kg	
79-01-6	Trichloroethene	0.00091	0.0024	0.00037	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.012	0.0040	mg/kg	
1330-20-7	Xylene (total)	ND	0.0024	0.00042	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		65-141%
2037-26-5	Toluene-D8	100%		65-129%
460-00-4	4-Bromofluorobenzene	106%		63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: X12664.D X12661.D

SGS Accutest

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X12664.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2	X12661.D	20	09/22/16	AA	09/15/16	OP48710	MSX425

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2	20.1 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.31	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.62	0.014	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.62	0.033	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.62	0.25	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.62	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.62	0.061	mg/kg	
95-48-7	2-Methylphenol	ND	0.62	0.066	mg/kg	
	3&4-Methylphenol	ND	0.62	0.054	mg/kg	
88-75-5	2-Nitrophenol	ND	0.62	0.048	mg/kg	
100-02-7	4-Nitrophenol	ND	0.62	0.072	mg/kg	
87-86-5	Pentachlorophenol	ND	0.62	0.070	mg/kg	
108-95-2	Phenol	ND	0.31	0.014	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.62	0.019	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.62	0.011	mg/kg	
83-32-9	Acenaphthene	0.0947	0.12	0.0085	mg/kg	J
208-96-8	Acenaphthylene	0.915	0.12	0.0098	mg/kg	
120-12-7	Anthracene	1.87	0.12	0.0099	mg/kg	
56-55-3	Benzo(a)anthracene	6.42	0.12	0.012	mg/kg	
50-32-8	Benzo(a)pyrene	5.54	0.31	0.011	mg/kg	
205-99-2	Benzo(b)fluoranthene	4.68	0.12	0.014	mg/kg	
191-24-2	Benzo(g,h,i)perylene	3.99	0.12	0.012	mg/kg	
207-08-9	Benzo(k)fluoranthene	3.83	0.12	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.31	0.013	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.31	0.016	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.31	0.012	mg/kg	
106-47-8	4-Chloroaniline	ND	0.62	0.014	mg/kg	
86-74-8	Carbazole	0.109	0.12	0.011	mg/kg	J
218-01-9	Chrysene	4.51	0.12	0.0096	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.31	0.012	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.31	0.011	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.31	0.015	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.31	0.015	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.31	0.011	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.31	0.0092	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.31	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.62	0.015	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.62	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.62	0.041	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.997	0.12	0.010	mg/kg	
132-64-9	Dibenzofuran	0.184	0.12	0.0097	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.31	0.013	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.31	0.010	mg/kg	
84-66-2	Diethyl phthalate	ND	0.31	0.0098	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.31	0.0098	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.31	0.012	mg/kg	
206-44-0	Fluoranthene	15.8 [a]	2.5	0.23	mg/kg	
86-73-7	Fluorene	0.495	0.12	0.014	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.31	0.016	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.31	0.012	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.62	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.31	0.029	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	4.46	0.31	0.034	mg/kg	
78-59-1	Isophorone	ND	0.31	0.022	mg/kg	
91-57-6	2-Methylnaphthalene	0.0468	0.12	0.015	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.62	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.62	0.015	mg/kg	
100-01-6	4-Nitroaniline	ND	0.62	0.015	mg/kg	
91-20-3	Naphthalene	0.214	0.12	0.010	mg/kg	
98-95-3	Nitrobenzene	ND	0.31	0.034	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.31	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.31	0.041	mg/kg	
85-01-8	Phenanthrene	4.57	0.12	0.0092	mg/kg	
129-00-0	Pyrene	11.8 [a]	2.5	0.24	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.31	0.016	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%	73%	25-109%
4165-62-2	Phenol-d5	83%	76%	29-113%
118-79-6	2,4,6-Tribromophenol	91%	66%	20-141%
4165-60-0	Nitrobenzene-d5	80%	69%	27-115%
321-60-8	2-Fluorobiphenyl	85%	82%	34-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	98%	99%	42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
483-78-3	Naphthalene, 1,6-dimethyl-4-(1-met	7.43	1.7	mg/kg	JN
2531-84-2	Phenanthrene, 2-methyl-	8.37	1.3	mg/kg	JN
613-12-7	Anthracene, 2-methyl-	8.39	1.2	mg/kg	JN
203-64-5	4H-Cyclopenta[def]phenanthrene	8.48	2.3	mg/kg	JN
35465-71-5	2-Phenylnaphthalene	8.63	.81	mg/kg	JN
2381-21-7	Pyrene, 1-methyl-	9.88	1.9	mg/kg	JN
27208-37-3	Cyclopenta[cd]pyrene	10.51	1.1	mg/kg	JN
111272-10-7	Pentacyclo[6.6.5.0(2,7).0(9,14).0(	13.56	1.9	mg/kg	JN
192-97-2	Benzo[e]pyrene	13.77	2.8	mg/kg	JN
198-55-0	Perylene	14.09	1.3	mg/kg	JN
36728-72-0	28-Nor-17.beta.(H)-hopane	15.55	1.5	mg/kg	JN
215-58-7	Benzo[b]triphenylene	15.71	1.3	mg/kg	JN
213-46-7	1,2:7,8-Dibenzophenanthrene	16.01	1.1	mg/kg	JN
215-58-7	Benzo[b]triphenylene	16.06	1.1	mg/kg	JN
191-26-4	Dibenzo[def,mno]chrysene	16.38	1.9	mg/kg	JN
5385-75-1	Dibenz(a,e)aceanthrylene	17.84	1.6	mg/kg	JN
192-65-4	1,2:4,5-Dibenzopyrene	17.96	1	mg/kg	JN
189-55-9	3,4:9,10-Dibenzopyrene	18.05	.95	mg/kg	JN
191-07-1	Coronene	18.17	.81	mg/kg	JN
	Total TIC, Semi-Volatile		27.57	mg/kg	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Method: SW846 8082A SW846 3510C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61741.D	1	09/21/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.039	0.0040	mg/kg	
11104-28-2	Aroclor 1221	ND	0.039	0.017	mg/kg	
11141-16-5	Aroclor 1232	ND	0.039	0.012	mg/kg	
53469-21-9	Aroclor 1242	ND	0.039	0.0090	mg/kg	
12672-29-6	Aroclor 1248	ND	0.039	0.0067	mg/kg	
11097-69-1	Aroclor 1254	ND	0.039	0.017	mg/kg	
11096-82-5	Aroclor 1260	ND	0.039	0.0035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		25-145%
877-09-8	Tetrachloro-m-xylene	63%		25-145%
2051-24-3	Decachlorobiphenyl	102%		25-179%
2051-24-3	Decachlorobiphenyl	89%		25-179%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.0020 U	D004	5.0	0.010	0.0020	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Barium	0.59	D005	100	0.50	0.00057	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Cadmium	0.0018 B	D006	1.0	0.0040	0.00030	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Chromium	0.0011 U	D007	5.0	0.010	0.0011	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Lead	6.6	D008	5.0	0.010	0.0011	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Mercury	0.000034 U	D009	0.20	0.00020	0.000034	mg/l	1	09/16/16	09/20/16	EAL	SW846 7470A [2]
Selenium	0.0034 U	D010	1.0	0.025	0.0034	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Silver	0.0014 U	D011	5.0	0.0050	0.0014	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]

(1) Instrument QC Batch: MA19466
(2) Instrument QC Batch: MA19470
(3) Prep QC Batch: MP26772
(4) Prep QC Batch: MP26773

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: LARGE PILE
Lab Sample ID: MC47774-6
Matrix: SO - Soil
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.4

4.6 4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Ignitability (Flashpoint)	> 230		Deg. F	1	09/15/16	BF	SW846 1020
Solids, Percent	80.4		%	1	09/15/16	CF	SM 2540G-97 MOD

RL = Reporting Limit

Raw Data: M80827.D V49917.D

SGS Accutest

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M80827.D	1	09/16/16	KP	n/a	n/a	MSM2895
Run #2 [a]	V49917.D	1	09/20/16	KP	n/a	n/a	MSV1838

	Initial Weight	Final Volume
Run #1	4.99 g	5.0 ml
Run #2	4.92 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.012	0.0038	mg/kg	
71-43-2	Benzene	ND	0.0012	0.00044	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0023	0.00050	mg/kg	
75-25-2	Bromoform	ND	0.0023	0.00056	mg/kg	
74-83-9	Bromomethane	ND	0.012	0.0019	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.012	0.0039	mg/kg	
75-15-0	Carbon disulfide	ND	0.0058	0.00048	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0023	0.00048	mg/kg	
108-90-7	Chlorobenzene	ND	0.0023	0.0011	mg/kg	
75-00-3	Chloroethane	ND	0.012	0.0024	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00059	mg/kg	
74-87-3	Chloromethane	ND	0.0058	0.00088	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0058	0.0013	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0023	0.00047	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0023	0.00043	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0023	0.00080	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0023	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0023	0.00047	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0023	0.00051	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0023	0.0014	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0023	0.0015	mg/kg	
100-41-4	Ethylbenzene	ND	0.0023	0.00044	mg/kg	
591-78-6	2-Hexanone	ND	0.0058	0.00079	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0058	0.00076	mg/kg	
75-09-2	Methylene chloride	0.0012	0.0023	0.00049	mg/kg	J
100-42-5	Styrene	ND	0.0058	0.00036	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0058	0.0022	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0023	0.00035	mg/kg	
108-88-3	Toluene	0.00079	0.0058	0.00047	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00041	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0023	0.0016	mg/kg	
79-01-6	Trichloroethene	ND	0.0023	0.00036	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.012	0.0039	mg/kg	
1330-20-7	Xylene (total)	ND	0.0023	0.00041	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%	106%	65-141%
2037-26-5	Toluene-D8	97%	82%	65-129%
460-00-4	4-Bromofluorobenzene	127%	169% [b]	63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
107-01-7	2-Butene	5.01	.039	mg/kg	JN
24145-88-8	1,4-Dimethyladamantane, [1.alpha., 3.bet	17.88	.0074	mg/kg	JN
144629-62-9	Benzenemethanol, .alpha.-(2-methylenecyc	17.95	.0081	mg/kg	JN
1486-75-5	Cyclododecene, (E)-	18.29	.0074	mg/kg	JN
700-56-1	2-Methyladamantane	18.57	.0077	mg/kg	JN
941-37-7	Tricyclo[3.3.1.1(3,7)-]decane, 1-bromo-3	18.75	.018	mg/kg	JN
1674-10-8	Cyclohexene, 1,2-dimethyl-	20.63	.42	mg/kg	JN
36258-08-9	trans-(2-Ethylcyclopentyl)methanol	20.72	.045	mg/kg	JN
1000216-89-9	1,3-Bis(bromomethyl)cyclohexane	20.87	.033	mg/kg	JN
	Total TIC, Volatile		.5856	mg/kg	J

(a) Confirmation run for internal standard areas.
(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: X12662.D

SGS Accutest

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	X12662.D	50	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	15	0.67	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	29	0.65	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	29	1.6	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	29	12	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	29	6.2	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	29	2.9	mg/kg	
95-48-7	2-Methylphenol	ND	29	3.1	mg/kg	
	3&4-Methylphenol	ND	29	2.5	mg/kg	
88-75-5	2-Nitrophenol	ND	29	2.3	mg/kg	
100-02-7	4-Nitrophenol	ND	29	3.4	mg/kg	
87-86-5	Pentachlorophenol	ND	29	3.3	mg/kg	
108-95-2	Phenol	ND	15	0.64	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	29	0.87	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	29	0.53	mg/kg	
83-32-9	Acenaphthene	ND	5.8	0.40	mg/kg	
208-96-8	Acenaphthylene	ND	5.8	0.46	mg/kg	
120-12-7	Anthracene	ND	5.8	0.47	mg/kg	
56-55-3	Benzo(a)anthracene	0.785	5.8	0.57	mg/kg	J
50-32-8	Benzo(a)pyrene	4.81	15	0.49	mg/kg	J
205-99-2	Benzo(b)fluoranthene	3.26	5.8	0.66	mg/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	5.8	0.56	mg/kg	
207-08-9	Benzo(k)fluoranthene	3.92	5.8	0.79	mg/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	15	0.60	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	15	0.75	mg/kg	
91-58-7	2-Chloronaphthalene	ND	15	0.58	mg/kg	
106-47-8	4-Chloroaniline	ND	29	0.67	mg/kg	
86-74-8	Carbazole	ND	5.8	0.50	mg/kg	
218-01-9	Chrysene	0.708	5.8	0.45	mg/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	15	0.57	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	15	0.53	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	15	0.70	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	15	0.69	mg/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	15	0.49	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	15	0.43	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	15	0.59	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	29	0.71	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	29	0.66	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	29	1.9	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	5.8	0.48	mg/kg	
132-64-9	Dibenzofuran	ND	5.8	0.45	mg/kg	
84-74-2	Di-n-butyl phthalate	1.15	15	0.62	mg/kg	JB
117-84-0	Di-n-octyl phthalate	ND	15	0.49	mg/kg	
84-66-2	Diethyl phthalate	ND	15	0.46	mg/kg	
131-11-3	Dimethyl phthalate	ND	15	0.46	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	15	0.58	mg/kg	
206-44-0	Fluoranthene	1.66	5.8	0.53	mg/kg	J
86-73-7	Fluorene	ND	5.8	0.64	mg/kg	
118-74-1	Hexachlorobenzene	ND	15	0.76	mg/kg	
87-68-3	Hexachlorobutadiene	ND	15	0.56	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	29	0.68	mg/kg	
67-72-1	Hexachloroethane	ND	15	1.4	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	4.08	15	1.6	mg/kg	J
78-59-1	Isophorone	ND	15	1.0	mg/kg	
91-57-6	2-Methylnaphthalene	ND	5.8	0.69	mg/kg	
88-74-4	2-Nitroaniline	ND	29	0.68	mg/kg	
99-09-2	3-Nitroaniline	ND	29	0.68	mg/kg	
100-01-6	4-Nitroaniline	ND	29	0.68	mg/kg	
91-20-3	Naphthalene	ND	5.8	0.49	mg/kg	
98-95-3	Nitrobenzene	ND	15	1.6	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	15	0.82	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	15	1.9	mg/kg	
85-01-8	Phenanthrene	0.726	5.8	0.43	mg/kg	J
129-00-0	Pyrene	1.56	5.8	0.56	mg/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	15	0.73	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		25-109%
4165-62-2	Phenol-d5	71%		29-113%
118-79-6	2,4,6-Tribromophenol	63%		20-141%
4165-60-0	Nitrobenzene-d5	60%		27-115%
321-60-8	2-Fluorobiphenyl	72%		34-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	89%		42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
15714-13-3	p-Menth-8(10)-en-9-ol, cis-	7.55	20	mg/kg	JN
15714-10-0	p-Menth-3-en-9-ol	8.37	28	mg/kg	JN
40702-26-9	3-Cyclohexene-1-carboxaldehyde, 1,	8.55	13	mg/kg	JN
	Total TIC, Semi-Volatile		61	mg/kg	J

(a) Elevated RL due to dilution required for matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Method: SW846 8082A SW846 3510C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61742.D	1	09/21/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.038	0.0039	mg/kg	
11104-28-2	Aroclor 1221	ND	0.038	0.016	mg/kg	
11141-16-5	Aroclor 1232	ND	0.038	0.012	mg/kg	
53469-21-9	Aroclor 1242	ND	0.038	0.0087	mg/kg	
12672-29-6	Aroclor 1248	ND	0.038	0.0065	mg/kg	
11097-69-1	Aroclor 1254	ND	0.038	0.017	mg/kg	
11096-82-5	Aroclor 1260	ND	0.038	0.0034	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		25-145%
877-09-8	Tetrachloro-m-xylene	67%		25-145%
2051-24-3	Decachlorobiphenyl	103%		25-179%
2051-24-3	Decachlorobiphenyl	70%		25-179%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.0020 U	D004	5.0	0.010	0.0020	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Barium	0.66	D005	100	0.50	0.00057	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Cadmium	0.0032 B	D006	1.0	0.0040	0.00030	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Chromium	0.0013 B	D007	5.0	0.010	0.0011	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Lead	0.59	D008	5.0	0.010	0.0011	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Mercury	0.000034 U	D009	0.20	0.00020	0.000034	mg/l	1	09/16/16	09/20/16	EAL	SW846 7470A [2]
Selenium	0.0034 U	D010	1.0	0.025	0.0034	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]
Silver	0.0014 U	D011	5.0	0.0050	0.0014	mg/l	1	09/16/16	09/16/16	EAL	SW846 6010C [1]

(1) Instrument QC Batch: MA19466
(2) Instrument QC Batch: MA19470
(3) Prep QC Batch: MP26772
(4) Prep QC Batch: MP26773

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SMALL PILE
Lab Sample ID: MC47774-7
Matrix: SO - Soil
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 85.9

4.7 4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Ignitability (Flashpoint)	> 230		Deg. F	1	09/15/16	BF	SW846 1020
Solids, Percent	85.9		%	1	09/15/16	CF	SM 2540G-97 MOD

RL = Reporting Limit

Raw Data: M80828.D

SGS Accutest

Report of Analysis

Client Sample ID: FIELD DUPE
Lab Sample ID: MC47774-8
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.1

4.8 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M80828.D	1	09/16/16	KP	n/a	n/a	MSM2895
Run #2							

	Initial Weight	Final Volume
Run #1	5.42 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	0.0042	0.012	0.0038	mg/kg	J
71-43-2	Benzene	ND	0.0012	0.00043	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0023	0.00049	mg/kg	
75-25-2	Bromoform	ND	0.0023	0.00055	mg/kg	
74-83-9	Bromomethane	ND	0.012	0.0019	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.012	0.0039	mg/kg	
75-15-0	Carbon disulfide	ND	0.0058	0.00047	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0023	0.00047	mg/kg	
108-90-7	Chlorobenzene	ND	0.0023	0.0011	mg/kg	
75-00-3	Chloroethane	ND	0.012	0.0024	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00058	mg/kg	
74-87-3	Chloromethane	ND	0.0058	0.00086	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0058	0.0012	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0023	0.00046	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0023	0.00042	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0023	0.00079	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0023	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0023	0.00046	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0023	0.00050	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0023	0.0014	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0023	0.0015	mg/kg	
100-41-4	Ethylbenzene	ND	0.0023	0.00044	mg/kg	
591-78-6	2-Hexanone	ND	0.0058	0.00078	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0058	0.00075	mg/kg	
75-09-2	Methylene chloride	0.00086	0.0023	0.00048	mg/kg	J
100-42-5	Styrene	ND	0.0058	0.00036	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0058	0.0022	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0023	0.00034	mg/kg	
108-88-3	Toluene	0.0032	0.0058	0.00046	mg/kg	JB
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00040	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0023	0.0016	mg/kg	
79-01-6	Trichloroethene	ND	0.0023	0.00035	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: FIELD DUPE
Lab Sample ID: MC47774-8
Matrix: SO - Soil
Method: SW846 8260C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.1

4.8 4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.012	0.0039	mg/kg	
1330-20-7	Xylene (total)	ND	0.0023	0.00040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		65-141%
2037-26-5	Toluene-D8	106%		65-129%
460-00-4	4-Bromofluorobenzene	109%		63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
107-01-7	2-Butene	5.00	.029	mg/kg	JN
313253-65-5	2-Pentanone, 4-cyclohexylidene-3,3-dieth	11.69	.14	mg/kg	JN
85136-08-9	2,6-Heptadienal, 2,4-dimethyl-	13.75	.039	mg/kg	JN
85136-08-9	2,6-Heptadienal, 2,4-dimethyl-	14.14	.072	mg/kg	JN
446-52-6	Benzaldehyde, 2-fluoro-	15.80	.039	mg/kg	JN
39905-57-2	Benzenamine, 4-(hexyloxy)-	17.11	.017	mg/kg	JN
54832-83-6	1H-Indene, octahydro-2,2,4,4,7,7-hexamet	17.25	.023	mg/kg	JN
767-15-7	2-Pyrimidinamine, 4,6-dimethyl-	17.51	.19	mg/kg	JN
	Total TIC, Volatile		.549	mg/kg	J

(a) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: X12663.D

SGS Accutest

Report of Analysis

Client Sample ID: FIELD DUPE
Lab Sample ID: MC47774-8
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.1

4.8 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X12663.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.30	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.61	0.013	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.61	0.032	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.61	0.25	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.61	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.61	0.060	mg/kg	
95-48-7	2-Methylphenol	ND	0.61	0.064	mg/kg	
	3&4-Methylphenol	ND	0.61	0.053	mg/kg	
88-75-5	2-Nitrophenol	ND	0.61	0.047	mg/kg	
100-02-7	4-Nitrophenol	ND	0.61	0.070	mg/kg	
87-86-5	Pentachlorophenol	ND	0.61	0.069	mg/kg	
108-95-2	Phenol	ND	0.30	0.013	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.61	0.018	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.61	0.011	mg/kg	
83-32-9	Acenaphthene	ND	0.12	0.0083	mg/kg	
208-96-8	Acenaphthylene	ND	0.12	0.0096	mg/kg	
120-12-7	Anthracene	ND	0.12	0.0097	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.12	0.012	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.30	0.010	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.12	0.014	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.012	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.016	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.30	0.013	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.30	0.016	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.30	0.012	mg/kg	
106-47-8	4-Chloroaniline	ND	0.61	0.014	mg/kg	
86-74-8	Carbazole	ND	0.12	0.010	mg/kg	
218-01-9	Chrysene	ND	0.12	0.0094	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.30	0.012	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.30	0.011	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.30	0.015	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.30	0.014	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID: FIELD DUPE
Lab Sample ID: MC47774-8
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.1

4.8 4

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	0.30	0.010	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.30	0.0090	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.30	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.61	0.015	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.61	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.61	0.040	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.010	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.0095	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.30	0.013	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.30	0.010	mg/kg	
84-66-2	Diethyl phthalate	ND	0.30	0.0096	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.30	0.0096	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.30	0.012	mg/kg	
206-44-0	Fluoranthene	ND	0.12	0.011	mg/kg	
86-73-7	Fluorene	ND	0.12	0.013	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.30	0.016	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.30	0.012	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.61	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.30	0.029	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.30	0.034	mg/kg	
78-59-1	Isophorone	ND	0.30	0.021	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.12	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.61	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.61	0.014	mg/kg	
100-01-6	4-Nitroaniline	ND	0.61	0.014	mg/kg	
91-20-3	Naphthalene	ND	0.12	0.010	mg/kg	
98-95-3	Nitrobenzene	ND	0.30	0.033	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.30	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.30	0.040	mg/kg	
85-01-8	Phenanthrene	ND	0.12	0.0090	mg/kg	
129-00-0	Pyrene	ND	0.12	0.012	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.30	0.015	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	82%		25-109%
4165-62-2	Phenol-d5	84%		29-113%
118-79-6	2,4,6-Tribromophenol	89%		20-141%
4165-60-0	Nitrobenzene-d5	80%		27-115%
321-60-8	2-Fluorobiphenyl	83%		34-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FIELD DUPE
Lab Sample ID: MC47774-8
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.1

4.8 4

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	109%		42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.88	.49	mg/kg	JN
	Total TIC, Semi-Volatile		.49	mg/kg	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Raw Data: BK61743.D

Report of Analysis

Client Sample ID: FIELD DUPE
Lab Sample ID: MC47774-8
Matrix: SO - Soil
Method: SW846 8082A SW846 3510C
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Date Sampled: 09/12/16
Date Received: 09/14/16
Percent Solids: 80.1

4.8 4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK61743.D	1	09/21/16	TA	09/15/16	OP48709	GBK1936
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.040	0.0041	mg/kg	
11104-28-2	Aroclor 1221	ND	0.040	0.017	mg/kg	
11141-16-5	Aroclor 1232	ND	0.040	0.012	mg/kg	
53469-21-9	Aroclor 1242	ND	0.040	0.0093	mg/kg	
12672-29-6	Aroclor 1248	ND	0.040	0.0069	mg/kg	
11097-69-1	Aroclor 1254	ND	0.040	0.018	mg/kg	
11096-82-5	Aroclor 1260	ND	0.040	0.0037	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		25-145%
877-09-8	Tetrachloro-m-xylene	80%		25-145%
2051-24-3	Decachlorobiphenyl	89%		25-179%
2051-24-3	Decachlorobiphenyl	84%		25-179%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS ACCUTEST New England

Section 5

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

SGS ACCUTEST

CHAIN OF CUSTODY

PAGE ___ OF ___

MC47774

5.1 5

MC47774: Chain of Custody
Page 1 of 3

SGS Accutest Sample Receipt Summary

Job Number: MC47774 **Client:** PLUMLEY **Project:** MARKET BASKET
Date / Time Received: 9/14/2016 9:30:00 AM **Delivery Method:** FEDX **Airbill #'s:** 777208894860
Cooler Temps (Initial/Adjusted): #1: (2.3/2.3);

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	IRGUN1
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

Quality Control ,Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☑	
2. Trip Blank listed on COC:	☐	☑	
3. Samples preserved properly:	☐	☑	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample rec'd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☐	☑	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume rec'd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

-1 through -8: 8260 volume was not collected according to 5035 specifications. Volume was submitted as intact soil and not prepped within 48 hrs of collection. Samples were aliquoted into 1-MeOH and 2-DI vials by SGS staff.

"Matrix Spike" and "Matrix Spike Dup" sample on COC no parent sample indicated.

5.1 5

Sample Receipt Summary - Problem Resolution

Job Number: MC47774
CSR: Frank D'Agostino **Response Date:** 9/19/2016
Response: no ms/msd needed per the clients email

5.1 5

Internal Sample Tracking Chronicle

Plumley Engineering, P.C.
Market Basket, 63 Gates Avenue, Geneva, NY
Project No: 2016018

Job No: MC47774

5.2 5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC47774-1 Collected: 12-SEP-16 09:15 By: DM Received: 14-SEP-16 By: BA						
BOTTOM						
MC47774-1	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-1	SW846 8260C	20-SEP-16 15:02	KP			V8260TCL+
MC47774-1	SW846 8082A	20-SEP-16 18:47	TA	15-SEP-16	AW	P8082PCB
MC47774-1	SW846 8270D	22-SEP-16 14:33	AA	15-SEP-16	AW	AB8270TCL
MC47774-2 Collected: 12-SEP-16 09:35 By: DM Received: 14-SEP-16 By: BA						
NORTH						
MC47774-2	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-2	SW846 8260C	16-SEP-16 15:53	KP			V8260TCL+
MC47774-2	SW846 8082A	20-SEP-16 19:03	TA	15-SEP-16	AW	P8082PCB
MC47774-2	SW846 8270D	22-SEP-16 14:58	AA	15-SEP-16	AW	AB8270TCL
MC47774-3 Collected: 12-SEP-16 09:45 By: DM Received: 14-SEP-16 By: BA						
SOUTH						
MC47774-3	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-3	SW846 8260C	20-SEP-16 15:31	KP			V8260TCL+
MC47774-3	SW846 8082A	20-SEP-16 19:19	TA	15-SEP-16	AW	P8082PCB
MC47774-3	SW846 8270D	22-SEP-16 15:23	AA	15-SEP-16	AW	AB8270TCL
MC47774-4 Collected: 12-SEP-16 09:55 By: DM Received: 14-SEP-16 By: BA						
WEST						
MC47774-4	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-4	SW846 8260C	20-SEP-16 16:01	KP			V8260TCL+
MC47774-4	SW846 8082A	21-SEP-16 08:03	TA	15-SEP-16	AW	P8082PCB
MC47774-4	SW846 8270D	22-SEP-16 15:48	AA	15-SEP-16	AW	AB8270TCL
MC47774-5 Collected: 12-SEP-16 10:10 By: DM Received: 14-SEP-16 By: BA						
EAST						
MC47774-5	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-5	SW846 8260C	16-SEP-16 17:16	KP			V8260TCL+
MC47774-5	SW846 8082A	21-SEP-16 08:19	TA	15-SEP-16	AW	P8082PCB
MC47774-5	SW846 8270D	22-SEP-16 16:13	AA	15-SEP-16	AW	AB8270TCL

Internal Sample Tracking Chronicle

Plumley Engineering, P.C.
Market Basket, 63 Gates Avenue, Geneva, NY
Project No: 2016018

Job No: MC47774

5.2 5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC47774-6 Collected: 12-SEP-16 10:45 By: DM Received: 14-SEP-16 By: BA						
LARGE PILE						
MC47774-6	SW846 1020	15-SEP-16	BF			IGN
MC47774-6	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-6	SW846 6010C	16-SEP-16 18:43	EAL	16-SEP-16	EM	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC47774-6	SW846 7470A	20-SEP-16 12:18	EAL	16-SEP-16	EM	EHG
MC47774-6	SW846 8260C	20-SEP-16 16:31	KP			V8260TCL+
MC47774-6	SW846 8082A	21-SEP-16 08:35	TA	15-SEP-16	AW	P8082PCB
MC47774-6	SW846 8270D	22-SEP-16 16:38	AA	15-SEP-16	AW	AB8270TCL
MC47774-6	SW846 8270D	22-SEP-16 17:54	AA	15-SEP-16	AW	AB8270TCL
MC47774-7 Collected: 12-SEP-16 10:55 By: DM Received: 14-SEP-16 By: BA						
SMALL PILE						
MC47774-7	SW846 1020	15-SEP-16	BF			IGN
MC47774-7	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-7	SW846 8260C	16-SEP-16 18:11	KP			V8260TCL+
MC47774-7	SW846 6010C	16-SEP-16 18:49	EAL	16-SEP-16	EM	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC47774-7	SW846 7470A	20-SEP-16 12:20	EAL	16-SEP-16	EM	EHG
MC47774-7	SW846 8260C	20-SEP-16 17:00	KP			V8260TCL+
MC47774-7	SW846 8082A	21-SEP-16 08:51	TA	15-SEP-16	AW	P8082PCB
MC47774-7	SW846 8270D	22-SEP-16 17:04	AA	15-SEP-16	AW	AB8270TCL
MC47774-8 Collected: 12-SEP-16 09:35 By: DM Received: 14-SEP-16 By: BA						
FIELD DUPE						
MC47774-8	SM 2540G-97 MOD	15-SEP-16	CF			%SOL
MC47774-8	SW846 8260C	16-SEP-16 18:39	KP			V8260TCL+
MC47774-8	SW846 8082A	21-SEP-16 09:07	TA	15-SEP-16	AW	P8082PCB
MC47774-8	SW846 8270D	22-SEP-16 17:29	AA	15-SEP-16	AW	AB8270TCL

SGS Accutest Internal Chain of Custody

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Received: 09/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC47774-1.1	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-1.1	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-1.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage
MC47774-1.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-1.3	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-1.3	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-1.3	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-1.3	Cara Baker		09/19/16 11:11	Disposed
MC47774-1.4	VOC Ref #10	Kayla Paradis	09/20/16 13:47	Retrieve from Storage
MC47774-1.4	Kayla Paradis	GCMSM	09/20/16 13:47	Load on Instrument
MC47774-2.1	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-2.1	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-2.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage
MC47774-2.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-2.8	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-2.8	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-2.8	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-2.8	Cara Baker		09/19/16 11:11	Disposed
MC47774-2.9	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-2.9	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-2.9	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-2.9	Cara Baker		09/19/16 11:11	Disposed
MC47774-2.14	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-2.14	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-2.14	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-2.14	Cara Baker		09/19/16 11:11	Disposed
MC47774-3.1	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-3.1	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-3.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage
MC47774-3.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-3.3	VOC Ref #10	Kayla Paradis	09/20/16 13:47	Retrieve from Storage
MC47774-3.3	Kayla Paradis	GCMSM	09/20/16 13:47	Load on Instrument
MC47774-3.4	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-3.4	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-3.4	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument

SGS Accutest Internal Chain of Custody

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Received: 09/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC47774-3.4	Cara Baker		09/19/16 11:11	Disposed
MC47774-4.1	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-4.1	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-4.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage
MC47774-4.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-4.3	VOC Ref #10	Kayla Paradis	09/20/16 13:47	Retrieve from Storage
MC47774-4.3	Kayla Paradis	GCMSM	09/20/16 13:47	Load on Instrument
MC47774-4.4	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-4.4	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-4.4	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-4.4	Cara Baker		09/19/16 11:11	Disposed
MC47774-5.1	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-5.1	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-5.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage
MC47774-5.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-5.4	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-5.4	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-5.4	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-5.4	Cara Baker		09/19/16 11:11	Disposed
MC47774-6.1	Walk In Ref #5	Edouard Adrian Lee	09/15/16 11:36	Retrieve from Storage
MC47774-6.1	Edouard Adrian Lee	Walk In Ref #5	09/15/16 16:14	Return to Storage
MC47774-6.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage
MC47774-6.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-6.2	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-6.2	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-6.3	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-6.3	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-6.3	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-6.3	Cara Baker		09/19/16 11:11	Disposed
MC47774-6.4	VOC Ref #10	Kayla Paradis	09/20/16 13:47	Retrieve from Storage
MC47774-6.4	Kayla Paradis	GCMSM	09/20/16 13:47	Load on Instrument
MC47774-7.1	Walk In Ref #5	Edouard Adrian Lee	09/15/16 11:36	Retrieve from Storage
MC47774-7.1	Edouard Adrian Lee	Walk In Ref #5	09/15/16 16:14	Return to Storage
MC47774-7.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Received: 09/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC47774-7.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-7.2	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-7.2	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-7.3	VOC Ref #10	Kayla Paradis	09/20/16 13:47	Retrieve from Storage
MC47774-7.3	Kayla Paradis	GCMSM	09/20/16 13:47	Load on Instrument
MC47774-7.4	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-7.4	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-7.4	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-7.4	Cara Baker		09/19/16 11:11	Disposed
MC47774-8.1	Walk In Ref #5	Eric Mensah	09/15/16 12:09	Retrieve from Storage
MC47774-8.1	Eric Mensah	Walk In Ref #5	09/15/16 13:38	Return to Storage
MC47774-8.1	Walk In Ref #5	Gert Dervishaj	09/15/16 16:19	Retrieve from Storage
MC47774-8.1	Gert Dervishaj	Walk In Ref #5	09/15/16 22:52	Return to Storage
MC47774-8.4	VOC Ref #10	Kayla Paradis	09/16/16 13:13	Retrieve from Storage
MC47774-8.4	Kayla Paradis	GCMSM	09/16/16 13:13	Load on Instrument
MC47774-8.4	GCMSM	Cara Baker	09/19/16 11:11	Unload from Instrument
MC47774-8.4	Cara Baker		09/19/16 11:11	Disposed

SGS ACCUTEST New England

Section 6

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Raw Data: M80816.D

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2895-MB	M80816.D	1	09/16/16	KP	n/a	n/a	MSM2895

6.1.1

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-2, MC47774-5, MC47774-7, MC47774-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/kg	
71-43-2	Benzene	ND	1.0	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	2.0	0.48	ug/kg	
74-83-9	Bromomethane	ND	10	1.6	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	3.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.41	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.41	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.94	ug/kg	
75-00-3	Chloroethane	ND	10	2.1	ug/kg	
67-66-3	Chloroform	ND	2.0	0.50	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.75	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.40	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.37	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.36	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.40	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	1.3	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.38	ug/kg	
591-78-6	2-Hexanone	ND	5.0	0.67	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.65	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.42	ug/kg	
100-42-5	Styrene	ND	5.0	0.31	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.9	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.30	ug/kg	
108-88-3	Toluene	1.5	5.0	0.40	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.35	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	1.4	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.31	ug/kg	
75-01-4	Vinyl chloride	ND	10	3.4	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.35	ug/kg	

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2895-MB	M80816.D	1	09/16/16	KP	n/a	n/a	MSM2895

6.1.1

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-2, MC47774-5, MC47774-7, MC47774-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	65-141%
2037-26-5	Toluene-D8	100%	65-129%
460-00-4	4-Bromofluorobenzene	110%	63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Raw Data: V49911.D

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1838-MB	V49911.D	1	09/20/16	KP	n/a	n/a	MSV1838

6.1.2

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-1, MC47774-3, MC47774-4, MC47774-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	3.5	10	3.3	ug/kg	J
71-43-2	Benzene	ND	1.0	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	2.0	0.48	ug/kg	
74-83-9	Bromomethane	ND	10	1.6	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.4	ug/kg	
75-15-0	Carbon disulfide	0.97	5.0	0.41	ug/kg	J
56-23-5	Carbon tetrachloride	ND	2.0	0.41	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.94	ug/kg	
75-00-3	Chloroethane	ND	10	2.1	ug/kg	
67-66-3	Chloroform	ND	2.0	0.50	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.75	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.40	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.37	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.36	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.40	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	1.3	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.38	ug/kg	
591-78-6	2-Hexanone	ND	5.0	0.67	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.65	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.42	ug/kg	
100-42-5	Styrene	ND	5.0	0.31	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.9	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.30	ug/kg	
108-88-3	Toluene	3.4	5.0	0.40	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.35	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	1.4	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.31	ug/kg	
75-01-4	Vinyl chloride	ND	10	3.4	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.35	ug/kg	

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1838-MB	V49911.D	1	09/20/16	KP	n/a	n/a	MSV1838

6.1.2

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-1, MC47774-3, MC47774-4, MC47774-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	65-141%
2037-26-5	Toluene-D8	99%	65-129%
460-00-4	4-Bromofluorobenzene	96%	63-137%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Raw Data: M80814.D

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2895-BS	M80814.D	1	09/16/16	KP	n/a	n/a	MSM2895

6.2.1

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-2, MC47774-5, MC47774-7, MC47774-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	63.8	128	24-179
71-43-2	Benzene	50	52.4	105	73-115
75-27-4	Bromodichloromethane	50	53.2	106	76-122
75-25-2	Bromoform	50	55.5	111	67-151
74-83-9	Bromomethane	50	50.3	101	52-139
78-93-3	2-Butanone (MEK)	50	49.2	98	32-151
75-15-0	Carbon disulfide	50	43.1	86	57-143
56-23-5	Carbon tetrachloride	50	53.0	106	73-129
108-90-7	Chlorobenzene	50	56.7	113	79-123
75-00-3	Chloroethane	50	56.4	113	51-159
67-66-3	Chloroform	50	51.9	104	72-122
74-87-3	Chloromethane	50	63.3	127	57-143
124-48-1	Dibromochloromethane	50	56.7	113	74-139
75-34-3	1,1-Dichloroethane	50	49.5	99	70-128
107-06-2	1,2-Dichloroethane	50	53.1	106	70-126
75-35-4	1,1-Dichloroethene	50	46.3	93	71-136
156-59-2	cis-1,2-Dichloroethene	50	55.3	111	78-128
156-60-5	trans-1,2-Dichloroethene	50	46.0	92	71-131
78-87-5	1,2-Dichloropropane	50	53.3	107	79-124
10061-01-5	cis-1,3-Dichloropropene	50	52.8	106	75-126
10061-02-6	trans-1,3-Dichloropropene	50	50.4	101	75-128
100-41-4	Ethylbenzene	50	59.1	118	76-122
591-78-6	2-Hexanone	50	68.1	136	26-169
108-10-1	4-Methyl-2-pentanone (MIBK)	50	56.7	113	43-166
75-09-2	Methylene chloride	50	49.4	99	74-125
100-42-5	Styrene	50	59.1	118	79-124
79-34-5	1,1,2,2-Tetrachloroethane	50	57.3	115	66-134
127-18-4	Tetrachloroethene	50	55.0	110	76-125
108-88-3	Toluene	50	52.8	106	76-119
71-55-6	1,1,1-Trichloroethane	50	54.5	109	70-130
79-00-5	1,1,2-Trichloroethane	50	53.9	108	75-124
79-01-6	Trichloroethene	50	52.3	105	74-127
75-01-4	Vinyl chloride	50	50.9	102	33-166
1330-20-7	Xylene (total)	150	178	119	78-122

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2895-BS	M80814.D	1	09/16/16	KP	n/a	n/a	MSM2895

6.2.1

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-2, MC47774-5, MC47774-7, MC47774-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	65-141%
2037-26-5	Toluene-D8	98%	65-129%
460-00-4	4-Bromofluorobenzene	98%	63-137%

* = Outside of Control Limits.

Raw Data: V49909.D

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1838-BS	V49909.D	1	09/20/16	KP	n/a	n/a	MSV1838

6.2.2

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-1, MC47774-3, MC47774-4, MC47774-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.9	96	24-200
71-43-2	Benzene	50	54.9	110	66-123
75-27-4	Bromodichloromethane	50	52.3	105	68-130
75-25-2	Bromoform	50	52.7	105	61-149
74-83-9	Bromomethane	50	39.4	79	52-151
78-93-3	2-Butanone (MEK)	50	56.2	112	45-171
75-15-0	Carbon disulfide	50	51.8	104	24-164
56-23-5	Carbon tetrachloride	50	51.2	102	54-151
108-90-7	Chlorobenzene	50	55.4	111	75-117
75-00-3	Chloroethane	50	39.8	80	54-160
67-66-3	Chloroform	50	49.1	98	65-127
74-87-3	Chloromethane	50	55.5	111	43-154
124-48-1	Dibromochloromethane	50	48.9	98	67-137
75-34-3	1,1-Dichloroethane	50	46.2	92	55-128
107-06-2	1,2-Dichloroethane	50	50.6	101	68-126
75-35-4	1,1-Dichloroethene	50	48.3	97	44-148
156-59-2	cis-1,2-Dichloroethene	50	54.2	108	63-132
156-60-5	trans-1,2-Dichloroethene	50	45.2	90	54-127
78-87-5	1,2-Dichloropropane	50	51.6	103	68-123
10061-01-5	cis-1,3-Dichloropropene	50	50.2	100	61-145
10061-02-6	trans-1,3-Dichloropropene	50	47.5	95	60-134
100-41-4	Ethylbenzene	50	58.1	116	74-127
591-78-6	2-Hexanone	50	60.6	121	44-166
108-10-1	4-Methyl-2-pentanone (MIBK)	50	47.7	95	63-138
75-09-2	Methylene chloride	50	50.3	101	54-132
100-42-5	Styrene	50	58.9	118	76-130
79-34-5	1,1,2,2-Tetrachloroethane	50	51.0	102	62-130
127-18-4	Tetrachloroethene	50	58.0	116	68-133
108-88-3	Toluene	50	53.9	108	73-124
71-55-6	1,1,1-Trichloroethane	50	48.4	97	60-135
79-00-5	1,1,2-Trichloroethane	50	52.3	105	72-125
79-01-6	Trichloroethene	50	54.3	109	73-120
75-01-4	Vinyl chloride	50	45.7	91	49-154
1330-20-7	Xylene (total)	150	177	118	74-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1838-BS	V49909.D	1	09/20/16	KP	n/a	n/a	MSV1838

6.2.2

6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-1, MC47774-3, MC47774-4, MC47774-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	76-129%
2037-26-5	Toluene-D8	98%	83-114%
460-00-4	4-Bromofluorobenzene	99%	75-124%

* = Outside of Control Limits.

Raw Data: M80834.D M80835.D

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC47774-2MS	M80834.D	1	09/16/16	KP	n/a	n/a	MSM2895
MC47774-2MSD	M80835.D	1	09/16/16	KP	n/a	n/a	MSM2895
MC47774-2	M80822.D	1	09/16/16	KP	n/a	n/a	MSM2895

6.3.1 6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-2, MC47774-5, MC47774-7, MC47774-8

CAS No.	Compound	MC47774-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	5.4	J	65.3	99.5	144	56.4	70.9	116	34* [a]	10-200/30
71-43-2	Benzene	ND		65.3	51.2	78	56.4	44.4	79	14	38-135/30
75-27-4	Bromodichloromethane	ND		65.3	56.4	86	56.4	47.3	84	18	45-136/30
75-25-2	Bromoform	ND		65.3	58.7	90	56.4	52.3	93	12	42-150/30
74-83-9	Bromomethane	ND		65.3	45.9	70	56.4	42.0	75	9	20-159/30
78-93-3	2-Butanone (MEK)	ND		65.3	38.7	59	56.4	39.8	71	3	10-187/30
75-15-0	Carbon disulfide	ND		65.3	41.8	64	56.4	35.6	63	16	29-157/30
56-23-5	Carbon tetrachloride	ND		65.3	55.8	85	56.4	49.9	89	11	42-148/30
108-90-7	Chlorobenzene	ND		65.3	52.9	81	56.4	46.2	82	14	33-148/30
75-00-3	Chloroethane	ND		65.3	45.3	69	56.4	35.5	63	24	32-162/30
67-66-3	Chloroform	ND		65.3	52.5	80	56.4	46.4	82	12	46-136/30
74-87-3	Chloromethane	ND		65.3	62.7	96	56.4	55.5	98	12	33-152/30
124-48-1	Dibromochloromethane	ND		65.3	56.2	86	56.4	49.4	88	13	46-147/30
75-34-3	1,1-Dichloroethane	ND		65.3	51.1	78	56.4	43.3	77	17	49-134/30
107-06-2	1,2-Dichloroethane	ND		65.3	60.5	93	56.4	50.7	90	18	46-135/30
75-35-4	1,1-Dichloroethene	ND		65.3	43.3	66	56.4	35.8	64	19	46-148/30
156-59-2	cis-1,2-Dichloroethene	ND		65.3	53.8	82	56.4	47.0	83	13	46-144/30
156-60-5	trans-1,2-Dichloroethene	ND		65.3	45.1	69	56.4	40.1	71	12	44-145/30
78-87-5	1,2-Dichloropropane	ND		65.3	58.2	89	56.4	50.9	90	13	48-138/30
10061-01-5	cis-1,3-Dichloropropene	ND		65.3	56.4	86	56.4	48.3	86	15	34-149/30
10061-02-6	trans-1,3-Dichloropropene	ND		65.3	58.4	89	56.4	47.8	85	20	28-151/30
100-41-4	Ethylbenzene	ND		65.3	54.0	83	56.4	47.9	85	12	32-150/30
591-78-6	2-Hexanone	ND		65.3	89.6	137	56.4	69.4	123	25	10-184/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		65.3	83.0	127	56.4	66.0	117	23	35-164/30
75-09-2	Methylene chloride	2.1		65.3	56.2	83	56.4	47.9	81	16	48-140/30
100-42-5	Styrene	ND		65.3	52.7	81	56.4	45.5	81	15	17-160/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		65.3	71.7	110	56.4	60.7	108	17	30-157/30
127-18-4	Tetrachloroethene	ND		65.3	48.1	74	56.4	42.7	76	12	40-146/30
108-88-3	Toluene	2.0	JB	65.3	56.3	83	56.4	48.9	83	14	33-145/30
71-55-6	1,1,1-Trichloroethane	ND		65.3	56.1	86	56.4	50.6	90	10	41-147/30
79-00-5	1,1,2-Trichloroethane	ND		65.3	70.8	108	56.4	55.8	99	24	40-148/30
79-01-6	Trichloroethene	2.6		65.3	52.8	77	56.4	46.8	78	12	36-155/30
75-01-4	Vinyl chloride	ND		65.3	54.4	83	56.4	49.3	87	10	11-183/30
1330-20-7	Xylene (total)	ND		196	158	81	169	142	84	11	33-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC47774-2MS	M80834.D	1	09/16/16	KP	n/a	n/a	MSM2895
MC47774-2MSD	M80835.D	1	09/16/16	KP	n/a	n/a	MSM2895
MC47774-2	M80822.D	1	09/16/16	KP	n/a	n/a	MSM2895

6.3.1 6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-2, MC47774-5, MC47774-7, MC47774-8

CAS No.	Surrogate Recoveries	MS	MSD	MC47774-2	Limits
1868-53-7	Dibromofluoromethane	99%	98%	101%	65-141%
2037-26-5	Toluene-D8	106%	102%	100%	65-129%
460-00-4	4-Bromofluorobenzene	102%	103%	114%	63-137%

(a) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Raw Data: V49923.D V49924.D

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC47776-1MS	V49923.D	1	09/20/16	KP	n/a	n/a	MSV1838
MC47776-1MSD	V49924.D	1	09/20/16	KP	n/a	n/a	MSV1838
MC47776-1	V49918.D	1	09/20/16	KP	n/a	n/a	MSV1838

6.3.2 6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-1, MC47774-3, MC47774-4, MC47774-6

CAS No.	Compound	MC47776-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	75.0		50.4	115	79	47.3	106	65	8	10-200/30
71-43-2	Benzene	1.4		50.4	48.4	93	47.3	39.6	81	20	38-135/30
75-27-4	Bromodichloromethane	ND		50.4	44.5	88	47.3	36.5	77	20	45-136/30
75-25-2	Bromoform	ND		50.4	40.4	80	47.3	35.5	75	13	42-150/30
74-83-9	Bromomethane	ND		50.4	33.5	66	47.3	26.4	56	24	20-159/30
78-93-3	2-Butanone (MEK)	11.1		50.4	54.7	86	47.3	56.9	97	4	10-187/30
75-15-0	Carbon disulfide	4.6	JB	50.4	43.0	76	47.3	33.8	62	24	29-157/30
56-23-5	Carbon tetrachloride	ND		50.4	47.3	94	47.3	35.2	74	29	42-148/30
108-90-7	Chlorobenzene	ND		50.4	46.8	93	47.3	34.3	72	31* [a]	33-148/30
75-00-3	Chloroethane	ND		50.4	38.7	77	47.3	31.7	67	20	32-162/30
67-66-3	Chloroform	ND		50.4	42.7	85	47.3	35.7	75	18	46-136/30
74-87-3	Chloromethane	ND		50.4	50.0	99	47.3	45.1	95	10	33-152/30
124-48-1	Dibromochloromethane	ND		50.4	42.9	85	47.3	34.2	72	23	46-147/30
75-34-3	1,1-Dichloroethane	ND		50.4	40.6	81	47.3	34.5	73	16	49-134/30
107-06-2	1,2-Dichloroethane	0.41	J	50.4	44.0	86	47.3	37.2	78	17	46-135/30
75-35-4	1,1-Dichloroethene	ND		50.4	44.6	88	47.3	36.2	76	21	46-148/30
156-59-2	cis-1,2-Dichloroethene	5.8		50.4	47.0	82	47.3	39.0	70	19	46-144/30
156-60-5	trans-1,2-Dichloroethene	ND		50.4	39.3	78	47.3	32.6	69	19	44-145/30
78-87-5	1,2-Dichloropropane	ND		50.4	45.2	90	47.3	36.7	78	21	48-138/30
10061-01-5	cis-1,3-Dichloropropene	ND		50.4	35.8	71	47.3	31.1	66	14	34-149/30
10061-02-6	trans-1,3-Dichloropropene	ND		50.4	32.3	64	47.3	29.3	62	10	28-151/30
100-41-4	Ethylbenzene	1.9	J	50.4	51.7	99	47.3	35.5	71	37* [a]	32-150/30
591-78-6	2-Hexanone	ND		50.4	50.3	100	47.3	50.0	106	1	10-184/30
108-10-1	4-Methyl-2-pentanone (MIBK)	2.2	J	50.4	35.8	67	47.3	35.8	71	0	35-164/30
75-09-2	Methylene chloride	ND		50.4	56.7	112	47.3	31.4	66	57* [a]	48-140/30
100-42-5	Styrene	ND		50.4	45.7	91	47.3	34.0	72	29	17-160/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		50.4	37.2	74	47.3	19.7	42	62* [a]	30-157/30
127-18-4	Tetrachloroethene	6.9		50.4	56.8	99	47.3	36.4	62	44* [a]	40-146/30
108-88-3	Toluene	1.7	JB	50.4	44.8	85	47.3	35.5	71	23	33-145/30
71-55-6	1,1,1-Trichloroethane	1.6	J	50.4	42.6	81	47.3	34.2	69	22	41-147/30
79-00-5	1,1,2-Trichloroethane	ND		50.4	42.7	85	47.3	37.0	78	14	40-148/30
79-01-6	Trichloroethene	2.2		50.4	58.4	111	47.3	48.8	98	18	36-155/30
75-01-4	Vinyl chloride	ND		50.4	43.5	86	47.3	35.7	75	20	11-183/30
1330-20-7	Xylene (total)	2.5		151	153	99	142	107	74	35* [a]	33-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC47776-1MS	V49923.D	1	09/20/16	KP	n/a	n/a	MSV1838
MC47776-1MSD	V49924.D	1	09/20/16	KP	n/a	n/a	MSV1838
MC47776-1	V49918.D	1	09/20/16	KP	n/a	n/a	MSV1838

6.3.2 6

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC47774-1, MC47774-3, MC47774-4, MC47774-6

CAS No.	Surrogate Recoveries	MS	MSD	MC47776-1	Limits
1868-53-7	Dibromofluoromethane	86%	88%	97%	65-141%
2037-26-5	Toluene-D8	95%	98%	93%	65-129%
460-00-4	4-Bromofluorobenzene	119%	96%	140%* [b]	63-137%

(a) High RPD due to possible matrix interference and/or sample non-homogeneity.
(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

* = Outside of Control Limits.

Raw Data: M80511.D

Instrument Performance Check (BFB)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSM2881-BFB **Injection Date:** 08/24/16
Lab File ID: M80511.D **Injection Time:** 09:10
Instrument ID: GCMSM

6.4.1 6

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	4816	21.2		Pass
75	30.0 - 60.0% of mass 95	11003	48.5		Pass
95	Base peak, 100% relative abundance	22680	100.0		Pass
96	5.0 - 9.0% of mass 95	1394	6.15		Pass
173	Less than 2.0% of mass 174	194	0.86	(1.07) [a]	Pass
174	50.0 - 100.0% of mass 95	18080	79.7		Pass
175	5.0 - 9.0% of mass 174	1465	6.46	(8.10) [a]	Pass
176	95.0 - 101.0% of mass 174	17344	76.5	(95.9) [a]	Pass
177	5.0 - 9.0% of mass 176	1037	4.57	(5.98) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSM2881-IC2881	M80511.D	08/24/16	09:10	00:00	Initial cal 0.5
MSM2881-IC2881	M80512.D	08/24/16	09:38	00:28	Initial cal 2
MSM2881-IC2881	M80513.D	08/24/16	10:06	00:56	Initial cal 5
MSM2881-IC2881	M80514.D	08/24/16	10:34	01:24	Initial cal 10
MSM2881-IC2881	M80515.D	08/24/16	11:02	01:52	Initial cal 20
MSM2881-ICC2881	M80516.D	08/24/16	11:30	02:20	Initial cal 50
MSM2881-IC2881	M80517.D	08/24/16	11:58	02:48	Initial cal 100
MSM2881-IC2881	M80518.D	08/24/16	12:26	03:16	Initial cal 200
MSM2881-IC2881	M80519.D	08/24/16	12:55	03:45	Initial cal 400
MSM2881-ICV2881	M80522.D	08/24/16	14:20	05:10	Initial cal verification 50
MSM2881-BS	M80522.D	08/24/16	14:20	05:10	Blank Spike
MSM2881-MB	M80524.D	08/24/16	15:18	06:08	Method Blank
ZZZZZZ	M80525.D	08/24/16	15:46	06:36	(unrelated sample)
ZZZZZZ	M80526.D	08/24/16	16:15	07:05	(unrelated sample)
MC47415-4	M80527.D	08/24/16	16:44	07:34	(used for QC only; not part of job MC47774)
ZZZZZZ	M80528.D	08/24/16	17:13	08:03	(unrelated sample)
ZZZZZZ	M80529.D	08/24/16	17:41	08:31	(unrelated sample)
MC47415-4MS	M80530.D	08/24/16	18:10	09:00	Matrix Spike

Raw Data: M80812.D

Instrument Performance Check (BFB)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSM2895-BFB **Injection Date:** 09/16/16
Lab File ID: M80812.D **Injection Time:** 11:10
Instrument ID: GCMSM

6.4.2 6

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	3991	21.5		Pass
75	30.0 - 60.0% of mass 95	9060	48.7		Pass
95	Base peak, 100% relative abundance	18589	100.0		Pass
96	5.0 - 9.0% of mass 95	1229	6.61		Pass
173	Less than 2.0% of mass 174	132	0.71	(0.88) [a]	Pass
174	50.0 - 100.0% of mass 95	14998	80.7		Pass
175	5.0 - 9.0% of mass 174	1167	6.28	(7.78) [a]	Pass
176	95.0 - 101.0% of mass 174	14380	77.4	(95.9) [a]	Pass
177	5.0 - 9.0% of mass 176	955	5.14	(6.64) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSM2895-CC2881	M80813.D	09/16/16	11:38	00:28	Continuing cal 50
MSM2895-BS	M80814.D	09/16/16	12:07	00:57	Blank Spike
MSM2895-MB	M80816.D	09/16/16	13:04	01:54	Method Blank
ZZZZZZ	M80819.D	09/16/16	14:28	03:18	(unrelated sample)
ZZZZZZ	M80820.D	09/16/16	14:56	03:46	(unrelated sample)
MC47774-2	M80822.D	09/16/16	15:53	04:43	NORTH
MC47774-5	M80825.D	09/16/16	17:16	06:06	EAST
MC47774-7	M80827.D	09/16/16	18:11	07:01	SMALL PILE
MC47774-8	M80828.D	09/16/16	18:39	07:29	FIELD DUPE
ZZZZZZ	M80829.D	09/16/16	19:07	07:57	(unrelated sample)
ZZZZZZ	M80830.D	09/16/16	19:34	08:24	(unrelated sample)
ZZZZZZ	M80831.D	09/16/16	20:02	08:52	(unrelated sample)
ZZZZZZ	M80832.D	09/16/16	20:30	09:20	(unrelated sample)
ZZZZZZ	M80833.D	09/16/16	20:57	09:47	(unrelated sample)
MC47774-2MS	M80834.D	09/16/16	21:26	10:16	Matrix Spike
MC47774-2MSD	M80835.D	09/16/16	21:54	10:44	Matrix Spike Duplicate

Raw Data: V49890.D

Instrument Performance Check (BFB)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSV1837-BFB **Injection Date:** 09/19/16
Lab File ID: V49890.D **Injection Time:** 12:56
Instrument ID: GCMSV

6.4.3 6

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	18368	23.8		Pass
75	30.0 - 60.0% of mass 95	40731	52.9		Pass
95	Base peak, 100% relative abundance	77040	100.0		Pass
96	5.0 - 9.0% of mass 95	5343	6.94		Pass
173	Less than 2.0% of mass 174	286	0.37	(0.59) [a]	Pass
174	50.0 - 100.0% of mass 95	48496	62.9		Pass
175	5.0 - 9.0% of mass 174	3510	4.56	(7.24) [a]	Pass
176	95.0 - 101.0% of mass 174	46776	60.7	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	2945	3.82	(6.30) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSV1837-IC1837	V49891.D	09/19/16	13:26	00:30	Initial cal 0.5
MSV1837-IC1837	V49892.D	09/19/16	13:56	01:00	Initial cal 2
MSV1837-IC1837	V49893.D	09/19/16	14:25	01:29	Initial cal 5
MSV1837-IC1837	V49894.D	09/19/16	14:55	01:59	Initial cal 10
MSV1837-IC1837	V49895.D	09/19/16	15:25	02:29	Initial cal 20
MSV1837-ICC1837	V49896.D	09/19/16	15:55	02:59	Initial cal 50
MSV1837-IC1837	V49897.D	09/19/16	16:25	03:29	Initial cal 100
MSV1837-IC1837	V49898.D	09/19/16	16:55	03:59	Initial cal 200
MSV1837-IC1837	V49899.D	09/19/16	17:25	04:29	Initial cal 400
MSV1837-ICV1837	V49902.D	09/19/16	18:55	05:59	Initial cal verification 50

Raw Data: V49908.D

Instrument Performance Check (BFB)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSV1838-BFB **Injection Date:** 09/20/16
Lab File ID: V49908.D **Injection Time:** 12:32
Instrument ID: GCMSV

6.4.4 6

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	19504	20.6		Pass
75	30.0 - 60.0% of mass 95	45125	47.7		Pass
95	Base peak, 100% relative abundance	94589	100.0		Pass
96	5.0 - 9.0% of mass 95	6062	6.41		Pass
173	Less than 2.0% of mass 174	541	0.57	(0.85) [a]	Pass
174	50.0 - 100.0% of mass 95	63480	67.1		Pass
175	5.0 - 9.0% of mass 174	4322	4.57	(6.81) [a]	Pass
176	95.0 - 101.0% of mass 174	60592	64.1	(95.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4142	4.38	(6.84) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSV1838-CC1837	V49908.D	09/20/16	12:32	00:00	Continuing cal 50
MSV1838-BS	V49909.D	09/20/16	13:02	00:30	Blank Spike
MSV1838-MB	V49911.D	09/20/16	14:02	01:30	Method Blank
ZZZZZZ	V49912.D	09/20/16	14:32	02:00	(unrelated sample)
MC47774-1	V49913.D	09/20/16	15:02	02:30	BOTTOM
MC47774-3	V49914.D	09/20/16	15:31	02:59	SOUTH
MC47774-4	V49915.D	09/20/16	16:01	03:29	WEST
MC47774-6	V49916.D	09/20/16	16:31	03:59	LARGE PILE
MC47774-7	V49917.D	09/20/16	17:00	04:28	SMALL PILE
MC47776-1	V49918.D	09/20/16	17:30	04:58	(used for QC only; not part of job MC47774)
ZZZZZZ	V49920.D	09/20/16	18:29	05:57	(unrelated sample)
ZZZZZZ	V49921.D	09/20/16	18:59	06:27	(unrelated sample)
ZZZZZZ	V49922.D	09/20/16	19:28	06:56	(unrelated sample)
MC47776-1MS	V49923.D	09/20/16	19:58	07:26	Matrix Spike
MC47776-1MSD	V49924.D	09/20/16	20:28	07:56	Matrix Spike Duplicate
ZZZZZZ	V49927.D	09/20/16	21:56	09:24	(unrelated sample)
ZZZZZZ	V49928.D	09/20/16	22:26	09:54	(unrelated sample)
ZZZZZZ	V49929.D	09/20/16	22:55	10:23	(unrelated sample)
ZZZZZZ	V49930.D	09/20/16	23:25	10:53	(unrelated sample)
ZZZZZZ	V49931.D	09/20/16	23:54	11:22	(unrelated sample)
ZZZZZZ	V49932.D	09/21/16	00:23	11:51	(unrelated sample)
ZZZZZZ	V49933.D	09/21/16	00:53	12:21	(unrelated sample)
ZZZZZZ	V49934.D	09/21/16	01:23	12:51	(unrelated sample)
ZZZZZZ	V49935.D	09/21/16	01:53	13:21	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSV1838-BFB **Injection Date:** 09/20/16
Lab File ID: V49908.D **Injection Time:** 12:32
Instrument ID: GCMSV

6.4.4 6

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	V49936.D	09/21/16	02:22	13:50	(unrelated sample)
ZZZZZZ	V49937.D	09/21/16	02:51	14:19	(unrelated sample)
ZZZZZZ	V49938.D	09/21/16	03:20	14:48	(unrelated sample)
ZZZZZZ	V49939.D	09/21/16	03:50	15:18	(unrelated sample)
ZZZZZZ	V49940.D	09/21/16	04:19	15:47	(unrelated sample)
ZZZZZZ	V49941.D	09/21/16	04:49	16:17	(unrelated sample)
ZZZZZZ	V49942.D	09/21/16	05:19	16:47	(unrelated sample)
ZZZZZZ	V49943.D	09/21/16	05:48	17:16	(unrelated sample)
ZZZZZZ	V49944.D	09/21/16	06:18	17:46	(unrelated sample)
ZZZZZZ	V49945.D	09/21/16	06:47	18:15	(unrelated sample)
ZZZZZZ	V49946.D	09/21/16	07:17	18:45	(unrelated sample)
ZZZZZZ	V49947.D	09/21/16	07:46	19:14	(unrelated sample)
ZZZZZZ	V49948.D	09/21/16	08:16	19:44	(unrelated sample)
ZZZZZZ	V49949.D	09/21/16	08:45	20:13	(unrelated sample)
ZZZZZZ	V49950.D	09/21/16	09:15	20:43	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Check Std: MSM2895-CC2881 **Injection Date:** 09/16/16
Lab File ID: M80813.D **Injection Time:** 11:38
Instrument ID: GCMSM **Method:** SW846 8260C

6.5.1 6

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	63129	9.77	103532	10.67	43803	13.90	51994	16.49	34336	7.69
Upper Limit [a]	126258	10.27	207064	11.17	87606	14.40	103988	16.99	68672	8.19
Lower Limit [b]	31565	9.27	51766	10.17	21902	13.40	25997	15.99	17168	7.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM2895-BS	60282	9.77	98667	10.67	42007	13.90	49678	16.49	32339	7.68
MSM2895-MB	57202	9.77	90356	10.68	40417	13.90	40749	16.49	33578	7.68
ZZZZZZ	58138	9.77	93538	10.67	41892	13.90	42228	16.49	56731	7.68
ZZZZZZ	53008	9.77	85643	10.67	38382	13.90	37414	16.49	31648	7.68
MC47774-2	51711	9.77	83017	10.67	36419	13.90	34388	16.49	30898	7.68
MC47774-5	51330	9.77	82495	10.67	38762	13.90	39268	16.49	31634	7.69
MC47774-7	41549	9.77	66364	10.67	28334	13.90	22540[c]	16.49	30921	7.68
MC47774-8	50752	9.77	80440	10.67	40910	13.90	40600	16.49	25560	7.68
ZZZZZZ	46493	9.77	75337	10.67	25182	13.90	12863[c]	16.49	29632	7.68
ZZZZZZ	43854	9.77	70300	10.67	31294	13.90	28337	16.49	25057	7.68
ZZZZZZ	46543	9.77	74479	10.67	30314	13.90	21156[c]	16.49	24600	7.68
ZZZZZZ	21895[c]	9.77	41433[c]	10.67	8156[c]	13.90	2590[c]	16.49	26602	7.68
ZZZZZZ	46163	9.77	71681	10.67	29342	13.90	22175[c]	16.49	24717	7.68
MC47774-2MS	8129[c]	9.77	12716[c]	10.67	6566[c]	13.90	7306[c]	16.49	5566[c]	7.67
MC47774-2MSD	7212[c]	9.77	11883[c]	10.67	5817[c]	13.90	6578[c]	16.49	4741[c]	7.66

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Internal Standard Area Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Check Std: MSV1838-CC1837 **Injection Date:** 09/20/16
Lab File ID: V49908.D **Injection Time:** 12:32
Instrument ID: GCMSV **Method:** SW846 8260C

6.5.2 6

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	176945	8.93	318160	9.83	159933	13.07	149824	15.68	118695	6.93
Upper Limit [a]	353890	9.43	636320	10.33	319866	13.57	299648	16.18	237390	7.43
Lower Limit [b]	88473	8.43	159080	9.33	79967	12.57	74912	15.18	59348	6.43

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1838-BS	183149	8.93	320114	9.83	160564	13.07	152830	15.68	115549	6.90
MSV1838-MB	147324	8.93	261695	9.83	135663	13.07	130352	15.68	121833	6.94
ZZZZZZ	159094	8.93	276553	9.83	143812	13.07	132549	15.68	234900	6.93
MC47774-1	149811	8.93	267417	9.83	124501	13.07	78383	15.68	105810	6.94
MC47774-3	154371	8.93	275999	9.83	143156	13.07	120584	15.68	95005	6.94
MC47774-4	142229	8.93	255117	9.83	127807	13.07	101389	15.68	93162	6.92
MC47774-6	137844	8.93	246738	9.83	126068	13.07	105795	15.68	97775	6.93
MC47774-7 [c]	112864	8.93	218861	9.83	81557	13.07	31784[d]	15.68	97432	6.93
MC47776-1	143976	8.93	255443	9.83	109909	13.07	61631[d]	15.68	180253	6.90
ZZZZZZ	7449[d]	8.93	12150[d]	9.82	6061[d]	13.07	5284[d]	15.68	7607[e]	6.85
ZZZZZZ	16402[d]	8.93	27450[d]	9.82	13783[d]	13.07	12875[d]	15.68	17469[e]	6.85
ZZZZZZ	173887	8.93	298816	9.83	145166	13.07	109712	15.68	189927	6.93
MC47776-1MS	176110	8.93	293495	9.83	130302	13.07	87865	15.68	86895	6.89
MC47776-1MSD	180890	8.93	309513	9.83	152938	13.07	148837	15.68	138737	6.93
ZZZZZZ	161966	8.93	275921	9.82	139653	13.07	137127	15.68	114059	6.94
ZZZZZZ	158238	8.93	275703	9.83	144462	13.07	137127	15.68	111072	6.93
ZZZZZZ	157075	8.93	270834	9.83	140802	13.07	135346	15.68	117977	6.92
ZZZZZZ	150818	8.93	262922	9.82	137802	13.07	129230	15.68	98563	6.94
ZZZZZZ	156429	8.93	272979	9.83	142392	13.07	129843	15.68	111119	6.94
ZZZZZZ	146506	8.93	268930	9.83	138655	13.07	131343	15.68	84253	6.90
ZZZZZZ	152189	8.93	272456	9.82	141573	13.07	130139	15.68	92406	6.92
ZZZZZZ	142722	8.93	248635	9.83	132444	13.07	122746	15.68	88655	6.95
ZZZZZZ	145130	8.93	259483	9.83	137461	13.07	127035	15.68	94029	6.95
ZZZZZZ	140268	8.93	257641	9.83	138382	13.07	125866	15.68	80611	6.91
ZZZZZZ	137683	8.93	245596	9.83	131933	13.07	120313	15.68	90866	6.94
ZZZZZZ	132255	8.93	242003	9.82	133867	13.07	120541	15.68	86665	6.94
ZZZZZZ	129255	8.93	229735	9.82	123866	13.07	115418	15.68	86688	6.95
ZZZZZZ	124990	8.93	225008	9.82	120452	13.07	111240	15.68	85137	6.95
ZZZZZZ	133353	8.93	244641	9.82	131918	13.07	120271	15.68	97796	6.95
ZZZZZZ	129867	8.93	233454	9.82	125547	13.07	114020	15.68	83498	6.94
ZZZZZZ	121655	8.93	218881	9.82	120187	13.07	110949	15.68	89140	6.95
ZZZZZZ	140369	8.93	253440	9.82	136221	13.07	123292	15.68	97521	6.95
ZZZZZZ	128356	8.93	231118	9.82	127302	13.07	115319	15.68	90845	6.95
ZZZZZZ	139159	8.93	249390	9.82	136711	13.07	126554	15.68	94715	6.95
ZZZZZZ	131736	8.93	244531	9.82	132532	13.07	121856	15.68	103174	6.96

Volatile Internal Standard Area Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Check Std: MSV1838-CC1837 **Injection Date:** 09/20/16
Lab File ID: V49908.D **Injection Time:** 12:32
Instrument ID: GCMSV **Method:** SW846 8260C

6.5.2 6

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
ZZZZZZ	121636	8.92	222622	9.82	118918	13.07	110991	15.68	77943	6.95
ZZZZZZ	121630	8.92	218553	9.82	119062	13.07	110322	15.68	85570	6.95
ZZZZZZ	138728	8.93	250910	9.82	134969	13.07	122979	15.68	91421	6.95

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run for internal standard areas.
(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.
(e) Outside control limits. Target analytes not associated with this internal standard.

Volatile Surrogate Recovery Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC47774-1	V49913.D	94	97	129
MC47774-2	M80822.D	101	100	114
MC47774-3	V49914.D	94	100	104
MC47774-4	V49915.D	95	100	110
MC47774-5	M80825.D	106	104	107
MC47774-6	V49916.D	94	100	106
MC47774-7	V49917.D	106	82	169* [a]
MC47774-7	M80827.D	110	97	127
MC47774-8	M80828.D	101	106	109
MC47774-2MS	M80834.D	99	106	102
MC47774-2MSD	M80835.D	98	102	103
MC47776-1MS	V49923.D	86	95	119
MC47776-1MSD	V49924.D	88	98	96
MSM2895-BS	M80814.D	101	98	98
MSM2895-MB	M80816.D	104	100	110
MSV1838-MB	V49911.D	94	99	96

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	65-141%
S2 = Toluene-D8	65-129%
S3 = 4-Bromofluorobenzene	63-137%

(a) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

6.6.1 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSM2881-ICC2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80516.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
                    Response Factor Report  GCMS M

 Method       : C:\msdchem\1\methods\M160824S.M (RTE Integrator)
 Title        : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
 Last Update  : Wed Aug 24 14:03:08 2016
 Response via : Initial Calibration

 Calibration Files
 .5  =M80511.D    2   =M80512.D    5   =M80513.D    10  =M80514.D
 20  =M80515.D    50  =M80516.D    100 =M80517.D    200 =M80518.D
 400 =M80519.D        =

  Compound
            .5    2     5     10    20    50    100   200   400     Avg    %RSD
 ------------------------------------------------------------------------------

 1) I   tert butyl alcohol-d9 ----------------ISTD--------------------
 2)  tertiary butyl alcohol
                         1.378 1.394 1.392 1.432 1.280 1.344 1.418   1.377    3.72
 3)  Ethanol
                         0.130 0.121 0.118 0.110 0.108 0.108 0.107   0.115    7.74

 4) I   pentafluorobenzene    ----------------ISTD--------------------
 5)  dichlorodifluoromethane
                   0.566 0.744 0.787 0.673 0.660 0.744 0.756 0.721   0.706   10.00
 6)  chloromethane
                   0.946 1.118 1.217 1.091 1.011 1.015 1.029 0.752   1.022   13.37
 7)  vinyl chloride
                   0.929 1.134 1.221 1.083 1.016 0.985 1.010 0.949   1.041    9.49
 8)  bromomethane
                   0.676 0.851 0.927 0.881 0.970 0.692 0.751 0.759   0.813   13.47
 9)  chloroethane
                         0.560 0.580 0.559 0.614 0.449 0.471 0.481   0.531   11.86
10)  ethyl ether
                   0.340 0.514 0.538 0.514 0.503 0.439 0.458 0.481   0.473   13.30
11)  acetonitrile
                               0.069 0.070 0.054 0.058 0.058 0.049   0.060   14.13
12)  trichlorofluoromethane
                   1.122 1.316 1.431 1.265 1.269 1.119 1.147 1.074   1.218   10.03
13)  freon-113
                   0.624 0.768 0.841 0.772 0.761 0.685 0.701 0.691   0.730    9.27
14)  acrolein
                         0.089 0.093 0.088 0.087 0.080 0.083 0.085   0.086    4.82
15)  1,1-dichloroethene
                   0.583 0.721 0.740 0.677 0.668 0.590 0.609 0.617   0.651    9.22
16)  acetone
                         0.169 0.142 0.142 0.132 0.101 0.097 0.096   0.126   22.37
              ---- Linear regression ----  Coefficient =  0.9924
                Response Ratio = 0.01041 + 0.09681 *A

17)  Methyl Acetate
                         0.447 0.486 0.444 0.431 0.376 0.377 0.401   0.423    9.58
18)  methylene chloride
                   0.828 0.894 0.888 0.793 0.762 0.648 0.669 0.669   0.769   12.90
19)  methyl tert butyl ether
                   1.552 1.857 1.966 1.829 1.838 1.636 1.699 1.757   1.767    7.56
20)  acrylonitrile
                         0.219 0.255 0.249 0.245 0.222 0.226 0.239   0.237    6.00
21)  allyl chloride
                   0.870 1.052 1.109 1.043 1.027 0.878 0.919 0.930   0.978    9.17
```

6.7.1 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSM2881-ICC2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80516.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
22)  trans-1,2-dichloroethene
                   0.617 0.772 0.795 0.751 0.741 0.640 0.664 0.673   0.707    9.38
23)  iodomethane
                   1.179 1.456 1.560 1.437 1.438 1.246 1.328 1.327   1.371    9.08
24)  carbon disulfide
                   1.978 2.319 2.401 2.181 2.165 1.984 2.056 1.959   2.130    7.77
25)  propionitrile
                         0.070 0.099 0.094 0.096 0.090 0.093 0.102   0.092   11.19
26)  vinyl acetate
                         1.305 1.579 1.538 1.542 1.408 1.466 1.511   1.478    6.42
27)  chloroprene
                   0.915 1.154 1.186 1.107 1.118 0.982 1.020 1.052   1.067    8.59
28)  di-isopropyl ether
                   1.861 2.246 2.362 2.233 2.247 1.975 2.076 2.137   2.142    7.69
29)  methacrylonitrile
                         0.364 0.373 0.367 0.356 0.329 0.336 0.363   0.355    4.72
30)  2-butanone
                               0.167 0.145 0.151 0.083 0.079 0.081   0.118   34.46
              ---- Quadratic regression ----  Coefficient =  0.9904
                Response Ratio = 0.03912 + 0.06682 *A + 0.00117 *A^2

31)  Hexane
                   0.566 0.676 0.675 0.606 0.610 0.570 0.580 0.587   0.609    7.20
32)  1,1-dichloroethane
                   1.112 1.342 1.337 1.292 1.254 1.091 1.119 1.144   1.211    8.75
33)  tert-butyl ethyl ether
                   1.761 2.173 2.209 2.135 2.120 1.892 1.977 2.049   2.040    7.53
34)  isobutyl alcohol
                                                                     0.000#  -1.00
35)  2,2-dichloropropane
                   0.990 1.125 1.173 1.067 1.070 0.945 0.989 0.977   1.042    7.65
36)  cis-1,2-dichloroethene
                   0.652 0.833 0.878 0.833 0.800 0.710 0.746 0.767   0.777    9.51
37)  ethyl acetate
                                                                     0.000#  -1.00
38)  bromochloromethane
                   0.338 0.408 0.467 0.448 0.428 0.376 0.399 0.415   0.410    9.87
39)  chloroform
                   1.232 1.379 1.419 1.336 1.322 1.143 1.186 1.207   1.278    7.78
40)  dibromofluoromethane (s)
             0.604 0.592 0.609 0.603 0.587 0.574 0.563 0.560 0.541   0.582    4.01
41)  Tetrahydrofuran
                         0.231 0.236 0.212 0.210 0.192 0.196 0.206   0.212    7.79
42)  1,1,1-trichloroethane
                   1.024 1.210 1.326 1.224 1.227 1.078 1.123 1.117   1.166    8.37

43) I   1,4-difluorobenzene   ----------------ISTD--------------------
44)  Cyclohexane
                   0.616 0.709 0.750 0.691 0.686 0.615 0.646 0.639   0.669    7.19
45)  carbon tetrachloride
                   0.629 0.748 0.787 0.733 0.727 0.645 0.671 0.674   0.702    7.85
46)  1,1-dichloropropene
                   0.474 0.549 0.591 0.568 0.552 0.486 0.509 0.527   0.532    7.65
47)  benzene
             1.668 1.355 1.654 1.716 1.647 1.640 1.413 1.503 1.559   1.573    7.93
48)  1,2-dichloroethane
                   0.479 0.574 0.598 0.583 0.565 0.499 0.528 0.568   0.549    7.74
49)  tert-amyl methyl ether
                   0.885 1.126 1.178 1.140 1.141 1.018 1.077 1.134   1.087    8.75
50)  heptane
```

6.7.1 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSM2881-ICC2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80516.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
                   0.435 0.517 0.548 0.520 0.522 0.473 0.487 0.502   0.500    7.03
51)  trichloroethene
                   0.378 0.463 0.474 0.456 0.455 0.400 0.423 0.440   0.436    7.62
52)  1,2-dichloropropane
                   0.346 0.433 0.443 0.440 0.427 0.371 0.400 0.426   0.411    8.64
53)  dibromomethane
                   0.236 0.267 0.293 0.289 0.275 0.244 0.253 0.269   0.266    7.62
54)  bromodichloromethane
                   0.487 0.578 0.608 0.584 0.573 0.504 0.532 0.563   0.554    7.59
55)  Methylcyclohexane
                   0.515 0.664 0.676 0.646 0.643 0.593 0.622 0.639   0.625    8.14
56)  2-chloroethyl vinyl ether
                         0.118 0.127 0.127 0.131 0.118 0.129 0.143   0.128    6.86
57)  methyl methacrylate
                         0.224 0.235 0.231 0.229 0.216 0.228 0.253   0.231    4.99
58)  1,4-dioxane
                                     0.003 0.004 0.004 0.004 0.004   0.004#  16.68
              ---- Linear regression ----  Coefficient =  0.9988
                Response Ratio = -0.00260 + 0.00454 *A

59)  cis-1,3-dichloropropene
                   0.456 0.574 0.597 0.595 0.590 0.527 0.575 0.623   0.567    9.31
60)  toluene-d8 (s)
           1.154 1.138 1.152 1.143 1.146 1.122 1.118 1.123 1.124   1.136    1.23
61)  4-methyl-2-pentanone
                   0.319 0.379 0.398 0.389 0.388 0.374 0.380 0.403   0.378    6.89
62)  toluene
                   0.979 1.033 1.006 0.978 0.999 0.878 0.942 0.988   0.975    4.85
63)  trans-1,3-dichloropropene
                   0.415 0.501 0.521 0.506 0.507 0.464 0.501 0.548   0.495    8.04
64)  1,1,2-trichloroethane
                   0.228 0.296 0.296 0.287 0.278 0.250 0.266 0.288   0.273    8.92
65)  ethyl methacrylate
                   0.350 0.413 0.432 0.425 0.425 0.392 0.414 0.451   0.413    7.41

66) I   chlorobenzene-d5      ----------------ISTD--------------------
67)  tetrachloroethene
                   0.774 0.960 1.015 0.974 1.021 0.943 1.022 1.099   0.976    9.71
68)  1,3-dichloropropane
                   0.855 1.046 1.142 1.102 1.113 1.009 1.061 1.138   1.058    8.90
69)  dibromochloromethane
                   0.812 1.030 1.035 1.028 1.059 0.976 1.048 1.126   1.014    9.05
70)  1,2-dibromoethane
                   0.563 0.758 0.780 0.766 0.790 0.719 0.760 0.814   0.744   10.49
71)  2-hexanone
                   0.495 0.621 0.697 0.653 0.638 0.629 0.624 0.666   0.628    9.45
72)  chlorobenzene
                   2.044 2.536 2.566 2.498 2.615 2.359 2.503 2.648   2.471    7.83
73)  1,1,1,2-tetrachloroethane
                   0.867 0.976 1.090 1.048 1.124 1.037 1.105 1.171   1.052    9.09
74)  ethylbenzene
                   3.396 4.099 4.201 4.135 4.439 3.981 4.216 4.478   4.118    8.16
75)  m,p-xylene
           1.600 1.325 1.590 1.687 1.668 1.807 1.641 1.738 1.841   1.655    9.11
76)  o-xylene
                   1.312 1.590 1.763 1.715 1.850 1.668 1.786 1.893   1.697   10.79
77)  styrene
                   2.135 2.464 2.699 2.693 2.899 2.640 2.785 3.028   2.668   10.26
78)  bromoform
                   0.477 0.616 0.666 0.654 0.672 0.642 0.685 0.751   0.645   12.19
```

6.7.1 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSM2881-ICC2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80516.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
 79)  trans-1,4-dichloro-2-butene
                        0.305 0.306 0.284 0.296 0.288 0.289 0.306   0.296    3.26

 80) I   1,4-dichlorobenzene-d ----------------ISTD--------------------
 81)  isopropylbenzene
                    3.083 3.798 4.020 3.944 4.045 3.569 3.776 3.835   3.759    8.32
 82)  bromofluorobenzene (s)
            0.863 0.840 0.837 0.820 0.808 0.783 0.746 0.745         0.805    5.43
 83)  bromobenzene
                    0.840 0.960 1.050 1.007 0.986 0.876 0.956 1.020   0.962    7.47
 84)  1,1,2,2-tetrachloroethane
                    0.824 0.979 1.010 0.965 0.911 0.824 0.840 0.862   0.902    8.31
 85)  1,2,3-trichloropropane
                    0.705 0.840 0.877 0.818 0.772 0.686 0.702 0.731   0.766    9.36
 86)  n-propylbenzene
                    3.832 4.592 4.680 4.634 4.671 4.079 4.244 4.342   4.384    7.18
 87)  2-chlorotoluene
                    2.518 2.981 3.088 3.047 3.094 2.669 2.820 2.989   2.901    7.31
 88)  4-chlorotoluene
                    2.236 2.662 2.773 2.656 2.642 2.299 2.368 2.416   2.507    7.97
 89)  1,3,5-trimethylbenzene
                    2.631 3.203 3.437 3.344 3.555 3.110 3.324 3.520   3.266    9.10
 90)  tert-butylbenzene
                    1.337 1.715 1.847 1.817 1.915 1.719 1.861 1.928   1.767   10.82
 91)  1,2,4-trimethylbenzene
                    2.759 3.311 3.526 3.483 3.624 3.174 3.374 3.457   3.339    8.14
 92)  sec-butylbenzene
                    3.428 4.206 4.432 4.396 4.628 4.147 4.415 4.516   4.271    8.76
 93)  1,3-dichlorobenzene
                    1.740 1.959 2.040 1.994 2.053 1.838 1.949 2.005   1.947    5.50
 94)  p-isopropyltoluene
                    3.028 3.611 3.843 3.809 4.048 3.688 3.927 4.035   3.749    8.78
 95)  1,4-dichlorobenzene
                    1.912 2.049 2.134 1.970 2.061 1.843 1.942 2.000   1.989    4.64
 96)  1,2-dichlorobenzene
                    1.652 1.973 2.075 2.017 2.061 1.845 1.950 2.024   1.950    7.21
 97)  n-butylbenzene
                    3.019 3.452 3.651 3.485 3.619 3.306 3.397 3.423   3.419    5.77
 98)  1,2-dibromo-3-chloropropane
                        0.205 0.236 0.203 0.192 0.183 0.184 0.190   0.199    9.23
 99)  1,3,5-trichlorobenzene
                    1.189 1.395 1.464 1.347 1.362 1.275 1.405 1.454   1.362    6.77
100)  1,2,4-trichlorobenzene
                    1.373 1.493 1.533 1.420 1.464 1.375 1.487 1.532   1.460    4.39
101)  hexachlorobutadiene
                    0.628 0.713 0.725 0.655 0.672 0.639 0.697 0.745   0.684    6.20
102)  naphthalene
                    3.369 3.878 4.067 3.933 4.008 3.857 4.155 4.202   3.934    6.60
103)  1,2,3-trichlorobenzene
                    1.251 1.467 1.490 1.397 1.445 1.328 1.471 1.487   1.417    6.10
104)  2-methylnaphthalene
                    1.940 2.218 2.373 2.178 2.268 2.194 2.393 2.437   2.250    7.06
105)  1-methylnaphthalene
                    1.606 1.823 1.960 1.820 1.904 1.841 2.014 2.070   1.880    7.65
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M160824S.M        Wed Aug 24 15:34:13 2016
```

6.7.1 6

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSM2881-ICV2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80522.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\M160824\M80522.D          Vial: 14
Acq On    : 24 Aug 2016   2:20 pm                     Operator: kaylap
Sample    : icv2881-50                                Inst    : GCMS M
Misc      : MS37188,MSM2881,5,,,5,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\methods\M160824S.M (RTE Integrator)
Title        : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
Last Update  : Wed Aug 24 14:03:08 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	500.000	500.000	0.0	106	0.00	7.68
2 P	tertiary butyl alcohol	500.000	577.777	-15.6	118	0.00	7.79
3 P	Ethanol	5000.000	4495.550	10.1	99	-0.01	6.54
4 I	pentafluorobenzene	50.000	50.000	0.0	102	0.00	9.77
5 P	dichlorodifluoromethane	50.000	57.739	-15.5	126	0.00	4.43
6 P	chloromethane	50.000	61.696	-23.4#	127	0.00	4.83
7 P	vinyl chloride	50.000	47.530	4.9	99	0.00	5.08
8 P	bromomethane	50.000	58.576	-17.2	100	0.00	5.71
9 P	chloroethane	50.000	54.321	-8.6	95	0.00	5.89
10 P	ethyl ether	50.000	49.312	1.4	94	0.00	6.70
11 P	acetonitrile	50.000	51.575	-3.2	116	0.00	7.52
12 P	trichlorofluoromethane	50.000	50.916	-1.8	99	0.00	6.34
13 P	freon-113	50.000	51.248	-2.5	100	0.00	7.10
14 P	acrolein	250.000	272.255	-8.9	110	0.00	6.93
15 P	1,1-dichloroethene	50.000	48.049	3.9	95	0.00	7.12
16 P	acetone	50.000	66.350	-32.7#	107	0.00	7.11
17 P	Methyl Acetate	50.000	72.314	-44.6#	144	0.00	7.52
18 P	methylene chloride	50.000	48.037	3.9	99	0.00	7.76
19 P	methyl tert butyl ether	50.000	52.983	-6.0	103	0.00	8.07
20 P	acrylonitrile	50.000	52.137	-4.3	102	0.00	8.03
21 P	allyl chloride	50.000	52.683	-5.4	102	0.00	7.59
22 P	trans-1,2-dichloroethene	50.000	46.496	7.0	90	0.00	8.12
23 P	iodomethane	50.000	48.124	3.8	93	0.00	7.37
24 P	carbon disulfide	50.000	40.662	18.7	81	0.00	7.52
25 P	propionitrile	50.000	53.138	-6.3	104	0.00	9.33
26 P	vinyl acetate	50.000	54.652	-9.3	106	0.00	8.57
27 P	chloroprene	50.000	45.953	8.1	89	0.00	8.74
28 P	di-isopropyl ether	50.000	52.475	-5.0	102	0.00	8.61
29 P	methacrylonitrile	50.000	51.384	-2.8	104	0.00	9.50
	----------	Amount	Calc.	%Drift	----------		
30 P	2-butanone	50.000	97.046	-94.1#	117	0.00	9.23
	----------	Amount	Calc.	%Drift	----------		
31 p	Hexane	50.000	54.714	-9.4	111	0.00	8.42
32 P	1,1-dichloroethane	50.000	48.184	3.6	95	0.00	8.65
33 P	tert-butyl ethyl ether	50.000	50.519	-1.0	99	0.00	9.03
34 P	isobutyl alcohol		----------NA----------				
35 P	2,2-dichloropropane	50.000	49.909	0.2	99	0.00	9.34
36 P	cis-1,2-dichloroethene	50.000	54.286	-8.6	107	0.00	9.31
37 P	ethyl acetate		----------NA----------				

6.7.2 6

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSM2881-ICV2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80522.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

38 P	bromochloromethane	50.000	53.100	-6.2	103	0.00	9.59
39 P	chloroform	50.000	50.840	-1.7	100	0.00	9.66
40 S	dibromofluoromethane (s)	50.000	49.524	1.0	102	0.00	9.84
41 P	Tetrahydrofuran	50.000	47.255	5.5	97	0.00	9.60
42 P	1,1,1-trichloroethane	50.000	51.501	-3.0	99	0.00	9.91
43 I	1,4-difluorobenzene	50.000	50.000	0.0	101	0.00	10.67
44 P	Cyclohexane	50.000	51.892	-3.8	102	0.00	10.01
45 P	carbon tetrachloride	50.000	51.120	-2.2	100	0.00	10.10
46 P	1,1-dichloropropene	50.000	51.753	-3.5	101	0.00	10.06
47 P	benzene	50.000	51.265	-2.5	99	0.00	10.30
48 P	1,2-dichloroethane	50.000	51.013	-2.0	100	0.00	10.32
49 P	tert-amyl methyl ether	50.000	53.652	-7.3	103	0.00	10.35
50 P	heptane	50.000	62.350	-24.7#	121	0.00	10.50
51 P	trichloroethene	50.000	51.690	-3.4	100	0.00	10.98
52 P	1,2-dichloropropane	50.000	51.312	-2.6	100	0.00	11.27
53 P	dibromomethane	50.000	50.633	-1.3	99	0.00	11.38
54 P	bromodichloromethane	50.000	51.438	-2.9	100	0.00	11.52
55 P	Methylcyclohexane	50.000	60.511	-21.0#	119	0.00	11.27
56 P	2-chloroethyl vinyl ether	50.000	52.902	-5.8	104	0.00	11.73
57 P	methyl methacrylate	50.000	50.582	-1.2	103	0.00	11.19
58 P	1,4-dioxane	250.000	286.893	-14.8	107	0.00	11.31
59 P	cis-1,3-dichloropropene	50.000	51.281	-2.6	99	0.00	11.98
60 S	toluene-d8 (s)	50.000	49.548	0.9	101	0.00	12.29
61 P	4-methyl-2-pentanone	50.000	55.611	-11.2	110	0.00	12.06
62 P	toluene	50.000	51.234	-2.5	101	0.00	12.37
63 P	trans-1,3-dichloropropene	50.000	48.874	2.3	96	0.00	12.55
64 P	1,1,2-trichloroethane	50.000	53.108	-6.2	106	0.00	12.79
65 P	ethyl methacrylate	50.000	54.164	-8.3	106	0.00	12.51
66 I	chlorobenzene-d5	50.000	50.000	0.0	100	0.00	13.90
67 P	tetrachloroethene	50.000	52.558	-5.1	100	0.00	12.95
68 P	1,3-dichloropropane	50.000	56.113	-12.2	106	0.00	12.99
69 P	dibromochloromethane	50.000	53.054	-6.1	101	0.00	13.25
70 P	1,2-dibromoethane	50.000	54.830	-9.7	103	0.00	13.43
71 P	2-hexanone	50.000	60.052	-20.1#	118	0.00	12.95
72 P	chlorobenzene	50.000	53.011	-6.0	100	0.00	13.94
73 P	1,1,1,2-tetrachloroethane	50.000	55.728	-11.5	104	0.00	14.00
74 P	ethylbenzene	50.000	55.047	-10.1	102	0.00	14.00
75 P	m,p-xylene	100.000	111.073	-11.1	101	0.00	14.12
76 P	o-xylene	50.000	55.728	-11.5	102	0.00	14.57
77 P	styrene	50.000	55.600	-11.2	102	0.00	14.58
78 P	bromoform	50.000	53.467	-6.9	102	0.00	14.85
79 P	trans-1,4-dichloro-2-bute	50.000	52.654	-5.3	105	0.00	15.30
80 I	1,4-dichlorobenzene-d4	50.000	50.000	0.0	100	0.00	16.49
81 P	isopropylbenzene	50.000	54.720	-9.4	102	0.00	14.95
82 S	bromofluorobenzene (s)	50.000	48.295	3.4	99	0.00	15.19
83 P	bromobenzene	50.000	54.325	-8.7	106	0.00	15.40
84 P	1,1,2,2-tetrachloroethane	50.000	54.464	-8.9	108	0.00	15.26
85 P	1,2,3-trichloropropane	50.000	53.258	-6.5	106	0.00	15.37
86 P	n-propylbenzene	50.000	53.267	-6.5	100	0.00	15.41
87 P	2-chlorotoluene	50.000	53.943	-7.9	101	0.00	15.57
88 P	4-chlorotoluene	50.000	53.803	-7.6	102	0.00	15.70
89 P	1,3,5-trimethylbenzene	50.000	57.367	-14.7	105	0.00	15.59
90 P	tert-butylbenzene	50.000	56.287	-12.6	104	0.00	15.97
91 P	1,2,4-trimethylbenzene	50.000	55.147	-10.3	102	0.00	16.02
92 P	sec-butylbenzene	50.000	55.882	-11.8	103	0.00	16.21
93 P	1,3-dichlorobenzene	50.000	53.526	-7.1	101	0.00	16.41
94 P	p-isopropyltoluene	50.000	56.738	-13.5	105	0.00	16.35

6.7.2 6

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSM2881-ICV2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80522.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

95 P	1,4-dichlorobenzene	50.000	53.036	-6.1	102	0.00	16.52
96 P	1,2-dichlorobenzene	50.000	53.984	-8.0	102	0.00	16.94
97 P	n-butylbenzene	50.000	56.316	-12.6	106	0.00	16.81
98 P	1,2-dibromo-3-chloropropa	50.000	51.933	-3.9	108	0.00	17.78
99 P	1,3,5-trichlorobenzene	50.000	57.733	-15.5	115	0.00	17.98
100 P	1,2,4-trichlorobenzene	50.000	53.120	-6.2	106	0.00	18.70
101 P	hexachlorobutadiene	50.000	54.386	-8.8	111	0.00	18.82
102 P	naphthalene	50.000	51.534	-3.1	101	0.00	19.05
103 P	1,2,3-trichlorobenzene	50.000	55.012	-10.0	108	0.00	19.30
104 P	2-methylnaphthalene	25.000	31.398	-25.6#	124	0.00	20.48
105 P	1-methylnaphthalene	25.000	31.571	-26.3#	125	0.00	20.75

```
 ----------------------------------------------------------------------------
 ----------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     M80516.D   M160824S.M       Wed Aug 24 15:34:12 2016
```

6.7.2 6

Raw Data: M80813.D

Continuing Calibration Summary

Job Number: MC47774 **Sample:** MSM2895-CC2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80813.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\M160916\M80813.D          Vial: 4
Acq On    : 16 Sep 2016  11:38 am                       Operator: kaylap
Sample    : cc2881-50                                   Inst    : GCMS M
Misc      : MS37320,MSM2895,5,,,5,1                     Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\methods\M160824S.M (RTE Integrator)
Title        : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
Last Update  : Wed Aug 24 14:03:08 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	83	0.00	7.69
2	P	tertiary butyl alcohol	1.377	1.544	-12.1	90	0.00	7.80
3	P	Ethanol	0.115	0.106	7.8	80	-0.02	6.53
4	I	pentafluorobenzene	1.000	1.000	0.0	88	0.00	9.77
5	P	dichlorodifluoromethane	0.706	0.524	25.8#	70	0.00	4.43
6	P	chloromethane	1.022	1.058	-3.5	92	0.00	4.83
7	P	vinyl chloride	1.041	1.033	0.8	89	0.00	5.08
8	P	bromomethane	0.813	0.997	-22.6#	90	0.01	5.72
9	P	chloroethane	0.531	0.609	-14.7	87	0.00	5.89
10	P	ethyl ether	0.473	0.526	-11.2	92	0.00	6.70
11	P	acetonitrile	0.060	0.059	1.7	97	0.00	7.51
12	P	trichlorofluoromethane	1.218	1.322	-8.5	92	0.00	6.34
13	P	freon-113	0.730	0.840	-15.1	97	0.00	7.09
14	P	acrolein	0.086	0.040#	53.5#	40#	0.00	6.94
15	P	1,1-dichloroethene	0.651	0.723	-11.1	95	0.00	7.12
		----------	Amount	Calc.	%Drift		----------	
16	P	acetone	50.000	64.426	-28.9#	90	0.00	7.11
		----------	AvgRF	CCRF	%Dev		----------	
17	P	Methyl Acetate	0.423	0.459	-8.5	93	0.00	7.52
18	P	methylene chloride	0.769	0.797	-3.6	92	0.00	7.77
19	P	methyl tert butyl ether	1.767	1.958	-10.8	94	0.00	8.07
20	P	acrylonitrile	0.237	0.255	-7.6	92	0.00	8.03
21	P	allyl chloride	0.978	1.115	-14.0	95	0.00	7.59
22	P	trans-1,2-dichloroethene	0.707	0.752	-6.4	89	0.00	8.12
23	P	iodomethane	1.371	1.524	-11.2	93	0.00	7.37
24	P	carbon disulfide	2.130	2.562	-20.3#	104	0.00	7.51
25	P	propionitrile	0.092	0.101	-9.8	93	0.00	9.32
26	P	vinyl acetate	1.478	1.474	0.3	84	0.00	8.57
27	P	chloroprene	1.067	1.150	-7.8	90	0.00	8.74
28	P	di-isopropyl ether	2.142	2.472	-15.4	97	0.00	8.60
29	P	methacrylonitrile	0.355	0.369	-3.9	91	0.00	9.50
		----------	Amount	Calc.	%Drift		----------	
30	P	2-butanone	50.000	47.012	6.0	60	0.00	9.23
		----------	AvgRF	CCRF	%Dev		----------	
31	p	Hexane	0.609	0.714	-17.2	103	0.00	8.42
32	P	1,1-dichloroethane	1.211	1.299	-7.3	91	0.00	8.65
33	P	tert-butyl ethyl ether	2.040	2.301	-12.8	95	0.00	9.03

6.7.3 6

Continuing Calibration Summary

Job Number: MC47774 **Sample:** MSM2895-CC2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80813.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

34	P	isobutyl alcohol	----------NA----------					
35	P	2,2-dichloropropane	1.042	1.152	-10.6	95	0.00	9.34
36	P	cis-1,2-dichloroethene	0.777	0.834	-7.3	91	0.00	9.31
37	P	ethyl acetate	----------NA----------					
38	P	bromochloromethane	0.410	0.446	-8.8	91	0.00	9.59
39	P	chloroform	1.278	1.352	-5.8	90	0.00	9.65
40	S	dibromofluoromethane (s)	0.582	0.582	0.0	89	0.00	9.83
41	P	Tetrahydrofuran	0.212	0.216	-1.9	90	0.00	9.60
42	P	1,1,1-trichloroethane	1.166	1.270	-8.9	91	0.00	9.91
43	I	1,4-difluorobenzene	1.000	1.000	0.0	88	0.00	10.67
44	P	Cyclohexane	0.669	0.767	-14.6	98	0.00	10.01
45	P	carbon tetrachloride	0.702	0.755	-7.5	91	0.00	10.10
46	P	1,1-dichloropropene	0.532	0.568	-6.8	90	0.00	10.06
47	P	benzene	1.573	1.660	-5.5	89	0.00	10.30
48	P	1,2-dichloroethane	0.549	0.587	-6.9	91	0.00	10.32
49	P	tert-amyl methyl ether	1.087	1.199	-10.3	92	0.00	10.35
50	P	heptane	0.500	0.600	-20.0	101	0.00	10.50
51	P	trichloroethene	0.436	0.459	-5.3	89	0.00	10.98
52	P	1,2-dichloropropane	0.411	0.437	-6.3	90	0.00	11.27
53	P	dibromomethane	0.266	0.281	-5.6	89	0.00	11.38
54	P	bromodichloromethane	0.554	0.589	-6.3	90	0.00	11.52
55	P	Methylcyclohexane	0.625	0.704	-12.6	96	0.00	11.27
56	P	2-chloroethyl vinyl ether	0.128	0.128	0.0	86	0.00	11.73
57	P	methyl methacrylate	0.231	0.235	-1.7	90	0.00	11.19
		----------	Amount	Calc.	%Drift		----------	
58	P	1,4-dioxane	250.000	218.151	12.7	68	0.00	11.30
		----------	AvgRF	CCRF	%Dev		----------	
59	P	cis-1,3-dichloropropene	0.567	0.599	-5.6	89	0.00	11.98
60	S	toluene-d8 (s)	1.136	1.107	2.6	87	0.00	12.29
61	P	4-methyl-2-pentanone	0.378	0.409	-8.2	93	0.00	12.06
62	P	toluene	0.975	1.003	-2.9	88	0.00	12.37
63	P	trans-1,3-dichloropropene	0.495	0.520	-5.1	90	0.00	12.55
64	P	1,1,2-trichloroethane	0.273	0.282	-3.3	89	0.00	12.79
65	P	ethyl methacrylate	0.413	0.423	-2.4	88	0.00	12.51
66	I	chlorobenzene-d5	1.000	1.000	0.0	83	0.00	13.90
67	P	tetrachloroethene	0.976	1.090	-11.7	89	0.00	12.95
68	P	1,3-dichloropropane	1.058	1.194	-12.9	89	0.00	12.99
69	P	dibromochloromethane	1.014	1.139	-12.3	90	0.00	13.26
70	P	1,2-dibromoethane	0.744	0.834	-12.1	88	0.00	13.43
71	P	2-hexanone	0.628	0.814	-29.6#	106	0.00	12.95
72	P	chlorobenzene	2.471	2.768	-12.0	88	0.00	13.94
73	P	1,1,1,2-tetrachloroethane	1.052	1.225	-16.4	91	0.00	14.00
74	P	ethylbenzene	4.118	4.703	-14.2	88	0.00	13.99
75	P	m,p-xylene	1.655	1.936	-17.0	89	0.00	14.12
76	P	o-xylene	1.697	1.989	-17.2	90	0.00	14.57
77	P	styrene	2.668	3.082	-15.5	89	0.00	14.58
78	P	bromoform	0.645	0.702	-8.8	87	0.00	14.85
79	P	trans-1,4-dichloro-2-bute	0.296	0.329	-11.1	93	0.00	15.30
80	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	82	0.00	16.49
81	P	isopropylbenzene	3.759	4.398	-17.0	89	0.00	14.95
82	S	bromofluorobenzene (s)	0.805	0.784	2.6	82	0.00	15.19
83	P	bromobenzene	0.962	1.083	-12.6	90	0.00	15.40
84	P	1,1,2,2-tetrachloroethane	0.902	0.978	-8.4	88	0.00	15.26
85	P	1,2,3-trichloropropane	0.766	0.831	-8.5	88	0.00	15.37
86	P	n-propylbenzene	4.384	5.102	-16.4	90	0.00	15.41

6.7.3 6

Continuing Calibration Summary

Job Number: MC47774 **Sample:** MSM2895-CC2881
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** M80813.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

87	P	2-chlorotoluene	2.901	3.317	-14.3	88	0.00	15.57
88	P	4-chlorotoluene	2.507	2.864	-14.2	89	0.00	15.69
89	P	1,3,5-trimethylbenzene	3.266	3.865	-18.3	89	0.00	15.59
90	P	tert-butylbenzene	1.767	2.092	-18.4	90	0.00	15.97
91	P	1,2,4-trimethylbenzene	3.339	3.972	-19.0	90	0.00	16.02
92	P	sec-butylbenzene	4.271	5.055	-18.4	90	0.00	16.21
93	P	1,3-dichlorobenzene	1.947	2.239	-15.0	90	0.00	16.41
94	P	p-isopropyltoluene	3.749	4.471	-19.3	91	0.00	16.35
95	P	1,4-dichlorobenzene	1.989	2.245	-12.9	89	0.00	16.52
96	P	1,2-dichlorobenzene	1.950	2.221	-13.9	89	0.00	16.93
97	P	n-butylbenzene	3.419	4.063	-18.8	92	0.00	16.81
98	P	1,2-dibromo-3-chloropropa	0.199	0.201	-1.0	86	0.00	17.78
99	P	1,3,5-trichlorobenzene	1.362	1.555	-14.2	94	0.00	17.98
100	P	1,2,4-trichlorobenzene	1.460	1.600	-9.6	90	0.00	18.70
101	P	hexachlorobutadiene	0.684	0.731	-6.9	89	0.00	18.82
102	P	naphthalene	3.934	4.297	-9.2	88	0.00	19.06
103	P	1,2,3-trichlorobenzene	1.417	1.591	-12.3	90	0.00	19.30
104	P	2-methylnaphthalene	2.250	2.519	-12.0	91	0.00	20.48
105	P	1-methylnaphthalene	1.880	2.082	-10.7	90	0.00	20.75

(#) = Out of Range SPCC's out = 3 CCC's out = 0
M80516.D M160824S.M Fri Sep 16 12:37:23 2016

6.7.3 6

Raw Data: V49891.D V49892.D V49893.D V49894.D V49895.D V49896.D V49897.D V49898.D V49899.D

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSV1837-ICC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49896.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Response Factor Report MSV

```
Method       : C:\msdchem\1\METHODS\V160919S.M (RTE Integrator)
Title        : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
Last Update  : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

Calibration Files
0.5 =V49891.D    2   =V49892.D    5   =V49893.D    10  =V49894.D
20  =V49895.D    50  =V49896.D    100 =V49897.D    200 =V49898.D
400 =V49899.D        =                =                =

Compound
            0.5   2     5     10    20    50    100   200   400          Avg    %RSD
-------------------------------------------------------------------------------------

1)     Tert butyl alcohol-d9 ----------------ISTD--------------------
2)  tertiary butyl alcohol
                        1.325 1.039 1.777 1.517 1.268 1.420 1.426        1.396   16.27
             ---- Linear regression ----  Coefficient =  0.9949
               Response Ratio = -0.00757 + 1.41703 *A

3)  Ethanol
                        0.070 0.065 0.081 0.081 0.050 0.056 0.072        0.068   17.41

4) I   pentafluorobenzene    ----------------ISTD--------------------
5)  dichlorodifluoromethane
                        0.622 0.747 0.887 0.765 0.768 0.757 1.004 0.879        0.803   14.40
6)  chloromethane
                        0.521 0.524 0.464 0.467 0.417 0.540 0.492        0.489    8.81
7)  vinyl chloride
                        0.322 0.673 0.657 0.679 0.660 0.618 0.754 0.700        0.633   20.76
             ---- Linear regression ----  Coefficient =  0.9964
               Response Ratio = -0.01305 + 0.70536 *A

8)  bromomethane
                        0.135 0.291 0.332 0.290 0.257 0.362 0.371 0.333        0.297   25.56
             ---- Linear regression ----  Coefficient =  0.9930
               Response Ratio = -0.00861 + 0.34424 *A

9)  chloroethane
                        0.377 0.505 0.461 0.370 0.474 0.525 0.457        0.453   13.11
10)  dichlorofluoromethane
                        1.233 1.585 1.584 1.566 1.309 1.561 1.478        1.474    9.82
11)  ethyl ether
                        0.633 0.655 0.698 0.686 0.553 0.644 0.602        0.639    7.78
12)  acetonitrile
                                    0.077 0.067 0.054 0.054 0.055        0.061   16.56
             ---- Linear regression ----  Coefficient =  0.9976
               Response Ratio = 0.00956 + 0.05310 *A

13)  trichlorofluoromethane
                        0.456 0.799 1.353 1.325 1.330 1.136 1.418 1.327        1.143   29.79
             ---- Linear regression ----  Coefficient =  0.9956
               Response Ratio = -0.03527 + 1.33849 *A

14)  freon-113
                        0.519 0.460 0.546 0.494 0.371 0.481 0.434        0.472   12.26
15)  acrolein
                        0.065 0.070 0.083 0.078 0.072 0.077 0.077        0.075    8.01
```

6.7.4 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSV1837-ICC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49896.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
16)  1,1-dichloroethene
                 0.224 0.388 0.615 0.642 0.653 0.527 0.679 0.636        0.545   29.43
            ---- Linear regression ----  Coefficient =  0.9945
              Response Ratio = -0.01708 + 0.64017 *A

17)  acetone
                           0.235 0.198 0.190 0.170 0.189 0.154        0.190   14.50
18)  Methyl Acetate
                 0.663 0.629 0.675 0.658 0.518 0.581 0.516        0.606   11.21
19)  methylene chloride
                 0.591 0.794 0.796 0.878 0.865 0.695 0.825 0.790        0.779   12.10
20)  methyl tert butyl ether
                 1.677 2.147 2.052 2.216 2.338 1.896 2.249 2.145        2.090   10.20
21)  acrylonitrile
                 0.431 0.419 0.443 0.438 0.352 0.398 0.356        0.405    9.35
22)  allyl chloride
                 0.950 0.916 0.922 0.888 0.767 0.914 0.724        0.869    9.99
23)  trans-1,2-dichloroethene
                 0.565 0.711 0.715 0.744 0.690 0.592 0.734 0.662        0.677    9.78
24)  iodomethane
                 0.873 0.907 0.937 0.995 0.880 1.145 1.122        0.980   11.50
25)  carbon disulfide
                 0.686 0.606 0.647 0.680 0.659 0.746 0.804        0.690    9.57
26)  propionitrile
                 0.159 0.165 0.176 0.181 0.144 0.162 0.134        0.160   10.47
27)  vinyl acetate
                 0.071 0.088 0.099 0.102 0.092 0.111 0.109        0.096   14.14
28)  chloroprene
                 1.398 1.413 1.504 1.465 1.231 1.419 1.256        1.384    7.42
29)  di-isopropyl ether
                 2.079 2.663 2.654 2.764 2.728 2.224 2.484 2.131        2.466   11.39
30)  methacrylonitrile
                 0.494 0.514 0.557 0.546 0.444 0.500 0.463        0.503    8.18
31)  2-butanone
                 0.106 0.131 0.127 0.128 0.112 0.127 0.115        0.121    8.09
32)  Hexane
                 0.743 0.738 0.738 0.699 0.600 0.685 0.590        0.685    9.51
33)  1,1-dichloroethane
                 1.328 1.534 1.579 1.588 1.515 1.257 1.456 1.334        1.449    8.76
34)  tert-butyl ethyl ether
                 2.041 2.638 2.580 2.741 2.782 2.345 2.768 2.600        2.562    9.89
35)  isobutyl alcohol
                                                                        0.000#  -1.00
36)  2,2-dichloropropane
                 0.932 0.959 0.921 0.790 0.729 0.837 0.693        0.837   12.51
37)  cis-1,2-dichloroethene
                 0.708 0.806 0.847 0.887 0.875 0.709 0.827 0.736        0.800    9.09
38)  ethyl acetate
                                                                        0.000#  -1.00
39)  bromochloromethane
                 0.415 0.396 0.426 0.415 0.342 0.409 0.380        0.398    7.27
40)  chloroform
                 1.239 1.546 1.551 1.562 1.521 1.275 1.494 1.365        1.444    9.11
41)  dibromofluoromethane (s)
          0.749 0.721 0.745 0.733 0.719 0.695 0.692 0.712 0.699        0.718    2.91
42)  Tetrahydrofuran
                 0.335 0.315 0.309 0.300 0.239 0.266 0.235        0.286   13.63
43)  1,1,1-trichloroethane
                 1.092 1.324 1.343 1.276 1.138 0.998 1.180 0.994        1.168   11.79
```

6.7.4 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSV1837-ICC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49896.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
44) I   1,4-difluorobenzene   ----------------ISTD--------------------
45)  Cyclohexane
                 0.771 0.808 0.822 0.670 0.581 0.636 0.400        0.670   22.36
            ---- Quadratic regression ----  Coefficient =  0.9904
              Response Ratio = 0.00834 + 0.73956 *A + -0.04140 *A^2

46)  carbon tetrachloride
                 0.491 0.616 0.621 0.631 0.603 0.555 0.629 0.564        0.589    8.29
47)  1,1-dichloropropene
                 0.527 0.556 0.572 0.573 0.481 0.535 0.484        0.533    7.20
48)  benzene
          1.352 1.208 1.420 1.455 1.537 1.516 1.243 1.371 1.207        1.367    9.26
49)  1,2-dichloroethane
                 0.673 0.798 0.817 0.845 0.833 0.669 0.729 0.648        0.751   10.80
50)  tert-amyl methyl ether
                 1.020 1.039 1.134 1.195 1.006 1.146 1.080        1.089    6.57
51)  heptane
                 0.545 0.562 0.594 0.564 0.491 0.514 0.428        0.529   10.52
52)  trichloroethene
                 0.372 0.435 0.442 0.468 0.473 0.397 0.455 0.416        0.432    8.14
53)  1,2-dichloropropane
                 0.385 0.466 0.480 0.489 0.484 0.398 0.430 0.362        0.437   11.46
54)  dibromomethane
                 0.318 0.310 0.336 0.336 0.279 0.313 0.291        0.312    6.89
55)  bromodichloromethane
                 0.416 0.523 0.536 0.582 0.602 0.520 0.612 0.579        0.546   11.56
56)  Methylcyclohexane
                 0.561 0.572 0.631 0.614 0.527 0.569 0.500        0.568    8.03
57)  2-chloroethyl vinyl ether
                 0.197 0.216 0.233 0.246 0.229 0.245 0.228        0.228    7.47
58)  methyl methacrylate
                 0.240 0.257 0.287 0.293 0.247 0.279 0.255        0.266    7.83
59)  1,4-dioxane
                           0.004 0.005 0.004 0.004 0.004        0.004#  13.72
60)  cis-1,3-dichloropropene
                 0.406 0.494 0.556 0.615 0.655 0.566 0.666 0.618        0.572   15.32
            ---- Linear regression ----  Coefficient =  0.9973
              Response Ratio = -0.01025 + 0.62893 *A

61)  toluene-d8 (s)
          1.139 1.143 1.128 1.140 1.134 1.144 1.133 1.136 1.149        1.138    0.56
62)  4-methyl-2-pentanone
                 0.464 0.478 0.533 0.539 0.447 0.493 0.437        0.484    8.16
63)  toluene
                 0.990 1.024 1.008 0.978 0.814 0.915 0.823        0.936    9.35
64)  trans-1,3-dichloropropene
                 0.324 0.434 0.495 0.552 0.596 0.519 0.605 0.562        0.511   18.36
            ---- Linear regression ----  Coefficient =  0.9975
              Response Ratio = -0.01120 + 0.57306 *A

65)  1,1,2-trichloroethane
                 0.240 0.302 0.322 0.326 0.328 0.274 0.309 0.286        0.298   10.24
66)  ethyl methacrylate
                 0.390 0.443 0.495 0.511 0.430 0.479 0.437        0.455    9.26

67) I   chlorobenzene-d5      ----------------ISTD--------------------
68)  tetrachloroethene
                 0.539 0.660 0.700 0.717 0.724 0.638 0.711 0.676        0.671    9.08
69)  1,3-dichloropropane
                 0.952 1.066 1.166 1.213 1.204 1.008 1.116 1.020        1.093    8.86
```

6.7.4 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSV1837-ICC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49896.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
70)  dibromochloromethane
                 0.490 0.632 0.683 0.772 0.848 0.768 0.909 0.908        0.751   19.27
            ---- Linear regression ----  Coefficient =  0.9969
              Response Ratio = -0.02507 + 0.89037 *A

71)  1,2-dibromoethane
                 0.568 0.687 0.695 0.770 0.793 0.671 0.766 0.746        0.712   10.26
72)  2-hexanone
                 0.710 0.810 0.882 0.844 0.736 0.732 0.554        0.753   14.41
73)  chlorobenzene
                 1.756 2.146 2.237 2.333 2.300 1.933 2.145 1.996        2.106    9.40
74)  1,1,1,2-tetrachloroethane
                 0.758 0.793 0.852 0.895 0.765 0.863 0.808        0.819    6.35
75)  ethylbenzene
                 2.941 3.544 3.814 3.971 3.936 3.247 3.463 2.974        3.486   11.70
76)  m,p-xylene
          1.042 0.992 1.199 1.319 1.405 1.389 1.157 1.227 1.081        1.201   12.38
77)  o-xylene
                 1.060 1.213 1.308 1.428 1.431 1.182 1.267 1.109        1.250   10.91
78)  styrene
                 1.490 2.008 2.219 2.377 2.339 1.944 2.070 1.818        2.033   14.38
79)  bromoform
                 0.272 0.311 0.361 0.431 0.481 0.448 0.553 0.586        0.430   25.82
            ---- Quadratic regression ----  Coefficient =  0.9982
              Response Ratio = -0.01127 + 0.46030 *A + 0.01656 *A^2

80)  cis-1,4-dichloro-2-butene
                                                                        0.000#  -1.00
81)  trans-1,4-dichloro-2-butene
                 0.335 0.362 0.418 0.431 0.373 0.407 0.380        0.387    8.74

82) I   1,4-dichlorobenzene-d ----------------ISTD--------------------
83)  isopropylbenzene
                 3.680 3.946 4.103 4.140 3.543 3.996 3.432        3.834    7.33
84)  bromofluorobenzene (s)
          1.092 1.081 1.083 1.084 1.063 1.060 1.040 1.037 1.005        1.060    2.69
85)  bromobenzene
                 0.914 0.978 1.002 0.987 0.845 0.965 0.866        0.937    6.63
86)  1,1,2,2-tetrachloroethane
                 1.051 1.182 1.206 1.274 1.263 1.066 1.191 1.063        1.162    7.79
87)  1,2,3-trichloropropane
                 0.941 1.190 1.208 1.185 1.135 0.948 1.048 0.890        1.068   12.00
88)  n-propylbenzene
                 3.959 5.083 5.333 5.549 5.372 4.550 4.992 4.092        4.866   12.34
89)  2-chlorotoluene
                 2.904 3.516 3.694 3.708 3.646 3.080 3.380 2.838        3.346   10.70
90)  4-chlorotoluene
                 2.635 3.117 3.305 3.430 3.307 2.800 3.118 2.672        3.048   10.09
91)  1,3,5-trimethylbenzene
                 2.463 3.211 3.514 3.667 3.631 3.114 3.437 2.931        3.246   12.57
92)  tert-butylbenzene
                 1.530 2.041 2.146 2.299 2.349 2.033 2.340 2.069        2.101   12.65
93)  1,2,4-trimethylbenzene
                 2.528 3.324 3.728 3.881 3.804 3.234 3.629 3.141        3.409   13.19
94)  sec-butylbenzene
                 3.199 4.069 4.516 4.761 4.716 4.074 4.548 3.945        4.228   12.30
95)  1,3-dichlorobenzene
                 1.648 1.950 2.040 2.068 2.071 1.763 2.003 1.787        1.916    8.44
96)  p-isopropyltoluene
                 2.635 3.484 3.835 4.033 4.028 3.452 3.890 3.426        3.598   12.89
```

6.7.4 6

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSV1837-ICC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49896.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
97)  1,4-dichlorobenzene
                 1.767 2.060 2.100 2.149 2.067 1.784 2.041 1.829        1.975    7.82
98)  1,2-dichlorobenzene
                 1.620 1.973 2.062 2.160 2.109 1.787 2.065 1.874        1.956    9.40
99)  n-butylbenzene
                 2.867 3.697 4.171 4.378 4.310 3.681 4.006 3.368        3.810   13.51
100)  1,2-dibromo-3-chloropropane
                 0.228 0.228 0.272 0.294 0.256 0.298 0.294        0.267   11.53
101)  1,3,5-trichlorobenzene
                 0.992 1.165 1.242 1.290 1.283 1.127 1.307 1.226        1.204    8.81
102)  1,2,4-trichlorobenzene
                 0.924 1.194 1.262 1.351 1.370 1.184 1.342 1.220        1.231   11.69
103)  hexachlorobutadiene
                 0.491 0.533 0.593 0.608 0.617 0.545 0.644 0.651        0.585    9.70
104)  naphthalene
                 3.684 3.900 4.362 4.555 3.721 3.918 3.521        3.952    9.51
105)  1,2,3-trichlorobenzene
                 1.001 1.233 1.282 1.368 1.384 1.125 1.150 1.051        1.199   11.79
106)  2-methylnaphthalene
                           1.888 2.367 2.674 2.003 1.779 1.483        2.032   21.01
            ---- Quadratic regression ----  Coefficient =  0.9900
              Response Ratio = -0.00308 + 2.32328 *A + -0.21655 *A^2

107)  1-methylnaphthalene
                           1.809 2.146 2.341 1.619 1.363 1.096        1.729   27.15
            ---- Quadratic regression ----  Coefficient =  0.9804
              Response Ratio = 0.03674 + 1.88228 *A + -0.20622 *A^2

 ----------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          V160919S.M        Wed Sep 21 18:58:21 2016
```

6.7.4 6

Raw Data: V49902.D

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSV1837-ICV1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49902.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\V160919\V49902.D          Vial: 16
Acq On    : 19 Sep 2016   6:55 pm                     Operator: carab
Sample    : icv1837-50                                Inst    : MSV
Misc      : MS37325,MSV1837,,,,5,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\V160919S.M (RTE Integrator)
Title        : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
Last Update  : Wed Sep 21 17:59:01 2016
Response via : Single Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	Tert butyl alcohol-d9	500.000	500.000	0.0	98	0.02	6.93
2 p	tertiary butyl alcohol	500.000	538.193	-7.6	98	0.00	7.01
3 p	Ethanol	5000.000	5106.236	-2.1	84	0.00	5.78
4 I	pentafluorobenzene	50.000	50.000	0.0	113	0.00	8.93
5 p	dichlorodifluoromethane	50.000	61.623	-23.2	146	0.00	3.96
6 p	chloromethane	50.000	64.069	-28.1	152	0.00	4.28
7 p	vinyl chloride	50.000	50.327	-0.7	119	0.00	4.57
8 p	bromomethane	50.000	42.005	16.0	123	0.00	5.10
9 p	chloroethane	50.000	41.357	17.3	114	0.00	5.37
10 p	dichlorofluoromethane	50.000	55.884	-11.8	119	0.00	5.66
11 p	ethyl ether	50.000	49.434	1.1	104	0.00	5.94
12 p	acetonitrile	50.000	45.637	8.7	98	0.00	6.69
13 p	trichlorofluoromethane	50.000	50.836	-1.7	113	0.00	5.78
14 p	freon-113	50.000	46.608	6.8	101	0.00	6.48
15 p	acrolein	250.000	256.449	-2.6	111	0.00	6.18
16 p	1,1-dichloroethene	50.000	51.974	-3.9	112	-0.01	6.49
17 p	acetone	50.000	51.207	-2.4	116	0.01	6.34
18 p	Methyl Acetate	50.000	57.894	-15.8	120	0.00	6.72
19 p	methylene chloride	50.000	53.593	-7.2	109	0.00	7.03
20 p	methyl tert butyl ether	50.000	53.125	-6.3	107	0.00	7.26
21 p	acrylonitrile	50.000	45.113	9.8	94	0.00	7.20
22 p	allyl chloride	50.000	51.360	-2.7	113	0.00	6.79
23 p	trans-1,2-dichloroethene	50.000	49.021	2.0	109	0.00	7.30
24 p	iodomethane	50.000	60.529	-21.1	135	0.01	6.65
25 p	carbon disulfide	50.000	50.756	-1.5	116	0.00	6.71
26 p	propionitrile	50.000	46.149	7.7	92	0.00	8.47
27 p	vinyl acetate	50.000	61.460	-22.9	130	0.00	7.73
28 p	chloroprene	50.000	45.705	8.6	97	0.00	7.90
29 p	di-isopropyl ether	50.000	49.001	2.0	100	0.00	7.78
30 p	methacrylonitrile	50.000	45.209	9.6	94	0.00	8.64
31 p	2-butanone	50.000	56.251	-12.5	120	0.00	8.38
32 p	Hexane	50.000	52.557	-5.1	116	0.00	7.60
33 P	1,1-dichloroethane	50.000	48.221	3.6	104	0.00	7.81
34 p	tert-butyl ethyl ether	50.000	50.339	-0.7	105	0.00	8.20
35 p	isobutyl alcohol	----------NA----------					
36 p	2,2-dichloropropane	50.000	47.313	5.4	113	0.00	8.50
37 p	cis-1,2-dichloroethene	50.000	56.614	-13.2	117	0.00	8.46
38 p	ethyl acetate	----------NA----------					
39 p	bromochloromethane	50.000	52.418	-4.8	113	0.00	8.74
40 p	chloroform	50.000	50.816	-1.6	109	0.00	8.81
41 S	dibromofluoromethane (s)	50.000	47.048	5.9	110	0.00	8.99

6.7.5 6

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSV1837-ICV1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49902.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

42 p	Tetrahydrofuran	50.000	41.703	16.6	90	0.00	8.76
43 p	1,1,1-trichloroethane	50.000	50.530	-1.1	117	0.00	9.06
44 I	1,4-difluorobenzene	50.000	50.000	0.0	113	0.00	9.83
	---------- Amount	Calc.	%Drift	----------			
45 p	Cyclohexane	50.000	48.386	3.2	115	0.00	9.17
	---------- Amount	Calc.	%Drift	----------			
46 p	carbon tetrachloride	50.000	53.463	-6.9	118	0.00	9.25
47 p	1,1-dichloropropene	50.000	53.472	-6.9	112	0.00	9.21
48 p	benzene	50.000	54.720	-9.4	111	0.00	9.45
49 p	1,2-dichloroethane	50.000	50.527	-1.1	103	0.00	9.47
50 p	tert-amyl methyl ether	50.000	52.767	-5.5	108	0.00	9.51
51 p	heptane	50.000	55.509	-11.0	117	0.00	9.67
52 p	trichloroethene	50.000	54.396	-8.8	112	0.00	10.13
53 p	1,2-dichloropropane	50.000	51.966	-3.9	106	0.00	10.42
54 p	dibromomethane	50.000	50.404	-0.8	105	0.00	10.53
55 p	bromodichloromethane	50.000	52.464	-4.9	107	0.00	10.67
56 p	Methylcyclohexane	50.000	60.605	-21.2	126	0.00	10.43
57 p	2-chloroethyl vinyl ether	50.000	50.313	-0.6	105	0.00	10.90
58 p	methyl methacrylate	50.000	49.091	1.8	100	0.00	10.36
59 p	1,4-dioxane	250.000	274.815	-9.9	102	0.00	10.49
60 p	cis-1,3-dichloropropene	50.000	49.055	1.9	104	0.00	11.13
61 S	toluene-d8 (s)	50.000	48.714	2.6	109	0.00	11.45
62 p	4-methyl-2-pentanone	50.000	47.753	4.5	97	0.00	11.22
63 p	toluene	50.000	54.032	-8.1	117	0.00	11.53
64 p	trans-1,3-dichloropropene	50.000	47.268	5.5	100	0.00	11.72
65 p	1,1,2-trichloroethane	50.000	52.117	-4.2	107	0.00	11.96
66 p	ethyl methacrylate	50.000	54.024	-8.0	108	0.00	11.69
67 I	chlorobenzene-d5	50.000	50.000	0.0	110	0.00	13.07
68 p	tetrachloroethene	50.000	57.230	-14.5	117	0.00	12.11
69 p	1,3-dichloropropane	50.000	55.204	-10.4	110	0.00	12.15
70 p	dibromochloromethane	50.000	48.552	2.9	109	0.00	12.42
71 p	1,2-dibromoethane	50.000	55.421	-10.8	110	0.00	12.59
72 p	2-hexanone	50.000	57.543	-15.1	113	0.00	12.11
73 p	chlorobenzene	50.000	54.996	-10.0	111	0.00	13.11
74 p	1,1,1,2-tetrachloroethane	50.000	55.414	-10.8	112	0.00	13.18
75 p	ethylbenzene	50.000	57.208	-14.4	112	0.00	13.17
76 p	m,p-xylene	100.000	117.803	-17.8	112	0.00	13.30
77 p	o-xylene	50.000	57.503	-15.0	111	0.00	13.75
78 p	styrene	50.000	58.522	-17.0	112	0.00	13.76
	---------- Amount	Calc.	%Drift	----------			
79 P	bromoform	50.000	51.867	-3.7	111	0.00	14.03
	---------- Amount	Calc.	%Drift	----------			
80 p	cis-1,4-dichloro-2-butene	-1.000	0.000	0.0	0	0.00	14.17
81 p	trans-1,4-dichloro-2-bute	50.000	49.281	1.4	97	0.00	14.48
82 I	1,4-dichlorobenzene-d4	50.000	50.000	0.0	112	0.00	15.68
83 p	isopropylbenzene	50.000	53.299	-6.6	110	0.00	14.13
84 S	bromofluorobenzene (s)	50.000	48.887	2.2	109	0.00	14.37
85 p	bromobenzene	50.000	54.891	-9.8	117	0.00	14.57
86 P	1,1,2,2-tetrachloroethane	50.000	51.304	-2.6	106	0.00	14.44
87 p	1,2,3-trichloropropane	50.000	49.415	1.2	104	0.00	14.55
88 p	n-propylbenzene	50.000	52.702	-5.4	107	0.00	14.60
89 p	2-chlorotoluene	50.000	52.937	-5.9	109	0.00	14.76
90 p	4-chlorotoluene	50.000	53.055	-6.1	109	0.00	14.88

6.7.5 6

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSV1837-ICV1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49902.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

91 p	1,3,5-trimethylbenzene	50.000	56.926	-13.9	114	0.00	14.77
92 p	tert-butylbenzene	50.000	54.950	-9.9	110	0.00	15.16
93 p	1,2,4-trimethylbenzene	50.000	54.791	-9.6	110	0.00	15.22
94 p	sec-butylbenzene	50.000	54.539	-9.1	109	0.00	15.41
95 p	1,3-dichlorobenzene	50.000	52.703	-5.4	109	0.00	15.60
96 p	p-isopropyltoluene	50.000	55.657	-11.3	111	0.00	15.55
97 p	1,4-dichlorobenzene	50.000	51.863	-3.7	111	0.00	15.71
98 p	1,2-dichlorobenzene	50.000	53.223	-6.4	110	0.00	16.13
99 p	n-butylbenzene	50.000	54.666	-9.3	108	0.00	16.01
100 p	1,2-dibromo-3-chloropropa	50.000	50.206	-0.4	102	0.00	16.98
101 p	1,3,5-trichlorobenzene	50.000	57.871	-15.7	121	0.00	17.19
102 p	1,2,4-trichlorobenzene	50.000	55.697	-11.4	112	0.00	17.92
103 p	hexachlorobutadiene	50.000	55.819	-11.6	118	0.00	18.04
104 p	naphthalene	50.000	51.340	-2.7	100	0.00	18.27
105 p	1,2,3-trichlorobenzene	50.000	57.907	-15.8	112	0.00	18.53
	---------- Amount	Calc.	%Drift	----------			
106 p	2-methylnaphthalene	25.000	32.832	-31.3#	120	0.00	19.75
107 p	1-methylnaphthalene	25.000	33.610	-34.4#	115	0.00	20.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
V49896.D V160919S.M Wed Sep 21 18:58:02 2016

6.7.5 6

Raw Data: V49908.D

Continuing Calibration Summary

Job Number: MC47774 **Sample:** MSV1838-CC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49908.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\V160920\V49908.D          Vial: 4
Acq On    : 20 Sep 2016  12:32 pm                     Operator: kaylap
Sample    : cc1837-50                                 Inst    : MSV
Misc      : MS37325,MSV1838,,,,5,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\V160919S.M (RTE Integrator)
Title        : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
Last Update  : Wed Sep 21 17:59:01 2016
Response via : Single Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	Tert butyl alcohol-d9	1.000	1.000	0.0	97	0.02	6.93
	---------- Amount	Calc.	%Drift	----------			
2 p	tertiary butyl alcohol	500.000	501.679	-0.3	90	0.00	7.01
	---------- AvgRF	CCRF	%Dev	----------			
3 p	Ethanol	0.068	0.061	10.3	74	-0.02	5.77
4 I	pentafluorobenzene	1.000	1.000	0.0	119	0.00	8.93
5 p	dichlorodifluoromethane	0.803	0.694	13.6	108	0.01	3.97
6 p	chloromethane	0.489	0.451	7.8	115	0.01	4.28
	---------- Amount	Calc.	%Drift	----------			
7 p	vinyl chloride	50.000	44.119	11.8	110	0.00	4.56
8 p	bromomethane	50.000	40.689	18.6	126	0.00	5.10
	---------- AvgRF	CCRF	%Dev	----------			
9 p	chloroethane	0.453	0.352	22.3#	113	0.00	5.37
10 p	dichlorofluoromethane	1.474	1.447	1.8	110	0.00	5.65
11 p	ethyl ether	0.639	0.614	3.9	107	0.00	5.94
	---------- Amount	Calc.	%Drift	----------			
12 p	acetonitrile	50.000	43.668	12.7	100	0.00	6.69
13 p	trichlorofluoromethane	50.000	47.179	5.6	110	0.00	5.79
	---------- AvgRF	CCRF	%Dev	----------			
14 p	freon-113	0.472	0.411	12.9	99	0.01	6.49
15 p	acrolein	0.075	0.071	5.3	109	0.00	6.17
	---------- Amount	Calc.	%Drift	----------			
16 p	1,1-dichloroethene	50.000	48.064	3.9	109	0.00	6.50
	---------- AvgRF	CCRF	%Dev	----------			
17 p	acetone	0.190	0.182	4.2	115	0.01	6.34
18 p	Methyl Acetate	0.606	0.503	17.0	91	0.00	6.71
19 p	methylene chloride	0.779	0.780	-0.1	107	0.00	7.03
20 p	methyl tert butyl ether	2.090	2.082	0.4	106	0.00	7.26
21 p	acrylonitrile	0.405	0.351	13.3	95	0.00	7.20
22 p	allyl chloride	0.869	0.782	10.0	105	0.00	6.78
23 p	trans-1,2-dichloroethene	0.677	0.670	1.0	116	0.00	7.29
24 p	iodomethane	0.980	1.106	-12.9	132	0.01	6.65
25 p	carbon disulfide	0.690	0.693	-0.4	122	0.00	6.71

6.7.6 6

Job Number: MC47774 **Sample:** MSV1838-CC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49908.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

26 p	propionitrile	0.160	0.134	16.2	88	0.00	8.47
27 p	vinyl acetate	0.096	0.103	-7.3	120	0.00	7.73
28 p	chloroprene	1.384	1.359	1.8	111	0.00	7.90
29 p	di-isopropyl ether	2.466	2.342	5.0	102	0.00	7.78
30 p	methacrylonitrile	0.503	0.433	13.9	94	0.00	8.64
31 p	2-butanone	0.121	0.132	-9.1	123	0.00	8.39
32 p	Hexane	0.685	0.648	5.4	110	0.00	7.60
33 P	1,1-dichloroethane	1.449	1.407	2.9	111	0.00	7.81
34 p	tert-butyl ethyl ether	2.562	2.561	0.0	110	0.00	8.20
35 p	isobutyl alcohol	----------NA---------					
36 p	2,2-dichloropropane	0.837	0.763	8.8	115	0.00	8.49
37 p	cis-1,2-dichloroethene	0.800	0.821	-2.6	112	0.00	8.46
38 p	ethyl acetate	----------NA---------					
39 p	bromochloromethane	0.398	0.394	1.0	113	0.00	8.74
40 p	chloroform	1.444	1.441	0.2	113	0.00	8.80
41 S	dibromofluoromethane (s)	0.718	0.665	7.4	114	0.00	8.98
42 p	Tetrahydrofuran	0.286	0.236	17.5	94	0.00	8.76
43 p	1,1,1-trichloroethane	1.168	1.126	3.6	118	0.00	9.06
44 I	1,4-difluorobenzene	1.000	1.000	0.0	119	0.00	9.83
	---------- Amount Calc. %Drift ----------						
45 p	Cyclohexane	50.000	43.986	12.0	111	0.00	9.17
	---------- AvgRF CCRF %Dev ----------						
46 p	carbon tetrachloride	0.589	0.602	-2.2	119	0.00	9.25
47 p	1,1-dichloropropene	0.533	0.550	-3.2	114	0.00	9.21
48 p	benzene	1.367	1.437	-5.1	112	0.00	9.45
49 p	1,2-dichloroethane	0.751	0.748	0.4	106	0.00	9.47
50 p	tert-amyl methyl ether	1.089	1.109	-1.8	110	0.00	9.51
51 p	heptane	0.529	0.527	0.4	111	0.00	9.67
52 p	trichloroethene	0.432	0.461	-6.7	116	0.00	10.13
53 p	1,2-dichloropropane	0.437	0.455	-4.1	112	0.00	10.42
54 p	dibromomethane	0.312	0.310	0.6	109	0.00	10.53
55 p	bromodichloromethane	0.546	0.585	-7.1	115	0.00	10.67
56 p	Methylcyclohexane	0.568	0.598	-5.3	116	0.00	10.43
57 p	2-chloroethyl vinyl ether	0.228	0.225	1.3	108	0.00	10.89
58 p	methyl methacrylate	0.266	0.259	2.6	105	0.00	10.35
59 p	1,4-dioxane	0.004	0.004#	0.0	93	0.00	10.49
	---------- Amount Calc. %Drift ----------						
60 p	cis-1,3-dichloropropene	50.000	50.758	-1.5	114	0.00	11.13
	---------- AvgRF CCRF %Dev ----------						
61 S	toluene-d8 (s)	1.138	1.109	2.5	115	0.00	11.45
62 p	4-methyl-2-pentanone	0.484	0.441	8.9	97	0.00	11.22
63 p	toluene	0.936	0.974	-4.1	118	0.00	11.53
	---------- Amount Calc. %Drift ----------						
64 p	trans-1,3-dichloropropene	50.000	51.261	-2.5	115	0.00	11.71
	---------- AvgRF CCRF %Dev ----------						
65 p	1,1,2-trichloroethane	0.298	0.309	-3.7	112	0.00	11.95
66 p	ethyl methacrylate	0.455	0.482	-5.9	112	0.00	11.69
67 I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00	13.07
68 p	tetrachloroethene	0.671	0.777	-15.8	124	0.00	12.11
69 p	1,3-dichloropropane	1.093	1.136	-3.9	109	0.00	12.15
	---------- Amount Calc. %Drift ----------						

6.7.6

6

Job Number: MC47774 **Sample:** MSV1838-CC1837
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** V49908.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

70 p	dibromochloromethane	50.000	49.614	0.8	117	0.00	12.42
	---------- AvgRF CCRF %Dev ----------						
71 p	1,2-dibromoethane	0.712	0.772	-8.4	113	0.00	12.59
72 p	2-hexanone	0.753	0.766	-1.7	105	0.00	12.11
73 p	chlorobenzene	2.106	2.308	-9.6	116	0.00	13.11
74 p	1,1,1,2-tetrachloroethane	0.819	0.896	-9.4	116	0.00	13.18
75 p	ethylbenzene	3.486	3.927	-12.7	116	0.00	13.17
76 p	m,p-xylene	1.201	1.392	-15.9	116	0.00	13.30
77 p	o-xylene	1.250	1.421	-13.7	115	0.00	13.74
78 p	styrene	2.033	2.357	-15.9	117	0.00	13.76
	---------- Amount Calc. %Drift ----------						
79 P	bromoform	50.000	52.472	-4.9	118	0.00	14.02
	---------- AvgRF CCRF %Dev ----------						
80 p	cis-1,4-dichloro-2-butene	0.000	0.000#	0.0	0#	0.00	14.17
81 p	trans-1,4-dichloro-2-bute	0.387	0.383	1.0	103	0.00	14.48
82 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	15.68
83 p	isopropylbenzene	3.834	4.152	-8.3	116	0.00	14.13
84 S	bromofluorobenzene (s)	1.060	1.050	0.9	115	0.00	14.36
85 p	bromobenzene	0.937	1.019	-8.8	120	0.00	14.57
86 P	1,1,2,2-tetrachloroethane	1.162	1.154	0.7	106	0.00	14.44
87 p	1,2,3-trichloropropane	1.068	1.043	2.3	106	0.00	14.55
88 p	n-propylbenzene	4.866	5.374	-10.4	116	0.00	14.60
89 p	2-chlorotoluene	3.346	3.654	-9.2	116	0.00	14.75
90 p	4-chlorotoluene	3.048	3.309	-8.6	116	0.00	14.88
91 p	1,3,5-trimethylbenzene	3.246	3.607	-11.1	115	0.00	14.77
92 p	tert-butylbenzene	2.101	2.332	-11.0	115	0.00	15.16
93 p	1,2,4-trimethylbenzene	3.409	3.781	-10.9	115	0.00	15.21
94 p	sec-butylbenzene	4.228	4.749	-12.3	117	0.00	15.40
95 p	1,3-dichlorobenzene	1.916	2.093	-9.2	117	0.00	15.60
96 p	p-isopropyltoluene	3.598	4.044	-12.4	116	0.00	15.55
97 p	1,4-dichlorobenzene	1.975	2.115	-7.1	119	0.00	15.71
98 p	1,2-dichlorobenzene	1.956	2.099	-7.3	115	0.00	16.12
99 p	n-butylbenzene	3.810	4.299	-12.8	116	0.00	16.01
100 p	1,2-dibromo-3-chloropropa	0.267	0.255	4.5	100	0.00	16.98
101 p	1,3,5-trichlorobenzene	1.204	1.343	-11.5	121	0.00	17.18
102 p	1,2,4-trichlorobenzene	1.231	1.415	-14.9	120	0.00	17.92
103 p	hexachlorobutadiene	0.585	0.653	-11.6	123	0.00	18.04
104 p	naphthalene	3.952	4.271	-8.1	109	0.00	18.27
105 p	1,2,3-trichlorobenzene	1.199	1.382	-15.3	116	0.00	18.53
	---------- Amount Calc. %Drift ----------						
106 p	2-methylnaphthalene	25.000	28.996	-16.0	110	0.00	19.75
107 p	1-methylnaphthalene	25.000	29.422	-17.7	106	0.00	20.03

(#) = Out of Range SPCC's out = 4 CCC's out = 0
V49896.D V160919S.M Wed Sep 21 19:35:00 2016

6.7.6

6

SGS ACCUTEST New England

Section 7

GC/MS Volatiles

Raw Data

7

Sample Results: V49913.D

Quantitation Report (QT/LSC Reviewed)

Data Path : T:\1\DATA\V160920\
Data File : V49913.D
Acq On : 20 Sep 2016 3:02 pm
Operator : kaylap
Sample : mc47774-1
Misc : MS37347,MSV1838,5.27,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 21 19:46:59 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert butyl alcohol-d9	6.941	65	105810	500.00	ug/kg	# 0.03
4) pentafluorobenzene	8.931	168	149811	50.00	ug/kg	0.00
44) 1,4-difluorobenzene	9.827	114	267417	50.00	ug/kg	0.00
67) chlorobenzene-d5	13.071	82	124501	50.00	ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.680	152	78383	50.00	ug/kg	0.00
System Monitoring Compounds						
41) dibromofluoromethane (s)	8.986	113	101536	47.17	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.34%			
61) toluene-d8 (s)	11.451	98	296618	48.72	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.44%			
84) bromofluorobenzene (s)	14.366	95	107334	64.57	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 129.14%			
Target Compounds						Qvalue
17) acetone	6.311	58	2476	4.36	ug/kg#	19
19) methylene chloride	6.957	84	5137	2.20	ug/kg#	47
25) carbon disulfide	6.699	76	2475	1.20	ug/kg	73
33) 1,1-dichloroethane	7.807	63	1268	0.29	ug/kg#	51
37) cis-1,2-dichloroethene	8.456	96	3192	1.33	ug/kg	86
48) benzene	9.450	78	1614	0.22	ug/kg	52
52) trichloroethene	10.133	95	38197	16.53	ug/kg	91
63) toluene	11.529	92	7995	1.60	ug/kg	93

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

7.1.1

7

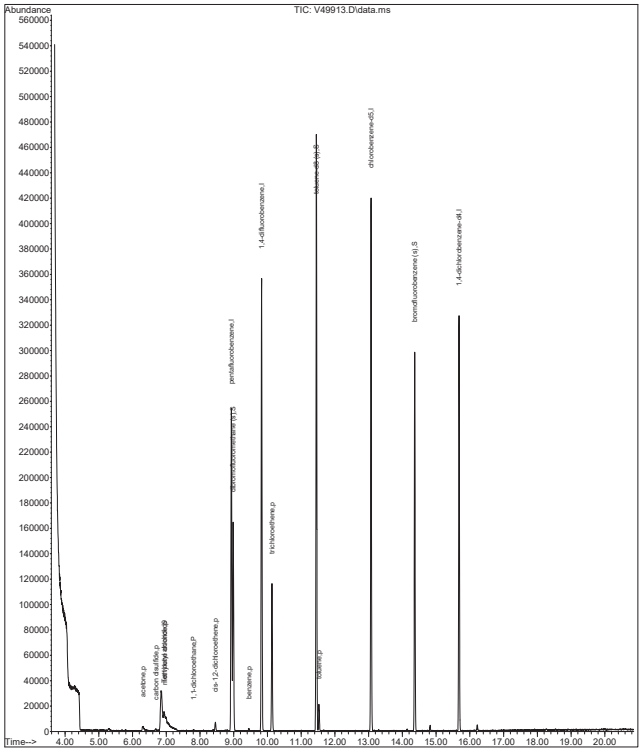
V160919S.M Wed Sep 21 21:14:28 2016 Page: 1

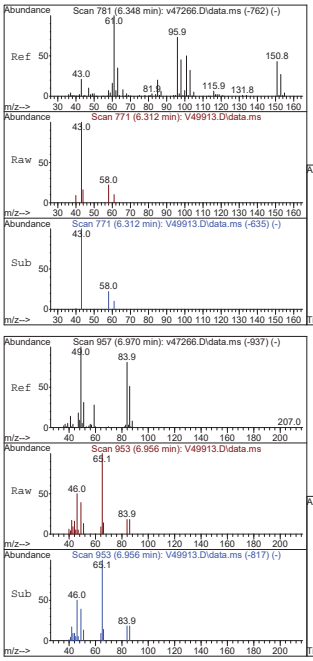
V49913.D: MC47774-1 BOTTOM page 1 of 6

Quantitation Report (QT/LSC Reviewed)

Data Path : T:\1\DATA\V160920\
Data File : V49913.D
Acq On : 20 Sep 2016 3:02 pm
Operator : kaylap
Sample : mc47774-1
Misc : MS37347,MSV1838,5.27,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 21 19:46:59 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

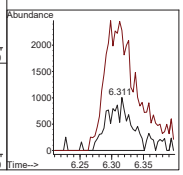




#17
acetone
Concen: 4.36 ug/kg
RT: 6.311 min Scan# 771
Delta R.T. -0.021 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 58 Resp: 2476

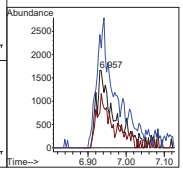
Ion	Ratio	Lower	Upper
58	100		
43	459.5	270.3	330.3#

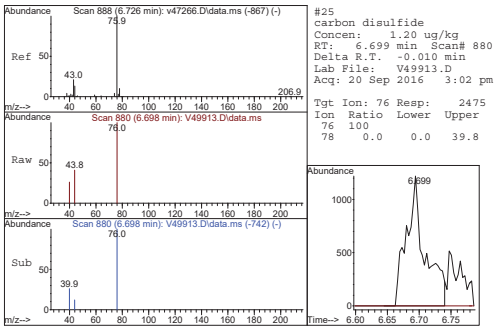


#19
methylene chloride
Concen: 2.20 ug/kg
RT: 6.957 min Scan# 953
Delta R.T. -0.077 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 84 Resp: 5137

Ion	Ratio	Lower	Upper
84	100		
86	102.1	40.9	100.9#
49	218.3	113.2	173.2#

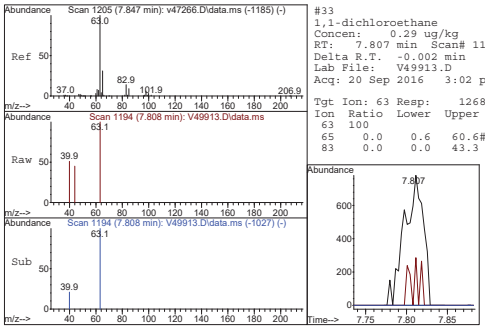




#25
carbon disulfide
Concen: 1.20 ug/kg
RT: 6.699 min Scan# 880
Delta R.T. -0.010 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 76 Resp: 2475

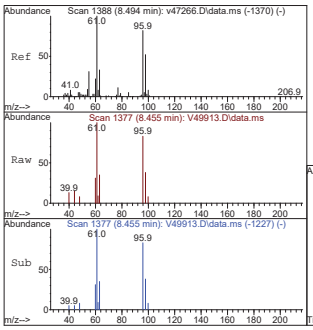
Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.8



#33
1,1-dichloroethane
Concen: 0.29 ug/kg
RT: 7.807 min Scan# 1194
Delta R.T. -0.002 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 63 Resp: 1268

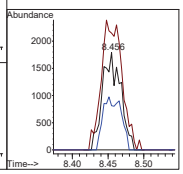
Ion	Ratio	Lower	Upper
63	100		
65	0.0	0.6	60.6#
83	0.0	0.0	43.3

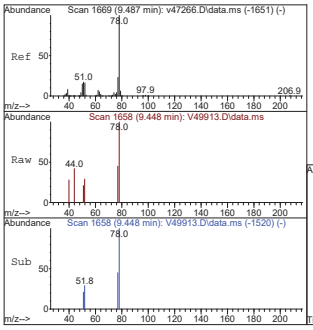


#37
cis-1,2-dichloroethene
Concen: 1.33 ug/kg
RT: 8.456 min Scan# 1377
Delta R.T. -0.000 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 96 Resp: 3192

Ion	Ratio	Lower	Upper
96	100		
61	119.9	100.2	160.2
98	45.4	35.0	95.0

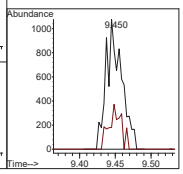


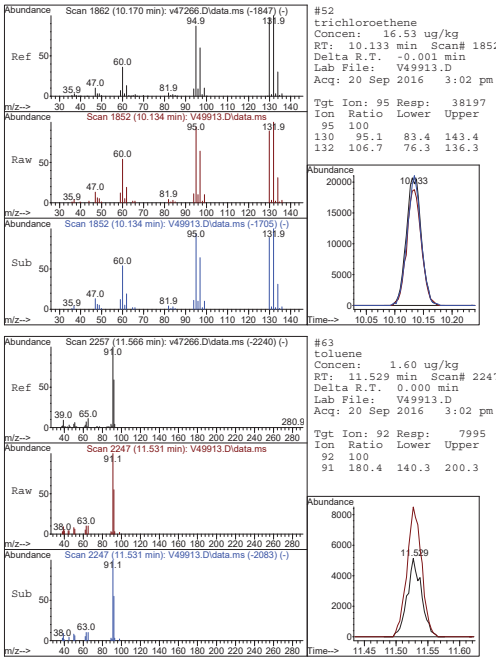


#48
benzene
Concen: 0.22 ug/kg
RT: 9.450 min Scan# 1658
Delta R.T. -0.000 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 78 Resp: 1614

Ion	Ratio	Lower	Upper
78	100		
77	45.2	0.0	52.2





#52
trichloroethene
Concen: 16.53 ug/kg
RT: 10.133 min Scan# 1852
Delta R.T. -0.001 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 95 Resp: 38197

Ion	Ratio	Lower	Upper
95	100		
130	95.1	83.4	143.4
132	106.7	76.3	136.3

#63
toluene
Concen: 1.60 ug/kg
RT: 11.529 min Scan# 2247
Delta R.T. 0.000 min
Lab File: V49913.D
Acq: 20 Sep 2016 3:02 pm

Tgt Ion: 92 Resp: 7995

Ion	Ratio	Lower	Upper
92	100		
91	180.4	140.3	200.3

7.1.1

7

LSC Area Percent Report

```
Data Path : T:\1\DATA\V160920\
Data File : V49913.D
Acq On    : 20 Sep 2016   3:02 pm
Operator  : kaylap
Sample    : mc47774-1
Misc      : MS37347,MSV1838,5.27,,,5,1
ALS Vial  : 9   Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON                          Filtering: 5
Sampling  : 3                            Min Area: 1000 Area counts
Start Thrs: 0.2                         Max Peaks: 100
Stop Thrs : 0.2                       Peak Location: CENTROID

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

Method    : T:\1\METHODS\V160919S.M
Title     : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

Signal     : TIC: V49913.D\data.ms
```

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.846	906	922	924	rBV2	31433	59210	7.44%	1.397%
2	8.455	1367	1377	1386	rBV5	6644	12089	1.52%	0.285%
3	8.929	1499	1511	1520	rBV2	253821	491774	61.83%	11.607%
4	8.985	1520	1527	1541	rVB	163900	312186	39.25%	7.368%
5	9.827	1753	1765	1780	rBV	356218	636589	80.04%	15.025%
6	10.134	1841	1852	1864	rVB2	116113	208058	26.16%	4.911%
7	11.449	2212	2224	2237	rBV	469601	795381	100.00%	18.773%
8	11.527	2237	2246	2257	rVB	20676	31213	3.92%	0.737%
9	13.072	2670	2683	2697	rBV	419582	695526	87.45%	16.416%
10	14.366	3038	3049	3062	rBV2	298277	475426	59.77%	11.221%
11	15.681	3410	3421	3437	rVB	326937	519450	65.31%	12.260%

Sum of corrected areas: 4236902

7.1.2

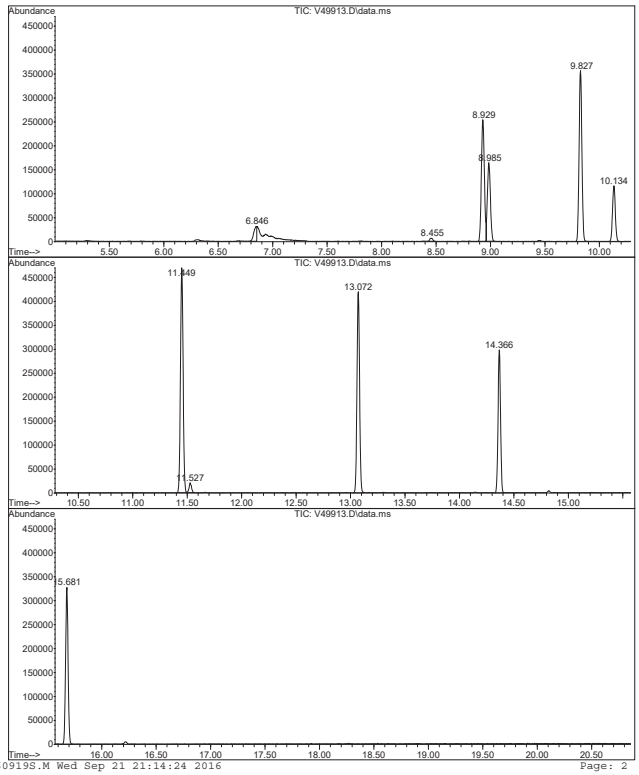
7

LSC Report - Integrated Chromatogram

```
Data Path : T:\1\DATA\V160920\
Data File : V49913.D
Acq On    : 20 Sep 2016   3:02 pm
Operator  : kaylap
Sample    : mc47774-1
Misc      : MS37347,MSV1838,5.27,,,5,1
ALS Vial  : 9   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library    : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p
```



7.1.2

7

Library Search Compound Report

```
Data Path : T:\1\DATA\V160920\
Data File : V49913.D
Acq On    : 20 Sep 2016   3:02 pm
Operator  : kaylap
Sample    : mc47774-1
Misc      : MS37347,MSV1838,5.27,,,5,1
ALS Vial  : 9   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library    : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

7.1.2

7

Tentatively Identified Compound (LSC) summary

```
Data Path : T:\1\DATA\V160920\
Data File : V49913.D
Acq On    : 20 Sep 2016   3:02 pm
Operator  : kaylap
Sample    : mc47774-1
Misc      : MS37347,MSV1838,5.27,,,5,1
ALS Vial  : 9   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library   : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

7.1.2

7

Quantitation Report (QT Reviewed)

```
Data Path : M:\1\data\M160916\
Data File : M80822.D
Acq On    : 16 Sep 2016   3:53 pm
Operator  : kaylap
Sample    : mc47774-2
Misc      : MS37330tic,MSM2895,5.80,,,5,1
ALS Vial  : 13   Sample Multiplier: 1

Quant Time: Sep 19 09:25:06 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title  : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

        Compound                    R.T. QIon  Response  Conc Units Dev(Min)
 ----------------------------------------------------------------------------
 Internal Standards
   1) tert butyl alcohol-d9       7.677   65    30898   500.00 ug/kg   -0.01
   4) pentafluorobenzene          9.772  168    51711    50.00 ug/kg    0.00
  43) 1,4-difluorobenzene        10.668  114    83017    50.00 ug/kg    0.00
  66) chlorobenzene-d5           13.902   82    36419    50.00 ug/kg    0.00
  80) 1,4-dichlorobenzene-d4     16.488  152    34388    50.00 ug/kg    0.00

 System Monitoring Compounds
  40) dibromofluoromethane (s)    9.833  113    30481    50.68 ug/kg   0.00
    Spiked Amount    50.000   Range  70 - 130    Recovery   =  101.36%
  60) toluene-d8 (s)             12.292   98    94590    50.17 ug/kg   0.00
    Spiked Amount    50.000   Range  70 - 130    Recovery   =  100.34%
  82) bromofluorobenzene (s)     15.182   95    31651    57.16 ug/kg   0.00
    Spiked Amount    50.000   Range  70 - 130    Recovery   =  114.32%

 Target Compounds                                              Qvalue
  16) acetone                     7.125   58     1050     5.11 ug/kg#     32
  18) methylene chloride          7.751   84     1576     1.98 ug/kg      82
  51) trichloroethene            10.978   95     1749     2.42 ug/kg      89
  62) toluene                    12.366   92     3059     1.89 ug/kg      88
 ----------------------------------------------------------------------------

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

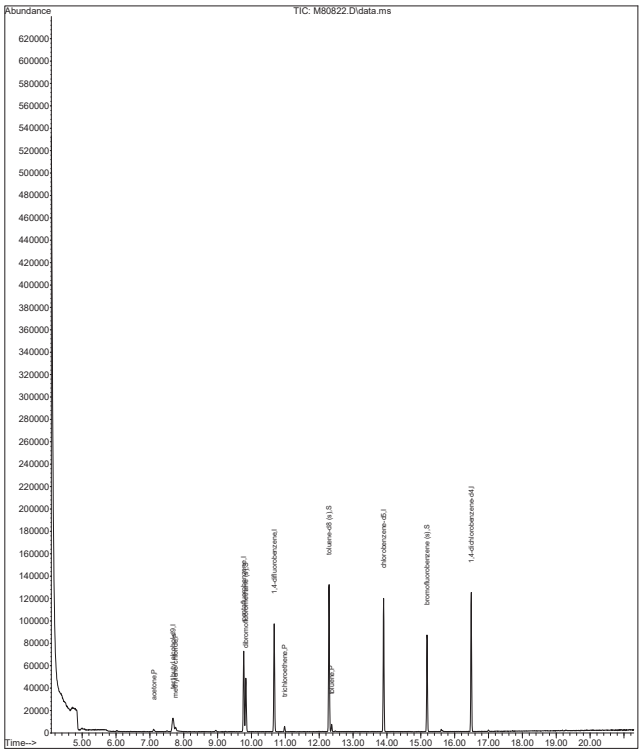
7.1.3

7

Quantitation Report (QT Reviewed)

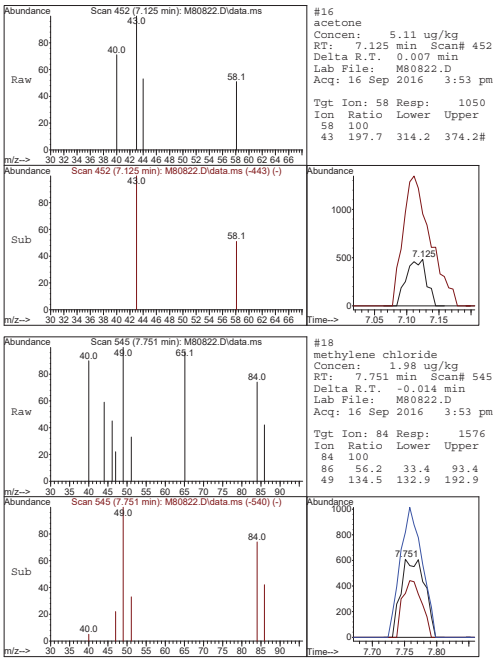
```
Data Path : M:\1\data\M160916\
Data File : M80822.D
Acq On    : 16 Sep 2016   3:53 pm
Operator  : kaylap
Sample    : mc47774-2
Misc      : MS37330tic,MSM2895,5.80,,,5,1
ALS Vial  : 13   Sample Multiplier: 1

Quant Time: Sep 19 09:25:06 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title  : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration
```



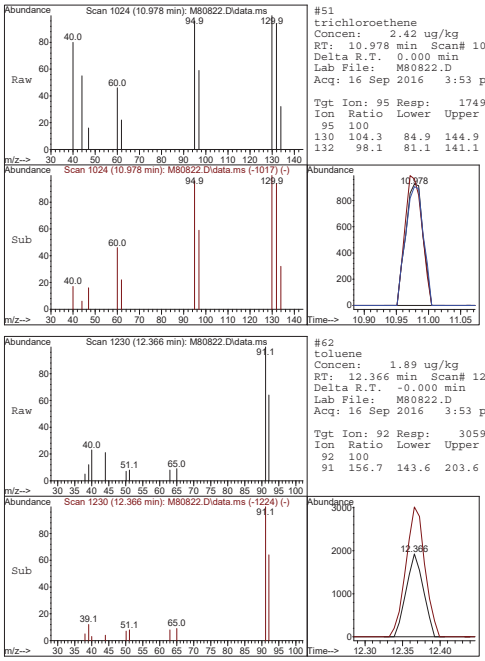
7.1.3

7



7.1.3

7



#51
trichloroethene
Concen: 2.42 ug/kg
RT: 10.978 min Scan# 1024
Delta R.T. 0.000 min
Lab File: M80822.D
Acq: 16 Sep 2016 3:53 pm

Tgt Ion: 95 Resp: 1749

Ion	Ratio	Lower	Upper
95	100		
130	104.3	84.9	144.9
132	98.1	81.1	141.1

#62
toluene
Concen: 1.89 ug/kg
RT: 12.366 min Scan# 1230
Delta R.T. -0.000 min
Lab File: M80822.D
Acq: 16 Sep 2016 3:53 pm

Tgt Ion: 92 Resp: 3059

Ion	Ratio	Lower	Upper
92	100		
91	156.7	143.6	203.6

7.1.3

7

LSC Area Percent Report

Data Path : M:\1\data\M160916\
Data File : M80822.D
Acq On : 16 Sep 2016 3:53 pm
Operator : kaylap
Sample : mc47774-2
Misc : MS37330tic,MSM2895,5.80,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: events.e
Integrator: ChemStation

Method : C:\msdchem\1\METHODS\DEFAULT.M
Title :

Signal : TIC: M80822.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.684	524	535	543	rBV2	12142	46106	18.98%	3.609%
2	9.772	836	845	850	rBV	71847	142802	58.78%	11.179%
3	9.833	850	854	865	rVB2	47788	92209	37.96%	7.219%
4	10.668	969	978	989	rBV	96387	180061	74.12%	14.096%
5	12.292	1208	1219	1226	rBV	131413	242933	100.00%	19.018%
6	13.902	1448	1458	1467	rBV	119095	209698	86.32%	16.416%
7	15.182	1642	1648	1657	rVB	86393	151304	62.28%	11.845%
8	16.488	1834	1842	1852	rBV	124202	212267	87.38%	16.617%

Sum of corrected areas: 1277380

7.1.4

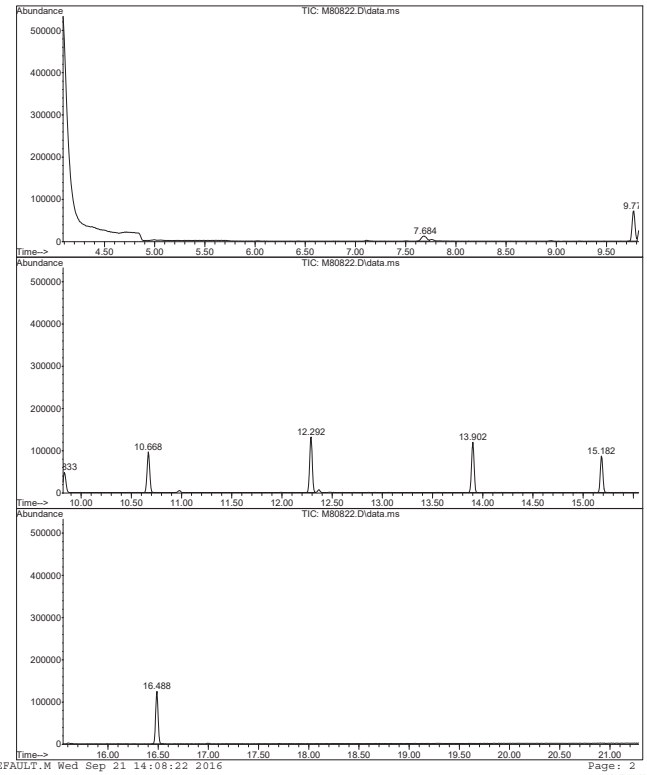
7

LSC Report - Integrated Chromatogram

Data Path : M:\1\data\M160916\
Data File : M80822.D
Acq On : 16 Sep 2016 3:53 pm
Operator : kaylap
Sample : mc47774-2
Misc : MS37330tic,MSM2895,5.80,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\NIST\NIST08.L
TIC Integration Parameters: rteint.p



7.1.4

7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80822.D
Acq On : 16 Sep 2016 3:53 pm
Operator : kaylap
Sample : mc47774-2
Misc : MS37330tic,MSM2895,5.80,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\NIST\NIST08.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

7.1.4

7

Sample Results: **M80822.D**

Tentatively Identified Compound (LSC) summary

```
Data Path : M:\1\data\M160916\
Data File : M80822.D
Acq On    : 16 Sep 2016   3:53 pm
Operator  : kaylap
Sample    : mc47774-2
Misc      : MS37330tic,MSM2895,5.80,,,5,1
ALS Vial  : 13   Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title  : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library   : C:\NIST\NIST08.L
TIC Integration Parameters: rteint.p

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

7.1.4 7

Sample Results: **V49914.D**

Quantitation Report (LSC Reviewed)

```
Data Path : T:\1\DATA\V160920\
Data File : V49914.D
Acq On    : 20 Sep 2016   3:31 pm
Operator  : kaylap
Sample    : mc47774-3
Misc      : MS37347,MSV1838,5.46,,,5,1
ALS Vial  : 10   Sample Multiplier: 1

Quant Time: Sep 20 15:59:23 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration

        Compound                    R.T. QIon  Response  Conc Units Dev(Min)
 -----------------------------------------------------------------------------
 Internal Standards
   1) Tert butyl alcohol-d9       6.938   65    95005   500.00 ug/kg  # 0.03
   4) pentafluorobenzene          8.931  168   154371    50.00 ug/kg    0.00
  44) 1,4-difluorobenzene         9.828  114   275999    50.00 ug/kg    0.00
  67) chlorobenzene-d5           13.071   82   143156    50.00 ug/kg  # 0.00
  82) 1,4-dichlorobenzene-d4     15.681  152   120584    50.00 ug/kg    0.00

 System Monitoring Compounds
  41) dibromofluoromethane (s)    8.986  113   104131    46.95 ug/kg    0.00
    Spiked Amount     50.000   Range  70 - 130    Recovery   =   93.90%
  61) toluene-d8 (s)             11.451   98   314331    50.03 ug/kg    0.00
    Spiked Amount     50.000   Range  70 - 130    Recovery   =  100.06%
  84) bromofluorobenzene (s)     14.367   95   133527    52.21 ug/kg    0.00
    Spiked Amount     50.000   Range  70 - 130    Recovery   =  104.42%

 Target Compounds                                                   Qvalue
  17) acetone                     6.318   58     2590     4.43 ug/kg#     77
  19) methylene chloride          6.952   84     2527     1.05 ug/kg#     70
  63) toluene                    11.529   92    13435     2.60 ug/kg      94
 -----------------------------------------------------------------------------

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

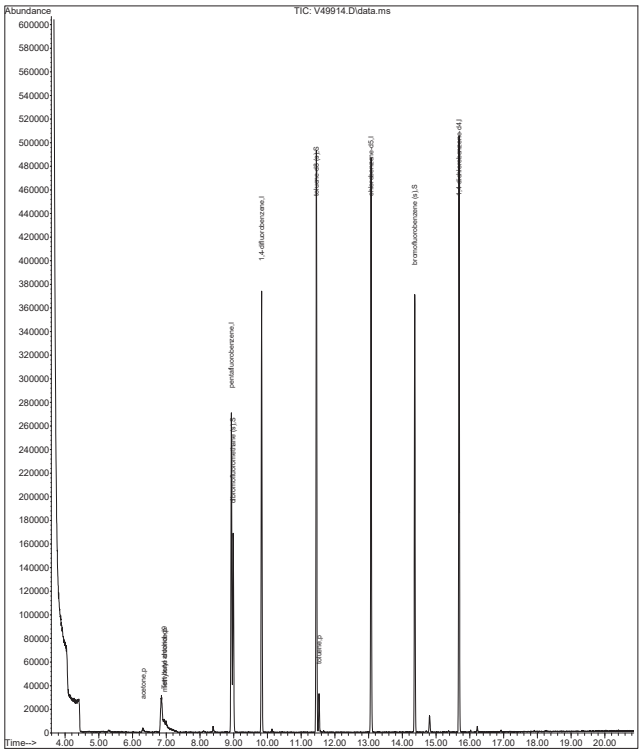
7.1.5 7

Sample Results: **V49914.D**

Quantitation Report (LSC Reviewed)

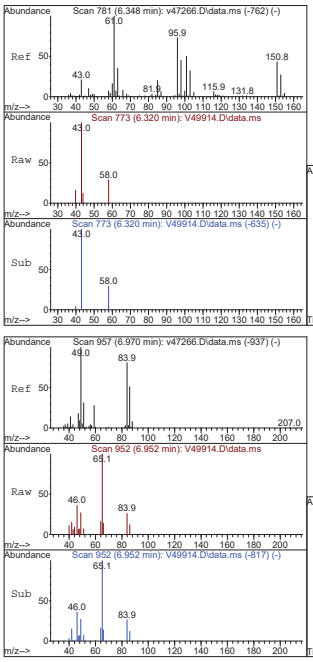
```
Data Path : T:\1\DATA\V160920\
Data File : V49914.D
Acq On    : 20 Sep 2016   3:31 pm
Operator  : kaylap
Sample    : mc47774-3
Misc      : MS37347,MSV1838,5.46,,,5,1
ALS Vial  : 10   Sample Multiplier: 1

Quant Time: Sep 20 15:59:23 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration
```



7.1.5 7

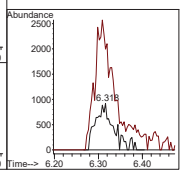
Sample Results: **V49914.D**



#17
acetone
Concen: 4.43 ug/kg
RT: 6.318 min Scan# 773
Delta R.T. -0.014 min
Lab File: V49914.D
Acq: 20 Sep 2016 3:31 pm

Tgt Ion: 58 Resp: 2590

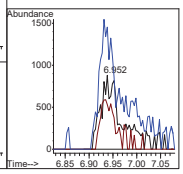
Ion	Ratio	Lower	Upper
58	100		
43	345.9	270.3	330.3#



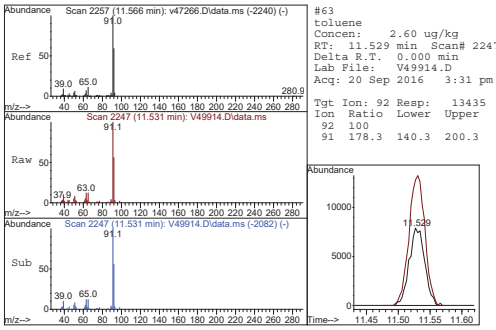
#19
methylene chloride
Concen: 1.05 ug/kg
RT: 6.952 min Scan# 952
Delta R.T. -0.082 min
Lab File: V49914.D
Acq: 20 Sep 2016 3:31 pm

Tgt Ion: 84 Resp: 2527

Ion	Ratio	Lower	Upper
84	100		
86	46.1	40.9	100.9
49	105.4	113.2	173.2#



7.1.5 7



#63
toluene
Concen: 2.60 ug/kg
RT: 11.529 min Scan# 2247
Delta R.T. 0.000 min
Lab File: V49914.D
Acq: 20 Sep 2016 3:31 pm

Tgt Ion: 92 Resp: 13435

Ion	Ratio	Lower	Upper
92	100		
91	178.3	140.3	200.3

7.1.5

7

LSC Area Percent Report

Data Path : T:\1\DATA\V160920\
Data File : V49914.D
Acq On : 20 Sep 2016 3:31 pm
Operator : kaylap
Sample : mc47774-3
Misc : MS37347,MSV1838,5.46,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 1000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: CENTROID

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

Method : T:\1\METHODS\V160919S.M
Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

Signal : TIC: V49914.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.846	906	922	923	rBV2	28894	46317	5.47%	0.994%
2	8.929	1499	1511	1520	rBV2	270577	513322	60.59%	11.015%
3	8.985	1520	1527	1546	rVB2	168705	319408	37.70%	6.854%
4	9.827	1751	1765	1781	rBV	373805	659634	77.85%	14.155%
5	11.449	2211	2224	2237	rBV	492998	847263	100.00%	18.181%
6	11.531	2237	2247	2256	rVB2	32301	54642	6.45%	1.173%
7	13.072	2670	2683	2696	rBV	486401	787104	92.90%	16.890%
8	14.366	3034	3049	3061	rBV2	370728	593439	70.04%	12.734%
9	14.804	3162	3173	3186	rVB3	14117	28722	3.39%	0.616%
10	15.681	3409	3421	3435	rBV	505264	810275	95.63%	17.387%

Sum of corrected areas: 4660126

7.1.6

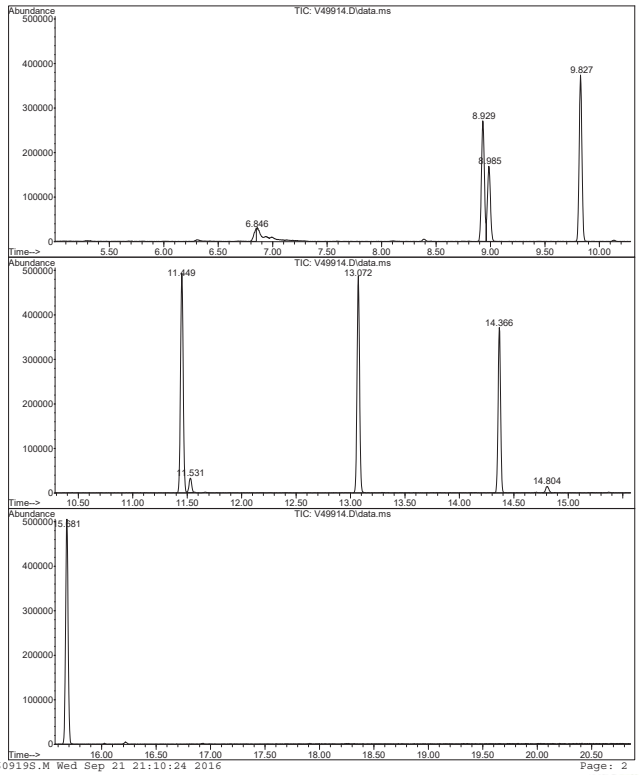
7

LSC Report - Integrated Chromatogram

Data Path : T:\1\DATA\V160920\
Data File : V49914.D
Acq On : 20 Sep 2016 3:31 pm
Operator : kaylap
Sample : mc47774-3
Misc : MS37347,MSV1838,5.46,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



7.1.6

7

Library Search Compound Report

Data Path : T:\1\DATA\V160920\
Data File : V49914.D
Acq On : 20 Sep 2016 3:31 pm
Operator : kaylap
Sample : mc47774-3
Misc : MS37347,MSV1838,5.46,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

No Library Search Compounds Detected
****

7.1.6

7

Tentatively Identified Compound (LSC) summary

Data Path : T:\1\DATA\V160920\
Data File : V49914.D
Acq On : 20 Sep 2016 3:31 pm
Operator : kaylap
Sample : mc47774-3
Misc : MS37347,MSV1838,5.46,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

7.1.6

7

Quantitation Report (QT/LSC Reviewed)

Data Path : T:\1\DATA\V160920\
Data File : V49915.D
Acq On : 20 Sep 2016 4:01 pm
Operator : kaylap
Sample : mc47774-4
Misc : MS37347,MSV1838,5.02,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 21 19:49:03 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.921	65	93162	500.00 ug/kg	# 0.00
4) pentafluorobenzene	8.930	168	142229	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.827	114	255117	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.071	82	127807	50.00 ug/kg	0.00
82) 1,4-dichlorobenzene-d4	15.680	152	101389	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.985	113	96851	47.39 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.78%		
61) toluene-d8 (s)	11.450	98	291519	50.19 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.38%		
84) bromofluorobenzene (s)	14.366	95	118366	55.05 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 110.10%		
Target Compounds					Qvalue
17) acetone	6.315	58	2649	4.91 ug/kg#	1
19) methylene chloride	6.964	84	5918	2.67 ug/kg	90
25) carbon disulfide	6.698	76	1472	0.75 ug/kg	73
40) chloroform	8.804	83	1193	0.29 ug/kg	82
52) trichloroethene	10.133	95	17172	7.79 ug/kg	82
63) toluene	11.529	92	8519	1.78 ug/kg	94

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

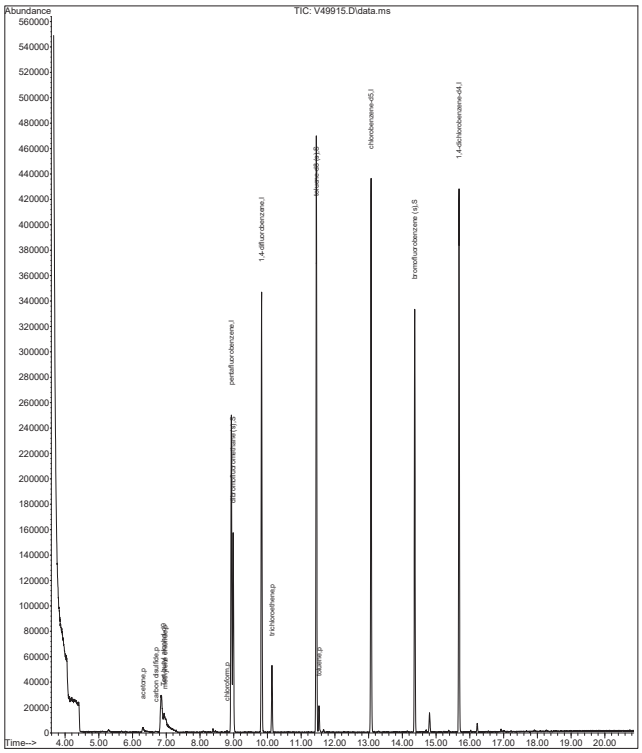
7.1.7

7

Quantitation Report (QT/LSC Reviewed)

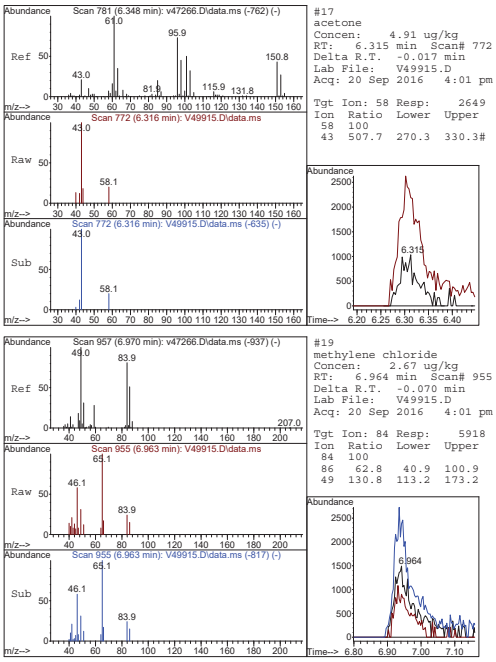
Data Path : T:\1\DATA\V160920\
Data File : V49915.D
Acq On : 20 Sep 2016 4:01 pm
Operator : kaylap
Sample : mc47774-4
Misc : MS37347,MSV1838,5.02,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 21 19:49:03 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration



7.1.7

7



#17
acetone
Concen: 4.91 ug/kg
RT: 6.315 min Scan# 772
Delta R.T. -0.017 min
Lab File: V49915.D
Acq: 20 Sep 2016 4:01 pm

Tgt Ion: 58 Resp: 2649

Ion	Ratio	Lower	Upper
58	100		
43	507.7	270.3	330.3#

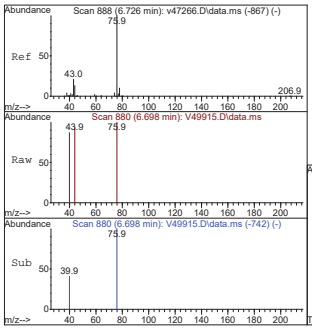
#19
methylene chloride
Concen: 2.67 ug/kg
RT: 6.964 min Scan# 955
Delta R.T. -0.070 min
Lab File: V49915.D
Acq: 20 Sep 2016 4:01 pm

Tgt Ion: 84 Resp: 5918

Ion	Ratio	Lower	Upper
84	100		
86	62.8	40.9	100.9
49	130.8	113.2	173.2

7.1.7

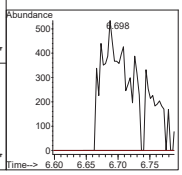
7

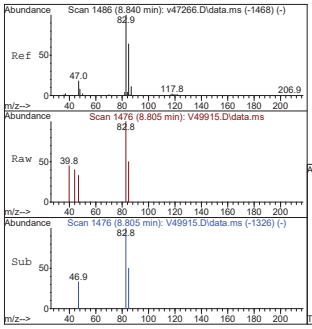


#25
carbon disulfide
Concen: 0.75 ug/kg
RT: 6.698 min Scan# 880
Delta R.T. -0.011 min
Lab File: V49915.D
Acq: 20 Sep 2016 4:01 pm

Tgt Ion: 76 Resp: 1472

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.8

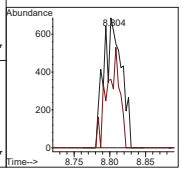




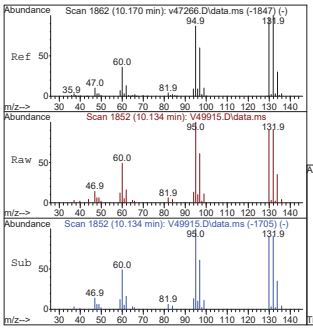
#40
chloroform
Concen: 0.29 ug/kg
RT: 8.804 min Scan# 1476
Delta R.T. -0.001 min
Lab File: V49915.D
Acq: 20 Sep 2016 4:01 pm

Tgt Ion: 83 Resp: 1193

Ion	Ratio	Lower	Upper
83	100		
85	50.0	34.3	94.3



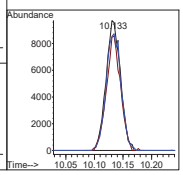
7.1.7

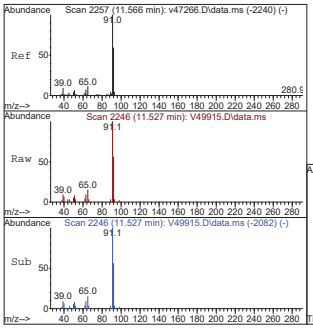


#52
trichloroethene
Concen: 7.79 ug/kg
RT: 10.133 min Scan# 1852
Delta R.T. -0.001 min
Lab File: V49915.D
Acq: 20 Sep 2016 4:01 pm

Tgt Ion: 95 Resp: 17172

Ion	Ratio	Lower	Upper
95	100		
130	89.6	83.4	143.4
132	91.4	76.3	136.3

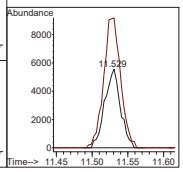




#63
toluene
Concen: 1.78 ug/kg
RT: 11.529 min Scan# 2246
Delta R.T. -0.000 min
Lab File: V49915.D
Acq: 20 Sep 2016 4:01 pm

Tgt Ion: 92 Resp: 8519

Ion	Ratio	Lower	Upper
92	100		
91	177.9	140.3	200.3



7.1.7

LSC Area Percent Report

Data Path : T:\1\DATA\V160920\
Data File : V49915.D
Acq On : 20 Sep 2016 4:01 pm
Operator : kaylap
Sample : mc47774-4
Misc : MS37347,MSV1838,5.02,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 1000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: CENTROID

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

Method : T:\1\METHODS\V160919S.M
Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

Signal : TIC: V49915.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.846	905	922	923	rBV3	29230	52181	6.66%	1.206%
2	6.935	939	947	952	rBV9	4835	8154	1.04%	0.188%
3	8.929	1498	1511	1519	rBV2	249868	467140	59.63%	10.799%
4	8.985	1519	1527	1543	rVB	157072	302738	38.65%	6.999%
5	9.827	1754	1765	1781	rVB2	346409	609863	77.85%	14.098%
6	10.134	1840	1852	1863	rBV2	52647	91122	11.63%	2.107%
7	11.449	2212	2224	2238	rBV	469551	783345	100.00%	18.109%
8	11.531	2238	2247	2263	rVB	20937	36480	4.66%	0.843%
9	13.072	2670	2683	2699	rBV	436180	719060	91.79%	16.623%
10	14.366	3037	3049	3060	rVB	332808	529146	67.55%	12.232%
11	14.804	3162	3173	3184	rBV3	15493	31134	3.97%	0.720%
12	15.681	3409	3421	3435	rVB	427701	683680	87.28%	15.805%
13	16.219	3561	3573	3582	rBV2	6953	11702	1.49%	0.271%

Sum of corrected areas: 4325745

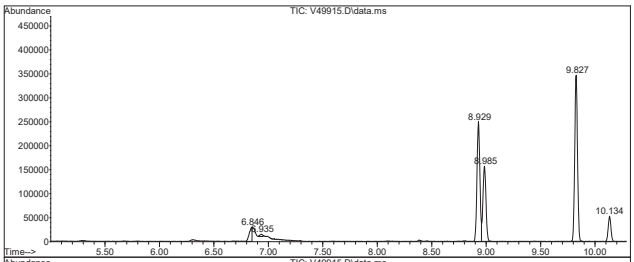
7.1.8

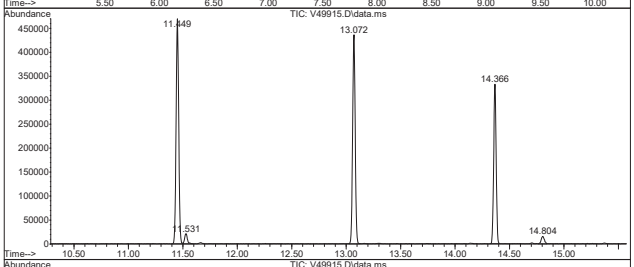
LSC Report - Integrated Chromatogram

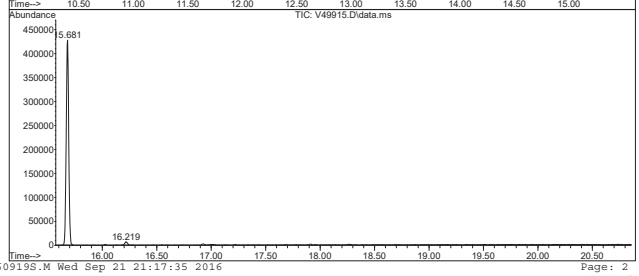
Data Path : T:\1\DATA\V160920\
Data File : V49915.D
Acq On : 20 Sep 2016 4:01 pm
Operator : kaylap
Sample : mc47774-4
Misc : MS37347,MSV1838,5.02,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p







7.1.8

Library Search Compound Report

```
Data Path : T:\1\DATA\V160920\
Data File : V49915.D
Acq On    : 20 Sep 2016   4:01 pm
Operator  : kaylap
Sample    : mc47774-4
Misc      : MS37347,MSV1838,5.02,,,5,1
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library   : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p
```

7.1.8

7

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

```
Data Path : T:\1\DATA\V160920\
Data File : V49915.D
Acq On    : 20 Sep 2016   4:01 pm
Operator  : kaylap
Sample    : mc47774-4
Misc      : MS37347,MSV1838,5.02,,,5,1
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library   : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

7.1.8

7

V160919S.M Wed Sep 21 21:17:35 2016 Page: 3

Quantitation Report (QT/LSC Reviewed)

```
Data Path : M:\1\data\M160916\
Data File : M80825.D
Acq On    : 16 Sep 2016   5:16 pm
Operator  : kaylap
Sample    : mc47774-5
Misc      : MS37330,MSM2895,5.48,,,5,1
ALS Vial  : 16   Sample Multiplier: 1

Quant Time: Sep 19 09:27:33 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title  : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

        Compound                    R.T. QIon  Response  Conc Units Dev(Min)
 ---------------------------------------------------------------------------
 Internal Standards
   1) tert butyl alcohol-d9        7.691   65    31634   500.00 ug/kg    0.00
   4) pentafluorobenzene           9.772  168    51330    50.00 ug/kg    0.00
  43) 1,4-difluorobenzene         10.668  114    82495    50.00 ug/kg    0.00
  66) chlorobenzene-d5            13.902   82    38762    50.00 ug/kg    0.00
  80) 1,4-dichlorobenzene-d4      16.488  152    39268    50.00 ug/kg    0.00

 System Monitoring Compounds
  40) dibromofluoromethane (s)     9.833  113    31597    52.92 ug/kg   0.00
   Spiked Amount     50.000   Range  70 - 130    Recovery   =  105.84%
  60) toluene-d8 (s)              12.292   98    97162    51.86 ug/kg   0.00
   Spiked Amount     50.000   Range  70 - 130    Recovery   =  103.72%
  82) bromofluorobenzene (s)      15.182   95    33888    53.60 ug/kg   0.00
   Spiked Amount     50.000   Range  70 - 130    Recovery   =  107.20%

 Target Compounds                                              Qvalue
  18) methylene chloride           7.758   84     1590     2.01 ug/kg#    76
  62) toluene                     12.366   92     2498     1.55 ug/kg     89
 ---------------------------------------------------------------------------

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

7.1.9

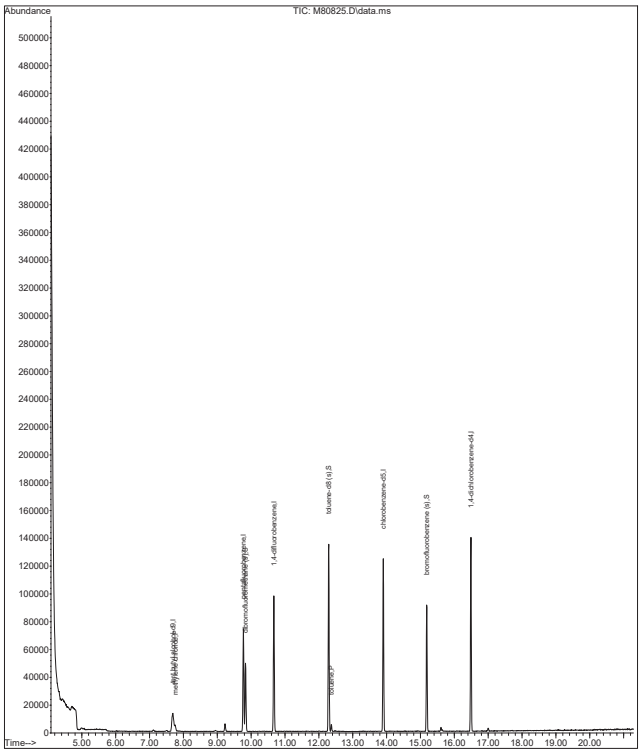
7

DEFAULT.M Wed Sep 21 14:24:02 2016 Page: 1

Quantitation Report (QT/LSC Reviewed)

```
Data Path : M:\1\data\M160916\
Data File : M80825.D
Acq On    : 16 Sep 2016   5:16 pm
Operator  : kaylap
Sample    : mc47774-5
Misc      : MS37330,MSM2895,5.48,,,5,1
ALS Vial  : 16   Sample Multiplier: 1

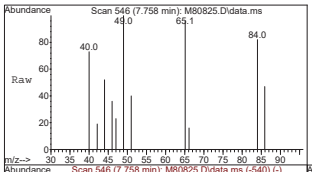
Quant Time: Sep 19 09:27:33 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title  : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration
```



7.1.9

7

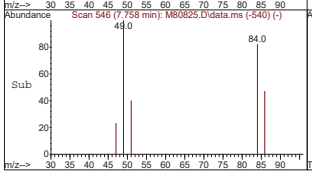
DEFAULT.M Wed Sep 21 14:24:02 2016 Page: 2

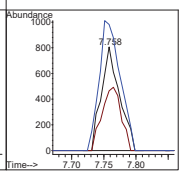


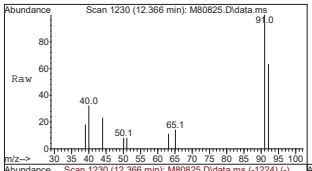
#18
methylene chloride
Concen: 2.01 ug/kg
RT: 7.758 min Scan# 546
Delta R.T. -0.007 min
Lab File: M80825.D
Acq: 16 Sep 2016 5:16 pm

Tgt Ion: 84 Resp: 1590

Ion	Ratio	Lower	Upper
84	100		
86	57.6	33.4	93.4
49	121.6	132.9	192.9#



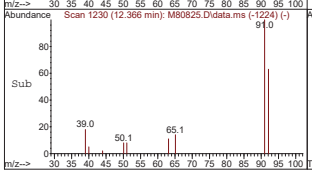


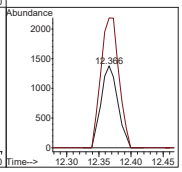


#62
toluene
Concen: 1.55 ug/kg
RT: 12.366 min Scan# 1230
Delta R.T. -0.000 min
Lab File: M80825.D
Acq: 16 Sep 2016 5:16 pm

Tgt Ion: 92 Resp: 2498

Ion	Ratio	Lower	Upper
92	100		
91	158.5	143.6	203.6





7.1.9 7

LSC Area Percent Report

Data Path : M:\1\data\M160916\
Data File : M80825.D
Acq On : 16 Sep 2016 5:16 pm
Operator : kaylap
Sample : mc47774-5
Misc : MS37330,MSM2895,5.48,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: events.e
Integrator: ChemStation

Method : C:\msdchem\1\METHODS\DEFAULT.M
Title :

Signal : TIC: M80825.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.989	129	135	261	rVB3	2612	75074	30.10%	4.934%
2	5.933	271	275	283	rBV2	221	700	0.28%	0.046%
3	6.034	283	290	307	rVV2	483	2447	0.98%	0.161%
4	6.512	351	361	369	rBV2	242	1023	0.41%	0.067%
5	6.795	393	403	445	rBV2	335	3056	1.23%	0.201%
6	7.111	445	450	469	rVV3	1153	3328	1.33%	0.219%
7	7.253	469	471	485	rVV2	260	688	0.28%	0.045%
8	7.435	485	498	499	rVV2	227	646	0.26%	0.042%
9	7.509	499	509	517	rVV3	717	2290	0.92%	0.151%
10	7.691	517	536	591	rVB2	13112	67140	26.92%	4.413%
11	8.209	599	613	615	rVB2	162	627	0.25%	0.041%
12	8.263	615	621	627	rVB2	296	713	0.29%	0.047%
13	8.371	631	637	649	rBV2	199	625	0.25%	0.041%
14	8.755	691	694	711	rVB2	249	1065	0.43%	0.070%
15	8.944	711	722	741	rBV3	893	3673	1.47%	0.241%
16	9.085	741	743	749	rBV2	238	514	0.21%	0.034%
17	9.227	757	764	777	rVB	5659	11964	4.80%	0.786%
18	9.355	781	783	789	rVB2	230	365	0.15%	0.024%
19	9.422	789	793	801	rBV2	220	699	0.28%	0.046%
20	9.577	811	816	833	rBV2	251	924	0.37%	0.061%
21	9.772	833	845	849	rVV	73877	142329	57.07%	9.354%
22	9.833	849	854	869	rVB	49107	96770	38.80%	6.360%
23	10.075	879	890	893	rBV2	262	722	0.29%	0.047%
24	10.237	905	914	923	rBV2	222	726	0.29%	0.048%
25	10.385	927	936	953	rVB2	360	1859	0.75%	0.122%
26	10.554	953	961	967	rBV2	260	707	0.28%	0.046%
27	10.668	967	978	991	rVB	97535	181444	72.76%	11.925%
28	10.911	1001	1014	1019	rVB2	287	1072	0.43%	0.070%
29	10.978	1019	1024	1031	rBV	383	1006	0.40%	0.066%
30	11.133	1031	1047	1051	rVB2	213	836	0.34%	0.055%
31	11.524	1101	1105	1113	rVB2	181	426	0.17%	0.028%
32	11.766	1135	1141	1169	rBV2	215	960	0.38%	0.063%
33	11.995	1169	1175	1187	rBV3	381	1112	0.45%	0.073%
34	12.130	1189	1195	1207	rVB2	225	708	0.28%	0.047%
35	12.292	1207	1219	1227	rBV	134676	249380	100.00%	16.390%
36	12.366	1227	1230	1243	rVB	4991	8484	3.40%	0.558%
37	12.480	1243	1247	1257	rBV3	603	1473	0.59%	0.097%
38	12.804	1293	1295	1307	rVB2	206	495	0.20%	0.033%
39	13.127	1337	1343	1347	rBV2	285	565	0.23%	0.037%
40	13.316	1365	1371	1375	rVB	363	709	0.28%	0.047%
41	13.471	1383	1394	1399	rBV2	229	565	0.23%	0.037%
42	13.801	1431	1443	1447	rBV2	249	841	0.34%	0.055%
43	13.902	1447	1458	1477	rBV	124274	221340	88.76%	14.547%
44	14.090	1477	1486	1487	rVV2	256	553	0.22%	0.036%
45	14.124	1487	1491	1525	rVB2	226	2011	0.81%	0.132%
46	14.703	1569	1577	1599	rBV2	268	1956	0.78%	0.129%
47	15.182	1639	1648	1669	rVB	90912	163856	65.71%	10.769%
48	15.606	1703	1711	1745	rVB	2861	6729	2.70%	0.442%
49	16.064	1775	1779	1783	rBV2	445	683	0.27%	0.045%
50	16.172	1791	1795	1805	rBV2	420	916	0.37%	0.060%

7.1.10 7

LSC Area Percent Report

Data Path : M:\1\data\M160916\
Data File : M80825.D
Acq On : 16 Sep 2016 5:16 pm
Operator : kaylap
Sample : mc47774-5
Misc : MS37330,MSM2895,5.48,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: events.e
Integrator: ChemStation

Method : C:\msdchem\1\METHODS\DEFAULT.M
Title :

51	16.488	1831	1842	1859	rVB	139619	240129	96.29%	15.782%
52	16.691	1859	1872	1883	rBV2	420	2366	0.95%	0.156%
53	16.994	1911	1917	1947	rBV3	2273	7217	2.89%	0.474%
54	20.005	2351	2364	2377	rBV3	550	3019	1.21%	0.198%

Sum of corrected areas: 1521525

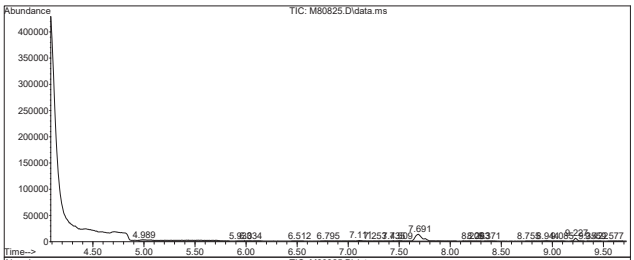
7.1.10 7

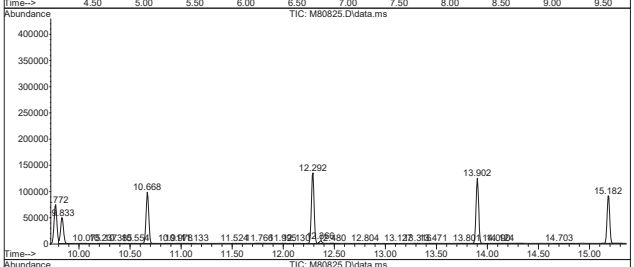
LSC Report - Integrated Chromatogram

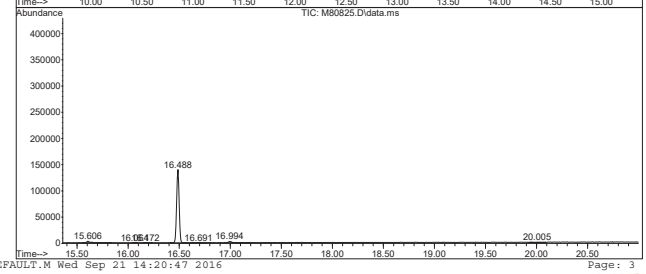
Data Path : M:\1\data\M160916\
Data File : M80825.D
Acq On : 16 Sep 2016 5:16 pm
Operator : kaylap
Sample : mc47774-5
Misc : MS37330,MSM2895,5.48,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P







7.1.10 7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80825.D
Acq On : 16 Sep 2016 5:16 pm
Operator : kaylap
Sample : mc47774-5
Misc : MS37330,MSM2895,5.48,,,5,1
ALS Vial : 16 Sample Multiplier: 1

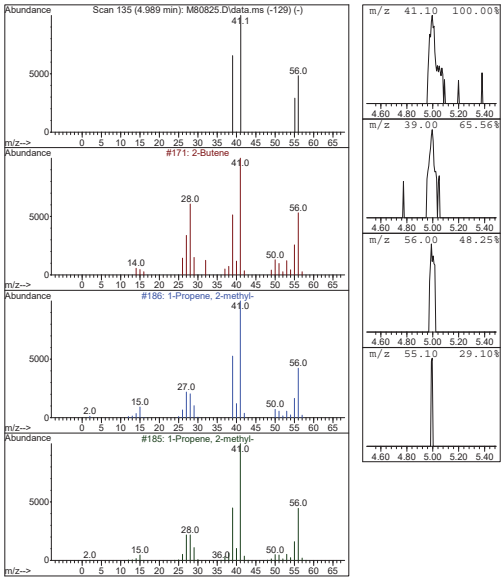
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 1 2-Butene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.989	26.37 ug/kg	75074	pentafluorobenzene	10.000

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butene	56	C4H8	000107-01-7	9
2	1-Propene, 2-methyl-	56	C4H8	000115-11-7	7
3	1-Propene, 2-methyl-	56	C4H8	000115-11-7	7
4	2-Butene, (Z)-	56	C4H8	000590-18-1	5
5	Cyclobutane	56	C4H8	000287-23-0	5



7.1.10 7

Tentatively Identified Compound (LSC) summary

Data Path : M:\1\data\M160916\
Data File : M80825.D
Acq On : 16 Sep 2016 5:16 pm
Operator : kaylap
Sample : mc47774-5
Misc : MS37330,MSM2895,5.48,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
2-Butene	4.989	26.4	ug/kg	75074	2	10.000	142329	50.0

7.1.10 7

Quantitation Report (QT/LSC Reviewed)

Data Path : T:\1\DATA\V160920\
Data File : V49916.D
Acq On : 20 Sep 2016 4:31 pm
Operator : kaylap
Sample : mc47774-6
Misc : MS37347,MSV1838,5.20,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 19:50:41 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.931	65	97775	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.929	168	137844	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.826	114	246738	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.071	82	126068	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.680	152	105795	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.984	113	93560	47.24 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.48%		
61) toluene-d8 (s)	11.450	98	279486	49.76 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.52%		
84) bromofluorobenzene (s)	14.366	95	118872	52.98 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.96%		
Target Compounds					Qvalue
17) acetone	6.316	58	4193	8.02 ug/kg	99
18) Methyl Acetate	6.714	43	4379	2.62 ug/kg#	69
19) methylene chloride	6.944	84	4235	1.97 ug/kg	84
40) chloroform	8.803	83	1196	0.30 ug/kg	91
52) trichloroethene	10.132	95	1622	0.76 ug/kg#	78
63) toluene	11.527	92	8695	1.88 ug/kg	94
104) naphthalene	18.269	128	1196	0.14 ug/kg	100

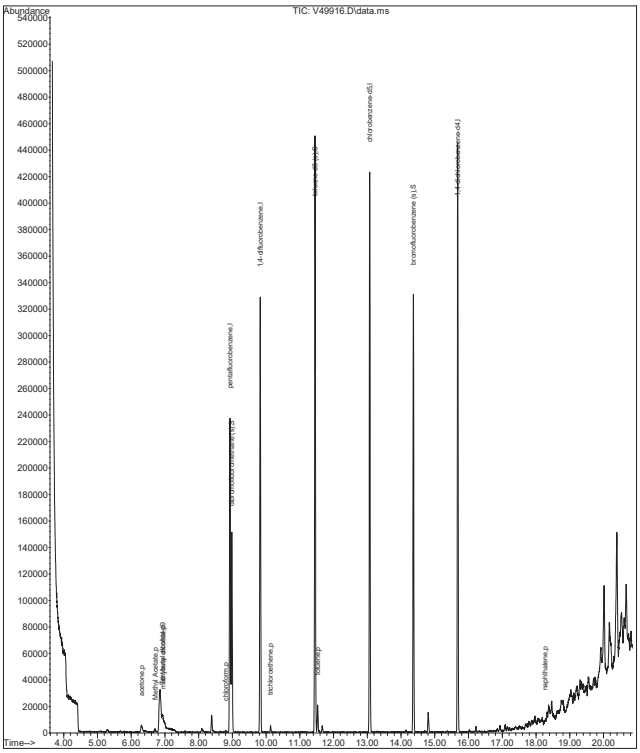
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.11 7

Quantitation Report (QT/LSC Reviewed)

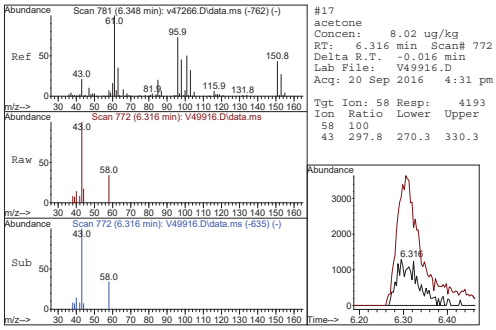
Data Path : T:\1\DATA\V160920\
Data File : V49916.D
Acq On : 20 Sep 2016 4:31 pm
Operator : kaylap
Sample : mc47774-6
Misc : MS37347,MSV1838,5.20,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 19:50:41 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration



7.1.11 7

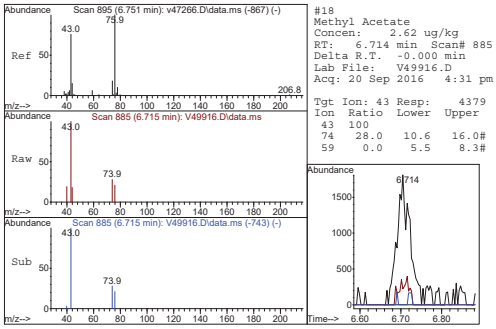
Sample Results: V49916.D



#17
acetone
Concen: 8.02 ug/kg
RT: 6.316 min Scan# 772
Delta R.T. -0.016 min
Lab File: V49916.D
Acq: 20 Sep 2016 4:31 pm

Tgt Ion: 58 Resp: 4193

Ion	Ratio	Lower	Upper
58	100		
43	297.8	270.3	330.3



#18
Methyl Acetate
Concen: 2.62 ug/kg
RT: 6.714 min Scan# 885
Delta R.T. -0.000 min
Lab File: V49916.D
Acq: 20 Sep 2016 4:31 pm

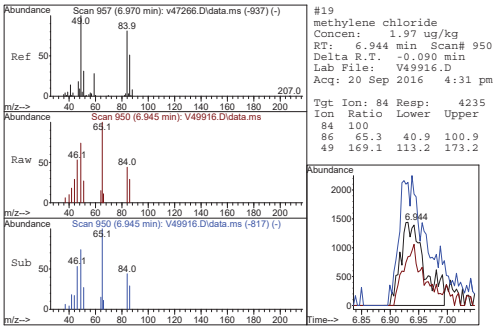
Tgt Ion: 43 Resp: 4379

Ion	Ratio	Lower	Upper
43	100		
74	28.0	10.6	16.0#
59	0.0	5.5	8.3#

7.1.11

7

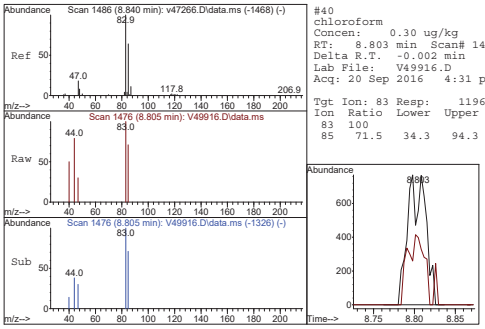
Sample Results: V49916.D



#19
methylene chloride
Concen: 1.97 ug/kg
RT: 6.944 min Scan# 950
Delta R.T. -0.090 min
Lab File: V49916.D
Acq: 20 Sep 2016 4:31 pm

Tgt Ion: 84 Resp: 4235

Ion	Ratio	Lower	Upper
84	100		
86	65.3	40.9	100.9
49	169.1	113.2	173.2



#40
chloroform
Concen: 0.30 ug/kg
RT: 8.803 min Scan# 1476
Delta R.T. -0.002 min
Lab File: V49916.D
Acq: 20 Sep 2016 4:31 pm

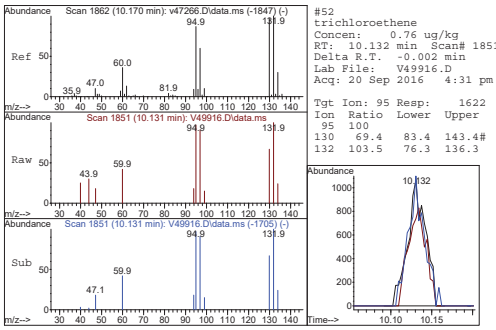
Tgt Ion: 83 Resp: 1196

Ion	Ratio	Lower	Upper
83	100		
85	71.5	34.3	94.3

7.1.11

7

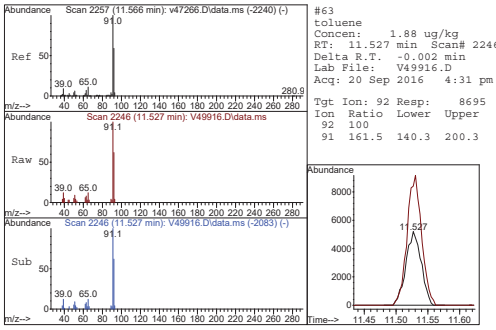
Sample Results: V49916.D



#52
trichloroethene
Concen: 0.76 ug/kg
RT: 10.132 min Scan# 1851
Delta R.T. -0.002 min
Lab File: V49916.D
Acq: 20 Sep 2016 4:31 pm

Tgt Ion: 95 Resp: 1622

Ion	Ratio	Lower	Upper
95	100		
130	69.4	83.4	143.4#
132	103.5	76.3	136.3



#63
toluene
Concen: 1.88 ug/kg
RT: 11.527 min Scan# 2246
Delta R.T. -0.002 min
Lab File: V49916.D
Acq: 20 Sep 2016 4:31 pm

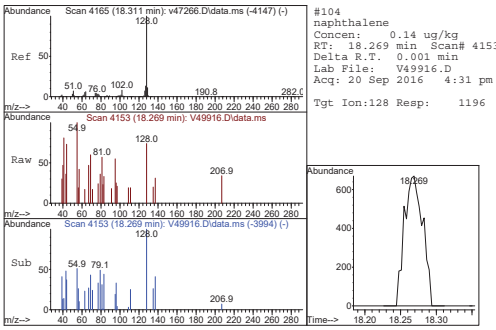
Tgt Ion: 92 Resp: 8695

Ion	Ratio	Lower	Upper
92	100		
91	161.5	140.3	200.3

7.1.11

7

Sample Results: V49916.D



#104
naphthalene
Concen: 0.14 ug/kg
RT: 18.269 min Scan# 4153
Delta R.T. 0.001 min
Lab File: V49916.D
Acq: 20 Sep 2016 4:31 pm

Tgt Ion:128 Resp: 1196

7.1.11

7

LSC Area Percent Report

Data Path : T:\1\DATA\V160920\
Data File : V49916.D
Acq On : 20 Sep 2016 4:31 pm
Operator : kaylap
Sample : mc47774-6
Misc : MS37347,MSV1838,5.20,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 1000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: CENTROID

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

Method : T:\1\METHODS\V160919S.M
Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

Signal : TIC: V49916.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.839	903	920	921	rBV	31078	44828	5.90%	1.062%
2	8.384	1347	1357	1367	rBV2	13446	27784	3.66%	0.658%
3	8.929	1498	1511	1519	rBV2	237039	454850	59.85%	10.779%
4	8.982	1519	1526	1543	rVB	151034	292460	38.48%	6.931%
5	9.827	1752	1765	1778	rBV	328453	591356	77.81%	14.014%
6	10.131	1845	1851	1861	rVB5	5420	7757	1.02%	0.184%
7	11.449	2212	2224	2237	rBV	450076	759989	100.00%	18.011%
8	11.527	2237	2246	2256	rVV3	19960	33268	4.38%	0.788%
9	11.665	2273	2285	2295	rVB4	5191	9561	1.26%	0.227%
10	13.072	2671	2683	2694	rBV	422996	703400	92.55%	16.670%
11	14.366	3036	3049	3063	rBV	330521	529883	69.72%	12.557%
12	14.804	3164	3173	3186	rVB4	14987	28657	3.77%	0.679%
13	15.681	3409	3421	3434	rBV	444933	717342	94.39%	17.000%
14	18.467	4204	4209	4219	rVB	11047	18525	2.44%	0.439%

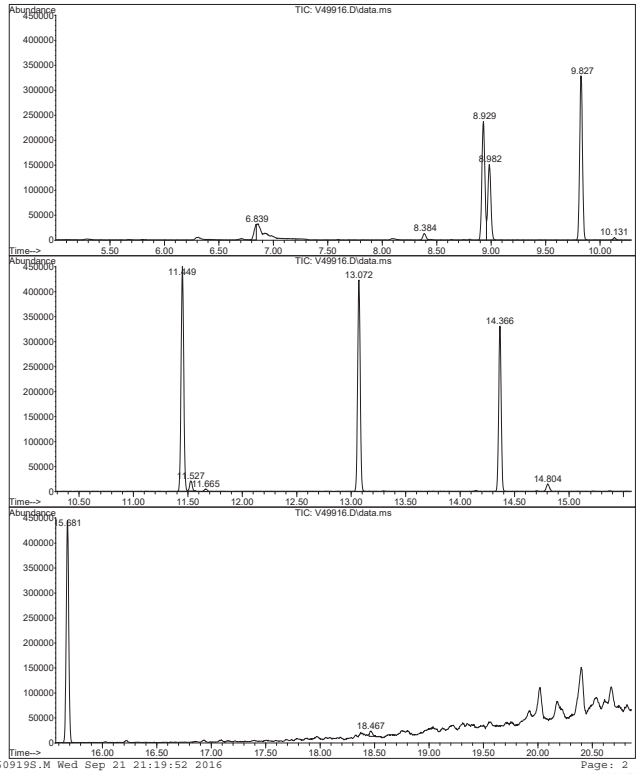
Sum of corrected areas: 4219660

LSC Report - Integrated Chromatogram

Data Path : T:\1\DATA\V160920\
Data File : V49916.D
Acq On : 20 Sep 2016 4:31 pm
Operator : kaylap
Sample : mc47774-6
Misc : MS37347,MSV1838,5.20,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



Library Search Compound Report

Data Path : T:\1\DATA\V160920\
Data File : V49916.D
Acq On : 20 Sep 2016 4:31 pm
Operator : kaylap
Sample : mc47774-6
Misc : MS37347,MSV1838,5.20,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : T:\1\DATA\V160920\
Data File : V49916.D
Acq On : 20 Sep 2016 4:31 pm
Operator : kaylap
Sample : mc47774-6
Misc : MS37347,MSV1838,5.20,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

Quantitation Report (LSC Reviewed)

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 09:41:04 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.677	65	30921	500.00 ug/kg	-0.01
4) pentafluorobenzene	9.772	168	41549	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.668	114	66364	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	28334	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.488	152	22540	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.833	113	26604	55.05 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 110.10%		
60) toluene-d8 (s)	12.292	98	73281	48.62 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.24%		
82) bromofluorobenzene (s)	15.181	95	23119	63.70 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 127.40%		
Target Compounds					Qvalue
18) methylene chloride	7.758	84	654	1.02 ug/kg	91
60) toluene	12.366	92	872	0.67 ug/kg	84

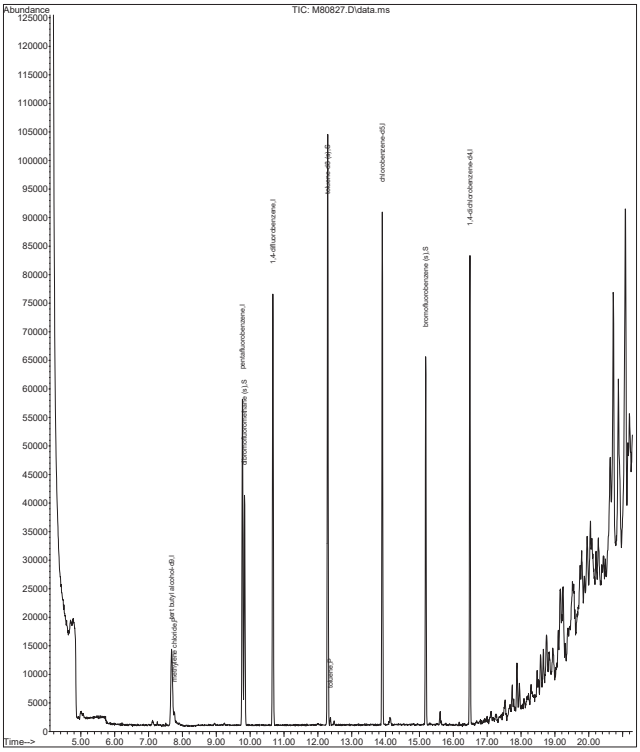
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.13 7

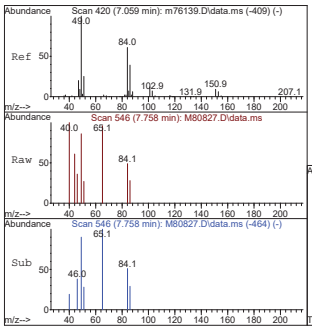
Quantitation Report (LSC Reviewed)

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 09:41:04 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



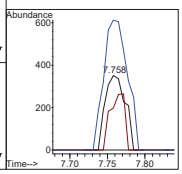
7.1.13 7

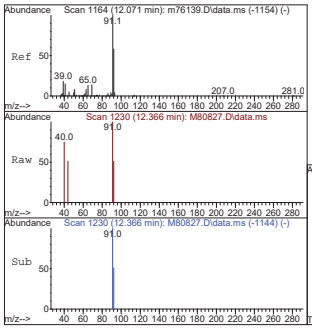


#18
methylene chloride
Concen: 1.02 ug/kg
RT: 7.758 min Scan# 546
Delta R.T. -0.007 min
Lab File: M80827.D
Acq: 16 Sep 2016 6:11 pm

Tgt Ion: 84 Resp: 654

Ion	Ratio	Lower	Upper
84	100		
86	56.4	33.4	93.4
49	174.6	132.9	192.9

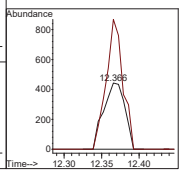




#62
toluene
Concen: 0.67 ug/kg
RT: 12.366 min Scan# 1230
Delta R.T. -0.000 min
Lab File: M80827.D
Acq: 16 Sep 2016 6:11 pm

Tgt Ion: 92 Resp: 872

Ion	Ratio	Lower	Upper
92	100		
91	196.2	143.6	203.6



7.1.13 7

LSC Area Percent Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 2 Min Area: 300 Area counts
Start Thrs: 0.4 Max Peaks: 100
Stop Thrs : 0.4 Peak Location: TOP

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

Method : M:\1\methods\M160824S.M
Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

Signal : TIC: M80827.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.010	131	138	313	rVB3	2479	74629	7.24%	2.925%
2	6.215	313	317	337	rVV2	525	1604	0.16%	0.063%
3	6.377	337	341	345	rVB2	266	497	0.05%	0.019%
4	6.444	345	351	363	rVB2	403	1875	0.18%	0.073%
5	6.566	363	369	373	rBV2	304	914	0.09%	0.036%
6	6.761	395	398	405	rBV2	198	501	0.05%	0.020%
7	6.929	417	423	427	rVB2	237	575	0.06%	0.023%
8	7.004	427	434	441	rVV2	295	868	0.08%	0.034%
9	7.118	443	451	467	rVV3	992	3217	0.31%	0.126%
10	7.259	467	472	491	rVB2	875	3255	0.32%	0.128%
11	7.401	491	493	497	rBV2	335	584	0.06%	0.023%
12	7.509	503	509	523	rVB2	450	583	0.06%	0.023%
13	7.677	523	534	593	rVB2	13506	62464	6.06%	2.448%
14	8.108	593	598	629	rVB2	260	1428	0.14%	0.056%
15	8.371	633	637	639	rVB2	222	314	0.03%	0.012%
16	8.472	643	652	665	rBV2	290	1077	0.10%	0.042%
17	8.768	679	696	715	rBV2	236	1071	0.10%	0.042%
18	8.944	715	722	739	rVB3	416	1413	0.14%	0.055%
19	9.240	757	766	779	rVV3	450	1327	0.13%	0.052%
20	9.368	779	785	793	rVB2	181	613	0.06%	0.024%
21	9.590	815	818	835	rBV2	226	800	0.08%	0.031%
22	9.772	835	845	849	rVV	57173	111324	10.79%	4.363%
23	9.833	849	854	877	rVB	40337	83160	8.06%	3.259%
24	10.149	895	901	905	rBV2	191	337	0.03%	0.013%
25	10.217	905	911	919	rVB2	266	883	0.09%	0.035%
26	10.378	919	935	943	rBV2	258	1633	0.16%	0.064%
27	10.547	943	960	961	rBV2	205	966	0.09%	0.038%
28	10.668	969	978	999	rVB	75594	144250	13.99%	5.653%
29	11.099	1029	1042	1047	rVB2	244	931	0.09%	0.036%
30	11.335	1063	1077	1089	rVB2	292	1712	0.17%	0.067%
31	11.537	1103	1107	1115	rVV2	238	412	0.04%	0.016%
32	11.604	1115	1117	1125	rVB2	288	534	0.05%	0.021%
33	11.982	1167	1173	1191	rVB3	317	1189	0.12%	0.047%
34	12.292	1207	1219	1227	rBV	103478	189150	18.34%	7.413%
35	12.372	1227	1231	1241	rVV2	1376	2615	0.25%	0.102%
36	12.480	1241	1247	1269	rVB3	828	2315	0.22%	0.091%
37	12.783	1279	1292	1295	rBV2	264	1011	0.10%	0.040%
38	13.902	1449	1458	1481	rBV	89850	161671	15.68%	6.336%
39	14.131	1481	1492	1509	rVB6	1390	4827	0.47%	0.189%
40	15.181	1641	1648	1661	rVV	64503	112814	10.94%	4.421%
41	15.309	1661	1667	1679	rVB3	479	1493	0.14%	0.059%
42	15.613	1703	1712	1727	rVB3	2389	5370	0.52%	0.210%
43	15.882	1747	1752	1777	rBV2	361	1918	0.19%	0.075%
44	16.172	1791	1795	1799	rBV	647	937	0.09%	0.037%
45	16.313	1809	1816	1821	rBV2	517	1738	0.17%	0.068%

7.1.14 7

LSC Area Percent Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 2 Min Area: 300 Area counts
Start Thrs: 0.4 Max Peaks: 100
Stop Thrs : 0.4 Peak Location: TOP

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

Method : M:\1\methods\M160824S.M
Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

46	16.488	1831	1842	1863	rVB	82294	142231	13.79%	5.574%
47	16.690	1863	1872	1881	rBV2	842	3366	0.33%	0.132%
48	16.798	1881	1888	1901	rBV4	702	2098	0.20%	0.082%
49	16.994	1913	1917	1925	rVB2	1274	2775	0.27%	0.109%
50	17.108	1925	1934	1949	rBV6	2112	9779	0.95%	0.383%
51	17.256	1949	1956	1967	rBV7	1315	3984	0.39%	0.156%
52	17.532	1989	1997	2005	rVB5	3161	8811	0.85%	0.345%
53	17.674	2007	2018	2021	rBV5	2148	6795	0.66%	0.266%
54	17.741	2021	2028	2043	rBV5	4660	12664	1.23%	0.496%
55	17.876	2043	2048	2055	rBV3	8431	18033	1.75%	0.707%
56	17.950	2055	2059	2105	rBV3	4154	19670	1.91%	0.771%
57	18.294	2105	2110	2131	rBV3	3551	18076	1.75%	0.708%
58	18.476	2131	2137	2147	rBV10	4497	13723	1.33%	0.538%
59	18.570	2147	2151	2159	rBV5	6979	18828	1.83%	0.738%
60	18.657	2159	2164	2171	rBV	5804	10586	1.03%	0.415%
61	18.752	2173	2178	2225	rVV	6639	44942	4.36%	1.761%
62	20.631	2233	2457	2465	rBV	32609	1031327	100.00%	40.419%
63	20.719	2465	2470	2487	rVV4	42810	109749	10.64%	4.301%
64	20.874	2487	2493	2503	rVB6	26303	81334	7.89%	3.188%

Sum of corrected areas: 2551570

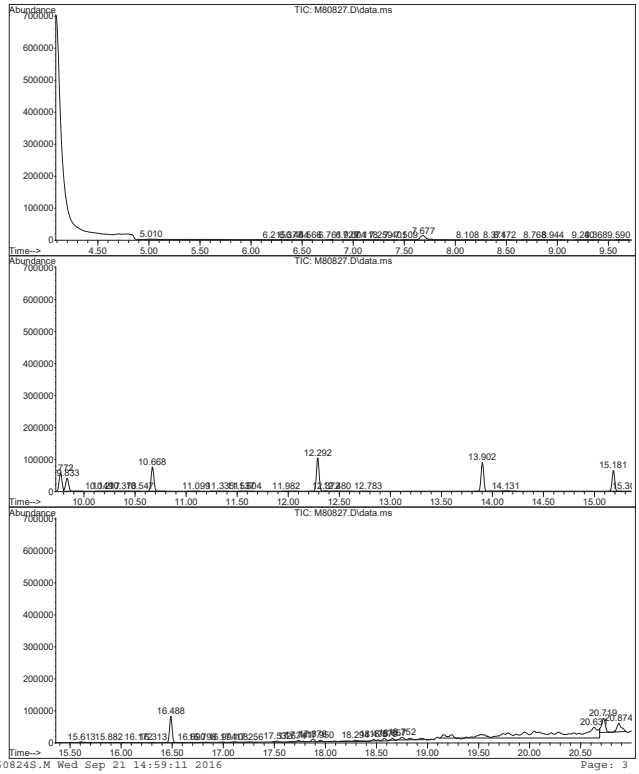
7.1.14 7

LSC Report - Integrated Chromatogram

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



7.1.14 7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

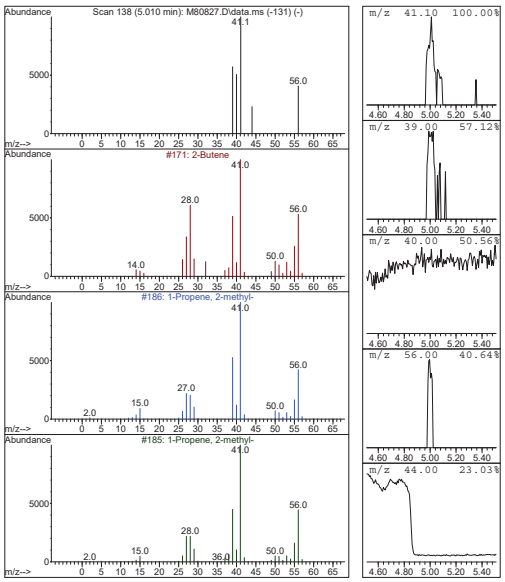
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 1 2-Butene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.010	33.52 ug/kg	74629	pentafluorobenzene	9.772

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butene	56	C4H8	000107-01-7	7
2	1-Propene, 2-methyl-	56	C4H8	000115-11-7	7
3	1-Propene, 2-methyl-	56	C4H8	000115-11-7	7
4	Allene	40	C3H4	000463-49-0	5
5	Propyne	40	C3H4	000074-99-7	5



7.1.14 7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

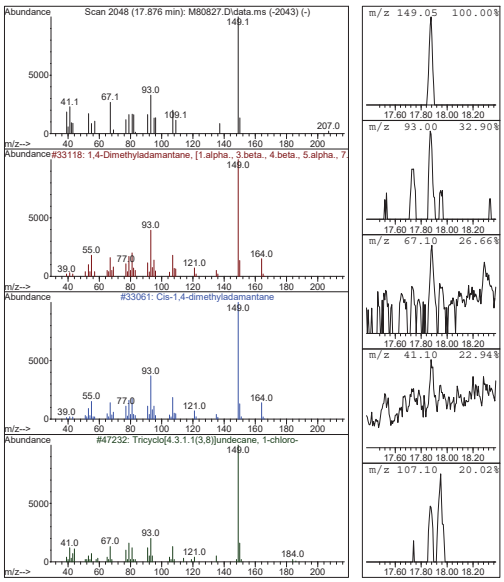
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 2 1,4-Dimethyladamantane, [1.... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.876	6.34 ug/kg	18033	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dimethyladamantane, [1.alpha...	164	C12H20	024145-88-8	72
2	Cis-1,4-dimethyladamantane	164	C12H20	024145-89-9	64
3	Tricyclo[4.3.1.1(3,8)]undecane, ...	184	C11H17Cl	027011-46-7	59
4	Adamantane, 1,3-dimethyl-	164	C12H20	000702-79-4	59
5	Adamantane, 1-isothiocyanato-3-m...	207	C12H17NS	136860-48-5	53



7.1.14 7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

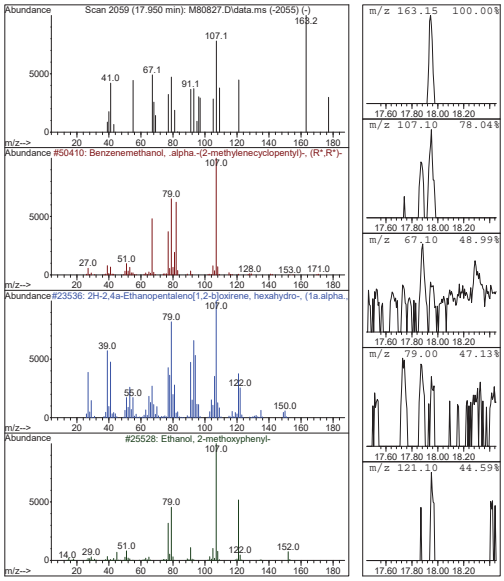
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 3 Benzenemethanol, .alpha.-(2... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.950	6.91 ug/kg	19670	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanol, .alpha.-(2-meth...	188	C13H16O	144629-62-9	25
2	2H-2,4a-Ethanopentaleno[1,2-b]ox...	150	C10H14O	117221-81-5	22
3	Ethanol, 2-methoxyphenyl-	152	C9H12O2	072403-22-6	10
4	1-Chloro-2-ethoxy-2-methoxy-propane	152	C6H13ClO2	1000193-67-3	10
5	Benzyl mandelate	242	C15H14O3	000890-98-2	10



Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

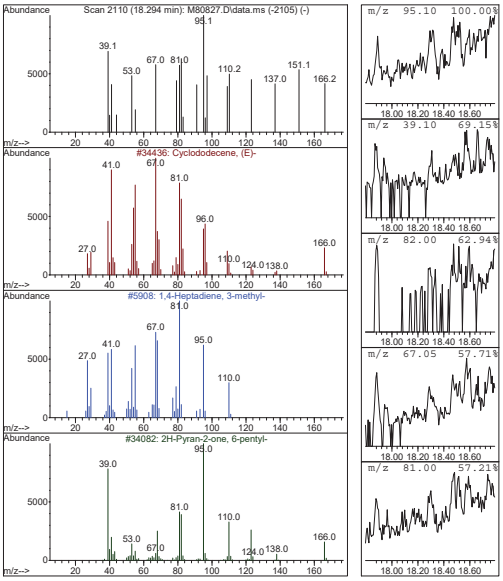
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 4 Cyclododecene, (E)- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.294	6.35 ug/kg	18076	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclododecene, (E)-	166	C12H22	001486-75-5	47
2	1,4-Heptadiene, 3-methyl-	110	C8H14	001603-01-6	38
3	2H-Pyran-2-one, 6-pentyl-	166	C10H14O2	027593-23-3	27
4	trans,cis-1,7-Dimethylspiro[4.5]...	166	C12H22	1000111-72-7	27
5	2H-Pyran-2-one, 6-pentyl-	166	C10H14O2	027593-23-3	22



Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

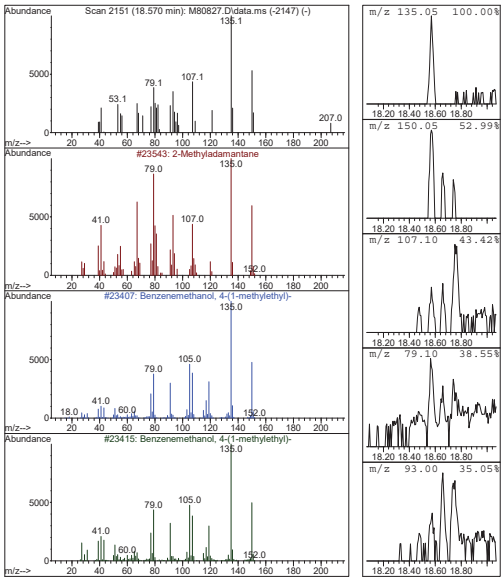
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 5 2-Methyladamantane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.570	6.62 ug/kg	18828	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Methyladamantane	150	C11H18	000700-56-1	83
2	Benzenemethanol, 4-(1-methylethyl)-	150	C10H14O	000536-60-7	64
3	Benzenemethanol, 4-(1-methylethyl)-	150	C10H14O	000536-60-7	64
4	Cyclohexene, 2-ethenyl-1,3,3-tri...	150	C11H18	005293-90-3	59
5	Cyclohexene, 2-ethenyl-1,3,3-tri...	150	C11H18	005293-90-3	53



Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

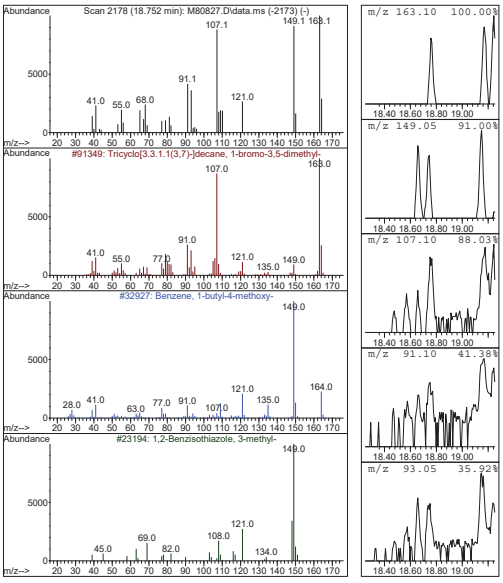
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 6 Tricyclo[3.3.1.1(3,7)-]deca... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.752	15.80 ug/kg	44942	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricyclo[3.3.1.1(3,7)-]decane, 1...	242	C12H19Br	000941-37-7	28
2	Benzene, 1-butyl-4-methoxy-	164	C11H16O	018272-84-9	22
3	1,2-Benzisothiazole, 3-methyl-	149	C8H7NS	006187-89-9	18
4	Adamantane, 1,3-dimethyl-	164	C12H20	000702-79-4	16
5	1-(2-Cyanoethyl)-2-ethyl-4-methy...	163	C9H13N3	023996-25-0	16



Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

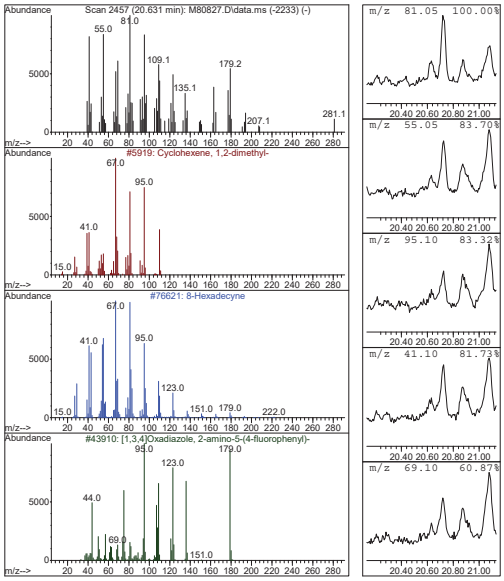
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 7 Cyclohexene, 1,2-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.631	362.55 ug/kg	1031330	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 1,2-dimethyl-	110	C8H14	001674-10-8	43
2	8-Hexadecyne	222	C16H30	019781-86-3	43
3	[1,3,4]Oxadiazole, 2-amino-5-(4-...	179	C8H6FN3O	1000316-48-2	38
4	1-Methylbicyclo[3.2.1]octane	124	C9H16	119972-41-7	30
5	Piperidine, 1-(1-oxo-2,4-hexadie...	179	C11H17NO	019074-11-4	20



7.1.14 7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

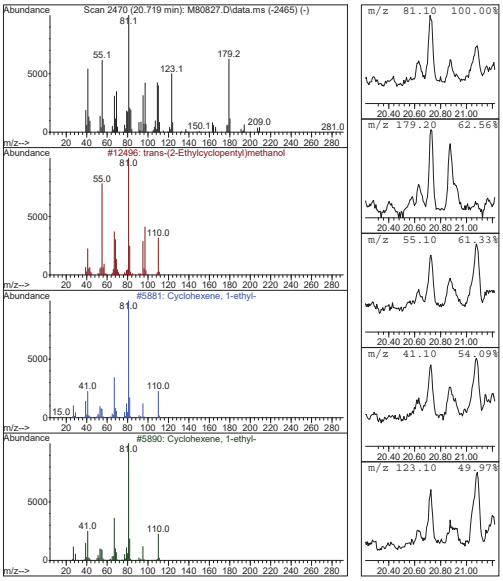
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 8 trans-(2-Ethylcyclopentyl)m... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.719	38.58 ug/kg	109749	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-(2-Ethylcyclopentyl)methanol	128	C8H16O	036258-08-9	37
2	Cyclohexene, 1-ethyl-	110	C8H14	001453-24-3	30
3	Cyclohexene, 1-ethyl-	110	C8H14	001453-24-3	27
4	Cyclohexene, 1-ethyl-	110	C8H14	001453-24-3	27
5	3-Heptyne, 5-methyl-	110	C8H14	061228-09-9	27



7.1.14 7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

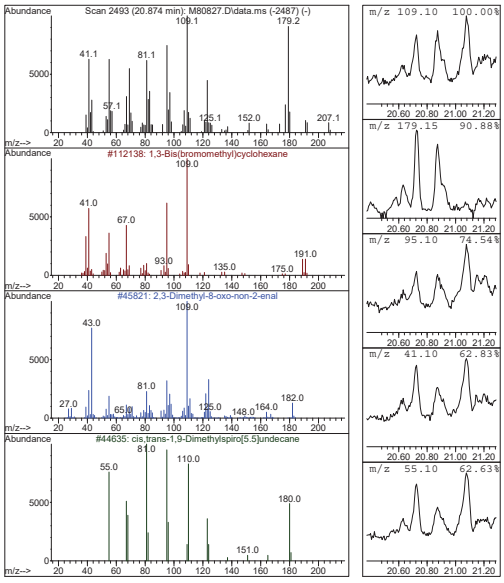
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 9 1,3-Bis(bromomethyl)cyclohe... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.874	28.59 ug/kg	81334	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Bis(bromomethyl)cyclohexane	268	C8H14Br2	1000216-89-9	35
2	2,3-Dimethyl-8-oxo-non-2-enal	182	C11H18O2	1000186-82-6	35
3	cis,trans-1,9-Dimethylspiro[5.5]...	180	C13H24	1000111-73-3	25
4	cis,cis-2,9-Dimethylspiro[5.5]un...	180	C13H24	095472-51-8	25
5	cis,trans-1,7-Dimethylspiro[5.5]...	180	C13H24	1000111-73-1	22



7.1.14 7

Tentatively Identified Compound (LSC) summary

Data Path : M:\1\data\M160916\
Data File : M80827.D
Acq On : 16 Sep 2016 6:11 pm
Operator : kaylap
Sample : mc47774-7
Misc : MS37330,MSM2895,4.99,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
2-Butene	5.010	33.5	ug/kg	74629	2	9.772	111324	50.0
1,4-Dimethylada...	17.876	6.3	ug/kg	18033	5	16.488	142231	50.0
Benzenemethanol...	17.950	6.9	ug/kg	19670	5	16.488	142231	50.0
Cyclododecene, ...	18.294	6.3	ug/kg	18076	5	16.488	142231	50.0
2-Methyladamantane	18.570	6.6	ug/kg	18828	5	16.488	142231	50.0
Tricyclo[3.3.1....	18.752	15.8	ug/kg	44942	5	16.488	142231	50.0
Cyclohexene, 1,...	20.631	362.6	ug/kg	1031330	5	16.488	142231	50.0
trans-(2-Ethylc...	20.719	38.6	ug/kg	109749	5	16.488	142231	50.0
1,3-Bis(bromome...	20.874	28.6	ug/kg	81334	5	16.488	142231	50.0

7.1.14 7

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49917.D
Acq On : 20 Sep 2016 5:00 pm
Operator : kaylap
Sample : mc47774-7cfi
Misc : MS37347,MSV1838,4.92,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 08:41:15 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.931	65	97432	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.930	168	112864	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.827	114	218861	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.072	82	81557	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.680	152	31784	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.985	113	86250	53.18 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.36%		
61) toluene-d8 (s)	11.451	98	203515	40.85 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 81.70%		
84) bromofluorobenzene (s)	14.365	95	56998	84.56 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 169.12%#		
Target Compounds					Qvalue
17) acetone	6.312	58	2199	5.14 ug/kg#	73
19) methylene chloride	6.951	84	2280	1.30 ug/kg	93
25) carbon disulfide	6.694	76	1053	0.68 ug/kg	73
40) chloroform	8.804	83	1528	0.47 ug/kg	99
63) toluene	11.529	92	4118	1.01 ug/kg	80

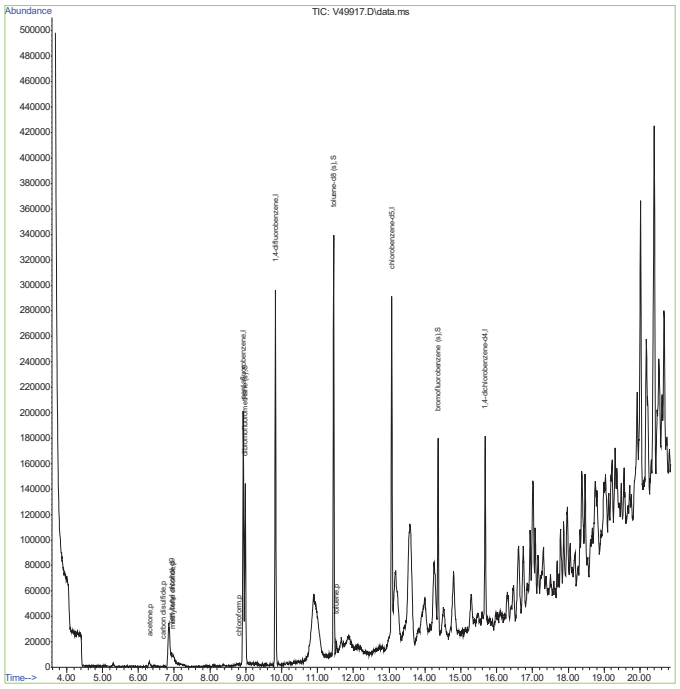
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.15 7

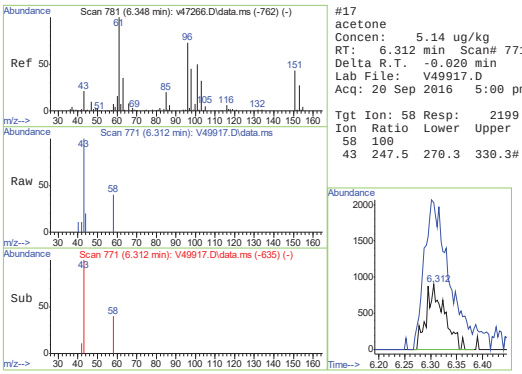
Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49917.D
Acq On : 20 Sep 2016 5:00 pm
Operator : kaylap
Sample : mc47774-7cfi
Misc : MS37347,MSV1838,4.92,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 21 08:41:15 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration



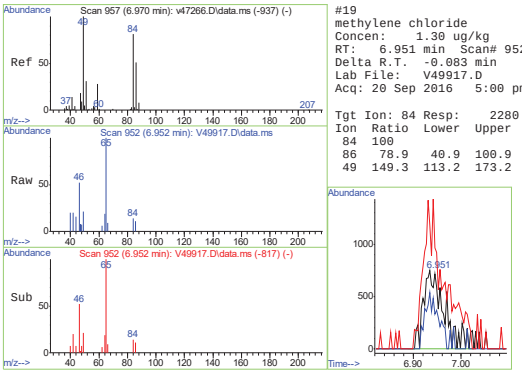
7.1.15 7



#17
acetone
Concen: 5.14 ug/kg
RT: 6.312 min Scan# 771
Delta R.T. -0.020 min
Lab File: V49917.D
Acq: 20 Sep 2016 5:00 pm

Tgt Ion: 58 Resp: 2199

Ion	Ratio	Lower	Upper
58	100		
43	247.5	270.3	330.3#

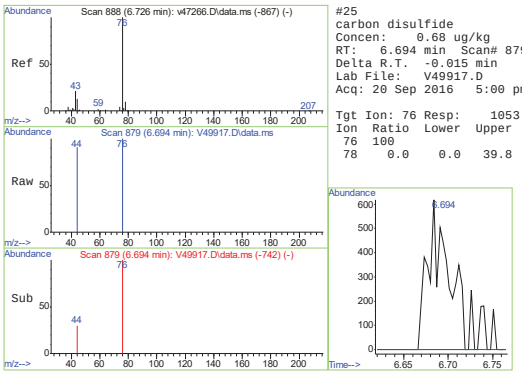


#19
methylene chloride
Concen: 1.30 ug/kg
RT: 6.951 min Scan# 952
Delta R.T. -0.083 min
Lab File: V49917.D
Acq: 20 Sep 2016 5:00 pm

Tgt Ion: 84 Resp: 2280

Ion	Ratio	Lower	Upper
84	100		
86	78.9	40.9	100.9
49	149.3	113.2	173.2

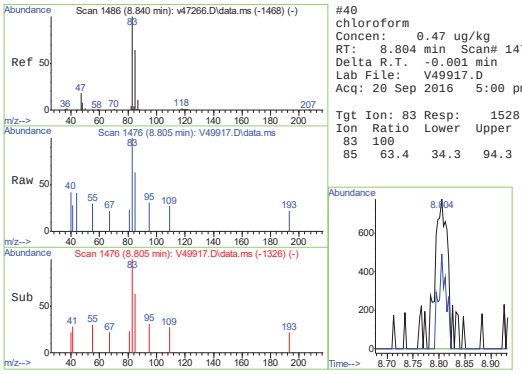
7.1.15 7



#25
carbon disulfide
Concen: 0.68 ug/kg
RT: 6.694 min Scan# 879
Delta R.T. -0.015 min
Lab File: V49917.D
Acq: 20 Sep 2016 5:00 pm

Tgt Ion: 76 Resp: 1053

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.8



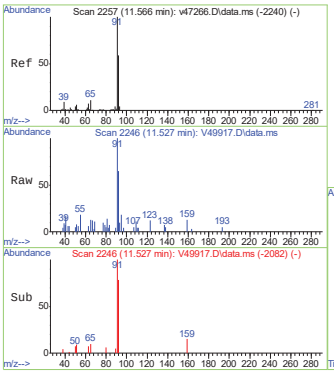
#40
chloroform
Concen: 0.47 ug/kg
RT: 8.804 min Scan# 1476
Delta R.T. -0.001 min
Lab File: V49917.D
Acq: 20 Sep 2016 5:00 pm

Tgt Ion: 83 Resp: 1528

Ion	Ratio	Lower	Upper
83	100		
85	63.4	34.3	94.3

7.1.15 7

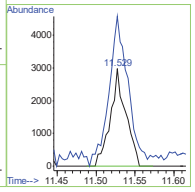
Sample Results: V49917.D



#63
toluene
Concen: 1.01 ug/kg
RT: 11.529 min Scan# 2246
Delta R.T. -0.000 min
Lab File: V49917.D
Acq: 20 Sep 2016 5:00 pm

Tgt Ion: 92 Resp: 4118

Ion	Ratio	Lower	Upper
92	100		
91	143.4	140.3	200.3



7.1.15 7

V49917.D V160919S.M Wed Sep 21 09:16:31 2016 Page 5

Sample Results: M80828.D

Quantitation Report (QT/LSC Reviewed)

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 19 09:42:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.684	65	25560	500.00	ug/kg	0.00
4) pentafluorobenzene	9.772	168	50752	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.668	114	80440	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.902	82	40910	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.488	152	40600	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.833	113	29757	50.41	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.82%			
60) toluene-d8 (s)	12.292	98	97257	53.23	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.46%			
82) bromofluorobenzene (s)	15.188	95	35486	54.28	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 108.56%			
Target Compounds						Qvalue
16) acetone	7.111	58	889	3.67	ug/kg#	50
18) methylene chloride	7.765	84	580	0.74	ug/kg	91
62) toluene	12.372	92	4308	2.75	ug/kg	97

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

7.1.16 7

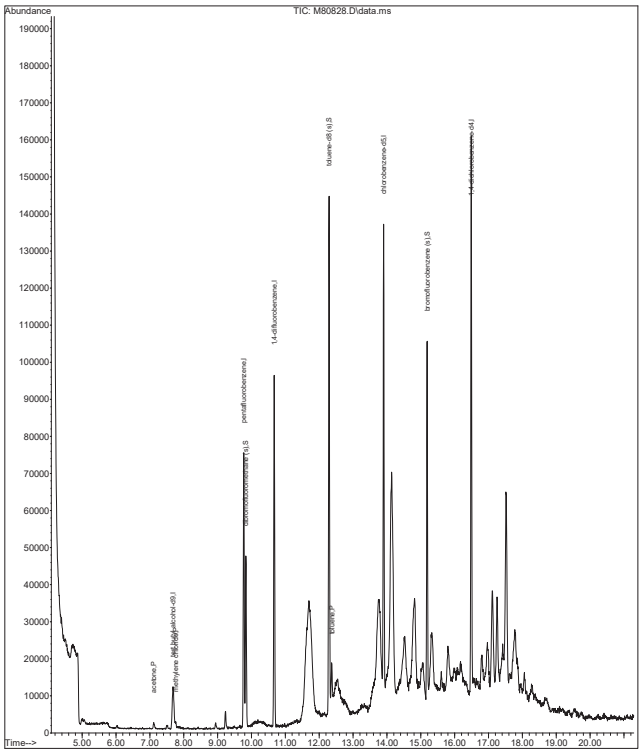
M160824S.M Wed Sep 21 15:20:25 2016 Page: 1

Sample Results: M80828.D

Quantitation Report (QT/LSC Reviewed)

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

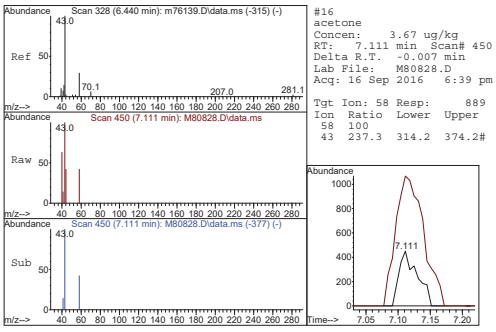
Quant Time: Sep 19 09:42:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



7.1.16 7

M160824S.M Wed Sep 21 15:20:25 2016 Page: 2

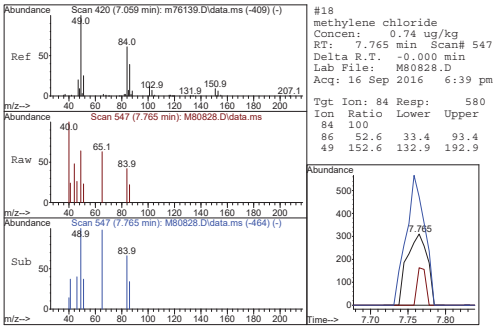
Sample Results: M80828.D



#16
acetone
Concen: 3.67 ug/kg
RT: 7.111 min Scan# 450
Delta R.T. -0.007 min
Lab File: M80828.D
Acq: 16 Sep 2016 6:39 pm

Tgt Ion: 58 Resp: 889

Ion	Ratio	Lower	Upper
58	100		
43	237.3	314.2	374.2#



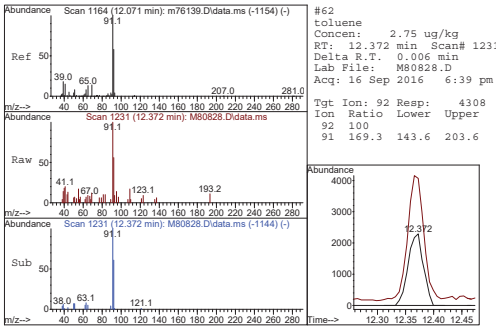
#18
methylene chloride
Concen: 0.74 ug/kg
RT: 7.765 min Scan# 547
Delta R.T. -0.000 min
Lab File: M80828.D
Acq: 16 Sep 2016 6:39 pm

Tgt Ion: 84 Resp: 580

Ion	Ratio	Lower	Upper
84	100		
86	52.6	33.4	93.4
49	152.6	132.9	192.9

7.1.16 7

M80828.D M160824S.M Wed Sep 21 15:20:25 2016 Page 3



#62
toluene
Concen: 2.75 ug/kg
RT: 12.372 min Scan# 1231
Delta R.T. 0.006 min
Lab File: M80828.D
Acq: 16 Sep 2016 6:39 pm

Tgt Ion: 92 Resp: 4308

Ion	Ratio	Lower	Upper
92	100		
91	169.3	143.6	203.6

LSC Area Percent Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 2 Min Area: 300 Area counts
Start Thrs: 0.4 Max Peaks: 100
Stop Thrs : 0.4 Peak Location: TOP

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

Method : M:\1\methods\M160824S.M
Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

Signal : TIC: M80828.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.003	129	137	275	rVB2	2654	71514	6.92%	1.844%
2	6.027	285	289	319	rVB2	937	3640	0.35%	0.094%
3	6.256	319	323	331	rBV2	216	483	0.05%	0.012%
4	6.384	331	342	347	rVB2	293	622	0.06%	0.016%
5	6.438	347	350	355	rBV2	426	684	0.07%	0.018%
6	6.579	369	371	383	rVB2	361	1074	0.10%	0.028%
7	6.707	387	390	395	rVB2	362	656	0.06%	0.017%
8	6.781	395	401	411	rBV2	470	1244	0.12%	0.032%
9	6.990	411	432	441	rVV2	346	1660	0.16%	0.043%
10	7.111	441	450	467	rVV2	1750	5332	0.52%	0.138%
11	7.448	489	500	503	rBV	400	1053	0.10%	0.027%
12	7.522	503	511	521	rVV2	1101	3587	0.35%	0.093%
13	7.684	521	535	577	rVV2	11449	50305	4.87%	1.297%
14	8.108	587	598	601	rBV	332	673	0.07%	0.017%
15	8.324	627	630	633	rVB3	407	640	0.06%	0.017%
16	8.425	633	645	651	rBV2	682	1911	0.18%	0.049%
17	8.620	667	674	677	rBV2	331	610	0.06%	0.016%
18	8.782	687	698	705	rBV2	376	1021	0.10%	0.026%
19	8.883	705	713	715	rVV2	285	604	0.06%	0.016%
20	8.944	715	722	731	rVV	1663	3811	0.37%	0.098%
21	9.126	745	749	757	rBV2	265	555	0.05%	0.014%
22	9.233	757	765	773	rBV	4695	10715	1.04%	0.276%
23	9.489	797	803	815	rBV4	721	2194	0.21%	0.057%
24	9.772	837	845	849	rBV	74008	142047	13.75%	3.664%
25	9.833	849	854	867	rVB	46085	94704	9.16%	2.442%
26	10.109	881	895	905	rBV7	1544	9286	0.90%	0.239%
27	10.668	971	978	995	rVB	94905	181646	17.58%	4.685%
28	10.978	1013	1024	1039	rBV4	1085	5402	0.52%	0.139%
29	11.692	1095	1130	1209	rBV5	32318	440288	42.61%	11.355%
30	12.292	1209	1219	1227	rBV	139712	270285	26.16%	6.971%
31	13.753	1423	1436	1451	rVB	21242	142028	13.74%	3.663%
32	13.902	1451	1458	1479	rBV	122500	211385	20.46%	5.452%
33	14.137	1479	1493	1579	rVB6	53987	264924	25.64%	6.833%
34	15.188	1643	1649	1657	rBV	96665	181566	17.57%	4.683%
35	15.801	1733	1740	1833	rVB	12885	207989	20.13%	5.364%
36	16.488	1833	1842	1883	rBV	150558	310869	30.08%	8.018%
37	17.108	1925	1934	1947	rBV7	24720	92671	8.97%	2.390%
38	17.250	1947	1955	1985	rVV7	23466	124316	12.03%	3.206%
39	17.512	1985	1994	2503	rVB3	61313	1033347	100.00%	26.651%

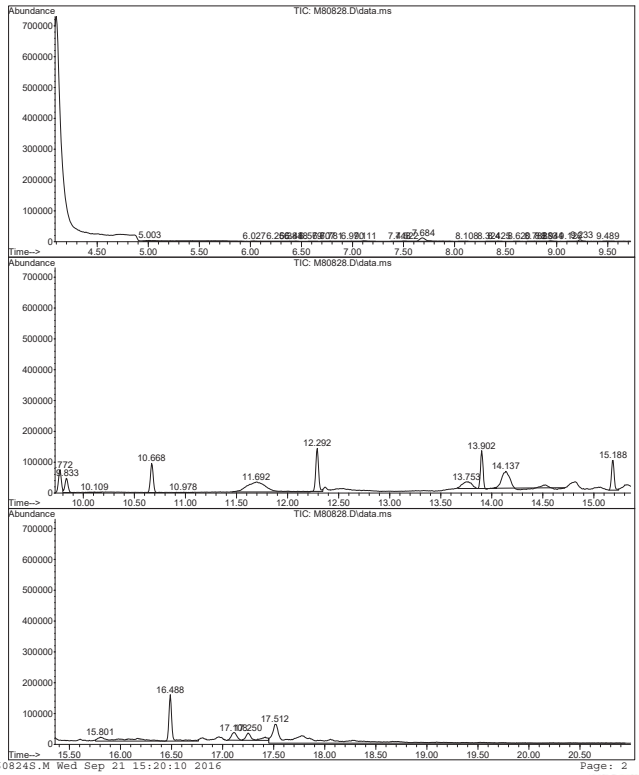
Sum of corrected areas: 3877341

LSC Report - Integrated Chromatogram

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

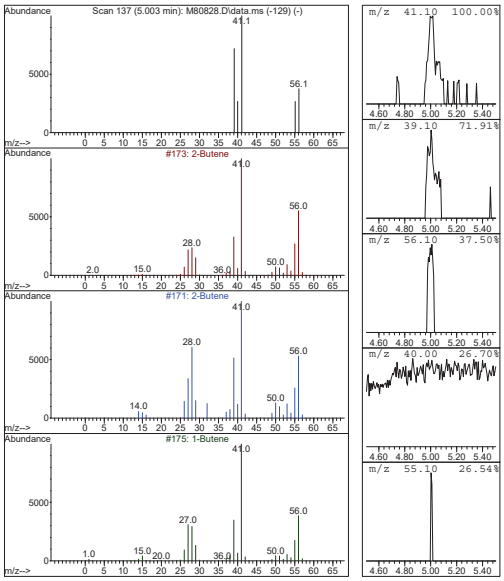
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 1 2-Butene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.003	25.17 ug/kg	71514	pentafluorobenzene	9.772

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butene	56	C4H8	000107-01-7	5
2	2-Butene	56	C4H8	000107-01-7	5
3	1-Butene	56	C4H8	000106-98-9	4
4	2-Butene, (Z)-	56	C4H8	000590-18-1	4
5	2-Butene, (E)-	56	C4H8	000624-64-6	4



m/z 41.10 100.00%
m/z 39.10 71.91%
m/z 56.10 37.50%
m/z 40.00 26.70%
m/z 55.10 26.54%

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

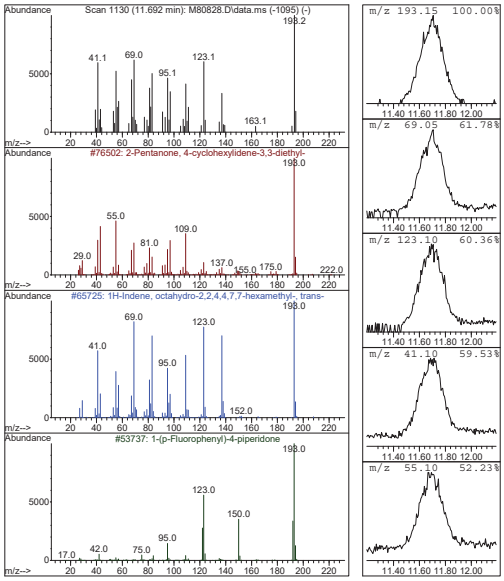
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 2 2-Pentanone, 4-cyclohexylid... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.692	121.19 ug/kg	440288	1,4-difluorobenzene	10.668

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-cyclohexylidene-3...	222	C15H26O	313253-65-5	47
2	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	38
3	1-(p-Fluorophenyl)-4-piperidone	193	C11H12FNO	1000238-56-7	27
4	Pyrimidine, 5-formamido-	123	C5H5N3O	056621-84-2	22
5	Cyclopropanol, 1-(3,7-dimethyl-1...	196	C13H24O	065147-72-0	22



7.1.17

7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

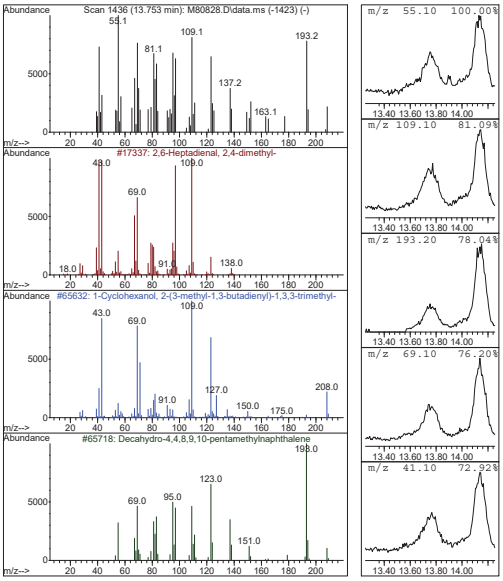
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 3 2,6-Heptadienal, 2,4-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.753	33.59 ug/kg	142028	chlorobenzene-d5	13.902

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6-Heptadienal, 2,4-dimethyl-	138	C9H14O	085136-08-9	43
2	1-Cyclohexanol, 2-(3-methyl-1,3-...	208	C14H24O	1000196-01-6	43
3	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	080655-44-3	38
4	3-Cyclohexene-1-carboxaldehyde, ...	152	C10H16O	040702-26-9	30
5	Bicyclo[2.2.1]heptane, 2,2,3-tri...	138	C10H18	020536-40-7	30



7.1.17

7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

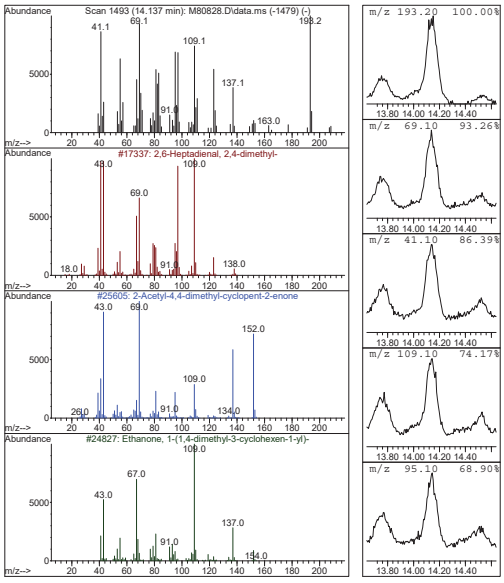
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 4 2,6-Heptadienal, 2,4-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.137	62.66 ug/kg	264924	chlorobenzene-d5	13.902

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6-Heptadienal, 2,4-dimethyl-	138	C9H14O	085136-08-9	38
2	2-Acetyl-4,4-dimethyl-cyclopent-...	152	C9H12O2	081979-96-6	25
3	Ethanone, 1-(1,4-dimethyl-3-cycl...	152	C10H16O	043219-68-7	25
4	Cyclopropane, 1,1-dimethyl-2-(2-...	124	C9H16	069147-03-1	25
5	Butan-2-one, 1-[3-(3,3-dimethyl-...	278	C16H26N2O2	1000303-34-2	14



7.1.17

7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

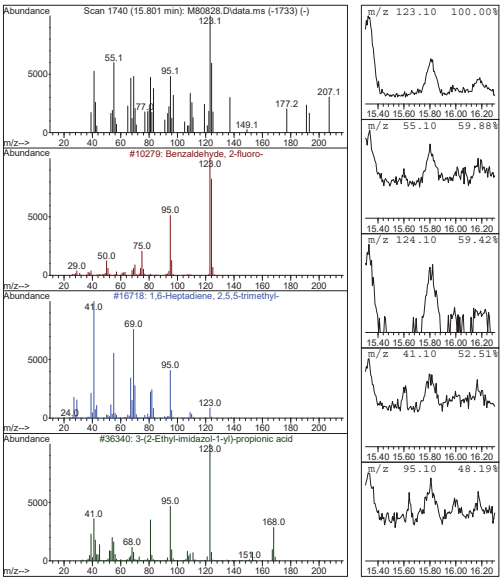
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 5 Benzaldehyde, 2-fluoro- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.801	33.45 ug/kg	207989	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde, 2-fluoro-	124	C7H5FO	000446-52-6	38
2	1,6-Heptadiene, 2,5,5-trimethyl-	138	C10H18	062238-28-2	27
3	3-(2-Ethyl-imidazol-1-yl)-propio...	168	C8H12N2O2	1000277-78-0	27
4	1,5-Diazabicyclo[4.3.0]non-5-ene	124	C7H12N2	003001-72-7	27
5	Bicyclo[4.1.0]heptane-7-carboxyl...	306	C14H14N2O6	1000311-95-8	27



7.1.17

7

Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

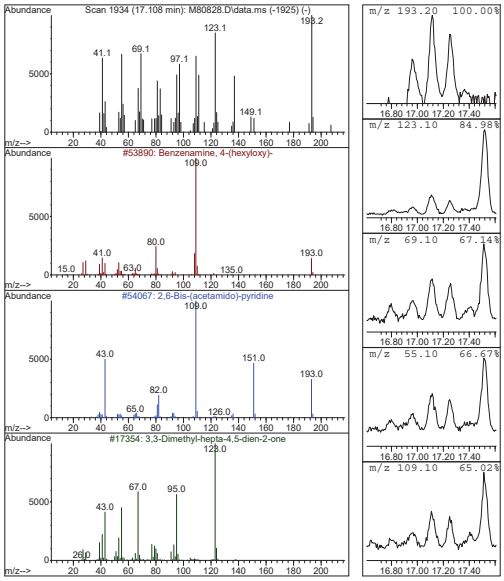
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 6 Benzenamine, 4-(hexyloxy)- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.108	14.91 ug/kg	92671	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenamine, 4-(hexyloxy)-	193	C12H19NO	039905-57-2	18
2	2,6-Bis-(acetamido)-pyridine	193	C9H11N3O2	005441-02-1	18
3	3,3-Dimethyl-hepta-4,5-dien-2-one	138	C9H14O	1000190-54-1	14
4	Cyclopentane, 1-(methyl-1-(2-meth...	138	C10H18	074764-47-9	14
5	1,4-Cyclopentadiene-1-carboxylic...	193	C11H15NO2	014485-75-7	11



Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

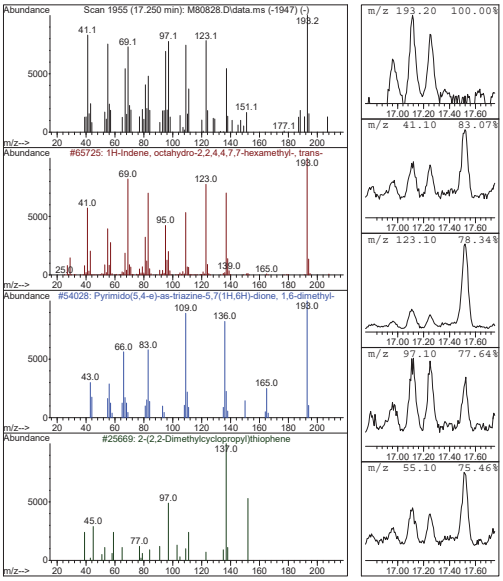
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 7 1H-Indene, octahydro-2,2,4,... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.250	19.99 ug/kg	124316	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	47
2	Pyrimido(5,4-e)-as-triazine-5,7(...	193	C7H7N5O2	000084-82-2	38
3	2-(2,2-Dimethylcyclopropyl)thiop...	152	C9H12S	005919-16-4	14
4	Cyclohexane, 1-(cyclohexylmethyl...	194	C14H26	054823-97-1	14
5	6-Nitroundec-5-ene	199	C11H21NO2	1000192-40-3	14



Library Search Compound Report

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

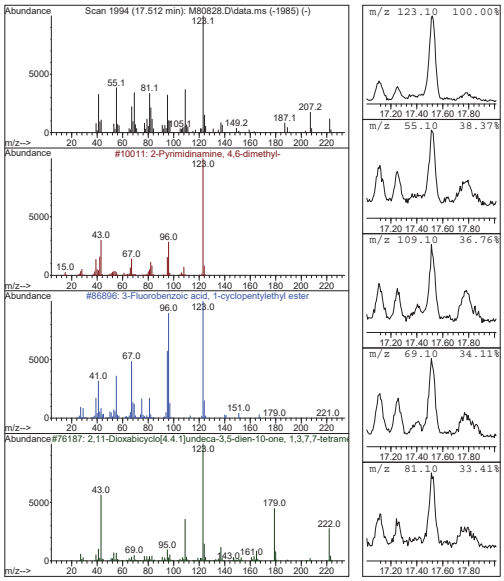
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 8 2-Pyrimidinamine, 4,6-dimet... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.512	166.20 ug/kg	1033350	1,4-dichlorobenzene-d4	16.488

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pyrimidinamine, 4,6-dimethyl-	123	C6H9N3	000767-15-7	53
2	3-Fluorobenzoic acid, 1-cyclopen...	236	C14H17FO2	1000279-04-7	50
3	2,11-Dioxabicyclo[4.4.1]undeca-3...	222	C13H18O3	070412-52-1	50
4	4-Fluorobenzoic acid, 3-methylbu...	208	C12H13FO2	1000299-15-1	49
5	3-Fluorobenzoic acid, 3-methylbu...	208	C12H13FO2	154559-38-3	49



Tentatively Identified Compound (LSC) summary

Data Path : M:\1\data\M160916\
Data File : M80828.D
Acq On : 16 Sep 2016 6:39 pm
Operator : kaylap
Sample : mc47774-8
Misc : MS37330,MSM2895,5.42,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#: Internal Standard	RT	Resp	Conc
2-Butene	5.003	25.2	ug/kg	71514	2	9.772	142047	50.0
2-Pentanone, 4-...	11.692	121.2	ug/kg	440288	3	10.668	181646	50.0
2,6-Heptadienal...	13.753	33.6	ug/kg	142028	4	13.902	211385	50.0
2,6-Heptadienal...	14.137	62.7	ug/kg	264924	4	13.902	211385	50.0
Benzaldehyde, 2...	15.801	33.5	ug/kg	207989	5	16.488	310869	50.0
Benzenamine, 4-...	17.108	14.9	ug/kg	92671	5	16.488	310869	50.0
1H-Indene, octa...	17.250	20.0	ug/kg	124316	5	16.488	310869	50.0
2-Pyrimidinamin...	17.512	166.2	ug/kg	1033350	5	16.488	310869	50.0

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80816.D
Acq On : 16 Sep 2016 1:04 pm
Operator : kaylap
Sample : mb
Misc : MS37330,MSM2895,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 16 13:33:08 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.684	65	33578	500.00	ug/kg	0.00
4) pentafluorobenzene	9.772	168	57202	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	90356	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.902	82	40417	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	40749	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.840	113	34749	52.23	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 104.46%			
60) toluene-d8 (s)	12.292	98	102634	50.01	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.02%			
82) bromofluorobenzene (s)	15.182	95	36146	55.09	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 110.18%			
Target Compounds						Qvalue
24) carbon disulfide	7.516	76	875	0.36	ug/kg	74
62) toluene	12.366	92	2657	1.51	ug/kg	94
102) naphthalene	19.048	128	559	0.17	ug/kg	100

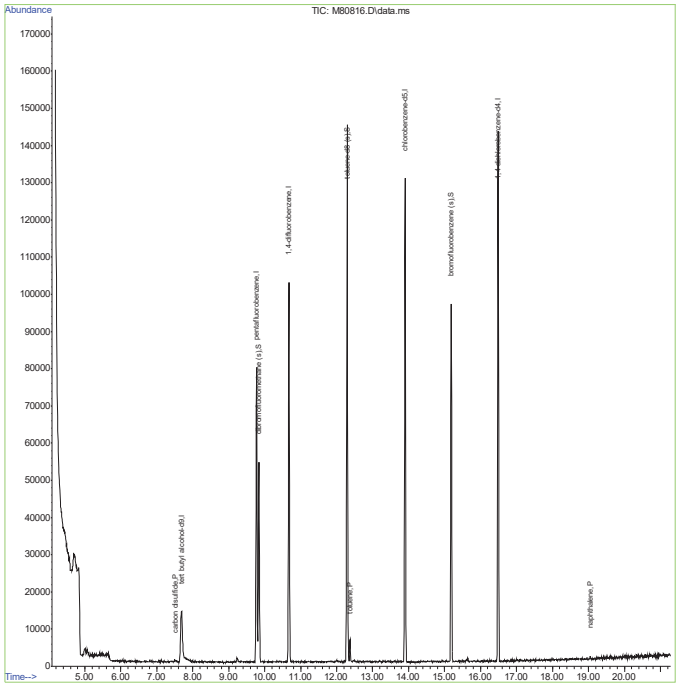
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.1 7

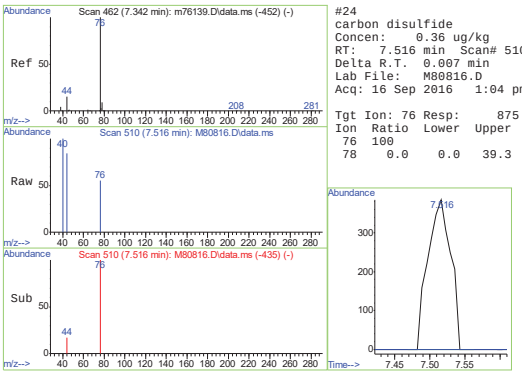
Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80816.D
Acq On : 16 Sep 2016 1:04 pm
Operator : kaylap
Sample : mb
Misc : MS37330,MSM2895,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 16 13:33:08 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



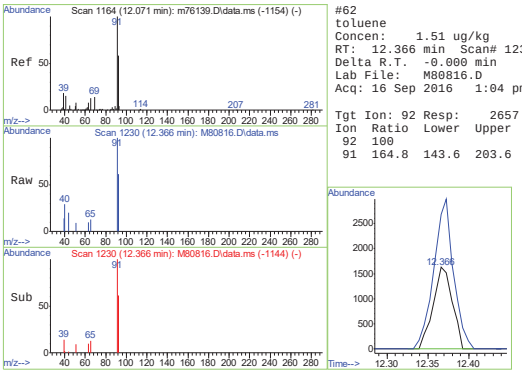
7.2.1 7



#24
carbon disulfide
Concen: 0.36 ug/kg
RT: 7.516 min Scan# 510
Delta R.T. 0.007 min
Lab File: M80816.D
Acq: 16 Sep 2016 1:04 pm

Tgt Ion: 76 Resp: 875

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.3

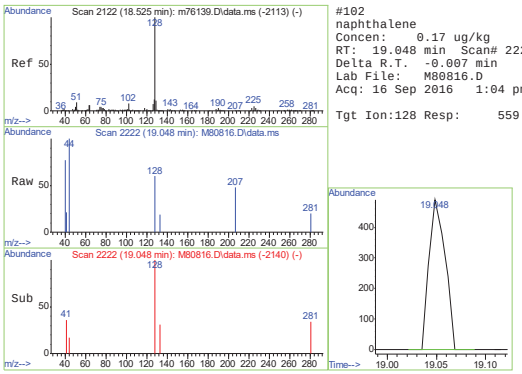


#62
toluene
Concen: 1.51 ug/kg
RT: 12.366 min Scan# 1230
Delta R.T. -0.000 min
Lab File: M80816.D
Acq: 16 Sep 2016 1:04 pm

Tgt Ion: 92 Resp: 2657

Ion	Ratio	Lower	Upper
92	100		
91	164.8	143.6	203.6

7.2.1 7



#102
naphthalene
Concen: 0.17 ug/kg
RT: 19.048 min Scan# 2222
Delta R.T. -0.007 min
Lab File: M80816.D
Acq: 16 Sep 2016 1:04 pm

Tgt Ion:128 Resp: 559

7.2.1 7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\M160916\
Data File : M80816.D
Acq On : 16 Sep 2016 1:04 pm
Operator : kaylap
Sample : mb
Misc : MS37330,MSM2895,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 2 Min Area: 300 Area counts
Start Thrs: 0.4 Max Peaks: 100
Stop Thrs : 0.4 Peak Location: TOP

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

Method : C:\msdchem\1\methods\M160824S.M
Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

Signal : TIC: M80816.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.010	129	138	263	rVB3	3517	86448	32.84%	5.450%
2	5.892	263	269	277	rVB2	329	835	0.32%	0.053%
3	6.040	287	291	297	rVB2	470	781	0.30%	0.049%
4	6.808	399	405	449	rVB2	591	3476	1.32%	0.219%
5	7.125	449	452	463	rBV2	418	1011	0.38%	0.064%
6	7.394	485	492	501	rBV2	282	975	0.37%	0.061%
7	7.509	501	509	525	rVV3	553	2054	0.78%	0.130%
8	7.691	525	536	587	rVV2	13668	60004	22.80%	3.783%
9	8.270	607	622	623	rVB2	358	1259	0.48%	0.079%
10	8.344	623	633	645	rBV2	314	1631	0.62%	0.103%
11	8.439	645	647	653	rBV2	216	444	0.17%	0.028%
12	8.957	721	724	733	rVB2	437	835	0.32%	0.053%
13	9.058	733	739	743	rVB2	245	436	0.17%	0.027%
14	9.132	743	750	751	rBV2	234	366	0.14%	0.023%
15	9.234	759	765	779	rVB3	1309	3770	1.43%	0.238%
16	9.409	781	791	801	rVV2	237	1411	0.54%	0.089%
17	9.496	801	804	809	rVV2	264	463	0.18%	0.029%
18	9.584	811	817	831	rVB2	211	829	0.31%	0.052%
19	9.772	837	845	851	rBV	79232	159446	60.58%	10.053%
20	9.840	851	855	907	rVV2	53786	105119	39.94%	6.628%
21	10.358	909	932	935	rVV2	304	1333	0.51%	0.084%
22	10.446	935	945	959	rVB2	262	1609	0.61%	0.101%
23	10.675	967	979	997	rBV	102213	197707	75.12%	12.465%
24	10.864	997	1007	1027	rVV2	256	1728	0.66%	0.109%
25	11.046	1029	1034	1043	rVB2	334	709	0.27%	0.045%
26	11.147	1043	1049	1055	rBV2	172	455	0.17%	0.029%
27	11.281	1055	1069	1077	rVB2	242	841	0.32%	0.053%
28	11.396	1077	1086	1089	rBV2	233	505	0.19%	0.032%
29	11.510	1101	1103	1107	rBV2	251	427	0.16%	0.027%
30	11.995	1169	1175	1193	rVB3	498	1625	0.62%	0.102%
31	12.144	1193	1197	1203	rVB2	215	307	0.12%	0.019%
32	12.292	1203	1219	1227	rBV	144404	263201	100.00%	16.595%
33	12.373	1227	1231	1239	rVB	6064	9684	3.68%	0.611%
34	12.743	1279	1286	1293	rBV2	322	849	0.32%	0.054%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\M160916\
Data File : M80816.D
Acq On : 16 Sep 2016 1:04 pm
Operator : kaylap
Sample : mb
Misc : MS37330,MSM2895,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 2 Min Area: 300 Area counts
Start Thrs: 0.4 Max Peaks: 100
Stop Thrs : 0.4 Peak Location: TOP

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

Method : C:\msdchem\1\methods\M160824S.M
Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

35	13.201	1347	1354	1377	rVB2	351	1694	0.64%	0.107%
36	13.706	1425	1429	1433	rVB	331	365	0.14%	0.023%
37	13.902	1449	1458	1481	rVB	130321	232993	88.52%	14.690%
38	14.124	1485	1491	1495	rVB	256	369	0.14%	0.023%
39	14.293	1495	1516	1523	rBV2	310	1765	0.67%	0.111%
40	15.182	1639	1648	1683	rVB	96352	175947	66.85%	11.093%
41	15.498	1683	1695	1709	rBV2	412	2228	0.85%	0.140%
42	15.647	1709	1717	1753	rVV2	1057	3661	1.39%	0.231%
43	16.489	1831	1842	1879	rBV	142579	247528	94.05%	15.606%
44	16.879	1889	1900	1903	rBV2	500	1128	0.43%	0.071%
45	16.994	1911	1917	1975	rVB3	590	5812	2.21%	0.366%

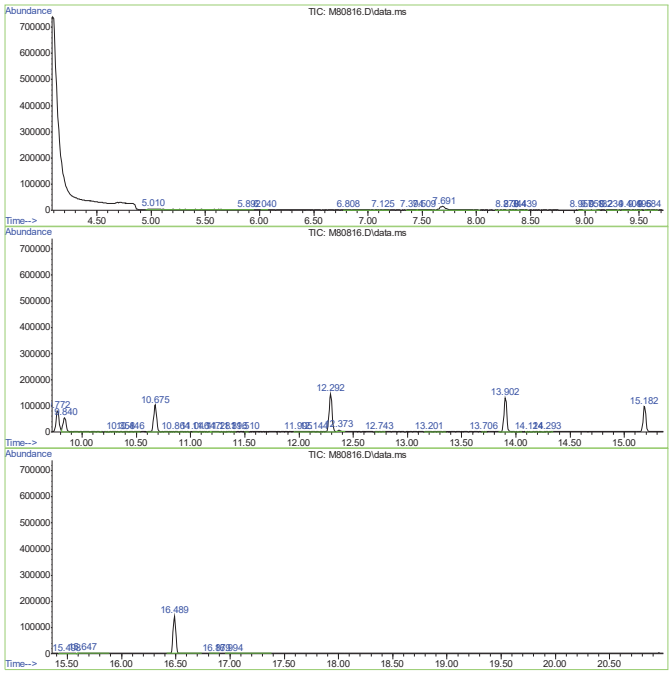
Sum of corrected areas: 1586063

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\M160916\
Data File : M80816.D
Acq On : 16 Sep 2016 1:04 pm
Operator : kaylap
Sample : mb
Misc : MS37330,MSM2895,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\data\M160916\
Data File : M80816.D
Acq On : 16 Sep 2016 1:04 pm
Operator : kaylap
Sample : mb
Misc : MS37330,MSM2895,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\data\M160916\
Data File : M80816.D
Acq On    : 16 Sep 2016   1:04 pm
Operator  : kaylap
Sample    : mb
Misc      : MS37330,MSM2895,5,,,5,1
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title  : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

TIC Library    : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

7.2.2 7

Quantitation Report (LSC Reviewed)

```
Data Path : T:\1\DATA\V160920\
Data File : V49911.D
Acq On    : 20 Sep 2016   2:02 pm
Operator  : kaylap
Sample    : mb
Misc      : MS37347,MSV1838,5,,,5,1
ALS Vial  : 7   Sample Multiplier: 1

Quant Time: Sep 20 14:24:36 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration

        Compound                      R.T. QIon  Response  Conc Units Dev(Min)
 ---------------------------------------------------------------------------
 Internal Standards
   1) Tert butyl alcohol-d9       6.936   65   121833   500.00 ug/kg  # 0.02
   4) pentafluorobenzene          8.929  168   147324    50.00 ug/kg    0.00
  44) 1,4-difluorobenzene         9.825  114   261695    50.00 ug/kg    0.00
  67) chlorobenzene-d5           13.070   82   135663    50.00 ug/kg    0.00
  82) 1,4-dichlorobenzene-d4     15.679  152   130352    50.00 ug/kg    0.00

 System Monitoring Compounds
  41) dibromofluoromethane (s)    8.983  113    99229    46.88 ug/kg   0.00
    Spiked Amount     50.000   Range  70 - 130    Recovery   =   93.76%
  61) toluene-d8 (s)             11.449   98   294921    49.50 ug/kg   0.00
    Spiked Amount     50.000   Range  70 - 130    Recovery   =   99.00%
  84) bromofluorobenzene (s)     14.365   95   132875    48.07 ug/kg   0.00
    Spiked Amount     50.000   Range  70 - 130    Recovery   =   96.14%

 Target Compounds                                                  Qvalue
  17) acetone                     6.311   58     1961     3.51 ug/kg     98
  25) carbon disulfide            6.713   76     1975     0.97 ug/kg     73
  63) toluene                    11.527   92    16545     3.38 ug/kg     91
 104) naphthalene                18.266  128     1697     0.16 ug/kg    100
 ---------------------------------------------------------------------------

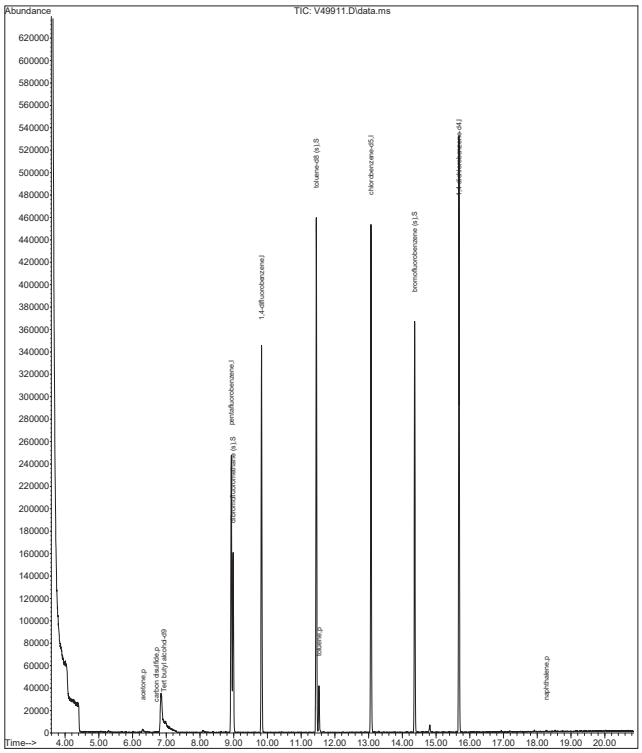
 (#) = qualifier out of range (m) = manual integration (+) = signals summed
```

7.2.3 7

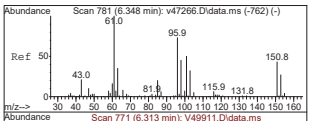
Quantitation Report (LSC Reviewed)

```
Data Path : T:\1\DATA\V160920\
Data File : V49911.D
Acq On    : 20 Sep 2016   2:02 pm
Operator  : kaylap
Sample    : mb
Misc      : MS37347,MSV1838,5,,,5,1
ALS Vial  : 7   Sample Multiplier: 1

Quant Time: Sep 20 14:24:36 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title  : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration
```



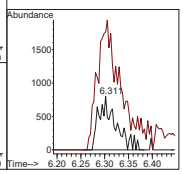
7.2.3 7

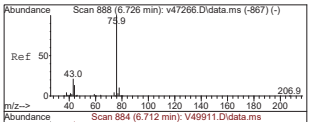


#17
acetone
Concen: 3.51 ug/kg
RT: 6.311 min Scan# 771
Delta R.T. -0.021 min
Lab File: V49911.D
Acq: 20 Sep 2016 2:02 pm

Tgt Ion: 58 Resp: 1961

Ion	Ratio	Lower	Upper
58	100		
43	304.9	270.3	330.3

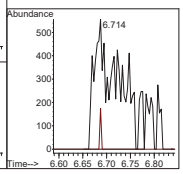




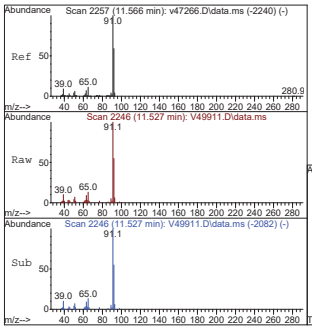
#25
carbon disulfide
Concen: 0.97 ug/kg
RT: 6.713 min Scan# 884
Delta R.T. 0.005 min
Lab File: V49911.D
Acq: 20 Sep 2016 2:02 pm

Tgt Ion: 76 Resp: 1975

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.8



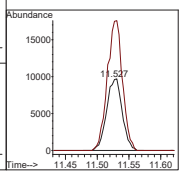
7.2.3 7

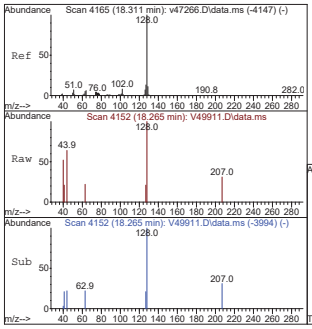


#63
toluene
Concen: 3.38 ug/kg
RT: 11.527 min Scan# 2246
Delta R.T. -0.002 min
Lab File: V49911.D
Acq: 20 Sep 2016 2:02 pm

Tgt Ion: 92 Resp: 16545

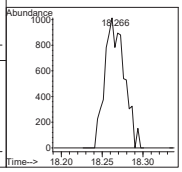
Ion	Ratio	Lower	Upper
92	100		
91	182.0	140.3	200.3





#104
naphthalene
Concen: 0.16 ug/kg
RT: 18.266 min Scan# 4152
Delta R.T. -0.002 min
Lab File: V49911.D
Acq: 20 Sep 2016 2:02 pm

Tgt Ion:128 Resp: 1697



7.2.3

7

LSC Area Percent Report

Data Path : T:\1\DATA\V160920\
Data File : V49911.D
Acq On : 20 Sep 2016 2:02 pm
Operator : kaylap
Sample : mb
Misc : MS37347,MSV1838,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 1000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: CENTROID

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

Method : T:\1\METHODS\V160919S.M
Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

Signal : TIC: V49911.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.846	905	922	938	rBV3	34947	137277	16.10%	2.983%
2	8.929	1497	1511	1519	rBV	247261	473406	55.51%	10.287%
3	8.982	1519	1526	1543	rVB2	160820	306526	35.94%	6.660%
4	9.823	1750	1764	1784	rBV	345650	616697	72.32%	13.400%
5	11.449	2210	2224	2237	rBV	459477	783516	91.88%	17.025%
6	11.527	2237	2246	2264	rVB	41684	70934	8.32%	1.541%
7	13.069	2669	2682	2696	rBV	453210	749686	87.91%	16.290%
8	14.366	3037	3049	3063	rBV2	366797	598103	70.14%	12.996%
9	14.815	3164	3176	3187	rVB6	6633	13232	1.55%	0.288%
10	15.678	3408	3420	3434	rVB	532414	852785	100.00%	18.530%

Sum of corrected areas: 4602162

7.2.4

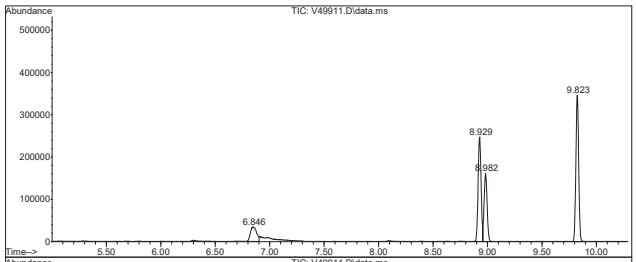
7

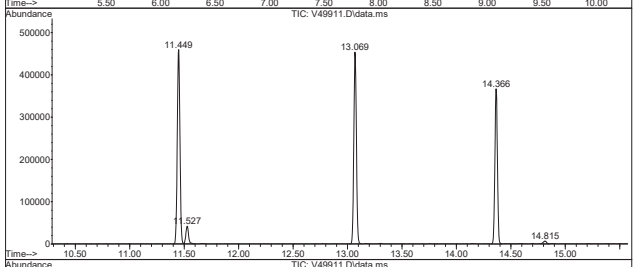
LSC Report - Integrated Chromatogram

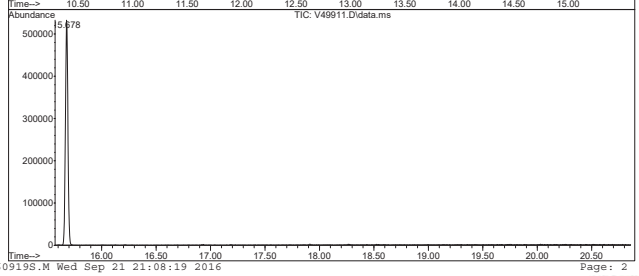
Data Path : T:\1\DATA\V160920\
Data File : V49911.D
Acq On : 20 Sep 2016 2:02 pm
Operator : kaylap
Sample : mb
Misc : MS37347,MSV1838,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p







7.2.4

7

Library Search Compound Report

Data Path : T:\1\DATA\V160920\
Data File : V49911.D
Acq On : 20 Sep 2016 2:02 pm
Operator : kaylap
Sample : mb
Misc : MS37347,MSV1838,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

No Library Search Compounds Detected
****

7.2.4

7

Tentatively Identified Compound (LSC) summary

Data Path : T:\1\DATA\V160920\
Data File : V49911.D
Acq On : 20 Sep 2016 2:02 pm
Operator : kaylap
Sample : mb
Misc : MS37347,MSV1838,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

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

7.2.4 7

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/20/16 10:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80814.D
Acq On : 16 Sep 2016 12:07 pm
Operator : kaylap
Sample : bs
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:34:41 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.684	65	32339	500.00 ug/kg	0.00
4) pentafluorobenzene	9.772	168	60282	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.668	114	98667	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	42007	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.488	152	49678	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	35266	50.30 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.60%		
60) toluene-d8 (s)	12.292	98	109586	48.90 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.80%		
82) bromofluorobenzene (s)	15.188	95	39013	48.77 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.54%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.798	59	56230	631.45 ug/kg	84
3) Ethanol	6.552	45	36594	4928.30 ug/kg	99
5) dichlorodifluoromethane	4.430	85	46152	54.20 ug/kg	97
6) chloromethane	4.821	50	78047	63.31 ug/kg	98
7) vinyl chloride	5.084	62	63873	50.89 ug/kg	97
8) bromomethane ...	5.724	96	49354	50.33 ug/kg	99
9) chloroethane	5.899	64	36096	56.42 ug/kg	98
10) ethyl ether	6.700	59	27962	49.00 ug/kg	90
11) acetonitrile	7.516	41	4424	61.53 ug/kg#	65
12) trichlorofluoromethane	6.337	101	80284	54.67 ug/kg	100
13) freon-113	7.091	101	42638	48.42 ug/kg	99
14) acrolein	6.943	56	14682	141.20 ug/kg	93
15) 1,1-dichloroethene	7.118	96	36341	46.33 ug/kg	85
16) acetone	7.111	58	8077	63.82 ug/kg	99
17) Methyl Acetate	7.522	43	38035	74.51 ug/kg	97
18) methylene chloride	7.765	84	45803	49.40 ug/kg	88
19) methyl tert butyl ether	8.075	73	120050	56.36 ug/kg	94
20) acrylonitrile	8.027	53	15143	53.11 ug/kg	98
21) allyl chloride	7.590	41	64741	54.88 ug/kg	84
22) trans-1,2-dichloroethene	8.115	96	39196	46.02 ug/kg	85
23) iodomethane	7.374	142	76813	46.46 ug/kg	93
24) carbon disulfide	7.509	76	110681	43.09 ug/kg	98
25) propionitrile	9.321	54	6396	57.71 ug/kg	100
26) vinyl acetate	8.566	43	90922m	51.01 ug/kg	
27) chloroprene	8.735	53	59866	46.55 ug/kg	89
28) di-isopropyl ether	8.600	45	152370	58.99 ug/kg	97
29) methacrylonitrile	9.496	41	23062	53.82 ug/kg	97
30) 2-butanone	9.240	72	6388	49.18 ug/kg#	1
31) Hexane	8.418	41	38424	52.37 ug/kg#	89
32) 1,1-dichloroethane	8.647	63	72255	49.47 ug/kg	94
33) tert-butyl ethyl ether	9.031	59	137747	56.02 ug/kg	96
35) 2,2-dichloropropane	9.341	77	67384	53.62 ug/kg	96
36) cis-1,2-dichloroethene	9.307	96	51799	55.27 ug/kg	88
38) bromochloromethane	9.590	128	26405	53.43 ug/kg#	77

7.3.1 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80814.D
Acq On : 16 Sep 2016 12:07 pm
Operator : kaylap
Sample : bs
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:34:41 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.651	83	79957	51.89 ug/kg	99
41) Tetrahydrofuran	9.604	42	12487	48.88 ug/kg	92
42) 1,1,1-trichloroethane	9.914	97	76559	54.46 ug/kg	97
44) Cyclohexane	10.015	56	69126	52.38 ug/kg	85
45) carbon tetrachloride	10.096	117	73378	52.99 ug/kg	94
46) 1,1-dichloropropene	10.062	75	53312	50.78 ug/kg	93
47) benzene	10.304	78	162625	52.39 ug/kg	99
48) 1,2-dichloroethane	10.325	62	57544	53.11 ug/kg	96
49) tert-amyl methyl ether	10.352	73	123691	57.65 ug/kg	95
50) heptane	10.500	43	61165	61.93 ug/kg	90
51) trichloroethene	10.978	95	44972	52.27 ug/kg	97
52) 1,2-dichloropropane	11.274	63	43231	53.32 ug/kg	99
53) dibromomethane	11.382	93	27658	52.73 ug/kg	93
54) bromodichloromethane	11.517	83	58155	53.22 ug/kg	98
55) Methylcyclohexane	11.274	83	75175	60.99 ug/kg	86
56) 2-chloroethyl vinyl ether	11.732	63	13571	53.90 ug/kg	89
57) methyl methacrylate	11.194	69	22631	49.66 ug/kg	87
58) 1,4-dioxane	11.301	88	1688	217.11 ug/kg	72
59) cis-1,3-dichloropropene	11.968	75	59123	52.82 ug/kg	98
61) 4-methyl-2-pentanone	12.063	43	42361	56.72 ug/kg	97
62) toluene	12.366	92	101569	52.77 ug/kg	97
63) trans-1,3-dichloropropene	12.548	75	49238	50.37 ug/kg	100
64) 1,1,2-trichloroethane	12.790	83	29102	53.94 ug/kg	98
65) ethyl methacrylate	12.514	69	43678	53.66 ug/kg	90
67) tetrachloroethene	12.945	166	45069	54.95 ug/kg	93
68) 1,3-dichloropropane	12.985	76	53363	60.02 ug/kg	97
69) dibromochloromethane	13.255	129	48324	56.71 ug/kg	99
70) 1,2-dibromoethane	13.430	107	35343	56.55 ug/kg	98
71) 2-hexanone	12.938	43	35915	68.08 ug/kg	98
72) chlorobenzene	13.935	112	117811	56.75 ug/kg	94
73) 1,1,1,2-tetrachloroethane	14.003	131	54119	61.22 ug/kg	99
74) ethylbenzene	13.989	91	204354	59.06 ug/kg	96
75) m,p-xylene	14.124	106	164925	118.59 ug/kg	97
76) o-xylene	14.569	106	84845	59.50 ug/kg	94
77) styrene	14.582	104	132563	59.14 ug/kg	99
78) bromoform	14.851	173	30118	55.54 ug/kg	95
79) trans-1,4-dichloro-2-b...	15.296	53	14320	57.55 ug/kg#	24
81) isopropylbenzene	14.952	105	225348	60.34 ug/kg	99
83) bromobenzene	15.397	156	55547	58.12 ug/kg	99
84) 1,1,2,2-tetrachloroethane	15.262	83	51383	57.34 ug/kg	98
85) 1,2,3-trichloropropane	15.370	75	43036	56.52 ug/kg	93
86) n-propylbenzene	15.411	91	255085	58.56 ug/kg	97
87) 2-chlorotoluene	15.572	91	169132	58.68 ug/kg	94
88) 4-chlorotoluene	15.693	91	147773	59.34 ug/kg	92
89) 1,3,5-trimethylbenzene	15.579	105	205707	63.40 ug/kg	98
90) tert-butylbenzene	15.963	91	109924	62.60 ug/kg	98
91) 1,2,4-trimethylbenzene	16.024	105	201666	60.80 ug/kg	98
92) sec-butylbenzene	16.212	105	261040	61.51 ug/kg	99
93) 1,3-dichlorobenzene	16.414	146	113302	58.56 ug/kg	95
94) p-isopropyltoluene	16.354	119	233706	62.75 ug/kg	99

7.3.1 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80814.D
Acq On : 16 Sep 2016 12:07 pm
Operator : kaylap
Sample : bs
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:34:41 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) 1,4-dichlorobenzene	16.515	146	115322	58.36 ug/kg	98
96) 1,2-dichlorobenzene	16.933	146	114418	59.07 ug/kg	99
97) n-butylbenzene	16.812	91	212945	62.69 ug/kg	97
98) 1,2-dibromo-3-chloropr...	17.782	75	10851	54.90 ug/kg	93
99) 1,3,5-trichlorobenzene	17.977	180	83696	61.87 ug/kg	100
100) 1,2,4-trichlorobenzene	18.705	180	83286	57.43 ug/kg	100
101) hexachlorobutadiene	18.819	225	39687	58.37 ug/kg	96
102) naphthalene	19.055	128	210888	53.96 ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	83813	59.53 ug/kg	100
104) 2-methylnaphthalene	20.476	142	72977	32.64 ug/kg	95
105) 1-methylnaphthalene	20.746	142	59348	31.78 ug/kg	97

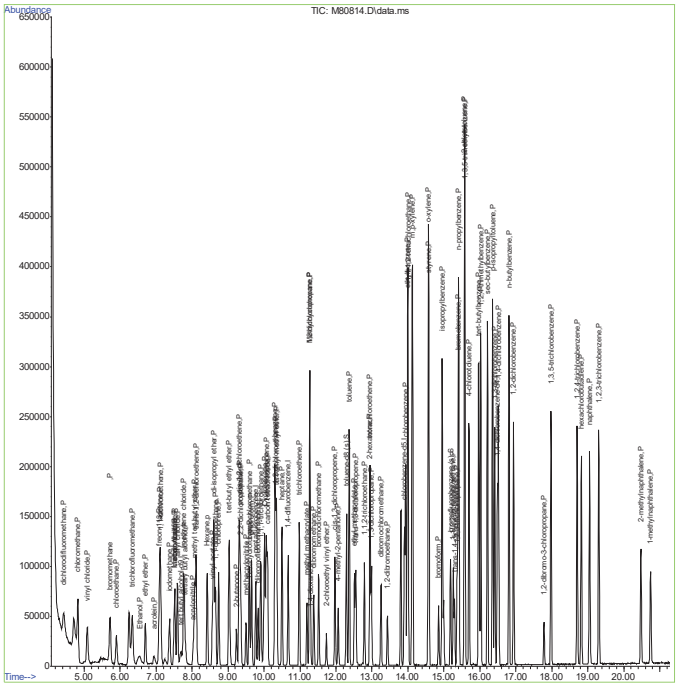
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.3.1 7

Quantitation Report (QT Reviewed)

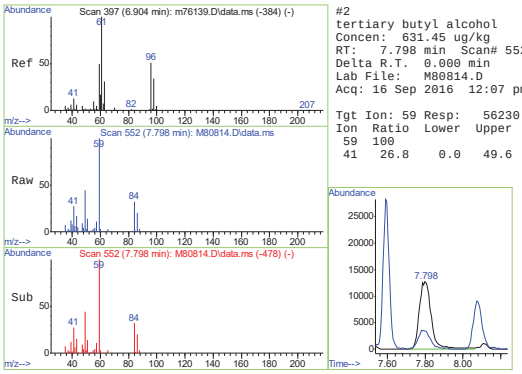
```
Data Path : C:\msdchem\1\data\M160916\
Data File : M80814.D
Acq On    : 16 Sep 2016  12:07 pm
Operator  : kaylap
Sample    : bs
Misc      : MS37320,MSM2895,5,,,5,1
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Sep 16 12:34:41 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title  : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration
```



7.3.1

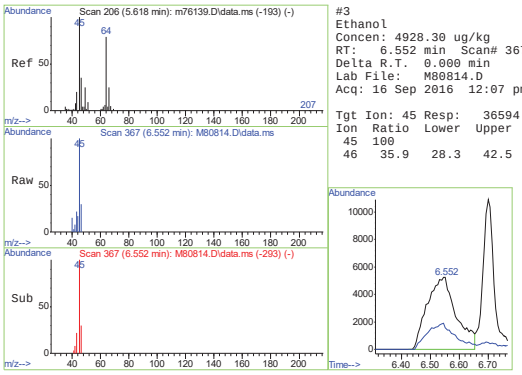
7



#2
tertiary butyl alcohol
Concen: 631.45 ug/kg
RT: 7.798 min Scan# 552
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 59 Resp: 56230

Ion	Ratio	Lower	Upper
59	100		
41	26.8	0.0	49.6



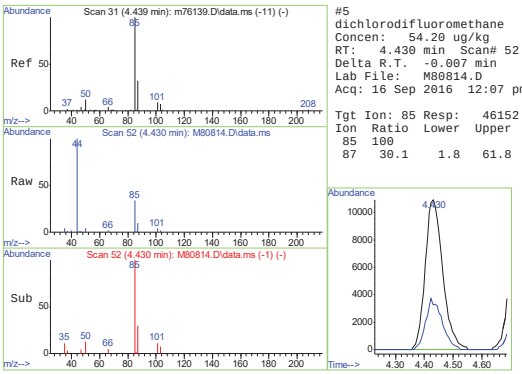
#3
Ethanol
Concen: 4928.30 ug/kg
RT: 6.552 min Scan# 367
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 45 Resp: 36594

Ion	Ratio	Lower	Upper
45	100		
46	35.9	28.3	42.5

7.3.1

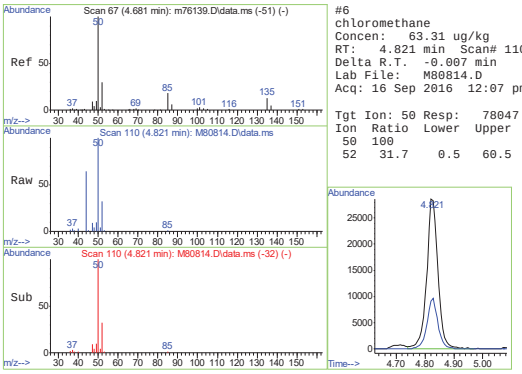
7



#5
dichlorodifluoromethane
Concen: 54.20 ug/kg
RT: 4.430 min Scan# 52
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 85 Resp: 46152

Ion	Ratio	Lower	Upper
85	100		
87	30.1	1.8	61.8



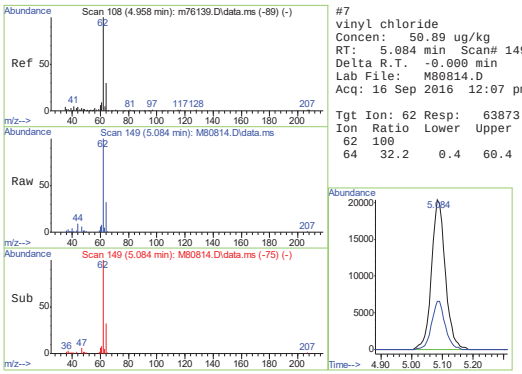
#6
chloromethane
Concen: 63.31 ug/kg
RT: 4.821 min Scan# 110
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 50 Resp: 78047

Ion	Ratio	Lower	Upper
50	100		
52	31.7	0.5	60.5

7.3.1

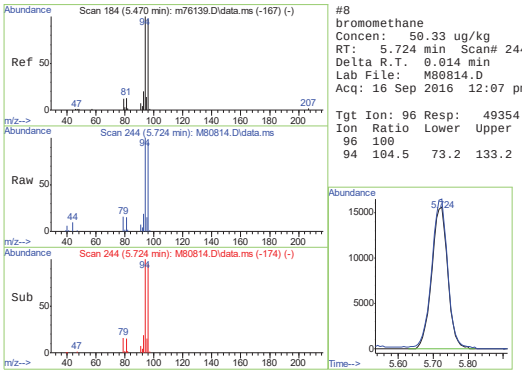
7



#7
vinyl chloride
Concen: 50.89 ug/kg
RT: 5.084 min Scan# 149
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 62 Resp: 63873

Ion	Ratio	Lower	Upper
62	100		
64	32.2	0.4	60.4



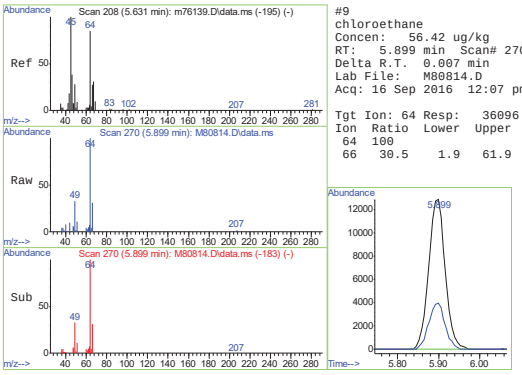
#8
bromomethane
Concen: 50.33 ug/kg
RT: 5.724 min Scan# 244
Delta R.T. 0.014 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 96 Resp: 49354

Ion	Ratio	Lower	Upper
96	100		
94	104.5	73.2	133.2

7.3.1

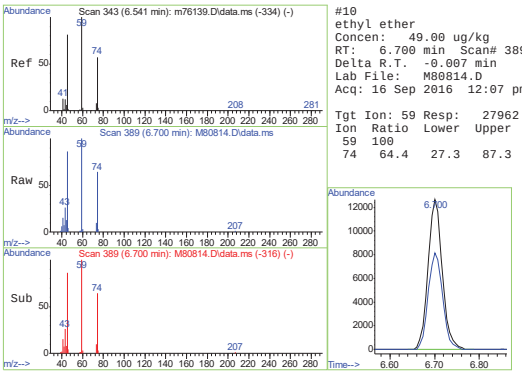
7



#9
chloroethane
Concen: 56.42 ug/kg
RT: 5.899 min Scan# 270
Delta R.T. 0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 64 Resp: 36096

Ion	Ratio	Lower	Upper
64	100		
66	30.5	1.9	61.9



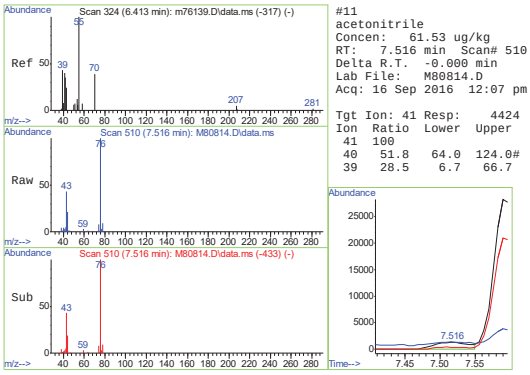
#10
ethyl ether
Concen: 49.00 ug/kg
RT: 6.700 min Scan# 389
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 59 Resp: 27962

Ion	Ratio	Lower	Upper
59	100		
74	64.4	27.3	87.3

7.3.1

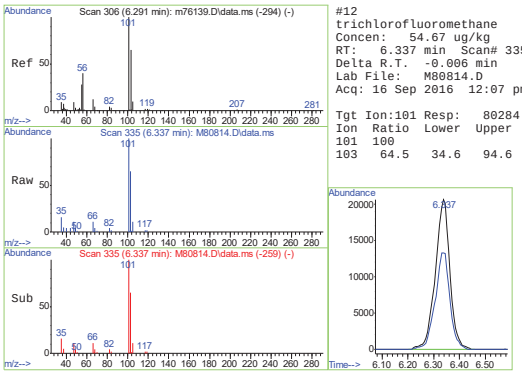
7



#11
acetonitrile
Concen: 61.53 ug/kg
RT: 7.516 min Scan# 510
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 41 Resp: 4424

Ion	Ratio	Lower	Upper
41	100		
40	51.8	64.0	124.0#
39	28.5	6.7	66.7



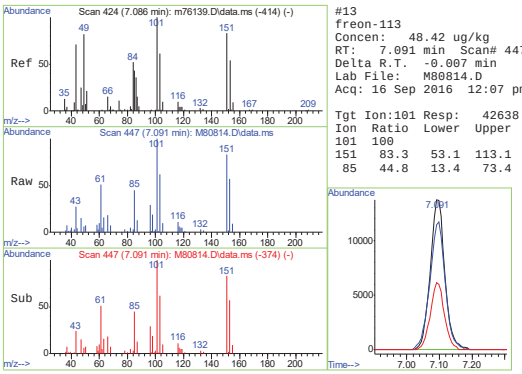
#12
trichlorofluoromethane
Concen: 54.67 ug/kg
RT: 6.337 min Scan# 335
Delta R.T. -0.006 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:101 Resp: 80284

Ion	Ratio	Lower	Upper
101	100		
103	64.5	34.6	94.6

7.3.1

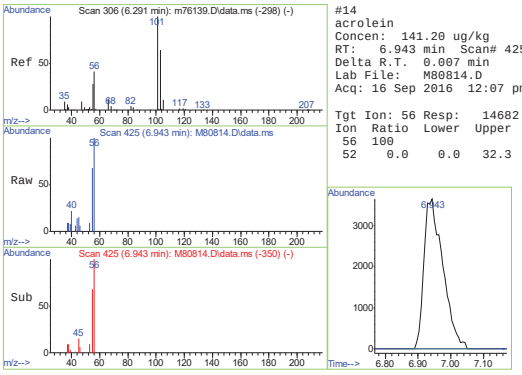
7



#13
freon-113
Concen: 48.42 ug/kg
RT: 7.091 min Scan# 447
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:101 Resp: 42638

Ion	Ratio	Lower	Upper
101	100		
151	83.3	53.1	113.1
85	44.8	13.4	73.4



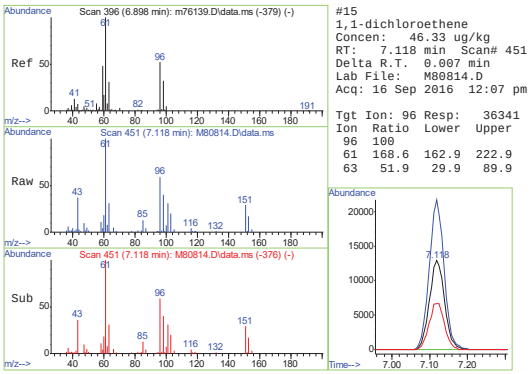
#14
acrolein
Concen: 141.20 ug/kg
RT: 6.943 min Scan# 425
Delta R.T. 0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 56 Resp: 14682

Ion	Ratio	Lower	Upper
56	100		
52	0.0	0.0	32.3

7.3.1

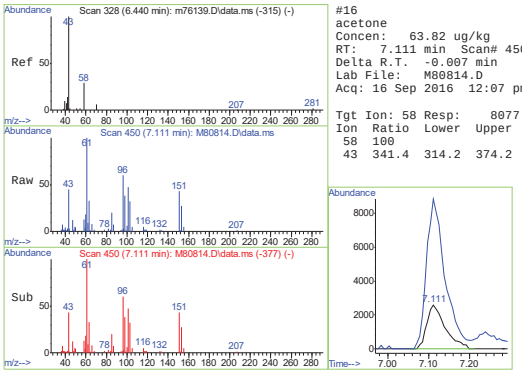
7



#15
1,1-dichloroethene
Concen: 46.33 ug/kg
RT: 7.118 min Scan# 451
Delta R.T. 0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 96 Resp: 36341

Ion	Ratio	Lower	Upper
96	100		
61	168.6	162.9	222.9
63	51.9	29.9	89.9



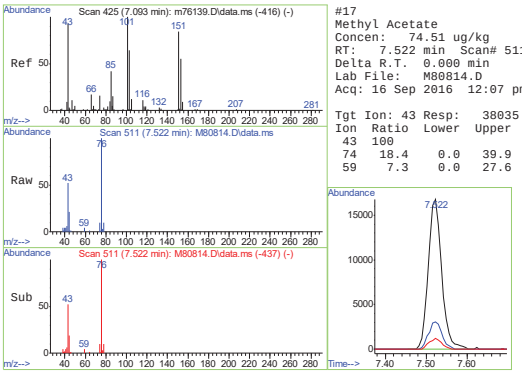
#16
acetone
Concen: 63.82 ug/kg
RT: 7.111 min Scan# 450
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 58 Resp: 8077

Ion	Ratio	Lower	Upper
58	100		
43	341.4	314.2	374.2

7.3.1

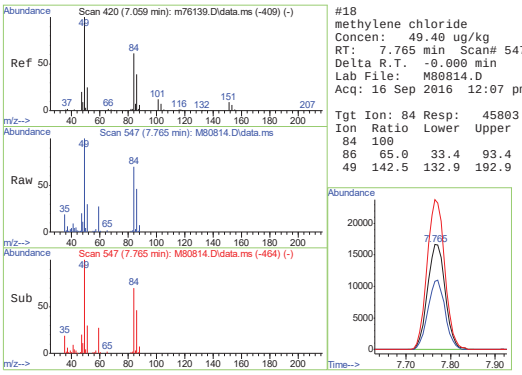
7



#17
Methyl Acetate
Concen: 74.51 ug/kg
RT: 7.522 min Scan# 511
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 43 Resp: 38035

Ion	Ratio	Lower	Upper
43	100		
74	18.4	0.0	39.9
59	7.3	0.0	27.6



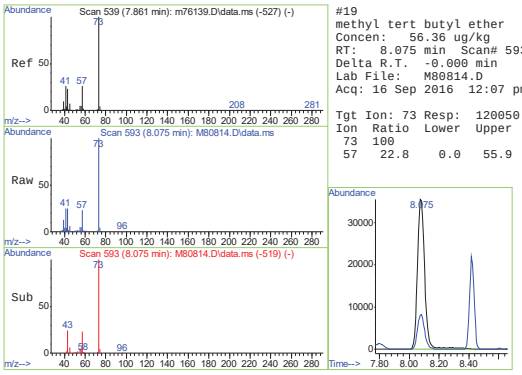
#18
methylene chloride
Concen: 49.40 ug/kg
RT: 7.765 min Scan# 547
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 84 Resp: 45803

Ion	Ratio	Lower	Upper
84	100		
86	65.0	33.4	93.4
49	142.5	132.9	192.9

7.3.1

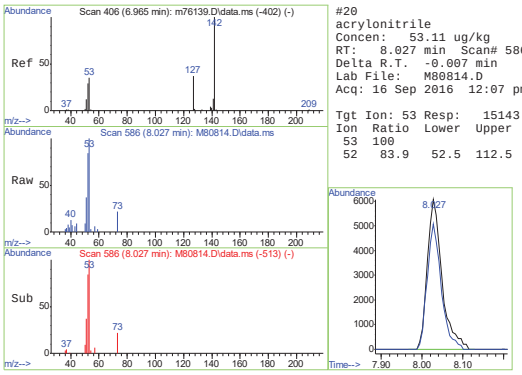
7



#19
methyl tert butyl ether
Concen: 56.36 ug/kg
RT: 8.075 min Scan# 593
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 73 Resp: 120050

Ion	Ratio	Lower	Upper
73	100		
57	22.8	0.0	55.9



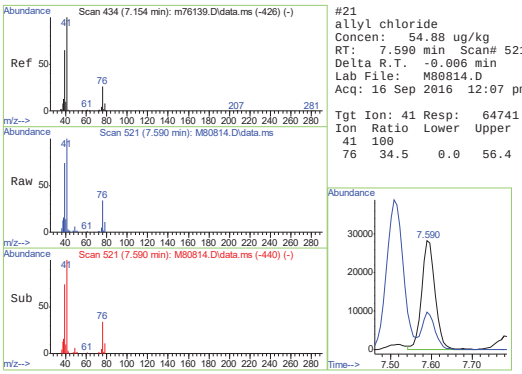
#20
acrylonitrile
Concen: 53.11 ug/kg
RT: 8.027 min Scan# 586
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 53 Resp: 15143

Ion	Ratio	Lower	Upper
53	100		
52	83.9	52.5	112.5

7.3.1

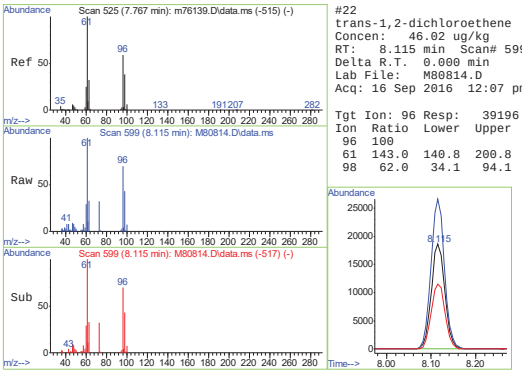
7



#21
allyl chloride
Concen: 54.88 ug/kg
RT: 7.590 min Scan# 521
Delta R.T. -0.006 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 41 Resp: 64741

Ion	Ratio	Lower	Upper
41	100		
76	34.5	0.0	56.4



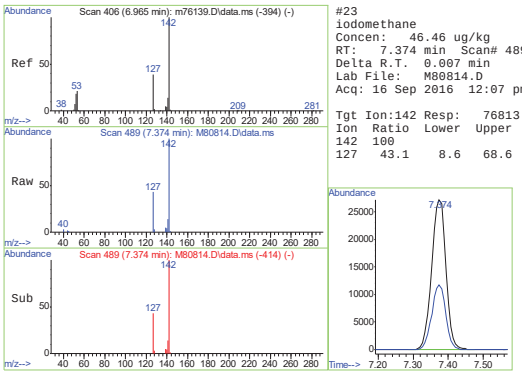
#22
trans-1,2-dichloroethene
Concen: 46.02 ug/kg
RT: 8.115 min Scan# 599
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 96 Resp: 39196

Ion	Ratio	Lower	Upper
96	100		
61	143.0	140.8	200.8
98	62.0	34.1	94.1

7.3.1

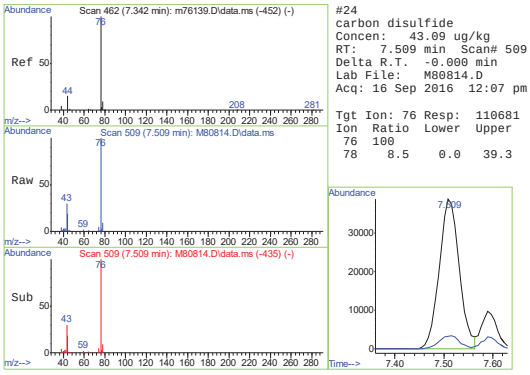
7



#23
iodomethane
Concen: 46.46 ug/kg
RT: 7.374 min Scan# 489
Delta R.T. 0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:142 Resp: 76813

Ion	Ratio	Lower	Upper
142	100		
127	43.1	8.6	68.6



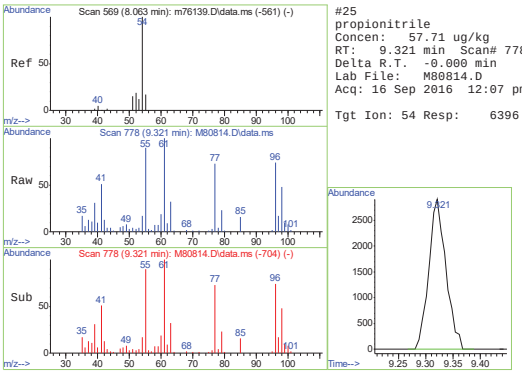
#24
carbon disulfide
Concen: 43.09 ug/kg
RT: 7.509 min Scan# 509
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 76 Resp: 110681

Ion	Ratio	Lower	Upper
76	100		
78	8.5	0.0	39.3

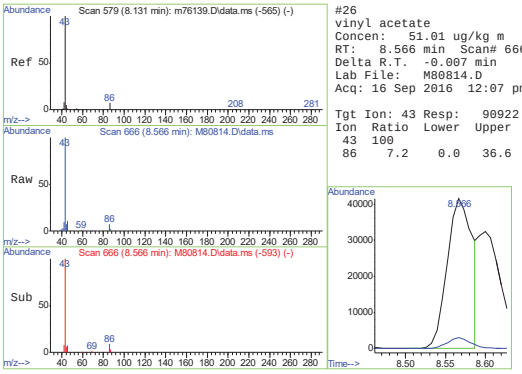
7.3.1

7



#25
propionitrile
Concen: 57.71 ug/kg
RT: 9.321 min Scan# 778
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 54 Resp: 6396



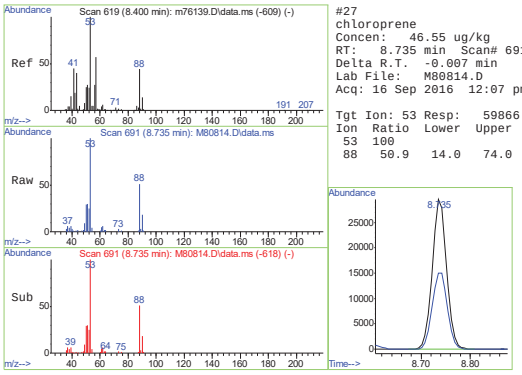
#26
vinyl acetate
Concen: 51.01 ug/kg m
RT: 8.566 min Scan# 666
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 43 Resp: 90922

Ion	Ratio	Lower	Upper
43	100		
86	7.2	0.0	36.6

7.3.1

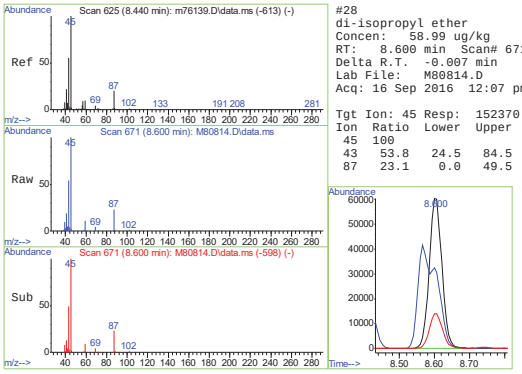
7



#27
chloroprene
Concen: 46.55 ug/kg
RT: 8.735 min Scan# 691
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 53 Resp: 59866

Ion	Ratio	Lower	Upper
53	100		
88	50.9	14.0	74.0



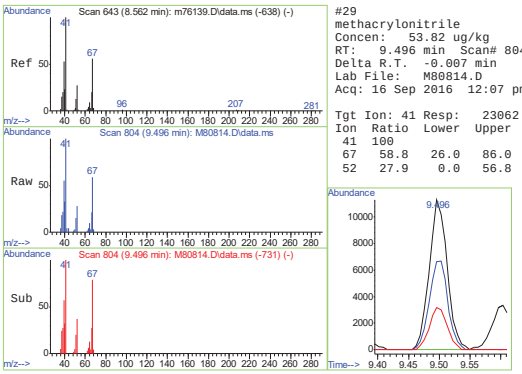
#28
di-isopropyl ether
Concen: 58.99 ug/kg
RT: 8.600 min Scan# 671
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 45 Resp: 152370

Ion	Ratio	Lower	Upper
45	100		
43	53.8	24.5	84.5
87	23.1	0.0	49.5

7.3.1

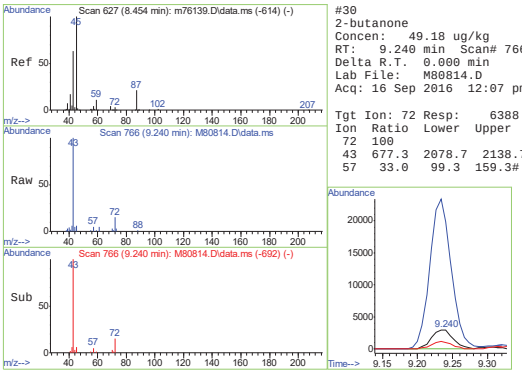
7



#29
methacrylonitrile
Concen: 53.82 ug/kg
RT: 9.496 min Scan# 804
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 41 Resp: 23062

Ion	Ratio	Lower	Upper
41	100		
67	58.8	26.0	86.0
52	27.9	0.0	56.8



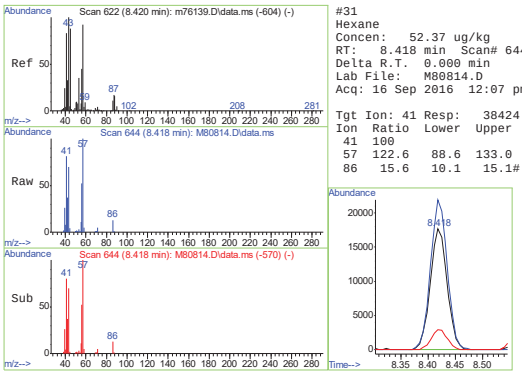
#30
2-butanone
Concen: 49.18 ug/kg
RT: 9.240 min Scan# 766
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 72 Resp: 6388

Ion	Ratio	Lower	Upper
72	100		
43	677.3	2078.7	2138.7#
57	33.0	99.3	159.3#

7.3.1

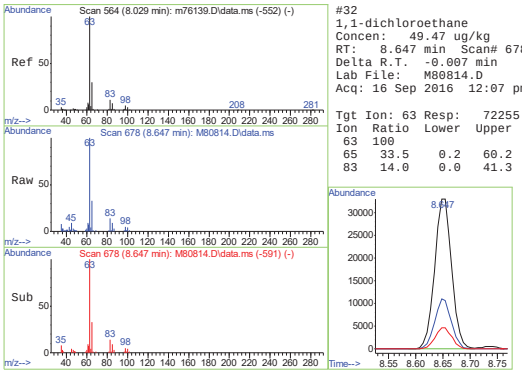
7



#31
Hexane
Concen: 52.37 ug/kg
RT: 8.418 min Scan# 644
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 41 Resp: 38424

Ion	Ratio	Lower	Upper
41	100		
57	122.6	88.6	133.0
86	15.6	10.1	15.1#



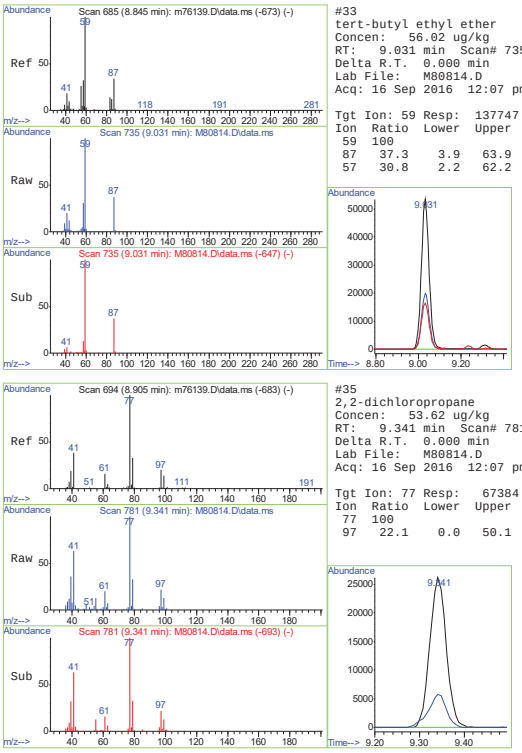
#32
1,1-dichloroethane
Concen: 49.47 ug/kg
RT: 8.647 min Scan# 678
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 63 Resp: 72255

Ion	Ratio	Lower	Upper
63	100		
65	33.5	0.2	60.2
83	14.0	0.0	41.3

7.3.1

7



#33
tert-butyl ethyl ether
Concen: 56.02 ug/kg
RT: 9.031 min Scan# 735
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 59 Resp: 137747

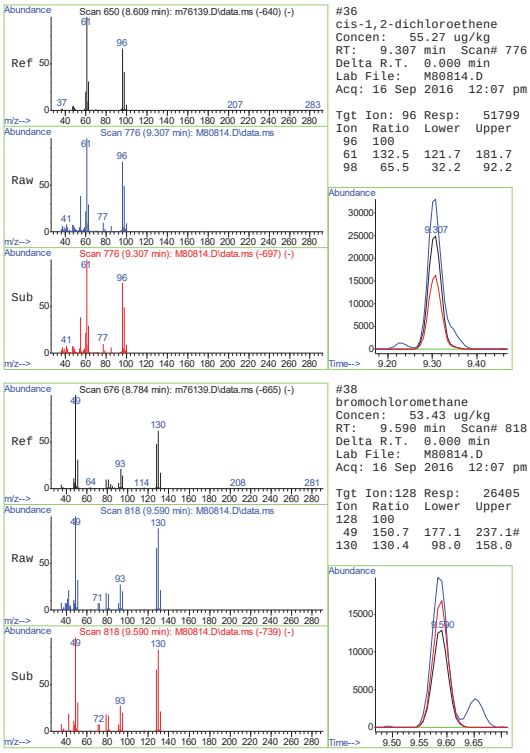
Ion	Ratio	Lower	Upper
59	100		
87	37.3	3.9	63.9
57	30.8	2.2	62.2

#35
2,2-dichloropropane
Concen: 53.62 ug/kg
RT: 9.341 min Scan# 781
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 77 Resp: 67384

Ion	Ratio	Lower	Upper
77	100		
97	22.1	0.0	50.1

7.3.1 7



#36
cis-1,2-dichloroethene
Concen: 55.27 ug/kg
RT: 9.307 min Scan# 776
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 96 Resp: 51799

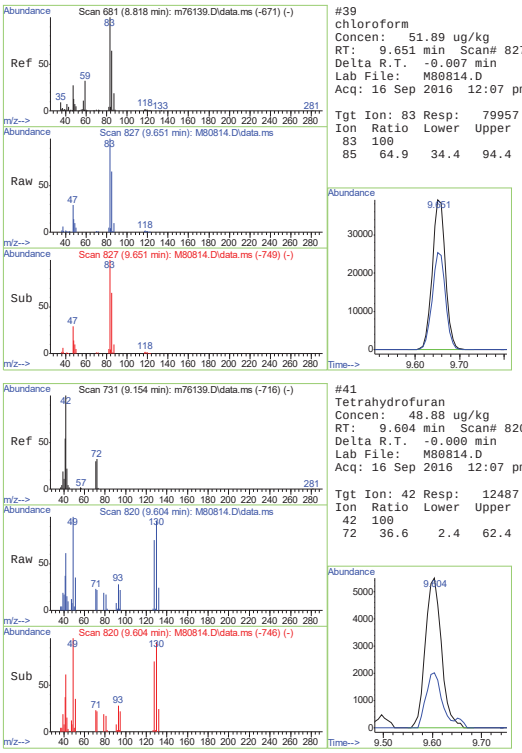
Ion	Ratio	Lower	Upper
96	100		
61	132.5	121.7	181.7
98	65.5	32.2	92.2

#38
bromochloromethane
Concen: 53.43 ug/kg
RT: 9.590 min Scan# 818
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:128 Resp: 26405

Ion	Ratio	Lower	Upper
128	100		
49	150.7	177.1	237.1#
130	130.4	98.0	158.0

7.3.1 7



#39
chloroform
Concen: 51.89 ug/kg
RT: 9.651 min Scan# 827
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 83 Resp: 79957

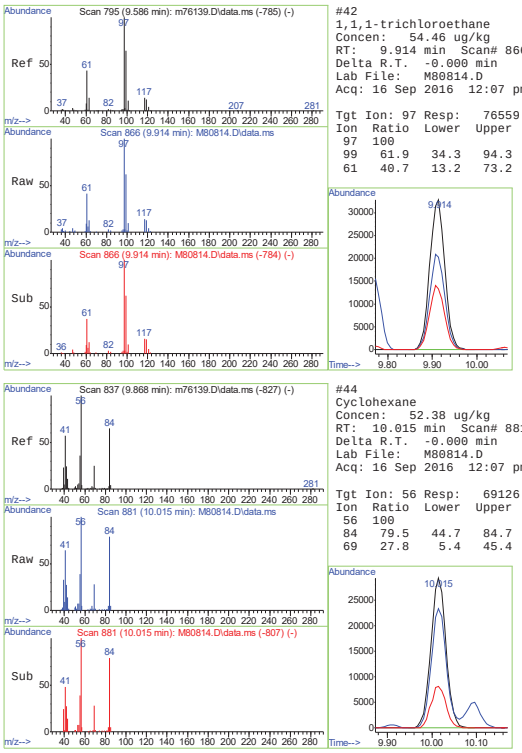
Ion	Ratio	Lower	Upper
83	100		
85	64.9	34.4	94.4

#41
Tetrahydrofuran
Concen: 48.88 ug/kg
RT: 9.604 min Scan# 820
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 42 Resp: 12487

Ion	Ratio	Lower	Upper
42	100		
72	36.6	2.4	62.4

7.3.1 7



#42
1,1,1-trichloroethane
Concen: 54.46 ug/kg
RT: 9.914 min Scan# 866
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 97 Resp: 76559

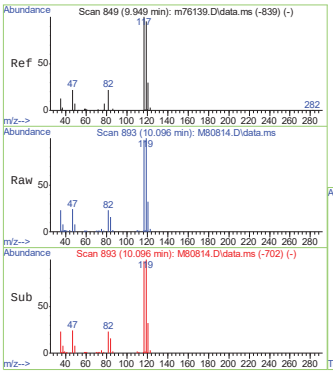
Ion	Ratio	Lower	Upper
97	100		
99	61.9	34.3	94.3
61	40.7	13.2	73.2

#44
Cyclohexane
Concen: 52.38 ug/kg
RT: 10.015 min Scan# 881
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 56 Resp: 69126

Ion	Ratio	Lower	Upper
56	100		
84	79.5	44.7	84.7
69	27.8	5.4	45.4

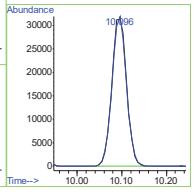
7.3.1 7

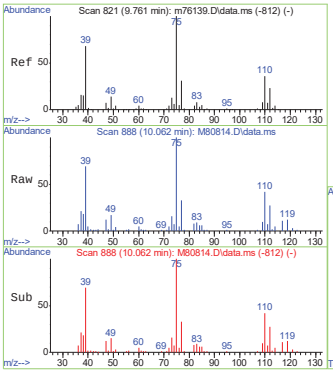


#45
carbon tetrachloride
Concen: 52.99 ug/kg
RT: 10.096 min Scan# 893
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:117 Resp: 73378

Ion	Ratio	Lower	Upper
117	100		
119	101.7	65.5	125.5

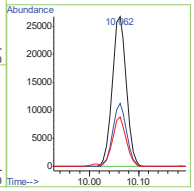




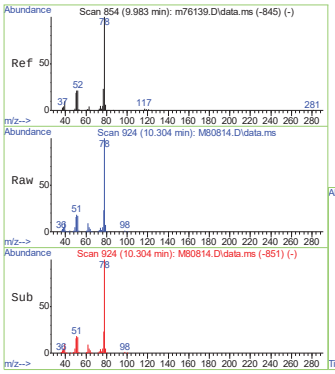
#46
1,1-dichloropropene
Concen: 50.78 ug/kg
RT: 10.062 min Scan# 888
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 75 Resp: 53312

Ion	Ratio	Lower	Upper
75	100		
110	42.2	6.1	66.1
77	33.0	1.0	61.0



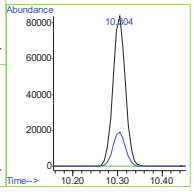
7.3.1 7

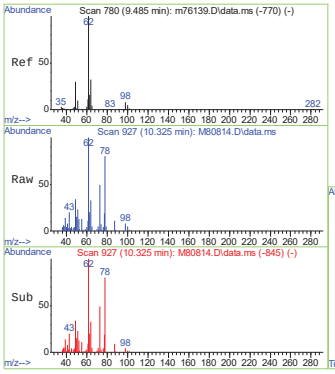


#47
benzene
Concen: 52.39 ug/kg
RT: 10.304 min Scan# 924
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 78 Resp: 162625

Ion	Ratio	Lower	Upper
78	100		
77	22.7	0.0	53.0

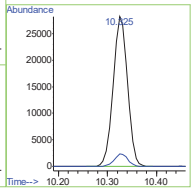




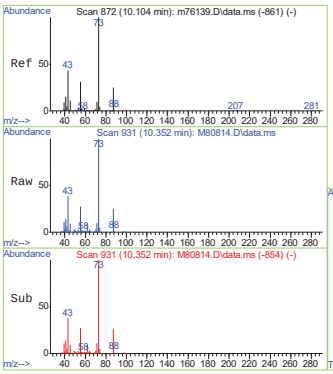
#48
1,2-dichloroethane
Concen: 53.11 ug/kg
RT: 10.325 min Scan# 927
Delta R.T. -0.006 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 62 Resp: 57544

Ion	Ratio	Lower	Upper
62	100		
98	8.2	0.0	39.5



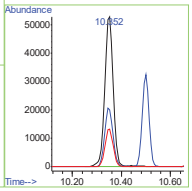
7.3.1 7

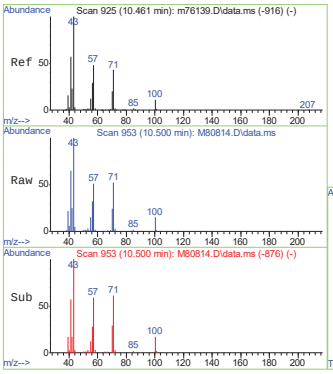


#49
tert-amyl methyl ether
Concen: 57.65 ug/kg
RT: 10.352 min Scan# 931
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 73 Resp: 123691

Ion	Ratio	Lower	Upper
73	100		
43	38.1	12.5	72.5
87	25.2	0.0	54.7

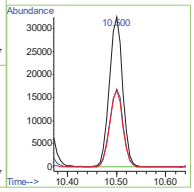




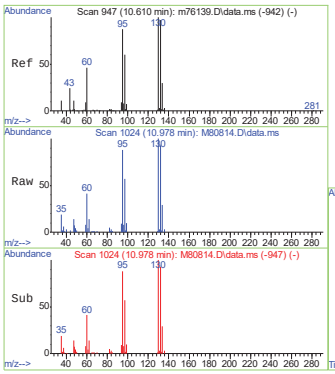
#50
heptane
Concen: 61.93 ug/kg
RT: 10.500 min Scan# 953
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 43 Resp: 61165

Ion	Ratio	Lower	Upper
43	100		
71	51.8	12.8	72.8
57	51.3	17.6	77.6



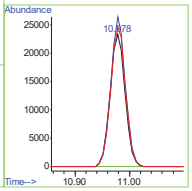
7.3.1 7

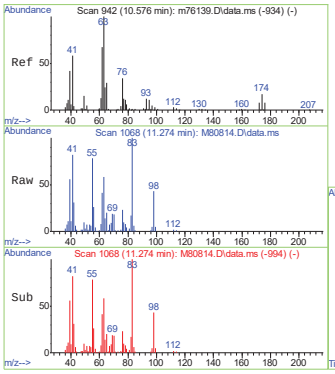


#51
trichloroethene
Concen: 52.27 ug/kg
RT: 10.978 min Scan# 1024
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 95 Resp: 44972

Ion	Ratio	Lower	Upper
95	100		
130	113.2	84.9	144.9
132	105.4	81.1	141.1

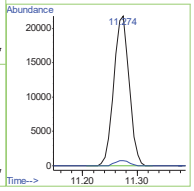




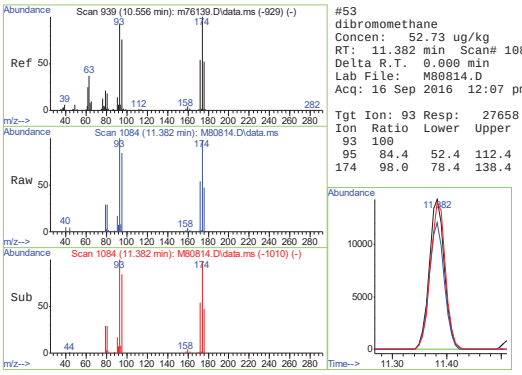
#52
1,2-dichloropropane
Concen: 53.32 ug/kg
RT: 11.274 min Scan# 1068
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 63 Resp: 43231

Ion	Ratio	Lower	Upper
63	100		
112	3.4	0.0	33.7



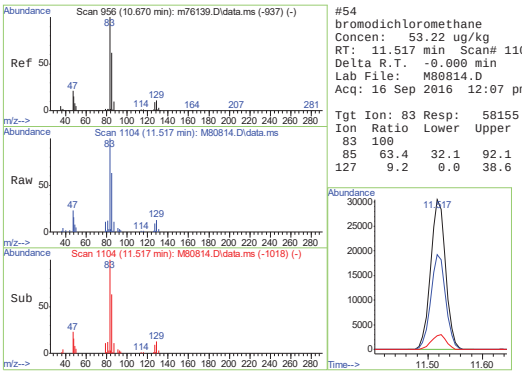
7.3.1 7



#53
dibromomethane
Concen: 52.73 ug/kg
RT: 11.382 min Scan# 1084
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 93 Resp: 27658

Ion	Ratio	Lower	Upper
93	100		
95	84.4	52.4	112.4
174	98.0	78.4	138.4



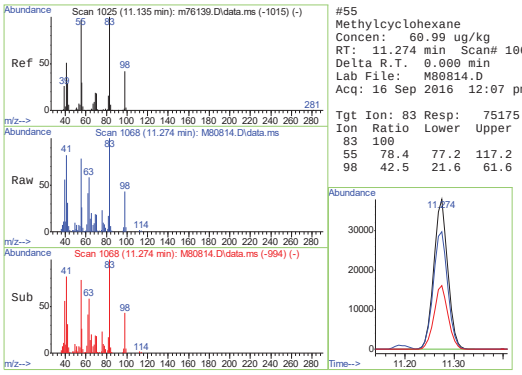
#54
bromodichloromethane
Concen: 53.22 ug/kg
RT: 11.517 min Scan# 1104
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 83 Resp: 58155

Ion	Ratio	Lower	Upper
83	100		
85	63.4	32.1	92.1
127	9.2	0.0	38.6

7.3.1

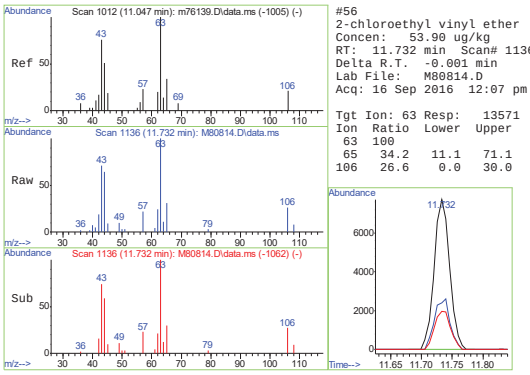
7



#55
Methylcyclohexane
Concen: 60.99 ug/kg
RT: 11.274 min Scan# 1068
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 83 Resp: 75175

Ion	Ratio	Lower	Upper
83	100		
55	78.4	77.2	117.2
98	42.5	21.6	61.6



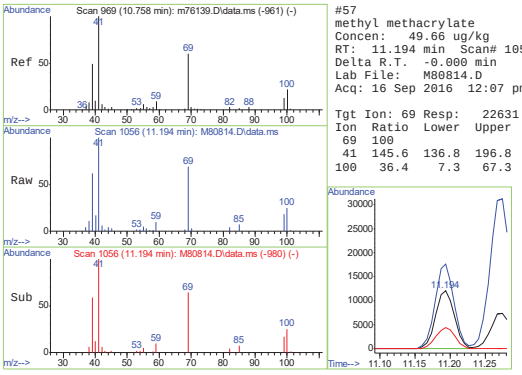
#56
2-chloroethyl vinyl ether
Concen: 53.90 ug/kg
RT: 11.732 min Scan# 1136
Delta R.T. -0.001 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 63 Resp: 13571

Ion	Ratio	Lower	Upper
63	100		
65	34.2	11.1	71.1
106	26.6	0.0	30.0

7.3.1

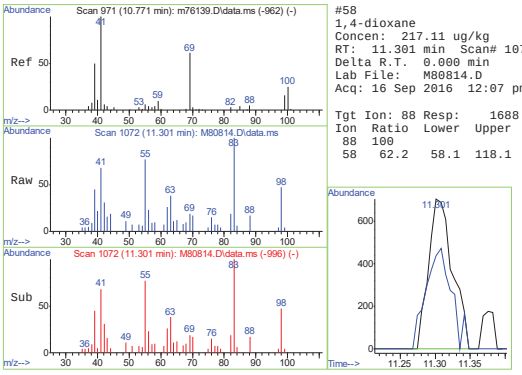
7



#57
methyl methacrylate
Concen: 49.66 ug/kg
RT: 11.194 min Scan# 1056
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 69 Resp: 22631

Ion	Ratio	Lower	Upper
69	100		
41	145.6	136.8	196.8
100	36.4	7.3	67.3



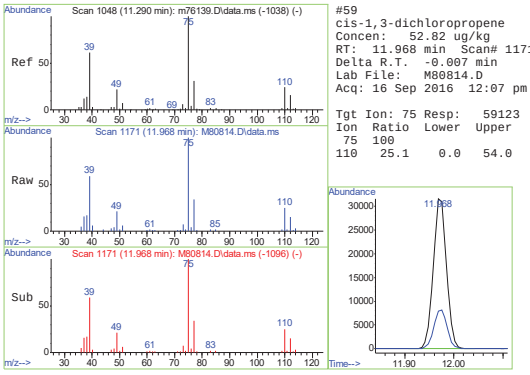
#58
1,4-dioxane
Concen: 217.11 ug/kg
RT: 11.301 min Scan# 1072
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 88 Resp: 1688

Ion	Ratio	Lower	Upper
88	100		
58	62.2	58.1	118.1

7.3.1

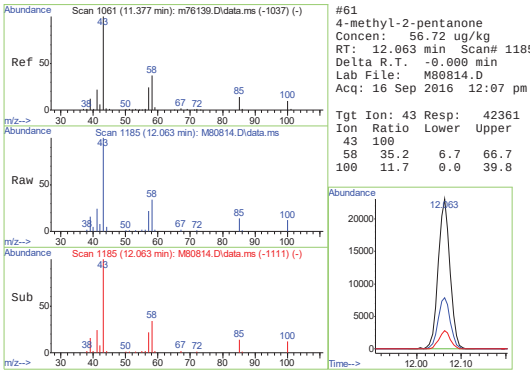
7



#59
cis-1,3-dichloropropene
Concen: 52.82 ug/kg
RT: 11.968 min Scan# 1171
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 75 Resp: 59123

Ion	Ratio	Lower	Upper
75	100		
110	25.1	0.0	54.0



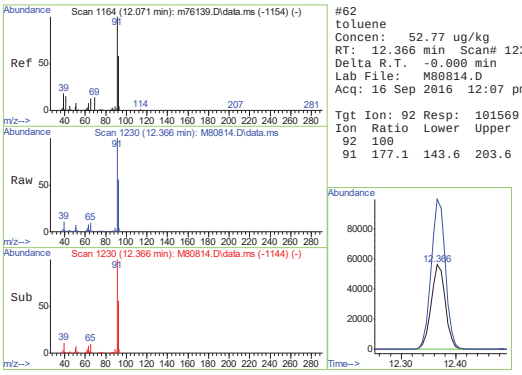
#61
4-methyl-2-pentanone
Concen: 56.72 ug/kg
RT: 12.063 min Scan# 1185
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 43 Resp: 42361

Ion	Ratio	Lower	Upper
43	100		
58	35.2	6.7	66.7
100	11.7	0.0	39.8

7.3.1

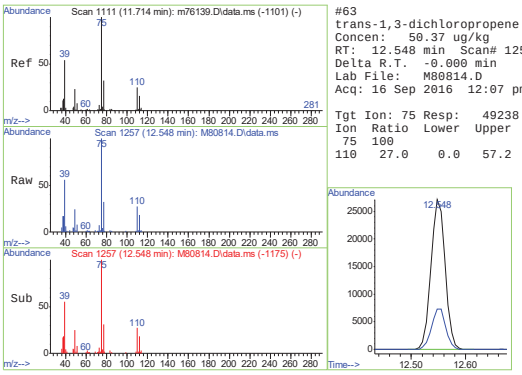
7



#62
toluene
Concen: 52.77 ug/kg
RT: 12.366 min Scan# 1230
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 92 Resp: 101569

Ion	Ratio	Lower	Upper
92	100		
91	177.1	143.6	203.6



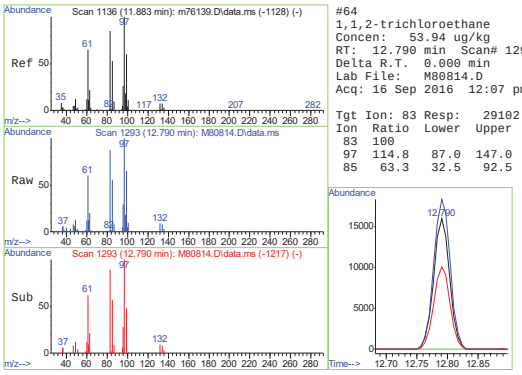
#63
trans-1,3-dichloropropene
Concen: 50.37 ug/kg
RT: 12.548 min Scan# 1257
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 75 Resp: 49238

Ion	Ratio	Lower	Upper
75	100		
110	27.0	0.0	57.2

7.3.1

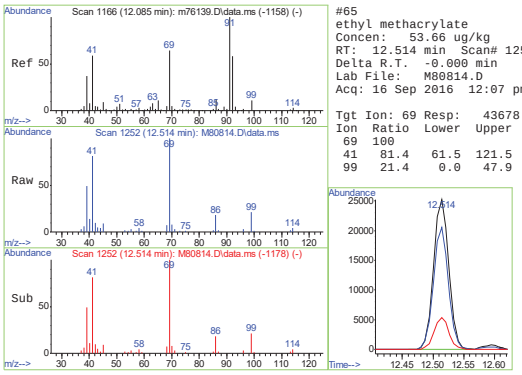
7



#64
1,1,2-trichloroethane
Concen: 53.94 ug/kg
RT: 12.790 min Scan# 1293
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 83 Resp: 29102

Ion	Ratio	Lower	Upper
83	100		
97	114.8	87.0	147.0
85	63.3	32.5	92.5



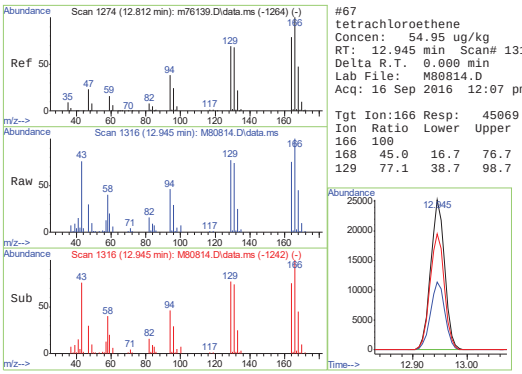
#65
ethyl methacrylate
Concen: 53.66 ug/kg
RT: 12.514 min Scan# 1252
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 69 Resp: 43678

Ion	Ratio	Lower	Upper
69	100		
41	81.4	61.5	121.5
99	21.4	0.0	47.9

7.3.1

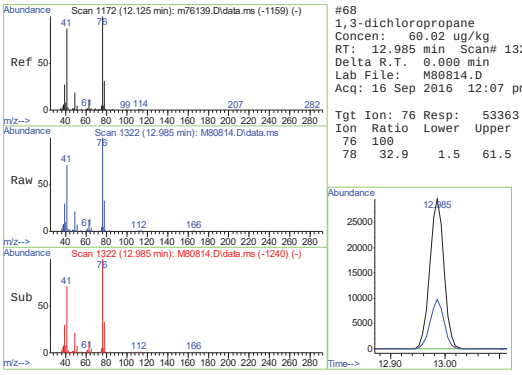
7



#67
tetrachloroethene
Concen: 54.95 ug/kg
RT: 12.945 min Scan# 1316
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:166 Resp: 45069

Ion	Ratio	Lower	Upper
166	100		
168	45.0	16.7	76.7
129	77.1	38.7	98.7



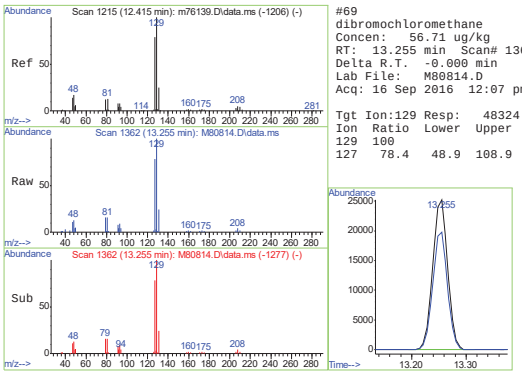
#68
1,3-dichloropropane
Concen: 60.02 ug/kg
RT: 12.985 min Scan# 1322
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 76 Resp: 53363

Ion	Ratio	Lower	Upper
76	100		
78	32.9	1.5	61.5

7.3.1

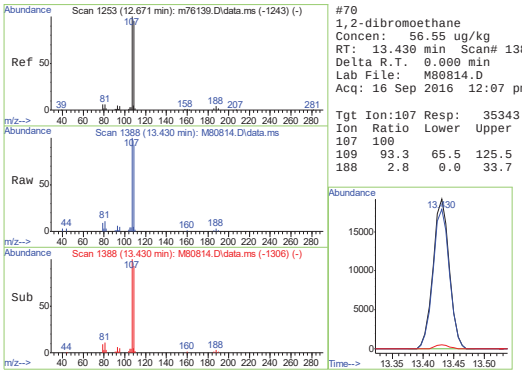
7



#69
dibromochloromethane
Concen: 56.71 ug/kg
RT: 13.255 min Scan# 1362
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:129 Resp: 48324

Ion	Ratio	Lower	Upper
129	100		
127	78.4	48.9	108.9



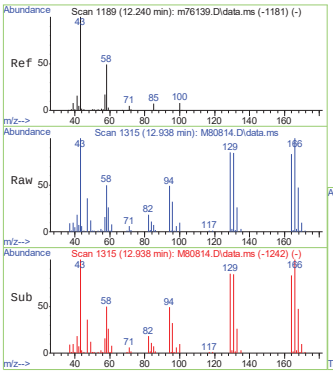
#70
1,2-dibromoethane
Concen: 56.55 ug/kg
RT: 13.430 min Scan# 1388
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:107 Resp: 35343

Ion	Ratio	Lower	Upper
107	100		
109	93.3	65.5	125.5
188	2.8	0.0	33.7

7.3.1

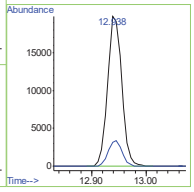
7

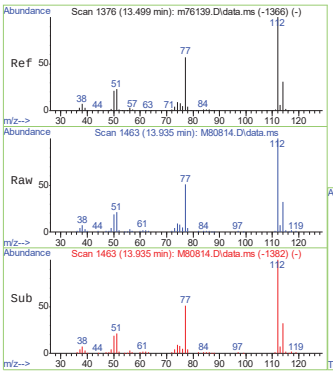


#71
2-hexanone
Concen: 68.08 ug/kg
RT: 12.938 min Scan# 1315
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 43 Resp: 35915

Ion	Ratio	Lower	Upper
43	100		
57	16.6	0.0	47.5

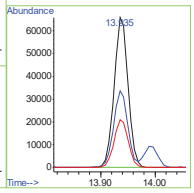




#72
chlorobenzene
Concen: 56.75 ug/kg
RT: 13.935 min Scan# 1463
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

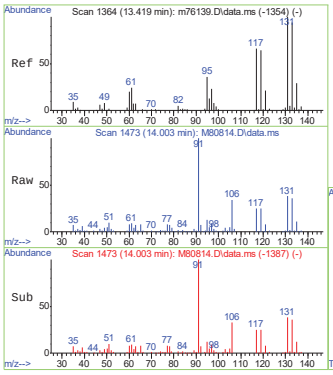
Tgt Ion:112 Resp: 117811

Ion	Ratio	Lower	Upper
112	100		
77	51.0	27.0	87.0
114	31.7	1.1	61.1



7.3.1

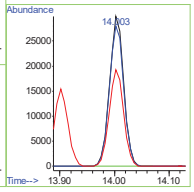
7

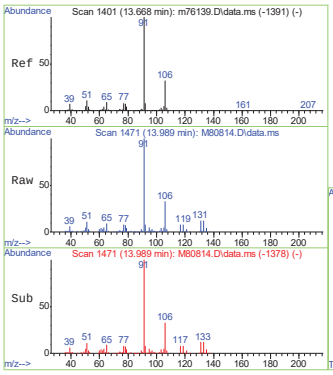


#73
1,1,1,2-tetrachloroethane
Concen: 61.22 ug/kg
RT: 14.003 min Scan# 1473
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:131 Resp: 54119

Ion	Ratio	Lower	Upper
131	100		
133	93.4	64.5	124.5
119	64.4	33.9	93.9

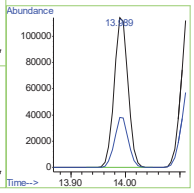




#74
ethylbenzene
Concen: 59.06 ug/kg
RT: 13.989 min Scan# 1471
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

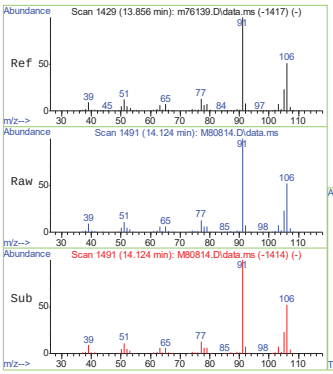
Tgt Ion: 91 Resp: 204354

Ion	Ratio	Lower	Upper
91	100		
106	33.5	1.5	61.5



7.3.1

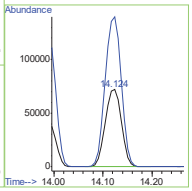
7

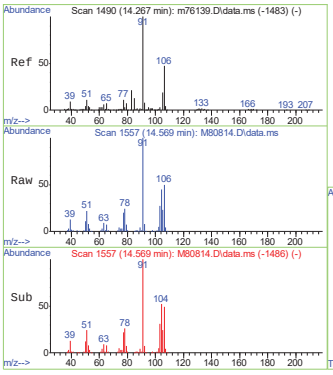


#75
m,p-xylene
Concen: 118.59 ug/kg
RT: 14.124 min Scan# 1491
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:106 Resp: 164925

Ion	Ratio	Lower	Upper
106	100		
91	193.8	167.6	227.6

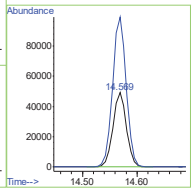




#76
o-xylene
Concen: 59.50 ug/kg
RT: 14.569 min Scan# 1557
Delta R.T. -0.001 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

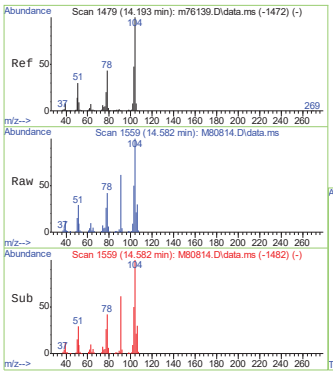
Tgt Ion:106 Resp: 84845

Ion	Ratio	Lower	Upper
106	100		
91	201.9	182.1	242.1



7.3.1

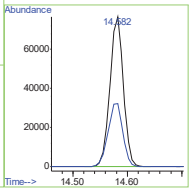
7

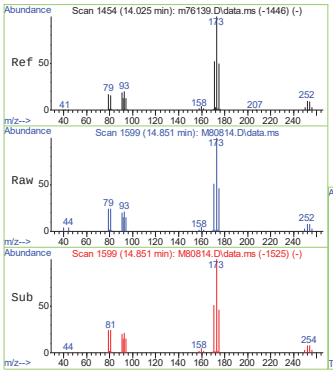


#77
styrene
Concen: 59.14 ug/kg
RT: 14.582 min Scan# 1559
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:104 Resp: 132563

Ion	Ratio	Lower	Upper
104	100		
78	41.9	12.6	72.6

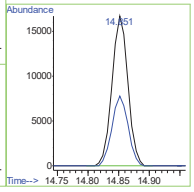




#78
bromoform
Concen: 55.54 ug/kg
RT: 14.851 min Scan# 1599
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

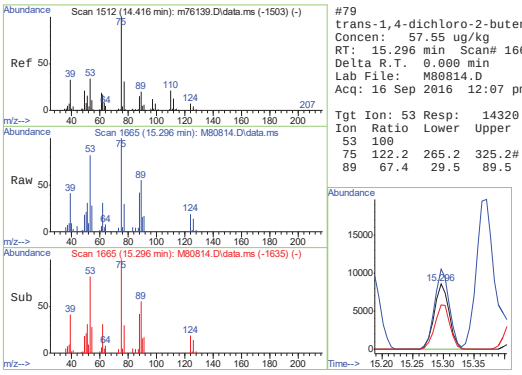
Tgt Ion:173 Resp: 30118

Ion	Ratio	Lower	Upper
173	100		
175	46.5	20.1	80.1



7.3.1

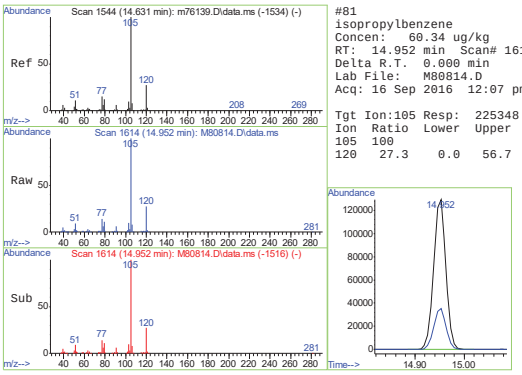
7



#79
trans-1,4-dichloro-2-butene
Concen: 57.55 ug/kg
RT: 15.296 min Scan# 1665
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 53 Resp: 14320

Ion	Ratio	Lower	Upper
53	100		
75	122.2	265.2	325.2#
89	67.4	29.5	89.5



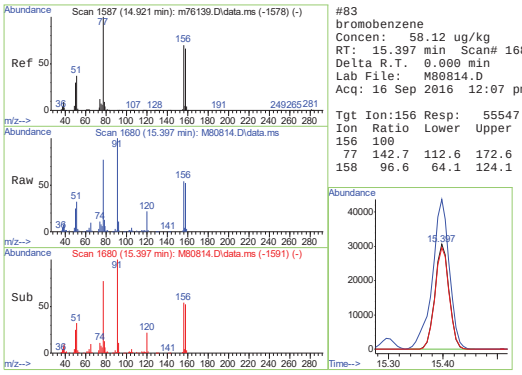
#81
isopropylbenzene
Concen: 60.34 ug/kg
RT: 14.952 min Scan# 1614
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:105 Resp: 225348

Ion	Ratio	Lower	Upper
105	100		
120	27.3	0.0	56.7

7.3.1

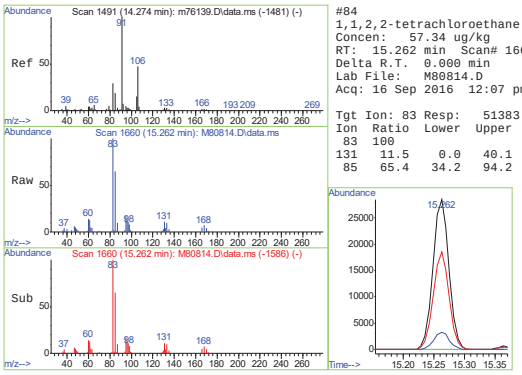
7



#83
bromobenzene
Concen: 58.12 ug/kg
RT: 15.397 min Scan# 1680
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:156 Resp: 55547

Ion	Ratio	Lower	Upper
156	100		
77	142.7	112.6	172.6
158	96.6	64.1	124.1



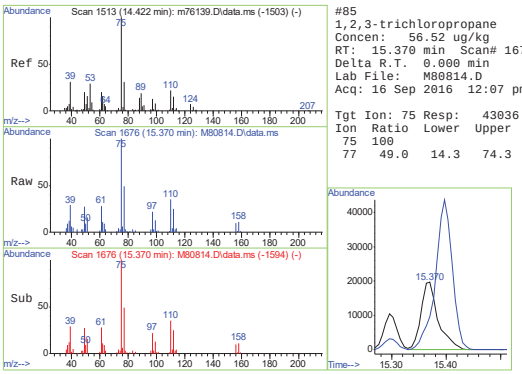
#84
1,1,2,2-tetrachloroethane
Concen: 57.34 ug/kg
RT: 15.262 min Scan# 1660
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 83 Resp: 51383

Ion	Ratio	Lower	Upper
83	100		
131	11.5	0.0	40.1
85	65.4	34.2	94.2

7.3.1

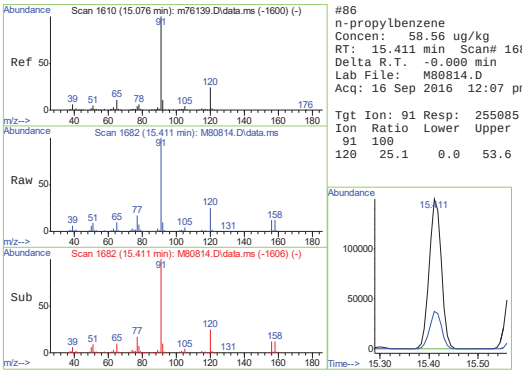
7



#85
1,2,3-trichloropropane
Concen: 56.52 ug/kg
RT: 15.370 min Scan# 1676
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 75 Resp: 43036

Ion	Ratio	Lower	Upper
75	100		
77	49.0	14.3	74.3



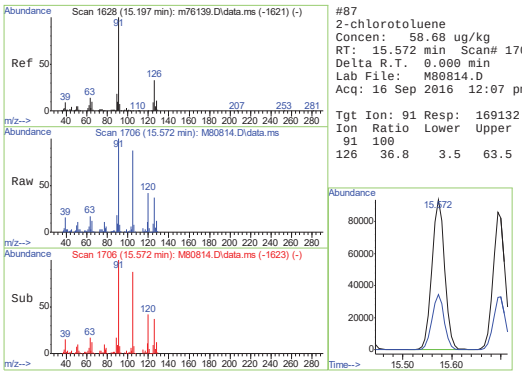
#86
n-propylbenzene
Concen: 58.56 ug/kg
RT: 15.411 min Scan# 1682
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 91 Resp: 255085

Ion	Ratio	Lower	Upper
91	100		
120	25.1	0.0	53.6

7.3.1

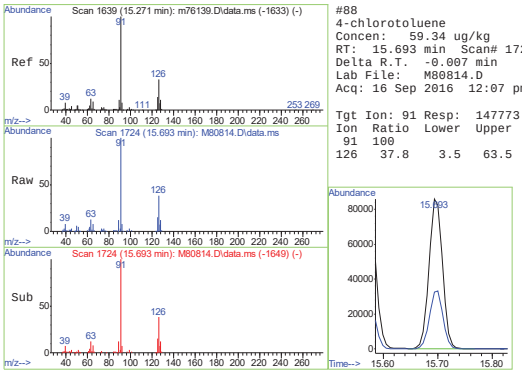
7



#87
2-chlorotoluene
Concen: 58.68 ug/kg
RT: 15.572 min Scan# 1706
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 91 Resp: 169132

Ion	Ratio	Lower	Upper
91	100		
126	36.8	3.5	63.5



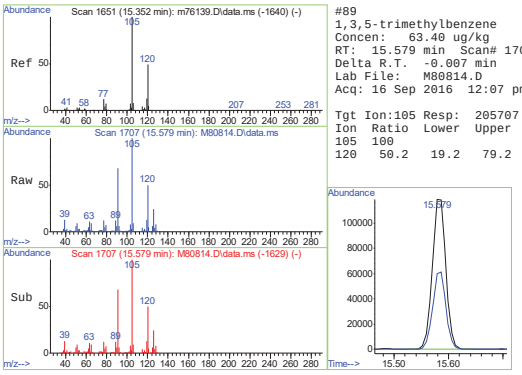
#88
4-chlorotoluene
Concen: 59.34 ug/kg
RT: 15.693 min Scan# 1724
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 91 Resp: 147773

Ion	Ratio	Lower	Upper
91	100		
126	37.8	3.5	63.5

7.3.1

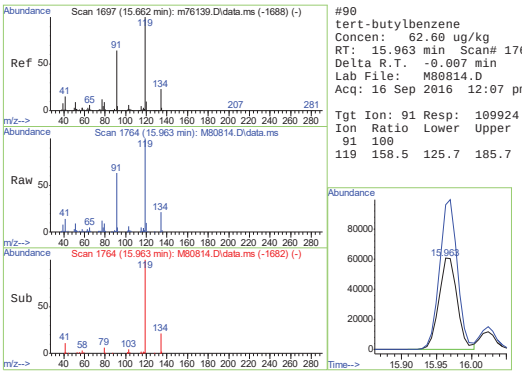
7



#89
1,3,5-trimethylbenzene
Concen: 63.40 ug/kg
RT: 15.579 min Scan# 1707
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:105 Resp: 205707

Ion	Ratio	Lower	Upper
105	100		
120	50.2	19.2	79.2



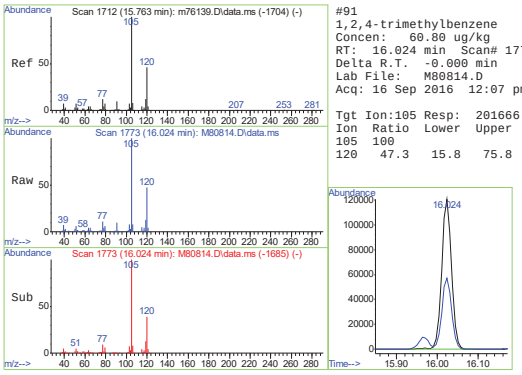
#90
tert-butylbenzene
Concen: 62.60 ug/kg
RT: 15.963 min Scan# 1764
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 91 Resp: 109924

Ion	Ratio	Lower	Upper
91	100		
119	158.5	125.7	185.7

7.3.1

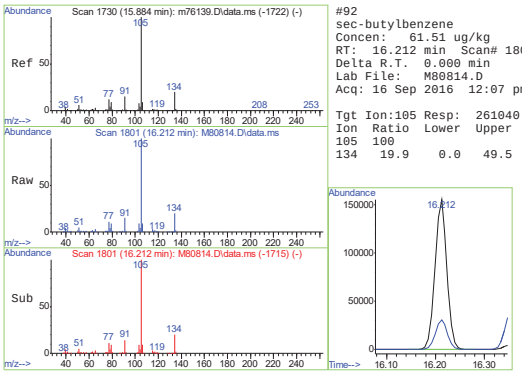
7



#91
1,2,4-trimethylbenzene
Concen: 60.80 ug/kg
RT: 16.024 min Scan# 1773
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:105 Resp: 201666

Ion	Ratio	Lower	Upper
105	100		
120	47.3	15.8	75.8



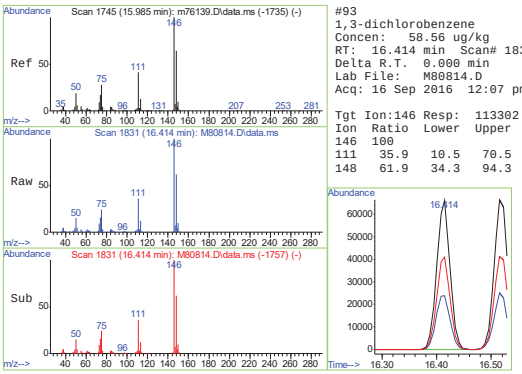
#92
sec-butylbenzene
Concen: 61.51 ug/kg
RT: 16.212 min Scan# 1801
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:105 Resp: 261040

Ion	Ratio	Lower	Upper
105	100		
134	19.9	0.0	49.5

7.3.1

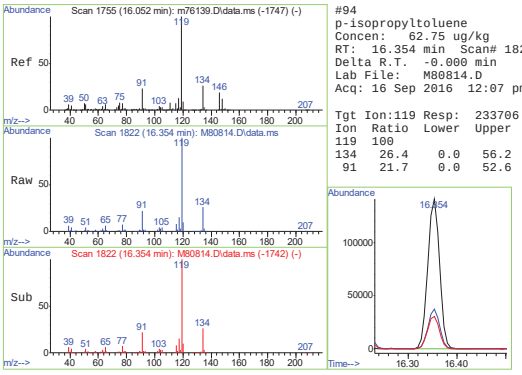
7



#93
1,3-dichlorobenzene
Concen: 58.56 ug/kg
RT: 16.414 min Scan# 1831
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:146 Resp: 113302

Ion	Ratio	Lower	Upper
146	100		
111	35.9	10.5	70.5
148	61.9	34.3	94.3



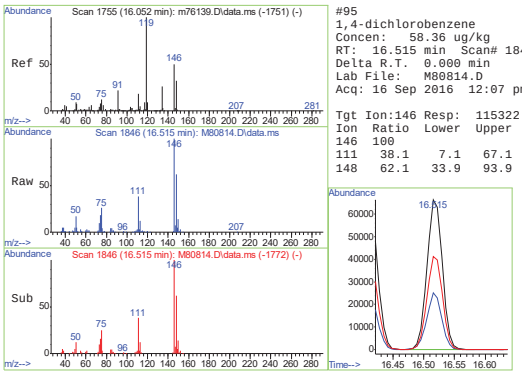
#94
p-isopropyltoluene
Concen: 62.75 ug/kg
RT: 16.354 min Scan# 1822
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:119 Resp: 233706

Ion	Ratio	Lower	Upper
119	100		
134	26.4	0.0	56.2
91	21.7	0.0	52.6

7.3.1

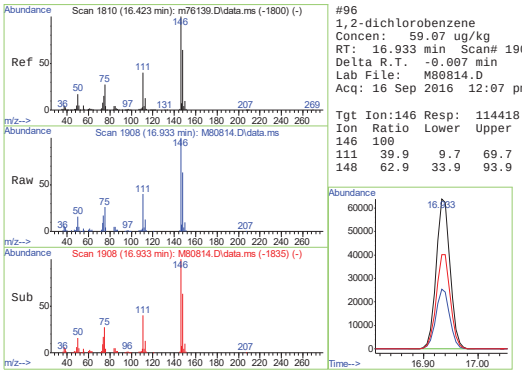
7



#95
1,4-dichlorobenzene
Concen: 58.36 ug/kg
RT: 16.515 min Scan# 1846
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:146 Resp: 115322

Ion	Ratio	Lower	Upper
146	100		
111	38.1	7.1	67.1
148	62.1	33.9	93.9



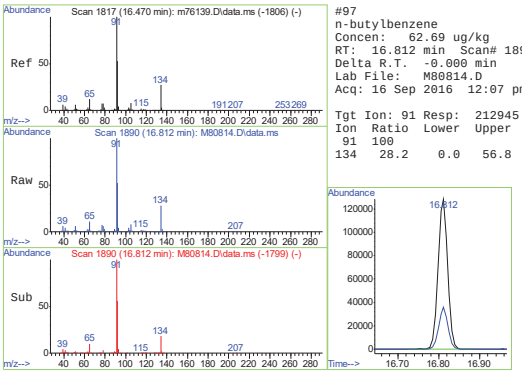
#96
1,2-dichlorobenzene
Concen: 59.07 ug/kg
RT: 16.933 min Scan# 1908
Delta R.T. -0.007 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:146 Resp: 114418

Ion	Ratio	Lower	Upper
146	100		
111	39.9	9.7	69.7
148	62.9	33.9	93.9

7.3.1

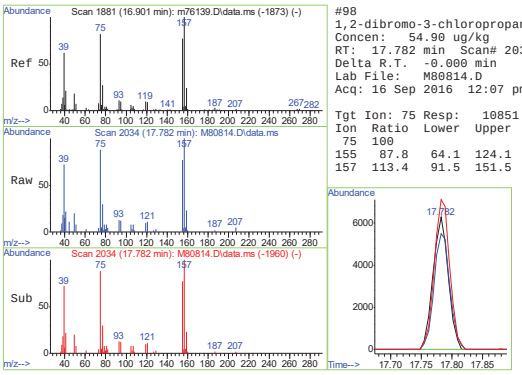
7



#97
n-butylbenzene
Concen: 62.69 ug/kg
RT: 16.812 min Scan# 1890
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 91 Resp: 212945

Ion	Ratio	Lower	Upper
91	100		
134	28.2	0.0	56.8



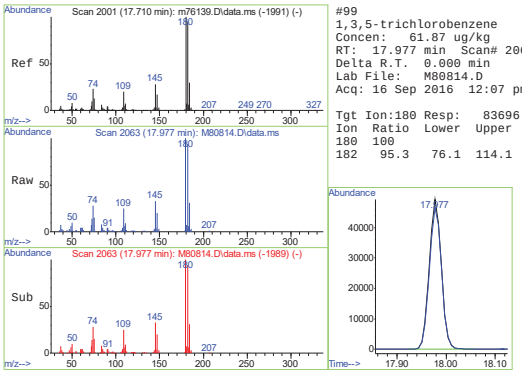
#98
1,2-dibromo-3-chloropropane
Concen: 54.90 ug/kg
RT: 17.782 min Scan# 2034
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion: 75 Resp: 10851

Ion	Ratio	Lower	Upper
75	100		
155	87.8	64.1	124.1
157	113.4	91.5	151.5

7.3.1

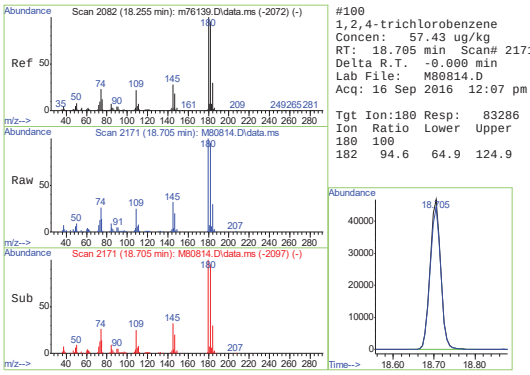
7



#99
1,3,5-trichlorobenzene
Concen: 61.87 ug/kg
RT: 17.977 min Scan# 2063
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:180 Resp: 83696

Ion	Ratio	Lower	Upper
180	100		
182	95.3	76.1	114.1



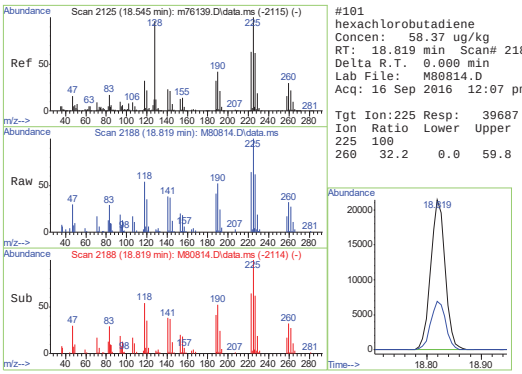
#100
1,2,4-trichlorobenzene
Concen: 57.43 ug/kg
RT: 18.705 min Scan# 2171
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:180 Resp: 83286

Ion	Ratio	Lower	Upper
180	100		
182	94.6	64.9	124.9

7.3.1

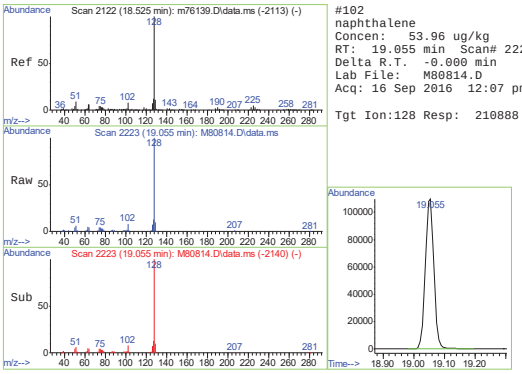
7



#101
hexachlorobutadiene
Concen: 58.37 ug/kg
RT: 18.819 min Scan# 2188
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:225 Resp: 39687

Ion	Ratio	Lower	Upper
225	100		
260	32.2	0.0	59.8

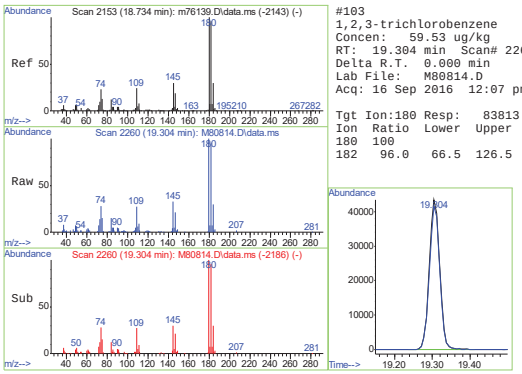


#102
naphthalene
Concen: 53.96 ug/kg
RT: 19.055 min Scan# 2223
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:128 Resp: 210888

7.3.1

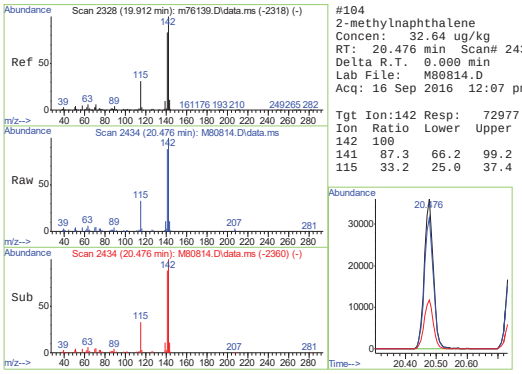
7



#103
1,2,3-trichlorobenzene
Concen: 59.53 ug/kg
RT: 19.304 min Scan# 2260
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:180 Resp: 83813

Ion	Ratio	Lower	Upper
180	100		
182	96.0	66.5	126.5



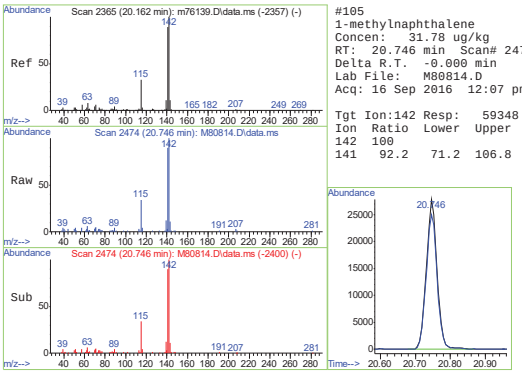
#104
2-methylnaphthalene
Concen: 32.64 ug/kg
RT: 20.476 min Scan# 2434
Delta R.T. 0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:142 Resp: 72977

Ion	Ratio	Lower	Upper
142	100		
141	87.3	66.2	99.2
115	33.2	25.0	37.4

7.3.1

7



#105
1-methylnaphthalene
Concen: 31.78 ug/kg
RT: 20.746 min Scan# 2474
Delta R.T. -0.000 min
Lab File: M80814.D
Acq: 16 Sep 2016 12:07 pm

Tgt Ion:142 Resp: 59348

Ion	Ratio	Lower	Upper
142	100		
141	92.2	71.2	106.8

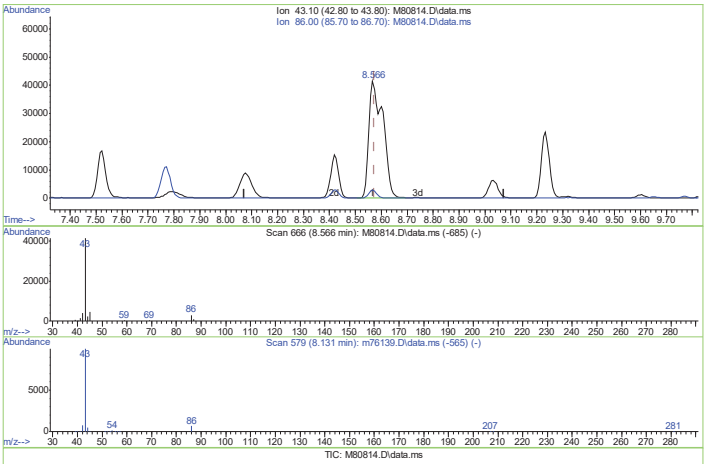
7.3.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80814.D
Acq On : 16 Sep 2016 12:07 pm
Operator : kaylap
Sample : bs
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:32:52 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



(26) vinyl acetate (P)

8.566min (-0.007) 87.55 ug/kg

response 156044

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.00	7.17
0.00	0.00	0.00
0.00	0.00	0.00

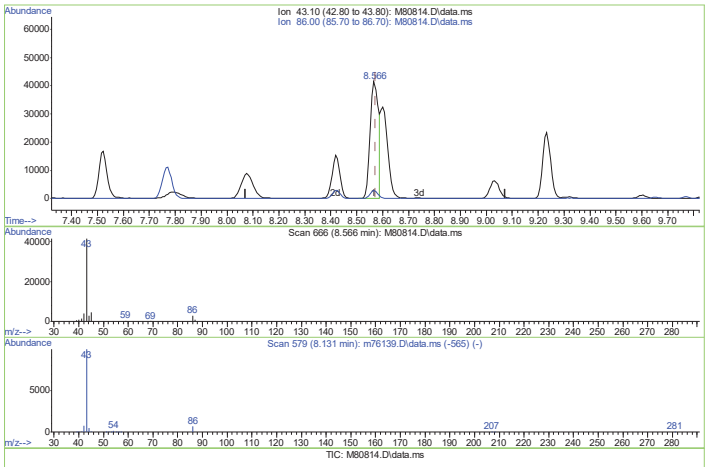
7.3.1.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80814.D
Acq On : 16 Sep 2016 12:07 pm
Operator : kaylap
Sample : bs
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:32:52 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



(26) vinyl acetate (P)

8.566min (-0.007) 51.01 ug/kg m

response 90022

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.00	7.17
0.00	0.00	0.00
0.00	0.00	0.00

7.3.1.2

7

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda
09/21/16 21:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:42:00 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.901	65	115549	500.00 ug/kg	#-0.01
4) pentafluorobenzene	8.930	168	183149	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.826	114	320114	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.069	82	160564	50.00 ug/kg	0.00
82) 1,4-dichlorobenzene-d4	15.679	152	152830	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.985	113	119430	45.38 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.76%	
61) toluene-d8 (s)	11.449	98	355640	48.80 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.60%	
84) bromofluorobenzene (s)	14.364	95	160322	49.46 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.92%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.008	59	191458	587.32 ug/kg#	39
3) Ethanol	5.777	45	82509	5265.58 ug/kg	94
5) dichlorodifluoromethane	3.958	85	146426m	49.75 ug/kg	
6) chloromethane	4.282	50	99452	55.48 ug/kg	99
7) vinyl chloride	4.575	62	115765	45.73 ug/kg	86
8) bromomethane	5.097	96	48128	39.42 ug/kg	94
9) chloroethane	5.386	64	66056m	39.83 ug/kg	
10) dichlorofluoromethane	5.662	67	282702m	52.37 ug/kg	
11) ethyl ether	5.937	59	111735	47.76 ug/kg	90
12) acetonitrile	6.687	41	10697m	45.99 ug/kg	
13) trichlorofluoromethane	5.793	101	223311m	46.86 ug/kg	
14) freon-113	6.489	101	70395m	40.70 ug/kg	
15) acrolein	6.184	56	70044	256.34 ug/kg	100
16) 1,1-dichloroethene	6.496	96	110183m	48.32 ug/kg	
17) acetone	6.329	58	33271	47.93 ug/kg#	76
18) Methyl Acetate	6.715	43	122660	55.28 ug/kg#	83
19) methylene chloride	7.038	84	143463	50.26 ug/kg	94
20) methyl tert butyl ether	7.258	73	385462	50.35 ug/kg	98
21) acrylonitrile	7.205	53	64716	43.59 ug/kg	61
22) allyl chloride	6.779	41	165651	52.05 ug/kg	48
23) trans-1,2-dichloroethene	7.295	96	112026	45.21 ug/kg	83
24) iodomethane	6.656	142	207512	57.81 ug/kg	99
25) carbon disulfide	6.710	76	130980	51.84 ug/kg	96
26) propionitrile	8.467	54	25792	43.98 ug/kg	100
27) vinyl acetate	7.733	86	21125	60.00 ug/kg#	1
28) chloroprene	7.898	53	226954	44.78 ug/kg	89
29) di-isopropyl ether	7.776	45	427187	47.30 ug/kg	94
30) methacrylonitrile	8.637	41	79268	43.04 ug/kg	84
31) 2-butanone	8.382	72	24920	56.20 ug/kg#	8
32) Hexane	7.595	41	131550	52.44 ug/kg#	76
33) 1,1-dichloroethane	7.810	63	244967	46.16 ug/kg	100
34) tert-butyl ethyl ether	8.199	59	452229	48.19 ug/kg	89
36) 2,2-dichloropropane	8.498	77	139751	45.56 ug/kg	99
37) cis-1,2-dichloroethene	8.456	96	158761	54.21 ug/kg	86

7.3.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:42:00 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2 7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.736	128	75055	51.54 ug/kg	89
40) chloroform	8.805	83	259963	49.15 ug/kg	98
42) Tetrahydrofuran	8.756	42	42195	40.33 ug/kg	99
43) 1,1,1-trichloroethane	9.062	97	207025	48.39 ug/kg	96
45) Cyclohexane	9.171	56	210511	46.30 ug/kg	87
46) carbon tetrachloride	9.247	117	192814	51.16 ug/kg	89
47) 1,1-dichloropropene	9.212	75	183903	53.92 ug/kg	86
48) benzene	9.449	78	480239	54.85 ug/kg	99
49) 1,2-dichloroethane	9.472	62	243378	50.59 ug/kg	100
50) tert-amyl methyl ether	9.507	73	363352	52.14 ug/kg	98
51) heptane	9.665	43	191938	56.72 ug/kg	80
52) trichloroethene	10.133	95	150175	54.28 ug/kg	84
53) 1,2-dichloropropane	10.420	63	144343	51.61 ug/kg	96
54) dibromomethane	10.530	93	100709	50.45 ug/kg	89
55) bromodichloromethane	10.673	83	183024	52.33 ug/kg	97
56) Methylcyclohexane	10.433	83	221932	61.08 ug/kg	88
57) 2-chloroethyl vinyl ether	10.895	63	73568	50.45 ug/kg#	100
58) methyl methacrylate	10.353	69	82465	48.51 ug/kg	87
59) 1,4-dioxane	10.491	88	8222m	289.48 ug/kg	
60) cis-1,3-dichloropropene	11.129	75	198873	50.20 ug/kg	86
62) 4-methyl-2-pentanone	11.219	43	147859	47.67 ug/kg	82
63) toluene	11.527	92	323278	53.95 ug/kg	99
64) trans-1,3-dichloropropene	11.714	75	170813	47.53 ug/kg	97
65) 1,1,2-trichloroethane	11.953	83	99973	52.33 ug/kg	92
66) ethyl methacrylate	11.688	69	161167	55.31 ug/kg	88
68) tetrachloroethene	12.112	166	125001	58.04 ug/kg	97
69) 1,3-dichloropropane	12.146	76	196719	56.03 ug/kg	99
70) dibromochloromethane	12.417	129	135747	48.88 ug/kg	95
71) 1,2-dibromoethane	12.590	107	128447	56.17 ug/kg	90
72) 2-hexanone	12.110	43	146432	60.58 ug/kg	88
73) chlorobenzene	13.105	112	374637	55.40 ug/kg	93
74) 1,1,1,2-tetrachloroethane	13.176	131	146519	55.71 ug/kg	96
75) ethylbenzene	13.167	91	650712	58.12 ug/kg	90
76) m,p-xylene	13.299	106	457932	118.72 ug/kg#	73
77) o-xylene	13.745	106	233664	58.22 ug/kg#	68
78) styrene	13.758	104	384484	58.89 ug/kg	88
79) bromoform	14.025	173	79076	52.72 ug/kg	96
81) trans-1,4-dichloro-2-b...	14.478	53	62080	50.01 ug/kg#	40
83) isopropylbenzene	14.133	105	628174	53.60 ug/kg	99
85) bromobenzene	14.571	156	158585	55.39 ug/kg	90
86) 1,1,2,2-tetrachloroethane	14.442	83	181180	51.01 ug/kg	97
87) 1,2,3-trichloropropane	14.548	75	159737	48.92 ug/kg#	1
88) n-propylbenzene	14.598	91	797289	53.60 ug/kg	91
89) 2-chlorotoluene	14.753	91	550183	53.80 ug/kg	89
90) 4-chlorotoluene	14.877	91	503003	53.99 ug/kg	91
91) 1,3,5-trimethylbenzene	14.773	105	570720	57.52 ug/kg	99
92) tert-butylbenzene	15.156	91	359253	55.94 ug/kg	79
93) 1,2,4-trimethylbenzene	15.213	105	570175	54.73 ug/kg	97
94) sec-butylbenzene	15.404	105	708663	54.83 ug/kg	99
95) 1,3-dichlorobenzene	15.600	146	313151	53.46 ug/kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:42:00 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2 7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.551	119	621340	56.50 ug/kg	94
97) 1,4-dichlorobenzene	15.708	146	318067	52.70 ug/kg	95
98) 1,2-dichlorobenzene	16.124	146	317806	53.15 ug/kg	98
99) n-butylbenzene	16.012	91	647600	55.61 ug/kg	93
100) 1,2-dibromo-3-chloropr...	16.978	75	40195	49.25 ug/kg#	76
101) 1,3,5-trichlorobenzene	17.183	180	216662	58.88 ug/kg	99
102) 1,2,4-trichlorobenzene	17.916	180	211277	56.15 ug/kg	92
103) hexachlorobutadiene	18.042	225	103340	57.75 ug/kg	99
104) naphthalene	18.265	128	606879	50.25 ug/kg	100
105) 1,2,3-trichlorobenzene	18.527	180	208388	56.85 ug/kg	98
106) 2-methylnaphthalene	19.746	142	216389	32.51 ug/kg	96
107) 1-methylnaphthalene	20.028	142	179753	32.60 ug/kg	97

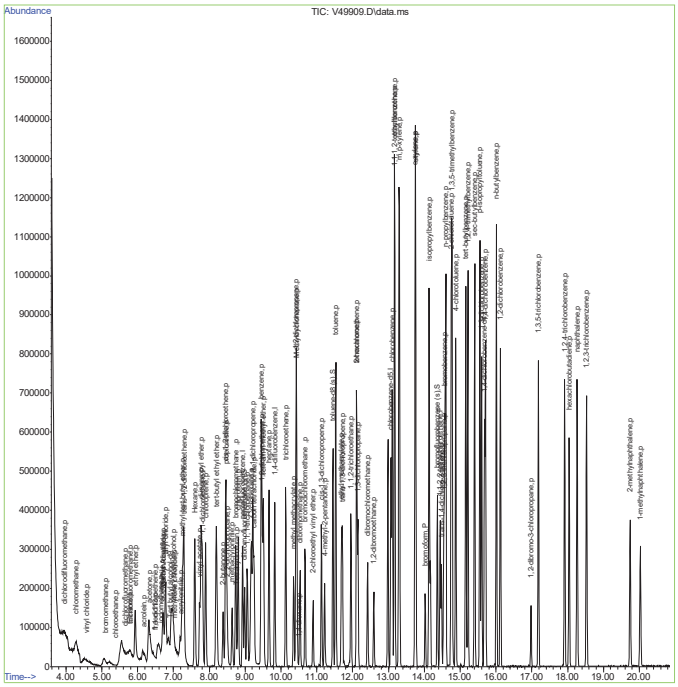
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:42:00 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2 7

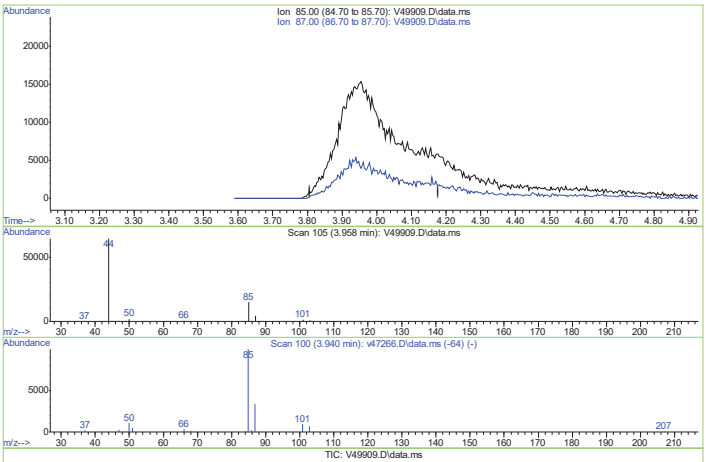


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.1 7



(5) dichlorodifluoromethane (p)

3.958min (-3.958) 0.00 ug/kg

response 0

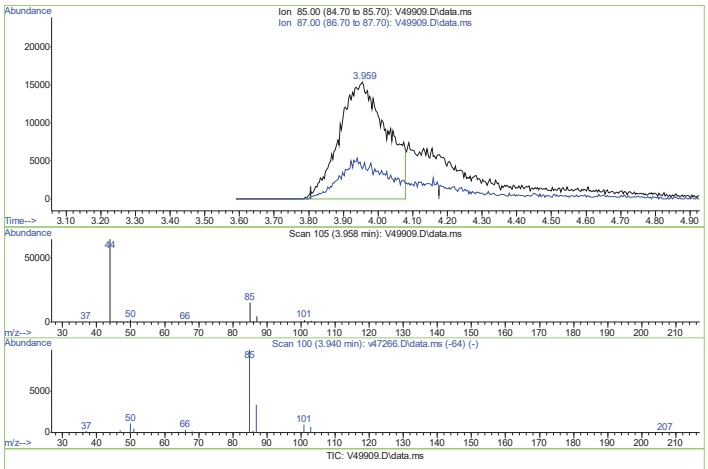
Ion	Exp%	Act%
85.00	100.00	0.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.2



(5) dichlorodifluoromethane (p)
3.958min (-0.000) 49.75 ug/kg m
response 146426

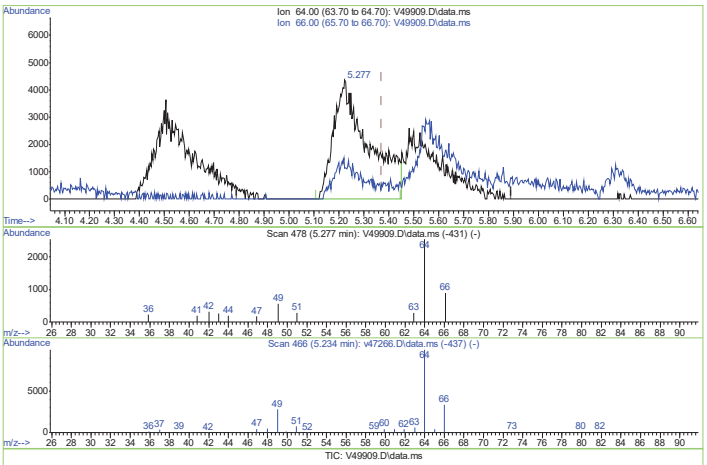
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	28.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.3



(9) chloroethane (p)
5.277min (-0.095) 25.24 ug/kg
response 41854

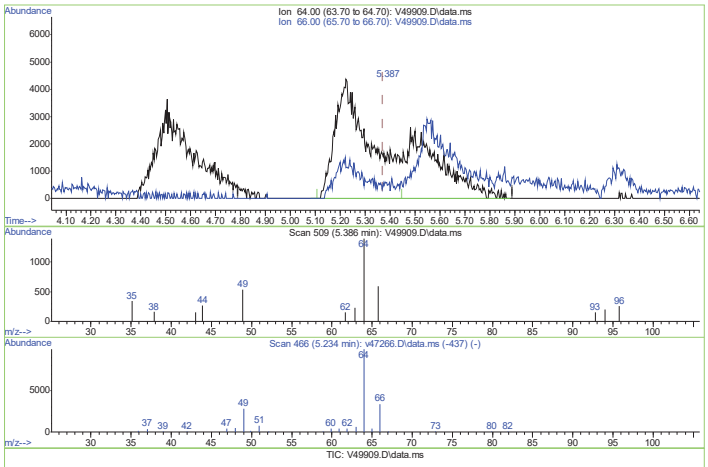
Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	35.26
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.4



(9) chloroethane (p)
5.386min (+ 0.014) 39.83 ug/kg m
response 66856

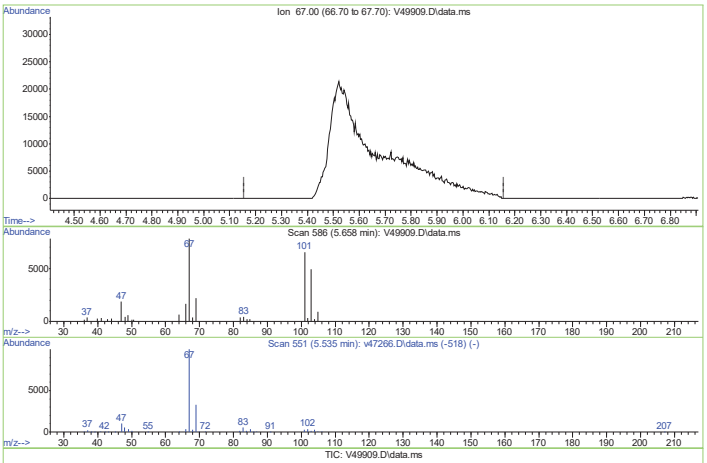
Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	42.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.5



(10) dichlorofluoromethane (p)
5.658min (-5.658) 0.00 ug/kg
response 0

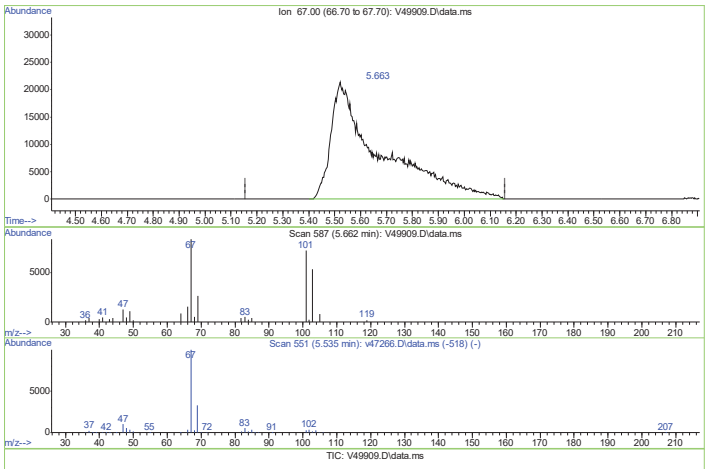
Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.6



(10) dichlorofluoromethane (p)
5.662min (+ 0.004) 52.37 ug/kg m
response 282702

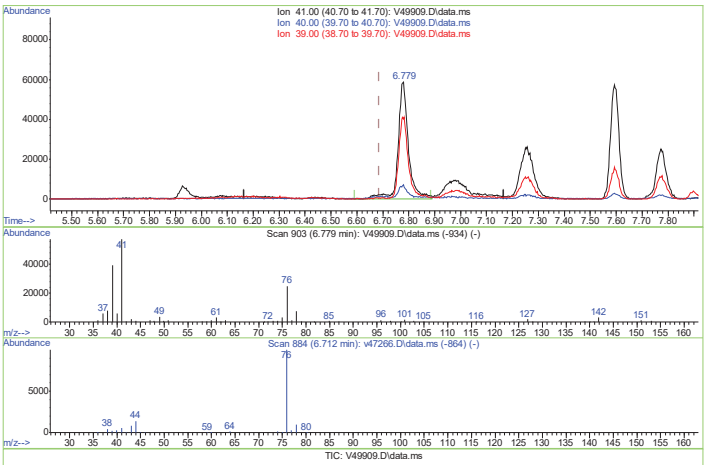
Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.7



(12) acetonitrile (p)
6.779min (+ 0.002) 842.58 ug/kg
response 165651

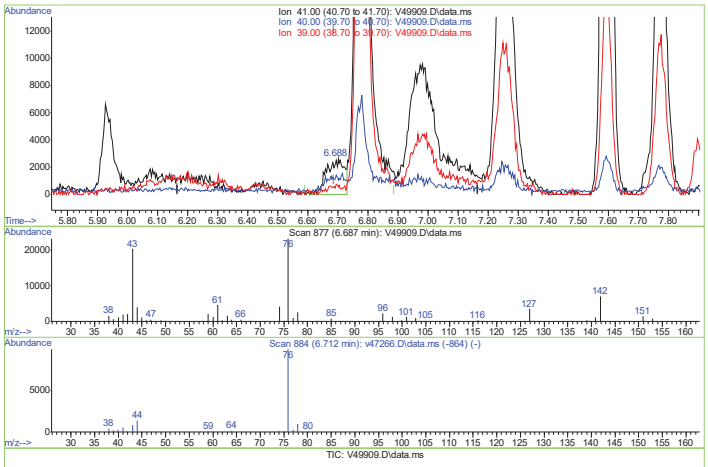
Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.90	12.03#
39.00	51.50	67.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.8



(12) acetonitrile (p)
6.687min (+ 0.000) 45.99 ug/kg m
response 10697

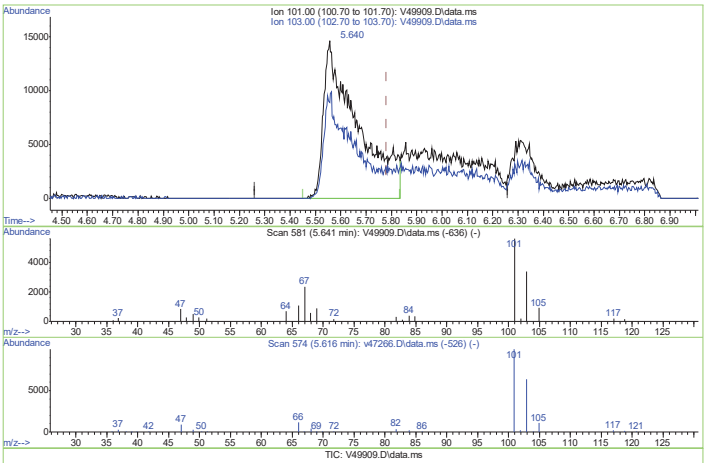
Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.90	56.00
39.00	51.50	29.65
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.9



(13) trichlorofluoromethane (p)
5.640min (-0.142) 28.83 ug/kg
response 134984

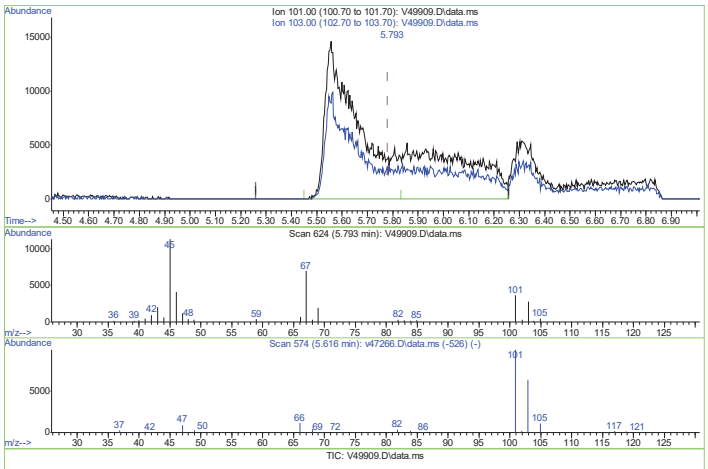
Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	68.56
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.10



(13) trichlorofluoromethane (p)
5.793min (+ 0.011) 46.86 ug/kg m
response 223311

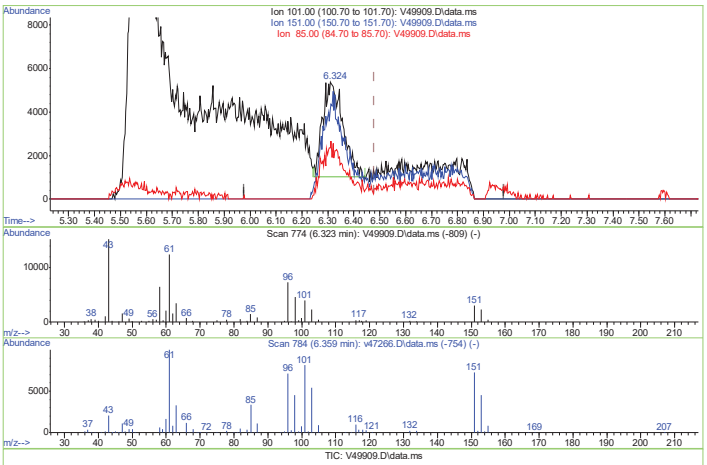
Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	77.10
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.11



(14) freon-113 (p)
6.324min (-0.155) 13.72 ug/kg
response 23721

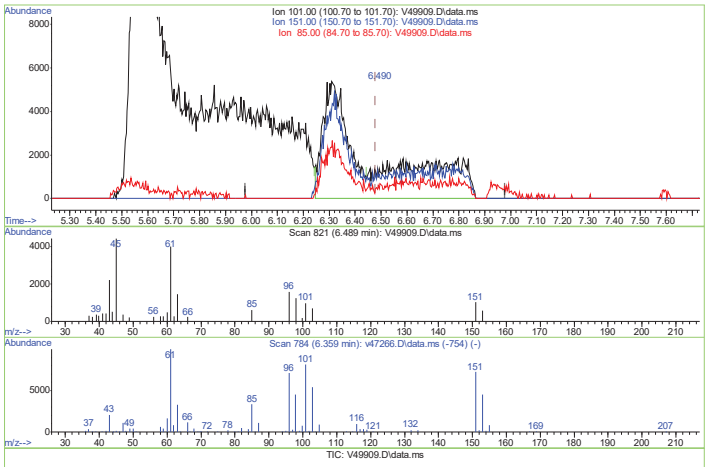
Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	86.22
85.00	41.30	42.63
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.12



(14) freon-113 (p)
6.489min (+ 0.018) 40.70 ug/kg m
response 78395

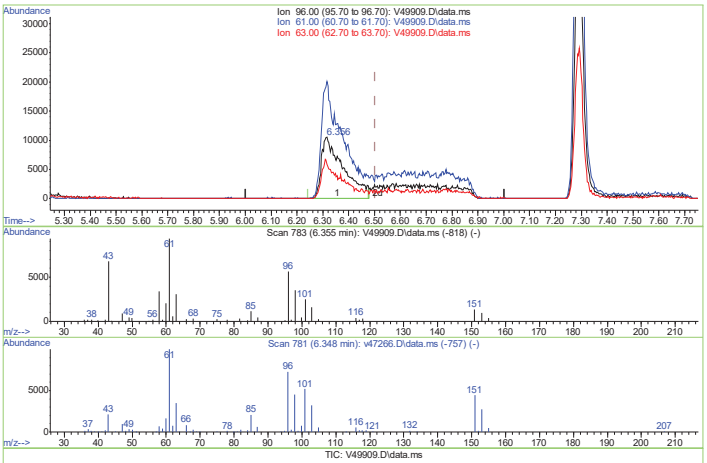
Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	105.43
85.00	41.30	63.63
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.13



(16) 1,1-dichloroethene (p)
6.356min (-0.147) 27.97 ug/kg
response 62461

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	179.35
63.00	57.50	54.46
0.00	0.00	0.00

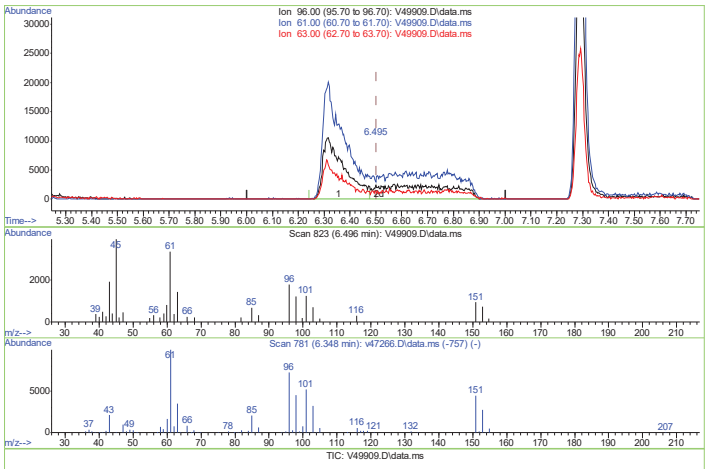
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.14

7



(16) 1,1-dichloroethene (p)

6.496min (-0.007) 48.32 ug/kg m

response 110183

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	188.05
63.00	57.50	79.00
0.00	0.00	0.00

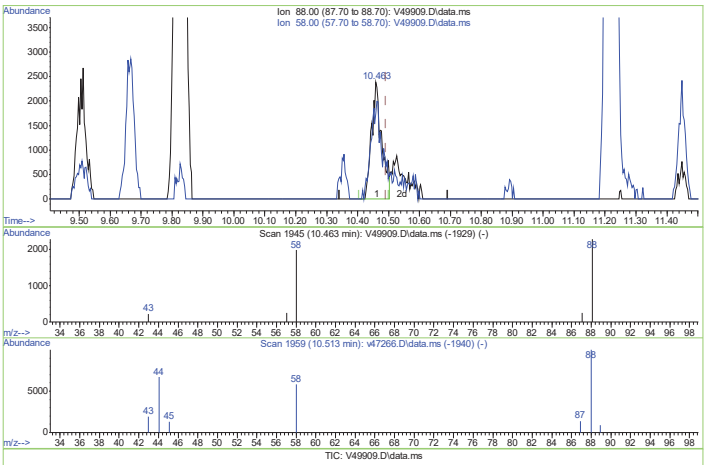
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.15

7



(59) 1,4-dioxane (p)

10.463min (-0.029) 192.27 ug/kg

response 5461

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.80	87.10#
0.00	0.00	0.00
0.00	0.00	0.00

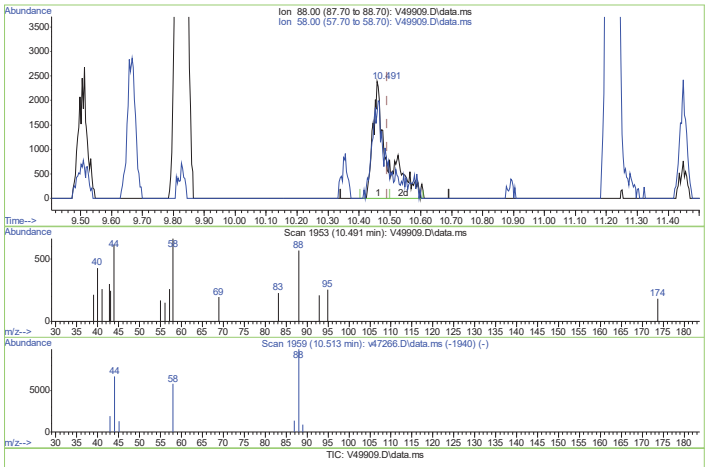
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49909.D
Acq On : 20 Sep 2016 1:02 pm
Operator : kaylap
Sample : bs
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 21 19:36:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.3.2.16

7



(59) 1,4-dioxane (p)

10.491min (-0.001) 289.48 ug/kg m

response 8222

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.00	116.67#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda
09/21/16 15:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80834.D
Acq On : 16 Sep 2016 9:26 pm
Operator : kaylap
Sample : mc47774-2ms
Misc : MS37330,MSM2895,4.72,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:47:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.4.1

7

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.671	65	5566	500.00	ug/kg	-0.02
4) pentafluorobenzene	9.772	168	8129	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.668	114	12716	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.902	82	6566	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	7306	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.833	113	4678	49.47	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.94%			
60) toluene-d8 (s)	12.292	98	15316	53.03	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 106.06%			
82) bromofluorobenzene (s)	15.182	95	6002	51.02	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.04%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.772	59	8117	529.60	ug/kg	85
3) Ethanol	6.478	45	9710	7597.83	ug/kg	96
5) dichlorodifluoromethane	4.417	85	4740	41.28	ug/kg	99
6) chloromethane	4.814	50	7983	48.02	ug/kg	97
7) vinyl chloride	5.064	62	7044	41.62	ug/kg	98
8) bromomethane ...	5.710	96	4643	35.11	ug/kg	100
9) chloroethane	5.886	64	2991	34.67	ug/kg	94
10) ethyl ether	6.694	59	3085	40.09	ug/kg	85
12) trichlorofluoromethane	6.303	101	7787	39.32	ug/kg	99
13) freon-113	7.085	101	4573	38.51	ug/kg	96
14) acrolein	6.923	56	357	25.46	ug/kg	93
15) 1,1-dichloroethene	7.098	96	3509	33.17	ug/kg#	78
16) acetone	7.112	58	1284	76.20	ug/kg#	70
17) Methyl Acetate	7.516	43	5410	78.59	ug/kg	98
18) methylene chloride	7.752	84	5376	43.00	ug/kg	86
19) methyl tert butyl ether	8.068	73	13774	47.96	ug/kg	100
20) acrylonitrile	8.021	53	1879	48.87	ug/kg	86
21) allyl chloride	7.590	41	6143	38.62	ug/kg	85
22) trans-1,2-dichloroethene	8.115	96	3967	34.54	ug/kg#	83
23) iodomethane	7.354	142	7785	34.92	ug/kg	88
24) carbon disulfide	7.489	76	11078	31.98	ug/kg	99
25) propionitrile	9.321	54	825	55.20	ug/kg	100
26) vinyl acetate	8.567	43	6822m	28.38	ug/kg	
27) chloroprene	8.735	53	5479	31.60	ug/kg	83
28) di-isopropyl ether	8.600	45	17141	49.21	ug/kg	91
29) methacrylonitrile	9.489	41	2874	49.73	ug/kg	95
30) 2-butanone	9.220	72	643	29.61	ug/kg#	1
31) Hexane	8.418	41	4002	40.45	ug/kg	84
32) 1,1-dichloroethane	8.647	63	7707	39.13	ug/kg	99
33) tert-butyl ethyl ether	9.025	59	14670	44.24	ug/kg	98
35) 2,2-dichloropropane	9.335	77	6716	39.63	ug/kg	97
36) cis-1,2-dichloroethene	9.308	96	5201	41.15	ug/kg	87
38) bromochloromethane	9.584	128	2812	42.19	ug/kg#	78
39) chloroform	9.651	83	8352	40.20	ug/kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80834.D
Acq On : 16 Sep 2016 9:26 pm
Operator : kaylap
Sample : mc47774-2ms
Misc : MS37330,MSM2895,4.72,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:47:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Tetrahydrofuran	9.597	42	1550	45.00	ug/kg	98
42) 1,1,1-trichloroethane	9.907	97	8144	42.96	ug/kg	96
44) Cyclohexane	10.008	56	6893	40.52	ug/kg	83
45) carbon tetrachloride	10.089	117	7625	42.72	ug/kg	98
46) 1,1-dichloropropene	10.062	75	5235	38.69	ug/kg	92
47) benzene	10.298	78	15678	39.19	ug/kg	98
48) 1,2-dichloroethane	10.325	62	6471	46.34	ug/kg	97
49) tert-amyl methyl ether	10.345	73	13388	48.41	ug/kg	95
50) heptane	10.500	43	6466	50.80	ug/kg	90
51) trichloroethene	10.978	95	4484	40.44	ug/kg	91
52) 1,2-dichloropropane	11.268	63	4659	44.59	ug/kg	89
53) dibromomethane	11.382	93	3180	47.04	ug/kg	94
54) bromodichloromethane	11.517	83	6081	43.18	ug/kg	96
55) Methylcyclohexane	11.268	83	7143	44.96	ug/kg	98
56) 2-chloroethyl vinyl ether	11.733	63	1140	35.13	ug/kg#	77
57) methyl methacrylate	11.187	69	2980	50.73	ug/kg#	77
59) cis-1,3-dichloropropene	11.968	75	6225	43.16	ug/kg	100
61) 4-methyl-2-pentanone	12.063	43	6117	63.55	ug/kg	95
62) toluene	12.366	92	10690	43.10	ug/kg	91
63) trans-1,3-dichloropropene	12.548	75	5630	44.69	ug/kg	92
64) 1,1,2-trichloroethane	12.790	83	3769	54.20	ug/kg	92
65) ethyl methacrylate	12.514	69	5737	54.69	ug/kg	91
67) tetrachloroethene	12.945	166	4718	36.80	ug/kg	93
68) 1,3-dichloropropane	12.986	76	6861	49.37	ug/kg	98
69) dibromochloromethane	13.255	129	5731	43.03	ug/kg	93
70) 1,2-dibromoethane	13.424	107	4642	47.52	ug/kg	94
71) 2-hexanone	12.945	43	5659	68.63	ug/kg	96
72) chlorobenzene	13.935	112	13148	40.52	ug/kg	95
73) 1,1,1,2-tetrachloroethane	14.003	131	5842	42.28	ug/kg	94
74) ethylbenzene	13.989	91	22343	41.31	ug/kg	100
75) m,p-xylene	14.117	106	17425	80.16	ug/kg	95
76) o-xylene	14.569	106	9058	40.64	ug/kg	92
77) styrene	14.582	104	14143	40.37	ug/kg	95
78) bromoform	14.852	173	3810	44.95	ug/kg	97
79) trans-1,4-dichloro-2-b...	15.296	53	1995	51.29	ug/kg#	19
81) isopropylbenzene	14.946	105	23219	42.28	ug/kg	99
83) bromobenzene	15.397	156	6250	44.46	ug/kg	96
84) 1,1,2,2-tetrachloroethane	15.263	83	7236	54.91	ug/kg	98
85) 1,2,3-trichloropropane	15.364	75	6005	53.63	ug/kg	90
86) n-propylbenzene	15.411	91	27420	42.80	ug/kg	97
87) 2-chlorotoluene	15.572	91	18560	43.79	ug/kg	98
88) 4-chlorotoluene	15.694	91	16648	45.45	ug/kg	91
89) 1,3,5-trimethylbenzene	15.579	105	20842	43.68	ug/kg	98
90) tert-butylbenzene	15.963	91	10911	42.25	ug/kg	100
91) 1,2,4-trimethylbenzene	16.024	105	20727	42.49	ug/kg	99
92) sec-butylbenzene	16.212	105	26635	42.68	ug/kg	94
93) 1,3-dichlorobenzene	16.414	146	11892	41.80	ug/kg	96
94) p-isopropyltoluene	16.354	119	23563	43.02	ug/kg	98
95) 1,4-dichlorobenzene	16.516	146	11970	41.19	ug/kg	99
96) 1,2-dichlorobenzene	16.933	146	12485	43.83	ug/kg	97

7.4.1 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80834.D
Acq On : 16 Sep 2016 9:26 pm
Operator : kaylap
Sample : mc47774-2ms
Misc : MS37330,MSM2895,4.72,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:47:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) n-butylbenzene	16.805	91	22429	44.90	ug/kg	94
98) 1,2-dibromo-3-chloropr...	17.782	75	1556	53.53	ug/kg	94
99) 1,3,5-trichlorobenzene	17.977	180	9187	46.18	ug/kg	97
100) 1,2,4-trichlorobenzene	18.705	180	8810	41.31	ug/kg	93
101) hexachlorobutadiene	18.819	225	4580	45.80	ug/kg	92
102) naphthalene	19.048	128	25144	43.74	ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	8939	43.17	ug/kg	92
104) 2-methylnaphthalene	20.477	142	7116	21.64	ug/kg	92
105) 1-methylnaphthalene	20.746	142	6205	22.59	ug/kg	94

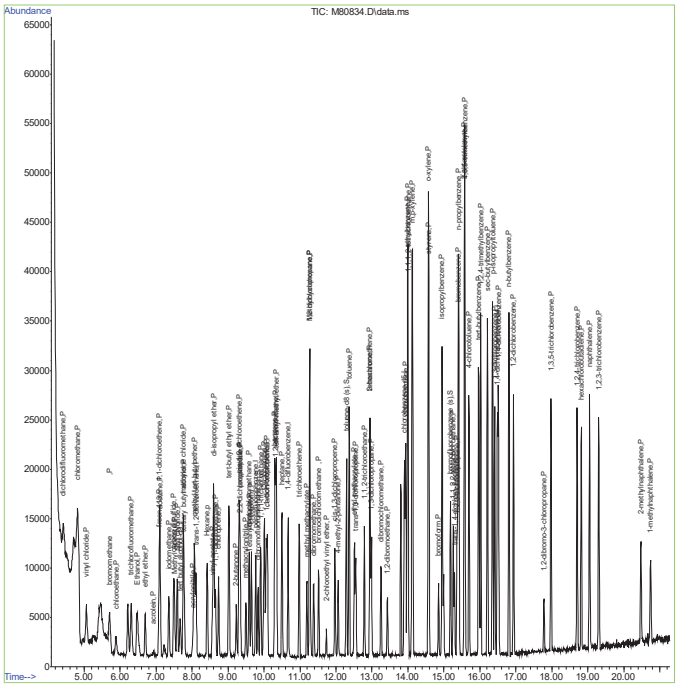
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.1 7

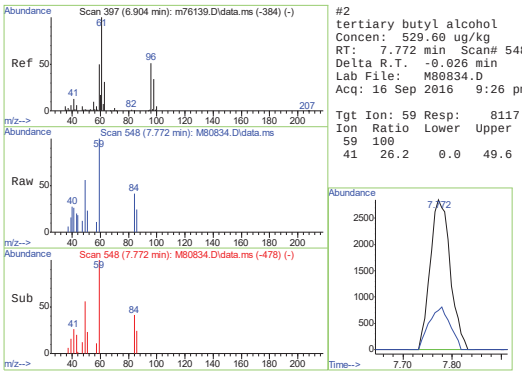
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80834.D
Acq On : 16 Sep 2016 9:26 pm
Operator : kaylap
Sample : mc47774-2ms
Misc : MS37330,MSM2895,4.72,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:47:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



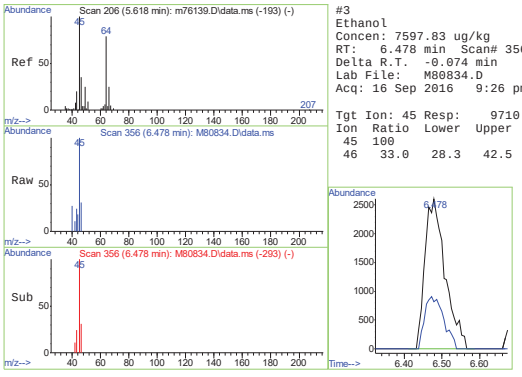
7.4.1 7



#2
tertiary butyl alcohol
Concen: 529.60 ug/kg
RT: 7.772 min Scan# 548
Delta R.T. -0.026 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 59 Resp: 8117

Ion	Ratio	Lower	Upper
59	100		
41	26.2	0.0	49.6

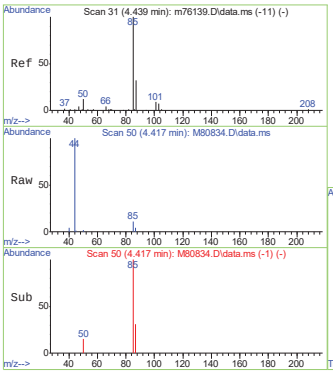


#3
Ethanol
Concen: 7597.83 ug/kg
RT: 6.478 min Scan# 356
Delta R.T. -0.074 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 45 Resp: 9710

Ion	Ratio	Lower	Upper
45	100		
46	33.0	28.3	42.5

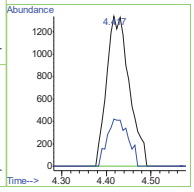
7.4.1 7

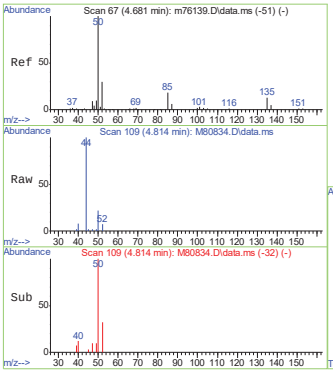


#5
dichlorodifluoromethane
Concen: 41.28 ug/kg
RT: 4.417 min Scan# 50
Delta R.T. -0.020 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 85 Resp: 4740

Ion	Ratio	Lower	Upper
85	100		
87	31.3	1.8	61.8

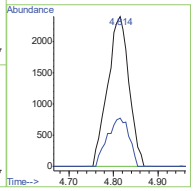




#6
chloromethane
Concen: 48.02 ug/kg
RT: 4.814 min Scan# 109
Delta R.T. -0.014 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 50 Resp: 7983

Ion	Ratio	Lower	Upper
50	100		
52	32.1	0.5	60.5



7.4.1

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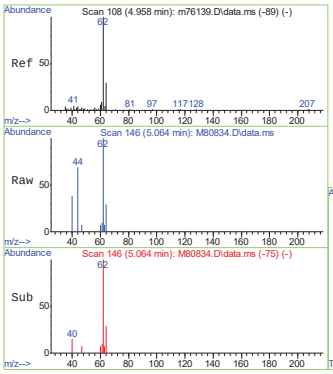
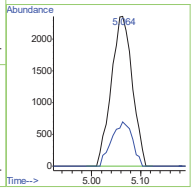
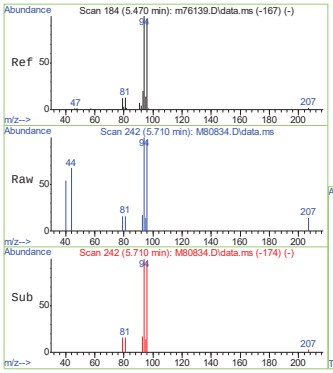


#7
vinyl chloride
Concen: 41.62 ug/kg
RT: 5.064 min Scan# 146
Delta R.T. -0.020 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 62 Resp: 7044

Ion	Ratio	Lower	Upper
62	100		
64	29.4	0.4	60.4

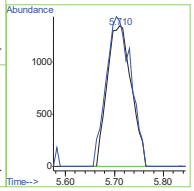




#8
bromomethane
Concen: 35.11 ug/kg
RT: 5.710 min Scan# 242
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 96 Resp: 4643

Ion	Ratio	Lower	Upper
96	100		
94	102.8	73.2	133.2



7.4.1

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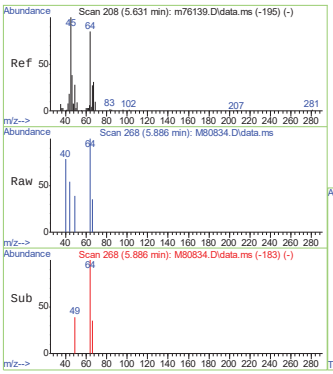
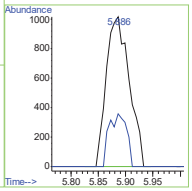
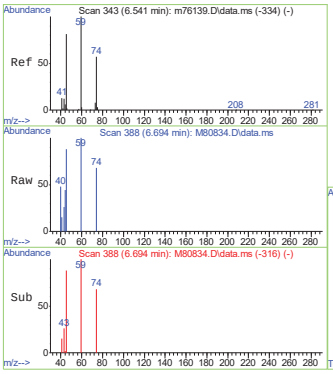


#9
chloroethane
Concen: 34.67 ug/kg
RT: 5.886 min Scan# 268
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 64 Resp: 2991

Ion	Ratio	Lower	Upper
64	100		
66	35.4	1.9	61.9

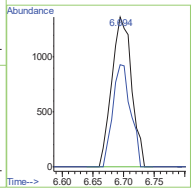




#10
ethyl ether
Concen: 40.09 ug/kg
RT: 6.694 min Scan# 388
Delta R.T. -0.013 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 59 Resp: 3085

Ion	Ratio	Lower	Upper
59	100		
74	68.4	27.3	87.3



7.4.1

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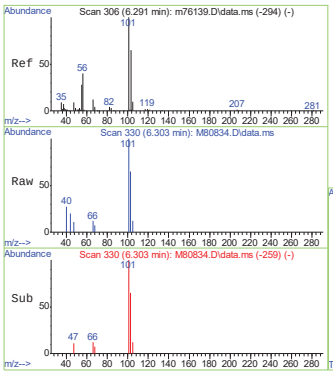
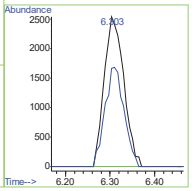
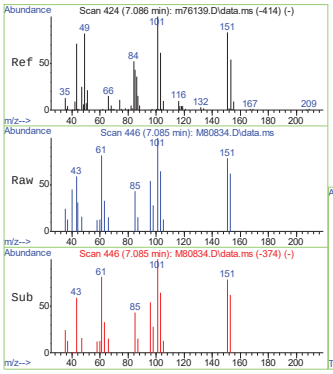


#12
trichlorofluoromethane
Concen: 39.32 ug/kg
RT: 6.303 min Scan# 330
Delta R.T. -0.040 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:101 Resp: 7787

Ion	Ratio	Lower	Upper
101	100		
103	65.4	34.6	94.6

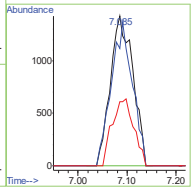




#13
freon-113
Concen: 38.51 ug/kg
RT: 7.085 min Scan# 446
Delta R.T. -0.013 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

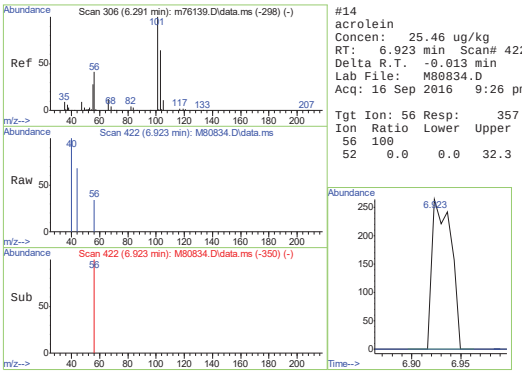
Tgt Ion:101 Resp: 4573

Ion	Ratio	Lower	Upper
101	100		
151	78.3	53.1	113.1
85	42.8	13.4	73.4



7.4.1

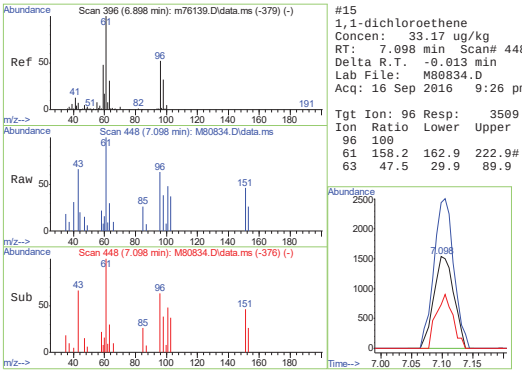
7



#14
acrolein
Concen: 25.46 ug/kg
RT: 6.923 min Scan# 422
Delta R.T. -0.013 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 56 Resp: 357

Ion	Ratio	Lower	Upper
56	100		
52	0.0	0.0	32.3



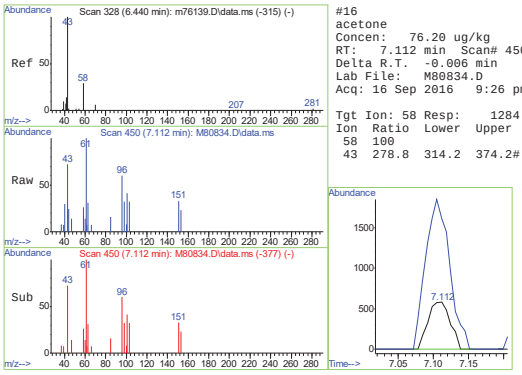
#15
1,1-dichloroethene
Concen: 33.17 ug/kg
RT: 7.098 min Scan# 448
Delta R.T. -0.013 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 96 Resp: 3509

Ion	Ratio	Lower	Upper
96	100		
61	158.2	162.9	222.9#
63	47.5	29.9	89.9

7.4.1

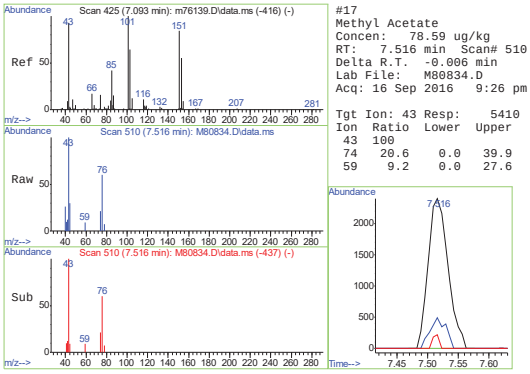
7



#16
acetone
Concen: 76.20 ug/kg
RT: 7.112 min Scan# 450
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 58 Resp: 1284

Ion	Ratio	Lower	Upper
58	100		
43	278.8	314.2	374.2#



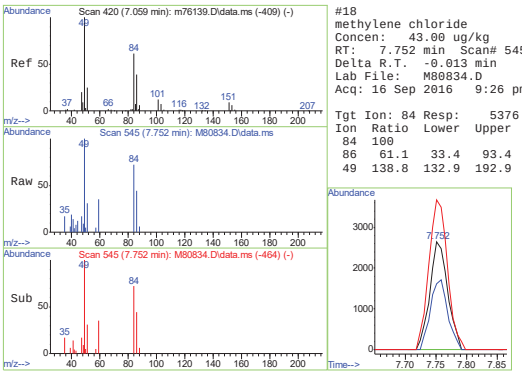
#17
Methyl Acetate
Concen: 78.59 ug/kg
RT: 7.516 min Scan# 510
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 43 Resp: 5410

Ion	Ratio	Lower	Upper
43	100		
74	20.6	0.0	39.9
59	9.2	0.0	27.6

7.4.1

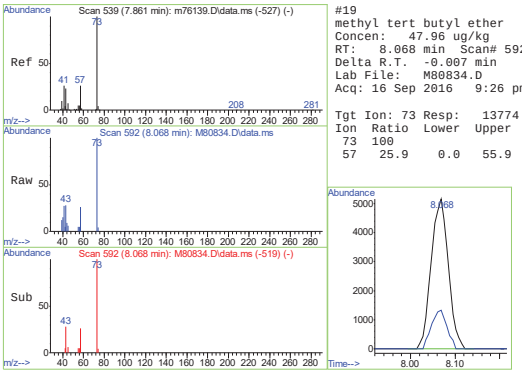
7



#18
methylene chloride
Concen: 43.00 ug/kg
RT: 7.752 min Scan# 545
Delta R.T. -0.013 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 84 Resp: 5376

Ion	Ratio	Lower	Upper
84	100		
86	61.1	33.4	93.4
49	138.8	132.9	192.9



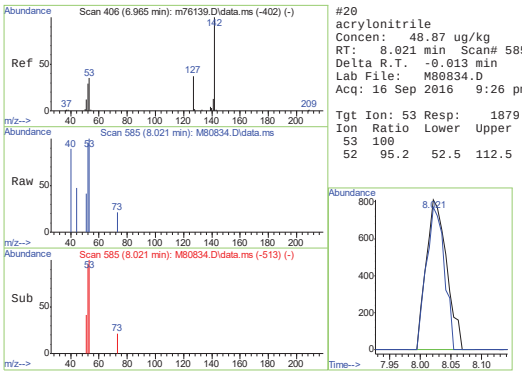
#19
methyl tert butyl ether
Concen: 47.96 ug/kg
RT: 8.068 min Scan# 592
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 73 Resp: 13774

Ion	Ratio	Lower	Upper
73	100		
57	25.9	0.0	55.9

7.4.1

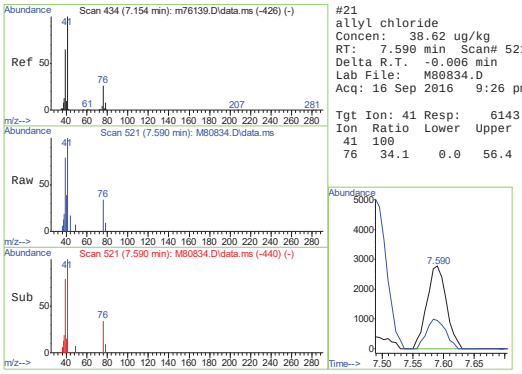
7



#20
acrylonitrile
Concen: 48.87 ug/kg
RT: 8.021 min Scan# 585
Delta R.T. -0.013 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 53 Resp: 1879

Ion	Ratio	Lower	Upper
53	100		
52	95.2	52.5	112.5



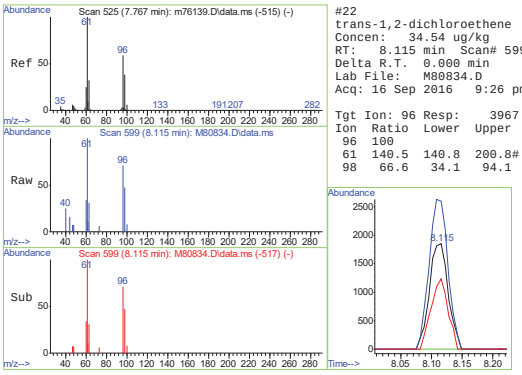
#21
allyl chloride
Concen: 38.62 ug/kg
RT: 7.590 min Scan# 521
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 41 Resp: 6143

Ion	Ratio	Lower	Upper
41	100		
76	34.1	0.0	56.4

7.4.1

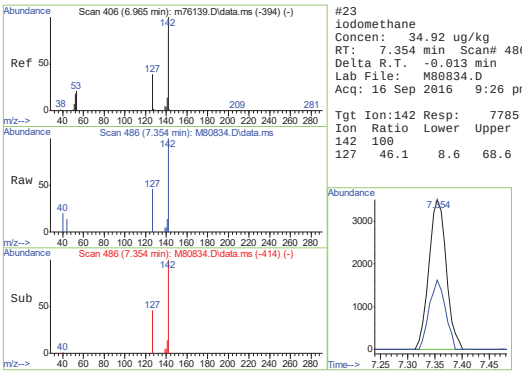
7



#22
trans-1,2-dichloroethene
Concen: 34.54 ug/kg
RT: 8.115 min Scan# 599
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 96 Resp: 3967

Ion	Ratio	Lower	Upper
96	100		
61	140.5	140.8	200.8#
98	66.6	34.1	94.1



#23
iodomethane
Concen: 34.92 ug/kg
RT: 7.354 min Scan# 486
Delta R.T. -0.013 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:142 Resp: 7785

Ion	Ratio	Lower	Upper
142	100		
127	46.1	8.6	68.6

7.4.1

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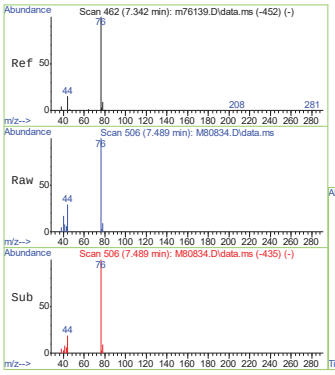
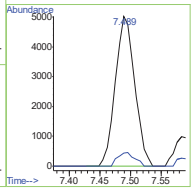
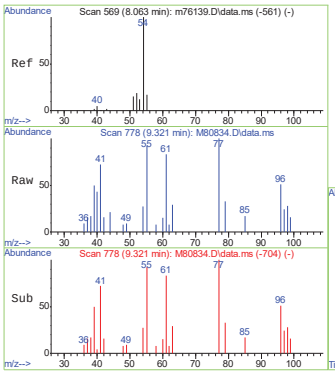


#24
carbon disulfide
Concen: 31.98 ug/kg
RT: 7.489 min Scan# 506
Delta R.T. -0.020 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 76 Resp: 11078

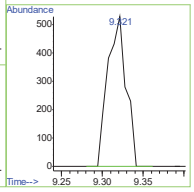
Ion	Ratio	Lower	Upper
76	100		
78	8.8	0.0	39.3





#25
propionitrile
Concen: 55.20 ug/kg
RT: 9.321 min Scan# 778
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 54 Resp: 825



7.4.1

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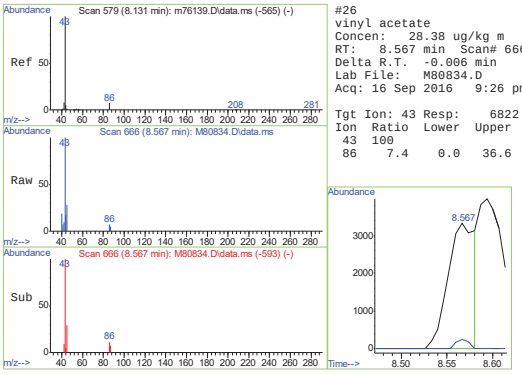
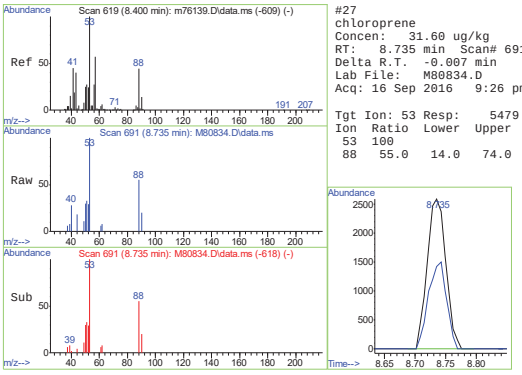


#26
vinyl acetate
Concen: 28.38 ug/kg m
RT: 8.567 min Scan# 666
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 43 Resp: 6822

Ion	Ratio	Lower	Upper
43	100		
86	7.4	0.0	36.6



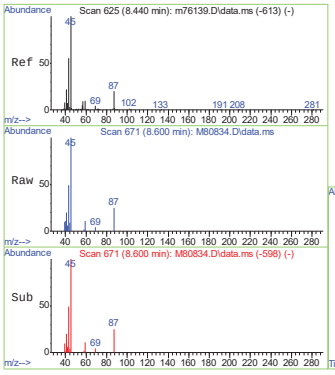
#27
chloroprene
Concen: 31.60 ug/kg
RT: 8.735 min Scan# 691
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 53 Resp: 5479

Ion	Ratio	Lower	Upper
53	100		
88	55.0	14.0	74.0

7.4.1

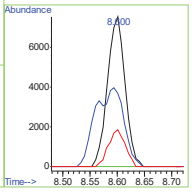
7

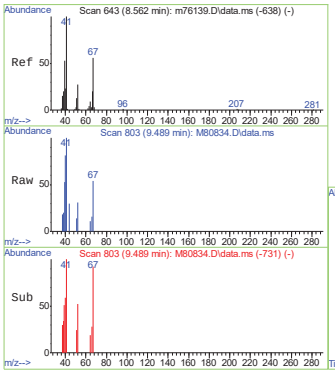


#28
di-isopropyl ether
Concen: 49.21 ug/kg
RT: 8.600 min Scan# 671
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 45 Resp: 17141

Ion	Ratio	Lower	Upper
45	100		
43	49.1	24.5	84.5
87	24.7	0.0	49.5

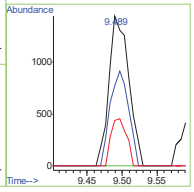




#29
methacrylonitrile
Concen: 49.73 ug/kg
RT: 9.489 min Scan# 803
Delta R.T. -0.014 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 41 Resp: 2874

Ion	Ratio	Lower	Upper
41	100		
67	53.6	26.0	86.0
52	30.5	0.0	56.8



7.4.1

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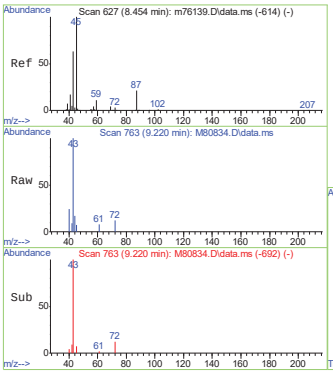
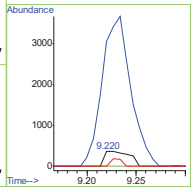
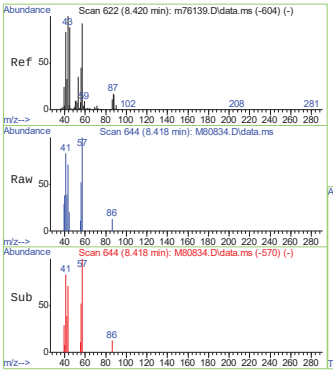


#30
2-butanone
Concen: 29.61 ug/kg
RT: 9.220 min Scan# 763
Delta R.T. -0.020 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 72 Resp: 643

Ion	Ratio	Lower	Upper
72	100		
43	789.6	2078.7	2138.7#
57	0.0	99.3	159.3#

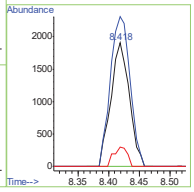




#31
Hexane
Concen: 40.45 ug/kg
RT: 8.418 min Scan# 644
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 41 Resp: 4002

Ion	Ratio	Lower	Upper
41	100		
57	129.1	88.6	133.0
86	11.6	10.1	15.1



7.4.1

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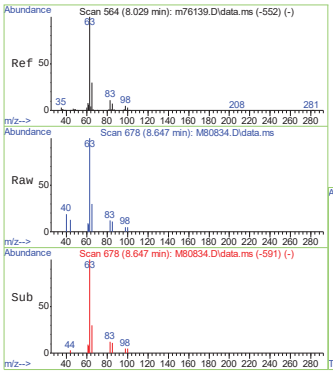
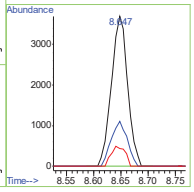
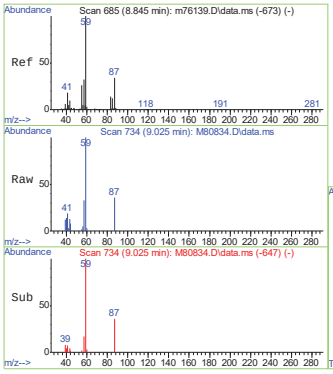


#32
1,1-dichloroethane
Concen: 39.13 ug/kg
RT: 8.647 min Scan# 678
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 63 Resp: 7707

Ion	Ratio	Lower	Upper
63	100		
65	29.9	0.2	60.2
83	11.9	0.0	41.3

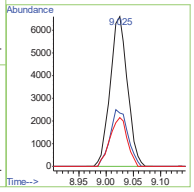




#33
tert-butyl ethyl ether
Concen: 44.24 ug/kg
RT: 9.025 min Scan# 734
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 59 Resp: 14670

Ion	Ratio	Lower	Upper
59	100		
87	35.5	3.9	63.9
57	32.7	2.2	62.2



7.4.1

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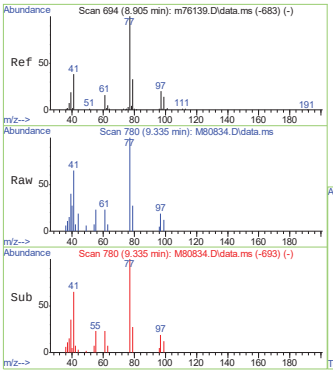
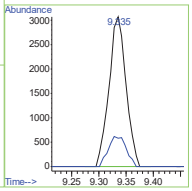
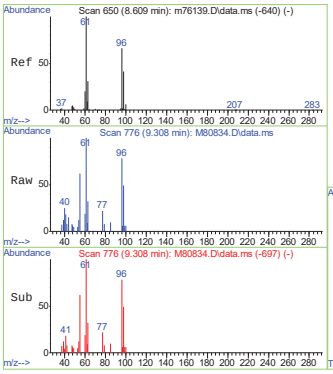


#35
2,2-dichloropropane
Concen: 39.63 ug/kg
RT: 9.335 min Scan# 780
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 77 Resp: 6716

Ion	Ratio	Lower	Upper
77	100		
97	18.8	0.0	50.1

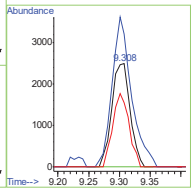




#36
cis-1,2-dichloroethene
Concen: 41.15 ug/kg
RT: 9.308 min Scan# 776
Delta R.T. 0.001 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 96 Resp: 5201

Ion	Ratio	Lower	Upper
96	100		
61	128.7	121.7	181.7
98	62.4	32.2	92.2



7.4.1

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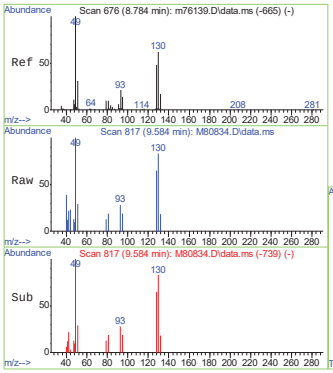
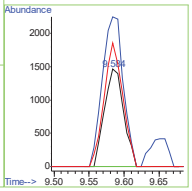
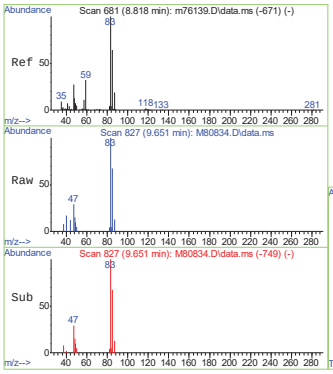


#38
bromochloromethane
Concen: 42.19 ug/kg
RT: 9.584 min Scan# 817
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:128 Resp: 2812

Ion	Ratio	Lower	Upper
128	100		
49	153.5	177.1	237.1#
130	126.9	98.0	158.0

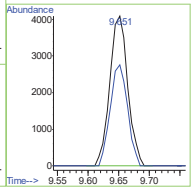




#39
chloroform
Concen: 40.20 ug/kg
RT: 9.651 min Scan# 827
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 83 Resp: 8352

Ion	Ratio	Lower	Upper
83	100		
85	67.4	34.4	94.4



7.4.1

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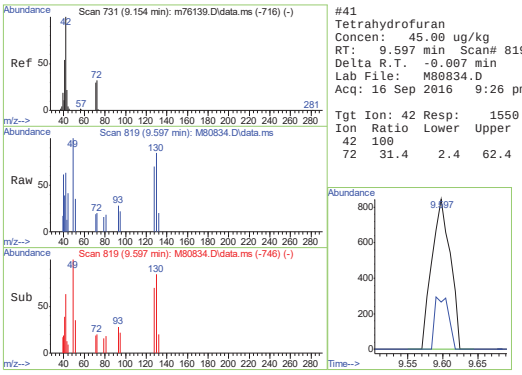
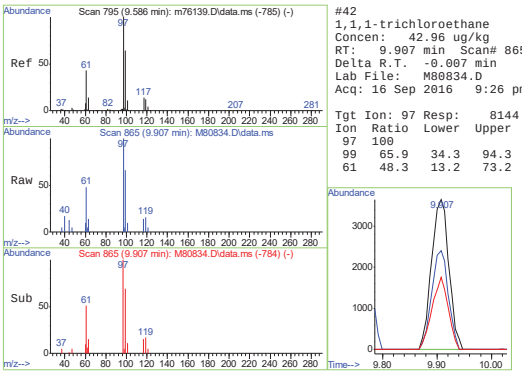


#41
Tetrahydrofuran
Concen: 45.00 ug/kg
RT: 9.597 min Scan# 819
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 42 Resp: 1550

Ion	Ratio	Lower	Upper
42	100		
72	31.4	2.4	62.4



#42
1,1,1-trichloroethane
Concen: 42.96 ug/kg
RT: 9.907 min Scan# 865
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 97 Resp: 8144

Ion	Ratio	Lower	Upper
97	100		
99	65.9	34.3	94.3
61	48.3	13.2	73.2

7.4.1

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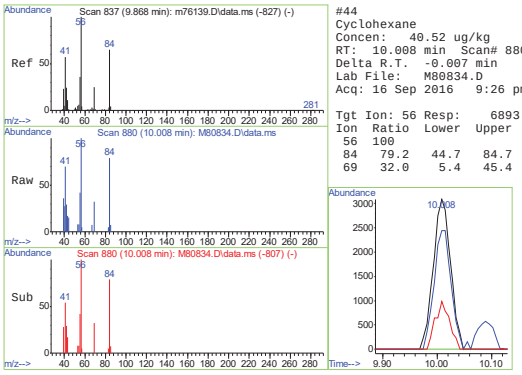
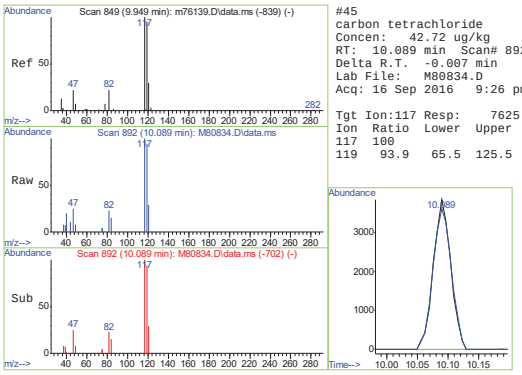


#44
Cyclohexane
Concen: 40.52 ug/kg
RT: 10.008 min Scan# 880
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 56 Resp: 6893

Ion	Ratio	Lower	Upper
56	100		
84	79.2	44.7	84.7
69	32.0	5.4	45.4



#45
carbon tetrachloride
Concen: 42.72 ug/kg
RT: 10.089 min Scan# 892
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:117 Resp: 7625

Ion	Ratio	Lower	Upper
117	100		
119	93.9	65.5	125.5

7.4.1

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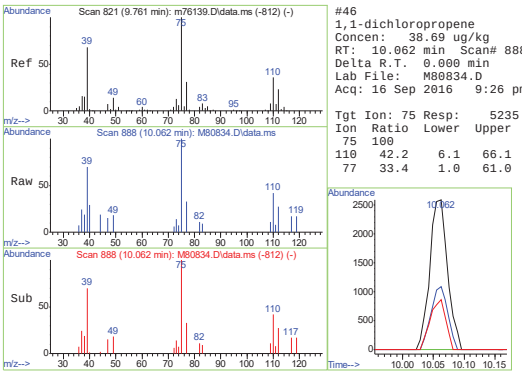
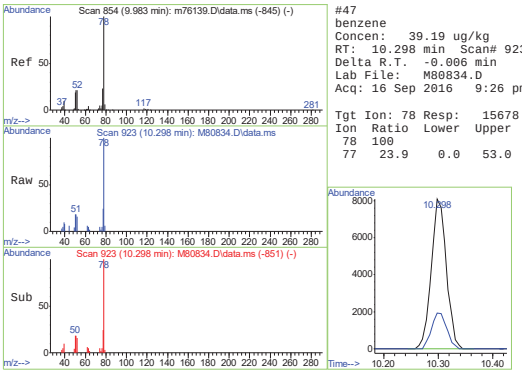


#46
1,1-dichloropropene
Concen: 38.69 ug/kg
RT: 10.062 min Scan# 888
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 75 Resp: 5235

Ion	Ratio	Lower	Upper
75	100		
110	42.2	6.1	66.1
77	33.4	1.0	61.0



#47
benzene
Concen: 39.19 ug/kg
RT: 10.298 min Scan# 923
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 78 Resp: 15678

Ion	Ratio	Lower	Upper
78	100		
77	23.9	0.0	53.0

7.4.1

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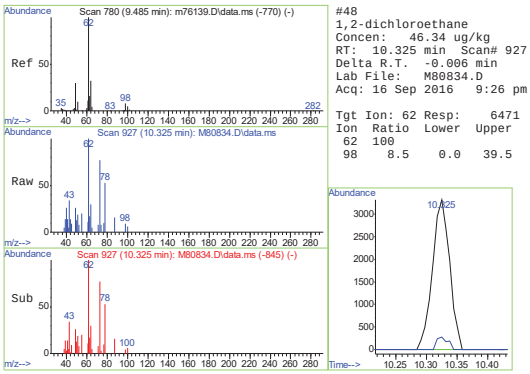
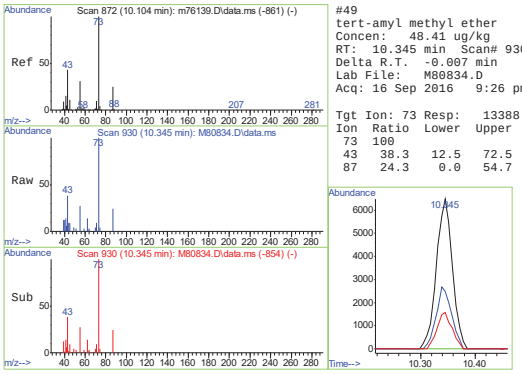


#48
1,2-dichloroethane
Concen: 46.34 ug/kg
RT: 10.325 min Scan# 927
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 62 Resp: 6471

Ion	Ratio	Lower	Upper
62	100		
98	8.5	0.0	39.5



#49
tert-amyl methyl ether
Concen: 48.41 ug/kg
RT: 10.345 min Scan# 930
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 73 Resp: 13388

Ion	Ratio	Lower	Upper
73	100		
43	38.3	12.5	72.5
87	24.3	0.0	54.7

7.4.1

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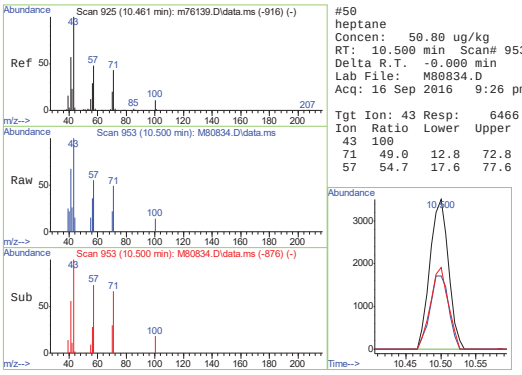
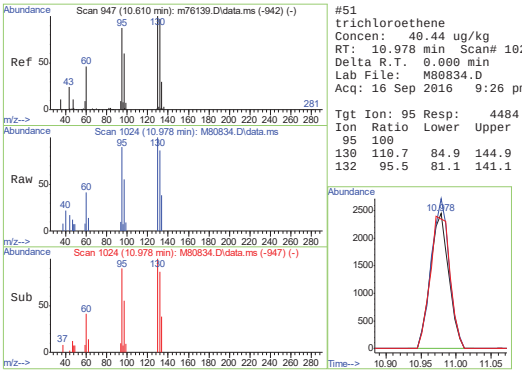


#50
heptane
Concen: 50.80 ug/kg
RT: 10.500 min Scan# 953
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 43 Resp: 6466

Ion	Ratio	Lower	Upper
43	100		
71	49.0	12.8	72.8
57	54.7	17.6	77.6



#51
trichloroethene
Concen: 40.44 ug/kg
RT: 10.978 min Scan# 1024
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 95 Resp: 4484

Ion	Ratio	Lower	Upper
95	100		
130	110.7	84.9	144.9
132	95.5	81.1	141.1

7.4.1

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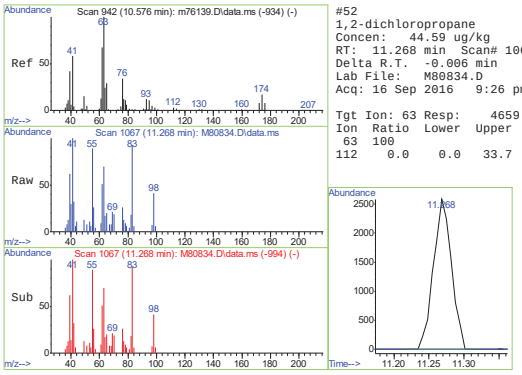
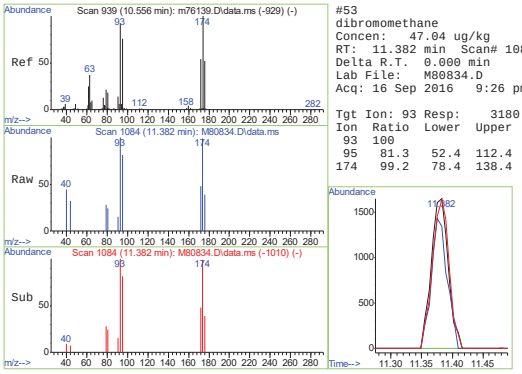


#52
1,2-dichloropropane
Concen: 44.59 ug/kg
RT: 11.268 min Scan# 1067
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 63 Resp: 4659

Ion	Ratio	Lower	Upper
63	100		
112	0.0	0.0	33.7



#53
dibromomethane
Concen: 47.04 ug/kg
RT: 11.382 min Scan# 1084
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 93 Resp: 3180

Ion	Ratio	Lower	Upper
93	100		
95	81.3	52.4	112.4
174	99.2	78.4	138.4

7.4.1

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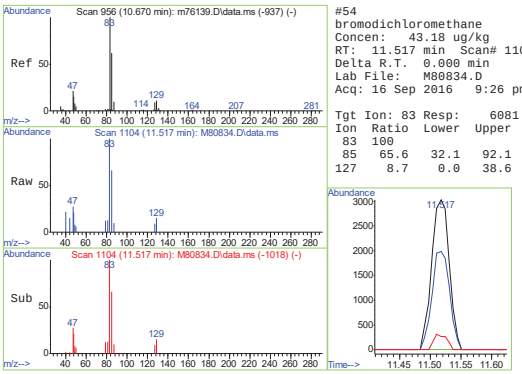
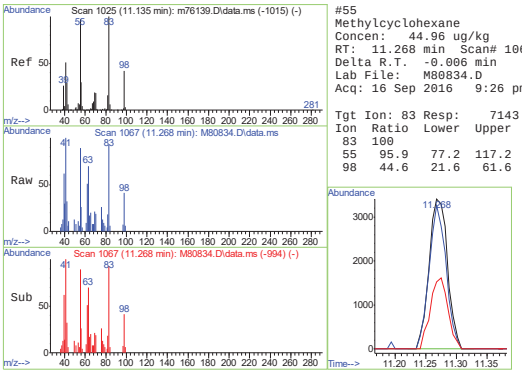


#54
bromodichloromethane
Concen: 43.18 ug/kg
RT: 11.517 min Scan# 1104
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 83 Resp: 6081

Ion	Ratio	Lower	Upper
83	100		
85	65.6	32.1	92.1
127	8.7	0.0	38.6



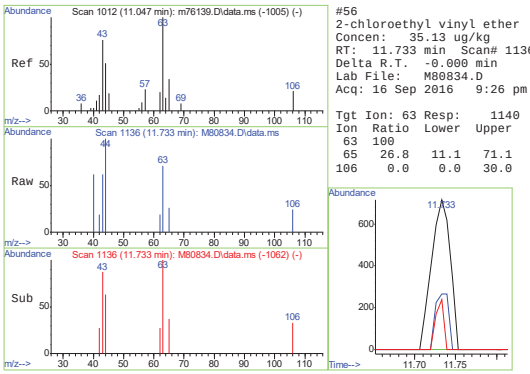
#55
Methylcyclohexane
Concen: 44.96 ug/kg
RT: 11.268 min Scan# 1067
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 83 Resp: 7143

Ion	Ratio	Lower	Upper
83	100		
55	95.9	77.2	117.2
98	44.6	21.6	61.6

7.4.1

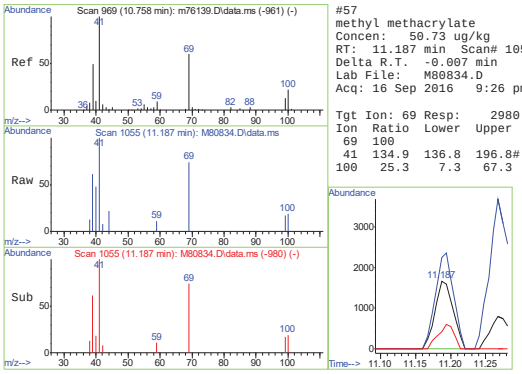
7



#56
2-chloroethyl vinyl ether
Concen: 35.13 ug/kg
RT: 11.733 min Scan# 1136
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 63 Resp: 1140

Ion	Ratio	Lower	Upper
63	100		
65	26.8	11.1	71.1
106	0.0	0.0	30.0



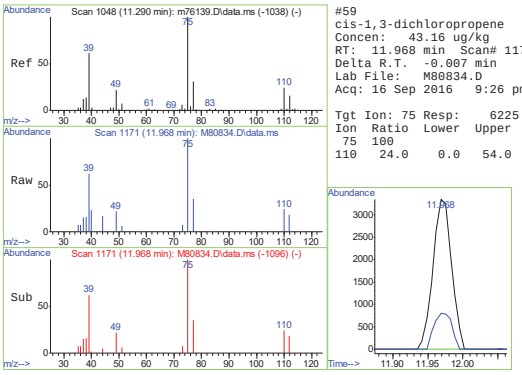
#57
methyl methacrylate
Concen: 50.73 ug/kg
RT: 11.187 min Scan# 1055
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 69 Resp: 2980

Ion	Ratio	Lower	Upper
69	100		
41	134.9	136.8	196.8#
100	25.3	7.3	67.3

7.4.1

7



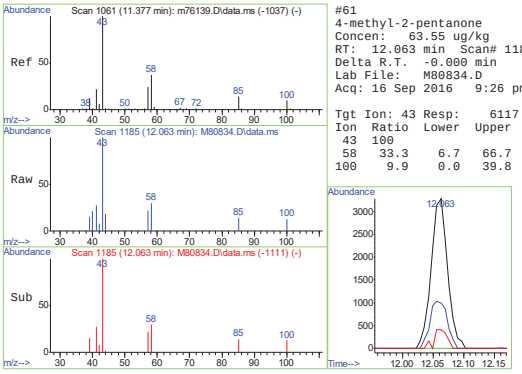
#59
cis-1,3-dichloropropene
Concen: 43.16 ug/kg
RT: 11.968 min Scan# 1171
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 75 Resp: 6225

Ion	Ratio	Lower	Upper
75	100		
110	24.0	0.0	54.0

7.4.1

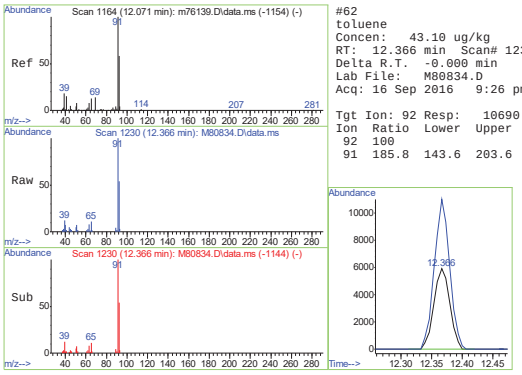
7



#61
4-methyl-2-pentanone
Concen: 63.55 ug/kg
RT: 12.063 min Scan# 1185
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 43 Resp: 6117

Ion	Ratio	Lower	Upper
43	100		
58	33.3	6.7	66.7
100	9.9	0.0	39.8



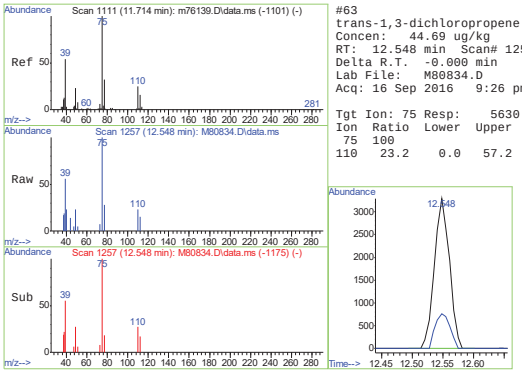
#62
toluene
Concen: 43.10 ug/kg
RT: 12.366 min Scan# 1230
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 92 Resp: 10690

Ion	Ratio	Lower	Upper
92	100		
91	185.8	143.6	203.6

7.4.1

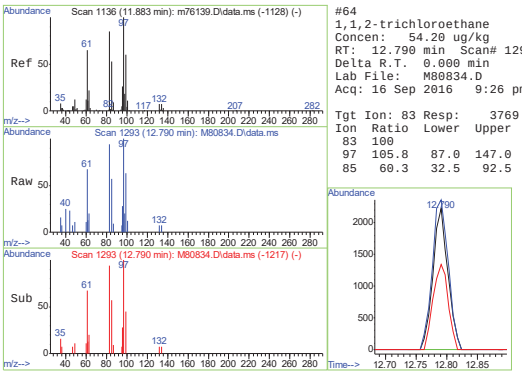
7



#63
trans-1,3-dichloropropene
Concen: 44.69 ug/kg
RT: 12.548 min Scan# 1257
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 75 Resp: 5630

Ion	Ratio	Lower	Upper
75	100		
110	23.2	0.0	57.2



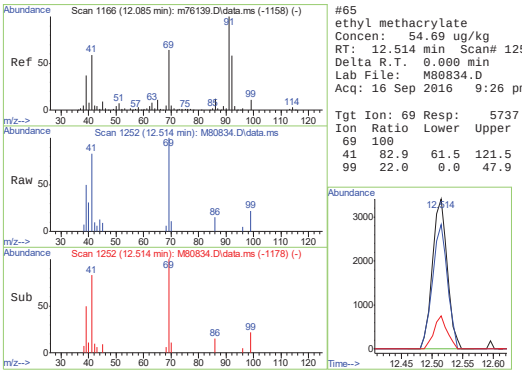
#64
1,1,2-trichloroethane
Concen: 54.20 ug/kg
RT: 12.790 min Scan# 1293
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 83 Resp: 3769

Ion	Ratio	Lower	Upper
83	100		
97	105.8	87.0	147.0
85	60.3	32.5	92.5

7.4.1

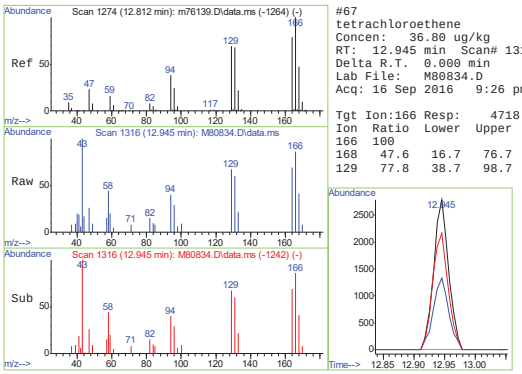
7



#65
ethyl methacrylate
Concen: 54.69 ug/kg
RT: 12.514 min Scan# 1252
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 69 Resp: 5737

Ion	Ratio	Lower	Upper
69	100		
41	82.9	61.5	121.5
99	22.0	0.0	47.9



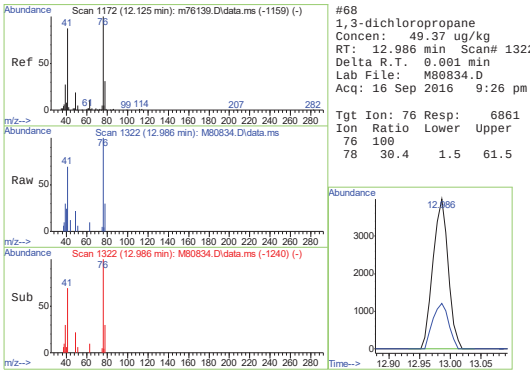
#67
tetrachloroethene
Concen: 36.80 ug/kg
RT: 12.945 min Scan# 1316
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:166 Resp: 4718

Ion	Ratio	Lower	Upper
166	100		
168	47.6	16.7	76.7
129	77.8	38.7	98.7

7.4.1

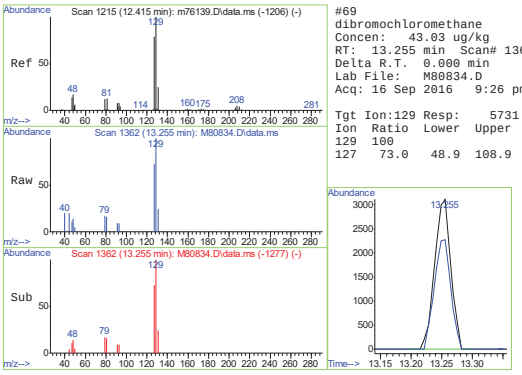
7



#68
1,3-dichloropropane
Concen: 49.37 ug/kg
RT: 12.986 min Scan# 1322
Delta R.T. 0.001 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 76 Resp: 6861

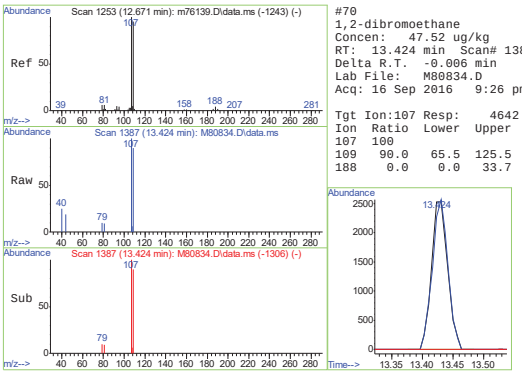
Ion	Ratio	Lower	Upper
76	100		
78	30.4	1.5	61.5



#69
dibromochloromethane
Concen: 43.03 ug/kg
RT: 13.255 min Scan# 1362
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:129 Resp: 5731

Ion	Ratio	Lower	Upper
129	100		
127	73.0	48.9	108.9



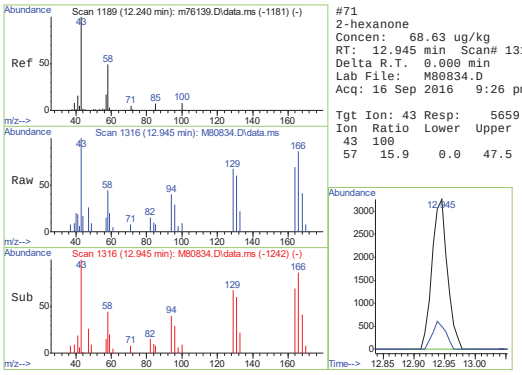
#70
1,2-dibromoethane
Concen: 47.52 ug/kg
RT: 13.424 min Scan# 1387
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:107 Resp: 4642

Ion	Ratio	Lower	Upper
107	100		
109	90.0	65.5	125.5
188	0.0	0.0	33.7

7.4.1

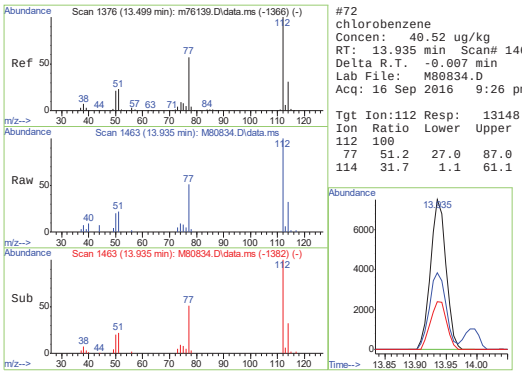
7



#71
2-hexanone
Concen: 68.63 ug/kg
RT: 12.945 min Scan# 1316
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 43 Resp: 5659

Ion	Ratio	Lower	Upper
43	100		
57	15.9	0.0	47.5



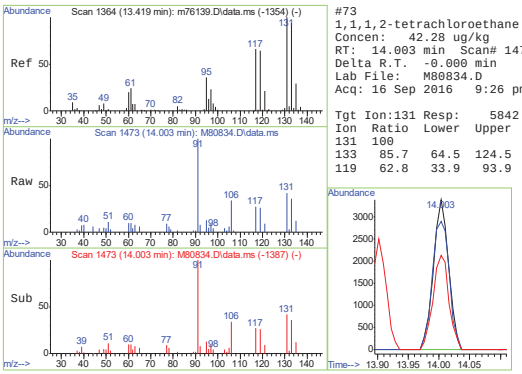
#72
chlorobenzene
Concen: 40.52 ug/kg
RT: 13.935 min Scan# 1463
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:112 Resp: 13148

Ion	Ratio	Lower	Upper
112	100		
77	51.2	27.0	87.0
114	31.7	1.1	61.1

7.4.1

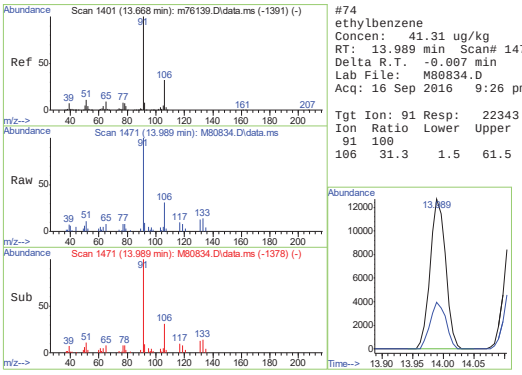
7



#73
1,1,1,2-tetrachloroethane
Concen: 42.28 ug/kg
RT: 14.003 min Scan# 1473
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:131 Resp: 5842

Ion	Ratio	Lower	Upper
131	100		
133	85.7	64.5	124.5
119	62.8	33.9	93.9



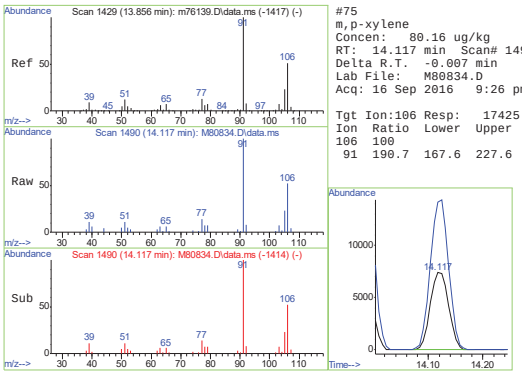
#74
ethylbenzene
Concen: 41.31 ug/kg
RT: 13.989 min Scan# 1471
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 91 Resp: 22343

Ion	Ratio	Lower	Upper
91	100		
106	31.3	1.5	61.5

7.4.1

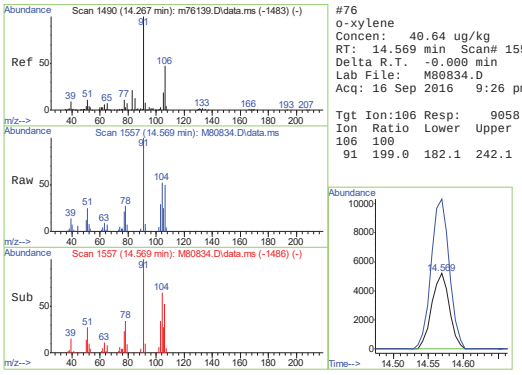
7



#75
m,p-xylene
Concen: 80.16 ug/kg
RT: 14.117 min Scan# 1490
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:106 Resp: 17425

Ion	Ratio	Lower	Upper
106	100		
91	190.7	167.6	227.6



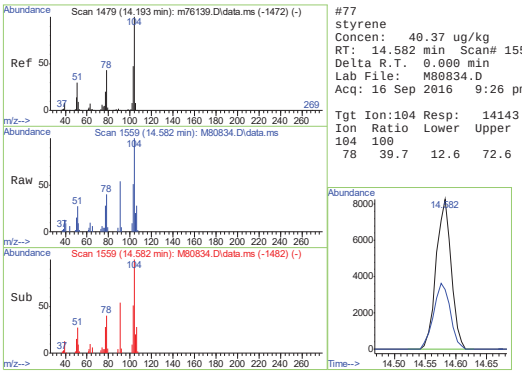
#76
o-xylene
Concen: 40.64 ug/kg
RT: 14.569 min Scan# 1557
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:106 Resp: 9058

Ion	Ratio	Lower	Upper
106	100		
91	199.0	182.1	242.1

7.4.1

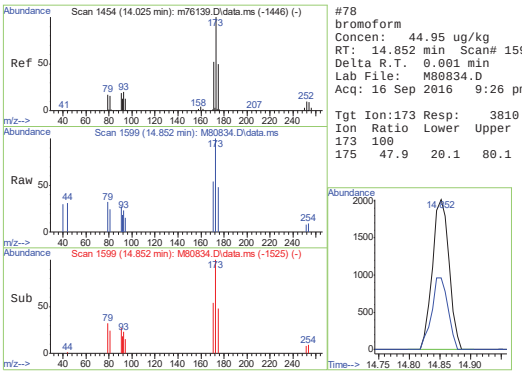
7



#77
styrene
Concen: 40.37 ug/kg
RT: 14.582 min Scan# 1559
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:104 Resp: 14143

Ion	Ratio	Lower	Upper
104	100		
78	39.7	12.6	72.6



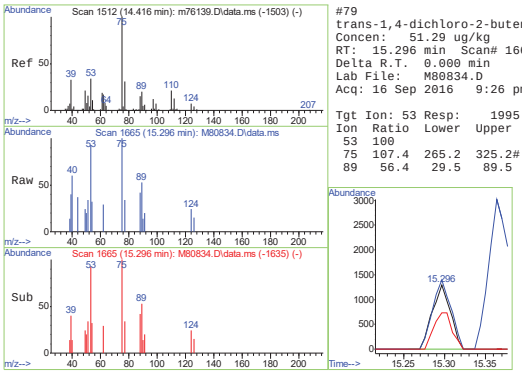
#78
bromoform
Concen: 44.95 ug/kg
RT: 14.852 min Scan# 1599
Delta R.T. 0.001 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:173 Resp: 3810

Ion	Ratio	Lower	Upper
173	100		
175	47.9	20.1	80.1

7.4.1

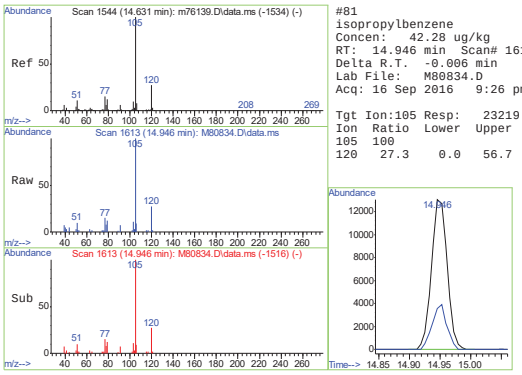
7



#79
trans-1,4-dichloro-2-butene
Concen: 51.29 ug/kg
RT: 15.296 min Scan# 1665
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 53 Resp: 1995

Ion	Ratio	Lower	Upper
53	100		
75	107.4	265.2	325.2#
89	56.4	29.5	89.5



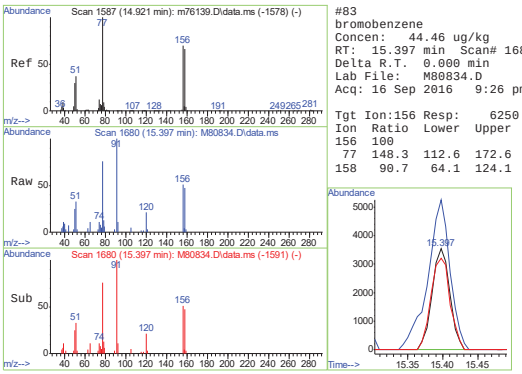
#81
isopropylbenzene
Concen: 42.28 ug/kg
RT: 14.946 min Scan# 1613
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:105 Resp: 23219

Ion	Ratio	Lower	Upper
105	100		
120	27.3	0.0	56.7

7.4.1

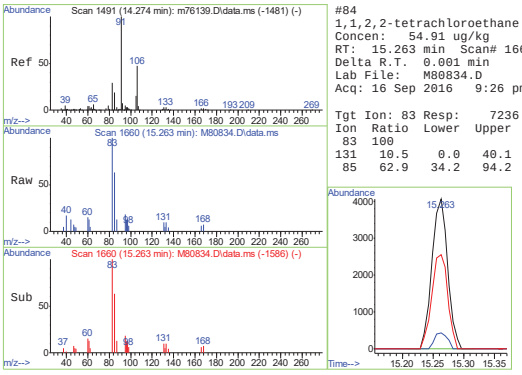
7



#83
bromobenzene
Concen: 44.46 ug/kg
RT: 15.397 min Scan# 1680
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:156 Resp: 6250

Ion	Ratio	Lower	Upper
156	100		
77	148.3	112.6	172.6
158	90.7	64.1	124.1



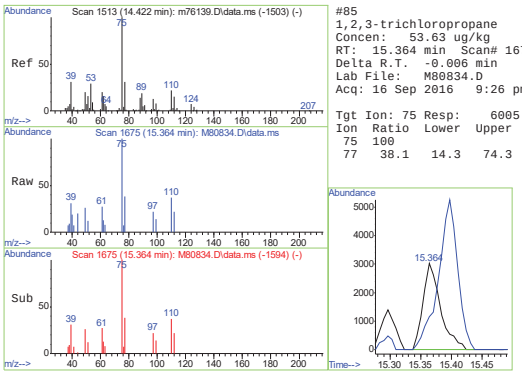
#84
1,1,2,2-tetrachloroethane
Concen: 54.91 ug/kg
RT: 15.263 min Scan# 1660
Delta R.T. 0.001 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 83 Resp: 7236

Ion	Ratio	Lower	Upper
83	100		
131	10.5	0.0	40.1
85	62.9	34.2	94.2

7.4.1

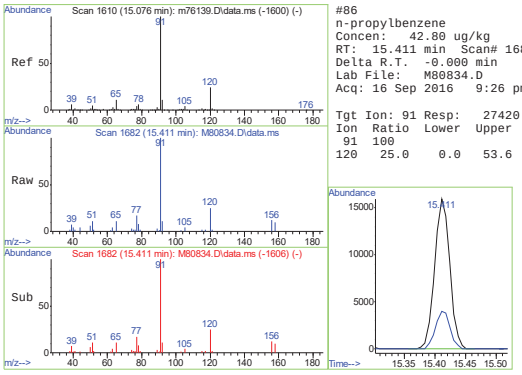
7



#85
1,2,3-trichloropropane
Concen: 53.63 ug/kg
RT: 15.364 min Scan# 1675
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 75 Resp: 6005

Ion	Ratio	Lower	Upper
75	100		
77	38.1	14.3	74.3



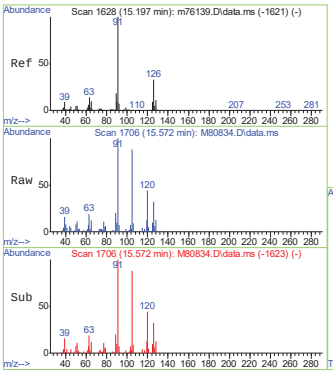
#86
n-propylbenzene
Concen: 42.80 ug/kg
RT: 15.411 min Scan# 1682
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 91 Resp: 27420

Ion	Ratio	Lower	Upper
91	100		
120	25.0	0.0	53.6

7.4.1

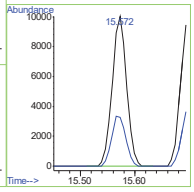
7

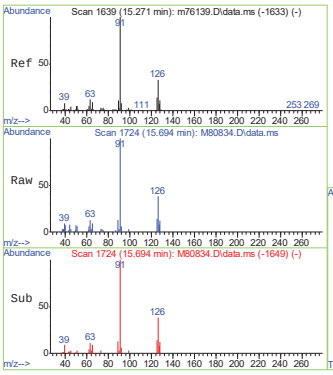


#87
2-chlorotoluene
Concen: 43.79 ug/kg
RT: 15.572 min Scan# 1706
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 91 Resp: 18560

Ion	Ratio	Lower	Upper
91	100		
126	32.5	3.5	63.5

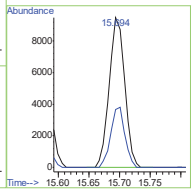




#88
4-chlorotoluene
Concen: 45.45 ug/kg
RT: 15.694 min Scan# 1724
Delta R.T. -0.006 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

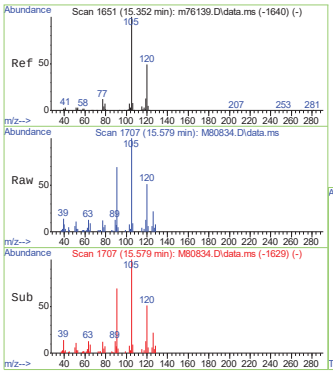
Tgt Ion: 91 Resp: 16648

Ion	Ratio	Lower	Upper
91	100		
126	38.5	3.5	63.5



7.4.1

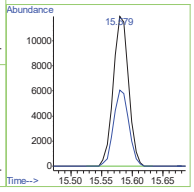
7

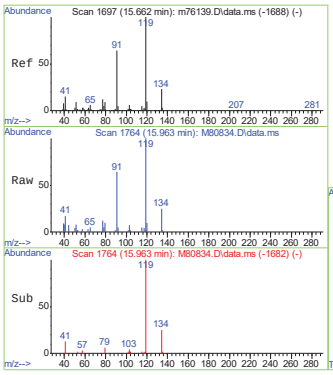


#89
1,3,5-trimethylbenzene
Concen: 43.68 ug/kg
RT: 15.579 min Scan# 1707
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:105 Resp: 20842

Ion	Ratio	Lower	Upper
105	100		
120	50.7	19.2	79.2

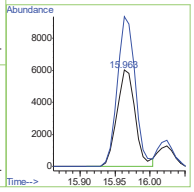




#90
tert-butylbenzene
Concen: 42.25 ug/kg
RT: 15.963 min Scan# 1764
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

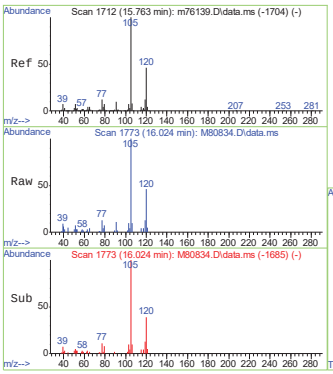
Tgt Ion: 91 Resp: 10911

Ion	Ratio	Lower	Upper
91	100		
119	155.4	125.7	185.7



7.4.1

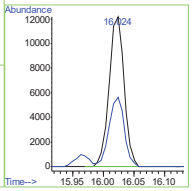
7

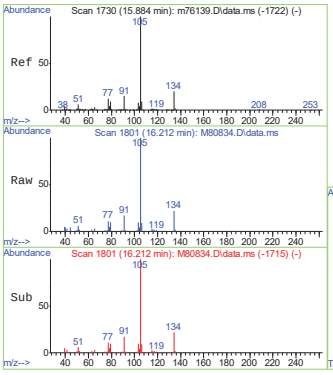


#91
1,2,4-trimethylbenzene
Concen: 42.49 ug/kg
RT: 16.024 min Scan# 1773
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:105 Resp: 20727

Ion	Ratio	Lower	Upper
105	100		
120	46.3	15.8	75.8

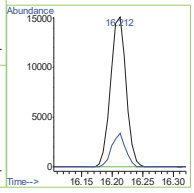




#92
sec-butylbenzene
Concen: 42.68 ug/kg
RT: 16.212 min Scan# 1801
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

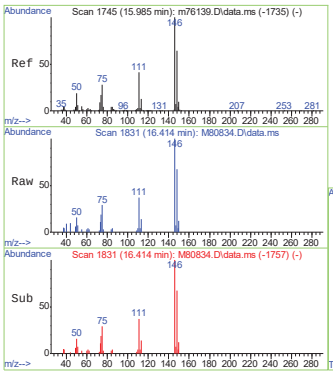
Tgt Ion:105 Resp: 26635

Ion	Ratio	Lower	Upper
105	100		
134	22.3	0.0	49.5



7.4.1

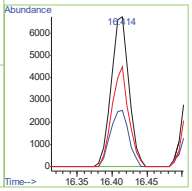
7

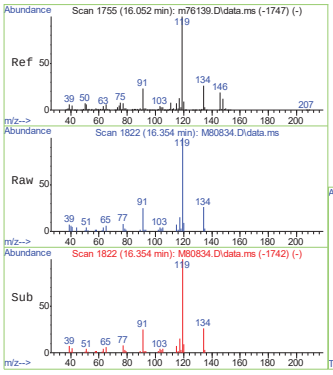


#93
1,3-dichlorobenzene
Concen: 41.80 ug/kg
RT: 16.414 min Scan# 1831
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:146 Resp: 11892

Ion	Ratio	Lower	Upper
146	100		
111	37.4	10.5	70.5
148	66.9	34.3	94.3

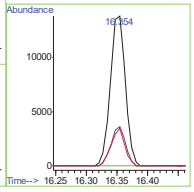




#94
p-isopropyltoluene
Concen: 43.02 ug/kg
RT: 16.354 min Scan# 1822
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

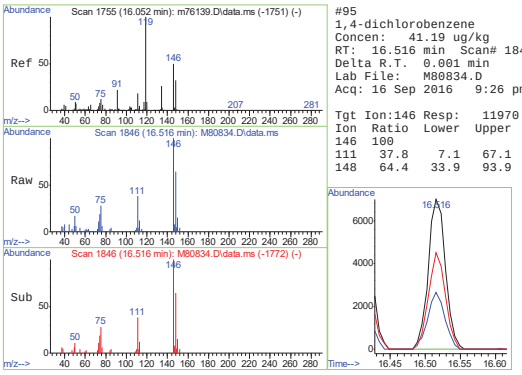
Tgt Ion:119 Resp: 23563

Ion	Ratio	Lower	Upper
119	100		
134	26.3	0.0	56.2
91	24.9	0.0	52.6



7.4.1

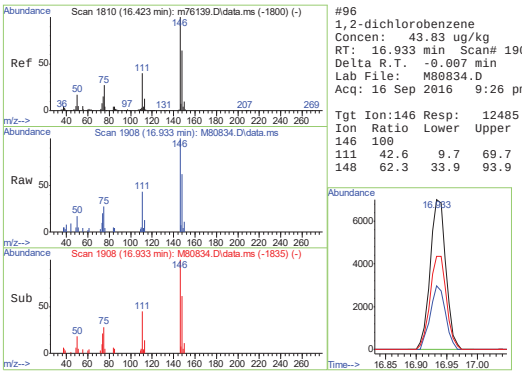
7



#95
1,4-dichlorobenzene
Concen: 41.19 ug/kg
RT: 16.516 min Scan# 1846
Delta R.T. 0.001 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:146 Resp: 11970

Ion	Ratio	Lower	Upper
146	100		
111	37.8	7.1	67.1
148	64.4	33.9	93.9



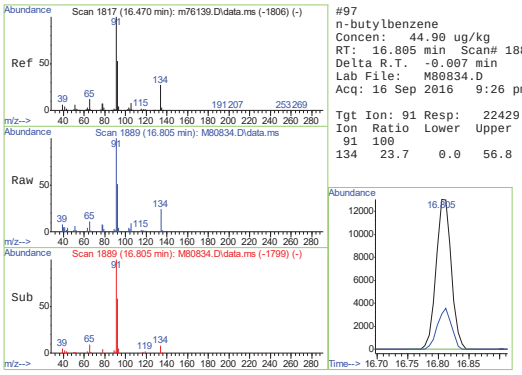
#96
1,2-dichlorobenzene
Concen: 43.83 ug/kg
RT: 16.933 min Scan# 1908
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:146 Resp: 12485

Ion	Ratio	Lower	Upper
146	100		
111	42.6	9.7	69.7
148	62.3	33.9	93.9

7.4.1

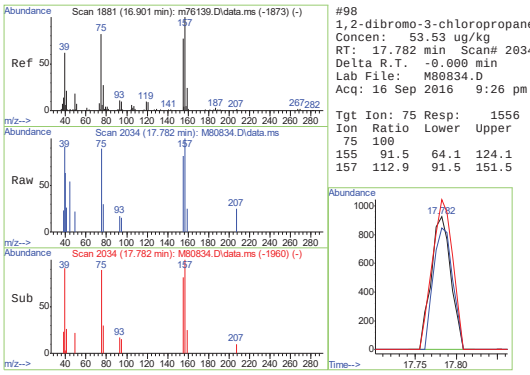
7



#97
n-butylbenzene
Concen: 44.90 ug/kg
RT: 16.805 min Scan# 1889
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 91 Resp: 22429

Ion	Ratio	Lower	Upper
91	100		
134	23.7	0.0	56.8



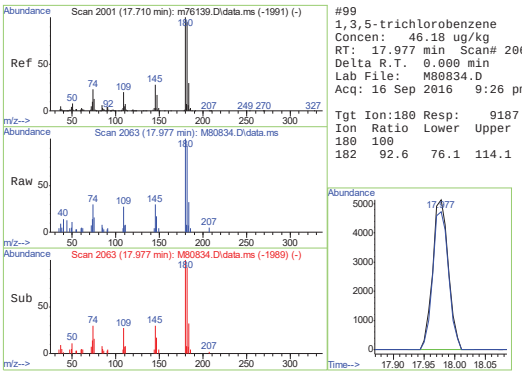
#98
1,2-dibromo-3-chloropropane
Concen: 53.53 ug/kg
RT: 17.782 min Scan# 2034
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion: 75 Resp: 1556

Ion	Ratio	Lower	Upper
75	100		
155	91.5	64.1	124.1
157	112.9	91.5	151.5

7.4.1

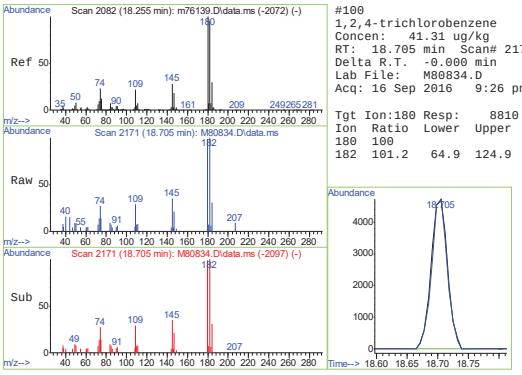
7



#99
1,3,5-trichlorobenzene
Concen: 46.18 ug/kg
RT: 17.977 min Scan# 2063
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:180 Resp: 9187

Ion	Ratio	Lower	Upper
180	100		
182	92.6	76.1	114.1



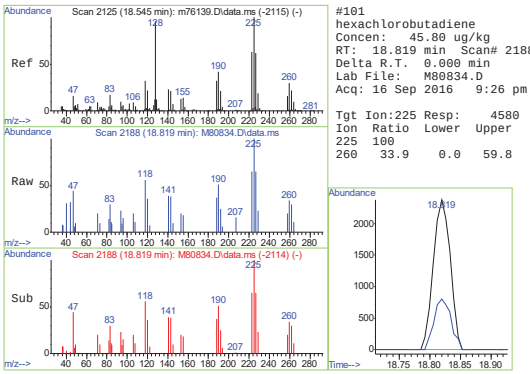
#100
1,2,4-trichlorobenzene
Concen: 41.31 ug/kg
RT: 18.705 min Scan# 2171
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:180 Resp: 8810

Ion	Ratio	Lower	Upper
180	100		
182	101.2	64.9	124.9

7.4.1

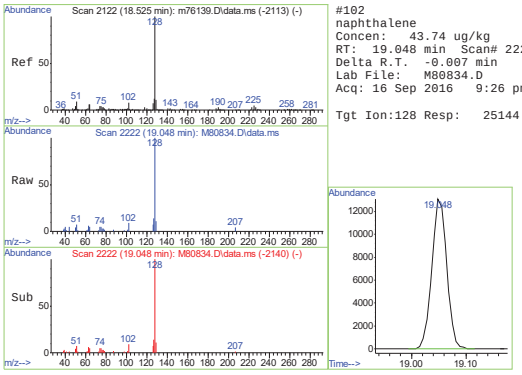
7



#101
hexachlorobutadiene
Concen: 45.80 ug/kg
RT: 18.819 min Scan# 2188
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:225 Resp: 4580

Ion	Ratio	Lower	Upper
225	100		
260	33.9	0.0	59.8

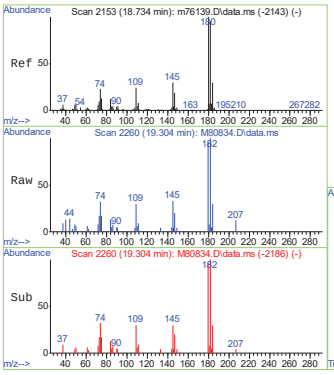


#102
naphthalene
Concen: 43.74 ug/kg
RT: 19.048 min Scan# 2222
Delta R.T. -0.007 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:128 Resp: 25144

7.4.1

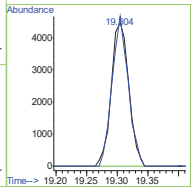
7

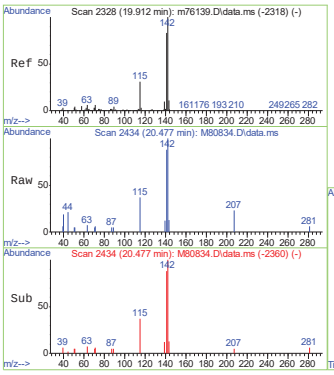


#103
1,2,3-trichlorobenzene
Concen: 43.17 ug/kg
RT: 19.304 min Scan# 2260
Delta R.T. 0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:180 Resp: 8939

Ion	Ratio	Lower	Upper
180	100		
182	104.3	66.5	126.5

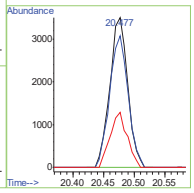




#104
2-methylnaphthalene
Concen: 21.64 ug/kg
RT: 20.477 min Scan# 2434
Delta R.T. 0.001 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

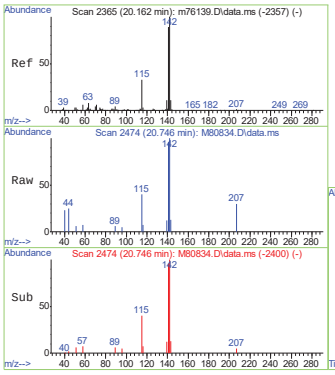
Tgt Ion:142 Resp: 7116

Ion	Ratio	Lower	Upper
142	100		
141	90.5	66.2	99.2
115	35.1	25.0	37.4



7.4.1

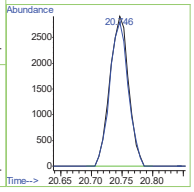
7



#105
1-methylnaphthalene
Concen: 22.59 ug/kg
RT: 20.746 min Scan# 2474
Delta R.T. -0.000 min
Lab File: M80834.D
Acq: 16 Sep 2016 9:26 pm

Tgt Ion:142 Resp: 6205

Ion	Ratio	Lower	Upper
142	100		
141	95.1	71.2	106.8



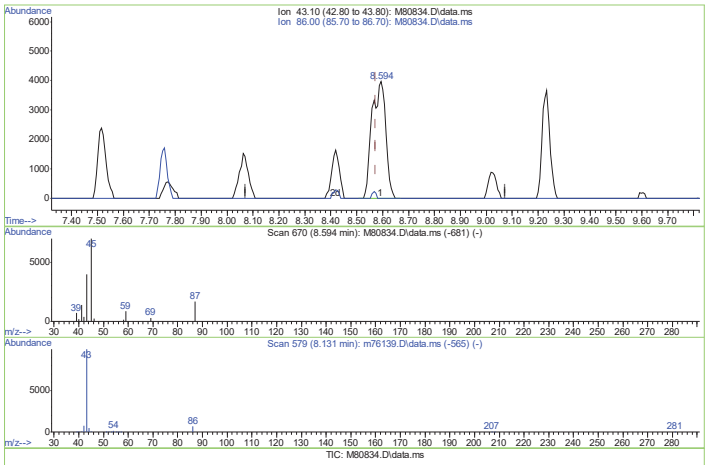
7.4.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80834.D
Acq On : 16 Sep 2016 9:26 pm
Operator : kaylap
Sample : mc47774-2ms
Misc : MS37330,MSM2895,4.72,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:47:13 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



TIC: M80834.D\data.ms

(26) vinyl acetate (P)
8.594min (+ 0.021) 60.87 ug/kg
response 14630

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

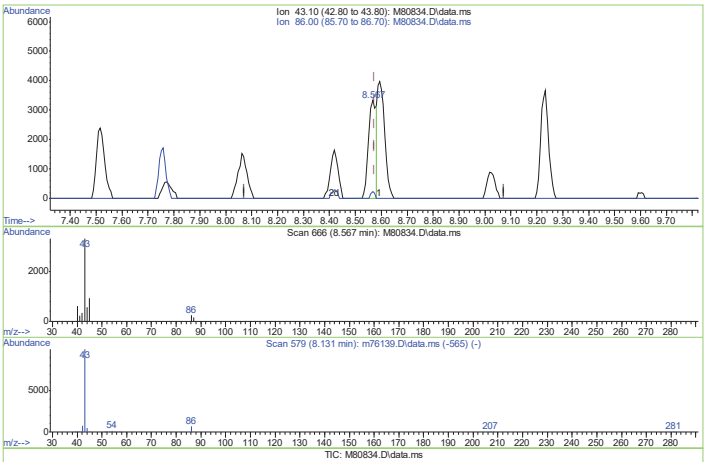
7.4.1.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80834.D
Acq On : 16 Sep 2016 9:26 pm
Operator : kaylap
Sample : mc47774-2ms
Misc : MS37330,MSM2895,4.72,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:47:13 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



TIC: M80834.D\data.ms

(26) vinyl acetate (P)
8.567min (-0.006) 28.38 ug/kg m
response 6822

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.43
0.00	0.00	0.00
0.00	0.00	0.00

7.4.1.2

7

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 15:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80835.D
Acq On : 16 Sep 2016 9:54 pm
Operator : kaylap
Sample : mc47774-2msd
Misc : MS37330,MSM2895,5.47,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:48:57 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.664	65	4741	500.00	ug/kg	-0.03
4) pentafluorobenzene	9.766	168	7212	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.668	114	11883	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.902	82	5817	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.488	152	6578	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.833	113	4095	48.82	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.64%			
60) toluene-d8 (s)	12.285	98	13763	50.99	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.98%			
82) bromofluorobenzene (s)	15.182	95	5445	51.41	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.82%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.772	59	7162	548.61	ug/kg	86
3) Ethanol	6.465	45	8714	8005.00	ug/kg	94
5) dichlorodifluoromethane	4.417	85	3733	36.64	ug/kg	99
6) chloromethane	4.808	50	7260	49.23	ug/kg	98
7) vinyl chloride	5.057	62	6564	43.71	ug/kg	97
8) bromomethane ...	5.697	96	4373	37.27	ug/kg	94
9) chloroethane	5.865	64	2412	31.51	ug/kg	97
10) ethyl ether	6.694	59	2687	39.36	ug/kg	93
12) trichlorofluoromethane	6.303	101	7085	40.33	ug/kg	98
13) freon-113	7.091	101	4048	38.42	ug/kg	93
14) acrolein	6.923	56	438	35.21	ug/kg	93
15) 1,1-dichloroethene	7.105	96	2979	31.75	ug/kg#	71
16) acetone	7.098	58	954	62.94	ug/kg	94
17) Methyl Acetate	7.516	43	4551	74.52	ug/kg	89
18) methylene chloride	7.751	84	4714	42.50	ug/kg	86
19) methyl tert butyl ether	8.061	73	12502	49.06	ug/kg	99
20) acrylonitrile	8.021	53	1602	46.96	ug/kg	98
21) allyl chloride	7.590	41	5659	40.10	ug/kg	87
22) trans-1,2-dichloroethene	8.115	96	3630	35.62	ug/kg#	70
23) iodomethane	7.347	142	6607	33.41	ug/kg	89
24) carbon disulfide	7.489	76	9707	31.59	ug/kg	97
25) propionitrile	9.307	54	540	40.73	ug/kg	100
26) vinyl acetate	8.566	43	5197m	24.37	ug/kg	
27) chloroprene	8.728	53	5237	34.04	ug/kg	91
28) di-isopropyl ether	8.593	45	15399	49.83	ug/kg	94
29) methacrylonitrile	9.496	41	2474	48.26	ug/kg	95
30) 2-butanone	9.233	72	627	35.35	ug/kg#	1
31) Hexane	8.418	41	3818	43.49	ug/kg	96
32) 1,1-dichloroethane	8.641	63	6707	38.38	ug/kg	92
33) tert-butyl ethyl ether	9.025	59	13217	44.93	ug/kg	98
35) 2,2-dichloropropane	9.334	77	6339	42.17	ug/kg	94
36) cis-1,2-dichloroethene	9.294	96	4671	41.66	ug/kg	84
38) bromochloromethane	9.584	128	2418	40.89	ug/kg#	73
39) chloroform	9.651	83	7586	41.15	ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80835.D
Acq On : 16 Sep 2016 9:54 pm
Operator : kaylap
Sample : mc47774-2msd
Misc : MS37330,MSM2895,5.47,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:48:57 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Tetrahydrofuran	9.590	42	1258	41.16	ug/kg	89
42) 1,1,1-trichloroethane	9.900	97	7547	44.87	ug/kg	98
44) Cyclohexane	10.008	56	6486	40.80	ug/kg	91
45) carbon tetrachloride	10.089	117	7377	44.23	ug/kg	99
46) 1,1-dichloropropene	10.062	75	4910	38.84	ug/kg	95
47) benzene	10.298	78	14721	39.38	ug/kg	97
48) 1,2-dichloroethane	10.325	62	5870	44.98	ug/kg	96
49) tert-amyl methyl ether	10.345	73	12123	46.91	ug/kg	93
50) heptane	10.500	43	6026	50.66	ug/kg	89
51) trichloroethene	10.978	95	4304	41.54	ug/kg	91
52) 1,2-dichloropropane	11.274	63	4412	45.18	ug/kg	89
53) dibromomethane	11.382	93	2684	42.49	ug/kg	91
54) bromodichloromethane	11.517	83	5528	42.00	ug/kg	98
55) Methylcyclohexane	11.268	83	7174	48.32	ug/kg	92
56) 2-chloroethyl vinyl ether	11.726	63	1031	34.00	ug/kg#	34
57) methyl methacrylate	11.194	69	2567	46.77	ug/kg	91
59) cis-1,3-dichloropropene	11.968	75	5774	42.83	ug/kg	96
61) 4-methyl-2-pentanone	12.063	43	5270	58.59	ug/kg	96
62) toluene	12.366	92	10052	43.37	ug/kg	88
63) trans-1,3-dichloropropene	12.548	75	4995	42.43	ug/kg	94
64) 1,1,2-trichloroethane	12.790	83	3219	49.54	ug/kg	93
65) ethyl methacrylate	12.514	69	5007	51.07	ug/kg	89
67) tetrachloroethene	12.945	166	4301	37.87	ug/kg	88
68) 1,3-dichloropropane	12.986	76	5968	48.48	ug/kg	97
69) dibromochloromethane	13.255	129	5176	43.87	ug/kg	96
70) 1,2-dibromoethane	13.430	107	4222	48.79	ug/kg	92
71) 2-hexanone	12.938	43	4499	61.59	ug/kg	93
72) chlorobenzene	13.935	112	11793	41.02	ug/kg	92
73) 1,1,1,2-tetrachloroethane	14.003	131	5315	43.42	ug/kg	88
74) ethylbenzene	13.989	91	20367	42.51	ug/kg	94
75) m,p-xylene	14.124	106	16090	83.55	ug/kg	99
76) o-xylene	14.569	106	8347	42.27	ug/kg	81
77) styrene	14.582	104	12521	40.34	ug/kg	95
78) bromoform	14.851	173	3481	46.36	ug/kg	95
79) trans-1,4-dichloro-2-b...	15.296	53	1657	48.09	ug/kg#	20
81) isopropylbenzene	14.953	105	21966	44.42	ug/kg	99
83) bromobenzene	15.397	156	5791	45.76	ug/kg	93
84) 1,1,2,2-tetrachloroethane	15.262	83	6392	53.87	ug/kg	97
85) 1,2,3-trichloropropane	15.370	75	5562	55.17	ug/kg	94
86) n-propylbenzene	15.411	91	25602	44.39	ug/kg	96
87) 2-chlorotoluene	15.572	91	17050	44.68	ug/kg	97
88) 4-chlorotoluene	15.694	91	14457	43.84	ug/kg	94
89) 1,3,5-trimethylbenzene	15.586	105	19514	45.42	ug/kg	96
90) tert-butylbenzene	15.963	91	10368	44.59	ug/kg	94
91) 1,2,4-trimethylbenzene	16.024	105	19420	44.22	ug/kg	100
92) sec-butylbenzene	16.212	105	25377	45.16	ug/kg	99
93) 1,3-dichlorobenzene	16.414	146	10696	41.75	ug/kg	97
94) p-isopropyltoluene	16.354	119	21889	44.39	ug/kg	98
95) 1,4-dichlorobenzene	16.515	146	10803	41.28	ug/kg	93
96) 1,2-dichlorobenzene	16.933	146	11314	44.11	ug/kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80835.D
Acq On : 16 Sep 2016 9:54 pm
Operator : kaylap
Sample : mc47774-2msd
Misc : MS37330,MSM2895,5.47,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:48:57 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

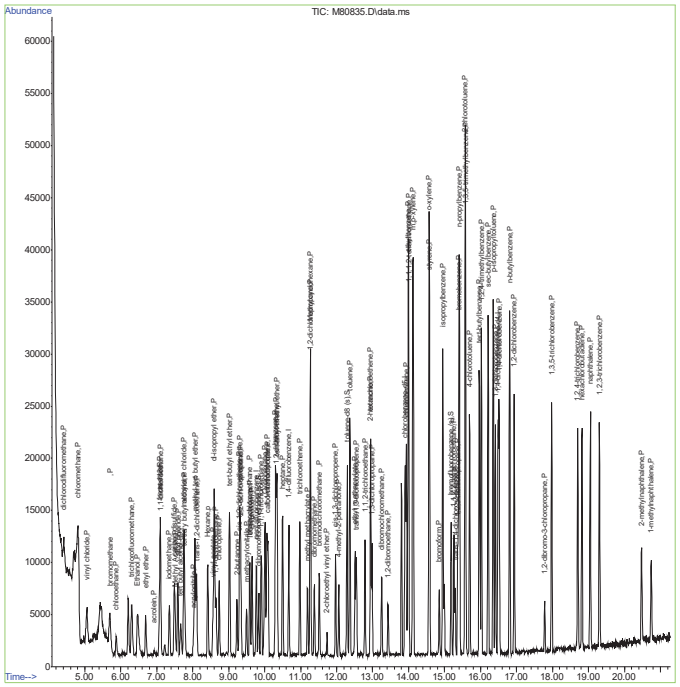
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) n-butylbenzene	16.812	91	20887	46.44	ug/kg	99
98) 1,2-dibromo-3-chloropr...	17.782	75	1454	55.56	ug/kg	90
99) 1,3,5-trichlorobenzene	17.977	180	8117	45.31	ug/kg	96
100) 1,2,4-trichlorobenzene	18.698	180	7943	41.36	ug/kg	94
101) hexachlorobutadiene	18.819	225	4348	48.29	ug/kg	81
102) naphthalene	19.055	128	22139	42.78	ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	7940	42.59	ug/kg	95
104) 2-methylnaphthalene	20.470	142	6486	21.91	ug/kg	94
105) 1-methylnaphthalene	20.746	142	5342	21.60	ug/kg	91

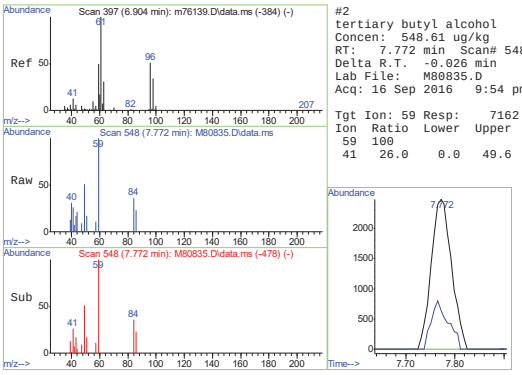
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80835.D
Acq On : 16 Sep 2016 9:54 pm
Operator : kaylap
Sample : mc47774-2msd
Misc : MS37330,MSM2895,5.47,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:48:57 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

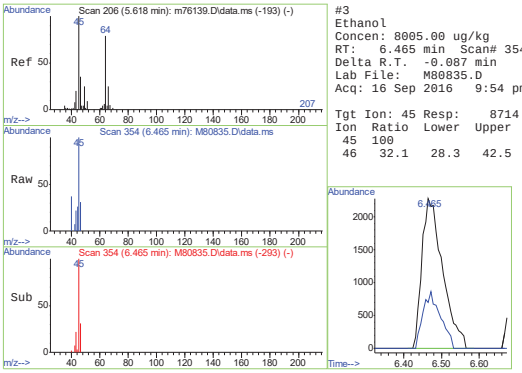




#2
tertiary butyl alcohol
Concen: 548.61 ug/kg
RT: 7.772 min Scan# 548
Delta R.T. -0.026 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 59 Resp: 7162

Ion	Ratio	Lower	Upper
59	100		
41	26.0	0.0	49.6

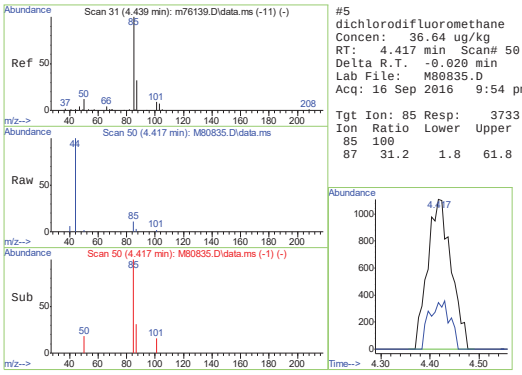


#3
Ethanol
Concen: 8005.00 ug/kg
RT: 6.465 min Scan# 354
Delta R.T. -0.087 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 45 Resp: 8714

Ion	Ratio	Lower	Upper
45	100		
46	32.1	28.3	42.5

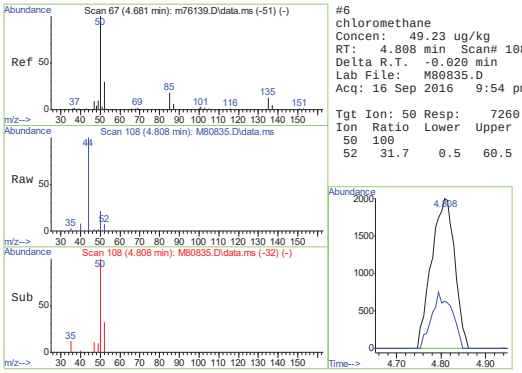
7.4.2
7



#5
dichlorodifluoromethane
Concen: 36.64 ug/kg
RT: 4.417 min Scan# 50
Delta R.T. -0.020 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 85 Resp: 3733

Ion	Ratio	Lower	Upper
85	100		
87	31.2	1.8	61.8

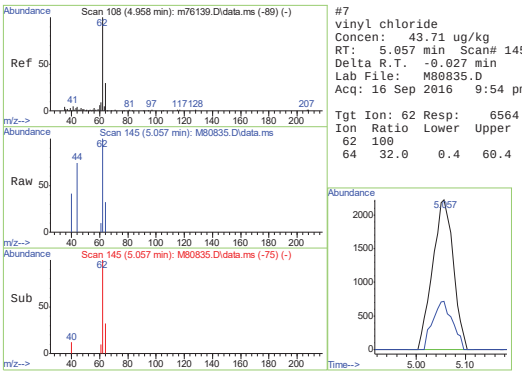


#6
chloromethane
Concen: 49.23 ug/kg
RT: 4.808 min Scan# 108
Delta R.T. -0.020 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 50 Resp: 7260

Ion	Ratio	Lower	Upper
50	100		
52	31.7	0.5	60.5

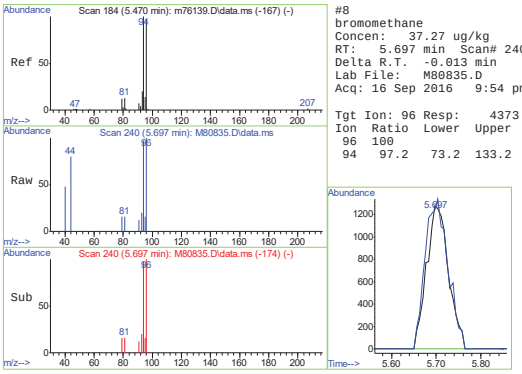
7.4.2
7



#7
vinyl chloride
Concen: 43.71 ug/kg
RT: 5.057 min Scan# 145
Delta R.T. -0.027 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 62 Resp: 6564

Ion	Ratio	Lower	Upper
62	100		
64	32.0	0.4	60.4

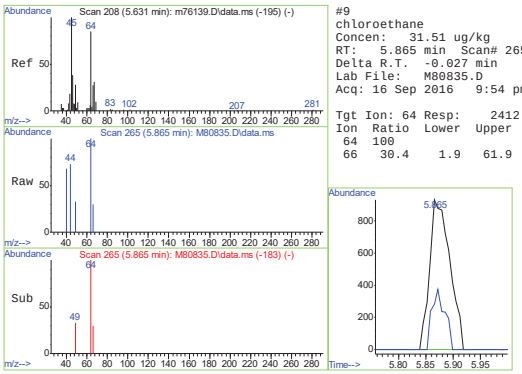


#8
bromomethane
Concen: 37.27 ug/kg
RT: 5.697 min Scan# 240
Delta R.T. -0.013 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 96 Resp: 4373

Ion	Ratio	Lower	Upper
96	100		
94	97.2	73.2	133.2

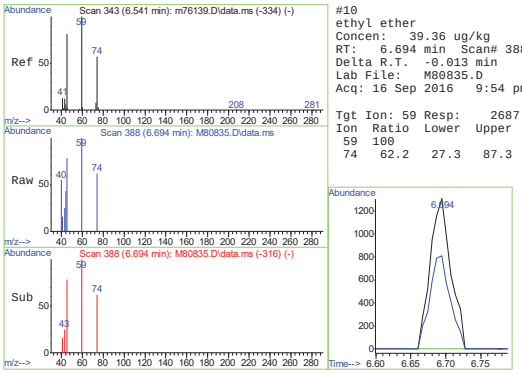
7.4.2
7



#9
chloroethane
Concen: 31.51 ug/kg
RT: 5.865 min Scan# 265
Delta R.T. -0.027 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 64 Resp: 2412

Ion	Ratio	Lower	Upper
64	100		
66	30.4	1.9	61.9

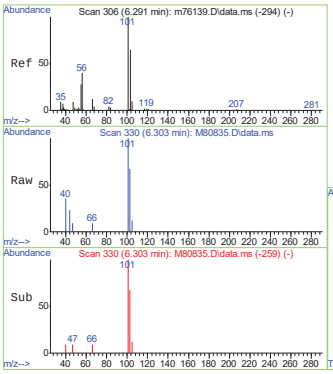


#10
ethyl ether
Concen: 39.36 ug/kg
RT: 6.694 min Scan# 388
Delta R.T. -0.013 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 59 Resp: 2687

Ion	Ratio	Lower	Upper
59	100		
74	62.2	27.3	87.3

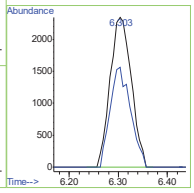
7.4.2
7

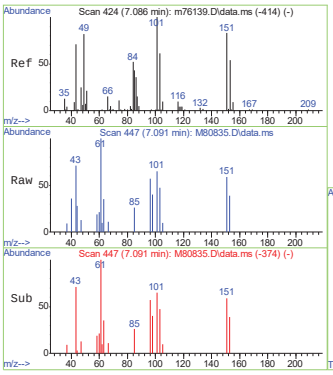


#12
trichlorofluoromethane
Concen: 40.33 ug/kg
RT: 6.303 min Scan# 330
Delta R.T. -0.040 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:101 Resp: 7085

Ion	Ratio	Lower	Upper
101	100		
103	66.5	34.6	94.6

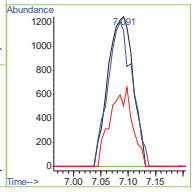




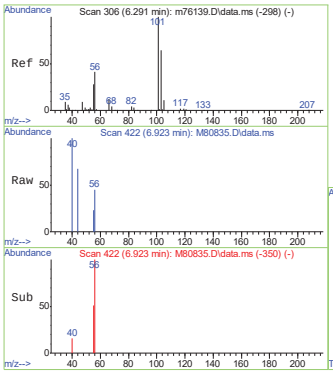
#13
freon-113
Concen: 38.42 ug/kg
RT: 7.091 min Scan# 447
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:101 Resp: 4048

Ion	Ratio	Lower	Upper
101	100		
151	91.1	53.1	113.1
85	40.7	13.4	73.4



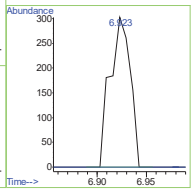
7.4.2
7

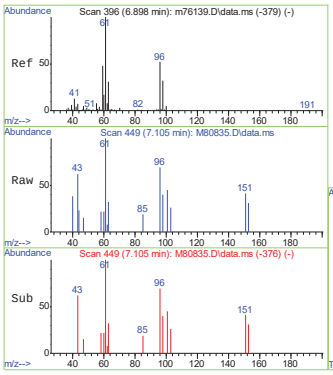


#14
acrolein
Concen: 35.21 ug/kg
RT: 6.923 min Scan# 422
Delta R.T. -0.013 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 56 Resp: 438

Ion	Ratio	Lower	Upper
56	100		
52	0.0	0.0	32.3

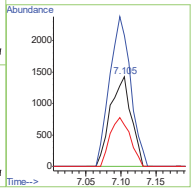




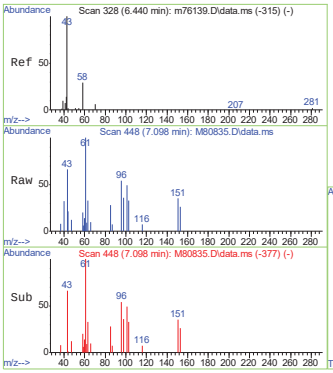
#15
1,1-dichloroethene
Concen: 31.75 ug/kg
RT: 7.105 min Scan# 449
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 96 Resp: 2979

Ion	Ratio	Lower	Upper
96	100		
61	145.5	162.9	222.9#
63	46.0	29.9	89.9



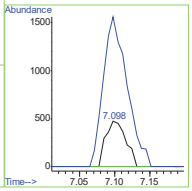
7.4.2
7

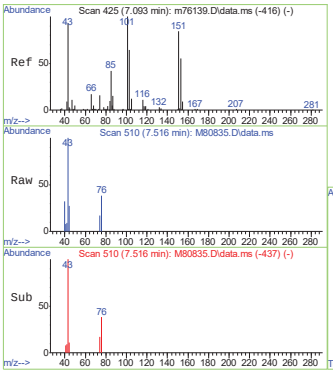


#16
acetone
Concen: 62.94 ug/kg
RT: 7.098 min Scan# 448
Delta R.T. -0.020 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 58 Resp: 954

Ion	Ratio	Lower	Upper
58	100		
43	331.4	314.2	374.2

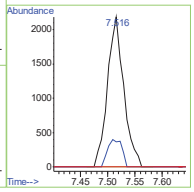




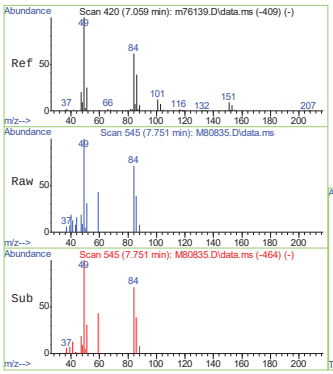
#17
Methyl Acetate
Concen: 74.52 ug/kg
RT: 7.516 min Scan# 510
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 43 Resp: 4551

Ion	Ratio	Lower	Upper
43	100		
74	16.6	0.0	39.9
59	0.0	0.0	27.6



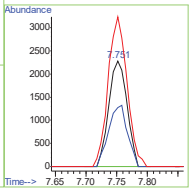
7.4.2
7

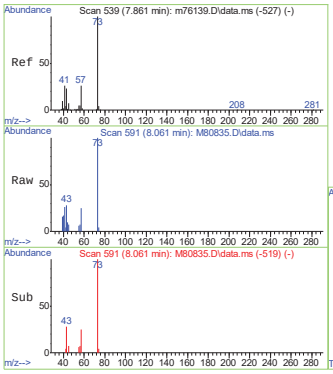


#18
methylene chloride
Concen: 42.50 ug/kg
RT: 7.751 min Scan# 545
Delta R.T. -0.014 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 84 Resp: 4714

Ion	Ratio	Lower	Upper
84	100		
86	55.7	33.4	93.4
49	141.6	132.9	192.9

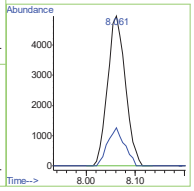




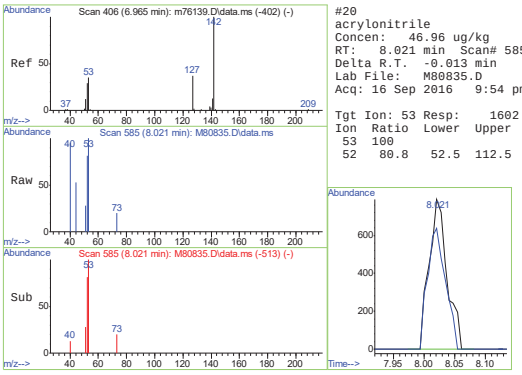
#19
methyl tert butyl ether
Concen: 49.06 ug/kg
RT: 8.061 min Scan# 591
Delta R.T. -0.014 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 73 Resp: 12502

Ion	Ratio	Lower	Upper
73	100		
57	25.2	0.0	55.9



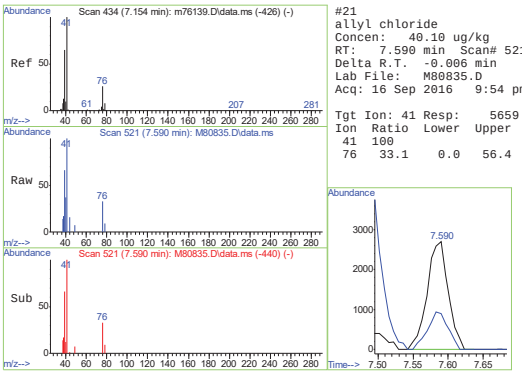
7.4.2
7



#20
acrylonitrile
Concen: 46.96 ug/kg
RT: 8.021 min Scan# 585
Delta R.T. -0.013 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 53 Resp: 1602

Ion	Ratio	Lower	Upper
53	100		
52	80.8	52.5	112.5

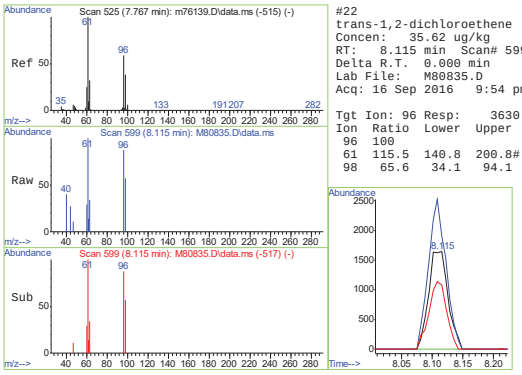


#21
allyl chloride
Concen: 40.10 ug/kg
RT: 7.590 min Scan# 521
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 41 Resp: 5659

Ion	Ratio	Lower	Upper
41	100		
76	33.1	0.0	56.4

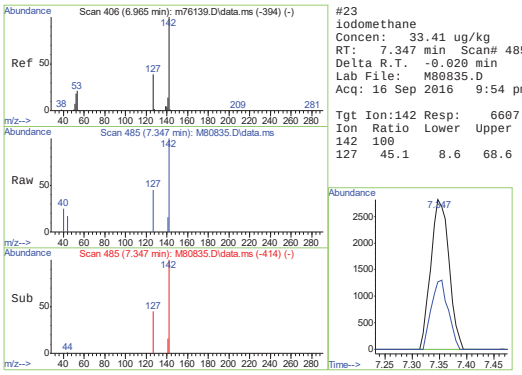
7.4.2 7



#22
trans-1,2-dichloroethene
Concen: 35.62 ug/kg
RT: 8.115 min Scan# 599
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 96 Resp: 3630

Ion	Ratio	Lower	Upper
96	100		
61	115.5	140.8	200.8#
98	65.6	34.1	94.1

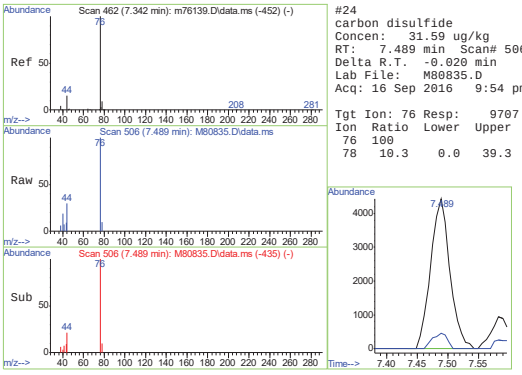


#23
iodomethane
Concen: 33.41 ug/kg
RT: 7.347 min Scan# 485
Delta R.T. -0.020 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:142 Resp: 6607

Ion	Ratio	Lower	Upper
142	100		
127	45.1	8.6	68.6

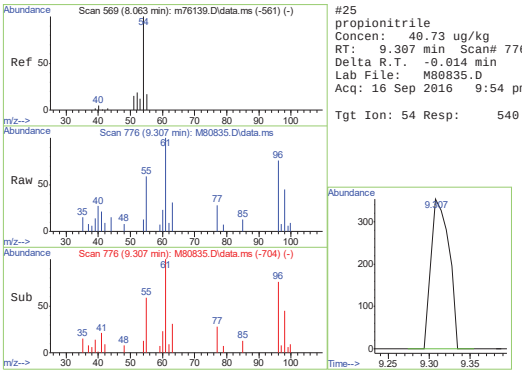
7.4.2 7



#24
carbon disulfide
Concen: 31.59 ug/kg
RT: 7.489 min Scan# 506
Delta R.T. -0.020 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 76 Resp: 9707

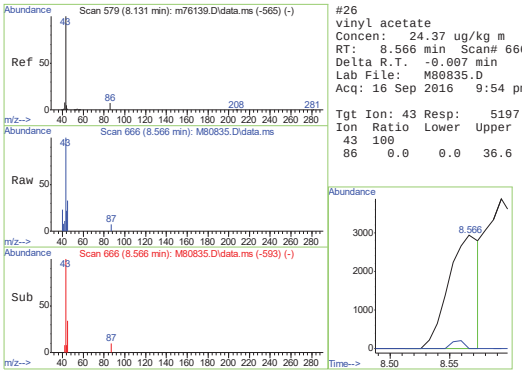
Ion	Ratio	Lower	Upper
76	100		
78	10.3	0.0	39.3



#25
propionitrile
Concen: 40.73 ug/kg
RT: 9.307 min Scan# 776
Delta R.T. -0.014 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 54 Resp: 540

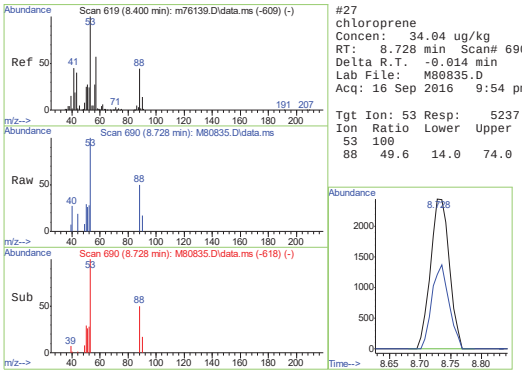
7.4.2 7



#26
vinyl acetate
Concen: 24.37 ug/kg m
RT: 8.566 min Scan# 666
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 43 Resp: 5197

Ion	Ratio	Lower	Upper
43	100		
86	0.0	0.0	36.6

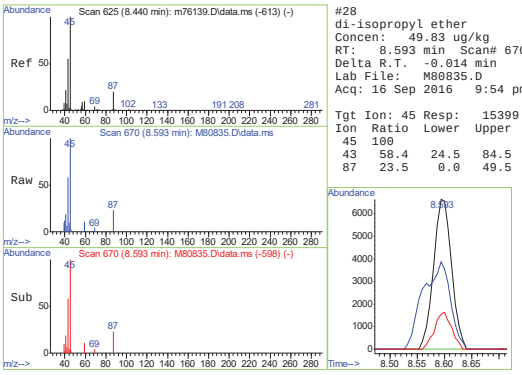


#27
chloroprene
Concen: 34.04 ug/kg
RT: 8.728 min Scan# 690
Delta R.T. -0.014 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 53 Resp: 5237

Ion	Ratio	Lower	Upper
53	100		
88	49.6	14.0	74.0

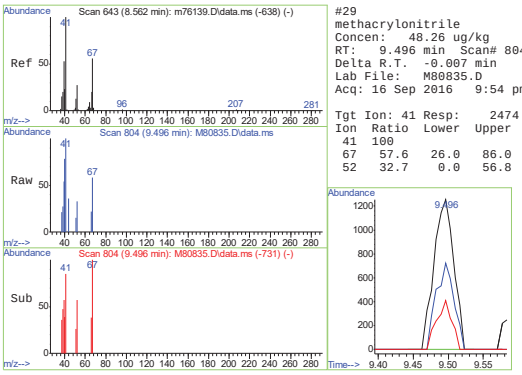
7.4.2 7



#28
di-isopropyl ether
Concen: 49.83 ug/kg
RT: 8.593 min Scan# 670
Delta R.T. -0.014 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 45 Resp: 15399

Ion	Ratio	Lower	Upper
45	100		
43	58.4	24.5	84.5
87	23.5	0.0	49.5



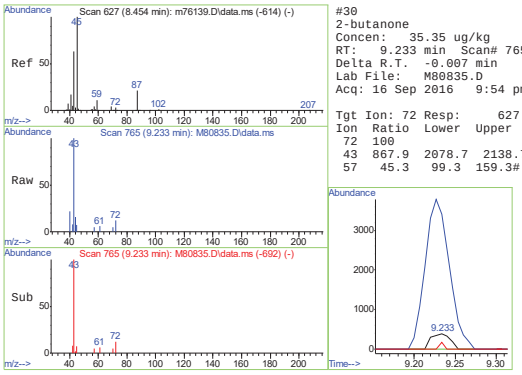
#29
methacrylonitrile
Concen: 48.26 ug/kg
RT: 9.496 min Scan# 804
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 41 Resp: 2474

Ion	Ratio	Lower	Upper
41	100		
67	57.6	26.0	86.0
52	32.7	0.0	56.8

7.4.2

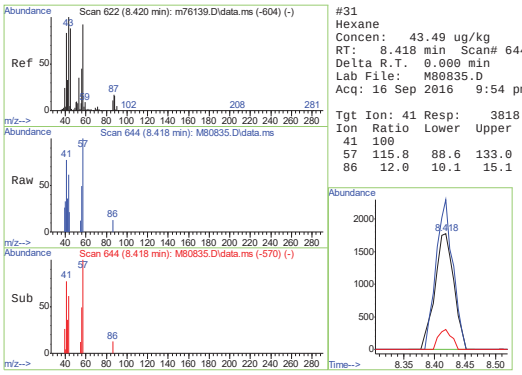
7



#30
2-butanone
Concen: 35.35 ug/kg
RT: 9.233 min Scan# 765
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 72 Resp: 627

Ion	Ratio	Lower	Upper
72	100		
43	867.9	2078.7	2138.7#
57	45.3	99.3	159.3#



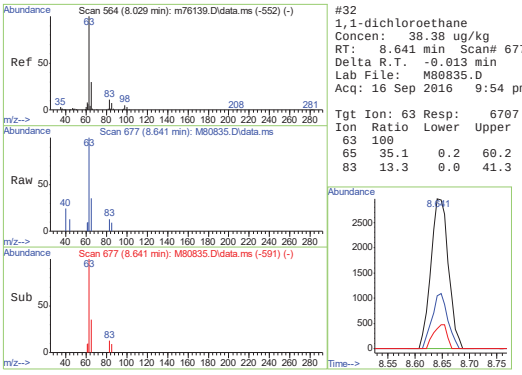
#31
Hexane
Concen: 43.49 ug/kg
RT: 8.418 min Scan# 644
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 41 Resp: 3818

Ion	Ratio	Lower	Upper
41	100		
57	115.8	88.6	133.0
86	12.0	10.1	15.1

7.4.2

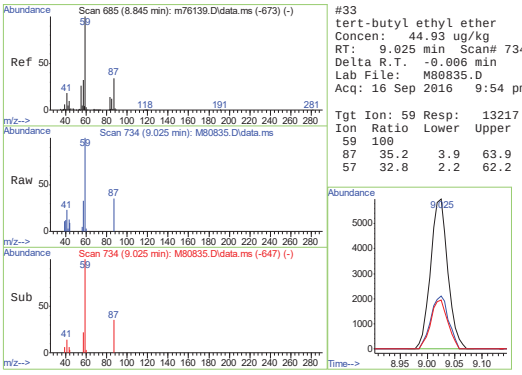
7



#32
1,1-dichloroethane
Concen: 38.38 ug/kg
RT: 8.641 min Scan# 677
Delta R.T. -0.013 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 63 Resp: 6707

Ion	Ratio	Lower	Upper
63	100		
65	35.1	0.2	60.2
83	13.3	0.0	41.3



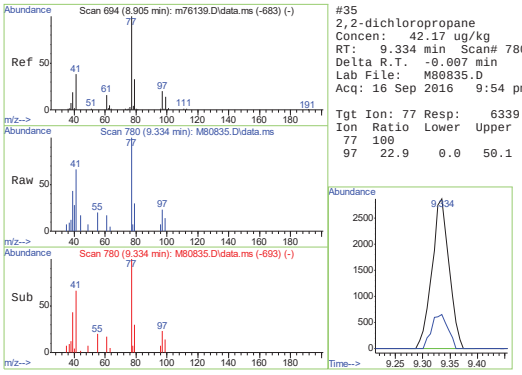
#33
tert-butyl ethyl ether
Concen: 44.93 ug/kg
RT: 9.025 min Scan# 734
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 59 Resp: 13217

Ion	Ratio	Lower	Upper
59	100		
87	35.2	3.9	63.9
57	32.8	2.2	62.2

7.4.2

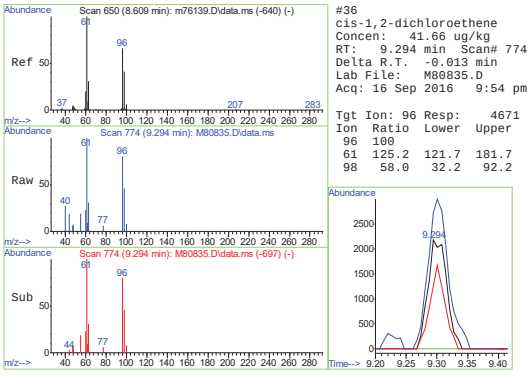
7



#35
2,2-dichloropropane
Concen: 42.17 ug/kg
RT: 9.334 min Scan# 780
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 77 Resp: 6339

Ion	Ratio	Lower	Upper
77	100		
97	22.9	0.0	50.1



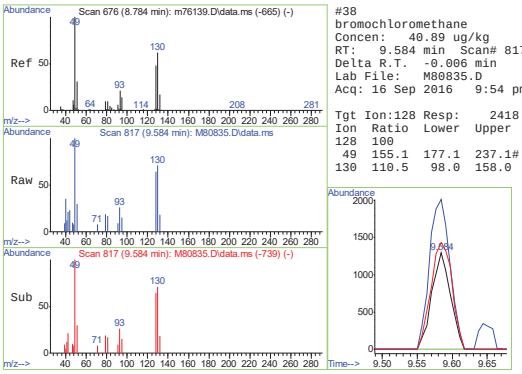
#36
cis-1,2-dichloroethene
Concen: 41.66 ug/kg
RT: 9.294 min Scan# 774
Delta R.T. -0.013 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 96 Resp: 4671

Ion	Ratio	Lower	Upper
96	100		
61	125.2	121.7	181.7
98	58.0	32.2	92.2

7.4.2

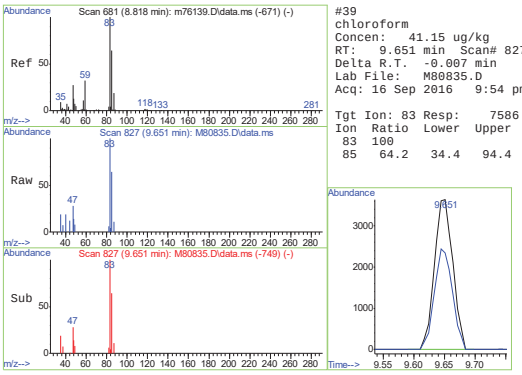
7



#38
bromochloromethane
Concen: 40.89 ug/kg
RT: 9.584 min Scan# 817
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:128 Resp: 2418

Ion	Ratio	Lower	Upper
128	100		
49	155.1	177.1	237.1#
130	110.5	98.0	158.0



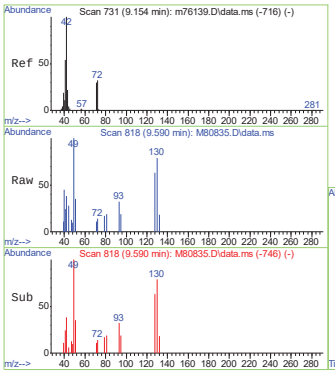
#39
chloroform
Concen: 41.15 ug/kg
RT: 9.651 min Scan# 827
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 83 Resp: 7586

Ion	Ratio	Lower	Upper
83	100		
85	64.2	34.4	94.4

7.4.2

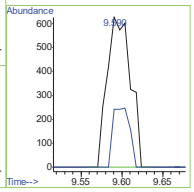
7

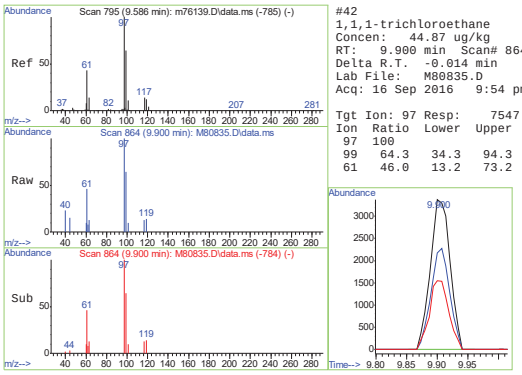


#41
Tetrahydrofuran
Concen: 41.16 ug/kg
RT: 9.590 min Scan# 818
Delta R.T. -0.014 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 42 Resp: 1258

Ion	Ratio	Lower	Upper
42	100		
72	38.5	2.4	62.4





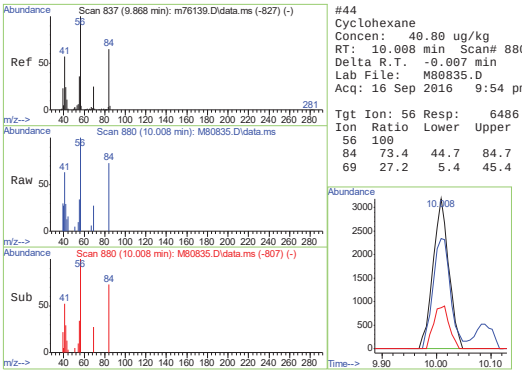
#42
1,1,1-trichloroethane
Concen: 44.87 ug/kg
RT: 9.900 min Scan# 864
Delta R.T. -0.014 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 97 Resp: 7547

Ion	Ratio	Lower	Upper
97	100		
99	64.3	34.3	94.3
61	46.0	13.2	73.2

7.4.2

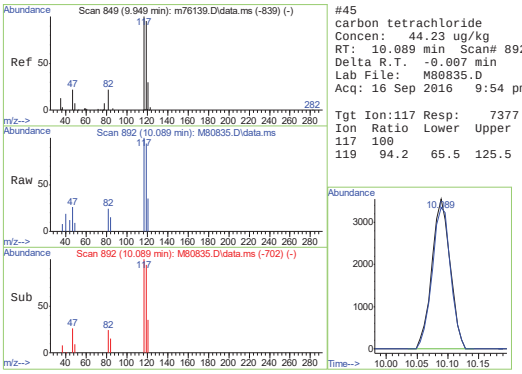
7



#44
Cyclohexane
Concen: 40.80 ug/kg
RT: 10.008 min Scan# 880
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 56 Resp: 6486

Ion	Ratio	Lower	Upper
56	100		
84	73.4	44.7	84.7
69	27.2	5.4	45.4



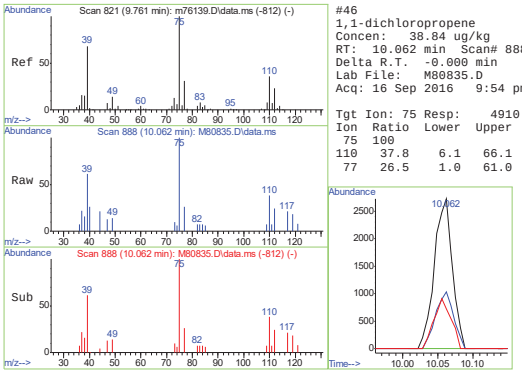
#45
carbon tetrachloride
Concen: 44.23 ug/kg
RT: 10.089 min Scan# 892
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:117 Resp: 7377

Ion	Ratio	Lower	Upper
117	100		
119	94.2	65.5	125.5

7.4.2

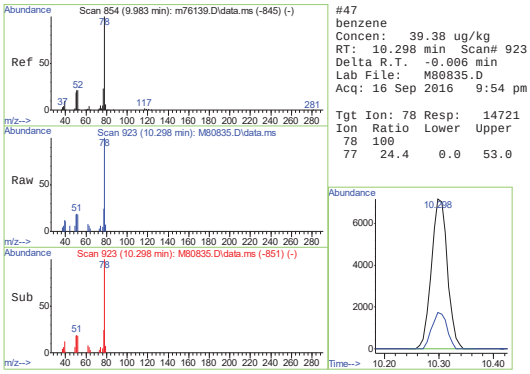
7



#46
1,1-dichloropropene
Concen: 38.84 ug/kg
RT: 10.062 min Scan# 888
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 75 Resp: 4910

Ion	Ratio	Lower	Upper
75	100		
110	37.8	6.1	66.1
77	26.5	1.0	61.0



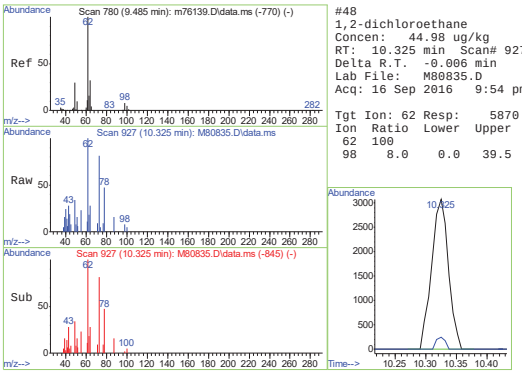
#47
benzene
Concen: 39.38 ug/kg
RT: 10.298 min Scan# 923
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 78 Resp: 14721

Ion	Ratio	Lower	Upper
78	100		
77	24.4	0.0	53.0

7.4.2

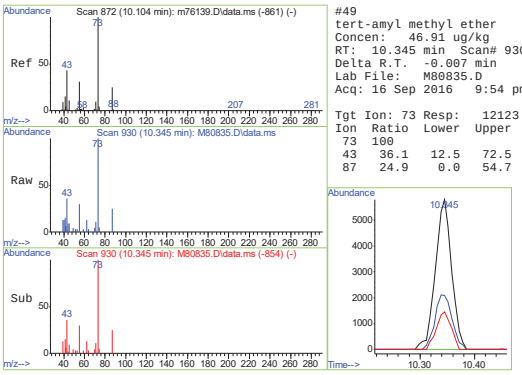
7



#48
1,2-dichloroethane
Concen: 44.98 ug/kg
RT: 10.325 min Scan# 927
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 62 Resp: 5870

Ion	Ratio	Lower	Upper
62	100		
98	8.0	0.0	39.5

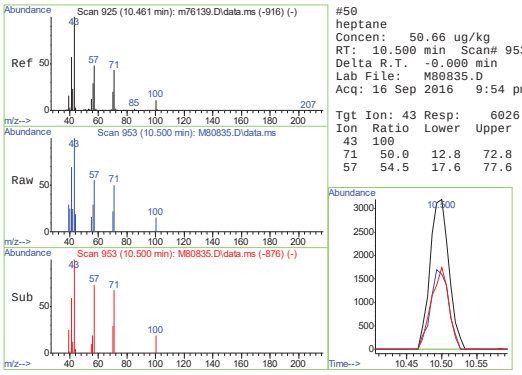


#49
tert-amyl methyl ether
Concen: 46.91 ug/kg
RT: 10.345 min Scan# 930
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 73 Resp: 12123

Ion	Ratio	Lower	Upper
73	100		
43	36.1	12.5	72.5
87	24.9	0.0	54.7

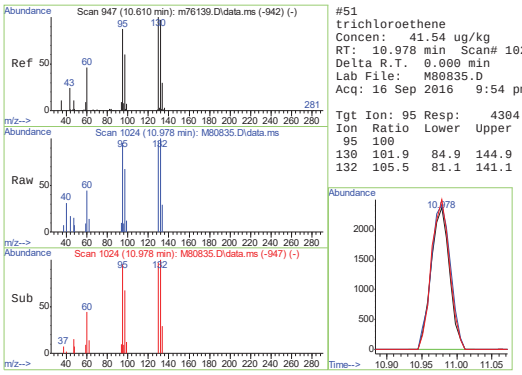
7.4.2 7



#50
heptane
Concen: 50.66 ug/kg
RT: 10.500 min Scan# 953
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 43 Resp: 6026

Ion	Ratio	Lower	Upper
43	100		
71	50.0	12.8	72.8
57	54.5	17.6	77.6

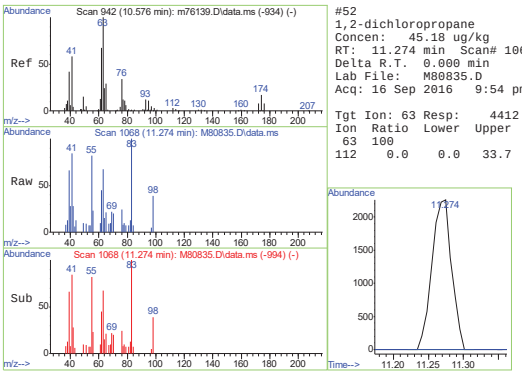


#51
trichloroethene
Concen: 41.54 ug/kg
RT: 10.978 min Scan# 1024
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 95 Resp: 4304

Ion	Ratio	Lower	Upper
95	100		
130	101.9	84.9	144.9
132	105.5	81.1	141.1

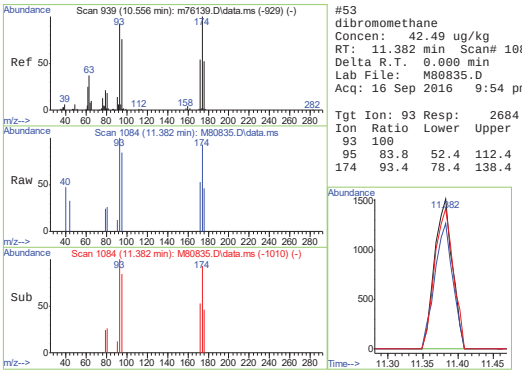
7.4.2 7



#52
1,2-dichloropropane
Concen: 45.18 ug/kg
RT: 11.274 min Scan# 1068
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 63 Resp: 4412

Ion	Ratio	Lower	Upper
63	100		
112	0.0	0.0	33.7

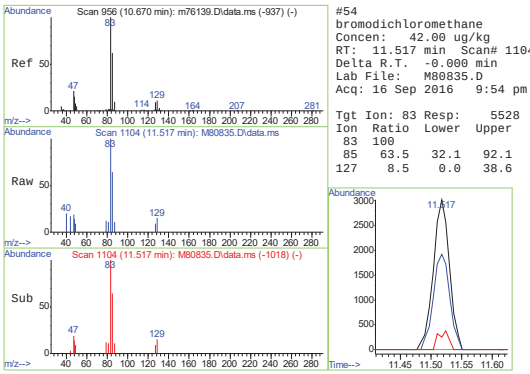


#53
dibromomethane
Concen: 42.49 ug/kg
RT: 11.382 min Scan# 1084
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 93 Resp: 2684

Ion	Ratio	Lower	Upper
93	100		
95	83.8	52.4	112.4
174	93.4	78.4	138.4

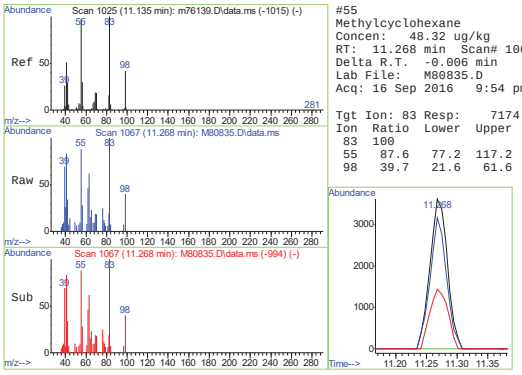
7.4.2 7



#54
bromodichloromethane
Concen: 42.00 ug/kg
RT: 11.517 min Scan# 1104
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 83 Resp: 5528

Ion	Ratio	Lower	Upper
83	100		
85	63.5	32.1	92.1
127	8.5	0.0	38.6

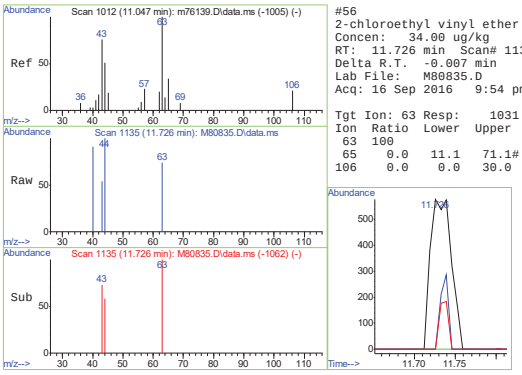


#55
Methylcyclohexane
Concen: 48.32 ug/kg
RT: 11.268 min Scan# 1067
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 83 Resp: 7174

Ion	Ratio	Lower	Upper
83	100		
55	87.6	77.2	117.2
98	39.7	21.6	61.6

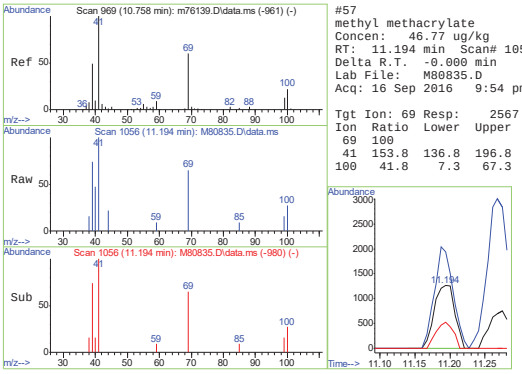
7.4.2 7



#56
2-chloroethyl vinyl ether
Concen: 34.00 ug/kg
RT: 11.726 min Scan# 1135
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 63 Resp: 1031

Ion	Ratio	Lower	Upper
63	100		
65	0.0	11.1	71.1#
106	0.0	0.0	30.0



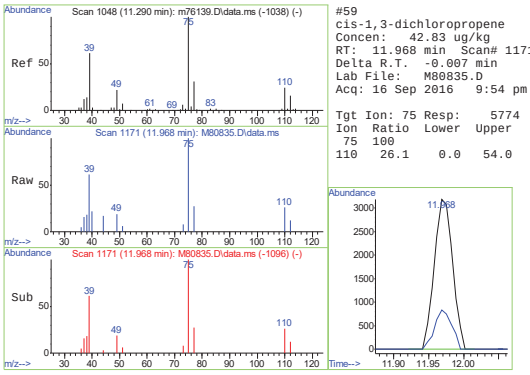
#57
methyl methacrylate
Concen: 46.77 ug/kg
RT: 11.194 min Scan# 1056
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 69 Resp: 2567

Ion	Ratio	Lower	Upper
69	100		
41	153.8	136.8	196.8
100	41.8	7.3	67.3

7.4.2

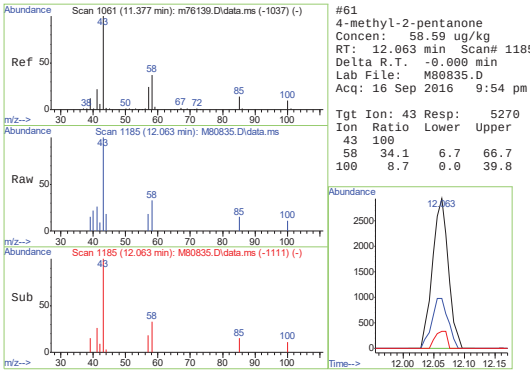
7



#59
cis-1,3-dichloropropene
Concen: 42.83 ug/kg
RT: 11.968 min Scan# 1171
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 75 Resp: 5774

Ion	Ratio	Lower	Upper
75	100		
110	26.1	0.0	54.0



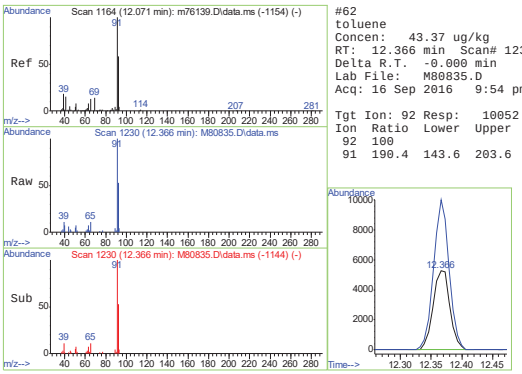
#61
4-methyl-2-pentanone
Concen: 58.59 ug/kg
RT: 12.063 min Scan# 1185
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 43 Resp: 5270

Ion	Ratio	Lower	Upper
43	100		
58	34.1	6.7	66.7
100	8.7	0.0	39.8

7.4.2

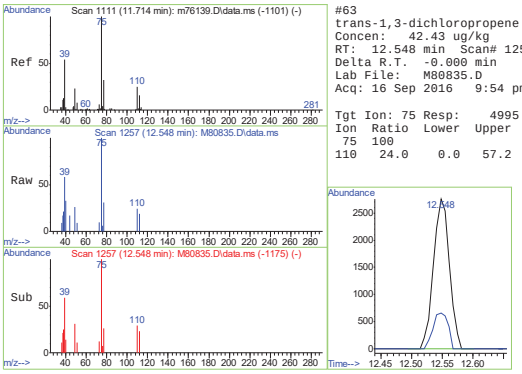
7



#62
toluene
Concen: 43.37 ug/kg
RT: 12.366 min Scan# 1230
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 92 Resp: 10052

Ion	Ratio	Lower	Upper
92	100		
91	190.4	143.6	203.6



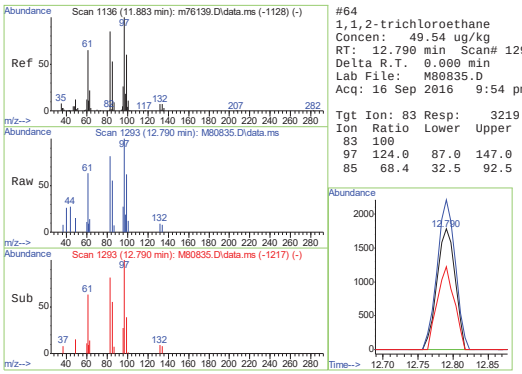
#63
trans-1,3-dichloropropene
Concen: 42.43 ug/kg
RT: 12.548 min Scan# 1257
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 75 Resp: 4995

Ion	Ratio	Lower	Upper
75	100		
110	24.0	0.0	57.2

7.4.2

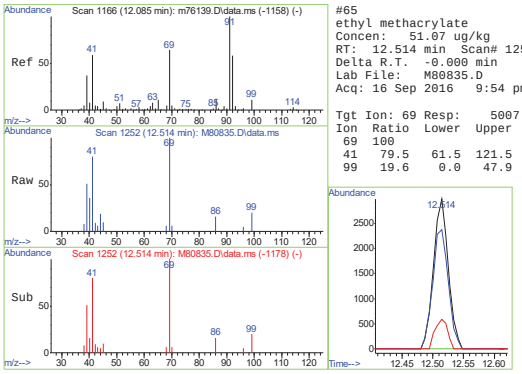
7



#64
1,1,2-trichloroethane
Concen: 49.54 ug/kg
RT: 12.790 min Scan# 1293
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 83 Resp: 3219

Ion	Ratio	Lower	Upper
83	100		
97	124.0	87.0	147.0
85	68.4	32.5	92.5



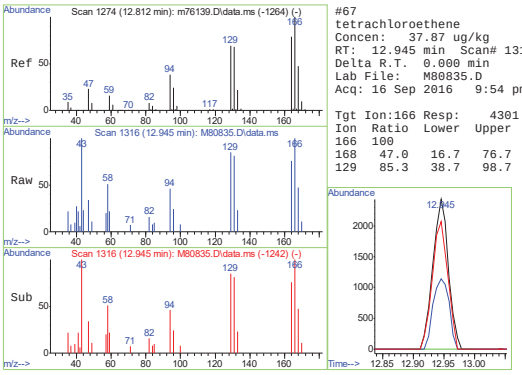
#65
ethyl methacrylate
Concen: 51.07 ug/kg
RT: 12.514 min Scan# 1252
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 69 Resp: 5007

Ion	Ratio	Lower	Upper
69	100		
41	79.5	61.5	121.5
99	19.6	0.0	47.9

7.4.2

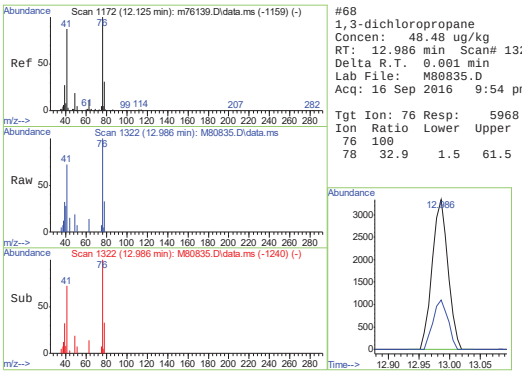
7



#67
tetrachloroethene
Concen: 37.87 ug/kg
RT: 12.945 min Scan# 1316
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:166 Resp: 4301

Ion	Ratio	Lower	Upper
166	100		
168	47.0	16.7	76.7
129	85.3	38.7	98.7

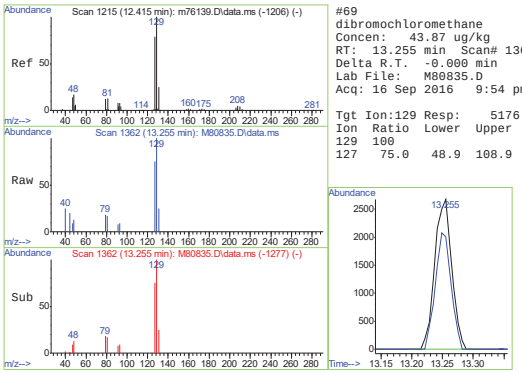


#68
1,3-dichloropropane
Concen: 48.48 ug/kg
RT: 12.986 min Scan# 1322
Delta R.T. 0.001 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 76 Resp: 5968

Ion	Ratio	Lower	Upper
76	100		
78	32.9	1.5	61.5

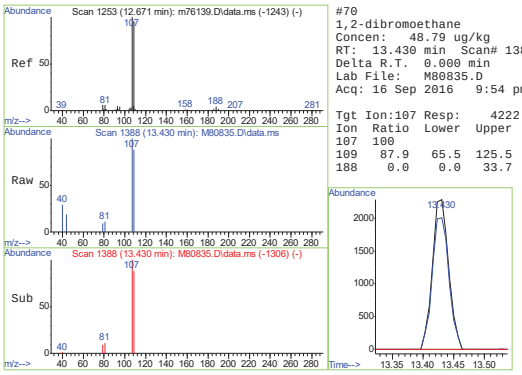
7.4.2 7



#69
dibromochloromethane
Concen: 43.87 ug/kg
RT: 13.255 min Scan# 1362
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:129 Resp: 5176

Ion	Ratio	Lower	Upper
129	100		
127	75.0	48.9	108.9

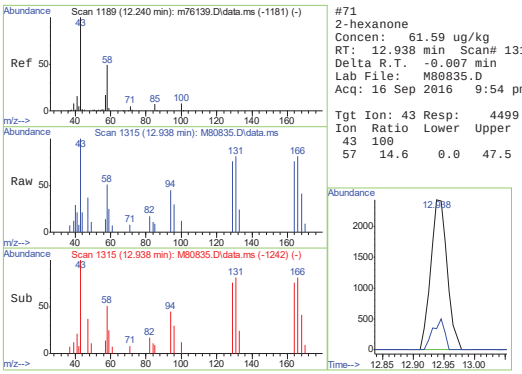


#70
1,2-dibromoethane
Concen: 48.79 ug/kg
RT: 13.430 min Scan# 1388
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:107 Resp: 4222

Ion	Ratio	Lower	Upper
107	100		
109	87.9	65.5	125.5
188	0.0	0.0	33.7

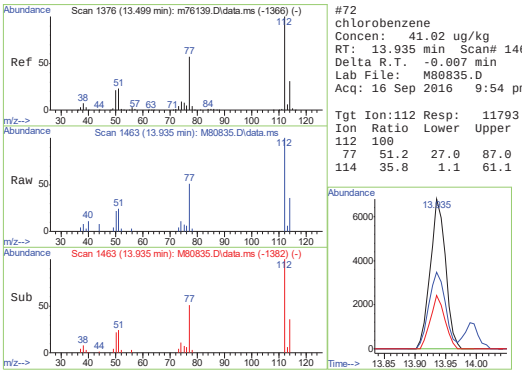
7.4.2 7



#71
2-hexanone
Concen: 61.59 ug/kg
RT: 12.938 min Scan# 1315
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 43 Resp: 4499

Ion	Ratio	Lower	Upper
43	100		
57	14.6	0.0	47.5

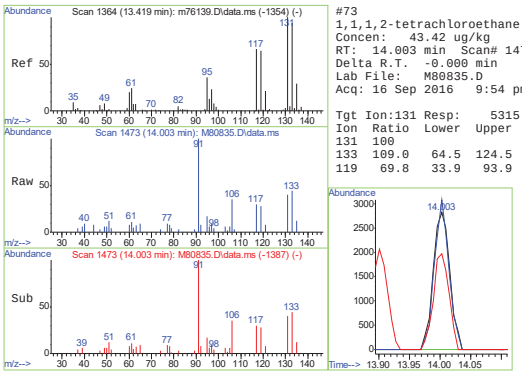


#72
chlorobenzene
Concen: 41.02 ug/kg
RT: 13.935 min Scan# 1463
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:112 Resp: 11793

Ion	Ratio	Lower	Upper
112	100		
77	51.2	27.0	87.0
114	35.8	1.1	61.1

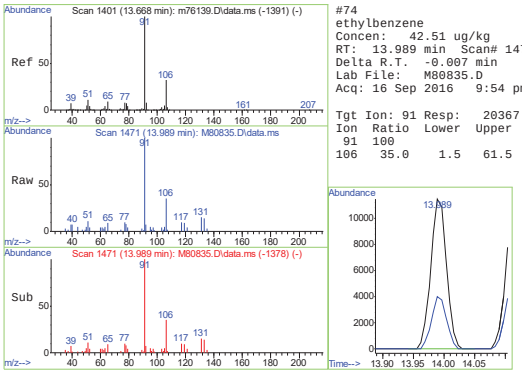
7.4.2 7



#73
1,1,1,2-tetrachloroethane
Concen: 43.42 ug/kg
RT: 14.003 min Scan# 1473
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:131 Resp: 5315

Ion	Ratio	Lower	Upper
131	100		
133	109.0	64.5	124.5
119	69.8	33.9	93.9

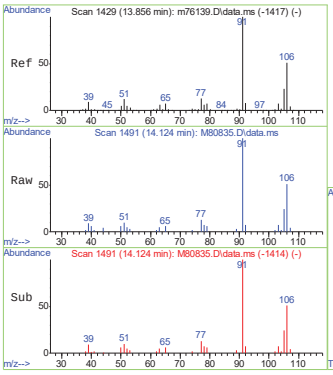


#74
ethylbenzene
Concen: 42.51 ug/kg
RT: 13.989 min Scan# 1471
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 91 Resp: 20367

Ion	Ratio	Lower	Upper
91	100		
106	35.0	1.5	61.5

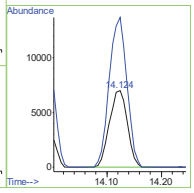
7.4.2 7



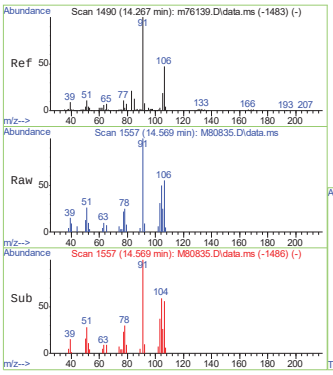
#75
m,p-xylene
Concen: 83.55 ug/kg
RT: 14.124 min Scan# 1491
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:106 Resp: 16090

Ion	Ratio	Lower	Upper
106	100		
91	195.9	167.6	227.6



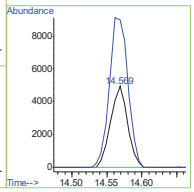
7.4.2 7

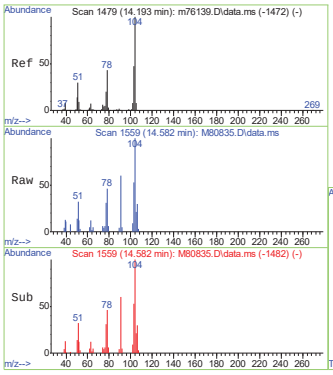


#76
o-xylene
Concen: 42.27 ug/kg
RT: 14.569 min Scan# 1557
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:106 Resp: 8347

Ion	Ratio	Lower	Upper
106	100		
91	182.2	182.1	242.1

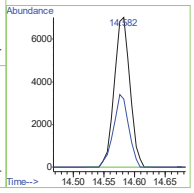




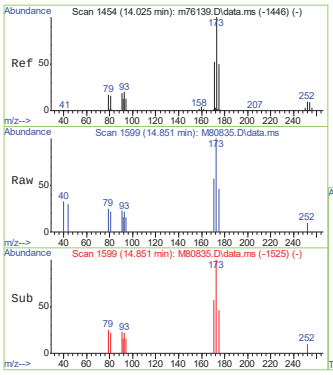
#77
styrene
Concen: 40.34 ug/kg
RT: 14.582 min Scan# 1559
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:104 Resp: 12521

Ion	Ratio	Lower	Upper
104	100		
78	45.5	12.6	72.6



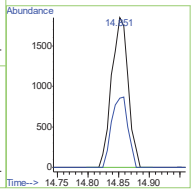
7.4.2 7

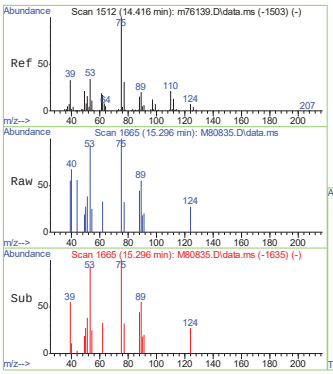


#78
bromoform
Concen: 46.36 ug/kg
RT: 14.851 min Scan# 1599
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:173 Resp: 3481

Ion	Ratio	Lower	Upper
173	100		
175	46.3	20.1	80.1

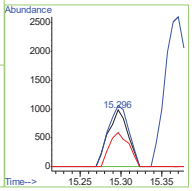




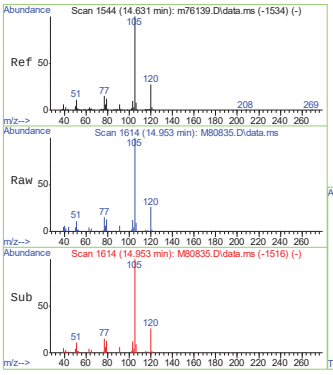
#79
trans-1,4-dichloro-2-butene
Concen: 48.09 ug/kg
RT: 15.296 min Scan# 1665
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 53 Resp: 1657

Ion	Ratio	Lower	Upper
53	100		
75	108.5	265.2	325.2#
89	59.8	29.5	89.5



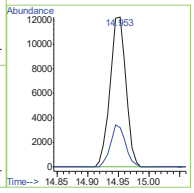
7.4.2 7

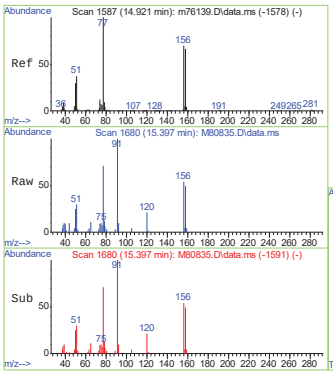


#81
isopropylbenzene
Concen: 44.42 ug/kg
RT: 14.953 min Scan# 1614
Delta R.T. 0.001 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:105 Resp: 21966

Ion	Ratio	Lower	Upper
105	100		
120	26.1	0.0	56.7

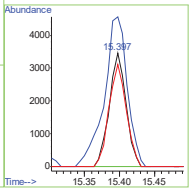




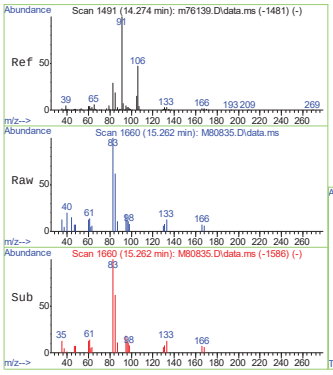
#83
bromobenzene
Concen: 45.76 ug/kg
RT: 15.397 min Scan# 1680
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:156 Resp: 5791

Ion	Ratio	Lower	Upper
156	100		
77	131.7	112.6	172.6
158	89.7	64.1	124.1



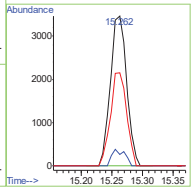
7.4.2 7

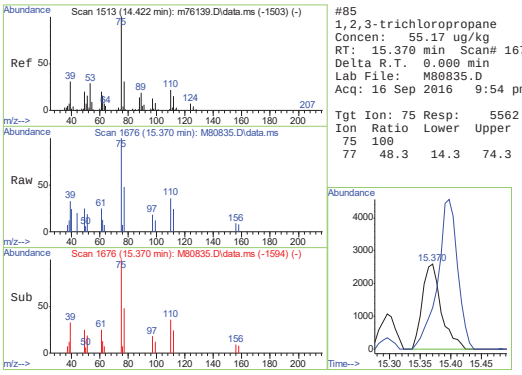


#84
1,1,2,2-tetrachloroethane
Concen: 53.87 ug/kg
RT: 15.262 min Scan# 1660
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 83 Resp: 6392

Ion	Ratio	Lower	Upper
83	100		
131	7.6	0.0	40.1
85	62.1	34.2	94.2

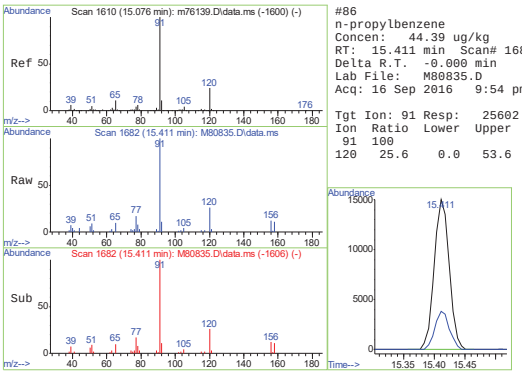




#85
1,2,3-trichloropropane
Concen: 55.17 ug/kg
RT: 15.370 min Scan# 1676
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 75 Resp: 5562

Ion	Ratio	Lower	Upper
75	100		
77	48.3	14.3	74.3

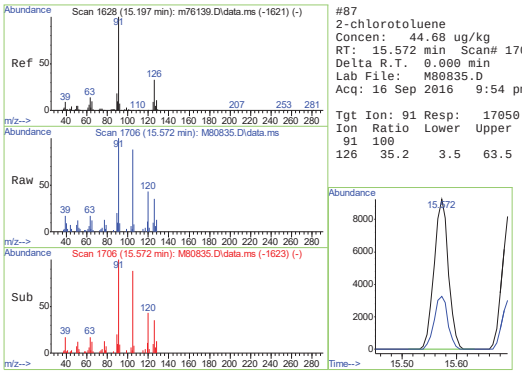


#86
n-propylbenzene
Concen: 44.39 ug/kg
RT: 15.411 min Scan# 1682
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 91 Resp: 25602

Ion	Ratio	Lower	Upper
91	100		
120	25.6	0.0	53.6

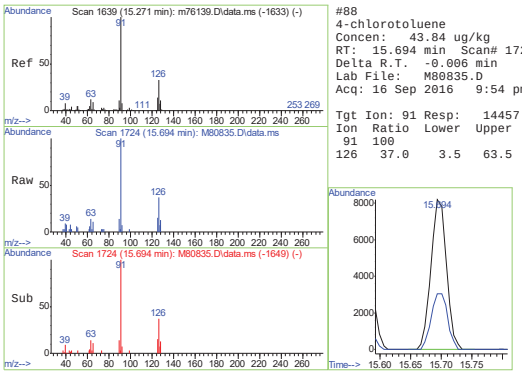
7.4.2 7



#87
2-chlorotoluene
Concen: 44.68 ug/kg
RT: 15.572 min Scan# 1706
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 91 Resp: 17050

Ion	Ratio	Lower	Upper
91	100		
126	35.2	3.5	63.5

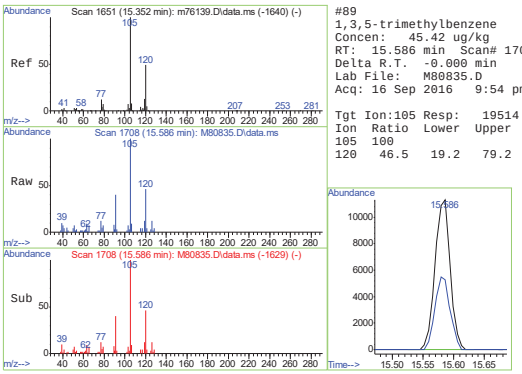


#88
4-chlorotoluene
Concen: 43.84 ug/kg
RT: 15.694 min Scan# 1724
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 91 Resp: 14457

Ion	Ratio	Lower	Upper
91	100		
126	37.0	3.5	63.5

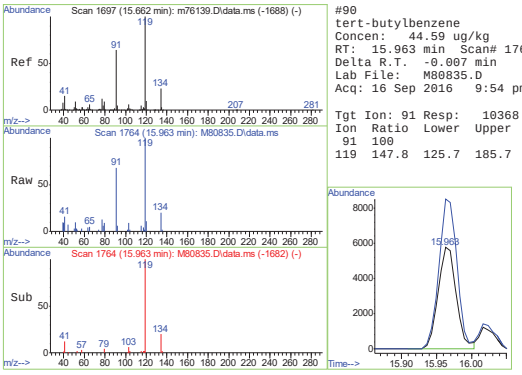
7.4.2 7



#89
1,3,5-trimethylbenzene
Concen: 45.42 ug/kg
RT: 15.586 min Scan# 1708
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:105 Resp: 19514

Ion	Ratio	Lower	Upper
105	100		
120	46.5	19.2	79.2

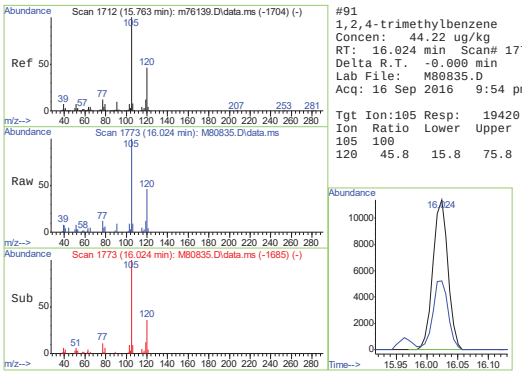


#90
tert-butylbenzene
Concen: 44.59 ug/kg
RT: 15.963 min Scan# 1764
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 91 Resp: 10368

Ion	Ratio	Lower	Upper
91	100		
119	147.8	125.7	185.7

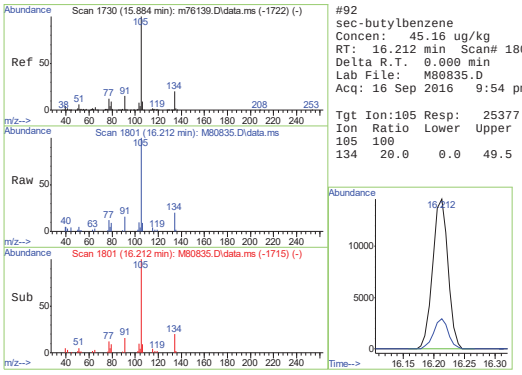
7.4.2 7



#91
1,2,4-trimethylbenzene
Concen: 44.22 ug/kg
RT: 16.024 min Scan# 1773
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:105 Resp: 19420

Ion	Ratio	Lower	Upper
105	100		
120	45.8	15.8	75.8

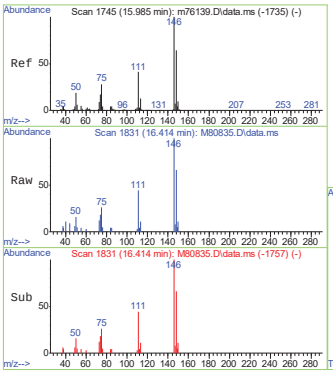


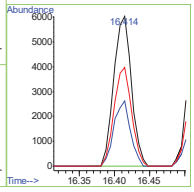
#92
sec-butylbenzene
Concen: 45.16 ug/kg
RT: 16.212 min Scan# 1801
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:105 Resp: 25377

Ion	Ratio	Lower	Upper
105	100		
134	20.0	0.0	49.5

7.4.2 7

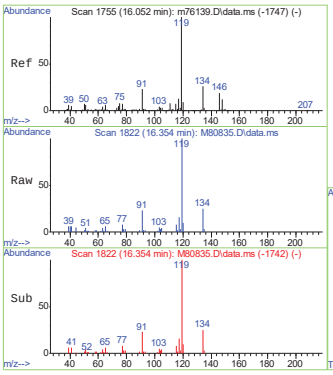


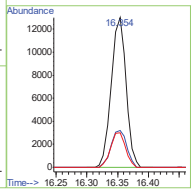


#93
1,3-dichlorobenzene
Concen: 41.75 ug/kg
RT: 16.414 min Scan# 1831
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:146 Resp: 10696

Ion	Ratio	Lower	Upper
146	100		
111	43.7	10.5	70.5
148	66.1	34.3	94.3



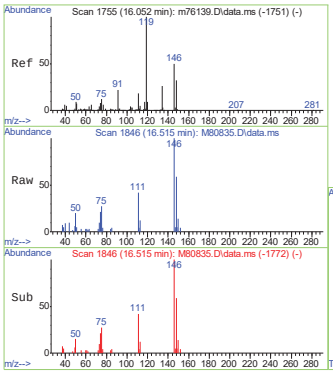


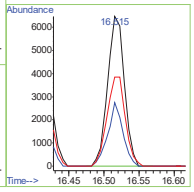
#94
p-isopropyltoluene
Concen: 44.39 ug/kg
RT: 16.354 min Scan# 1822
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:119 Resp: 21889

Ion	Ratio	Lower	Upper
119	100		
134	24.6	0.0	56.2
91	23.0	0.0	52.6

7.4.2 7

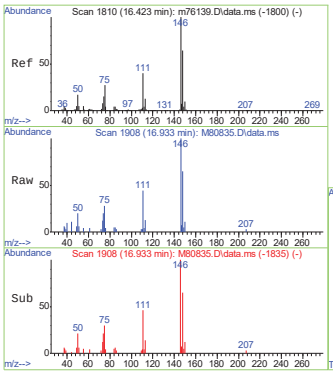


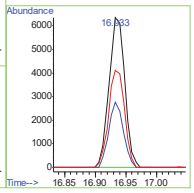


#95
1,4-dichlorobenzene
Concen: 41.28 ug/kg
RT: 16.515 min Scan# 1846
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:146 Resp: 10803

Ion	Ratio	Lower	Upper
146	100		
111	42.5	7.1	67.1
148	59.3	33.9	93.9



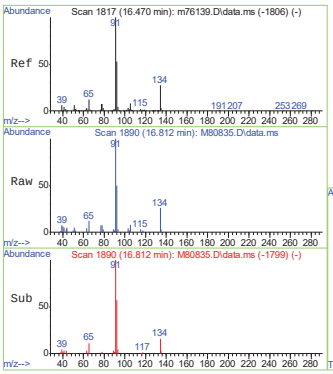


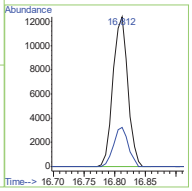
#96
1,2-dichlorobenzene
Concen: 44.11 ug/kg
RT: 16.933 min Scan# 1908
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:146 Resp: 11314

Ion	Ratio	Lower	Upper
146	100		
111	43.7	9.7	69.7
148	65.0	33.9	93.9

7.4.2 7

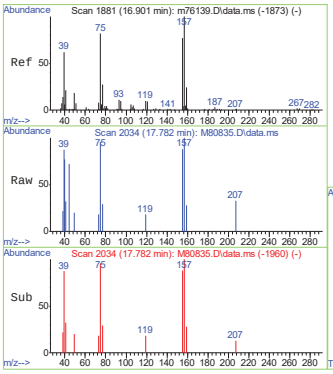


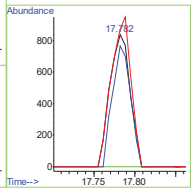


#97
n-butylbenzene
Concen: 46.44 ug/kg
RT: 16.812 min Scan# 1890
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 91 Resp: 20887

Ion	Ratio	Lower	Upper
91	100		
134	26.1	0.0	56.8



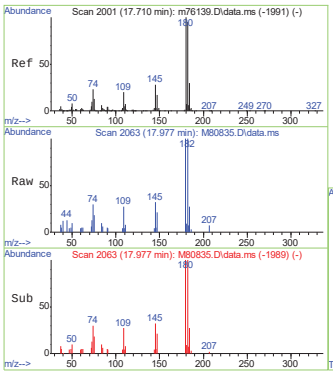


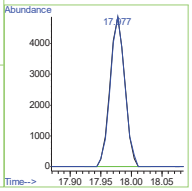
#98
1,2-dibromo-3-chloropropane
Concen: 55.56 ug/kg
RT: 17.782 min Scan# 2034
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion: 75 Resp: 1454

Ion	Ratio	Lower	Upper
75	100		
155	91.6	64.1	124.1
157	104.7	91.5	151.5

7.4.2 7

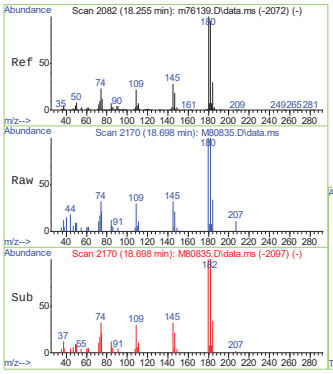


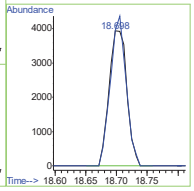


#99
1,3,5-trichlorobenzene
Concen: 45.31 ug/kg
RT: 17.977 min Scan# 2063
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:180 Resp: 8117

Ion	Ratio	Lower	Upper
180	100		
182	99.1	76.1	114.1



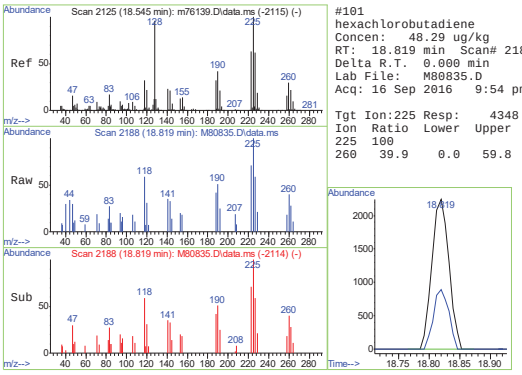


#100
1,2,4-trichlorobenzene
Concen: 41.36 ug/kg
RT: 18.698 min Scan# 2170
Delta R.T. -0.007 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:180 Resp: 7943

Ion	Ratio	Lower	Upper
180	100		
182	100.5	64.9	124.9

7.4.2 7

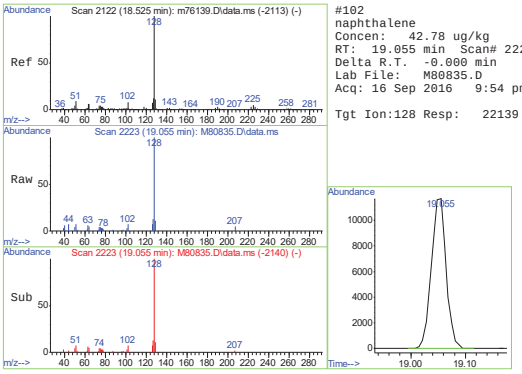


#101
hexachlorobutadiene
Concen: 48.29 ug/kg
RT: 18.819 min Scan# 2188
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:225 Resp: 4348

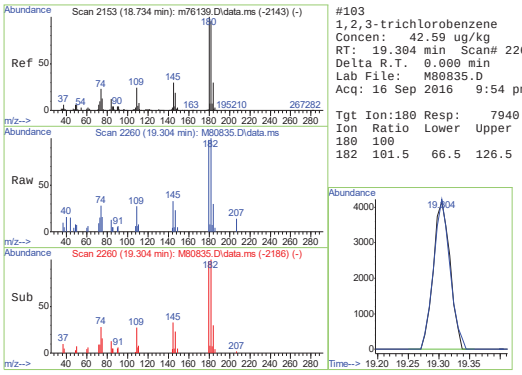
Ion	Ratio	Lower	Upper
225	100		
260	39.9	0.0	59.8

7.4.2 7



#102
naphthalene
Concen: 42.78 ug/kg
RT: 19.055 min Scan# 2223
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:128 Resp: 22139

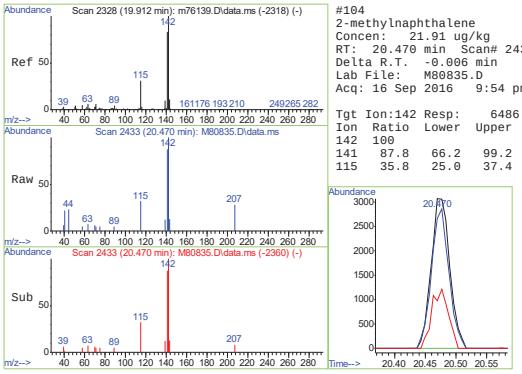


#103
1,2,3-trichlorobenzene
Concen: 42.59 ug/kg
RT: 19.304 min Scan# 2260
Delta R.T. 0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:180 Resp: 7940

Ion	Ratio	Lower	Upper
180	100		
182	101.5	66.5	126.5

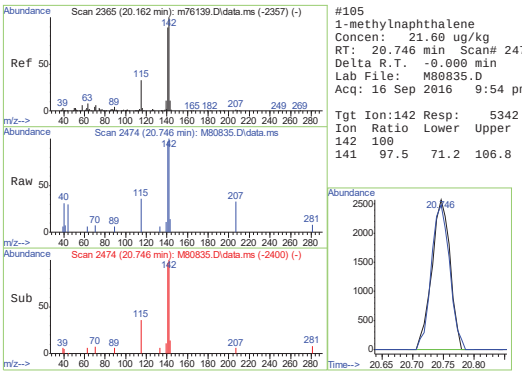
7.4.2 7



#104
2-methylnaphthalene
Concen: 21.91 ug/kg
RT: 20.470 min Scan# 2433
Delta R.T. -0.006 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:142 Resp: 6486

Ion	Ratio	Lower	Upper
142	100		
141	87.8	66.2	99.2
115	35.8	25.0	37.4



#105
1-methylnaphthalene
Concen: 21.60 ug/kg
RT: 20.746 min Scan# 2474
Delta R.T. -0.000 min
Lab File: M80835.D
Acq: 16 Sep 2016 9:54 pm

Tgt Ion:142 Resp: 5342

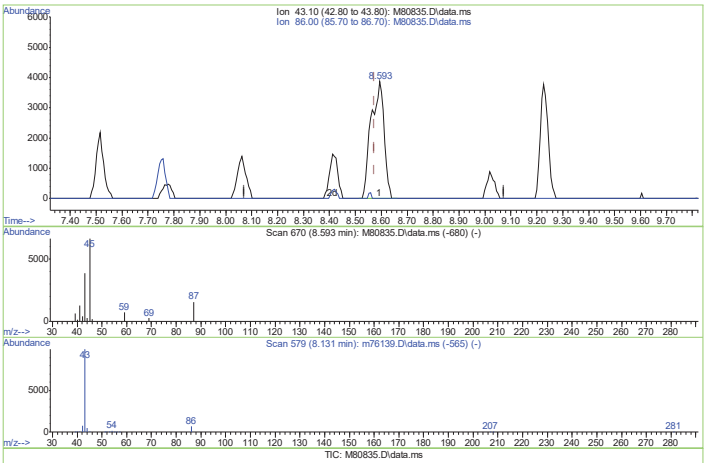
Ion	Ratio	Lower	Upper
142	100		
141	97.5	71.2	106.8

7.4.2 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80835.D
Acq On : 16 Sep 2016 9:54 pm
Operator : kaylap
Sample : mc47774-2msd
Misc : MS37330,MSM2895,5.47,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:48:28 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



7.4.2.1 7

(26) vinyl acetate (P)
8.593min (+ 0.020) 63.26 ug/kg
response 13489

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

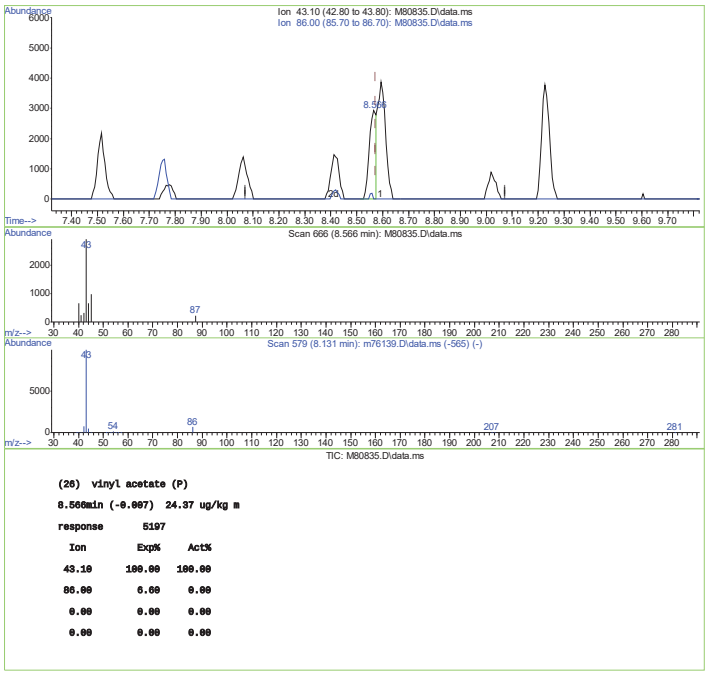
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80835.D
Acq On : 16 Sep 2016 9:54 pm
Operator : kaylap
Sample : mc47774-2msd
Misc : MS37330,MSM2895,5.47,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:48:28 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.4.2.2

7



(26) vinyl acetate (P)

8.566min (-0.007) 24.37 ug/kg m

response 5197

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/23/16 16:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:13:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.891	65	86895	500.00 ug/kg	#-0.02
4) pentafluorobenzene	8.929	168	176110	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.825	114	293495	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.070	82	130302	50.00 ug/kg	0.00
82) 1,4-dichlorobenzene-d4	15.679	152	87865	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.983	113	108224	42.77 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 85.54%		
61) toluene-d8 (s)	11.449	98	317142	47.47 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.94%		
84) bromofluorobenzene (s)	14.365	95	111118	59.63 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 119.26%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.012	59	154441	629.80 ug/kg#	40
3) Ethanol	5.768	45	42569m	3612.52 ug/kg	
5) dichlorodifluoromethane	3.937	85	105423m	37.25 ug/kg	
6) chloromethane	4.276	50	85401	49.54 ug/kg	91
7) vinyl chloride	4.582	62	104974	43.18 ug/kg	95
8) bromomethane	5.100	96	38719	33.18 ug/kg#	69
9) chloroethane	5.386	64	61227m	38.40 ug/kg	
10) dichlorofluoromethane	5.665	67	252138m	48.57 ug/kg	
11) ethyl ether	5.932	59	92184	40.98 ug/kg	90
12) acetonitrile	6.684	41	7587m	31.56 ug/kg	
13) trichlorofluoromethane	5.779	101	200343	43.81 ug/kg	96
14) freon-113	6.479	101	64716m	38.91 ug/kg	
16) 1,1-dichloroethene	6.486	96	96742m	44.24 ug/kg	
17) acetone	6.347	58	76106	114.01 ug/kg#	78
18) Methyl Acetate	6.710	43	99324	46.55 ug/kg#	86
19) methylene chloride	7.031	84	154347	56.23 ug/kg	98
20) methyl tert butyl ether	7.259	73	334467	45.44 ug/kg	95
21) acrylonitrile	7.202	53	39454	27.64 ug/kg	76
22) allyl chloride	6.775	41	120024	39.22 ug/kg	46
23) trans-1,2-dichloroethene	7.292	96	92970	39.02 ug/kg	82
24) iodomethane	6.648	142	141191	40.91 ug/kg	92
25) carbon disulfide	6.705	76	103660	42.67 ug/kg	97
26) propionitrile	8.467	54	14991	26.59 ug/kg	100
27) vinyl acetate	7.592	86	12974	38.32 ug/kg#	1
28) chloroprene	7.896	53	166331	34.13 ug/kg	88
29) di-isopropyl ether	7.774	45	343042	39.50 ug/kg	93
30) methacrylonitrile	8.636	41	30439	17.19 ug/kg	84
31) 2-butanone	8.389	72	23118	54.22 ug/kg#	68
32) Hexane	7.592	41	74964	31.08 ug/kg	81
33) 1,1-dichloroethane	7.807	63	205330	40.23 ug/kg	98
34) tert-butyl ethyl ether	8.198	59	374509	41.51 ug/kg	90
36) 2,2-dichloropropane	8.494	77	109814	37.23 ug/kg	98
37) cis-1,2-dichloroethene	8.454	96	131184	46.58 ug/kg	89
39) bromochloromethane	8.734	128	62576	44.69 ug/kg	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:13:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) chloroform	8.803	83	215577	42.39 ug/kg	99
42) Tetrahydrofuran	8.756	42	33661	33.46 ug/kg	99
43) 1,1,1-trichloroethane	9.059	97	173569	42.19 ug/kg	98
45) Cyclohexane	9.169	56	155606	36.80 ug/kg	89
46) carbon tetrachloride	9.247	117	162191	46.94 ug/kg	94
47) 1,1-dichloropropene	9.211	75	142268	45.50 ug/kg	87
48) benzene	9.448	78	385342	48.01 ug/kg	98
49) 1,2-dichloroethane	9.471	62	192372	43.61 ug/kg	97
50) tert-amyl methyl ether	9.507	73	303342	47.48 ug/kg	95
51) heptane	9.665	43	76970	24.81 ug/kg	79
52) trichloroethene	10.132	95	147018	57.96 ug/kg	82
53) 1,2-dichloropropane	10.420	63	115003	44.85 ug/kg	98
54) dibromomethane	10.529	93	77893	42.56 ug/kg	91
55) bromodichloromethane	10.673	83	141378	44.09 ug/kg	95
56) Methylcyclohexane	10.433	83	135517	40.68 ug/kg	89
57) 2-chloroethyl vinyl ether	10.895	63	53292	39.86 ug/kg#	100
58) methyl methacrylate	10.353	69	93911	60.26 ug/kg	84
59) 1,4-dioxane	10.491	88	6320m	242.69 ug/kg	
60) cis-1,3-dichloropropene	11.129	75	127949	35.47 ug/kg	87
62) 4-methyl-2-pentanone	11.219	43	100984	35.51 ug/kg	81
63) toluene	11.527	92	243963	44.40 ug/kg	97
64) trans-1,3-dichloropropene	11.714	75	104372	32.01 ug/kg	96
65) 1,1,2-trichloroethane	11.953	83	74241	42.39 ug/kg	94
66) ethyl methacrylate	11.690	69	7884	2.95 ug/kg	91
68) tetrachloroethene	12.112	166	98410	56.31 ug/kg	94
69) 1,3-dichloropropane	12.146	76	144717	50.79 ug/kg	95
70) dibromochloromethane	12.417	129	95329	42.49 ug/kg	95
71) 1,2-dibromoethane	12.590	107	88702	47.80 ug/kg	88
72) 2-hexanone	12.110	43	97904	49.91 ug/kg	87
73) chlorobenzene	13.105	112	254462	46.37 ug/kg	94
74) 1,1,1,2-tetrachloroethane	13.176	131	110057	51.56 ug/kg	94
75) ethylbenzene	13.167	91	465754	51.26 ug/kg	90
76) m,p-xylene	13.299	106	322213	102.94 ug/kg#	70
77) o-xylene	13.745	106	160385	49.24 ug/kg#	70
78) styrene	13.758	104	239924	45.28 ug/kg	86
79) bromoform	14.025	173	47968	40.06 ug/kg	89
81) trans-1,4-dichloro-2-b...	14.479	53	25995m	25.80 ug/kg	
83) isopropylbenzene	14.133	105	412023	61.15 ug/kg	99
85) bromobenzene	14.571	156	94133	57.19 ug/kg	86
86) 1,1,2,2-tetrachloroethane	14.442	83	75339	36.89 ug/kg	94
87) 1,2,3-trichloropropane	14.547	75	106881	56.94 ug/kg#	1
88) n-propylbenzene	14.599	91	479572	56.08 ug/kg	93
89) 2-chlorotoluene	14.754	91	328567	55.89 ug/kg	91
90) 4-chlorotoluene	14.878	91	282502	52.74 ug/kg	94
91) 1,3,5-trimethylbenzene	14.773	105	339516	59.52 ug/kg	99
92) tert-butylbenzene	15.157	91	194126	52.58 ug/kg	82
93) 1,2,4-trimethylbenzene	15.214	105	330693	55.21 ug/kg	97
94) sec-butylbenzene	15.404	105	355288	47.81 ug/kg	100
95) 1,3-dichlorobenzene	15.600	146	151119	44.88 ug/kg	94
96) p-isopropyltoluene	15.551	119	309886	49.01 ug/kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:13:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97) 1,4-dichlorobenzene	15.708	146	148558	42.81 ug/kg	94
98) 1,2-dichlorobenzene	16.124	146	141130	41.05 ug/kg	99
99) n-butylbenzene	16.012	91	272355	40.68 ug/kg	94
100) 1,2-dibromo-3-chloropr...	16.978	75	19059	40.62 ug/kg#	73
101) 1,3,5-trichlorobenzene	17.184	180	65220	30.83 ug/kg	100
102) 1,2,4-trichlorobenzene	17.917	180	52822	24.42 ug/kg	96
103) hexachlorobutadiene	18.043	225	23730	23.07 ug/kg	95
104) naphthalene	18.266	128	140109	20.18 ug/kg	100
105) 1,2,3-trichlorobenzene	18.528	180	41301	19.60 ug/kg	91
106) 2-methylnaphthalene	19.746	142	25131	6.30 ug/kg	93
107) 1-methylnaphthalene	20.030	142	22607	5.94 ug/kg	95

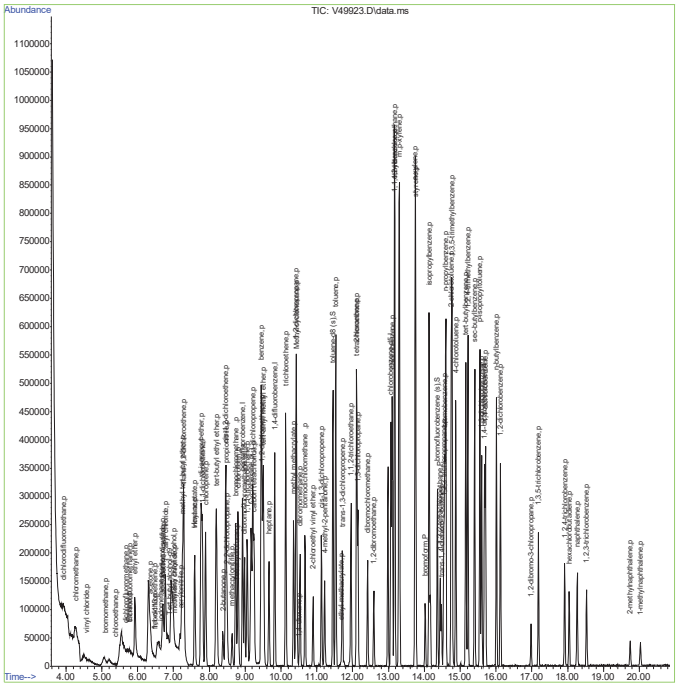
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:13:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3

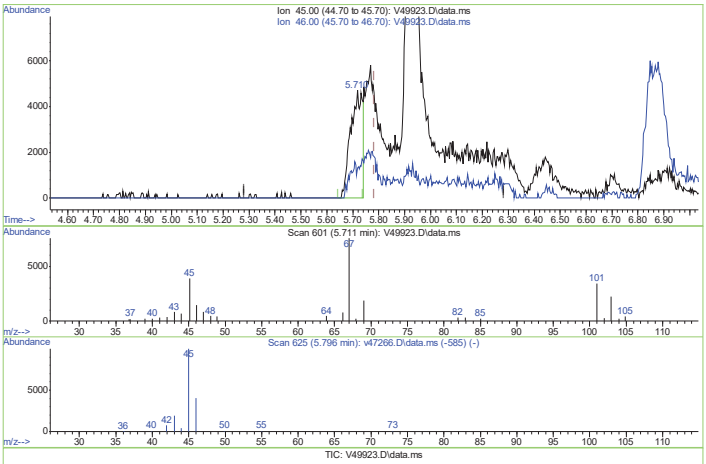


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.1



(3) Ethanol (p)
5.710min (-0.073) 1247.57 ug/kg
response 14701

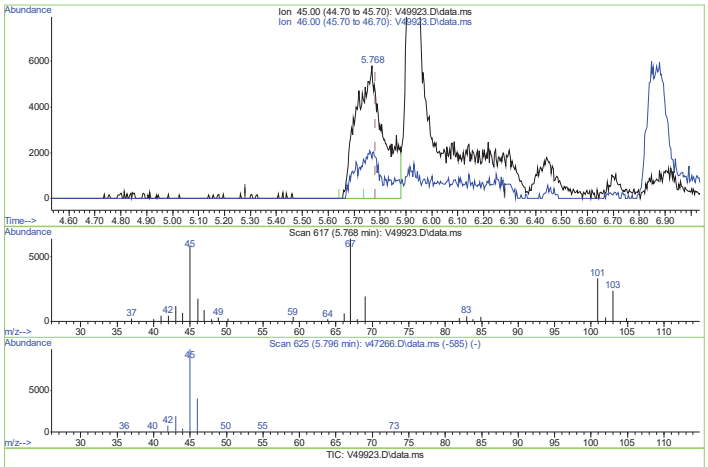
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	34.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.2



(3) Ethanol (p)
5.768min (-0.015) 3812.52 ug/kg m
response 42569

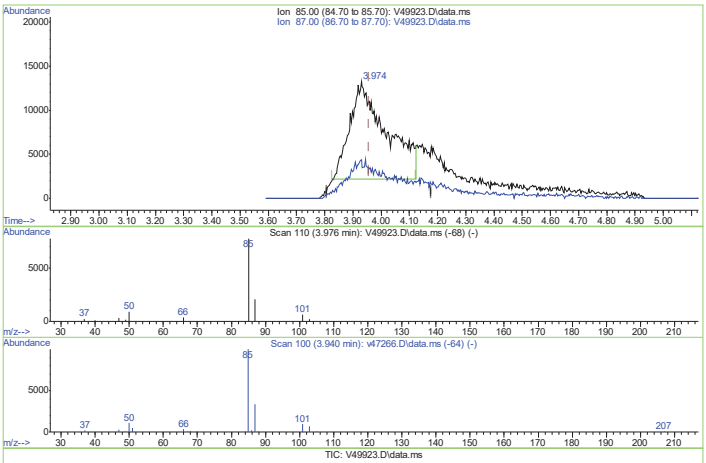
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	34.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.3



(5) dichlorodifluoromethane (p)
3.974min (+ 0.016) 35.06 ug/kg
response 99216

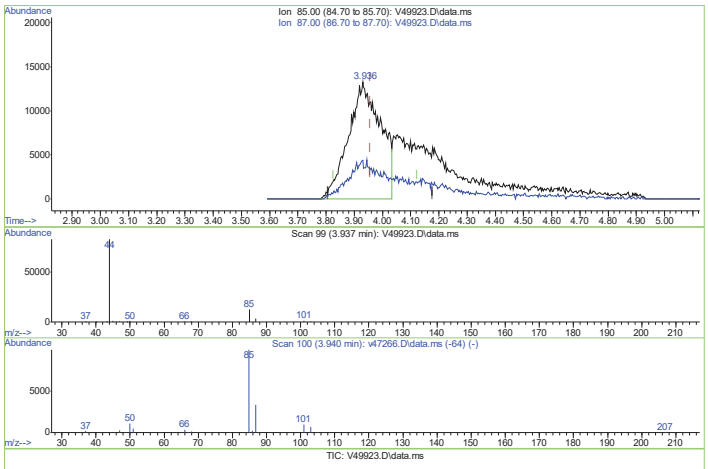
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	26.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.4



(5) dichlorodifluoromethane (p)
3.937min (-0.021) 37.25 ug/kg m
response 105423

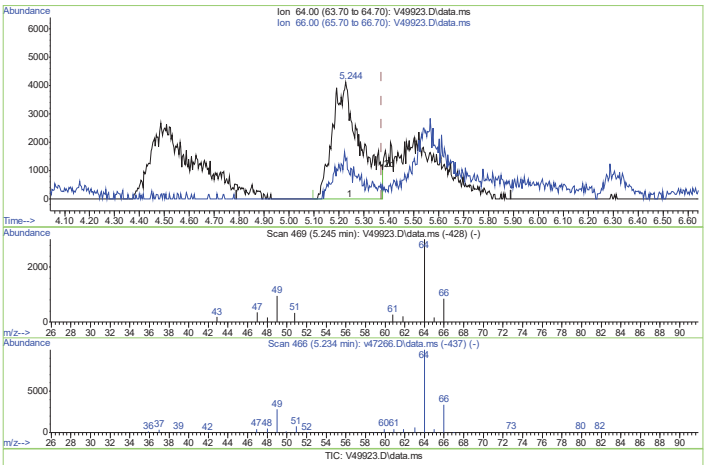
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	28.60
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.5



(9) chloroethane (p)
5.244min (-0.128) 20.01 ug/kg
response 31910

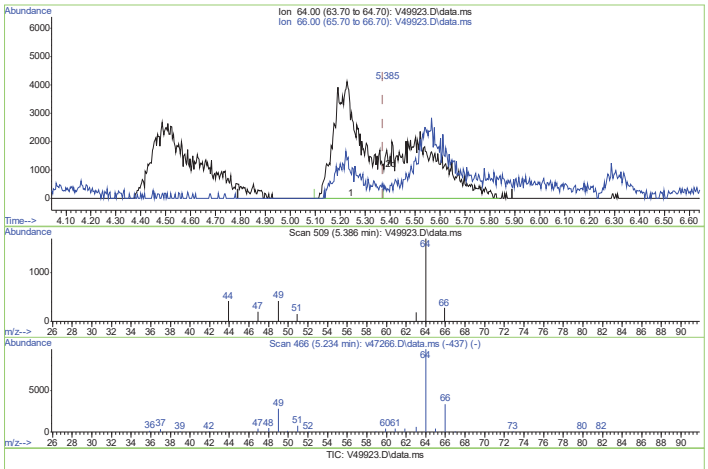
Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.00	27.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.6



(9) chloroethane (p)
5.386min (+ 0.014) 38.40 ug/kg m
response 61227

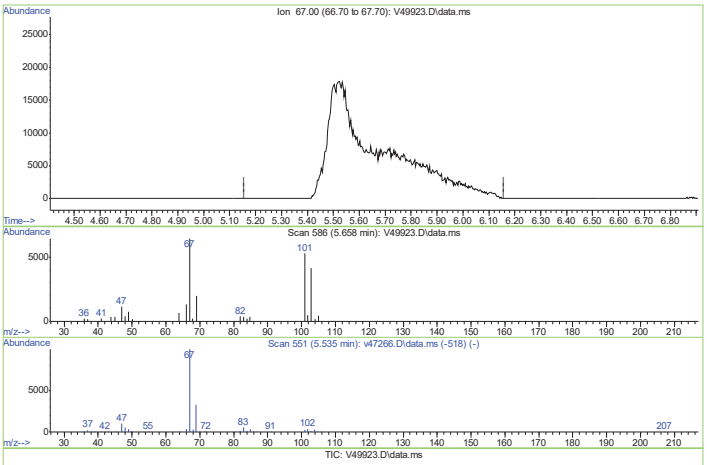
Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	16.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.7



(10) dichlorofluoromethane (p)
5.658min (-5.658) 0.00 ug/kg
response 0

Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

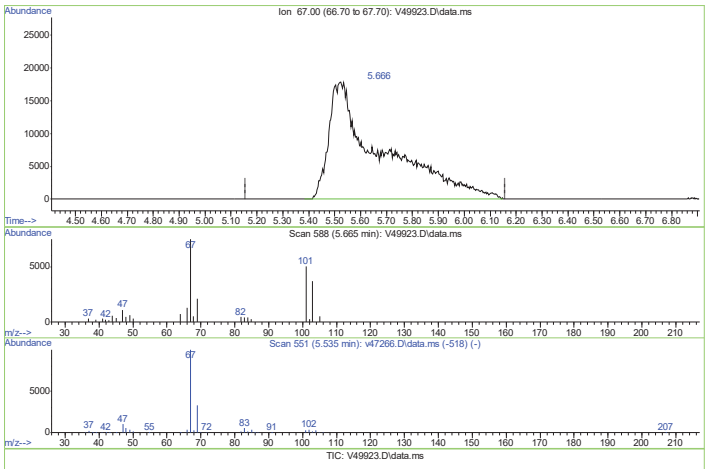
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.8

7



(10) dichlorofluoromethane (p)

5.665min (+ 0.007) 48.57 ug/kg m

response 252138

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

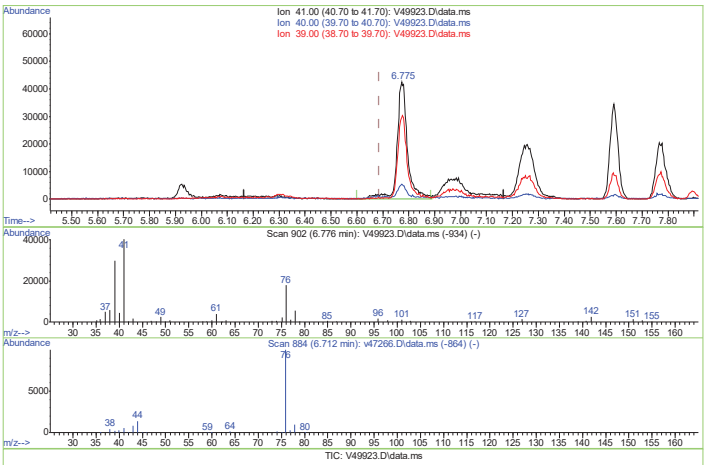
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.9

7



(12) acetonitrile (p)

6.775min (+ 0.088) 632.68 ug/kg

response 120024

Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.00	11.79#
39.00	51.50	73.54
0.00	0.00	0.00

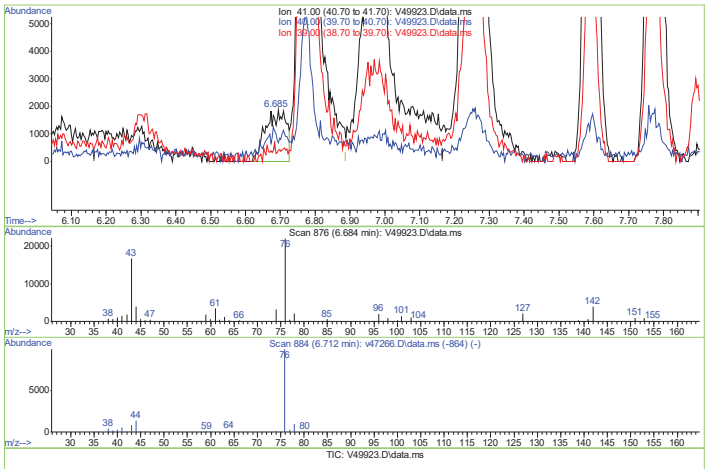
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.10

7



(12) acetonitrile (p)

6.684min (-0.003) 31.58 ug/kg m

response 7587

Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.00	71.65
39.00	51.50	41.39
0.00	0.00	0.00

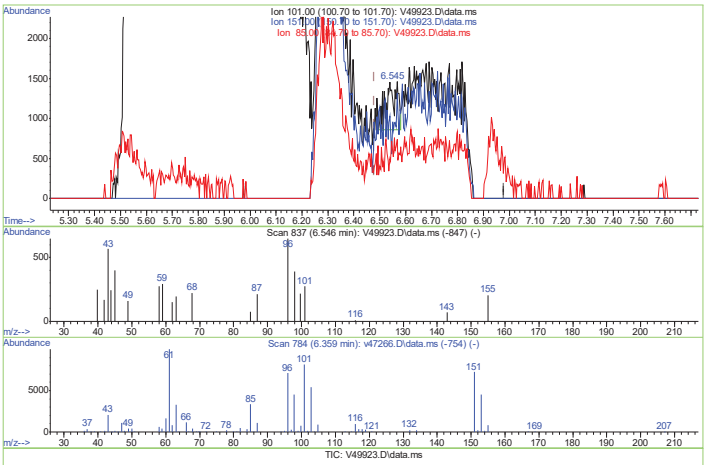
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.11

7



(14) freon-113 (p)

6.545min (+ 0.066) 1.05 ug/kg

response 1747

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	0.00#
85.00	41.30	85.23#
0.00	0.00	0.00

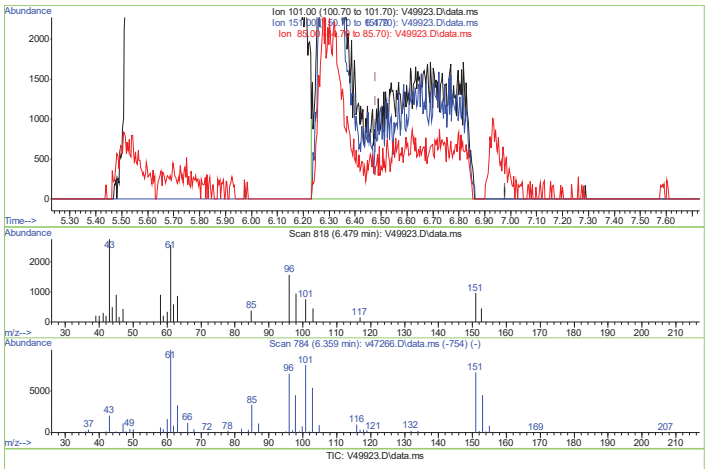
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.12

7



(14) freon-113 (p)
6.479min (-0.000) 38.91 ug/kg m
response 64716

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	127.43#
85.00	41.30	51.13
0.00	0.00	0.00

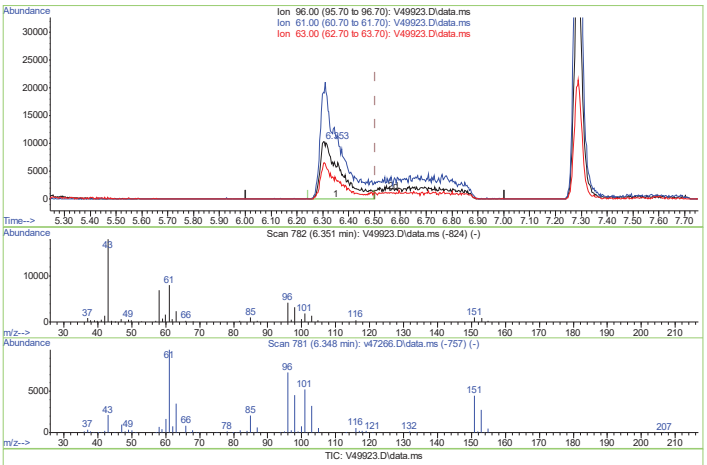
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.13

7



(16) 1,1-dichloroethene (p)
6.353min (-0.150) 26.93 ug/kg
response 57711

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	192.19
63.00	57.50	60.59
0.00	0.00	0.00

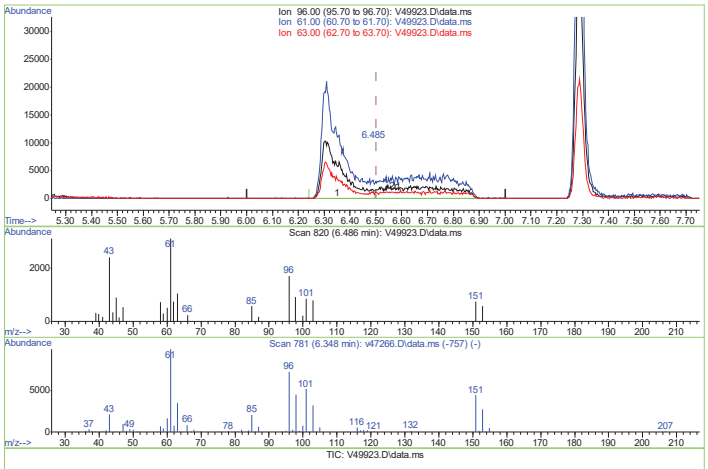
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.14

7



(16) 1,1-dichloroethene (p)
6.486min (-0.017) 44.24 ug/kg m
response 96742

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	181.69
63.00	57.50	61.62
0.00	0.00	0.00

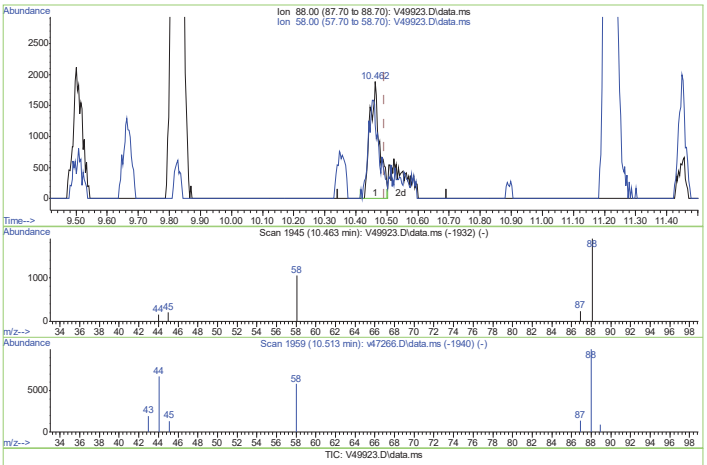
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.15

7



(59) 1,4-dioxane (p)
10.462min (-0.030) 159.25 ug/kg
response 4147

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.80	55.26#
0.00	0.00	0.00
0.00	0.00	0.00

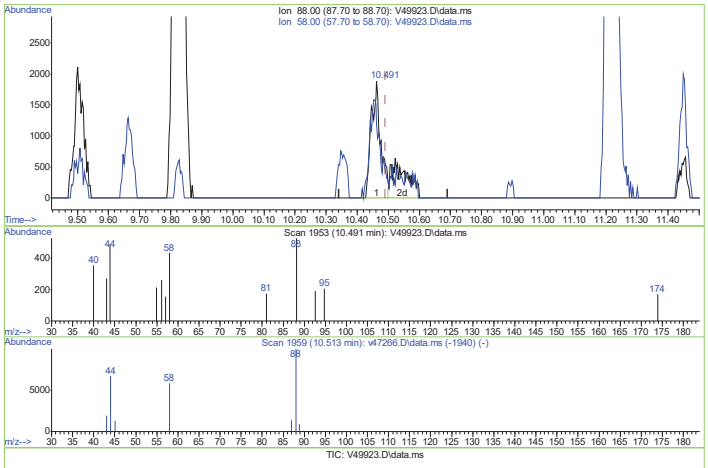
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.16

7



(59) 1,4-dioxane (p)

10.491min (-0.001) 242.60 ug/kg m

response 6320

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.00	82.16#
0.00	0.00	0.00
0.00	0.00	0.00

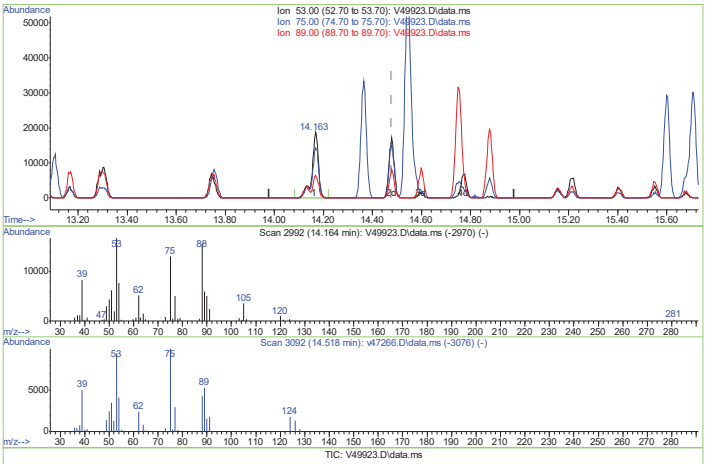
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.17

7



(81) trans-1,4-dichloro-2-butene (p)

14.163min (-0.316) 34.95 ug/kg

response 35211

Ion	Exp%	Act%
53.00	100.00	100.00
75.00	48.10	78.02
89.00	36.50	35.63
0.00	0.00	0.00

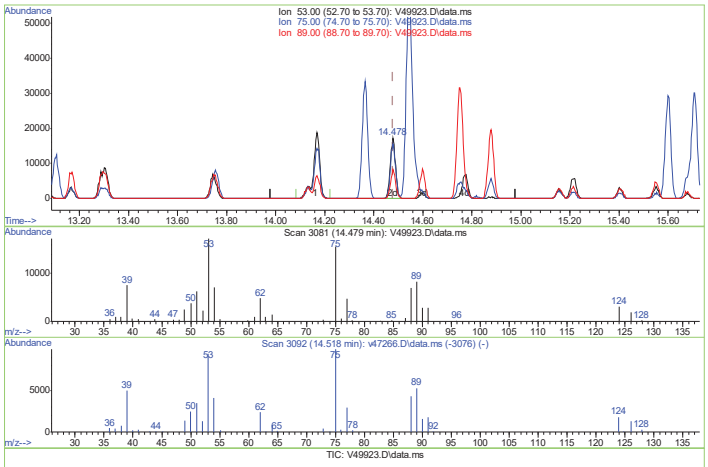
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49923.D
Acq On : 20 Sep 2016 7:58 pm
Operator : kaylap
Sample : mc47776-1ms
Misc : MS37347,MSV1838,5.596,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 21 20:09:44 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.3.18

7



(81) trans-1,4-dichloro-2-butene (p)

14.479min (-0.000) 25.80 ug/kg m

response 25995

Ion	Exp%	Act%
53.00	100.00	100.00
75.00	48.10	90.32#
89.00	36.50	48.20
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda
09/23/16 16:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:16:55 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.934	65	138737	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.929	168	180890	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.826	114	309513	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.070	82	152938	50.00 ug/kg	0.00
82) 1,4-dichlorobenzene-d4	15.679	152	148837	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.984	113	114478	44.04 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 88.08%		
61) toluene-d8 (s)	11.449	98	343616	48.77 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.54%		
84) bromofluorobenzene (s)	14.365	95	151069	47.86 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.72%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.016	59	185621	474.76 ug/kg#	36
3) Ethanol	5.779	45	57927	3078.93 ug/kg	94
5) dichlorodifluoromethane	3.958	85	112167m	38.59 ug/kg	
6) chloromethane	4.279	50	84352	47.64 ug/kg	95
7) vinyl chloride	4.578	62	93949	37.74 ug/kg	90
8) bromomethane	5.100	96	33191	27.90 ug/kg	100
9) chloroethane	5.388	64	54839	33.48 ug/kg	88
10) dichlorofluoromethane	5.662	67	230905m	43.31 ug/kg	
11) ethyl ether	5.934	59	88483	38.30 ug/kg	94
12) acetonitrile	6.677	41	6556	25.12 ug/kg#	77
13) trichlorofluoromethane	5.789	101	173940m	37.24 ug/kg	
14) freon-113	6.468	101	52069m	30.48 ug/kg	
16) 1,1-dichloroethene	6.486	96	85474m	38.24 ug/kg	
17) acetone	6.340	58	76458	111.51 ug/kg	91
18) Methyl Acetate	6.712	43	127555	58.20 ug/kg#	82
19) methylene chloride	6.970	84	93633	33.21 ug/kg	95
20) methyl tert butyl ether	7.262	73	319389	42.24 ug/kg	97
21) acrylonitrile	7.204	53	47397	32.33 ug/kg#	56
22) allyl chloride	6.780	41	103936	33.07 ug/kg	70
23) trans-1,2-dichloroethene	7.293	96	84289	34.44 ug/kg	83
24) iodomethane	6.654	142	139571	39.37 ug/kg	100
25) carbon disulfide	6.707	76	88990	35.66 ug/kg	97
26) propionitrile	8.468	54	18485	31.92 ug/kg	100
27) vinyl acetate	7.594	86	10452	30.06 ug/kg#	1
28) chloroprene	7.896	53	153087	30.58 ug/kg	87
29) di-isopropyl ether	7.776	45	315735	35.39 ug/kg	92
30) methacrylonitrile	8.637	41	42405	23.31 ug/kg	89
31) 2-butanone	8.388	72	26322	60.10 ug/kg#	55
32) Hexane	7.593	41	58266	23.52 ug/kg	81
33) 1,1-dichloroethane	7.810	63	190830	36.41 ug/kg	99
34) tert-butyl ethyl ether	8.200	59	351669	37.94 ug/kg	91
36) 2,2-dichloropropane	8.491	77	94813	31.30 ug/kg	98
37) cis-1,2-dichloroethene	8.455	96	119151	41.19 ug/kg	85
39) bromochloromethane	8.735	128	57551	40.01 ug/kg	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:16:55 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4 7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) chloroform	8.804	83	197203	37.75 ug/kg	97
42) Tetrahydrofuran	8.755	42	37192	35.99 ug/kg	96
43) 1,1,1-trichloroethane	9.060	97	152626	36.12 ug/kg	97
45) Cyclohexane	9.169	56	122040	26.90 ug/kg	90
46) carbon tetrachloride	9.247	117	135557	37.20 ug/kg	94
47) 1,1-dichloropropene	9.211	75	127384	38.63 ug/kg	89
48) benzene	9.448	78	354217	41.84 ug/kg	97
49) 1,2-dichloroethane	9.472	62	182747	39.28 ug/kg	96
50) tert-amyl methyl ether	9.508	73	287542	42.67 ug/kg	95
51) heptane	9.665	43	66319	20.27 ug/kg	84
52) trichloroethene	10.132	95	137906	51.55 ug/kg	83
53) 1,2-dichloropropane	10.420	63	104686	38.72 ug/kg	99
54) dibromomethane	10.530	93	74338	38.51 ug/kg	97
55) bromodichloromethane	10.673	83	130172	38.50 ug/kg	98
56) Methylcyclohexane	10.433	83	102419	29.15 ug/kg	91
57) 2-chloroethyl vinyl ether	10.895	63	54207	38.45 ug/kg#	100
58) methyl methacrylate	10.353	69	103052	62.70 ug/kg	83
59) 1,4-dioxane	10.488	88	7515	273.65 ug/kg#	1
60) cis-1,3-dichloropropene	11.130	75	124884	32.89 ug/kg	91
62) 4-methyl-2-pentanone	11.219	43	113352	37.80 ug/kg	81
63) toluene	11.527	92	217380	37.52 ug/kg	98
64) trans-1,3-dichloropropene	11.714	75	106243	30.93 ug/kg	95
65) 1,1,2-trichloroethane	11.953	83	72221	39.10 ug/kg	96
66) ethyl methacrylate	11.690	69	12396	4.40 ug/kg	85
68) tetrachloroethene	12.112	166	78888	38.46 ug/kg	97
69) 1,3-dichloropropane	12.147	76	140994	42.16 ug/kg	94
70) dibromochloromethane	12.417	129	94422	36.08 ug/kg	90
71) 1,2-dibromoethane	12.591	107	92538	42.48 ug/kg	92
72) 2-hexanone	12.111	43	121558	52.80 ug/kg	88
73) chlorobenzene	13.106	112	233304	36.22 ug/kg	94
74) 1,1,1,2-tetrachloroethane	13.177	131	97472	38.91 ug/kg	97
75) ethylbenzene	13.167	91	399918	37.50 ug/kg	91
76) m,p-xylene	13.300	106	279724	76.14 ug/kg#	77
77) o-xylene	13.745	106	142344	37.23 ug/kg#	70
78) styrene	13.759	104	223023	35.86 ug/kg	89
79) bromoform	14.025	173	52480	37.49 ug/kg	95
81) trans-1,4-dichloro-2-b...	14.478	53	34186	28.91 ug/kg#	44
83) isopropylbenzene	14.133	105	338218	29.63 ug/kg	99
85) bromobenzene	14.572	156	91992	32.99 ug/kg	90
86) 1,1,2,2-tetrachloroethane	14.442	83	71924	20.79 ug/kg	98
87) 1,2,3-trichloropropane	14.547	75	115388	36.29 ug/kg#	1
88) n-propylbenzene	14.599	91	390904	26.99 ug/kg	91
89) 2-chlorotoluene	14.754	91	282084	28.32 ug/kg	90
90) 4-chlorotoluene	14.878	91	252632	27.85 ug/kg	88
91) 1,3,5-trimethylbenzene	14.773	105	282276	29.21 ug/kg	95
92) tert-butylbenzene	15.157	91	158050	25.27 ug/kg	83
93) 1,2,4-trimethylbenzene	15.214	105	285665	28.15 ug/kg	99
94) sec-butylbenzene	15.404	105	292618	23.25 ug/kg	100
95) 1,3-dichlorobenzene	15.600	146	145491	25.51 ug/kg	98
96) p-isopropyltoluene	15.551	119	258524	24.14 ug/kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:16:55 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4 7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97) 1,4-dichlorobenzene	15.709	146	146273	24.88 ug/kg	97
98) 1,2-dichlorobenzene	16.125	146	148305	25.47 ug/kg	98
99) n-butylbenzene	16.013	91	229494	20.24 ug/kg	95
100) 1,2-dibromo-3-chloropr...	16.978	75	27077	34.07 ug/kg#	78
101) 1,3,5-trichlorobenzene	17.184	180	70081	19.56 ug/kg	98
102) 1,2,4-trichlorobenzene	17.917	180	64759	17.67 ug/kg	94
103) hexachlorobutadiene	18.043	225	29561	16.96 ug/kg	96
104) naphthalene	18.266	128	248463	21.12 ug/kg	100
105) 1,2,3-trichlorobenzene	18.528	180	62827	17.60 ug/kg	98
106) 2-methylnaphthalene	19.746	142	53469	7.91 ug/kg	96
107) 1-methylnaphthalene	20.030	142	50118	8.11 ug/kg	100

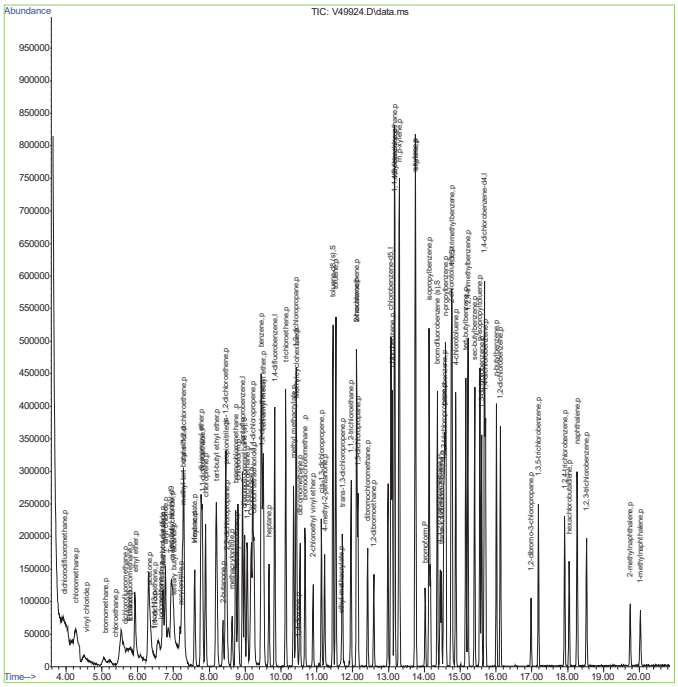
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:16:55 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4 7

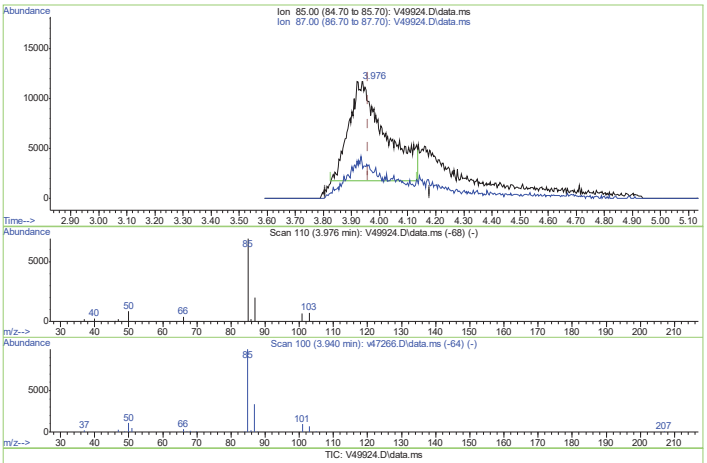


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.1 7



(5) dichlorodifluoromethane (p)
3.976min (+ 0.018) 30.93 ug/kg

response 89914

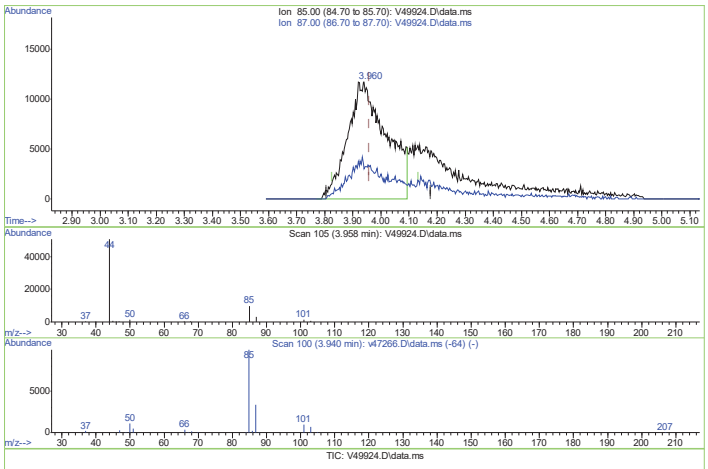
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	29.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.2



(5) dichlorodifluoromethane (p)

3.958min (+ 0.000) 38.59 ug/kg m

response 112167

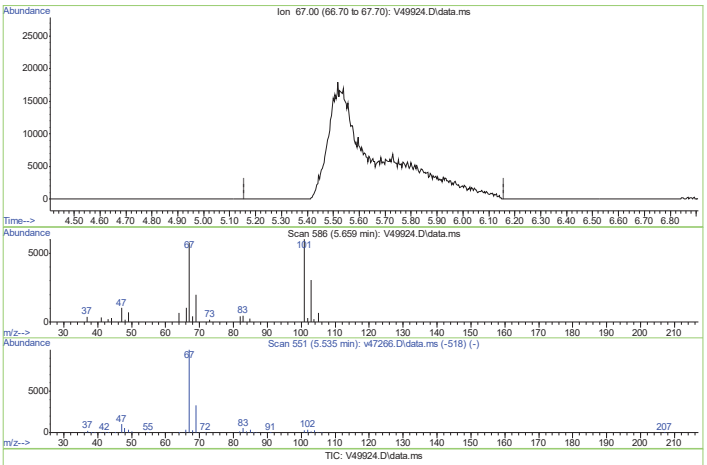
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	33.69
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.3



(10) dichlorofluoromethane (p)

5.658min (-5.658) 0.00 ug/kg

response 0

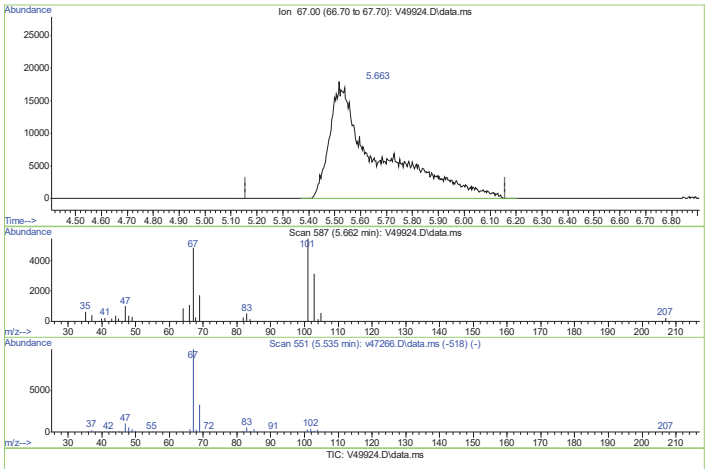
Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.4



(10) dichlorofluoromethane (p)

5.662min (+ 0.004) 43.31 ug/kg m

response 238005

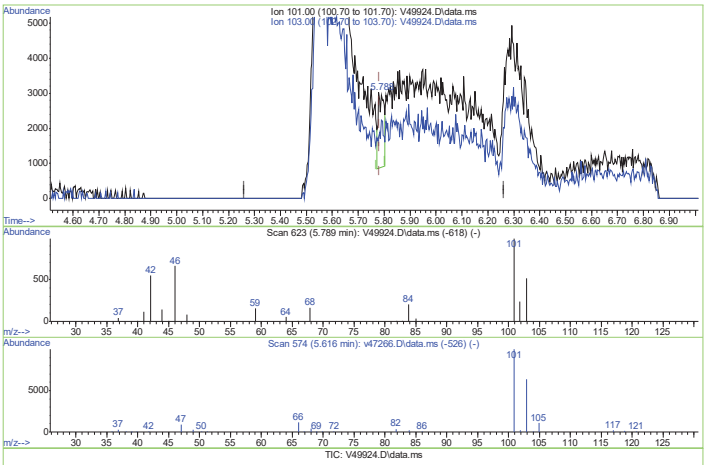
Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.5



(13) trichlorofluoromethane (p)

5.788min (+ 0.006) 2.02 ug/kg

response 3484

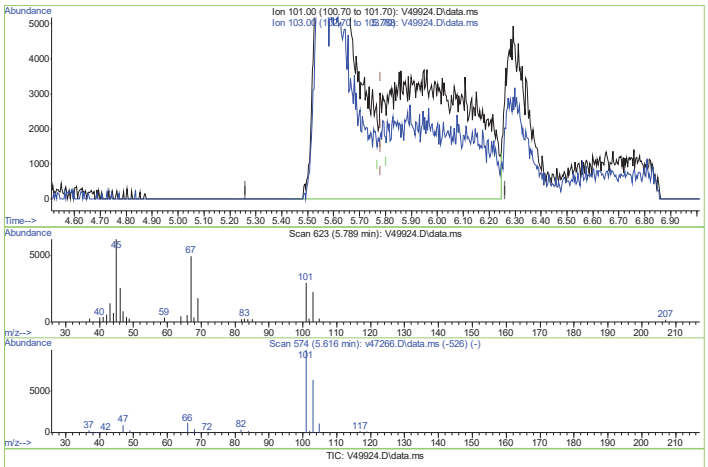
Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	64.94
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.6



(13) trichlorofluoromethane (p)
5.789min (+ 0.007) 37.24 ug/kg m
response 173940

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	76.27
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 20:15:43 2016 Page: 1

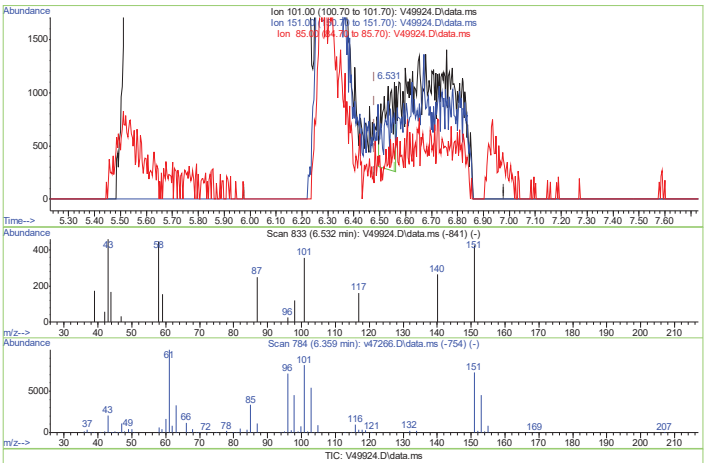
V49924.D edits: trichlorofluoromethane

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.7



(14) freon-113 (p)
6.531min (+ 0.052) 1.26 ug/kg
response 2145

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	77.00
85.00	41.30	2.00#
0.00	0.00	0.00

V160919S.M Wed Sep 21 20:15:51 2016 Page: 1

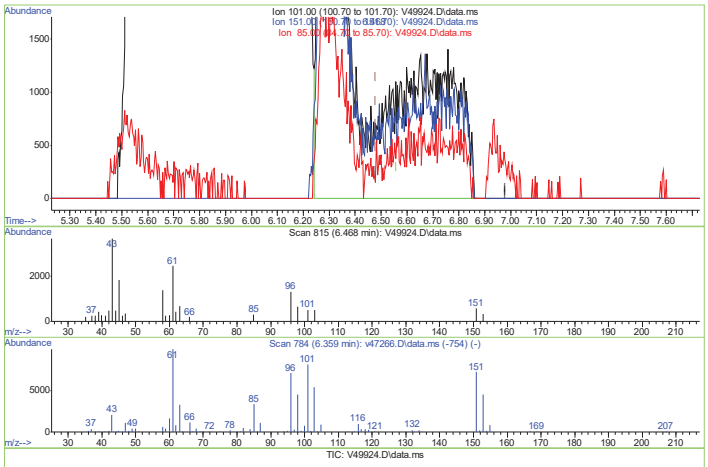
V49924.D edits: freon-113

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.8



(14) freon-113 (p)
6.468min (-0.011) 30.48 ug/kg m
response 52869

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	115.51
85.00	41.30	61.03
0.00	0.00	0.00

V160919S.M Wed Sep 21 20:16:17 2016 Page: 1

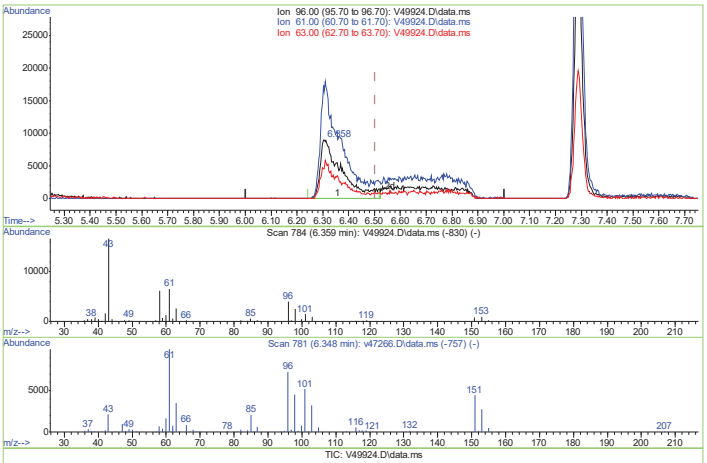
V49924.D edits: freon-113

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.9



(16) 1,1-dichloroethene (p)
6.358min (-0.145) 24.06 ug/kg
response 52637

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	180.58
63.00	57.50	68.14
0.00	0.00	0.00

V160919S.M Wed Sep 21 20:16:38 2016 Page: 1

V49924.D edits: 1,1-dichloroethene

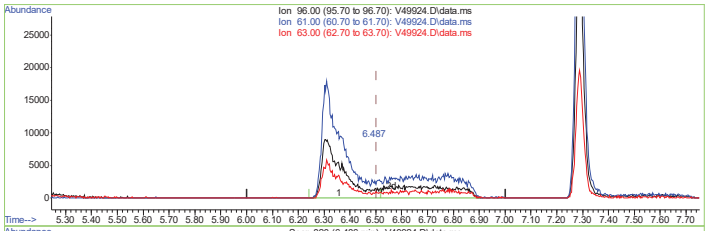
Quantitation Report (Qedit)

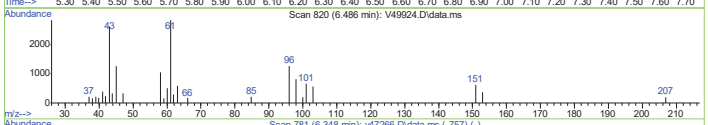
Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49924.D
Acq On : 20 Sep 2016 8:28 pm
Operator : kaylap
Sample : mc47776-1msd
Misc : MS37347,MSV1838,5.960,,,5,1
ALS Vial : 20 Sample Multiplier: 1

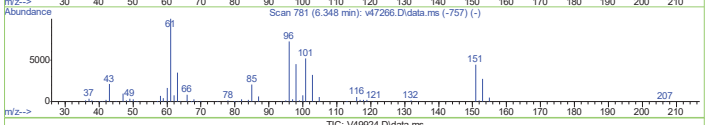
Quant Time: Sep 21 20:14:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.4.4.10

7







TIC: V49924.D\data.ms

(16) 1,1-dichloroethene (p)
6.486min (-0.017) 38.24 ug/kg m
response 85474

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	222.82#
63.00	57.50	45.71
0.00	0.00	0.00

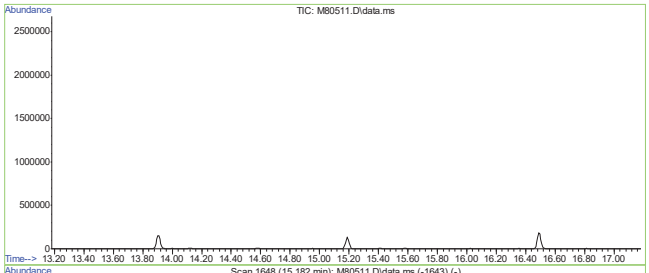
V160919S.M Wed Sep 21 20:16:44 2016 Page: 1

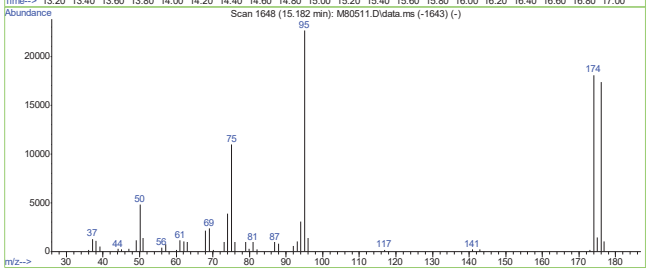
BFB
Data File : C:\msdchem\1\data\M160824\M80511.D Vial: 3
Acq On : 24 Aug 2016 9:10 am Operator: kaylap
Sample : bfb Inst : GCMS M
Misc : MS37188,MSM2881,5,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\M160822S.M (RTE Integrator)
Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20

7.5.1

7





Spectrum Information: Scan 1648

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.2	4816	PASS
75	95	30	60	48.5	11003	PASS
95	95	100	100	100.0	22680	PASS
96	95	5	9	6.1	1394	PASS
173	174	0.00	2	1.1	194	PASS
174	95	50	100	79.7	18080	PASS
175	174	5	9	8.1	1465	PASS
176	174	95	101	95.9	17344	PASS
177	176	5	9	6.0	1037	PASS

M80511.D M160822S.M Wed Aug 24 10:01:48 2016

Scan 1648 (15.182 min): M80511.D\data.ms (-1643)
ic2881-0.5
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	200	56.00	406	75.10	11003	95.00	22680
37.10	1297	57.10	744	76.00	970	96.00	1394
38.10	1127	60.00	204	78.90	987	116.90	188
39.10	549	61.00	1144	79.90	268	140.90	246
40.00	68	62.10	1043	80.90	987	142.90	226
44.05	266	63.00	992	82.00	245	172.90	194
45.00	220	68.00	2135	86.90	978	174.00	18080
47.10	268	69.00	2378	87.90	828	174.90	1465
49.10	1173	70.10	162	92.00	594	176.00	17344
50.10	4816	73.10	1008	93.00	1024	176.90	1037
51.00	1374	74.00	3886	94.00	3095		

7.5.1

7

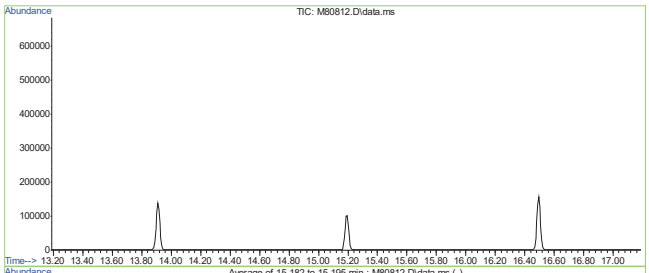
M160822S.M Tue Aug 23 09:03:34 2016 Page: 0

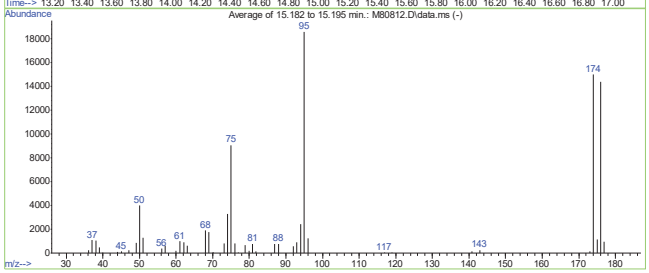
BFB
Data File : C:\msdchem\1\data\M160916\M80812.D Vial: 3
Acq On : 16 Sep 2016 11:10 am Operator: kaylap
Sample : bfb Inst : GCMS M
Misc : MS37320,MSM2895,5,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\M160824S.M (RTE Integrator)
Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate

7.5.2

7





AutoFind: Scans 1648, 1649, 1650; Background Corrected with Scan 1640

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	3991	PASS
75	95	30	60	48.7	9060	PASS
95	95	100	100	100.0	18589	PASS
96	95	5	9	6.6	1229	PASS
173	174	0.00	2	0.9	132	PASS
174	95	50	100	80.7	14998	PASS
175	174	5	9	7.8	1167	PASS
176	174	95	101	95.9	14380	PASS
177	176	5	9	6.6	955	PASS

M80812.D M160824S.M Fri Sep 16 12:37:13 2016

Average of 15.182 to 15.195 min.: M80812.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	217	56.05	390	74.00	3286	93.00	913
37.10	1075	57.05	630	75.05	9060	94.00	2422
38.10	1066	60.00	192	76.00	820	95.00	18589
39.05	454	61.00	988	77.00	59	96.05	1229
40.00	59	62.10	910	78.90	691	116.90	63
44.00	82	63.05	613	79.95	183	118.90	53
45.05	168	68.05	1894	80.90	775	140.85	156
47.05	233	69.00	1766	81.85	132	142.90	247
49.10	838	70.00	58	86.95	744	173.05	132
50.05	3991	70.20	72	87.95	762	173.95	14998
51.05	1298	73.05	802	92.00	574	174.95	1167

Average of 15.182 to 15.195 min.: M80812.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.95	14380						
176.95	955						

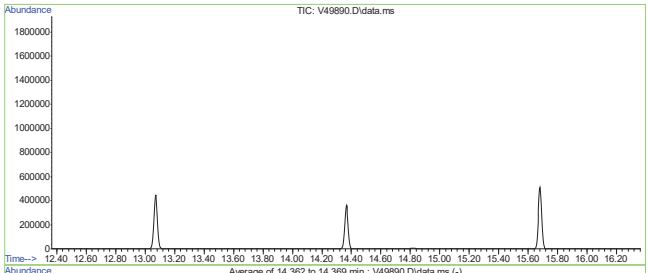
7.5.2

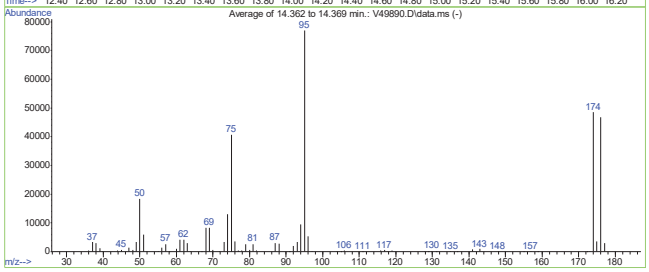
7

M160824S.M Fri Sep 16 12:35:24 2016 Page: 0

SW-846 Method 8260
Data File : C:\msdchem\1\DATA\V160919\V49890.D Vial: 4
Acq On : 19 Sep 2016 12:56 pm Operator: carab
Sample : bfb Inst : MSV
Misc : MS37325,MSV1837,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\V160919S.M (RTE Integrator)
Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate





AutoFind: Scans 3048, 3049, 3050; Background Corrected with Scan 3033

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.8	18368	PASS
75	95	30	60	52.9	40731	PASS
95	95	100	100	100.0	77040	PASS
96	95	5	9	6.9	5343	PASS
173	174	0.00	2	0.6	286	PASS
174	95	50	100	62.9	48496	PASS
175	174	5	9	7.2	3510	PASS
176	174	95	101	96.5	46776	PASS
177	176	5	9	6.3	2945	PASS

7.5.3

7

V49890.D V160919S.M Tue Sep 20 11:23:57 2016

Average of 14.362 to 14.369 min.: V49890.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	492	51.00	5866	66.90	67	77.85	322
37.05	3294	52.00	281	68.00	8350	78.90	2487
38.00	2972	55.00	231	69.00	8375	79.95	593
39.00	1287	56.00	1461	69.95	564	80.90	2634
39.90	166	57.00	2635	71.85	280	81.85	472
43.95	478	58.00	60	73.00	3314	86.95	3013
44.95	626	59.95	896	74.00	13051	88.00	2756
46.95	1334	61.00	4184	75.00	40731	90.80	62
48.00	506	62.00	4227	76.00	3509	91.00	239
49.00	3309	63.00	2989	76.90	358	92.00	2055
50.00	18368	63.95	221	77.10	125	93.00	3360

Average of 14.362 to 14.369 min.: V49890.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	9518	118.90	415	156.90	130		
95.00	77040	127.85	225	158.80	52		
96.05	5343	128.80	53	172.20	58		
97.05	143	129.80	270	173.05	286		
103.90	285	131.00	64	174.00	48496		
105.00	71	134.95	122	174.95	3510		
105.85	395	136.80	54	176.00	46776		
110.90	53	140.95	832	177.00	2945		
115.90	316	142.95	903				
116.85	569	147.85	102				
117.90	291	154.90	61				

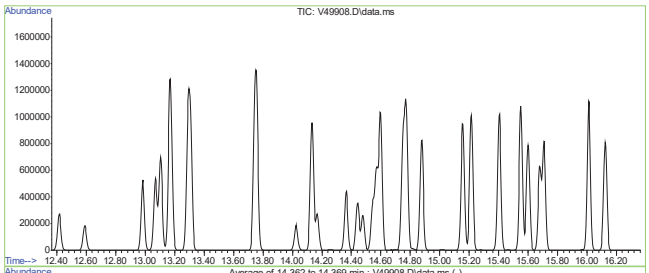
7.5.3

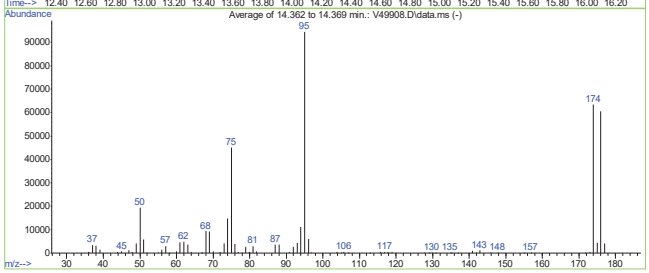
7

V160919S.M Tue Sep 20 11:23:36 2016 Page: 0

SW-846 Method 8260
Data File : C:\msdchem\1\DATA\V160920\V49908.D Vial: 4
Acq On : 20 Sep 2016 12:32 pm Operator: kaylap
Sample : bfb Inst : MSV
Misc : MS37325,MSV1838,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\V160919S.M (RTE Integrator)
Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate





AutoFind: Scans 3048, 3049, 3050; Background Corrected with Scan 3033

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	19504	PASS
75	95	30	60	47.7	45125	PASS
95	95	100	100	100.0	94589	PASS
96	95	5	9	6.4	6062	PASS
173	174	0.00	2	0.9	541	PASS
174	95	50	100	67.1	63480	PASS
175	174	5	9	6.8	4322	PASS
176	174	95	101	95.5	60592	PASS
177	176	5	9	6.8	4142	PASS

7.5.4

7

V49908.D V160919S.M Tue Sep 20 12:57:25 2016

Average of 14.362 to 14.369 min.: V49908.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	462	51.00	5705	66.80	72	77.90	356
36.10	284	52.00	265	67.05	154	78.90	2788
37.00	3438	55.00	288	68.00	9361	79.80	248
38.00	3239	56.00	1539	69.05	9208	79.95	491
39.05	1508	57.00	2999	70.05	776	80.90	2916
43.95	459	58.00	51	71.95	439	81.90	637
45.00	693	59.95	794	73.00	4159	87.00	3759
46.95	1203	61.00	4589	74.00	14823	88.00	3619
47.95	529	62.00	4879	75.00	45125	90.90	397
49.00	4060	63.05	3537	76.00	3836	92.00	2631
50.00	19504	64.00	372	76.95	537	93.00	4275

Average of 14.362 to 14.369 min.: V49908.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	11193	117.85	399	142.90	1137		
95.00	94589	118.90	533	145.90	134		
96.05	6062	127.80	312	147.85	183		
96.95	194	129.00	65	155.00	62		
103.90	533	129.90	315	156.80	64		
104.90	112	130.90	75	171.70	54		
105.80	537	134.80	93	172.95	541		
106.90	59	135.10	70	174.00	63480		
112.90	72	136.90	68	175.00	4322		
115.80	402	140.90	1046	176.00	60592		
116.95	568	141.90	56	176.95	4142		

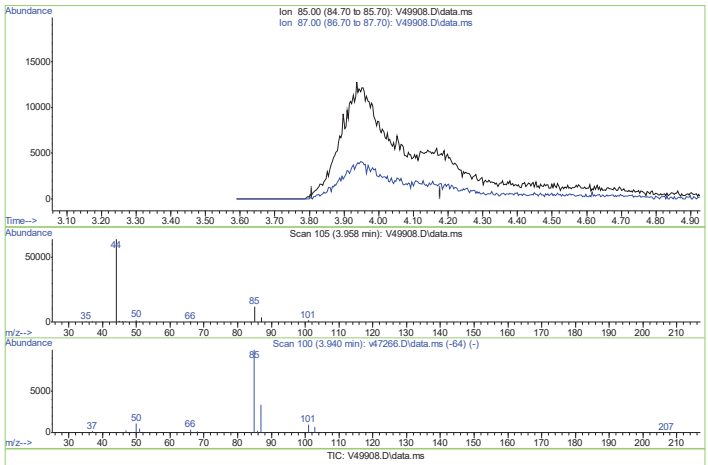
7.5.4

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration



(5) dichlorodifluoromethane (p)
3.958min (-3.958) 0.00 ug/kg
response 0

Ion	Exp%	Act%
85.00	100.00	0.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

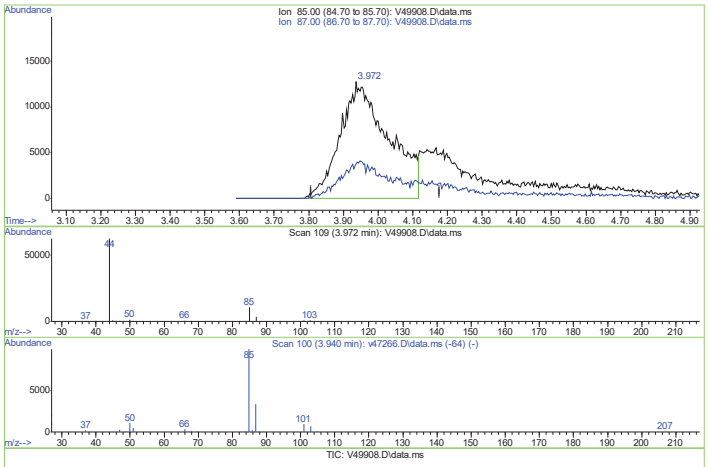
7.5.4.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration



(5) dichlorodifluoromethane (p)
3.972min (+ 0.014) 43.22 ug/kg m
response 122879

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	31.84
0.00	0.00	0.00
0.00	0.00	0.00

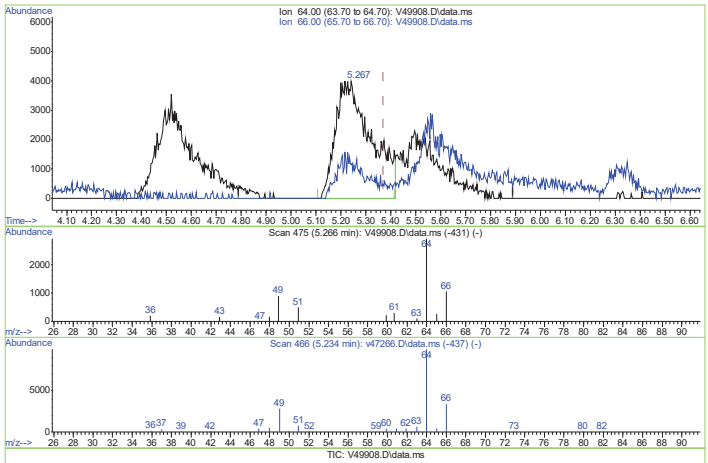
7.5.4.2

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration



(9) chloroethane (p)
5.267min (-0.105) 24.40 ug/kg
response 30898

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	36.44
0.00	0.00	0.00
0.00	0.00	0.00

7.5.4.3

7

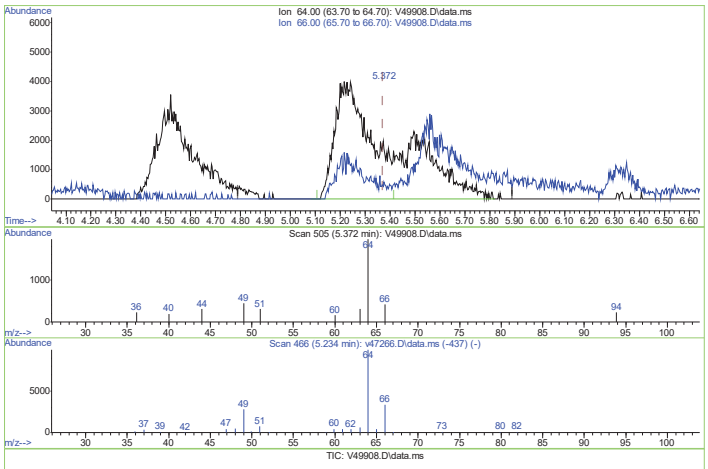
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.4

7



(9) chloroethane (p)

5.372min (+ 0.000) 38.84 ug/kg m

response 62223

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.00	21.43
0.00	0.00	0.00
0.00	0.00	0.00

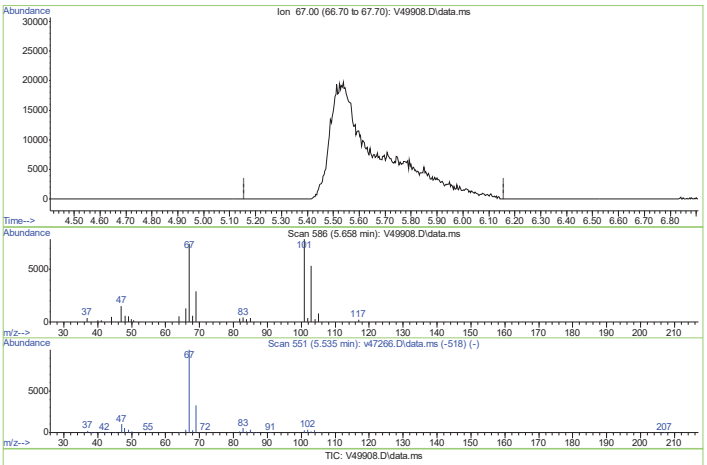
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.5

7



(10) dichlorofluoromethane (p)

5.658min (-5.658) 0.00 ug/kg

response 0

Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

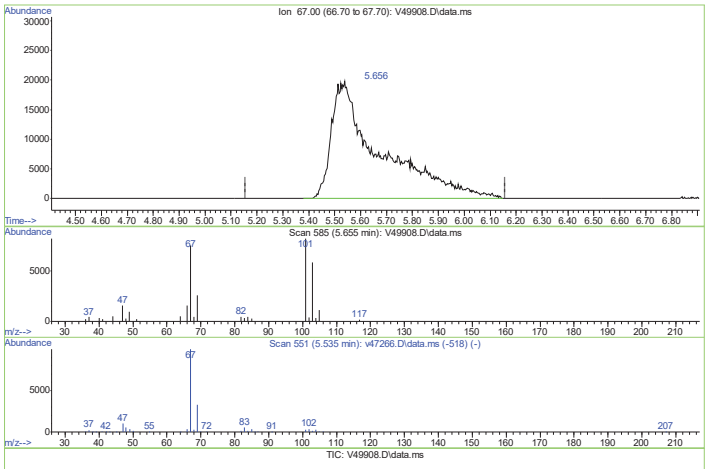
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.6

7



(10) dichlorofluoromethane (p)

5.655min (-0.003) 49.10 ug/kg m

response 256070

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

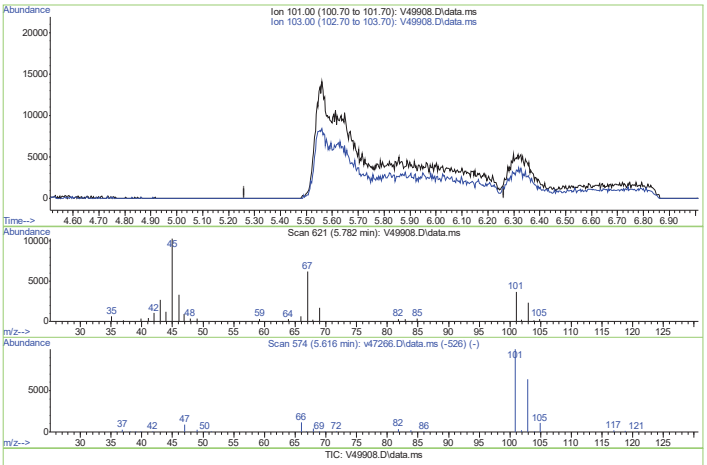
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.7

7



(13) trichlorofluoromethane (p)

5.782min (-5.782) 0.00 ug/kg

response 0

Ion	Exp%	Act%
101.00	100.00	0.00
103.00	68.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

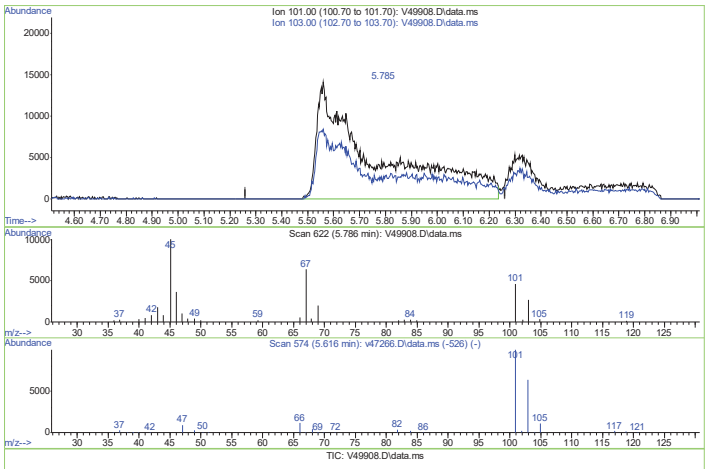
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.8

7



(13) trichlorofluoromethane (p)
5.786min (+ 0.004) 47.18 ug/kg m
response 217235

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	58.36
0.00	0.00	0.00
0.00	0.00	0.00

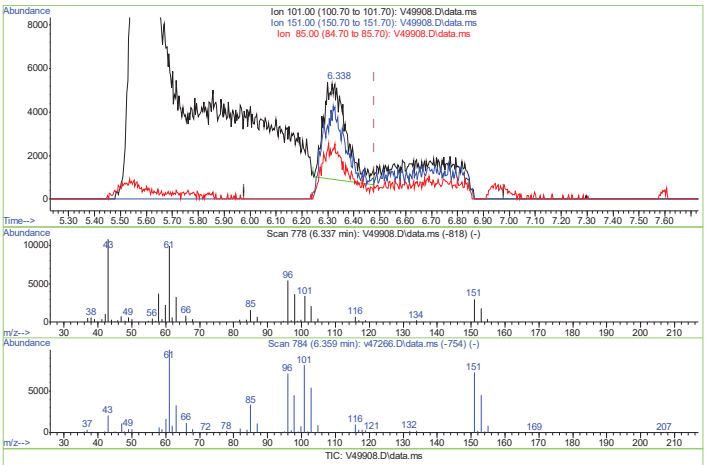
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.9

7



(14) freon-113 (p)
6.338min (-0.141) 16.27 ug/kg
response 27193

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	98.00
85.00	41.30	56.33
0.00	0.00	0.00

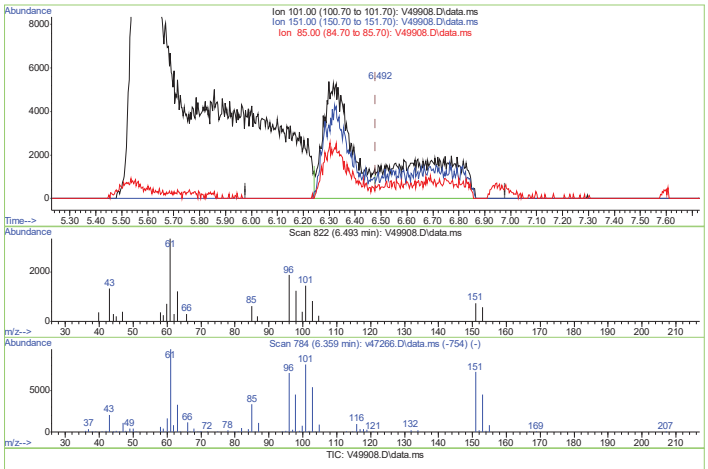
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.10

7



(14) freon-113 (p)
6.493min (+ 0.014) 43.57 ug/kg m
response 72808

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	51.60#
85.00	41.30	43.45
0.00	0.00	0.00

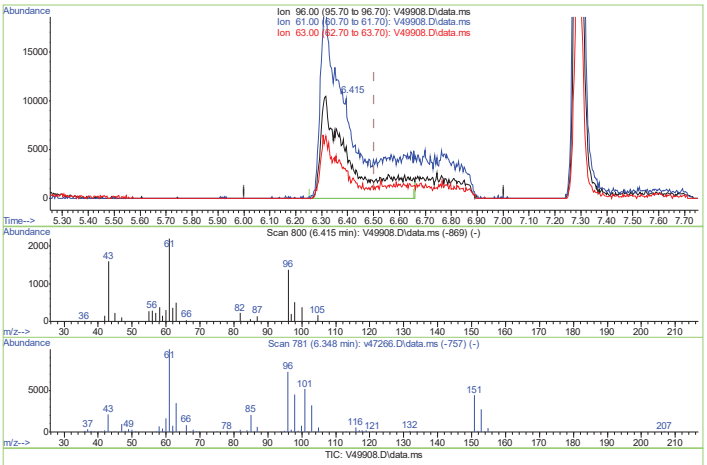
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.11

7



(16) 1,1-dichloroethene (p)
6.415min (-0.088) 37.27 ug/kg
response 81484

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	201.33#
63.00	57.50	55.31
0.00	0.00	0.00

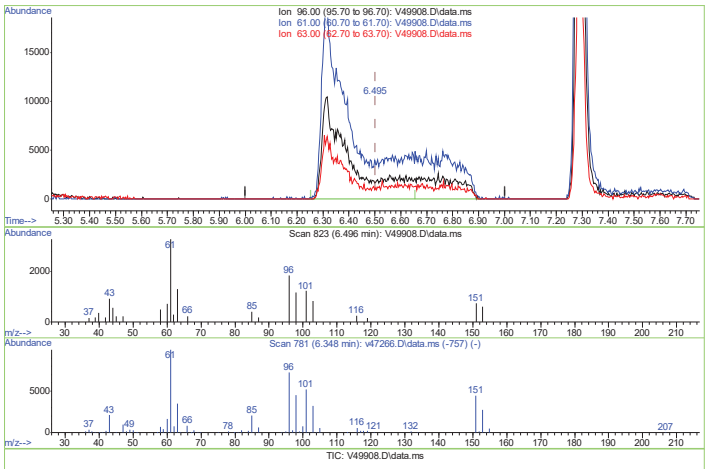
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.12

7



(16) 1,1-dichloroethene (p)

6.496min (-0.007) 48.86 ug/kg m

response 105867

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	177.40
63.00	57.50	70.83
0.00	0.00	0.00

V160919S.M Wed Sep 21 19:32:24 2016

V49908.D edits: 1,1-dichloroethene

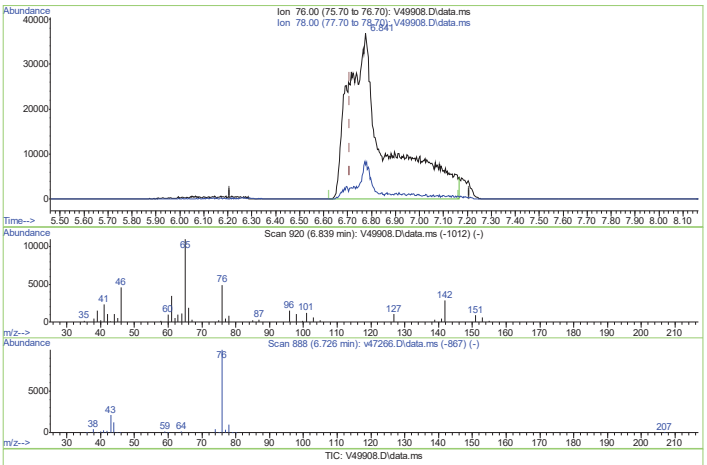
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.13

7



(25) carbon disulfide (p)

6.841min (+ 0.132) 165.58 ug/kg

response 404191

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.80	13.79
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 19:32:41 2016

V49908.D edits: carbon disulfide

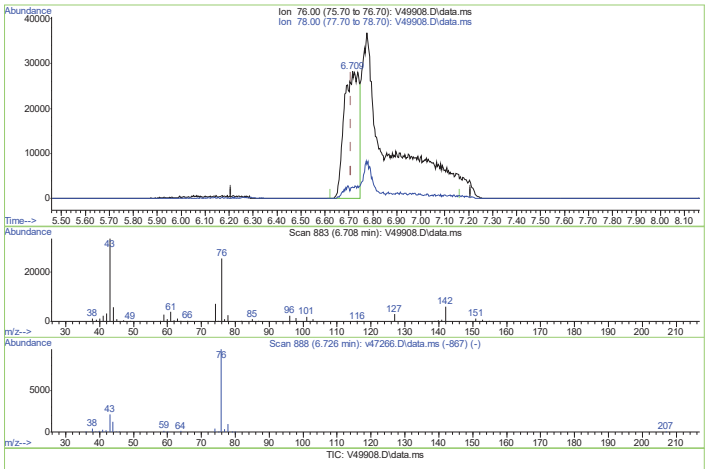
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.5.4.14

7



(25) carbon disulfide (p)

6.708min (-0.001) 50.26 ug/kg m

response 122685

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.80	9.70
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 19:33:05 2016

V49908.D edits: carbon disulfide

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80511.D
Acq On : 24 Aug 2016 9:10 am
Operator : kaylap
Sample : ic2881-0.5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 24 12:54:05 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:53:05 2016
Response via : Initial Calibration

7.6.1

7

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.684	65	44048	500.00	ug/kg	0.00
4) pentafluorobenzene	9.779	168	63631	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	102436	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.908	82	48497	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	52117	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.840	113	38459	52.62	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 105.24%			
60) toluene-d8 (s)	12.292	98	118208	51.43	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.86%			
82) bromofluorobenzene (s)	15.188	95	44954	55.19	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 110.38%			
Target Compounds						Qvalue
47) benzene	10.311	78	1709	0.51	ug/kg	93
75) m,p-xylene	14.124	106	1552	0.89	ug/kg	90

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

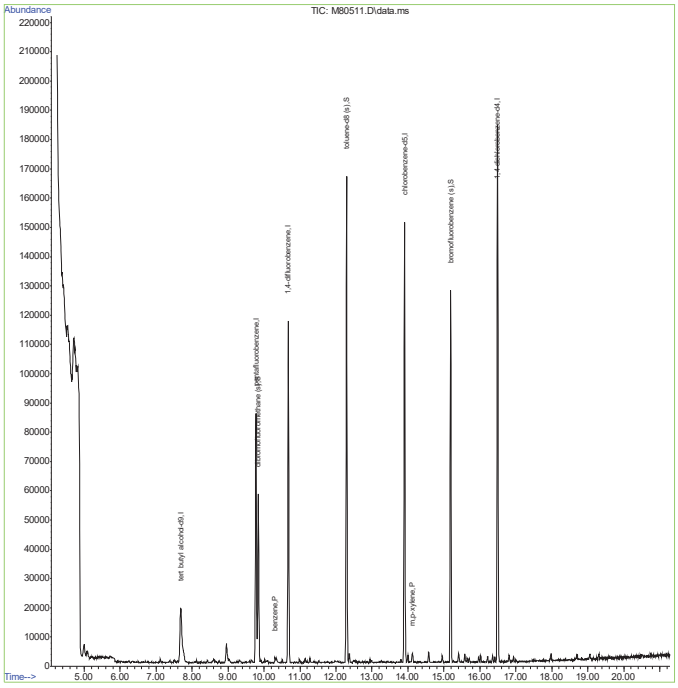
M160824S.M Wed Aug 24 15:31:18 2016

M80511.D: MSM2881-IC2881 Initial Calibration (0.5) page 1 of 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80511.D
Acq On : 24 Aug 2016 9:10 am
Operator : kaylap
Sample : ic2881-0.5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 24 12:54:05 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:53:05 2016
Response via : Initial Calibration



7.6.1

7

M160824S.M Wed Aug 24 15:31:18 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80512.D
Acq On : 24 Aug 2016 9:38 am
Operator : kaylap
Sample : ic2881-2
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 24 13:53:45 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:54:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.677	65	40191	500.00	ug/kg	-0.01
4) pentafluorobenzene	9.772	168	66419	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	107910	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.902	82	50517	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	55736	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.840	113	39347	50.26	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.52%			
60) toluene-d8 (s)	12.292	98	122848	50.02	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.04%			
82) bromofluorobenzene (s)	15.188	95	46815	51.09	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.18%			
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.444	85	1504	1.72	ug/kg#	43
6) chloromethane	4.828	50	2513	1.87	ug/kg	96
7) vinyl chloride	5.091	62	2469	1.83	ug/kg	92
8) bromomethane ...	5.731	96	1795	1.39	ug/kg	87
10) ethyl ether	6.707	59	902	1.35	ug/kg	70
12) trichlorofluoromethane	6.337	101	2981	1.77	ug/kg	100
13) freon-113	7.091	101	1658	1.64	ug/kg	84
15) 1,1-dichloroethene	7.112	96	1548	1.75	ug/kg#	54
16) acetone	7.132	58	528	3.00	ug/kg#	48
18) methylene chloride	7.765	84	2201	2.17	ug/kg	85
19) methyl tert butyl ether	8.075	73	4122	1.69	ug/kg	89
21) allyl chloride	7.597	41	2312	1.70	ug/kg	80
22) trans-1,2-dichloroethene	8.122	96	1638	1.66	ug/kg#	78
23) iodomethane	7.368	142	3131	1.64	ug/kg	84
24) carbon disulfide	7.502	76	5256	1.84	ug/kg	97
27) chloroprene	8.742	53	2430	1.64	ug/kg	92
28) di-isopropyl ether	8.600	45	4945	1.66	ug/kg	97
31) Hexane	8.418	41	1503	1.86	ug/kg#	91
32) 1,1-dichloroethane	8.654	63	2955	1.77	ug/kg	91
33) tert-butyl ethyl ether	9.031	59	4679	1.66	ug/kg	96
35) 2,2-dichloropropane	9.335	77	2631	1.85	ug/kg	91
36) cis-1,2-dichloroethene	9.308	96	1732	1.63	ug/kg#	83
38) bromochloromethane	9.591	128	899	1.58	ug/kg#	64
39) chloroform	9.658	83	3273	1.86	ug/kg	100
42) 1,1,1-trichloroethane	9.914	97	2721	1.67	ug/kg	87
44) Cyclohexane	10.015	56	2658	1.80	ug/kg	87
45) carbon tetrachloride	10.103	117	2716	1.73	ug/kg	91
46) 1,1-dichloropropene	10.062	75	2044	1.72	ug/kg	92
47) benzene	10.305	78	5847	1.64	ug/kg	98
48) 1,2-dichloroethane	10.325	62	2067	1.70	ug/kg	74
49) tert-amyl methyl ether	10.345	73	3821	1.55	ug/kg	98
50) heptane	10.500	43	1877	1.67	ug/kg	85
51) trichloroethene	10.978	95	1631	1.66	ug/kg	97
52) 1,2-dichloropropane	11.275	63	1493	1.62	ug/kg	89

7.6.2

7

M160824S.M Wed Aug 24 15:31:21 2016 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80512.D
Acq On : 24 Aug 2016 9:38 am
Operator : kaylap
Sample : ic2881-2
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 24 13:53:45 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:54:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) dibromomethane	11.382	93	1018	1.71	ug/kg#	79
54) bromodichloromethane	11.524	83	2102	1.70	ug/kg	93
55) Methylcyclohexane	11.275	83	2224	1.60	ug/kg	87
59) cis-1,3-dichloropropene	11.969	75	1967	1.54	ug/kg	97
61) 4-methyl-2-pentanone	12.063	43	1375	1.64	ug/kg#	84
62) toluene	12.366	92	4225	1.96	ug/kg	90
63) trans-1,3-dichloropropene	12.555	75	1792	1.64	ug/kg	99
64) 1,1,2-trichloroethane	12.790	83	982	1.64	ug/kg	97
65) ethyl methacrylate	12.514	69	1509	1.65	ug/kg	85
67) tetrachloroethene	12.945	166	1565	1.52	ug/kg	87
68) 1,3-dichloropropane	12.986	76	1728	1.54	ug/kg	93
69) dibromochloromethane	13.248	129	1640	1.53	ug/kg	93
70) 1,2-dibromoethane	13.430	107	1138	1.43	ug/kg	90
71) 2-hexanone	12.945	43	1001	1.55	ug/kg#	60
72) chlorobenzene	13.936	112	4130	1.56	ug/kg	91
73) 1,1,1,2-tetrachloroethane	14.003	131	1751	1.54	ug/kg	97
74) ethylbenzene	13.989	91	6862	1.53	ug/kg	94
75) m,p-xylene	14.131	106	5355	3.11	ug/kg	99
76) o-xylene	14.569	106	2651	1.42	ug/kg	89
77) styrene	14.582	104	4315	1.47	ug/kg	99
78) bromoform	14.858	173	963	1.42	ug/kg	90
81) isopropylbenzene	14.953	105	6873	1.52	ug/kg	96
83) bromobenzene	15.404	156	1872	1.70	ug/kg	84
84) 1,1,2,2-tetrachloroethane	15.263	83	1838	1.81	ug/kg	89
85) 1,2,3-trichloropropane	15.364	75	1572	1.83	ug/kg	81
86) n-propylbenzene	15.411	91	8543	1.64	ug/kg	99
87) 2-chlorotoluene	15.572	91	5613	1.63	ug/kg	91
88) 4-chlorotoluene	15.694	91	4986	1.69	ug/kg	95
89) 1,3,5-trimethylbenzene	15.586	105	5866	1.48	ug/kg	97
90) tert-butylbenzene	15.963	91	2980	1.40	ug/kg	87
91) 1,2,4-trimethylbenzene	16.024	105	6151	1.52	ug/kg	99
92) sec-butylbenzene	16.212	105	7643	1.48	ug/kg	97
93) 1,3-dichlorobenzene	16.415	146	3879	1.70	ug/kg	96
94) p-isopropyltoluene	16.354	119	6750	1.50	ug/kg	99
95) 1,4-dichlorobenzene	16.516	146	4263	1.86	ug/kg	96
96) 1,2-dichlorobenzene	16.933	146	3683	1.60	ug/kg	95
97) n-butylbenzene	16.812	91	6731	1.67	ug/kg	98
99) 1,3,5-trichlorobenzene	17.984	180	2651	1.75	ug/kg	96
100) 1,2,4-trichlorobenzene	18.705	180	3061	1.88	ug/kg	96
101) hexachlorobutadiene	18.819	225	1401	1.87	ug/kg	81
102) naphthalene	19.055	128	7511	1.68	ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	2789	1.73	ug/kg	83
104) 2-methylnaphthalene	20.477	142	2162	0.86	ug/kg#	92
105) 1-methylnaphthalene	20.746	142	1790	0.84	ug/kg	99

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

7.6.2

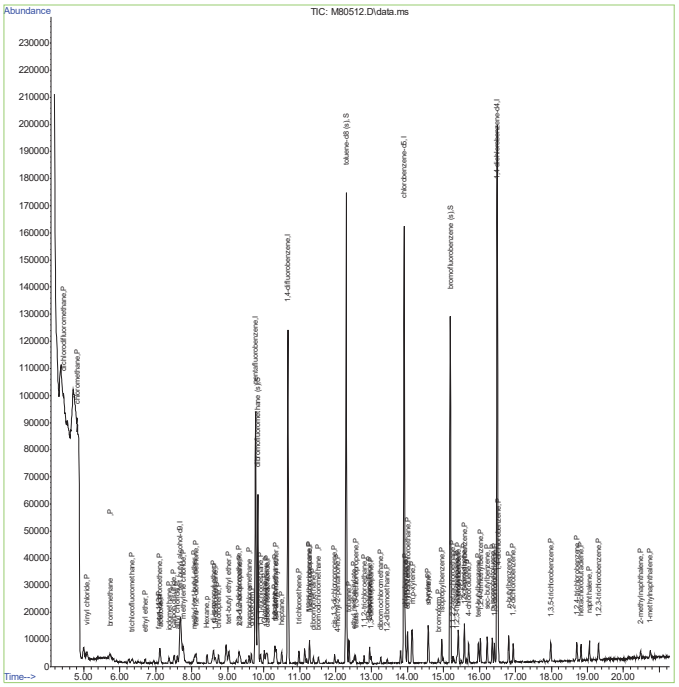
7

M160824S.M Wed Aug 24 15:31:21 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80512.D
Acq On : 24 Aug 2016 9:38 am
Operator : kaylap
Sample : ic2881-2
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 24 13:53:45 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:54:19 2016
Response via : Initial Calibration



7.6.2

7

M160824S.M Wed Aug 24 15:31:21 2016 Page: 3

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80513.D
Acq On : 24 Aug 2016 10:06 am
Operator : kaylap
Sample : ic2881-5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 24 12:57:08 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:56:14 2016
Response via : Initial Calibration

7.6.3 7

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.684	65	39196	500.00	ug/kg	0.00
4) pentafluorobenzene	9.772	168	64846	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	105591	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.902	82	49168	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	54583	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.840	113	39471	51.55	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.10%			
60) toluene-d8 (s)	12.292	98	121643	50.61	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.22%			
82) bromofluorobenzene (s)	15.188	95	45660	50.52	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.04%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.792	59	5401	47.98	ug/kg	64
3) Ethanol	6.532	45	5113	580.16	ug/kg#	81
5) dichlorodifluoromethane	4.437	85	4825	6.07	ug/kg	100
6) chloromethane	4.828	50	7251	5.71	ug/kg	95
7) vinyl chloride	5.084	62	7354	5.83	ug/kg	98
8) bromomethane ...	5.724	96	5518	5.17	ug/kg	94
9) chloroethane	5.899	64	3634	4.56	ug/kg	96
10) ethyl ether	6.707	59	3336	6.11	ug/kg	92
12) trichlorofluoromethane	6.350	101	8534	5.50	ug/kg	98
13) freon-113	7.105	101	4980	5.54	ug/kg	97
14) acrolein	6.936	56	2888	25.66	ug/kg	93
15) 1,1-dichloroethene	7.112	96	4675	5.77	ug/kg#	78
16) acetone	7.118	58	1096	5.10	ug/kg	93
17) Methyl Acetate	7.529	43	2898	5.18	ug/kg	83
18) methylene chloride	7.765	84	5800	5.62	ug/kg#	79
19) methyl tert butyl ether	8.075	73	12040	5.48	ug/kg	94
20) acrylonitrile	8.028	53	1421	4.50	ug/kg	90
21) allyl chloride	7.603	41	6820	5.54	ug/kg	97
22) trans-1,2-dichloroethene	8.122	96	5005	5.69	ug/kg#	81
23) iodomethane	7.368	142	9444	5.57	ug/kg	98
24) carbon disulfide	7.509	76	15038	5.61	ug/kg	99
25) propionitrile	9.328	54	456	3.68	ug/kg	100
26) vinyl acetate	8.573	43	8460m	4.23	ug/kg	
27) chloroprene	8.742	53	7482	5.68	ug/kg	79
28) di-isopropyl ether	8.607	45	14567	5.47	ug/kg	94
29) methacrylonitrile	9.496	41	2360	5.11	ug/kg	90
30) 2-butanone	9.234	72	982	4.70	ug/kg#	1
31) Hexane	8.418	41	4381	5.75	ug/kg	92
32) 1,1-dichloroethane	8.654	63	8705	5.67	ug/kg	94
33) tert-butyl ethyl ether	9.031	59	14093	5.60	ug/kg	98
35) 2,2-dichloropropane	9.341	77	7295	5.46	ug/kg	97
36) cis-1,2-dichloroethene	9.308	96	5400	5.73	ug/kg	88
38) bromochloromethane	9.591	128	2647	5.32	ug/kg#	84
39) chloroform	9.658	83	8940	5.40	ug/kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80513.D
Acq On : 24 Aug 2016 10:06 am
Operator : kaylap
Sample : ic2881-5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 24 12:57:08 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:56:14 2016
Response via : Initial Calibration

7.6.3 7

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Tetrahydrofuran	9.604	42	1496	5.49	ug/kg	91
42) 1,1,1-trichloroethane	9.914	97	7845	5.38	ug/kg	95
44) Cyclohexane	10.015	56	7487	5.45	ug/kg#	78
45) carbon tetrachloride	10.103	117	7893	5.51	ug/kg	97
46) 1,1-dichloropropene	10.062	75	5798	5.35	ug/kg	94
47) benzene	10.305	78	17469	5.32	ug/kg	97
48) 1,2-dichloroethane	10.325	62	6061	5.50	ug/kg	95
49) tert-amyl methyl ether	10.345	73	11894	5.56	ug/kg	92
50) heptane	10.500	43	5455	5.40	ug/kg	85
51) trichloroethene	10.978	95	4885	5.56	ug/kg	81
52) 1,2-dichloropropane	11.275	63	4577	5.61	ug/kg	89
53) dibromomethane	11.382	93	2823	5.23	ug/kg	95
54) bromodichloromethane	11.524	83	6108	5.46	ug/kg	98
55) Methylcyclohexane	11.275	83	7010	5.73	ug/kg#	84
56) 2-chloroethyl vinyl ether	11.733	63	1245	4.50	ug/kg#	34
57) methyl methacrylate	11.194	69	2369	4.89	ug/kg#	80
59) cis-1,3-dichloropropene	11.975	75	6064	5.49	ug/kg	97
61) 4-methyl-2-pentanone	12.063	43	4001	5.37	ug/kg	99
62) toluene	12.366	92	10907	5.22	ug/kg	100
63) trans-1,3-dichloropropene	12.548	75	5292	5.44	ug/kg	97
64) 1,1,2-trichloroethane	12.790	83	3121	5.85	ug/kg	92
65) ethyl methacrylate	12.514	69	4362	5.34	ug/kg	83
67) tetrachloroethene	12.952	166	4721	5.35	ug/kg	94
68) 1,3-dichloropropane	12.986	76	5145	5.32	ug/kg	95
69) dibromochloromethane	13.248	129	5063	5.51	ug/kg	98
70) 1,2-dibromoethane	13.430	107	3727	5.60	ug/kg	95
71) 2-hexanone	12.945	43	3051	5.48	ug/kg	98
72) chlorobenzene	13.936	112	12470	5.44	ug/kg	98
73) 1,1,1,2-tetrachloroethane	14.010	131	4800	4.90	ug/kg	99
74) ethylbenzene	13.996	91	20155	5.23	ug/kg	100
75) m,p-xylene	14.124	106	15640	10.08	ug/kg	97
76) o-xylene	14.569	106	7820	5.03	ug/kg	96
77) styrene	14.582	104	12116	4.89	ug/kg	100
78) bromoform	14.852	173	3029	5.36	ug/kg	99
79) trans-1,4-dichloro-2-b...	15.296	53	1501	5.16	ug/kg#	21
81) isopropylbenzene	14.953	105	20730	5.33	ug/kg	97
83) bromobenzene	15.397	156	5242	5.26	ug/kg	88
84) 1,1,2,2-tetrachloroethane	15.263	83	5346	5.65	ug/kg	97
85) 1,2,3-trichloropropane	15.364	75	4584	5.69	ug/kg	93
86) n-propylbenzene	15.418	91	25064	5.40	ug/kg	97
87) 2-chlorotoluene	15.572	91	16273	5.31	ug/kg	89
88) 4-chlorotoluene	15.694	91	14529	5.46	ug/kg	98
89) 1,3,5-trimethylbenzene	15.586	105	17484	5.18	ug/kg	97
90) tert-butylbenzene	15.970	91	9360	5.27	ug/kg	99
91) 1,2,4-trimethylbenzene	16.024	105	18070	5.19	ug/kg	100
92) sec-butylbenzene	16.212	105	22960	5.22	ug/kg	99
93) 1,3-dichlorobenzene	16.415	146	10691	5.16	ug/kg	96
94) p-isopropyltoluene	16.354	119	19711	5.10	ug/kg	99
95) 1,4-dichlorobenzene	16.516	146	11184	5.16	ug/kg	99
96) 1,2-dichlorobenzene	16.940	146	10770	5.31	ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80513.D
Acq On : 24 Aug 2016 10:06 am
Operator : kaylap
Sample : ic2881-5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 24 12:57:08 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:56:14 2016
Response via : Initial Calibration

7.6.3 7

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) n-butylbenzene	16.812	91	18840	5.20	ug/kg	94
98) 1,2-dibromo-3-chloropr...	17.789	75	1120	5.35	ug/kg	80
99) 1,3,5-trichlorobenzene	17.977	180	7612	5.47	ug/kg	98
100) 1,2,4-trichlorobenzene	18.705	180	8149	5.26	ug/kg	91
101) hexachlorobutadiene	18.819	225	3894	5.49	ug/kg	96
102) naphthalene	19.055	128	21168	5.26	ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	8007	5.44	ug/kg	90
104) 2-methylnaphthalene	20.477	142	6054	2.64	ug/kg	92
105) 1-methylnaphthalene	20.746	142	4976	2.60	ug/kg	97

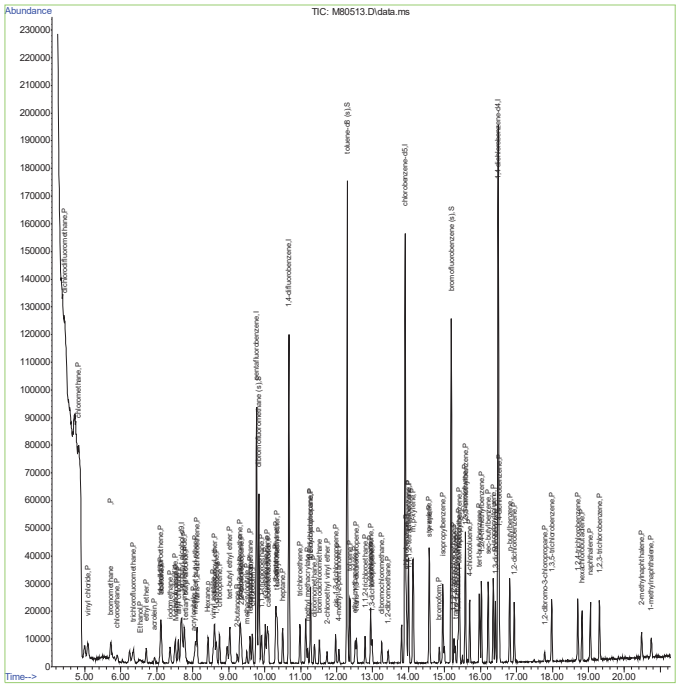
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80513.D
Acq On : 24 Aug 2016 10:06 am
Operator : kaylap
Sample : ic2881-5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 24 12:57:08 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:56:14 2016
Response via : Initial Calibration

7.6.3 7



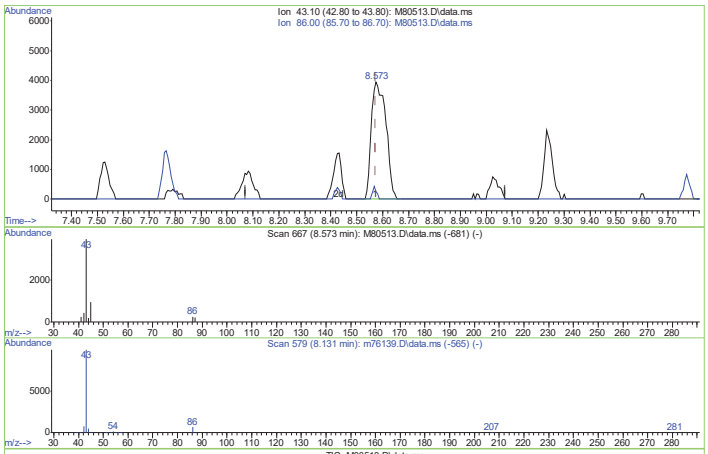
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80513.D
Acq On : 24 Aug 2016 10:06 am
Operator : kaylap
Sample : ic2881-5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 24 12:56:20 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:56:14 2016
Response via : Initial Calibration

7.6.3.1

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 7.69 ug/kg

response 15386

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	6.51
0.00	0.00	0.00
0.00	0.00	0.00

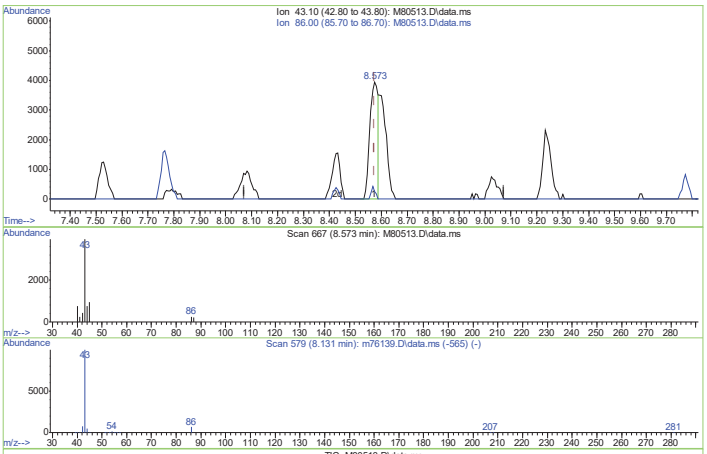
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80513.D
Acq On : 24 Aug 2016 10:06 am
Operator : kaylap
Sample : ic2881-5
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 24 12:56:20 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:56:14 2016
Response via : Initial Calibration

7.6.3.2

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 4.23 ug/kg m

response 8460

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	6.51
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:59:03 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration

7.6.4

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.684	65	41442	500.00 ug/kg	0.00
4) pentafluorobenzene	9.772	168	62468	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	102992	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	47595	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	53524	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	37652	50.65 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.30%		
60) toluene-d8 (s)	12.292	98	117741	50.07 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.14%		
82) bromofluorobenzene (s)	15.188	95	43884	49.38 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.76%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.785	59	11550	99.05 ug/kg	86
3) Ethanol	6.546	45	10069	1000.39 ug/kg	96
5) dichlorodifluoromethane	4.424	85	9835	11.99 ug/kg	100
6) chloromethane	4.821	50	15205	11.87 ug/kg	92
7) vinyl chloride	5.077	62	15252	11.89 ug/kg	99
8) bromomethane ...	5.717	96	11585	11.14 ug/kg	89
9) chloroethane	5.892	64	7248	9.88 ug/kg	96
10) ethyl ether	6.701	59	6717	11.89 ug/kg	85
11) acetonitrile	7.516	41	865m	11.83 ug/kg	
12) trichlorofluoromethane	6.337	101	17683	11.58 ug/kg	94
13) freon-113	7.098	101	10507	11.72 ug/kg	99
14) acrolein	6.936	56	5795	52.75 ug/kg	93
15) 1,1-dichloroethene	7.118	96	9250	11.27 ug/kg	85
16) acetone	7.112	58	1775	8.52 ug/kg#	73
17) Methyl Acetate	7.522	43	6078	11.08 ug/kg	94
18) methylene chloride	7.765	84	11097	10.72 ug/kg#	82
19) methyl tert butyl ether	8.075	73	24565	11.24 ug/kg	92
20) acrylonitrile	8.034	53	3191	11.04 ug/kg	98
21) allyl chloride	7.590	41	13851	11.28 ug/kg	79
22) trans-1,2-dichloroethene	8.122	96	9930	11.20 ug/kg#	81
23) iodomethane	7.374	142	19486	11.49 ug/kg	95
24) carbon disulfide	7.502	76	29992	11.16 ug/kg	98
25) propionitrile	9.321	54	1231	11.87 ug/kg	100
26) vinyl acetate	8.573	43	19726m	11.09 ug/kg	
27) chloroprene	8.735	53	14814	11.16 ug/kg	92
28) di-isopropyl ether	8.600	45	29515	11.15 ug/kg	92
29) methacrylonitrile	9.503	41	4663	10.37 ug/kg	83
30) 2-butanone	9.240	72	2085	10.68 ug/kg#	1
31) Hexane	8.425	41	8427	10.93 ug/kg#	88
32) 1,1-dichloroethane	8.654	63	16703	10.82 ug/kg	95
33) tert-butyl ethyl ether	9.031	59	27596	10.94 ug/kg	94
35) 2,2-dichloropropane	9.341	77	14658	11.05 ug/kg	97
36) cis-1,2-dichloroethene	9.308	96	10971	11.53 ug/kg	86
38) bromochloromethane	9.591	128	5833	11.92 ug/kg#	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:59:03 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration

7.6.4

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.658	83	17733	10.83 ug/kg	99
41) Tetrahydrofuran	9.604	42	2950	10.71 ug/kg	95
42) 1,1,1-trichloroethane	9.914	97	16569	11.50 ug/kg	99
44) Cyclohexane	10.015	56	15450	11.19 ug/kg	84
45) carbon tetrachloride	10.096	117	16219	11.23 ug/kg	100
46) 1,1-dichloropropene	10.062	75	12174	11.26 ug/kg	98
47) benzene	10.305	78	35349	10.87 ug/kg	95
48) 1,2-dichloroethane	10.332	62	12313	11.08 ug/kg	89
49) tert-amyl methyl ether	10.345	73	24267	11.21 ug/kg	95
50) heptane	10.500	43	11292	11.16 ug/kg	89
51) trichloroethene	10.978	95	9761	10.98 ug/kg	87
52) 1,2-dichloropropane	11.275	63	9133	11.03 ug/kg	99
53) dibromomethane	11.382	93	6028	11.28 ug/kg	92
54) bromodichloromethane	11.517	83	12534	11.14 ug/kg	97
55) Methylcyclohexane	11.275	83	13915	11.12 ug/kg	85
56) 2-chloroethyl vinyl ether	11.733	63	2622	10.23 ug/kg	84
57) methyl methacrylate	11.194	69	4836	10.35 ug/kg#	74
59) cis-1,3-dichloropropene	11.975	75	12300	11.06 ug/kg	97
61) 4-methyl-2-pentanone	12.063	43	8189	10.99 ug/kg	98
62) toluene	12.366	92	20724	10.02 ug/kg	99
63) trans-1,3-dichloropropene	12.548	75	10741	10.99 ug/kg	95
64) 1,1,2-trichloroethane	12.790	83	6105	11.11 ug/kg	98
65) ethyl methacrylate	12.514	69	8893	10.91 ug/kg	89
67) tetrachloroethene	12.945	166	9664	11.05 ug/kg	88
68) 1,3-dichloropropane	12.986	76	10873	11.37 ug/kg	94
69) dibromochloromethane	13.255	129	9849	10.70 ug/kg	98
70) 1,2-dibromoethane	13.430	107	7427	11.08 ug/kg	99
71) 2-hexanone	12.945	43	6638	11.93 ug/kg	100
72) chlorobenzene	13.942	112	24423	10.70 ug/kg	92
73) 1,1,1,2-tetrachloroethane	14.003	131	10372	11.02 ug/kg	96
74) ethylbenzene	13.996	91	39993	10.56 ug/kg	97
75) m,p-xylene	14.124	106	32112	21.34 ug/kg	97
76) o-xylene	14.569	106	16786	11.13 ug/kg	89
77) styrene	14.582	104	25692	10.80 ug/kg	99
78) bromoform	14.852	173	6343	11.33 ug/kg	99
79) trans-1,4-dichloro-2-b...	15.296	53	2912	10.18 ug/kg#	24
81) isopropylbenzene	14.953	105	43032	11.04 ug/kg	98
83) bromobenzene	15.397	156	11241	11.31 ug/kg	94
84) 1,1,2,2-tetrachloroethane	15.263	83	10808	11.16 ug/kg	97
85) 1,2,3-trichloropropane	15.370	75	9390	11.36 ug/kg	99
86) n-propylbenzene	15.411	91	50095	10.72 ug/kg	97
87) 2-chlorotoluene	15.572	91	33056	10.78 ug/kg	90
88) 4-chlorotoluene	15.700	91	29686	11.03 ug/kg	93
89) 1,3,5-trimethylbenzene	15.586	105	36792	10.98 ug/kg	97
90) tert-butylbenzene	15.963	91	19775	11.16 ug/kg	94
91) 1,2,4-trimethylbenzene	16.024	105	37744	10.91 ug/kg	99
92) sec-butylbenzene	16.212	105	47448	10.84 ug/kg	97
93) 1,3-dichlorobenzene	16.414	146	21842	10.64 ug/kg	98
94) p-isopropyltoluene	16.354	119	41134	10.79 ug/kg	95
95) 1,4-dichlorobenzene	16.522	146	22841	10.63 ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:59:03 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) 1,2-dichlorobenzene	16.940	146	22216	10.95 ug/kg	97
97) n-butylbenzene	16.812	91	39080	10.86 ug/kg	98
98) 1,2-dibromo-3-chloropr...	17.782	75	2523	11.88 ug/kg	91
99) 1,3,5-trichlorobenzene	17.977	180	15676	11.13 ug/kg	99
100) 1,2,4-trichlorobenzene	18.705	180	16410	10.62 ug/kg	100
101) hexachlorobutadiene	18.819	225	7764	10.80 ug/kg	88
102) naphthalene	19.055	128	43533	10.84 ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	15949	10.74 ug/kg	96
104) 2-methylnaphthalene	20.476	142	12701	5.54 ug/kg	94
105) 1-methylnaphthalene	20.753	142	10492	5.51 ug/kg	97

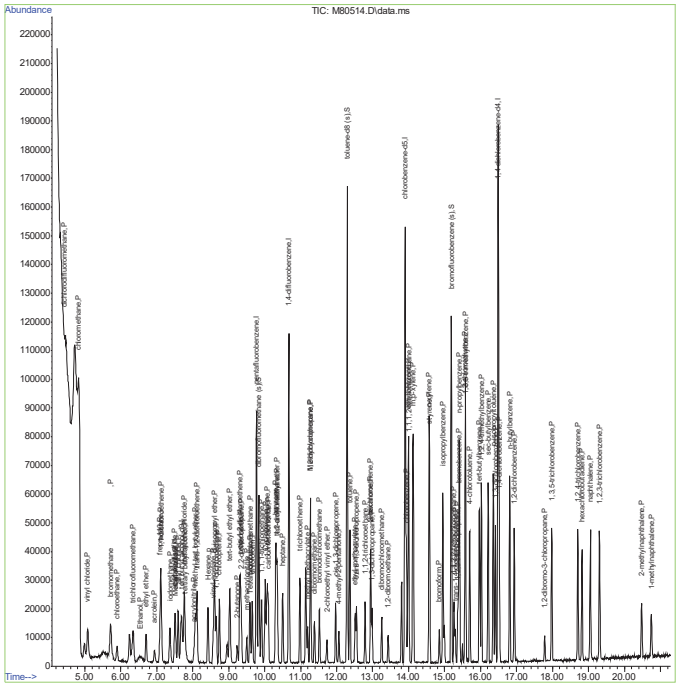
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.4 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:59:03 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration

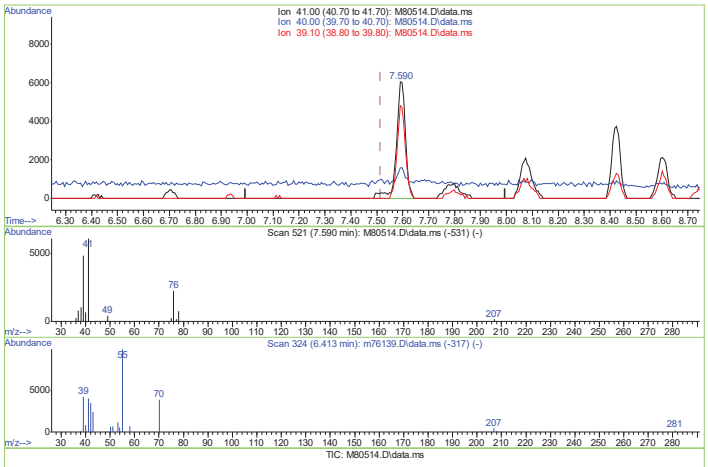


7.6.4 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:57:52 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration



TIC: M80514.D\data.ms

(11) acetonitrile (P)
7.590min (+ 0.074) 201.19 ug/kg
response 14715

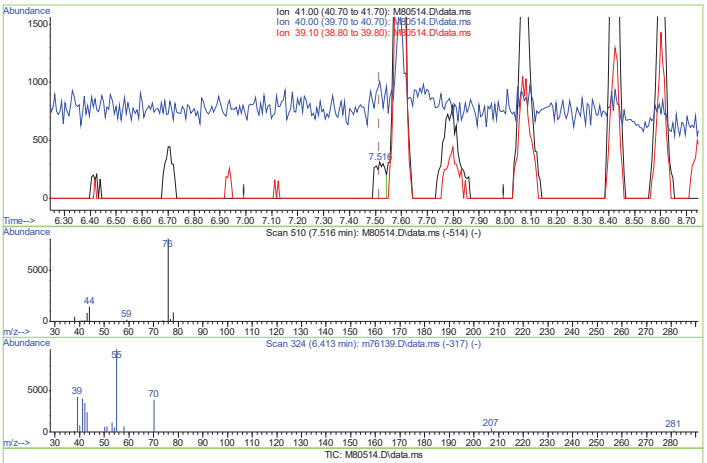
Ion	Exp%	Act%
41.00	100.00	100.00
40.00	94.00	15.92#
39.10	36.70	79.36#
0.00	0.00	0.00

7.6.4.1 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:57:52 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration



TIC: M80514.D\data.ms

(11) acetonitrile (P)
7.516min (+ 0.000) 11.83 ug/kg m
response 865

Ion	Exp%	Act%
41.00	100.00	100.00
40.00	94.00	323.79#
39.10	36.70	0.00#
0.00	0.00	0.00

7.6.4.2 7

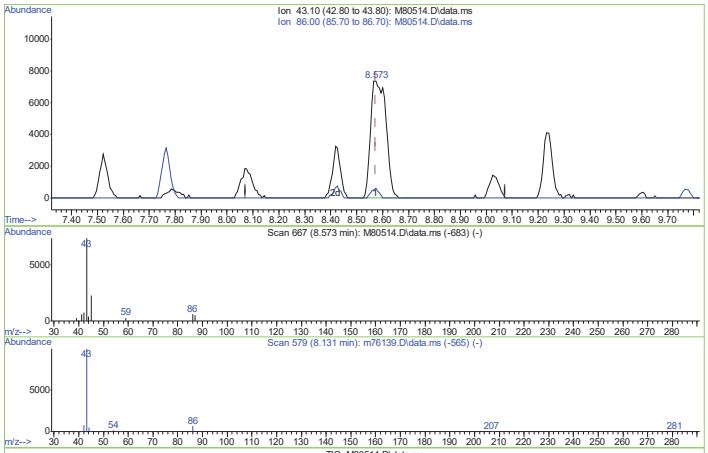
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:57:52 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration

7.6.4.3

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 16.92 ug/kg

response 30092

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	8.20
0.00	0.00	0.00
0.00	0.00	0.00

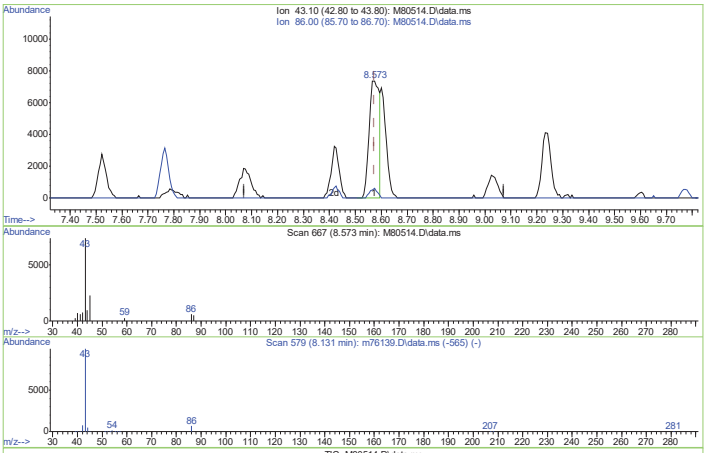
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 12:57:52 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:57:46 2016
Response via : Initial Calibration

7.6.4.4

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 11.00 ug/kg m

response 19726

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	8.20
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 13:00:26 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration

7.6.5

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.684	65	40986	500.00 ug/kg	0.00
4) pentafluorobenzene	9.772	168	69222	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	111484	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	51892	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	58757	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	40660	49.24 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.48%		
60) toluene-d8 (s)	12.292	98	127728	50.17 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.34%		
82) bromofluorobenzene (s)	15.188	95	47493	48.81 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.62%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.792	59	22825	198.54 ug/kg	79
3) Ethanol	6.539	45	19390	1947.65 ug/kg	100
5) dichlorodifluoromethane	4.444	85	18642	19.54 ug/kg	93
6) chloromethane	4.828	50	30212	20.34 ug/kg	98
7) vinyl chloride	5.091	62	29992	20.15 ug/kg	97
8) bromomethane ...	5.724	96	24402	20.59 ug/kg	97
9) chloroethane	5.906	64	15473	19.11 ug/kg	94
10) ethyl ether	6.707	59	14245	21.73 ug/kg	86
11) acetonitrile	7.516	41	1937m	21.90 ug/kg	
12) trichlorofluoromethane	6.344	101	35040	19.70 ug/kg	99
13) freon-113	7.105	101	21381	20.63 ug/kg	96
14) acrolein	6.936	56	12117	97.75 ug/kg	93
15) 1,1-dichloroethene	7.118	96	18753	19.98 ug/kg	84
16) acetone	7.118	58	3920	17.64 ug/kg	86
17) Methyl Acetate	7.522	43	12298	19.53 ug/kg	97
18) methylene chloride	7.765	84	21971	18.82 ug/kg	86
19) methyl tert butyl ether	8.075	73	50644	20.29 ug/kg	95
20) acrylonitrile	8.028	53	6891	20.79 ug/kg	92
21) allyl chloride	7.597	41	28873	20.56 ug/kg	83
22) trans-1,2-dichloroethene	8.122	96	20803	20.56 ug/kg#	81
23) iodomethane	7.374	142	39784	20.41 ug/kg	90
24) carbon disulfide	7.509	76	60391	19.71 ug/kg	99
25) propionitrile	9.328	54	2602	21.32 ug/kg	100
26) vinyl acetate	8.573	43	42537m	20.86 ug/kg	
27) chloroprene	8.742	53	30653	20.26 ug/kg	82
28) di-isopropyl ether	8.607	45	61842	20.50 ug/kg	96
29) methacrylonitrile	9.503	41	10169	20.16 ug/kg	88
30) 2-butanone	9.240	72	4013	18.14 ug/kg#	1
31) Hexane	8.425	41	16777	19.19 ug/kg#	88
32) 1,1-dichloroethane	8.654	63	35775	20.49 ug/kg	97
33) tert-butyl ethyl ether	9.031	59	59107	20.67 ug/kg	96
35) 2,2-dichloropropane	9.341	77	29549	19.59 ug/kg	96
36) cis-1,2-dichloroethene	9.308	96	23066	21.07 ug/kg	88
38) bromochloromethane	9.591	128	12412	21.84 ug/kg#	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 13:00:26 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration

7.6.5

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.658	83	36986	19.97 ug/kg	95
41) Tetrahydrofuran	9.604	42	5882	18.83 ug/kg	90
42) 1,1,1-trichloroethane	9.907	97	33888	20.46 ug/kg	98
44) Cyclohexane	10.015	56	30794	20.01 ug/kg	84
45) carbon tetrachloride	10.096	117	32696	20.29 ug/kg	92
46) 1,1-dichloropropene	10.062	75	25340	20.99 ug/kg	96
47) benzene	10.305	78	73450	20.50 ug/kg	98
48) 1,2-dichloroethane	10.332	62	25987	21.04 ug/kg	97
49) tert-amyl methyl ether	10.345	73	50830	21.06 ug/kg	96
50) heptane	10.500	43	23199	20.58 ug/kg	87
51) trichloroethene	10.978	95	20332	20.62 ug/kg	91
52) 1,2-dichloropropane	11.275	63	19642	21.37 ug/kg	100
53) dibromomethane	11.382	93	12867	21.55 ug/kg	94
54) bromodichloromethane	11.517	83	26055	20.80 ug/kg	99
55) Methylcyclohexane	11.275	83	28804	20.69 ug/kg	88
56) 2-chloroethyl vinyl ether	11.739	63	5681	20.32 ug/kg	88
57) methyl methacrylate	11.194	69	10290	20.11 ug/kg#	75
58) 1,4-dioxane	11.308	88	641	64.89 ug/kg	86
59) cis-1,3-dichloropropene	11.975	75	26542	21.47 ug/kg	96
61) 4-methyl-2-pentanone	12.063	43	17344	20.99 ug/kg	99
62) toluene	12.373	92	43597	19.47 ug/kg	100
63) trans-1,3-dichloropropene	12.548	75	22546	20.80 ug/kg	97
64) 1,1,2-trichloroethane	12.790	83	12805	20.94 ug/kg	95
65) ethyl methacrylate	12.514	69	18950	21.00 ug/kg	88
67) tetrachloroethene	12.945	166	20224	20.67 ug/kg	96
68) 1,3-dichloropropane	12.986	76	22870	21.21 ug/kg	99
69) dibromochloromethane	13.255	129	21348	20.91 ug/kg	95
70) 1,2-dibromoethane	13.430	107	15899	21.19 ug/kg	97
71) 2-hexanone	12.945	43	13556	21.32 ug/kg	99
72) chlorobenzene	13.936	112	51858	20.48 ug/kg	95
73) 1,1,1,2-tetrachloroethane	14.003	131	21751	20.66 ug/kg	97
74) ethylbenzene	13.996	91	85835	20.50 ug/kg	97
75) m,p-xylene	14.124	106	69264	41.66 ug/kg	99
76) o-xylene	14.569	106	35599	21.06 ug/kg	93
77) styrene	14.582	104	55895	21.13 ug/kg	98
78) bromoform	14.852	173	13580	21.53 ug/kg	97
79) trans-1,4-dichloro-2-b...	15.296	53	5894	18.79 ug/kg#	26
81) isopropylbenzene	14.953	105	92690	21.11 ug/kg	96
83) bromobenzene	15.397	156	23671	21.00 ug/kg	98
84) 1,1,2,2-tetrachloroethane	15.263	83	22690	20.74 ug/kg	94
85) 1,2,3-trichloropropane	15.370	75	19228	20.49 ug/kg	91
86) n-propylbenzene	15.411	91	108912	20.86 ug/kg	98
87) 2-chlorotoluene	15.572	91	71614	20.87 ug/kg	97
88) 4-chlorotoluene	15.700	91	62434	20.61 ug/kg	91
89) 1,3,5-trimethylbenzene	15.586	105	78597	20.86 ug/kg	97
90) tert-butylbenzene	15.970	91	42705	21.33 ug/kg	96
91) 1,2,4-trimethylbenzene	16.024	105	81868	21.08 ug/kg	98
92) sec-butylbenzene	16.212	105	103324	21.07 ug/kg	99
93) 1,3-dichlorobenzene	16.415	146	46865	20.47 ug/kg	98
94) p-isopropyltoluene	16.354	119	89530	20.97 ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 13:00:26 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) 1,4-dichlorobenzene	16.516	146	46297	19.32 ug/kg	98
96) 1,2-dichlorobenzene	16.933	146	47401	20.79 ug/kg	99
97) n-butylbenzene	16.812	91	81916	20.29 ug/kg	99
98) 1,2-dibromo-3-chloropr...	17.782	75	4777	19.28 ug/kg	85
99) 1,3,5-trichlorobenzene	17.977	180	31669	19.93 ug/kg	100
100) 1,2,4-trichlorobenzene	18.705	180	33369	19.37 ug/kg	99
101) hexachlorobutadiene	18.819	225	15389	19.12 ug/kg	94
102) naphthalene	19.055	128	92444	20.54 ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	32828	19.77 ug/kg	98
104) 2-methylnaphthalene	20.477	142	25590	9.90 ug/kg	95
105) 1-methylnaphthalene	20.746	142	21384	9.98 ug/kg	95

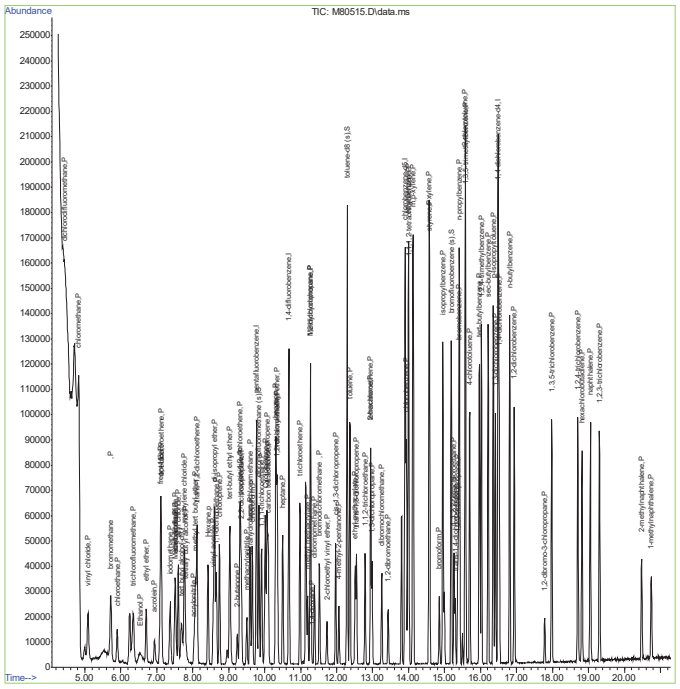
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.5 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 13:00:26 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration

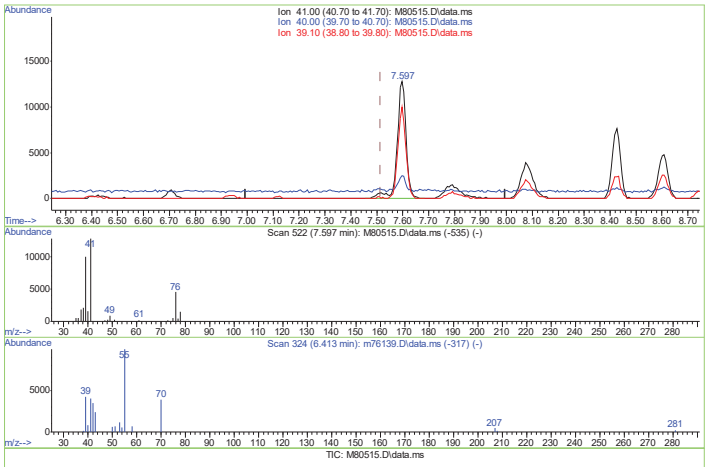


7.6.5 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 12:59:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration



(11) acetonitrile (P)
7.597min (+ 0.081) 346.88 ug/kg
response 38681

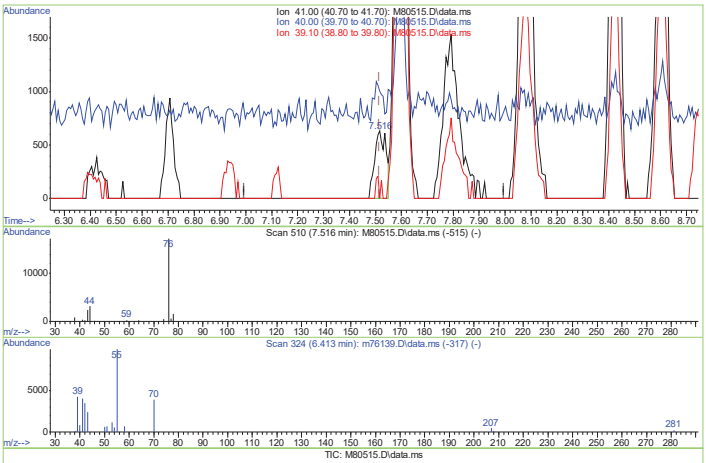
Ion	Exp%	Act%
41.00	100.00	100.00
40.00	94.00	13.61#
39.10	36.70	78.30#
0.00	0.00	0.00

7.6.5.1 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 12:59:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration



(11) acetonitrile (P)
7.516min (+ 0.000) 21.90 ug/kg m
response 1937

Ion	Exp%	Act%
41.00	100.00	100.00
40.00	94.00	158.39#
39.10	36.70	0.00#
0.00	0.00	0.00

7.6.5.2 7

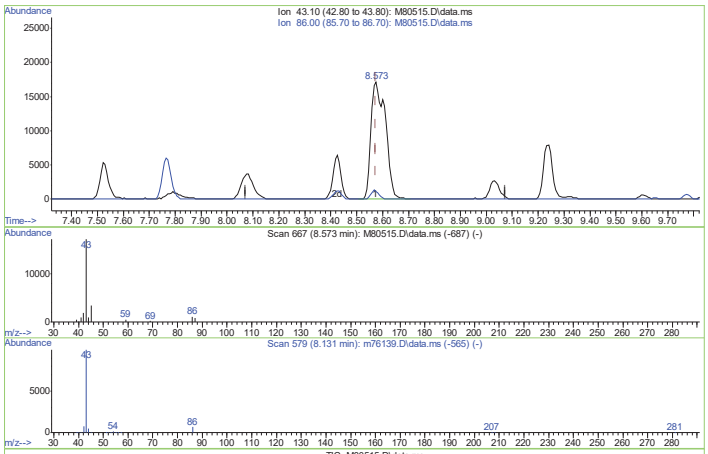
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 12:59:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration

7.6.5.3

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 32.57 ug/kg

response 66514

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	6.52
0.00	0.00	0.00
0.00	0.00	0.00

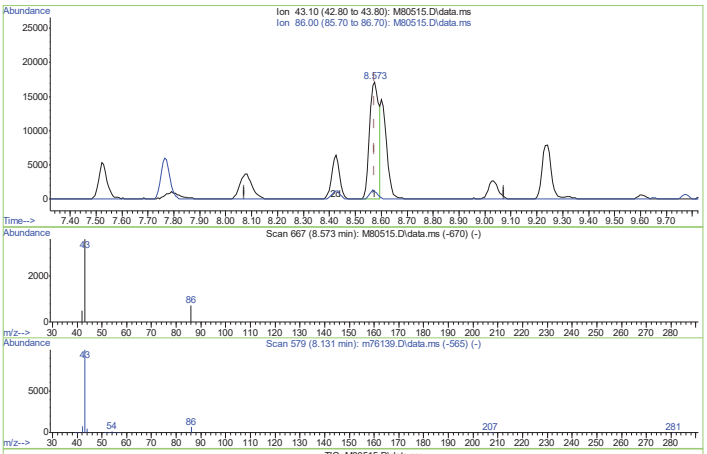
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 12:59:39 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 12:59:32 2016
Response via : Initial Calibration

7.6.5.4

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 20.86 ug/kg m

response 42597

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	6.52
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:45:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration

7.6.6

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.691	65	41252	500.00 ug/kg	0.00
4) pentafluorobenzene	9.772	168	71882	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	117912	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	52587	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.488	152	63306	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	41280	48.26 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.52%	
60) toluene-d8 (s)	12.292	98	132295	49.10 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.20%	
82) bromofluorobenzene (s)	15.182	95	49543	47.44 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.88%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.798	59	59084	511.56 ug/kg	88
3) Ethanol	6.552	45	45459	4566.61 ug/kg#	68
5) dichlorodifluoromethane	4.437	85	47410	48.07 ug/kg	94
6) chloromethane	4.828	50	72694	46.96 ug/kg	96
7) vinyl chloride	5.084	62	73053	47.19 ug/kg	98
8) bromomethane ...	5.710	96	69717	56.32 ug/kg	100
9) chloroethane	5.892	64	44150	53.09 ug/kg	98
10) ethyl ether	6.707	59	36133	52.17 ug/kg	88
11) acetonitrile	7.516	41	3863	40.77 ug/kg#	62
12) trichlorofluoromethane	6.343	101	91193	49.53 ug/kg	100
13) freon-113	7.098	101	54723	50.53 ug/kg	99
14) acrolein	6.936	56	31129	243.19 ug/kg	99
15) 1,1-dichloroethene	7.111	96	47996	49.26 ug/kg#	78
16) acetone	7.118	58	9513	42.21 ug/kg#	83
17) Methyl Acetate	7.522	43	31013	47.70 ug/kg	99
18) methylene chloride	7.765	84	54760	45.71 ug/kg	85
19) methyl tert butyl ether	8.075	73	132087	50.81 ug/kg	95
20) acrylonitrile	8.034	53	17586	50.59 ug/kg	99
21) allyl chloride	7.596	41	73793	50.32 ug/kg	78
22) trans-1,2-dichloroethene	8.115	96	53246	50.39 ug/kg	85
23) iodomethane	7.367	142	103389	50.86 ug/kg	92
24) carbon disulfide	7.509	76	155617	49.05 ug/kg	99
25) propionitrile	9.321	54	6875	53.36 ug/kg	100
26) vinyl acetate	8.573	43	110846m	51.71 ug/kg	
27) chloroprene	8.742	53	80377	51.02 ug/kg	84
28) di-isopropyl ether	8.607	45	161543	51.31 ug/kg	95
29) methacrylonitrile	9.503	41	25574	48.73 ug/kg	88
30) 2-butanone	9.240	72	10845m	48.33 ug/kg	
31) Hexane	8.418	41	43819	48.67 ug/kg#	85
32) 1,1-dichloroethane	8.654	63	90127	49.46 ug/kg	96
33) tert-butyl ethyl ether	9.031	59	152383	50.97 ug/kg	96
35) 2,2-dichloropropane	9.341	77	76933	49.31 ug/kg	95
36) cis-1,2-dichloroethene	9.307	96	57528	50.07 ug/kg	86
38) bromochloromethane	9.590	128	30780	51.22 ug/kg#	77

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:45:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration

7.6.6

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.658	83	95007	49.41 ug/kg	99
41) Tetrahydrofuran	9.604	42	15109	47.26 ug/kg	89
42) 1,1,1-trichloroethane	9.914	97	88167	51.02 ug/kg	98
44) Cyclohexane	10.015	56	80876	49.68 ug/kg	83
45) carbon tetrachloride	10.096	117	85702	50.14 ug/kg	99
46) 1,1-dichloropropene	10.062	75	65101	50.49 ug/kg	95
47) benzene	10.304	78	193418	50.83 ug/kg	100
48) 1,2-dichloroethane	10.331	62	66620	50.48 ug/kg	97
49) tert-amyl methyl ether	10.352	73	134511	52.13 ug/kg	95
50) heptane	10.500	43	61589	51.37 ug/kg	88
51) trichloroethene	10.978	95	53595	51.07 ug/kg	92
52) 1,2-dichloropropane	11.274	63	50290	51.02 ug/kg	98
53) dibromomethane	11.382	93	32470	50.63 ug/kg	96
54) bromodichloromethane	11.517	83	67543	50.58 ug/kg	97
55) Methylcyclohexane	11.274	83	75815	51.13 ug/kg	86
56) 2-chloroethyl vinyl ether	11.733	63	15436	52.00 ug/kg	86
57) methyl methacrylate	11.194	69	27058	49.92 ug/kg	86
58) 1,4-dioxane	11.301	88	2612	303.23 ug/kg	77
59) cis-1,3-dichloropropene	11.975	75	69616	52.48 ug/kg	97
61) 4-methyl-2-pentanone	12.063	43	45707	51.78 ug/kg	98
62) toluene	12.366	92	117833	50.02 ug/kg	100
63) trans-1,3-dichloropropene	12.548	75	59763	51.71 ug/kg	100
64) 1,1,2-trichloroethane	12.790	83	32723	50.13 ug/kg	96
65) ethyl methacrylate	12.514	69	50059	51.93 ug/kg	84
67) tetrachloroethene	12.945	166	53680	53.78 ug/kg	92
68) 1,3-dichloropropane	12.985	76	58520	52.91 ug/kg	100
69) dibromochloromethane	13.255	129	55686	53.34 ug/kg	97
70) 1,2-dibromoethane	13.430	107	41565	54.02 ug/kg	97
71) 2-hexanone	12.945	43	33536	51.36 ug/kg	99
72) chlorobenzene	13.942	112	137516	53.33 ug/kg	92
73) 1,1,1,2-tetrachloroethane	14.003	131	59134	55.07 ug/kg	99
74) ethylbenzene	13.996	91	233448	54.75 ug/kg	97
75) m,p-xylene	14.124	106	190040	112.02 ug/kg	97
76) o-xylene	14.569	106	97291	56.19 ug/kg	92
77) styrene	14.582	104	152436	56.22 ug/kg	99
78) bromoform	14.851	173	35359	54.48 ug/kg	97
79) trans-1,4-dichloro-2-b...	15.296	53	15544	49.65 ug/kg#	24
81) isopropylbenzene	14.952	105	256054	53.53 ug/kg	98
83) bromobenzene	15.397	156	62416	50.89 ug/kg	98
84) 1,1,2,2-tetrachloroethane	15.262	83	57642	48.54 ug/kg	99
85) 1,2,3-trichloropropane	15.370	75	48867	48.10 ug/kg	95
86) n-propylbenzene	15.411	91	295700	52.11 ug/kg	98
87) 2-chlorotoluene	15.572	91	195861	52.52 ug/kg	96
88) 4-chlorotoluene	15.700	91	167248	50.92 ug/kg	91
89) 1,3,5-trimethylbenzene	15.586	105	225043	54.96 ug/kg	98
90) tert-butylbenzene	15.970	91	121234	55.47 ug/kg	92
91) 1,2,4-trimethylbenzene	16.024	105	229451	54.25 ug/kg	97
92) sec-butylbenzene	16.212	105	292978	54.86 ug/kg	99
93) 1,3-dichlorobenzene	16.414	146	129944	52.44 ug/kg	98
94) p-isopropyltoluene	16.354	119	256246	55.18 ug/kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:45:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) 1,4-dichlorobenzene	16.515	146	130491	50.89 ug/kg	99
96) 1,2-dichlorobenzene	16.940	146	130454	52.69 ug/kg	98
97) n-butylbenzene	16.812	91	229073	52.52 ug/kg	100
98) 1,2-dibromo-3-chloropr...	17.782	75	12130	45.85 ug/kg	96
99) 1,3,5-trichlorobenzene	17.977	180	86226	50.39 ug/kg	99
100) 1,2,4-trichlorobenzene	18.705	180	92651	50.24 ug/kg	98
101) hexachlorobutadiene	18.819	225	42557	49.52 ug/kg	90
102) naphthalene	19.055	128	253754	52.04 ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	91497	51.25 ug/kg	96
104) 2-methylnaphthalene	20.476	142	71786	25.83 ug/kg	95
105) 1-methylnaphthalene	20.746	142	60255	26.11 ug/kg	96

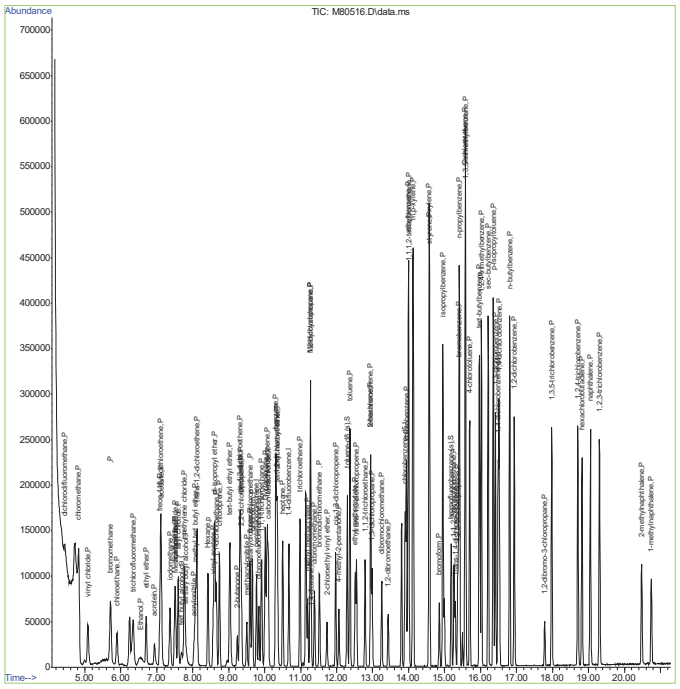
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.6 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:45:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration

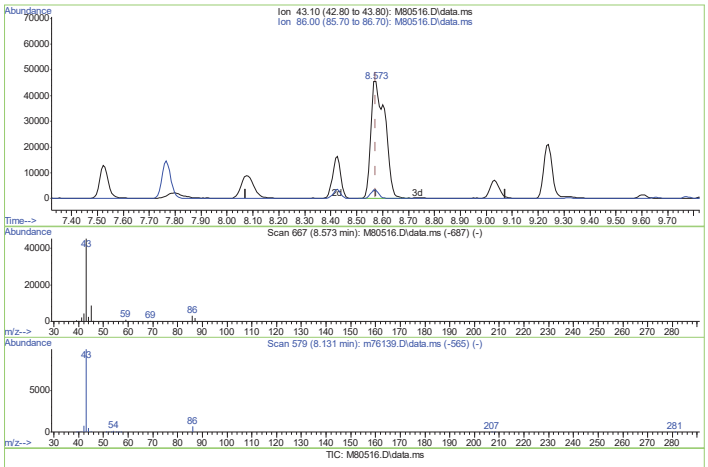


7.6.6 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:01:12 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration



(26) vinyl acetate (P)
8.573min (0.000) 80.24 ug/kg
response 171993

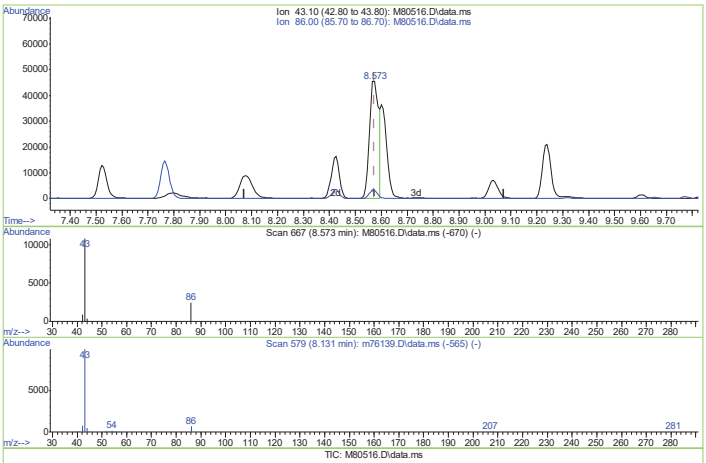
Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.00	6.97
0.00	0.00	0.00
0.00	0.00	0.00

7.6.6.1 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:01:12 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration



(26) vinyl acetate (P)
8.573min (0.000) 51.71 ug/kg m
response 118846

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.00	6.97
0.00	0.00	0.00
0.00	0.00	0.00

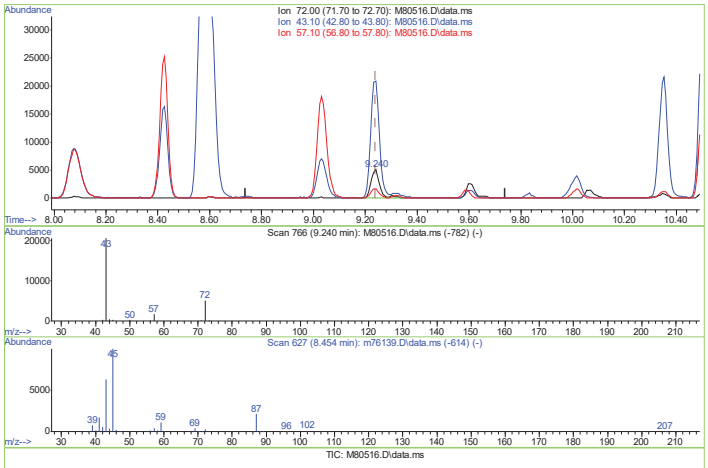
7.6.6.2 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:01:48 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration

7.6.6.3



(30) 2-butanone (P)

9.240min (0.000) 51.61 ug/kg

response 11582

Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2100.70	410.35#
57.10	129.30	32.57#
0.00	0.00	0.00

M160824S.M Wed Aug 24 13:45:36 2016 Page: 1

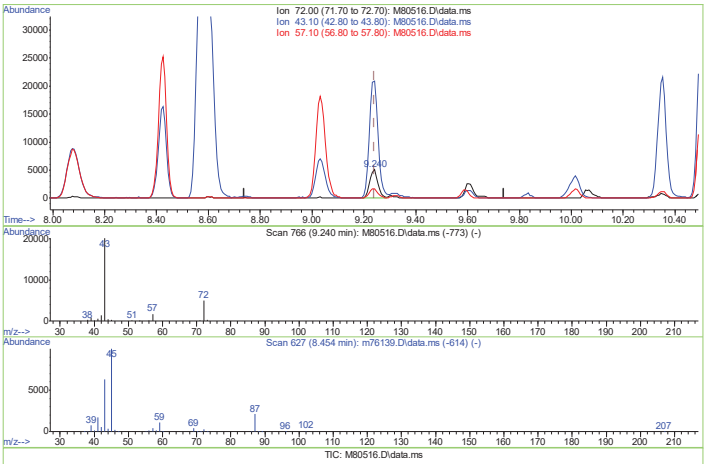
M80516.D edits: 2-butanone

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80516.D
Acq On : 24 Aug 2016 11:30 am
Operator : kaylap
Sample : icc2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 24 13:01:48 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:01:05 2016
Response via : Initial Calibration

7.6.6.4



(30) 2-butanone (P)

9.240min (0.000) 48.33 ug/kg m

response 10845

Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2100.70	410.35#
57.10	129.30	32.57#
0.00	0.00	0.00

M160824S.M Wed Aug 24 13:45:45 2016 Page: 1

M80516.D edits: 2-butanone

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:46:12 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration

7.6.7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.691	65	48240	500.00 ug/kg	0.00
4) pentafluorobenzene	9.772	168	75604	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	124908	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	55327	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	69846	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	42601	47.35 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.70%	
60) toluene-d8 (s)	12.292	98	139598	48.91 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.82%	
82) bromofluorobenzene (s)	15.182	95	52082	45.19 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.38%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.792	59	123460	914.69 ug/kg	89
3) Ethanol	6.532	45	104294	9000.75 ug/kg#	80
5) dichlorodifluoromethane	4.444	85	112471	108.42 ug/kg	100
6) chloromethane	4.835	50	153448	94.25 ug/kg	96
7) vinyl chloride	5.091	62	148985	91.51 ug/kg	99
8) bromomethane ...	5.731	96	104578	80.33 ug/kg	96
9) chloroethane	5.906	64	67921	77.66 ug/kg	98
10) ethyl ether	6.707	59	66447	91.22 ug/kg	86
11) acetonitrile	7.516	41	8770	90.19 ug/kg#	67
12) trichlorofluoromethane	6.350	101	169247	87.40 ug/kg	98
13) freon-113	7.105	101	103573	90.93 ug/kg	100
14) acrolein	6.936	56	60497	449.57 ug/kg	99
15) 1,1-dichloroethene	7.118	96	89177	87.01 ug/kg#	81
16) acetone	7.118	58	15281	64.47 ug/kg	92
17) Methyl Acetate	7.522	43	56925	83.24 ug/kg	99
18) methylene chloride	7.765	84	97919	77.71 ug/kg	86
19) methyl tert butyl ether	8.082	73	247328	90.46 ug/kg	93
20) acrylonitrile	8.028	53	33578	91.76 ug/kg	96
21) allyl chloride	7.597	41	132758	86.08 ug/kg	83
22) trans-1,2-dichloroethene	8.122	96	96699	87.00 ug/kg#	83
23) iodomethane	7.374	142	188336	88.09 ug/kg	96
24) carbon disulfide	7.509	76	299972	89.82 ug/kg	100
25) propionitrile	9.321	54	13628	100.57 ug/kg	100
26) vinyl acetate	8.573	43	212944m	94.45 ug/kg	
27) chloroprene	8.742	53	148462	89.59 ug/kg	81
28) di-isopropyl ether	8.607	45	298653	90.18 ug/kg	96
29) methacrylonitrile	9.503	41	49672	89.99 ug/kg	88
30) 2-butanone	9.233	72	12591m	53.35 ug/kg	
31) Hexane	8.425	41	86189	91.02 ug/kg#	82
32) 1,1-dichloroethane	8.654	63	164917	86.05 ug/kg	96
33) tert-butyl ethyl ether	9.031	59	286116	90.99 ug/kg	96
35) 2,2-dichloropropane	9.341	77	142965	87.13 ug/kg	94
36) cis-1,2-dichloroethene	9.308	96	107345	88.83 ug/kg	89
38) bromochloromethane	9.591	128	56899	90.03 ug/kg#	77

M160824S.M Wed Aug 24 15:31:35 2016 Page: 1

M80517.D: MSM2881-IC2881 Initial Calibration (100) page 1 of 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:46:12 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration

7.6.7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.658	83	172778	85.43 ug/kg	100
41) Tetrahydrofuran	9.604	42	29018	86.30 ug/kg	87
42) 1,1,1-trichloroethane	9.914	97	163067	89.71 ug/kg	99
44) Cyclohexane	10.015	56	153521	89.03 ug/kg	86
45) carbon tetrachloride	10.096	117	161047	88.94 ug/kg	99
46) 1,1-dichloropropene	10.062	75	121382	88.86 ug/kg	95
47) benzene	10.305	78	353039	87.59 ug/kg	99
48) 1,2-dichloroethane	10.332	62	124588	89.11 ug/kg	98
49) tert-amyl methyl ether	10.352	73	254280	93.03 ug/kg	95
50) heptane	10.500	43	118121	93.00 ug/kg	88
51) trichloroethene	10.978	95	99994	89.95 ug/kg	96
52) 1,2-dichloropropane	11.275	63	92746	88.83 ug/kg	98
53) dibromomethane	11.382	93	61004	89.79 ug/kg	95
54) bromodichloromethane	11.517	83	125895	89.00 ug/kg	98
55) Methylcyclohexane	11.275	83	148224	94.37 ug/kg	87
56) 2-chloroethyl vinyl ether	11.733	63	29362	93.37 ug/kg	87
57) methyl methacrylate	11.194	69	53887	93.85 ug/kg#	82
58) 1,4-dioxane	11.315	88	5294	580.17 ug/kg	75
59) cis-1,3-dichloropropene	11.975	75	131601	93.64 ug/kg	95
61) 4-methyl-2-pentanone	12.063	43	93423	99.91 ug/kg	98
62) toluene	12.366	92	219276	87.87 ug/kg	100
63) trans-1,3-dichloropropene	12.548	75	116014	94.77 ug/kg	100
64) 1,1,2-trichloroethane	12.790	83	62355	90.17 ug/kg	97
65) ethyl methacrylate	12.514	69	97818	95.79 ug/kg	85
67) tetrachloroethene	12.945	166	104342	99.36 ug/kg	91
68) 1,3-dichloropropane	12.986	76	111596	95.89 ug/kg	100
69) dibromochloromethane	13.255	129	108047	98.36 ug/kg	100
70) 1,2-dibromoethane	13.430	107	79575	98.30 ug/kg	99
71) 2-hexanone	12.945	43	69621	101.35 ug/kg	100
72) chlorobenzene	13.942	112	261027	96.21 ug/kg	93
73) 1,1,1,2-tetrachloroethane	14.003	131	114747	101.57 ug/kg	98
74) ethylbenzene	13.996	91	440564	98.21 ug/kg	95
75) m,p-xylene	14.124	106	363247	203.52 ug/kg	96
76) o-xylene	14.569	106	184586	101.33 ug/kg	96
77) styrene	14.582	104	292177	102.42 ug/kg	99
78) bromoform	14.852	173	71020	104.00 ug/kg	98
79) trans-1,4-dichloro-2-b...	15.296	53	31834	96.64 ug/kg#	24
81) isopropylbenzene	14.953	105	498570	94.47 ug/kg	97
83) bromobenzene	15.397	156	122437	90.48 ug/kg	96
84) 1,1,2,2-tetrachloroethane	15.263	83	115060	87.82 ug/kg	99
85) 1,2,3-trichloropropane	15.370	75	95829	85.49 ug/kg	95
86) n-propylbenzene	15.411	91	569825	91.02 ug/kg	98
87) 2-chlorotoluene	15.572	91	372817	90.61 ug/kg	94
88) 4-chlorotoluene	15.700	91	321084	88.61 ug/kg	89
89) 1,3,5-trimethylbenzene	15.586	105	434442	96.16 ug/kg	96
90) tert-butylbenzene	15.970	91	240061	99.56 ug/kg	93
91) 1,2,4-trimethylbenzene	16.024	105	443440	95.02 ug/kg	95
92) sec-butylbenzene	16.212	105	579247	98.30 ug/kg	98
93) 1,3-dichlorobenzene	16.414	146	256752	93.91 ug/kg	97
94) p-isopropyltoluene	16.354	119	515191	100.55 ug/kg	98

M160824S.M Wed Aug 24 15:31:35 2016 Page: 2

M80517.D: MSM2881-IC2881 Initial Calibration (100) page 2 of 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:46:12 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) 1,4-dichlorobenzene	16.515	146	257494	91.02 ug/kg	100
96) 1,2-dichlorobenzene	16.933	146	257678	94.33 ug/kg	98
97) n-butylbenzene	16.812	91	461780	95.95 ug/kg	97
98) 1,2-dibromo-3-chloropr...	17.782	75	25548	87.53 ug/kg	98
99) 1,3,5-trichlorobenzene	17.977	180	178169	94.37 ug/kg	99
100) 1,2,4-trichlorobenzene	18.705	180	192101	94.42 ug/kg	99
101) hexachlorobutadiene	18.819	225	89216	94.08 ug/kg	96
102) naphthalene	19.055	128	538860	100.17 ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	185530	94.20 ug/kg	98
104) 2-methylnaphthalene	20.477	142	153238	49.97 ug/kg	95
105) 1-methylnaphthalene	20.746	142	128556	50.49 ug/kg	98

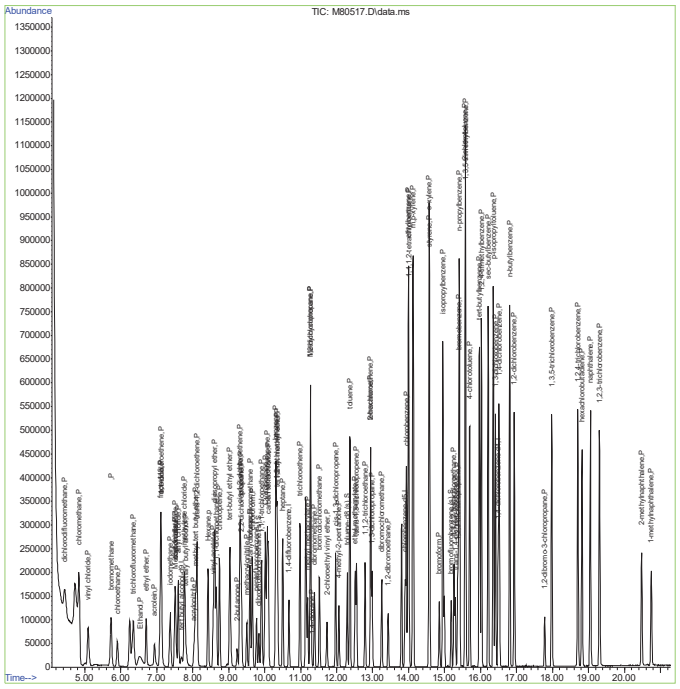
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:46:12 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration

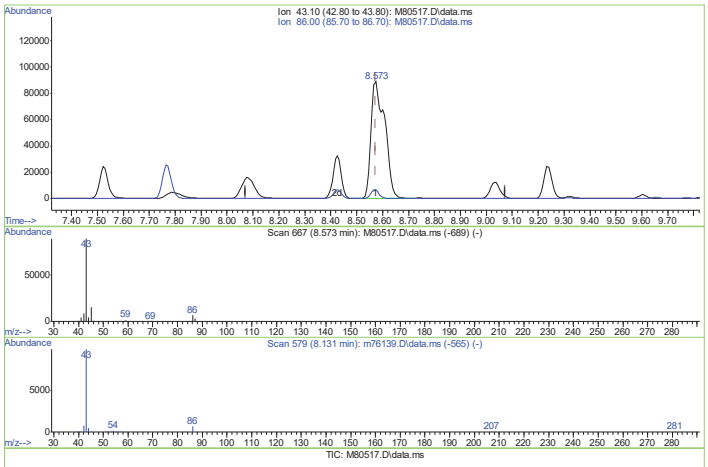


7.6.7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:02:35 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration



(26) vinyl acetate (P)
8.573min (+ 0.000) 145.19 ug/kg
response 327335

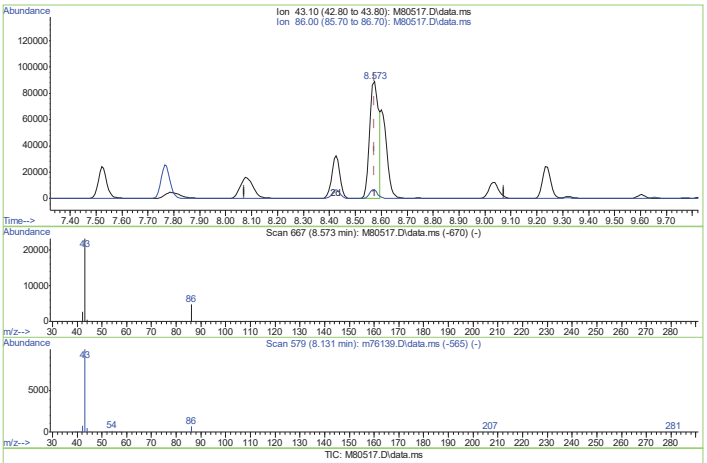
Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.30
0.00	0.00	0.00
0.00	0.00	0.00

7.6.7.1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:02:35 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration



(26) vinyl acetate (P)
8.573min (+ 0.000) 94.45 ug/kg m
response 212944

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.30
0.00	0.00	0.00
0.00	0.00	0.00

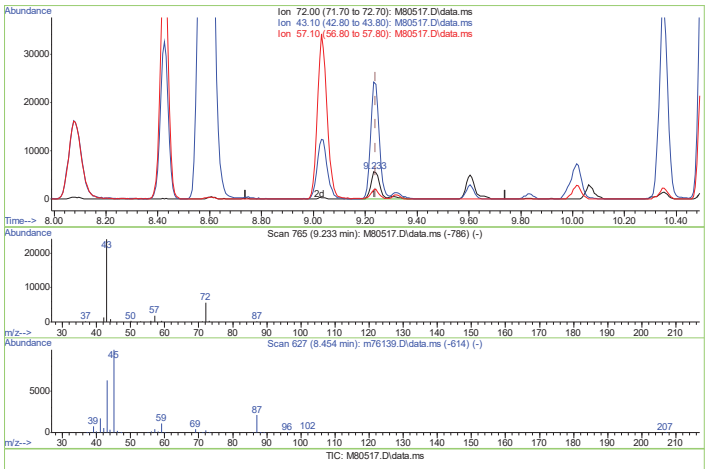
7.6.7.2

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:03:11 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration

7.6.7.3



(30) 2-butanone (P)

9.233min (-0.007) 00.14 ug/kg

response 14195

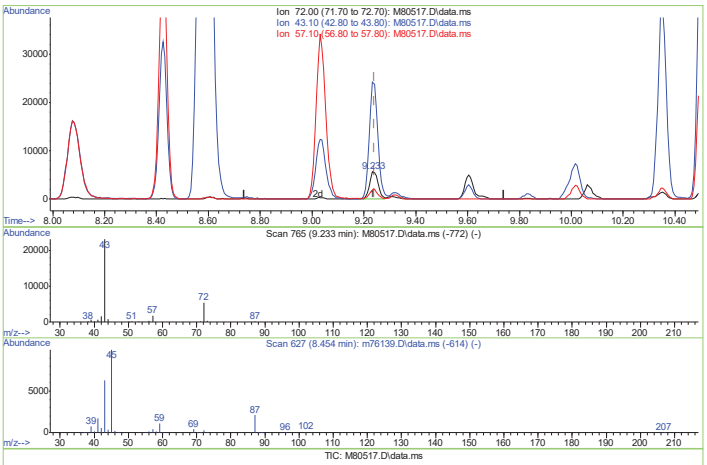
Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2100.70	427.69#
57.10	129.30	33.38#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80517.D
Acq On : 24 Aug 2016 11:58 am
Operator : kaylap
Sample : ic2881-100
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 24 13:03:11 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:02:28 2016
Response via : Initial Calibration

7.6.7.4



(30) 2-butanone (P)

9.233min (-0.007) 53.35 ug/kg m

response 12591

Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2100.70	430.86#
57.10	129.30	33.38#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:46:47 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration

7.6.8

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.684	65	45569	500.00 ug/kg	0.00
4) pentafluorobenzene	9.772	168	76782	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	126537	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	56619	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	71158	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	43005	47.43 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.86%	
60) toluene-d8 (s)	12.292	98	142156	49.32 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.64%	
82) bromofluorobenzene (s)	15.188	95	53028	45.80 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.60%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.792	59	245047	1955.28 ug/kg	93
3) Ethanol	6.532	45	197425	18404.61 ug/kg#	74
5) dichlorodifluoromethane	4.437	85	232055	217.22 ug/kg	100
6) chloromethane	4.828	50	316110	193.03 ug/kg	97
7) vinyl chloride	5.091	62	310333	190.38 ug/kg	98
8) bromomethane ...	5.731	96	230801	180.48 ug/kg	97
9) chloroethane	5.906	64	144657	170.48 ug/kg	98
10) ethyl ether	6.701	59	140581	192.85 ug/kg	89
11) acetonitrile	7.509	41	17827	185.05 ug/kg#	62
12) trichlorofluoromethane	6.350	101	352333	182.99 ug/kg	100
13) freon-113	7.105	101	215413	189.07 ug/kg	96
14) acrolein	6.936	56	127669	953.43 ug/kg	99
15) 1,1-dichloroethene	7.118	96	187191	183.82 ug/kg#	81
16) acetone	7.112	58	29921	132.13 ug/kg	89
17) Methyl Acetate	7.522	43	115748	172.45 ug/kg	99
18) methylene chloride	7.765	84	205362	166.68 ug/kg	85
19) methyl tert butyl ether	8.082	73	521730	190.93 ug/kg	94
20) acrylonitrile	8.028	53	69406	189.88 ug/kg	96
21) allyl chloride	7.597	41	282297	184.51 ug/kg	83
22) trans-1,2-dichloroethene	8.115	96	203911	184.65 ug/kg	84
23) iodomethane	7.374	142	407720	191.58 ug/kg	95
24) carbon disulfide	7.509	76	631505	189.40 ug/kg	99
25) propionitrile	9.321	54	28508	206.92 ug/kg	100
26) vinyl acetate	8.567	43	450101m	198.79 ug/kg	
27) chloroprene	8.742	53	313195	189.39 ug/kg	80
28) di-isopropyl ether	8.607	45	637659	192.75 ug/kg	94
29) methacrylonitrile	9.503	41	103227	187.90 ug/kg	89
30) 2-butanone	9.240	72	24383m	110.53 ug/kg	
31) Hexane	8.425	41	178174	188.08 ug/kg#	84
32) 1,1-dichloroethane	8.654	63	343702	180.79 ug/kg	97
33) tert-butyl ethyl ether	9.031	59	607215	193.04 ug/kg	94
35) 2,2-dichloropropane	9.341	77	303839	186.32 ug/kg	96
36) cis-1,2-dichloroethene	9.308	96	229073	190.19 ug/kg	85
38) bromochloromethane	9.591	128	122392	193.90 ug/kg#	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:46:47 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration

7.6.8

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.658	83	364301	181.78 ug/kg	100
41) Tetrahydrofuran	9.604	42	60208	181.29 ug/kg	86
42) 1,1,1-trichloroethane	9.914	97	344840	190.06 ug/kg	98
44) Cyclohexane	10.015	56	326990	190.67 ug/kg	83
45) carbon tetrachloride	10.096	117	339856	188.75 ug/kg	98
46) 1,1-dichloropropene	10.062	75	257527	189.62 ug/kg	95
47) benzene	10.305	78	760790	189.68 ug/kg	100
48) 1,2-dichloroethane	10.332	62	267214	192.15 ug/kg	96
49) tert-amyl methyl ether	10.352	73	544903	199.11 ug/kg	95
50) heptane	10.500	43	246303	193.68 ug/kg	87
51) trichloroethene	10.978	95	214085	193.35 ug/kg	94
52) 1,2-dichloropropane	11.275	63	202395	194.98 ug/kg	99
53) dibromomethane	11.382	93	128025	189.24 ug/kg	96
54) bromodichloromethane	11.517	83	269509	191.59 ug/kg	99
55) Methylcyclohexane	11.275	83	314643	199.62 ug/kg	87
56) 2-chloroethyl vinyl ether	11.733	63	65114	207.15 ug/kg	86
57) methyl methacrylate	11.194	69	115602	201.22 ug/kg#	80
58) 1,4-dioxane	11.308	88	11237	1153.94 ug/kg	81
59) cis-1,3-dichloropropene	11.975	75	290931	206.54 ug/kg	95
61) 4-methyl-2-pentanone	12.063	43	192088	202.81 ug/kg	98
62) toluene	12.373	92	476841	192.51 ug/kg	99
63) trans-1,3-dichloropropene	12.548	75	253555	206.25 ug/kg	100
64) 1,1,2-trichloroethane	12.790	83	134526	195.22 ug/kg	97
65) ethyl methacrylate	12.514	69	209387	203.83 ug/kg	85
67) tetrachloroethene	12.945	166	231571	215.72 ug/kg	90
68) 1,3-dichloropropane	12.986	76	240292	203.16 ug/kg	99
69) dibromochloromethane	13.255	129	237368	211.74 ug/kg	98
70) 1,2-dibromoethane	13.430	107	172024	208.25 ug/kg	98
71) 2-hexanone	12.945	43	141391	200.68 ug/kg	99
72) chlorobenzene	13.935	112	566786	205.44 ug/kg	94
73) 1,1,1,2-tetrachloroethane	14.003	131	250335	215.97 ug/kg	98
74) ethylbenzene	13.996	91	954728	208.58 ug/kg	96
75) m,p-xylene	14.124	106	787136	429.88 ug/kg	95
76) o-xylene	14.569	106	404430	216.47 ug/kg	94
77) styrene	14.582	104	630648	215.16 ug/kg	98
78) bromoform	14.852	173	155131	220.52 ug/kg	98
79) trans-1,4-dichloro-2-b...	15.296	53	65351	195.18 ug/kg#	26
81) isopropylbenzene	14.953	105	1074836	201.77 ug/kg	97
83) bromobenzene	15.397	156	272043	200.52 ug/kg	95
84) 1,1,2,2-tetrachloroethane	15.263	83	238988	182.76 ug/kg	99
85) 1,2,3-trichloropropane	15.370	75	199680	179.19 ug/kg	98
86) n-propylbenzene	15.417	91	1208033	192.28 ug/kg	95
87) 2-chlorotoluene	15.572	91	802641	194.51 ug/kg	95
88) 4-chlorotoluene	15.700	91	674104	186.14 ug/kg	88
89) 1,3,5-trimethylbenzene	15.586	105	946050	206.87 ug/kg	96
90) tert-butylbenzene	15.970	91	529588	215.74 ug/kg	91
91) 1,2,4-trimethylbenzene	16.024	105	960314	203.68 ug/kg	96
92) sec-butylbenzene	16.212	105	1256632	209.92 ug/kg	97
93) 1,3-dichlorobenzene	16.414	146	554845	201.25 ug/kg	97
94) p-isopropyltoluene	16.354	119	1117648	213.92 ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:46:47 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) 1,4-dichlorobenzene	16.515	146	552862	194.74 ug/kg	98
96) 1,2-dichlorobenzene	16.940	146	554968	201.31 ug/kg	98
97) n-butylbenzene	16.812	91	966953	198.56 ug/kg	95
98) 1,2-dibromo-3-chloropr...	17.782	75	52430	180.83 ug/kg	95
99) 1,3,5-trichlorobenzene	17.977	180	399939	209.90 ug/kg	100
100) 1,2,4-trichlorobenzene	18.705	180	423351	206.16 ug/kg	99
101) hexachlorobutadiene	18.819	225	198378	207.39 ug/kg	94
102) naphthalene	19.055	128	1182665	215.73 ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	418598	210.65 ug/kg	96
104) 2-methylnaphthalene	20.476	142	340523	109.01 ug/kg	95
105) 1-methylnaphthalene	20.746	142	286659	110.34 ug/kg	97

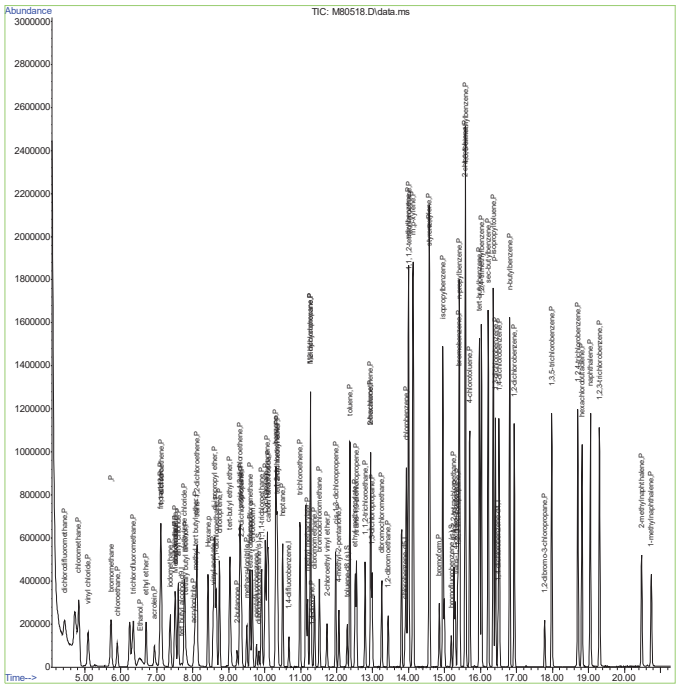
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.8 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:46:47 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration

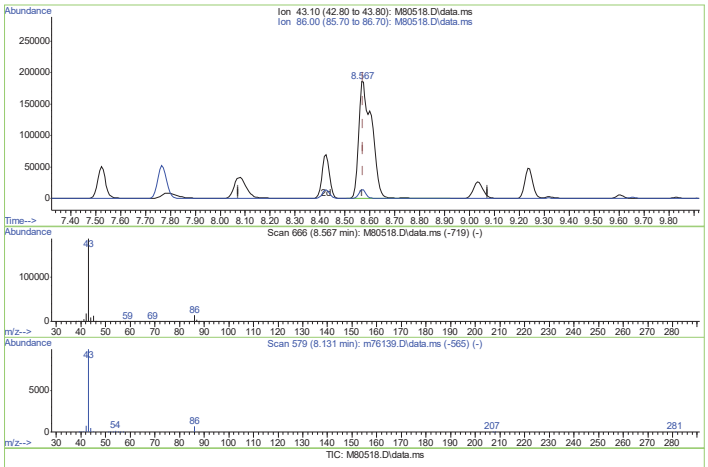


7.6.8 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:03:56 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration



(26) vinyl acetate (P)
8.567min (-0.007) 306.22 ug/kg
response 693345

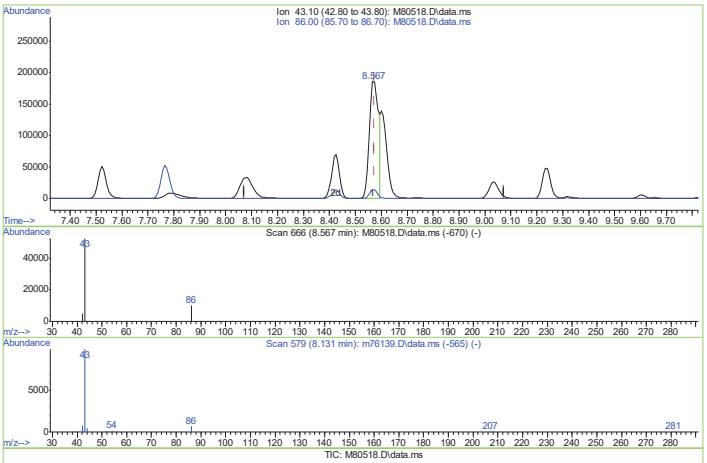
Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.26
0.00	0.00	0.00
0.00	0.00	0.00

7.6.8.1 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:03:56 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration



(26) vinyl acetate (P)
8.567min (-0.007) 198.79 ug/kg m
response 450101

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.26
0.00	0.00	0.00
0.00	0.00	0.00

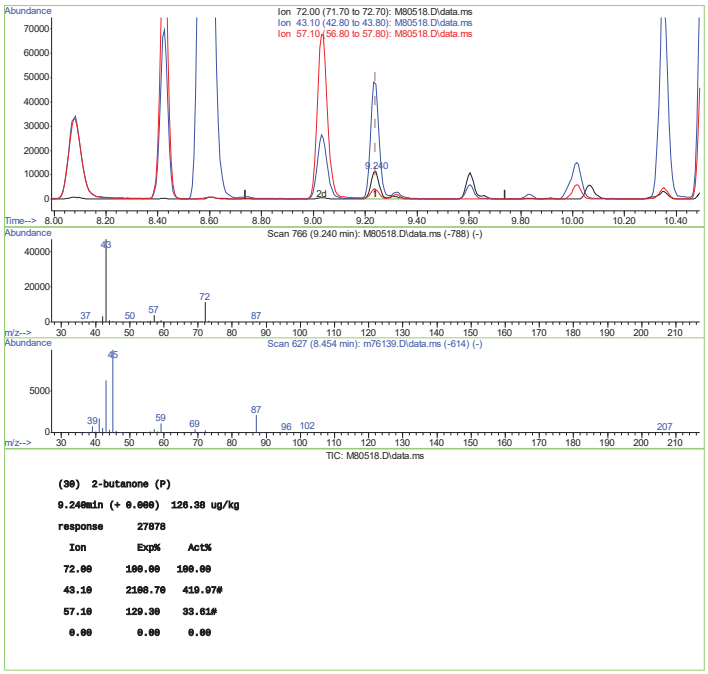
7.6.8.2 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:04:35 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration

7.6.8.3



(30) 2-butanone (P)

9.240min (+ 0.000) 126.38 ug/kg

response 27878

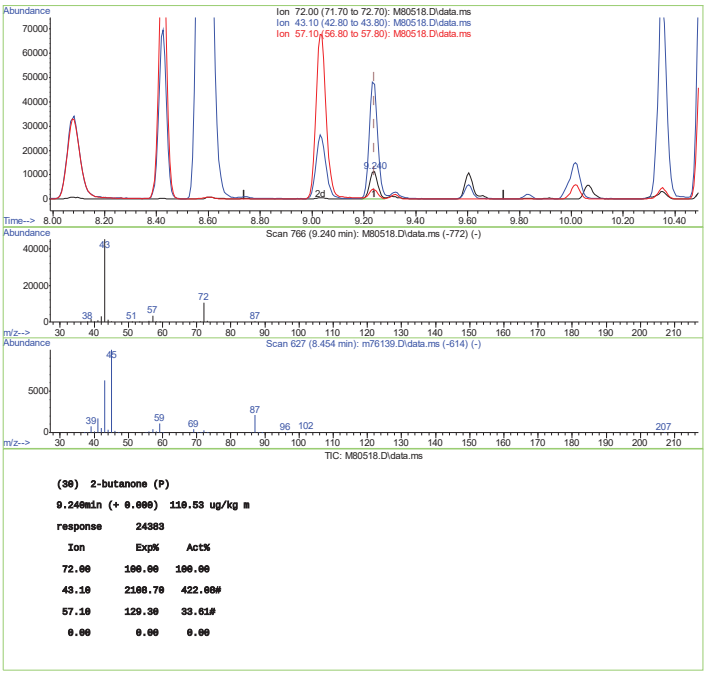
Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2100.70	419.97#
57.10	129.30	33.61#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80518.D
Acq On : 24 Aug 2016 12:26 pm
Operator : kaylap
Sample : ic2881-200
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 24 13:04:35 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:03:49 2016
Response via : Initial Calibration

7.6.8.4



(30) 2-butanone (P)

9.240min (+ 0.000) 110.53 ug/kg m

response 24383

Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2100.70	422.06#
57.10	129.30	33.61#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:17:20 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration

7.6.9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.691	65	50997	500.00 ug/kg	0.00
4) pentafluorobenzene	9.779	168	87117	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	143456	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	64718	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.488	152	81872	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	47113	46.09 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.18%	
60) toluene-d8 (s)	12.292	98	161288	49.44 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.88%	
82) bromofluorobenzene (s)	15.188	95	59709	45.29 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.58%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.792	59	578359	4139.07 ug/kg	91
3) Ethanol	6.539	45	435786	36790.46 ug/kg#	76
5) dichlorodifluoromethane	4.444	85	502380	409.44 ug/kg	99
6) chloromethane	4.835	50	524361	283.63 ug/kg	96
7) vinyl chloride	5.097	62	661221	359.99 ug/kg	97
8) bromomethane ...	5.737	96	528969	369.72 ug/kg	96
9) chloroethane	5.906	64	335272	357.03 ug/kg	98
10) ethyl ether	6.707	59	335064	407.20 ug/kg	87
11) acetonitrile	7.516	41	34045	316.20 ug/kg#	61
12) trichlorofluoromethane	6.350	101	748849	347.01 ug/kg	100
13) freon-113	7.111	101	481423	375.36 ug/kg	97
14) acrolein	6.936	56	294747m	1955.20 ug/kg	
15) 1,1-dichloroethene	7.125	96	429662	376.23 ug/kg#	79
16) acetone	7.118	58	66793	273.20 ug/kg	99
17) Methyl Acetate	7.529	43	279735	375.95 ug/kg	100
18) methylene chloride	7.772	84	466456	341.81 ug/kg	85
19) methyl tert butyl ether	8.082	73	1224858	397.64 ug/kg	95
20) acrylonitrile	8.034	53	166902	405.86 ug/kg	98
21) allyl chloride	7.596	41	648383	377.69 ug/kg	82
22) trans-1,2-dichloroethene	8.122	96	469284	378.69 ug/kg#	84
23) iodomethane	7.381	142	924677	385.26 ug/kg	95
24) carbon disulfide	7.516	76	1365250	363.63 ug/kg	100
25) propionitrile	9.328	54	71138	452.47 ug/kg	100
26) vinyl acetate	8.573	43	1053075m	410.33 ug/kg	
27) chloroprene	8.742	53	732988	393.64 ug/kg	81
28) di-isopropyl ether	8.607	45	1489338	398.84 ug/kg	96
29) methacrylonitrile	9.503	41	253140	410.26 ug/kg	89
30) 2-butanone	9.240	72	56672	241.23 ug/kg#	1
31) Hexane	8.425	41	409265	384.04 ug/kg#	83
32) 1,1-dichloroethane	8.654	63	797352	374.79 ug/kg	96
33) tert-butyl ethyl ether	9.038	59	1428063	402.14 ug/kg	95
35) 2,2-dichloropropane	9.348	77	681137	371.77 ug/kg	95
36) cis-1,2-dichloroethene	9.308	96	534403	393.81 ug/kg	86
38) bromochloromethane	9.590	128	289061	405.39 ug/kg#	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:17:20 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration

7.6.9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.658	83	841444	374.94 ug/kg	100
41) Tetrahydrofuran	9.604	42	143384	386.54 ug/kg	85
42) 1,1,1-trichloroethane	9.914	97	778388	380.82 ug/kg	99
44) Cyclohexane	10.022	56	732949	379.51 ug/kg	82
45) carbon tetrachloride	10.096	117	773429	381.96 ug/kg	97
46) 1,1-dichloropropene	10.062	75	604889	395.79 ug/kg	95
47) benzene	10.311	78	1789515	396.10 ug/kg	99
48) 1,2-dichloroethane	10.331	62	651648	415.65 ug/kg	96
49) tert-amyl methyl ether	10.352	73	1301519	419.76 ug/kg	96
50) heptane	10.500	43	576309	401.54 ug/kg	87
51) trichloroethene	10.978	95	504907	404.14 ug/kg	95
52) 1,2-dichloropropane	11.275	63	488886	416.93 ug/kg	99
53) dibromomethane	11.382	93	309274	406.36 ug/kg	97
54) bromodichloromethane	11.524	83	645651	407.31 ug/kg	97
55) Methylcyclohexane	11.275	83	733097	410.36 ug/kg	87
56) 2-chloroethyl vinyl ether	11.733	63	164663	459.32 ug/kg	86
57) methyl methacrylate	11.194	69	290650	445.79 ug/kg	83
58) 1,4-dioxane	11.308	88	25445	2219.39 ug/kg	73
59) cis-1,3-dichloropropene	11.975	75	715192	445.78 ug/kg	95
61) 4-methyl-2-pentanone	12.063	43	462324	429.69 ug/kg	98
62) toluene	12.373	92	1133763	405.91 ug/kg	98
63) trans-1,3-dichloropropene	12.554	75	628472	448.92 ug/kg	97
64) 1,1,2-trichloroethane	12.790	83	330453	424.44 ug/kg	99
65) ethyl methacrylate	12.514	69	517438	443.09 ug/kg	87
67) tetrachloroethene	12.945	166	569217	458.74 ug/kg	92
68) 1,3-dichloropropane	12.986	76	589123	434.78 ug/kg	98
69) dibromochloromethane	13.255	129	582917	451.13 ug/kg	98
70) 1,2-dibromoethane	13.430	107	421594	443.89 ug/kg	98
71) 2-hexanone	12.945	43	344750	427.86 ug/kg	100
72) chlorobenzene	13.942	112	1371055	433.09 ug/kg	93
73) 1,1,1,2-tetrachloroethane	14.003	131	606157	452.34 ug/kg	99
74) ethylbenzene	13.996	91	2318594	440.46 ug/kg	96
75) m,p-xylene	14.124	106	1906687	902.56 ug/kg	97
76) o-xylene	14.569	106	979983	453.56 ug/kg	95
77) styrene	14.582	104	1567831	462.94 ug/kg	98
78) bromoform	14.852	173	388745	476.47 ug/kg	97
79) trans-1,4-dichloro-2-b...	15.303	53	158588	416.04 ug/kg#	27
81) isopropylbenzene	14.953	105	2511854	409.31 ug/kg	96
83) bromobenzene	15.397	156	668379	428.03 ug/kg	94
84) 1,1,2,2-tetrachloroethane	15.262	83	564731	380.03 ug/kg	99
85) 1,2,3-trichloropropane	15.370	75	478919	379.16 ug/kg	99
86) n-propylbenzene	15.417	91	2843685	395.57 ug/kg	95
87) 2-chlorotoluene	15.572	91	1957784	413.99 ug/kg	95
88) 4-chlorotoluene	15.700	91	1582684	383.63 ug/kg	89
89) 1,3,5-trimethylbenzene	15.586	105	2305552	436.03 ug/kg	96
90) tert-butylbenzene	15.970	91	1262714	442.10 ug/kg	94
91) 1,2,4-trimethylbenzene	16.024	105	2263954	416.24 ug/kg	97
92) sec-butylbenzene	16.212	105	2957620	426.39 ug/kg	96
93) 1,3-dichlorobenzene	16.414	146	1312920	413.52 ug/kg	97
94) p-isopropyltoluene	16.354	119	2643058	435.36 ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:17:20 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95)	1,4-dichlorobenzene	16.522	146	1310093	402.58 ug/kg	98
96)	1,2-dichlorobenzene	16.940	146	1325499	417.50 ug/kg	99
97)	n-butylbenzene	16.812	91	2242281	400.60 ug/kg	96
98)	1,2-dibromo-3-chloropr...	17.782	75	124184	378.31 ug/kg	88
99)	1,3,5-trichlorobenzene	17.977	180	952574	431.47 ug/kg	100
100)	1,2,4-trichlorobenzene	18.705	180	1003699	422.95 ug/kg	99
101)	hexachlorobutadiene	18.819	225	488006	441.08 ug/kg	93
102)	naphthalene	19.055	128	2752382	431.51 ug/kg	100
103)	1,2,3-trichlorobenzene	19.304	180	974109	422.83 ug/kg	99
104)	2-methylnaphthalene	20.476	142	798024	219.21 ug/kg	95
105)	1-methylnaphthalene	20.746	142	677879	223.48 ug/kg	98

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

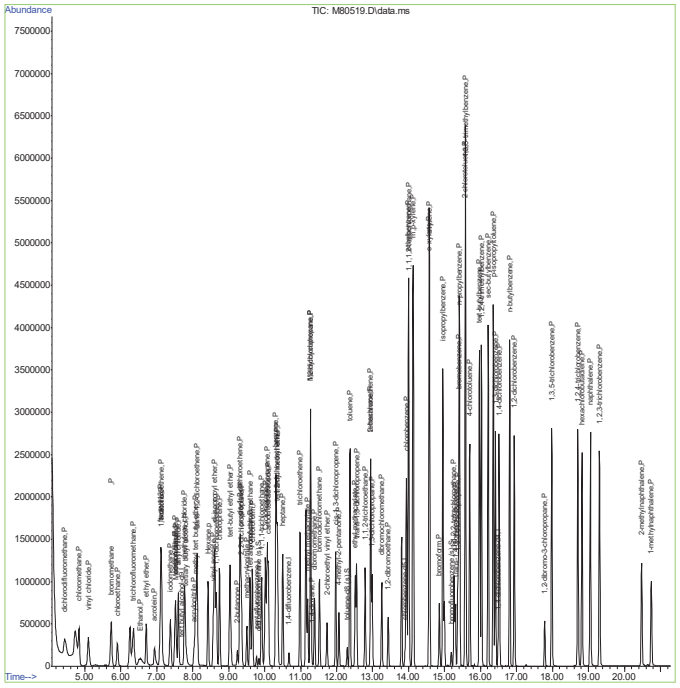
7.6.9

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:17:20 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration



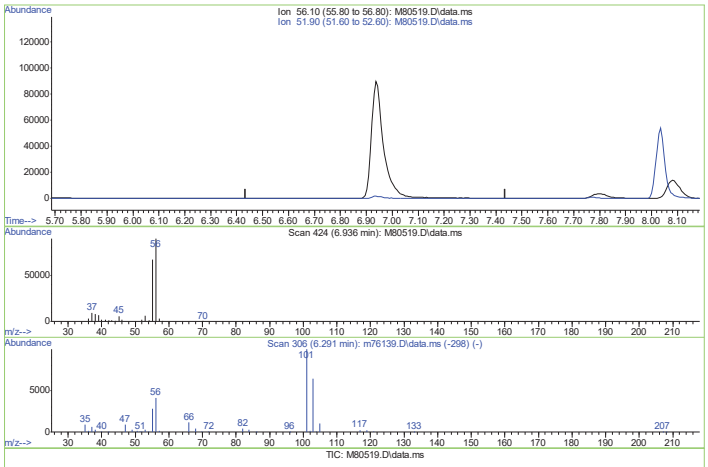
7.6.9

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:16:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration



(14) acrolein (P)

6.936min (-6.936) 0.00 ug/kg

response 0

Ion	Exp%	Act%
56.10	100.00	0.00
51.90	2.30	0.00
0.00	0.00	0.00
0.00	0.00	0.00

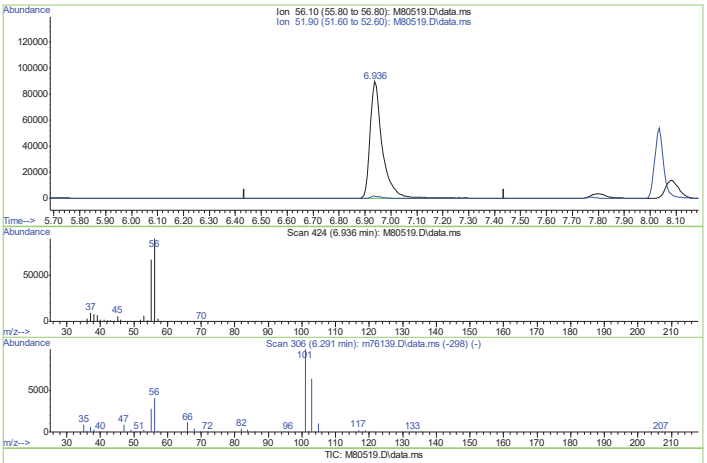
7.6.9.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:16:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration



(14) acrolein (P)

6.936min (+ 0.000) 1955.20 ug/kg m

response 294747

Ion	Exp%	Act%
56.10	100.00	100.00
51.90	2.30	2.12
0.00	0.00	0.00
0.00	0.00	0.00

7.6.9.2

7

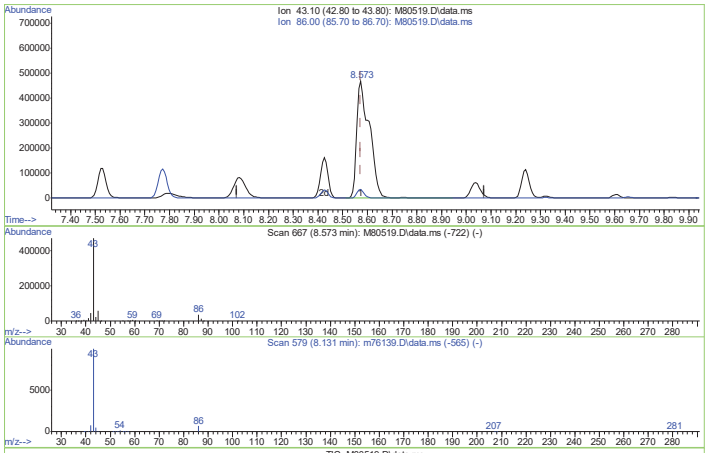
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:16:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration

7.6.9.3

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 649.90 ug/kg

response 1667904

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.43
0.00	0.00	0.00
0.00	0.00	0.00

M80519.D edits: vinyl acetate

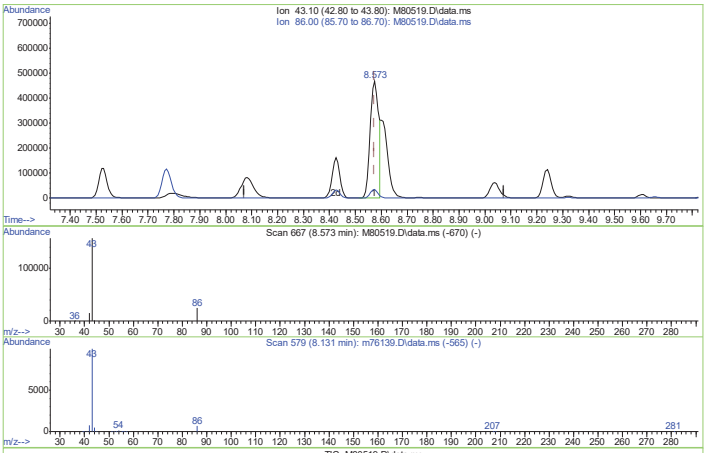
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80519.D
Acq On : 24 Aug 2016 12:55 pm
Operator : kaylap
Sample : ic2881-400
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 24 13:16:40 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:05:09 2016
Response via : Initial Calibration

7.6.9.4

7



(26) vinyl acetate (P)

8.573min (+ 0.000) 410.33 ug/kg m

response 1053075

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.43
0.00	0.00	0.00
0.00	0.00	0.00

M80519.D edits: vinyl acetate

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 08/25/16 14:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : bs
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:45:11 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.10

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.684	65	43740	500.00 ug/kg	0.00
4) pentafluorobenzene	9.772	168	73022	50.00 ug/kg	0.00
43) 1,4-difluorobenzene	10.675	114	118932	50.00 ug/kg	0.00
66) chlorobenzene-d5	13.902	82	52442	50.00 ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.488	152	63255	50.00 ug/kg	0.00
System Monitoring Compounds					
40) dibromofluoromethane (s)	9.840	113	42064	49.52 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.04%	
60) toluene-d8 (s)	12.292	98	133841	49.55 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.10%	
82) bromofluorobenzene (s)	15.188	95	49189	48.29 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.58%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.792	59	69589	577.78 ug/kg	81
3) Ethanol	6.539	45	45149	4495.55 ug/kg#	73
5) dichlorodifluoromethane	4.430	85	59559	57.74 ug/kg	98
6) chloromethane	4.828	50	92130	61.70 ug/kg	97
7) vinyl chloride	5.084	62	72262	47.53 ug/kg	96
8) bromomethane ...	5.710	96	69583	58.58 ug/kg	99
9) chloroethane	5.892	64	42101	54.32 ug/kg	95
10) ethyl ether	6.700	59	34088	49.31 ug/kg	86
11) acetonitrile	7.522	41	4492m	51.57 ug/kg	
12) trichlorofluoromethane	6.343	101	90575	50.92 ug/kg	94
13) freon-113	7.098	101	54671	51.25 ug/kg	98
14) acrolein	6.930	56	34292	272.26 ug/kg	99
15) 1,1-dichloroethene	7.118	96	45654	48.05 ug/kg	83
16) acetone	7.111	58	10141	66.35 ug/kg#	86
17) Methyl Acetate	7.522	43	44714	72.31 ug/kg	100
18) methylene chloride	7.765	84	53949	48.04 ug/kg	84
19) methyl tert butyl ether	8.075	73	136699	52.98 ug/kg	97
20) acrylonitrile	8.034	53	18009	52.14 ug/kg	95
21) allyl chloride	7.590	41	75280	52.68 ug/kg	83
22) trans-1,2-dichloroethene	8.115	96	47975	46.50 ug/kg#	81
23) iodomethane	7.374	142	96371	48.12 ug/kg	96
24) carbon disulfide	7.516	76	126511	40.66 ug/kg	98
25) propionitrile	9.328	54	7134	53.14 ug/kg	100
26) vinyl acetate	8.566	43	118001m	54.65 ug/kg	
27) chloroprene	8.742	53	71580	45.95 ug/kg	82
28) di-isopropyl ether	8.607	45	164185	52.47 ug/kg	94
29) methacrylonitrile	9.503	41	26673	51.38 ug/kg	87
30) 2-butanone	9.233	72	12649m	97.05 ug/kg	
31) Hexane	8.425	41	48630	54.71 ug/kg#	84
32) 1,1-dichloroethane	8.654	63	85246	48.18 ug/kg	96
33) tert-butyl ethyl ether	9.031	59	150477	50.52 ug/kg	94
35) 2,2-dichloropropane	9.341	77	75970	49.91 ug/kg	94
36) cis-1,2-dichloroethene	9.307	96	61628	54.29 ug/kg	86
38) bromochloromethane	9.590	128	31790	53.10 ug/kg#	75

M80522.D: MSM2881-ICV2881 Initial Calibration Verification (50) page 1 of 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : bs
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:45:11 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.10

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) chloroform	9.658	83	94887	50.84 ug/kg	100
41) Tetrahydrofuran	9.604	42	14622	47.25 ug/kg	84
42) 1,1,1-trichloroethane	9.907	97	87707	51.50 ug/kg	99
44) Cyclohexane	10.015	56	82554	51.89 ug/kg	83
45) carbon tetrachloride	10.096	117	85333	51.12 ug/kg	93
46) 1,1-dichloropropene	10.062	75	65486	51.75 ug/kg	95
47) benzene	10.304	78	191805	51.26 ug/kg	99
48) 1,2-dichloroethane	10.325	62	66629	51.01 ug/kg	96
49) tert-amyl methyl ether	10.352	73	138768	53.65 ug/kg	95
50) heptane	10.500	43	74225	62.35 ug/kg	88
51) trichloroethene	10.978	95	53608	51.69 ug/kg	97
52) 1,2-dichloropropane	11.274	63	50146	51.31 ug/kg	100
53) dibromomethane	11.382	93	32012	50.63 ug/kg	95
54) bromodichloromethane	11.517	83	67753	51.44 ug/kg	99
55) Methylcyclohexane	11.274	83	89911	60.51 ug/kg	87
56) 2-chloroethyl vinyl ether	11.733	63	16056	52.90 ug/kg	85
57) methyl methacrylate	11.194	69	27788	50.58 ug/kg#	81
58) 1,4-dioxane	11.308	88	2788	286.89 ug/kg	77
59) cis-1,3-dichloropropene	11.975	75	69185	51.28 ug/kg	94
61) 4-methyl-2-pentanone	12.063	43	50066	55.61 ug/kg	98
62) toluene	12.366	92	118860	51.23 ug/kg	98
63) trans-1,3-dichloropropene	12.548	75	57592	48.87 ug/kg	99
64) 1,1,2-trichloroethane	12.790	83	34541	53.11 ug/kg	98
65) ethyl methacrylate	12.514	69	53146	54.16 ug/kg	84
67) tetrachloroethene	12.945	166	53815	52.56 ug/kg	89
68) 1,3-dichloropropane	12.986	76	62281	56.11 ug/kg	96
69) dibromochloromethane	13.255	129	56437	53.05 ug/kg	99
70) 1,2-dibromoethane	13.430	107	42777	54.83 ug/kg	100
71) 2-hexanone	12.945	43	39550	60.05 ug/kg	99
72) chlorobenzene	13.942	112	137393	53.01 ug/kg	93
73) 1,1,1,2-tetrachloroethane	14.003	131	61503	55.73 ug/kg	96
74) ethylbenzene	13.996	91	237771	55.05 ug/kg	97
75) m,p-xylene	14.124	106	192846	111.07 ug/kg	93
76) o-xylene	14.569	106	99201	55.73 ug/kg	94
77) styrene	14.582	104	155582	55.60 ug/kg	99
78) bromoform	14.851	173	36193	53.47 ug/kg	99
79) trans-1,4-dichloro-2-b...	15.296	53	16357	52.65 ug/kg#	27
81) isopropylbenzene	14.953	105	260197	54.72 ug/kg	96
83) bromobenzene	15.397	156	66114	54.32 ug/kg	98
84) 1,1,2,2-tetrachloroethane	15.262	83	62141	54.46 ug/kg	99
85) 1,2,3-trichloropropane	15.370	75	51635	53.26 ug/kg	95
86) n-propylbenzene	15.411	91	295442	53.27 ug/kg	98
87) 2-chlorotoluene	15.572	91	197956	53.94 ug/kg	96
88) 4-chlorotoluene	15.700	91	170615	53.80 ug/kg	92
89) 1,3,5-trimethylbenzene	15.586	105	236993	57.37 ug/kg	96
90) tert-butylbenzene	15.970	91	125843	56.29 ug/kg	92
91) 1,2,4-trimethylbenzene	16.024	105	232915	55.15 ug/kg	96
92) sec-butylbenzene	16.212	105	301946	55.88 ug/kg	98
93) 1,3-dichlorobenzene	16.414	146	131854	53.53 ug/kg	97
94) p-isopropyltoluene	16.354	119	269071	56.74 ug/kg	98

M80522.D: MSM2881-ICV2881 Initial Calibration Verification (50) page 2 of 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : bs
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:45:11 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
95) 1,4-dichlorobenzene	16.522	146	133453	53.04 ug/kg	99
96) 1,2-dichlorobenzene	16.940	146	133143	53.98 ug/kg	99
97) n-butylbenzene	16.812	91	243585	56.32 ug/kg	98
98) 1,2-dibromo-3-chloropr...	17.782	75	13069	51.93 ug/kg	99
99) 1,3,5-trichlorobenzene	17.977	180	99446	57.73 ug/kg	99
100) 1,2,4-trichlorobenzene	18.705	180	98091	53.12 ug/kg	99
101) hexachlorobutadiene	18.819	225	47086	54.39 ug/kg	95
102) naphthalene	19.055	128	256466	51.53 ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	98616	55.01 ug/kg	100
104) 2-methylnaphthalene	20.476	142	89372	31.40 ug/kg	95
105) 1-methylnaphthalene	20.746	142	75075	31.57 ug/kg	99

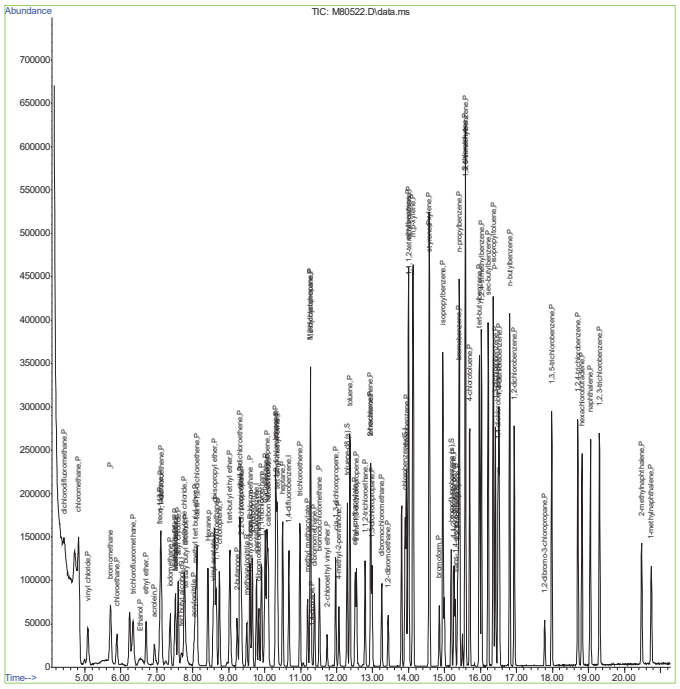
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.10 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : bs
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:45:11 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

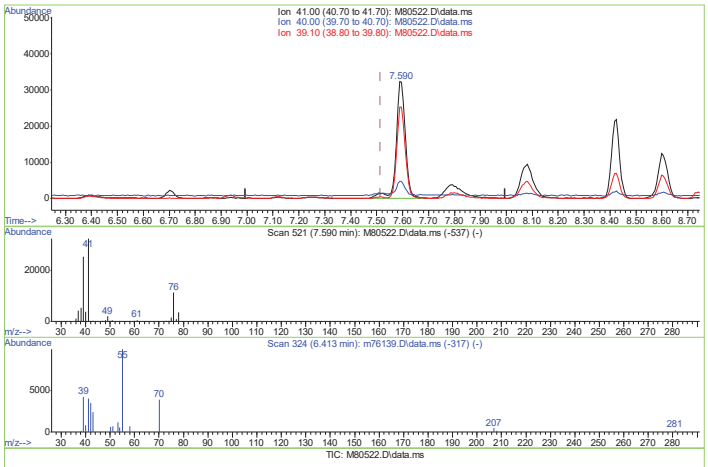


7.6.10 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : icv2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:43:07 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



(11) acetonitrile (P)
7.590min (+ 0.074) 911.30 ug/kg
response 79372

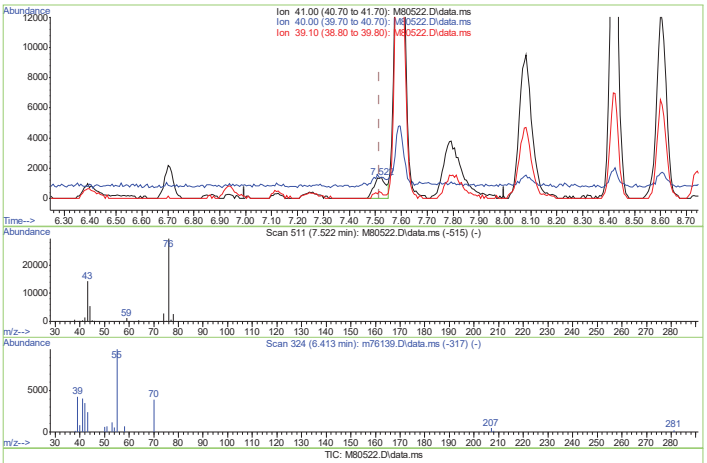
Ion	Exp%	Act%
41.00	100.00	100.00
40.00	94.00	11.58#
39.10	36.70	78.01#
0.00	0.00	0.00

7.6.10.1 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : icv2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:43:07 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



(11) acetonitrile (P)
7.522min (+ 0.006) 51.57 ug/kg m
response 4492

Ion	Exp%	Act%
41.00	100.00	100.00
40.00	94.00	100.64
39.10	36.70	27.69
0.00	0.00	0.00

7.6.10.2 7

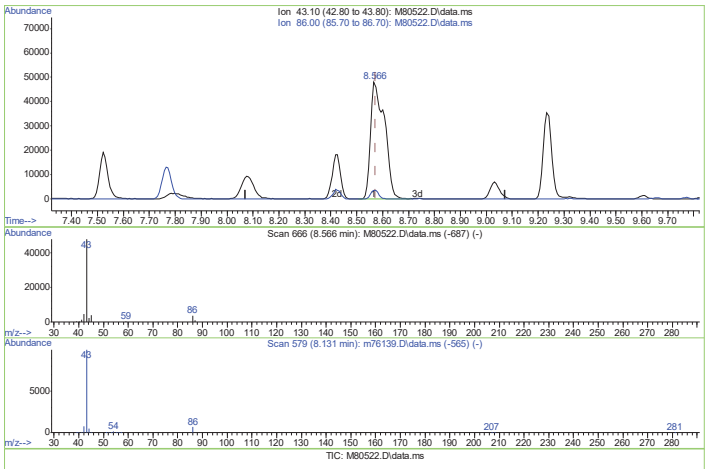
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : icv2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:43:07 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.10.3

7



(26) vinyl acetate (P)

8.566min (-0.007) 83.13 ug/kg

response 179480

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.00	7.62
0.00	0.00	0.00
0.00	0.00	0.00

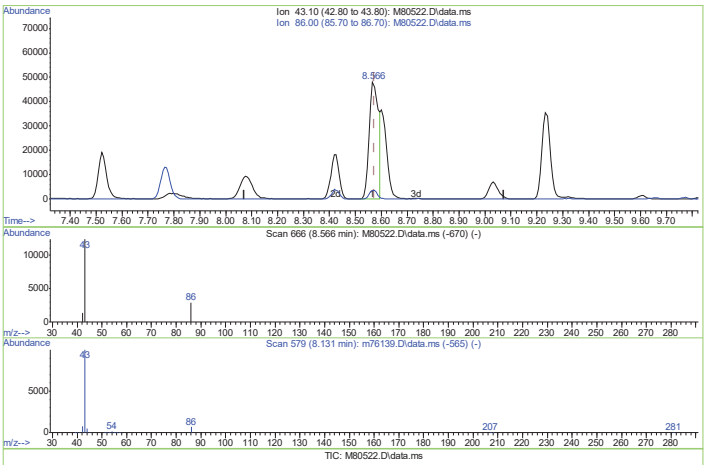
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : icv2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:43:07 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.10.4

7



(26) vinyl acetate (P)

8.566min (-0.007) 54.65 ug/kg m

response 118001

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.00	7.62
0.00	0.00	0.00
0.00	0.00	0.00

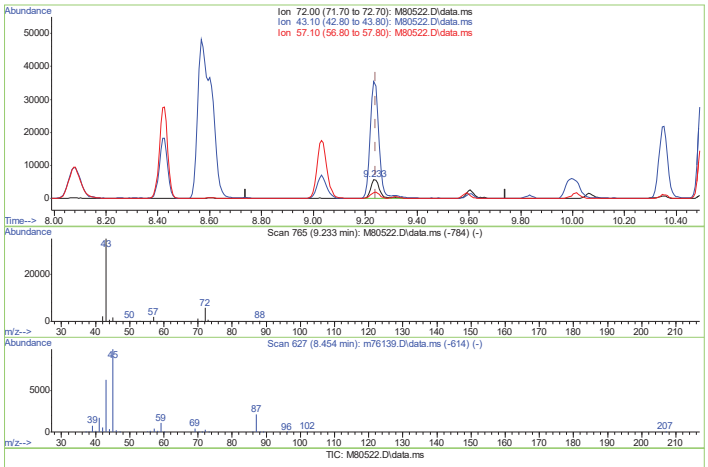
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : icv2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:44:05 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.10.5

7



(30) 2-butanone (P)

9.233min (-0.007) 106.49 ug/kg

response 13636

Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2168.70	623.99#
57.10	129.30	32.48#
0.00	0.00	0.00

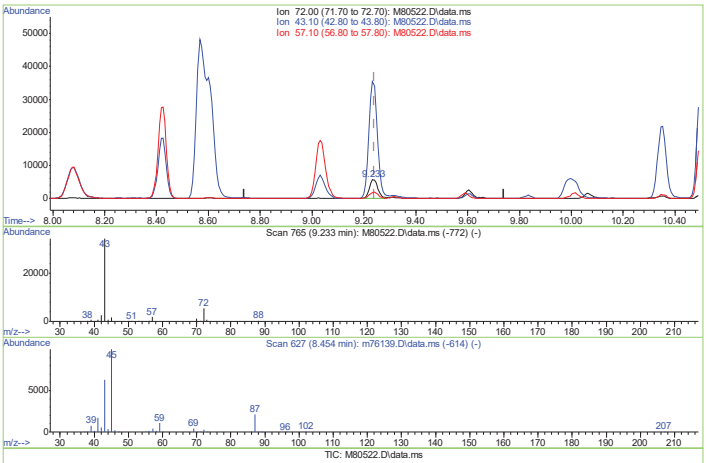
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : M80522.D
Acq On : 24 Aug 2016 2:20 pm
Operator : kaylap
Sample : icv2881-50
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 24 14:44:05 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.10.6

7



(30) 2-butanone (P)

9.233min (-0.007) 97.05 ug/kg m

response 12649

Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2168.70	623.99#
57.10	129.30	32.48#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda
09/20/16 10:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80813.D
Acq On : 16 Sep 2016 11:38 am
Operator : kaylap
Sample : cc2881-50
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 16 12:03:18 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.691	65	34336	500.00	ug/kg	0.00
4) pentafluorobenzene	9.772	168	63129	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.668	114	103532	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.902	82	43803	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.489	152	51994	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	9.833	113	36714	50.00	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.00%			
60) toluene-d8 (s)	12.292	98	114641	48.75	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.50%			
82) bromofluorobenzene (s)	15.188	95	40766	48.69	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.38%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.799	59	53000	560.56	ug/kg	88
3) Ethanol	6.532	45	36436	4621.62	ug/kg#	69
5) dichlorodifluoromethane	4.430	85	33064	37.08	ug/kg	97
6) chloromethane	4.828	50	66796	51.74	ug/kg	97
7) vinyl chloride	5.084	62	65243	49.64	ug/kg	99
8) bromomethane ...	5.724	96	62961	61.31	ug/kg	100
9) chloroethane	5.892	64	38442	57.37	ug/kg	98
10) ethyl ether	6.701	59	33219	55.59	ug/kg	86
11) acetonitrile	7.509	41	3748	49.78	ug/kg#	66
12) trichlorofluoromethane	6.337	101	83479	54.28	ug/kg	96
13) freon-113	7.091	101	53034	57.50	ug/kg	99
14) acrolein	6.936	56	12606	115.77	ug/kg	93
15) 1,1-dichloroethene	7.118	96	45647	55.57	ug/kg	83
16) acetone	7.112	58	8532	64.43	ug/kg	94
17) Methyl Acetate	7.522	43	28967	54.19	ug/kg	99
18) methylene chloride	7.772	84	50337	51.85	ug/kg	88
19) methyl tert butyl ether	8.075	73	123635	55.43	ug/kg	98
20) acrylonitrile	8.028	53	16096	53.90	ug/kg	97
21) allyl chloride	7.590	41	70392	56.98	ug/kg	82
22) trans-1,2-dichloroethene	8.115	96	47460	53.21	ug/kg	86
23) iodomethane	7.374	142	96180	55.56	ug/kg	93
24) carbon disulfide	7.509	76	161759	60.14	ug/kg	99
25) propionitrile	9.321	54	6405	55.18	ug/kg	100
26) vinyl acetate	8.567	43	93062m	49.86	ug/kg	
27) chloroprene	8.735	53	72597	53.91	ug/kg	83
28) di-isopropyl ether	8.600	45	156080	57.70	ug/kg	97
29) methacrylonitrile	9.496	41	23301	51.92	ug/kg	94
30) 2-butanone	9.234	72	6501	47.01	ug/kg#	1
31) Hexane	8.418	41	45091	58.68	ug/kg#	87
32) 1,1-dichloroethane	8.647	63	82010	53.62	ug/kg	97
33) tert-butyl ethyl ether	9.031	59	145230	56.40	ug/kg	96
35) 2,2-dichloropropane	9.341	77	72726	55.27	ug/kg	97
36) cis-1,2-dichloroethene	9.308	96	52626	53.62	ug/kg	88
38) bromochloromethane	9.591	128	28156	54.40	ug/kg#	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80813.D
Acq On : 16 Sep 2016 11:38 am
Operator : kaylap
Sample : cc2881-50
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 16 12:03:18 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) chloroform	9.651	83	85373	52.91	ug/kg	98
41) Tetrahydrofuran	9.597	42	13616	50.90	ug/kg	95
42) 1,1,1-trichloroethane	9.907	97	80169	54.45	ug/kg	99
44) Cyclohexane	10.015	56	79433	57.36	ug/kg	88
45) carbon tetrachloride	10.096	117	78214	53.82	ug/kg	95
46) 1,1-dichloropropene	10.062	75	58770	53.35	ug/kg	93
47) benzene	10.305	78	171913	52.78	ug/kg	100
48) 1,2-dichloroethane	10.325	62	60777	53.45	ug/kg	93
49) tert-amyl methyl ether	10.352	73	124171	55.15	ug/kg	96
50) heptane	10.500	43	62093	59.92	ug/kg	92
51) trichloroethene	10.978	95	47519	52.63	ug/kg	94
52) 1,2-dichloropropane	11.268	63	45241	53.18	ug/kg	99
53) dibromomethane	11.382	93	29049	52.78	ug/kg	94
54) bromodichloromethane	11.517	83	60929	53.14	ug/kg	99
55) Methylcyclohexane	11.275	83	72855	56.33	ug/kg	85
56) 2-chloroethyl vinyl ether	11.733	63	13222	50.04	ug/kg	87
57) methyl methacrylate	11.194	69	24304	50.82	ug/kg	82
58) 1,4-dioxane	11.302	88	1781	218.15	ug/kg	74
59) cis-1,3-dichloropropene	11.975	75	62045	52.83	ug/kg	95
61) 4-methyl-2-pentanone	12.063	43	42329	54.01	ug/kg	98
62) toluene	12.366	92	103866	51.43	ug/kg	98
63) trans-1,3-dichloropropene	12.548	75	53836	52.48	ug/kg	99
64) 1,1,2-trichloroethane	12.790	83	29160	51.50	ug/kg	98
65) ethyl methacrylate	12.514	69	43828	51.31	ug/kg	90
67) tetrachloroethene	12.945	166	47735	55.81	ug/kg	89
68) 1,3-dichloropropane	12.986	76	52319	56.43	ug/kg	100
69) dibromochloromethane	13.255	129	49903	56.16	ug/kg	96
70) 1,2-dibromoethane	13.430	107	36512	56.03	ug/kg	98
71) 2-hexanone	12.945	43	35646	64.80	ug/kg	99
72) chlorobenzene	13.935	112	121230	56.00	ug/kg	96
73) 1,1,1,2-tetrachloroethane	14.003	131	53671	58.22	ug/kg	99
74) ethylbenzene	13.989	91	206013	57.10	ug/kg	98
75) m,p-xylene	14.124	106	169601	116.95	ug/kg	94
76) o-xylene	14.569	106	87108	58.59	ug/kg	93
77) styrene	14.582	104	134986	57.75	ug/kg	100
78) bromoform	14.852	173	30768	54.42	ug/kg	98
79) trans-1,4-dichloro-2-b...	15.296	53	14431	55.62	ug/kg#	22
81) isopropylbenzene	14.953	105	228660	58.50	ug/kg	98
83) bromobenzene	15.397	156	56296	56.28	ug/kg	98
84) 1,1,2,2-tetrachloroethane	15.263	83	50868	54.24	ug/kg	99
85) 1,2,3-trichloropropane	15.370	75	43219	54.23	ug/kg	92
86) n-propylbenzene	15.411	91	265261	58.18	ug/kg	97
87) 2-chlorotoluene	15.572	91	172457	57.17	ug/kg	96
88) 4-chlorotoluene	15.694	91	148902	57.13	ug/kg	94
89) 1,3,5-trimethylbenzene	15.586	105	200964	59.18	ug/kg	97
90) tert-butylbenzene	15.970	91	108748	59.18	ug/kg	92
91) 1,2,4-trimethylbenzene	16.024	105	206544	59.49	ug/kg	97
92) sec-butylbenzene	16.212	105	262811	59.17	ug/kg	99
93) 1,3-dichlorobenzene	16.414	146	116401	57.49	ug/kg	98
94) p-isopropyltoluene	16.354	119	232444	59.63	ug/kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80813.D
Acq On : 16 Sep 2016 11:38 am
Operator : kaylap
Sample : cc2881-50
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 16 12:03:18 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

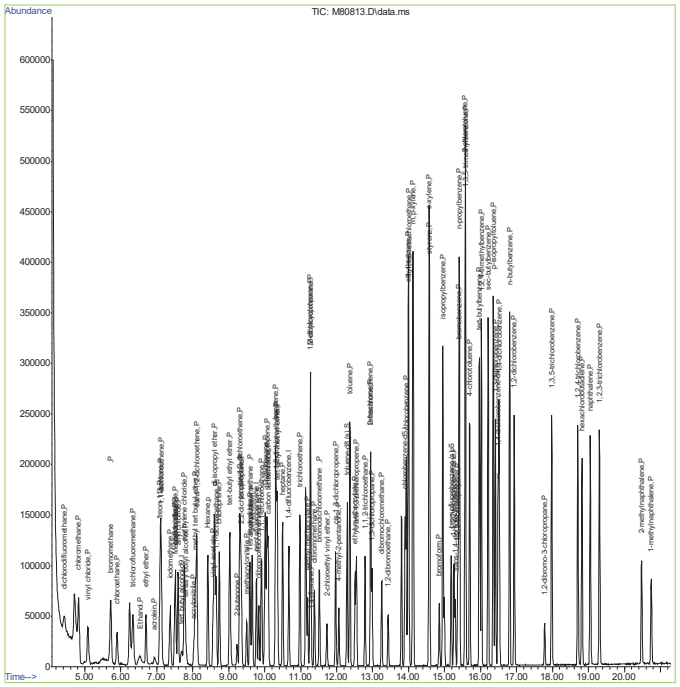
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 1,4-dichlorobenzene	16.516	146	116743	56.44	ug/kg	99
96) 1,2-dichlorobenzene	16.933	146	115461	56.95	ug/kg	99
97) n-butylbenzene	16.812	91	211258	59.42	ug/kg	100
98) 1,2-dibromo-3-chloropr...	17.782	75	10441	50.48	ug/kg	95
99) 1,3,5-trichlorobenzene	17.977	180	80863	57.11	ug/kg	99
100) 1,2,4-trichlorobenzene	18.705	180	83189	54.81	ug/kg	100
101) hexachlorobutadiene	18.819	225	38022	53.43	ug/kg	92
102) naphthalene	19.055	128	223404	54.61	ug/kg	100
103) 1,2,3-trichlorobenzene	19.304	180	82743	56.15	ug/kg	98
104) 2-methylnaphthalene	20.477	142	65476	27.98	ug/kg	94
105) 1-methylnaphthalene	20.746	142	54133	27.69	ug/kg	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80813.D
Acq On : 16 Sep 2016 11:38 am
Operator : kaylap
Sample : cc2881-50
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 16 12:03:18 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



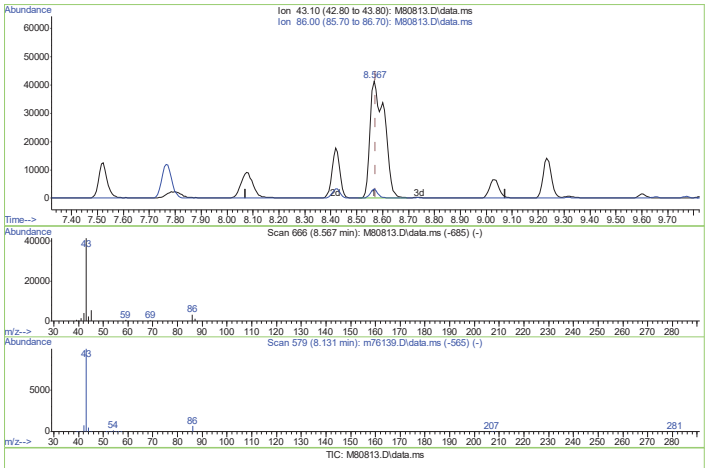
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80813.D
Acq On : 16 Sep 2016 11:38 am
Operator : kaylap
Sample : cc2881-50
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 16 12:01:13 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.11.1

7



(26) vinyl acetate (P)

8.567min (-0.006) 85.14 ug/kg

response 158924

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.72
0.00	0.00	0.00
0.00	0.00	0.00

M160824S.M Fri Sep 16 12:01:52 2016 Page: 1

M80813.D edits: vinyl acetate

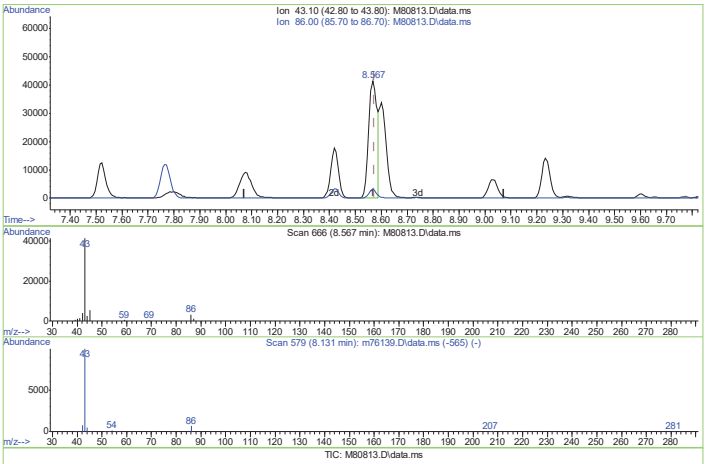
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80813.D
Acq On : 16 Sep 2016 11:38 am
Operator : kaylap
Sample : cc2881-50
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 16 12:01:13 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.6.11.2

7



(26) vinyl acetate (P)

8.567min (-0.006) 49.86 ug/kg m

response 93062

Ion	Exp%	Act%
43.10	100.00	100.00
86.00	6.60	7.72
0.00	0.00	0.00
0.00	0.00	0.00

M160824S.M Fri Sep 16 12:01:57 2016 Page: 1

M80813.D edits: vinyl acetate

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49891.D
Acq On : 19 Sep 2016 1:26 pm
Operator : carab
Sample : ic1837-0.5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 08:38:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:37:55 2016
Response via : Initial Calibration

7.6.12

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.935	65	117862	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.932	168	139303	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.828	114	264512	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.071	82	139549	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.680	152	120654	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.987	113	104323	53.89 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 107.78%		
61) toluene-d8 (s)	11.451	98	301258	49.76 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.52%		
84) bromofluorobenzene (s)	14.367	95	131697	51.50 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.00%		
Target Compounds					Qvalue
48) benzene	9.452	78	3575	0.45 ug/kg	92
76) m,p-xylene	13.300	106	2908	0.75 ug/kg	99

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

V160919S.M Tue Sep 20 11:23:15 2016 Page: 1

V49891.D: MSV1837-IC1837 Initial Calibration (0.5) page 1 of 2

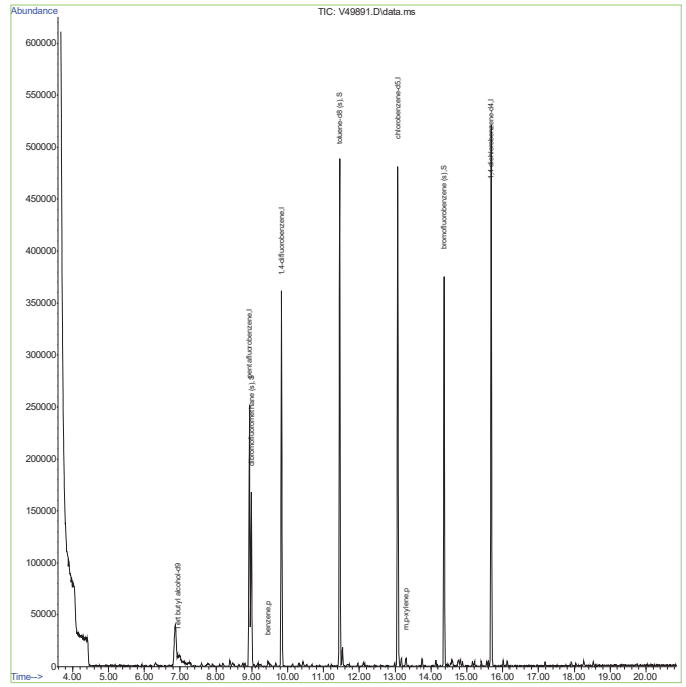
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49891.D
Acq On : 19 Sep 2016 1:26 pm
Operator : carab
Sample : ic1837-0.5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 08:38:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:37:55 2016
Response via : Initial Calibration

7.6.12

7



V160919S.M Tue Sep 20 11:23:15 2016 Page: 2

V49891.D: MSV1837-IC1837 Initial Calibration (0.5) page 2 of 2

Cal Report: V49892.D

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda
09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : T:\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 18:01:54 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.925	65	101448	500.00 ug/kg	# 0.01
4) pentafluorobenzene	8.931	168	136403	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.827	114	249478	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.072	82	131156	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.681	152	116212	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.985	113	98403	49.97 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.94%		
61) toluene-d8 (s)	11.451	98	285083	50.05 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.10%		
84) bromofluorobenzene (s)	14.367	95	125596	50.24 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.48%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.970	59	3770	12.22 ug/kg#	55
5) dichlorodifluoromethane	3.951	85	3395m	1.12 ug/kg	
7) vinyl chloride	4.513	62	1759	0.98 ug/kg#	45
8) bromomethane	5.082	96	736m	1.05 ug/kg	
13) trichlorofluoromethane	5.591	101	2490	1.22 ug/kg	64
16) 1,1-dichloroethene	6.333	96	1221	1.09 ug/kg#	77
19) methylene chloride	6.963	84	3227	1.37 ug/kg#	6
20) methyl tert butyl ether	7.250	73	9149	1.43 ug/kg	94
23) trans-1,2-dichloroethene	7.293	96	3081	1.64 ug/kg#	69
29) di-isopropyl ether	7.774	45	11345	1.52 ug/kg	82
33) 1,1-dichloroethane	7.809	63	7243	1.76 ug/kg	94
34) tert-butyl ethyl ether	8.196	59	11134	1.47 ug/kg	83
37) cis-1,2-dichloroethene	8.457	96	3862	1.62 ug/kg	85
40) chloroform	8.805	83	6758	1.63 ug/kg	87
43) 1,1,1-trichloroethane	9.061	97	5959	1.90 ug/kg	93
46) carbon tetrachloride	9.249	117	4903	1.63 ug/kg	86
48) benzene	9.450	78	12050	1.68 ug/kg	94
49) 1,2-dichloroethane	9.473	62	6718	1.62 ug/kg	97
52) trichloroethene	10.134	95	3712m	1.57 ug/kg	
53) 1,2-dichloropropane	10.421	63	3846m	1.59 ug/kg	
55) bromodichloromethane	10.674	83	4155	1.38 ug/kg	97
60) cis-1,3-dichloropropene	11.132	75	4049	1.24 ug/kg	87
64) trans-1,3-dichloropropene	11.715	75	3234	1.09 ug/kg	100
65) 1,1,2-trichloroethane	11.954	83	2394	1.46 ug/kg	92
68) tetrachloroethene	12.114	166	2830	1.49 ug/kg	94
69) 1,3-dichloropropane	12.148	76	4996	1.58 ug/kg	94
70) dibromochloromethane	12.419	129	2569	1.16 ug/kg	79
71) 1,2-dibromoethane	12.594	107	2981	1.43 ug/kg	76
73) chlorobenzene	13.107	112	9212	1.53 ug/kg	89
75) ethylbenzene	13.169	91	15431	1.49 ug/kg	90
76) m,p-xylene	13.301	106	10407	3.26 ug/kg	80
77) o-xylene	13.747	106	5559	1.48 ug/kg#	67
78) styrene	13.760	104	7816	1.27 ug/kg	94
79) bromoform	14.027	173	1427	1.13 ug/kg	95
86) 1,1,2,2-tetrachloroethane	14.444	83	4886	1.66 ug/kg	85
87) 1,2,3-trichloropropane	14.549	75	4376	1.65 ug/kg#	6
88) n-propylbenzene	14.601	91	18403	1.47 ug/kg	92
89) 2-chlorotoluene	14.755	91	13497	1.59 ug/kg	86
90) 4-chlorotoluene	14.880	91	12249	1.59 ug/kg	97
91) 1,3,5-trimethylbenzene	14.775	105	11450	1.36 ug/kg	99
92) tert-butylbenzene	15.159	91	7114	1.30 ug/kg	77
93) 1,2,4-trimethylbenzene	15.216	105	11751	1.33 ug/kg	92
94) sec-butylbenzene	15.406	105	14872	1.36 ug/kg	97
95) 1,3-dichlorobenzene	15.603	146	7660	1.59 ug/kg	95
96) p-isopropyltoluene	15.553	119	12250	1.31 ug/kg	90
97) 1,4-dichlorobenzene	15.710	146	8213	1.71 ug/kg	93
98) 1,2-dichlorobenzene	16.126	146	7532	1.54 ug/kg	99

7.6.13 7

Cal Report: V49892.D

Quantitation Report (QT Reviewed)

Data Path : T:\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 18:01:54 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
99) n-butylbenzene	16.014	91	13329	1.33 ug/kg	84
100) 1,2-dibromo-3-chloropr...	16.982	75	865m	1.27 ug/kg	
101) 1,3,5-trichlorobenzene	17.185	180	4610	1.55 ug/kg	88
102) 1,2,4-trichlorobenzene	17.918	180	4297	1.35 ug/kg	97
103) hexachlorobutadiene	18.044	225	2283	1.59 ug/kg	93
104) naphthalene	18.268	128	12351	1.17 ug/kg	100
105) 1,2,3-trichlorobenzene	18.530	180	4652	1.45 ug/kg	93
106) 2-methylnaphthalene	19.750	142	2171	0.35 ug/kg#	75
107) 1-methylnaphthalene	20.030	142	2340	0.43 ug/kg	92

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

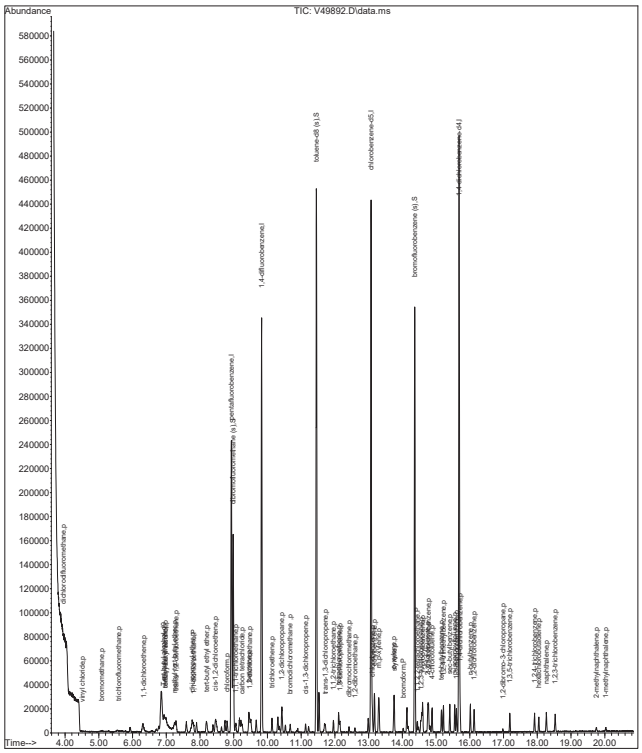
7.6.13 7

Cal Report: V49892.D

Quantitation Report (QT Reviewed)

Data Path : T:\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 18:01:54 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration



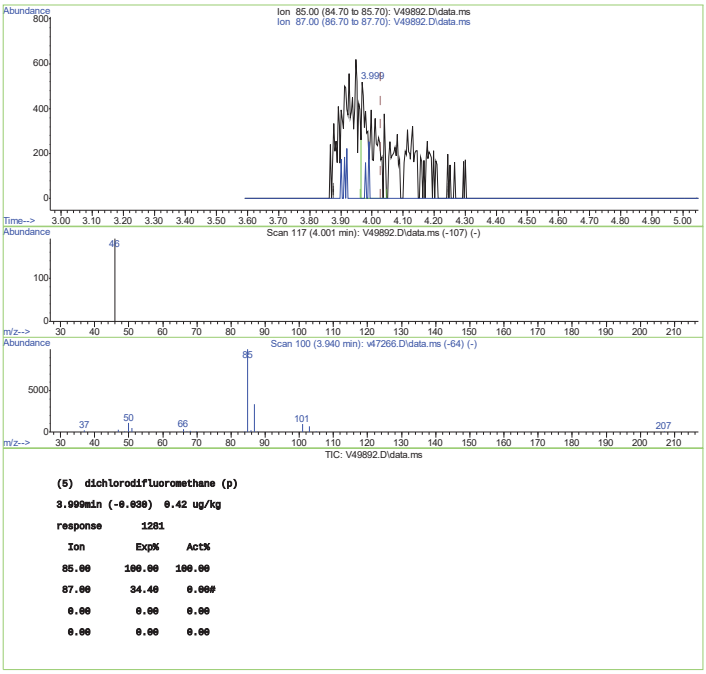
7.6.13 7

Cal Report: V49892.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:39:20 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration



(5) dichlorodifluoromethane (p)

3.999min (-0.038) 0.42 ug/kg

response 1281

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

7.6.13.1 7

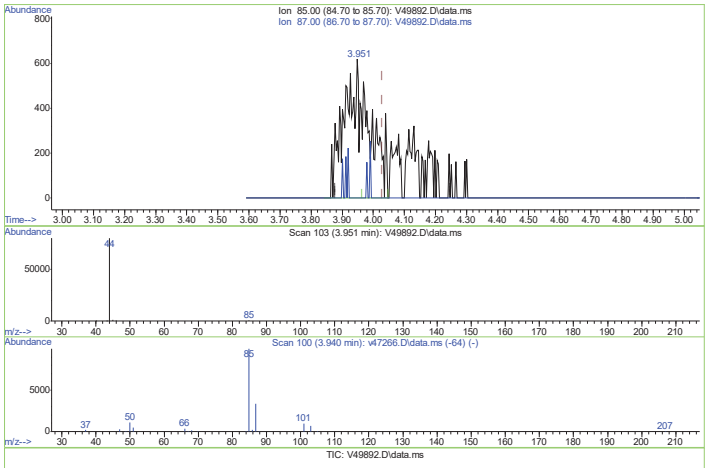
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:39:20 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.2

7



(5) dichlorodifluoromethane (p)
3.951min (-0.078) 1.12 ug/kg m
response 3395

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

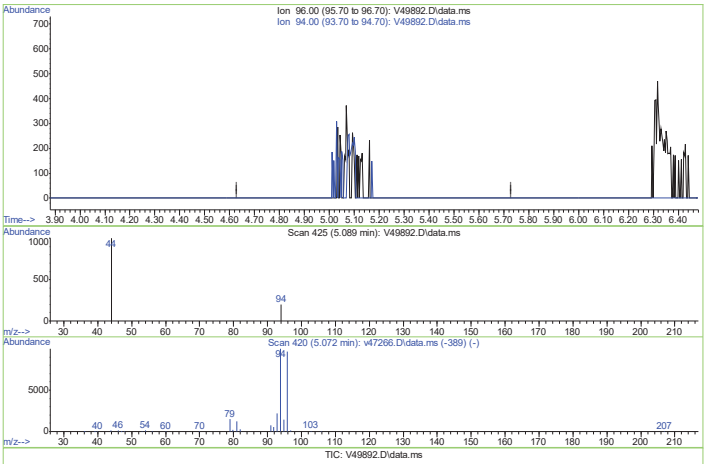
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:39:20 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.3

7



(8) bromomethane (p)
5.090min (-5.090) 0.00 ug/kg
response 0

Ion	Exp%	Act%
96.00	100.00	0.00
94.00	100.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

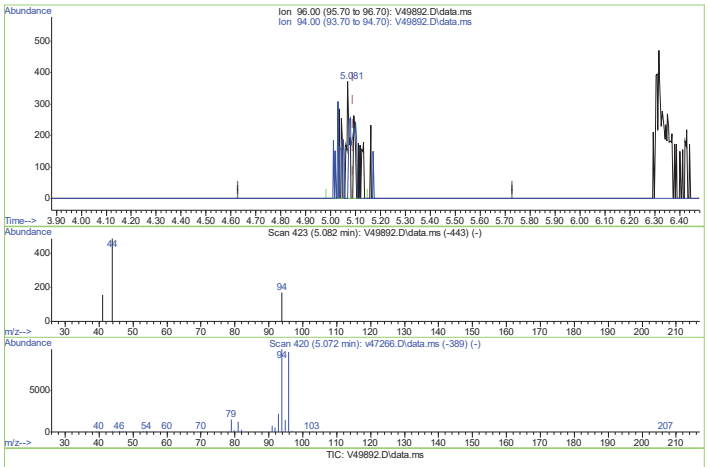
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:39:20 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.4

7



(8) bromomethane (p)
5.082min (-0.008) 1.05 ug/kg m
response 736

Ion	Exp%	Act%
96.00	100.00	100.00
94.00	100.00	17000.00#
0.00	0.00	0.00
0.00	0.00	0.00

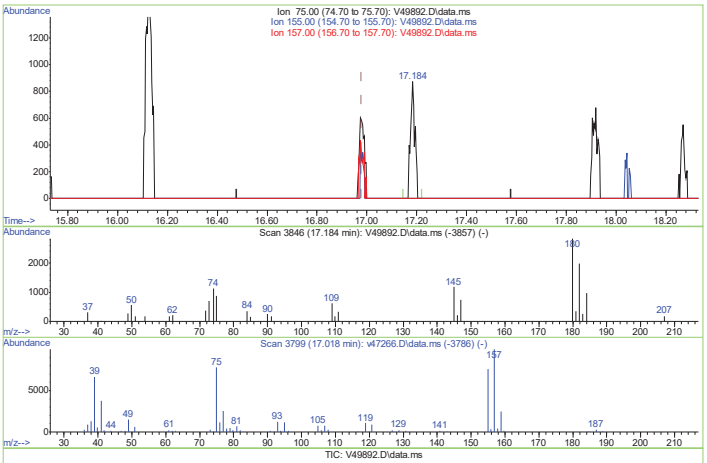
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:39:20 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.5

7



(100) 1,2-dibromo-3-chloropropane (p)
17.184min (+ 0.205) 1.58 ug/kg
response 1078

Ion	Exp%	Act%
75.00	100.00	100.00
155.00	91.80	0.00#
157.00	131.40	0.00#
0.00	0.00	0.00

Cal Report: V49892.D

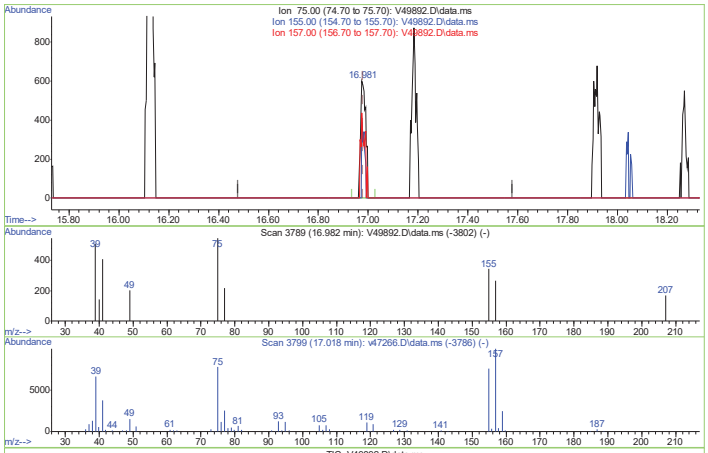
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:39:20 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.6

7



TIC: V49892.D\data.ms

(100) 1,2-dibromo-3-chloropropane (p)

16.982min (+ 0.002) 1.27 ug/kg m

response 865

Ion	Exp%	Act%
75.00	100.00	100.00
155.00	91.00	62.71
157.00	131.40	48.81#
0.00	0.00	0.00

V160919S.M Tue Sep 20 08:50:55 2016 Page: 1

V49892.D edits: 1,2-dibromo-3-chloropropane

Cal Report: V49892.D

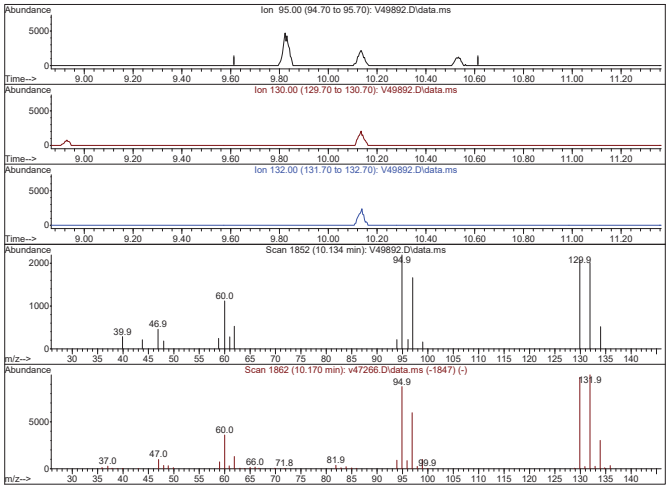
Quantitation Report (Qedit)

Data Path : T:\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:50:52 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.7

7



TIC: V49892.D\data.ms

(52) trichloroethene (p)

10.134min 0.00 ug/kg d

response 0

Ion	Exp%	Act%
95.00	100.00	0.00
130.00	113.40	0.00
132.00	106.30	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 17:32:23 2016 Page: 1

V49892.D edits: trichloroethene

Cal Report: V49892.D

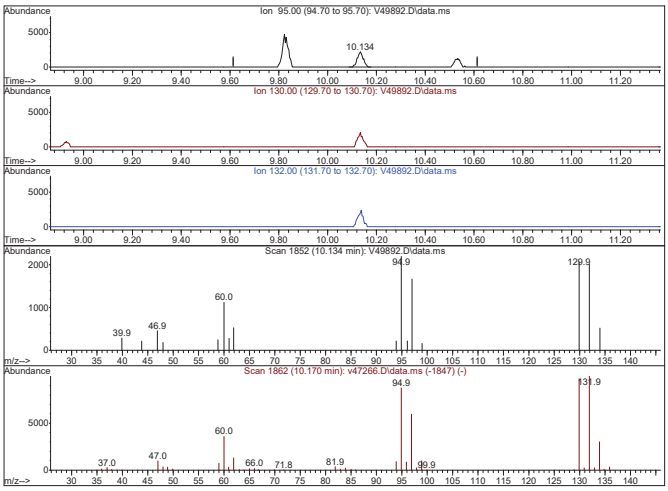
Quantitation Report (Qedit)

Data Path : T:\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 08:50:52 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.8

7



TIC: V49892.D\data.ms

(52) trichloroethene (p)

10.134min (+ 0.000) 1.57 ug/kg m

response 3712

Ion	Exp%	Act%
95.00	100.00	100.00
130.00	113.40	94.12
132.00	106.30	91.57
0.00	0.00	0.00

V160919S.M Wed Sep 21 17:32:35 2016 Page: 1

V49892.D edits: trichloroethene

Cal Report: V49892.D

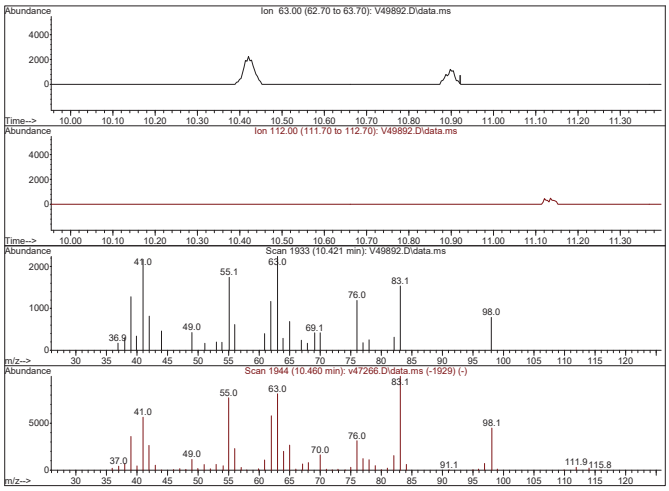
Quantitation Report (Qedit)

Data Path : T:\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 17:32:28 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration

7.6.13.9

7



TIC: V49892.D\data.ms

(53) 1,2-dichloropropane (p)

10.422min 0.00 ug/kg d

response 0

Ion	Exp%	Act%
63.00	100.00	0.00
112.00	2.40	0.00
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:01:51 2016 Page: 1

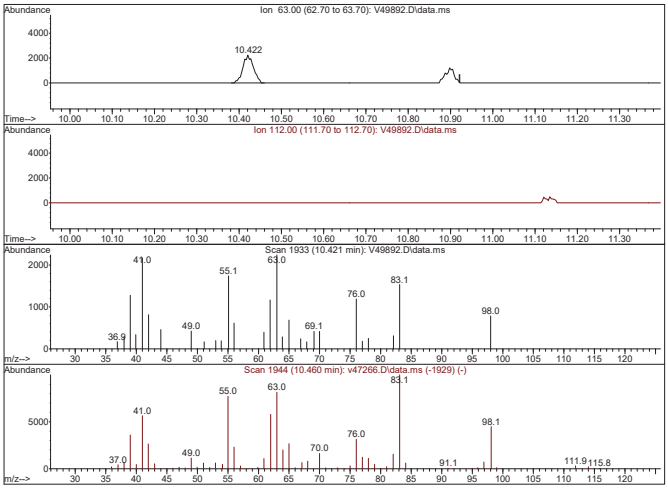
V49892.D edits: 1,2-dichloropropane

Cal Report: V49892.D

Quantitation Report (Qedit)

Data Path : T:\1\DATA\V160919\
Data File : V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 17:32:28 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:39:08 2016
Response via : Initial Calibration



TIC: V49892.D\data.ms

(53) 1,2-dichloropropane (p)

10.421min (-0.001) 1.59 ug/kg m

response 3846

Ion	Exp%	Act%
63.00	100.00	100.00
112.00	2.40	0.00
0.00	0.00	0.00
0.00	0.00	0.00

7.6.13.10 7

V160919S.M Wed Sep 21 18:02:01 2016 Page: 1

V49892.D edits: 1,2-dichloropropane

Cal Report: V49893.D

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:58:46 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.934	65	103951	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.930	168	126482	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.827	114	241481	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.071	82	127725	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.681	152	112748	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.984	113	94242	51.62 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.24%		
61) toluene-d8 (s)	11.451	98	272362	49.38 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.76%		
84) bromofluorobenzene (s)	14.366	95	122089	50.25 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.50%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.997	59	13776	54.11 ug/kg#	47
3) Ethanol	5.764	45	7263m	432.27 ug/kg	
5) dichlorodifluoromethane	3.944	85	9443m	4.31 ug/kg	
6) chloromethane	4.266	50	6596	5.61 ug/kg	91
7) vinyl chloride	4.548	62	8516m	6.86 ug/kg	
8) bromomethane	5.089	96	3685	7.43 ug/kg#	35
9) chloroethane	5.244	64	4766	9.29 ug/kg#	42
10) dichlorofluoromethane	5.567	67	15597	4.14 ug/kg	100
11) ethyl ether	5.929	59	8009	4.62 ug/kg	99
13) trichlorofluoromethane	5.619	101	10100m	6.64 ug/kg	
14) freon-113	6.306	101	6568	15.79 ug/kg#	69
15) acrolein	6.174	56	4110	21.56 ug/kg	100
16) 1,1-dichloroethene	6.348	96	4906	6.11 ug/kg#	75
17) acetone	6.318	58	3278	6.86 ug/kg#	72
18) Methyl Acetate	6.710	43	8381	5.03 ug/kg#	92
19) methylene chloride	6.977	84	10043	5.45 ug/kg	83
20) methyl tert butyl ether	7.249	73	27153	5.35 ug/kg	97
21) acrylonitrile	7.197	53	5450	4.91 ug/kg#	42
22) allyl chloride	6.782	41	12011	5.35 ug/kg	84
23) trans-1,2-dichloroethene	7.291	96	8991	5.67 ug/kg#	54
24) iodomethane	6.605	142	11036	4.38 ug/kg	77
25) carbon disulfide	6.704	76	8676	4.59 ug/kg	95
26) propionitrile	8.461	54	2009	4.38 ug/kg	100
27) vinyl acetate	7.730	86	904m	3.41 ug/kg	
28) chloroprene	7.897	53	17683	4.77 ug/kg	77
29) di-isopropyl ether	7.773	45	33676	5.54 ug/kg	90
30) methacrylonitrile	8.638	41	6252	4.53 ug/kg	92
31) 2-butanone	8.382	72	1343	3.75 ug/kg#	71
32) Hexane	7.594	41	9395	5.31 ug/kg	82
33) 1,1-dichloroethane	7.809	63	19397	5.40 ug/kg	96
34) tert-butyl ethyl ether	8.196	59	33368	5.47 ug/kg	87
36) 2,2-dichloropropane	8.492	77	11792	5.90 ug/kg	95
37) cis-1,2-dichloroethene	8.455	96	10195	5.09 ug/kg#	80
39) bromochloromethane	8.735	128	5251	5.00 ug/kg#	72

7.6.14 7

V160919S.M Tue Sep 20 11:23:20 2016 Page: 1

V49893.D: MSV1837-IC1837 Initial Calibration (5) page 1 of 4

Cal Report: V49893.D

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:58:46 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) chloroform	8.804	83	19549	5.60 ug/kg	99
42) Tetrahydrofuran	8.753	42	4235	5.58 ug/kg	76
43) 1,1,1-trichloroethane	9.060	97	16743	5.90 ug/kg	97
45) Cyclohexane	9.170	56	18626	5.73 ug/kg	87
46) carbon tetrachloride	9.247	117	14867	5.63 ug/kg	92
47) 1,1-dichloropropene	9.212	75	12730	4.60 ug/kg	86
48) benzene	9.449	78	34281	5.23 ug/kg	92
49) 1,2-dichloroethane	9.472	62	19278	5.30 ug/kg	98
50) tert-amyl methyl ether	9.506	73	24633	4.27 ug/kg	83
51) heptane	9.667	43	13168	4.83 ug/kg	92
52) trichloroethene	10.134	95	10512	4.61 ug/kg	78
53) 1,2-dichloropropane	10.422	63	11250	4.81 ug/kg	90
54) dibromomethane	10.531	93	7679	4.73 ug/kg#	67
55) bromodichloromethane	10.674	83	12629	5.13 ug/kg	95
56) Methylcyclohexane	10.434	83	13538	4.56 ug/kg#	84
57) 2-chloroethyl vinyl ether	10.896	63	4759	4.01 ug/kg#	100
58) methyl methacrylate	10.355	69	5796	4.09 ug/kg	80
60) cis-1,3-dichloropropene	11.131	75	11931	4.66 ug/kg	84
62) 4-methyl-2-pentanone	11.221	43	11211	4.31 ug/kg	89
63) toluene	11.529	92	23902	5.06 ug/kg	97
64) trans-1,3-dichloropropene	11.716	75	10477	4.72 ug/kg	96
65) 1,1,2-trichloroethane	11.955	83	7288	5.31 ug/kg	84
66) ethyl methacrylate	11.691	69	9427	3.82 ug/kg	92
68) tetrachloroethene	12.114	166	8432	5.23 ug/kg	90
69) 1,3-dichloropropane	12.148	76	13621	4.95 ug/kg	69
70) dibromochloromethane	12.419	129	8073	4.73 ug/kg	96
71) 1,2-dibromoethane	12.592	107	8776	5.05 ug/kg	83
72) 2-hexanone	12.113	43	9067	4.20 ug/kg	91
73) chlorobenzene	13.107	112	27409	5.29 ug/kg	92
74) 1,1,1,2-tetrachloroethane	13.178	131	9680	4.24 ug/kg	85
75) ethylbenzene	13.169	91	45269	5.15 ug/kg	87
76) m,p-xylene	13.302	106	30621	10.51 ug/kg#	66
77) o-xylene	13.747	106	15495	4.87 ug/kg#	54
78) styrene	13.761	104	25648	5.24 ug/kg	92
79) bromoform	14.026	173	3971	4.13 ug/kg	86
81) trans-1,4-dichloro-2-b...	14.480	53	4281	3.89 ug/kg	79
83) isopropylbenzene	14.134	105	41495	4.45 ug/kg	97
85) bromobenzene	14.573	156	10300	4.63 ug/kg	93
86) 1,1,2,2-tetrachloroethane	14.444	83	13327	5.11 ug/kg	89
87) 1,2,3-trichloropropane	14.550	75	13420	5.72 ug/kg#	1
88) n-propylbenzene	14.601	91	57309	5.45 ug/kg	87
89) 2-chlorotoluene	14.755	91	39641	5.37 ug/kg	91
90) 4-chlorotoluene	14.880	91	35141	5.25 ug/kg	87
91) 1,3,5-trimethylbenzene	14.775	105	36205	5.27 ug/kg	95
92) tert-butylbenzene	15.158	91	23008	5.26 ug/kg	83
93) 1,2,4-trimethylbenzene	15.216	105	37482	5.25 ug/kg	100
94) sec-butylbenzene	15.406	105	45873	5.14 ug/kg	97
95) 1,3-dichlorobenzene	15.602	146	21985	5.24 ug/kg	94
96) p-isopropyltoluene	15.553	119	39287	5.23 ug/kg	92
97) 1,4-dichlorobenzene	15.710	146	23223	5.37 ug/kg	96

7.6.14 7

V160919S.M Tue Sep 20 11:23:20 2016 Page: 2

V49893.D: MSV1837-IC1837 Initial Calibration (5) page 2 of 4

Cal Report: V49893.D

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:58:46 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
98) 1,2-dichlorobenzene	16.126	146	22248	5.29 ug/kg	97
99) n-butylbenzene	16.014	91	41680	5.15 ug/kg	92
100) 1,2-dibromo-3-chloropr...	16.979	75	2567	4.75 ug/kg#	51
101) 1,3,5-trichlorobenzene	17.185	180	13132	5.12 ug/kg	99
102) 1,2,4-trichlorobenzene	17.918	180	13458	5.20 ug/kg	99
103) hexachlorobutadiene	18.045	225	6011	4.81 ug/kg	69
104) naphthalene	18.268	128	41533	5.11 ug/kg	100
105) 1,2,3-trichlorobenzene	18.529	180	13907	5.17 ug/kg	95
106) 2-methylnaphthalene	19.749	142	9179	2.26 ug/kg	92
107) 1-methylnaphthalene	20.033	142	8861	2.35 ug/kg	99

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

7.6.14 7

V160919S.M Tue Sep 20 11:23:20 2016 Page: 3

V49893.D: MSV1837-IC1837 Initial Calibration (5) page 3 of 4

Cal Report: V49893.D

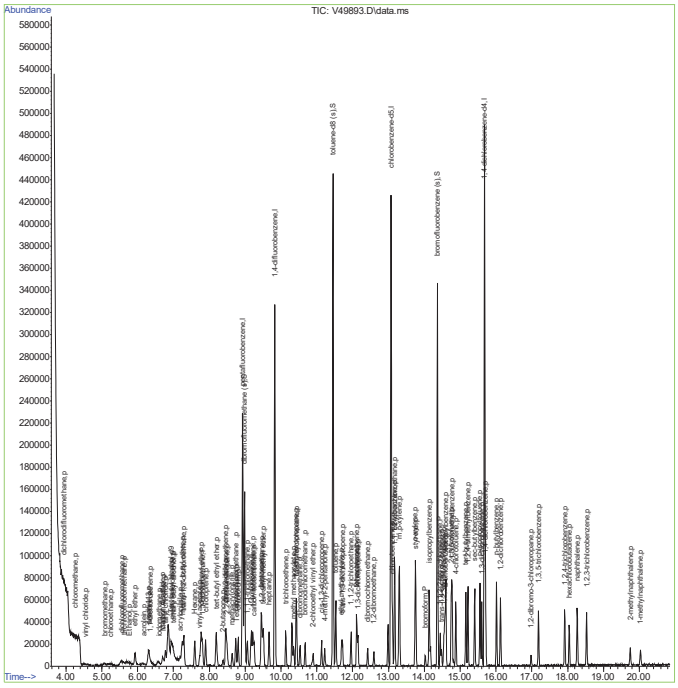
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:58:46 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14

7



V160919S.M Tue Sep 20 11:23:21 2016 Page: 4

V49893.D: MSV1837-IC1837 Initial Calibration (5) page 4 of 4

Cal Report: V49893.D

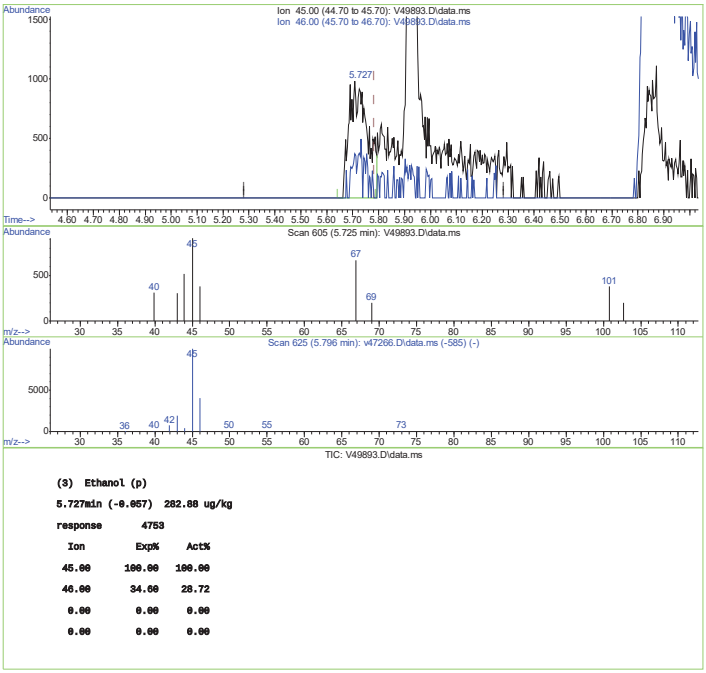
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.1

7



(3) Ethanol (p)

5.727min (-0.057) 282.88 ug/kg

response 4753

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	34.00	28.72
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 08:57:25 2016 Page: 1

V49893.D edits: Ethanol

Cal Report: V49893.D

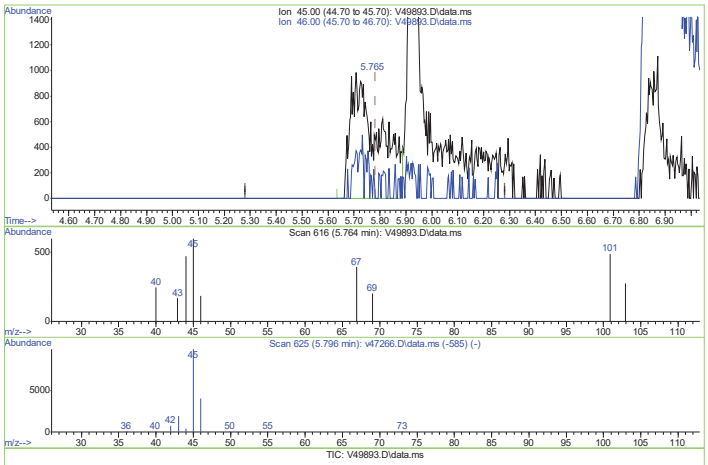
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.2

7



(3) Ethanol (p)

5.764min (-0.019) 432.27 ug/kg m

response 7263

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	34.00	18.79#
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 08:57:32 2016 Page: 1

V49893.D edits: Ethanol

Cal Report: V49893.D

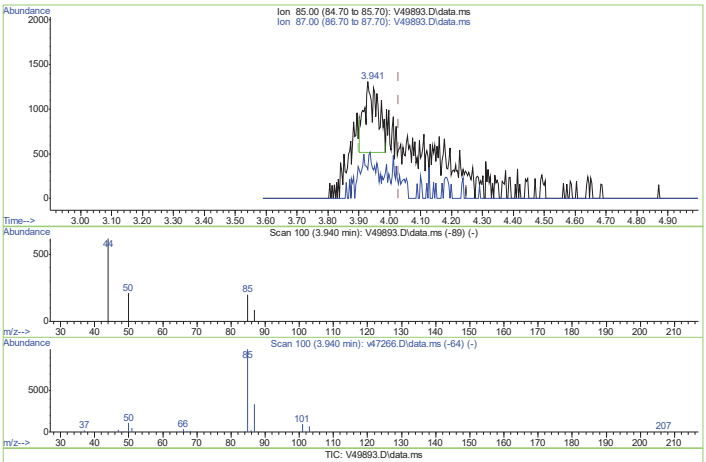
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.3

7



(5) dichlorodifluoromethane (p)

3.941min (-0.087) 1.10 ug/kg

response 2419

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	19.18
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 08:57:36 2016 Page: 1

V49893.D edits: dichlorodifluoromethane

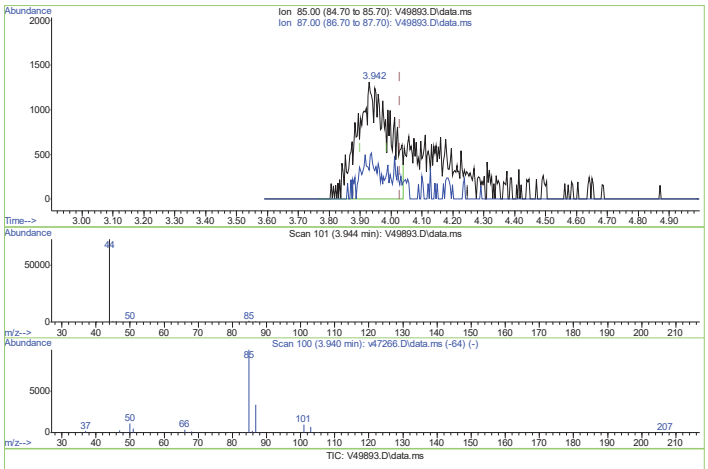
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.4

7



(5) dichlorodifluoromethane (p)

3.944min (-0.085) 4.31 ug/kg m

response 9443

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	40.45
0.00	0.00	0.00
0.00	0.00	0.00

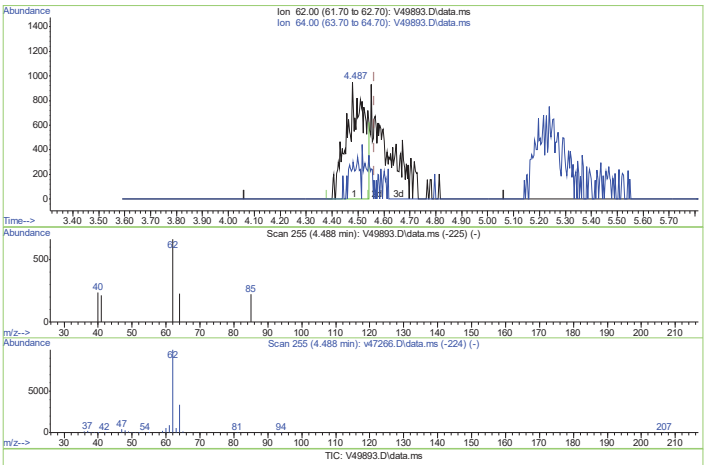
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.5

7



(7) vinyl chloride (p)

4.487min (-0.076) 3.53 ug/kg

response 4381

Ion	Exp%	Act%
62.00	100.00	100.00
64.00	30.10	34.04
0.00	0.00	0.00
0.00	0.00	0.00

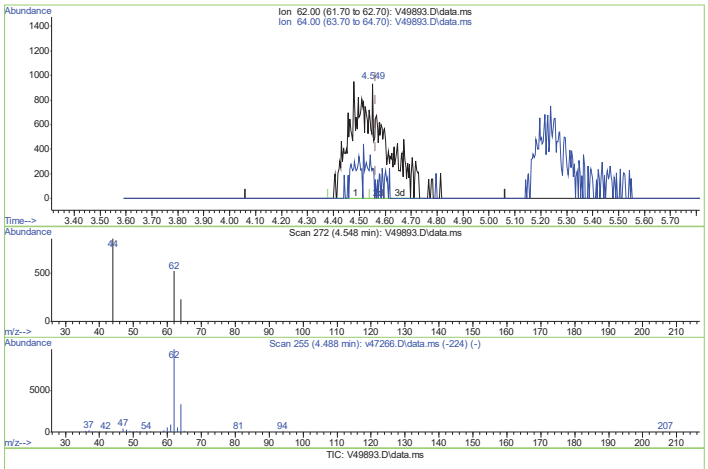
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.6

7



(7) vinyl chloride (p)

4.548min (-0.015) 6.86 ug/kg m

response 8516

Ion	Exp%	Act%
62.00	100.00	100.00
64.00	30.10	43.70
0.00	0.00	0.00
0.00	0.00	0.00

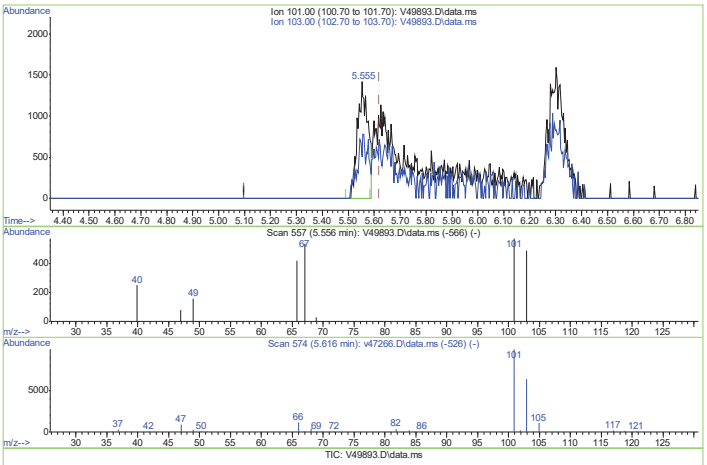
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.7

7



(13) trichlorofluoromethane (p)

5.555min (-0.065) 2.55 ug/kg

response 3876

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	63.19
0.00	0.00	0.00
0.00	0.00	0.00

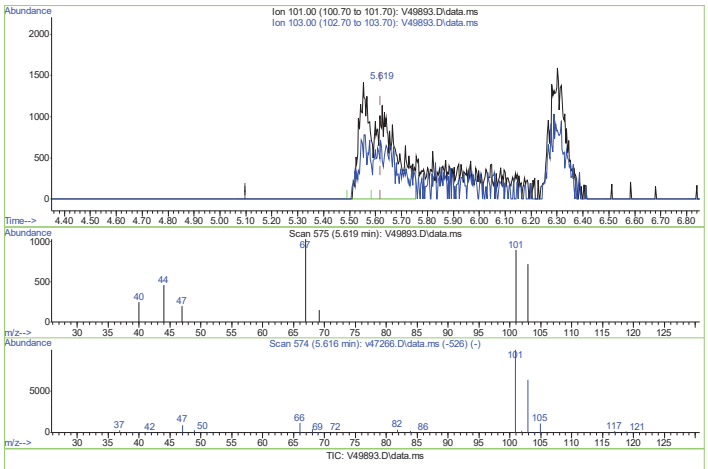
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.8

7



(13) trichlorofluoromethane (p)
5.619min (-0.001) 6.64 ug/kg m
response 10100

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	80.02
0.00	0.00	0.00
0.00	0.00	0.00

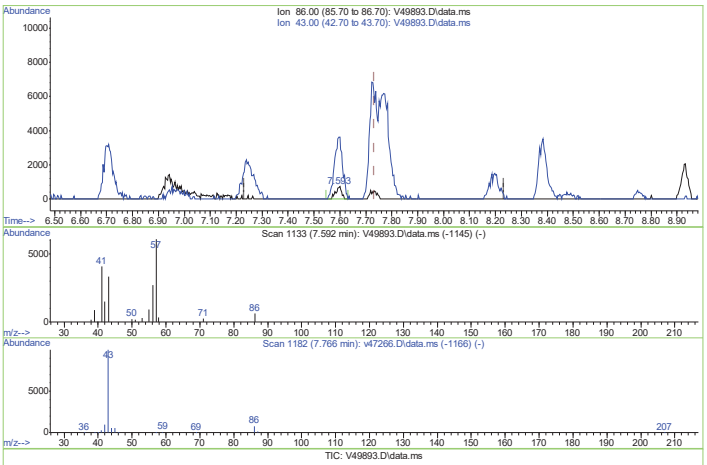
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.9

7



(27) vinyl acetate (p)
7.593min (-0.139) 4.34 ug/kg
response 1151

Ion	Exp%	Act%
86.00	100.00	100.00
43.00	6.40	560.13#
0.00	0.00	0.00
0.00	0.00	0.00

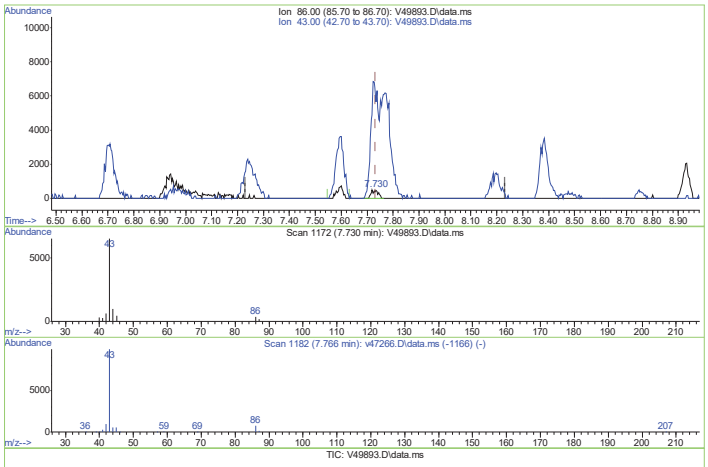
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 08:57:11 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:51:36 2016
Response via : Initial Calibration

7.6.14.10

7



(27) vinyl acetate (p)
7.730min (-0.003) 3.41 ug/kg m
response 904

Ion	Exp%	Act%
86.00	100.00	100.00
43.00	6.40	1789.84#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 10:12:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.930	65	104305	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.932	168	135524	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.828	114	254740	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.071	82	133594	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.681	152	119313	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.987	113	99305	50.36 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.72%		
61) toluene-d8 (s)	11.451	98	290294	50.05 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.10%		
84) bromofluorobenzene (s)	14.366	95	129317	50.24 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.48%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.970	59	21685	82.62 ug/kg#	49
3) Ethanol	5.769	45	13534	861.09 ug/kg#	40
5) dichlorodifluoromethane	3.983	85	24037m	10.72 ug/kg	
6) chloromethane	4.276	50	14198	10.62 ug/kg	95
7) vinyl chloride	4.563	62	17804	11.90 ug/kg	86
8) bromomethane	5.093	96	9006	14.58 ug/kg	85
9) chloroethane	5.319	64	13686m	17.43 ug/kg	
10) dichlorofluoromethane	5.644	67	42973m	11.64 ug/kg	
11) ethyl ether	5.935	59	17756	9.94 ug/kg	79
12) acetonitrile	6.691	41	1940m	10.70 ug/kg	
13) trichlorofluoromethane	5.782	101	36662m	20.29 ug/kg	
14) freon-113	6.321	101	12471	13.46 ug/kg	95
15) acrolein	6.181	56	9527	50.09 ug/kg	100
16) 1,1-dichloroethene	6.472	96	16663m	18.04 ug/kg	
17) acetone	6.325	58	6373	10.49 ug/kg#	82
18) Methyl Acetate	6.715	43	17045	9.52 ug/kg#	93
19) methylene chloride	7.001	84	21564	10.61 ug/kg#	56
20) methyl tert butyl ether	7.254	73	55618	9.99 ug/kg	89
21) acrylonitrile	7.202	53	11368	9.65 ug/kg	90
22) allyl chloride	6.785	41	24827	9.97 ug/kg	78
23) trans-1,2-dichloroethene	7.295	96	19368	10.91 ug/kg#	71
24) iodomethane	6.620	142	24595m	9.72 ug/kg	
25) carbon disulfide	6.707	76	16434	8.46 ug/kg	94
26) propionitrile	8.464	54	4479	9.72 ug/kg	100
27) vinyl acetate	7.732	86	2398	10.03 ug/kg#	1
28) chloroprene	7.900	53	38303	9.87 ug/kg	78
29) di-isopropyl ether	7.776	45	71936	10.66 ug/kg	89
30) methacrylonitrile	8.640	41	13930	9.88 ug/kg	88
31) 2-butanone	8.385	72	3552	10.57 ug/kg#	71
32) Hexane	7.599	41	20007	10.24 ug/kg	90
33) 1,1-dichloroethane	7.812	63	42805	10.83 ug/kg	99
34) tert-butyl ethyl ether	8.199	59	69925	10.37 ug/kg	89
36) 2,2-dichloropropane	8.495	77	26004	11.14 ug/kg	99
37) cis-1,2-dichloroethene	8.459	96	22971	10.64 ug/kg#	77

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 10:12:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.739	128	10733	9.54 ug/kg#	77
40) chloroform	8.807	83	42036	10.81 ug/kg	96
42) Tetrahydrofuran	8.757	42	8529	9.91 ug/kg	88
43) 1,1,1-trichloroethane	9.063	97	36409	11.29 ug/kg	93
45) Cyclohexane	9.172	56	41167	11.19 ug/kg	85
46) carbon tetrachloride	9.250	117	31643	10.90 ug/kg	96
47) 1,1-dichloropropene	9.214	75	28345	10.11 ug/kg	83
48) benzene	9.452	78	74105	10.59 ug/kg	92
49) 1,2-dichloroethane	9.474	62	41605	10.63 ug/kg	100
50) tert-amyl methyl ether	9.508	73	52938	9.38 ug/kg	94
51) heptane	9.668	43	28650	10.13 ug/kg	90
52) trichloroethene	10.135	95	22499	9.73 ug/kg	83
53) 1,2-dichloropropane	10.423	63	24464	10.11 ug/kg	100
54) dibromomethane	10.532	93	15781	9.47 ug/kg	94
55) bromodichloromethane	10.675	83	27300	10.43 ug/kg	98
56) Methylcyclohexane	10.435	83	29119	9.73 ug/kg#	78
57) 2-chloroethyl vinyl ether	10.898	63	11008	9.75 ug/kg	100
58) methyl methacrylate	10.354	69	13119	9.66 ug/kg	93
60) cis-1,3-dichloropropene	11.131	75	28332	10.73 ug/kg	85
62) 4-methyl-2-pentanone	11.222	43	24377	9.54 ug/kg	89
63) toluene	11.529	92	52168	10.41 ug/kg	97
64) trans-1,3-dichloropropene	11.716	75	25213	10.97 ug/kg	95
65) 1,1,2-trichloroethane	11.955	83	16420	11.11 ug/kg	89
66) ethyl methacrylate	11.692	69	22560	9.82 ug/kg	88
68) tetrachloroethene	12.115	166	18702	10.92 ug/kg	93
69) 1,3-dichloropropane	12.149	76	31155	10.85 ug/kg	95
70) dibromochloromethane	12.419	129	18258	10.41 ug/kg	98
71) 1,2-dibromoethane	12.593	107	18564	10.18 ug/kg	82
72) 2-hexanone	12.113	43	21649	10.43 ug/kg	92
73) chlorobenzene	13.107	112	59773	10.82 ug/kg	95
74) 1,1,1,2-tetrachloroethane	13.178	131	21177	9.59 ug/kg	96
75) ethylbenzene	13.169	91	101910	10.98 ug/kg	89
76) m,p-xylene	13.302	106	70470	22.83 ug/kg#	71
77) o-xylene	13.747	106	34942	10.59 ug/kg#	65
78) styrene	13.761	104	59292	11.41 ug/kg	88
79) bromoform	14.026	173	9642	10.17 ug/kg	93
81) trans-1,4-dichloro-2-b...	14.481	53	9664	9.44 ug/kg	74
83) isopropylbenzene	14.135	105	94168	10.09 ug/kg	99
85) bromobenzene	14.573	156	23330	10.29 ug/kg#	74
86) 1,1,2,2-tetrachloroethane	14.444	83	28785	10.35 ug/kg	98
87) 1,2,3-trichloropropane	14.550	75	28816	11.07 ug/kg#	5
88) n-propylbenzene	14.600	91	127259	11.10 ug/kg	91
89) 2-chlorotoluene	14.755	91	88155	11.01 ug/kg	88
90) 4-chlorotoluene	14.880	91	78872	10.95 ug/kg	86
91) 1,3,5-trimethylbenzene	14.775	105	83848	11.33 ug/kg	96
92) tert-butylbenzene	15.158	91	51198	10.87 ug/kg	84
93) 1,2,4-trimethylbenzene	15.215	105	88969	11.58 ug/kg	92
94) sec-butylbenzene	15.406	105	107755	11.30 ug/kg	100
95) 1,3-dichlorobenzene	15.602	146	48669	10.79 ug/kg	94
96) p-isopropyltoluene	15.553	119	91517	11.34 ug/kg	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 10:12:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97) 1,4-dichlorobenzene	15.710	146	50112	10.69 ug/kg	94
98) 1,2-dichlorobenzene	16.126	146	49193	10.84 ug/kg	98
99) n-butylbenzene	16.014	91	99534	11.51 ug/kg	87
100) 1,2-dibromo-3-chloropr...	16.979	75	5431	9.65 ug/kg#	49
101) 1,3,5-trichlorobenzene	17.185	180	29626	10.83 ug/kg	100
102) 1,2,4-trichlorobenzene	17.918	180	30105	10.85 ug/kg	99
103) hexachlorobutadiene	18.045	225	14145	10.83 ug/kg	99
104) naphthalene	18.268	128	93062	10.74 ug/kg	100
105) 1,2,3-trichlorobenzene	18.529	180	30601	10.63 ug/kg	96
106) 2-methylnaphthalene	19.749	142	22527	5.41 ug/kg	95
107) 1-methylnaphthalene	20.032	142	21583	5.52 ug/kg	98

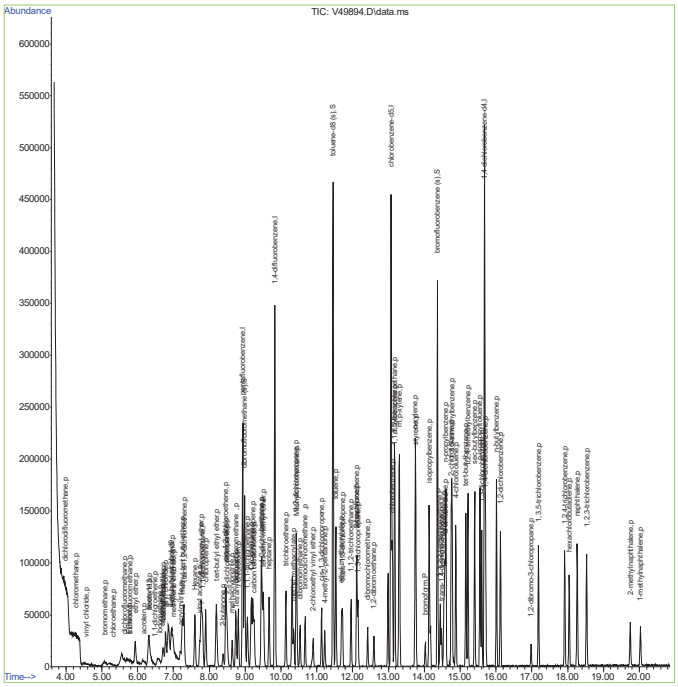
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 10:12:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15

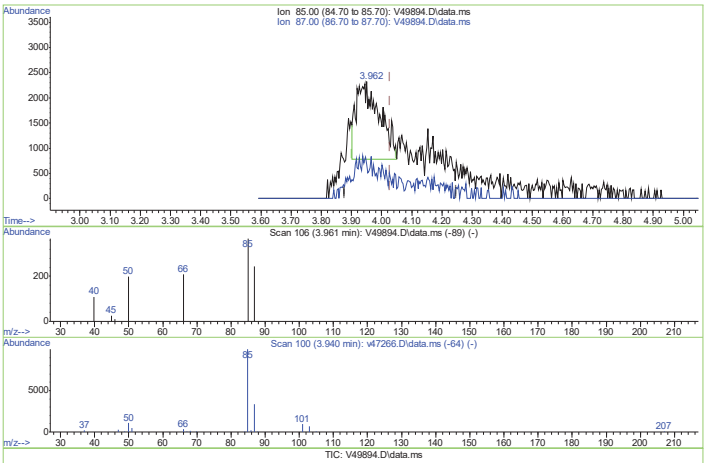


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 08:59:38 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.1



TIC: V49894.D\data.ms

(5) dichlorodifluoromethane (p)

3.962min (-0.067) 3.61 ug/kg

response 8888

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	40.00
0.00	0.00	0.00
0.00	0.00	0.00

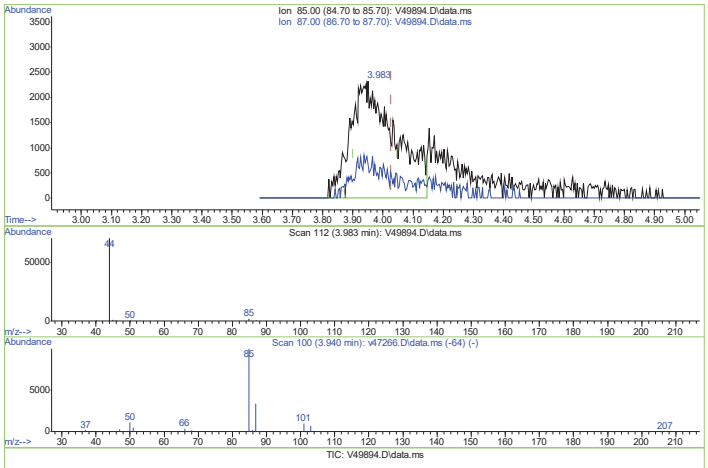
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 08:59:38 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.2

7



(5) dichlorodifluoromethane (p)

3.983min (-0.046) 10.72 ug/kg m

response 24037

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	26.49
0.00	0.00	0.00
0.00	0.00	0.00

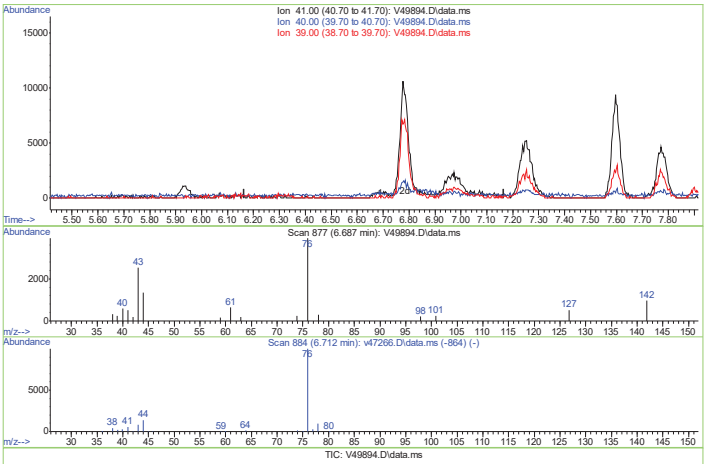
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:01:14 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.3

7



(12) acetonitrile (p)

6.686min 0.00 ug/kg d

response 0

Ion	Exp%	Act%
41.00	100.00	0.00
40.00	68.90	0.00
39.00	51.50	0.00
0.00	0.00	0.00

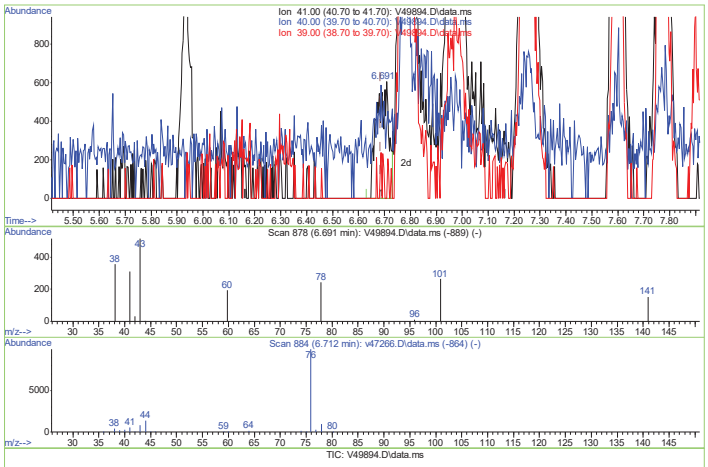
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:01:14 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.4

7



(12) acetonitrile (p)

6.691min (+ 0.005) 10.70 ug/kg m

response 1940

Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.90	66.67
39.00	51.50	0.00#
0.00	0.00	0.00

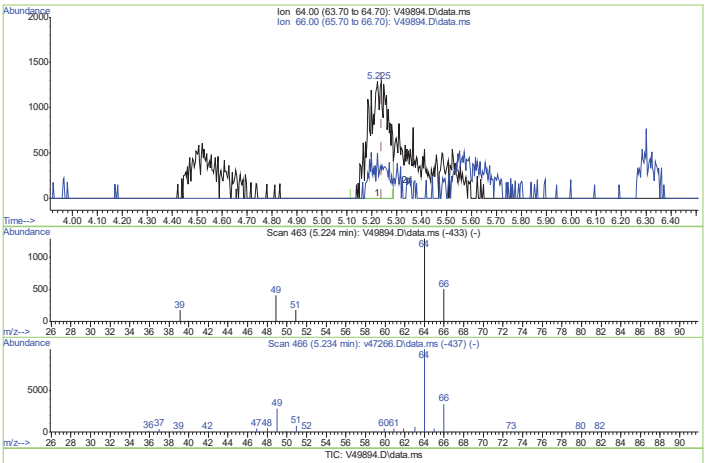
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.5

7



(9) chloroethane (p)

5.225min (-0.015) 8.93 ug/kg

response 7612

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	38.93
0.00	0.00	0.00
0.00	0.00	0.00

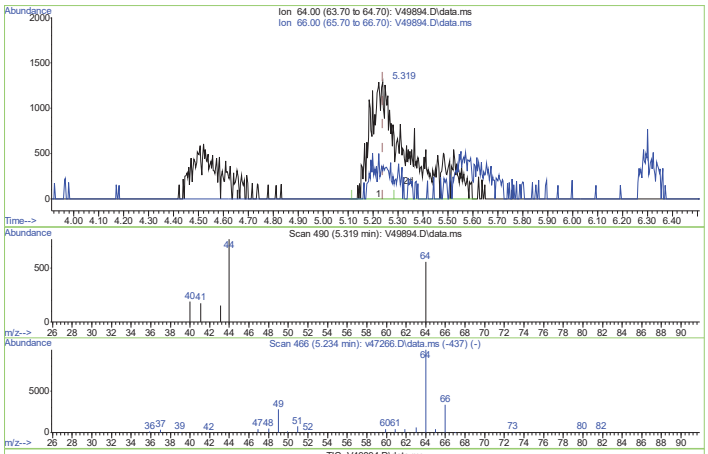
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.6

7



(9) chloroethane (p)
5.319min (+ 0.079) 17.43 ug/kg m
response 13686

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:11:31 2016 Page: 1

V49894.D edits: chloroethane

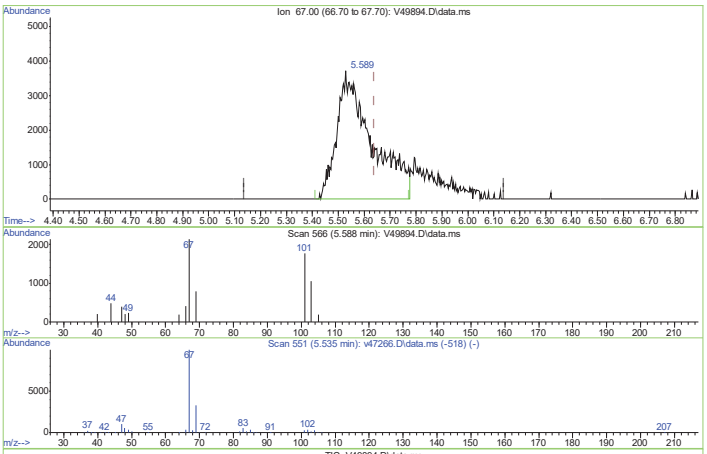
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.7

7



(10) dichlorofluoromethane (p)
5.589min (-0.050) 9.43 ug/kg
response 34800

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:11:33 2016 Page: 1

V49894.D edits: dichlorofluoromethane

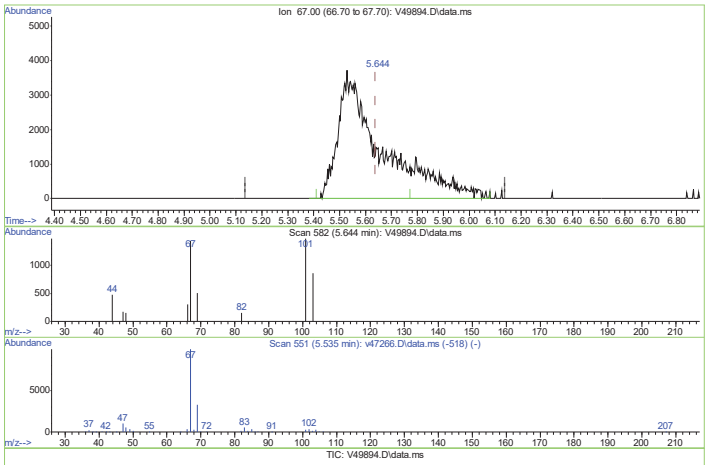
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.8

7



(10) dichlorofluoromethane (p)
5.644min (+ 0.005) 11.64 ug/kg m
response 42973

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:11:37 2016 Page: 1

V49894.D edits: dichlorofluoromethane

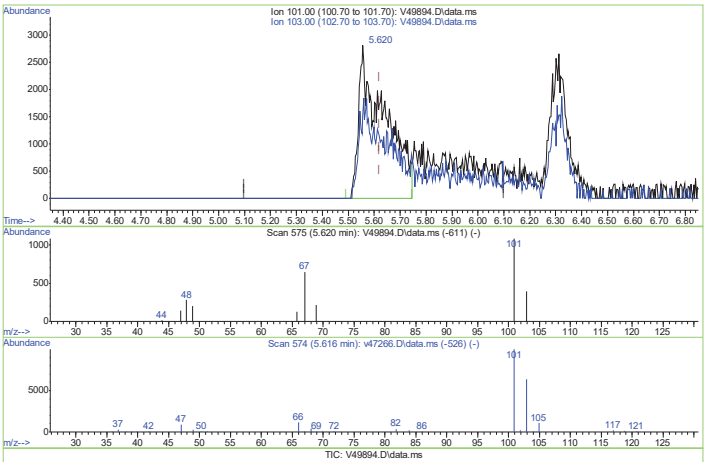
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.9

7



(13) trichlorofluoromethane (p)
5.620min (-0.001) 10.81 ug/kg
response 19531

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	67.25
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:11:43 2016 Page: 1

V49894.D edits: trichlorofluoromethane

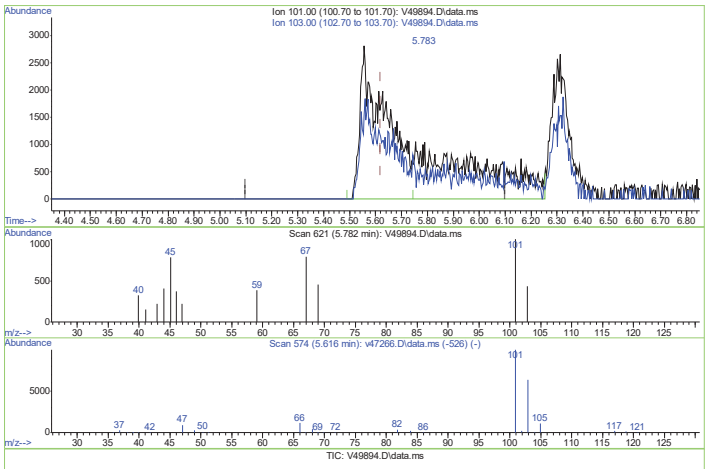
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.10

7



(13) trichlorofluoromethane (p)
5.782min (+ 0.162) 20.29 ug/kg m
response 36662

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	43.31
0.00	0.00	0.00
0.00	0.00	0.00

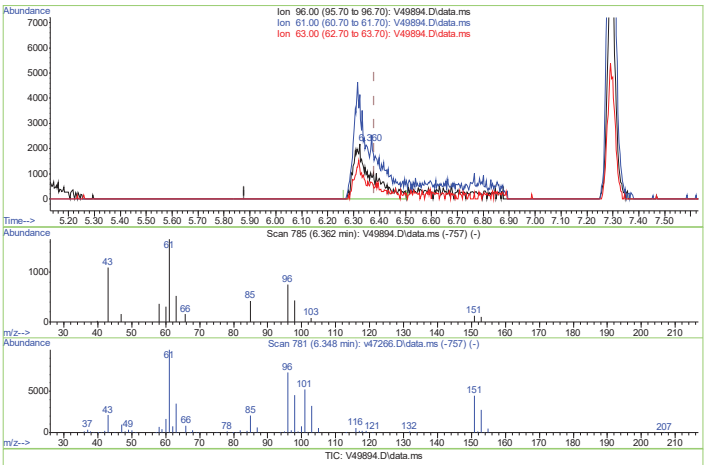
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.11

7



(16) 1,1-dichloroethene (p)
6.360min (-0.010) 11.66 ug/kg
response 10767

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	220.45#
63.00	57.50	68.92
0.00	0.00	0.00

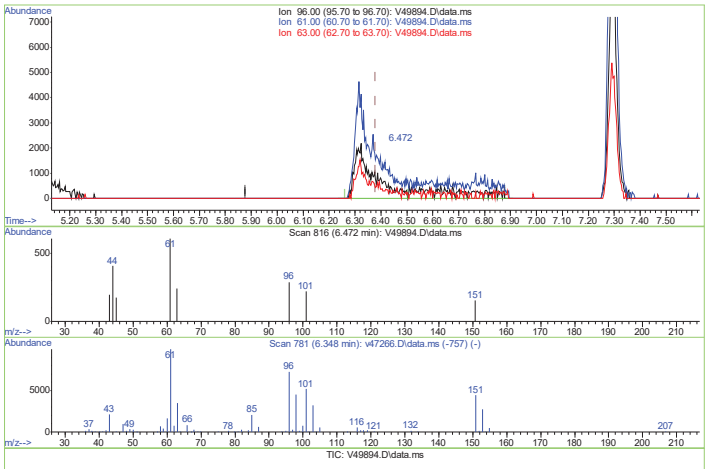
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.12

7



(16) 1,1-dichloroethene (p)
6.472min (+ 0.092) 18.04 ug/kg m
response 16663

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	210.03#
63.00	57.50	83.74
0.00	0.00	0.00

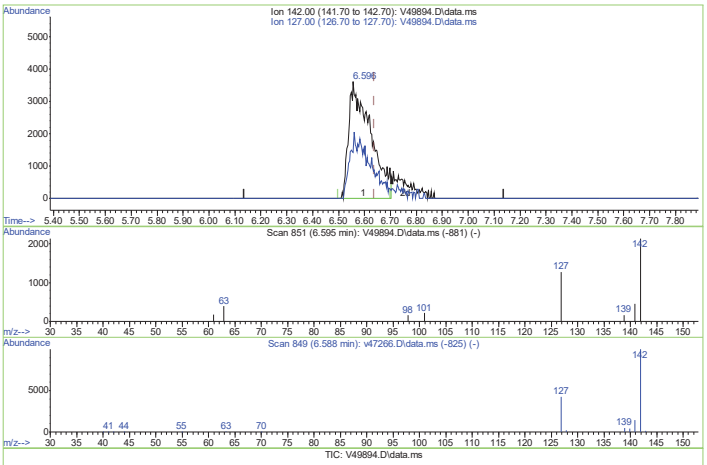
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.13

7



(24) iodomethane (p)
6.596min (-0.042) 8.32 ug/kg
response 21070

Ion	Exp%	Act%
142.00	100.00	100.00
127.00	49.70	59.29
0.00	0.00	0.00
0.00	0.00	0.00

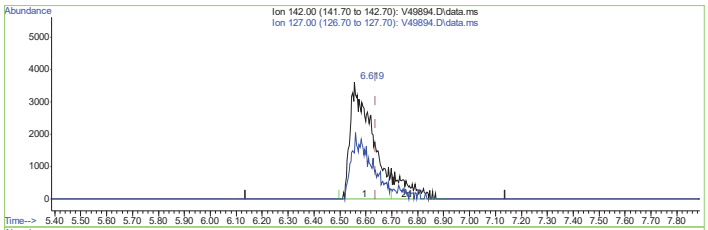
Quantitation Report (Qedit)

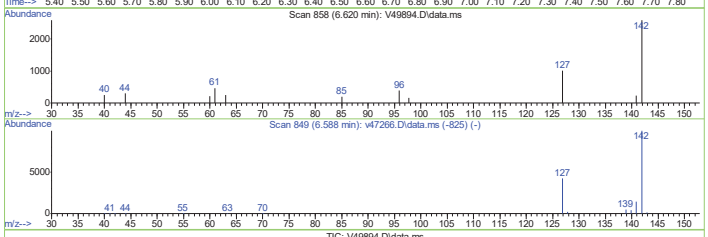
Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 09:07:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 08:59:30 2016
Response via : Initial Calibration

7.6.15.14

7





TIC: V49894.D\data.ms

(24) iodomethane (p)

6.620min (-0.018) 9.72 ug/kg m

response 24595

Ion	Exp%	Act%
142.00	100.00	100.00
127.00	49.70	39.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 10:10:58 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.876	65	90744	500.00 ug/kg	#-0.04
4) pentafluorobenzene	8.932	168	145410	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.829	114	267880	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.072	82	138182	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.681	152	127991	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.987	113	104614	49.37 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.74%		
61) toluene-d8 (s)	11.451	98	303758	49.79 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.58%		
84) bromofluorobenzene (s)	14.367	95	136008	49.21 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.42%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.989	59	64484	330.97 ug/kg#	47
3) Ethanol	5.758	45	29537	2666.20 ug/kg	93
5) dichlorodifluoromethane	3.962	85	44508m	20.93 ug/kg	
6) chloromethane	4.276	50	27015	22.32 ug/kg	97
7) vinyl chloride	4.575	62	39498	27.39 ug/kg	83
8) bromomethane	5.103	96	16858	27.29 ug/kg	88
9) chloroethane	5.351	64	26836m	39.05 ug/kg	
10) dichlorofluoromethane	5.657	67	92116	28.23 ug/kg	100
11) ethyl ether	5.937	59	40591	25.44 ug/kg	92
12) acetonitrile	6.692	41	4473	22.98 ug/kg#	57
13) trichlorofluoromethane	5.779	101	77073m	44.91 ug/kg	
14) freon-113	6.458	101	31754m	35.85 ug/kg	
15) acrolein	6.186	56	24194	142.21 ug/kg	100
16) 1,1-dichloroethene	6.500	96	37317m	42.03 ug/kg	
17) acetone	6.324	58	11542	21.05 ug/kg	85
18) Methyl Acetate	6.715	43	39284	24.78 ug/kg#	87
19) methylene chloride	7.038	84	51057	26.52 ug/kg	89
20) methyl tert butyl ether	7.255	73	128869	24.66 ug/kg	99
21) acrylonitrile	7.203	53	25757	24.62 ug/kg	71
22) allyl chloride	6.788	41	53647	24.11 ug/kg	76
23) trans-1,2-dichloroethene	7.297	96	43276	25.63 ug/kg	86
24) iodomethane	6.634	142	54486m	24.91 ug/kg	
25) carbon disulfide	6.712	76	37604m	22.34 ug/kg	
26) propionitrile	8.463	54	10243	25.00 ug/kg	100
27) vinyl acetate	7.733	86	5779	27.02 ug/kg#	1
28) chloroprene	7.901	53	87501	25.29 ug/kg	83
29) di-isopropyl ether	7.777	45	160752	25.14 ug/kg	91
30) methacrylonitrile	8.639	41	32425	25.78 ug/kg	90
31) 2-butanone	8.386	72	7410	24.38 ug/kg#	81
32) Hexane	7.598	41	42943	24.46 ug/kg	83
33) 1,1-dichloroethane	7.812	63	92385	24.61 ug/kg	99
34) tert-butyl ethyl ether	8.199	59	159424	25.06 ug/kg	87
36) 2,2-dichloropropane	8.498	77	53543	25.08 ug/kg	92
37) cis-1,2-dichloroethene	8.458	96	51594	25.23 ug/kg	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 10:10:58 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.738	128	24780	24.86 ug/kg#	75
40) chloroform	8.807	83	90832	24.59 ug/kg	100
42) Tetrahydrofuran	8.757	42	17956	23.37 ug/kg	92
43) 1,1,1-trichloroethane	9.063	97	74194	24.07 ug/kg	93
45) Cyclohexane	9.174	56	88129	26.70 ug/kg#	80
46) carbon tetrachloride	9.250	117	67601	24.98 ug/kg	91
47) 1,1-dichloropropene	9.214	75	61323	24.91 ug/kg	90
48) benzene	9.452	78	164678	24.70 ug/kg	96
49) 1,2-dichloroethane	9.475	62	90541	24.92 ug/kg	94
50) tert-amyl methyl ether	9.509	73	121469	24.87 ug/kg	98
51) heptane	9.668	43	63598	25.60 ug/kg	90
52) trichloroethene	10.135	95	50098	24.85 ug/kg	80
53) 1,2-dichloropropane	10.423	63	52433	24.68 ug/kg	100
54) dibromomethane	10.532	93	36007	24.91 ug/kg	86
55) bromodichloromethane	10.675	83	62340	25.72 ug/kg	99
56) Methylcyclohexane	10.435	83	67610	25.92 ug/kg#	79
57) 2-chloroethyl vinyl ether	10.897	63	24950	25.35 ug/kg#	100
58) methyl methacrylate	10.354	69	30802	26.06 ug/kg	96
59) 1,4-dioxane	10.469	88	2063	71.23 ug/kg#	1
60) cis-1,3-dichloropropene	11.132	75	65949	26.86 ug/kg	89
62) 4-methyl-2-pentanone	11.221	43	57098	25.74 ug/kg	88
63) toluene	11.530	92	108046	24.39 ug/kg	96
64) trans-1,3-dichloropropene	11.716	75	59195	27.61 ug/kg	92
65) 1,1,2-trichloroethane	11.956	83	34925	25.29 ug/kg	93
66) ethyl methacrylate	11.691	69	53070	26.46 ug/kg	94
68) tetrachloroethene	12.114	166	39643	25.24 ug/kg	99
69) 1,3-dichloropropane	12.149	76	67069	25.51 ug/kg	99
70) dibromochloromethane	12.419	129	42680	26.73 ug/kg	97
71) 1,2-dibromoethane	12.592	107	42579	25.73 ug/kg	91
72) 2-hexanone	12.113	43	48773	27.02 ug/kg	92
73) chlorobenzene	13.107	112	128976	25.50 ug/kg	92
74) 1,1,1,2-tetrachloroethane	13.178	131	47118	24.97 ug/kg	98
75) ethylbenzene	13.169	91	219506	25.77 ug/kg	89
76) m,p-xylene	13.302	106	155278	53.20 ug/kg#	71
77) o-xylene	13.747	106	78935	26.22 ug/kg#	75
78) styrene	13.760	104	131387	27.38 ug/kg	86
79) bromoform	14.027	173	23821	27.70 ug/kg	87
81) trans-1,4-dichloro-2-b...	14.480	53	23103	26.49 ug/kg	72
83) isopropylbenzene	14.135	105	210051	25.14 ug/kg	98
85) bromobenzene	14.573	156	51299	25.16 ug/kg	86
86) 1,1,2,2-tetrachloroethane	14.444	83	65214	24.86 ug/kg	95
87) 1,2,3-trichloropropane	14.549	75	60663	24.46 ug/kg#	4
88) n-propylbenzene	14.600	91	284113	25.99 ug/kg	92
89) 2-chlorotoluene	14.756	91	189829	24.90 ug/kg	90
90) 4-chlorotoluene	14.880	91	175591	25.62 ug/kg	89
91) 1,3,5-trimethylbenzene	14.775	105	187750	26.52 ug/kg	100
92) tert-butylbenzene	15.158	91	117696	26.30 ug/kg	81
93) 1,2,4-trimethylbenzene	15.216	105	198681	26.95 ug/kg	94
94) sec-butylbenzene	15.406	105	243747	26.74 ug/kg	100
95) 1,3-dichlorobenzene	15.602	146	105899	24.74 ug/kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 10:10:58 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.553	119	206479	26.74 ug/kg	93
97) 1,4-dichlorobenzene	15.710	146	110031	24.76 ug/kg	92
98) 1,2-dichlorobenzene	16.126	146	110589	25.66 ug/kg	96
99) n-butylbenzene	16.014	91	224156	27.03 ug/kg	89
100) 1,2-dibromo-3-chloropr...	16.980	75	13939	26.52 ug/kg#	62
101) 1,3,5-trichlorobenzene	17.186	180	66067	25.43 ug/kg	99
102) 1,2,4-trichlorobenzene	17.918	180	69191	26.25 ug/kg	96
103) hexachlorobutadiene	18.045	225	31149	25.12 ug/kg	100
104) naphthalene	18.268	128	223324	27.17 ug/kg	100
105) 1,2,3-trichlorobenzene	18.530	180	70050	25.70 ug/kg	91
106) 2-methylnaphthalene	19.749	142	60582	15.32 ug/kg	93
107) 1-methylnaphthalene	20.032	142	54936	14.74 ug/kg	99

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

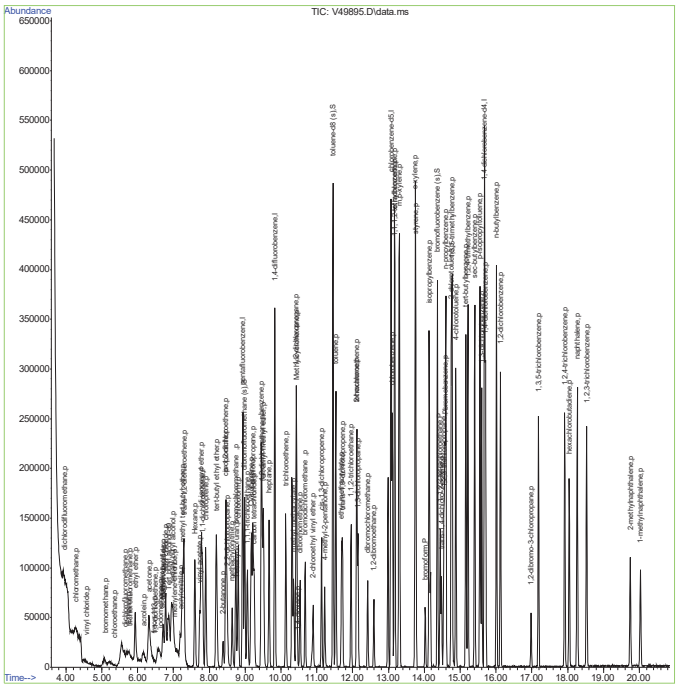
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 10:10:58 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16

7



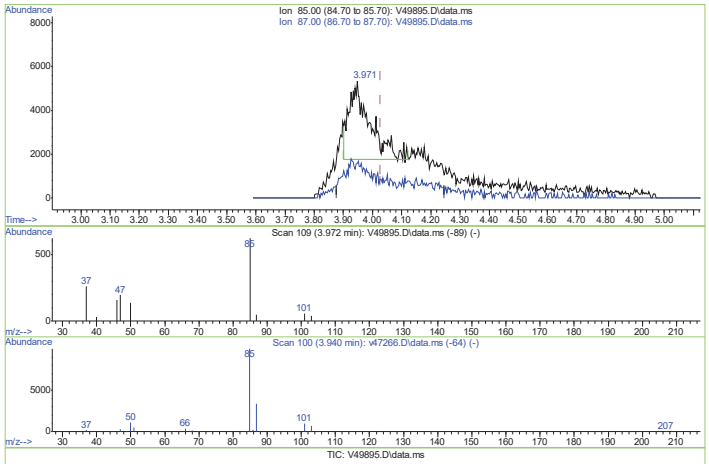
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:01:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.1

7



(5) dichlorodifluoromethane (p)
3.971min (-0.058) 8.19 ug/kg
response 17415

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	24.85
0.00	0.00	0.00
0.00	0.00	0.00

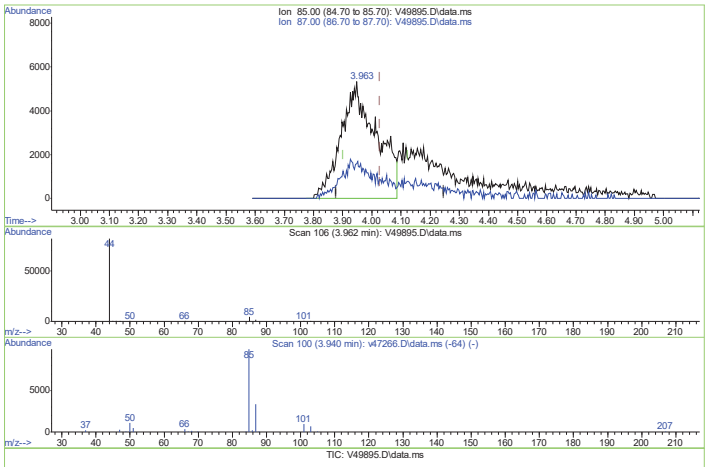
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:01:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.2

7



(5) dichlorodifluoromethane (p)
3.962min (-0.067) 20.93 ug/kg m
response 44508

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	36.40
0.00	0.00	0.00
0.00	0.00	0.00

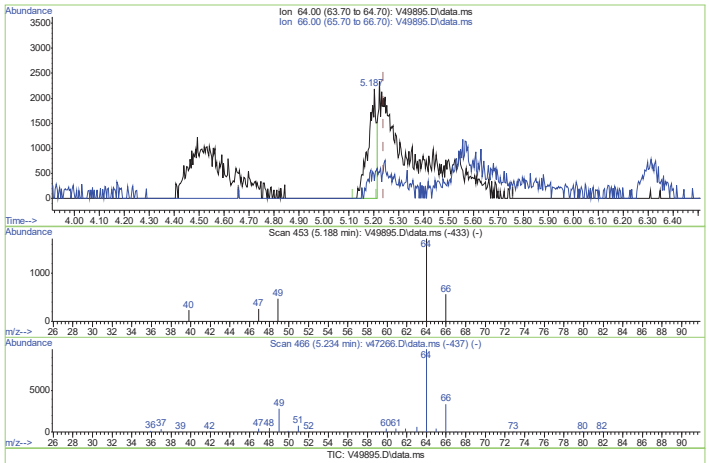
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:01:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.3

7



(9) chloroethane (p)
5.187min (-0.053) 7.13 ug/kg
response 4898

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	32.75
0.00	0.00	0.00
0.00	0.00	0.00

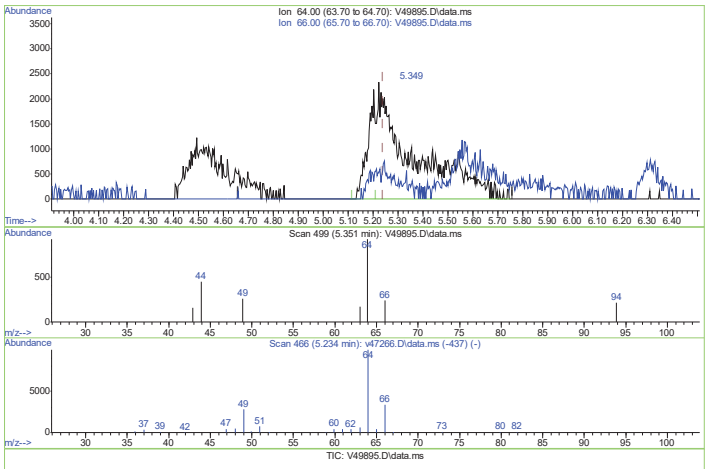
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:01:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.4

7



(9) chloroethane (p)

5.351min (+ 0.111) 39.05 ug/kg m

response 26836

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	26.12
0.00	0.00	0.00
0.00	0.00	0.00

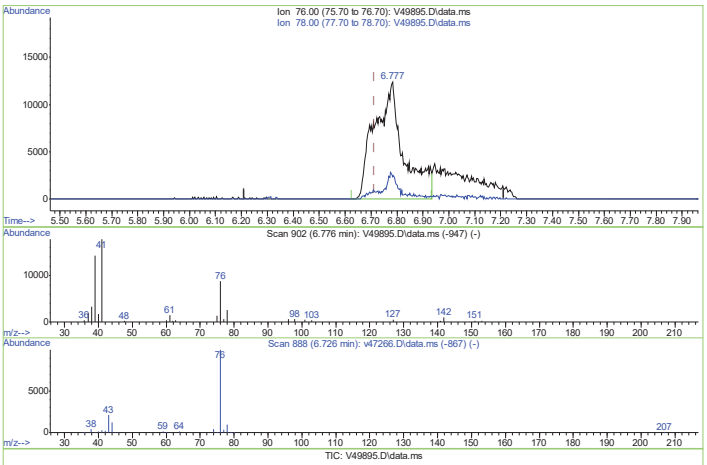
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:01:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.5

7



(25) carbon disulfide (p)

6.777min (+ 0.065) 57.16 ug/kg

response 96200

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.80	24.50
0.00	0.00	0.00
0.00	0.00	0.00

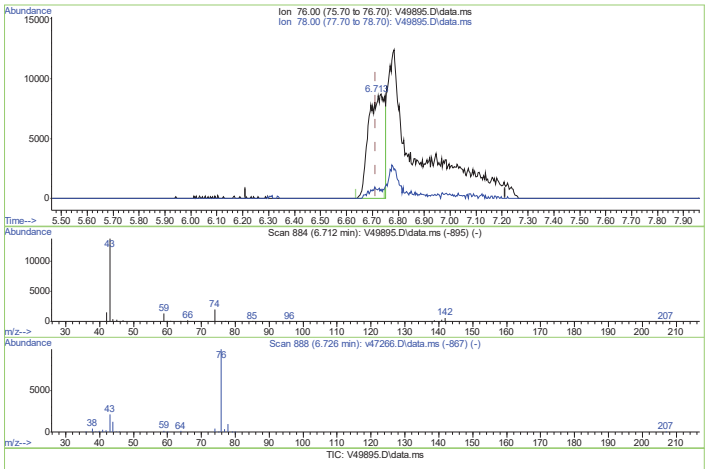
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:01:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.6

7



(25) carbon disulfide (p)

6.712min (-0.000) 22.34 ug/kg m

response 37604

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.80	11.25
0.00	0.00	0.00
0.00	0.00	0.00

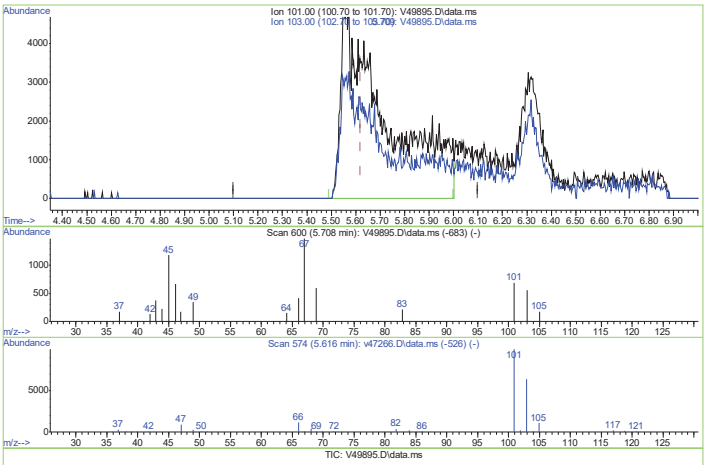
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.7

7



(13) trichlorofluoromethane (p)

5.709min (+ 0.009) 36.82 ug/kg

response 63196

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	72.07
0.00	0.00	0.00
0.00	0.00	0.00

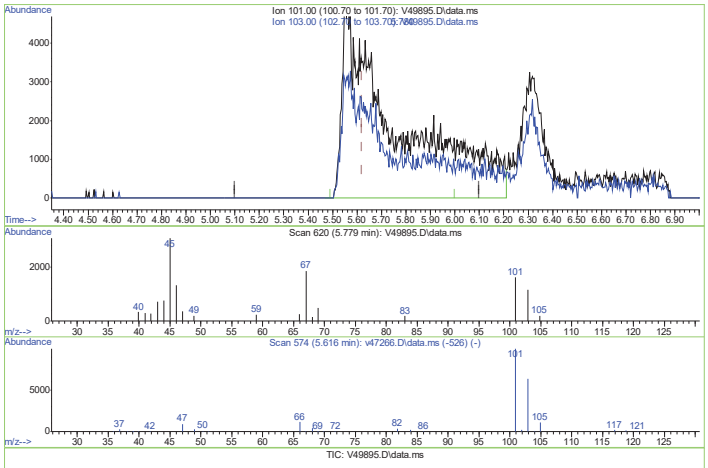
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.8

7



(13) trichlorofluoromethane (p)
5.779min (+ 0.159) 44.01 ug/kg m
response 77073

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	71.82
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:10:34 2016 Page: 1

V49895.D edits: trichlorofluoromethane

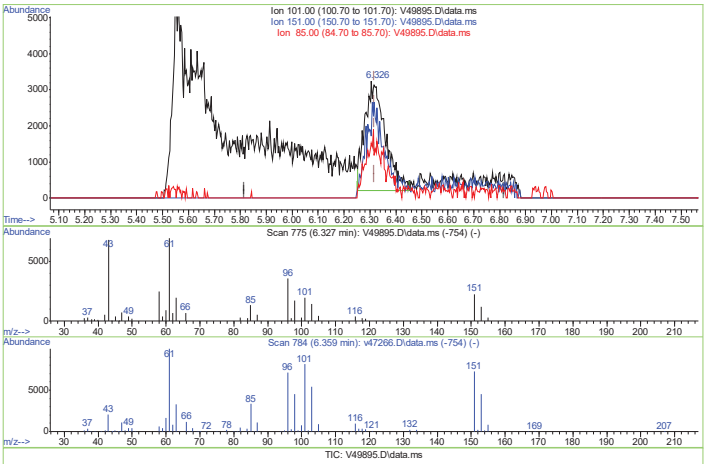
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.9

7



(14) freon-113 (p)
6.326min (+ 0.009) 18.74 ug/kg
response 16602

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	88.34
85.00	41.30	52.51
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:10:38 2016 Page: 1

V49895.D edits: freon-113

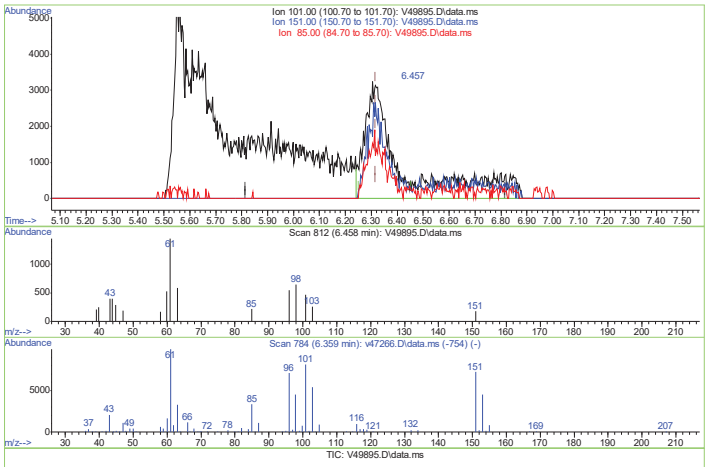
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.10

7



(14) freon-113 (p)
6.458min (+ 0.141) 35.85 ug/kg m
response 31754

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	37.82#
85.00	41.30	45.73
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:10:42 2016 Page: 1

V49895.D edits: freon-113

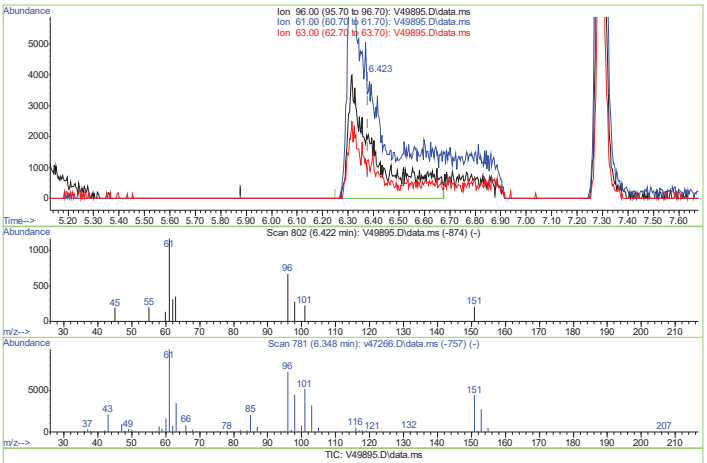
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.11

7



(16) 1,1-dichloroethene (p)
6.423min (+ 0.043) 32.98 ug/kg
response 29282

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	239.05#
63.00	57.50	70.07
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:10:46 2016 Page: 1

V49895.D edits: 1,1-dichloroethene

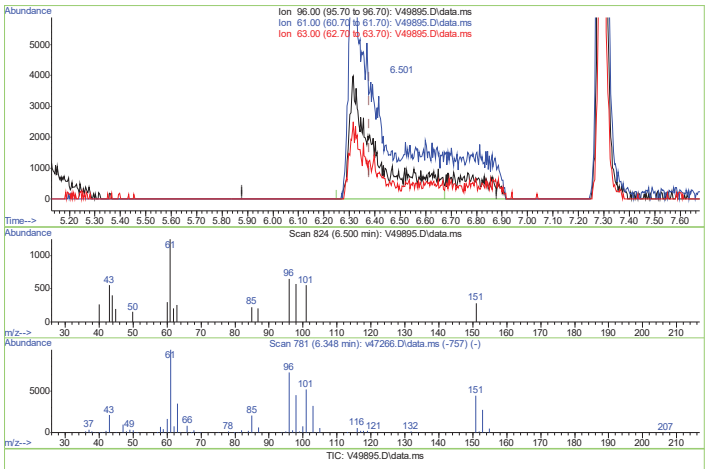
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.12

7



(16) 1,1-dichloroethene (p)

6.500min (+ 0.120) 42.03 ug/kg m

response 37317

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	191.00
63.00	57.50	39.63
0.00	0.00	0.00

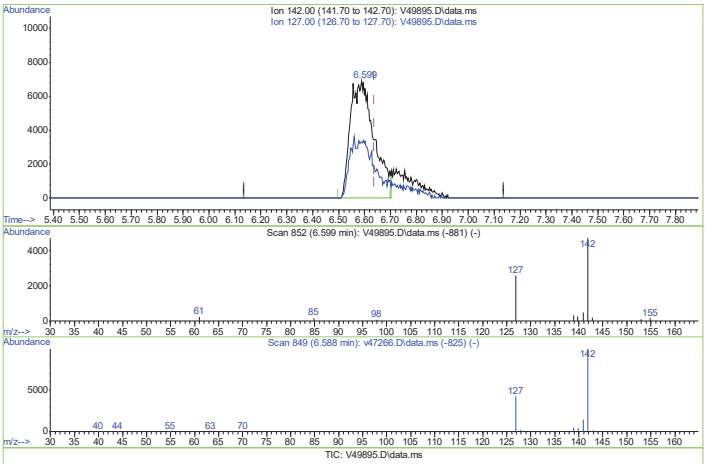
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.13

7



(24) iodomethane (p)

6.599min (-0.039) 20.09 ug/kg

response 43949

Ion	Exp%	Act%
142.00	100.00	100.00
127.00	49.70	53.88
0.00	0.00	0.00
0.00	0.00	0.00

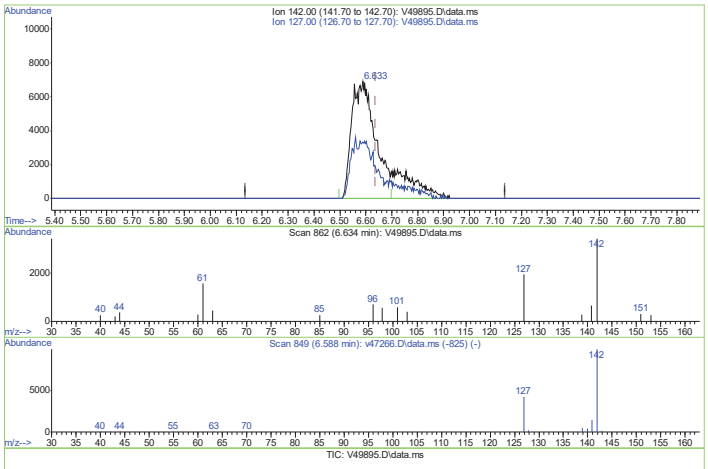
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 09:03:18 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:01:41 2016
Response via : Initial Calibration

7.6.16.14

7



(24) iodomethane (p)

6.634min (-0.003) 24.91 ug/kg m

response 54486

Ion	Exp%	Act%
142.00	100.00	100.00
127.00	49.70	57.07
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 10:09:54 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.912	65	122465	500.00 ug/kg	# 0.00
4) pentafluorobenzene	8.930	168	148517	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.827	114	268225	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.071	82	138130	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.681	152	129327	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.985	113	103216	47.37 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 94.74%		
61) toluene-d8 (s)	11.451	98	306900	50.33 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.66%		
84) bromofluorobenzene (s)	14.367	95	137061	49.05 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 98.10%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.005	59	185812	870.83 ug/kg#	36
3) Ethanol	5.783	45	98972	8989.09 ug/kg	94
5) dichlorodifluoromethane	3.958	85	114013m	72.48 ug/kg	
6) chloromethane	4.269	50	69365	72.28 ug/kg	96
7) vinyl chloride	4.563	62	97986	82.69 ug/kg	97
8) bromomethane	5.090	96	38217	72.66 ug/kg	78
9) chloroethane	5.372	64	54915m	80.30 ug/kg	
10) dichlorofluoromethane	5.658	67	232593m	93.64 ug/kg	
11) ethyl ether	5.934	59	101817	82.94 ug/kg	92
12) acetonitrile	6.687	41	9941m	108.80 ug/kg	
13) trichlorofluoromethane	5.782	101	197483m	129.74 ug/kg	
14) freon-113	6.479	101	73347m	85.79 ug/kg	
15) acrolein	6.182	56	57794m	437.51 ug/kg	
16) 1,1-dichloroethene	6.503	96	97034m	129.16 ug/kg	
17) acetone	6.332	58	28168	62.37 ug/kg#	85
18) Methyl Acetate	6.714	43	97759	79.16 ug/kg#	89
19) methylene chloride	7.034	84	128489	81.07 ug/kg	86
20) methyl tert butyl ether	7.260	73	347219	81.52 ug/kg	98
21) acrylonitrile	7.202	53	65004	80.29 ug/kg	60
22) allyl chloride	6.783	41	131922	75.00 ug/kg	86
23) trans-1,2-dichloroethene	7.295	96	102487	71.49 ug/kg#	78
24) iodomethane	6.638	142	147828	95.50 ug/kg	96
25) carbon disulfide	6.709	76	100974	81.74 ug/kg	97
26) propionitrile	8.465	54	26914	87.15 ug/kg	100
27) vinyl acetate	7.731	86	15197	98.74 ug/kg#	1
28) chloroprene	7.897	53	217632	81.22 ug/kg	87
29) di-isopropyl ether	7.776	45	405131	76.04 ug/kg	89
30) methacrylonitrile	8.638	41	81152	84.13 ug/kg	93
31) 2-butanone	8.384	72	19065	86.48 ug/kg#	83
32) Hexane	7.594	41	103880	74.56 ug/kg	85
33) 1,1-dichloroethane	7.809	63	225049	70.71 ug/kg	99
34) tert-butyl ethyl ether	8.200	59	413171	78.75 ug/kg	87
36) 2,2-dichloropropane	8.498	77	117400	66.61 ug/kg	98
37) cis-1,2-dichloroethene	8.456	96	129977	76.35 ug/kg	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 10:09:54 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.736	128	61667	79.49 ug/kg#	73
40) chloroform	8.805	83	225920	72.71 ug/kg	99
42) Tetrahydrofuran	8.756	42	44607	73.18 ug/kg	100
43) 1,1,1-trichloroethane	9.061	97	168967	63.24 ug/kg	97
45) Cyclohexane	9.171	56	179640	66.78 ug/kg#	84
46) carbon tetrachloride	9.248	117	161623	72.17 ug/kg	93
47) 1,1-dichloropropene	9.212	75	153715	83.11 ug/kg	83
48) benzene	9.450	78	406689	71.24 ug/kg	97
49) 1,2-dichloroethane	9.473	62	223497	75.14 ug/kg	97
50) tert-amyl methyl ether	9.509	73	320517	89.93 ug/kg	99
51) heptane	9.666	43	151388	79.58 ug/kg	88
52) trichloroethene	10.134	95	126747	84.07 ug/kg	78
53) 1,2-dichloropropane	10.422	63	129794	80.50 ug/kg	99
54) dibromomethane	10.531	93	90223	83.08 ug/kg	86
55) bromodichloromethane	10.674	83	161566	83.66 ug/kg	97
56) Methylcyclohexane	10.435	83	164714	83.83 ug/kg#	81
57) 2-chloroethyl vinyl ether	10.897	63	65961	92.62 ug/kg	100
58) methyl methacrylate	10.354	69	78628	90.90 ug/kg	86
59) 1,4-dioxane	10.492	88	7250	877.44 ug/kg#	1
60) cis-1,3-dichloropropene	11.131	75	175795	92.05 ug/kg	83
62) 4-methyl-2-pentanone	11.221	43	144441	88.12 ug/kg	87
63) toluene	11.529	92	262416	77.03 ug/kg	97
64) trans-1,3-dichloropropene	11.716	75	159743	97.13 ug/kg	90
65) 1,1,2-trichloroethane	11.955	83	88048	78.79 ug/kg	93
66) ethyl methacrylate	11.691	69	137158	94.71 ug/kg	93
68) tetrachloroethene	12.114	166	99997	78.84 ug/kg	97
69) 1,3-dichloropropane	12.148	76	166298	78.00 ug/kg	97
70) dibromochloromethane	12.419	129	117119	95.68 ug/kg	95
71) 1,2-dibromoethane	12.592	107	109522	82.99 ug/kg	93
72) 2-hexanone	12.112	43	116597	86.25 ug/kg	90
73) chlorobenzene	13.107	112	317736	77.27 ug/kg	92
74) 1,1,1,2-tetrachloroethane	13.178	131	123558	89.74 ug/kg	97
75) ethylbenzene	13.169	91	543620	78.86 ug/kg	89
76) m,p-xylene	13.301	106	383749	155.95 ug/kg#	67
77) o-xylene	13.747	106	197660	81.82 ug/kg#	71
78) styrene	13.760	104	323081	84.16 ug/kg	89
79) bromoform	14.027	173	66466	102.85 ug/kg	92
81) trans-1,4-dichloro-2-b...	14.479	53	59512m	94.59 ug/kg	
83) isopropylbenzene	14.135	105	535359	85.12 ug/kg	99
85) bromobenzene	14.573	156	127603	82.08 ug/kg#	83
86) 1,1,2,2-tetrachloroethane	14.444	83	163404	75.53 ug/kg	96
87) 1,2,3-trichloropropane	14.550	75	146777	70.73 ug/kg#	1
88) n-propylbenzene	14.601	91	694694	77.13 ug/kg	92
89) 2-chlorotoluene	14.756	91	471571	74.80 ug/kg	86
90) 4-chlorotoluene	14.880	91	427662	75.36 ug/kg	88
91) 1,3,5-trimethylbenzene	14.776	105	469640	81.62 ug/kg	99
92) tert-butylbenzene	15.159	91	303800	84.45 ug/kg	78
93) 1,2,4-trimethylbenzene	15.216	105	491997	82.09 ug/kg	95
94) sec-butylbenzene	15.406	105	609874	82.51 ug/kg	99
95) 1,3-dichlorobenzene	15.602	146	267871	76.08 ug/kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 10:09:54 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.553	119	520962	83.48 ug/kg	95
97) 1,4-dichlorobenzene	15.711	146	267335	72.07 ug/kg	95
98) 1,2-dichlorobenzene	16.126	146	272790	76.86 ug/kg	96
99) n-butylbenzene	16.014	91	557344	82.87 ug/kg	90
100) 1,2-dibromo-3-chloropr...	16.980	75	37983	92.29 ug/kg#	66
101) 1,3,5-trichlorobenzene	17.186	180	165881	77.89 ug/kg	100
102) 1,2,4-trichlorobenzene	17.918	180	177228	83.32 ug/kg	92
103) hexachlorobutadiene	18.045	225	79832	78.94 ug/kg	98
104) naphthalene	18.268	128	589101	90.78 ug/kg	100
105) 1,2,3-trichlorobenzene	18.530	180	178940	80.85 ug/kg	95
106) 2-methylnaphthalene	19.749	142	172902	60.05 ug/kg	94
107) 1-methylnaphthalene	20.031	142	151394	53.93 ug/kg	97

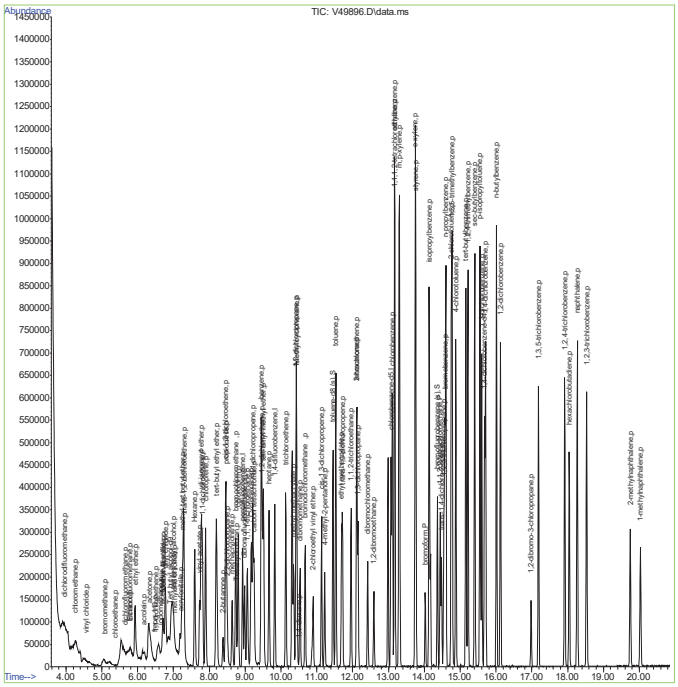
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 10:09:54 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17

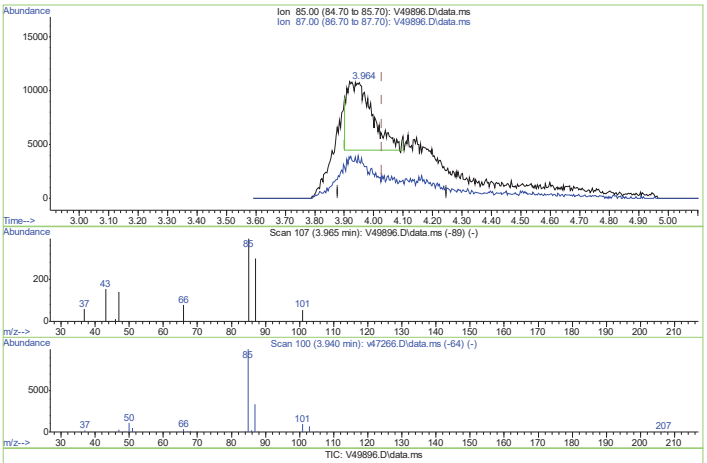


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.1



(5) dichlorodifluoromethane (p)

3.964min (-0.064) 24.21 ug/kg

response 38076

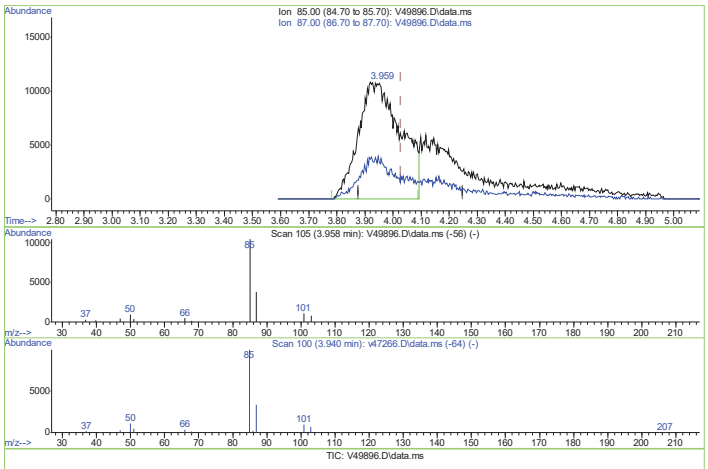
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	35.27
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.2



(5) dichlorodifluoromethane (p)
3.958min (-0.071) 72.48 ug/kg m
response 114013

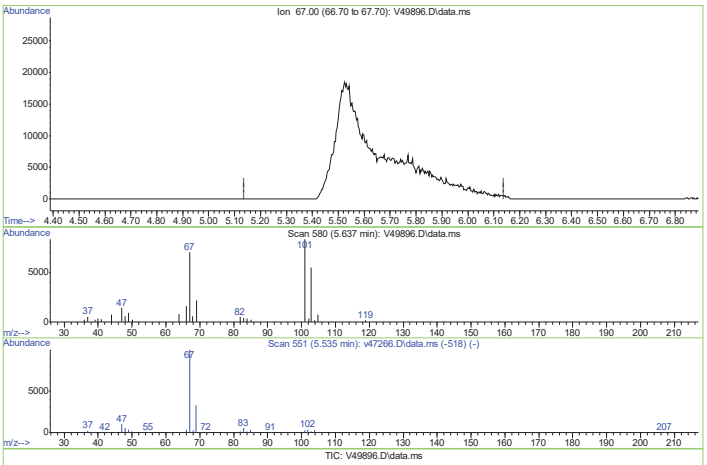
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	36.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.3



(10) dichlorofluoromethane (p)
5.639min (-5.639) 0.00 ug/kg
response 0

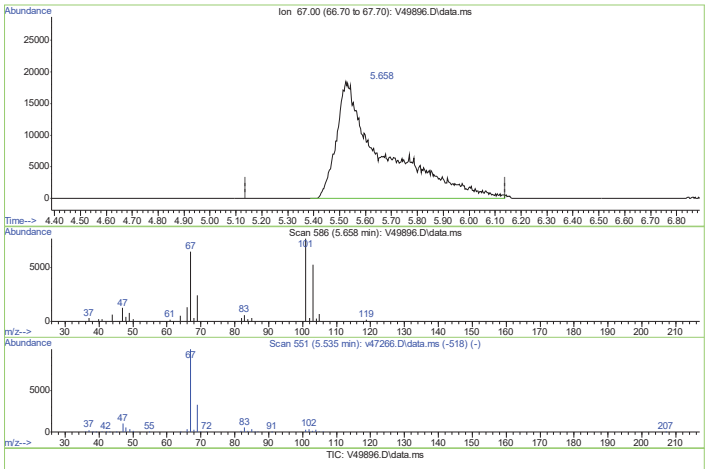
Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.4



(10) dichlorofluoromethane (p)
5.658min (+ 0.020) 93.64 ug/kg m
response 232593

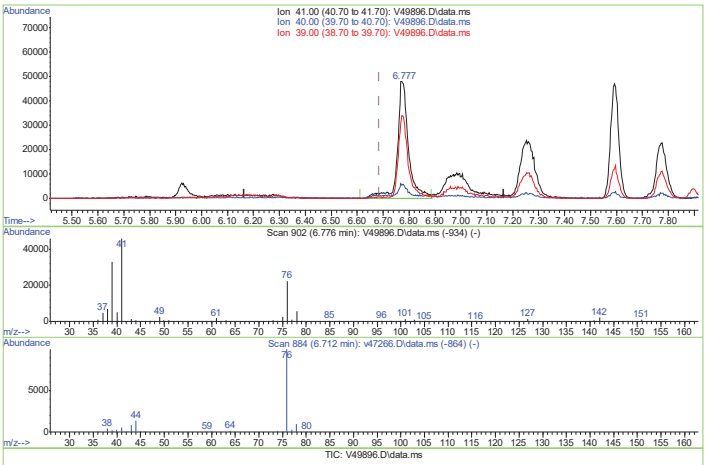
Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.5



(12) acetonitrile (p)
6.777min (+ 0.001) 1582.68 ug/kg
response 144612

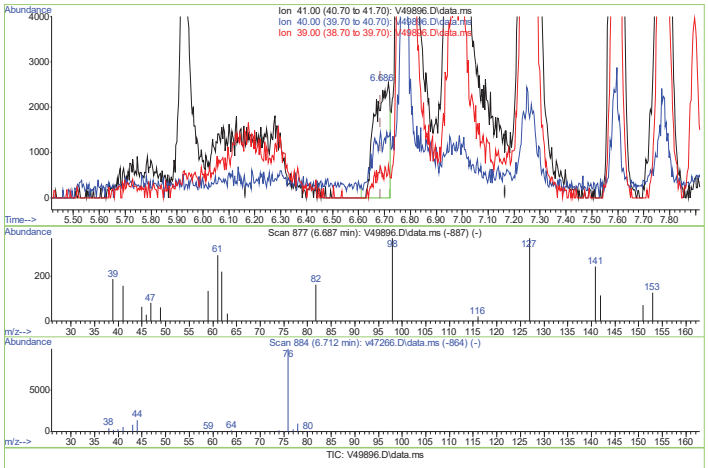
Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.90	11.91#
39.00	51.50	71.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.6



(12) acetonitrile (p)
6.687min (+ 0.001) 100.00 ug/kg m
response 9941

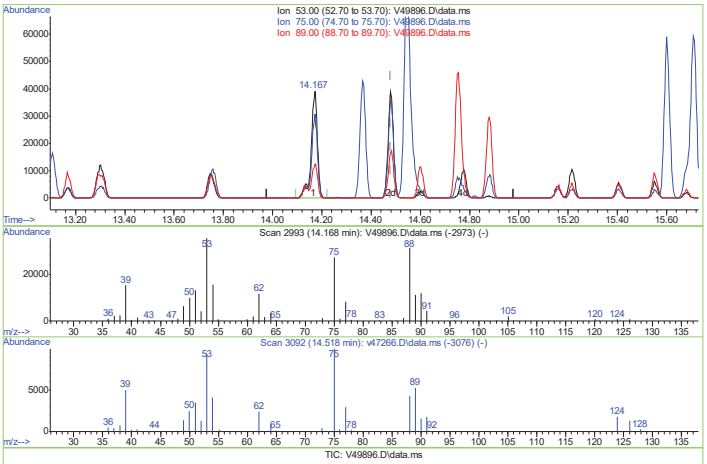
Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.90	65.71
39.00	51.50	30.79
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.7



(81) trans-1,4-dichloro-2-butene (p)
14.167min (-0.312) 109.72 ug/kg
response 69030

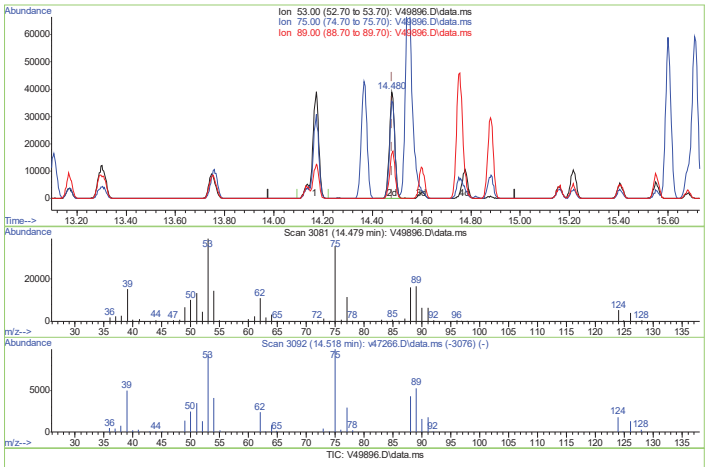
Ion	Exp%	Act%
53.00	100.00	100.00
75.00	48.10	76.87
89.00	36.50	31.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:04:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.8



(81) trans-1,4-dichloro-2-butene (p)
14.479min (0.000) 94.59 ug/kg m
response 59512

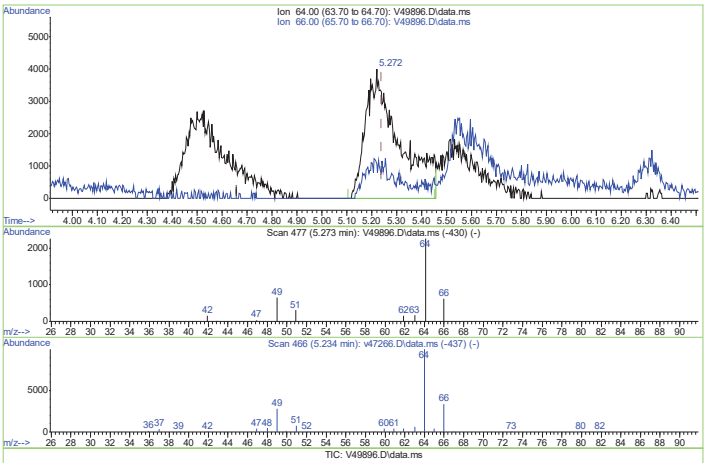
Ion	Exp%	Act%
53.00	100.00	100.00
75.00	48.10	91.12#
89.00	36.50	42.55
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.9



(9) chloroethane (p)
5.272min (+ 0.032) 54.32 ug/kg
response 37151

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	27.69
0.00	0.00	0.00
0.00	0.00	0.00

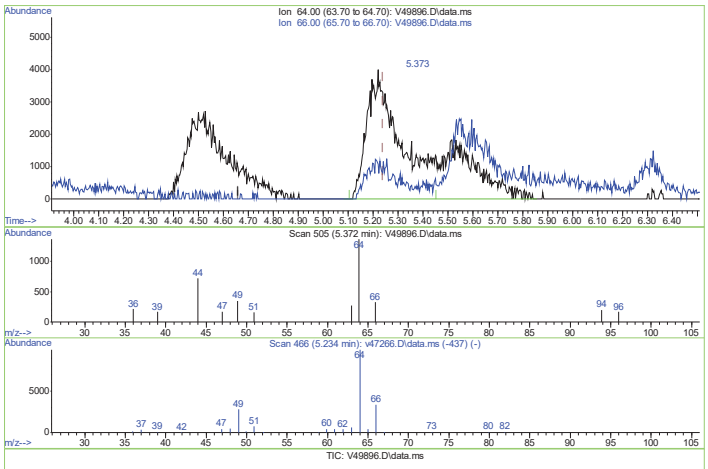
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.10

7



(9) chloroethane (p)

5.372min (+ 0.132) 80.30 ug/kg m

response 54915

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.00	23.68
0.00	0.00	0.00
0.00	0.00	0.00

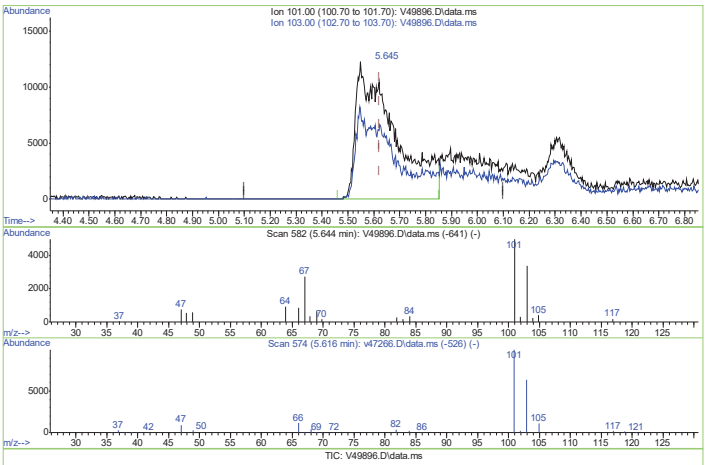
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.11

7



(13) trichlorofluoromethane (p)

5.645min (+ 0.025) 83.25 ug/kg

response 126715

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	68.69
0.00	0.00	0.00
0.00	0.00	0.00

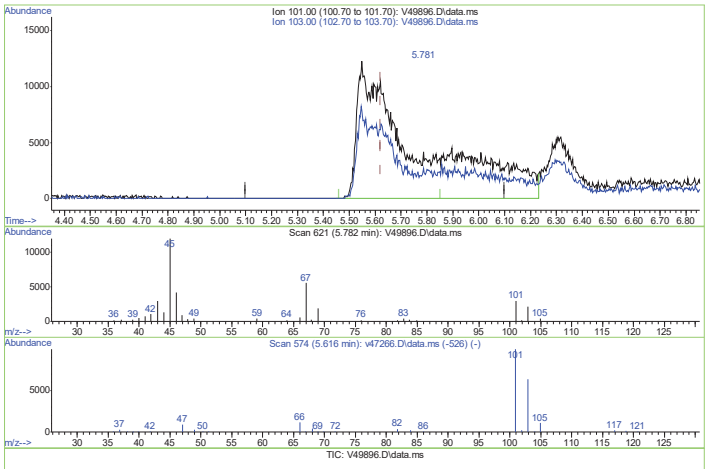
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.12

7



(13) trichlorofluoromethane (p)

5.782min (+ 0.162) 129.74 ug/kg m

response 197483

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	72.49
0.00	0.00	0.00
0.00	0.00	0.00

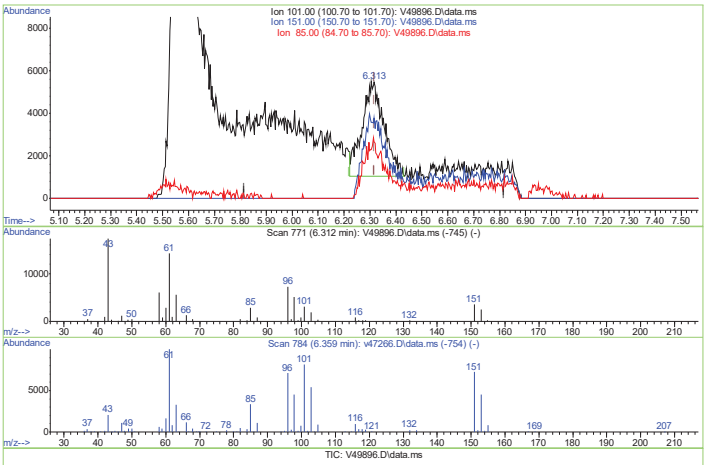
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.13

7



(14) freon-113 (p)

6.313min (-0.003) 30.81 ug/kg

response 26342

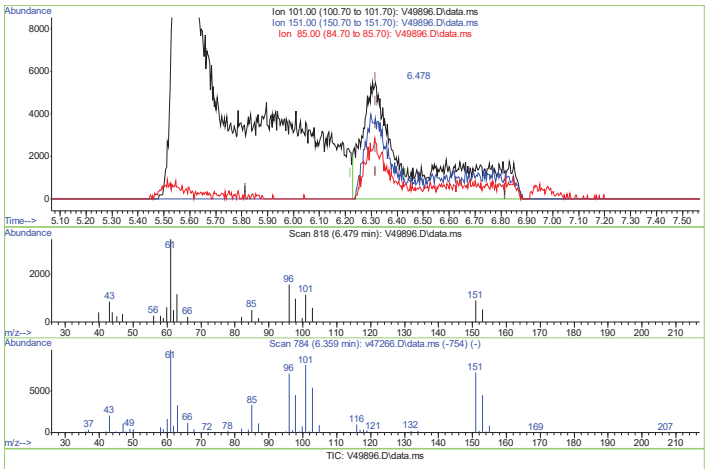
Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	83.24
85.00	41.30	66.65
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.14



(14) freon-113 (p)
6.479min (+ 0.162) 85.79 ug/kg m
response 73347

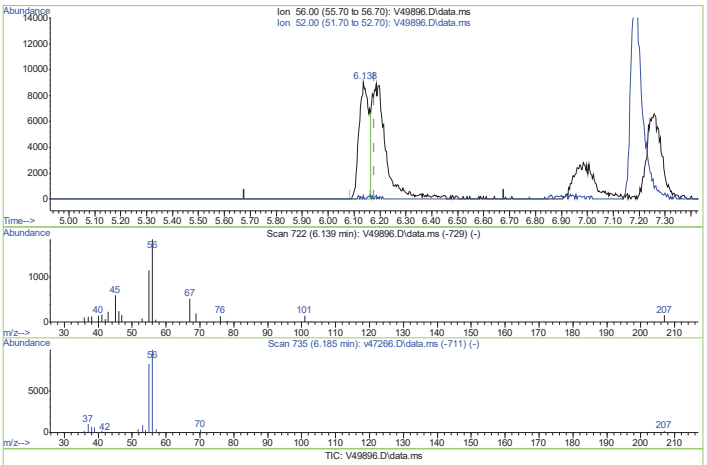
Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	80.37
85.00	41.30	44.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.15



(15) acrolein (p)
6.139min (-0.039) 184.07 ug/kg m
response 24315

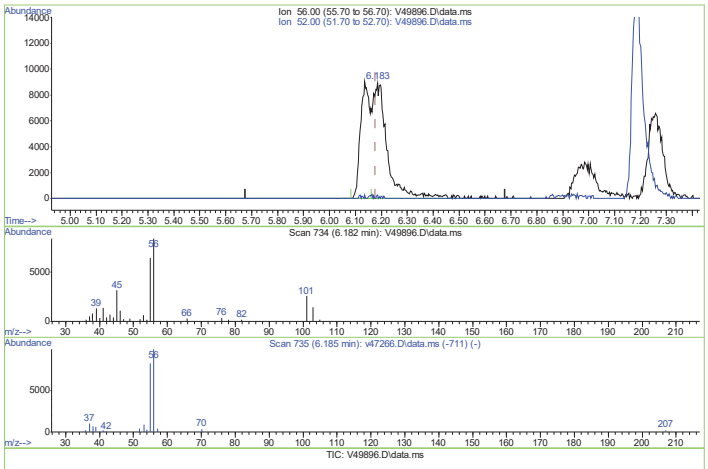
Ion	Exp%	Act%
56.00	100.00	100.00
52.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.16



(15) acrolein (p)
6.182min (+ 0.004) 437.51 ug/kg m
response 57794

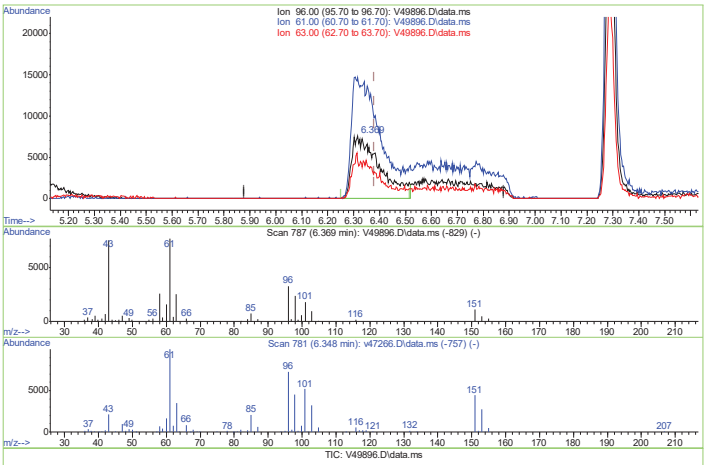
Ion	Exp%	Act%
56.00	100.00	100.00
52.00	0.00	2.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.17



(16) 1,1-dichloroethene (p)
6.369min (-0.011) 76.09 ug/kg
response 57160

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	236.48#
63.00	57.50	75.14
0.00	0.00	0.00

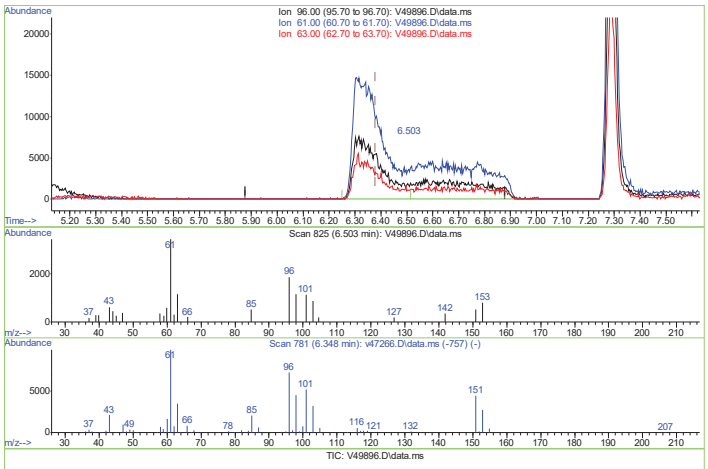
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49896.D
Acq On : 19 Sep 2016 3:55 pm
Operator : carab
Sample : icc1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 20 09:06:37 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:04:00 2016
Response via : Initial Calibration

7.6.17.18

7



(16) 1,1-dichloroethene (p)

6.503min (+ 0.124) 129.16 ug/kg m

response 97034

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	184.35
63.00	57.50	61.97
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 10:08:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.929	65	125247	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.932	168	159962	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.829	114	290856	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.072	82	147992	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.681	152	137436	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.987	113	110697	47.59 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 95.18%		
61) toluene-d8 (s)	11.452	98	329439	49.77 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.54%		
84) bromofluorobenzene (s)	14.367	95	142958	48.29 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.58%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.009	59	317545	962.17 ug/kg#	31
3) Ethanol	5.759	45	126232	6788.39 ug/kg	91
5) dichlorodifluoromethane	3.965	85	242113m	99.88 ug/kg	
6) chloromethane	4.280	50	133348	84.34 ug/kg	99
7) vinyl chloride	4.584	62	197846m	103.37 ug/kg	
8) bromomethane	5.109	96	115819	138.63 ug/kg	95
9) chloroethane	5.358	64	151765m	140.87 ug/kg	
10) dichlorofluoromethane	5.659	67	418896m	92.42 ug/kg	
11) ethyl ether	5.937	59	176795	82.74 ug/kg	89
12) acetonitrile	6.687	41	17252	75.10 ug/kg	80
13) trichlorofluoromethane	5.786	101	363432m	145.08 ug/kg	
14) freon-113	6.489	101	118685m	102.89 ug/kg	
15) acrolein	6.178	56	115048	572.58 ug/kg	100
16) 1,1-dichloroethene	6.493	96	168647m	138.93 ug/kg	
17) acetone	6.343	58	54448	77.15 ug/kg	98
18) Methyl Acetate	6.713	43	165707	78.92 ug/kg#	90
19) methylene chloride	7.039	84	222284	88.53 ug/kg#	64
20) methyl tert butyl ether	7.260	73	606668	90.91 ug/kg	96
21) acrylonitrile	7.203	53	112674	81.39 ug/kg	66
22) allyl chloride	6.788	41	245463	83.48 ug/kg	85
23) trans-1,2-dichloroethene	7.299	96	189256	86.38 ug/kg#	81
24) iodomethane	6.649	142	281638	103.54 ug/kg	92
25) carbon disulfide	6.716	76	210943m	100.72 ug/kg	
26) propionitrile	8.468	54	46029	84.46 ug/kg	100
27) vinyl acetate	7.735	86	29353	101.49 ug/kg#	1
28) chloroprene	7.900	53	393895	85.19 ug/kg	85
29) di-isopropyl ether	7.777	45	711612	86.30 ug/kg	91
30) methacrylonitrile	8.638	41	141979	84.05 ug/kg	88
31) 2-butanone	8.383	72	35707	90.56 ug/kg#	81
32) Hexane	7.598	41	192078	82.28 ug/kg	83
33) 1,1-dichloroethane	7.812	63	402298	83.34 ug/kg	99
34) tert-butyl ethyl ether	8.201	59	750151	91.73 ug/kg	88
36) 2,2-dichloropropane	8.501	77	233118	80.90 ug/kg	98
37) cis-1,2-dichloroethene	8.458	96	226983	86.03 ug/kg	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 10:08:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.739	128	109323	82.72 ug/kg#	78
40) chloroform	8.807	83	407867	85.93 ug/kg	99
42) Tetrahydrofuran	8.756	42	76467	75.96 ug/kg	94
43) 1,1,1-trichloroethane	9.064	97	319138	80.81 ug/kg	97
45) Cyclohexane	9.174	56	338122	75.70 ug/kg	85
46) carbon tetrachloride	9.256	117	322607	93.63 ug/kg	92
47) 1,1-dichloropropene	9.215	75	280049	86.40 ug/kg	85
48) benzene	9.452	78	723197	87.90 ug/kg	98
49) 1,2-dichloroethane	9.475	62	388946	84.29 ug/kg	97
50) tert-amyl methyl ether	9.510	73	584968	91.67 ug/kg	99
51) heptane	9.668	43	285885	86.77 ug/kg	84
52) trichloroethene	10.135	95	230752	87.33 ug/kg	80
53) 1,2-dichloropropane	10.423	63	231452	82.92 ug/kg	99
54) dibromomethane	10.532	93	162062	85.71 ug/kg	88
55) bromodichloromethane	10.675	83	302693	97.83 ug/kg	98
56) Methylcyclohexane	10.436	83	306285	88.59 ug/kg#	85
57) 2-chloroethyl vinyl ether	10.897	63	133391	102.84 ug/kg#	100
58) methyl methacrylate	10.354	69	143748	91.68 ug/kg	95
59) 1,4-dioxane	10.491	88	11611	431.26 ug/kg#	1
60) cis-1,3-dichloropropene	11.132	75	329299	103.80 ug/kg	87
62) 4-methyl-2-pentanone	11.220	43	260123	88.81 ug/kg	86
63) toluene	11.530	92	473300	81.35 ug/kg	98
64) trans-1,3-dichloropropene	11.716	75	301911	108.09 ug/kg	93
65) 1,1,2-trichloroethane	11.956	83	159377	90.23 ug/kg	92
66) ethyl methacrylate	11.690	69	250307	93.55 ug/kg	93
68) tetrachloroethene	12.115	166	188785	95.46 ug/kg	95
69) 1,3-dichloropropane	12.149	76	298296	89.95 ug/kg	93
70) dibromochloromethane	12.419	129	227392	112.15 ug/kg	95
71) 1,2-dibromoethane	12.592	107	198565	95.47 ug/kg	89
72) 2-hexanone	12.111	43	217969	90.73 ug/kg	90
73) chlorobenzene	13.108	112	572261	89.74 ug/kg	93
74) 1,1,1,2-tetrachloroethane	13.178	131	226499	92.83 ug/kg	97
75) ethylbenzene	13.169	91	960920	89.16 ug/kg	88
76) m,p-xylene	13.302	106	685155	189.10 ug/kg#	69
77) o-xylene	13.747	106	349983	91.81 ug/kg#	65
78) styrene	13.760	104	575306	93.15 ug/kg	90
79) bromoform	14.027	173	132562	120.66 ug/kg	93
81) trans-1,4-dichloro-2-b...	14.480	53	110468	96.58 ug/kg#	44
83) isopropylbenzene	14.135	105	974004	89.32 ug/kg	99
85) bromobenzene	14.573	156	232383	87.16 ug/kg	87
86) 1,1,2,2-tetrachloroethane	14.444	83	292899	89.14 ug/kg	96
87) 1,2,3-trichloropropane	14.550	75	260707	83.80 ug/kg#	3
88) n-propylbenzene	14.601	91	1250768	89.94 ug/kg	91
89) 2-chlorotoluene	14.755	91	846480	88.15 ug/kg	88
90) 4-chlorotoluene	14.880	91	769553	88.63 ug/kg	89
91) 1,3,5-trimethylbenzene	14.775	105	855981	94.44 ug/kg	97
92) tert-butylbenzene	15.158	91	558914	98.09 ug/kg	83
93) 1,2,4-trimethylbenzene	15.216	105	888804	93.64 ug/kg	97
94) sec-butylbenzene	15.406	105	1119877	95.82 ug/kg	99
95) 1,3-dichlorobenzene	15.602	146	484652	90.17 ug/kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 10:08:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.553	119	948977	95.81 ug/kg	95
97) 1,4-dichlorobenzene	15.710	146	490482	87.96 ug/kg	94
98) 1,2-dichlorobenzene	16.126	146	491176	90.03 ug/kg	98
99) n-butylbenzene	16.014	91	1011764	94.75 ug/kg	91
100) 1,2-dibromo-3-chloropr...	16.980	75	70236	105.82 ug/kg#	69
101) 1,3,5-trichlorobenzene	17.186	180	309692	94.34 ug/kg	100
102) 1,2,4-trichlorobenzene	17.918	180	325503	97.04 ug/kg	91
103) hexachlorobutadiene	18.045	225	149874	95.90 ug/kg	100
104) naphthalene	18.268	128	1022687	97.10 ug/kg	100
105) 1,2,3-trichlorobenzene	18.530	180	309295	89.75 ug/kg	96
106) 2-methylnaphthalene	19.748	142	275220	52.75 ug/kg	95
107) 1-methylnaphthalene	20.031	142	222462	45.60 ug/kg	96

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

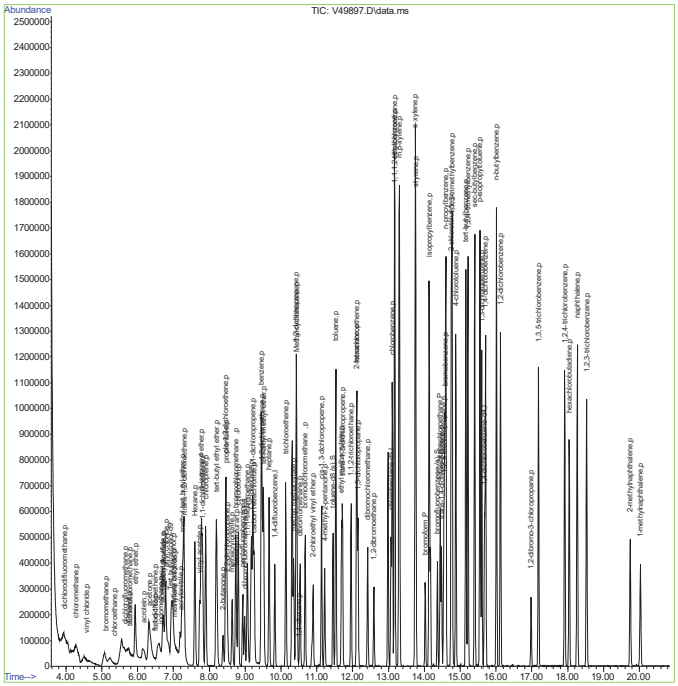
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 10:08:47 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18

7



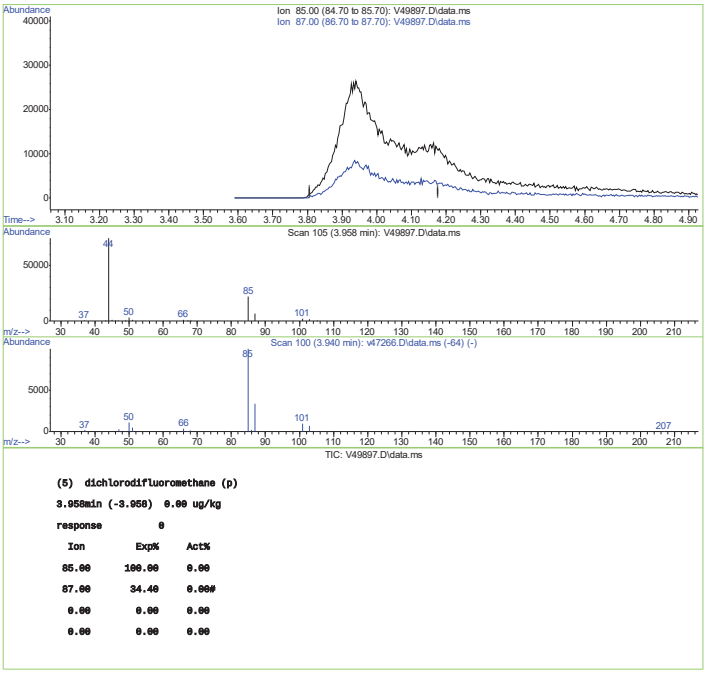
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.1

7



(5) dichlorodifluoromethane (p)

3.958min (-3.958) 0.00 ug/kg

response 0

Ion	Exp%	Act%
85.00	100.00	0.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

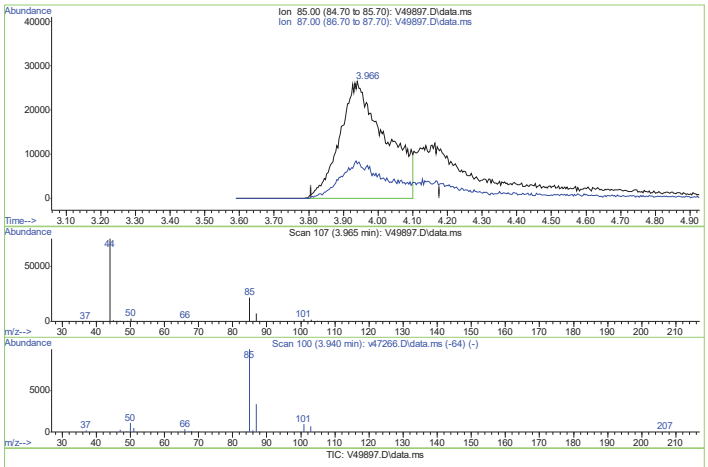
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.2

7



(5) dichlorodifluoromethane (p)

3.965min (+ 0.007) 99.88 ug/kg m

response 242113

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	33.38
0.00	0.00	0.00
0.00	0.00	0.00

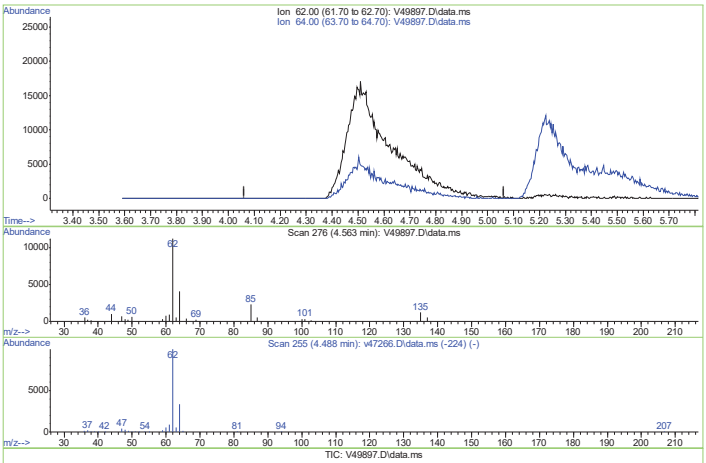
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.3

7



(7) vinyl chloride (p)

4.563min (-4.563) 0.00 ug/kg

response 0

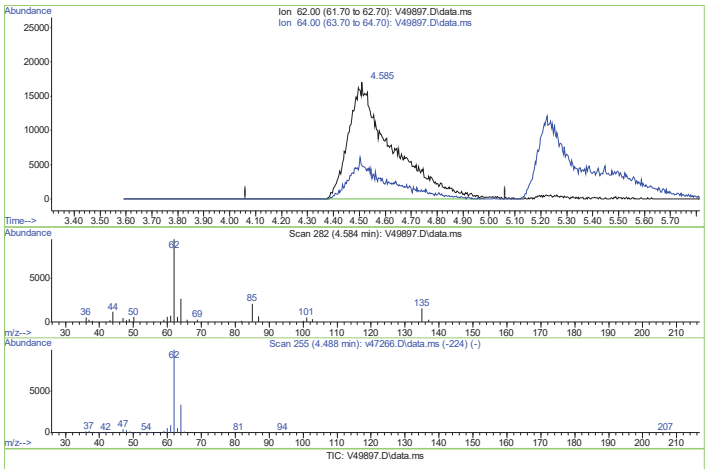
Ion	Exp%	Act%
62.00	100.00	0.00
64.00	30.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.4 7



(7) vinyl chloride (p)
4.584min (+ 0.021) 103.37 ug/kg m
response 197846

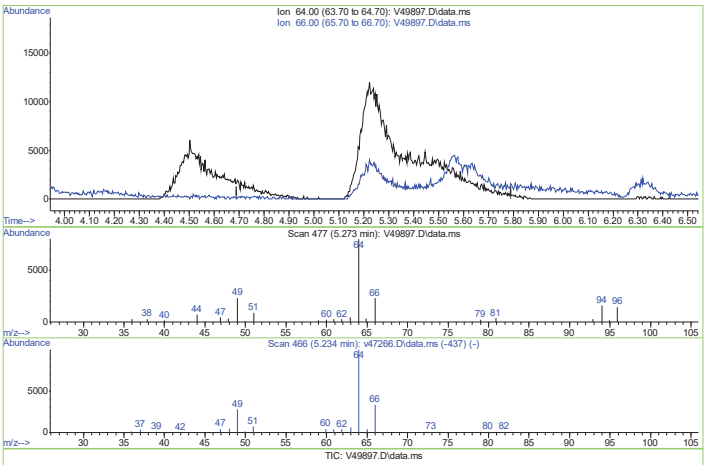
Ion	Exp%	Act%
62.00	100.00	100.00
64.00	30.10	28.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.5 7



(9) chloroethane (p)
5.272min (-5.272) 0.00 ug/kg
response 0

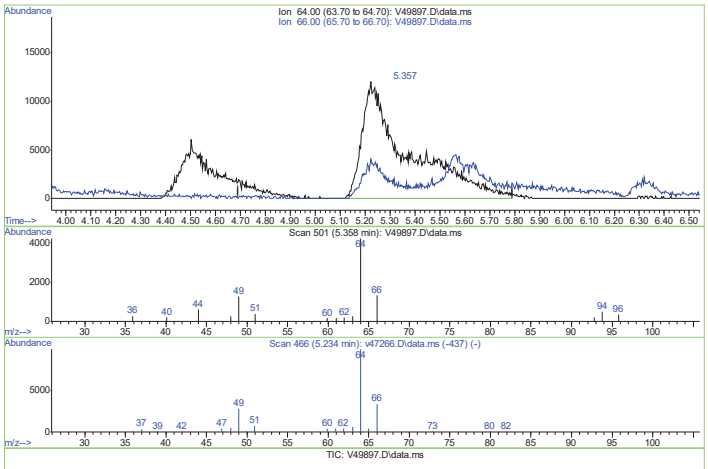
Ion	Exp%	Act%
64.00	100.00	0.00
66.00	32.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.6 7



(9) chloroethane (p)
5.358min (+ 0.086) 140.87 ug/kg m
response 151765

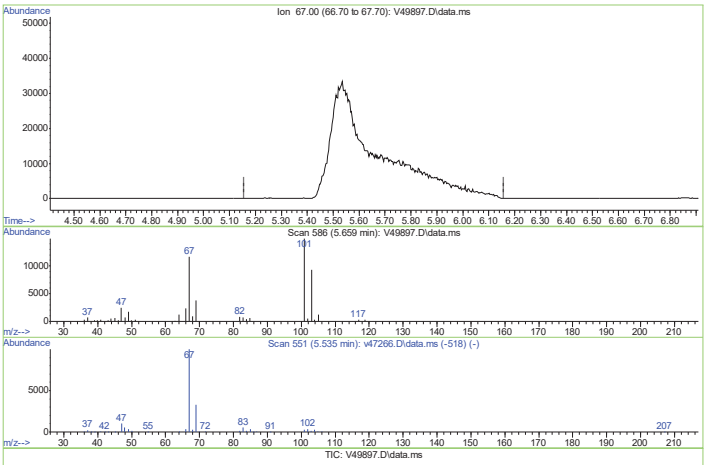
Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.00	31.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.7 7



(10) dichlorofluoromethane (p)
5.658min (-5.658) 0.00 ug/kg
response 0

Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

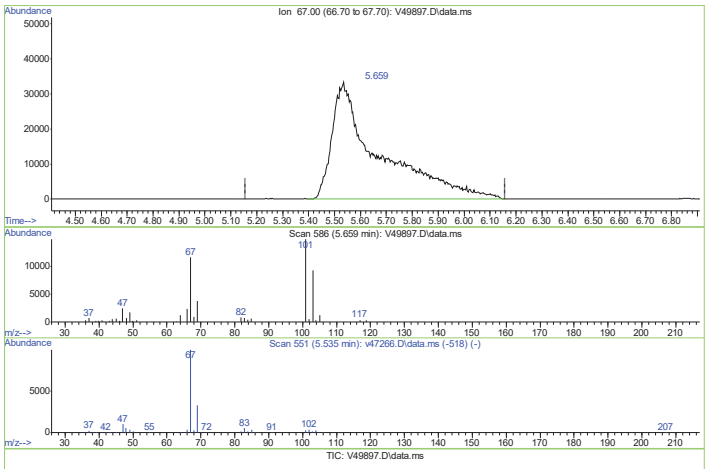
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.8

7



(10) dichlorofluoromethane (p)

5.659min (+ 0.000) 92.42 ug/kg m

response 418896

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

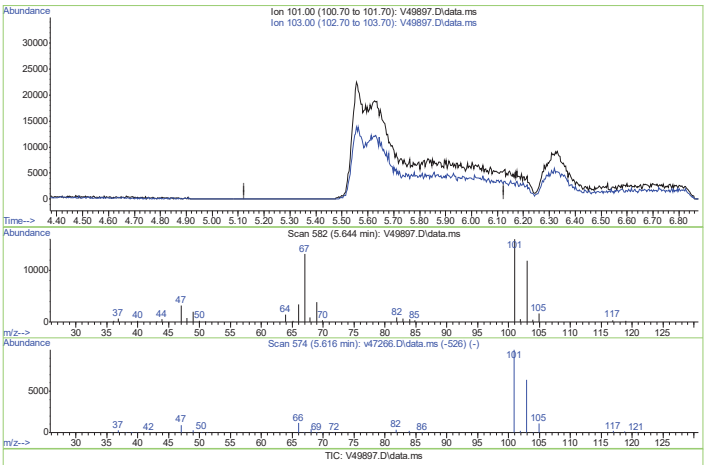
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.9

7



(13) trichlorofluoromethane (p)

5.645min (-5.645) 0.00 ug/kg

response 0

Ion	Exp%	Act%
101.00	100.00	0.00
103.00	68.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

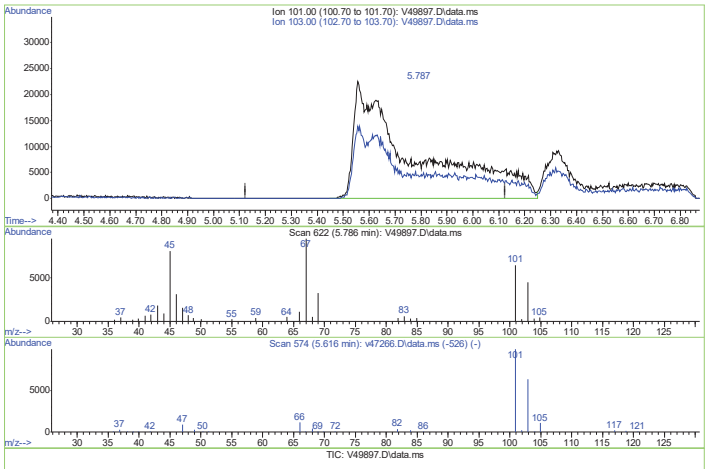
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.10

7



(13) trichlorofluoromethane (p)

5.786min (+ 0.141) 145.00 ug/kg m

response 363432

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	69.74
0.00	0.00	0.00
0.00	0.00	0.00

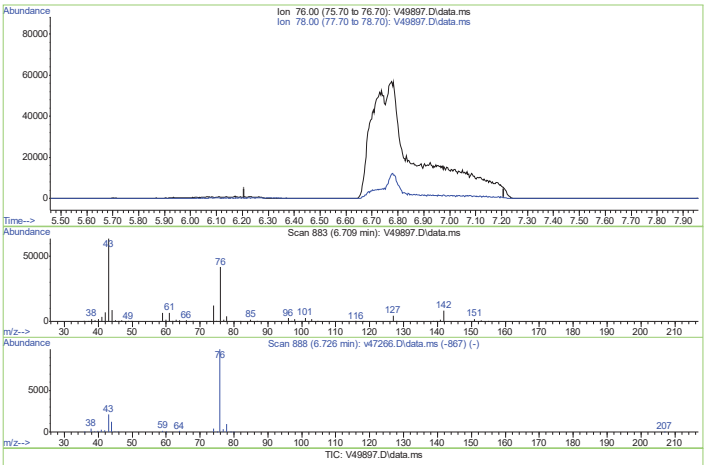
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.11

7



(25) carbon disulfide (p)

6.709min (-0.709) 0.00 ug/kg

response 0

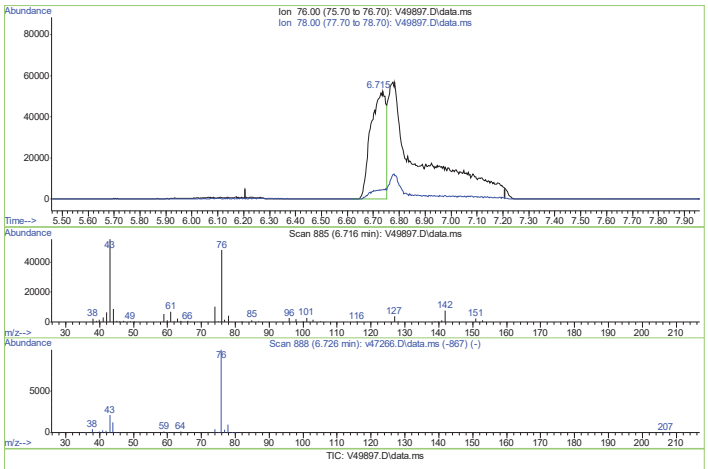
Ion	Exp%	Act%
76.00	100.00	0.00
78.00	9.80	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:34:02 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.12



(25) carbon disulfide (p)
6.716min (+ 0.007) 100.72 ug/kg m
response 210943

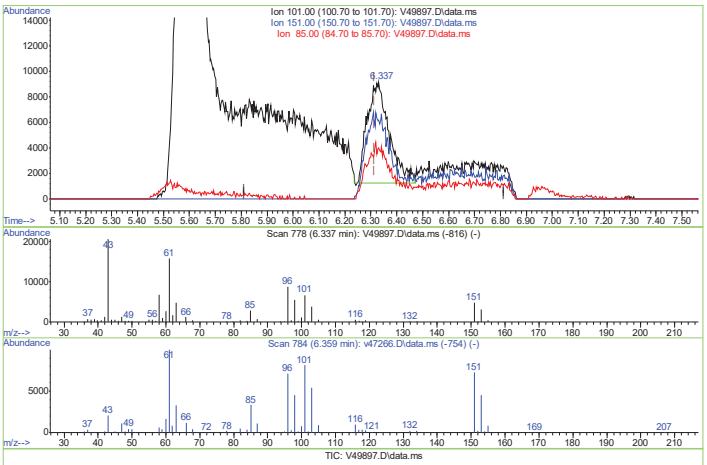
Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.00	8.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:35:03 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.13



(14) freon-113 (p)
6.337min (+ 0.023) 40.64 ug/kg
response 46882

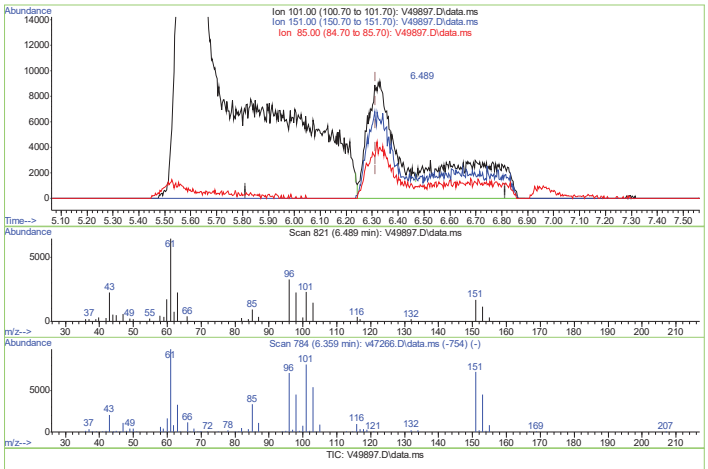
Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	84.29
85.00	41.30	52.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:35:03 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.14



(14) freon-113 (p)
6.489min (+ 0.176) 102.89 ug/kg m
response 118685

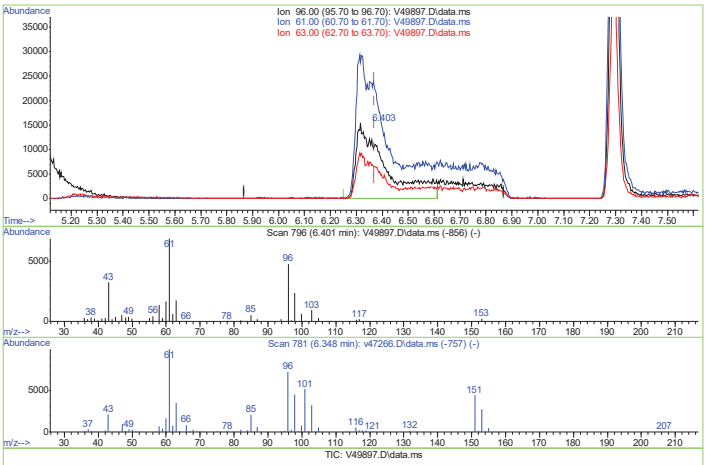
Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	73.82
85.00	41.30	41.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:35:03 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.15



(16) 1,1-dichloroethene (p)
6.403min (+ 0.033) 101.27 ug/kg
response 122932

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	184.68
63.00	57.50	55.04
0.00	0.00	0.00

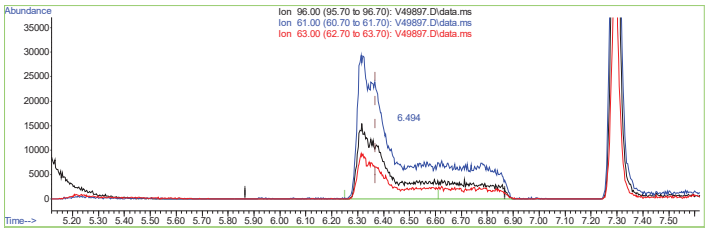
Quantitation Report (Qedit)

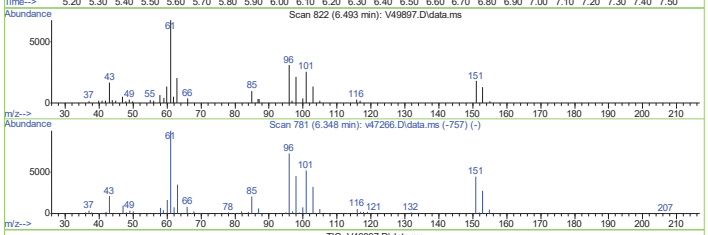
Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49897.D
Acq On : 19 Sep 2016 4:25 pm
Operator : carab
Sample : ic1837-100
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 20 09:35:03 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:33:43 2016
Response via : Initial Calibration

7.6.18.16

7





TIC: V49897.D\data.ms

(16) 1,1-dichloroethene (p)

6.493min (+ 0.124) 138.93 ug/kg m

response 168647

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	218.43#
63.00	57.50	65.43
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 10:08:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.942	65	126562	500.00 ug/kg	# 0.03
4) pentafluorobenzene	8.933	168	159103	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.829	114	302236	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.072	82	155939	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.681	152	142113	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.987	113	113255	48.95 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 97.90%		
61) toluene-d8 (s)	11.452	98	343298	49.91 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 99.82%		
84) bromofluorobenzene (s)	14.367	95	147397	48.16 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 96.32%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.015	59	718915	3346.66 ug/kg#	28
3) Ethanol	5.759	45	281027	25338.26 ug/kg	91
5) dichlorodifluoromethane	3.972	85	638656m	401.06 ug/kg	
6) chloromethane	4.283	50	343522	359.04 ug/kg	96
7) vinyl chloride	4.570	62	479770m	391.49 ug/kg	
8) bromomethane	5.111	96	236021	443.10 ug/kg	82
9) chloroethane	5.337	64	334092m	514.80 ug/kg	
10) dichlorofluoromethane	5.641	67	993498m	379.41 ug/kg	
11) ethyl ether	5.936	59	410137	325.75 ug/kg	88
12) acetonitrile	6.680	41	34484	325.06 ug/kg#	67
13) trichlorofluoromethane	5.786	101	902197m	572.46 ug/kg	
14) freon-113	6.511	101	306358m	404.44 ug/kg	
15) acrolein	6.185	56	243453	2043.11 ug/kg	100
16) 1,1-dichloroethene	6.493	96	432129m	563.92 ug/kg	
17) acetone	6.348	58	120565	275.09 ug/kg	97
18) Methyl Acetate	6.713	43	369620	294.75 ug/kg#	91
19) methylene chloride	7.024	84	525245	321.52 ug/kg	84
20) methyl tert butyl ether	7.260	73	1430993m	325.65 ug/kg	
21) acrylonitrile	7.202	53	253326	307.21 ug/kg	72
22) allyl chloride	6.787	41	581363	329.09 ug/kg	63
23) trans-1,2-dichloroethene	7.314	96	467235	322.65 ug/kg	85
24) iodomethane	6.645	142	728678m	444.41 ug/kg	
25) carbon disulfide	6.705	76	475054m	376.13 ug/kg	
26) propionitrile	8.470	54	102792	321.02 ug/kg	100
27) vinyl acetate	7.734	86	70599	429.53 ug/kg#	1
28) chloroprene	7.900	53	902888	330.02 ug/kg	86
29) di-isopropyl ether	7.778	45	1580875	290.93 ug/kg	92
30) methacrylonitrile	8.638	41	318502	320.95 ug/kg	89
31) 2-butanone	8.383	72	81060	355.23 ug/kg#	88
32) Hexane	7.598	41	435817	311.82 ug/kg	81
33) 1,1-dichloroethane	7.813	63	926483	288.64 ug/kg	99
34) tert-butyl ethyl ether	8.201	59	1761354	327.30 ug/kg	89
36) 2,2-dichloropropane	8.503	77	532941	307.95 ug/kg	98
37) cis-1,2-dichloroethene	8.458	96	526075	302.79 ug/kg	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 10:08:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.738	128	260433	330.29 ug/kg	84
40) chloroform	8.807	83	950897	302.16 ug/kg	100
42) Tetrahydrofuran	8.758	42	169565	278.33 ug/kg	94
43) 1,1,1-trichloroethane	9.066	97	750726	283.11 ug/kg	96
45) Cyclohexane	9.190	56	768716	276.58 ug/kg	85
46) carbon tetrachloride	9.259	117	760815	319.26 ug/kg	92
47) 1,1-dichloropropene	9.215	75	646533	323.92 ug/kg	86
48) benzene	9.452	78	1657537	270.66 ug/kg	99
49) 1,2-dichloroethane	9.475	62	881698	276.84 ug/kg	96
50) tert-amyl methyl ether	9.511	73	1385164	353.83 ug/kg	97
51) heptane	9.668	43	621572	305.56 ug/kg	85
52) trichloroethene	10.136	95	550466	337.47 ug/kg	80
53) 1,2-dichloropropane	10.423	63	520016	300.89 ug/kg	98
54) dibromomethane	10.533	93	378366	322.87 ug/kg	91
55) bromodichloromethane	10.675	83	739528	351.32 ug/kg	99
56) Methylcyclohexane	10.437	83	687861	323.78 ug/kg	88
57) 2-chloroethyl vinyl ether	10.897	63	296252	376.13 ug/kg#	100
58) methyl methacrylate	10.354	69	337018	353.81 ug/kg	93
59) 1,4-dioxane	10.498	88	26929m	2099.81 ug/kg	
60) cis-1,3-dichloropropene	11.132	75	804901	380.07 ug/kg	87
62) 4-methyl-2-pentanone	11.221	43	595595	332.34 ug/kg	84
63) toluene	11.530	92	1106415	305.79 ug/kg	98
64) trans-1,3-dichloropropene	11.716	75	731797	397.16 ug/kg	93
65) 1,1,2-trichloroethane	11.956	83	373880	310.08 ug/kg	93
66) ethyl methacrylate	11.690	69	579200	359.69 ug/kg	87
68) tetrachloroethene	12.115	166	443533	323.44 ug/kg	99
69) 1,3-dichloropropane	12.149	76	696310	302.60 ug/kg	97
70) dibromochloromethane	12.419	129	566885	413.81 ug/kg	95
71) 1,2-dibromoethane	12.593	107	477926	332.08 ug/kg	89
72) 2-hexanone	12.110	43	456491	309.77 ug/kg	87
73) chlorobenzene	13.108	112	1338113	301.98 ug/kg	93
74) 1,1,1,2-tetrachloroethane	13.179	131	538265	355.41 ug/kg	98
75) ethylbenzene	13.170	91	2159762	289.77 ug/kg	90
76) m,p-xylene	13.302	106	1530670	571.99 ug/kg#	67
77) o-xylene	13.747	106	790495	300.78 ug/kg#	66
78) styrene	13.761	104	1291183	307.68 ug/kg	87
79) bromoform	14.027	173	344874	470.02 ug/kg	91
81) trans-1,4-dichloro-2-b...	14.481	53	253930	362.42 ug/kg#	36
83) isopropylbenzene	14.135	105	2271764	341.41 ug/kg	100
85) bromobenzene	14.574	156	548836	336.33 ug/kg	88
86) 1,1,2,2-tetrachloroethane	14.445	83	677214	299.52 ug/kg	97
87) 1,2,3-trichloropropane	14.550	75	595924	277.57 ug/kg#	2
88) n-propylbenzene	14.602	91	2837915	300.49 ug/kg	92
89) 2-chlorotoluene	14.756	91	1921343	292.06 ug/kg	88
90) 4-chlorotoluene	14.880	91	1772185	298.91 ug/kg	90
91) 1,3,5-trimethylbenzene	14.776	105	1953609	320.77 ug/kg	98
92) tert-butylbenzene	15.159	91	1330181	347.29 ug/kg	79
93) 1,2,4-trimethylbenzene	15.216	105	2062775	324.84 ug/kg	95
94) sec-butylbenzene	15.407	105	2585326	329.85 ug/kg	100
95) 1,3-dichlorobenzene	15.603	146	1138647	309.09 ug/kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 10:08:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.553	119	2211267	333.48 ug/kg	95
97) 1,4-dichlorobenzene	15.711	146	1160461	301.55 ug/kg	94
98) 1,2-dichlorobenzene	16.126	146	1174014	315.65 ug/kg	98
99) n-butylbenzene	16.014	91	2277490	319.09 ug/kg	93
100) 1,2-dibromo-3-chloropr...	16.980	75	169451	380.55 ug/kg#	70
101) 1,3,5-trichlorobenzene	17.186	180	743148	332.25 ug/kg	100
102) 1,2,4-trichlorobenzene	17.919	180	762983	337.70 ug/kg	90
103) hexachlorobutadiene	18.045	225	366212	344.02 ug/kg	98
104) naphthalene	18.268	128	2227192	318.20 ug/kg	100
105) 1,2,3-trichlorobenzene	18.530	180	653554	279.43 ug/kg	97
106) 2-methylnaphthalene	19.749	142	505625	153.62 ug/kg	95
107) 1-methylnaphthalene	20.032	142	387385	123.63 ug/kg	97

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

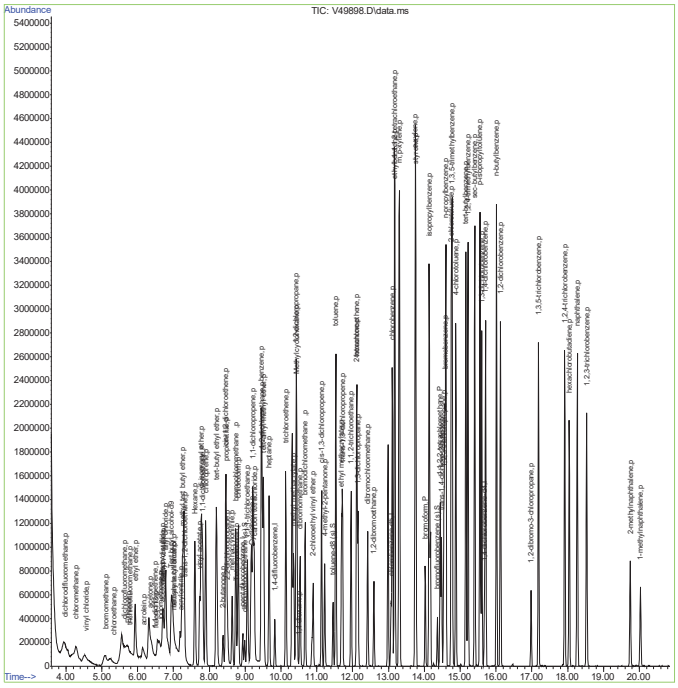
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 10:08:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19

7



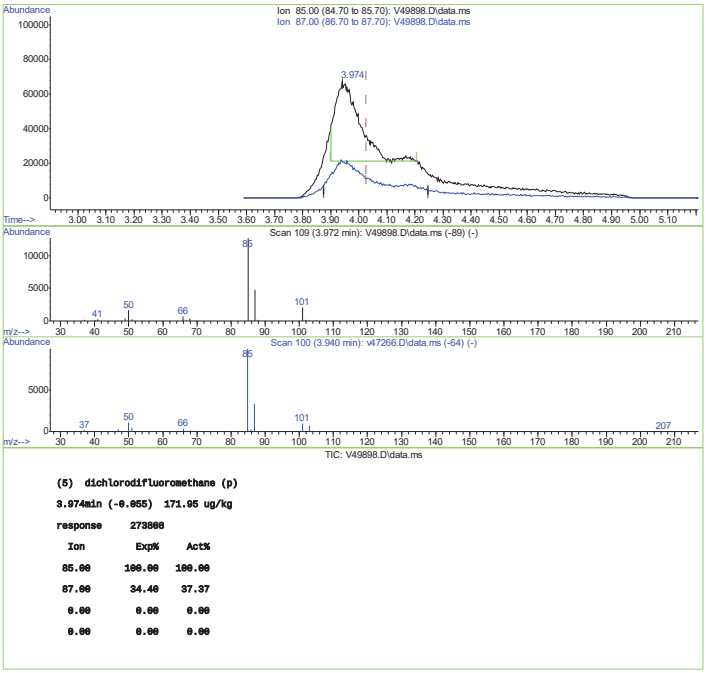
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.1

7



(5) dichlorodifluoromethane (p)

3.974min (-0.055) 171.95 ug/kg

response 273800

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	37.37
0.00	0.00	0.00
0.00	0.00	0.00

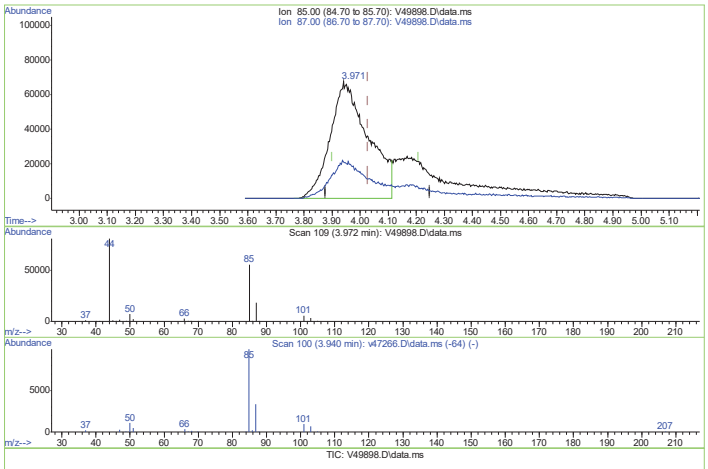
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.2

7



(5) dichlorodifluoromethane (p)

3.972min (-0.056) 401.06 ug/kg m

response 638656

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	33.51
0.00	0.00	0.00
0.00	0.00	0.00

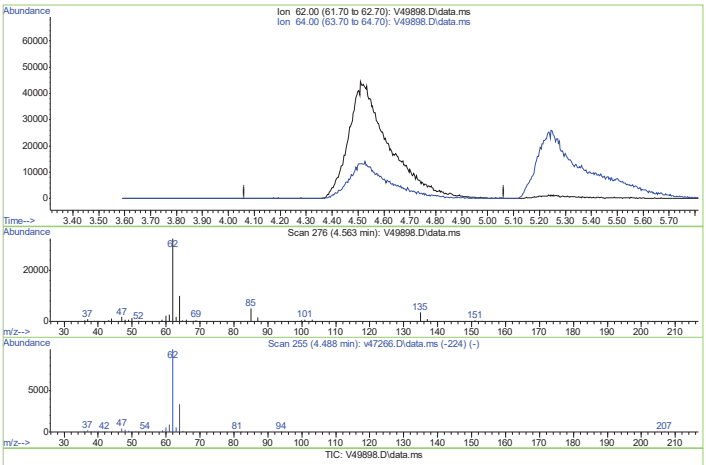
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.3

7



(7) vinyl chloride (p)

4.563min (-4.563) 0.00 ug/kg

response 0

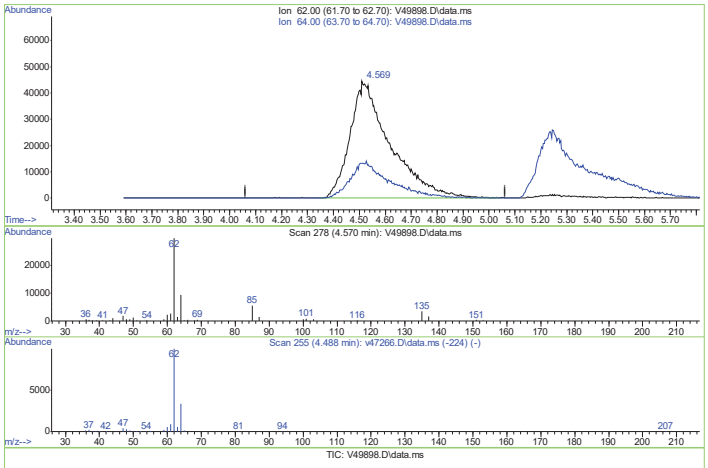
Ion	Exp%	Act%
62.00	100.00	0.00
64.00	30.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.4



(7) vinyl chloride (p)

4.570min (+ 0.007) 391.49 ug/kg m

response 479770

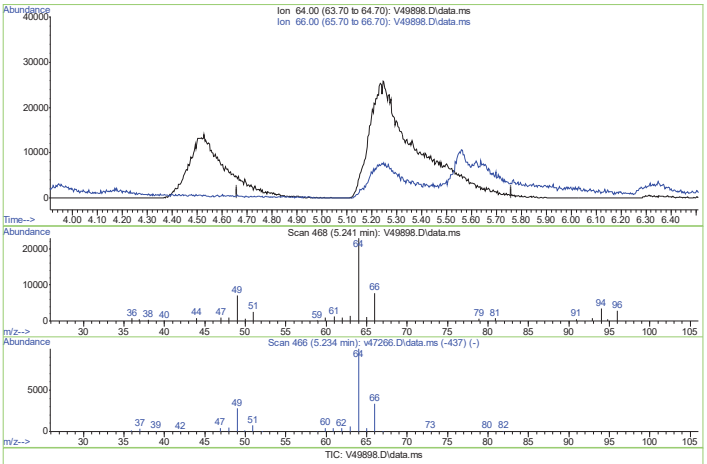
Ion	Exp%	Act%
62.00	100.00	100.00
64.00	30.19	31.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.5



(9) chloroethane (p)

5.240min (-5.240) 0.00 ug/kg

response 0

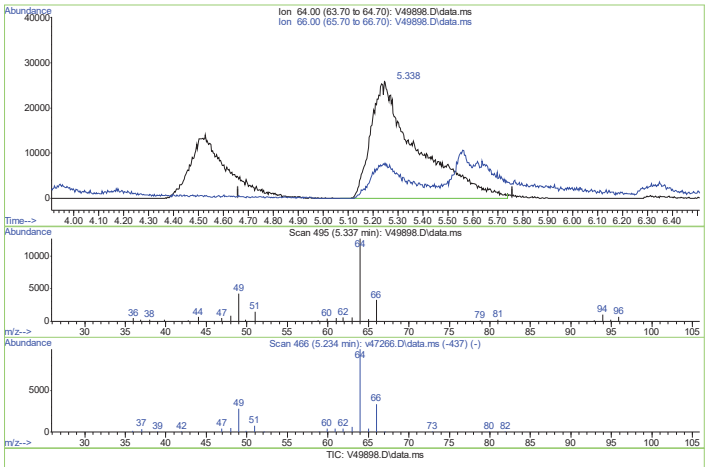
Ion	Exp%	Act%
64.00	100.00	0.00
66.00	32.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.6



(9) chloroethane (p)

5.337min (+ 0.097) 514.80 ug/kg m

response 334802

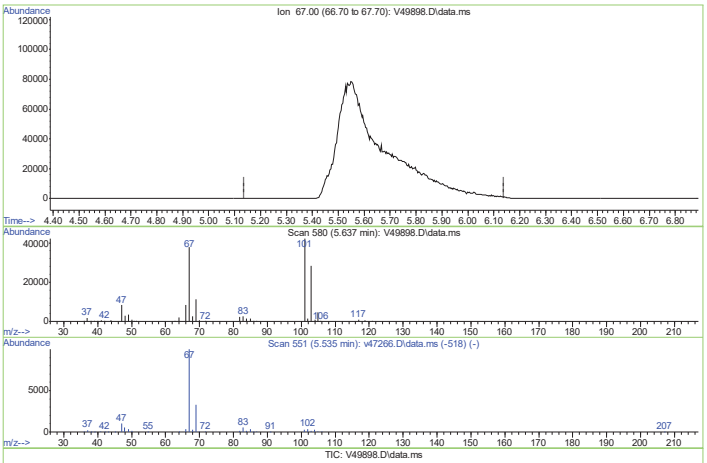
Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	25.85
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.7



(10) dichlorofluoromethane (p)

5.639min (-5.639) 0.00 ug/kg

response 0

Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

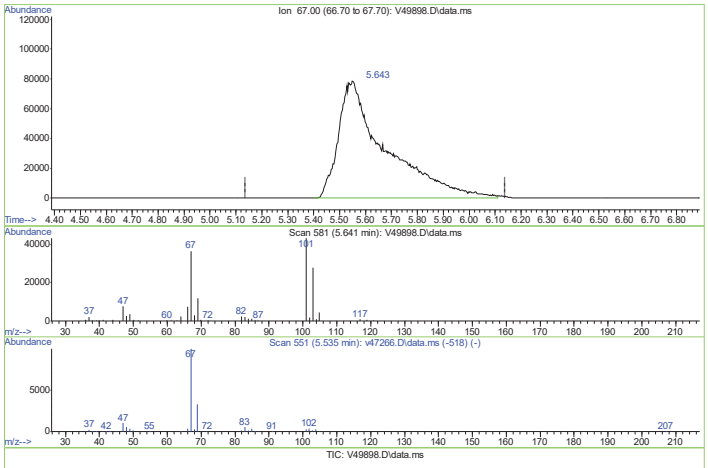
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.8

7



(10) dichlorofluoromethane (p)

5.641min (+ 0.002) 379.41 ug/kg m

response 993498

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

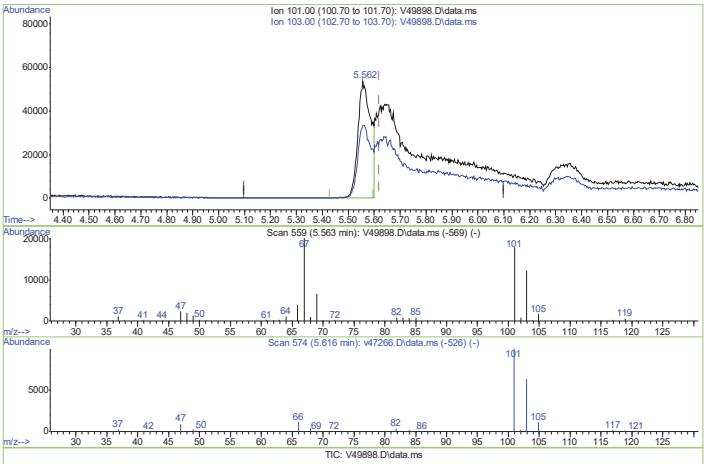
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.9

7



(13) trichlorofluoromethane (p)

5.562min (-0.059) 116.61 ug/kg

response 183784

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	65.27
0.00	0.00	0.00
0.00	0.00	0.00

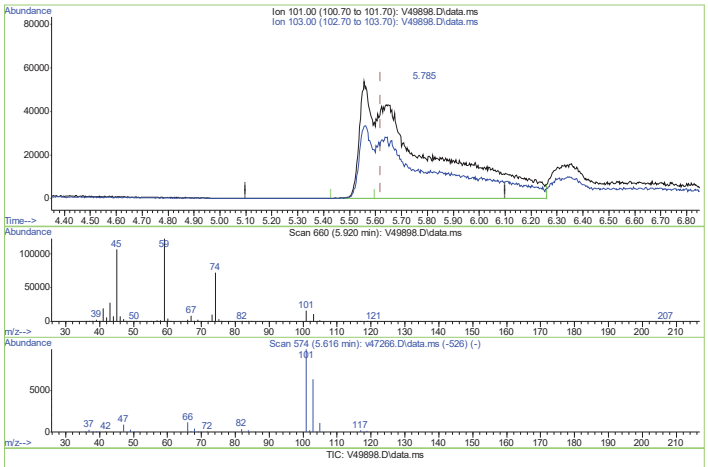
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.10

7



(13) trichlorofluoromethane (p)

5.786min (+ 0.165) 572.46 ug/kg m

response 962197

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	63.11
0.00	0.00	0.00
0.00	0.00	0.00

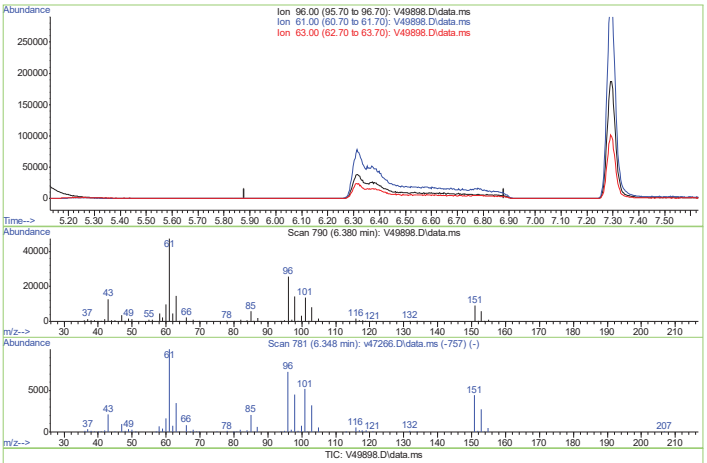
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.11

7



(16) 1,1-dichloroethene (p)

6.380min (-0.380) 0.00 ug/kg

response 0

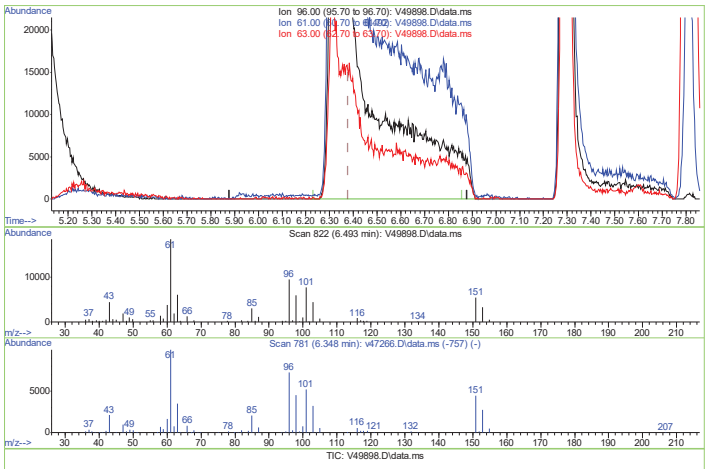
Ion	Exp%	Act%
96.00	100.00	0.00
61.00	164.80	0.00#
63.00	57.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.12



(16) 1,1-dichloroethene (p)
6.493min (+ 0.113) 563.92 ug/kg m
response 432129

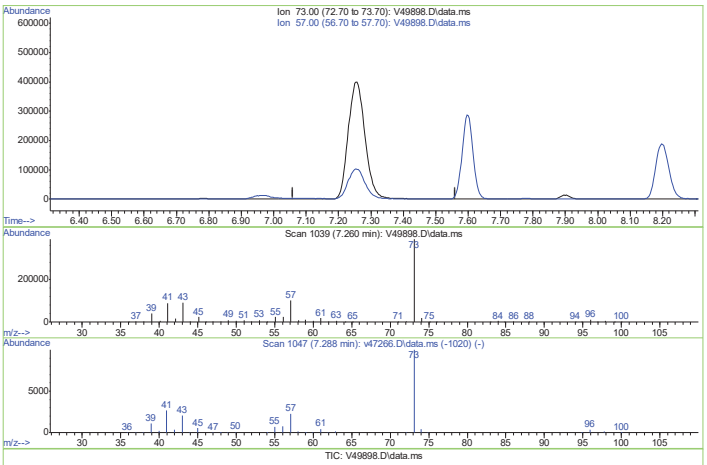
Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	194.92#
63.00	57.50	63.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.13



(20) methyl tert butyl ether (p)
7.260min (-7.260) 0.00 ug/kg
response 0

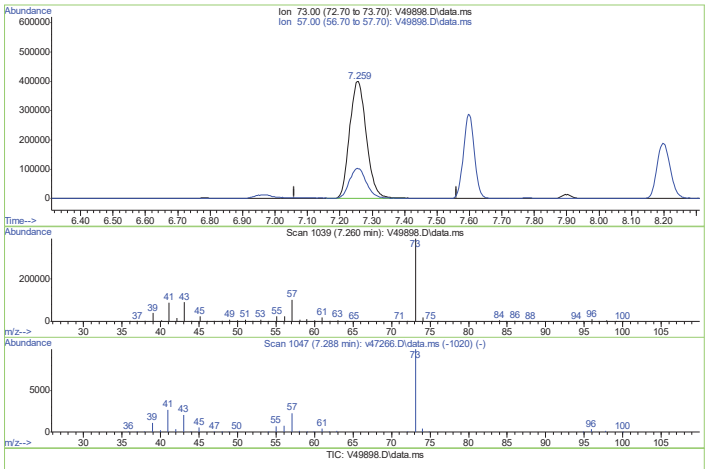
Ion	Exp%	Act%
73.00	100.00	0.00
57.00	24.10	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.14



(20) methyl tert butyl ether (p)
7.260min (-0.000) 325.65 ug/kg m
response 1438093

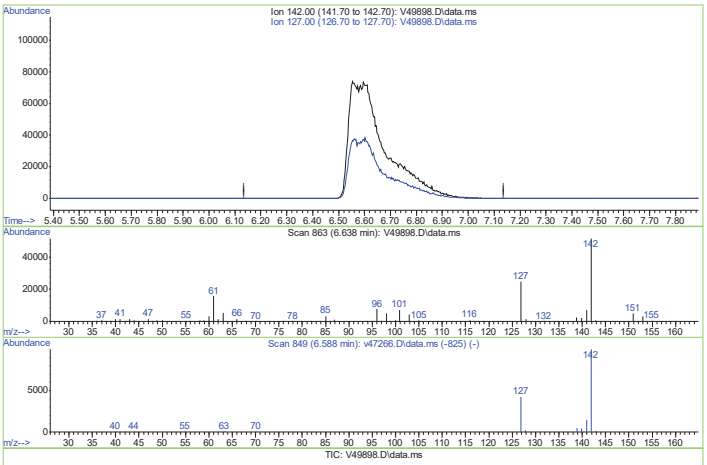
Ion	Exp%	Act%
73.00	100.00	100.00
57.00	24.10	26.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.15



(24) iodomethane (p)
6.638min (-0.638) 0.00 ug/kg
response 0

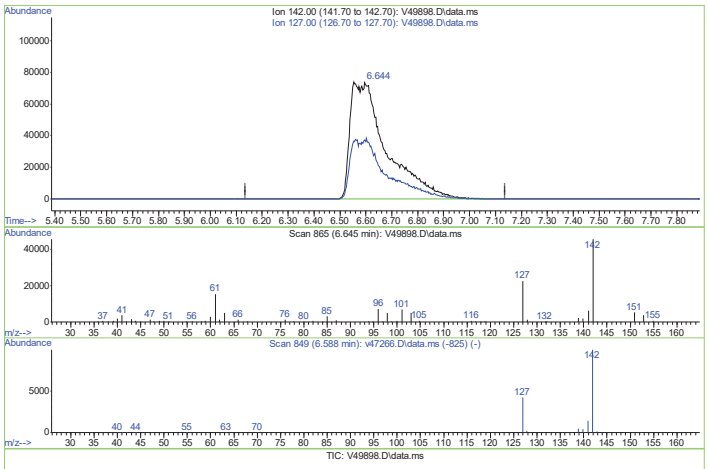
Ion	Exp%	Act%
142.00	100.00	0.00
127.00	49.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.16



(24) iodomethane (p)
6.645min (+ 0.007) 444.41 ug/kg m
response 728678

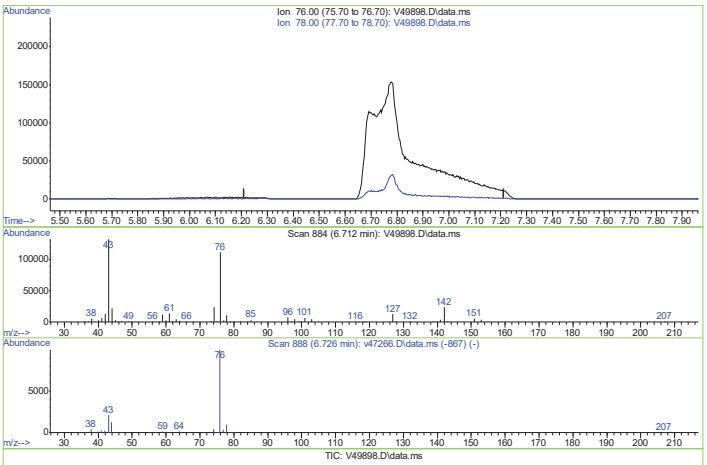
Ion	Exp%	Act%
142.00	100.00	100.00
127.00	49.70	49.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.17



(25) carbon disulfide (p)
6.712min (-0.712) 0.00 ug/kg
response 0

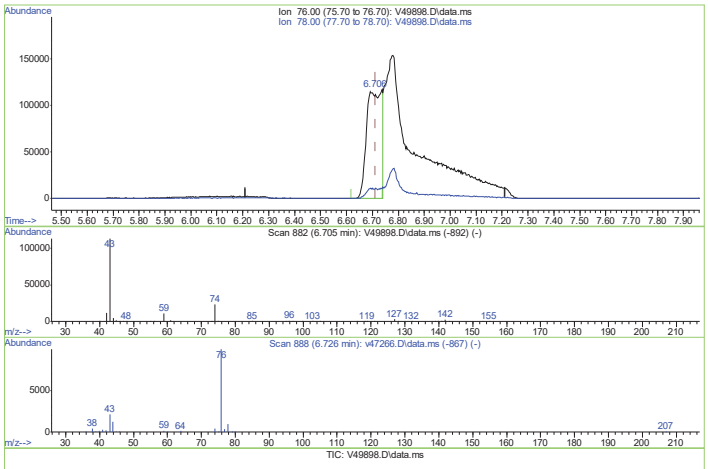
Ion	Exp%	Act%
76.00	100.00	0.00
78.00	9.80	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.18



(25) carbon disulfide (p)
6.705min (-0.008) 376.13 ug/kg m
response 475054

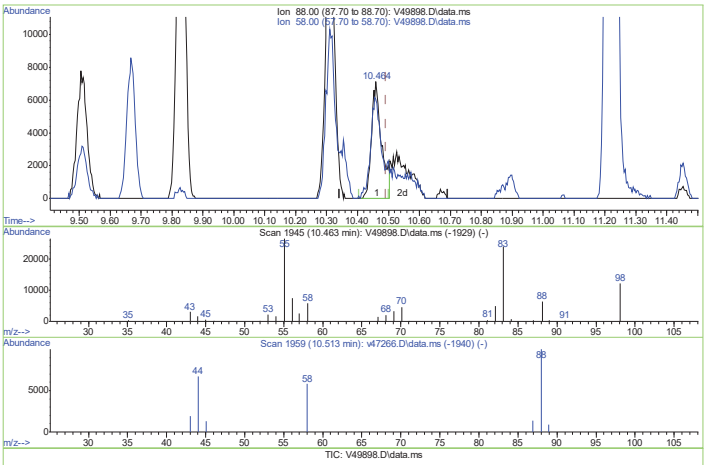
Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.00	8.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.19



(59) 1,4-dioxane (p)
10.464min (-0.028) 1251.83 ug/kg
response 16054

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.80	89.90#
0.00	0.00	0.00
0.00	0.00	0.00

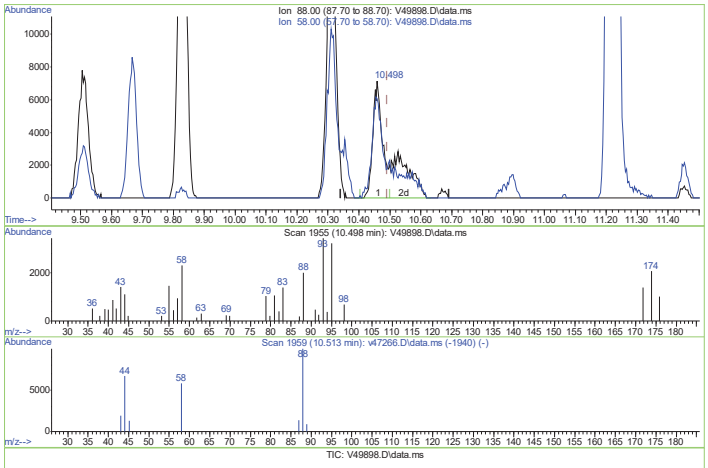
Cal Report: V49898.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:08:07 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.20 7



(59) 1,4-dioxane (p)
10.498min (+ 0.006) 2899.81 ug/kg m
response 26929

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.00	115.26#
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 09:10:43 2016 Page: 1

V49898.D edits: 1,4-dioxane

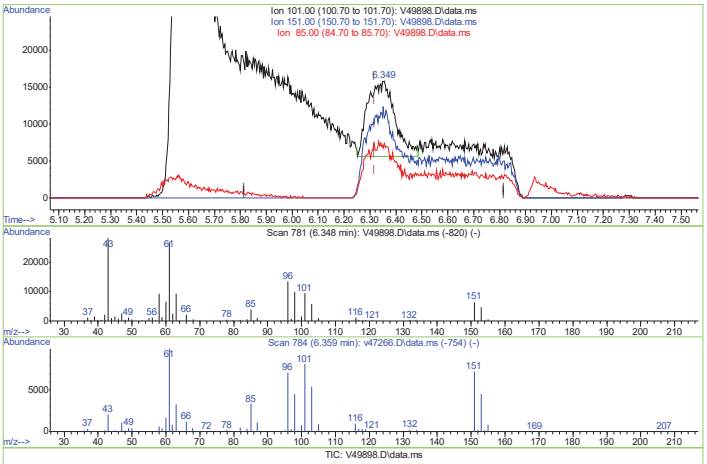
Cal Report: V49898.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:10:41 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.21 7



(14) freon-113 (p)
6.349min (+ 0.032) 97.77 ug/kg
response 74057

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	89.09
85.00	41.30	58.37
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:07:39 2016 Page: 1

V49898.D edits: freon-113

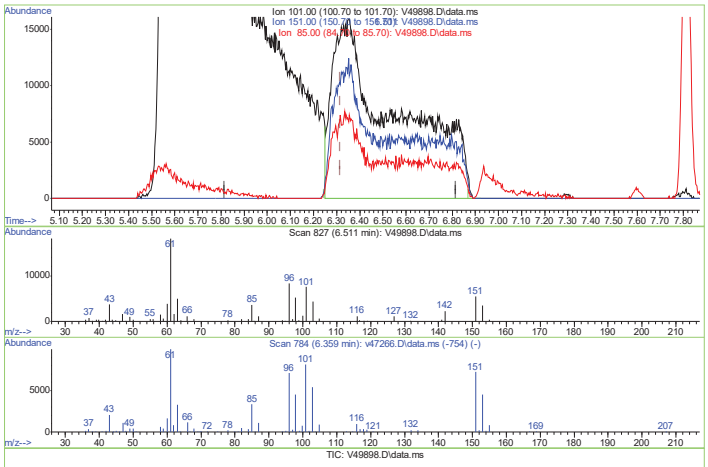
Cal Report: V49898.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49898.D
Acq On : 19 Sep 2016 4:55 pm
Operator : carab
Sample : ic1837-200
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 09:10:41 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:07:54 2016
Response via : Initial Calibration

7.6.19.22 7



(14) freon-113 (p)
6.511min (+ 0.194) 404.44 ug/kg m
response 306358

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	72.22
85.00	41.30	48.09
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:08:06 2016 Page: 1

V49898.D edits: freon-113

Cal Report: V49899.D

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 10:07:05 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20 7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.916	65	131996	500.00 ug/kg	# 0.00
4) pentafluorobenzene	8.932	168	163228	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.829	114	309328	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.073	82	158020	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.682	152	152832	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.986	113	114174	48.25 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.50%	
61) toluene-d8 (s)	11.453	98	355280	50.48 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.96%	
84) bromofluorobenzene (s)	14.368	95	153544	46.89 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.78%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.005	59	1506129	6044.32 ug/kg#	29
3) Ethanol	5.772	45	758069	62214.84 ug/kg#	40
5) dichlorodifluoromethane	3.962	85	1147440m	601.57 ug/kg	
6) chloromethane	4.281	50	642974	565.15 ug/kg	98
7) vinyl chloride	4.566	62	914523m	627.29 ug/kg	
8) bromomethane	5.107	96	435457	662.62 ug/kg	97
9) chloroethane	5.354	64	596377m	681.27 ug/kg	
10) dichlorofluoromethane	5.651	67	1929359m	608.94 ug/kg	
11) ethyl ether	5.937	59	785581	540.24 ug/kg	93
12) acetonitrile	6.686	41	72366	575.02 ug/kg	62
13) trichlorofluoromethane	5.793	101	1732634m	817.78 ug/kg	
14) freon-113	6.518	101	566116m	811.43 ug/kg	
15) acrolein	6.175	56	505612	3422.06 ug/kg	100
16) 1,1-dichloroethene	6.507	96	830609m	810.68 ug/kg	
17) acetone	6.336	58	201474	416.78 ug/kg	86
18) Methyl Acetate	6.711	43	674314	478.78 ug/kg#	85
19) methylene chloride	7.041	84	1031662	558.95 ug/kg	89
20) methyl tert butyl ether	7.261	73	2800859	562.39 ug/kg	98
21) acrylonitrile	7.199	53	464793	496.21 ug/kg	69
22) allyl chloride	6.788	41	945933	462.26 ug/kg	70
23) trans-1,2-dichloroethene	7.328	96	864690	528.05 ug/kg	82
24) iodomethane	6.655	142	1465084m	699.89 ug/kg	
25) carbon disulfide	6.712	76	1050057m	689.03 ug/kg	
26) propionitrile	8.467	54	174773	474.59 ug/kg	100
27) vinyl acetate	7.732	86	141759	683.74 ug/kg#	1
28) chloroprene	7.899	53	1639511	516.92 ug/kg	89
29) di-isopropyl ether	7.779	45	2782292	463.93 ug/kg	94
30) methacrylonitrile	8.638	41	604656	529.82 ug/kg	86
31) 2-butanone	8.383	72	150700	557.22 ug/kg#	76
32) Hexane	7.597	41	770030	483.01 ug/kg#	78
33) 1,1-dichloroethane	7.822	63	1741786	492.54 ug/kg	99
34) tert-butyl ethyl ether	8.203	59	3395607	556.04 ug/kg	89
36) 2,2-dichloropropane	8.507	77	904329	459.72 ug/kg	98
37) cis-1,2-dichloroethene	8.457	96	961625	496.93 ug/kg	87

V160919S.M Tue Sep 20 11:23:36 2016 Page: 1

V49899.D: MSV1837-IC1837 Initial Calibration (400) page 1 of 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 10:07:05 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.738	128	495773	542.22 ug/kg	93
40) chloroform	8.806	83	1782640	508.83 ug/kg	98
42) Tetrahydrofuran	8.757	42	307242	455.86 ug/kg	97
43) 1,1,1-trichloroethane	9.066	97	1297681	446.11 ug/kg	98
45) Cyclohexane	9.173	56	989269	323.04 ug/kg	87
46) carbon tetrachloride	9.264	117	1395445	520.43 ug/kg	92
47) 1,1-dichloropropene	9.214	75	1196904	521.31 ug/kg	86
48) benzene	9.451	78	2986479	453.59 ug/kg	98
49) 1,2-dichloroethane	9.475	62	1602443	462.02 ug/kg	97
50) tert-amyl methyl ether	9.512	73	2673689	578.35 ug/kg	96
51) heptane	9.668	43	1060175	460.61 ug/kg	78
52) trichloroethene	10.136	95	1029901	542.36 ug/kg	81
53) 1,2-dichloropropane	10.423	63	895289	459.77 ug/kg	97
54) dibromomethane	10.533	93	720102	534.70 ug/kg	92
55) bromodichloromethane	10.676	83	1431833	590.10 ug/kg	98
56) Methylcyclohexane	10.440	83	1237992	506.66 ug/kg	92
57) 2-chloroethyl vinyl ether	10.897	63	564254	595.14 ug/kg#	100
58) methyl methacrylate	10.355	69	630043	560.12 ug/kg	85
59) 1,4-dioxane	10.493	88	55410	3089.11 ug/kg#	1
60) cis-1,3-dichloropropene	11.133	75	1529192	613.46 ug/kg	87
62) 4-methyl-2-pentanone	11.221	43	1082367	521.15 ug/kg	82
63) toluene	11.531	92	2035538	497.10 ug/kg	96
64) trans-1,3-dichloropropene	11.717	75	1391732	633.85 ug/kg	94
65) 1,1,2-trichloroethane	11.957	83	706671	524.53 ug/kg	92
66) ethyl methacrylate	11.691	69	1080239	565.20 ug/kg	85
68) tetrachloroethene	12.116	166	854086	557.30 ug/kg	95
69) 1,3-dichloropropane	12.150	76	1289697	509.53 ug/kg	98
70) dibromochloromethane	12.420	129	1148136	701.99 ug/kg	94
71) 1,2-dibromoethane	12.593	107	943618	582.87 ug/kg	89
72) 2-hexanone	12.110	43	700107	422.46 ug/kg	82
73) chlorobenzene	13.109	112	2523472	517.97 ug/kg	93
74) 1,1,1,2-tetrachloroethane	13.181	131	1020833	575.70 ug/kg	95
75) ethylbenzene	13.171	91	3760121	463.20 ug/kg	90
76) m,p-xylene	13.304	106	2732625	949.38 ug/kg#	68
77) o-xylene	13.748	106	1402074	485.67 ug/kg#	65
78) styrene	13.763	104	2298114	495.92 ug/kg	84
79) bromoform	14.028	173	741284	813.85 ug/kg	93
81) trans-1,4-dichloro-2-b...	14.483	53	480566	582.27 ug/kg#	32
83) isopropylbenzene	14.136	105	4196190	513.75 ug/kg	99
85) bromobenzene	14.575	156	1058502	530.80 ug/kg	91
86) 1,1,2,2-tetrachloroethane	14.446	83	1299595	493.54 ug/kg	97
87) 1,2,3-trichloropropane	14.551	75	1088276	442.72 ug/kg#	1
88) n-propylbenzene	14.604	91	5002547	454.48 ug/kg	93
89) 2-chlorotoluene	14.758	91	3469607	455.47 ug/kg	89
90) 4-chlorotoluene	14.882	91	3267241	473.41 ug/kg	91
91) 1,3,5-trimethylbenzene	14.778	105	3583073	497.04 ug/kg	97
92) tert-butylbenzene	15.160	91	2530101	547.09 ug/kg	81
93) 1,2,4-trimethylbenzene	15.218	105	3840528	509.38 ug/kg	95
94) sec-butylbenzene	15.408	105	4822940	516.31 ug/kg	99
95) 1,3-dichlorobenzene	15.604	146	2184958	505.55 ug/kg	97

7.6.20 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 10:07:05 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.555	119	4188244	528.54 ug/kg	94
97) 1,4-dichlorobenzene	15.713	146	2236369	498.21 ug/kg	96
98) 1,2-dichlorobenzene	16.128	146	2290730	522.35 ug/kg	98
99) n-butylbenzene	16.015	91	4117785	488.03 ug/kg	96
100) 1,2-dibromo-3-chloropr...	16.980	75	359831	653.16 ug/kg#	76
101) 1,3,5-trichlorobenzene	17.188	180	1498420	561.10 ug/kg	99
102) 1,2,4-trichlorobenzene	17.920	180	1491326	550.59 ug/kg	93
103) hexachlorobutadiene	18.047	225	795823	620.67 ug/kg	95
104) naphthalene	18.270	128	4305100	520.65 ug/kg	100
105) 1,2,3-trichlorobenzene	18.532	180	1285053	479.17 ug/kg	97
106) 2-methylnaphthalene	19.750	142	906459m	235.08 ug/kg	
107) 1-methylnaphthalene	20.032	142	670085	191.32 ug/kg	97

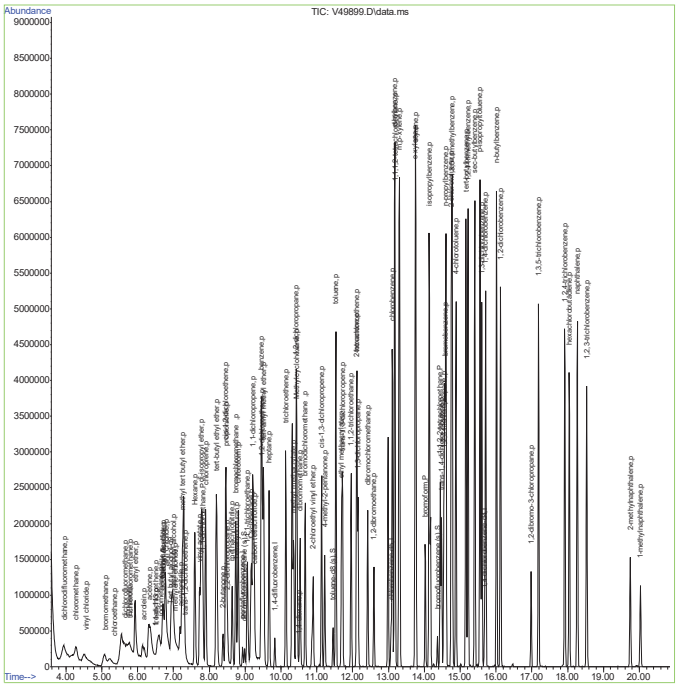
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.20 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 10:07:05 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

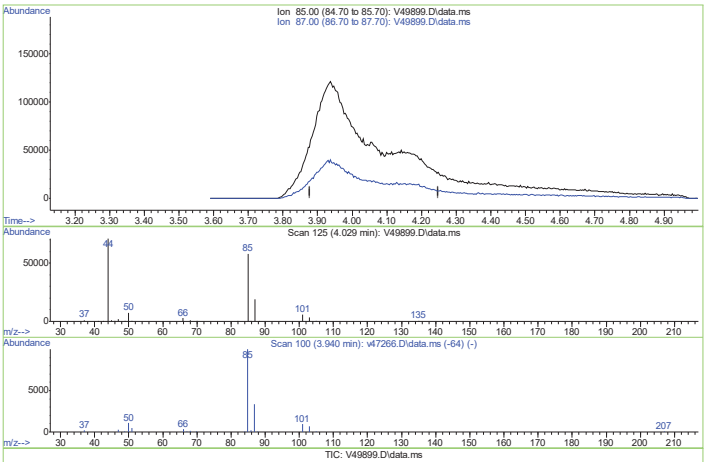


7.6.20 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration



(5) dichlorodifluoromethane (p)

4.029min (-4.029) 0.00 ug/kg

response 0

Ion	Exp%	Act%
85.00	100.00	0.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

7.6.20.1 7

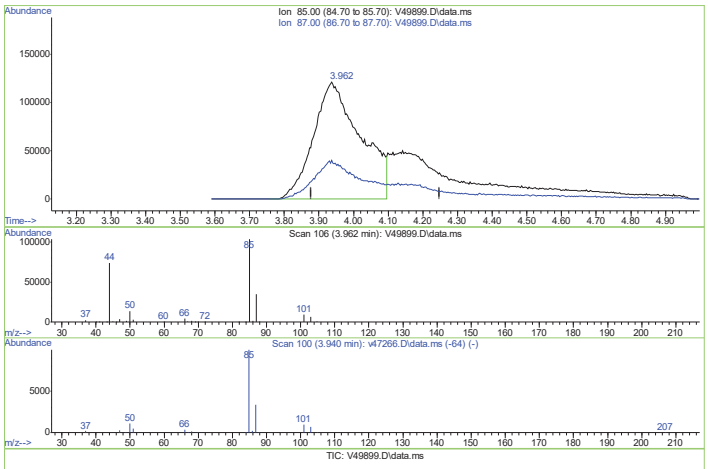
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.2

7



TIC: V49899.D\data.ms

(5) dichlorodifluoromethane (p)
3.962min (-0.067) 681.57 ug/kg m
response 1147440

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	33.58
0.00	0.00	0.00
0.00	0.00	0.00

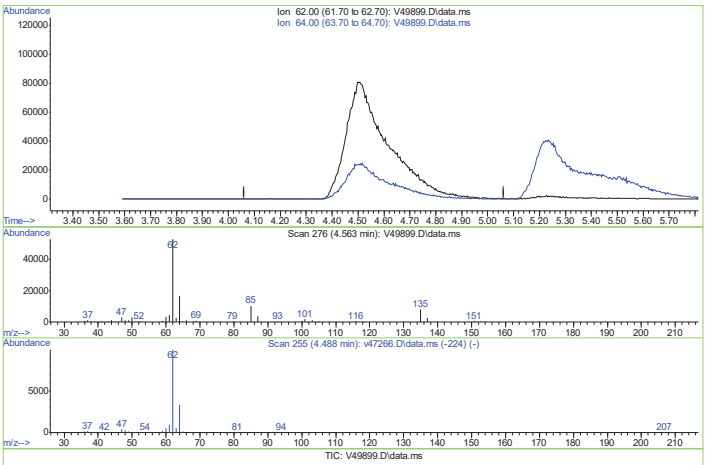
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.3

7



TIC: V49899.D\data.ms

(7) vinyl chloride (p)
4.563min (-4.563) 0.00 ug/kg
response 0

Ion	Exp%	Act%
62.00	100.00	0.00
64.00	30.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

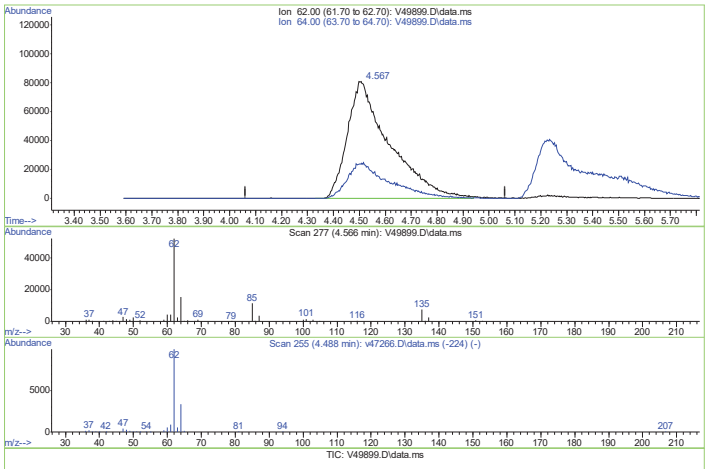
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.4

7



TIC: V49899.D\data.ms

(7) vinyl chloride (p)
4.566min (+ 0.003) 627.29 ug/kg m
response 914523

Ion	Exp%	Act%
62.00	100.00	100.00
64.00	30.10	29.52
0.00	0.00	0.00
0.00	0.00	0.00

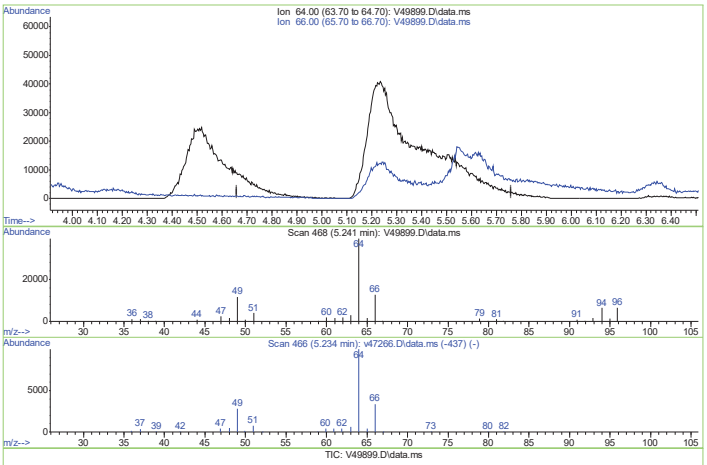
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.5

7



TIC: V49899.D\data.ms

(9) chloroethane (p)
5.240min (-5.240) 0.00 ug/kg
response 0

Ion	Exp%	Act%
64.00	100.00	0.00
66.00	32.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

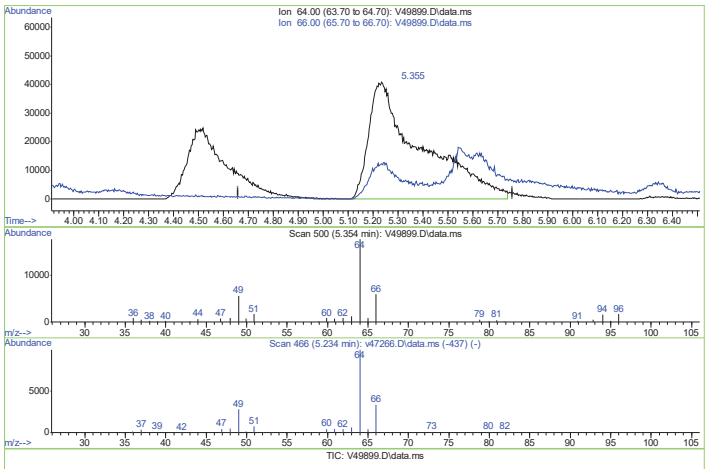
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.6

7



(9) chloroethane (p)

5.354min (+ 0.114) 681.27 ug/kg m

response 596377

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	33.38
0.00	0.00	0.00
0.00	0.00	0.00

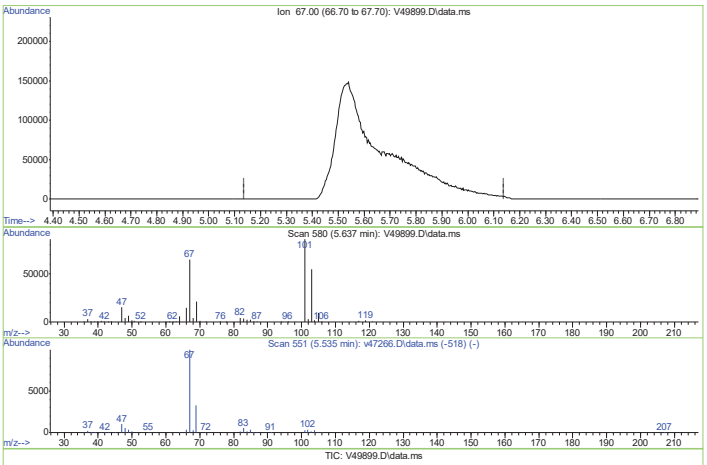
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.7

7



(10) dichlorofluoromethane (p)

5.639min (-5.639) 0.00 ug/kg

response 0

Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

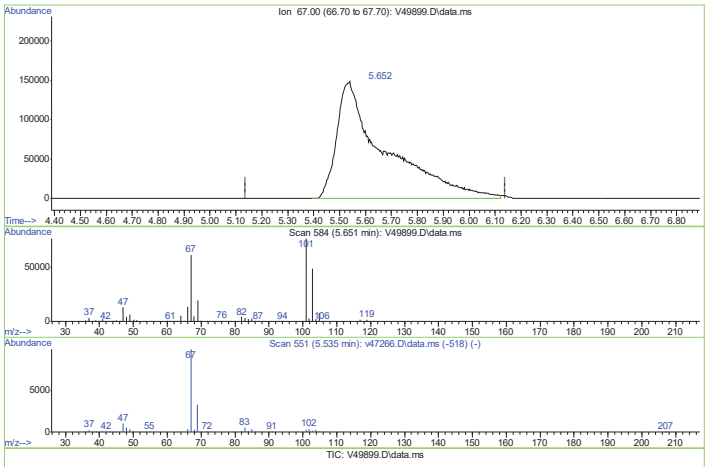
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.8

7



(10) dichlorofluoromethane (p)

5.651min (+ 0.013) 608.94 ug/kg m

response 1929359

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

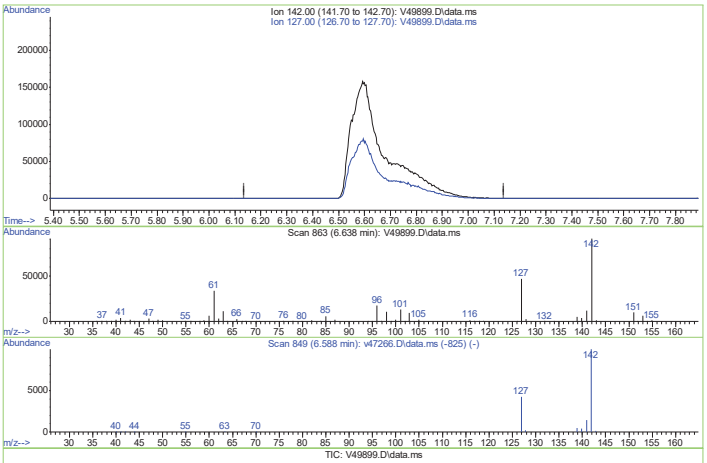
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.9

7



(24) iodomethane (p)

6.638min (-6.638) 0.00 ug/kg

response 0

Ion	Exp%	Act%
142.00	100.00	0.00
127.00	49.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

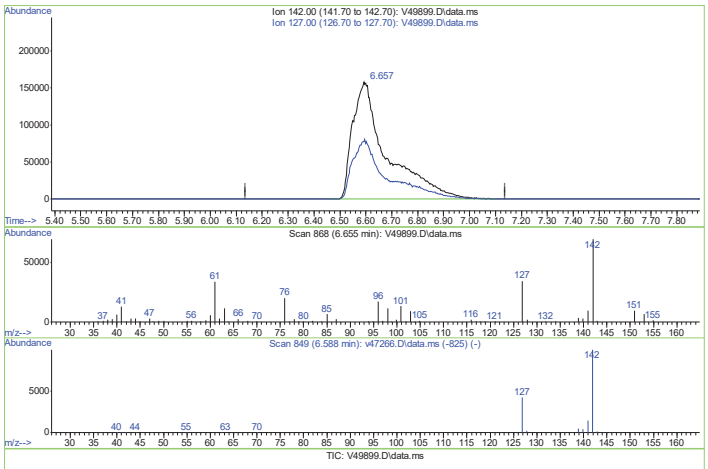
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.10

7



TIC: V49899.D\data.ms

(24) iodomethane (p)
6.655min (+ 0.018) 699.80 ug/kg m
response 1465084

Ion	Exp%	Act%
142.00	100.00	100.00
127.00	49.70	49.32
0.00	0.00	0.00
0.00	0.00	0.00

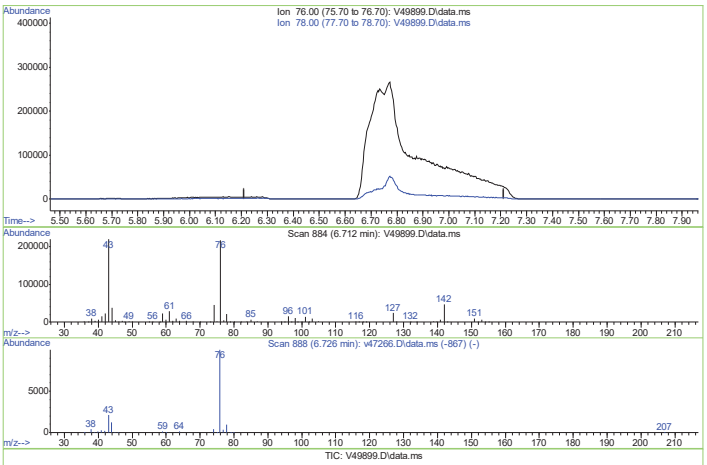
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.11

7



TIC: V49899.D\data.ms

(25) carbon disulfide (p)
6.712min (-6.712) 0.00 ug/kg
response 0

Ion	Exp%	Act%
76.00	100.00	0.00
78.00	9.80	0.00
0.00	0.00	0.00
0.00	0.00	0.00

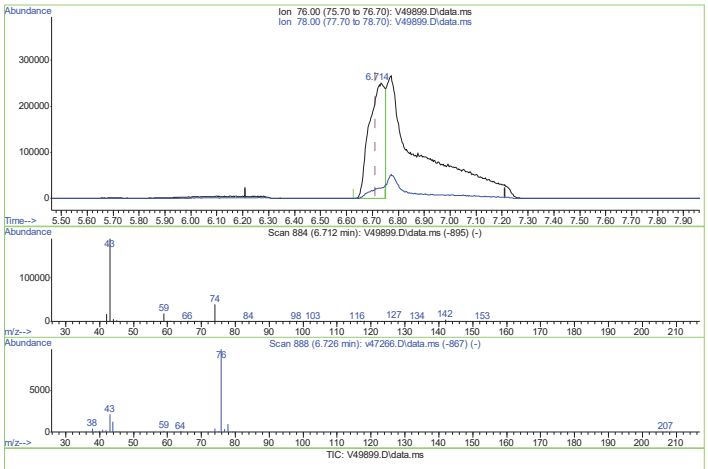
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.12

7



TIC: V49899.D\data.ms

(25) carbon disulfide (p)
6.712min (-0.000) 689.03 ug/kg m
response 1050057

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.80	9.86
0.00	0.00	0.00
0.00	0.00	0.00

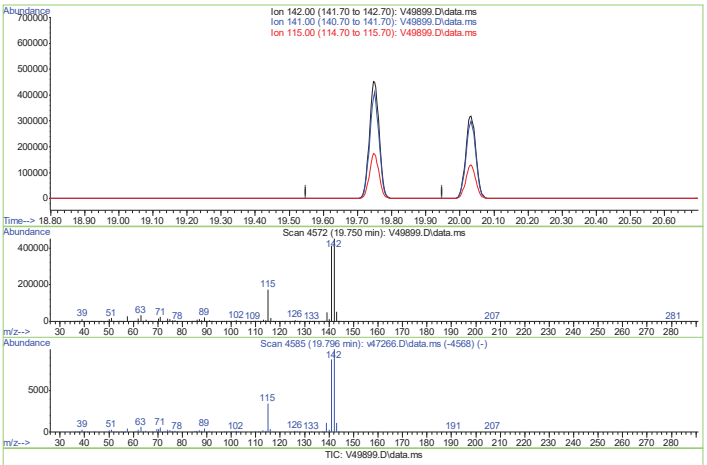
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.13

7



TIC: V49899.D\data.ms

(186) 2-methylnaphthalene (p)
19.749min (-19.749) 0.00 ug/kg
response 0

Ion	Exp%	Act%
142.00	100.00	0.00
141.00	92.50	0.00#
115.00	36.20	0.00#
0.00	0.00	0.00

Cal Report: V49899.D

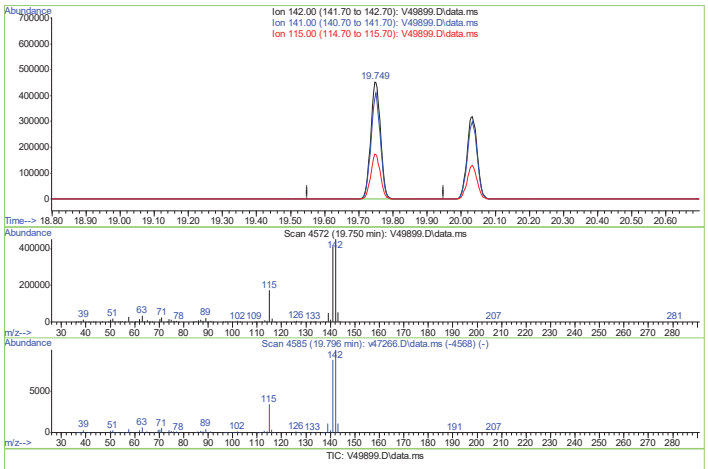
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:12:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.14

7



(106) 2-methylnaphthalene (p)
19.750min (+ 0.001) 235.08 ug/kg m
response 906459

Ion	Exp%	Act%
142.00	100.00	100.00
141.00	92.50	0.00#
115.00	36.20	0.00#
0.00	0.00	0.00

V160919S.M Tue Sep 20 09:18:15 2016 Page: 1

V49899.D edits: 2-methylnaphthalene

Cal Report: V49899.D

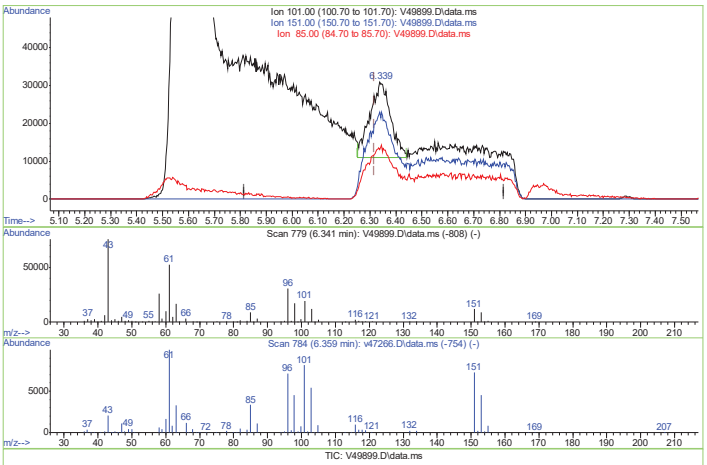
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:18:12 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.15

7



(14) freon-113 (p)
6.339min (+ 0.023) 157.07 ug/kg
response 109586

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	92.96
85.00	41.30	59.80
0.00	0.00	0.00

V160919S.M Tue Sep 20 09:50:41 2016 Page: 1

V49899.D edits: freon-113

Cal Report: V49899.D

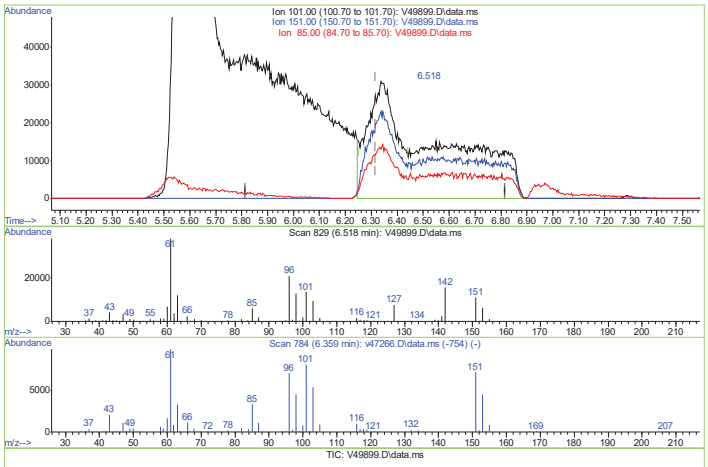
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:18:12 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.16

7



(14) freon-113 (p)
6.518min (+ 0.201) 811.43 ug/kg m
response 566116

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	81.94
85.00	41.30	45.26
0.00	0.00	0.00

V160919S.M Tue Sep 20 09:52:04 2016 Page: 1

V49899.D edits: freon-113

Cal Report: V49899.D

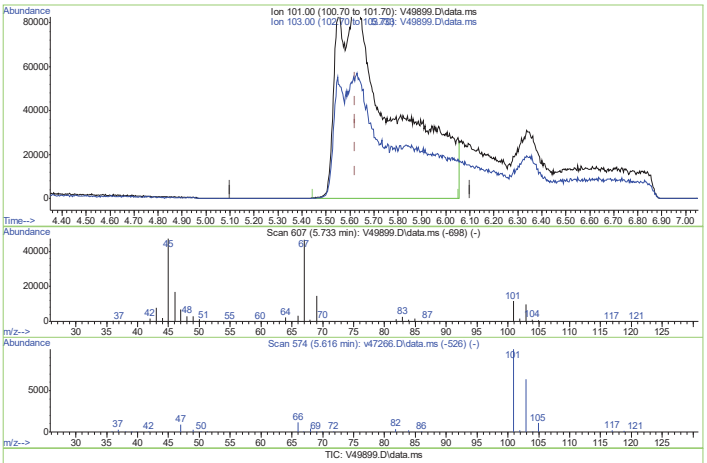
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:18:12 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.17

7



(13) trichlorofluoromethane (p)
5.733min (+ 0.112) 702.43 ug/kg m
response 1488258

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	71.51
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:06:42 2016 Page: 1

V49899.D edits: trichlorofluoromethane

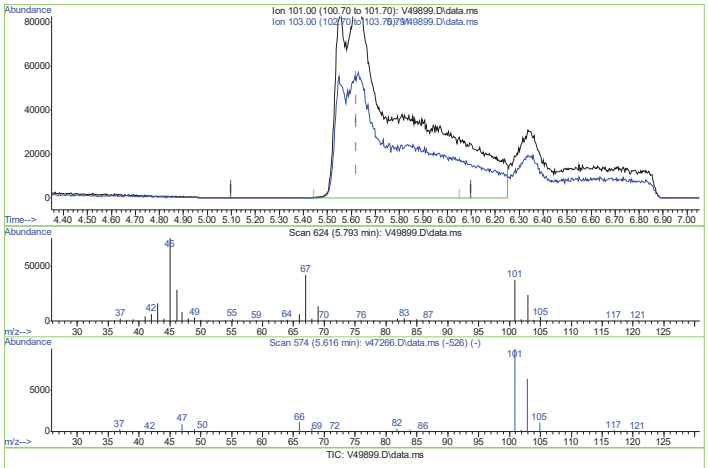
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:18:12 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.18

7



(13) trichlorofluoromethane (p)
5.793min (+ 0.173) 817.78 ug/kg m
response 1732634

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	63.00
0.00	0.00	0.00
0.00	0.00	0.00

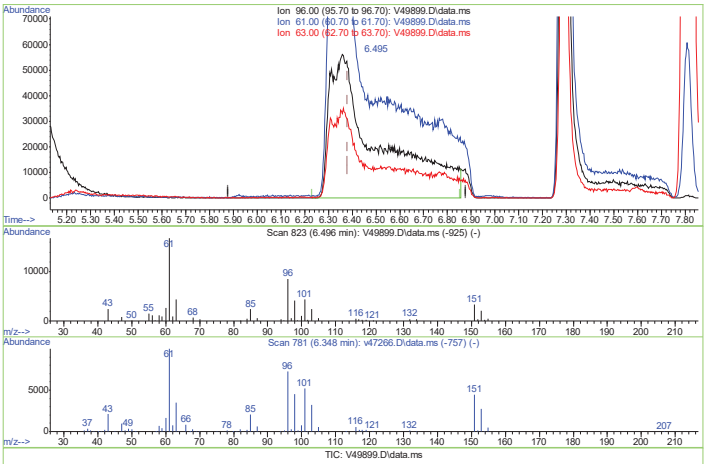
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:18:12 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.19

7



(16) 1,1-dichloroethene (p)
6.496min (+ 0.117) 787.12 ug/kg m
response 806475

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	195.20#
63.00	57.50	56.42
0.00	0.00	0.00

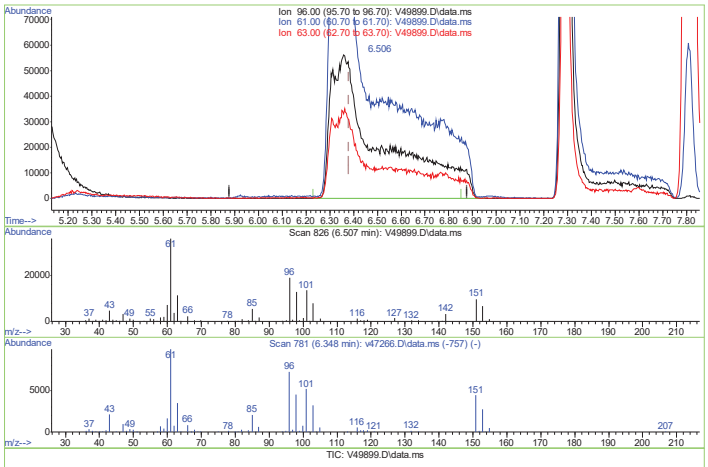
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49899.D
Acq On : 19 Sep 2016 5:25 pm
Operator : carab
Sample : ic1837-400
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 09:18:12 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 09:11:55 2016
Response via : Initial Calibration

7.6.20.20

7



(16) 1,1-dichloroethene (p)
6.507min (+ 0.127) 810.68 ug/kg m
response 838609

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	188.89
63.00	57.50	59.76
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda 09/21/16 19:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:55:43 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.927	65	119734	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.931	168	167745	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.828	114	302582	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.071	82	151998	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.680	152	144643	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.986	113	113399	47.05 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.10%	
61) toluene-d8 (s)	11.451	98	335554	48.71 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.42%	
84) bromofluorobenzene (s)	14.366	95	149961	48.89 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.78%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.011	59	181721	538.19 ug/kg#	39
3) Ethanol	5.785	45	82910	5106.24 ug/kg#	40
5) dichlorodifluoromethane	3.961	85	166102m	61.62 ug/kg	
6) chloromethane	4.278	50	105195	64.07 ug/kg	93
7) vinyl chloride	4.572	62	116907	50.33 ug/kg	97
8) bromomethane	5.097	96	47068	42.01 ug/kg	94
9) chloroethane	5.372	64	62812m	41.36 ug/kg	
10) dichlorofluoromethane	5.658	67	276309m	55.88 ug/kg	
11) ethyl ether	5.937	59	105913	49.43 ug/kg	92
12) acetonitrile	6.687	41	9735	45.64 ug/kg#	65
13) trichlorofluoromethane	5.782	101	222363m	50.84 ug/kg	
14) freon-113	6.482	101	73828m	46.61 ug/kg	
15) acrolein	6.182	56	64180	256.45 ug/kg	100
16) 1,1-dichloroethene	6.493	96	108761m	51.97 ug/kg	
17) acetone	6.342	58	32559	51.21 ug/kg#	68
18) Methyl Acetate	6.716	43	117653	57.89 ug/kg#	84
19) methylene chloride	7.033	84	140112	53.59 ug/kg	93
20) methyl tert butyl ether	7.259	73	372475	53.13 ug/kg	99
21) acrylonitrile	7.204	53	61340	45.11 ug/kg	66
22) allyl chloride	6.786	41	149693	51.36 ug/kg	77
23) trans-1,2-dichloroethene	7.295	96	111260	49.02 ug/kg	84
24) iodomethane	6.651	142	198989	60.53 ug/kg	92
25) carbon disulfide	6.708	76	117461m	50.76 ug/kg	
26) propionitrile	8.470	54	24786	46.15 ug/kg	100
27) vinyl acetate	7.735	86	19820	61.46 ug/kg#	1
28) chloroprene	7.899	53	212181	45.70 ug/kg	90
29) di-isopropyl ether	7.777	45	405359	49.00 ug/kg	94
30) methacrylonitrile	8.639	41	76257	45.21 ug/kg	83
31) 2-butanone	8.385	72	22845	56.25 ug/kg#	1
32) Hexane	7.596	41	120746	52.56 ug/kg#	77
33) 1,1-dichloroethane	7.811	63	234394	48.22 ug/kg	99
34) tert-butyl ethyl ether	8.200	59	432642	50.34 ug/kg	90
36) 2,2-dichloropropane	8.500	77	132911	47.31 ug/kg	95
37) cis-1,2-dichloroethene	8.457	96	151856	56.61 ug/kg	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:55:43 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.738	128	69915	52.42 ug/kg	89
40) chloroform	8.806	83	246178	50.82 ug/kg	94
42) Tetrahydrofuran	8.758	42	39960	41.70 ug/kg	90
43) 1,1,1-trichloroethane	9.064	97	197991	50.53 ug/kg	95
45) Cyclohexane	9.173	56	207344	48.39 ug/kg#	84
46) carbon tetrachloride	9.250	117	190457	53.46 ug/kg	91
47) 1,1-dichloropropene	9.214	75	172374	53.47 ug/kg	87
48) benzene	9.451	78	452836	54.72 ug/kg	98
49) 1,2-dichloroethane	9.474	62	229783	50.53 ug/kg	98
50) tert-amyl methyl ether	9.509	73	347589	52.77 ug/kg	97
51) heptane	9.667	43	177537	55.51 ug/kg	83
52) trichloroethene	10.134	95	142256	54.40 ug/kg	85
53) 1,2-dichloropropane	10.422	63	137368	51.97 ug/kg	100
54) dibromomethane	10.532	93	95112	50.40 ug/kg	91
55) bromodichloromethane	10.675	83	173431	52.46 ug/kg	98
56) Methylcyclohexane	10.435	83	208161	60.60 ug/kg	89
57) 2-chloroethyl vinyl ether	10.896	63	69345	50.31 ug/kg	100
58) methyl methacrylate	10.355	69	78880	49.09 ug/kg	93
59) 1,4-dioxane	10.491	88	7378m	274.81 ug/kg	
60) cis-1,3-dichloropropene	11.131	75	183604	49.05 ug/kg	88
62) 4-methyl-2-pentanone	11.221	43	140005	47.75 ug/kg	84
63) toluene	11.529	92	306046	54.03 ug/kg	98
64) trans-1,3-dichloropropene	11.716	75	160536	47.27 ug/kg	92
65) 1,1,2-trichloroethane	11.955	83	94105	52.12 ug/kg	96
66) ethyl methacrylate	11.690	69	148790	54.02 ug/kg	90
68) tetrachloroethene	12.114	166	116679	57.23 ug/kg	94
69) 1,3-dichloropropane	12.148	76	183477	55.20 ug/kg	95
70) dibromochloromethane	12.419	129	127605	48.55 ug/kg	98
71) 1,2-dibromoethane	12.592	107	119974	55.42 ug/kg	90
72) 2-hexanone	12.112	43	131664	57.54 ug/kg	87
73) chlorobenzene	13.107	112	352080	55.00 ug/kg	93
74) 1,1,1,2-tetrachloroethane	13.178	131	137969	55.41 ug/kg	98
75) ethylbenzene	13.169	91	606294	57.21 ug/kg	90
76) m,p-xylene	13.301	106	430145	117.80 ug/kg#	74
77) o-xylene	13.746	106	218476	57.50 ug/kg#	69
78) styrene	13.760	104	361697	58.52 ug/kg	88
79) bromoform	14.027	173	73574	51.87 ug/kg	90
81) trans-1,4-dichloro-2-b...	14.480	53	57917	49.28 ug/kg#	45
83) isopropylbenzene	14.134	105	591215	53.30 ug/kg	99
85) bromobenzene	14.573	156	148732	54.89 ug/kg	87
86) 1,1,2,2-tetrachloroethane	14.444	83	172470	51.30 ug/kg	98
87) 1,2,3-trichloropropane	14.550	75	152707	49.42 ug/kg#	3
88) n-propylbenzene	14.600	91	741905	52.70 ug/kg	94
89) 2-chlorotoluene	14.755	91	512346	52.94 ug/kg	90
90) 4-chlorotoluene	14.879	91	467789	53.05 ug/kg	92
91) 1,3,5-trimethylbenzene	14.775	105	534547	56.93 ug/kg	96
92) tert-butylbenzene	15.158	91	333969	54.95 ug/kg	82
93) 1,2,4-trimethylbenzene	15.215	105	540278	54.79 ug/kg	97
94) sec-butylbenzene	15.406	105	667127	54.54 ug/kg	100
95) 1,3-dichlorobenzene	15.602	146	292162	52.70 ug/kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:55:43 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.553	119	579314	55.66 ug/kg	95
97) 1,4-dichlorobenzene	15.710	146	296275	51.86 ug/kg	95
98) 1,2-dichlorobenzene	16.126	146	301203	53.22 ug/kg	99
99) n-butylbenzene	16.014	91	602485	54.67 ug/kg	93
100) 1,2-dibromo-3-chloropr...	16.979	75	38782	50.21 ug/kg#	71
101) 1,3,5-trichlorobenzene	17.186	180	201535	57.87 ug/kg	99
102) 1,2,4-trichlorobenzene	17.918	180	198335	55.70 ug/kg	93
103) hexachlorobutadiene	18.045	225	94526	55.82 ug/kg	100
104) naphthalene	18.268	128	586873	51.34 ug/kg	100
105) 1,2,3-trichlorobenzene	18.529	180	200905	57.91 ug/kg	97
106) 2-methylnaphthalene	19.748	142	206712	32.83 ug/kg	95
107) 1-methylnaphthalene	20.031	142	174847	33.61 ug/kg	98

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

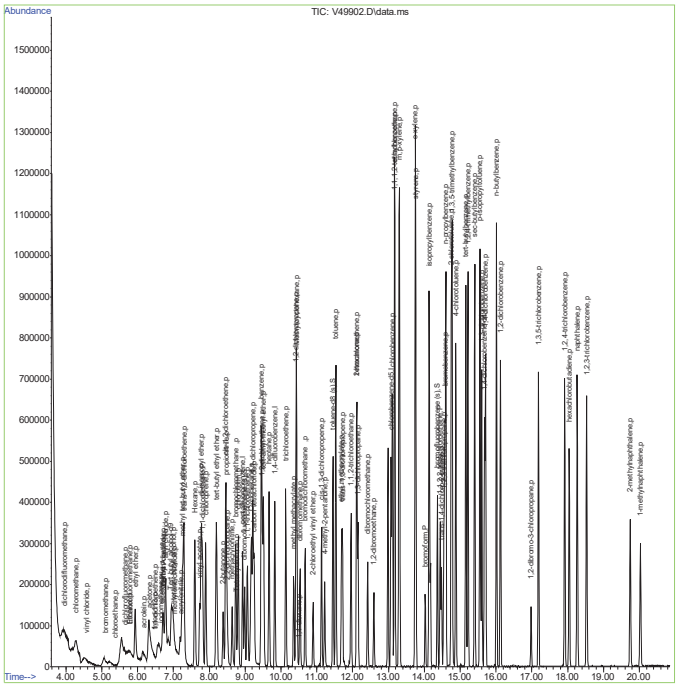
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:55:43 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21

7



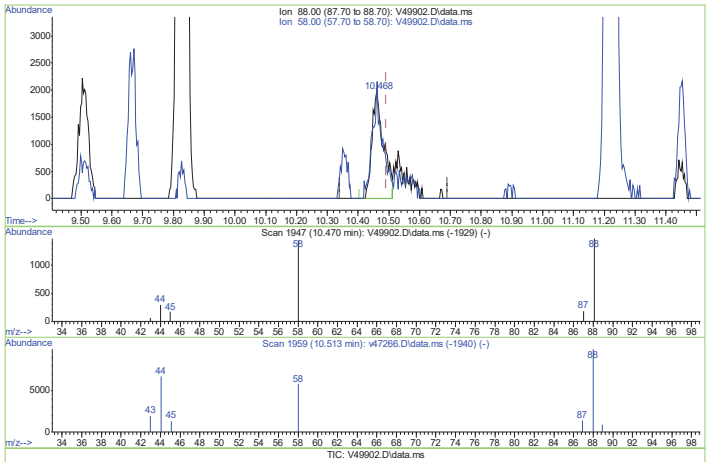
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.1

7



TIC: V49902.D\data.ms

(59) 1,4-dioxane (p)

10.468min (-0.024) 194.58 ug/kg

response	5224	
Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.80	98.11#
0.00	0.00	0.00
0.00	0.00	0.00

Cal Report: V49902.D

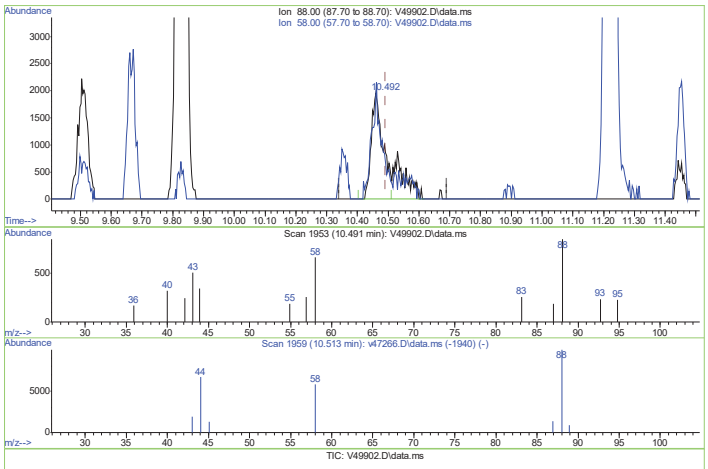
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.2

7



(59) 1,4-dioxane (p)
10.491min (-0.001) 274.81 ug/kg m
response 7378

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	8.00	78.33#
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:49:41 2016 Page: 1

V49902.D edits: 1,4-dioxane

Cal Report: V49902.D

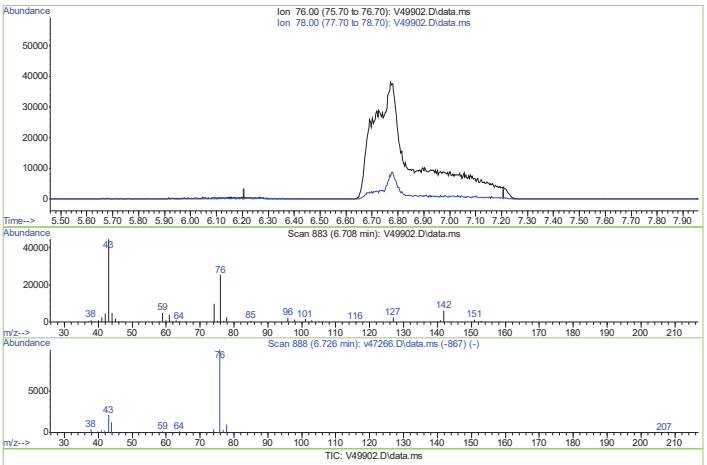
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.3

7



(25) carbon disulfide (p)
6.709min (-0.709) 0.00 ug/kg
response 0

Ion	Exp%	Act%
76.00	100.00	0.00
78.00	9.80	0.00
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:50:06 2016 Page: 1

V49902.D edits: carbon disulfide

Cal Report: V49902.D

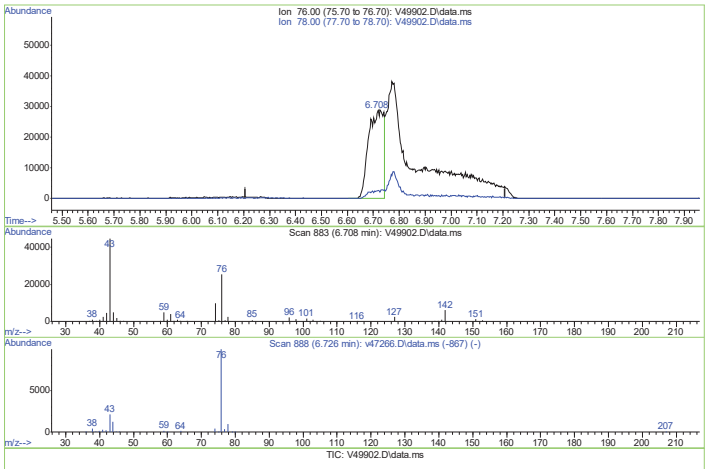
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.4

7



(25) carbon disulfide (p)
6.708min (-0.001) 50.76 ug/kg m
response 117461

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.00	9.28
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:50:58 2016 Page: 1

V49902.D edits: carbon disulfide

Cal Report: V49902.D

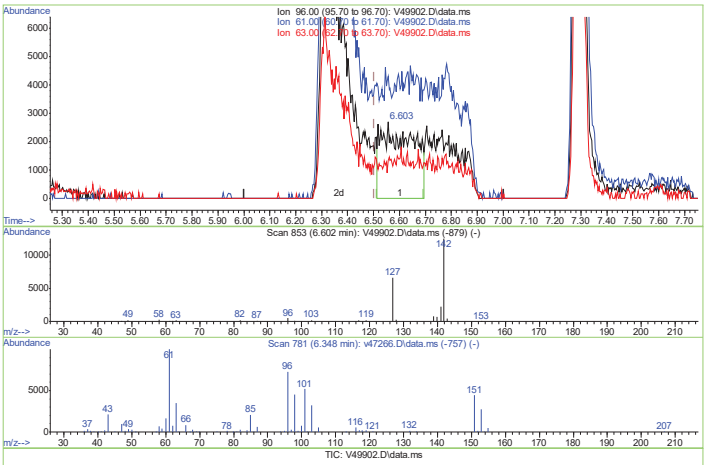
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.5

7



(16) 1,1-dichloroethene (p)
6.603min (+ 0.100) 11.63 ug/kg
response 22123

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	7.66#
63.00	57.50	34.38
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:51:31 2016 Page: 1

V49902.D edits: 1,1-dichloroethene

Cal Report: V49902.D

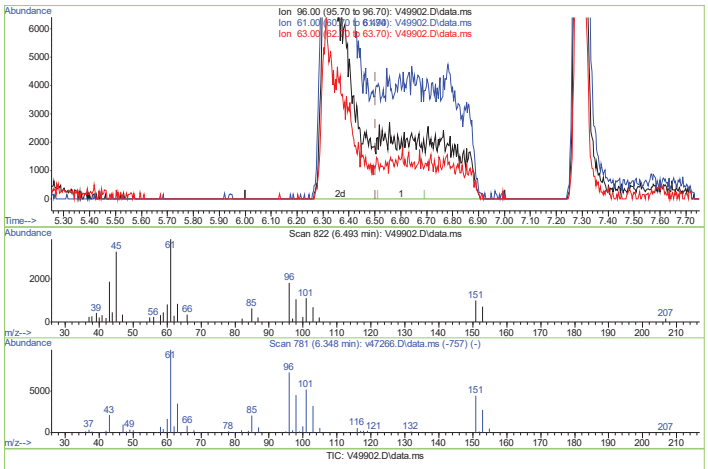
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.6

7



(16) 1,1-dichloroethene (p)

6.493min (-0.010) 51.97 ug/kg m

response 108761

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.00	210.19#
63.00	57.50	46.28
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:52:12 2016 Page: 1

V49902.D edits: 1,1-dichloroethene

Cal Report: V49902.D

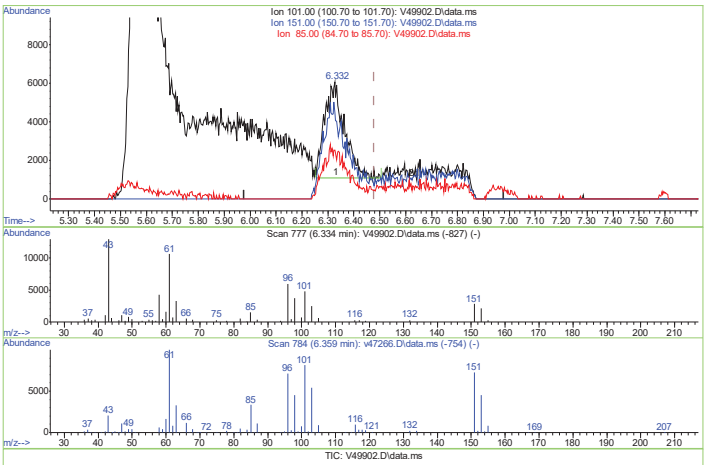
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.7

7



(14) freon-113 (p)

6.332min (-0.147) 16.50 ug/kg

response 26140

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	64.53
85.00	41.30	30.79
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:52:17 2016 Page: 1

V49902.D edits: freon-113

Cal Report: V49902.D

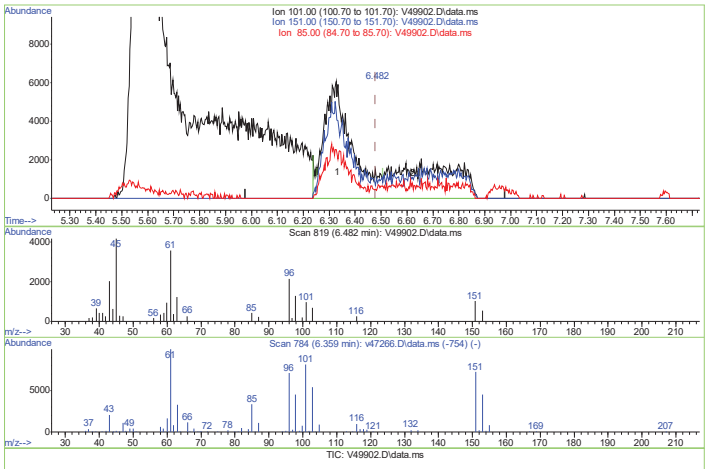
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.8

7



(14) freon-113 (p)

6.482min (+ 0.003) 46.61 ug/kg m

response 73828

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	105.88
85.00	41.30	43.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:52:42 2016 Page: 1

V49902.D edits: freon-113

Cal Report: V49902.D

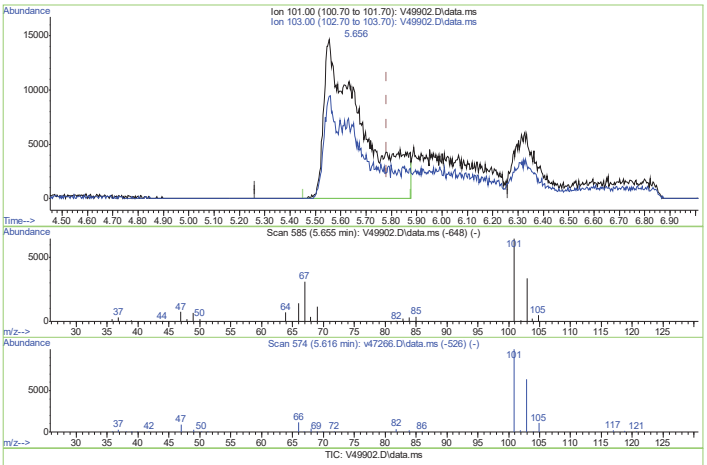
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.9

7



(13) trichlorofluoromethane (p)

5.656min (-0.126) 34.98 ug/kg

response 151139

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	58.84
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:52:58 2016 Page: 1

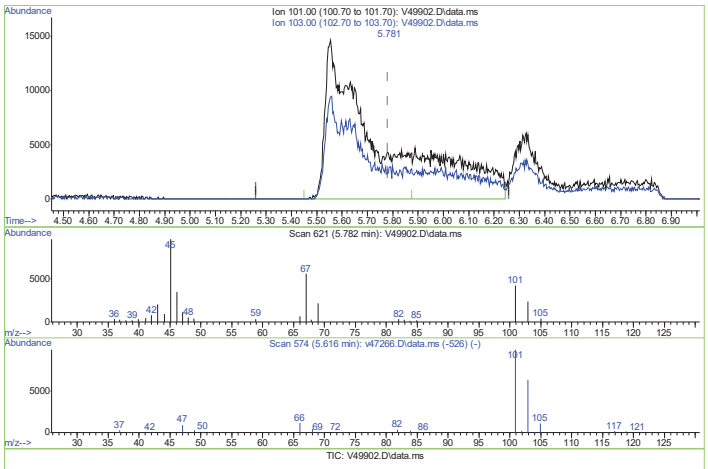
V49902.D edits: trichlorofluoromethane

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.10



(13) trichlorofluoromethane (p)
5.782min (+ 0.000) 50.84 ug/kg m
response 222363

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	56.62
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:53:25 2016 Page: 1

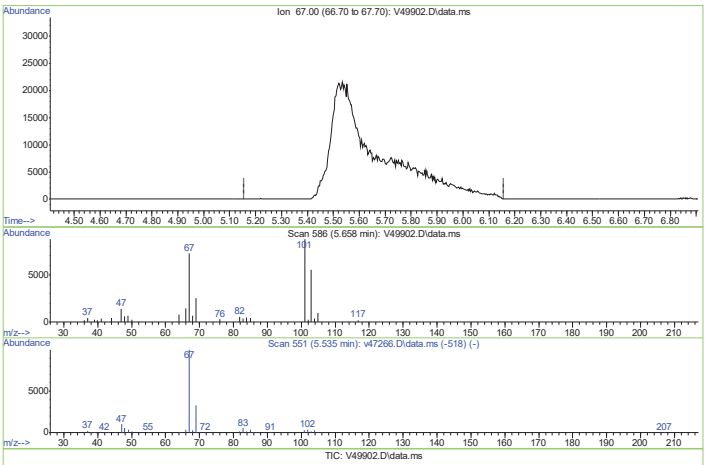
V49902.D edits: trichlorofluoromethane

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.11



(10) dichlorofluoromethane (p)
5.658min (-5.658) 0.00 ug/kg
response 0

Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:53:39 2016 Page: 1

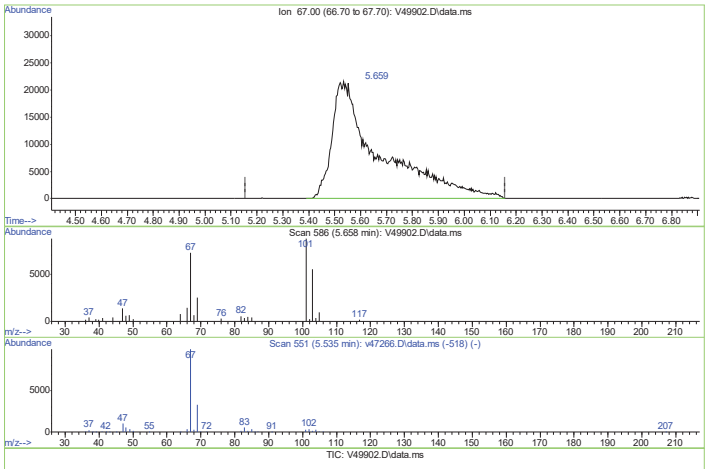
V49902.D edits: dichlorofluoromethane

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.12



(10) dichlorofluoromethane (p)
5.658min (+ 0.000) 55.88 ug/kg m
response 276309

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:54:01 2016 Page: 1

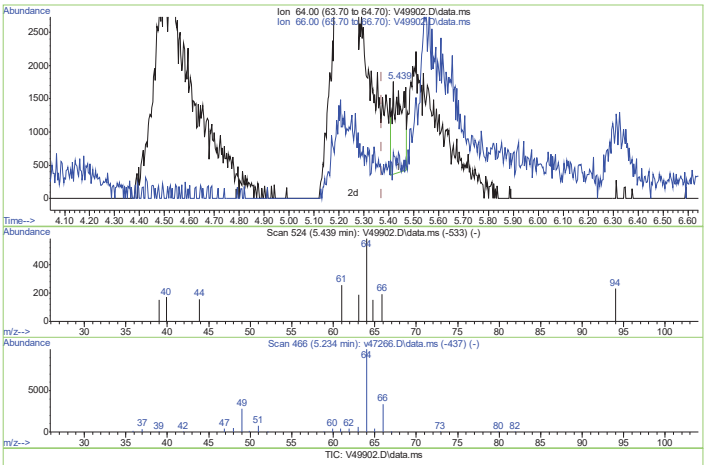
V49902.D edits: dichlorofluoromethane

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.13



(9) chloroethane (p)
5.439min (+ 0.067) 2.48 ug/kg
response 3771

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	32.99
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 18:54:24 2016 Page: 1

V49902.D edits: chloroethane

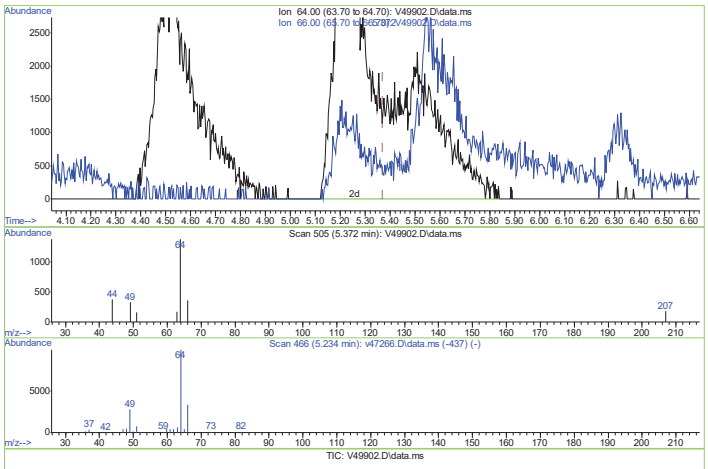
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.14

7



(9) chloroethane (p)

5.372min (+ 0.000) 41.36 ug/kg m

response 62812

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	26.33
0.00	0.00	0.00
0.00	0.00	0.00

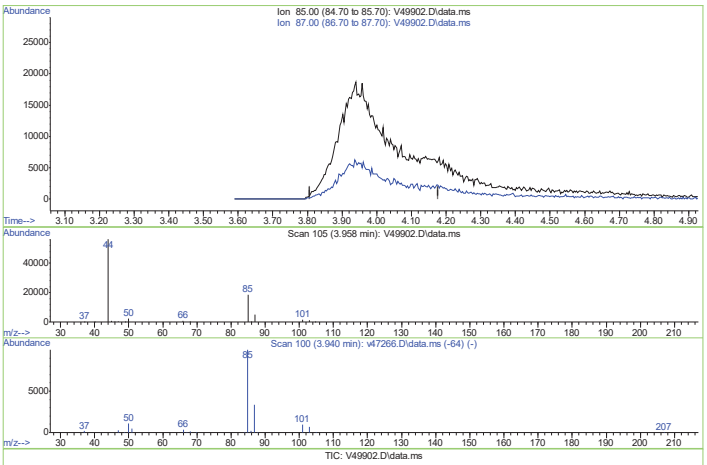
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.15

7



(5) dichlorodifluoromethane (p)

3.958min (-3.958) 0.00 ug/kg

response 0

Ion	Exp%	Act%
85.00	100.00	0.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

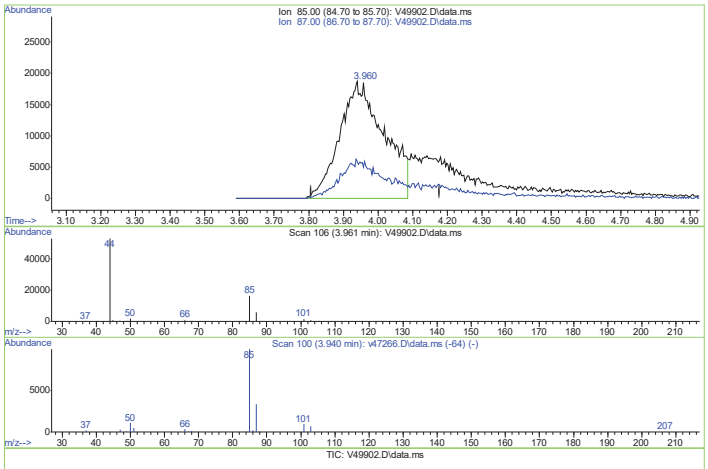
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : V49902.D
Acq On : 19 Sep 2016 6:55 pm
Operator : carab
Sample : icv1837-50
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 18:47:51 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.21.16

7



(5) dichlorodifluoromethane (p)

3.961min (+ 0.003) 61.62 ug/kg m

response 166102

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	35.91
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Russell Sloboda
09/21/16 21:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:32:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert butyl alcohol-d9	6.932	65	118695	500.00 ug/kg	# 0.02
4) pentafluorobenzene	8.929	168	176945	50.00 ug/kg	0.00
44) 1,4-difluorobenzene	9.826	114	318160	50.00 ug/kg	0.00
67) chlorobenzene-d5	13.069	82	159933	50.00 ug/kg	# 0.00
82) 1,4-dichlorobenzene-d4	15.679	152	149824	50.00 ug/kg	0.00
System Monitoring Compounds					
41) dibromofluoromethane (s)	8.985	113	117653	46.28 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.56%	
61) toluene-d8 (s)	11.449	98	352939	48.73 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.46%	
84) bromofluorobenzene (s)	14.364	95	157273	49.50 ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.00%	
Target Compounds					Qvalue
2) tertiary butyl alcohol	7.011	59	167861	501.68 ug/kg#	42
3) Ethanol	5.767	45	72781	4521.65 ug/kg	92
5) dichlorodifluoromethane	3.972	85	122879m	43.22 ug/kg	
6) chloromethane	4.280	50	79728	46.03 ug/kg	91
7) vinyl chloride	4.564	62	107822	44.12 ug/kg	95
8) bromomethane	5.098	96	48046	40.69 ug/kg	92
9) chloroethane	5.372	64	62223m	38.84 ug/kg	
10) dichlorofluoromethane	5.655	67	256070m	49.10 ug/kg	
11) ethyl ether	5.936	59	108606	48.05 ug/kg	94
12) acetonitrile	6.690	41	9899	43.67 ug/kg	74
13) trichlorofluoromethane	5.786	101	217235m	47.18 ug/kg	
14) freon-113	6.493	101	72808m	43.57 ug/kg	
15) acrolein	6.174	56	62765	237.75 ug/kg	100
16) 1,1-dichloroethene	6.496	96	105867m	48.06 ug/kg	
17) acetone	6.343	58	32274	48.12 ug/kg#	77
18) Methyl Acetate	6.714	43	88984	41.51 ug/kg#	83
19) methylene chloride	7.034	84	137977	50.03 ug/kg	88
20) methyl tert butyl ether	7.258	73	368416	49.81 ug/kg	98
21) acrylonitrile	7.204	53	62070	43.28 ug/kg	66
22) allyl chloride	6.783	41	138445	45.03 ug/kg	69
23) trans-1,2-dichloroethene	7.295	96	118619	49.55 ug/kg#	82
24) iodomethane	6.650	142	195774	56.46 ug/kg	94
25) carbon disulfide	6.708	76	122685m	50.26 ug/kg	
26) propionitrile	8.465	54	23797	42.00 ug/kg	100
27) vinyl acetate	7.733	86	18166	53.40 ug/kg#	1
28) chloroprene	7.898	53	240489	49.11 ug/kg	86
29) di-isopropyl ether	7.775	45	414475	47.50 ug/kg	93
30) methacrylonitrile	8.637	41	76679	43.10 ug/kg	84
31) 2-butanone	8.392	72	23412	54.65 ug/kg#	69
32) Hexane	7.595	41	114586	47.28 ug/kg	84
33) 1,1-dichloroethane	7.810	63	249048	48.57 ug/kg	99
34) tert-butyl ethyl ether	8.199	59	453119	49.98 ug/kg	90
36) 2,2-dichloropropane	8.494	77	135063	45.58 ug/kg	97
37) cis-1,2-dichloroethene	8.456	96	145342	51.37 ug/kg	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:32:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) bromochloromethane	8.736	128	69658	49.51 ug/kg#	83
40) chloroform	8.805	83	255046	49.91 ug/kg	100
42) Tetrahydrofuran	8.757	42	41761	41.32 ug/kg	98
43) 1,1,1-trichloroethane	9.062	97	199218	48.20 ug/kg	99
45) Cyclohexane	9.171	56	199455	43.99 ug/kg	86
46) carbon tetrachloride	9.248	117	191584	51.15 ug/kg	93
47) 1,1-dichloropropene	9.212	75	175141	51.67 ug/kg	85
48) benzene	9.449	78	457054	52.53 ug/kg	95
49) 1,2-dichloroethane	9.472	62	237834	49.74 ug/kg	98
50) tert-amyl methyl ether	9.507	73	352935	50.96 ug/kg	98
51) heptane	9.665	43	167773	49.89 ug/kg	82
52) trichloroethene	10.133	95	146778	53.38 ug/kg	87
53) 1,2-dichloropropane	10.420	63	144907	52.13 ug/kg	97
54) dibromomethane	10.530	93	98765	49.78 ug/kg	90
55) bromodichloromethane	10.673	83	186118	53.55 ug/kg	97
56) Methylcyclohexane	10.433	83	190245	52.68 ug/kg	89
57) 2-chloroethyl vinyl ether	10.894	63	71505	49.34 ug/kg#	100
58) methyl methacrylate	10.351	69	82561	48.87 ug/kg	96
59) 1,4-dioxane	10.491	88	6744	238.90 ug/kg#	1
60) cis-1,3-dichloropropene	11.129	75	199871	50.76 ug/kg	89
62) 4-methyl-2-pentanone	11.219	43	140389	45.54 ug/kg	83
63) toluene	11.527	92	309761	52.01 ug/kg	99
64) trans-1,3-dichloropropene	11.713	75	183360	51.26 ug/kg	93
65) 1,1,2-trichloroethane	11.953	83	98301	51.77 ug/kg	90
66) ethyl methacrylate	11.688	69	153272	52.93 ug/kg	88
68) tetrachloroethene	12.112	166	124301	57.94 ug/kg	98
69) 1,3-dichloropropane	12.146	76	181604	51.93 ug/kg	97
70) dibromochloromethane	12.417	129	137291	49.61 ug/kg	90
71) 1,2-dibromoethane	12.590	107	123508	54.22 ug/kg	87
72) 2-hexanone	12.110	43	122443	50.86 ug/kg	86
73) chlorobenzene	13.105	112	369086	54.79 ug/kg	93
74) 1,1,1,2-tetrachloroethane	13.176	131	143231	54.67 ug/kg	96
75) ethylbenzene	13.167	91	628017	56.32 ug/kg	89
76) m,p-xylene	13.299	106	445301	115.90 ug/kg#	68
77) o-xylene	13.745	106	227308	56.86 ug/kg#	71
78) styrene	13.758	104	376907	57.96 ug/kg	89
79) bromoform	14.025	173	78372	52.47 ug/kg	88
81) trans-1,4-dichloro-2-b...	14.478	53	61312	49.58 ug/kg#	44
83) isopropylbenzene	14.132	105	622107	54.14 ug/kg	100
85) bromobenzene	14.571	156	152621	54.38 ug/kg	88
86) 1,1,2,2-tetrachloroethane	14.442	83	172839	49.64 ug/kg	97
87) 1,2,3-trichloropropane	14.547	75	156268	48.82 ug/kg#	1
88) n-propylbenzene	14.598	91	805090	55.21 ug/kg	92
89) 2-chlorotoluene	14.753	91	547497	54.61 ug/kg	87
90) 4-chlorotoluene	14.877	91	495805	54.29 ug/kg	88
91) 1,3,5-trimethylbenzene	14.773	105	540365	55.56 ug/kg	98
92) tert-butylbenzene	15.156	91	349361	55.50 ug/kg	78
93) 1,2,4-trimethylbenzene	15.213	105	566419	55.46 ug/kg	97
94) sec-butylbenzene	15.404	105	711545	56.16 ug/kg	99
95) 1,3-dichlorobenzene	15.600	146	313510	54.60 ug/kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:32:57 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22

7

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
96) p-isopropyltoluene	15.551	119	605881	56.20 ug/kg	95
97) 1,4-dichlorobenzene	15.708	146	316943	53.56 ug/kg	93
98) 1,2-dichlorobenzene	16.124	146	314447	53.64 ug/kg	98
99) n-butylbenzene	16.012	91	644142	56.42 ug/kg	93
100) 1,2-dibromo-3-chloropr...	16.977	75	38161	47.69 ug/kg#	74
101) 1,3,5-trichlorobenzene	17.183	180	201258	55.79 ug/kg	100
102) 1,2,4-trichlorobenzene	17.916	180	211970	57.47 ug/kg	95
103) hexachlorobutadiene	18.043	225	97908	55.82 ug/kg	96
104) naphthalene	18.265	128	639877	54.04 ug/kg	100
105) 1,2,3-trichlorobenzene	18.527	180	207041	57.61 ug/kg	98
106) 2-methylnaphthalene	19.746	142	190488	29.00 ug/kg	95
107) 1-methylnaphthalene	20.028	142	160753	29.42 ug/kg	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V160920\
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Acq On : 20 Sep 2016 12:32 pm
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Quant Time: Sep 21 19:32:57 2016
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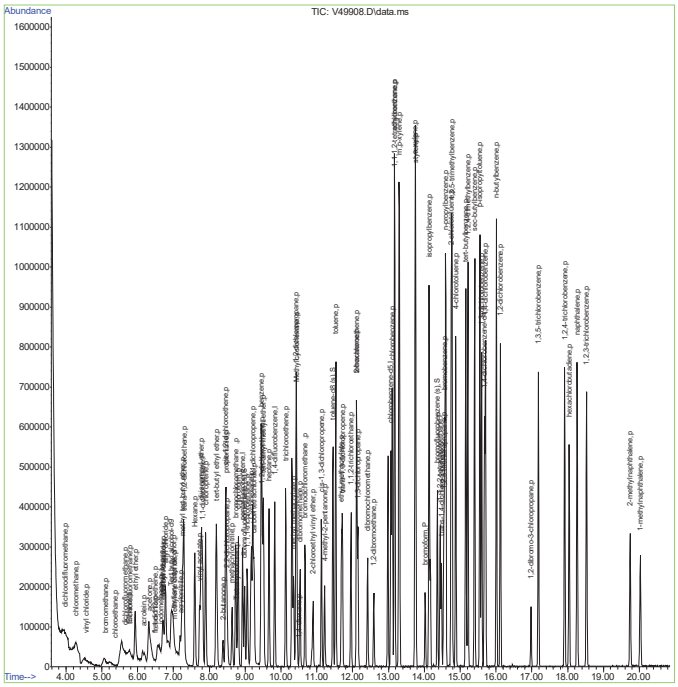
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22

7



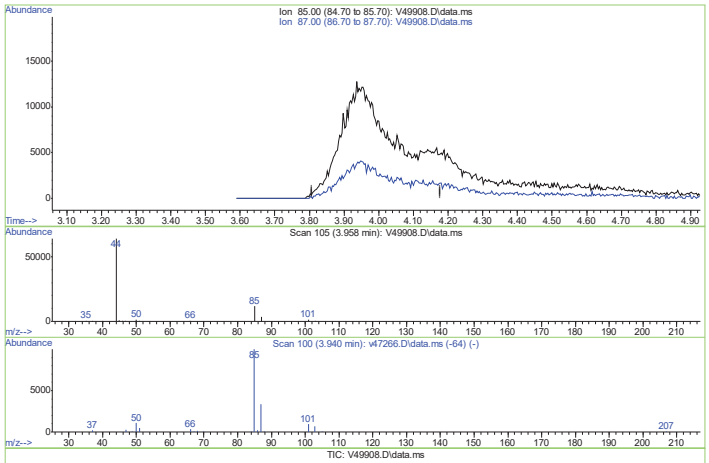
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.1

7



(5) dichlorodifluoromethane (p)

3.958min (-3.958) 0.00 ug/kg

response 0

Ion	Exp%	Act%
85.00	100.00	0.00
87.00	34.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

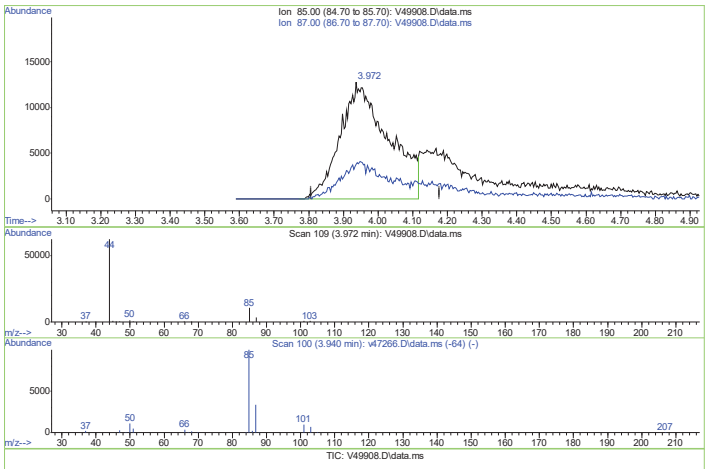
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.2

7



(5) dichlorodifluoromethane (p)

3.972min (+ 0.014) 43.22 ug/kg m

response 122879

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	34.40	31.84
0.00	0.00	0.00
0.00	0.00	0.00

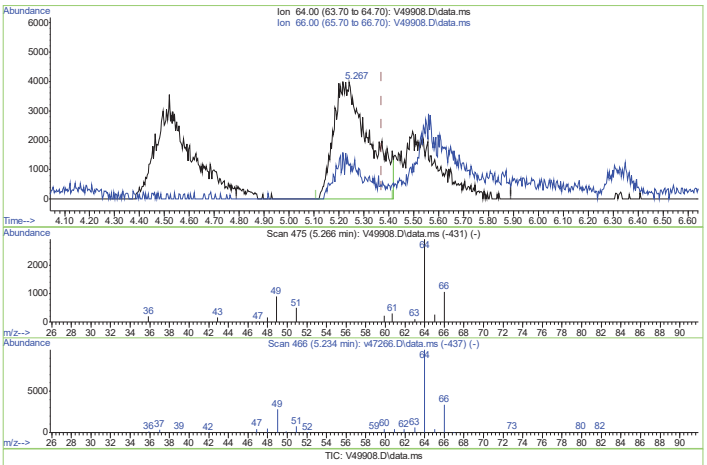
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.3

7



(9) chloroethane (p)

5.267min (-0.105) 24.40 ug/kg

response 39898

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.00	36.44
0.00	0.00	0.00
0.00	0.00	0.00

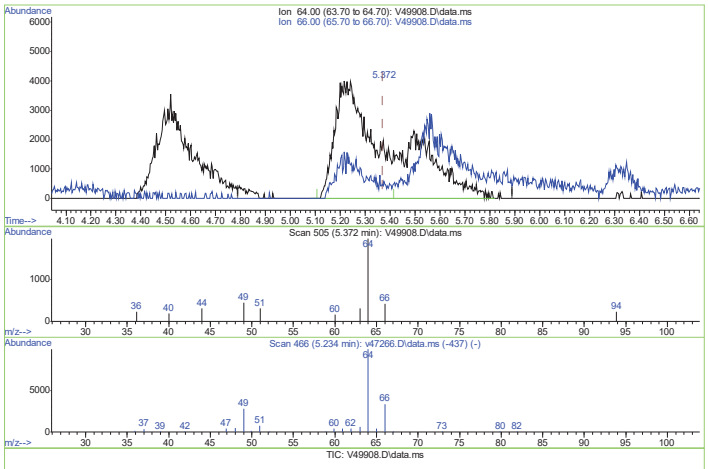
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.4

7



(9) chloroethane (p)

5.372min (+ 0.000) 38.84 ug/kg m

response 62223

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.00	21.43
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
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Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
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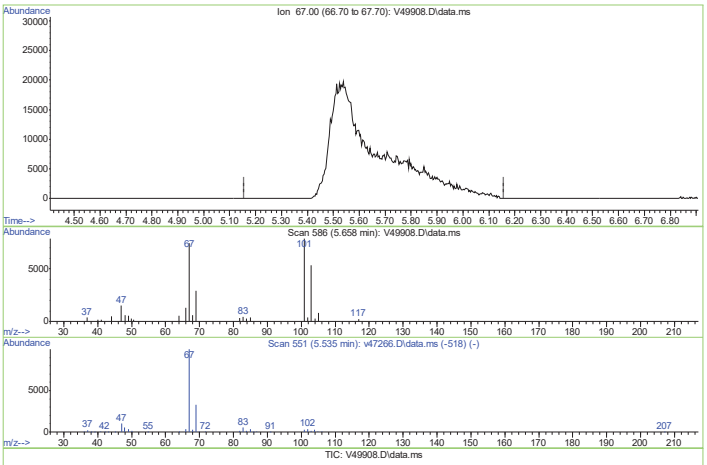
7.6.22.5

7



(10) dichlorofluoromethane (p)

5.658min (-5.658) 0.00 ug/kg

response 0

Ion	Exp%	Act%
67.00	100.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

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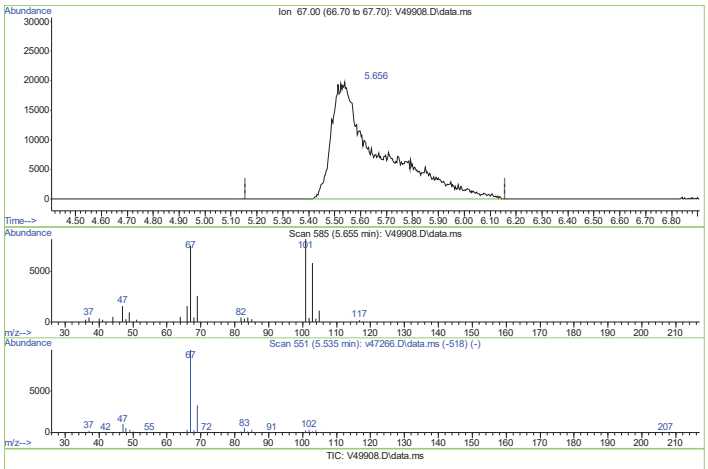
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.6

7



(10) dichlorofluoromethane (p)
5.655min (-0.003) 49.10 ug/kg m
response 256070

Ion	Exp%	Act%
67.00	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
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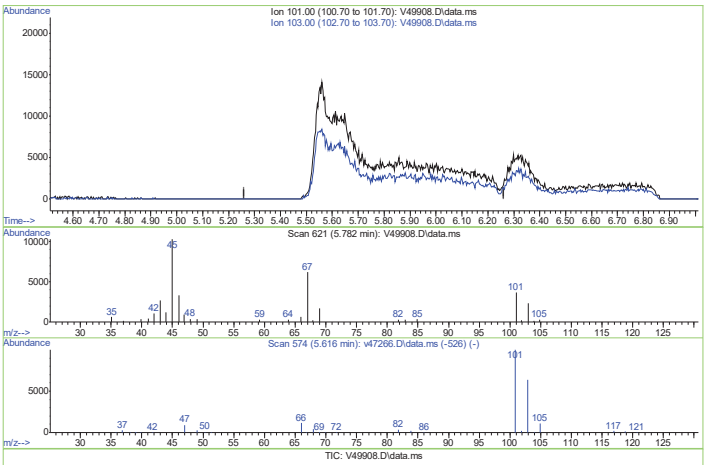
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.7

7



(13) trichlorofluoromethane (p)
5.782min (-5.782) 0.00 ug/kg
response 0

Ion	Exp%	Act%
101.00	100.00	0.00
103.00	68.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

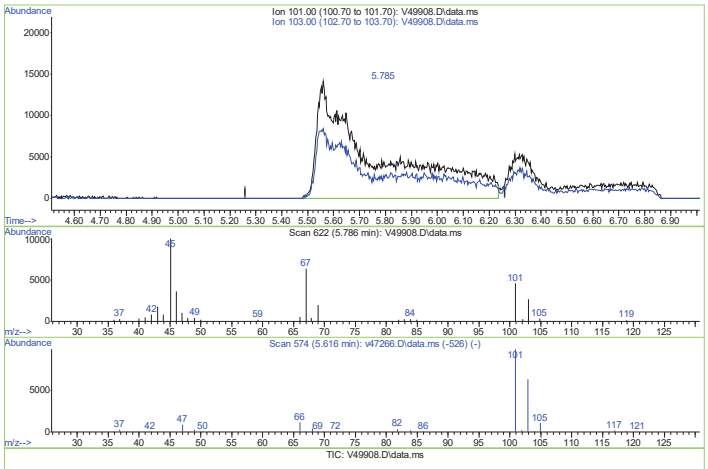
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.8

7



(13) trichlorofluoromethane (p)
5.786min (+ 0.004) 47.18 ug/kg m
response 217235

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	58.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
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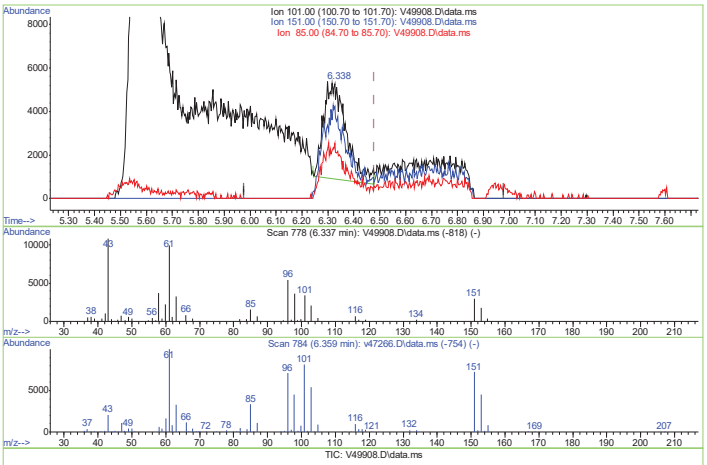
7.6.22.9

7



(14) freon-113 (p)
6.338min (-0.141) 16.27 ug/kg
response 27193

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	98.00
85.00	41.30	56.33
0.00	0.00	0.00

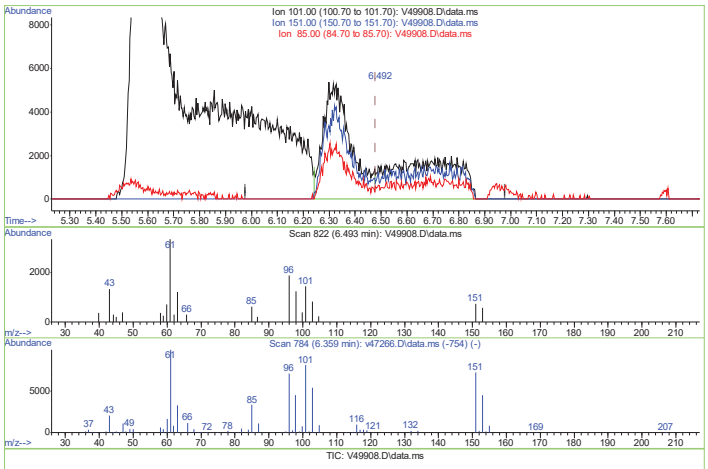
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.10

7



(14) freon-113 (p)

6.493min (+ 0.014) 43.57 ug/kg m

response 72898

Ion	Exp%	Act%
101.00	100.00	100.00
151.00	89.20	51.06#
85.00	41.30	43.45
0.00	0.00	0.00

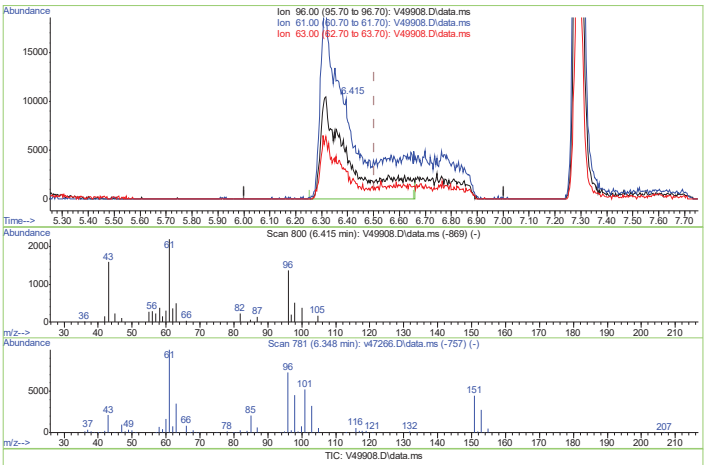
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.11

7



(16) 1,1-dichloroethene (p)

6.415min (-0.088) 37.27 ug/kg

response 81404

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	201.33#
63.00	57.50	55.31
0.00	0.00	0.00

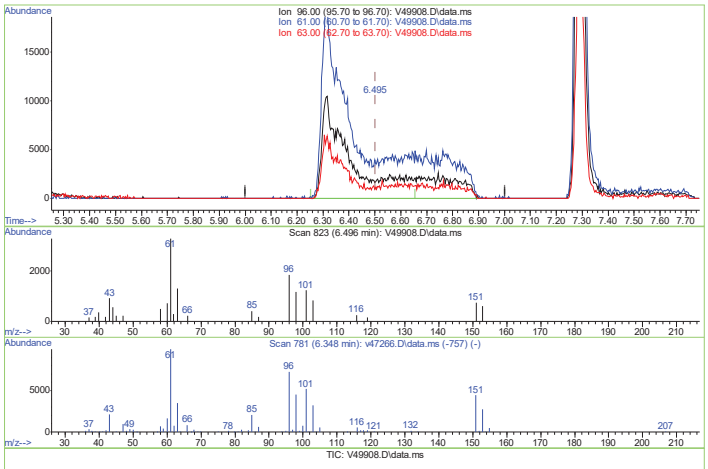
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.12

7



(16) 1,1-dichloroethene (p)

6.496min (-0.007) 48.06 ug/kg m

response 105867

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	177.40
63.00	57.50	70.83
0.00	0.00	0.00

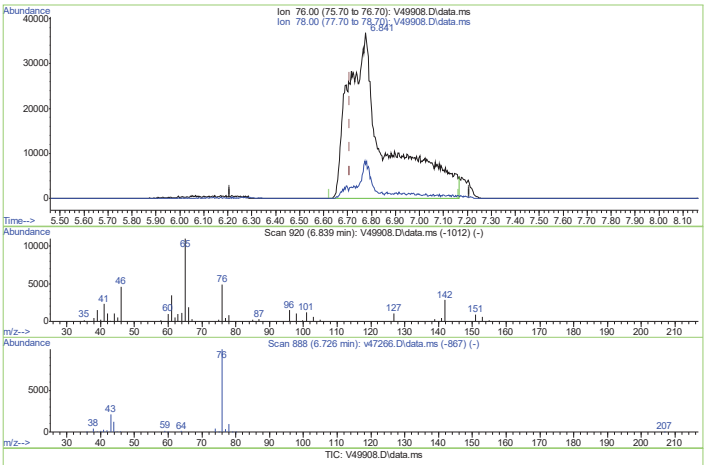
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.13

7



(25) carbon disulfide (p)

6.841min (+ 0.132) 165.58 ug/kg

response 404191

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.80	13.79
0.00	0.00	0.00
0.00	0.00	0.00

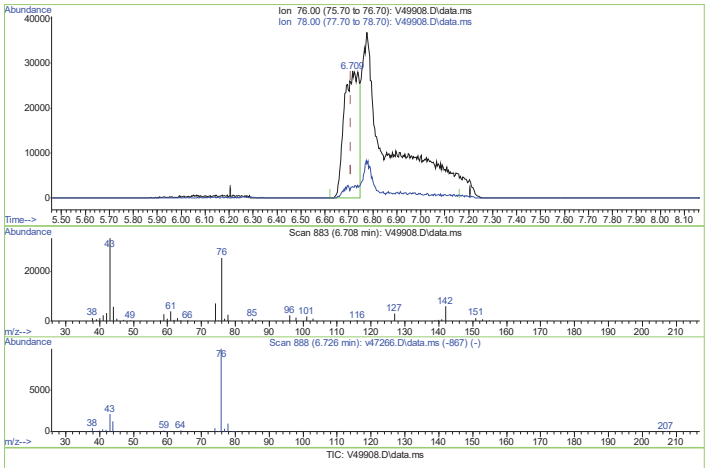
Cal Report: V49908.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49908.D
Acq On : 20 Sep 2016 12:32 pm
Operator : kaylap
Sample : cc1837-50
Misc : MS37325,MSV1838,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 21 19:29:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:59:01 2016
Response via : Initial Calibration

7.6.22.14 7



(25) carbon disulfide (p)

6.708min (-0.001) 50.26 ug/kg m

response 122685

Ion	Exp%	Act%
76.00	100.00	100.00
78.00	9.80	9.70
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Wed Sep 21 19:33:05 2016 Page: 1

SGS Accutest - Marlborough

Instrument: GCMS M

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot Number	Description	Conc.
MS10883	8260 cc	5.00ug/mL
↓	cl2c2	↓
MS10884	BS	
↓	BS gas	↓
MS10810	IS/SS	25ug/mL
	1:1 HCL	0.4mL

Daily Saved File

Tune file 1:	M80511
Tune file 2:	NA
Initial Cal:	8/24/16
ID File:	M160824S.M
ICAL Verified:	VR
Sequence loaded Initials:	VR
Sequence verified Initials:	VR
pH paper LOT #	NA Exp NA

Date: 8/24/16
Batch ID: MSM2881
Analysts VR
Signature: NCF

*Note: If sample matrix is soil – method SW846 5035A used for preparation. SW846 5030 in purge and trap method for soil and water

Matrix: Circle One: W for water, S for soil, O for oil.

7.7.1 7

Data File	Sample ID	Bot #	Work Group	Test	ALS #	Sample Amount	Dil. Factor	pH	Data Process Initials	Comments
M80509	blank	NA	NA	8260	1	5.00	NA	NA	VR	
510	↓			Calibrat.	2					
511	IC2881-0.5				3					(bfb) //
512	-2				4					//
513	-5				5					//
514	-10				6					//
515	-20				7					//
516	-50				8					ICC //
517	-100				9					//
518	-200				10					//
519	-400				11					//
520	blank				12					
521	↓				13					
522	IC2881-50				14					// (85)
523	blank				15					
524	↓	↓	↓	↓	16	↓	↓	↓	↓	(mb) //
525	MS47415-1	2	MS57218	BTX	17	5.698				//
526	-3	3			18	7.124				//
527	-4				19	6.46				//
528	-5	↓			20	6.385				//
529	-8	2		↓	21	5.819				//
530	-4MS	4		8260	22	5.005				//
531	-4MSD	↓			23	5.028				// RR ↓ISTD
532	blank	NA			24	5.00				
533	↓	↓	↓	↓	25	↓	↓	↓	↓	

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-09 Date: 04/14/16

Review: _____

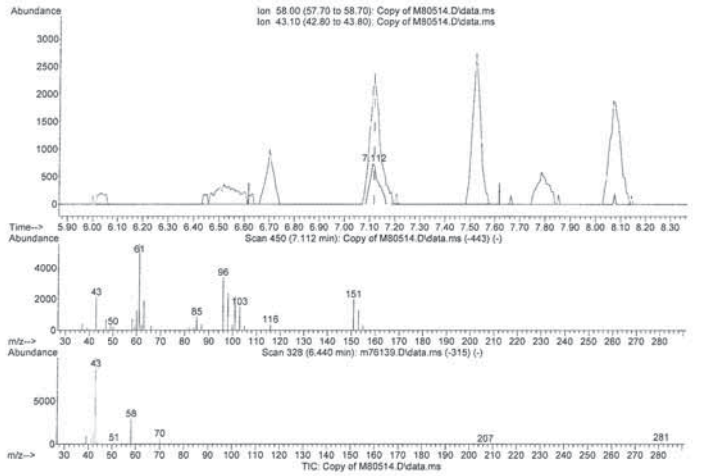
17

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : Copy of M80514.D
Acq On : 24 Aug 2016 10:34 am
Operator : kaylap
Sample : ic2881-10
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 24 13:25:02 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:24:27 2016
Response via : Initial Calibration

7.7.1 7



(16) acetone (P)

7.112min (-0.006) 9.30 ug/kg

response 1775

Ion	Exp%	Act%
58.00	100.00	100.00
43.10	344.20	287.13#
0.00	0.00	0.00
0.00	0.00	0.00

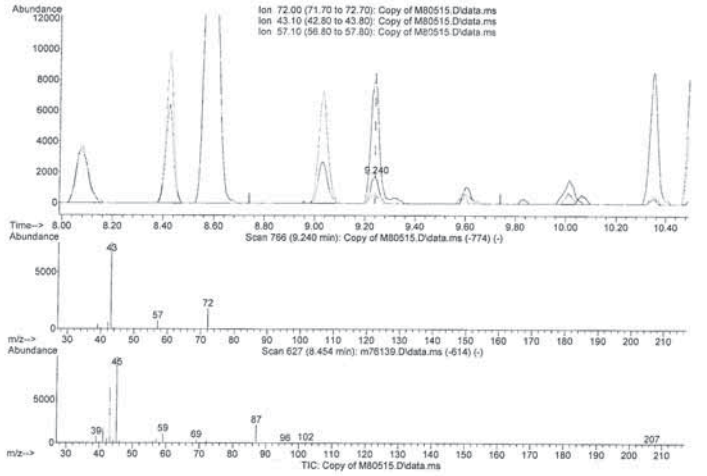
M160824S.M Wed Aug 24 13:25:20 2016 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : Copy of M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 14:19:28 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration

7.7.1 7



(30) 2-butanone (P)

9.240min (+ 0.000) 14.04 ug/kg

response 4013

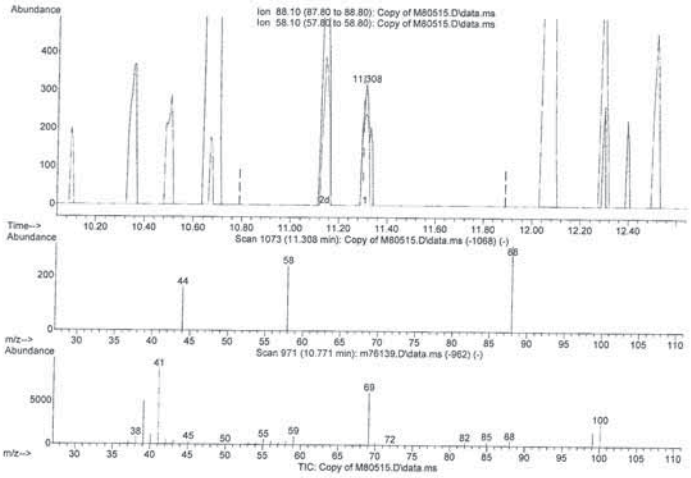
Ion	Exp%	Act%
72.00	100.00	100.00
43.10	2108.70	436.94#
57.10	129.30	40.16#
0.00	0.00	0.00

M160824S.M Wed Aug 24 14:19:49 2016 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160824\
Data File : Copy of M80515.D
Acq On : 24 Aug 2016 11:02 am
Operator : kaylap
Sample : ic2881-20
Misc : MS37188,MSM2881,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 24 13:25:46 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: propionitrile=10, acetonitrile=20
QLast Update : Wed Aug 24 13:24:27 2016
Response via : Initial Calibration



(58) 1,4-dioxane (P)

11.308min (+ 0.007) 91.97 ug/kg

response 641

Ion	Exp%	Act%
88.10	100.00	100.00
58.10	88.10	75.47
0.00	0.00	0.00
0.00	0.00	0.00

M160824S.M Wed Aug 24 13:28:01 2016

Page: 1

7.7.1

7

8/24/16
MSM2881

Methanol Prep Log

ACCUTEST

Vial #:	Sample ID:	Initial Tare Wt (g)	Total Wt (g)	Sample Wt (g)
	MC47415-1.2	34.61	40.308	5.698
	MC47415-3.3	34.67	41.994	7.324
	MC47415-4.3	35.19	41.650	6.46
	MC47415-5.2	34.77	41.155	6.385
	MC47415-8.3	34.82	40.139	5.319

Comments:

Analyst: KP Date: 8/24/16

Page 1 of 1

7.7.1

7

SGS Accutest - Marlborough

Instrument: GCMS M

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot Number	Description	Conc.
M610953	8260 cc	5.0µg/ml
↓	cc gas	↓
M610981	BS	
↓	BS gas	↓
M610920	IS/SS	250µg/ml
	1:1 HCL	0.4ml

Daily Saved File

Tune file 1:	M80812
Tune file 2:	NA
Initial Cal:	8/24/16
ID File:	M160824S.M
ICAL Verified:	KP
Sequence loaded Initials:	KP
Sequence verified Initials:	CG
pH paper LOT # N/A	Exp: N/A

Date: 9/16/16

Batch ID: MSM2895

Analysts KP

Signature:

*Note: If sample matrix is soil – method SW846 5035A used for preparation. SW846 5030 is purge and trap method for soil and water

Matrix: Circle One: W for water, S for soil, O for oil.

Data File	Sample ID	Bot #	Work Group	Test	ALS #	Sample Amount	Dil. Factor	pH	Data Process Initials	Comments
M80810	blank	NA	NA	8260	1	5.00	NA	NA	KP	
811	↓	↓	↓	↓	2	↓	↓	↓	↓	
812	↓				3					(bfb)
813	CC2881-50				4					✓✓
814	BS				5					✓✓
815	blank				6					
816	mb				7					✓✓
817	RIV-2	↓	↓	↓	8	↓			↓	✓
818	MC47792-1	3	M637330	RCP	9	5.97			CG	✓✓ RR↑ SURR/↓ISTD
819	-2				10	5.82				✓✓
820	MC47788-1			↓	11	6.90				✓✓
821	MC47734-1	↓		TCL+	12	5.70				✓✓ AR↓ ISTD CG
822	-2	14			13	5.80				✓✓ for GC cont RR
823	-3	4			14	4.92				✓✓ RR↓ ISTD
824	-4	↓			15	5.29				✓✓ RR↓ ISTD
825	-5	↓			16	5.48				✓✓
826	-6	3			17	5.02				✓✓ ↓ISTD RR
827	-7	4			18	4.99				✓✓ ↓ISTD RR
828	-8	↓		↓	19	5.42				✓✓ ~~RR matrix~~
829	MC47775-5	3		STAR	20	5.64				✓✓ RR↑ SURR/↓ISTD
830	-9	2			21	4.71				✓✓ ~~↓ISTD~~ CG
831	-10	↓			22	4.67				✓✓ RR↑ SURR/↓ISTD
832	-11	↓			23	5.96				✓✓ RR↑ SURR/↓ISTD
833	-1			↓	24	4.889				✓✓ ~~RR↑ ISTD~~ CG
834	MC47794-2MS			8260	25	4.72				✓✓ ↓ISTD RR
835	-2MSD				26	5.47			↓	✓✓ ↓ISTD RR
836	blank	NA			27	5.00				
837	↓	↓	↓	↓	28	↓	↓	↓		
838					29					

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-09 Date: 04/14/16

Review: RA 9/21/16

31

7.7.2

7

MSM2895

Methanol Prep Log

ACCUTEST

Vial #:	Sample ID:	Initial Tare Wt (g)	Total Wt (g)	Sample Wt (g)
	MC47774-1.3	34.68	40.380	5.70
	MC47774-2.14	~~34.67~~ 34.58	40.380	5.80
	MC47774-2.8	34.84	40.310	5.47
	MC47774-2.9	35.04	39.760	4.72
	MC47774-3.4	34.96	39.880	4.92
	MC47774-4.4	34.98	40.190	5.21
	MC47774-5.4	34.94	40.320	5.48
	MC47774-6.3	35.01	40.030	5.02
	MC47774-7.4	34.85	39.840	4.99
	MC47774-8.4	34.85	40.270	5.42
	MC47775-10.2	35.26	39.950	4.69
	MC47775-11.2	34.94	40.900	5.96
	MC47775-5.3	36.17	40.810	4.64
	MC47775-9.2	35.10	39.810	4.71
	MC47788-1.3	34.76	41.660	6.90
	MC47792-1.3	35.08	41.050	5.97

Comments:

Analyst: KP Date: 9/16/16

Page 1 of 1

7.7.2

7

MSM 2895

Methanol Prep Log

ACCUTEST

Vial #:	Sample ID:	Initial Tare Wt (g)	Total Wt (g)	Sample Wt (g)
34.91	MC47792-2-3	34.91	40.730	5.820

Comments:

Analyst: VP

Date: 9/16/16

Page 1 of 1

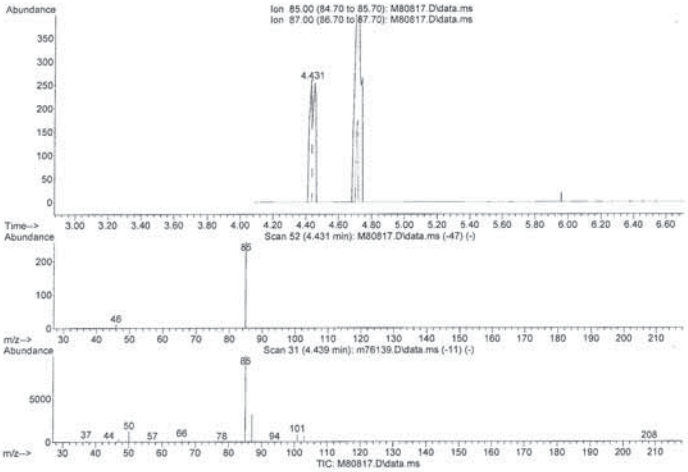
7.7.2

Instrument Run Log MSM2895 page 3 of 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M160916\
Data File : M80817.D
Acq On : 16 Sep 2016 1:32 pm
Operator : kaylap
Sample : rlv-2
Misc : MS37320,MSM2895,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 16 14:04:46 2016
Quant Method : C:\msdchem\1\methods\M160824S.M
Quant Title : SW846 Meth.8260: 2-butanone=20, no isobutyl alc + e.acetate
QLast Update : Wed Aug 24 14:03:08 2016
Response via : Initial Calibration



(5) dichlorodifluoromethane (P)

4.431min (-0.006) 0.80 ug/kg

response 604

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	31.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

M160824S.M Fri Sep 16 14:05:05 2016 Page: 1

7.7.2

Instrument Run Log MSM2895 page 4 of 4

SGS Accutest - Marlborough

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Instrument: GCMS V

Standards Data

Lot Number	Description	Conc. ppm
MSV-9946	8260 CC	5
MSV-9947	8260	5
MSV-9948	8260	5
MSV-9949	8260	5
MSV-9950	8260	2.5
	1:1 HCL	0.4ml

Daily Saved File

Tune file 1: V160910
Tune file 2: N/A
Initial Cal: 9/13/16
ID File: V160919.s.m
ICAL Verified: VP
Sequence loaded Initials: CB
Sequence verified Initials: VP
pH paper LOT # N/A Exp: N/A

Date: 9/19/16
Batch ID: MSV1837
Analysts: CB + VP
Signature:

Note: If sample matrix is soil- method SW846 5035A used for preparation. SW846 5030 is purge and trap Method for soil and water.

CIRCLE MATRIX: W S O (Water Soil Oil)

Data File	Sample ID	Bot #	Work Group	Test	ALS #	Sample Amount	Dil. Factor	pH	Data Process Errors	Headspace Free?	Comments
V49893	Blank	N/A	N/A	8260 SLL	1	5.00	N/A	N/A	VP	yes N/A no	
88				Curve	2					yes no	
89					3					yes no	
90	Blank				4					yes no	(pab)
91	ic1837-0.5				5					yes no	
92	-2				6					yes no	"
93	-5				7					yes no	"
94	-10				8					yes no	"
95	-20				9					yes no	"
96	ic1837-50				10					yes no	"
97	ic1837-100				11					yes no	"
98	-200				12					yes no	"
99	-400				13					yes no	"
900	Blank				14					yes no	
01	Blank				15					yes no	
02	ic1837-50				16					yes no	"
03	Blank				17					yes no	
04	Blank				18					yes no	

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-10 Date: 07/12/16

Review: AB 9/21/16

18

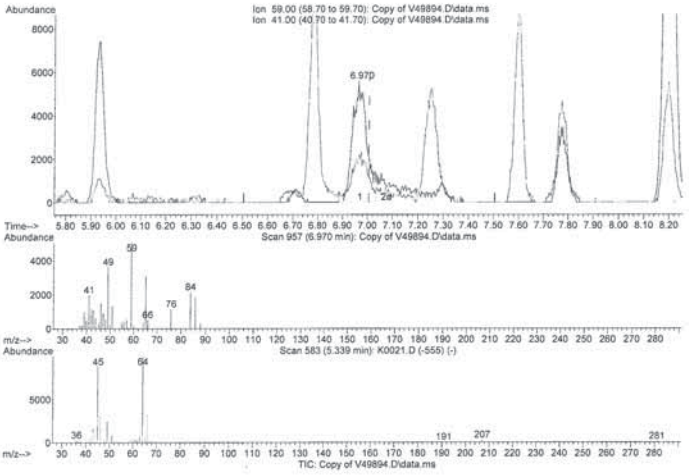
7.7.3

Instrument Run Log MSV1837 page 1 of 14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 11:00:05 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration



(2) tertiary butyl alcohol (p)

6.970min (-0.035) 76.03 ug/kg

response 21685

Ion	Exp%	Act%
59.00	100.00	100.00
41.00	94.00	45.05#
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 11:00:21 2016 Page: 1

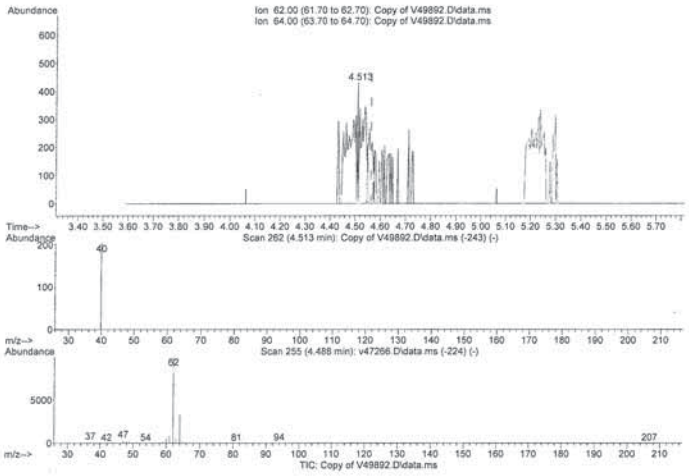
7.7.3

Instrument Run Log MSV1837 page 2 of 14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 10:47:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:42:54 2016
Response via : Initial Calibration



(7) vinyl chloride (p)

4.513min (-0.050) 1.84 ug/kg

response 1759

Ion	Exp%	Act%
62.00	100.00	100.00
64.00	30.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

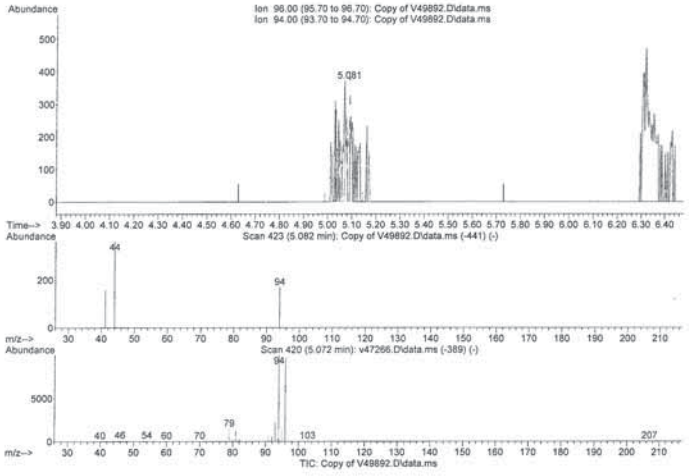
V160919S.M Tue Sep 20 10:47:25 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 10:47:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:42:54 2016
Response via : Initial Calibration



(8) bromomethane (p)

5.082min (-0.008) 2.03 ug/kg m

response 736

Ion	Exp%	Act%
96.00	100.00	100.00
94.00	100.90	17000.00#
0.00	0.00	0.00
0.00	0.00	0.00

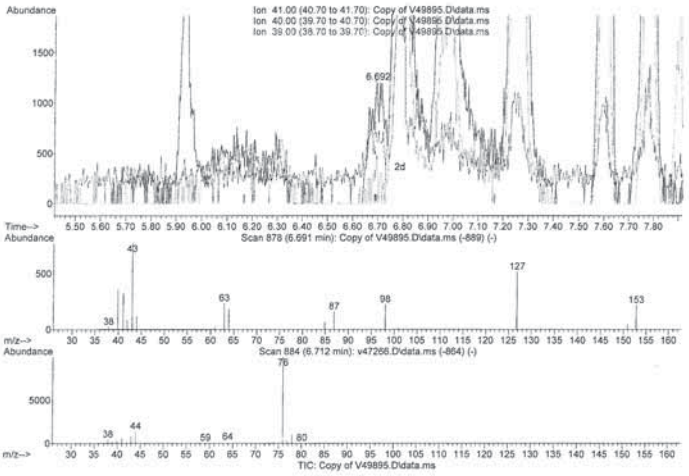
V160919S.M Tue Sep 20 10:47:37 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49895.D
Acq On : 19 Sep 2016 3:25 pm
Operator : carab
Sample : ic1837-20
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 11:00:39 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration



(12) acetonitrile (p)

6.692min (+ 0.005) 19.96 ug/kg

response 4473

Ion	Exp%	Act%
41.00	100.00	100.00
40.00	68.90	30.64#
39.00	51.50	24.78
0.00	0.00	0.00

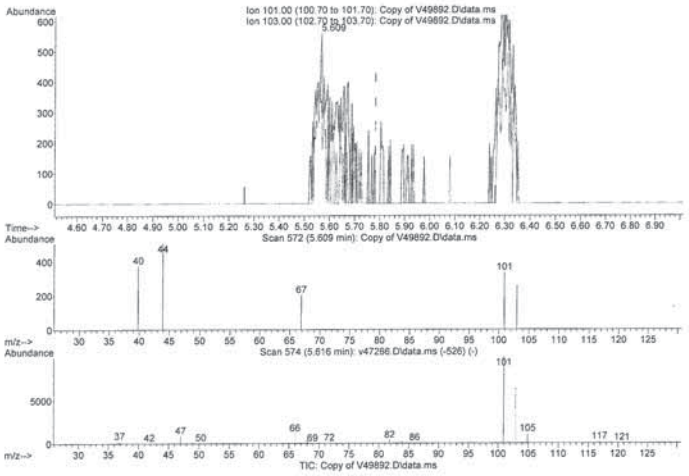
V160919S.M Tue Sep 20 11:00:49 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 10:47:01 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:42:54 2016
Response via : Initial Calibration



(13) trichlorofluoromethane (p)

5.609min (-0.173) 2.16 ug/kg m

response 3065

Ion	Exp%	Act%
101.00	100.00	100.00
103.00	68.00	76.42
0.00	0.00	0.00
0.00	0.00	0.00

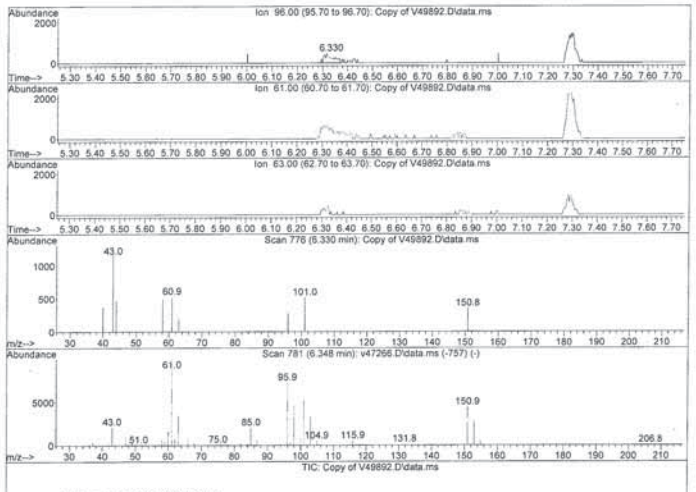
V160919S.M Tue Sep 20 10:47:45 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : T:\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 21 17:10:04 2016
Quant Method : T:\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Wed Sep 21 17:07:03 2016
Response via : Initial Calibration



(16) 1,1-dichloroethene (p)

6.330min (-0.173) 1.99 ug/kg m

response 1148

Ion	Exp%	Act%
96.00	100.00	100.00
61.00	164.80	191.37
63.00	57.50	69.78
0.00	0.00	0.00

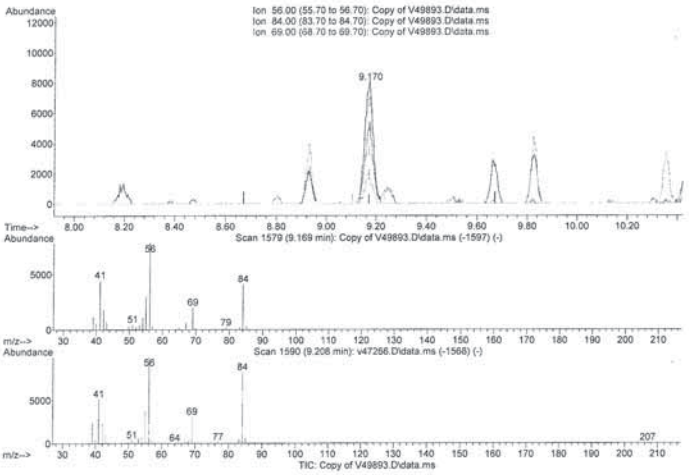
V160919S.M Wed Sep 21 17:10:29 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49893.D
Acq On : 19 Sep 2016 2:25 pm
Operator : carab
Sample : ic1837-5
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 10:48:22 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:42:54 2016
Response via : Initial Calibration



(45) Cyclohexane (p)

9.170min (-0.001) 4.68 ug/kg

response 18626

Ion	Exp%	Act%
56.00	100.00	100.00
84.00	77.40	63.64
69.00	28.10	25.21
0.00	0.00	0.00

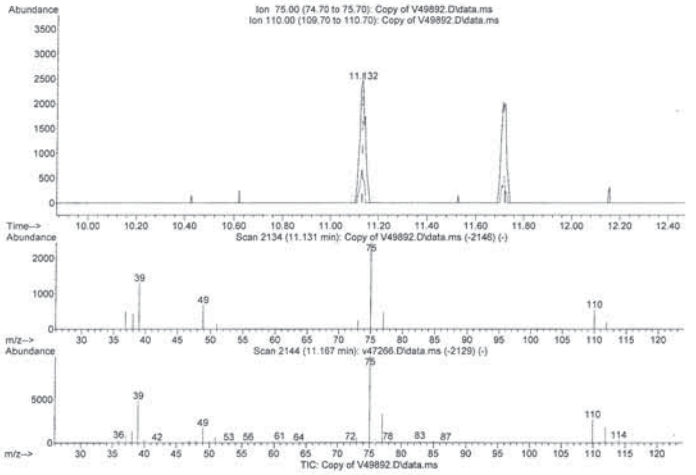
V160919S.M Tue Sep 20 10:48:55 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 10:59:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration



(60) cis-1,3-dichloropropene (p)

11.132min (+ 0.001) 2.11 ug/kg

response 4049

Ion	Exp%	Act%
75.00	100.00	100.00
110.00	28.90	21.99
0.00	0.00	0.00
0.00	0.00	0.00

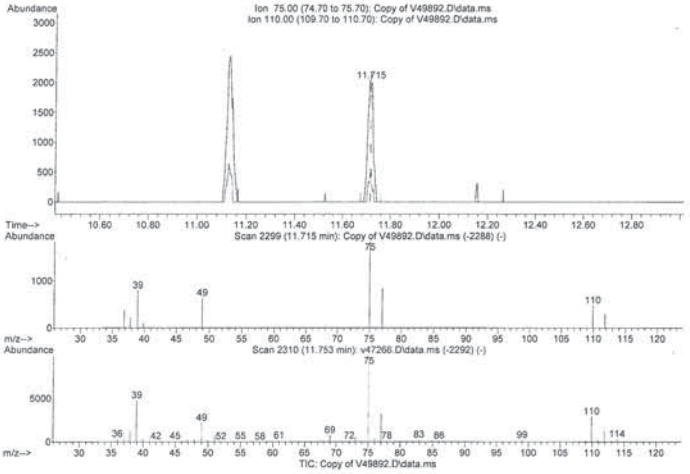
V160919S.M Tue Sep 20 10:59:44 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 10:59:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration



(64) trans-1,3-dichloropropene (p)

11.715min (-0.001) 2.11 ug/kg

response 3234

Ion	Exp%	Act%
75.00	100.00	100.00
110.00	26.00	25.98
0.00	0.00	0.00
0.00	0.00	0.00

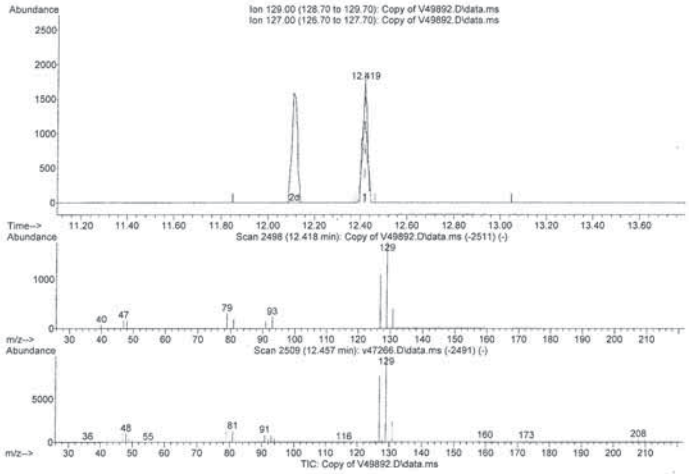
V160919S.M Tue Sep 20 10:59:40 2016 Page: 1

7.7.3 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 10:59:30 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration



(70) dibromochloromethane (p)

12.419min (+ 0.000) 2.51 ug/kg

response 2569

Ion	Exp%	Act%
129.00	100.00	100.00
127.00	82.30	63.23
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:59:54 2016 Page: 1

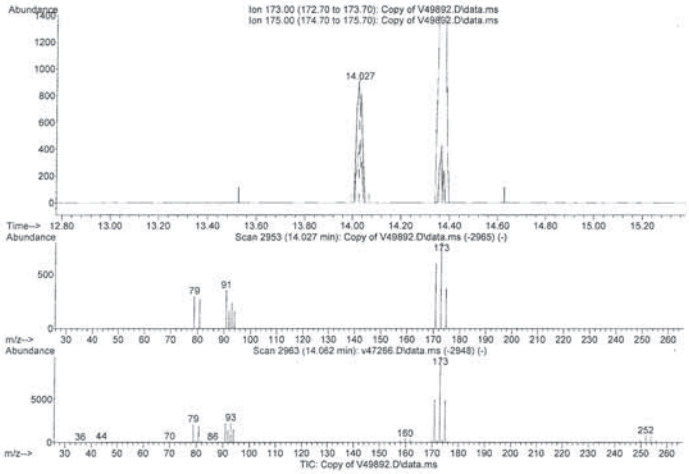
7.7.3

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49892.D
Acq On : 19 Sep 2016 1:56 pm
Operator : carab
Sample : ic1837-2
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 10:50:04 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:49:52 2016
Response via : Initial Calibration



(79) bromoform (P)

14.027min (+ 0.000) 2.40 ug/kg

response 1427

Ion	Exp%	Act%
173.00	100.00	100.00
175.00	42.40	45.80
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:50:20 2016 Page: 1

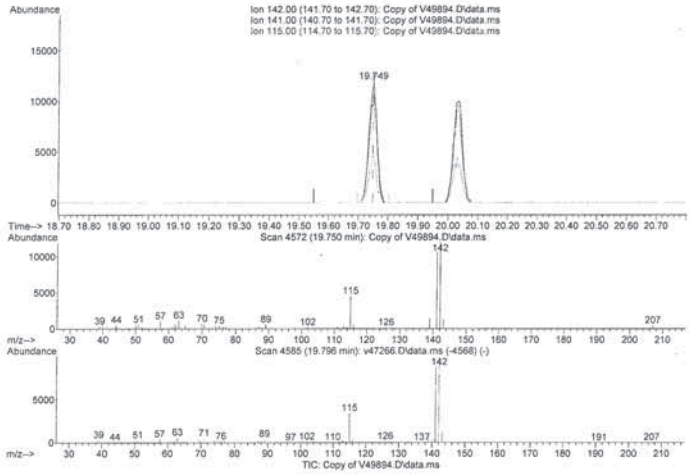
7.7.3

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 10:49:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:42:54 2016
Response via : Initial Calibration



(106) 2-methylnaphthalene (p)

19.749min (-0.000) 4.16 ug/kg

response 22527

Ion	Exp%	Act%
142.00	100.00	100.00
141.00	92.50	86.55
115.00	36.20	37.83
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:49:25 2016 Page: 1

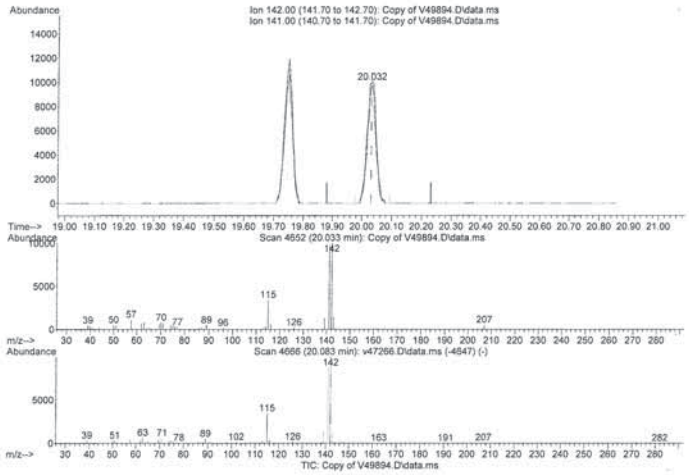
7.7.3

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160919\
Data File : Copy of V49894.D
Acq On : 19 Sep 2016 2:55 pm
Operator : carab
Sample : ic1837-10
Misc : MS37325,MSV1837,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 20 10:49:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:42:54 2016
Response via : Initial Calibration



(107) 1-methylnaphthalene (p)

20.032min (+ 0.001) 3.86 ug/kg

response 21583

Ion	Exp%	Act%
142.00	100.00	100.00
141.00	87.70	86.17
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 10:49:33 2016 Page: 1

7.7.3

7

SGS Accutest - Marlborough

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Instrument: GCMS V

Standards Data

Lot Number	Description	Conc. µg/mL
m610946	8260 CC	5.00
↓	CC/GS	↓
m610947	BS	
↓	BS GGS	↓
m610926	BS/GS	250
	1:1 HCL	0.4ml

Daily Saved File

Tune file 1: V49908
Tune file 2: NA
Initial Cal: 9/19/16
ID File: V1609196.M
ICAL Verified: KR
Sequence loaded Initials: KR
Sequence verified Initials: KR
pH paper LOT # NA Exp: NA

Date: 9/20/16
Batch ID: ~~m5V1838~~ m5V1838 KR 9/20
Analysts KR
Signature:

Note: If sample matrix is soil- method SW845 5035A used for preparation.
SW846 5030 is purge and trap Method for soil and water.

CIRCLE MATRIX: W (S) O (Water, Soil, Oil)

Data File	Sample ID	Bot #	Work Group	Test	ALS #	Sample Amount	Dil. Factor	pH	Data Process Initials	Headspace Free?	Comments
V49905	blank	NA	NA	8260	1	5.00	NA	NA	KR	yes (NA) no	
906	CC1887-50				2					yes no	Failing ↑, RR
907	BS				3					yes no	
908	mc1887-50				4					yes no	(bad) //
909	BS				5					yes no	//
910	EW-5				6					yes no	/
911	mb				7					yes no	W+
912	mc47793-1	2	m587347	KCP	8	5.90				yes no	//
913	mc47774-1	4		TCL +	9	5.27				yes no	W+
914	-3	5			10	5.46				yes no	W+
915	-4				11	5.02				yes no	W+
916	-6	4			12	5.20				yes no	W+
917	-7	3			13	4.92				yes no	W+ ISS / LSSTD (CFI)
918	mc47776-1			STD + MTBE	14	5.44				yes no	// ISS / LSSTD RR
919	mc47807-2				15	5.08				yes no	// LSSTD RR
920	-5	2		STAR	16	5.61				yes no	// LSSTD RR
921	-6				17	4.37				yes no	// LSSTD RR
922	mc47808-1	3		STD TMTBE	18	7.51				yes no	//
923	mc47776-1MS	1		8260	19	5.916				yes no	//
924	-1MSD				20	5.960				yes no	//

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-10 Date: 07/12/16

Review:

SGS Accutest - Marlborough

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Instrument: GCMS V

Standards Data

Lot Number	Description	Conc. µg/mL
See	page 19	
	1:1 HCL	0.4ml

Daily Saved File

Tune file 1:
Tune file 2:
Initial Cal:
ID File: See page 19
ICAL Verified:
Sequence loaded Initials:
Sequence verified Initials:
pH paper LOT # Exp:

Date: 9/20/16
Batch ID: m5V1838
Analysts KR
Signature:

Note: If sample matrix is soil- method SW845 5035A used for preparation.
SW846 5030 is purge and trap Method for soil and water.

CIRCLE MATRIX: W (S) O (Water, Soil, Oil)

Data File	Sample ID	Bot #	Work Group	Test	ALS #	Sample Amount	Dil. Factor	pH	Data Process Initials	Headspace Free?	Comments
V49925	blank	NA	NA	8260	21	5.00	NA	NA	KR	yes (NA) no	
926	↓		↓	↓	22					yes no	
927	mc47869-2		m587348	MDL-0.5	23					yes no	
928					24					yes no	
929					25					yes no	
930					26					yes no	
931					27					yes no	
932					28					yes no	
933					29					yes no	
934				↓	30					yes no	
935	mc47869-5			MDL-1	31					yes no	
936					32					yes no	
937					33					yes no	
938					34					yes no	
939					35					yes no	
940					36					yes no	
941					37					yes no	
942	↓			↓	38					yes no	
943	mc47869-8			MDL-5	39					yes no	
944	↓	↓	↓	↓	40	↓	↓	↓	↓	yes no	

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-10 Date: 07/12/16

Review:

SGS Accutest - Marlborough

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Instrument: GCMS V

Standards Data

Lot Number	Description	Conc. µg/mL
See	page 19	
	1:1 HCL	0.4ml

Daily Saved File

Tune file 1:
Tune file 2:
Initial Cal:
ID File: See page 19
ICAL Verified:
Sequence loaded Initials:
Sequence verified Initials:
pH paper LOT # Exp:

Date: 9/20/16
Batch ID: m5V1838
Analysts KR
Signature:

Note: If sample matrix is soil- method SW845 5035A used for preparation.
SW846 5030 is purge and trap Method for soil and water.

CIRCLE MATRIX: W (S) O (Water, Soil, Oil)

Data File	Sample ID	Bot #	Work Group	Test	ALS #	Sample Amount	Dil. Factor	pH	Data Process Initials	Headspace Free?	Comments
V49945	mc47869-8	NA	m587348	MDL-5	41	5.00	NA	NA	KR	yes (NA) no	
946	↓	↓	↓	↓	42	↓	↓	↓	↓	yes no	
947					43					yes no	
948					44					yes no	
949					45					yes no	
950	↓	↓	↓	↓	46	↓	↓	↓	↓	yes ↓ no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes no	
										yes (KR) no	9/20/16

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-10 Date: 07/12/16

Review: 9/21/16

m5V1838

ACCUTEST

Methanol Prep Log

Vial #:	Sample ID:	Initial Tare Wt (g)	Total Wt (g)	Sample Wt (g)	Comments:
	MC47774-1.4	35.01	40.280	5.27	
	MC47774-3.3	34.45	39.910	5.46	
	MC47774-4.3	34.54	39.560	5.02	
	MC47774-6.4	35.45	40.650	5.20	
	MC47774-7.3	34.64	39.560	4.92	
	~~MC47776-1.3~~	~~35.50~~	~~40.930~~		
	MC47776-1.3	35.50	40.940	5.44	
	MC47792-1.2	35.48	41.380	5.90	
	MC47807-2.3	35.05	40.130	5.08	
	MC47807-5.2	34.98	40.560	5.61	
	MC47807-6.2	35.07	39.440	4.37	
	MC47808-1.3	36.54	43.050	7.51	

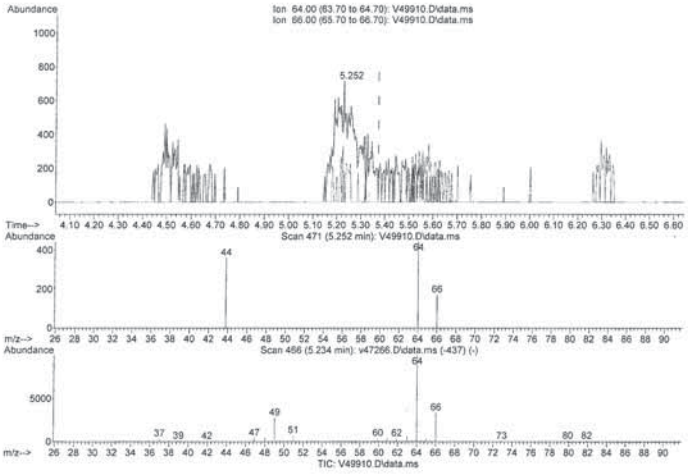
Analyst: KR Date: 9/20/16

Page 1 of 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V160920\
Data File : V49910.D
Acq On : 20 Sep 2016 1:32 pm
Operator : kaylap
Sample : rlv-5
Misc : MS37325,MSV1838,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 20 14:23:10 2016
Quant Method : C:\msdchem\1\METHODS\V160919S.M
Quant Title : SW-846 Method 8260: acetonitrile=20, no isobut alcohol & ethyl acetate
QLast Update : Tue Sep 20 10:59:18 2016
Response via : Initial Calibration



(9) chloroethane (p)

5.252min (-0.120) 3.02 ug/kg m

response 4606

Ion	Exp%	Act%
64.00	100.00	100.00
66.00	32.90	38.83
0.00	0.00	0.00
0.00	0.00	0.00

V160919S.M Tue Sep 20 14:23:38 2016 Page: 1

7.7.4

7

Instrument Run Log MSV1838 page 5 of 5

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

8

Raw Data: X12652.D

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-MB	X12652.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	240	11	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	480	11	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	480	26	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	480	200	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	480	100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	480	48	ug/kg	
95-48-7	2-Methylphenol	ND	480	51	ug/kg	
	3&4-Methylphenol	ND	480	42	ug/kg	
88-75-5	2-Nitrophenol	ND	480	38	ug/kg	
100-02-7	4-Nitrophenol	ND	480	56	ug/kg	
87-86-5	Pentachlorophenol	ND	480	55	ug/kg	
108-95-2	Phenol	ND	240	11	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	480	15	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	480	8.8	ug/kg	
83-32-9	Acenaphthene	ND	97	6.6	ug/kg	
208-96-8	Acenaphthylene	ND	97	7.7	ug/kg	
120-12-7	Anthracene	ND	97	7.8	ug/kg	
56-55-3	Benzo(a)anthracene	ND	97	9.5	ug/kg	
50-32-8	Benzo(a)pyrene	ND	240	8.3	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	97	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	97	9.4	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	97	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	10	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	240	13	ug/kg	
91-58-7	2-Chloronaphthalene	ND	240	9.7	ug/kg	
106-47-8	4-Chloroaniline	ND	480	11	ug/kg	
86-74-8	Carbazole	ND	97	8.4	ug/kg	
218-01-9	Chrysene	ND	97	7.5	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	9.4	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	8.8	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	11	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	240	8.2	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	240	7.2	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	240	9.8	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	480	12	ug/kg	

8.1.1

8

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-MB	X12652.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

CAS No.	Compound	Result	RL	MDL	Units	Q
606-20-2	2,6-Dinitrotoluene	ND	480	11	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	480	32	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	97	8.0	ug/kg	
132-64-9	Dibenzofuran	ND	97	7.6	ug/kg	
84-74-2	Di-n-butyl phthalate	23.9	240	10	ug/kg	J
117-84-0	Di-n-octyl phthalate	ND	240	8.2	ug/kg	
84-66-2	Diethyl phthalate	ND	240	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	7.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	240	9.6	ug/kg	
206-44-0	Fluoranthene	ND	97	8.8	ug/kg	
86-73-7	Fluorene	ND	97	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	13	ug/kg	
87-68-3	Hexachlorobutadiene	ND	240	9.3	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	480	11	ug/kg	
67-72-1	Hexachloroethane	ND	240	23	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	240	27	ug/kg	
78-59-1	Isophorone	ND	240	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	97	11	ug/kg	
88-74-4	2-Nitroaniline	ND	480	11	ug/kg	
99-09-2	3-Nitroaniline	ND	480	11	ug/kg	
100-01-6	4-Nitroaniline	ND	480	11	ug/kg	
91-20-3	Naphthalene	ND	97	8.2	ug/kg	
98-95-3	Nitrobenzene	ND	240	27	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	14	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	32	ug/kg	
85-01-8	Phenanthrene	ND	97	7.2	ug/kg	
129-00-0	Pyrene	ND	97	9.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	240	12	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	81%	25-109%
4165-62-2	Phenol-d5	82%	29-113%
118-79-6	2,4,6-Tribromophenol	69%	20-141%
4165-60-0	Nitrobenzene-d5	73%	27-115%

8.1.1

8

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-MB	X12652.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

8.1.1 8

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	78%	34-118%
1718-51-0	Terphenyl-d14	92%	42-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-BS	X12653.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

8.2.1 8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	2470	1780	72	39-104
59-50-7	4-Chloro-3-methyl phenol	2470	2020	82	51-110
120-83-2	2,4-Dichlorophenol	2470	1960	79	47-109
105-67-9	2,4-Dimethylphenol	2470	1950	79	43-105
51-28-5	2,4-Dinitrophenol	2470	1440	58	10-130
534-52-1	4,6-Dinitro-o-cresol	2470	1790	73	16-140
95-48-7	2-Methylphenol	2470	1920	78	40-105
	3&4-Methylphenol	4940	3910	79	39-113
88-75-5	2-Nitrophenol	2470	1610	65	41-112
100-02-7	4-Nitrophenol	2470	1940	79	28-134
87-86-5	Pentachlorophenol	2470	1790	73	22-123
108-95-2	Phenol	2470	1970	80	40-107
95-95-4	2,4,5-Trichlorophenol	2470	2060	83	54-115
88-06-2	2,4,6-Trichlorophenol	2470	2010	81	51-110
83-32-9	Acenaphthene	2470	2090	85	49-108
208-96-8	Acenaphthylene	2470	1620	66	37-102
120-12-7	Anthracene	2470	2040	83	54-111
56-55-3	Benzo(a)anthracene	2470	2170	88	56-117
50-32-8	Benzo(a)pyrene	2470	1810	73	57-117
205-99-2	Benzo(b)fluoranthene	2470	1940	79	55-122
191-24-2	Benzo(g,h,i)perylene	2470	2310	94	52-123
207-08-9	Benzo(k)fluoranthene	2470	1840	75	54-117
101-55-3	4-Bromophenyl phenyl ether	2470	2130	86	54-118
85-68-7	Butyl benzyl phthalate	2470	2240	91	54-121
91-58-7	2-Chloronaphthalene	2470	2070	84	46-114
106-47-8	4-Chloroaniline	2470	1790	73	12-88
86-74-8	Carbazole	2470	2220	90	56-116
218-01-9	Chrysene	2470	2080	84	56-114
111-91-1	bis(2-Chloroethoxy)methane	2470	1950	79	41-106
111-44-4	bis(2-Chloroethyl)ether	2470	1830	74	28-113
108-60-1	bis(2-Chloroisopropyl)ether	2470	2130	86	30-132
7005-72-3	4-Chlorophenyl phenyl ether	2470	2110	85	54-114
95-50-1	1,2-Dichlorobenzene	2470	1740	71	34-100
541-73-1	1,3-Dichlorobenzene	2470	1720	70	35-99
106-46-7	1,4-Dichlorobenzene	2470	1700	69	35-98
121-14-2	2,4-Dinitrotoluene	2470	2100	85	50-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-BS	X12653.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

8.2.1 8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
606-20-2	2,6-Dinitrotoluene	2470	1930	78	52-115
91-94-1	3,3'-Dichlorobenzidine	2470	1570	64	17-120
53-70-3	Dibenzo(a,h)anthracene	2470	2310	94	54-121
132-64-9	Dibenzofuran	2470	2100	85	52-109
84-74-2	Di-n-butyl phthalate	2470	2290	93	55-113
117-84-0	Di-n-octyl phthalate	2470	1910	77	53-126
84-66-2	Diethyl phthalate	2470	2090	85	54-111
131-11-3	Dimethyl phthalate	2470	2070	84	53-111
117-81-7	bis(2-Ethylhexyl)phthalate	2470	2010	81	55-125
206-44-0	Fluoranthene	2470	2200	89	55-116
86-73-7	Fluorene	2470	2190	89	52-111
118-74-1	Hexachlorobenzene	2470	2070	84	52-117
87-68-3	Hexachlorobutadiene	2470	1890	77	36-108
77-47-4	Hexachlorocyclopentadiene	2470	1050	43	10-99
67-72-1	Hexachloroethane	2470	1690	68	33-100
193-39-5	Indeno(1,2,3-cd)pyrene	2470	2120	86	55-120
78-59-1	Isophorone	2470	1990	81	37-101
91-57-6	2-Methylnaphthalene	2470	2080	84	38-114
88-74-4	2-Nitroaniline	2470	2030	82	55-120
99-09-2	3-Nitroaniline	2470	1930	78	31-103
100-01-6	4-Nitroaniline	2470	1890	77	50-112
91-20-3	Naphthalene	2470	2600	105	27-128
98-95-3	Nitrobenzene	2470	1940	79	33-108
621-64-7	N-Nitroso-di-n-propylamine	2470	2210	90	37-112
86-30-6	N-Nitrosodiphenylamine	2470	2080	84	47-114
85-01-8	Phenanthrene	2470	2180	88	54-112
129-00-0	Pyrene	2470	2250	91	54-118
120-82-1	1,2,4-Trichlorobenzene	2470	1870	76	38-105

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	79%	25-109%
4165-62-2	Phenol-d5	82%	29-113%
118-79-6	2,4,6-Tribromophenol	85%	20-141%
4165-60-0	Nitrobenzene-d5	77%	27-115%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-BS	X12653.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

8.2.1 8

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	82%	34-118%
1718-51-0	Terphenyl-d14	89%	42-139%

* = Outside of Control Limits.

Raw Data: X12654.D X12655.D

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-MS	X12654.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
OP48710-MSD	X12655.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
MC47774-2	X12657.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

8.3.1 8

CAS No.	Compound	MC47774-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		3030	2460	81	2990	2360	79	4	27-112/30
59-50-7	4-Chloro-3-methyl phenol	ND		3030	2740	91	2990	2680	90	2	30-130/30
120-83-2	2,4-Dichlorophenol	ND		3030	2660	88	2990	2620	88	2	36-119/30
105-67-9	2,4-Dimethylphenol	ND		3030	2640	87	2990	2570	86	3	28-118/30
51-28-5	2,4-Dinitrophenol	ND		3030	901	30	2990	970	32	7	10-149/30
534-52-1	4,6-Dinitro-o-cresol	ND		3030	1710	57	2990	1880	63	9	10-150/30
95-48-7	2-Methylphenol	ND		3030	2590	86	2990	2470	83	5	23-119/30
	3&4-Methylphenol	ND		6050	5230	86	5980	5040	84	4	24-124/30
88-75-5	2-Nitrophenol	ND		3030	2280	75	2990	2260	76	1	23-126/30
100-02-7	4-Nitrophenol	ND		3030	2640	87	2990	2590	87	2	18-141/30
87-86-5	Pentachlorophenol	ND		3030	2390	79	2990	2450	82	2	10-145/30
108-95-2	Phenol	ND		3030	2630	87	2990	2530	85	4	25-119/30
95-95-4	2,4,5-Trichlorophenol	ND		3030	2720	90	2990	2800	94	3	34-128/30
88-06-2	2,4,6-Trichlorophenol	ND		3030	2710	90	2990	2700	90	0	32-124/30
83-32-9	Acenaphthene	ND		3030	2780	92	2990	2760	92	1	27-133/30
208-96-8	Acenaphthylene	ND		3030	2140	71	2990	2140	72	0	25-111/30
120-12-7	Anthracene	ND		3030	2710	90	2990	2710	91	0	25-138/30
56-55-3	Benzo(a)anthracene	ND		3030	2900	96	2990	2860	96	1	23-147/30
50-32-8	Benzo(a)pyrene	ND		3030	2390	79	2990	2410	81	1	24-144/30
205-99-2	Benzo(b)fluoranthene	ND		3030	2580	85	2990	2590	87	0	25-149/30
191-24-2	Benzo(g,h,i)perylene	ND		3030	2940	97	2990	3080	103	5	18-150/30
207-08-9	Benzo(k)fluoranthene	ND		3030	2350	78	2990	2400	80	2	18-143/30
101-55-3	4-Bromophenyl phenyl ether	ND		3030	2750	91	2990	2800	94	2	42-128/30
85-68-7	Butyl benzyl phthalate	ND		3030	2910	96	2990	2980	100	2	39-132/30
91-58-7	2-Chloronaphthalene	ND		3030	2740	91	2990	2770	93	1	39-121/30
106-47-8	4-Chloroaniline	ND		3030	2530	84	2990	2360	79	7	10-105/30
86-74-8	Carbazole	ND		3030	2960	98	2990	2910	97	2	32-134/30
218-01-9	Chrysene	ND		3030	2730	90	2990	2760	92	1	23-145/30
111-91-1	bis(2-Chloroethoxy)methane	ND		3030	2600	86	2990	2540	85	2	32-114/30
111-44-4	bis(2-Chloroethyl)ether	ND		3030	2410	80	2990	2360	79	2	25-111/30
108-60-1	bis(2-Chloroisopropyl)ether	ND		3030	2780	92	2990	2670	89	4	24-136/30
7005-72-3	4-Chlorophenyl phenyl ether	ND		3030	2850	94	2990	2860	96	0	42-123/30
95-50-1	1,2-Dichlorobenzene	ND		3030	2360	78	2990	2310	77	2	25-105/30
541-73-1	1,3-Dichlorobenzene	ND		3030	2320	77	2990	2280	76	2	26-103/30
106-46-7	1,4-Dichlorobenzene	ND		3030	2280	75	2990	2240	75	2	25-104/30
121-14-2	2,4-Dinitrotoluene	ND		3030	2840	94	2990	2830	95	0	34-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-MS	X12654.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
OP48710-MSD	X12655.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
MC47774-2	X12657.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

8.3.1 8

CAS No.	Compound	MC47774-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
606-20-2	2,6-Dinitrotoluene	ND		3030	2610	86	2990	2600	87	0	39-124/30
91-94-1	3,3'-Dichlorobenzidine	ND		3030	2270	75	2990	2280	76	0	10-139/30
53-70-3	Dibenzo(a,h)anthracene	ND		3030	3020	100	2990	3090	103	2	35-134/30
132-64-9	Dibenzofuran	ND		3030	2810	93	2990	2780	93	1	30-131/30
84-74-2	Di-n-butyl phthalate	ND		3030	3090	102	2990	2990	100	3	41-123/30
117-84-0	Di-n-octyl phthalate	ND		3030	2530	84	2990	2540	85	0	33-142/30
84-66-2	Diethyl phthalate	ND		3030	2810	93	2990	2770	93	1	42-119/30
131-11-3	Dimethyl phthalate	ND		3030	2770	92	2990	2770	93	0	38-122/30
117-81-7	bis(2-Ethylhexyl)phthalate	ND		3030	2630	87	2990	2680	90	2	35-141/30
206-44-0	Fluoranthene	ND		3030	2990	99	2990	2900	97	3	17-151/30
86-73-7	Fluorene	ND		3030	2920	97	2990	2860	96	2	34-128/30
118-74-1	Hexachlorobenzene	ND		3030	2710	90	2990	2750	92	1	40-125/30
87-68-3	Hexachlorobutadiene	ND		3030	2600	86	2990	2550	85	2	30-113/30
77-47-4	Hexachlorocyclopentadiene	ND		3030	1410	47	2990	1420	47	1	10-103/30
67-72-1	Hexachloroethane	ND		3030	2270	75	2990	2240	75	1	10-125/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		3030	2720	90	2990	2800	94	3	22-147/30
78-59-1	Isophorone	ND		3030	2670	88	2990	2630	88	2	29-109/30
91-57-6	2-Methylnaphthalene	ND		3030	2790	92	2990	2720	91	3	26-127/30
88-74-4	2-Nitroaniline	ND		3030	2720	90	2990	2730	91	0	40-128/30
99-09-2	3-Nitroaniline	ND		3030	2660	88	2990	2610	87	2	21-116/30
100-01-6	4-Nitroaniline	ND		3030	2580	85	2990	2550	85	1	21-125/30
91-20-3	Naphthalene	ND		3030	3520	116	2990	3440	115	2	18-135/30
98-95-3	Nitrobenzene	ND		3030	2620	87	2990	2580	86	2	29-110/30
621-64-7	N-Nitroso-di-n-propylamine	ND		3030	2930	97	2990	2810	94	4	22-128/30
86-30-6	N-Nitrosodiphenylamine	ND		3030	2690	89	2990	2720	91	1	22-142/30
85-01-8	Phenanthrene	ND		3030	2880	95	2990	2880	96	0	21-141/30
129-00-0	Pyrene	ND		3030	2900	96	2990	2980	100	3	22-148/30
120-82-1	1,2,4-Trichlorobenzene	ND		3030	2550	84	2990	2530	85	1	30-113/30

CAS No.	Surrogate Recoveries	MS	MSD	MC47774-2	Limits
367-12-4	2-Fluorophenol	86%	82%	90%	25-109%
4165-62-2	Phenol-d5	88%	85%	91%	29-113%
118-79-6	2,4,6-Tribromophenol	90%	92%	95%	20-141%
4165-60-0	Nitrobenzene-d5	85%	85%	86%	27-115%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48710-MS	X12654.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
OP48710-MSD	X12655.D	1	09/22/16	AA	09/15/16	OP48710	MSX425
MC47774-2	X12657.D	1	09/22/16	AA	09/15/16	OP48710	MSX425

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

8.3.1 8

CAS No.	Surrogate Recoveries	MS	MSD	MC47774-2	Limits
321-60-8	2-Fluorobiphenyl	88%	88%	92%	34-118%
1718-51-0	Terphenyl-d14	94%	97%	112%	42-139%

* = Outside of Control Limits.

Raw Data: X12637.D

Instrument Performance Check (DFTPP)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSX424-DFTPP **Injection Date:** 09/21/16
Lab File ID: X12637.D **Injection Time:** 14:16
Instrument ID: GCMSX

8.4.1 8

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	271327	37.4		Pass
68	Less than 2.0% of mass 69	5395	0.74	(1.78) [a]	Pass
69	Mass 69 relative abundance	302677	41.8		Pass
70	Less than 2.0% of mass 69	1860	0.26	(0.61) [a]	Pass
127	40.0 - 60.0% of mass 198	375957	51.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	724736	100.0		Pass
199	5.0 - 9.0% of mass 198	48677	6.72		Pass
275	10.0 - 30.0% of mass 198	192000	26.5		Pass
365	1.0 - 100.0% of mass 198	29109	4.02		Pass
441	Present, but less than mass 443	102147	14.1	(80.5) [b]	Pass
442	40.0 - 100.0% of mass 198	653483	90.2		Pass
443	17.0 - 23.0% of mass 442	126835	17.5	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSX424-IC424	X12638.D	09/21/16	15:57	01:41	Initial cal 2
MSX424-IC424	X12639.D	09/21/16	16:21	02:05	Initial cal 5
MSX424-IC424	X12640.D	09/21/16	16:46	02:30	Initial cal 10
MSX424-IC424	X12641.D	09/21/16	17:11	02:55	Initial cal 20
MSX424-ICC424	X12642.D	09/21/16	17:36	03:20	Initial cal 50
MSX424-IC424	X12643.D	09/21/16	18:01	03:45	Initial cal 80
MSX424-IC424	X12644.D	09/21/16	18:26	04:10	Initial cal 120
MSX424-IC424	X12645.D	09/21/16	18:51	04:35	Initial cal 160
MSX424-ICV424	X12646.D	09/21/16	19:16	05:00	Initial cal verification 50
MSX424-ICV424	X12647.D	09/21/16	19:40	05:24	Initial cal verification 50
MSX424-ICV424	X12648.D	09/21/16	20:04	05:48	Initial cal verification 50
MSX424-ICV424	X12649.D	09/21/16	20:29	06:13	Initial cal verification 50

Raw Data: X12650.D

Instrument Performance Check (DFTPP)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSX425-DFTPP **Injection Date:** 09/22/16
Lab File ID: X12650.D **Injection Time:** 11:49
Instrument ID: GCMSX

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	179767	38.5		Pass
68	Less than 2.0% of mass 69	3286	0.70	(1.66) [a]	Pass
69	Mass 69 relative abundance	197760	42.3		Pass
70	Less than 2.0% of mass 69	1209	0.26	(0.61) [a]	Pass
127	40.0 - 60.0% of mass 198	246720	52.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	467008	100.0		Pass
199	5.0 - 9.0% of mass 198	31997	6.85		Pass
275	10.0 - 30.0% of mass 198	120824	25.9		Pass
365	1.0 - 100.0% of mass 198	18685	4.00		Pass
441	Present, but less than mass 443	64643	13.8	(78.8) [b]	Pass
442	40.0 - 100.0% of mass 198	420800	90.1		Pass
443	17.0 - 23.0% of mass 442	82061	17.6	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSX425-CC424	X12651.D	09/22/16	12:14	00:25	Continuing cal 50
OP48710-MB	X12652.D	09/22/16	12:54	01:05	Method Blank
OP48710-BS	X12653.D	09/22/16	13:19	01:30	Blank Spike
OP48710-MS	X12654.D	09/22/16	13:43	01:54	Matrix Spike
OP48710-MSD	X12655.D	09/22/16	14:08	02:19	Matrix Spike Duplicate
MC47774-1	X12656.D	09/22/16	14:33	02:44	BOTTOM
MC47774-2	X12657.D	09/22/16	14:58	03:09	NORTH
MC47774-3	X12658.D	09/22/16	15:23	03:34	SOUTH
MC47774-4	X12659.D	09/22/16	15:48	03:59	WEST
MC47774-5	X12660.D	09/22/16	16:13	04:24	EAST
MC47774-6	X12661.D	09/22/16	16:38	04:49	LARGE PILE
MC47774-7	X12662.D	09/22/16	17:04	05:15	SMALL PILE
MC47774-8	X12663.D	09/22/16	17:29	05:40	FIELD DUPE
MC47774-6	X12664.D	09/22/16	17:54	06:05	LARGE PILE
ZZZZZZ	X12665.D	09/22/16	18:19	06:30	(unrelated sample)
ZZZZZZ	X12666.D	09/22/16	18:44	06:55	(unrelated sample)
ZZZZZZ	X12667.D	09/22/16	19:10	07:21	(unrelated sample)
ZZZZZZ	X12668.D	09/22/16	19:35	07:46	(unrelated sample)
ZZZZZZ	X12669.D	09/22/16	19:59	08:10	(unrelated sample)

8.4.2 8

Instrument Performance Check (DFTPP)

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MSX425-DFTPP **Injection Date:** 09/22/16
Lab File ID: X12650.D **Injection Time:** 11:49
Instrument ID: GCMSX

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X12670.D	09/22/16	20:24	08:35	(unrelated sample)
ZZZZZZ	X12671.D	09/22/16	20:49	09:00	(unrelated sample)
ZZZZZZ	X12672.D	09/22/16	21:13	09:24	(unrelated sample)
ZZZZZZ	X12673.D	09/22/16	21:38	09:49	(unrelated sample)
ZZZZZZ	X12674.D	09/22/16	22:03	10:14	(unrelated sample)
ZZZZZZ	X12675.D	09/22/16	22:27	10:38	(unrelated sample)
ZZZZZZ	X12676.D	09/22/16	22:51	11:02	(unrelated sample)

8.4.2 8

Semivolatile Internal Standard Area Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Check Std: MSX425-CC424 **Injection Date:** 09/22/16
Lab File ID: X12651.D **Injection Time:** 12:14
Instrument ID: GCMSX **Method:** SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	467349	4.04	1766250	5.09	1001757	6.62	1601409	7.92	1585332	10.83	1353519	14.01
Upper Limit [a]	934698	4.54	3532500	5.59	2003514	7.12	3202818	8.42	3170664	11.33	2707038	14.51
Lower Limit [b]	233675	3.54	883125	4.59	500879	6.12	800705	7.42	792666	10.33	676760	13.51

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP48710-MB	607837	4.04	2295847	5.09	1311592	6.63	2166422	7.92	1963582	10.84	1663070	14.02
OP48710-BS	506882	4.04	1906500	5.09	1098955	6.62	1734171	7.92	1679579	10.83	1480235	14.01
OP48710-MS	513235	4.04	1899808	5.09	1124233	6.62	1829542	7.92	1866838	10.83	1629778	14.01
OP48710-MSD	543328	4.04	1984124	5.09	1135026	6.62	1802185	7.92	1715936	10.83	1492048	14.01
MC47774-1	511985	4.04	1928770	5.09	1107137	6.62	1865388	7.92	1764483	10.82	1533011	14.01
MC47774-2	603975	4.04	2250494	5.09	1291854	6.62	2175338	7.92	1955270	10.82	1608578	14.01
MC47774-3	549629	4.04	2067074	5.09	1187945	6.62	1998444	7.92	1826139	10.82	1523804	14.01
MC47774-4	545272	4.04	2018354	5.09	1157532	6.62	1918732	7.92	1709244	10.82	1440712	14.01
MC47774-5	576418	4.04	2118056	5.09	1207250	6.62	1998529	7.91	1784242	10.82	1482364	14.00
MC47774-6	397853	4.04	1544321	5.09	909747	6.62	1580641	7.92	1556575	10.82	1420770	14.01
MC47774-7 [c]	416493	4.04	1592410	5.09	942082	6.62	1638745	7.92	1607282	10.83	1389965	14.01
MC47774-8	563229	4.04	2091503	5.09	1201450	6.62	2011394	7.92	1838561	10.82	1602690	14.01
MC47774-6	486688	4.04	1818601	5.09	1070765	6.62	1866851	7.92	1748835	10.85	1313299	14.03
ZZZZZZ	519764	4.04	1945143	5.09	1147643	6.62	1949598	7.91	1974856	10.82	1792235	14.01
ZZZZZZ	593773	4.04	2142226	5.09	1225571	6.62	2017072	7.92	1815493	10.83	1634590	14.01
ZZZZZZ	537201	4.04	2007645	5.09	1160491	6.62	1958294	7.91	1897770	10.83	1715200	14.02
ZZZZZZ	520719	4.04	1955799	5.09	1139845	6.62	1938261	7.91	1886290	10.82	1686645	14.01
ZZZZZZ	552209	4.04	2057869	5.09	1182128	6.62	1967667	7.91	1880946	10.82	1723203	14.01
ZZZZZZ	544171	4.04	2055272	5.09	1198913	6.62	1980459	7.91	1819574	10.82	1532903	14.01
ZZZZZZ	538159	4.04	2003628	5.09	1144598	6.62	1853740	7.91	1645545	10.82	1417150	14.00
ZZZZZZ	517472	4.04	1912270	5.09	1100637	6.62	1826839	7.91	1760047	10.82	1672560	14.01
ZZZZZZ	512440	4.04	1928139	5.09	1095987	6.62	1794905	7.91	1723848	10.82	1526662	14.01
ZZZZZZ	557189	4.04	2048629	5.09	1166354	6.62	1908202	7.92	1717265	10.83	1653353	14.02
ZZZZZZ	537464	4.04	2032472	5.09	1172928	6.62	1958596	7.92	1790611	10.83	1575566	14.01
ZZZZZZ	513037	4.04	1910424	5.09	1078264	6.62	1792458	7.92	1645887	10.83	1563774	14.01

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

8.5.1 8

Semivolatile Internal Standard Area Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Check Std: MSX425-CC424 **Injection Date:** 09/22/16
Lab File ID: X12651.D **Injection Time:** 12:14
Instrument ID: GCMSX **Method:** SW846 8270D

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT

(c) Elevated RL due to dilution required for matrix interference.

8.5.1 8

Semivolatile Surrogate Recovery Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC47774-1	X12656.D	89	89	87	84	90	103
MC47774-2	X12657.D	90	91	95	86	92	112
MC47774-3	X12658.D	75	78	84	72	78	101
MC47774-4	X12659.D	79	82	93	76	87	111
MC47774-5	X12660.D	77	79	83	75	83	100
MC47774-6	X12661.D	73	76	66	69	82	99
MC47774-6	X12664.D	78	83	91	80	85	98
MC47774-7	X12662.D	55	71	63	60	72	89
MC47774-8	X12663.D	82	84	89	80	83	109
OP48710-BS	X12653.D	79	82	85	77	82	89
OP48710-MB	X12652.D	81	82	69	73	78	92
OP48710-MS	X12654.D	86	88	90	85	88	94
OP48710-MSD	X12655.D	82	85	92	85	88	97

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	25-109%
S2 = Phenol-d5	29-113%
S3 = 2,4,6-Tribromophenol	20-141%
S4 = Nitrobenzene-d5	27-115%
S5 = 2-Fluorobiphenyl	34-118%
S6 = Terphenyl-d14	42-139%

8.6.1 8

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSX424-ICC424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12642.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
                    Response Factor Report  MSX

 Method       : X:\1\methods\X160921_8270.m (RTE Integrator)
 Title        : SW-864 Method 8270
 Last Update  : Thu Sep 22 10:40:58 2016
 Response via : Initial Calibration

 Calibration Files
 2   =x12638.D    5   =x12639.D    10  =x12640.D    20  =x12641.D
 50  =x12642.D    80  =x12643.D    120 =x12644.D    160 =x12645.D

  Compound          2     5     10    20    50    80    120   160   Avg %RSD
 ---------------------------------------------------------------------------

 1) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 2) N-nitrosodim 1.016 0.991 1.055 1.047 1.065 1.036 0.999 0.941 1.019   4.01
 3) 1,4-Dioxane  0.783 0.715 0.659 0.659 0.670 0.646 0.637 0.611 0.672   7.98
 4) Pyridine     1.770 1.760 1.824 1.816 1.865 1.797 1.751 1.663 1.781   3.41
 5) Aniline      1.701 1.939 2.196 2.293 2.381 2.282 2.051 1.845 2.086  11.60
 6) 2-Fluorophen 1.187 1.268 1.354 1.364 1.443 1.450 1.422 1.357 1.356   6.66
 7) bis(2-Chloro 1.049 1.022 1.046 1.028 1.057 1.033 0.988 0.929 1.019   4.14
 8) Phenol-d5    1.658 1.734 1.836 1.836 1.873 1.822 1.703 1.570 1.754   6.02
 9) Phenol       1.769 2.017 1.995 2.002 2.082 1.980 1.777 1.631 1.907   8.34
10) 2-Chlorophen 1.233 1.295 1.376 1.368 1.458 1.454 1.461 1.397 1.380   5.97
11) 1,3-Dichloro 1.417 1.431 1.496 1.475 1.568 1.534 1.537 1.476 1.492   3.54
12) 1,4-Dichloro 1.517 1.521 1.575 1.561 1.640 1.600 1.601 1.521 1.567   2.90
13) 1,2-Dichloro 1.384 1.397 1.454 1.411 1.487 1.487 1.480 1.405 1.438   3.02
14) Benzyl alcoh 0.767 0.837 0.901 0.952 1.019 1.021 0.994 0.940 0.929   9.71
15) bis(2-chloro 1.626 1.585 1.601 1.494 1.451 1.347 1.215 1.105 1.428  13.36
16) o-cresol     1.164 1.249 1.337 1.319 1.380 1.360 1.295 1.181 1.286   6.24
17) Acetophenone 1.858 2.003 2.103 2.098 2.211 2.205 2.110 2.009 2.075   5.60
18) Hexachloroet 0.596 0.615 0.632 0.624 0.658 0.651 0.636 0.597 0.626   3.64
19) N-Nitroso-di 0.922 0.998 1.037 1.016 1.013 0.950 0.845 0.697 0.935  12.28
20) m+p-cresols  1.244 1.360 1.429 1.425 1.496 1.421 1.299 1.188 1.358   7.77
21) 4-methylphen 1.244 1.360 1.429 1.425 1.496 1.421 1.299 1.188 1.358   7.77

22) I   Naphthalene-d8        ----------------ISTD--------------------
23) Nitrobenzene 0.383 0.411 0.428 0.441 0.461 0.456 0.457 0.439 0.434   6.16
24) Nitrobenzene 0.373 0.404 0.433 0.439 0.455 0.450 0.439 0.418 0.426   6.36
25) Isophorone   0.689 0.711 0.755 0.758 0.789 0.777 0.761 0.737 0.747   4.50
26) 2-Nitropheno 0.127 0.155 0.174 0.182 0.203 0.209 0.213 0.207 0.184  16.59
             ---- Linear regression ----  Coefficient =  0.9992
               Response Ratio = -0.00582 + 0.20990 *A

27) 2,4-Dimethyl 0.344 0.358 0.378 0.378 0.397 0.396 0.393 0.375 0.377   4.97
28) bis(2-Chloro 0.445 0.452 0.475 0.470 0.488 0.485 0.476 0.451 0.468   3.49
29) Benzoic acid       0.032 0.060 0.096 0.157 0.199 0.222 0.229 0.142  56.23
             ---- Quadratic regression ----  Coefficient =  0.9965
               Response Ratio = -0.02061 + 0.15455 *A + 0.02158 *A^2

30) 2,4-Dichloro 0.224 0.256 0.283 0.287 0.311 0.319 0.320 0.312 0.289  11.91
31) 1,2,4-Trichl 0.284 0.293 0.306 0.309 0.328 0.332 0.341 0.330 0.315   6.47
32) Naphthalene  1.012 1.018 1.048 1.025 1.067 1.057 1.036 0.993 1.032   2.41
33) 2,6-Dichloro 0.247 0.276 0.288 0.299 0.317 0.315 0.311 0.297 0.294   8.02
34) 4-Chloroanil 0.329 0.377 0.422 0.441 0.474 0.470 0.450 0.421 0.423  11.64
35) Hexachlorobu 0.158 0.162 0.173 0.176 0.192 0.197 0.201 0.195 0.182   9.23
36) 4-Chloro-3-m 0.270 0.286 0.316 0.315 0.336 0.343 0.336 0.325 0.316   8.15
37) 2-Methylnaph 0.615 0.652 0.686 0.689 0.720 0.711 0.706 0.673 0.681   5.07
38) 1-Methylnaph 0.617 0.626 0.672 0.670 0.691 0.690 0.682 0.656 0.663   4.22
39) 1,2,4,5-Tetr 0.261 0.276 0.302 0.300 0.334 0.346 0.356 0.344 0.315  11.18
```

8.7.1 8

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSX424-ICC424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12642.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
40) Caprolactam  0.122 0.143 0.154 0.156 0.168 0.168 0.163 0.155 0.153   9.96

41) I   Acenaphthene-d10      ----------------ISTD--------------------
42) Pentachloron 0.097 0.112 0.135 0.142 0.165 0.174 0.180 0.175 0.148  21.05
             ---- Linear regression ----  Coefficient =  0.9979
               Response Ratio = -0.00638 + 0.17629 *A

43) Hexachlorocy       0.035 0.070 0.118 0.197 0.243 0.286 0.288 0.177  58.51
             ---- Quadratic regression ----  Coefficient =  0.9958
               Response Ratio = -0.02626 + 0.19068 *A + 0.02862 *A^2

44) 2,4,6-Trichl 0.266 0.284 0.307 0.323 0.368 0.378 0.397 0.385 0.338  14.70
45) 2,4,5-Trichl 0.301 0.306 0.335 0.350 0.397 0.414 0.430 0.411 0.368  13.94
46) 2-Fluorobiph 1.242 1.288 1.350 1.377 1.454 1.447 1.449 1.361 1.371   5.72
47) 2-Chloronaph 0.979 1.027 1.079 1.077 1.148 1.146 1.157 1.092 1.088   5.75
48) Acenaphthyle 1.464 1.564 1.657 1.680 1.792 1.745 1.749 1.637 1.661   6.49
49) Dimethylphth 1.103 1.149 1.213 1.215 1.301 1.308 1.329 1.279 1.237   6.57
50) 2,6-Dinitrot 0.163 0.211 0.240 0.267 0.298 0.300 0.305 0.292 0.260  19.74
             ---- Linear regression ----  Coefficient =  0.9989
               Response Ratio = -0.00808 + 0.29972 *A

51) Acenaphthene 1.074 1.105 1.138 1.122 1.176 1.166 1.167 1.117 1.133   3.11
52) 2,4-Dinitrop       0.032 0.061 0.119 0.151 0.172 0.175 0.118  50.70
             ---- Quadratic regression ----  Coefficient =  0.9968
               Response Ratio = -0.03162 + 0.13627 *A + 0.01278 *A^2

53) Dibenzofuran 1.496 1.534 1.609 1.610 1.710 1.690 1.697 1.605 1.619   4.80
54) 2,4-Dinitrot       0.271 0.323 0.335 0.381 0.390 0.396 0.386 0.354  13.07
55) 4-Nitropheno       0.142 0.178 0.202 0.234 0.240 0.243 0.234 0.210  18.14
             ---- Linear regression ----  Coefficient =  0.9992
               Response Ratio = -0.01414 + 0.24244 *A

56) 2,3,4,6-Tetr       0.183 0.208 0.227 0.270 0.287 0.315 0.308 0.257  19.93
             ---- Quadratic regression ----  Coefficient =  0.9987
               Response Ratio = -0.01389 + 0.26867 *A + 0.01250 *A^2

57) Fluorene     1.146 1.169 1.275 1.266 1.357 1.350 1.311 1.213 1.261   6.27
58) 4-Chlorophen 0.534 0.543 0.591 0.600 0.666 0.668 0.672 0.628 0.613   9.01
59) Diethylphtha 1.075 1.165 1.242 1.235 1.330 1.343 1.361 1.290 1.255   7.78
60) 2-nitroanili 0.229 0.289 0.348 0.367 0.408 0.417 0.424 0.408 0.361  19.40
             ---- Linear regression ----  Coefficient =  0.9992
               Response Ratio = -0.01253 + 0.41739 *A

61) 3-nitroanili 0.241 0.280 0.323 0.337 0.359 0.363 0.366 0.347 0.327  13.65
             ---- Linear regression ----  Coefficient =  0.9992
               Response Ratio = -0.00719 + 0.35931 *A

62) 4-nitroanili 0.204 0.263 0.299 0.308 0.345 0.353 0.361 0.347 0.310  17.52
             ---- Linear regression ----  Coefficient =  0.9992
               Response Ratio = -0.00985 + 0.35412 *A

63) 1,1-Biphenyl 1.379 1.418 1.454 1.462 1.541 1.520 1.513 1.413 1.463   3.97

64) I   Phenanthrene-d10      ----------------ISTD--------------------
65) 4,6-Dinitro-       0.034 0.056 0.092 0.134 0.153 0.165 0.162 0.114  46.91
             ---- Quadratic regression ----  Coefficient =  0.9970
               Response Ratio = -0.01745 + 0.14159 *A + 0.00726 *A^2

66) n-Nitrosodip 0.469 0.501 0.527 0.540 0.603 0.597 0.603 0.578 0.552   9.23
67) 1,2-Diphenyl       0.879 0.918 0.931 0.960 0.898 0.857       0.907   4.08
```

8.7.1 8

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSX424-ICC424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12642.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
68) 2,4,6-Tribro 0.062 0.072 0.083 0.087 0.108 0.118 0.135 0.138 0.100  28.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9986
               Response Ratio = 0.00000 + 0.08856 *A + 0.01333 *A^2

69) 4-Bromopheny       0.170 0.178 0.190 0.216 0.228 0.241 0.243 0.210  14.38
70) Hexachlorobe       0.176 0.192 0.201 0.233 0.245 0.266 0.269 0.226  16.25
             ---- Quadratic regression ----  Coefficient =  0.9995
               Response Ratio = -0.00779 + 0.22332 *A + 0.01273 *A^2

71) Pentachlorop       0.013 0.030 0.051 0.087 0.107 0.127 0.134 0.078  61.10
             ---- Quadratic regression ----  Coefficient =  0.9973
               Response Ratio = -0.01100 + 0.07916 *A + 0.01526 *A^2

72) Phenanthrene 0.978 1.013 1.063 1.058 1.148 1.150 1.156 1.117 1.085   6.23
73) Anthracene   0.951 1.042 1.113 1.139 1.245 1.241 1.241 1.191 1.146   9.31
74) Carbazole    0.905 0.980 1.039 1.040 1.138 1.137 1.138 1.102 1.060   8.06
75) Di-n-butylph 0.906 1.051 1.153 1.234 1.368 1.373 1.383 1.260 1.216  14.09
76) Fluoranthene 0.883 0.960 1.055 1.088 1.207 1.234 1.266 1.247 1.118  12.87
77) Atrazine           0.168 0.188 0.190 0.212 0.219 0.222 0.213 0.202   9.87

78) I   Chrysene-d12          ----------------ISTD--------------------
79) Benzidine    0.186 0.190 0.268 0.354 0.389 0.410 0.369 0.326 0.312  27.98
             ---- Quadratic regression ----  Coefficient =  0.9947
               Response Ratio = -0.02087 + 0.43868 *A + -0.02396 *A^2

80) Pyrene       1.040 1.074 1.123 1.195 1.259 1.254 1.246 1.181 1.172   7.19
81) Terphenyl-d1 0.697 0.736 0.766 0.827 0.917 0.939 0.959 0.909 0.844  11.95
82) Butylbenzylp 0.374 0.459 0.513 0.552 0.592 0.595 0.596 0.565 0.531  14.92
83) 3,3-Dimethyl       0.247 0.332 0.373 0.355 0.376 0.339 0.300 0.332  13.76
84) 3,3'-Dichlor       0.308 0.359 0.399 0.456 0.480 0.485 0.465 0.422  16.14
             ---- Linear regression ----  Coefficient =  0.9990
               Response Ratio = -0.02634 + 0.48141 *A

85) Benzo[a]anth 0.876 0.932 1.015 1.075 1.223 1.261 1.278 1.217 1.110  14.12
86) Chrysene     0.968 0.980 1.046 1.068 1.152 1.191 1.204 1.162 1.096   8.55
87) bis(2-Ethylh 0.420 0.558 0.654 0.735 0.826 0.841 0.869 0.825 0.716  22.39
             ---- Linear regression ----  Coefficient =  0.9987
               Response Ratio = -0.02950 + 0.84826 *A


88) I   Perylene-d12          ----------------ISTD--------------------
89) Di-n-octylph 0.573 0.829 1.077 1.310 1.586 1.677 1.807 1.822 1.335  35.18
             ---- Quadratic regression ----  Coefficient =  0.9987
               Response Ratio = -0.06470 + 1.49228 *A + 0.09541 *A^2

90) Benzo[b]fluo 0.796 0.937 1.023 1.113 1.262 1.311 1.388 1.421 1.157  19.51
             ---- Quadratic regression ----  Coefficient =  0.9996
               Response Ratio = -0.02663 + 1.18712 *A + 0.06367 *A^2

91) Benzo[k]fluo 0.946 1.034 1.085 1.166 1.296 1.353 1.454 1.428 1.220  15.56
             ---- Linear regression ----  Coefficient =  0.9973
               Response Ratio = -0.04258 + 1.41134 *A

92) Benzo[a]pyre 0.675 0.817 0.931 1.018 1.165 1.210 1.274 1.263 1.044  21.24
             ---- Linear regression ----  Coefficient =  0.9979
               Response Ratio = -0.04653 + 1.25300 *A

93) Indeno[1,2,3 0.613 0.833 0.879 0.962 1.077 1.020 1.078 1.165 0.953  18.41
             ---- Linear regression ----  Coefficient =  0.9970
               Response Ratio = -0.03466 + 1.10883 *A
```

8.7.1 8

Initial Calibration Summary

Job Number: MC47774 **Sample:** MSX424-ICC424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12642.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
94) Dibenz[a,h]a 0.764 0.884 0.956 1.015 1.128 1.089 1.155 1.186 1.022  14.34
95) Benzo[g,h,i] 0.847 0.913 0.996 1.011 1.025 0.944 1.031 1.087 0.982   7.78

96) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
97) Benzaldehyde       0.224 0.403 0.795 0.715 0.606 0.521       0.544  38.50
              ---- Quadratic regression ----  Coefficient =  0.9937
                Response Ratio = -0.09681 + 0.96208 *A + -0.13974 *A^2

-----------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          X160921_8270.m        Thu Sep 22 11:17:30 2016
```

8.7.1 8

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12646.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\X160921\x12646.D           Vial: 9
Acq On    : 21 Sep 2016   7:16 pm                     Operator: AkinA
Sample    : ICV424-50,MEGA                            Inst    : MSX
Misc      : op48431,msx424,,,,1,1                     Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : X:\1\methods\X160921_8270.m (RTE Integrator)
Title        : SW-864 Method 8270
Last Update  : Thu Sep 22 10:40:58 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	110	0.00	4.04
2	T	N-nitrosodimethylamine	50.000	50.583	-1.2	106	0.00	2.23
3	T	1,4-Dioxane		----------NA----------				
4	T	Pyridine	50.000	50.555	-1.1	106	0.00	2.23
5	T	Aniline	50.000	57.159	-14.3	110	0.00	3.83
6	S	2-Fluorophenol		----------NA----------				
7	T	bis(2-Chloroethyl)ether	50.000	51.590	-3.2	109	0.00	3.86
8	S	Phenol-d5		----------NA----------				
9	T	Phenol	50.000	52.751	-5.5	106	0.00	3.82
10	T	2-Chlorophenol	50.000	51.493	-3.0	107	0.00	3.91
11	T	1,3-Dichlorobenzene	50.000	53.087	-6.2	111	0.00	4.01
12	T	1,4-Dichlorobenzene	50.000	51.940	-3.9	109	0.00	4.05
13	T	1,2-Dichlorobenzene	50.000	51.903	-3.8	110	0.00	4.21
14	T	Benzyl alcohol	50.000	53.485	-7.0	107	0.00	4.17
15	T	bis(2-chloroisopropyl)eth		----------NA----------				
16	T	o-cresol	50.000	52.809	-5.6	108	0.00	4.28
17	T	Acetophenone		----------NA----------				
18	T	Hexachloroethane	50.000	51.899	-3.8	108	0.00	4.44
19	T	N-Nitroso-di-n-propylamin	50.000	58.884	-17.8	119	0.00	4.40
20	T	m+p-cresols	50.000	53.032	-6.1	106	0.00	4.40
21	T	4-methylphenol	50.000	53.032	-6.1	106	0.00	4.40
22	I	Naphthalene-d8	40.000	40.000	0.0	108	0.00	5.09
23	S	Nitrobenzene-d5		----------NA----------				
24	T	Nitrobenzene	50.000	52.769	-5.5	107	0.00	4.53
25	T	Isophorone	50.000	54.669	-9.3	112	0.00	4.71
26	T	2-Nitrophenol	50.000	48.479	3.0	106	0.00	4.79
27	T	2,4-Dimethylphenol	50.000	52.346	-4.7	108	0.00	4.83
28	T	bis(2-Chloroethoxy)methan	50.000	51.608	-3.2	107	0.00	4.90
		---------- Amount Calc. %Drift ----------						
29	T	Benzoic acid		----------NA----------				
		---------- Amount Calc. %Drift ----------						
30	T	2,4-Dichlorophenol	50.000	52.491	-5.0	106	0.00	4.99
31	T	1,2,4-Trichlorobenzene	50.000	53.482	-7.0	112	0.00	5.05
32	T	Naphthalene	50.000	51.479	-3.0	108	0.00	5.11
33	T	2,6-Dichlorophenol		----------NA----------				
34	T	4-Chloroaniline	50.000	54.952	-9.9	106	0.00	5.18
35	T	Hexachlorobutadiene	50.000	53.727	-7.5	111	0.00	5.25
36	T	4-Chloro-3-methylphenol	50.000	52.158	-4.3	106	-0.01	5.61
37	T	2-Methylnaphthalene	50.000	50.827	-1.7	104	0.00	5.70

8.7.2 8

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12646.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

38	T	1-Methylnaphthalene	50.000	48.857	2.3	102	0.00	5.79
39	T	1,2,4,5-Tetrachlorobenzen		----------NA----------				
40	T	Caprolactam		----------NA----------				
41	I	Acenaphthene-d10	40.000	40.000	0.0	109	0.00	6.62
42	T	Pentachloronitrobenzene		----------NA----------				
		---------- Amount Calc. %Drift ----------						
43	T	Hexachlorocyclopentadiene	50.000	50.023	-0.0	114	0.00	5.89
		---------- Amount Calc. %Drift ----------						
44	T	2,4,6-Trichlorophenol	50.000	52.194	-4.4	105	0.00	5.97
45	T	2,4,5-Trichlorophenol	50.000	48.926	2.1	99	-0.01	6.01
46	S	2-Fluorobiphenyl		----------NA----------				
47	T	2-Chloronaphthalene	50.000	52.811	-5.6	109	0.00	6.12
48	T	Acenaphthylene	50.000	55.121	-10.2	111	0.00	6.49
49	T	Dimethylphthalate	50.000	52.324	-4.6	108	0.00	6.42
50	T	2,6-Dinitrotoluene	50.000	52.717	-5.4	113	0.00	6.49
51	T	Acenaphthene	50.000	51.971	-3.9	109	0.00	6.65
		---------- Amount Calc. %Drift ----------						
52	T	2,4-Dinitrophenol	50.000	48.838	2.3	113	0.00	6.71
		---------- Amount Calc. %Drift ----------						
53	T	Dibenzofuran	50.000	51.324	-2.6	106	0.00	6.79
54	T	2,4-Dinitrotoluene	50.000	55.709	-11.4	113	0.00	6.84
55	T	4-Nitrophenol	50.000	48.402	3.2	104	0.00	6.80
		---------- Amount Calc. %Drift ----------						
56	T	2,3,4,6-Tetrachlorophenol	50.000	51.814	-3.6	114	0.00	6.95
		---------- Amount Calc. %Drift ----------						
57	T	Fluorene	50.000	54.097	-8.2	110	0.00	7.09
58	T	4-Chlorophenyl-phenylethe	50.000	53.592	-7.2	107	0.00	7.09
59	T	Diethylphthalate	50.000	53.707	-7.4	110	0.00	7.03
60	T	2-nitroaniline	50.000	49.038	1.9	107	0.00	6.26
61	T	3-nitroaniline	50.000	51.755	-3.5	111	0.00	6.62
62	T	4-nitroaniline	50.000	47.599	4.8	104	0.00	7.17
63	T	1,1-Biphenyl		----------NA----------				
64	I	Phenanthrene-d10	40.000	40.000	0.0	110	0.00	7.92
		---------- Amount Calc. %Drift ----------						
65	T	4,6-Dinitro-2-methylpheno	50.000	47.298	5.4	105	0.00	7.20
		---------- Amount Calc. %Drift ----------						
66	T	n-Nitrosodiphenylamine		----------NA----------				
67	T	1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount Calc. %Drift ----------						
68	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount Calc. %Drift ----------						
69	T	4-Bromophenyl-phenylether	50.000	53.383	-6.8	114	0.00	7.51
		---------- Amount Calc. %Drift ----------						
70	T	Hexachlorobenzene	50.000	50.969	-1.9	113	0.00	7.65
71	T	Pentachlorophenol	50.000	44.694	10.6	97	0.00	7.82
		---------- Amount Calc. %Drift ----------						

8.7.2 8

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12646.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

72	T	Phenanthrene	50.000	54.051	-8.1	112	0.00	7.94
73	T	Anthracene	50.000	53.012	-6.0	107	0.00	7.98
74	T	Carbazole	50.000	52.663	-5.3	108	0.00	8.13
75	T	Di-n-butylphthalate	50.000	55.742	-11.5	109	0.00	8.45
76	T	Fluoranthene	50.000	55.459	-10.9	113	0.00	9.00
77	T	Atrazine		----------NA----------				
78	I	Chrysene-d12	40.000	40.000	0.0	110	0.00	10.83
		---------- Amount Calc. %Drift ----------						
79	T	Benzidine		----------NA----------				
		---------- Amount Calc. %Drift ----------						
80	T	Pyrene	50.000	54.397	-8.8	111	0.00	9.23
81	S	Terphenyl-d14		----------NA----------				
82	T	Butylbenzylphthalate	50.000	55.537	-11.1	109	0.00	10.01
83	T	3,3-Dimethylbenzidine		----------NA----------				
84	T	3,3'-Dichlorobenzidine		----------NA----------				
85	T	Benzo[a]anthracene	50.000	52.321	-4.6	104	0.00	10.80
86	T	Chrysene	50.000	51.652	-3.3	108	0.00	10.87
87	T	bis(2-Ethylhexyl)phthalat	50.000	50.294	-0.6	110	0.00	10.93
88	I	Perylene-d12	40.000	40.000	0.0	113	0.00	14.01
		---------- Amount Calc. %Drift ----------						
89	T	Di-n-octylphthalate	50.000	48.734	2.5	108	-0.01	12.22
90	T	Benzo[b]fluoranthene	50.000	48.177	3.6	107	-0.01	13.05
91	T	Benzo[k]fluoranthene	50.000	45.220	9.6	109	-0.01	13.11
92	T	Benzo[a]pyrene	50.000	48.592	2.8	115	-0.01	13.87
93	T	Indeno[1,2,3-cd]pyrene	50.000	49.193	1.6	112	0.00	15.85
		---------- Amount Calc. %Drift ----------						
94	T	Dibenz[a,h]anthracene	50.000	55.624	-11.2	114	0.00	15.88
95	T	Benzo[g,h,i]perylene	50.000	52.197	-4.4	113	0.00	16.19
96	I	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	110	0.00	4.04
		---------- Amount Calc. %Drift ----------						
97	T	Benzaldehyde		----------NA----------				

```
-----------------------------------------------------------------------------
-----------------------------------------------------------------------------

   (#) = Out of Range                SPCC's out = 0  CCC's out = 0
    x12642.D   X160921_8270.m       Thu Sep 22 12:13:27 2016
```

8.7.2 8

Raw Data: X12647.D

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12647.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\X160921\x12647.D           Vial: 10
Acq On    : 21 Sep 2016   7:40 pm                    Operator: AkinA
Sample    : ICV424-50,8270                           Inst    : MSX
Misc      : op48431,msx424,,,,1,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : X:\1\methods\X160921_8270.m (RTE Integrator)
Title        : SW-864 Method 8270
Last Update  : Thu Sep 22 10:40:58 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

8.7.3 8

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	117	0.00	4.04
2	T	N-nitrosodimethylamine		----------	NA----------			
3	T	1,4-Dioxane	50.000	49.800	0.4	117	0.00	2.00
4	T	Pyridine		----------	NA----------			
5	T	Aniline		----------	NA----------			
6	S	2-Fluorophenol	50.000	50.688	-1.4	111	0.00	3.13
7	T	bis(2-Chloroethyl)ether		----------	NA----------			
8	S	Phenol-d5	50.000	49.768	0.5	109	0.00	3.81
9	T	Phenol		----------	NA----------			
10	T	2-Chlorophenol		----------	NA----------			
11	T	1,3-Dichlorobenzene		----------	NA----------			
12	T	1,4-Dichlorobenzene		----------	NA----------			
13	T	1,2-Dichlorobenzene		----------	NA----------			
14	T	Benzyl alcohol		----------	NA----------			
15	T	bis(2-chloroisopropyl)eth	50.000	57.498	-15.0	132	0.00	4.28
16	T	o-cresol		----------	NA----------			
17	T	Acetophenone	50.000	55.793	-11.6	122	0.00	4.39
18	T	Hexachloroethane		----------	NA----------			
19	T	N-Nitroso-di-n-propylamin		----------	NA----------			
20	T	m+p-cresols		----------	NA----------			
21	T	4-methylphenol		----------	NA----------			
22	I	Naphthalene-d8	40.000	40.000	0.0	116	0.00	5.09
23	S	Nitrobenzene-d5	50.000	49.652	0.7	108	0.00	4.52
24	T	Nitrobenzene		----------	NA----------			
25	T	Isophorone		----------	NA----------			
26	T	2-Nitrophenol		----------	NA----------			
27	T	2,4-Dimethylphenol		----------	NA----------			
28	T	bis(2-Chloroethoxy)methan		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
29	T	Benzoic acid	50.000	42.156	15.7	98	0.00	4.95
		---------- Amount Calc. %Drift ----------						
30	T	2,4-Dichlorophenol		----------	NA----------			
31	T	1,2,4-Trichlorobenzene		----------	NA----------			
32	T	Naphthalene		----------	NA----------			
33	T	2,6-Dichlorophenol	50.000	52.997	-6.0	114	0.00	5.19
34	T	4-Chloroaniline		----------	NA----------			
35	T	Hexachlorobutadiene		----------	NA----------			
36	T	4-Chloro-3-methylphenol		----------	NA----------			
37	T	2-Methylnaphthalene		----------	NA----------			

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12647.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

8.7.3 8

38	T	1-Methylnaphthalene		----------	NA----------			
39	T	1,2,4,5-Tetrachlorobenzen	50.000	57.718	-15.4	126	0.00	5.88
40	T	Caprolactam		----------	NA----------			
41	I	Acenaphthene-d10	40.000	40.000	0.0	116	0.00	6.62
42	T	Pentachloronitrobenzene	50.000	53.435	-6.9	129	0.00	7.88
		---------- Amount Calc. %Drift ----------						
43	T	Hexachlorocyclopentadiene		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
44	T	2,4,6-Trichlorophenol		----------	NA----------			
45	T	2,4,5-Trichlorophenol		----------	NA----------			
46	S	2-Fluorobiphenyl	50.000	48.525	3.0	106	0.00	6.03
47	T	2-Chloronaphthalene		----------	NA----------			
48	T	Acenaphthylene		----------	NA----------			
49	T	Dimethylphthalate		----------	NA----------			
50	T	2,6-Dinitrotoluene		----------	NA----------			
51	T	Acenaphthene		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
52	T	2,4-Dinitrophenol		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
53	T	Dibenzofuran		----------	NA----------			
54	T	2,4-Dinitrotoluene		----------	NA----------			
55	T	4-Nitrophenol		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
56	T	2,3,4,6-Tetrachlorophenol		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
57	T	Fluorene		----------	NA----------			
58	T	4-Chlorophenyl-phenylethe		----------	NA----------			
59	T	Diethylphthalate		----------	NA----------			
60	T	2-nitroaniline		----------	NA----------			
61	T	3-nitroaniline		----------	NA----------			
62	T	4-nitroaniline		----------	NA----------			
63	T	1,1-Biphenyl	50.000	57.707	-15.4	127	0.00	6.11
64	I	Phenanthrene-d10	40.000	40.000	0.0	116	0.00	7.92
		---------- Amount Calc. %Drift ----------						
65	T	4,6-Dinitro-2-methylpheno		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
66	T	n-Nitrosodiphenylamine	50.000	55.000	-10.0	117	0.00	7.20
67	T	1,2-Diphenylhydrazine	50.000	55.977	-12.0	123	0.00	7.22
		---------- Amount Calc. %Drift ----------						
68	S	2,4,6-Tribromophenol	50.000	48.270	3.5	109	0.00	7.33
		---------- Amount Calc. %Drift ----------						
69	T	4-Bromophenyl-phenylether		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
70	T	Hexachlorobenzene		----------	NA----------			
71	T	Pentachlorophenol		----------	NA----------			
		---------- Amount Calc. %Drift ----------						

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12647.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

8.7.3 8

72	T	Phenanthrene		----------	NA----------			
73	T	Anthracene		----------	NA----------			
74	T	Carbazole		----------	NA----------			
75	T	Di-n-butylphthalate		----------	NA----------			
76	T	Fluoranthene		----------	NA----------			
77	T	Atrazine		----------	NA----------			
78	I	Chrysene-d12	40.000	40.000	0.0	114	0.00	10.83
		---------- Amount Calc. %Drift ----------						
79	T	Benzidine	50.000	35.060	29.9	81	0.00	9.14
		---------- Amount Calc. %Drift ----------						
80	T	Pyrene		----------	NA----------			
81	S	Terphenyl-d14	50.000	50.685	-1.4	106	0.00	9.39
82	T	Butylbenzylphthalate		----------	NA----------			
83	T	3,3-Dimethylbenzidine		----------	NA----------			
84	T	3,3'-Dichlorobenzidine	50.000	38.720	22.6	88	-0.01	10.80
85	T	Benzo[a]anthracene		----------	NA----------			
86	T	Chrysene		----------	NA----------			
87	T	bis(2-Ethylhexyl)phthalat		----------	NA----------			
88	I	Perylene-d12	40.000	40.000	0.0	116	-0.01	14.01
		---------- Amount Calc. %Drift ----------						
89	T	Di-n-octylphthalate		----------	NA----------			
90	T	Benzo[b]fluoranthene		----------	NA----------			
91	T	Benzo[k]fluoranthene		----------	NA----------			
92	T	Benzo[a]pyrene		----------	NA----------			
93	T	Indeno[1,2,3-cd]pyrene		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
94	T	Dibenz[a,h]anthracene		----------	NA----------			
95	T	Benzo[g,h,i]perylene		----------	NA----------			
96	I	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	117	0.00	4.04
		---------- Amount Calc. %Drift ----------						
97	T	Benzaldehyde		----------	NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x12642.D X160921_8270.m Thu Sep 22 12:13:29 2016

Raw Data: X12648.D

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12648.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\X160921\x12648.D           Vial: 11
Acq On    : 21 Sep 2016   8:04 pm                    Operator: AkinA
Sample    : ICV424-50,3,3DMB                         Inst    : MSX
Misc      : op48431,msx424,,,,1,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : X:\1\methods\X160921_8270.m (RTE Integrator)
Title        : SW-864 Method 8270
Last Update  : Thu Sep 22 10:40:58 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

8.7.4 8

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	97	0.00	4.04
2	T	N-nitrosodimethylamine		----------	NA----------			
3	T	1,4-Dioxane		----------	NA----------			
4	T	Pyridine		----------	NA----------			
5	T	Aniline		----------	NA----------			
6	S	2-Fluorophenol		----------	NA----------			
7	T	bis(2-Chloroethyl)ether		----------	NA----------			
8	S	Phenol-d5		----------	NA----------			
9	T	Phenol		----------	NA----------			
10	T	2-Chlorophenol		----------	NA----------			
11	T	1,3-Dichlorobenzene		----------	NA----------			
12	T	1,4-Dichlorobenzene		----------	NA----------			
13	T	1,2-Dichlorobenzene		----------	NA----------			
14	T	Benzyl alcohol		----------	NA----------			
15	T	bis(2-chloroisopropyl)eth		----------	NA----------			
16	T	o-cresol		----------	NA----------			
17	T	Acetophenone		----------	NA----------			
18	T	Hexachloroethane		----------	NA----------			
19	T	N-Nitroso-di-n-propylamin		----------	NA----------			
20	T	m+p-cresols		----------	NA----------			
21	T	4-methylphenol		----------	NA----------			
22	I	Naphthalene-d8	40.000	40.000	0.0	99	0.00	5.09
23	S	Nitrobenzene-d5		----------	NA----------			
24	T	Nitrobenzene		----------	NA----------			
25	T	Isophorone		----------	NA----------			
26	T	2-Nitrophenol		----------	NA----------			
27	T	2,4-Dimethylphenol		----------	NA----------			
28	T	bis(2-Chloroethoxy)methan		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
29	T	Benzoic acid		----------	NA----------			
		---------- Amount Calc. %Drift ----------						
30	T	2,4-Dichlorophenol		----------	NA----------			
31	T	1,2,4-Trichlorobenzene		----------	NA----------			
32	T	Naphthalene		----------	NA----------			
33	T	2,6-Dichlorophenol		----------	NA----------			
34	T	4-Chloroaniline		----------	NA----------			
35	T	Hexachlorobutadiene		----------	NA----------			
36	T	4-Chloro-3-methylphenol		----------	NA----------			
37	T	2-Methylnaphthalene		----------	NA----------			

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12648.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

38 T	1-Methylnaphthalene		----------NA----------					
39 T	1,2,4,5-Tetrachlorobenzen		----------NA----------					
40 T	Caprolactam		----------NA----------					
41 I	Acenaphthene-d10	40.000	40.000	0.0	101	0.00	6.62	
42 T	Pentachloronitrobenzene		----------NA----------					
	---------- Amount Calc. %Drift ----------							
43 T	Hexachlorocyclopentadiene		----------NA----------					
	---------- Amount Calc. %Drift ----------							
44 T	2,4,6-Trichlorophenol		----------NA----------					
45 T	2,4,5-Trichlorophenol		----------NA----------					
46 S	2-Fluorobiphenyl		----------NA----------					
47 T	2-Chloronaphthalene		----------NA----------					
48 T	Acenaphthylene		----------NA----------					
49 T	Dimethylphthalate		----------NA----------					
50 T	2,6-Dinitrotoluene		----------NA----------					
51 T	Acenaphthene		----------NA----------					
	---------- Amount Calc. %Drift ----------							
52 T	2,4-Dinitrophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
53 T	Dibenzofuran		----------NA----------					
54 T	2,4-Dinitrotoluene		----------NA----------					
55 T	4-Nitrophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
56 T	2,3,4,6-Tetrachlorophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
57 T	Fluorene		----------NA----------					
58 T	4-Chlorophenyl-phenylethe		----------NA----------					
59 T	Diethylphthalate		----------NA----------					
60 T	2-nitroaniline		----------NA----------					
61 T	3-nitroaniline		----------NA----------					
62 T	4-nitroaniline		----------NA----------					
63 T	1,1-Biphenyl		----------NA----------					
64 I	Phenanthrene-d10	40.000	40.000	0.0	107	0.00	7.91	
	---------- Amount Calc. %Drift ----------							
65 T	4,6-Dinitro-2-methylpheno		----------NA----------					
	---------- Amount Calc. %Drift ----------							
66 T	n-Nitrosodiphenylamine		----------NA----------					
67 T	1,2-Diphenylhydrazine		----------NA----------					
	---------- Amount Calc. %Drift ----------							
68 S	2,4,6-Tribromophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
69 T	4-Bromophenyl-phenylether		----------NA----------					
	---------- Amount Calc. %Drift ----------							
70 T	Hexachlorobenzene		----------NA----------					
71 T	Pentachlorophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							

8.7.4 8

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12648.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

72 T	Phenanthrene		----------NA----------					
73 T	Anthracene		----------NA----------					
74 T	Carbazole		----------NA----------					
75 T	Di-n-butylphthalate		----------NA----------					
76 T	Fluoranthene		----------NA----------					
77 T	Atrazine		----------NA----------					
78 I	Chrysene-d12	40.000	40.000	0.0	101	-0.02	10.82	
	---------- Amount Calc. %Drift ----------							
79 T	Benzidine		----------NA----------					
	---------- Amount Calc. %Drift ----------							
80 T	Pyrene		----------NA----------					
81 S	Terphenyl-d14		----------NA----------					
82 T	Butylbenzylphthalate		----------NA----------					
83 T	3,3-Dimethylbenzidine	50.000	124.528	-149.1#	236	0.00	9.98	
84 T	3,3'-Dichlorobenzidine		----------NA----------					
85 T	Benzo[a]anthracene		----------NA----------					
86 T	Chrysene		----------NA----------					
87 T	bis(2-Ethylhexyl)phthalat		----------NA----------					
88 I	Perylene-d12	40.000	40.000	0.0	102	-0.02	14.00	
	---------- Amount Calc. %Drift ----------							
89 T	Di-n-octylphthalate		----------NA----------					
90 T	Benzo[b]fluoranthene		----------NA----------					
91 T	Benzo[k]fluoranthene		----------NA----------					
92 T	Benzo[a]pyrene		----------NA----------					
93 T	Indeno[1,2,3-cd]pyrene		----------NA----------					
	---------- Amount Calc. %Drift ----------							
94 T	Dibenz[a,h]anthracene		----------NA----------					
95 T	Benzo[g,h,i]perylene		----------NA----------					
96 I	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	97	0.00	4.04	
	---------- Amount Calc. %Drift ----------							
97 T	Benzaldehyde		----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x12642.D X160921_8270.m Thu Sep 22 12:13:31 2016

8.7.4 8

Raw Data: X12649.D

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12649.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\X160921\x12649.D          Vial: 12
Acq On    : 21 Sep 2016   8:29 pm                   Operator: AkinA
Sample    : ICV424-50,BENZALD                       Inst    : MSX
Misc      : op48431,msx424,,,,1,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : X:\1\methods\X160921_8270.m (RTE Integrator)
Title        : SW-864 Method 8270
Last Update  : Thu Sep 22 10:40:58 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	99	0.00	4.04
2 T	N-nitrosodimethylamine		----------NA----------				
3 T	1,4-Dioxane		----------NA----------				
4 T	Pyridine		----------NA----------				
5 T	Aniline		----------NA----------				
6 S	2-Fluorophenol		----------NA----------				
7 T	bis(2-Chloroethyl)ether		----------NA----------				
8 S	Phenol-d5		----------NA----------				
9 T	Phenol		----------NA----------				
10 T	2-Chlorophenol		----------NA----------				
11 T	1,3-Dichlorobenzene		----------NA----------				
12 T	1,4-Dichlorobenzene		----------NA----------				
13 T	1,2-Dichlorobenzene		----------NA----------				
14 T	Benzyl alcohol		----------NA----------				
15 T	bis(2-chloroisopropyl)eth		----------NA----------				
16 T	o-cresol		----------NA----------				
17 T	Acetophenone		----------NA----------				
18 T	Hexachloroethane		----------NA----------				
19 T	N-Nitroso-di-n-propylamin		----------NA----------				
20 T	m+p-cresols		----------NA----------				
21 T	4-methylphenol		----------NA----------				
22 I	Naphthalene-d8	40.000	40.000	0.0	101	0.00	5.09
23 S	Nitrobenzene-d5		----------NA----------				
24 T	Nitrobenzene		----------NA----------				
25 T	Isophorone		----------NA----------				
26 T	2-Nitrophenol		----------NA----------				
27 T	2,4-Dimethylphenol		----------NA----------				
28 T	bis(2-Chloroethoxy)methan		----------NA----------				
	---------- Amount Calc. %Drift ----------						
29 T	Benzoic acid		----------NA----------				
	---------- Amount Calc. %Drift ----------						
30 T	2,4-Dichlorophenol		----------NA----------				
31 T	1,2,4-Trichlorobenzene		----------NA----------				
32 T	Naphthalene		----------NA----------				
33 T	2,6-Dichlorophenol		----------NA----------				
34 T	4-Chloroaniline		----------NA----------				
35 T	Hexachlorobutadiene		----------NA----------				
36 T	4-Chloro-3-methylphenol		----------NA----------				
37 T	2-Methylnaphthalene		----------NA----------				

8.7.5 8

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12649.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

38 T	1-Methylnaphthalene		----------NA----------					
39 T	1,2,4,5-Tetrachlorobenzen		----------NA----------					
40 T	Caprolactam	50.000	55.515	-11.0	102	-0.03	5.44	
41 I	Acenaphthene-d10	40.000	40.000	0.0	101	0.00	6.62	
42 T	Pentachloronitrobenzene		----------NA----------					
	---------- Amount Calc. %Drift ----------							
43 T	Hexachlorocyclopentadiene		----------NA----------					
	---------- Amount Calc. %Drift ----------							
44 T	2,4,6-Trichlorophenol		----------NA----------					
45 T	2,4,5-Trichlorophenol		----------NA----------					
46 S	2-Fluorobiphenyl		----------NA----------					
47 T	2-Chloronaphthalene		----------NA----------					
48 T	Acenaphthylene		----------NA----------					
49 T	Dimethylphthalate		----------NA----------					
50 T	2,6-Dinitrotoluene		----------NA----------					
51 T	Acenaphthene		----------NA----------					
	---------- Amount Calc. %Drift ----------							
52 T	2,4-Dinitrophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
53 T	Dibenzofuran		----------NA----------					
54 T	2,4-Dinitrotoluene		----------NA----------					
55 T	4-Nitrophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
56 T	2,3,4,6-Tetrachlorophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
57 T	Fluorene		----------NA----------					
58 T	4-Chlorophenyl-phenylethe		----------NA----------					
59 T	Diethylphthalate		----------NA----------					
60 T	2-nitroaniline		----------NA----------					
61 T	3-nitroaniline		----------NA----------					
62 T	4-nitroaniline		----------NA----------					
63 T	1,1-Biphenyl		----------NA----------					
64 I	Phenanthrene-d10	40.000	40.000	0.0	108	0.00	7.91	
	---------- Amount Calc. %Drift ----------							
65 T	4,6-Dinitro-2-methylpheno		----------NA----------					
	---------- Amount Calc. %Drift ----------							
66 T	n-Nitrosodiphenylamine		----------NA----------					
67 T	1,2-Diphenylhydrazine		----------NA----------					
	---------- Amount Calc. %Drift ----------							
68 S	2,4,6-Tribromophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							
69 T	4-Bromophenyl-phenylether		----------NA----------					
	---------- Amount Calc. %Drift ----------							
70 T	Hexachlorobenzene		----------NA----------					
71 T	Pentachlorophenol		----------NA----------					
	---------- Amount Calc. %Drift ----------							

8.7.5 8

Initial Calibration Verification

Job Number: MC47774 **Sample:** MSX424-ICV424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12649.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

72 T	Phenanthrene			----------NA----------				
73 T	Anthracene			----------NA----------				
74 T	Carbazole			----------NA----------				
75 T	Di-n-butylphthalate			----------NA----------				
76 T	Fluoranthene			----------NA----------				
77 T	Atrazine	50.000	59.100	-18.2	121	0.00	7.70	
78 I	Chrysene-d12	40.000	40.000	0.0	99	-0.02	10.82	
	---------- Amount Calc. %Drift ----------							
79 T	Benzidine			----------NA----------				
	---------- Amount Calc. %Drift ----------							
80 T	Pyrene			----------NA----------				
81 S	Terphenyl-d14			----------NA----------				
82 T	Butylbenzylphthalate			----------NA----------				
83 T	3,3-Dimethylbenzidine			----------NA----------				
84 T	3,3'-Dichlorobenzidine			----------NA----------				
85 T	Benzo[a]anthracene			----------NA----------				
86 T	Chrysene			----------NA----------				
87 T	bis(2-Ethylhexyl)phthalat			----------NA----------				
88 I	Perylene-d12	40.000	40.000	0.0	101	-0.02	14.00	
	---------- Amount Calc. %Drift ----------							
89 T	Di-n-octylphthalate			----------NA----------				
90 T	Benzo[b]fluoranthene			----------NA----------				
91 T	Benzo[k]fluoranthene			----------NA----------				
92 T	Benzo[a]pyrene			----------NA----------				
93 T	Indeno[1,2,3-cd]pyrene			----------NA----------				
	---------- Amount Calc. %Drift ----------							
94 T	Dibenz[a,h]anthracene			----------NA----------				
95 T	Benzo[g,h,i]perylene			----------NA----------				
96 I	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	99	0.00	4.04	
	---------- Amount Calc. %Drift ----------							
97 T	Benzaldehyde	50.000	-40.000	180.0#	193	0.00	3.71	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x12642.D X160921_8270.m Thu Sep 22 12:13:33 2016

8.7.5 8

Continuing Calibration Summary

Job Number: MC47774 **Sample:** MSX425-CC424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12651.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\X160922\x12651.D Vial: 3
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA
Sample : CC424-50 Inst : MSX
Misc : op48431,msx425,,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : X:\1\methods\X160921_8270.m (RTE Integrator)
Title : SW-864 Method 8270
Last Update : Thu Sep 22 10:40:58 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	4.04
2	T	N-nitrosodimethylamine	1.019	1.055	-3.5	106	0.00	2.23
3	T	1,4-Dioxane	0.672	0.660	1.8	106	0.00	2.00
4	T	Pyridine	1.781	1.820	-2.2	105	0.00	2.23
5	T	Aniline	2.086	2.334	-11.9	105	0.00	3.82
6	S	2-Fluorophenol	1.356	1.405	-3.6	104	0.00	3.13
7	T	bis(2-Chloroethyl)ether	1.019	1.050	-3.0	107	0.00	3.85
8	S	Phenol-d5	1.754	1.823	-3.9	104	0.00	3.81
9	T	Phenol	1.907	2.047	-7.3	105	0.00	3.82
10	T	2-Chlorophenol	1.380	1.431	-3.7	105	0.00	3.91
11	T	1,3-Dichlorobenzene	1.492	1.528	-2.4	105	0.00	4.01
12	T	1,4-Dichlorobenzene	1.567	1.615	-3.1	106	0.00	4.05
13	T	1,2-Dichlorobenzene	1.438	1.465	-1.9	106	0.00	4.20
14	T	Benzyl alcohol	0.929	1.006	-8.3	106	0.00	4.17
15	T	bis(2-chloroisopropyl)eth	1.428	1.441	-0.9	107	0.00	4.28
16	T	o-cresol	1.286	1.374	-6.8	107	0.00	4.28
17	T	Acetophenone	2.075	2.207	-6.4	107	0.00	4.39
18	T	Hexachloroethane	0.626	0.656	-4.8	107	0.00	4.44
19	T	N-Nitroso-di-n-propylamin	0.935	1.007	-7.7	107	0.00	4.40
20	T	m+p-cresols	1.358	1.480	-9.0	106	0.00	4.40
21	T	4-methylphenol	1.358	1.480	-9.0	106	0.00	4.40
22	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00	5.09
23	S	Nitrobenzene-d5	0.434	0.461	-6.2	107	0.00	4.52
24	T	Nitrobenzene	0.426	0.456	-7.0	107	0.00	4.53
25	T	Isophorone	0.747	0.788	-5.5	106	0.00	4.71
		---------- Amount Calc. %Drift ----------						
26	T	2-Nitrophenol	50.000	49.018	2.0	106	0.00	4.79
		---------- AvgRF CCRF %Dev ----------						
27	T	2,4-Dimethylphenol	0.377	0.391	-3.7	105	0.00	4.83
28	T	bis(2-Chloroethoxy)methan	0.468	0.492	-5.1	108	0.00	4.90
		---------- Amount Calc. %Drift ----------						
29	T	Benzoic acid	50.000	41.200	17.6	88	0.00	4.95
		---------- AvgRF CCRF %Dev ----------						
30	T	2,4-Dichlorophenol	0.289	0.312	-8.0	107	0.00	4.99
31	T	1,2,4-Trichlorobenzene	0.315	0.332	-5.4	108	0.00	5.05
32	T	Naphthalene	1.032	1.071	-3.8	107	0.00	5.11
33	T	2,6-Dichlorophenol	0.294	0.315	-7.1	106	0.00	5.19

8.7.6 8

Continuing Calibration Summary

Job Number: MC47774 **Sample:** MSX425-CC424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12651.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

34	T	4-Chloroaniline	0.423	0.472	-11.6	106	0.00	5.18
35	T	Hexachlorobutadiene	0.182	0.194	-6.6	108	0.00	5.25
36	T	4-Chloro-3-methylphenol	0.316	0.338	-7.0	107	0.00	5.61
37	T	2-Methylnaphthalene	0.681	0.709	-4.1	105	0.00	5.69
38	T	1-Methylnaphthalene	0.663	0.690	-4.1	107	0.00	5.79
39	T	1,2,4,5-Tetrachlorobenzen	0.315	0.335	-6.3	107	0.00	5.88
40	T	Caprolactam	0.153	0.165	-7.8	105	0.00	5.47
41	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	6.62
		---------- Amount Calc. %Drift ----------						
42	T	Pentachloronitrobenzene	50.000	48.780	2.4	107	0.00	7.88
43	T	Hexachlorocyclopentadiene	50.000	47.723	4.6	103	0.00	5.89
		---------- AvgRF CCRF %Dev ----------						
44	T	2,4,6-Trichlorophenol	0.338	0.369	-9.2	105	0.00	5.98
45	T	2,4,5-Trichlorophenol	0.368	0.404	-9.8	107	0.00	6.02
46	S	2-Fluorobiphenyl	1.371	1.471	-7.3	106	0.00	6.03
47	T	2-Chloronaphthalene	1.088	1.155	-6.2	106	0.00	6.12
48	T	Acenaphthylene	1.661	1.791	-7.8	105	0.00	6.49
49	T	Dimethylphthalate	1.237	1.306	-5.6	106	0.00	6.42
		---------- Amount Calc. %Drift ----------						
50	T	2,6-Dinitrotoluene	50.000	50.815	-1.6	105	0.00	6.49
		---------- AvgRF CCRF %Dev ----------						
51	T	Acenaphthene	1.133	1.188	-4.9	106	0.00	6.65
		---------- Amount Calc. %Drift ----------						
52	T	2,4-Dinitrophenol	50.000	45.552	8.9	99	0.00	6.71
		---------- AvgRF CCRF %Dev ----------						
53	T	Dibenzofuran	1.619	1.702	-5.1	105	0.00	6.79
54	T	2,4-Dinitrotoluene	0.354	0.375	-5.9	104	0.00	6.84
		---------- Amount Calc. %Drift ----------						
55	T	4-Nitrophenol	50.000	49.548	0.9	103	0.00	6.79
56	T	2,3,4,6-Tetrachlorophenol	50.000	49.079	1.8	104	0.00	6.95
		---------- AvgRF CCRF %Dev ----------						
57	T	Fluorene	1.261	1.355	-7.5	105	0.00	7.09
58	T	4-Chlorophenyl-phenylethe	0.613	0.674	-10.0	106	0.00	7.09
59	T	Diethylphthalate	1.255	1.331	-6.1	105	0.00	7.03
		---------- Amount Calc. %Drift ----------						
60	T	2-nitroaniline	50.000	50.621	-1.2	106	0.00	6.26
61	T	3-nitroaniline	50.000	51.262	-2.5	106	0.00	6.62
62	T	4-nitroaniline	50.000	50.274	-0.5	106	0.00	7.17
		---------- AvgRF CCRF %Dev ----------						
63	T	1,1-Biphenyl	1.463	1.552	-6.1	106	0.00	6.11
64	I	Phenanthrene-d10	1.000	1.000	0.0	104	0.00	7.92
		---------- Amount Calc. %Drift ----------						
65	T	4,6-Dinitro-2-methylpheno	50.000	48.116	3.8	101	0.00	7.20
		---------- AvgRF CCRF %Dev ----------						
66	T	n-Nitrosodiphenylamine	0.552	0.602	-9.1	104	0.00	7.20
67	T	1,2-Diphenylhydrazine	0.907	0.956	-5.4	103	0.00	7.23

8.7.6 8

Continuing Calibration Summary

Job Number: MC47774 **Sample:** MSX425-CC424
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** X12651.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

		---------- Amount Calc. %Drift ----------						
68	S	2,4,6-Tribromophenol	50.000	51.695	-3.4	105	0.00	7.33
		---------- AvgRF CCRF %Dev ----------						
69	T	4-Bromophenyl-phenylether	0.210	0.220	-4.8	106	0.00	7.51
		---------- Amount Calc. %Drift ----------						
70	T	Hexachlorobenzene	50.000	50.358	-0.7	105	0.00	7.65
71	T	Pentachlorophenol	50.000	48.609	2.8	103	0.00	7.82
		---------- AvgRF CCRF %Dev ----------						
72	T	Phenanthrene	1.085	1.150	-6.0	104	0.00	7.94
73	T	Anthracene	1.146	1.254	-9.4	105	0.00	7.98
74	T	Carbazole	1.060	1.133	-6.9	103	0.00	8.13
75	T	Di-n-butylphthalate	1.216	1.366	-12.3	104	0.00	8.46
76	T	Fluoranthene	1.118	1.204	-7.7	104	0.00	9.01
77	T	Atrazine	0.202	0.213	-5.4	104	0.00	7.70
78	I	Chrysene-d12	1.000	1.000	0.0	103	0.00	10.83
		---------- Amount Calc. %Drift ----------						
79	T	Benzidine	50.000	44.546	10.9	93	0.00	9.14
		---------- AvgRF CCRF %Dev ----------						
80	T	Pyrene	1.172	1.275	-8.8	105	0.00	9.23
81	S	Terphenyl-d14	0.844	0.921	-9.1	104	0.00	9.39
82	T	Butylbenzylphthalate	0.531	0.589	-10.9	103	0.00	10.01
83	T	3,3-Dimethylbenzidine	0.332	0.310	6.6	90	0.00	9.98
		---------- Amount Calc. %Drift ----------						
84	T	3,3'-Dichlorobenzidine	50.000	48.571	2.9	101	0.00	10.80
		---------- AvgRF CCRF %Dev ----------						
85	T	Benzo[a]anthracene	1.110	1.219	-9.8	103	0.00	10.80
86	T	Chrysene	1.096	1.152	-5.1	103	0.00	10.87
		---------- Amount Calc. %Drift ----------						
87	T	bis(2-Ethylhexyl)phthalat	50.000	49.694	0.6	103	0.00	10.93
		---------- AvgRF CCRF %Dev ----------						
88	I	Perylene-d12	1.000	1.000	0.0	104	-0.01	14.01
		---------- Amount Calc. %Drift ----------						
89	T	Di-n-octylphthalate	50.000	49.838	0.3	102	0.00	12.22
90	T	Benzo[b]fluoranthene	50.000	49.596	0.8	101	-0.01	13.05
91	T	Benzo[k]fluoranthene	50.000	48.008	4.0	106	-0.01	13.11
92	T	Benzo[a]pyrene	50.000	47.751	4.5	103	-0.01	13.87
93	T	Indeno[1,2,3-cd]pyrene	50.000	50.743	-1.5	106	0.00	15.85
		---------- AvgRF CCRF %Dev ----------						
94	T	Dibenz[a,h]anthracene	1.022	1.150	-12.5	106	0.00	15.88
95	T	Benzo[g,h,i]perylene	0.982	1.063	-8.2	108	0.00	16.19
96	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	107	0.00	4.04
		---------- Amount Calc. %Drift ----------						
97	T	Benzaldehyde	50.000	43.933	12.1	95	0.00	3.72

8.7.6 8

Continuing Calibration Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY
Sample: MSX425-CC424
Lab FileID: X12651.D

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 x12642.D   X160921_8270.m        Thu Sep 22 15:46:43 2016
```

8.7.6 8

GC/MS Semi-volatiles

Raw Data

9

Sample Results: X12656.D

Quantitation Report (QT/LSC Reviewed)

```
Data File: C:\msdchem\1\data\X160922\x12656.D
Sample    : MC47774-1
Misc      : op48710,msx425,20.19,,,1,1
ALS Vial  : 7   Sample Multiplier: 1
Acq On    : 22 Sep 2016   2:33 pm                    Operator: AkinA

Quant Time: Sep 22 17:02:54 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270
```

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	511985	40.00	ug/mL	0.00
22) Naphthalene-d8	5.088	136	1928770	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.620	164	1107137	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.916	188	1865388	40.00	ug/mL	0.00
78) Chrysene-d12	10.823	240	1764483	40.00	ug/mL	-0.01
88) Perylene-d12	14.005	264	1533011	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	511985	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	769334	44.34	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 88.68%			
8) Phenol-d5	3.811	99	1000345	44.56	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 89.12%			
23) Nitrobenzene-d5	4.513	82	879859	42.00	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 84.00%			
46) 2-Fluorobiphenyl	6.030	172	1712281	45.13	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 90.26%			
68) 2,4,6-Tribromophenol	7.326	330	209845	43.64	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 87.28%			
81) Terphenyl-d14	9.390	244	1920338	51.59	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 103.18%			
Target Compounds						Qvalue
75) Di-n-butylphthalate	8.454	149	35538	0.627	ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.931	149	10491	1.672	ug/mL	98

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

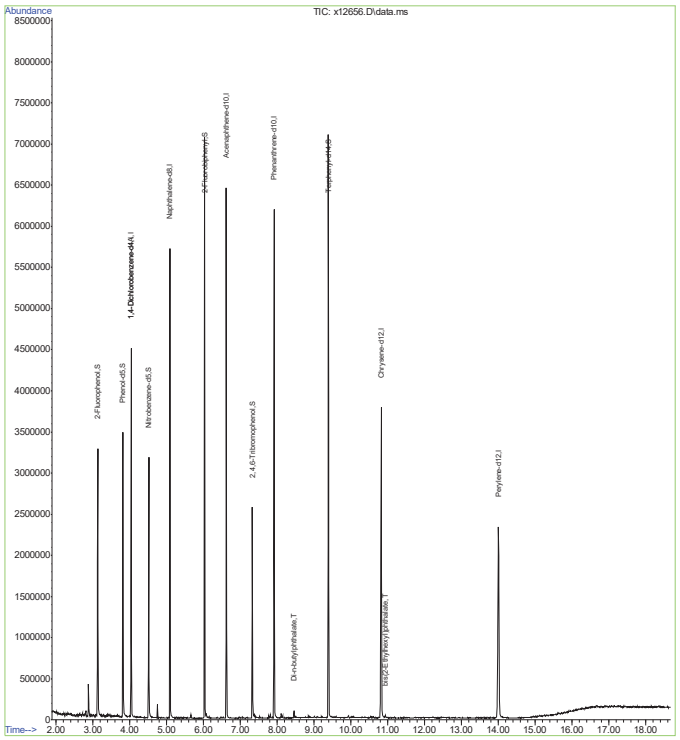
9.1.1 9

Sample Results: X12656.D

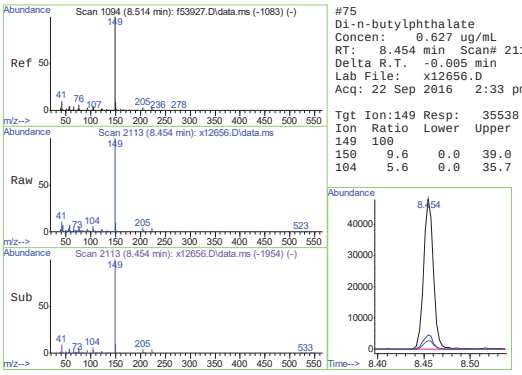
Quantitation Report (QT/LSC Reviewed)

```
Data File: C:\msdchem\1\data\X160922\x12656.D
Sample    : MC47774-1
Misc      : op48710,msx425,20.19,,,1,1
ALS Vial  : 7   Sample Multiplier: 1
Acq On    : 22 Sep 2016   2:33 pm                    Operator: AkinA

Quant Time: Sep 22 17:02:54 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270
```



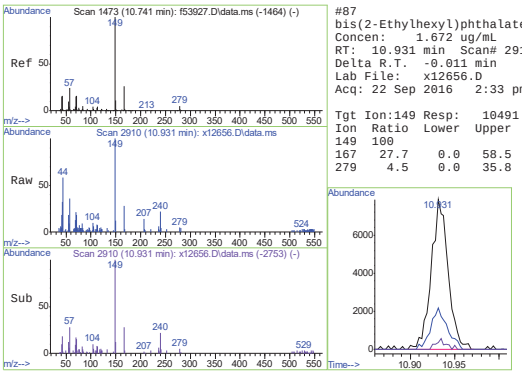
9.1.1 9



#75
Di-n-butylphthalate
Concen: 0.627 ug/mL
RT: 8.454 min Scan# 2113
Delta R.T. -0.005 min
Lab File: x12656.D
Acq: 22 Sep 2016 2:33 pm

Tgt Ion:149 Resp: 35538

Ion	Ratio	Lower	Upper
149	100		
150	9.6	0.0	39.0
104	5.6	0.0	35.7



#87
bis(2-Ethylhexyl)phthalate
Concen: 1.672 ug/mL
RT: 10.931 min Scan# 2910
Delta R.T. -0.011 min
Lab File: x12656.D
Acq: 22 Sep 2016 2:33 pm

Tgt Ion:149 Resp: 10491

Ion	Ratio	Lower	Upper
149	100		
167	27.7	0.0	58.5
279	4.5	0.0	35.8

9.1.1 9

x12656.D X160921_8270.m Thu Sep 22 17:52:12 2016 Page 3

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12656.D
Acq On : 22 Sep 2016 2:33 pm
Operator : AkinA
Sample : MC47774-1
Misc : op48710,msx425,20.19,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12656.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.278	124	126	137	rVB	17199	18833	0.30%	0.037%
2	2.325	137	141	146	rBV8	25330	23092	0.37%	0.046%
3	2.586	223	225	228	rBV3	13694	7810	0.13%	0.016%
4	2.639	240	242	249	rVB8	17589	18418	0.30%	0.037%
5	2.689	257	258	260	rBV2	20710	7488	0.12%	0.015%
6	2.713	261	266	272	rVB6	33761	32293	0.52%	0.064%
7	2.807	288	296	312	rVB	69112	103103	1.67%	0.205%
8	2.878	312	319	331	rBV	391124	349555	5.65%	0.694%
9	3.003	358	359	362	rBV3	13509	6895	0.11%	0.014%
10	3.130	394	400	431	rBV	3247230	2640177	42.68%	5.243%
11	3.307	456	457	460	rBV3	15020	6761	0.11%	0.013%
12	3.397	483	486	489	rBV5	10379	5304	0.09%	0.011%
13	3.494	510	517	521	rVB10	10397	8921	0.14%	0.018%
14	3.528	526	528	535	rBV7	9137	9710	0.16%	0.019%
15	3.565	535	540	543	rVV7	11369	9084	0.15%	0.018%
16	3.643	563	565	567	rBV3	19265	9656	0.16%	0.019%
17	3.739	591	596	601	rVB8	12042	10735	0.17%	0.021%
18	3.761	601	603	612	rVB9	9087	5894	0.10%	0.012%
19	3.811	613	619	658	rBV	3466154	2838431	45.88%	5.637%
20	4.003	678	681	686	rBV5	8091	7766	0.13%	0.015%
21	4.038	686	692	721	rVB	4481607	3297304	53.30%	6.548%
22	4.268	763	766	782	rVB10	9890	21772	0.35%	0.043%
23	4.330	782	786	791	rBV8	5692	5328	0.09%	0.011%
24	4.392	803	806	813	rVB9	7902	7288	0.12%	0.014%
25	4.445	819	823	835	rVB9	8981	13871	0.22%	0.028%
26	4.513	835	845	875	rBV	3171027	2506647	40.52%	4.978%
27	4.700	901	905	912	rVB10	6333	5768	0.09%	0.011%
28	4.749	916	921	927	rVB	162972	117106	1.89%	0.233%
29	4.839	946	950	955	rVV8	6335	5654	0.09%	0.011%
30	4.870	955	960	966	rVB9	5251	6820	0.11%	0.014%
31	4.923	972	977	981	rVB7	10683	9831	0.16%	0.020%
32	5.088	1016	1030	1058	rBV	5707870	4235165	68.46%	8.411%
33	5.421	1131	1137	1140	rBV8	5944	5392	0.09%	0.011%
34	5.660	1208	1214	1224	rVV	45042	43115	0.70%	0.086%

9.1.2 9

X160921_8270.m Thu Sep 22 17:15:46 2016 Page: 1

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12656.D
Acq On : 22 Sep 2016 2:33 pm
Operator : AkinA
Sample : MC47774-1
Misc : op48710,msx425,20.19,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	5.697	1224	1226	1235	rVB8	6974	6412	0.10%	0.013%
36	5.924	1295	1299	1307	rBV10	4274	6166	0.10%	0.012%
37	6.030	1324	1333	1344	rBV	7068534	5134360	83.00%	10.197%
38	6.076	1345	1348	1359	rVB2	52202	51349	0.83%	0.102%
39	6.170	1375	1378	1385	rVV7	11879	11418	0.18%	0.023%
40	6.359	1434	1439	1446	rVB8	9920	9115	0.15%	0.018%
41	6.474	1464	1476	1483	rBV3	17432	19591	0.32%	0.039%
42	6.530	1490	1494	1498	rBV6	12969	9935	0.16%	0.020%
43	6.620	1514	1523	1551	rVB	6448486	4840879	78.25%	9.614%
44	6.732	1555	1559	1567	rBV10	4648	6002	0.10%	0.012%
45	6.965	1626	1634	1641	rBV2	19204	18061	0.29%	0.036%
46	7.009	1641	1648	1653	rBV5	9384	8312	0.13%	0.017%
47	7.065	1660	1666	1677	rBV3	18532	20774	0.34%	0.041%
48	7.170	1695	1700	1703	rVV4	8082	6835	0.11%	0.014%
49	7.202	1707	1710	1715	rVB6	8834	7788	0.13%	0.015%
50	7.326	1738	1750	1764	rBV	2567628	2035304	32.90%	4.042%
51	7.376	1764	1766	1771	rVV2	44417	40314	0.65%	0.080%
52	7.400	1771	1774	1780	rVV4	26558	27109	0.44%	0.054%
53	7.428	1781	1783	1793	rVV9	10680	15737	0.25%	0.031%
54	7.472	1793	1797	1810	rVV9	6000	11281	0.18%	0.022%
55	7.525	1810	1814	1820	rVV4	18320	13394	0.22%	0.027%
56	7.770	1889	1893	1900	rBV3	25111	20586	0.33%	0.041%
57	7.811	1900	1906	1920	rVB2	44123	46290	0.75%	0.092%
58	7.916	1931	1940	1978	rBV	6184223	5002813	80.87%	9.936%
59	8.109	1993	2002	2009	rBV	53360	48669	0.79%	0.097%
60	8.146	2009	2014	2022	rVB3	23298	20485	0.33%	0.041%
61	8.454	2106	2113	2122	rBV	90465	74802	1.21%	0.149%
62	8.504	2125	2129	2134	rVB2	18875	13049	0.21%	0.026%
63	8.594	2154	2158	2164	rBV9	4783	6157	0.10%	0.012%
64	8.849	2234	2240	2244	rBV4	18999	16306	0.26%	0.032%
65	8.880	2247	2250	2269	rVB4	14889	25685	0.42%	0.051%
66	8.955	2271	2274	2285	rBV4	6652	11196	0.18%	0.022%
67	9.007	2285	2291	2308	rVV10	18985	23332	0.38%	0.046%
68	9.101	2316	2321	2331	rVB10	10065	14216	0.23%	0.028%
69	9.203	2349	2354	2359	rVB5	15333	14097	0.23%	0.028%
70	9.228	2359	2362	2369	rBV8	6691	6831	0.11%	0.014%
71	9.390	2405	2414	2438	rBV	7087043	6186131	100.00%	12.286%

9.1.2 9

X160921_8270.m Thu Sep 22 17:15:46 2016 Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12656.D
Acq On : 22 Sep 2016 2:33 pm
Operator : AkinA
Sample : MC47774-1
Misc : op48710,msx425,20.19,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

72	9.474	2438	2441	2454	rVB	16194	21538	0.35%	0.043%
73	9.592	2475	2479	2489	rBV10	14614	15726	0.25%	0.031%
74	9.847	2553	2561	2565	rBV10	4864	7236	0.12%	0.014%
75	9.930	2578	2588	2596	rBV4	24938	32337	0.52%	0.064%
76	10.002	2607	2611	2614	rVV6	8025	6797	0.11%	0.013%
77	10.030	2616	2620	2627	rVV10	17430	19734	0.32%	0.039%
78	10.073	2627	2634	2645	rVV7	14056	17705	0.29%	0.035%
79	10.226	2680	2683	2694	rVB10	4988	7923	0.13%	0.016%
80	10.540	2775	2784	2797	rBV10	15895	33631	0.54%	0.067%
81	10.617	2807	2809	2820	rVB10	11375	11261	0.18%	0.022%
82	10.763	2850	2856	2862	rVV10	5897	8614	0.14%	0.017%
83	10.823	2862	2875	2903	rVV	3776519	5155638	83.34%	10.239%
84	10.934	2903	2911	2931	rVB3	32746	55823	0.90%	0.111%
85	11.112	2964	2968	2974	rBV9	5785	7409	0.12%	0.015%
86	11.354	3041	3046	3050	rBV7	5128	6394	0.10%	0.013%
87	11.553	3105	3110	3116	rBV10	6975	7268	0.12%	0.014%
88	11.795	3181	3188	3195	rBV10	5923	7053	0.11%	0.014%
89	11.867	3206	3211	3219	rBV10	4766	7624	0.12%	0.015%
90	12.147	3297	3301	3309	rBV10	6415	8695	0.14%	0.017%
91	12.237	3328	3330	3344	rVB10	12686	16139	0.26%	0.032%
92	12.457	3397	3401	3408	rBV10	13180	13133	0.21%	0.026%
93	12.734	3484	3490	3496	rBV10	6436	6387	0.10%	0.013%
94	12.930	3540	3553	3564	rBV10	9113	21672	0.35%	0.043%
95	13.172	3628	3631	3638	rVB9	6765	7031	0.11%	0.014%
96	13.210	3638	3643	3645	rBV6	7146	7121	0.12%	0.014%
97	14.005	3879	3899	3937	rBV2	2316555	4589388	74.19%	9.115%
98	14.394	4019	4024	4032	rBV8	4422	7775	0.13%	0.015%
99	14.670	4105	4113	4117	rBV10	5213	7876	0.13%	0.016%
100	14.708	4122	4125	4130	rBV7	5184	5690	0.09%	0.011%

Sum of corrected areas: 50352386

9.1.2 9

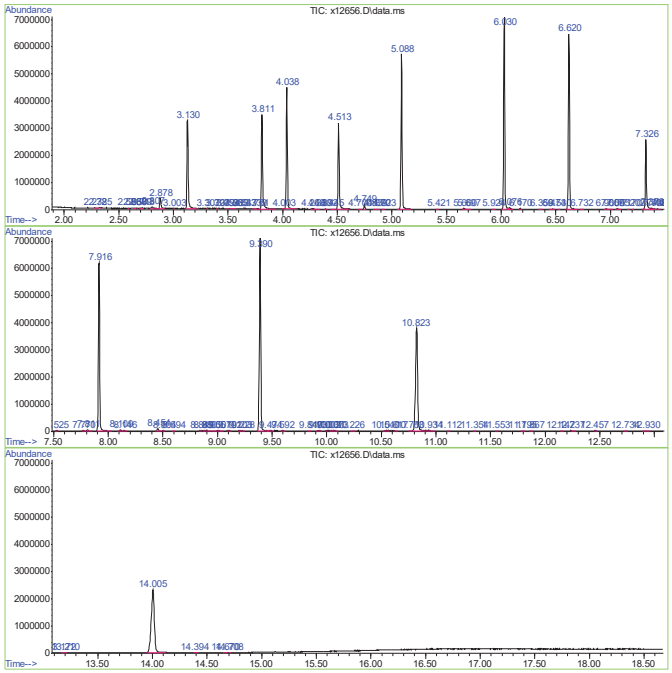
X160921_8270.m Thu Sep 22 17:15:46 2016 Page: 3

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\X160922\
Data File : x12656.D
Acq On : 22 Sep 2016 2:33 pm
Operator : AkinA
Sample : MC47774-1
Misc : op48710,msx425,20.19,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



X160921_8270.m Thu Sep 22 17:15:46 2016 Page: 4

Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12656.D
Acq On : 22 Sep 2016 2:33 pm
Operator : AkinA
Sample : MC47774-1
Misc : op48710,msx425,20.19,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\X160922\
Data File : x12656.D
Acq On : 22 Sep 2016 2:33 pm
Operator : AkinA
Sample : MC47774-1
Misc : op48710,msx425,20.19,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

X160921_8270.m Thu Sep 22 17:15:46 2016 Page: 5

Quantitation Report (LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12657.D
Sample : MC47774-2
Misc : op48710,msx425,20.86,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:58 pm Operator: AkinA

Quant Time: Sep 22 17:17:54 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.041	152	603975	40.00	ug/mL	0.00
22) Naphthalene-d8	5.088	136	2250494	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.620	164	1291854	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.917	188	2175338	40.00	ug/mL	0.00
78) Chrysene-d12	10.823	240	1955270	40.00	ug/mL	-0.01
88) Perylene-d12	14.005	264	1608578	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.041	152	603975	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	917777	44.83	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 89.66%			
8) Phenol-d5	3.811	99	1205322	45.51	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 91.02%			
23) Nitrobenzene-d5	4.513	82	1049391	42.93	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 85.86%			
46) 2-Fluorobiphenyl	6.030	172	2044674	46.19	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 92.38%			
68) 2,4,6-Tribromophenol	7.326	330	268810	47.37	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 94.74%			
81) Terphenyl-d14	9.390	244	2313216	56.08	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 112.16%			

Target Compounds Qvalue

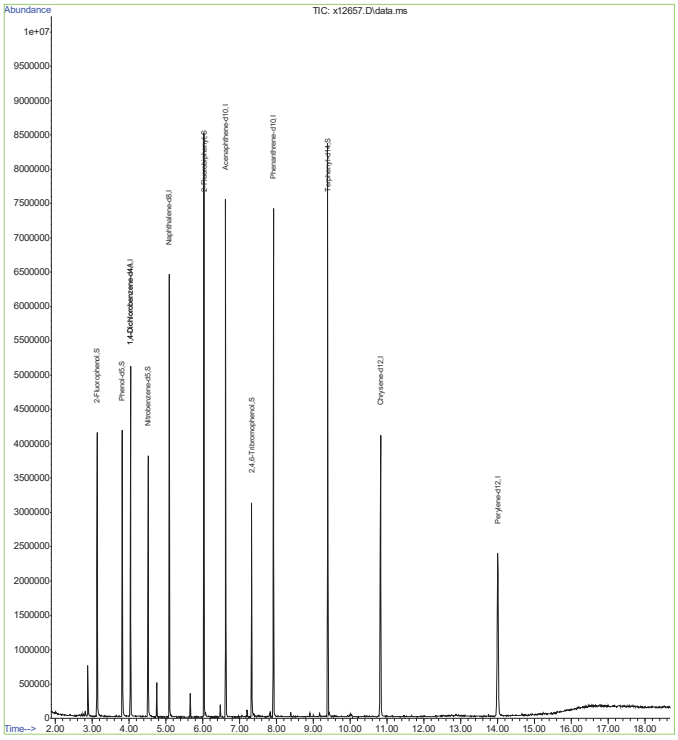
(#) = qualifier out of range (m) = manual integration (+) = signals summed

X160921_8270.m Thu Sep 22 17:52:15 2016 Page: 1

Quantitation Report (LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12657.D
Sample : MC47774-2
Misc : op48710,msx425,20.86,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:58 pm Operator: AkinA

Quant Time: Sep 22 17:17:54 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



X160921_8270.m Thu Sep 22 17:52:15 2016 Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12657.D
Acq On : 22 Sep 2016 2:58 pm
Operator : AkinA
Sample : MC47774-2
Misc : op48710,msx425,20.86,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12657.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.393	159	163	179	rVB3	21830	27085	0.37%	0.046%
2	2.720	263	268	274	rVB3	29540	27390	0.37%	0.046%
3	2.763	275	282	288	rVB3	22975	19013	0.26%	0.032%
4	2.813	290	298	307	rVB	74737	78527	1.07%	0.132%
5	2.881	314	320	341	rBV	735879	597980	8.14%	1.007%
6	3.130	394	400	464	rBV	4135109	3208540	43.65%	5.403%
7	3.621	550	558	563	rBV6	9728	13722	0.19%	0.023%
8	3.655	564	569	585	rVB3	15814	23891	0.33%	0.040%
9	3.714	585	588	590	rBV4	8951	4845	0.07%	0.008%
10	3.811	610	619	648	rBV	4172170	3424723	46.59%	5.767%
11	4.010	679	683	686	rBV6	13374	11408	0.16%	0.019%
12	4.038	686	692	720	rVV	5098855	3883972	52.84%	6.540%
13	4.268	762	766	770	rBV5	6578	6219	0.08%	0.010%
14	4.286	770	772	780	rVB9	9205	7385	0.10%	0.012%
15	4.513	837	845	877	rBV	3797440	2974025	40.46%	5.008%
16	4.749	913	921	932	rVB	500798	349349	4.75%	0.588%
17	4.917	971	975	983	rBV7	8740	8799	0.12%	0.015%
18	5.026	1003	1010	1015	rBV9	4650	6344	0.09%	0.011%
19	5.057	1015	1020	1022	rVV5	9707	6401	0.09%	0.011%
20	5.088	1022	1030	1069	rVV	6447751	4959381	67.47%	8.351%
21	5.216	1070	1071	1078	rVV7	8426	9646	0.13%	0.016%
22	5.247	1079	1081	1099	rVB7	8035	15232	0.21%	0.026%
23	5.657	1207	1213	1222	rVB	346752	259633	3.53%	0.437%
24	5.766	1241	1248	1253	rBV10	4930	5361	0.07%	0.009%
25	5.875	1281	1283	1296	rVB9	7158	9824	0.13%	0.017%
26	5.958	1304	1310	1314	rBV8	6136	5867	0.08%	0.010%
27	5.986	1314	1319	1324	rVB9	4846	4641	0.06%	0.008%
28	6.030	1324	1333	1344	rBV	8505994	6157637	83.77%	10.369%
29	6.077	1345	1348	1365	rVV2	60952	83472	1.14%	0.141%
30	6.145	1366	1370	1374	rVV7	7476	8075	0.11%	0.014%
31	6.170	1374	1378	1385	rVB3	11657	10701	0.15%	0.018%
32	6.474	1466	1476	1489	rVV	183726	137011	1.86%	0.231%
33	6.530	1489	1494	1497	rVB6	6980	6504	0.09%	0.011%
34	6.620	1515	1523	1549	rBV	7546407	5653563	76.92%	9.520%

X160921_8270.m Thu Sep 22 17:19:43 2016 Page: 1

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12657.D
Acq On : 22 Sep 2016 2:58 pm
Operator : AkinA
Sample : MC47774-2
Misc : op48710,msx425,20.86,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	6.965	1630	1634	1639	rBV2	13042	8629	0.12%	0.015%
36	7.065	1661	1666	1674	rBV2	24426	26183	0.36%	0.044%
37	7.171	1693	1700	1704	rBV9	9817	9620	0.13%	0.016%
38	7.202	1704	1710	1716	rVV	105442	78849	1.07%	0.133%
39	7.251	1725	1726	1734	rVB8	5634	5245	0.07%	0.009%
40	7.326	1740	1750	1764	rBV	3119290	2532808	34.46%	4.265%
41	7.401	1771	1774	1783	rVB7	17756	11458	0.16%	0.019%
42	7.525	1810	1814	1822	rBV6	17036	17027	0.23%	0.029%
43	7.774	1888	1894	1899	rBV4	13868	12407	0.17%	0.021%
44	7.811	1899	1906	1908	rVV2	43697	35132	0.48%	0.059%
45	7.830	1908	1912	1919	rVB	81398	68928	0.94%	0.116%
46	7.867	1923	1924	1930	rVB6	7279	6095	0.08%	0.010%
47	7.917	1930	1940	1967	rBV	7411258	5814665	79.11%	9.791%
48	8.109	1996	2002	2009	rBV5	11640	12250	0.17%	0.021%
49	8.143	2009	2013	2020	rVB7	13927	15241	0.21%	0.026%
50	8.293	2056	2061	2067	rVB9	6138	8669	0.12%	0.015%
51	8.389	2086	2092	2101	rVB	65762	52286	0.71%	0.088%
52	8.454	2106	2113	2120	rBV2	11307	14742	0.20%	0.025%
53	8.501	2120	2128	2136	rVV8	13160	13132	0.18%	0.022%
54	8.544	2136	2142	2144	rVV6	5572	5540	0.08%	0.009%
55	8.572	2144	2151	2156	rVV10	13879	14955	0.20%	0.025%
56	8.594	2156	2158	2168	rVB10	5595	6891	0.09%	0.012%
57	8.759	2208	2211	2217	rVB8	6364	5222	0.07%	0.009%
58	8.790	2217	2221	2225	rBV6	4670	4519	0.06%	0.008%
59	8.846	2235	2239	2245	rBV7	13506	11349	0.15%	0.019%
60	8.905	2251	2258	2266	rBV	52573	50516	0.69%	0.085%
61	9.004	2285	2290	2303	rVB8	25889	29333	0.40%	0.049%
62	9.048	2303	2304	2311	rBV7	3738	4549	0.06%	0.008%
63	9.104	2317	2322	2332	rBV7	7945	10038	0.14%	0.017%
64	9.169	2333	2343	2350	rBV2	56517	53682	0.73%	0.090%
65	9.203	2350	2354	2367	rVB2	11945	16652	0.23%	0.028%
66	9.287	2375	2381	2389	rBV2	6210	10617	0.14%	0.018%
67	9.346	2396	2400	2405	rBV8	5378	5280	0.07%	0.009%
68	9.390	2405	2414	2424	rVV	8355268	7350329	100.00%	12.377%
69	9.433	2424	2428	2446	rVB2	57953	73752	1.00%	0.124%
70	9.788	2541	2542	2547	rBV5	5423	4575	0.06%	0.008%
71	9.862	2561	2566	2578	rVB5	6104	10607	0.14%	0.018%

X160921_8270.m Thu Sep 22 17:19:43 2016 Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12657.D
Acq On : 22 Sep 2016 2:58 pm
Operator : AkinA
Sample : MC47774-2
Misc : op48710,msx425,20.86,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

72	9.934	2580	2589	2595	rBV5	23905	33325	0.45%	0.056%
73	9.996	2602	2609	2616	rBV9	28435	33895	0.46%	0.057%
74	10.036	2616	2622	2635	rVB3	37929	56390	0.77%	0.095%
75	10.139	2650	2655	2661	rBV9	4576	4793	0.07%	0.008%
76	10.241	2684	2688	2698	rVB9	6613	9708	0.13%	0.016%
77	10.487	2763	2767	2775	rVB9	7763	9380	0.13%	0.016%
78	10.527	2775	2780	2790	rBV9	6815	9952	0.14%	0.017%
79	10.773	2843	2859	2862	rBV3	24930	41854	0.57%	0.070%
80	10.823	2862	2875	2907	rVB	4100559	5654898	76.93%	9.522%
81	11.109	2963	2967	2977	rBV	5827	8132	0.11%	0.014%
82	11.463	3078	3081	3084	rBV5	9880	5810	0.08%	0.010%
83	11.665	3139	3146	3162	rVB7	18220	29049	0.40%	0.049%
84	11.817	3193	3195	3197	rBV3	6828	4586	0.06%	0.008%
85	11.827	3197	3198	3203	rVB5	6903	4433	0.06%	0.007%
86	11.910	3219	3225	3232	rBV5	8410	9171	0.12%	0.015%
87	12.535	3421	3426	3428	rVB6	9270	6855	0.09%	0.012%
88	12.865	3530	3532	3550	rVB6	25930	38238	0.52%	0.064%
89	12.942	3551	3557	3567	rVV6	13236	13651	0.19%	0.023%
90	13.275	3660	3664	3669	rBV8	4446	5061	0.07%	0.009%
91	13.390	3695	3701	3707	rVB10	6747	5961	0.08%	0.010%
92	13.511	3737	3740	3743	rVB5	9639	5773	0.08%	0.010%
93	13.542	3743	3750	3754	rVB9	6236	9116	0.12%	0.015%
94	13.601	3766	3769	3774	rVB6	6952	5568	0.08%	0.009%
95	13.657	3783	3787	3797	rBV6	6745	9091	0.12%	0.015%
96	13.754	3816	3818	3820	rBV2	27943	5481	0.07%	0.009%
97	13.834	3839	3844	3849	rVB8	7192	7974	0.11%	0.013%
98	13.862	3851	3853	3857	rVB5	8592	4753	0.06%	0.008%
99	14.005	3879	3899	3961	rVB2	2370419	4919607	66.93%	8.284%
100	14.394	4022	4024	4045	rBV2	7720	16713	0.23%	0.028%

Sum of corrected areas: 59387156

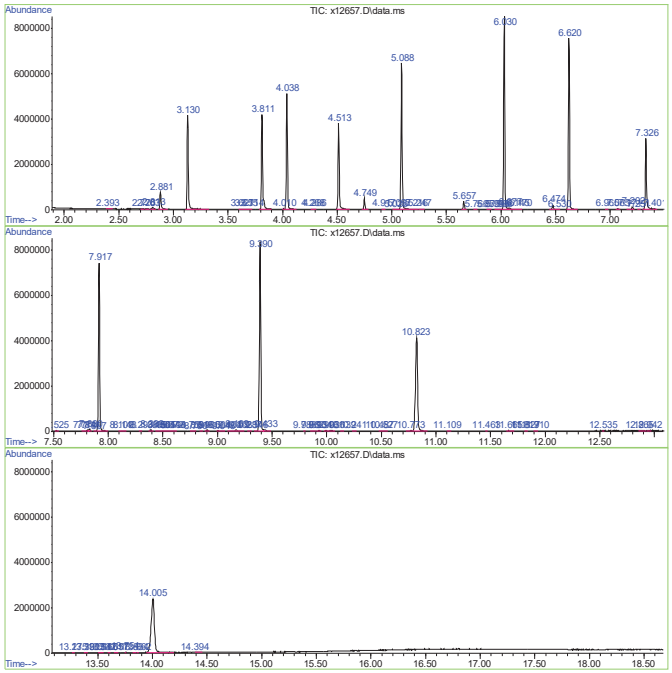
X160921_8270.m Thu Sep 22 17:19:43 2016 Page: 3

LSC Report - Integrated Chromatogram

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12657.D
Acq On    : 22 Sep 2016   2:58 pm
Operator  : AkinA
Sample    : MC47774-2
Misc      : op48710,msx425,20.86,,,1,1
ALS Vial  : 8   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P
```



9.1.4 9

Library Search Compound Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12657.D
Acq On    : 22 Sep 2016   2:58 pm
Operator  : AkinA
Sample    : MC47774-2
Misc      : op48710,msx425,20.86,,,1,1
ALS Vial  : 8   Sample Multiplier: 1

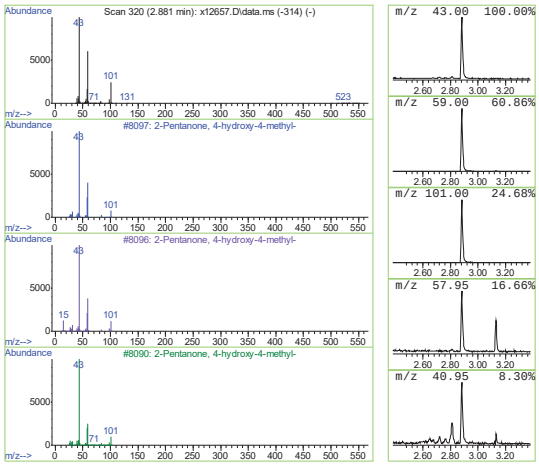
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

*****************************************************************
Peak Number  1  2-Pentanone, 4-hydroxy-4-me...  Concentration Rank  1

  R.T.     EstConc          Area       Relative to ISTD         R.T.
-----------------------------------------------------------------
  2.881    6.16 ug/mL      597980   1,4-Dichlorobenzene-d4      4.041

 Hit# of  5    Tentative ID             MW  MolForm       CAS#       Qual
-----------------------------------------------------------------
 1 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 56
 2 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 40
 3 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 38
 4 2,3-Butanedione, monooxime          101 C4H7NO2        000057-71-6 25
 5 Acetic acid, cyano-, 1,1-dimethy... 141 C7H11NO2       001116-98-9 17
```



9.1.4 9

Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12657.D
Acq On    : 22 Sep 2016   2:58 pm
Operator  : AkinA
Sample    : MC47774-2
Misc      : op48710,msx425,20.86,,,1,1
ALS Vial  : 8   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

                                                  |--Internal Standard---|
  TIC Top Hit name      RT  EstConc Units Response |#    RT     Resp  Conc|
-----------------------------------------------------------------------------
2-Pentanone, 4-...   2.881     6.2  ug/mL   597980   1   4.041 3883970  40.0
```

9.1.4 9

Quantitation Report (QT Reviewed)

```
Data File: C:\msdchem\1\data\X160922\x12658.D
Sample    : MC47774-3
Misc      : op48710,msx425,20.97,,,1,1
ALS Vial  : 9   Sample Multiplier: 1
Acq On    : 22 Sep 2016   3:23 pm                    Operator: AkinA

Quant Time: Sep 22 17:32:27 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

        Compound                     R.T. QIon  Response  Conc Units Dev(Min)
 ---------------------------------------------------------------------------
 Internal Standards
   1) 1,4-Dichlorobenzene-d4      4.038  152   549629    40.00 ug/mL    0.00
  22) Naphthalene-d8              5.088  136  2067074    40.00 ug/mL    0.00
  41) Acenaphthene-d10            6.621  164  1187945    40.00 ug/mL    0.00
  64) Phenanthrene-d10            7.917  188  1998444    40.00 ug/mL    0.00
  78) Chrysene-d12               10.823  240  1826139    40.00 ug/mL   -0.01
  88) Perylene-d12               14.005  264  1523804    40.00 ug/mL   -0.01
  96) 1,4-Dichlorobenzene-d4A     4.038  152   549629    40.00 ug/mL    0.00

 System Monitoring Compounds
   6) 2-Fluorophenol              3.130  112   702992    37.74 ug/mL    0.00
   Spiked Amount     50.000   Range  30 - 130    Recovery   =   75.48%
   8) Phenol-d5                   3.811   99   939744    38.99 ug/mL    0.00
   Spiked Amount     50.000   Range  30 - 130    Recovery   =   77.98%
  23) Nitrobenzene-d5             4.513   82   805259    35.87 ug/mL    0.00
   Spiked Amount     50.000   Range  30 - 130    Recovery   =   71.74%
  46) 2-Fluorobiphenyl            6.030  172  1595996    39.20 ug/mL    0.00
   Spiked Amount     50.000   Range  30 - 130    Recovery   =   78.40%
  68) 2,4,6-Tribromophenol        7.326  330   215985    42.13 ug/mL    0.00
   Spiked Amount     50.000   Range  30 - 130    Recovery   =   84.26%
  81) Terphenyl-d14               9.390  244  1935967    50.25 ug/mL    0.00
   Spiked Amount     50.000   Range  30 - 130    Recovery   =  100.50%

 Target Compounds                                                  Qvalue
  87) bis(2-Ethylhexyl)phtha...  10.935  149     2050     1.444 ug/mL     81
 ---------------------------------------------------------------------------

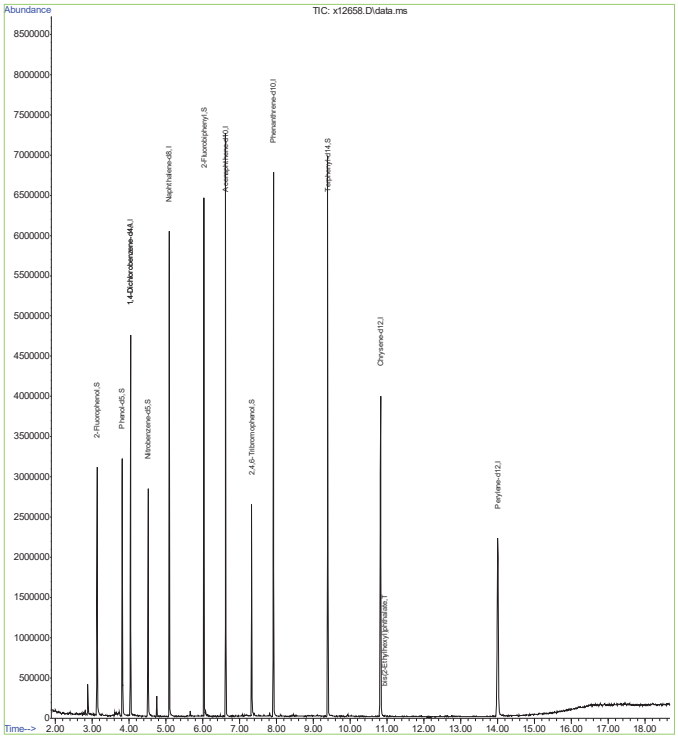
 (#) = qualifier out of range (m) = manual integration (+) = signals summed
```

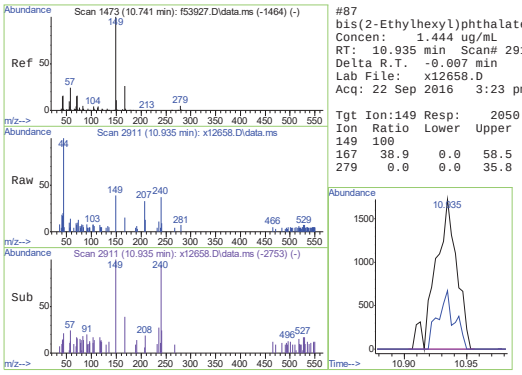
9.1.5 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12658.D
Sample : MC47774-3
Misc : op48710,msx425,20.97,,,1,1
ALS Vial : 9 Sample Multiplier: 1
Acq On : 22 Sep 2016 3:23 pm Operator: AkinA

Quant Time: Sep 22 17:32:27 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





#87
bis(2-Ethylhexyl)phthalate
Concen: 1.444 ug/mL
RT: 10.935 min Scan# 2911
Delta R.T. -0.007 min
Lab File: x12658.D
Acq: 22 Sep 2016 3:23 pm

Tgt Ion:149 Resp: 2050

Ion	Ratio	Lower	Upper
149	100		
167	38.9	0.0	58.5
279	0.0	0.0	35.8

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12658.D
Acq On : 22 Sep 2016 3:23 pm
Operator : AkinA
Sample : MC47774-3
Misc : op48710,msx425,20.97,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12658.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.717	264	267	278	rVB3	23495	18773	0.30%	0.037%
2	2.760	278	281	288	rVB8	21221	20745	0.33%	0.041%
3	2.810	289	297	305	rVB	59823	62155	0.99%	0.122%
4	2.881	315	320	337	rBV	376080	326853	5.23%	0.642%
5	3.031	365	368	394	rBV	11729	20784	0.33%	0.041%
6	3.130	394	400	427	rVB	3078402	2432722	38.91%	4.776%
7	3.264	439	443	464	rVB	14061	27830	0.45%	0.055%
8	3.360	471	474	489	rVB	13743	19342	0.31%	0.038%
9	3.547	531	534	542	rBV9	8247	10613	0.17%	0.021%
10	3.615	551	556	560	rBV8	39903	25570	0.41%	0.050%
11	3.652	564	568	574	rVB9	22042	20812	0.33%	0.041%
12	3.811	613	619	660	rBV	3199689	2759681	44.14%	5.418%
13	4.038	685	692	734	rBV	4729955	3585114	57.34%	7.039%
14	4.513	837	845	876	rVV	2829354	2295704	36.72%	4.507%
15	4.749	916	921	930	rVB	252215	179872	2.88%	0.353%
16	4.889	962	966	973	rVB9	8976	7305	0.12%	0.014%
17	4.917	973	975	984	rBV8	7008	6067	0.10%	0.012%
18	5.017	1000	1007	1012	rBV8	6350	7185	0.11%	0.014%
19	5.088	1023	1030	1074	rVB	6028626	4570352	73.10%	8.974%
20	5.234	1074	1077	1084	rBV9	7091	9436	0.15%	0.019%
21	5.340	1109	1111	1122	rVB9	4819	5795	0.09%	0.011%
22	5.433	1138	1141	1146	rBV7	7061	6673	0.11%	0.013%
23	5.589	1182	1191	1194	rBV7	10132	12982	0.21%	0.025%
24	5.657	1207	1213	1222	rVB	63687	51318	0.82%	0.101%
25	5.697	1224	1226	1236	rVB	8944	10744	0.17%	0.021%
26	5.840	1263	1272	1273	rBV9	5754	6756	0.11%	0.013%
27	5.881	1282	1285	1295	rVB9	7473	7418	0.12%	0.015%
28	6.030	1326	1333	1344	rBV	6439164	4848014	77.54%	9.519%
29	6.077	1345	1348	1366	rVB	60984	77199	1.23%	0.152%
30	6.170	1376	1378	1395	rVB	11500	18459	0.30%	0.036%
31	6.422	1456	1459	1465	rBV6	8787	10059	0.16%	0.020%
32	6.474	1471	1476	1482	rBV	25324	20823	0.33%	0.041%
33	6.621	1514	1523	1557	rBV	7246572	5200349	83.18%	10.210%
34	6.795	1575	1579	1581	rBV5	8266	6654	0.11%	0.013%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12658.D
Acq On : 22 Sep 2016 3:23 pm
Operator : AkinA
Sample : MC47774-3
Misc : op48710,msx425,20.97,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	6.819	1582	1587	1593	rVB10	11953	10142	0.16%	0.020%
36	6.860	1593	1600	1605	rBV10	5866	9251	0.15%	0.018%
37	6.966	1628	1634	1637	rBV7	10410	9329	0.15%	0.018%
38	7.068	1662	1667	1672	rVB3	23726	19605	0.31%	0.038%
39	7.090	1672	1674	1679	rBV6	6382	5464	0.09%	0.011%
40	7.121	1679	1684	1691	rVV6	10549	13688	0.22%	0.027%
41	7.164	1691	1698	1707	rVV6	15280	29039	0.46%	0.057%
42	7.199	1707	1709	1717	rVB6	14243	13782	0.22%	0.027%
43	7.326	1743	1750	1770	rBV	2628525	2103316	33.64%	4.130%
44	7.522	1810	1813	1819	rVB4	16301	16049	0.26%	0.032%
45	7.665	1858	1859	1865	rVB6	18329	6578	0.11%	0.013%
46	7.774	1889	1894	1900	rVV10	13296	14162	0.23%	0.028%
47	7.811	1901	1906	1920	rVB2	48277	55032	0.88%	0.108%
48	7.873	1920	1926	1928	rBV7	4688	4837	0.08%	0.009%
49	7.917	1932	1940	1973	rBV	6758616	5305943	84.87%	10.418%
50	8.032	1974	1977	1985	rVV10	5228	7659	0.12%	0.015%
51	8.066	1986	1988	1996	rVV9	6731	5302	0.08%	0.010%
52	8.109	1996	2002	2009	rVV	15314	17380	0.28%	0.034%
53	8.143	2009	2013	2042	rVB	9887	25114	0.40%	0.049%
54	8.252	2046	2048	2053	rVB6	8355	5967	0.10%	0.012%
55	8.290	2055	2060	2070	rVB6	4839	6103	0.10%	0.012%
56	8.330	2070	2073	2078	rBV7	9237	7147	0.11%	0.014%
57	8.392	2089	2093	2100	rBV9	9594	14524	0.23%	0.029%
58	8.423	2100	2103	2108	rVV7	8971	7656	0.12%	0.015%
59	8.454	2108	2113	2121	rVV	20856	19246	0.31%	0.038%
60	8.656	2176	2178	2186	rBV9	5009	6178	0.10%	0.012%
61	8.846	2234	2239	2244	rBV9	9817	8218	0.13%	0.016%
62	8.955	2271	2274	2284	rVB9	7124	6373	0.10%	0.013%
63	9.004	2285	2290	2298	rVB9	9590	10677	0.17%	0.021%
64	9.101	2316	2321	2336	rVB9	13054	16507	0.26%	0.032%
65	9.169	2340	2343	2360	rVB9	12846	23970	0.38%	0.047%
66	9.390	2404	2414	2440	rBV2	6966478	6252146	100.00%	12.276%
67	9.685	2502	2509	2520	rBV2	4434	7164	0.11%	0.014%
68	9.934	2580	2589	2596	rVB3	26344	33947	0.54%	0.067%
69	10.120	2644	2649	2654	rBV9	4817	4677	0.07%	0.009%
70	10.344	2717	2721	2725	rBV7	6634	5997	0.10%	0.012%
71	10.369	2728	2729	2741	rVB10	4638	6020	0.10%	0.012%

LSC Area Percent Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12658.D
Acq On    : 22 Sep 2016   3:23 pm
Operator  : AkinA
Sample    : MC47774-3
Misc      : op48710,msx425,20.97,,,1,1
ALS Vial  : 9   Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON                          Filtering: 5
Sampling  : 1                            Min Area: 1000 Area counts
Start Thrs: 0.1                         Max Peaks: 100
Stop Thrs : 0.05                     Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method    : X:\1\methods\X160921_8270.m
Title     : SW-864 Method 8270

 72  10.518  2775 2777 2788 rVB10    4822      7017   0.11%   0.014%
 73  10.593  2794 2801 2811 rBV10   10056     18083   0.29%   0.036%
 74  10.677  2821 2828 2832 rBV10    3859      5060   0.08%   0.010%
 75  10.823  2863 2875 2905 rBV  3981626   5305699  84.86%  10.417%

 76  11.155  2981 2982 2990 rVB8    9876      7327   0.12%   0.014%
 77  11.432  3068 3071 3079 rVV10    3831      5286   0.08%   0.010%
 78  11.485  3083 3088 3094 rBV9    4716      6330   0.10%   0.012%
 79  11.674  3143 3149 3153 rVB9    7287      7841   0.13%   0.015%
 80  11.715  3159 3162 3174 rVV9    5059      7409   0.12%   0.015%

 81  11.780  3181 3183 3188 rVB6    5486      4674   0.07%   0.009%
 82  11.842  3201 3203 3213 rVB10    4204      5058   0.08%   0.010%
 83  11.923  3222 3229 3233 rBV9    7339      9836   0.16%   0.019%
 84  11.985  3246 3249 3257 rVB9    4679      5571   0.09%   0.011%
 85  12.265  3336 3339 3351 rVB9    5232      5884   0.09%   0.012%

 86  12.423  3386 3390 3394 rBV6    8591      5544   0.09%   0.011%
 87  12.647  3459 3462 3477 rVB6   10444     19332   0.31%   0.038%
 88  12.697  3477 3478 3484 rBV6    5352      4856   0.08%   0.010%
 89  12.803  3509 3512 3518 rBV7    7532      6187   0.10%   0.012%
 90  12.846  3522 3526 3530 rVB7    9069      5240   0.08%   0.010%

 91  12.924  3546 3551 3558 rBV10    8804     11759   0.19%   0.023%
 92  13.238  3647 3652 3658 rBV10    4564      5002   0.08%   0.010%
 93  13.303  3669 3673 3679 rBV9    5482      7122   0.11%   0.014%
 94  13.362  3689 3692 3698 rBV7    6776      4886   0.08%   0.010%
 95  13.555  3752 3754 3760 rVB5    4451      4917   0.08%   0.010%

 96  13.726  3806 3809 3812 rVB5    7704      5931   0.09%   0.012%
 97  13.806  3830 3835 3840 rBV7    6925      5353   0.09%   0.011%
 98  14.005  3879 3899 3934 rVV2 2215476   4621718  73.92%   9.074%
 99  14.245  3973 3976 3981 rBV7    8378      9445   0.15%   0.019%
100  14.879  4176 4180 4185 rBV8   10438      8724   0.14%   0.017%


                    Sum of corrected areas:    50931438
```

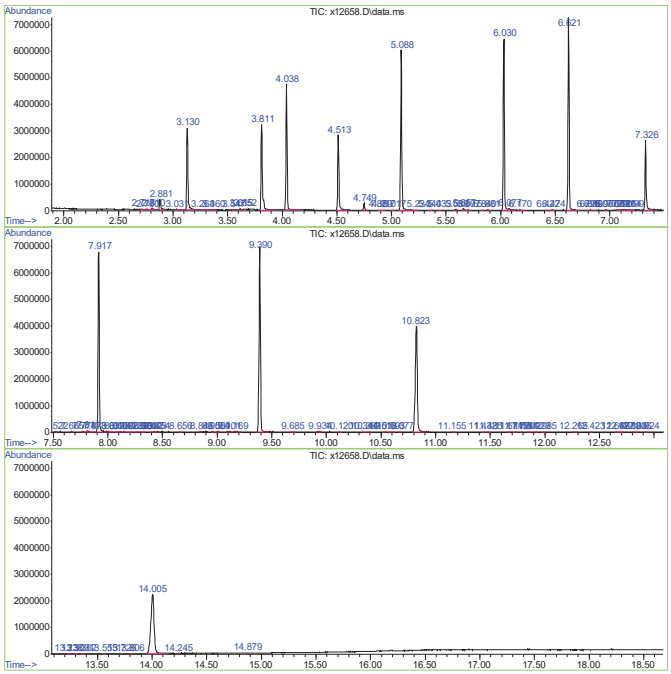
9.1.6 9

LSC Report - Integrated Chromatogram

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12658.D
Acq On    : 22 Sep 2016   3:23 pm
Operator  : AkinA
Sample    : MC47774-3
Misc      : op48710,msx425,20.97,,,1,1
ALS Vial  : 9   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P
```



9.1.6 9

Library Search Compound Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12658.D
Acq On    : 22 Sep 2016   3:23 pm
Operator  : AkinA
Sample    : MC47774-3
Misc      : op48710,msx425,20.97,,,1,1
ALS Vial  : 9   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



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

9.1.6 9

Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12658.D
Acq On    : 22 Sep 2016   3:23 pm
Operator  : AkinA
Sample    : MC47774-3
Misc      : op48710,msx425,20.97,,,1,1
ALS Vial  : 9   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

9.1.6 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12659.D
Sample : MC47774-4
Misc : op48710,msx425,20.00,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 22 Sep 2016 3:48 pm Operator: AkinA

Quant Time: Sep 22 17:37:15 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	545272	40.00	ug/mL	0.00
22) Naphthalene-d8	5.088	136	2018354	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.621	164	1157532	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1918732	40.00	ug/mL	0.00
78) Chrysene-d12	10.820	240	1709244	40.00	ug/mL	-0.01
88) Perylene-d12	14.005	264	1440712	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	545272	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	729239	39.46	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 78.92%			
8) Phenol-d5	3.811	99	976780	40.85	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 81.70%			
23) Nitrobenzene-d5	4.513	82	834610	38.07	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 76.14%			
46) 2-Fluorobiphenyl	6.030	172	1717414	43.30	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 86.60%			
68) 2,4,6-Tribromophenol	7.326	330	230901	46.29	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 92.58%			
81) Terphenyl-d14	9.390	244	2000808	55.49	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 110.98%			

Target Compounds Qvalue

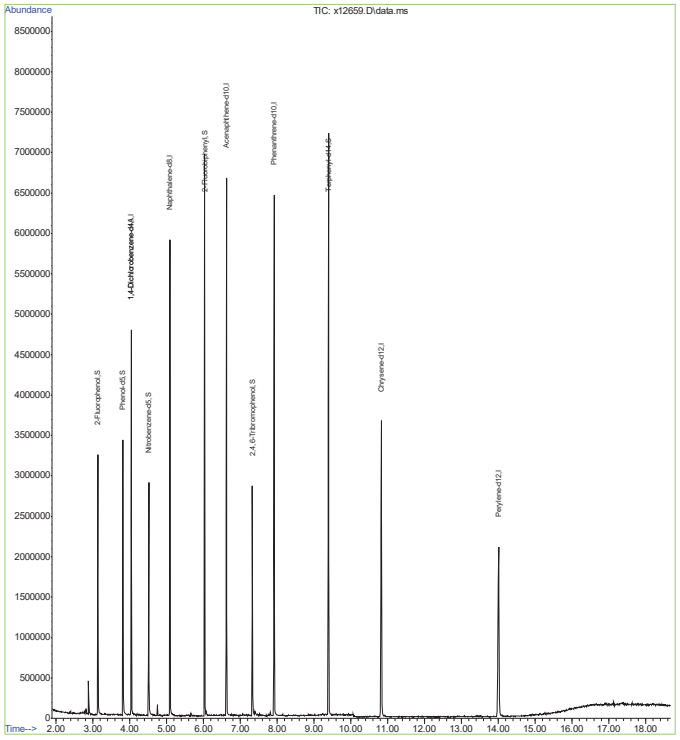
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.7 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12659.D
Sample : MC47774-4
Misc : op48710,msx425,20.00,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 22 Sep 2016 3:48 pm Operator: AkinA

Quant Time: Sep 22 17:37:15 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.1.7 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12659.D
Acq On : 22 Sep 2016 3:48 pm
Operator : AkinA
Sample : MC47774-4
Misc : op48710,msx425,20.00,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12659.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.813	292	298	316	rVB	64456	84641	1.31%	0.168%
2	2.882	316	320	342	rVB	412241	349073	5.42%	0.692%
3	3.130	394	400	448	rBV	3220731	2561027	39.76%	5.079%
4	3.811	613	619	660	rBV	3406622	2775355	43.09%	5.504%
5	4.038	682	692	708	rBV	4762208	3508676	54.48%	6.958%
6	4.190	739	741	745	rBV5	12928	10574	0.16%	0.021%
7	4.513	837	845	896	rVB	2885019	2392634	37.15%	4.745%
8	4.750	914	921	932	rBV	135062	99695	1.55%	0.198%
9	4.877	959	962	968	rBV8	6559	6200	0.10%	0.012%
10	4.920	973	976	987	rBV8	9908	12024	0.19%	0.024%
11	4.958	987	988	994	rBV6	9003	4469	0.07%	0.009%
12	5.088	1022	1030	1076	rVB	5892426	4487359	69.67%	8.899%
13	5.660	1208	1214	1224	rVB	34037	29988	0.47%	0.059%
14	5.825	1262	1267	1279	rVB	6023	10688	0.17%	0.021%
15	5.875	1279	1283	1294	rVB	5612	7138	0.11%	0.014%
16	6.030	1322	1333	1344	rBV	6949793	5124317	79.56%	10.162%
17	6.077	1345	1348	1360	rVB	48838	53126	0.82%	0.105%
18	6.621	1513	1523	1552	rBV	6655596	5084198	78.94%	10.082%
19	6.745	1560	1563	1574	rBV	12739	18554	0.29%	0.037%
20	6.851	1594	1597	1611	rVB	5935	8102	0.13%	0.016%
21	6.966	1630	1634	1638	rVB4	14046	11189	0.17%	0.022%
22	7.065	1662	1666	1679	rBV3	21295	24463	0.38%	0.049%
23	7.171	1696	1700	1707	rVB9	11862	11752	0.18%	0.023%
24	7.326	1742	1750	1763	rBV	2845434	2229102	34.61%	4.421%
25	7.401	1770	1774	1783	rVB	38242	46469	0.72%	0.092%
26	7.525	1810	1814	1819	rVB7	16395	13545	0.21%	0.027%
27	7.749	1883	1886	1889	rBV5	5823	4511	0.07%	0.009%
28	7.771	1889	1893	1900	rVV8	19293	16825	0.26%	0.033%
29	7.811	1901	1906	1930	rVB3	41292	45592	0.71%	0.090%
30	7.917	1931	1940	1967	rBV	6437627	5098108	79.15%	10.110%
31	8.147	2011	2014	2027	rVB	12025	9624	0.15%	0.019%
32	8.501	2126	2128	2143	rVB	10892	7722	0.12%	0.015%
33	8.719	2195	2198	2203	rVB7	13027	10461	0.16%	0.021%
34	8.846	2236	2239	2243	rVB6	12422	7898	0.12%	0.016%

9.1.8 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12659.D
Acq On : 22 Sep 2016 3:48 pm
Operator : AkinA
Sample : MC47774-4
Misc : op48710,msx425,20.00,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	8.905	2255	2258	2268	rBV6	7089	10895	0.17%	0.022%
36	9.008	2287	2291	2310	rVB6	12072	16275	0.25%	0.032%
37	9.138	2331	2333	2339	rBV7	7868	7942	0.12%	0.016%
38	9.390	2404	2414	2475	rBV2	7191941	6440859	100.00%	12.773%
39	9.934	2585	2589	2596	rVB6	19832	20381	0.32%	0.040%
40	10.061	2617	2630	2636	rVB6	30964	61118	0.95%	0.121%
41	10.176	2661	2667	2670	rBV7	3977	3733	0.06%	0.007%
42	10.270	2693	2697	2705	rVB9	3633	4293	0.07%	0.009%
43	10.316	2705	2712	2714	rVV8	4988	3903	0.06%	0.008%
44	10.366	2723	2728	2731	rBV6	6354	4607	0.07%	0.009%
45	10.397	2732	2738	2740	rVB5	3634	3579	0.06%	0.007%
46	10.515	2764	2776	2780	rBV5	14307	23294	0.36%	0.046%
47	10.596	2800	2802	2808	rBV7	5137	5158	0.08%	0.010%
48	10.621	2808	2810	2814	rVV5	6839	3699	0.06%	0.007%
49	10.674	2824	2827	2831	rVB5	6195	4845	0.08%	0.010%
50	10.705	2835	2837	2846	rVB8	5967	4472	0.07%	0.009%
51	10.751	2848	2852	2858	rBV9	6149	6854	0.11%	0.014%
52	10.823	2860	2875	2897	rBV	3665946	5003612	77.69%	9.923%
53	11.261	3011	3016	3018	rVB4	5599	4162	0.06%	0.008%
54	11.426	3067	3069	3075	rBV7	4382	4756	0.07%	0.009%
55	11.587	3117	3121	3122	rBV4	4927	3657	0.06%	0.007%
56	11.628	3129	3134	3136	rBV6	5410	4084	0.06%	0.008%
57	11.721	3161	3164	3171	rVV8	6080	7778	0.12%	0.015%
58	11.774	3175	3181	3186	rBV10	4896	6463	0.10%	0.013%
59	11.817	3193	3195	3197	rVB3	10281	3655	0.06%	0.007%
60	11.830	3197	3199	3202	rBV4	11274	6760	0.10%	0.013%
61	11.939	3231	3234	3240	rVB7	10197	9858	0.15%	0.020%
62	11.970	3240	3244	3251	rBV10	8945	13019	0.20%	0.026%
63	12.131	3294	3296	3300	rVB5	8606	4605	0.07%	0.009%
64	12.150	3300	3302	3305	rBV4	7672	4739	0.07%	0.009%
65	12.175	3305	3310	3312	rVB5	6432	5180	0.08%	0.010%
66	12.274	3337	3342	3344	rBV3	4642	3799	0.06%	0.008%
67	12.358	3368	3369	3378	rVB7	3547	3839	0.06%	0.008%
68	12.408	3380	3385	3388	rBV6	3675	3903	0.06%	0.008%
69	12.427	3388	3391	3397	rBV8	4944	5203	0.08%	0.010%
70	12.501	3407	3415	3419	rVB8	5069	5078	0.08%	0.010%
71	12.570	3436	3437	3447	rVB10	7626	5806	0.09%	0.012%

9.1.8 9

LSC Area Percent Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12659.D
Acq On    : 22 Sep 2016   3:48 pm
Operator  : AkinA
Sample    : MC47774-4
Misc      : op48710,msx425,20.00,,,1,1
ALS Vial  : 10   Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON                          Filtering: 5
Sampling  : 1                            Min Area: 1000 Area counts
Start Thrs: 0.1                         Max Peaks: 100
Stop Thrs : 0.05                      Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method    : X:\1\methods\X160921_8270.m
Title     : SW-864 Method 8270
```

72	12.653	3460	3464	3474	rVB8	6824	10041	0.16%	0.020%
73	12.762	3494	3499	3504	rVB5	6967	6168	0.10%	0.012%
74	12.784	3504	3506	3511	rVB6	6780	4051	0.06%	0.008%
75	12.818	3516	3517	3525	rVB7	3696	4173	0.06%	0.008%
76	12.852	3525	3528	3536	rBV9	5299	5842	0.09%	0.012%
77	12.887	3536	3539	3543	rBV4	7281	3545	0.06%	0.007%
78	12.939	3553	3556	3563	rVB9	6113	6678	0.10%	0.013%
79	12.967	3563	3565	3573	rVB8	3038	3629	0.06%	0.007%
80	13.064	3590	3596	3598	rBV7	6473	6576	0.10%	0.013%
81	13.073	3598	3599	3604	rVV5	8422	5654	0.09%	0.011%
82	13.092	3604	3605	3614	rVB7	9015	8653	0.13%	0.017%
83	13.219	3637	3646	3648	rBV8	6083	6625	0.10%	0.013%
84	13.272	3656	3663	3669	rBV9	8976	9505	0.15%	0.019%
85	13.306	3673	3674	3679	rBV5	5249	4666	0.07%	0.009%
86	13.365	3691	3693	3698	rBV5	5883	4494	0.07%	0.009%
87	13.440	3715	3717	3721	rVB5	6205	4679	0.07%	0.009%
88	13.539	3748	3749	3760	rVB5	9338	11044	0.17%	0.022%
89	13.586	3760	3764	3767	rBV5	7046	5828	0.09%	0.012%
90	13.632	3774	3779	3782	rBV5	5284	3727	0.06%	0.007%
91	13.701	3799	3801	3806	rBV5	7388	4391	0.07%	0.009%
92	13.757	3815	3819	3825	rVB8	5171	5563	0.09%	0.011%
93	13.791	3825	3830	3834	rBV8	5700	6577	0.10%	0.013%
94	13.872	3851	3856	3863	rVV8	6421	7444	0.12%	0.015%
95	13.900	3863	3865	3875	rVB9	3599	3953	0.06%	0.008%
96	14.005	3880	3899	3929	rBV2	2103577	4356282	67.64%	8.639%
97	14.211	3963	3965	3975	rBV2	4916	5288	0.08%	0.010%
98	14.344	4002	4008	4012	rBV8	3146	4117	0.06%	0.008%
99	14.431	4033	4036	4043	rVB9	7718	7880	0.12%	0.016%
100	14.764	4139	4143	4148	rBV8	6531	8364	0.13%	0.017%

Sum of corrected areas: 50426399

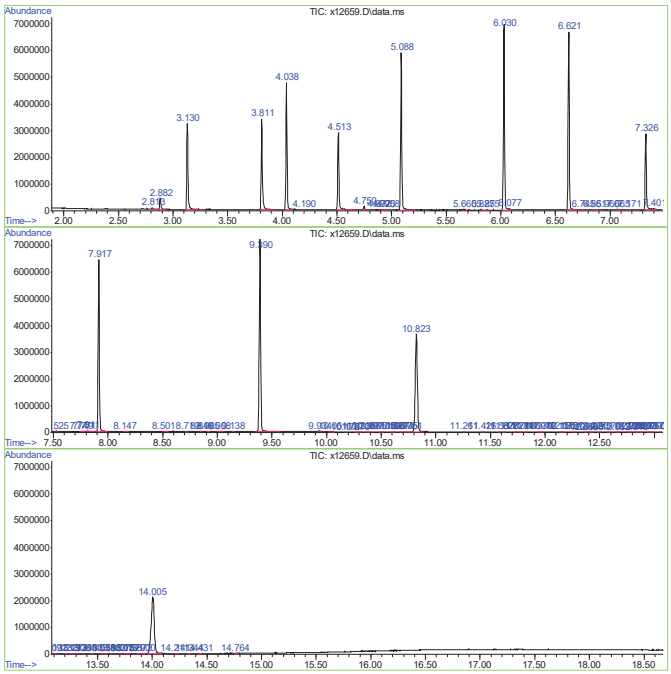
9.1.8 6

LSC Report - Integrated Chromatogram

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12659.D
Acq On    : 22 Sep 2016   3:48 pm
Operator  : AkinA
Sample    : MC47774-4
Misc      : op48710,msx425,20.00,,,1,1
ALS Vial  : 10   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library    : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P
```



9.1.8 6

Library Search Compound Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12659.D
Acq On    : 22 Sep 2016   3:48 pm
Operator  : AkinA
Sample    : MC47774-4
Misc      : op48710,msx425,20.00,,,1,1
ALS Vial  : 10   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library    : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

9.1.8 6

Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12659.D
Acq On    : 22 Sep 2016   3:48 pm
Operator  : AkinA
Sample    : MC47774-4
Misc      : op48710,msx425,20.00,,,1,1
ALS Vial  : 10   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library    : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

9.1.8 6

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12660.D
Sample : MC47774-5
Misc : op48710,msx425,20.70,,,1,1
ALS Vial : 11 Sample Multiplier: 1
Acq On : 22 Sep 2016 4:13 pm Operator: AkinA

Quant Time: Sep 22 17:50:36 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	576418	40.00	ug/mL	0.00
22) Naphthalene-d8	5.088	136	2118056	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.620	164	1207250	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.913	188	1998529	40.00	ug/mL	0.00
78) Chrysene-d12	10.823	240	1784242	40.00	ug/mL	-0.01
88) Perylene-d12	14.002	264	1482364	40.00	ug/mL	-0.02
96) 1,4-Dichlorobenzene-d4A	4.038	152	576418	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	754021	38.60	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 77.20%			
8) Phenol-d5	3.811	99	999697	39.55	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 79.10%			
23) Nitrobenzene-d5	4.513	82	861408	37.45	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 74.90%			
46) 2-Fluorobiphenyl	6.030	172	1707398	41.27	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 82.54%			
68) 2,4,6-Tribromophenol	7.326	330	212809	41.59	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 83.18%			
81) Terphenyl-d14	9.390	244	1874096	49.79	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 99.58%			

Target Compounds Qvalue

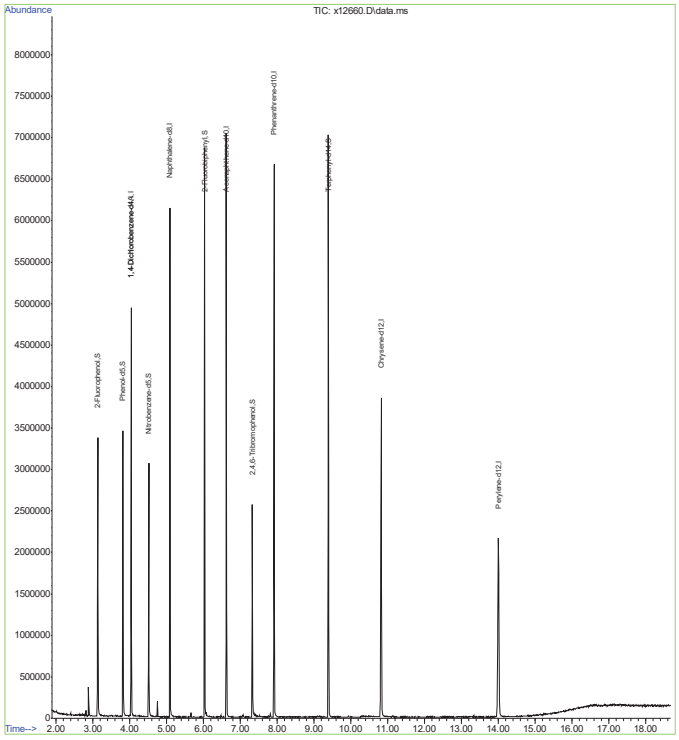
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.9 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12660.D
Sample : MC47774-5
Misc : op48710,msx425,20.70,,,1,1
ALS Vial : 11 Sample Multiplier: 1
Acq On : 22 Sep 2016 4:13 pm Operator: AkinA

Quant Time: Sep 22 17:50:36 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.1.9 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12660.D
Acq On : 22 Sep 2016 4:13 pm
Operator : AkinA
Sample : MC47774-5
Misc : op48710,msx425,20.70,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12660.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.396	159	164	178	rVB	22199	22550	0.37%	0.044%
2	2.651	244	246	250	rVB5	14158	6933	0.11%	0.014%
3	2.673	250	253	262	rVB7	12256	12837	0.21%	0.025%
4	2.720	263	268	275	rVB2	23950	22335	0.37%	0.044%
5	2.766	278	283	289	rVB6	20352	19803	0.33%	0.039%
6	2.813	290	298	306	rVB	64352	63139	1.04%	0.124%
7	2.881	315	320	340	rBV	345521	295536	4.87%	0.579%
8	3.130	394	400	451	rBV	3358507	2630686	43.36%	5.150%
9	3.491	512	516	524	rVB10	8204	11601	0.19%	0.023%
10	3.652	566	568	578	rVB8	11731	11016	0.18%	0.022%
11	3.745	594	598	604	rVB7	9028	7693	0.13%	0.015%
12	3.811	613	619	654	rBV	3444489	2817335	46.44%	5.515%
13	4.038	685	692	747	rVB	4925458	3685707	60.76%	7.215%
14	4.513	837	845	889	rVB	3058636	2430361	40.06%	4.758%
15	4.749	915	921	927	rVB	184112	127891	2.11%	0.250%
16	4.793	931	935	944	rVB	4781	4769	0.08%	0.009%
17	4.920	973	976	986	rVB6	6818	5688	0.09%	0.011%
18	5.017	1005	1007	1015	rVB8	5207	5000	0.08%	0.010%
19	5.060	1015	1021	1022	rBV6	4913	4089	0.07%	0.008%
20	5.088	1022	1030	1071	rVV	6133391	4665924	76.91%	9.134%
21	5.265	1085	1087	1101	rVB	3929	6074	0.10%	0.012%
22	5.660	1208	1214	1220	rVB	52661	40513	0.67%	0.079%
23	6.030	1323	1333	1345	rBV	6858386	5113015	84.28%	10.009%
24	6.076	1345	1348	1366	rVB3	58826	73408	1.21%	0.144%
25	6.173	1375	1379	1394	rVB10	13216	19978	0.33%	0.039%
26	6.412	1449	1456	1459	rBV9	6819	7312	0.12%	0.014%
27	6.474	1472	1476	1480	rBV2	17819	11352	0.19%	0.022%
28	6.530	1490	1494	1499	rVB8	4995	4922	0.08%	0.010%
29	6.620	1514	1523	1551	rBV	7038341	5303082	87.42%	10.382%
30	6.872	1601	1604	1611	rVB9	4019	4638	0.08%	0.009%
31	6.965	1630	1634	1639	rVB5	10078	7252	0.12%	0.014%
32	7.021	1639	1652	1653	rBV10	5263	8031	0.13%	0.016%
33	7.068	1658	1667	1684	rVB3	22672	32380	0.53%	0.063%
34	7.167	1689	1699	1706	rBV7	8800	9951	0.16%	0.019%

9.1.10 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12660.D
Acq On : 22 Sep 2016 4:13 pm
Operator : AkinA
Sample : MC47774-5
Misc : op48710,msx425,20.70,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	7.199	1706	1709	1715	rVB7	9832	9744	0.16%	0.019%
36	7.226	1715	1718	1722	rBV5	5681	4129	0.07%	0.008%
37	7.326	1737	1750	1765	rBV	2563319	2068016	34.09%	4.048%
38	7.401	1771	1774	1780	rVB2	23671	15017	0.25%	0.029%
39	7.432	1782	1784	1788	rVB5	10066	5385	0.09%	0.011%
40	7.525	1810	1814	1820	rVV5	17615	14296	0.24%	0.028%
41	7.584	1830	1833	1839	rVB7	4594	4189	0.07%	0.008%
42	7.609	1839	1841	1855	rVB10	4608	6583	0.11%	0.013%
43	7.770	1888	1893	1898	rBV7	10162	9282	0.15%	0.018%
44	7.811	1898	1906	1919	rVB3	40787	44911	0.74%	0.088%
45	7.913	1931	1939	1968	rBV	6664766	5319987	87.69%	10.415%
46	8.109	1994	2002	2011	rBV8	7646	12552	0.21%	0.025%
47	8.146	2011	2014	2019	rVB6	4801	4272	0.07%	0.008%
48	8.261	2045	2051	2052	rVB6	6007	4845	0.08%	0.009%
49	8.289	2052	2060	2067	rBV6	8011	13289	0.22%	0.026%
50	8.327	2068	2072	2078	rVV8	6799	6190	0.10%	0.012%
51	8.376	2084	2088	2101	rVB10	6680	12643	0.21%	0.025%
52	8.454	2108	2113	2117	rVB2	9374	7729	0.13%	0.015%
53	8.491	2124	2125	2136	rVB9	5367	5714	0.09%	0.011%
54	8.849	2234	2240	2248	rBV9	6067	6930	0.11%	0.014%
55	8.908	2254	2259	2264	rBV9	5822	5335	0.09%	0.010%
56	9.001	2286	2289	2299	rVB9	6739	5542	0.09%	0.011%
57	9.057	2303	2307	2315	rBV8	6300	6710	0.11%	0.013%
58	9.110	2315	2324	2333	rVB8	10904	20441	0.34%	0.040%
59	9.153	2333	2338	2341	rBV5	12852	10513	0.17%	0.021%
60	9.237	2358	2365	2370	rVB9	8545	6631	0.11%	0.013%
61	9.390	2402	2414	2438	rBV	7023981	6066474	100.00%	11.876%
62	9.498	2443	2449	2452	rBV8	4828	4464	0.07%	0.009%
63	9.586	2476	2477	2485	rVB6	5970	6318	0.10%	0.012%
64	9.728	2519	2523	2530	rVV8	4268	5149	0.08%	0.010%
65	9.931	2581	2588	2595	rVV5	17982	19604	0.32%	0.038%
66	10.027	2613	2619	2625	rBV10	7493	6965	0.11%	0.014%
67	10.170	2660	2665	2669	rBV5	4602	4450	0.07%	0.009%
68	10.260	2686	2694	2695	rBV7	4192	4377	0.07%	0.009%
69	10.285	2695	2702	2707	rBV7	13029	14884	0.25%	0.029%
70	10.335	2716	2718	2723	rBV6	5586	4186	0.07%	0.008%
71	10.356	2723	2725	2730	rVB5	8767	4488	0.07%	0.009%

9.1.10 9

LSC Area Percent Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12660.D
Acq On    : 22 Sep 2016   4:13 pm
Operator  : AkinA
Sample    : MC47774-5
Misc      : op48710,msx425,20.70,,,1,1
ALS Vial  : 11   Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON                              Filtering: 5
Sampling  : 1                                Min Area: 1000 Area counts
Start Thrs: 0.1                             Max Peaks: 100
Stop Thrs : 0.05                         Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method    : X:\1\methods\X160921_8270.m
Title     : SW-864 Method 8270
```

72	10.387	2731	2735	2741	rBV8	7755	9650	0.16%	0.019%
73	10.484	2764	2766	2771	rVV6	7511	5622	0.09%	0.011%
74	10.521	2772	2778	2785	rVB6	5293	7570	0.12%	0.015%
75	10.558	2785	2790	2792	rBV5	7238	4147	0.07%	0.008%
76	10.621	2807	2810	2816	rVB8	5701	5263	0.09%	0.010%
77	10.823	2860	2875	2911	rBV	3844995	5195245	85.64%	10.170%
78	10.941	2911	2913	2921	rVB9	8016	7090	0.12%	0.014%
79	11.012	2931	2936	2938	rVB5	6340	5478	0.09%	0.011%
80	11.065	2952	2953	2960	rVB6	7199	5173	0.09%	0.010%
81	11.118	2965	2970	2971	rBV5	8299	4805	0.08%	0.009%
82	11.217	2997	3002	3008	rVB9	4246	5893	0.10%	0.012%
83	11.581	3113	3119	3124	rVB10	5410	4406	0.07%	0.009%
84	11.836	3197	3201	3206	rVV7	5662	4975	0.08%	0.010%
85	12.069	3265	3276	3281	rBV7	8797	9271	0.15%	0.018%
86	12.122	3289	3293	3296	rVB6	6221	5043	0.08%	0.010%
87	12.787	3502	3507	3516	rVB6	5228	9395	0.15%	0.018%
88	12.877	3532	3536	3539	rBV5	4519	4559	0.08%	0.009%
89	12.924	3545	3551	3554	rVB8	6161	5367	0.09%	0.011%
90	13.029	3582	3585	3591	rVV7	5246	4787	0.08%	0.009%
91	13.151	3623	3624	3631	rVB6	7122	5456	0.09%	0.011%
92	13.194	3631	3638	3640	rBV7	6097	5429	0.09%	0.011%
93	13.253	3654	3657	3661	rVB5	6774	4490	0.07%	0.009%
94	13.272	3661	3663	3672	rVB9	5635	6276	0.10%	0.012%
95	13.303	3672	3673	3678	rVB4	7446	4873	0.08%	0.010%
96	13.337	3678	3684	3689	rVB10	17375	14647	0.24%	0.029%
97	13.837	3836	3845	3852	rBV8	5917	4345	0.07%	0.009%
98	14.002	3880	3898	3937	rBV3	2158136	4453786	73.42%	8.719%
99	14.176	3948	3954	3959	rBV10	5482	7120	0.12%	0.014%
100	14.614	4093	4095	4105	rVB10	5885	6714	0.11%	0.013%

Sum of corrected areas: 51081910

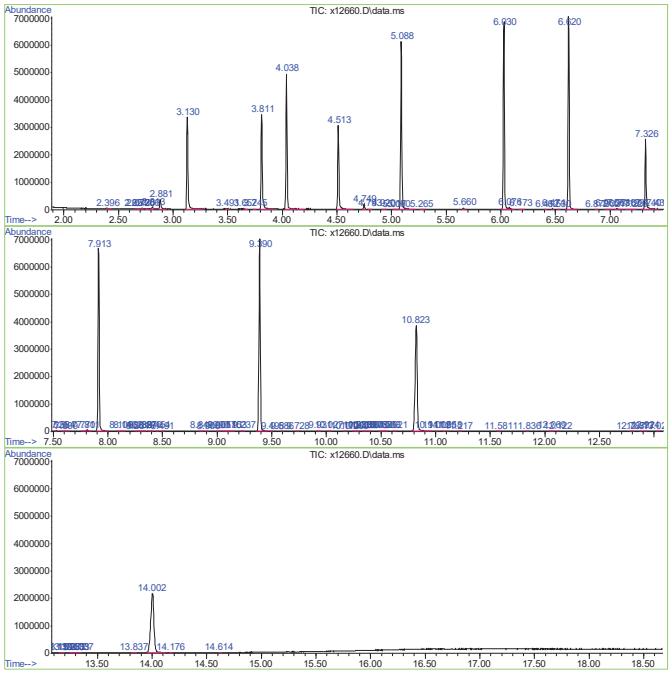
9.1.10 9

LSC Report - Integrated Chromatogram

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12660.D
Acq On    : 22 Sep 2016   4:13 pm
Operator  : AkinA
Sample    : MC47774-5
Misc      : op48710,msx425,20.70,,,1,1
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P
```



9.1.10 9

Library Search Compound Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12660.D
Acq On    : 22 Sep 2016   4:13 pm
Operator  : AkinA
Sample    : MC47774-5
Misc      : op48710,msx425,20.70,,,1,1
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

9.1.10 9

Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12660.D
Acq On    : 22 Sep 2016   4:13 pm
Operator  : AkinA
Sample    : MC47774-5
Misc      : op48710,msx425,20.70,,,1,1
ALS Vial  : 11   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

9.1.10 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12661.D
Sample : MC47774-6,1:20
Misc : op48710,msx425,20.13,,,1,20
ALS Vial : 12 Sample Multiplier: 1
Acq On : 22 Sep 2016 4:38 pm Operator: AkinA

Quant Time: Sep 23 07:09:27 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.038	152	397853	40.00 ug/mL	0.00
22) Naphthalene-d8	5.088	136	1544321	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.620	164	909747	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1580641	40.00 ug/mL	0.00
78) Chrysene-d12	10.823	240	1556575	40.00 ug/mL	-0.01
88) Perylene-d12	14.005	264	1420770	40.00 ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	397853	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	3.133	112	24586	1.82 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery =	3.64%#	
8) Phenol-d5	3.817	99	33021	1.89 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery =	3.78%#	
23) Nitrobenzene-d5	4.519	82	28912	1.72 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery =	3.44%#	
46) 2-Fluorobiphenyl	6.030	172	64299	2.06 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery =	4.12%#	
68) 2,4,6-Tribromophenol	7.329	330	5840	1.66 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery =	3.32%#	
81) Terphenyl-d14	9.387	244	81064	2.47 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery =	4.94%#	
Target Compounds					Qvalue
72) Phenanthrene	7.935	178	168608	3.932 ug/mL	99
73) Anthracene	7.976	178	60274	1.332 ug/mL	99
76) Fluoranthene	9.004	202	566399	12.825 ug/mL	98
80) Pyrene	9.228	202	436770	9.580 ug/mL	97
85) Benzo[a]anthracene	10.792	228	234103	5.421 ug/mL	99
86) Chrysene	10.860	228	165842	3.887 ug/mL	98
90) Benzo[b]fluoranthene	13.032	252	147236	4.363 ug/mL	97
91) Benzo[k]fluoranthene	13.079	252	157196	4.343 ug/mL	95
92) Benzo[a]pyrene	13.850	252	180868	5.549 ug/mL	98
93) Indeno[1,2,3-cd]pyrene	15.836	276	106699	3.959 ug/mL	94
94) Dibenz[a,h]anthracene	15.867	278	21610	0.595 ug/mL	87
95) Benzo[g,h,i]perylene	16.181	276	91822	2.633 ug/mL	95

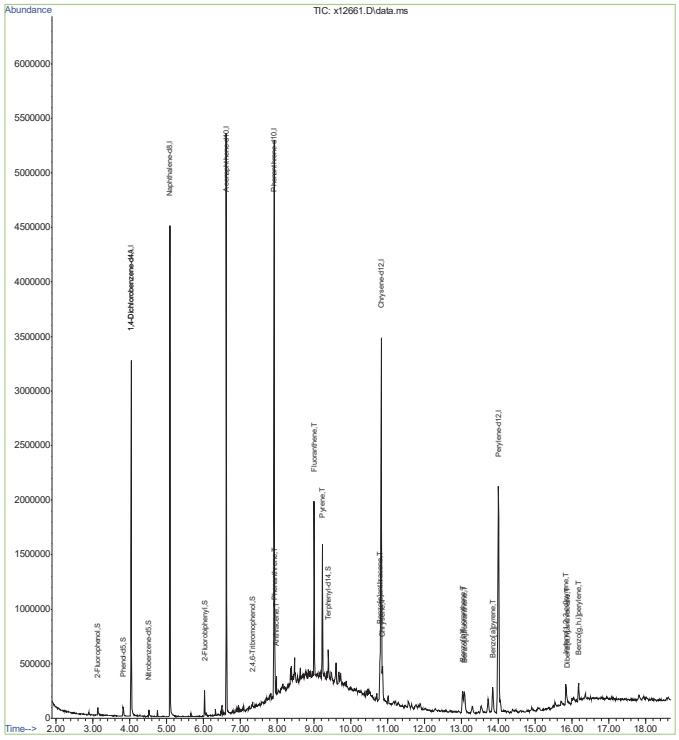
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.11 9

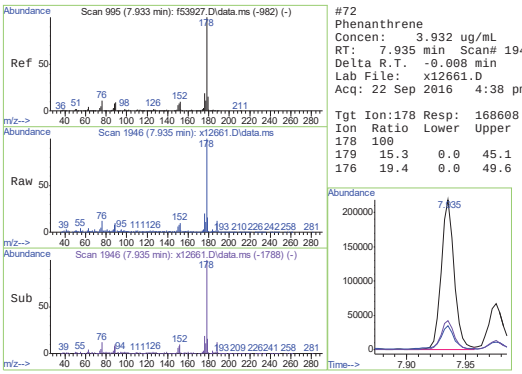
Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12661.D
Sample : MC47774-6,1:20
Misc : op48710,msx425,20.13,,,1,20
ALS Vial : 12 Sample Multiplier: 1
Acq On : 22 Sep 2016 4:38 pm Operator: AkinA

Quant Time: Sep 23 07:09:27 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



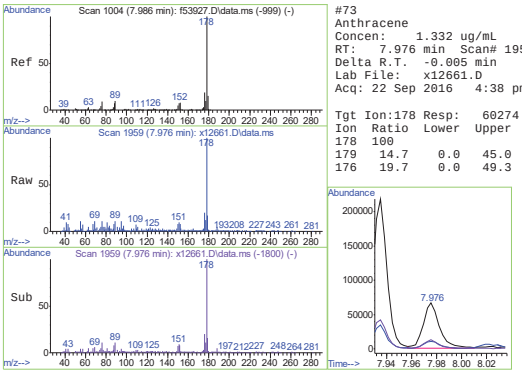
9.1.11 9



#72
Phenanthrene
Concen: 3.932 ug/mL
RT: 7.935 min Scan# 1946
Delta R.T. -0.008 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:178 Resp: 168608

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.1
176	19.4	0.0	49.6

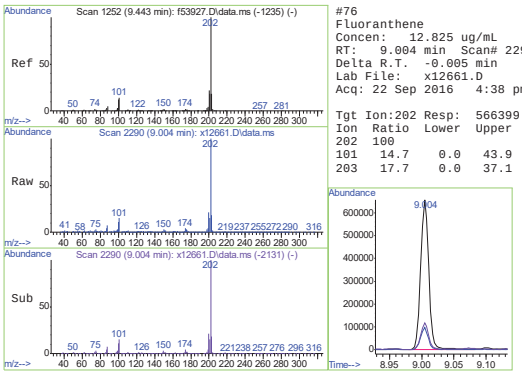


#73
Anthracene
Concen: 1.332 ug/mL
RT: 7.976 min Scan# 1959
Delta R.T. -0.005 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:178 Resp: 60274

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.0
176	19.7	0.0	49.3

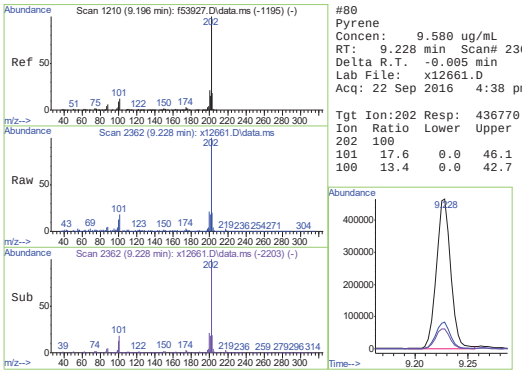
9.1.11 9



#76
Fluoranthene
Concen: 12.825 ug/mL
RT: 9.004 min Scan# 2290
Delta R.T. -0.005 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:202 Resp: 566399

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	43.9
203	17.7	0.0	37.1

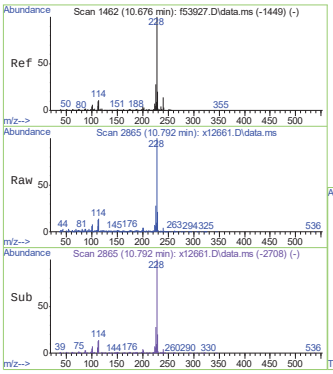


#80
Pyrene
Concen: 9.580 ug/mL
RT: 9.228 min Scan# 2362
Delta R.T. -0.005 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:202 Resp: 436770

Ion	Ratio	Lower	Upper
202	100		
101	17.6	0.0	46.1
100	13.4	0.0	42.7

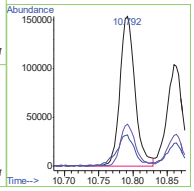
9.1.11 9

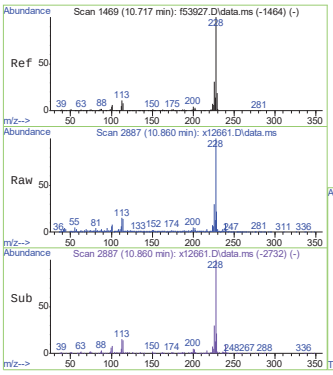


#85
Benzo[a]anthracene
Concen: 5.421 ug/mL
RT: 10.792 min Scan# 2865
Delta R.T. -0.011 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:228 Resp: 234103

Ion	Ratio	Lower	Upper
228	100		
229	20.3	0.0	49.3
226	28.0	0.0	58.0

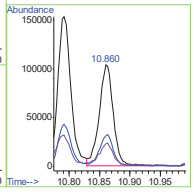




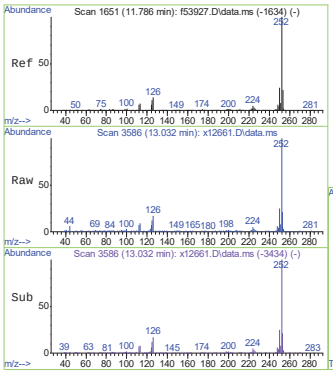
#86
Chrysene
Concen: 3.887 ug/mL
RT: 10.860 min Scan# 2887
Delta R.T. -0.019 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:228 Resp: 165842

Ion	Ratio	Lower	Upper
228	100		
226	29.9	0.0	60.0
229	21.1	0.0	49.3



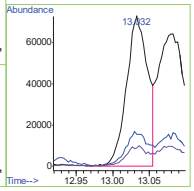
9.1.11 9

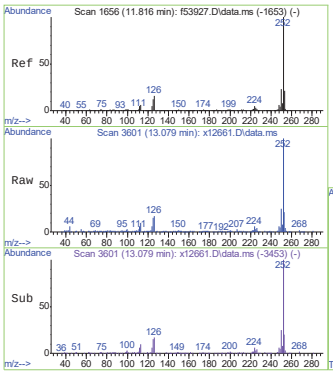


#90
Benzo[b]fluoranthene
Concen: 4.363 ug/mL
RT: 13.032 min Scan# 3586
Delta R.T. -0.028 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:252 Resp: 147236

Ion	Ratio	Lower	Upper
252	100		
253	20.2	0.0	51.4
125	11.6	0.0	42.8

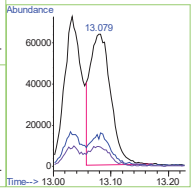




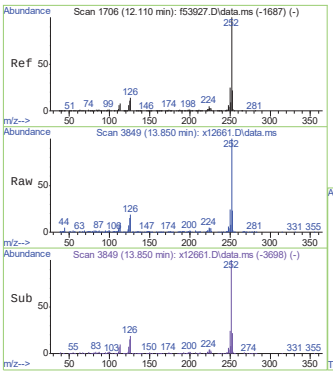
#91
Benzo[k]fluoranthene
Concen: 4.343 ug/mL
RT: 13.079 min Scan# 3601
Delta R.T. -0.040 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:252 Resp: 157196

Ion	Ratio	Lower	Upper
252	100		
253	19.6	0.0	51.6
125	15.0	0.0	42.5



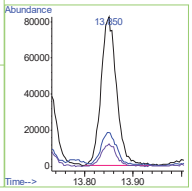
9.1.11 9

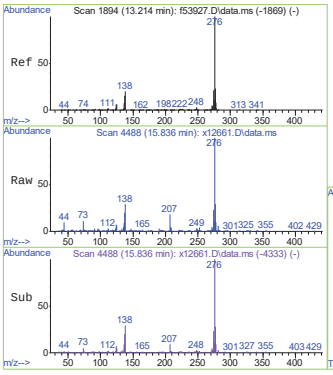


#92
Benzo[a]pyrene
Concen: 5.549 ug/mL
RT: 13.850 min Scan# 3849
Delta R.T. -0.030 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:252 Resp: 180868

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.3
125	14.6	0.0	43.6

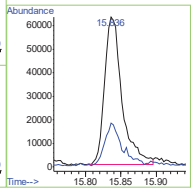




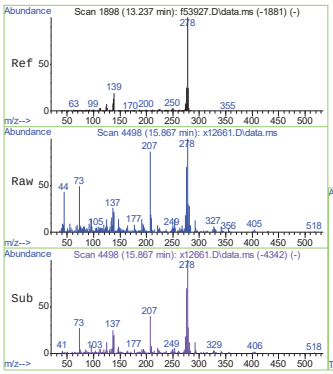
#93
Indeno[1,2,3-cd]pyrene
Concen: 3.959 ug/mL
RT: 15.836 min Scan# 4488
Delta R.T. -0.017 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:276 Resp: 106699

Ion	Ratio	Lower	Upper
276	100		
138	28.5	0.0	55.4



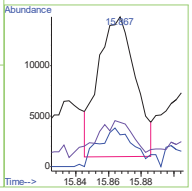
9.1.11 9

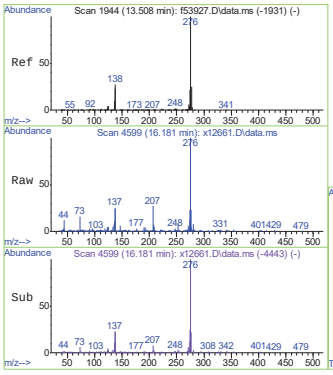


#94
Dibenz[a,h]anthracene
Concen: 0.595 ug/mL
RT: 15.867 min Scan# 4498
Delta R.T. -0.014 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:278 Resp: 21610

Ion	Ratio	Lower	Upper
278	100		
139	30.2	0.0	50.6
279	26.0	0.0	53.3

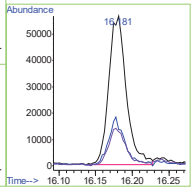




#95
Benzo[g,h,i]perylene
Concen: 2.633 ug/mL
RT: 16.181 min Scan# 4599
Delta R.T. -0.016 min
Lab File: x12661.D
Acq: 22 Sep 2016 4:38 pm

Tgt Ion:276 Resp: 91822

Ion	Ratio	Lower	Upper
276	100		
138	24.7	0.0	58.6
277	22.2	0.0	53.5



9.1.11 9

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/23/16 14:46

Quantitation Report (QT/LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12664.D
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:54 pm Operator: AkinA

Quant Time: Sep 23 07:00:53 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.038	152	486688	40.00 ug/mL	0.00
22) Naphthalene-d8	5.088	136	1818601	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.621	164	1070765	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.920	188	1866851	40.00 ug/mL	0.00
78) Chrysene-d12	10.848	240	1748835	40.00 ug/mL	0.01
88) Perylene-d12	14.030	264	1313299	40.00 ug/mL	0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	486688	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	3.130	112	643992	39.04 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 78.08%		
8) Phenol-d5	3.811	99	889884	41.70 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 83.40%		
23) Nitrobenzene-d5	4.513	82	787493	39.87 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 79.74%		
46) 2-Fluorobiphenyl	6.030	172	1554695	42.37 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 84.74%		
68) 2,4,6-Tribromophenol	7.326	330	220392	45.52 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 91.04%		
81) Terphenyl-d14	9.399	244	1802170	48.85 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 97.70%		
Target Compounds					Qvalue
32) Naphthalene	5.104	128	162693	3.467 ug/mL	99
37) 2-Methylnaphthalene	5.694	142	23443	0.757 ug/mL	95
48) Acenaphthylene	6.490	152	658686	14.813 ug/mL	99
51) Acenaphthene	6.649	153	46480	1.532 ug/mL	96
53) Dibenzofuran	6.788	168	129177	2.981 ug/mL	92
57) Fluorene	7.090	166	270579m	8.017 ug/mL	
72) Phenanthrene	7.938	178	3742108	73.885 ug/mL	100
73) Anthracene	7.979	178	1614643	30.202 ug/mL	98
74) Carbazole	8.134	167	86968m	1.758 ug/mL	
76) Fluoranthene	9.023	202	10162065	194.827 ug/mL	93
80) Pyrene	9.247	202	8365915	163.327 ug/mL	89
85) Benzo[a]anthracene	10.823	228	5040790	103.903 ug/mL	97
86) Chrysene	10.894	228	3501853	73.057 ug/mL	97
90) Benzo[b]fluoranthene	13.076	252	3220395	75.815 ug/mL	99
91) Benzo[k]fluoranthene	13.129	252	2813123	61.916 ug/mL	99
92) Benzo[a]pyrene	13.903	252	3628321	89.682 ug/mL	97
93) Indeno[1,2,3-cd]pyrene	15.864	276	2579873	72.115 ug/mL	98
94) Dibenz[a,h]anthracene	15.880	278	541605m	16.138 ug/mL	
95) Benzo[g,h,i]perylene	16.206	276	2080802	64.562 ug/mL	96

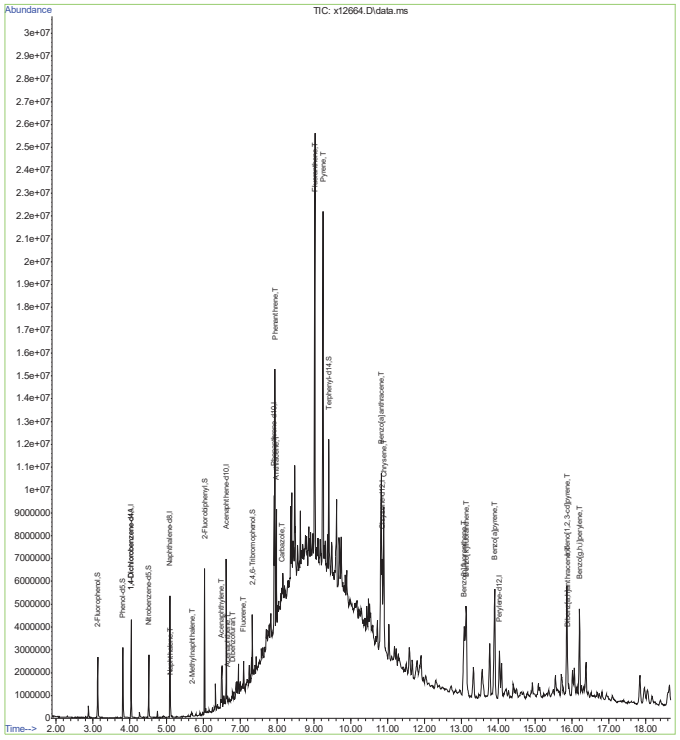
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.12 9

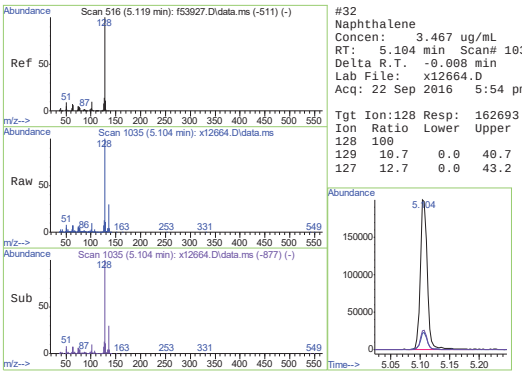
Quantitation Report (QT/LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12664.D
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:54 pm Operator: AkinA

Quant Time: Sep 23 07:00:53 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



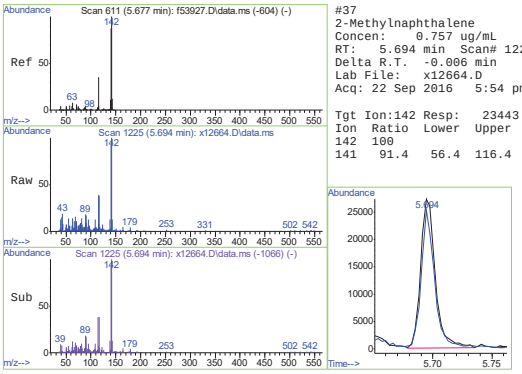
9.1.12 9



#32
Naphthalene
Concen: 3.467 ug/mL
RT: 5.104 min Scan# 1035
Delta R.T. -0.008 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:128 Resp: 162693

Ion	Ratio	Lower	Upper
128	100		
129	10.7	0.0	40.7
127	12.7	0.0	43.2

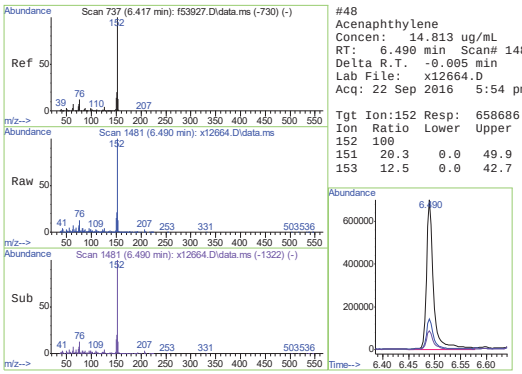


#37
2-Methylnaphthalene
Concen: 0.757 ug/mL
RT: 5.694 min Scan# 1225
Delta R.T. -0.006 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:142 Resp: 23443

Ion	Ratio	Lower	Upper
142	100		
141	91.4	56.4	116.4

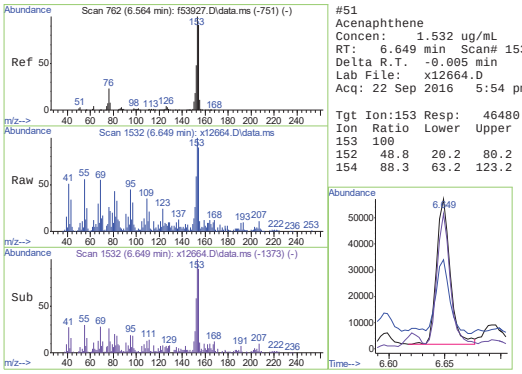
9.1.12 9



#48
Acenaphthylene
Concen: 14.813 ug/mL
RT: 6.490 min Scan# 1481
Delta R.T. -0.005 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:152 Resp: 658686

Ion	Ratio	Lower	Upper
152	100		
151	20.3	0.0	49.9
153	12.5	0.0	42.7

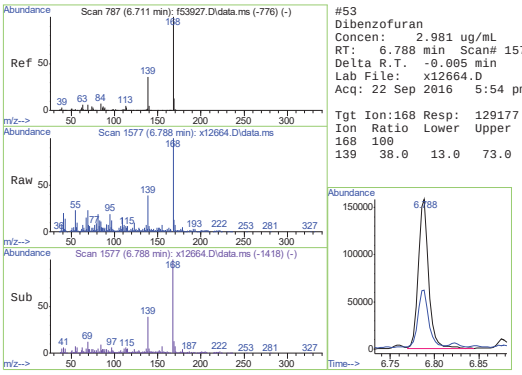


#51
Acenaphthene
Concen: 1.532 ug/mL
RT: 6.649 min Scan# 1532
Delta R.T. -0.005 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:153 Resp: 46480

Ion	Ratio	Lower	Upper
153	100		
152	48.8	20.2	80.2
154	88.3	63.2	123.2

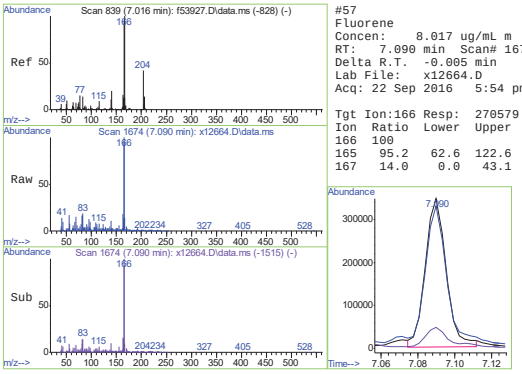
9.1.12 9



#53
Dibenzofuran
Concen: 2.981 ug/mL
RT: 6.788 min Scan# 1577
Delta R.T. -0.005 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:168 Resp: 129177

Ion	Ratio	Lower	Upper
168	100		
139	38.0	13.0	73.0

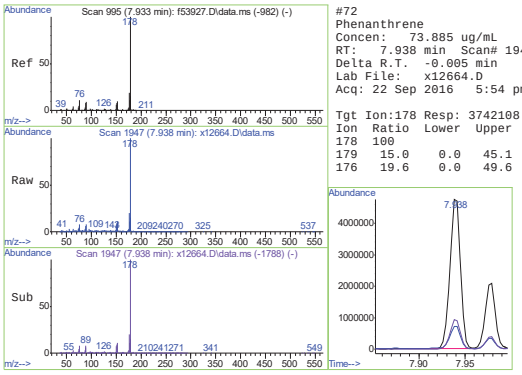


#57
Fluorene
Concen: 8.017 ug/mL m
RT: 7.090 min Scan# 1674
Delta R.T. -0.005 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:166 Resp: 270579

Ion	Ratio	Lower	Upper
166	100		
165	95.2	62.6	122.6
167	14.0	0.0	43.1

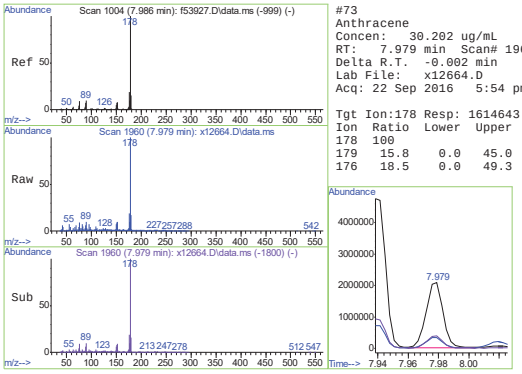
9.1.12 9



#72
Phenanthrene
Concen: 73.885 ug/mL
RT: 7.938 min Scan# 1947
Delta R.T. -0.005 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:178 Resp: 3742108

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.1
176	19.6	0.0	49.6

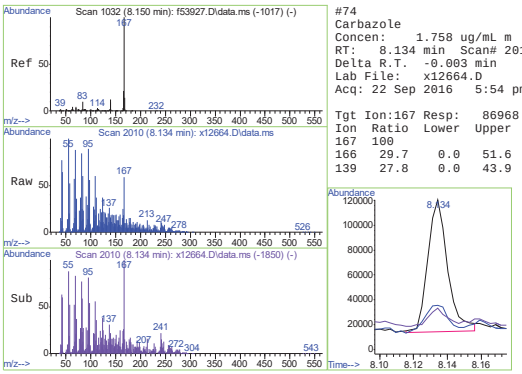


#73
Anthracene
Concen: 30.202 ug/mL
RT: 7.979 min Scan# 1960
Delta R.T. -0.002 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:178 Resp: 1614643

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.0
176	18.5	0.0	49.3

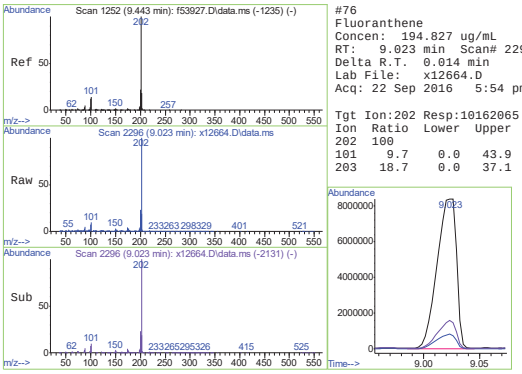
9.1.12 9



#74
Carbazole
Concen: 1.758 ug/mL m
RT: 8.134 min Scan# 2010
Delta R.T. -0.003 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:167 Resp: 86968

Ion	Ratio	Lower	Upper
167	100		
166	29.7	0.0	51.6
139	27.8	0.0	43.9

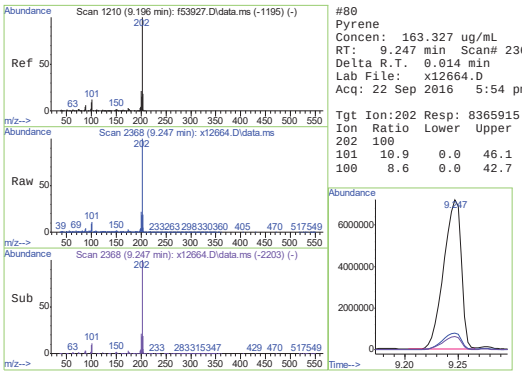


#76
Fluoranthene
Concen: 194.827 ug/mL
RT: 9.023 min Scan# 2296
Delta R.T. 0.014 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:202 Resp:10162065

Ion	Ratio	Lower	Upper
202	100		
101	9.7	0.0	43.9
203	18.7	0.0	37.1

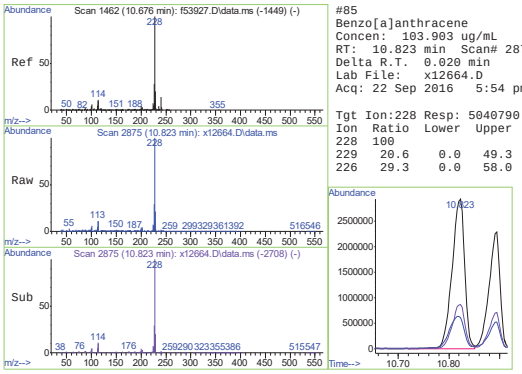
9.1.12 9



#80
Pyrene
Concen: 163.327 ug/mL
RT: 9.247 min Scan# 2368
Delta R.T. 0.014 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:202 Resp: 8365915

Ion	Ratio	Lower	Upper
202	100		
101	10.9	0.0	46.1
100	8.6	0.0	42.7

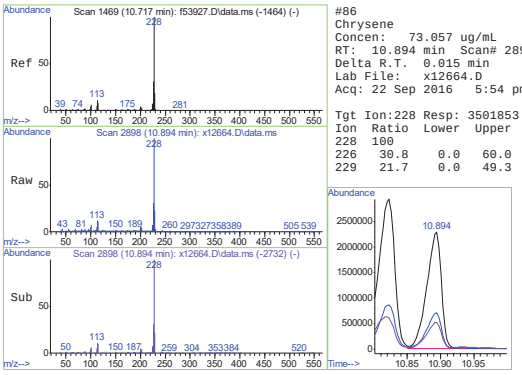


#85
Benzo[a]anthracene
Concen: 103.903 ug/mL
RT: 10.823 min Scan# 2875
Delta R.T. 0.020 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:228 Resp: 5040790

Ion	Ratio	Lower	Upper
228	100		
229	20.6	0.0	49.3
226	29.3	0.0	58.0

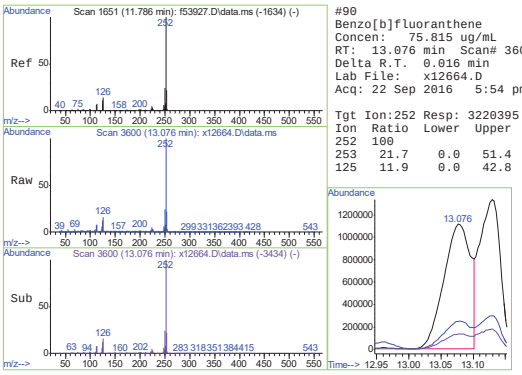
9.1.12 9



#86
Chrysene
Concen: 73.057 ug/mL
RT: 10.894 min Scan# 2898
Delta R.T. 0.015 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:228 Resp: 3501853

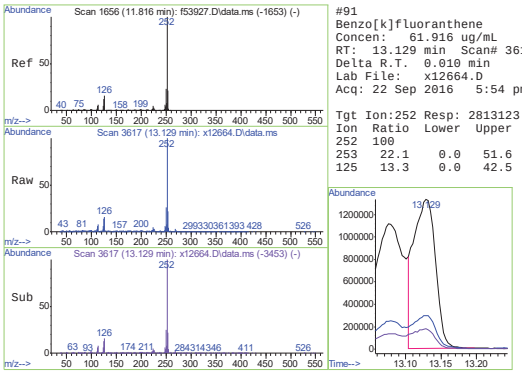
Ion	Ratio	Lower	Upper
228	100		
226	30.8	0.0	60.0
229	21.7	0.0	49.3



#90
Benzo[b]fluoranthene
Concen: 75.815 ug/mL
RT: 13.076 min Scan# 3600
Delta R.T. 0.016 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:252 Resp: 3220395

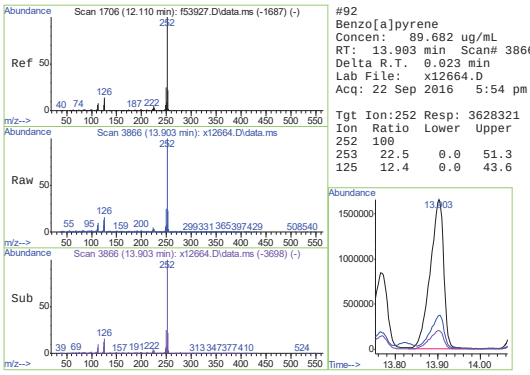
Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.4
125	11.9	0.0	42.8



#91
Benzo[k]fluoranthene
Concen: 61.916 ug/mL
RT: 13.129 min Scan# 3617
Delta R.T. 0.010 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:252 Resp: 2813123

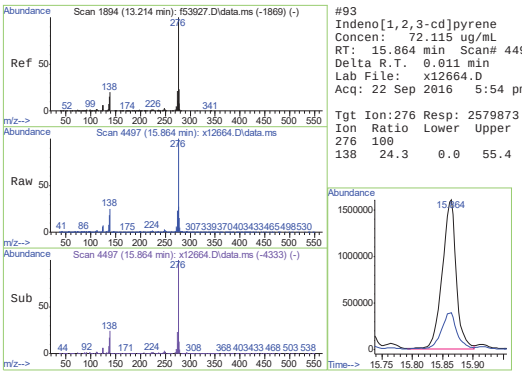
Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.6
125	13.3	0.0	42.5



#92
Benzo[a]pyrene
Concen: 89.682 ug/mL
RT: 13.903 min Scan# 3866
Delta R.T. 0.023 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:252 Resp: 3628321

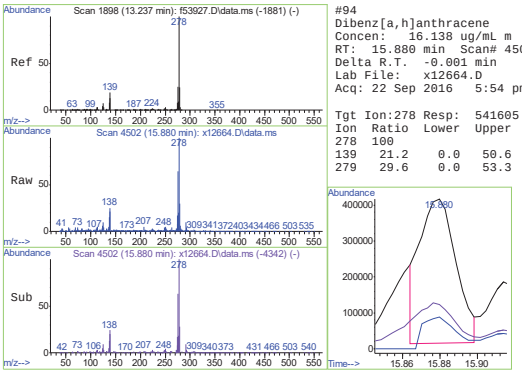
Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.3
125	12.4	0.0	43.6



#93
Indeno[1,2,3-cd]pyrene
Concen: 72.115 ug/mL
RT: 15.864 min Scan# 4497
Delta R.T. 0.011 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:276 Resp: 2579873

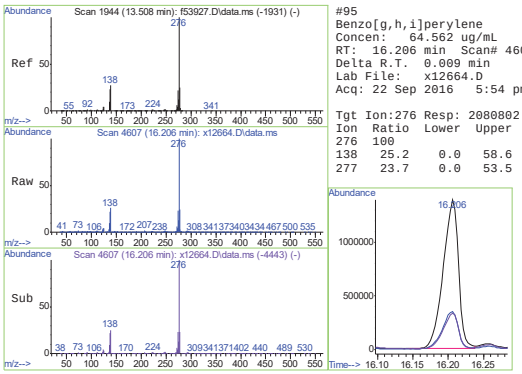
Ion	Ratio	Lower	Upper
276	100		
138	24.3	0.0	55.4



#94
Dibenz[a,h]anthracene
Concen: 16.138 ug/mL m
RT: 15.880 min Scan# 4502
Delta R.T. -0.001 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:278 Resp: 541605

Ion	Ratio	Lower	Upper
278	100		
139	21.2	0.0	50.6
279	29.6	0.0	53.3



#95
Benzo[g,h,i]perylene
Concen: 64.562 ug/mL
RT: 16.206 min Scan# 4607
Delta R.T. 0.009 min
Lab File: x12664.D
Acq: 22 Sep 2016 5:54 pm

Tgt Ion:276 Resp: 2080802

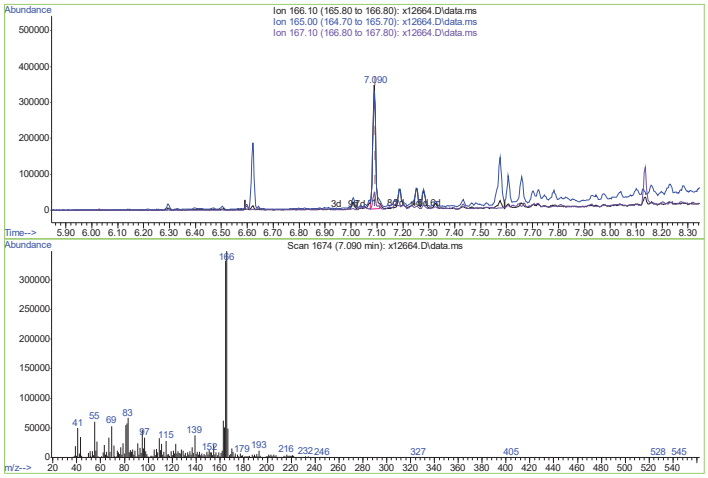
Ion	Ratio	Lower	Upper
276	100		
138	25.2	0.0	58.6
277	23.7	0.0	53.5

Sample Results: X12664.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12664.D
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:54 pm Operator: AkinA

Quant Time: Sep 22 18:13:33 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.1.12.1

9

TIC: x12664.D\data.ms

(57) Fluorene (T)

7.090min (-0.005) 8.02ug/mL m

response 270579

Ion	Exp%	Act%
166.10	100	100
165.00	92.60	95.22
167.10	13.10	14.02
0.00	0.00	0.00

X160921_8270.m Fri Sep 23 06:58:49 2016 Page: 1

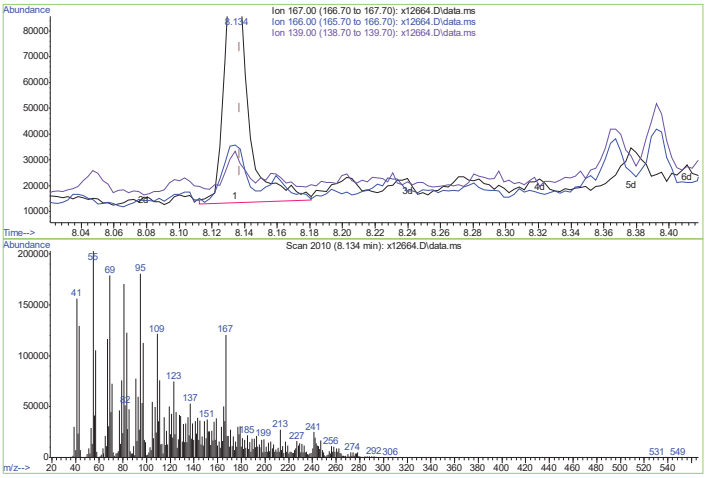
X12664.D edits: Fluorene

Sample Results: X12664.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12664.D
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:54 pm Operator: AkinA

Quant Time: Sep 22 18:13:33 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.1.12.2

9

TIC: x12664.D\data.ms

(74) Carbazole (T)

8.134min (-0.003) 1.94ug/mL

response 95717

Ion	Exp%	Act%
167.00	100	100
166.00	21.60	19.66
139.00	13.90	13.00
0.00	0.00	0.00

X160921_8270.m Fri Sep 23 06:59:41 2016 Page: 1

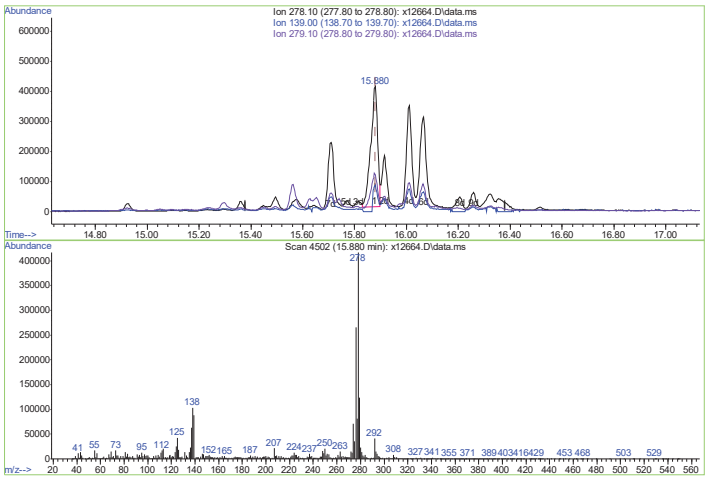
X12664.D edits: Carbazole

Sample Results: X12664.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12664.D
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:54 pm Operator: AkinA

Quant Time: Sep 22 18:13:33 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.1.12.3

9

TIC: x12664.D\data.ms

(94) Dibenz[a,h]anthracene (T)

15.880min (-0.001) 22.04ug/mL

response 739763

Ion	Exp%	Act%
278.10	100	100
139.00	20.60	20.57
279.10	23.30	28.81
0.00	0.00	0.00

X160921_8270.m Fri Sep 23 07:00:39 2016 Page: 1

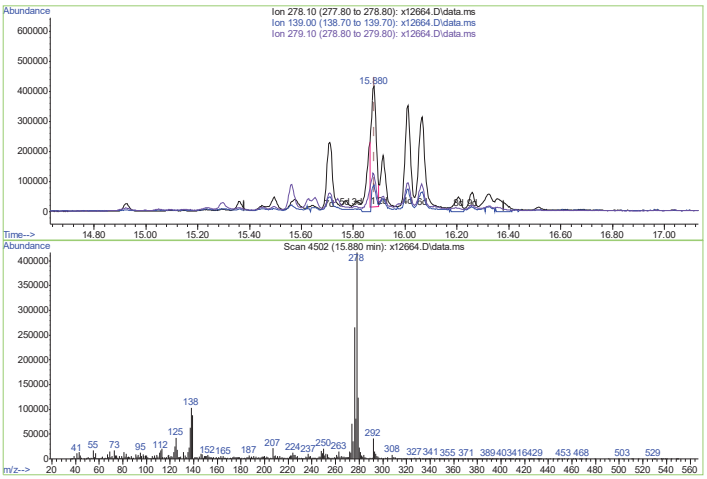
X12664.D edits: Dibenz[a,h]anthracene

Sample Results: X12664.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12664.D
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:54 pm Operator: AkinA

Quant Time: Sep 22 18:13:33 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.1.12.4

9

TIC: x12664.D\data.ms

(94) Dibenz[a,h]anthracene (T)

15.880min (-0.001) 16.14ug/mL m

response 541605

Ion	Exp%	Act%
278.10	100	100
139.00	20.60	21.24
279.10	23.30	29.62
0.00	0.00	0.00

X160921_8270.m Fri Sep 23 07:00:50 2016 Page: 1

X12664.D edits: Dibenz[a,h]anthracene

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12664.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.878	313	319	336	rBV	519832	466969	2.10%	0.160%
2	3.130	393	400	429	rBV	2665772	2263929	10.20%	0.774%
3	3.811	613	619	649	rBV	3070659	2621914	11.82%	0.896%
4	4.038	685	692	710	rBV	4278370	3135020	14.13%	1.071%
5	4.265	758	765	782	rBV	246241	317634	1.43%	0.109%
6	4.513	837	845	866	rVV	2750547	2213840	9.98%	0.757%
7	4.750	916	921	928	rVB	298426	216944	0.98%	0.074%
8	5.088	1024	1030	1048	rVV	5316394	4354804	19.63%	1.488%
9	6.030	1325	1333	1339	rBV	6405366	4684530	21.11%	1.601%
10	6.061	1339	1343	1353	rVV4	231168	240910	1.09%	0.082%
11	6.241	1395	1401	1409	rBV4	218110	277617	1.25%	0.095%
12	6.294	1409	1418	1421	rBV3	174998	198942	0.90%	0.068%
13	6.328	1421	1429	1435	rVB2	1166054	1004804	4.53%	0.343%
14	6.378	1435	1445	1449	rBV5	260856	363363	1.64%	0.124%
15	6.468	1468	1474	1477	rBV3	424524	406595	1.83%	0.139%
16	6.490	1477	1481	1483	rVV	1739552	1322243	5.96%	0.452%
17	6.502	1483	1485	1491	rVB	1813935	1326421	5.98%	0.453%
18	6.537	1492	1496	1500	rBV3	308564	293020	1.32%	0.100%
19	6.558	1500	1503	1517	rVV3	414951	444286	2.00%	0.152%
20	6.621	1517	1523	1538	rBV	6342969	5236018	23.60%	1.789%
21	6.788	1574	1577	1583	rVB2	325279	310780	1.40%	0.106%
22	6.823	1584	1588	1599	rVB4	327045	303964	1.37%	0.104%
23	6.885	1600	1608	1614	rBV3	720706	910225	4.10%	0.311%
24	6.913	1614	1617	1622	rVB4	514195	381549	1.72%	0.130%
25	6.947	1623	1628	1635	rVB	1310815	963891	4.34%	0.329%
26	6.990	1635	1642	1651	rBV5	541544	720332	3.25%	0.246%
27	7.059	1652	1664	1669	rBV5	238317	558646	2.52%	0.191%
28	7.090	1669	1674	1688	rVB	1343509	1370889	6.18%	0.468%
29	7.152	1689	1694	1697	rBV5	289503	312155	1.41%	0.107%
30	7.239	1717	1722	1730	rBV2	887058	907276	4.09%	0.310%
31	7.298	1737	1741	1745	rVV	1006069	860376	3.88%	0.294%
32	7.326	1745	1750	1765	rVB	2683658	2396866	10.80%	0.819%
33	7.432	1779	1784	1826	rBV	737729	3468191	15.63%	1.185%
34	7.575	1827	1830	1836	rBV2	482630	464684	2.09%	0.159%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	7.702	1867	1871	1875	rBV3	868072	858454	3.87%	0.293%
36	7.811	1902	1906	1908	rBV3	654470	553146	2.49%	0.189%
37	7.920	1934	1941	1943	rBV	5932240	5114791	23.05%	1.748%
38	7.938	1943	1947	1953	rVB	11308651	9104485	41.03%	3.111%
39	7.979	1954	1960	1965	rVV	5067211	3996034	18.01%	1.366%
40	8.100	1996	1999	2004	rBV6	636788	656943	2.96%	0.224%
41	8.153	2013	2016	2027	rVB8	1109249	1181606	5.33%	0.404%
42	8.367	2080	2085	2089	rBV	3167744	2791842	12.58%	0.954%
43	8.392	2089	2093	2100	rVB	3353007	2580176	11.63%	0.882%
44	8.426	2101	2104	2108	rBV	1016621	858978	3.87%	0.294%
45	8.476	2115	2120	2142	rVB2	4436611	4808062	21.67%	1.643%
46	8.557	2143	2146	2164	rVB9	975429	958697	4.32%	0.328%
47	8.628	2165	2169	2174	rBV	2336081	1677801	7.56%	0.573%
48	8.852	2236	2241	2245	rBV4	1521735	1538044	6.93%	0.526%
49	9.023	2287	2296	2311	rVB	18622966	22189412	100.00%	7.583%
50	9.247	2358	2368	2374	rBV3	15339166	20532826	92.53%	7.017%
51	9.362	2400	2405	2410	rVV	1491045	1332545	6.01%	0.455%
52	9.399	2411	2417	2436	rVB2	5834610	6527737	29.42%	2.231%
53	9.477	2437	2442	2474	rVB3	1276511	1190513	5.37%	0.407%
54	9.611	2481	2485	2501	rVB	3744599	3612301	16.28%	1.234%
55	9.682	2502	2508	2519	rVV	2164718	3906042	17.60%	1.335%
56	9.732	2520	2524	2557	rVB3	2373296	3700139	16.68%	1.264%
57	9.884	2569	2573	2698	rVB10	1952607	10585264	47.70%	3.617%
58	10.431	2744	2749	2758	rVB	906682	983704	4.43%	0.336%
59	10.481	2760	2765	2770	rVV	1405145	1716816	7.74%	0.587%
60	10.512	2771	2775	2824	rVB5	1699062	6013145	27.10%	2.055%
61	10.717	2836	2841	2857	rVB	1082255	1084262	4.89%	0.371%
62	10.823	2862	2875	2881	rBV2	7383269	13787981	62.14%	4.712%
63	10.894	2890	2898	2934	rVB	6650358	11788182	53.13%	4.028%
64	11.031	2935	2942	2984	rVB2	1520750	2123348	9.57%	0.726%
65	11.286	3019	3024	3086	rVB7	781830	3399530	15.32%	1.162%
66	11.584	3111	3120	3138	rVB	1203412	2769273	12.48%	0.946%
67	11.668	3140	3147	3172	rVB2	674216	547850	2.47%	0.187%
68	11.901	3217	3222	3254	rVB3	1190386	2427738	10.94%	0.830%
69	13.079	3582	3601	3608	rBV	2965875	8630283	38.89%	2.949%
70	13.129	3609	3617	3663	rVB2	3947588	9062886	40.84%	3.097%
71	13.328	3667	3681	3718	rVB2	1343474	3345602	15.08%	1.143%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

72	13.561	3744	3756	3805	rVB2	1164512	3349650	15.10%	1.145%
73	13.766	3807	3822	3847	rVV2	2266041	4970442	22.40%	1.699%
74	13.903	3848	3866	3892	rVB2	4792844	11232884	50.62%	3.839%
75	14.033	3893	3908	3917	rBV2	2061464	4441340	20.02%	1.518%
76	14.089	3917	3926	3947	rVB2	1363717	2322375	10.47%	0.794%
77	14.406	4019	4028	4048	rBV6	542923	1380218	6.22%	0.472%
78	14.493	4049	4056	4085	rVB4	314711	708042	3.19%	0.242%
79	14.929	4190	4196	4230	rVB2	588714	1165993	5.25%	0.398%
80	15.087	4240	4247	4256	rBV5	435233	727106	3.28%	0.248%
81	15.364	4331	4336	4368	rBV8	202083	276841	1.25%	0.095%
82	15.550	4388	4396	4438	rVB10	874820	2605475	11.74%	0.890%
83	15.712	4439	4448	4463	rBV3	912535	2312593	10.42%	0.790%
84	15.864	4484	4497	4509	rBV2	4725197	8493361	38.28%	2.902%
85	15.914	4510	4513	4535	rVB	499334	520094	2.34%	0.178%
86	16.010	4536	4544	4554	rBV2	1051627	1946244	8.77%	0.665%
87	16.063	4555	4561	4577	rVB3	1122016	1955006	8.81%	0.668%
88	16.134	4578	4584	4594	rBV5	307165	404699	1.82%	0.138%
89	16.206	4594	4607	4617	rBV	3702148	5553181	25.03%	1.898%
90	16.256	4618	4623	4635	rVB7	308373	447834	2.02%	0.153%
91	16.315	4637	4642	4651	rBV6	204659	273168	1.23%	0.093%
92	16.380	4653	4663	4699	rVB	1518083	3440687	15.51%	1.176%
93	16.815	4796	4803	4832	rVB2	310524	442805	2.00%	0.151%
94	17.841	5118	5133	5155	rBV	1202023	2864917	12.91%	0.979%
95	17.962	5159	5172	5188	rBV3	590244	1865921	8.41%	0.638%
96	18.046	5189	5199	5226	rVB3	570350	1700114	7.66%	0.581%
97	18.170	5232	5239	5300	rVB7	364049	1456542	6.56%	0.498%
98	18.394	5304	5311	5362	rVB5	199409	449641	2.03%	0.154%
99	18.609	5365	5380	5383	rBV2	503099	1154741	5.20%	0.395%
100	18.646	5385	5392	5398	rVB5	488381	913085	4.11%	0.312%

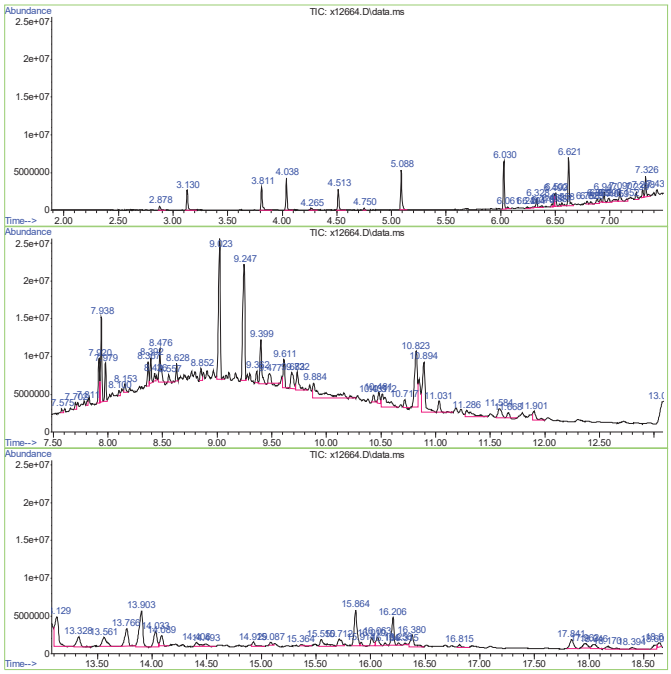
Sum of corrected areas: 292631064

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

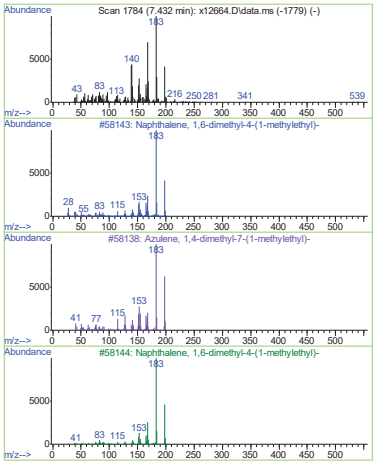
****

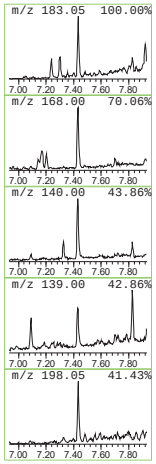
Peak Number 1 Naphthalene, 1,6-dimethyl-4... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.432	27.12 ug/mL	3468190	Phenanthrene-d10	7.920

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	90
2	Azulene, 1,4-dimethyl-7-(1-methy...	198	C15H18	000489-84-9	78
3	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	60
4	Azulene, 1,4-dimethyl-7-(1-methy...	198	C15H18	000489-84-9	49
5	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	43

9.1.13 9





Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

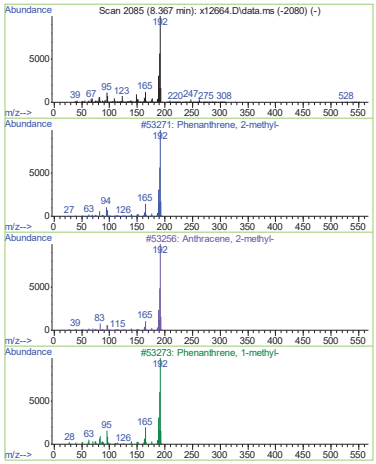
****

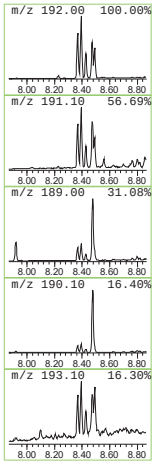
Peak Number 2 Phenanthrene, 2-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.367	21.83 ug/mL	2791840	Phenanthrene-d10	7.920

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	95
3	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
4	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
5	Anthracene, 2-methyl-	192	C15H12	000613-12-7	93

9.1.13 9





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Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

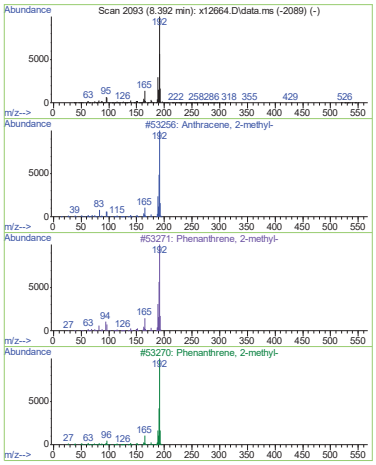
****

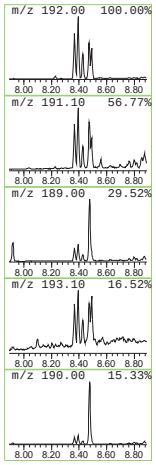
Peak Number 3 Anthracene, 2-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.392	20.18 ug/mL	2580180	Phenanthrene-d10	7.920

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 2-methyl-	192	C15H12	000613-12-7	97
2	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
3	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
4	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96
5	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	96

9.1.13 9





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Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

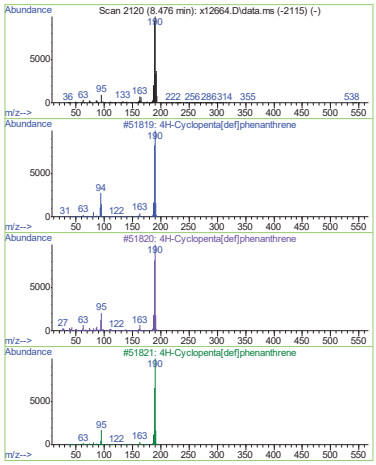
****

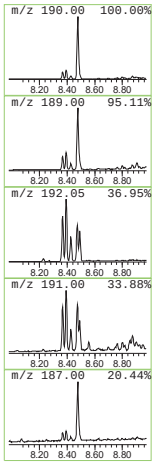
Peak Number 4 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.476	37.60 ug/mL	4808060	Phenanthrene-d10	7.920

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	81
2	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	70
3	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
4	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	64
5	Thiophene-3-carboxaldehyde, 5-ch...	190	C5H4BClO3S	036155-87-0	52

9.1.13 9





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Misc : op48710,msx425,20.13,,,1,1
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Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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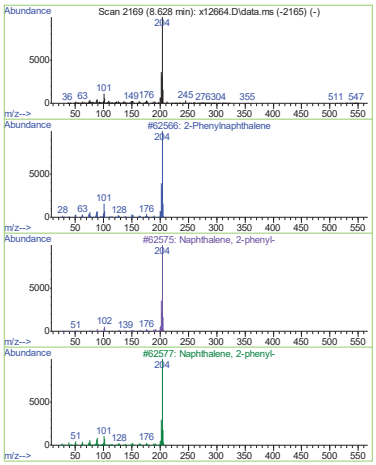
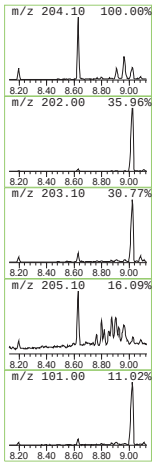
Peak Number 5 2-Phenylnaphthalene Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.628	13.12 ug/mL	1677800	Phenanthrene-d10	7.920

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Phenylnaphthalene	204	C16H12	035465-71-5	90
2	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	89
3	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	70
4	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	70
5	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	62





9.1.13 9

Library Search Compound Report

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Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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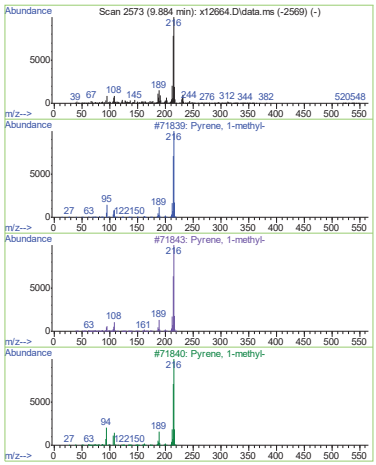
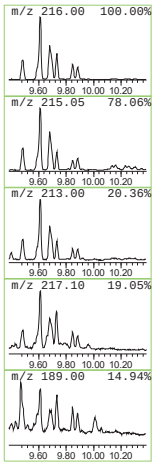
Peak Number 6 Pyrene, 1-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.884	30.71 ug/mL	10585300	Chrysene-d12	10.848

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 1-methyl-	216	C17H12	002381-21-7	94
2	Pyrene, 1-methyl-	216	C17H12	002381-21-7	93
3	Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
4	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	90
5	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	90





9.1.13 9

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Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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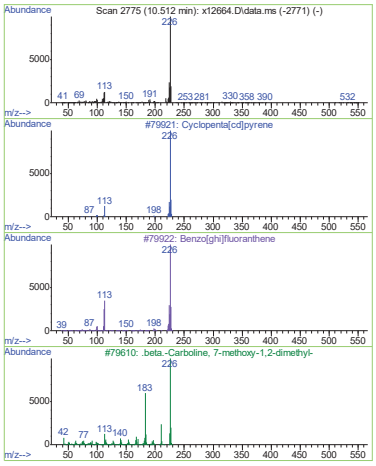
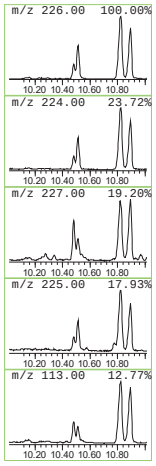
Peak Number 7 Cyclopenta[cd]pyrene Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.512	17.44 ug/mL	6013150	Chrysene-d12	10.848

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta[cd]pyrene	226	C18H10	027208-37-3	81
2	Benzo[ghi]fluoranthene	226	C18H10	000203-12-3	62
3	.beta.-Carboline, 7-methoxy-1,2-...	226	C14H14N2O	006519-18-2	58
4	9-Phenanthrenecarbonitrile, 10-a...	226	C15H18N2	1000338-20-4	40
5	1,3-Diamino-5,6-dihydro-7-methyl...	226	C13H14N4	037436-37-6	36





9.1.13 9

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Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

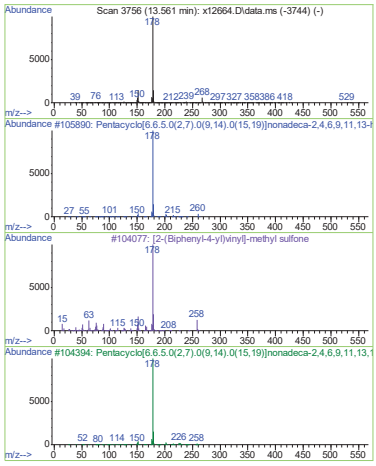
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

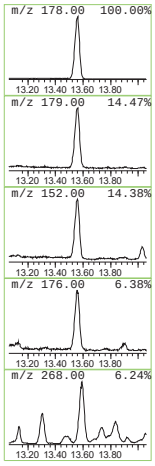
****

Peak Number 9 Pentacyclo[6.6.5.0(2,7).0(9... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.561	30.17 ug/mL	3349650	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentacyclo[6.6.5.0(2,7).0(9,14)....	260	C19H16O	111272-10-7	78
2	[2-(Biphenyl-4-yl)vinyl]-methyl ...	258	C15H14O2S	1000286-42-2	78
3	Pentacyclo[6.6.5.0(2,7).0(9,14)....	258	C19H14O	1000156-78-8	72
4	Diphenylethyne	178	C14H10	000501-65-5	72
5	1H-Pyrazole, 4-chloro-1-phenyl-	178	C9H7ClN2	006831-92-1	72





9.1.13 9

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Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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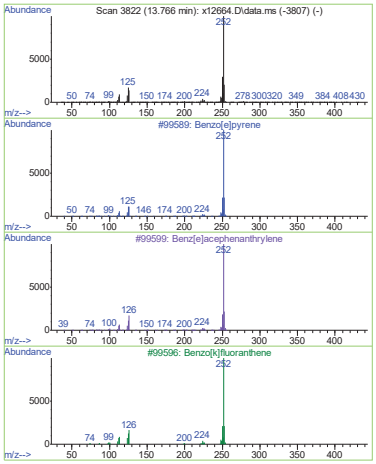
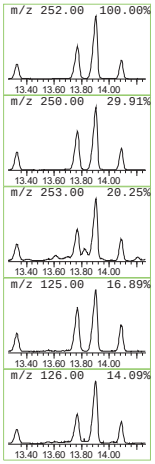
Peak Number 10 Benzo[e]pyrene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.766	44.77 ug/mL	4970440	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	93
2	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	91
4	Perylene	252	C20H12	000198-55-0	91
5	Benzo[j]fluoranthene	252	C20H12	000205-82-3	90

9.1.13 9





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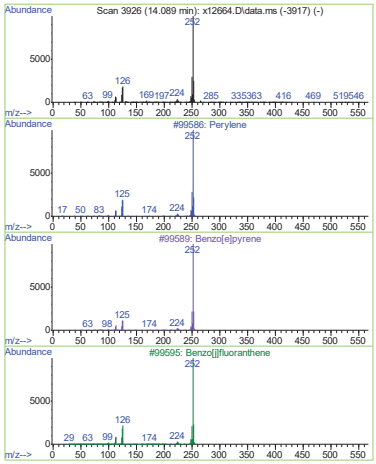
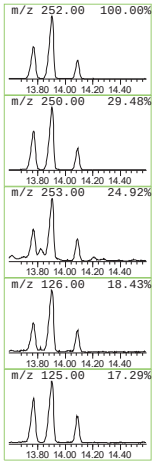
Peak Number 11 Perylene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.089	20.92 ug/mL	2322380	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene	252	C20H12	000198-55-0	98
2	Benzo[e]pyrene	252	C20H12	000192-97-2	98
3	Benzo[j]fluoranthene	252	C20H12	000205-82-3	97
4	Benzo[k]fluoranthene	252	C20H12	000207-08-9	97
5	Benzo[a]pyrene	252	C20H12	000050-32-8	96

9.1.13 9





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TIC Library : C:\Database\NIST08.L
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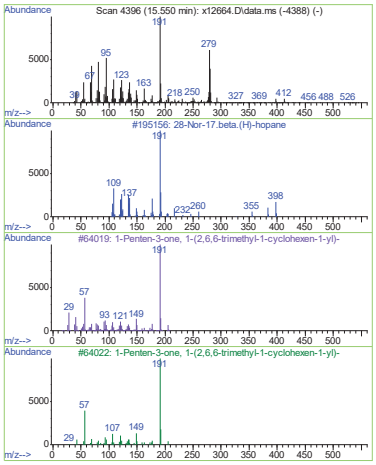
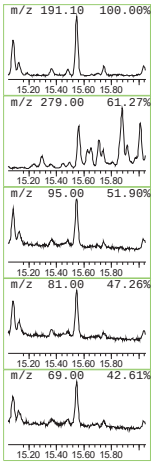
Peak Number 12 28-Nor-17.beta.(H)-hopane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.550	23.47 ug/mL	2605480	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	28-Nor-17.beta.(H)-hopane	398	C29H50	036728-72-0	46
2	1-Penten-3-one, 1-(2,6,6-trimeth...	206	C14H22O	000127-43-5	38
3	1-Penten-3-one, 1-(2,6,6-trimeth...	206	C14H22O	000127-43-5	38
4	3H-Perylo[1,12-b,c,d]pyran	280	C21H12O	1000281-21-7	35
5	Phenanthro[1,2-b]furan-10,11-dio...	310	C19H18O4	017397-93-2	25

9.1.13 9





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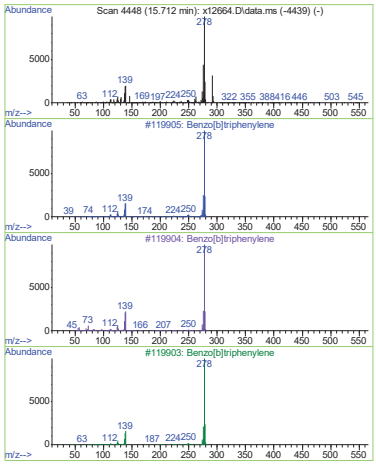
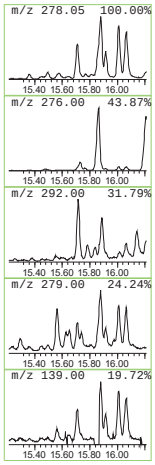
Peak Number 13 Benzo[b]triphenylene Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.712	20.83 ug/mL	2312590	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]triphenylene	278	C22H14	000215-58-7	99
2	Benzo[b]triphenylene	278	C22H14	000215-58-7	95
3	Benzo[b]triphenylene	278	C22H14	000215-58-7	93
4	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	83
5	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	83

9.1.13 9





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TIC Library : C:\Database\NIST08.L
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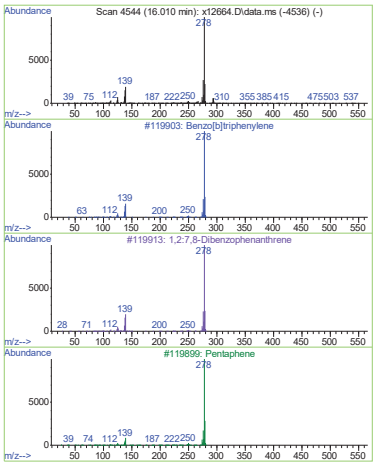
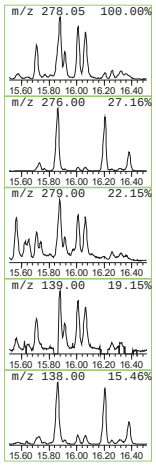
Peak Number 14 1,2:7,8-Dibenzophenanthrene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.010	17.53 ug/mL	1946240	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]triphenylene	278	C22H14	000215-58-7	98
2	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	98
3	Pentaphene	278	C22H14	000222-93-5	97
4	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	97
5	Benzo[b]triphenylene	278	C22H14	000215-58-7	96

9.1.13 9





Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

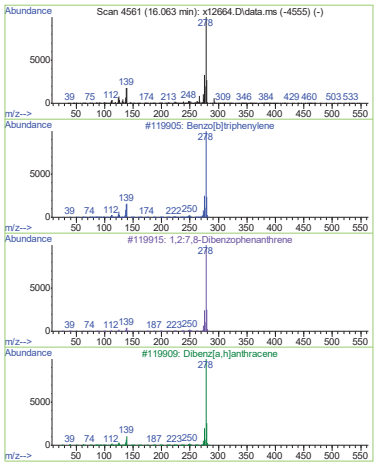
****

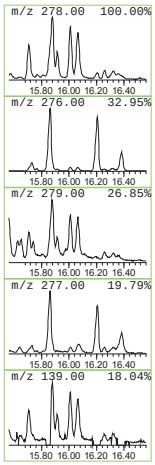
Peak Number 15 Benzo[b]triphenylene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.063	17.61 ug/mL	1955010	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]triphenylene	278	C22H14	000215-58-7	93
2	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	86
3	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	86
4	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	86
5	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	86

9.1.13 9





Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

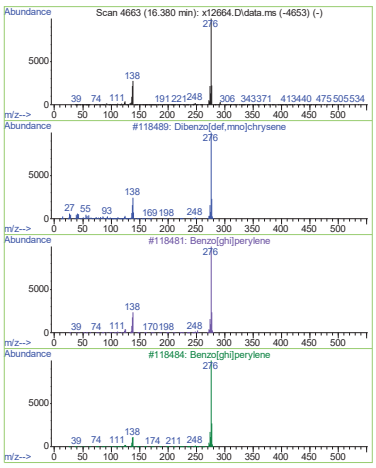
****

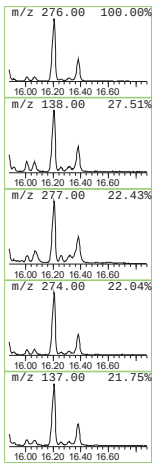
Peak Number 16 Dibenzo[def,mno]chrysene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.380	30.99 ug/mL	3440690	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	94
2	Benzo[ghi]perylene	276	C22H12	000191-24-2	94
3	Benzo[ghi]perylene	276	C22H12	000191-24-2	92
4	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	91
5	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	87

9.1.13 9





Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On : 22 Sep 2016 5:54 pm
Operator : AkinA
Sample : MC47774-6
Misc : op48710,msx425,20.13,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

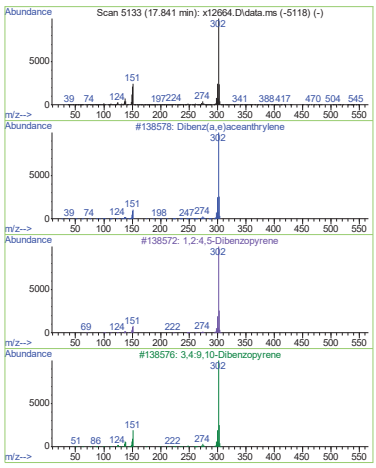
****

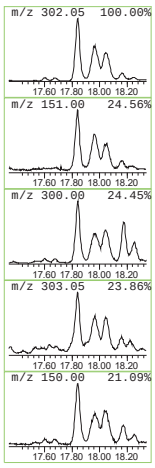
Peak Number 17 Dibenz(a,e)aceanthrylene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.841	25.80 ug/mL	2864920	Perylene-d12	14.030

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenz(a,e)aceanthrylene	302	C24H14	005385-75-1	99
2	1,2:4,5-Dibenzopyrene	302	C24H14	000192-65-4	98
3	3,4:9,10-Dibenzopyrene	302	C24H14	000189-55-9	98
4	3,4:8,9-Dibenzopyrene	302	C24H14	000189-64-0	96
5	1,2:4,5-Dibenzopyrene	302	C24H14	000192-65-4	95

9.1.13 9





Library Search Compound Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On    : 22 Sep 2016   5:54 pm
Operator  : AkinA
Sample    : MC47774-6
Misc      : op48710,msx425,20.13,,,1,1
ALS Vial  : 27   Sample Multiplier: 1

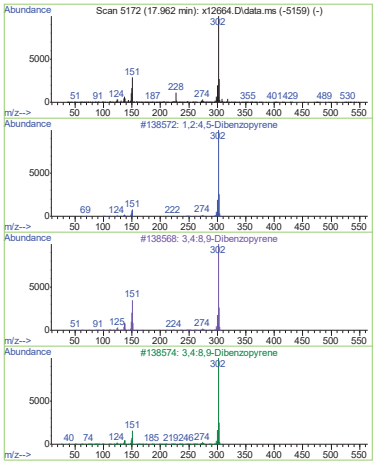
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

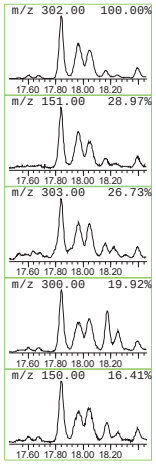
TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

*****************************************************************
Peak Number 18  1,2:4,5-Dibenzopyrene          Concentration Rank 17

  R.T.     EstConc          Area       Relative to ISTD         R.T.
-------------------------------------------------------------------
 17.962   16.81 ug/mL     1865920   Perylene-d12               14.030

 Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
-------------------------------------------------------------------
 1 1,2:4,5-Dibenzopyrene                302 C24H14         000192-65-4 97
 2 3,4:8,9-Dibenzopyrene                302 C24H14         000189-64-0 96
 3 3,4:8,9-Dibenzopyrene                302 C24H14         000189-64-0 96
 4 Dibenz(a,e)aceanthrylene             302 C24H14         005385-75-1 95
 5 3,4:9,10-Dibenzopyrene               302 C24H14         000189-55-9 95
```





9.1.13 9

Library Search Compound Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On    : 22 Sep 2016   5:54 pm
Operator  : AkinA
Sample    : MC47774-6
Misc      : op48710,msx425,20.13,,,1,1
ALS Vial  : 27   Sample Multiplier: 1

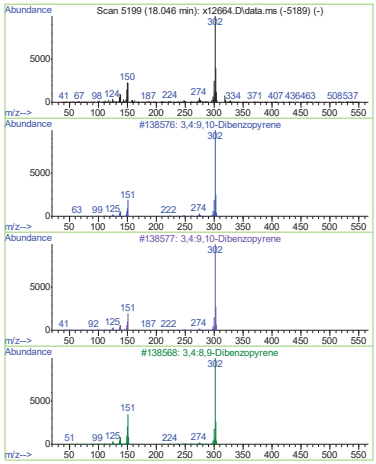
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

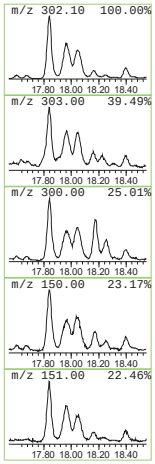
TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

*****************************************************************
Peak Number 19  3,4:9,10-Dibenzopyrene         Concentration Rank 18

  R.T.     EstConc          Area       Relative to ISTD         R.T.
-------------------------------------------------------------------
 18.046   15.31 ug/mL     1700110   Perylene-d12               14.030

 Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
-------------------------------------------------------------------
 1 3,4:9,10-Dibenzopyrene               302 C24H14         000189-55-9 96
 2 3,4:9,10-Dibenzopyrene               302 C24H14         000189-55-9 94
 3 3,4:8,9-Dibenzopyrene                302 C24H14         000189-64-0 93
 4 1,2:4,5-Dibenzopyrene                302 C24H14         000192-65-4 86
 5 Dibenz(a,e)aceanthrylene             302 C24H14         005385-75-1 76
```





9.1.13 9

Library Search Compound Report

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On    : 22 Sep 2016   5:54 pm
Operator  : AkinA
Sample    : MC47774-6
Misc      : op48710,msx425,20.13,,,1,1
ALS Vial  : 27   Sample Multiplier: 1

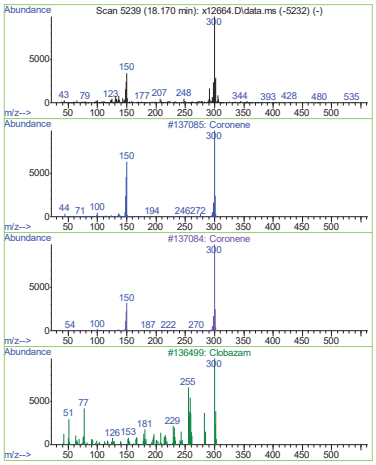
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

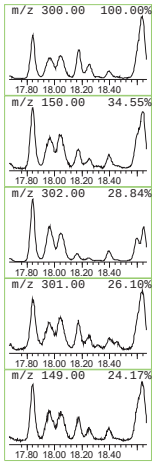
TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

*****************************************************************
Peak Number 20  Coronene                       Concentration Rank 20

  R.T.     EstConc          Area       Relative to ISTD         R.T.
-------------------------------------------------------------------
 18.170   13.12 ug/mL     1456540   Perylene-d12               14.030

 Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
-------------------------------------------------------------------
 1 Coronene                             300 C24H12         000191-07-1 70
 2 Coronene                             300 C24H12         000191-07-1 70
 3 Clobazam                             300 C16H13ClN2O2   022316-47-8 47
 4 Clobazam                             300 C16H13ClN2O2   022316-47-8 43
 5 2,4-Quinazolinediamine, 6-(pheny...  300 C14H12N4O2S    051123-24-1 38
```





9.1.13 9

Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12664.D
Acq On    : 22 Sep 2016   5:54 pm
Operator  : AkinA
Sample    : MC47774-6
Misc      : op48710,msx425,20.13,,,1,1
ALS Vial  : 27   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library   : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P
```

TIC Top Hit name	RT	EstConc	Units	Response	|--Internal Standard---| |#	RT	Resp	Conc|
Naphthalene, 1,...	7.432	27.1	ug/mL	3468190	5	7.920	5114790	40.0
Phenanthrene, 2...	8.367	21.8	ug/mL	2791840	5	7.920	5114790	40.0
Anthracene, 2-m...	8.392	20.2	ug/mL	2580180	5	7.920	5114790	40.0
4H-Cyclopenta[d...	8.476	37.6	ug/mL	4808060	5	7.920	5114790	40.0
2-Phenylnaphtha...	8.628	13.1	ug/mL	1677800	5	7.920	5114790	40.0
Pyrene, 1-methyl-	9.884	30.7	ug/mL	10585300	6	10.848	13788000	40.0
Cyclopenta[cd]p...	10.512	17.4	ug/mL	6013150	6	10.848	13788000	40.0
Pentacyclo[6.6....	13.561	30.2	ug/mL	3349650	7	14.030	4441340	40.0
Benzo[e]pyrene	13.766	44.8	ug/mL	4970440	7	14.030	4441340	40.0
Perylene	14.089	20.9	ug/mL	2322380	7	14.030	4441340	40.0
28-Nor-17.beta....	15.550	23.5	ug/mL	2605480	7	14.030	4441340	40.0
Benzo[b]triphen...	15.712	20.8	ug/mL	2312590	7	14.030	4441340	40.0
1,2:7,8-Dibenzo...	16.010	17.5	ug/mL	1946240	7	14.030	4441340	40.0
Benzo[b]triphen...	16.063	17.6	ug/mL	1955010	7	14.030	4441340	40.0
Dibenzo[def,mno...	16.380	31.0	ug/mL	3440690	7	14.030	4441340	40.0
Dibenz(a,e)acea...	17.841	25.8	ug/mL	2864920	7	14.030	4441340	40.0
1,2:4,5-Dibenzo...	17.962	16.8	ug/mL	1865920	7	14.030	4441340	40.0
3,4:9,10-Dibenz...	18.046	15.3	ug/mL	1700110	7	14.030	4441340	40.0
Coronene	18.170	13.1	ug/mL	1456540	7	14.030	4441340	40.0

9.1.13 9

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/23/16 14:46

Quantitation Report (QT/LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12662.D
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:04 pm Operator: AkinA

Quant Time: Sep 22 17:59:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	416493	40.00	ug/mL	0.00
22) Naphthalene-d8	5.088	136	1592410	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.621	164	942082	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1638745	40.00	ug/mL	0.00
78) Chrysene-d12	10.829	240	1607282	40.00	ug/mL	0.00
88) Perylene-d12	14.012	264	1389965	40.00	ug/mL	0.00
96) 1,4-Dichlorobenzene-d4A	4.038	152	416493	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.136	112	7817	0.55	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 1.10%#			
8) Phenol-d5	3.820	99	13029	0.71	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 1.42%#			
23) Nitrobenzene-d5	4.520	82	10313	0.60	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 1.20%#			
46) 2-Fluorobiphenyl	6.030	172	23318	0.72	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 1.44%#			
68) 2,4,6-Tribromophenol	7.329	330	2282	0.63	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 1.26%#			
81) Terphenyl-d14	9.390	244	30213	0.89	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 1.78%#			
Target Compounds						Qvalue
72) Phenanthrene	7.935	178	11125	0.250	ug/mL	98
75) Di-n-butylphthalate	8.454	149	19698	0.395	ug/mL	87
76) Fluoranthene	9.008	202	26271	0.574	ug/mL	94
80) Pyrene	9.228	202	25360	0.539	ug/mL	97
85) Benzo[a]anthracene	10.795	228	12062	0.271	ug/mL	74
86) Chrysene	10.866	228	10752	0.244	ug/mL	87
90) Benzo[b]fluoranthene	13.042	252	9489	1.125	ug/mL	70
91) Benzo[k]fluoranthene	13.085	252	7036m	1.350	ug/mL	
92) Benzo[a]pyrene	13.856	252	7568	1.659	ug/mL	87
93) Indeno[1,2,3-cd]pyrene	15.842	276	6068	1.408	ug/mL	87

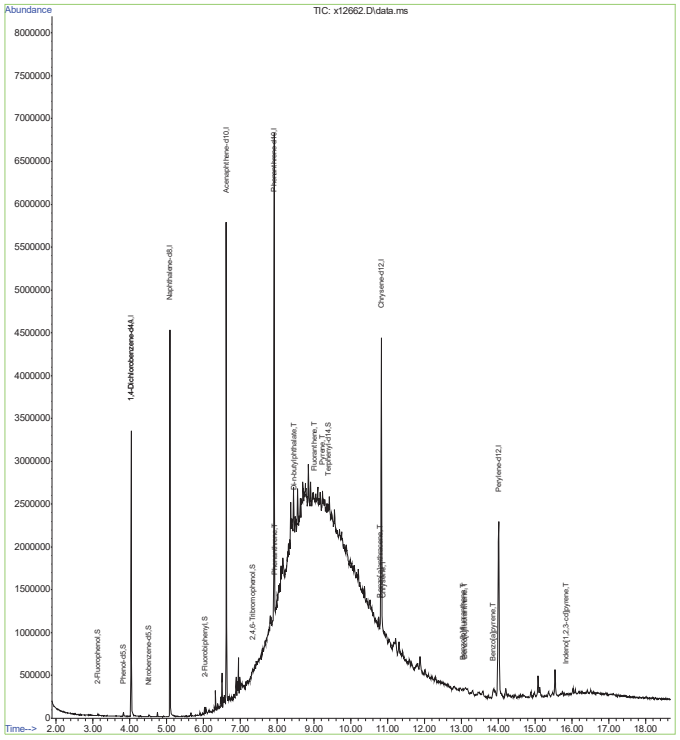
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.14 9

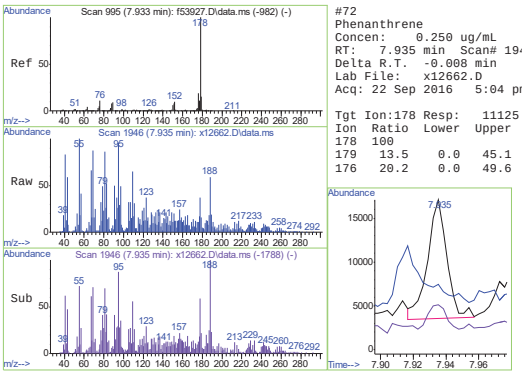
Quantitation Report (QT/LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12662.D
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:04 pm Operator: AkinA

Quant Time: Sep 22 17:59:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



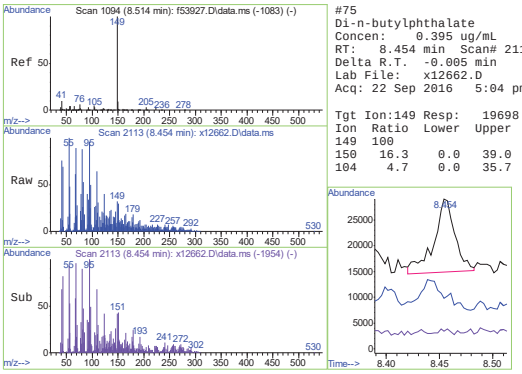
9.1.14 9



#72
Phenanthrene
Concen: 0.250 ug/mL
RT: 7.935 min Scan# 1946
Delta R.T. -0.008 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:178 Resp: 11125

Ion	Ratio	Lower	Upper
178	100		
179	13.5	0.0	45.1
176	20.2	0.0	49.6

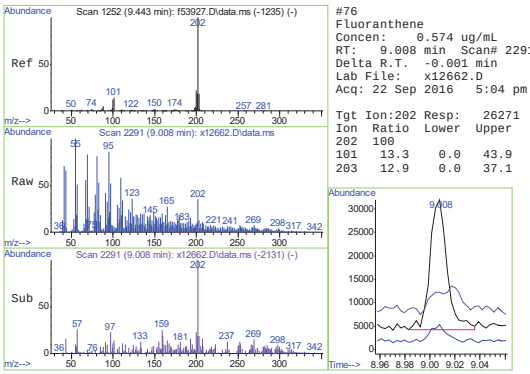


#75
Di-n-butylphthalate
Concen: 0.395 ug/mL
RT: 8.454 min Scan# 2113
Delta R.T. -0.005 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:149 Resp: 19698

Ion	Ratio	Lower	Upper
149	100		
150	16.3	0.0	39.0
104	4.7	0.0	35.7

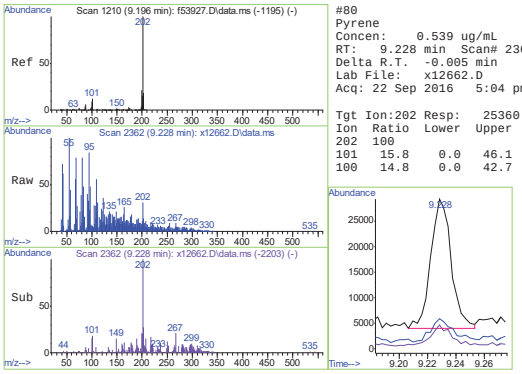
9.1.14 9



#76
Fluoranthene
Concen: 0.574 ug/mL
RT: 9.008 min Scan# 2291
Delta R.T. -0.001 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:202 Resp: 26271

Ion	Ratio	Lower	Upper
202	100		
101	13.3	0.0	43.9
203	12.9	0.0	37.1

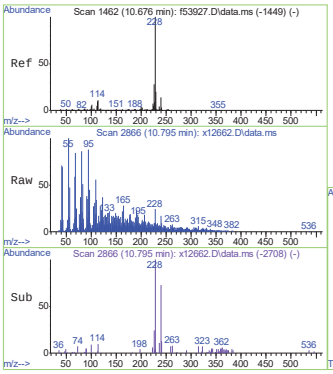


#80
Pyrene
Concen: 0.539 ug/mL
RT: 9.228 min Scan# 2362
Delta R.T. -0.005 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:202 Resp: 25360

Ion	Ratio	Lower	Upper
202	100		
101	15.8	0.0	46.1
100	14.8	0.0	42.7

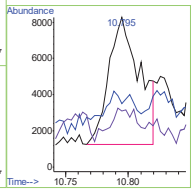
9.1.14 9

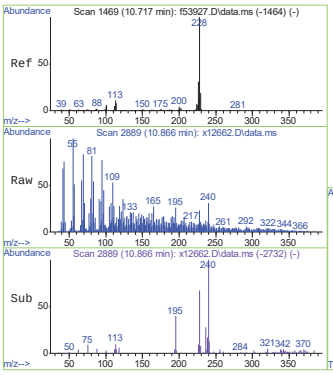


#85
Benzo[a]anthracene
Concen: 0.271 ug/mL
RT: 10.795 min Scan# 2866
Delta R.T. -0.008 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:228 Resp: 12062

Ion	Ratio	Lower	Upper
228	100		
229	10.6	0.0	49.3
226	11.6	0.0	58.0

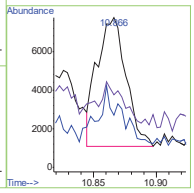




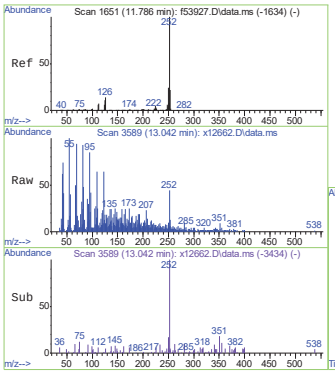
#86
Chrysene
Concen: 0.244 ug/mL
RT: 10.866 min Scan# 2889
Delta R.T. -0.013 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:228 Resp: 10752

Ion	Ratio	Lower	Upper
228	100		
226	21.6	0.0	60.0
229	15.2	0.0	49.3



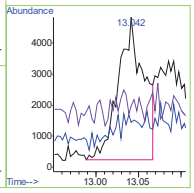
9.1.14 9

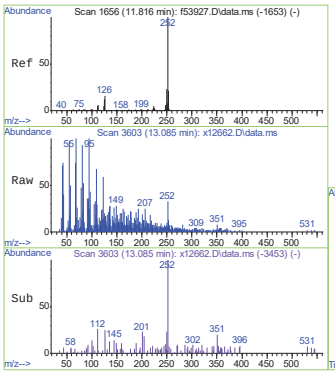


#90
Benzo[b]fluoranthene
Concen: 1.125 ug/mL
RT: 13.042 min Scan# 3589
Delta R.T. -0.018 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:252 Resp: 9489

Ion	Ratio	Lower	Upper
252	100		
253	4.8	0.0	51.4
125	4.1	0.0	42.8

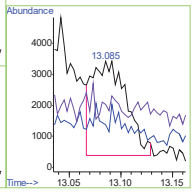




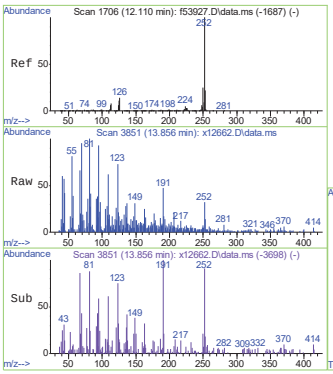
#91
Benzo[k]fluoranthene
Concen: 1.350 ug/mL m
RT: 13.085 min Scan# 3603
Delta R.T. -0.034 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:252 Resp: 7036

Ion	Ratio	Lower	Upper
252	100		
253	40.1	0.0	51.6
125	59.5	0.0	42.5#



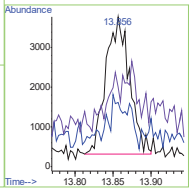
9.1.14 9

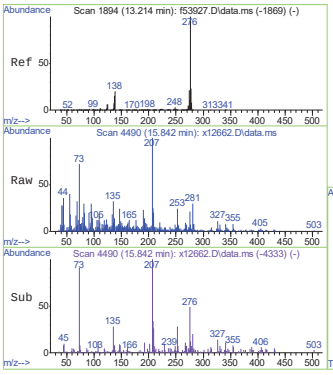


#92
Benzo[a]pyrene
Concen: 1.659 ug/mL
RT: 13.856 min Scan# 3851
Delta R.T. -0.024 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:252 Resp: 7568

Ion	Ratio	Lower	Upper
252	100		
253	28.3	0.0	51.3
125	17.6	0.0	43.6

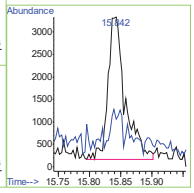




#93
Indeno[1,2,3-cd]pyrene
Concen: 1.408 ug/mL
RT: 15.842 min Scan# 4490
Delta R.T. -0.011 min
Lab File: x12662.D
Acq: 22 Sep 2016 5:04 pm

Tgt Ion:276 Resp: 6068

Ion	Ratio	Lower	Upper
276	100		
138	18.7	0.0	55.4

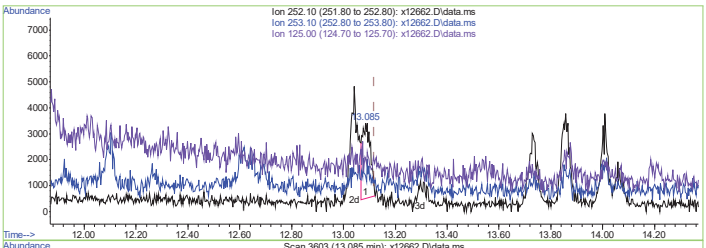


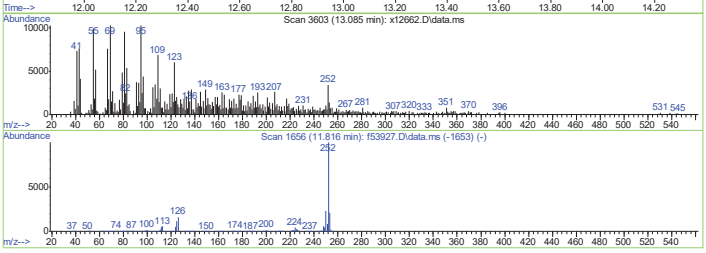
9.1.14 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12662.D
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:04 pm Operator: AkinA

Quant Time: Sep 22 17:53:31 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12662.D\data.ms

(91) Benzo[k]fluoranthene (T)

13.085min (-0.034) 1.34ug/mL

response 6391

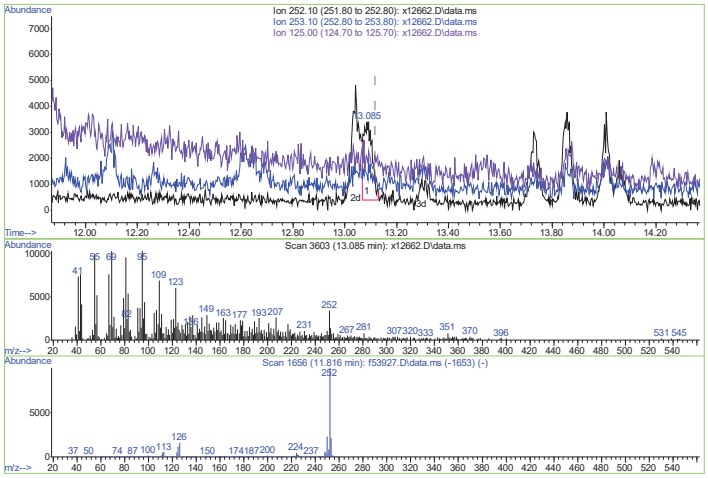
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	5.12
125.00	12.50	1.96
0.00	0.00	0.00

9.1.14.1 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12662.D
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:04 pm Operator: AkinA

Quant Time: Sep 22 17:53:31 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12662.D\data.ms

(91) Benzo[k]fluoranthene (T)

13.085min (-0.034) 1.35ug/mL m

response 7036

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	40.06
125.00	12.50	59.50#
0.00	0.00	0.00

9.1.14.2 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12662.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.583	222	224	235	rVB	5973	8244	0.10%	0.023%
2	2.891	316	323	335	rVB5	10721	15363	0.19%	0.042%
3	3.015	361	363	368	rVB6	4089	2827	0.03%	0.008%
4	3.077	379	383	389	rVB9	3725	3860	0.05%	0.011%
5	3.133	397	401	422	rBV5	20272	31825	0.39%	0.087%
6	3.267	439	444	449	rBV6	5130	4819	0.06%	0.013%
7	3.376	474	479	481	rBV6	3250	2048	0.03%	0.006%
8	3.425	494	495	503	rVV8	3259	2767	0.03%	0.008%
9	3.587	542	547	549	rBV5	4082	3324	0.04%	0.009%
10	3.628	558	560	567	rVB8	5554	5208	0.06%	0.014%
11	3.743	590	597	601	rVB10	4105	5443	0.07%	0.015%
12	3.761	601	603	608	rBV6	2519	2172	0.03%	0.006%
13	3.830	613	625	633	rBV3	51366	63296	0.78%	0.174%
14	3.895	644	646	650	rVB5	4420	2643	0.03%	0.007%
15	3.935	654	659	661	rVV5	4451	3713	0.05%	0.010%
16	3.994	674	678	682	rVB6	2357	2357	0.03%	0.006%
17	4.038	682	692	719	rBV	3333351	2695178	33.30%	7.402%
18	4.302	776	777	783	rVB6	3922	1947	0.02%	0.005%
19	4.523	843	848	863	rVV	21559	31677	0.39%	0.087%
20	4.588	867	869	875	rVV7	3966	3953	0.05%	0.011%
21	4.613	875	877	884	rVB7	3005	3378	0.04%	0.009%
22	4.650	888	889	895	rVV6	3109	2028	0.03%	0.006%
23	4.697	899	904	907	rBV7	4090	2476	0.03%	0.007%
24	4.750	914	921	928	rBV2	58057	42610	0.53%	0.117%
25	4.821	941	944	949	rVB5	4234	2162	0.03%	0.006%
26	4.889	962	966	968	rVB4	2639	2165	0.03%	0.006%
27	4.899	968	969	973	rBV4	2802	2057	0.03%	0.006%
28	4.920	973	976	981	rVB7	7502	4964	0.06%	0.014%
29	4.955	985	987	991	rVB5	2947	1867	0.02%	0.005%
30	5.001	997	1002	1005	rVB7	3085	2524	0.03%	0.007%
31	5.023	1005	1009	1011	rBV5	2958	2029	0.03%	0.006%
32	5.051	1017	1018	1023	rVB5	5579	3652	0.05%	0.010%
33	5.088	1023	1030	1064	rBV	4517897	3539349	43.73%	9.720%
34	5.200	1064	1066	1069	rVV4	11069	7575	0.09%	0.021%

9.1.15 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	5.216	1069	1071	1074	rVV4	7441	5684	0.07%	0.016%
36	5.234	1074	1077	1082	rVV6	7214	8086	0.10%	0.022%
37	5.262	1082	1086	1090	rVV7	6698	6253	0.08%	0.017%
38	5.300	1090	1098	1104	rVB7	5745	7702	0.10%	0.021%
39	5.362	1115	1118	1124	rBV7	3274	2849	0.04%	0.008%
40	5.421	1130	1137	1139	rVB8	3490	3411	0.04%	0.009%
41	5.443	1139	1144	1145	rBV5	6725	5096	0.06%	0.014%
42	5.452	1145	1147	1152	rVV6	5811	4472	0.06%	0.012%
43	5.489	1156	1159	1164	rVB6	4524	3000	0.04%	0.008%
44	5.514	1164	1167	1172	rBV6	2925	3003	0.04%	0.008%
45	5.539	1172	1175	1177	rBV4	3318	2123	0.03%	0.006%
46	5.558	1179	1181	1187	rVB7	3048	2133	0.03%	0.006%
47	5.583	1187	1189	1194	rBV6	3501	3687	0.05%	0.010%
48	5.660	1199	1214	1221	rBV	43440	46894	0.58%	0.129%
49	5.701	1221	1227	1235	rBV10	8769	11043	0.14%	0.030%
50	5.735	1235	1238	1239	rBV3	4627	2202	0.03%	0.006%
51	5.772	1244	1250	1251	rBV6	5592	4994	0.06%	0.014%
52	5.788	1251	1255	1261	rBV7	8362	8002	0.10%	0.022%
53	5.819	1261	1265	1268	rBV5	4323	3560	0.04%	0.010%
54	5.890	1283	1288	1291	rBV5	13579	12337	0.15%	0.034%
55	5.912	1291	1295	1304	rVB7	28463	28990	0.36%	0.080%
56	5.962	1304	1311	1314	rBV7	15482	16001	0.20%	0.044%
57	5.983	1314	1318	1326	rVB7	15476	16046	0.20%	0.044%
58	6.030	1326	1333	1338	rBV	89115	80431	0.99%	0.221%
59	6.061	1338	1343	1358	rVV3	77941	91952	1.14%	0.253%
60	6.123	1359	1363	1366	rVV6	11213	11017	0.14%	0.030%
61	6.148	1366	1371	1382	rVV10	27715	47188	0.58%	0.130%
62	6.251	1396	1404	1409	rBV10	33222	49230	0.61%	0.135%
63	6.294	1409	1418	1424	rVV7	53816	75775	0.94%	0.208%
64	6.328	1424	1429	1435	rVV	236878	180598	2.23%	0.496%
65	6.378	1440	1445	1449	rBV3	70094	61227	0.76%	0.168%
66	6.397	1449	1451	1463	rVV3	23324	31996	0.40%	0.088%
67	6.468	1468	1474	1479	rBV6	130983	140807	1.74%	0.387%
68	6.503	1479	1485	1492	rVB2	403063	362041	4.47%	0.994%
69	6.540	1492	1497	1500	rBV3	120171	107606	1.33%	0.296%
70	6.562	1500	1504	1508	rBV2	96140	77681	0.96%	0.213%
71	6.621	1516	1523	1536	rBV	5627392	4249012	52.49%	11.669%

9.1.15 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

72	6.680	1538	1542	1547	rVV6	67293	74528	0.92%	0.205%
73	6.708	1548	1551	1559	rVB10	48033	50039	0.62%	0.137%
74	6.748	1561	1564	1567	rVB4	33195	20493	0.25%	0.056%
75	6.773	1568	1572	1576	rVB2	53800	40418	0.50%	0.111%
76	6.798	1576	1580	1582	rBV5	38287	31209	0.39%	0.086%
77	6.835	1588	1592	1598	rVB5	45122	31827	0.39%	0.087%
78	6.885	1600	1608	1613	rBV2	231587	235942	2.91%	0.648%
79	6.916	1613	1618	1623	rBV3	161491	163061	2.01%	0.448%
80	6.947	1623	1628	1635	rVB	417518	335168	4.14%	0.920%
81	6.987	1635	1641	1648	rBV3	192029	230347	2.85%	0.633%
82	7.152	1689	1694	1700	rBV8	77052	87621	1.08%	0.241%
83	7.298	1738	1741	1745	rBV6	56873	51175	0.63%	0.141%
84	7.547	1780	1821	1827	rBV6	151341	809566	10.00%	2.223%
85	7.808	1902	1905	1910	rBV6	118569	99564	1.23%	0.273%
86	7.917	1933	1940	1957	rBV	5664920	4679922	57.82%	12.853%
87	8.100	1995	1999	2004	rBV6	304030	327376	4.04%	0.899%
88	8.367	2080	2085	2104	rBV6	492734	1119280	13.83%	3.074%
89	8.442	2105	2109	2122	rVB4	523361	600260	7.42%	1.649%
90	8.554	2141	2145	2163	rBV7	403571	508347	6.28%	1.396%
91	8.849	2235	2240	2255	rBV4	417411	375405	4.64%	1.031%
92	10.826	2866	2876	3024	rVB	3650492	8094269	100.00%	22.230%
93	11.876	3209	3214	3253	rVB6	181851	256841	3.17%	0.705%
94	13.875	3843	3857	3883	rBV6	91468	371924	4.59%	1.021%
95	14.012	3883	3901	3953	rBV3	2041467	4323463	53.41%	11.874%
96	14.204	3956	3963	4037	rVB3	102984	379191	4.68%	1.041%
97	14.888	4177	4183	4193	rVB3	66065	94107	1.16%	0.258%
98	15.078	4237	4244	4253	rBV3	212302	303594	3.75%	0.834%
99	15.124	4254	4259	4327	rVB3	103848	143866	1.78%	0.395%
100	15.541	4385	4393	4453	rBV4	282074	287556	3.55%	0.790%

Sum of corrected areas: 36411988

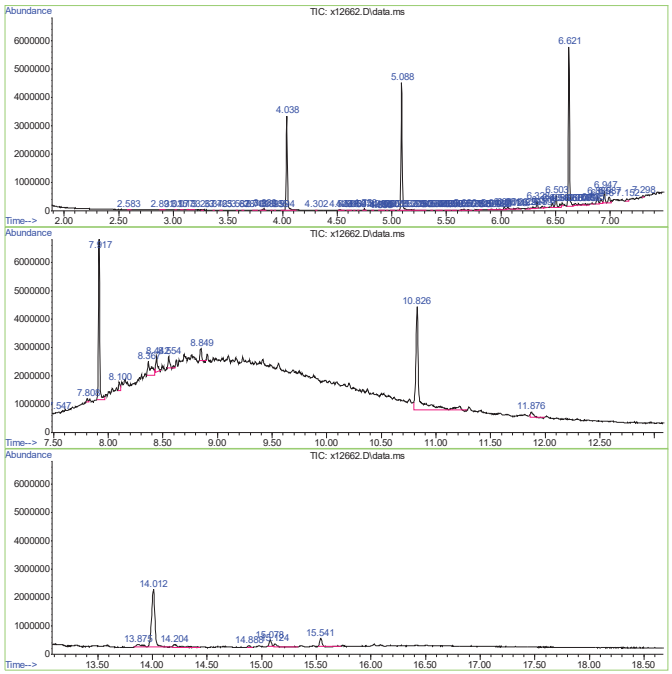
9.1.15 9

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



9.1.15 9

Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

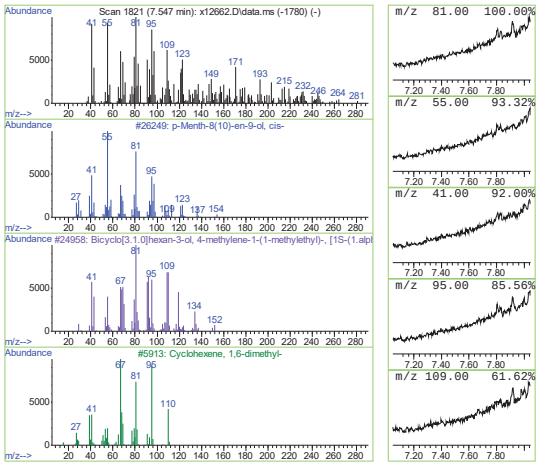
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 1 p-Menth-8(10)-en-9-ol, cis- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.547	6.92 ug/mL	809566	Phenanthrene-d10	7.917

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Menth-8(10)-en-9-ol, cis-	154	C10H18O	015714-13-3	43
2	Bicyclo[3.1.0]hexan-3-ol, 4-meth...	152	C10H16O	000471-16-9	38
3	Cyclohexene, 1,6-dimethyl-	110	C8H14	001759-64-4	38
4	1H-Pyrrole-2,5-dione, dihydro-1-...	193	C10H11NO3	1000351-31-4	35
5	1,2-Di-but-2-enyl-cyclohexane	192	C14H24	1000188-05-3	30



9.1.15 9

Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

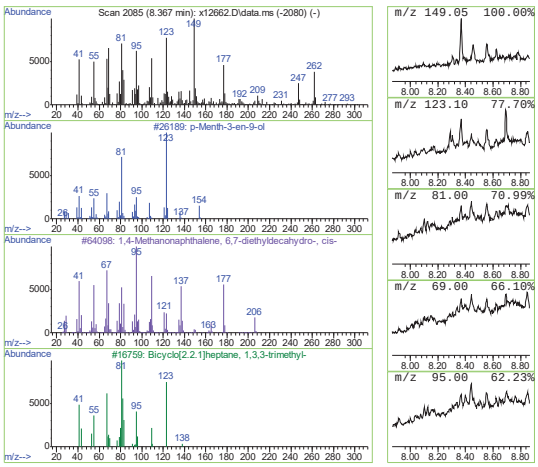
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 2 p-Menth-3-en-9-ol Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.367	9.57 ug/mL	1119280	Phenanthrene-d10	7.917

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Menth-3-en-9-ol	154	C10H18O	015714-10-0	25
2	1,4-Methanonaphthalene, 6,7-diet...	206	C15H26	016539-02-9	22
3	Bicyclo[2.2.1]heptane, 1,3,3-tri...	138	C10H18	006248-88-0	22
4	Vinyltris(cyclopropyl)silane	178	C11H18Si	1000109-97-3	22
5	18-Norabietane	262	C19H34	1000293-16-6	18



9.1.15 9

Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

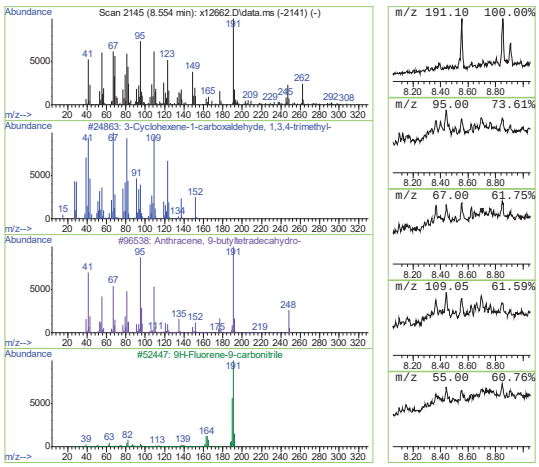
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 3 3-Cyclohexene-1-carboxaldeh... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.554	4.34 ug/mL	508347	Phenanthrene-d10	7.917

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclohexene-1-carboxaldehyde, ...	152	C10H16O	040702-26-9	62
2	Anthracene, 9-butyltetradecahydro-	248	C18H32	055133-89-6	49
3	9H-Fluorene-9-carbonitrile	191	C14H9N	001529-40-4	38
4	(1R,2R,8S,8Ar)-8-hydroxy-1-(2-hy...	254	C16H30O2	1000298-98-6	30
5	3-Cyclohexene-1-carboxaldehyde, ...	152	C10H16O	040702-26-9	25



9.1.15 9

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\X160922\
Data File : x12662.D
Acq On : 22 Sep 2016 5:04 pm
Operator : AkinA
Sample : MC47774-7,1:50
Misc : op48710,msx425,20.07,,,1,50
ALS Vial : 13 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

TIC Top Hit name	RT	EstConc	Units	Response		--Internal Standard---| #| RT	Resp	Conc|
p-Menth-8(10)-e...	7.547	6.9	ug/mL	809566	5	7.917	4679920	40.0
p-Menth-3-en-9-ol	8.367	9.6	ug/mL	1119280	5	7.917	4679920	40.0
3-Cyclohexene-1...	8.554	4.3	ug/mL	508347	5	7.917	4679920	40.0

9.1.15 9

Quantitation Report (QT/LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12663.D
Sample : MC47774-8
Misc : op48710,msx425,20.61,,,1,1
ALS Vial : 14 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:29 pm Operator: AkinA

Quant Time: Sep 23 06:55:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	563229	40.00	ug/mL	0.00
22) Naphthalene-d8	5.088	136	2091503	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.620	164	1201450	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.916	188	2011394	40.00	ug/mL	0.00
78) Chrysene-d12	10.823	240	1838561	40.00	ug/mL	-0.01
88) Perylene-d12	14.005	264	1602690	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	563229	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	786911	41.22	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 82.44%			
8) Phenol-d5	3.811	99	1035161	41.92	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 83.84%			
23) Nitrobenzene-d5	4.513	82	904797	39.83	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 79.66%			
46) 2-Fluorobiphenyl	6.030	172	1710325	41.54	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 83.08%			
68) 2,4,6-Tribromophenol	7.326	330	230161	44.30	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 88.60%			
81) Terphenyl-d14	9.390	244	2106819	54.32	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 108.64%			
Target Compounds						Qvalue

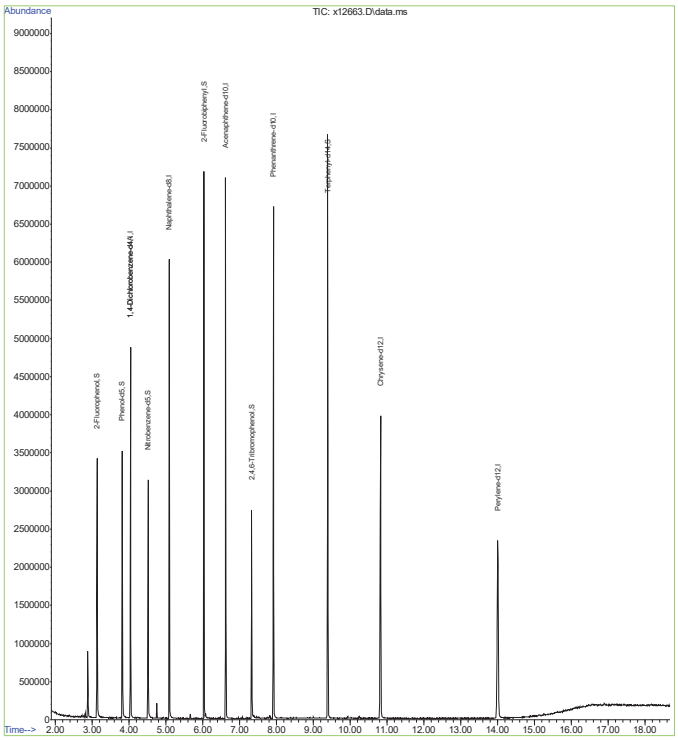
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.16 9

Quantitation Report (QT/LSC Reviewed)

Data File: C:\msdchem\1\data\X160922\x12663.D
Sample : MC47774-8
Misc : op48710,msx425,20.61,,,1,1
ALS Vial : 14 Sample Multiplier: 1
Acq On : 22 Sep 2016 5:29 pm Operator: AkinA

Quant Time: Sep 23 06:55:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.1.16 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12663.D
Acq On : 22 Sep 2016 5:29 pm
Operator : AkinA
Sample : MC47774-8
Misc : op48710,msx425,20.61,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12663.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.387	158	161	176	rVB2	20992	28576	0.42%	0.054%
2	2.651	241	246	250	rBV7	9224	8411	0.12%	0.016%
3	2.717	263	267	273	rVB4	24600	20415	0.30%	0.038%
4	2.760	276	281	288	rVB6	18142	20081	0.30%	0.038%
5	2.810	289	297	306	rVB	55646	58599	0.87%	0.110%
6	2.878	314	319	341	rBV	868185	731632	10.86%	1.373%
7	3.130	393	400	449	rBV	3403383	2766294	41.05%	5.190%
8	3.618	552	557	564	rBV9	8577	12664	0.19%	0.024%
9	3.655	564	569	578	rVB8	11405	14481	0.21%	0.027%
10	3.730	590	593	601	rBV10	5351	6389	0.09%	0.012%
11	3.786	607	611	613	rBV5	4258	3750	0.06%	0.007%
12	3.811	613	619	650	rVV	3499602	2955527	43.86%	5.545%
13	4.038	684	692	749	rVB	4857983	3624540	53.79%	6.801%
14	4.513	837	845	882	rBV	3125878	2546494	37.79%	4.778%
15	4.634	882	884	896	rVB10	4087	6421	0.10%	0.012%
16	4.749	915	921	932	rVB	197505	145597	2.16%	0.273%
17	4.920	973	976	992	rVB9	10648	10946	0.16%	0.021%
18	5.057	1013	1020	1022	rBV7	4349	3892	0.06%	0.007%
19	5.088	1022	1030	1068	rVV	6016836	4601086	68.28%	8.633%
20	5.219	1069	1072	1090	rVB	6069	10508	0.16%	0.020%
21	5.377	1114	1123	1125	rVB9	4176	5829	0.09%	0.011%
22	5.396	1125	1129	1136	rBV9	3926	5616	0.08%	0.011%
23	5.582	1185	1189	1204	rVV9	3612	7137	0.11%	0.013%
24	5.660	1204	1214	1221	rVB	55740	45879	0.68%	0.086%
25	5.756	1240	1245	1254	rVB10	5737	7245	0.11%	0.014%
26	6.030	1322	1333	1344	rBV	7173810	5179140	76.86%	9.717%
27	6.076	1345	1348	1369	rVB2	58370	71089	1.06%	0.133%
28	6.173	1374	1379	1385	rVB6	10742	13155	0.20%	0.025%
29	6.356	1435	1438	1444	rBV7	5221	3797	0.06%	0.007%
30	6.400	1448	1452	1456	rBV7	5363	4846	0.07%	0.009%
31	6.474	1472	1476	1489	rVB3	24362	22497	0.33%	0.042%
32	6.530	1489	1494	1499	rVB9	5951	6016	0.09%	0.011%
33	6.620	1513	1523	1556	rBV	7090799	5260061	78.06%	9.869%
34	6.847	1591	1596	1598	rVB5	3829	3341	0.05%	0.006%

9.1.17 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12663.D
Acq On : 22 Sep 2016 5:29 pm
Operator : AkinA
Sample : MC47774-8
Misc : op48710,msx425,20.61,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	6.965	1627	1634	1638	rVB6	11909	9843	0.15%	0.018%
36	7.068	1657	1667	1674	rBV3	23616	29892	0.44%	0.056%
37	7.167	1692	1699	1704	rBV5	9263	9970	0.15%	0.019%
38	7.202	1704	1710	1716	rVV	16547	12522	0.19%	0.023%
39	7.326	1739	1750	1764	rBV	2731894	2232923	33.14%	4.190%
40	7.401	1771	1774	1780	rVB5	20225	14697	0.22%	0.028%
41	7.432	1782	1784	1788	rVV5	7142	4624	0.07%	0.009%
42	7.466	1788	1795	1808	rVB3	18767	30571	0.45%	0.057%
43	7.525	1810	1814	1829	rVB8	21641	29190	0.43%	0.055%
44	7.587	1829	1834	1837	rBV7	5756	5484	0.08%	0.010%
45	7.659	1855	1857	1865	rVB9	4086	4640	0.07%	0.009%
46	7.774	1889	1894	1900	rBV6	10282	7836	0.12%	0.015%
47	7.811	1900	1906	1910	rBV2	42339	34968	0.52%	0.066%
48	7.873	1921	1926	1931	rBV9	3505	3375	0.05%	0.006%
49	7.916	1931	1940	1976	rVV	6710512	5363446	79.60%	10.063%
50	8.038	1976	1979	1988	rVB	4341	6350	0.09%	0.012%
51	8.112	1995	2003	2009	rBV6	7927	10701	0.16%	0.020%
52	8.143	2009	2013	2023	rVB6	8308	7974	0.12%	0.015%
53	8.330	2069	2073	2077	rBV7	6351	4480	0.07%	0.008%
54	8.389	2083	2092	2097	rVV5	9956	10585	0.16%	0.020%
55	8.454	2111	2113	2121	rVB2	8161	6419	0.10%	0.012%
56	8.504	2125	2129	2135	rBV8	5031	5255	0.08%	0.010%
57	8.538	2136	2140	2147	rVB10	4680	5312	0.08%	0.010%
58	8.709	2189	2195	2200	rBV9	3855	4273	0.06%	0.008%
59	8.843	2232	2238	2244	rBV10	9098	10779	0.16%	0.020%
60	8.905	2253	2258	2265	rVB7	8502	8914	0.13%	0.017%
61	8.955	2270	2274	2279	rVB8	4601	3597	0.05%	0.007%
62	9.004	2284	2290	2301	rVV8	16124	16194	0.24%	0.030%
63	9.113	2319	2325	2337	rVB8	5290	7111	0.11%	0.013%
64	9.169	2338	2343	2346	rVB6	6824	4991	0.07%	0.009%
65	9.206	2350	2355	2357	rVB6	4566	3841	0.06%	0.007%
66	9.231	2357	2363	2368	rVB10	4837	6393	0.09%	0.012%
67	9.259	2368	2372	2378	rBV9	3401	3969	0.06%	0.007%
68	9.284	2378	2380	2389	rVB9	5107	4978	0.07%	0.009%
69	9.390	2404	2414	2439	rBV	7651567	6738268	100.00%	12.643%
70	9.508	2449	2452	2459	rVB9	4541	4598	0.07%	0.009%
71	9.601	2476	2482	2485	rBV8	5468	4788	0.07%	0.009%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12663.D
Acq On : 22 Sep 2016 5:29 pm
Operator : AkinA
Sample : MC47774-8
Misc : op48710,msx425,20.61,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

72	9.716	2513	2519	2521	rBV7	4569	4941	0.07%	0.009%
73	9.763	2529	2534	2545	rVB7	3219	4837	0.07%	0.009%
74	9.931	2578	2588	2595	rBV3	26349	29751	0.44%	0.056%
75	9.993	2604	2608	2615	rVB9	6321	5769	0.09%	0.011%
76	10.033	2615	2621	2630	rVB9	8143	8169	0.12%	0.015%
77	10.241	2680	2688	2694	rVV	26236	29559	0.44%	0.055%
78	10.384	2730	2734	2743	rVB8	5657	7416	0.11%	0.014%
79	10.698	2830	2835	2842	rBV8	4261	5189	0.08%	0.010%
80	10.748	2845	2851	2861	rBV5	7331	11352	0.17%	0.021%
81	10.823	2861	2875	2909	rBV	3969777	5381747	79.87%	10.098%
82	10.966	2919	2921	2928	rVB8	3604	3582	0.05%	0.007%
83	11.056	2945	2950	2958	rVB8	4066	5069	0.08%	0.010%
84	11.152	2974	2981	2986	rVB8	6224	8271	0.12%	0.016%
85	11.668	3138	3147	3152	rBV8	6834	9846	0.15%	0.018%
86	11.721	3157	3164	3167	rBV9	3288	3751	0.06%	0.007%
87	12.389	3376	3379	3383	rBV6	3907	3423	0.05%	0.006%
88	12.436	3387	3394	3396	rBV7	4154	3323	0.05%	0.006%
89	12.448	3396	3398	3407	rVB10	5244	5462	0.08%	0.010%
90	12.597	3443	3446	3450	rVB6	5468	3724	0.06%	0.007%
91	12.635	3450	3458	3463	rBV9	4481	7037	0.10%	0.013%
92	12.750	3492	3495	3502	rBV9	5115	4390	0.07%	0.008%
93	12.921	3545	3550	3553	rBV7	6543	6990	0.10%	0.013%
94	13.014	3575	3580	3582	rBV6	4703	4465	0.07%	0.008%
95	13.048	3589	3591	3598	rBV8	6659	5963	0.09%	0.011%
96	13.499	3731	3736	3743	rVB8	4672	5576	0.08%	0.010%
97	14.005	3877	3899	3939	rBV3	2325900	4827026	71.64%	9.057%
98	14.198	3958	3961	3968	rVB9	5574	4617	0.07%	0.009%
99	14.297	3991	3993	4008	rBV9	3753	5193	0.08%	0.010%
100	14.559	4073	4077	4081	rBV6	4866	5061	0.08%	0.009%

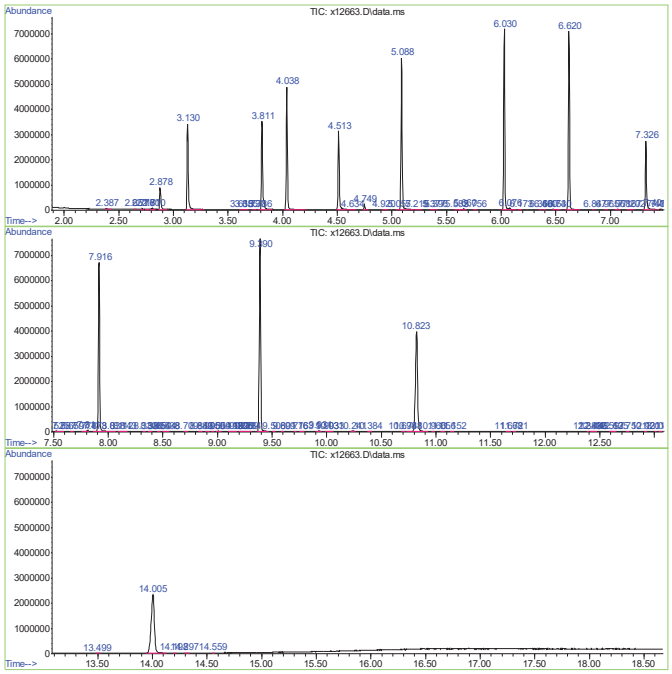
Sum of corrected areas: 53297201

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\X160922\
Data File : x12663.D
Acq On : 22 Sep 2016 5:29 pm
Operator : AkinA
Sample : MC47774-8
Misc : op48710,msx425,20.61,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12663.D
Acq On : 22 Sep 2016 5:29 pm
Operator : AkinA
Sample : MC47774-8
Misc : op48710,msx425,20.61,,,1,1
ALS Vial : 14 Sample Multiplier: 1

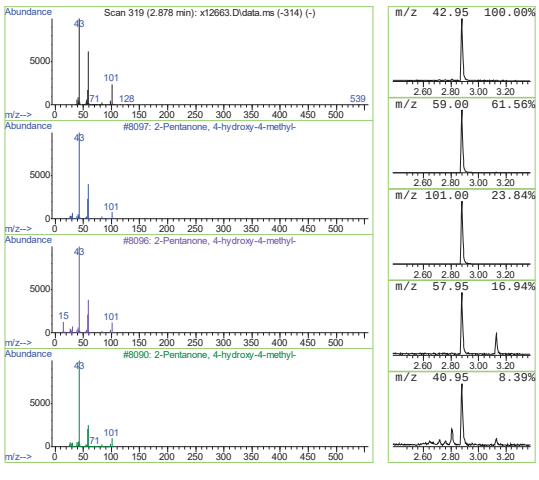
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.878	8.07 ug/mL	731632	1,4-Dichlorobenzene-d4	4.038

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
4	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
5	Guanidine	59	CH5N3	000113-00-8	9



Tentatively Identified Compound (LSC) summary

```
Data Path : C:\msdchem\1\data\X160922\
Data File : x12663.D
Acq On    : 22 Sep 2016   5:29 pm
Operator  : AkinA
Sample    : MC47774-8
Misc      : op48710,msx425,20.61,,,1,1
ALS Vial  : 14   Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270

TIC Library    : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P
```

TIC Top Hit name	RT	EstConc	Units	Response	|--Internal Standard---| #	RT	Resp	Conc|
2-Pentanone, 4-...	2.878	8.1	ug/mL	731632	1	4.038	3624540	40.0

9.1.17 9

Quantitation Report (LSC Reviewed)

```
Data File: C:\msdchem\1\data\X160922\x12652.D
Sample    : OP48710-MB
Misc      : op48710,msx425,20.66,,,1,1
ALS Vial  : 3   Sample Multiplier: 1
Acq On    : 22 Sep 2016  12:54 pm                    Operator: AkinA

Quant Time: Sep 22 15:34:00 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270
```

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.040	152	607837	40.00	ug/mL	0.00
22) Naphthalene-d8	5.090	136	2295847	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.626	164	1311592	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.922	188	2166422	40.00	ug/mL	0.00
78) Chrysene-d12	10.837	240	1963582	40.00	ug/mL	0.00
88) Perylene-d12	14.023	264	1663070	40.00	ug/mL	0.00
96) 1,4-Dichlorobenzene-d4A	4.040	152	607837	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.129	112	833425	40.46	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 80.92%			
8) Phenol-d5	3.813	99	1098319	41.21	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 82.42%			
23) Nitrobenzene-d5	4.515	82	904876	36.29	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 72.58%			
46) 2-Fluorobiphenyl	6.032	172	1763388	39.23	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 78.46%			
68) 2,4,6-Tribromophenol	7.331	330	186079	34.35	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 68.70%			
81) Terphenyl-d14	9.401	244	1914097	46.21	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 92.42%			
Target Compounds						Qvalue
75) Di-n-butylphthalate	8.462	149	32527	0.494	ug/mL	98

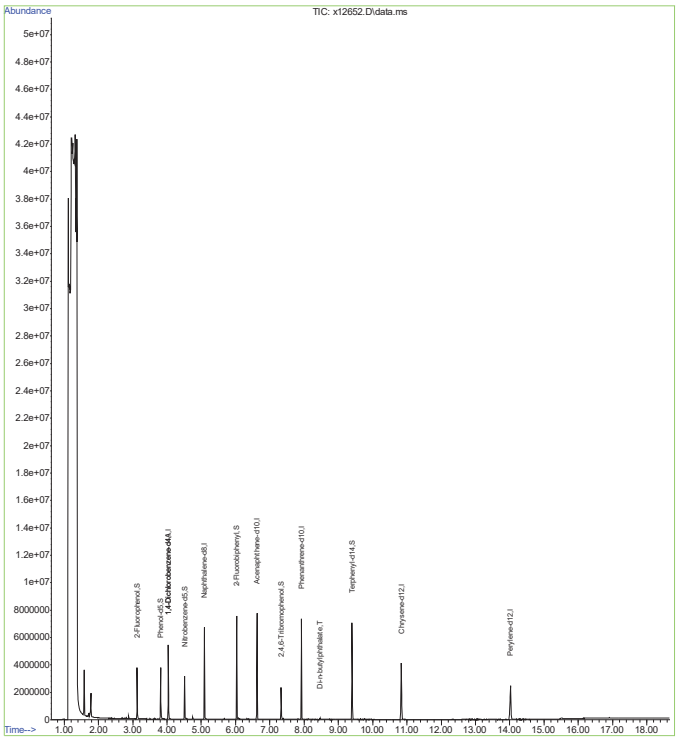
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.2.1 9

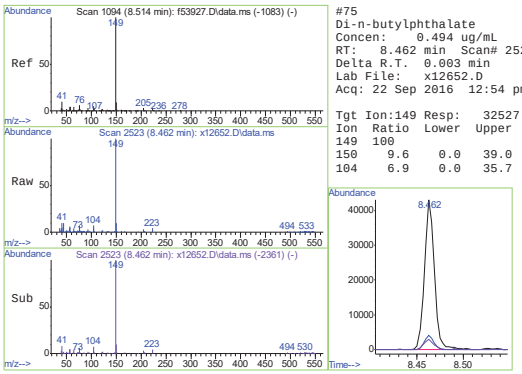
Quantitation Report (LSC Reviewed)

```
Data File: C:\msdchem\1\data\X160922\x12652.D
Sample    : OP48710-MB
Misc      : op48710,msx425,20.66,,,1,1
ALS Vial  : 3   Sample Multiplier: 1
Acq On    : 22 Sep 2016  12:54 pm                    Operator: AkinA

Quant Time: Sep 22 15:34:00 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title  : SW-864 Method 8270
```



9.2.1 9



#75
Di-n-butylphthalate
Concen: 0.494 ug/mL
RT: 8.462 min Scan# 2523
Delta R.T. 0.003 min
Lab File: x12652.D
Acq: 22 Sep 2016 12:54 pm

Tgt Ion:149 Resp: 32527

Ion	Ratio	Lower	Upper
149	100		
150	9.6	0.0	39.0
104	6.9	0.0	35.7

9.2.1 9

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12652.D
Acq On : 22 Sep 2016 12:54 pm
Operator : AkinA
Sample : OP48710-MB
Misc : op48710,msx425,20.66,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

Signal : TIC: x12652.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.959	98	109	149	rBV2	48725	173478	0.04%	0.026%
2	1.115	151	159	183	rBV2	38034863	162695912	39.13%	24.222%
3	1.320	184	225	240	rVV6	42548394	415834287	100.00%	61.909%
4	1.373	240	242	299	rVV2	42184599	32195997	7.74%	4.793%
5	1.581	300	309	331	rVB	3369956	2774656	0.67%	0.413%
6	1.721	347	354	359	rBV2	266667	222186	0.05%	0.033%
7	1.777	359	372	441	rVB	1785654	2327899	0.56%	0.347%
8	2.007	442	446	469	rVB6	46753	85033	0.02%	0.013%
9	2.237	516	520	555	rVB6	44182	101298	0.02%	0.015%
10	2.389	562	569	589	rVV5	30285	66537	0.02%	0.010%
11	2.461	589	592	600	rVB10	20337	17745	0.00%	0.003%
12	2.675	658	661	666	rBV7	11788	5937	0.00%	0.001%
13	2.716	670	674	681	rVB6	40668	36637	0.01%	0.005%
14	2.759	684	688	692	rVB5	25127	18072	0.00%	0.003%
15	2.809	693	704	712	rVB	74338	89674	0.02%	0.013%
16	2.880	723	727	747	rBV	227874	205724	0.05%	0.031%
17	3.129	801	807	860	rBV	3741086	2990764	0.72%	0.445%
18	3.402	891	895	902	rVB10	22804	15343	0.00%	0.002%
19	3.654	974	976	987	rVB10	16478	16438	0.00%	0.002%
20	3.741	998	1004	1015	rVB10	12008	15536	0.00%	0.002%
21	3.813	1021	1027	1068	rBV	3762105	3147198	0.76%	0.469%
22	4.040	1093	1100	1125	rBV	5422611	3965561	0.95%	0.590%
23	4.512	1245	1252	1282	rBV	3144602	2581930	0.62%	0.384%
24	4.751	1324	1329	1335	rVB2	157052	115252	0.03%	0.017%
25	4.922	1381	1384	1394	rVB2	14257	14549	0.00%	0.002%
26	4.984	1394	1404	1405	rBV10	5611	8137	0.00%	0.001%
27	4.997	1405	1408	1413	rBV7	6535	6328	0.00%	0.001%
28	5.053	1423	1426	1431	rBV6	9285	6905	0.00%	0.001%
29	5.090	1431	1438	1477	rVB	6716816	5063504	1.22%	0.754%
30	5.581	1587	1596	1598	rBV10	8076	9239	0.00%	0.001%
31	5.662	1616	1622	1631	rVB	40271	32413	0.01%	0.005%
32	5.696	1631	1633	1643	rVB	6556	6982	0.00%	0.001%
33	5.746	1643	1649	1659	rBV	17078	21327	0.01%	0.003%
34	5.970	1718	1721	1724	rBV5	6306	5793	0.00%	0.001%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12652.D
Acq On : 22 Sep 2016 12:54 pm
Operator : AkinA
Sample : OP48710-MB
Misc : op48710,msx425,20.66,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

35	6.032	1734	1741	1753	rBV	7528818	5327990	1.28%	0.793%
36	6.082	1753	1757	1764	rVB2	52637	52596	0.01%	0.008%
37	6.228	1803	1804	1812	rVB8	10234	11202	0.00%	0.002%
38	6.262	1813	1815	1821	rVB7	11431	11047	0.00%	0.002%
39	6.299	1821	1827	1831	rBV8	15188	15035	0.00%	0.002%
40	6.340	1835	1840	1846	rVV10	25339	19350	0.00%	0.003%
41	6.371	1846	1850	1851	rVV4	11990	8944	0.00%	0.001%
42	6.380	1851	1853	1860	rVB8	28689	18442	0.00%	0.003%
43	6.417	1864	1865	1871	rBV6	8095	6120	0.00%	0.001%
44	6.476	1878	1884	1894	rVB7	25649	34128	0.01%	0.005%
45	6.529	1897	1901	1918	rVB7	15909	11372	0.00%	0.002%
46	6.626	1923	1932	1960	rBV	7740728	5764842	1.39%	0.858%
47	6.967	2039	2042	2047	rVB7	6748	5609	0.00%	0.001%
48	7.017	2055	2058	2061	rBV3	9511	6758	0.00%	0.001%
49	7.036	2062	2064	2071	rVV7	11848	9269	0.00%	0.001%
50	7.070	2071	2075	2086	rVV4	25722	34265	0.01%	0.005%
51	7.126	2086	2093	2095	rVB8	10845	10098	0.00%	0.002%
52	7.179	2107	2110	2115	rVB7	12058	5541	0.00%	0.001%
53	7.207	2116	2119	2127	rVB9	14660	10079	0.00%	0.002%
54	7.331	2153	2159	2173	rBV	2347010	1858895	0.45%	0.277%
55	7.384	2174	2176	2181	rVB6	16895	12077	0.00%	0.002%
56	7.446	2191	2196	2198	rBV5	10733	9218	0.00%	0.001%
57	7.530	2220	2223	2234	rVB8	18634	16573	0.00%	0.002%
58	7.670	2265	2268	2275	rBV9	8398	5879	0.00%	0.001%
59	7.707	2276	2280	2288	rBV9	11599	12164	0.00%	0.002%
60	7.748	2288	2293	2298	rVB9	9134	6909	0.00%	0.001%
61	7.779	2298	2303	2305	rBV6	16054	10182	0.00%	0.002%
62	7.816	2310	2315	2320	rBV	53613	42203	0.01%	0.006%
63	7.838	2320	2322	2327	rVB6	22532	14055	0.00%	0.002%
64	7.859	2327	2329	2335	rBV7	5784	6419	0.00%	0.001%
65	7.922	2339	2349	2394	rVB	7352819	5870926	1.41%	0.874%
66	8.117	2401	2412	2419	rBV	73857	73870	0.02%	0.011%
67	8.152	2419	2423	2432	rVB	8629	10534	0.00%	0.002%
68	8.226	2443	2447	2451	rVB7	6779	6391	0.00%	0.001%
69	8.264	2451	2459	2462	rBV9	11104	11657	0.00%	0.002%
70	8.292	2463	2468	2479	rVB9	8688	11777	0.00%	0.002%
71	8.462	2516	2523	2536	rBV	87867	73663	0.02%	0.011%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12652.D
Acq On : 22 Sep 2016 12:54 pm
Operator : AkinA
Sample : OP48710-MB
Misc : op48710,msx425,20.66,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.05 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 2

Method : X:\1\methods\X160921_8270.m
Title : SW-864 Method 8270

72	8.711	2596	2603	2612	rVB	9084	15290	0.00%	0.002%
73	8.773	2618	2623	2634	rBV	7870	10370	0.00%	0.002%
74	8.854	2646	2649	2655	rBV8	7367	5637	0.00%	0.001%
75	8.891	2656	2661	2666	rVV8	7869	7398	0.00%	0.001%
76	9.112	2726	2732	2741	rBV8	7575	11155	0.00%	0.002%
77	9.289	2786	2789	2796	rBV9	5882	5637	0.00%	0.001%
78	9.401	2815	2825	2852	rBV	7054848	6228361	1.50%	0.927%
79	9.665	2908	2910	2922	rVB	5688	6909	0.00%	0.001%
80	9.948	2995	3001	3009	rVV6	16969	21809	0.01%	0.003%
81	10.837	3273	3287	3313	rBV	4127587	5741321	1.38%	0.855%
82	11.412	3466	3472	3478	rBV7	4242	6215	0.00%	0.001%
83	11.872	3618	3620	3628	rBV8	5763	5295	0.00%	0.001%
84	12.599	3848	3854	3856	rBV6	9452	9425	0.00%	0.001%
85	12.702	3882	3887	3894	rVB10	15390	12082	0.00%	0.002%
86	12.969	3964	3973	3976	rBV9	4325	5764	0.00%	0.001%
87	13.137	4016	4027	4031	rVV9	8368	13463	0.00%	0.002%
88	13.153	4031	4032	4040	rVB8	6928	6028	0.00%	0.001%
89	13.463	4125	4132	4141	rBV8	6338	12138	0.00%	0.002%
90	13.644	4189	4190	4203	rVB8	7264	9820	0.00%	0.001%
91	13.936	4281	4284	4291	rBV9	5005	5543	0.00%	0.001%
92	14.023	4291	4312	4355	rVV2	2456569	5038951	1.21%	0.750%
93	14.259	4381	4388	4392	rBV9	4978	5906	0.00%	0.001%
94	14.296	4396	4400	4409	rBV9	4196	5307	0.00%	0.001%
95	14.489	4457	4462	4470	rBV9	4603	6738	0.00%	0.001%
96	14.778	4544	4555	4556	rBV10	4969	8503	0.00%	0.001%
97	15.021	4628	4633	4639	rVB9	8593	9384	0.00%	0.001%
98	15.052	4639	4643	4649	rBV9	7176	9252	0.00%	0.001%
99	15.142	4662	4672	4682	rBV9	9898	21838	0.01%	0.003%
100	15.509	4773	4790	4792	rBV5	67993	148209	0.04%	0.022%

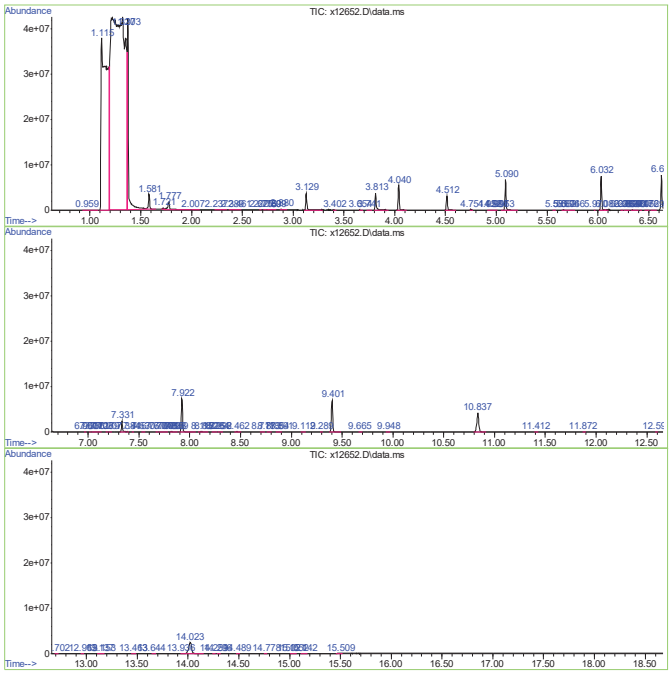
Sum of corrected areas: 671684098

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\X160922\
Data File : x12652.D
Acq On : 22 Sep 2016 12:54 pm
Operator : AkinA
Sample : OP48710-MB
Misc : op48710,msx425,20.66,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\data\X160922\
Data File : x12652.D
Acq On : 22 Sep 2016 12:54 pm
Operator : AkinA
Sample : OP48710-MB
Misc : op48710,msx425,20.66,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

9.2.2 9

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\X160922\
Data File : x12652.D
Acq On : 22 Sep 2016 12:54 pm
Operator : AkinA
Sample : OP48710-MB
Misc : op48710,msx425,20.66,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: RTEINT.P

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

9.2.2 9

X160921_8270.m Thu Sep 22 16:50:26 2016 Page: 5

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/23/16 14:46

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12653.D
Sample : OP48710-BS
Misc : op48710,msx425,20.26,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:19 pm Operator: AkinA

Quant Time: Sep 22 15:40:30 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.041	152	506882	40.00	ug/mL	0.00
22) Naphthalene-d8	5.091	136	1906500	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.623	164	1098955	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.920	188	1734171	40.00	ug/mL	0.00
78) Chrysene-d12	10.829	240	1679579	40.00	ug/mL	0.00
88) Perylene-d12	14.008	264	1480235	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.041	152	506882	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	679511	39.55	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 79.10%			
8) Phenol-d5	3.814	99	907805	40.85	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 81.70%			
23) Nitrobenzene-d5	4.513	82	794268	38.36	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 76.72%			
46) 2-Fluorobiphenyl	6.030	172	1548850	41.13	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 82.26%			
68) 2,4,6-Tribromophenol	7.329	330	188396	42.33	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 84.66%			
81) Terphenyl-d14	9.390	244	1574616	44.44	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 88.88%			
Target Compounds						Qvalue
2) N-nitrosodimethylamine	2.238	74	418788	32.438	ug/mL	99
3) 1,4-Dioxane	2.011	88	166034	19.486	ug/mL	95
4) Pyridine	2.238	79	557182	24.690	ug/mL	99
5) Aniline	3.823	93	769048	29.094	ug/mL	72
7) bis(2-Chloroethyl)ether	3.854	63	478613	37.068	ug/mL	97
9) Phenol	3.823	94	963330	39.873	ug/mL	90
10) 2-Chlorophenol	3.910	128	628953	35.962	ug/mL	97
11) 1,3-Dichlorobenzene	4.010	146	656966	34.753	ug/mL	100
12) 1,4-Dichlorobenzene	4.053	146	684475	34.467	ug/mL	99
13) 1,2-Dichlorobenzene	4.202	146	643570	35.312	ug/mL	99
14) Benzyl alcohol	4.171	108	489251	41.567	ug/mL	100
15) bis(2-chloroisopropyl)...	4.280	45	782335	43.237	ug/mL	83
16) o-cresol	4.283	108	634320	38.935	ug/mL	97
17) Acetophenone	4.383	105	1020921	38.835	ug/mL	99
18) Hexachloroethane	4.445	117	272214	34.299	ug/mL	96
19) N-Nitroso-di-n-propyla...	4.395	70	529584	44.717	ug/mL	97
20) m+p-cresols	4.404	108	1364159	79.298	ug/mL	99
21) 4-methylphenol	4.404	108	1364159	79.298	ug/mL	99
24) Nitrobenzene	4.529	77	797231	39.231	ug/mL	99
25) Isophorone	4.709	82	1437524	40.369	ug/mL	100
26) 2-Nitrophenol	4.793	139	314684	32.564	ug/mL	98
27) 2,4-Dimethylphenol	4.830	107	708537	39.411	ug/mL	98
28) bis(2-Chloroethoxy)met...	4.895	93	881276	39.542	ug/mL	100
29) Benzoic acid	4.939	105	143330	22.953	ug/mL	98
30) 2,4-Dichlorophenol	4.995	162	545752	39.608	ug/mL	99
31) 1,2,4-Trichlorobenzene	5.054	180	568480	37.821	ug/mL	98
32) Naphthalene	5.107	128	2588125	52.611	ug/mL	99
33) 2,6-Dichlorophenol	5.184	162	556884	39.784	ug/mL	99
34) 4-Chloroaniline	5.181	127	730710	36.242	ug/mL	98
35) Hexachlorobutadiene	5.250	225	332287	38.388	ug/mL	98

9.3.1 9

X160921_8270.m Thu Sep 22 15:45:32 2016 Page: 1

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12653.D
Sample : OP48710-BS
Misc : op48710,msx425,20.26,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:19 pm Operator: AkinA

Quant Time: Sep 22 15:40:30 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.613	107	615453	40.893	ug/mL	99
37) 2-Methylnaphthalene	5.694	142	1366899	42.092	ug/mL	100
38) 1-Methylnaphthalene	5.791	142	1252716	39.646	ug/mL	99
39) 1,2,4,5-Tetrachloroben...	5.878	216	607496	40.489	ug/mL	99
40) Caprolactam	5.464	55	300583	41.089	ug/mL	99
42) Pentachloronitrobenzene	7.879	237	177471	38.090	ug/mL	97
43) Hexachlorocyclopentadiene	5.887	237	91814	21.327	ug/mL	99
44) 2,4,6-Trichlorophenol	5.977	196	378641	40.721	ug/mL	100
45) 2,4,5-Trichlorophenol	6.021	196	422654	41.803	ug/mL	97
47) 2-Chloronaphthalene	6.120	162	1256151	42.020	ug/mL	99
48) Acenaphthylene	6.490	152	1498728	32.840	ug/mL	99
49) Dimethylphthalate	6.421	163	1423334	41.879	ug/mL	99
50) 2,6-Dinitrotoluene	6.493	165	313734	39.179	ug/mL	95
51) Acenaphthene	6.651	153	1317598	42.326	ug/mL	99
52) 2,4-Dinitrophenol	6.714	184	82011	29.188	ug/mL	91
53) Dibenzofuran	6.788	168	1892462	42.550	ug/mL	98
54) 2,4-Dinitrotoluene	6.838	165	414036	42.520	ug/mL	99
55) 4-Nitrophenol	6.794	65	246483	39.337	ug/mL	88
56) 2,3,4,6-Tetrachlorophenol	6.947	232	266983	36.674	ug/mL	100
57) Fluorene	7.093	166	1537436	44.385	ug/mL	100
58) 4-Chlorophenyl-phenyle...	7.087	204	721478	42.847	ug/mL	98
59) Diethylphthalate	7.034	149	1462397	42.406	ug/mL	100
60) 2-nitroaniline	6.257	138	458247	41.162	ug/mL	98
61) 3-nitroaniline	6.623	138	378318	39.125	ug/mL	97
62) 4-nitroaniline	7.171	138	362613	38.384	ug/mL	99
63) 1,1-Biphenyl	6.108	154	1710592	42.571	ug/mL	99
65) 4,6-Dinitro-2-methylph...	7.202	198	203350	36.361	ug/mL	92
66) n-Nitrosodiphenylamine	7.205	169	1008269	42.105	ug/mL	99
67) 1,2-Diphenylhydrazine	7.226	77	1748858	44.462	ug/mL	100
69) 4-Bromophenyl-phenylether	7.512	248	391433	43.076	ug/mL	98
70) Hexachlorobenzene	7.649	284	416235	41.885	ug/mL	99
71) Pentachlorophenol	7.820	266	127571	36.361	ug/mL	97
72) Phenanthrene	7.938	178	2073679	44.076	ug/mL	100
73) Anthracene	7.979	178	2054215	41.364	ug/mL	100
74) Carbazole	8.134	167	2062348	44.889	ug/mL	99
75) Di-n-butylphthalate	8.457	149	2450535	46.484	ug/mL	100
76) Fluoranthene	9.007	202	2164315	44.669	ug/mL	99
77) Atrazine	7.699	200	383435	43.862	ug/mL	99
79) Benzidine	9.144	184	447885	27.230	ug/mL	99
80) Pyrene	9.231	202	2240272	45.540	ug/mL	99
82) Butylbenzylphthalate	10.011	149	1013424	45.462	ug/mL	100
84) 3,3'-Dichlorobenzidine	10.801	252	598127	31.778	ug/mL	97
85) Benzo[a]anthracene	10.798	228	2049928	43.996	ug/mL	99
86) Chrysene	10.872	228	1940586	42.155	ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.938	149	1398994	40.669	ug/mL	98
89) Di-n-octylphthalate	12.224	149	2173688	38.702	ug/mL	100
90) Benzo[b]fluoranthene	13.045	252	1782934	39.401	ug/mL	99
91) Benzo[k]fluoranthene	13.104	252	1887518m	37.347	ug/mL	
92) Benzo[a]pyrene	13.862	252	1631308	36.667	ug/mL	100
93) Indeno[1,2,3-cd]pyrene	15.848	276	1711383	42.958	ug/mL	99
94) Dibenz[a,h]anthracene	15.876	278	1769636	46.782	ug/mL	100
95) Benzo[g,h,i]perylene	16.193	276	1700424	46.809	ug/mL	97
97) Benzaldehyde	3.717	77	543989	63.106	ug/mL	99

9.3.1 9

X160921_8270.m Thu Sep 22 15:45:32 2016 Page: 2

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12653.D
Sample : OP48710-BS
Misc : op48710,msx425,20.26,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:19 pm Operator: AkinA

Quant Time: Sep 22 15:40:30 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

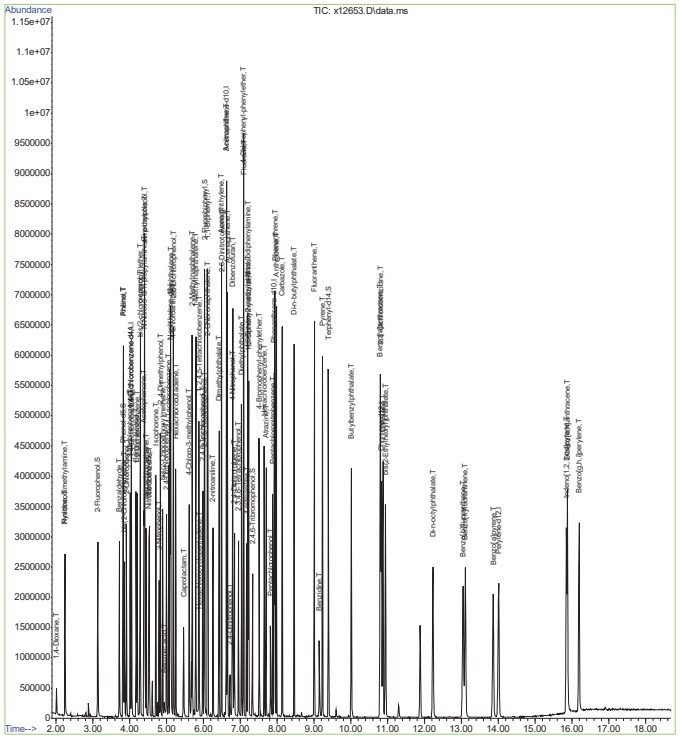
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.3.1 9

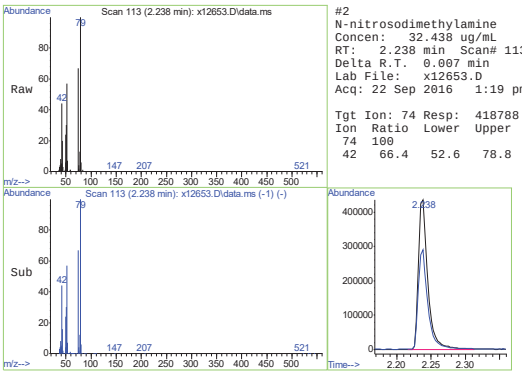
Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12653.D
Sample : OP48710-BS
Misc : op48710,msx425,20.26,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:19 pm Operator: AkinA

Quant Time: Sep 22 15:40:30 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



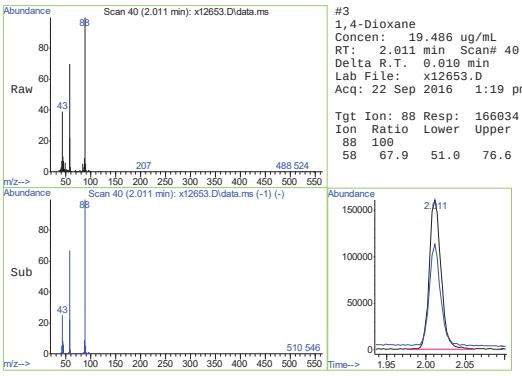
9.3.1 9



#2
N-nitrosodimethylamine
Concen: 32.438 ug/mL
RT: 2.238 min Scan# 113
Delta R.T. 0.007 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 74 Resp: 418788

Ion	Ratio	Lower	Upper
74	100		
42	66.4	52.6	78.8

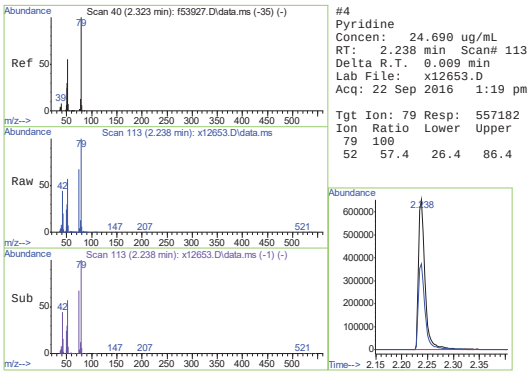


#3
1,4-Dioxane
Concen: 19.486 ug/mL
RT: 2.011 min Scan# 40
Delta R.T. 0.010 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 88 Resp: 166034

Ion	Ratio	Lower	Upper
88	100		
58	67.9	51.0	76.6

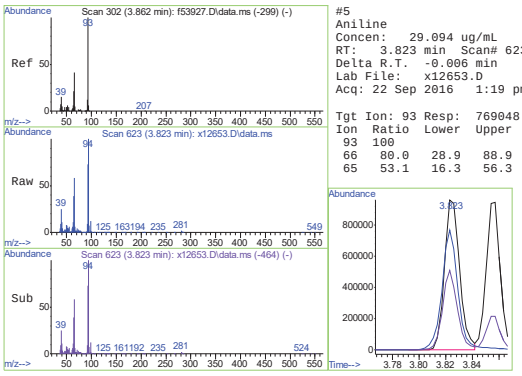
9.3.1 9



#4
Pyridine
Concen: 24.690 ug/mL
RT: 2.238 min Scan# 113
Delta R.T. 0.009 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 79 Resp: 557182

Ion	Ratio	Lower	Upper
79	100		
52	57.4	26.4	86.4

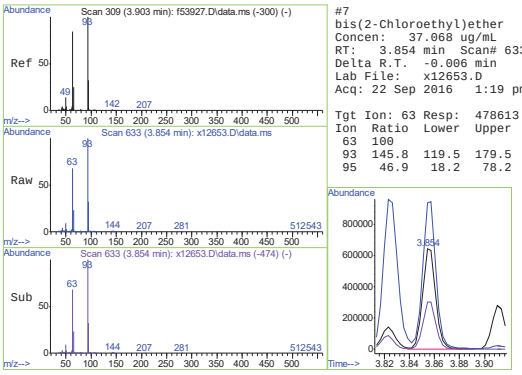


#5
Aniline
Concen: 29.094 ug/mL
RT: 3.823 min Scan# 623
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 93 Resp: 769048

Ion	Ratio	Lower	Upper
93	100		
66	80.0	28.9	88.9
65	53.1	16.3	56.3

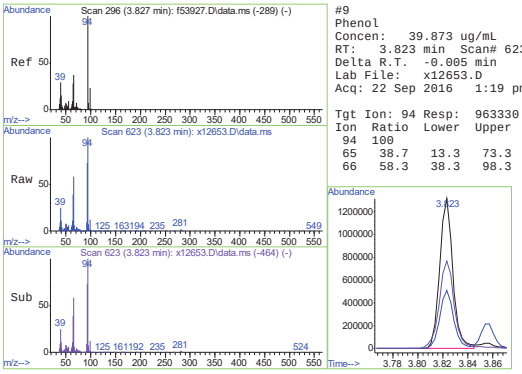
9.3.1 9



#7
bis(2-Chloroethyl)ether
Concen: 37.068 ug/mL
RT: 3.854 min Scan# 633
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 63 Resp: 478613

Ion	Ratio	Lower	Upper
63	100		
93	145.8	119.5	179.5
95	46.9	18.2	78.2



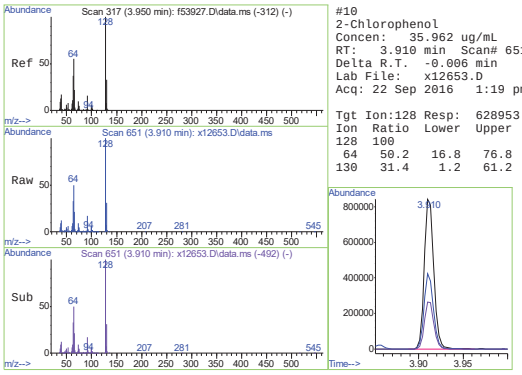
#9
Phenol
Concen: 39.873 ug/mL
RT: 3.823 min Scan# 623
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 94 Resp: 963330

Ion	Ratio	Lower	Upper
94	100		
65	38.7	13.3	73.3
66	58.3	38.3	98.3

9.3.1

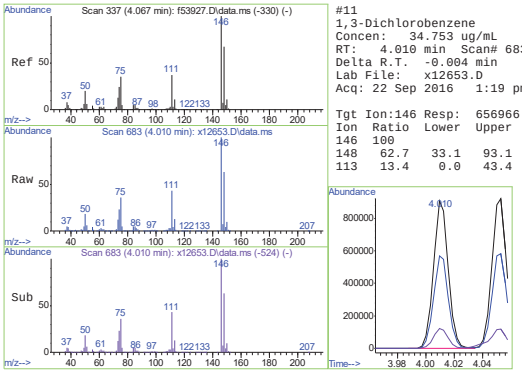
9



#10
2-Chlorophenol
Concen: 35.962 ug/mL
RT: 3.910 min Scan# 651
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:128 Resp: 628953

Ion	Ratio	Lower	Upper
128	100		
64	50.2	16.8	76.8
130	31.4	1.2	61.2



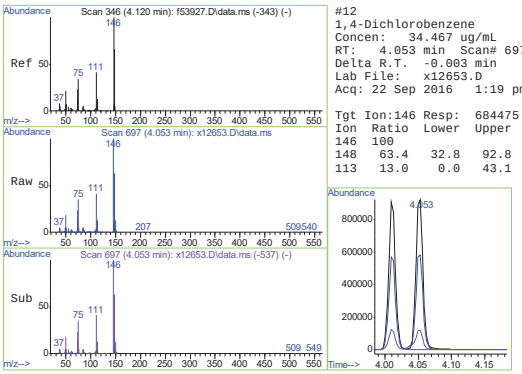
#11
1,3-Dichlorobenzene
Concen: 34.753 ug/mL
RT: 4.010 min Scan# 683
Delta R.T. -0.004 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:146 Resp: 656966

Ion	Ratio	Lower	Upper
146	100		
148	62.7	33.1	93.1
113	13.4	0.0	43.4

9.3.1

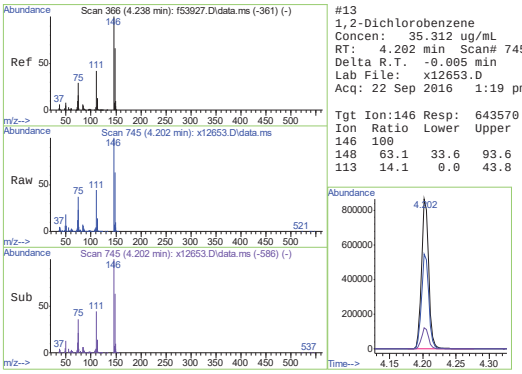
9



#12
1,4-Dichlorobenzene
Concen: 34.467 ug/mL
RT: 4.053 min Scan# 697
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:146 Resp: 684475

Ion	Ratio	Lower	Upper
146	100		
148	63.4	32.8	92.8
113	13.0	0.0	43.1



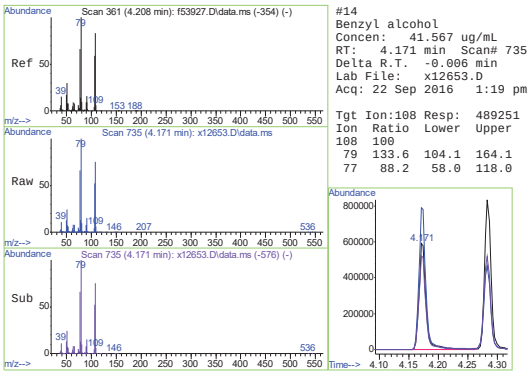
#13
1,2-Dichlorobenzene
Concen: 35.312 ug/mL
RT: 4.202 min Scan# 745
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:146 Resp: 643570

Ion	Ratio	Lower	Upper
146	100		
148	63.1	33.6	93.6
113	14.1	0.0	43.8

9.3.1

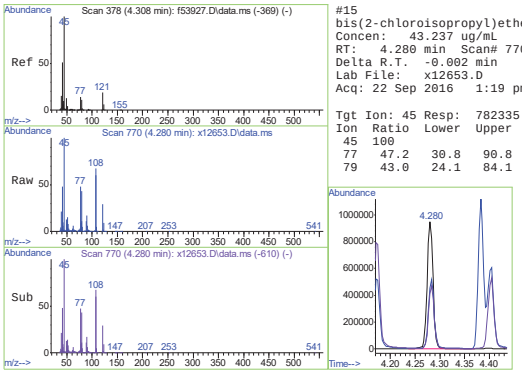
9



#14
Benzyl alcohol
Concen: 41.567 ug/mL
RT: 4.171 min Scan# 735
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:108 Resp: 489251

Ion	Ratio	Lower	Upper
108	100		
79	133.6	104.1	164.1
77	88.2	58.0	118.0



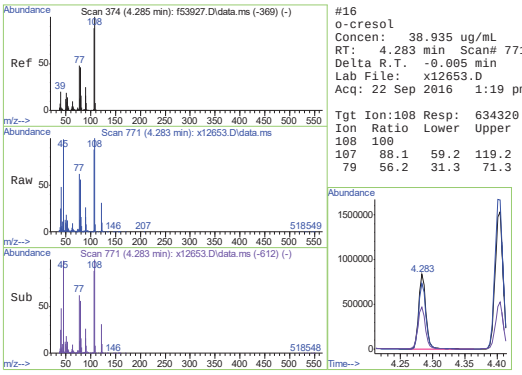
#15
bis(2-chloroisopropyl)ether
Concen: 43.237 ug/mL
RT: 4.280 min Scan# 770
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 45 Resp: 782335

Ion	Ratio	Lower	Upper
45	100		
77	47.2	30.8	90.8
79	43.0	24.1	84.1

9.3.1

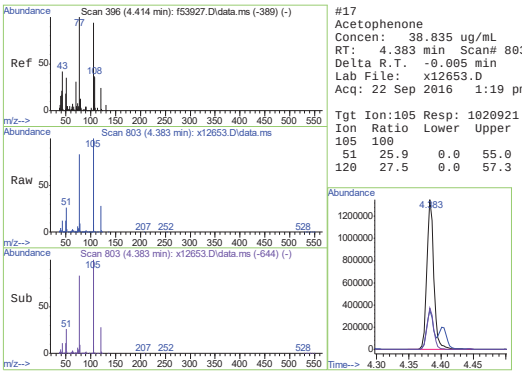
9



#16
o-cresol
Concen: 38.935 ug/mL
RT: 4.283 min Scan# 771
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:108 Resp: 634320

Ion	Ratio	Lower	Upper
108	100		
107	88.1	59.2	119.2
79	56.2	31.3	71.3



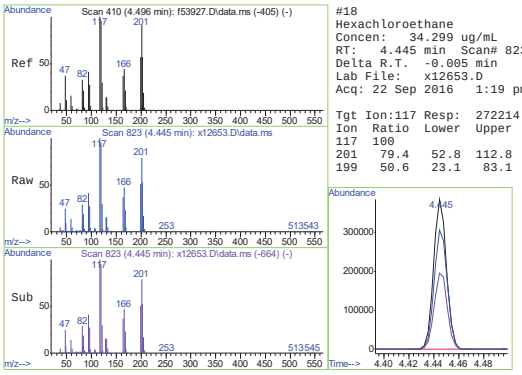
#17
Acetophenone
Concen: 38.835 ug/mL
RT: 4.383 min Scan# 803
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:105 Resp: 1020921

Ion	Ratio	Lower	Upper
105	100		
51	25.9	0.0	55.0
120	27.5	0.0	57.3

9.3.1

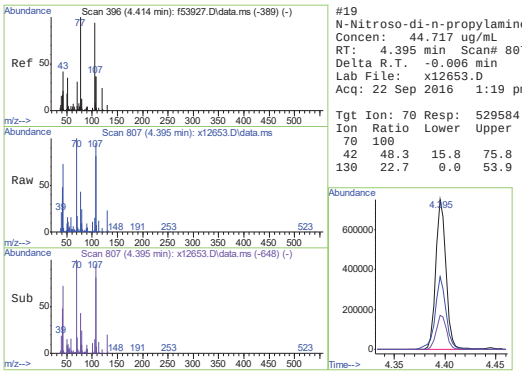
9



#18
Hexachloroethane
Concen: 34.299 ug/mL
RT: 4.445 min Scan# 823
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:117 Resp: 272214

Ion	Ratio	Lower	Upper
117	100		
201	79.4	52.8	112.8
199	50.6	23.1	83.1



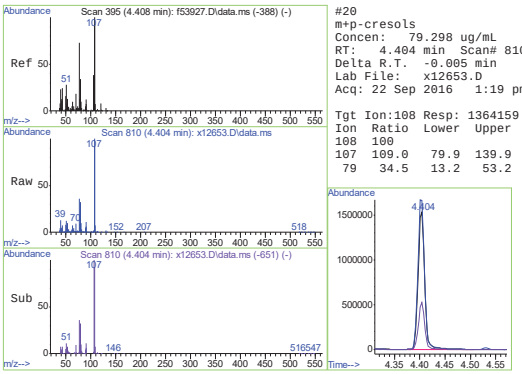
#19
N-Nitroso-di-n-propylamine
Concen: 44.717 ug/mL
RT: 4.395 min Scan# 807
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 70 Resp: 529584

Ion	Ratio	Lower	Upper
70	100		
42	48.3	15.8	75.8
130	22.7	0.0	53.9

9.3.1

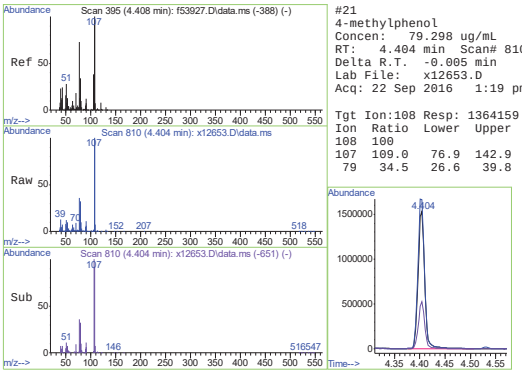
9



#20
m+p-cresols
Concen: 79.298 ug/mL
RT: 4.404 min Scan# 810
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:108 Resp: 1364159

Ion	Ratio	Lower	Upper
108	100		
107	109.0	79.9	139.9
79	34.5	13.2	53.2



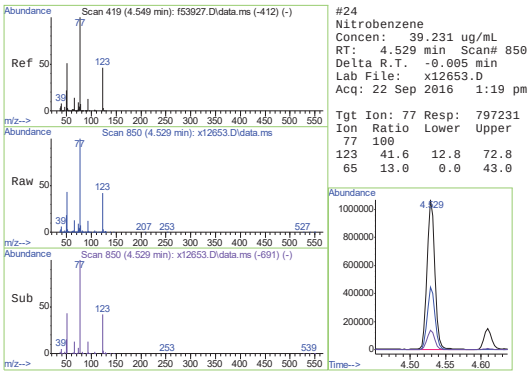
#21
4-methylphenol
Concen: 79.298 ug/mL
RT: 4.404 min Scan# 810
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:108 Resp: 1364159

Ion	Ratio	Lower	Upper
108	100		
107	109.0	76.9	142.9
79	34.5	26.6	39.8

9.3.1

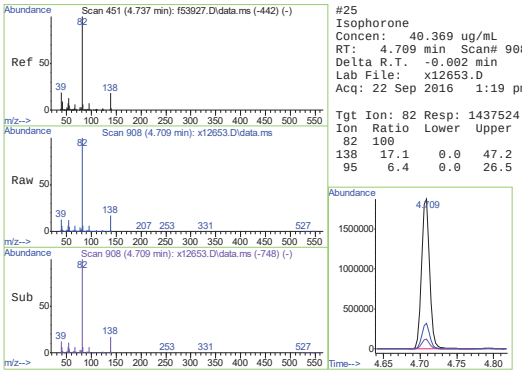
9



#24
Nitrobenzene
Concen: 39.231 ug/mL
RT: 4.529 min Scan# 850
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 77 Resp: 797231

Ion	Ratio	Lower	Upper
77	100		
123	41.6	12.8	72.8
65	13.0	0.0	43.0



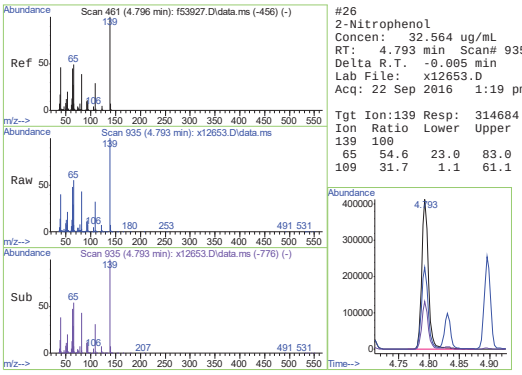
#25
Isophorone
Concen: 40.369 ug/mL
RT: 4.709 min Scan# 908
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 82 Resp: 1437524

Ion	Ratio	Lower	Upper
82	100		
138	17.1	0.0	47.2
95	6.4	0.0	26.5

9.3.1

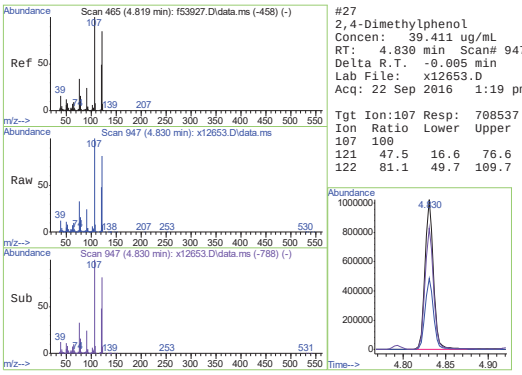
9



#26
2-Nitrophenol
Concen: 32.564 ug/mL
RT: 4.793 min Scan# 935
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:139 Resp: 314684

Ion	Ratio	Lower	Upper
139	100		
65	54.6	23.0	83.0
109	31.7	1.1	61.1



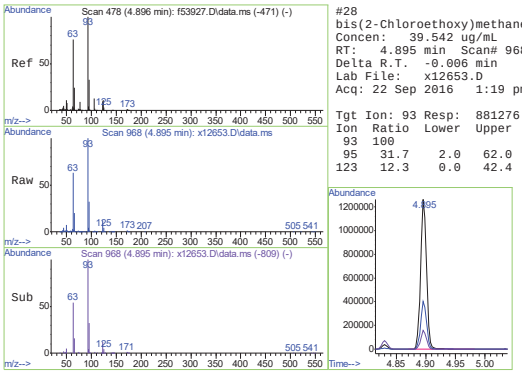
#27
2,4-Dimethylphenol
Concen: 39.411 ug/mL
RT: 4.830 min Scan# 947
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:107 Resp: 708537

Ion	Ratio	Lower	Upper
107	100		
121	47.5	16.6	76.6
122	81.1	49.7	109.7

9.3.1

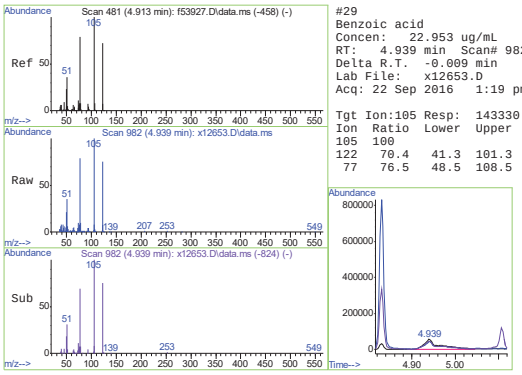
9



#28
bis(2-Chloroethoxy)methane
Concen: 39.542 ug/mL
RT: 4.895 min Scan# 968
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 93 Resp: 881276

Ion	Ratio	Lower	Upper
93	100		
95	31.7	2.0	62.0
123	12.3	0.0	42.4



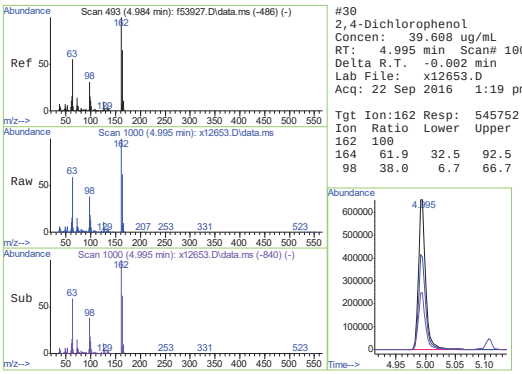
#29
Benzoic acid
Concen: 22.953 ug/mL
RT: 4.939 min Scan# 982
Delta R.T. -0.009 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:105 Resp: 143330

Ion	Ratio	Lower	Upper
105	100		
122	70.4	41.3	101.3
77	76.5	48.5	108.5

9.3.1

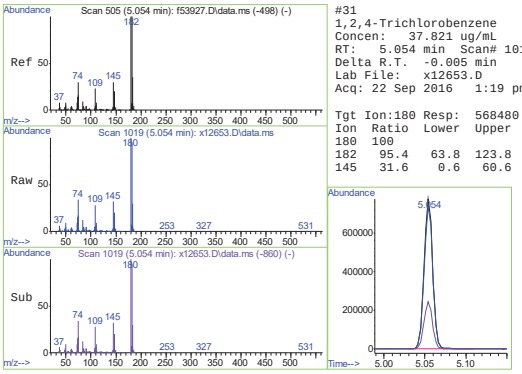
9



#30
2,4-Dichlorophenol
Concen: 39.608 ug/mL
RT: 4.995 min Scan# 1000
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:162 Resp: 545752

Ion	Ratio	Lower	Upper
162	100		
164	61.9	32.5	92.5
98	38.0	6.7	66.7



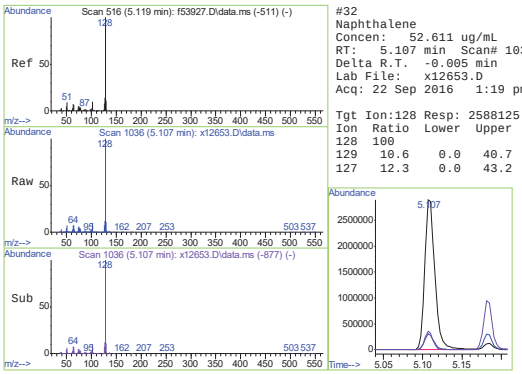
#31
1,2,4-Trichlorobenzene
Concen: 37.821 ug/mL
RT: 5.054 min Scan# 1019
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:180 Resp: 568480

Ion	Ratio	Lower	Upper
180	100		
182	95.4	63.8	123.8
145	31.6	0.6	60.6

9.3.1

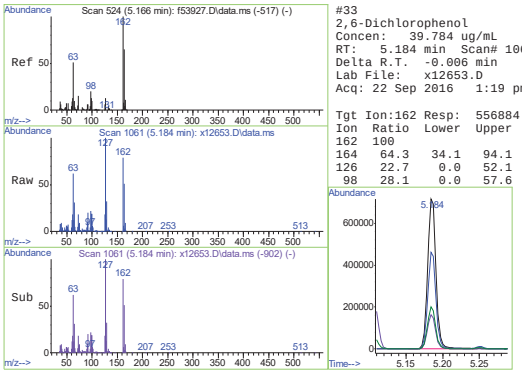
9



#32
Naphthalene
Concen: 52.611 ug/mL
RT: 5.107 min Scan# 1036
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:128 Resp: 2588125

Ion	Ratio	Lower	Upper
128	100		
129	10.6	0.0	40.7
127	12.3	0.0	43.2



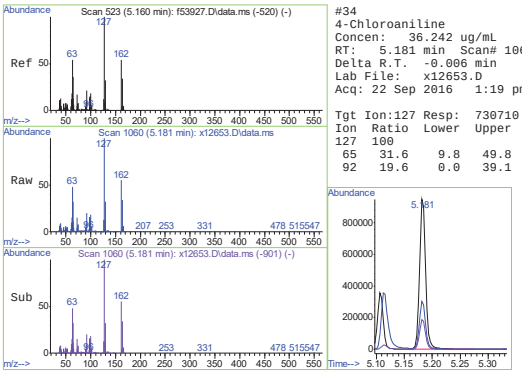
#33
2,6-Dichlorophenol
Concen: 39.784 ug/mL
RT: 5.184 min Scan# 1061
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:162 Resp: 556884

Ion	Ratio	Lower	Upper
162	100		
164	64.3	34.1	94.1
126	22.7	0.0	52.1
98	28.1	0.0	57.6

9.3.1

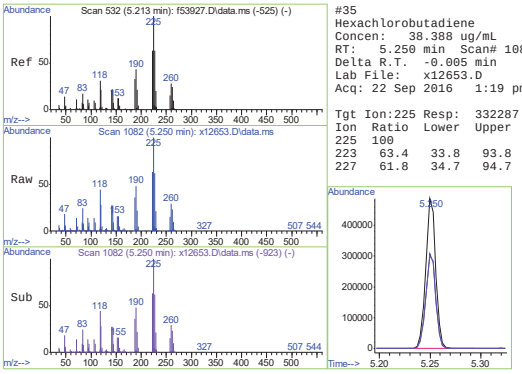
9



#34
4-Chloroaniline
Concen: 36.242 ug/mL
RT: 5.181 min Scan# 1060
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:127 Resp: 730710

Ion	Ratio	Lower	Upper
127	100		
65	31.6	9.8	49.8
92	19.6	0.0	39.1



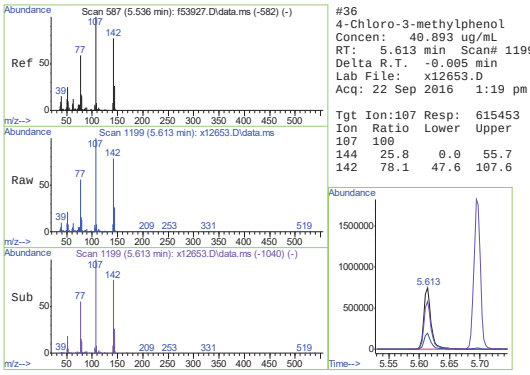
#35
Hexachlorobutadiene
Concen: 38.388 ug/mL
RT: 5.250 min Scan# 1082
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:225 Resp: 332287

Ion	Ratio	Lower	Upper
225	100		
223	63.4	33.8	93.8
227	61.8	34.7	94.7

9.3.1

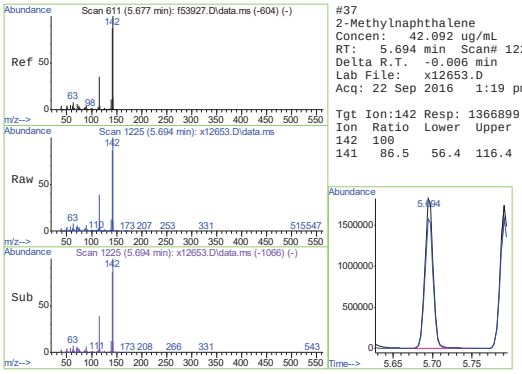
9



#36
4-Chloro-3-methylphenol
Concen: 40.893 ug/mL
RT: 5.613 min Scan# 1199
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:107 Resp: 615453

Ion	Ratio	Lower	Upper
107	100		
144	25.8	0.0	55.7
142	78.1	47.6	107.6



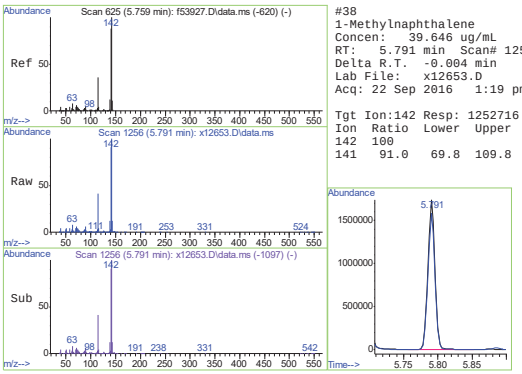
#37
2-Methylnaphthalene
Concen: 42.092 ug/mL
RT: 5.694 min Scan# 1225
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:142 Resp: 1366899

Ion	Ratio	Lower	Upper
142	100		
141	86.5	56.4	116.4

9.3.1

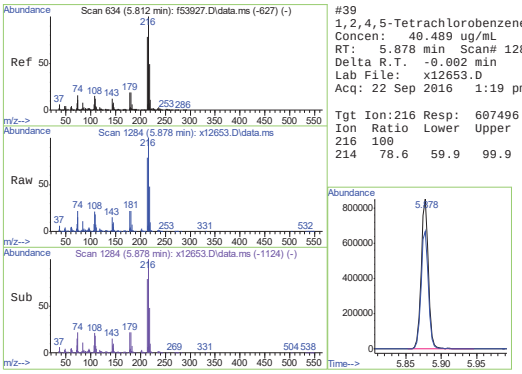
9



#38
1-Methylnaphthalene
Concen: 39.646 ug/mL
RT: 5.791 min Scan# 1256
Delta R.T. -0.004 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:142 Resp: 1252716

Ion	Ratio	Lower	Upper
142	100		
141	91.0	69.8	109.8



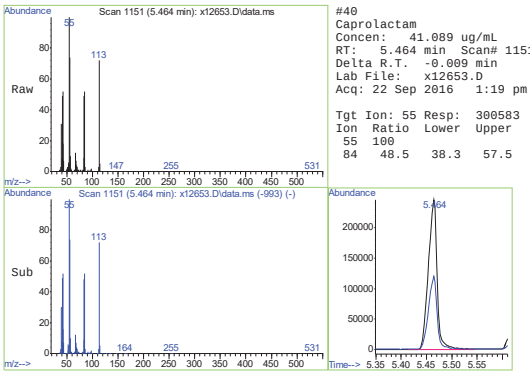
#39
1,2,4,5-Tetrachlorobenzene
Concen: 40.489 ug/mL
RT: 5.878 min Scan# 1284
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:216 Resp: 607496

Ion	Ratio	Lower	Upper
216	100		
214	78.6	59.9	99.9

9.3.1

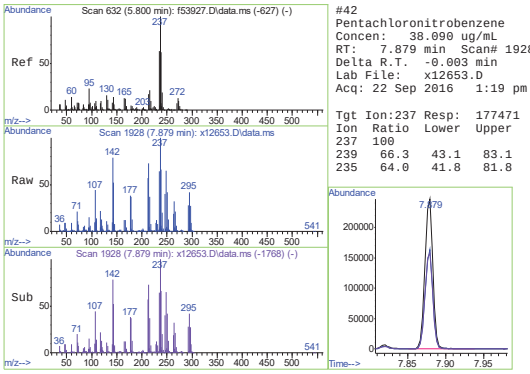
9



#40
Caprolactam
Concen: 41.089 ug/mL
RT: 5.464 min Scan# 1151
Delta R.T. -0.009 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 55 Resp: 300583

Ion	Ratio	Lower	Upper
55	100		
84	48.5	38.3	57.5



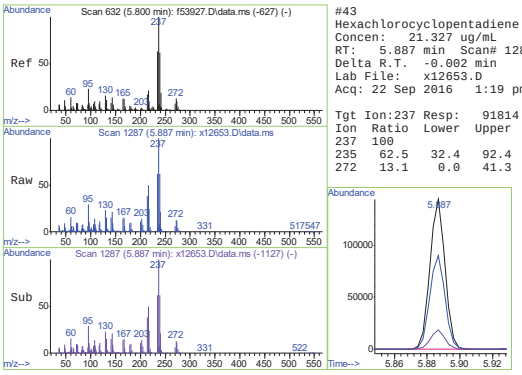
#42
Pentachloronitrobenzene
Concen: 38.090 ug/mL
RT: 7.879 min Scan# 1928
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:237 Resp: 177471

Ion	Ratio	Lower	Upper
237	100		
239	66.3	43.1	83.1
235	64.0	41.8	81.8

9.3.1

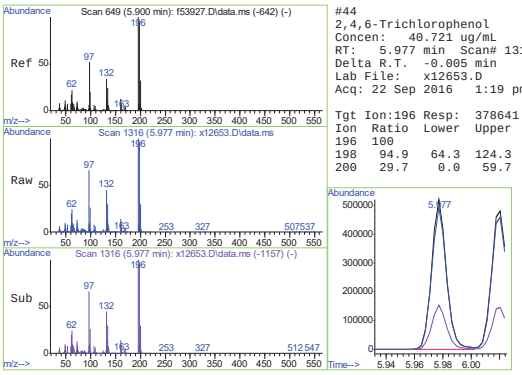
9



#43
Hexachlorocyclopentadiene
Concen: 21.327 ug/mL
RT: 5.887 min Scan# 1287
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:237 Resp: 91814

Ion	Ratio	Lower	Upper
237	100		
235	62.5	32.4	92.4
272	13.1	0.0	41.3

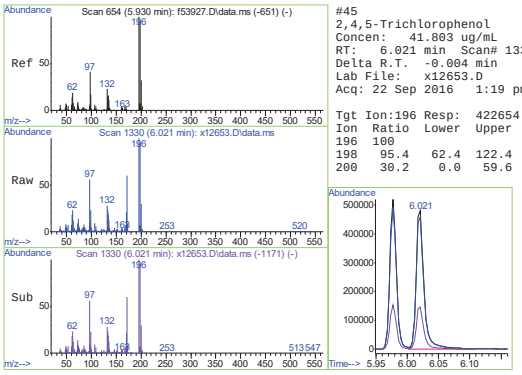


#44
2,4,6-Trichlorophenol
Concen: 40.721 ug/mL
RT: 5.977 min Scan# 1316
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:196 Resp: 378641

Ion	Ratio	Lower	Upper
196	100		
198	94.9	64.3	124.3
200	29.7	0.0	59.7

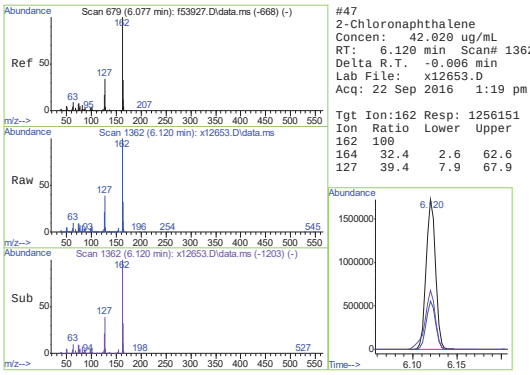
9.3.1 9



#45
2,4,5-Trichlorophenol
Concen: 41.803 ug/mL
RT: 6.021 min Scan# 1330
Delta R.T. -0.004 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:196 Resp: 422654

Ion	Ratio	Lower	Upper
196	100		
198	95.4	62.4	122.4
200	30.2	0.0	59.6

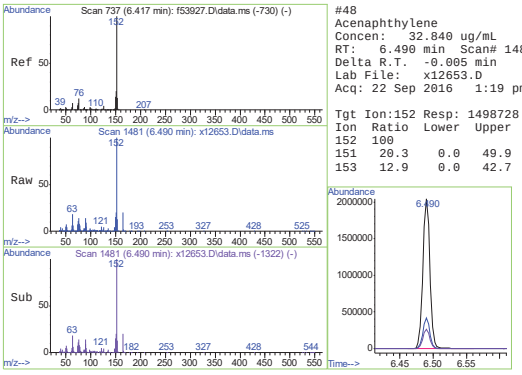


#47
2-Chloronaphthalene
Concen: 42.020 ug/mL
RT: 6.120 min Scan# 1362
Delta R.T. -0.006 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:162 Resp: 1256151

Ion	Ratio	Lower	Upper
162	100		
164	32.4	2.6	62.6
127	39.4	7.9	67.9

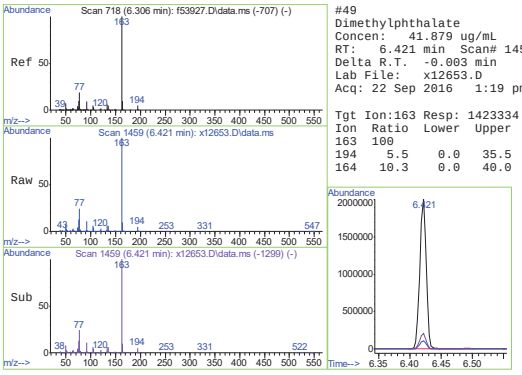
9.3.1 9



#48
Acenaphthylene
Concen: 32.840 ug/mL
RT: 6.490 min Scan# 1481
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:152 Resp: 1498728

Ion	Ratio	Lower	Upper
152	100		
151	20.3	0.0	49.9
153	12.9	0.0	42.7

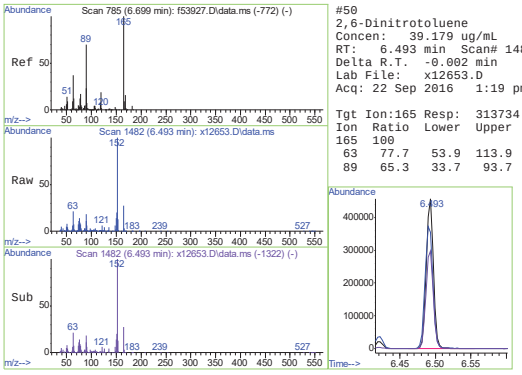


#49
Dimethylphthalate
Concen: 41.879 ug/mL
RT: 6.421 min Scan# 1459
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:163 Resp: 1423334

Ion	Ratio	Lower	Upper
163	100		
194	5.5	0.0	35.5
164	10.3	0.0	40.0

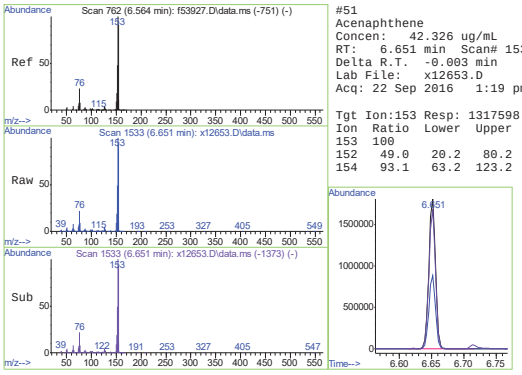
9.3.1 9



#50
2,6-Dinitrotoluene
Concen: 39.179 ug/mL
RT: 6.493 min Scan# 1482
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:165 Resp: 313734

Ion	Ratio	Lower	Upper
165	100		
63	77.7	53.9	113.9
89	65.3	33.7	93.7

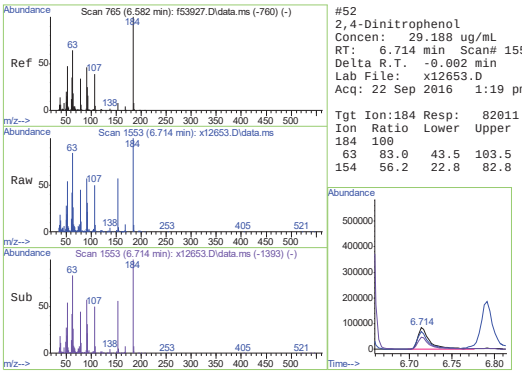


#51
Acenaphthene
Concen: 42.326 ug/mL
RT: 6.651 min Scan# 1533
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:153 Resp: 1317598

Ion	Ratio	Lower	Upper
153	100		
152	49.0	20.2	80.2
154	93.1	63.2	123.2

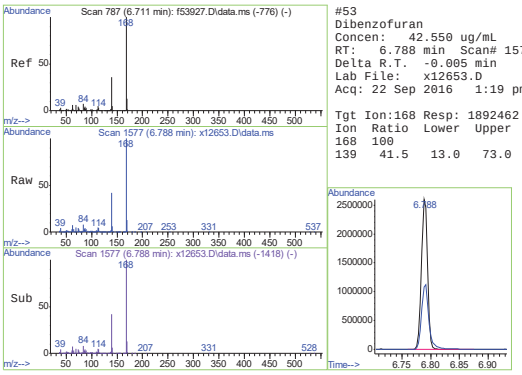
9.3.1 9



#52
2,4-Dinitrophenol
Concen: 29.188 ug/mL
RT: 6.714 min Scan# 1553
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:184 Resp: 82011

Ion	Ratio	Lower	Upper
184	100		
63	83.0	43.5	103.5
154	56.2	22.8	82.8



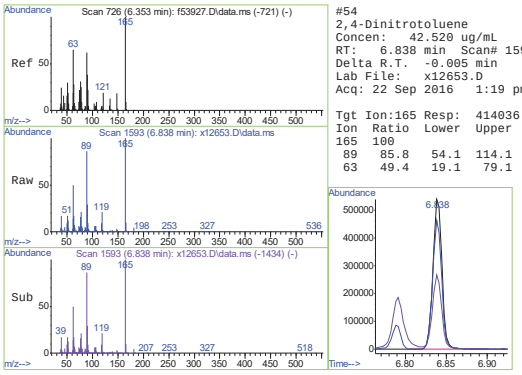
#53
Dibenzofuran
Concen: 42.550 ug/mL
RT: 6.788 min Scan# 1577
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:168 Resp: 1892462

Ion	Ratio	Lower	Upper
168	100		
139	41.5	13.0	73.0

9.3.1

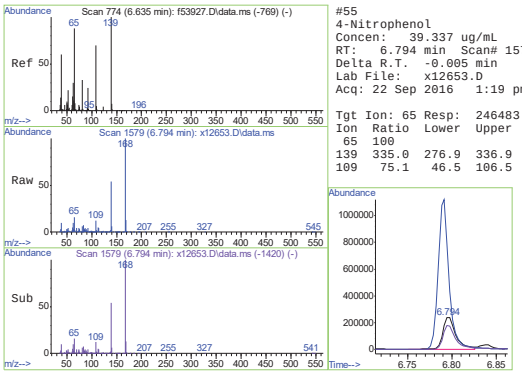
9



#54
2,4-Dinitrotoluene
Concen: 42.520 ug/mL
RT: 6.838 min Scan# 1593
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:165 Resp: 414036

Ion	Ratio	Lower	Upper
165	100		
89	85.8	54.1	114.1
63	49.4	19.1	79.1



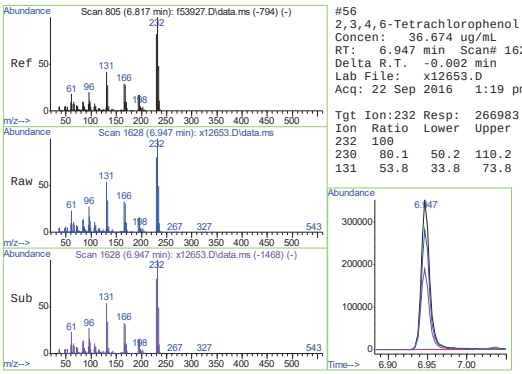
#55
4-Nitrophenol
Concen: 39.337 ug/mL
RT: 6.794 min Scan# 1579
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 65 Resp: 246483

Ion	Ratio	Lower	Upper
65	100		
139	335.0	276.9	336.9
109	75.1	46.5	106.5

9.3.1

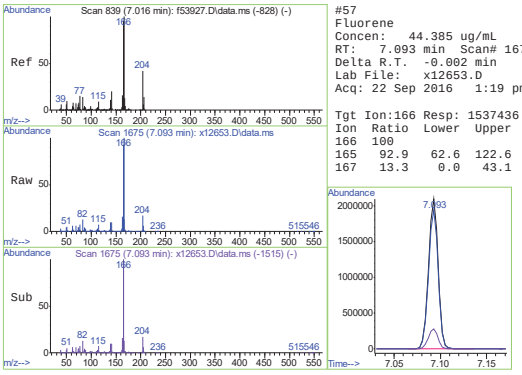
9



#56
2,3,4,6-Tetrachlorophenol
Concen: 36.674 ug/mL
RT: 6.947 min Scan# 1628
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:232 Resp: 266983

Ion	Ratio	Lower	Upper
232	100		
230	80.1	50.2	110.2
131	53.8	33.8	73.8



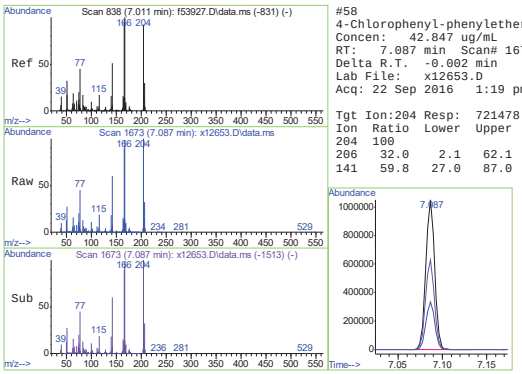
#57
Fluorene
Concen: 44.385 ug/mL
RT: 7.093 min Scan# 1675
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:166 Resp: 1537436

Ion	Ratio	Lower	Upper
166	100		
165	92.9	62.6	122.6
167	13.3	0.0	43.1

9.3.1

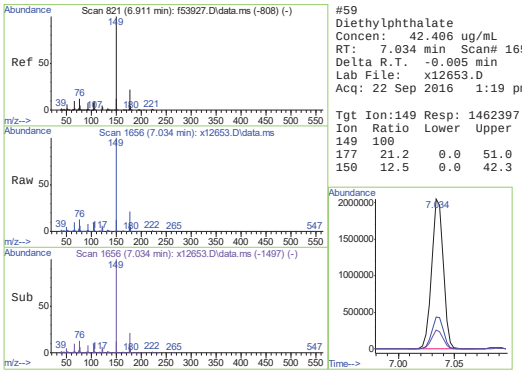
9



#58
4-Chlorophenyl-phenylether
Concen: 42.847 ug/mL
RT: 7.087 min Scan# 1673
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:204 Resp: 721478

Ion	Ratio	Lower	Upper
204	100		
206	32.0	2.1	62.1
141	59.8	27.0	87.0



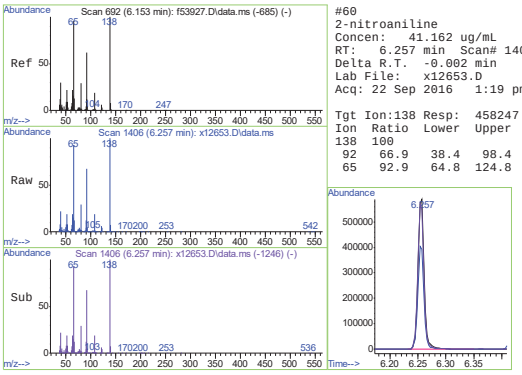
#59
Diethylphthalate
Concen: 42.406 ug/mL
RT: 7.034 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:149 Resp: 1462397

Ion	Ratio	Lower	Upper
149	100		
177	21.2	0.0	51.0
150	12.5	0.0	42.3

9.3.1

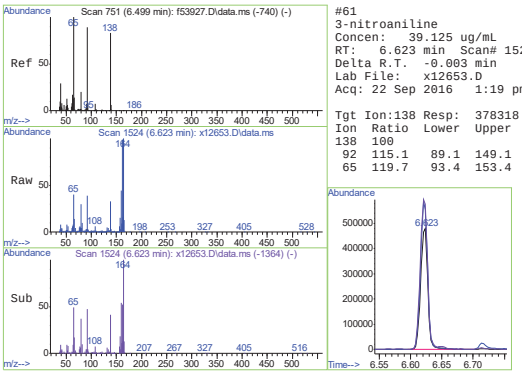
9



#60
2-nitroaniline
Concen: 41.162 ug/mL
RT: 6.257 min Scan# 1406
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:138 Resp: 458247

Ion	Ratio	Lower	Upper
138	100		
92	66.9	38.4	98.4
65	92.9	64.8	124.8

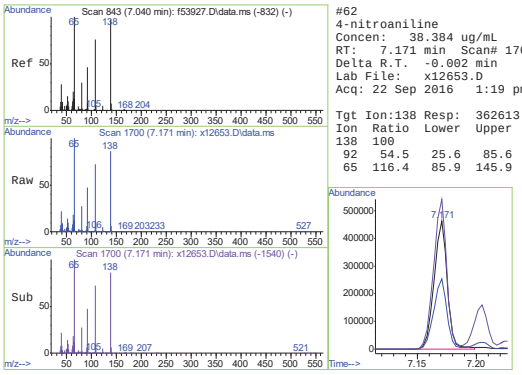


#61
3-nitroaniline
Concen: 39.125 ug/mL
RT: 6.623 min Scan# 1524
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:138 Resp: 378318

Ion	Ratio	Lower	Upper
138	100		
92	115.1	89.1	149.1
65	119.7	93.4	153.4

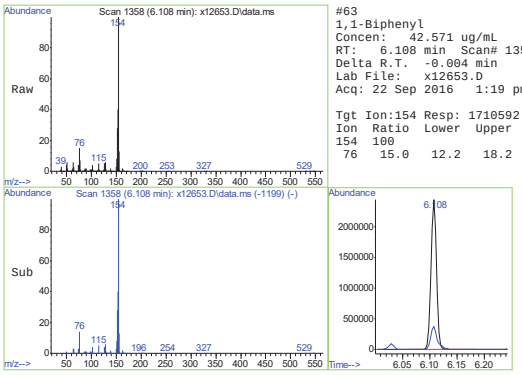
9.3.1 9



#62
4-nitroaniline
Concen: 38.384 ug/mL
RT: 7.171 min Scan# 1700
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:138 Resp: 362613

Ion	Ratio	Lower	Upper
138	100		
92	54.5	25.6	85.6
65	116.4	85.9	145.9

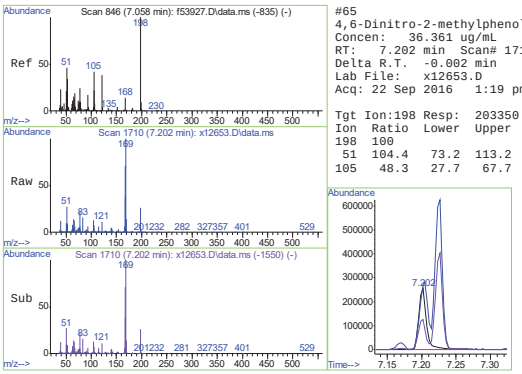


#63
1,1-Biphenyl
Concen: 42.571 ug/mL
RT: 6.108 min Scan# 1358
Delta R.T. -0.004 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:154 Resp: 1710592

Ion	Ratio	Lower	Upper
154	100		
76	15.0	12.2	18.2

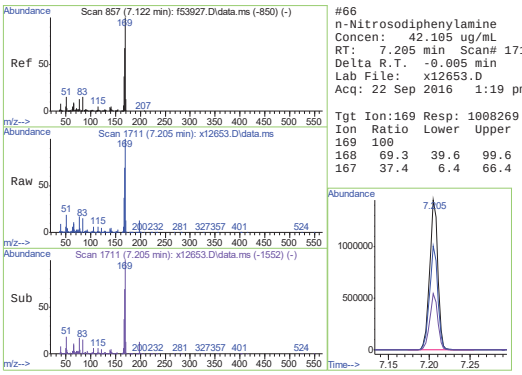
9.3.1 9



#65
4,6-Dinitro-2-methylphenol
Concen: 36.361 ug/mL
RT: 7.202 min Scan# 1710
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:198 Resp: 203350

Ion	Ratio	Lower	Upper
198	100		
51	104.4	73.2	113.2
105	48.3	27.7	67.7

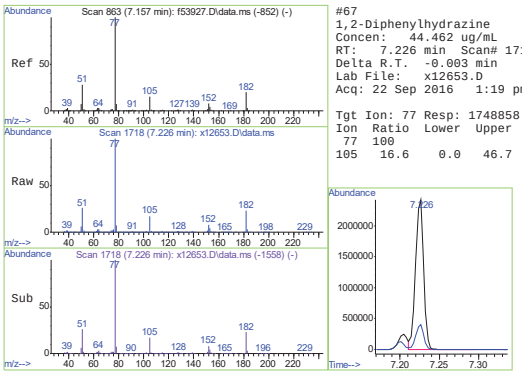


#66
n-Nitrosodiphenylamine
Concen: 42.105 ug/mL
RT: 7.205 min Scan# 1711
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:169 Resp: 1008269

Ion	Ratio	Lower	Upper
169	100		
168	69.3	39.6	99.6
167	37.4	6.4	66.4

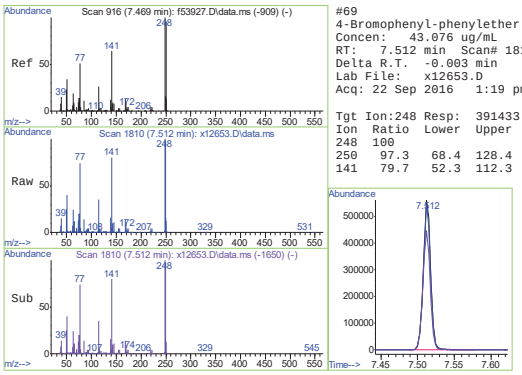
9.3.1 9



#67
1,2-Diphenylhydrazine
Concen: 44.462 ug/mL
RT: 7.226 min Scan# 1718
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 77 Resp: 1748858

Ion	Ratio	Lower	Upper
77	100		
105	16.6	0.0	46.7

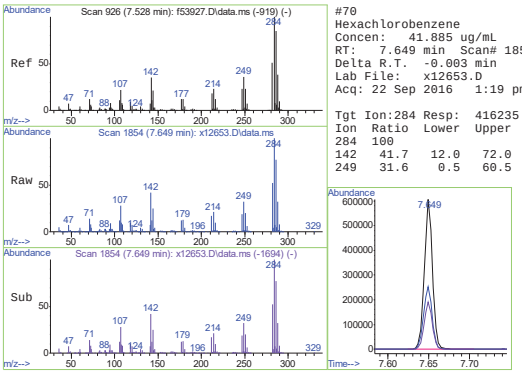


#69
4-Bromophenyl-phenylether
Concen: 43.076 ug/mL
RT: 7.512 min Scan# 1810
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:248 Resp: 391433

Ion	Ratio	Lower	Upper
248	100		
250	97.3	68.4	128.4
141	79.7	52.3	112.3

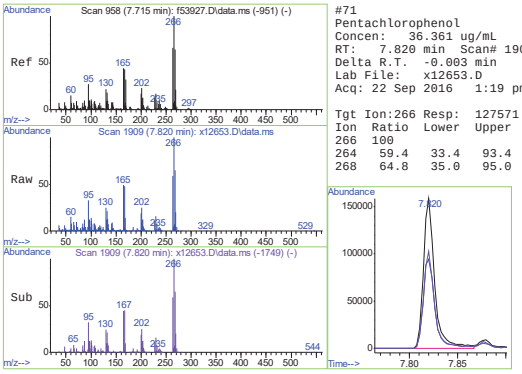
9.3.1 9



#70
Hexachlorobenzene
Concen: 41.885 ug/mL
RT: 7.649 min Scan# 1854
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:284 Resp: 416235

Ion	Ratio	Lower	Upper
284	100		
142	41.7	12.0	72.0
249	31.6	0.5	60.5



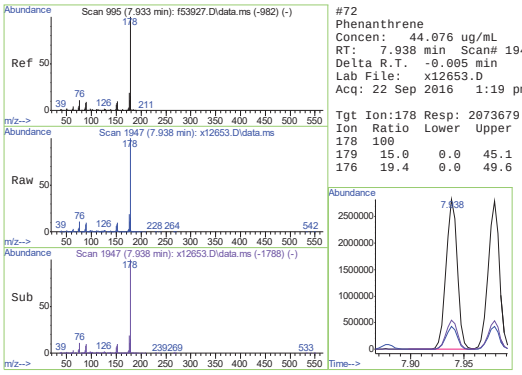
#71
Pentachlorophenol
Concen: 36.361 ug/mL
RT: 7.820 min Scan# 1909
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:266 Resp: 127571

Ion	Ratio	Lower	Upper
266	100		
264	59.4	33.4	93.4
268	64.8	35.0	95.0

9.3.1

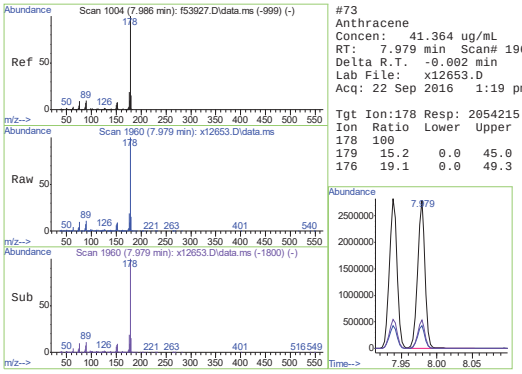
9



#72
Phenanthrene
Concen: 44.076 ug/mL
RT: 7.938 min Scan# 1947
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:178 Resp: 2073679

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.1
176	19.4	0.0	49.6



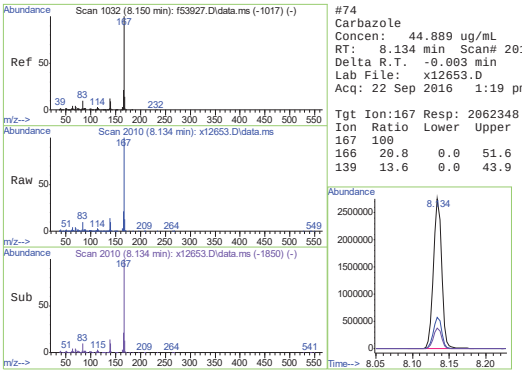
#73
Anthracene
Concen: 41.364 ug/mL
RT: 7.979 min Scan# 1960
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:178 Resp: 2054215

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.0
176	19.1	0.0	49.3

9.3.1

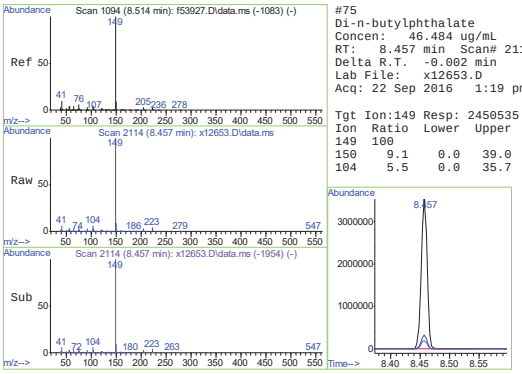
9



#74
Carbazole
Concen: 44.889 ug/mL
RT: 8.134 min Scan# 2010
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:167 Resp: 2062348

Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.0	51.6
139	13.6	0.0	43.9



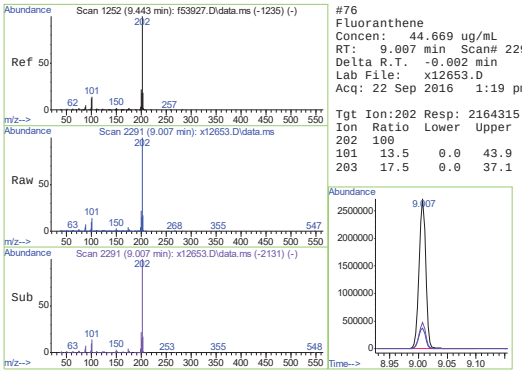
#75
Di-n-butylphthalate
Concen: 46.484 ug/mL
RT: 8.457 min Scan# 2114
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:149 Resp: 2450535

Ion	Ratio	Lower	Upper
149	100		
150	9.1	0.0	39.0
104	5.5	0.0	35.7

9.3.1

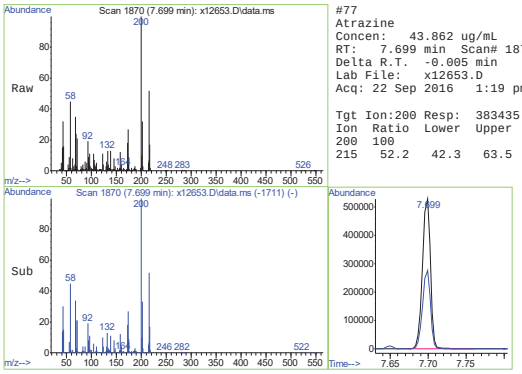
9



#76
Fluoranthene
Concen: 44.669 ug/mL
RT: 9.007 min Scan# 2291
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:202 Resp: 2164315

Ion	Ratio	Lower	Upper
202	100		
101	13.5	0.0	43.9
203	17.5	0.0	37.1



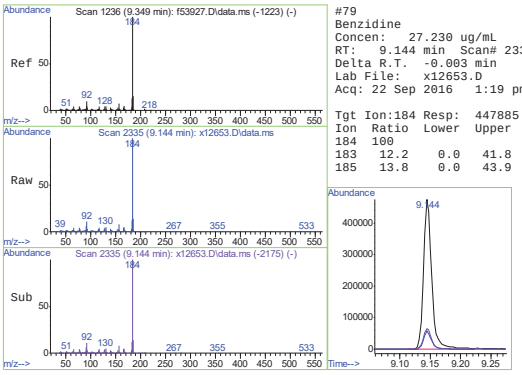
#77
Atrazine
Concen: 43.862 ug/mL
RT: 7.699 min Scan# 1870
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:200 Resp: 383435

Ion	Ratio	Lower	Upper
200	100		
215	52.2	42.3	63.5

9.3.1

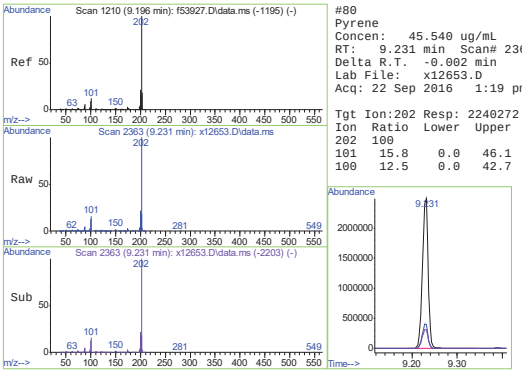
9



#79
Benzidine
Concen: 27.230 ug/mL
RT: 9.144 min Scan# 2335
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:184 Resp: 447885

Ion	Ratio	Lower	Upper
184	100		
183	12.2	0.0	41.8
185	13.8	0.0	43.9

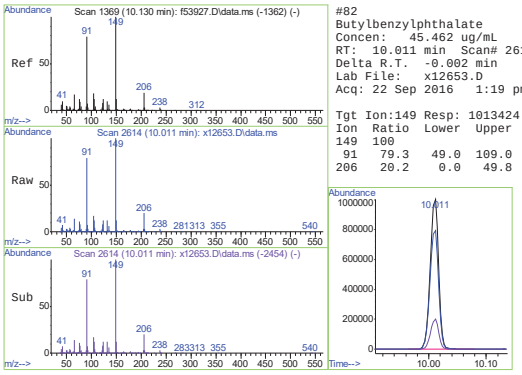


#80
Pyrene
Concen: 45.540 ug/mL
RT: 9.231 min Scan# 2363
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:202 Resp: 2240272

Ion	Ratio	Lower	Upper
202	100		
101	15.8	0.0	46.1
100	12.5	0.0	42.7

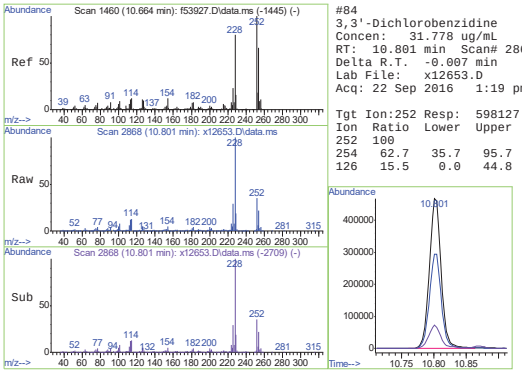
9.3.1 9



#82
Butylbenzylphthalate
Concen: 45.462 ug/mL
RT: 10.011 min Scan# 2614
Delta R.T. -0.002 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:149 Resp: 1013424

Ion	Ratio	Lower	Upper
149	100		
91	79.3	49.0	109.0
206	20.2	0.0	49.8

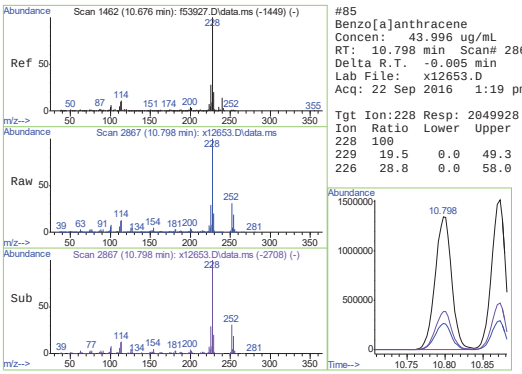


#84
3,3'-Dichlorobenzidine
Concen: 31.778 ug/mL
RT: 10.801 min Scan# 2868
Delta R.T. -0.007 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:252 Resp: 598127

Ion	Ratio	Lower	Upper
252	100		
254	62.7	35.7	95.7
126	15.5	0.0	44.8

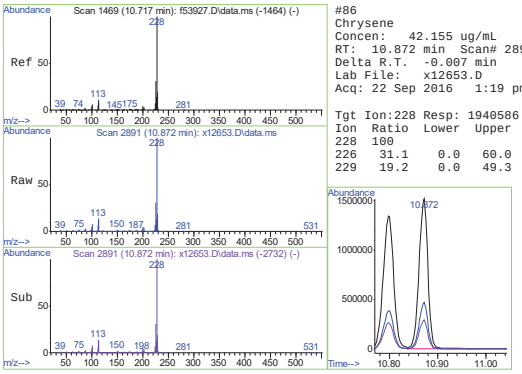
9.3.1 9



#85
Benzo[a]anthracene
Concen: 43.996 ug/mL
RT: 10.798 min Scan# 2867
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:228 Resp: 2049928

Ion	Ratio	Lower	Upper
228	100		
229	19.5	0.0	49.3
226	28.8	0.0	58.0

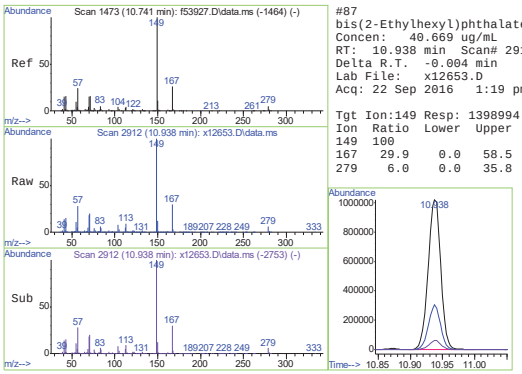


#86
Chrysene
Concen: 42.155 ug/mL
RT: 10.872 min Scan# 2891
Delta R.T. -0.007 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:228 Resp: 1940586

Ion	Ratio	Lower	Upper
228	100		
226	31.1	0.0	60.0
229	19.2	0.0	49.3

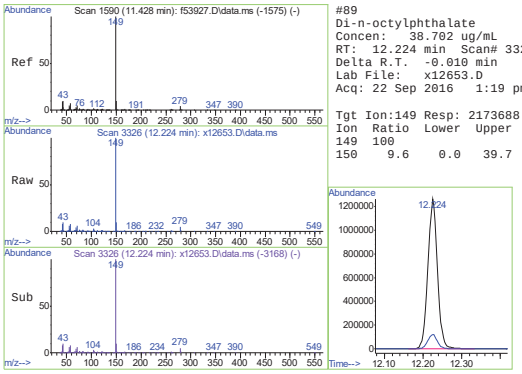
9.3.1 9



#87
bis(2-Ethylhexyl)phthalate
Concen: 40.669 ug/mL
RT: 10.938 min Scan# 2912
Delta R.T. -0.004 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:149 Resp: 1398994

Ion	Ratio	Lower	Upper
149	100		
167	29.9	0.0	58.5
279	6.0	0.0	35.8

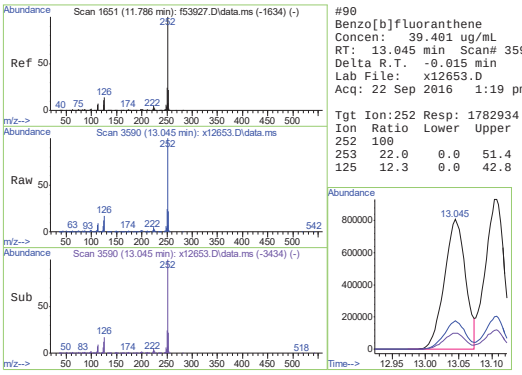


#89
Di-n-octylphthalate
Concen: 38.702 ug/mL
RT: 12.224 min Scan# 3326
Delta R.T. -0.010 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:149 Resp: 2173688

Ion	Ratio	Lower	Upper
149	100		
150	9.6	0.0	39.7

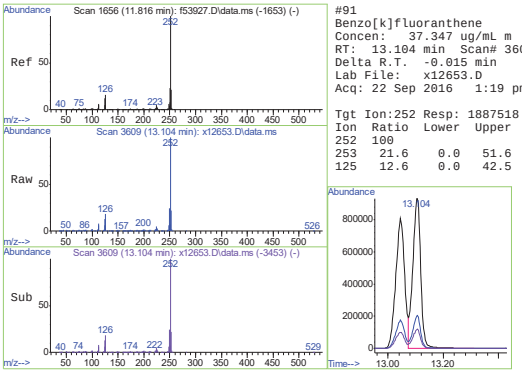
9.3.1 9



#90
Benzo[b]fluoranthene
Concen: 39.401 ug/mL
RT: 13.045 min Scan# 3590
Delta R.T. -0.015 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:252 Resp: 1782934

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.4
125	12.3	0.0	42.8

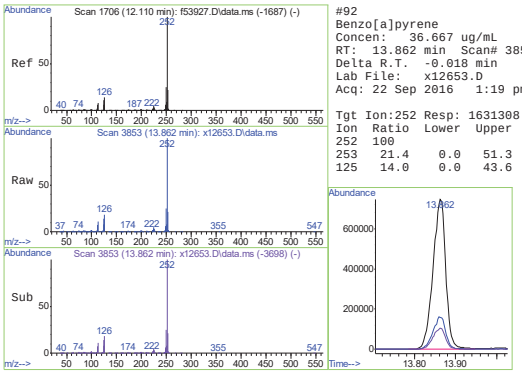


#91
Benzo[k]fluoranthene
Concen: 37.347 ug/mL m
RT: 13.104 min Scan# 3609
Delta R.T. -0.015 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:252 Resp: 1887518

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.6
125	12.6	0.0	42.5

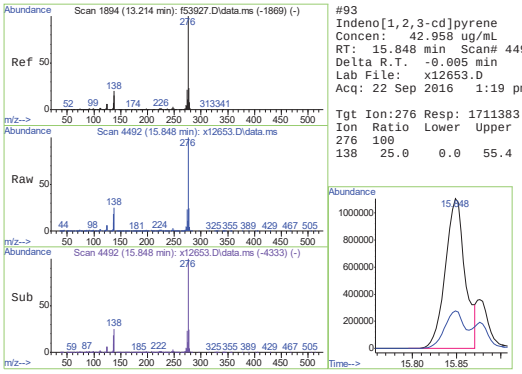
9.3.1 9



#92
Benzo[a]pyrene
Concen: 36.667 ug/mL
RT: 13.862 min Scan# 3853
Delta R.T. -0.018 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:252 Resp: 1631308

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	51.3
125	14.0	0.0	43.6

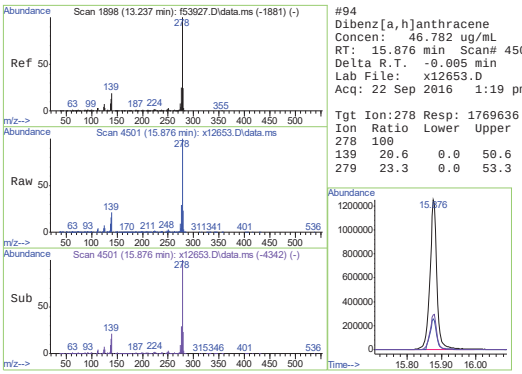


#93
Indeno[1,2,3-cd]pyrene
Concen: 42.958 ug/mL
RT: 15.848 min Scan# 4492
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:276 Resp: 1711383

Ion	Ratio	Lower	Upper
276	100		
138	25.0	0.0	55.4

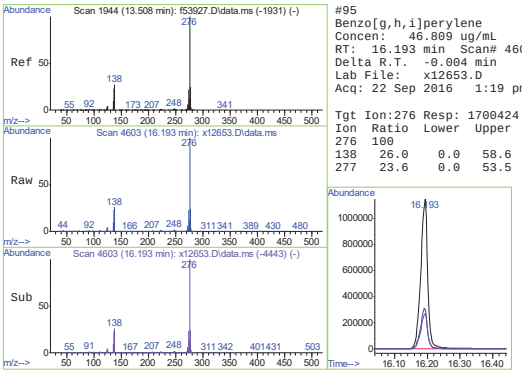
9.3.1 9



#94
Dibenz[a,h]anthracene
Concen: 46.782 ug/mL
RT: 15.876 min Scan# 4501
Delta R.T. -0.005 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:278 Resp: 1769636

Ion	Ratio	Lower	Upper
278	100		
139	20.6	0.0	50.6
279	23.3	0.0	53.3

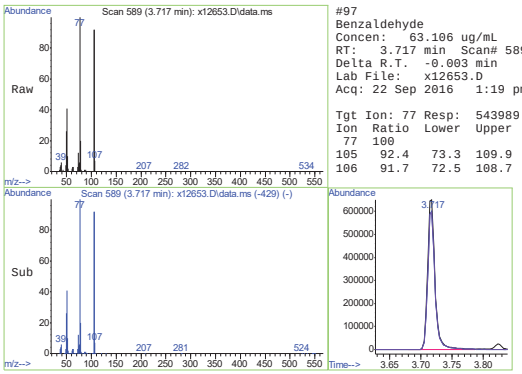


#95
Benzo[g,h,i]perylene
Concen: 46.809 ug/mL
RT: 16.193 min Scan# 4603
Delta R.T. -0.004 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion:276 Resp: 1700424

Ion	Ratio	Lower	Upper
276	100		
138	26.0	0.0	58.6
277	23.6	0.0	53.5

9.3.1 9



#97
Benzaldehyde
Concen: 63.106 ug/mL
RT: 3.717 min Scan# 589
Delta R.T. -0.003 min
Lab File: x12653.D
Acq: 22 Sep 2016 1:19 pm

Tgt Ion: 77 Resp: 543989

Ion	Ratio	Lower	Upper
77	100		
105	92.4	73.3	109.9
106	91.7	72.5	108.7

9.3.1 9

Manual Integrations
APPROVED
(compounds with "m" flag)
Doug Yargeau
09/23/16 14:46

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12654.D
Sample : OP48710-MS
Misc : op48710,msx425,20.38,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:43 pm Operator: AkinA

Quant Time: Sep 22 15:59:37 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	513235	40.00	ug/mL	0.00
22) Naphthalene-d8	5.091	136	1899808	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.624	164	1124233	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.920	188	1829542	40.00	ug/mL	0.00
78) Chrysene-d12	10.829	240	1866838	40.00	ug/mL	0.00
88) Perylene-d12	14.008	264	1629778	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	513235	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	744085	42.78	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 85.56%			
8) Phenol-d5	3.814	99	985997	43.81	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 87.62%			
23) Nitrobenzene-d5	4.513	82	879175	42.61	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 85.22%			
46) 2-Fluorobiphenyl	6.030	172	1695966	44.02	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 88.04%			
68) 2,4,6-Tribromophenol	7.329	330	213623	45.09	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 90.18%			
81) Terphenyl-d14	9.390	244	1844008	46.82	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 93.64%			
Target Compounds						Qvalue
2) N-nitrosodimethylamine	2.235	74	434010	33.201	ug/mL	98
3) 1,4-Dioxane	2.008	88	178534	20.694	ug/mL	97
4) Pyridine	2.235	79	608126	26.614	ug/mL	99
5) Aniline	3.823	93	860696	32.158	ug/mL	75
7) bis(2-Chloroethyl)ether	3.854	63	520755	39.832	ug/mL	96
9) Phenol	3.823	94	1063195	43.462	ug/mL	91
10) 2-Chlorophenol	3.910	128	720628	40.694	ug/mL	98
11) 1,3-Dichlorobenzene	4.010	146	732577	38.273	ug/mL	99
12) 1,4-Dichlorobenzene	4.050	146	756472	37.621	ug/mL	99
13) 1,2-Dichlorobenzene	4.202	146	719073	38.966	ug/mL	99
14) Benzyl alcohol	4.171	108	533940	44.802	ug/mL	99
15) bis(2-chloroisopropyl)...	4.280	45	841004	45.904	ug/mL	86
16) o-cresol	4.283	108	706064	42.802	ug/mL	97
17) Acetophenone	4.383	105	1133940	42.601	ug/mL	99
18) Hexachloroethane	4.445	117	301621	37.534	ug/mL	99
19) N-Nitroso-di-n-propyla...	4.395	70	580831	48.437	ug/mL	98
20) m+p-cresols	4.404	108	1504694	86.385	ug/mL	99
21) 4-methylphenol	4.404	108	1504694	86.385	ug/mL	99
24) Nitrobenzene	4.529	77	876769	43.296	ug/mL	99
25) Isophorone	4.709	82	1566533	44.147	ug/mL	100
26) 2-Nitrophenol	4.793	139	365069	37.729	ug/mL	99
27) 2,4-Dimethylphenol	4.830	107	783155	43.715	ug/mL	98
28) bis(2-Chloroethoxy)met...	4.895	93	955709	43.032	ug/mL	99
29) Benzoic acid	4.920	105	19883m	7.829	ug/mL	
30) 2,4-Dichlorophenol	4.995	162	603182	43.931	ug/mL	99
31) 1,2,4-Trichlorobenzene	5.054	180	631210	42.142	ug/mL	99
32) Naphthalene	5.110	128	2848058	58.098	ug/mL	96
33) 2,6-Dichlorophenol	5.184	162	620886	44.513	ug/mL	99
34) 4-Chloroaniline	5.181	127	839127	41.766	ug/mL	98
35) Hexachlorobutadiene	5.250	225	369988	42.894	ug/mL	97

9.4.1 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12654.D
Sample : OP48710-MS
Misc : op48710,msx425,20.38,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:43 pm Operator: AkinA

Quant Time: Sep 22 15:59:37 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.613	107	678141	45.216	ug/mL	100
37) 2-Methylnaphthalene	5.694	142	1492629	46.125	ug/mL	100
38) 1-Methylnaphthalene	5.791	142	1376370	43.713	ug/mL	98
39) 1,2,4,5-Tetrachloroben...	5.878	216	669385	44.771	ug/mL	99
40) Caprolactam	5.452	55	270101	37.053	ug/mL	99
42) Pentachloronitrobenzene	7.879	237	205357	42.894	ug/mL	97
43) Hexachlorocyclopentadiene	5.887	237	106213	23.291	ug/mL	99
44) 2,4,6-Trichlorophenol	5.977	196	426395	44.826	ug/mL	99
45) 2,4,5-Trichlorophenol	6.021	196	465042	44.961	ug/mL	100
47) 2-Chloronaphthalene	6.120	162	1383472	45.239	ug/mL	98
48) Acenaphthylene	6.490	152	1650493	35.352	ug/mL	100
49) Dimethylphthalate	6.422	163	1593967	45.846	ug/mL	99
50) 2,6-Dinitrotoluene	6.493	165	354660	43.180	ug/mL	94
51) Acenaphthene	6.652	153	1461948	45.907	ug/mL	99
52) 2,4-Dinitrophenol	6.717	184	23459	14.886	ug/mL	98
53) Dibenzofuran	6.788	168	2112353	46.426	ug/mL	97
54) 2,4-Dinitrotoluene	6.838	165	467455	46.926	ug/mL	97
55) 4-Nitrophenol	6.794	65	281800	43.688	ug/mL	92
56) 2,3,4,6-Tetrachlorophenol	6.947	232	306798	40.765	ug/mL	99
57) Fluorene	7.093	166	1709021	48.230	ug/mL	100
58) 4-Chlorophenyl-phenyle...	7.087	204	812124	47.146	ug/mL	98
59) Diethylphthalate	7.034	149	1638931	46.457	ug/mL	100
60) 2-nitroaniline	6.257	138	512650	44.901	ug/mL	99
61) 3-nitroaniline	6.620	138	435963	43.971	ug/mL	99
62) 4-nitroaniline	7.171	138	413641	42.673	ug/mL	99
63) 1,1-Biphenyl	6.108	154	1870833	45.512	ug/mL	100
65) 4,6-Dinitro-2-methylph...	7.202	198	157793	28.271	ug/mL#	72
66) n-Nitrosodiphenylamine	7.205	169	1123328	44.465	ug/mL	99
67) 1,2-Diphenylhydrazine	7.226	77	1934240	46.612	ug/mL	99
69) 4-Bromophenyl-phenylether	7.512	248	435287	45.405	ug/mL	97
70) Hexachlorobenzene	7.649	284	471819	44.734	ug/mL	99
71) Pentachlorophenol	7.820	266	150522	39.583	ug/mL	97
72) Phenanthrene	7.938	178	2363771	47.623	ug/mL	100
73) Anthracene	7.979	178	2348602	44.826	ug/mL	99
74) Carbazole	8.134	167	2373755	48.973	ug/mL	99
75) Di-n-butylphthalate	8.457	149	2839554	51.056	ug/mL	100
76) Fluoranthene	9.007	202	2527197	49.440	ug/mL	99
77) Atrazine	7.699	200	436413	47.320	ug/mL	100
79) Benzidine	9.144	184	493544	27.005	ug/mL	99
80) Pyrene	9.231	202	2617898	47.879	ug/mL	98
82) Butylbenzylphthalate	10.011	149	1192596	48.133	ug/mL	100
84) 3,3'-Dichlorobenzidine	10.801	252	795102	37.577	ug/mL	98
85) Benzo[a]anthracene	10.798	228	2479746	47.883	ug/mL	100
86) Chrysene	10.872	228	2305542	45.059	ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.938	149	1665974	43.473	ug/mL	100
89) Di-n-octylphthalate	12.224	149	2611476	41.881	ug/mL	100
90) Benzo[b]fluoranthene	13.051	252	2132962	42.566	ug/mL	99
91) Benzo[k]fluoranthene	13.110	252	2160761	38.783	ug/mL	100
92) Benzo[a]pyrene	13.865	252	1944512	39.574	ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.851	276	1975491	44.977	ug/mL	97
94) Dibenz[a,h]anthracene	15.879	278	2079450	49.928	ug/mL	98
95) Benzo[g,h,i]perylene	16.193	276	1942936	48.578	ug/mL	98
97) Benzaldehyde	3.714	77	608570	72.312	ug/mL	99

9.4.1 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12654.D
Sample : OP48710-MS
Misc : op48710,msx425,20.38,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:43 pm Operator: AkinA

Quant Time: Sep 22 15:59:37 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

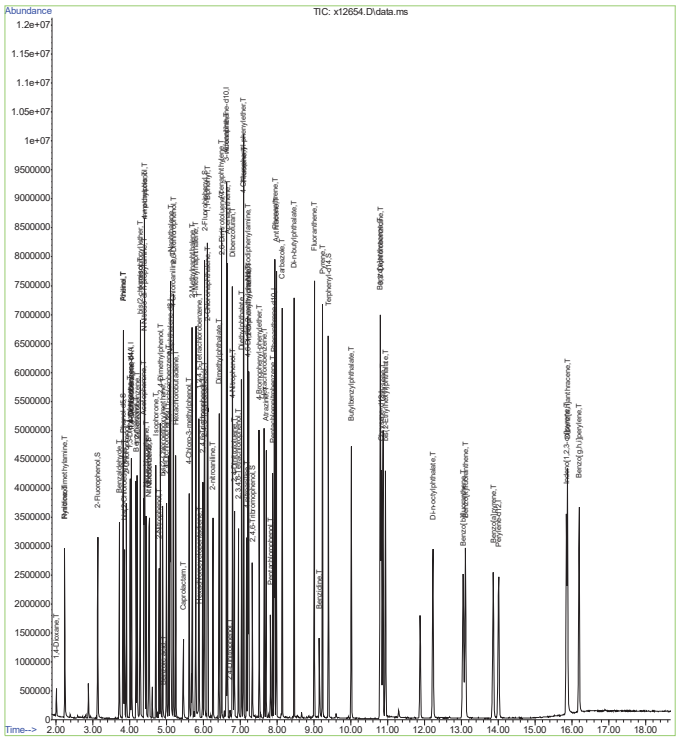
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.4.1 9

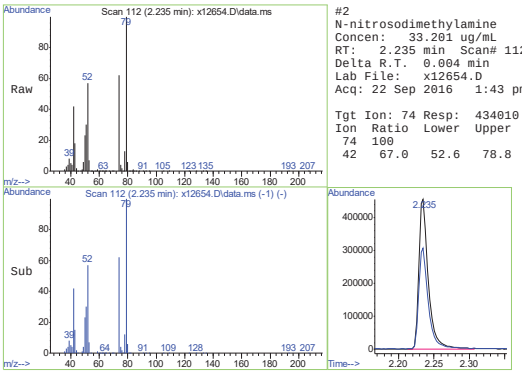
Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12654.D
Sample : OP48710-MS
Misc : op48710,msx425,20.38,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:43 pm Operator: AkinA

Quant Time: Sep 22 15:59:37 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



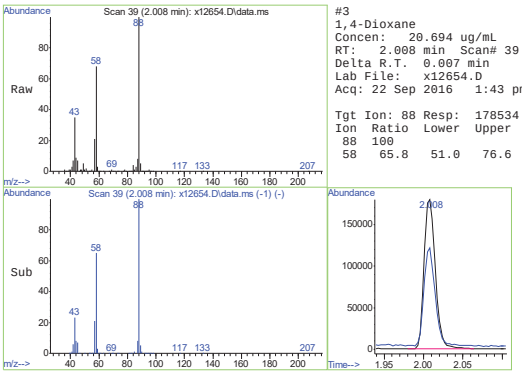
9.4.1 9



#2
N-nitrosodimethylamine
Concen: 33.201 ug/mL
RT: 2.235 min Scan# 112
Delta R.T. 0.004 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 74 Resp: 434010

Ion	Ratio	Lower	Upper
74	100		
42	67.0	52.6	78.8



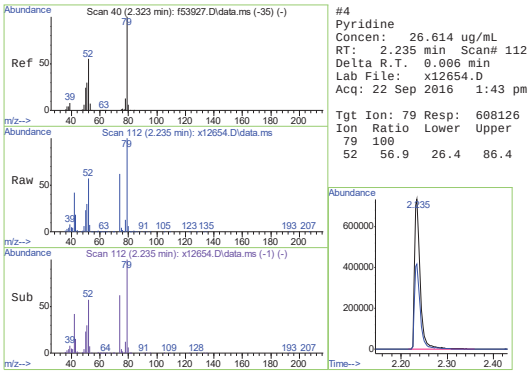
#3
1,4-Dioxane
Concen: 20.694 ug/mL
RT: 2.008 min Scan# 39
Delta R.T. 0.007 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 88 Resp: 178534

Ion	Ratio	Lower	Upper
88	100		
58	65.8	51.0	76.6

9.4.1

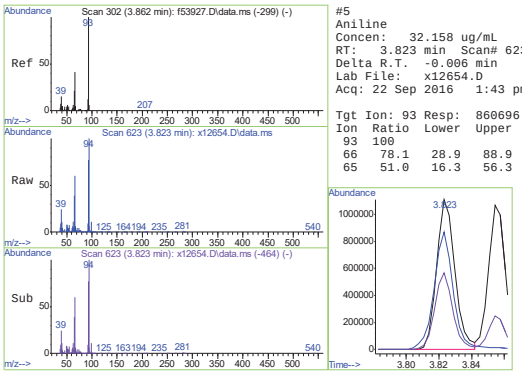
9



#4
Pyridine
Concen: 26.614 ug/mL
RT: 2.235 min Scan# 112
Delta R.T. 0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 79 Resp: 608126

Ion	Ratio	Lower	Upper
79	100		
52	56.9	26.4	86.4



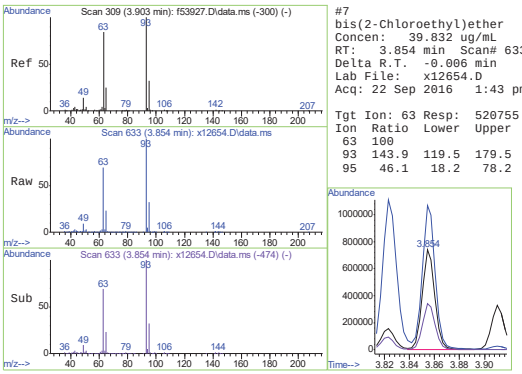
#5
Aniline
Concen: 32.158 ug/mL
RT: 3.823 min Scan# 623
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 93 Resp: 860696

Ion	Ratio	Lower	Upper
93	100		
66	78.1	28.9	88.9
65	51.0	16.3	56.3

9.4.1

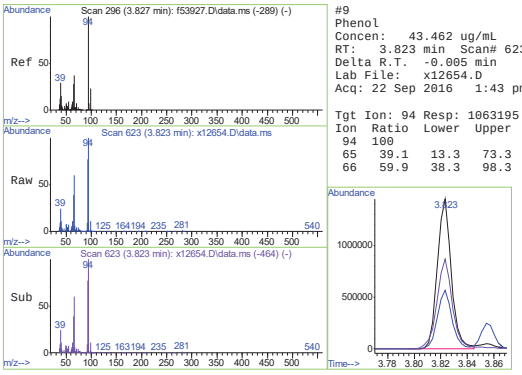
9



#7
bis(2-Chloroethyl)ether
Concen: 39.832 ug/mL
RT: 3.854 min Scan# 633
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 63 Resp: 520755

Ion	Ratio	Lower	Upper
63	100		
93	143.9	119.5	179.5
95	46.1	18.2	78.2



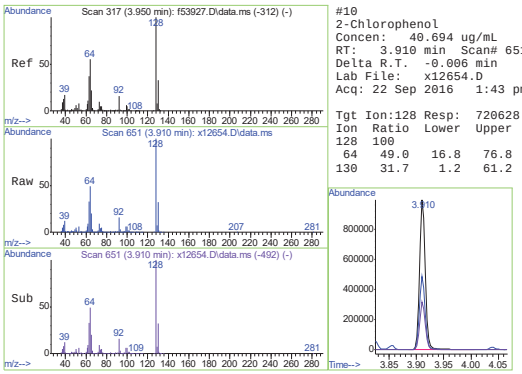
#9
Phenol
Concen: 43.462 ug/mL
RT: 3.823 min Scan# 623
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 94 Resp: 1063195

Ion	Ratio	Lower	Upper
94	100		
65	39.1	13.3	73.3
66	59.9	38.3	98.3

9.4.1

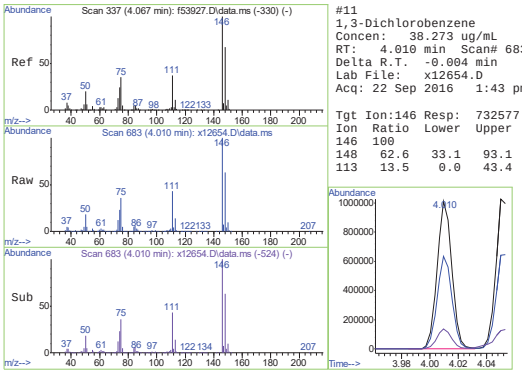
9



#10
2-Chlorophenol
Concen: 40.694 ug/mL
RT: 3.910 min Scan# 651
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:128 Resp: 720628

Ion	Ratio	Lower	Upper
128	100		
64	49.0	16.8	76.8
130	31.7	1.2	61.2



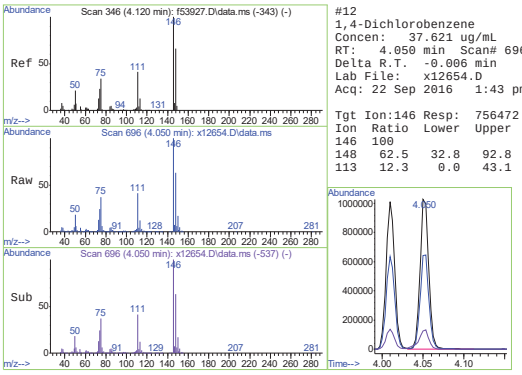
#11
1,3-Dichlorobenzene
Concen: 38.273 ug/mL
RT: 4.010 min Scan# 683
Delta R.T. -0.004 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:146 Resp: 732577

Ion	Ratio	Lower	Upper
146	100		
148	62.6	33.1	93.1
113	13.5	0.0	43.4

9.4.1

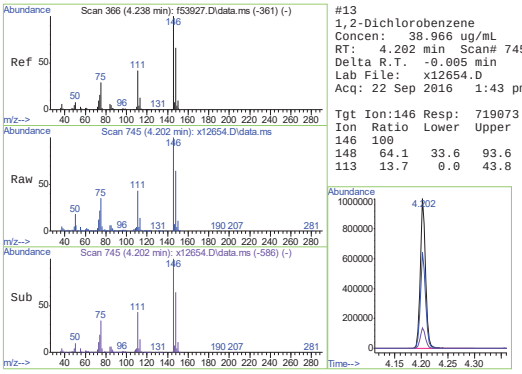
9



#12
1,4-Dichlorobenzene
Concen: 37.621 ug/mL
RT: 4.050 min Scan# 696
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:146 Resp: 756472

Ion	Ratio	Lower	Upper
146	100		
148	62.5	32.8	92.8
113	12.3	0.0	43.1



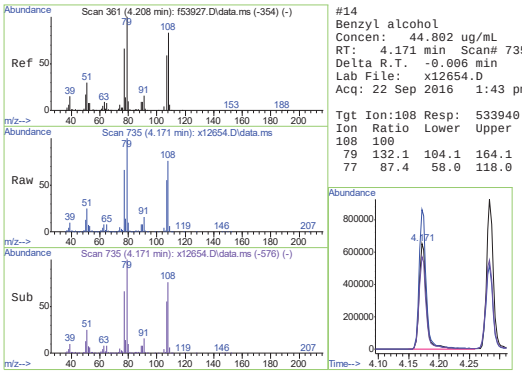
#13
1,2-Dichlorobenzene
Concen: 38.966 ug/mL
RT: 4.202 min Scan# 745
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:146 Resp: 719073

Ion	Ratio	Lower	Upper
146	100		
148	64.1	33.6	93.6
113	13.7	0.0	43.8

9.4.1

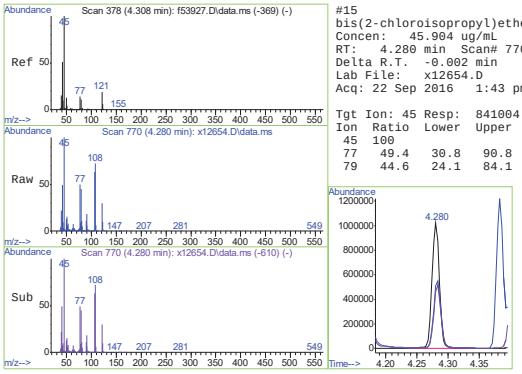
9



#14
Benzyl alcohol
Concen: 44.802 ug/mL
RT: 4.171 min Scan# 735
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:108 Resp: 533940

Ion	Ratio	Lower	Upper
108	100		
79	132.1	104.1	164.1
77	87.4	58.0	118.0



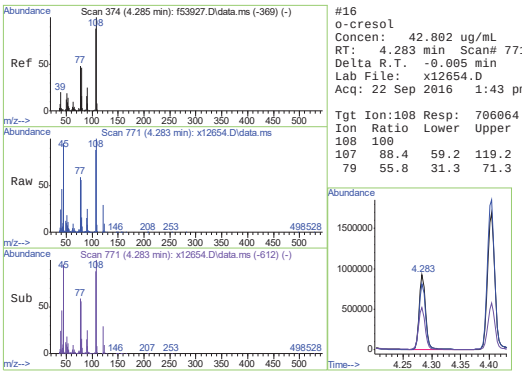
#15
bis(2-chloroisopropyl)ether
Concen: 45.904 ug/mL
RT: 4.280 min Scan# 770
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 45 Resp: 841004

Ion	Ratio	Lower	Upper
45	100		
77	49.4	30.8	90.8
79	44.6	24.1	84.1

9.4.1

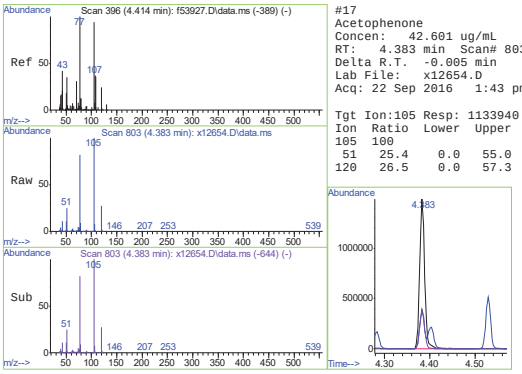
9



#16
o-cresol
Concen: 42.802 ug/mL
RT: 4.283 min Scan# 771
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:108 Resp: 706064

Ion	Ratio	Lower	Upper
108	100		
107	88.4	59.2	119.2
79	55.8	31.3	71.3



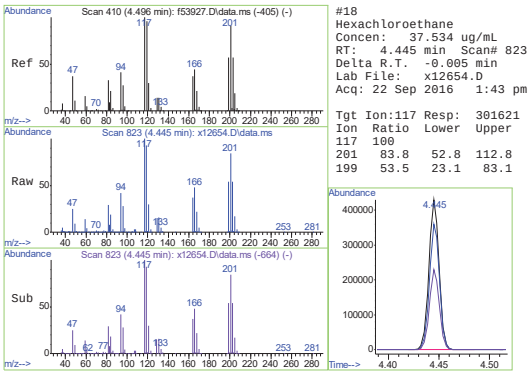
#17
Acetophenone
Concen: 42.601 ug/mL
RT: 4.383 min Scan# 803
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:105 Resp: 1133940

Ion	Ratio	Lower	Upper
105	100		
51	25.4	0.0	55.0
120	26.5	0.0	57.3

9.4.1

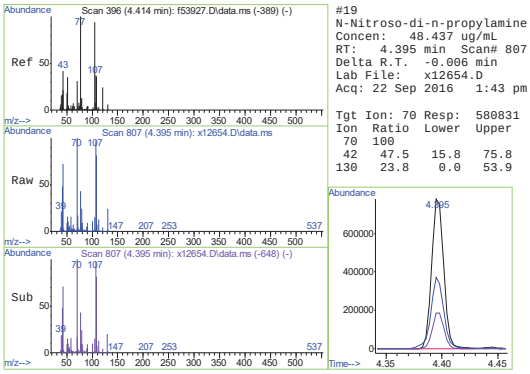
9



#18
Hexachloroethane
Concen: 37.534 ug/mL
RT: 4.445 min Scan# 823
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:117 Resp: 301621

Ion	Ratio	Lower	Upper
117	100		
201	83.8	52.8	112.8
199	53.5	23.1	83.1



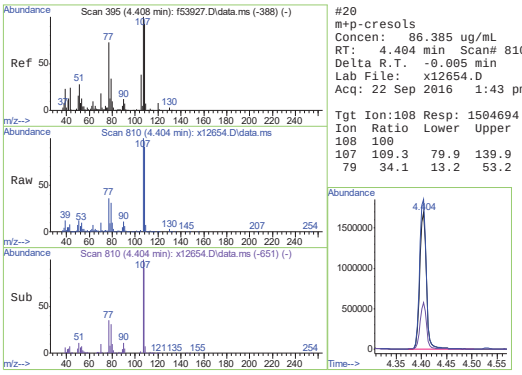
#19
N-Nitroso-di-n-propylamine
Concen: 48.437 ug/mL
RT: 4.395 min Scan# 807
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 70 Resp: 580831

Ion	Ratio	Lower	Upper
70	100		
42	47.5	15.8	75.8
130	23.8	0.0	53.9

9.4.1

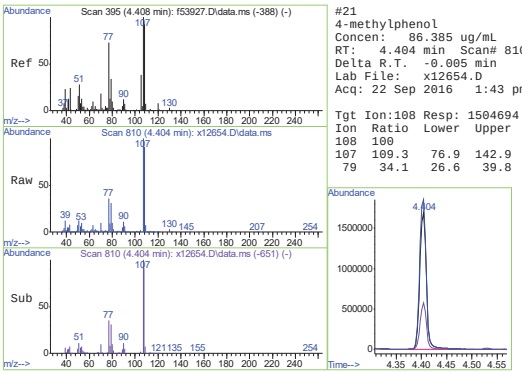
9



#20
m+p-cresols
Concen: 86.385 ug/mL
RT: 4.404 min Scan# 810
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:108 Resp: 1504694

Ion	Ratio	Lower	Upper
108	100		
107	109.3	79.9	139.9
79	34.1	13.2	53.2



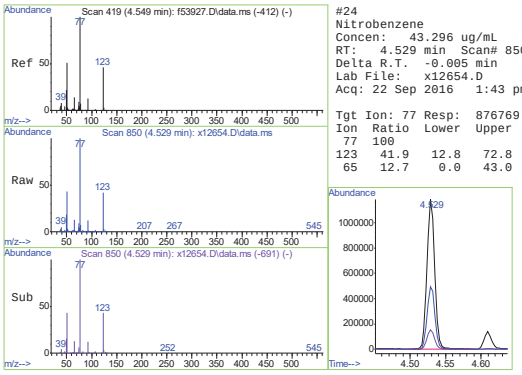
#21
4-methylphenol
Concen: 86.385 ug/mL
RT: 4.404 min Scan# 810
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:108 Resp: 1504694

Ion	Ratio	Lower	Upper
108	100		
107	109.3	76.9	142.9
79	34.1	26.6	39.8

9.4.1

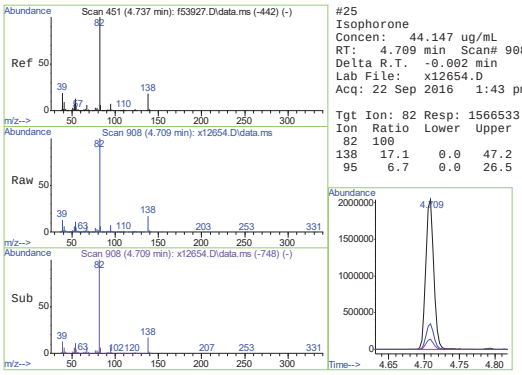
9



#24
Nitrobenzene
Concen: 43.296 ug/mL
RT: 4.529 min Scan# 850
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 77 Resp: 876769

Ion	Ratio	Lower	Upper
77	100		
123	41.9	12.8	72.8
65	12.7	0.0	43.0



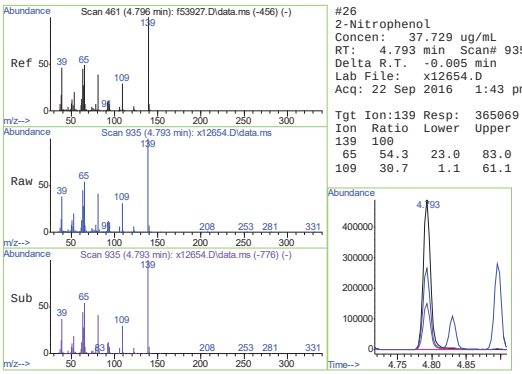
#25
Isophorone
Concen: 44.147 ug/mL
RT: 4.709 min Scan# 908
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 82 Resp: 1566533

Ion	Ratio	Lower	Upper
82	100		
138	17.1	0.0	47.2
95	6.7	0.0	26.5

9.4.1

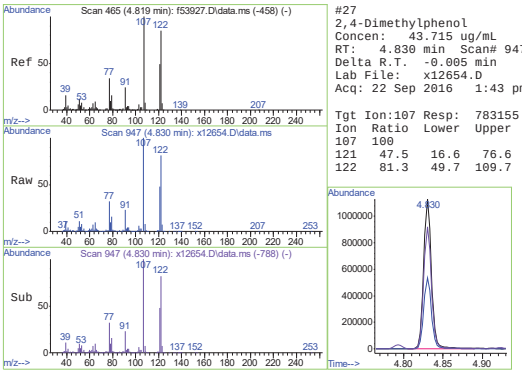
9



#26
2-Nitrophenol
Concen: 37.729 ug/mL
RT: 4.793 min Scan# 935
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:139 Resp: 365069

Ion	Ratio	Lower	Upper
139	100		
65	54.3	23.0	83.0
109	30.7	1.1	61.1



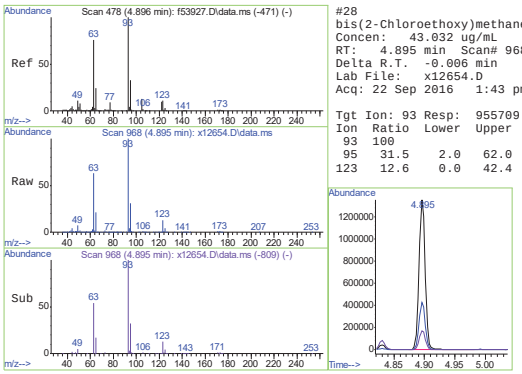
#27
2,4-Dimethylphenol
Concen: 43.715 ug/mL
RT: 4.830 min Scan# 947
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:107 Resp: 783155

Ion	Ratio	Lower	Upper
107	100		
121	47.5	16.6	76.6
122	81.3	49.7	109.7

9.4.1

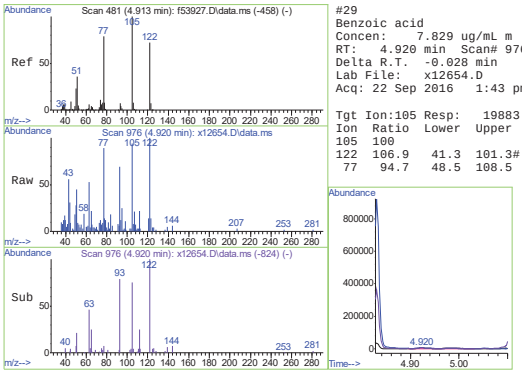
9



#28
bis(2-Chloroethoxy)methane
Concen: 43.032 ug/mL
RT: 4.895 min Scan# 968
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 93 Resp: 955709

Ion	Ratio	Lower	Upper
93	100		
95	31.5	2.0	62.0
123	12.6	0.0	42.4



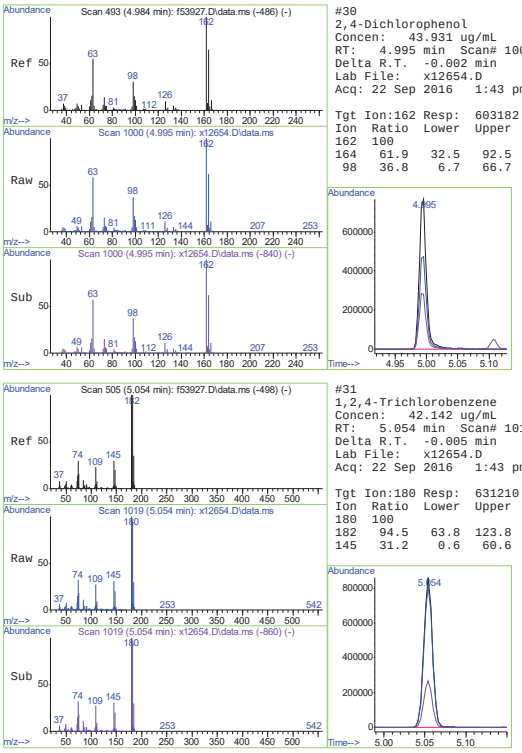
#29
Benzoic acid
Concen: 7.829 ug/mL m
RT: 4.920 min Scan# 976
Delta R.T. -0.028 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:105 Resp: 19883

Ion	Ratio	Lower	Upper
105	100		
122	106.9	41.3	101.3#
77	94.7	48.5	108.5

9.4.1

9



#30
2,4-Dichlorophenol
Concen: 43.931 ug/mL
RT: 4.995 min Scan# 1000
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:162 Resp: 603182

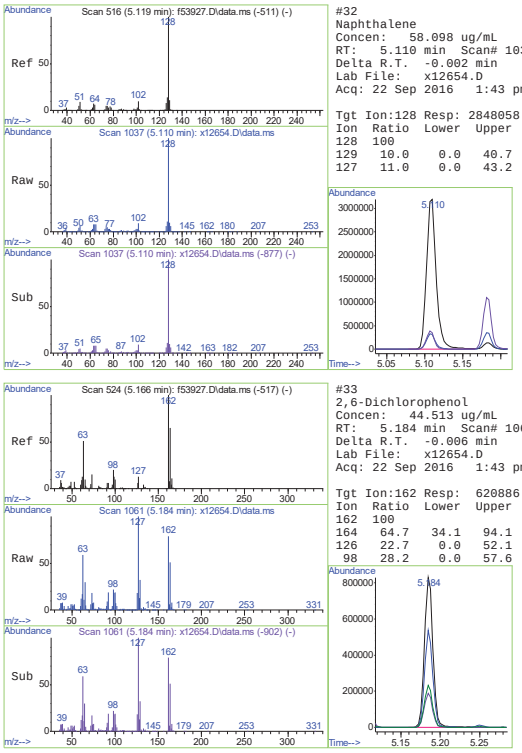
Ion	Ratio	Lower	Upper
162	100		
164	61.9	32.5	92.5
98	36.8	6.7	66.7

#31
1,2,4-Trichlorobenzene
Concen: 42.142 ug/mL
RT: 5.054 min Scan# 1019
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:180 Resp: 631210

Ion	Ratio	Lower	Upper
180	100		
182	94.5	63.8	123.8
145	31.2	0.6	60.6

9.4.1 9



#32
Naphthalene
Concen: 58.098 ug/mL
RT: 5.110 min Scan# 1037
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:128 Resp: 2848058

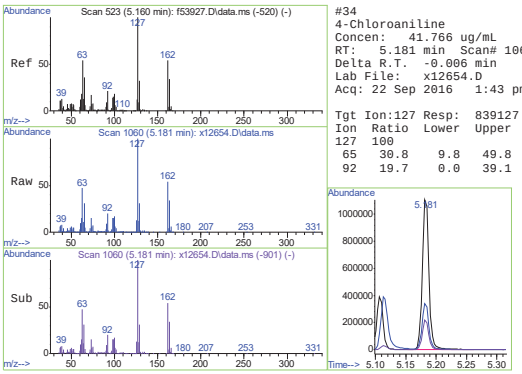
Ion	Ratio	Lower	Upper
128	100		
129	10.0	0.0	40.7
127	11.0	0.0	43.2

#33
2,6-Dichlorophenol
Concen: 44.513 ug/mL
RT: 5.184 min Scan# 1061
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:162 Resp: 620886

Ion	Ratio	Lower	Upper
162	100		
164	64.7	34.1	94.1
126	22.7	0.0	52.1
98	28.2	0.0	57.6

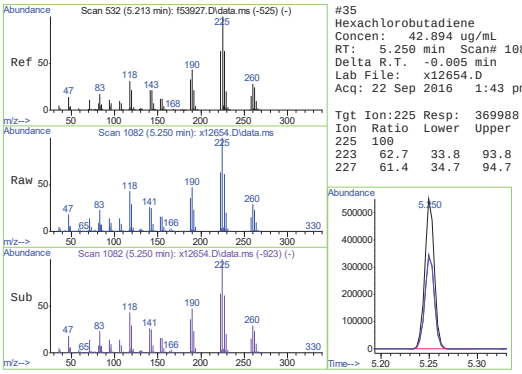
9.4.1 9



#34
4-Chloroaniline
Concen: 41.766 ug/mL
RT: 5.181 min Scan# 1060
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:127 Resp: 839127

Ion	Ratio	Lower	Upper
127	100		
65	30.8	9.8	49.8
92	19.7	0.0	39.1

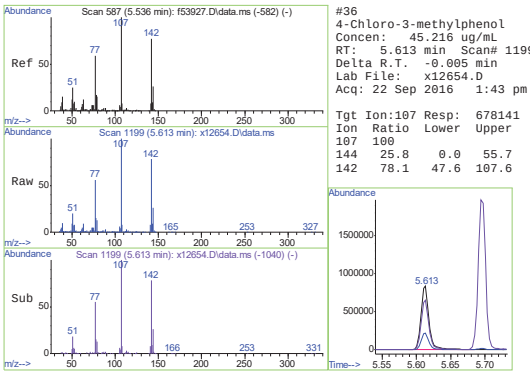


#35
Hexachlorobutadiene
Concen: 42.894 ug/mL
RT: 5.250 min Scan# 1082
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:225 Resp: 369988

Ion	Ratio	Lower	Upper
225	100		
223	62.7	33.8	93.8
227	61.4	34.7	94.7

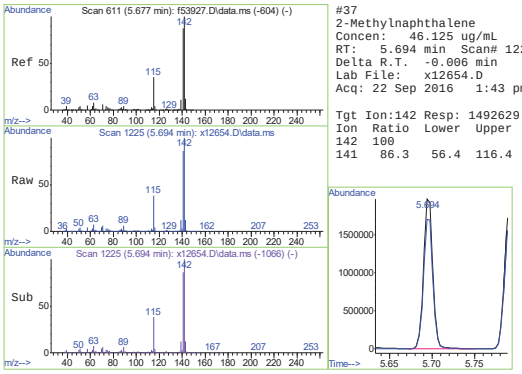
9.4.1 9



#36
4-Chloro-3-methylphenol
Concen: 45.216 ug/mL
RT: 5.613 min Scan# 1199
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:107 Resp: 678141

Ion	Ratio	Lower	Upper
107	100		
144	25.8	0.0	55.7
142	78.1	47.6	107.6

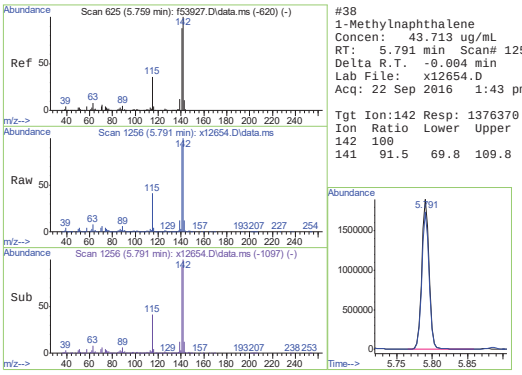


#37
2-Methylnaphthalene
Concen: 46.125 ug/mL
RT: 5.694 min Scan# 1225
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:142 Resp: 1492629

Ion	Ratio	Lower	Upper
142	100		
141	86.3	56.4	116.4

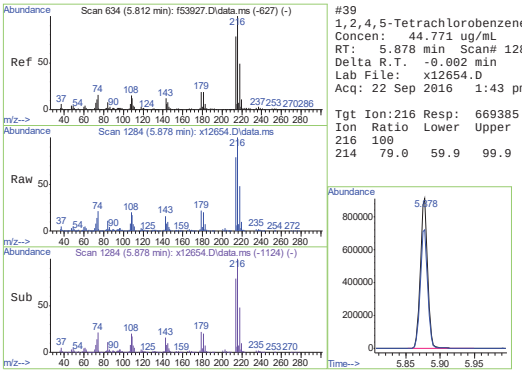
9.4.1 9



#38
1-Methylnaphthalene
Concen: 43.713 ug/mL
RT: 5.791 min Scan# 1256
Delta R.T. -0.004 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:142 Resp: 1376370

Ion	Ratio	Lower	Upper
142	100		
141	91.5	69.8	109.8

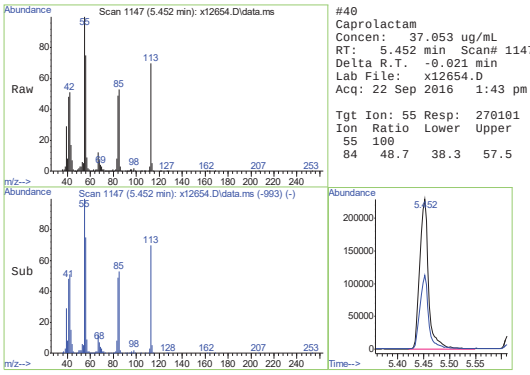


#39
1,2,4,5-Tetrachlorobenzene
Concen: 44.771 ug/mL
RT: 5.878 min Scan# 1284
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:216 Resp: 669385

Ion	Ratio	Lower	Upper
216	100		
214	79.0	59.9	99.9

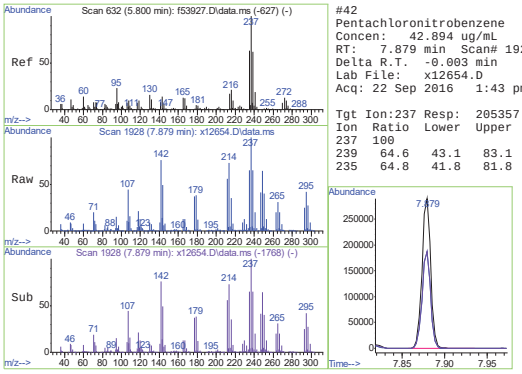
9.4.1 9



#40
Caprolactam
Concen: 37.053 ug/mL
RT: 5.452 min Scan# 1147
Delta R.T. -0.021 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 55 Resp: 270101

Ion	Ratio	Lower	Upper
55	100		
84	48.7	38.3	57.5

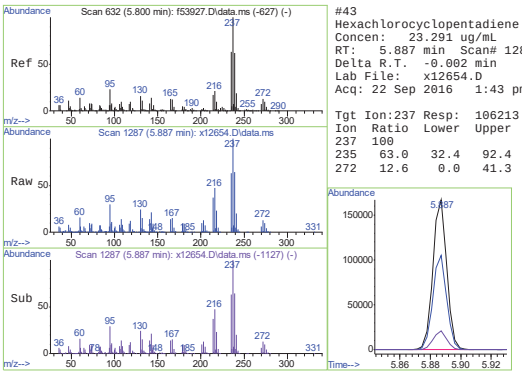


#42
Pentachloronitrobenzene
Concen: 42.894 ug/mL
RT: 7.879 min Scan# 1928
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:237 Resp: 205357

Ion	Ratio	Lower	Upper
237	100		
239	64.6	43.1	83.1
235	64.8	41.8	81.8

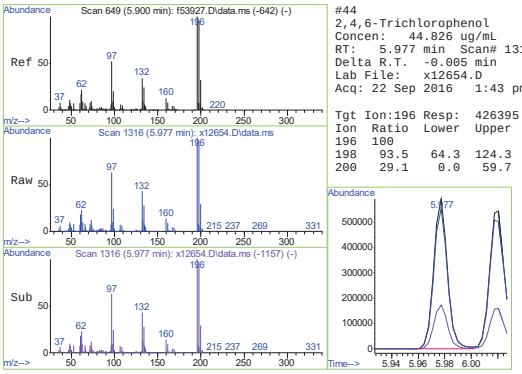
9.4.1 9



#43
Hexachlorocyclopentadiene
Concen: 23.291 ug/mL
RT: 5.887 min Scan# 1287
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:237 Resp: 106213

Ion	Ratio	Lower	Upper
237	100		
235	63.0	32.4	92.4
272	12.6	0.0	41.3

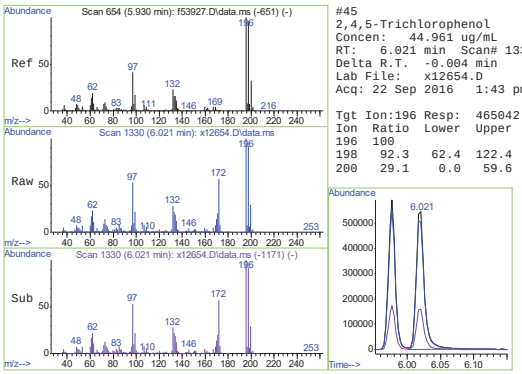


#44
2,4,6-Trichlorophenol
Concen: 44.826 ug/mL
RT: 5.977 min Scan# 1316
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:196 Resp: 426395

Ion	Ratio	Lower	Upper
196	100		
198	93.5	64.3	124.3
200	29.1	0.0	59.7

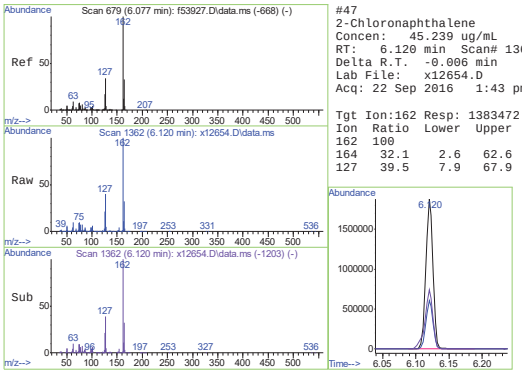
9.4.1 9



#45
2,4,5-Trichlorophenol
Concen: 44.961 ug/mL
RT: 6.021 min Scan# 1330
Delta R.T. -0.004 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:196 Resp: 465042

Ion	Ratio	Lower	Upper
196	100		
198	92.3	62.4	122.4
200	29.1	0.0	59.6

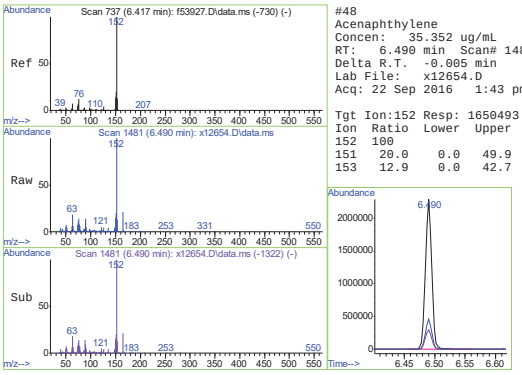


#47
2-Chloronaphthalene
Concen: 45.239 ug/mL
RT: 6.120 min Scan# 1362
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:162 Resp: 1383472

Ion	Ratio	Lower	Upper
162	100		
164	32.1	2.6	62.6
127	39.5	7.9	67.9

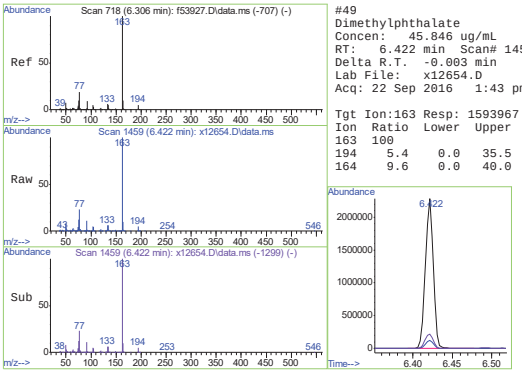
9.4.1 9



#48
Acenaphthylene
Concen: 35.352 ug/mL
RT: 6.490 min Scan# 1481
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:152 Resp: 1650493

Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	49.9
153	12.9	0.0	42.7



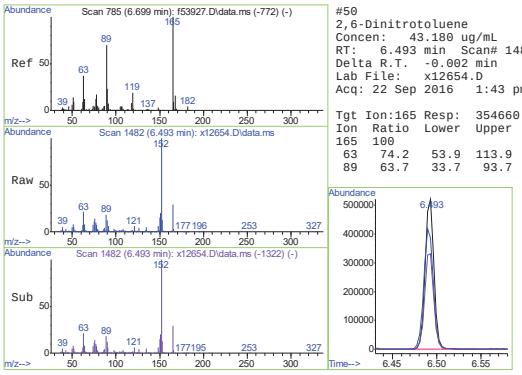
#49
Dimethylphthalate
Concen: 45.846 ug/mL
RT: 6.422 min Scan# 1459
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:163 Resp: 1593967

Ion	Ratio	Lower	Upper
163	100		
194	5.4	0.0	35.5
164	9.6	0.0	40.0

9.4.1

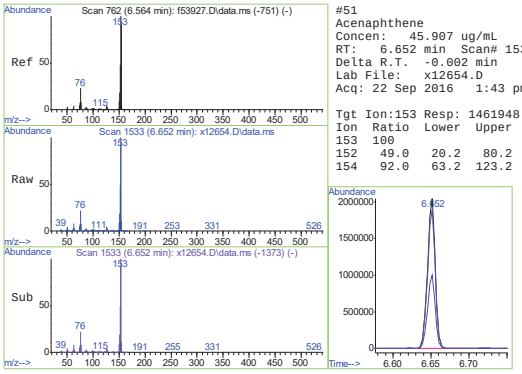
9



#50
2,6-Dinitrotoluene
Concen: 43.180 ug/mL
RT: 6.493 min Scan# 1482
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:165 Resp: 354660

Ion	Ratio	Lower	Upper
165	100		
63	74.2	53.9	113.9
89	63.7	33.7	93.7



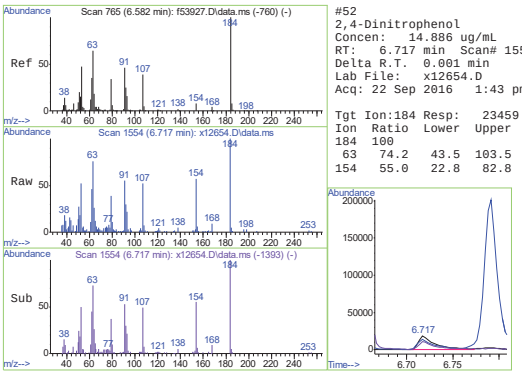
#51
Acenaphthene
Concen: 45.907 ug/mL
RT: 6.652 min Scan# 1533
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:153 Resp: 1461948

Ion	Ratio	Lower	Upper
153	100		
152	49.0	20.2	80.2
154	92.0	63.2	123.2

9.4.1

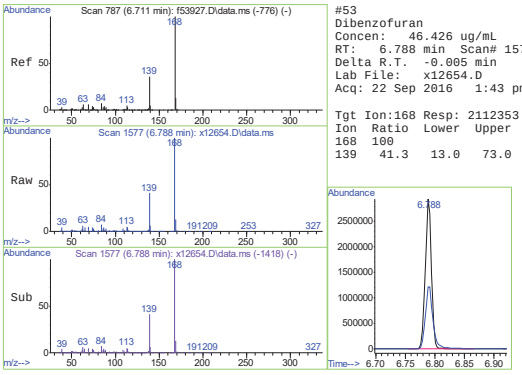
9



#52
2,4-Dinitrophenol
Concen: 14.886 ug/mL
RT: 6.717 min Scan# 1554
Delta R.T. 0.001 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:184 Resp: 23459

Ion	Ratio	Lower	Upper
184	100		
63	74.2	43.5	103.5
154	55.0	22.8	82.8



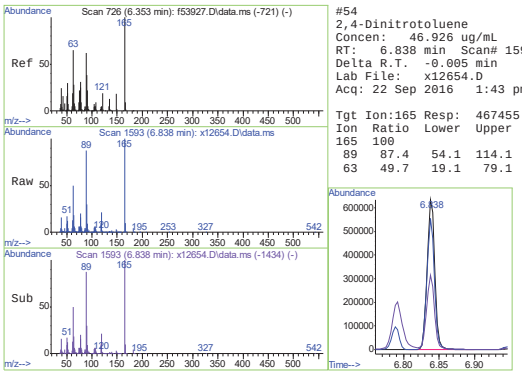
#53
Dibenzofuran
Concen: 46.426 ug/mL
RT: 6.788 min Scan# 1577
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:168 Resp: 2112353

Ion	Ratio	Lower	Upper
168	100		
139	41.3	13.0	73.0

9.4.1

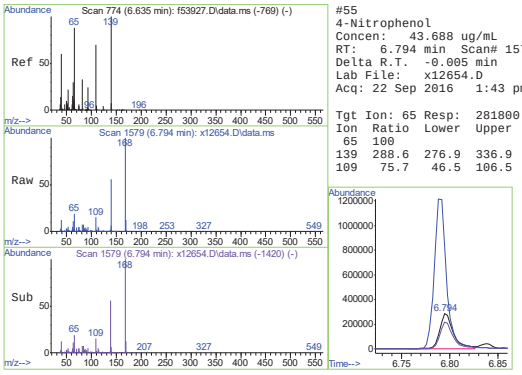
9



#54
2,4-Dinitrotoluene
Concen: 46.926 ug/mL
RT: 6.838 min Scan# 1593
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:165 Resp: 467455

Ion	Ratio	Lower	Upper
165	100		
89	87.4	54.1	114.1
63	49.7	19.1	79.1



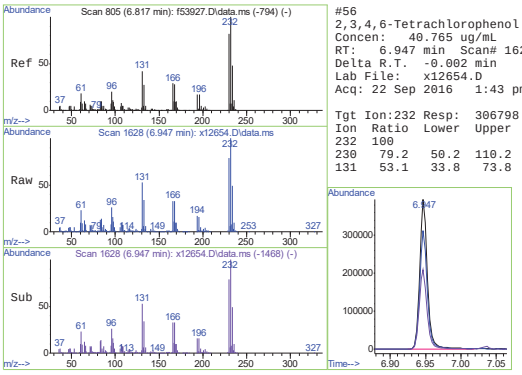
#55
4-Nitrophenol
Concen: 43.688 ug/mL
RT: 6.794 min Scan# 1579
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 65 Resp: 281800

Ion	Ratio	Lower	Upper
65	100		
139	288.6	276.9	336.9
109	75.7	46.5	106.5

9.4.1

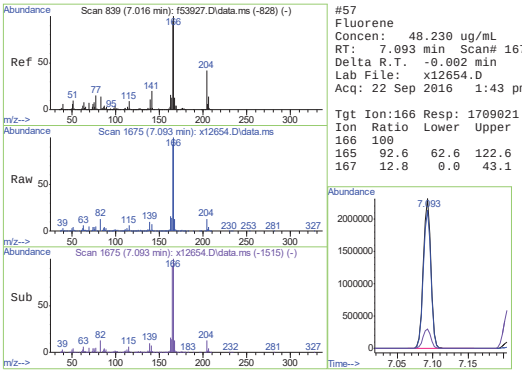
9



#56
2,3,4,6-Tetrachlorophenol
Concen: 40.765 ug/mL
RT: 6.947 min Scan# 1628
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:232 Resp: 306798

Ion	Ratio	Lower	Upper
232	100		
230	79.2	50.2	110.2
131	53.1	33.8	73.8



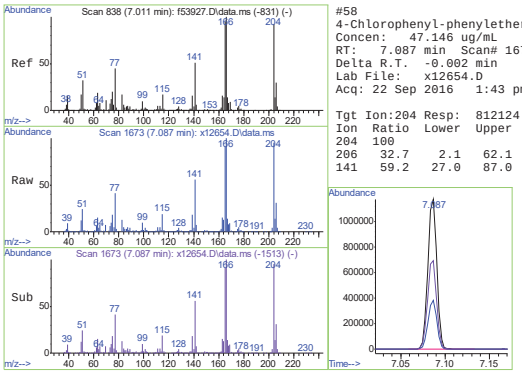
#57
Fluorene
Concen: 48.230 ug/mL
RT: 7.093 min Scan# 1675
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:166 Resp: 1709021

Ion	Ratio	Lower	Upper
166	100		
165	92.6	62.6	122.6
167	12.8	0.0	43.1

9.4.1

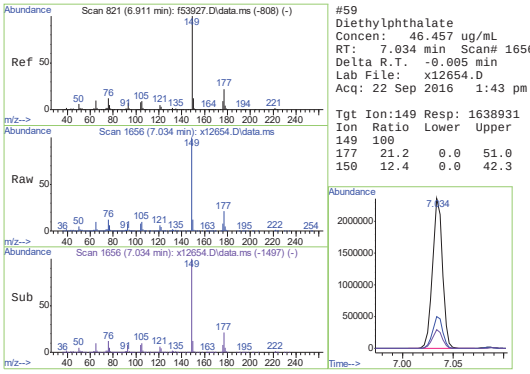
9



#58
4-Chlorophenyl-phenylether
Concen: 47.146 ug/mL
RT: 7.087 min Scan# 1673
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:204 Resp: 812124

Ion	Ratio	Lower	Upper
204	100		
206	32.7	2.1	62.1
141	59.2	27.0	87.0



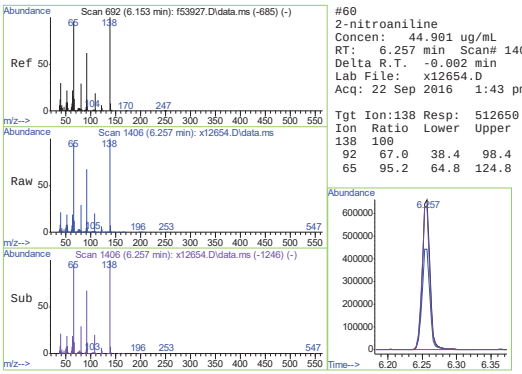
#59
Diethylphthalate
Concen: 46.457 ug/mL
RT: 7.034 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:149 Resp: 1638931

Ion	Ratio	Lower	Upper
149	100		
177	21.2	0.0	51.0
150	12.4	0.0	42.3

9.4.1

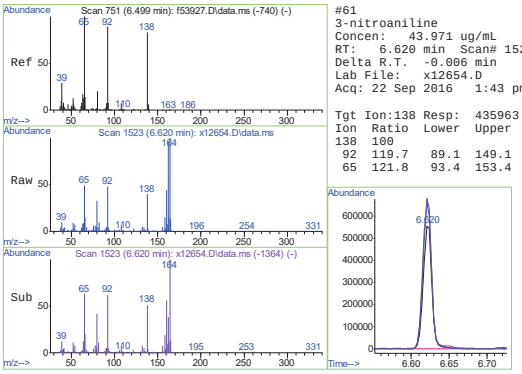
9



#60
2-nitroaniline
Concen: 44.901 ug/mL
RT: 6.257 min Scan# 1406
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:138 Resp: 512650

Ion	Ratio	Lower	Upper
138	100		
92	67.0	38.4	98.4
65	95.2	64.8	124.8



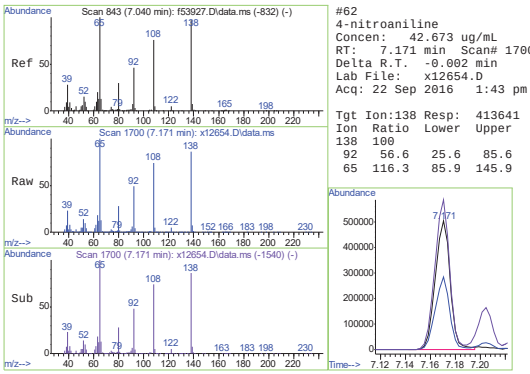
#61
3-nitroaniline
Concen: 43.971 ug/mL
RT: 6.620 min Scan# 1523
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:138 Resp: 435963

Ion	Ratio	Lower	Upper
138	100		
92	119.7	89.1	149.1
65	121.8	93.4	153.4

9.4.1

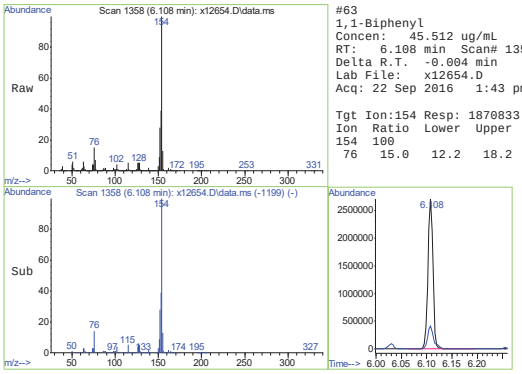
9



#62
4-nitroaniline
Concen: 42.673 ug/mL
RT: 7.171 min Scan# 1700
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:138 Resp: 413641

Ion	Ratio	Lower	Upper
138	100		
92	56.6	25.6	85.6
65	116.3	85.9	145.9



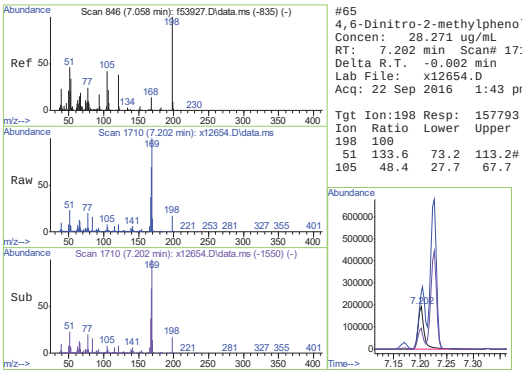
#63
1,1-Biphenyl
Concen: 45.512 ug/mL
RT: 6.108 min Scan# 1358
Delta R.T. -0.004 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:154 Resp: 1870833

Ion	Ratio	Lower	Upper
154	100		
76	15.0	12.2	18.2

9.4.1

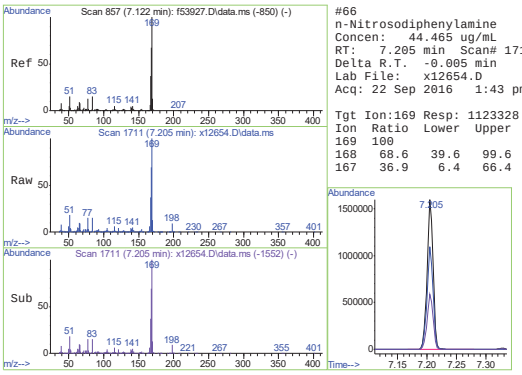
9



#65
4,6-Dinitro-2-methylphenol
Concen: 28.271 ug/mL
RT: 7.202 min Scan# 1710
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:198 Resp: 157793

Ion	Ratio	Lower	Upper
198	100		
51	133.6	73.2	113.2#
105	48.4	27.7	67.7



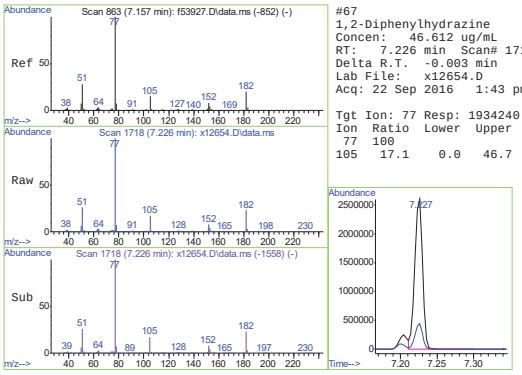
#66
n-Nitrosodiphenylamine
Concen: 44.465 ug/mL
RT: 7.205 min Scan# 1711
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:169 Resp: 1123328

Ion	Ratio	Lower	Upper
169	100		
168	68.6	39.6	99.6
167	36.9	6.4	66.4

9.4.1

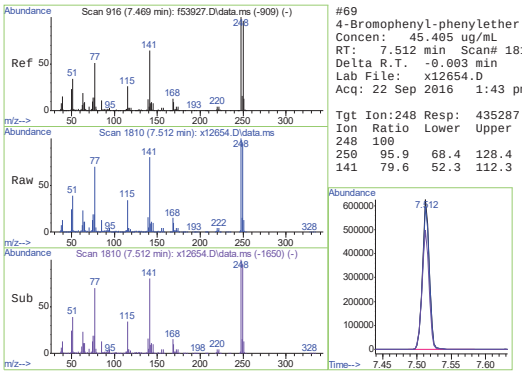
9



#67
1,2-Diphenylhydrazine
Concen: 46.612 ug/mL
RT: 7.226 min Scan# 1718
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 77 Resp: 1934240

Ion	Ratio	Lower	Upper
77	100		
105	17.1	0.0	46.7



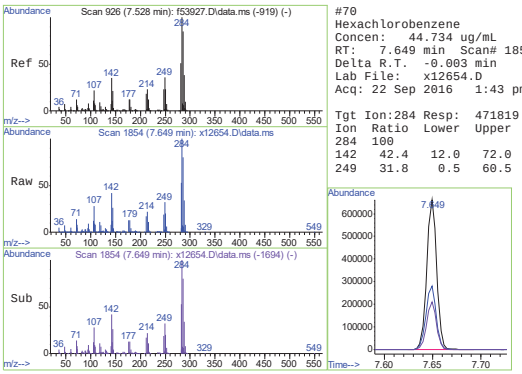
#69
4-Bromophenyl-phenylether
Concen: 45.405 ug/mL
RT: 7.512 min Scan# 1810
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:248 Resp: 435287

Ion	Ratio	Lower	Upper
248	100		
250	95.9	68.4	128.4
141	79.6	52.3	112.3

9.4.1

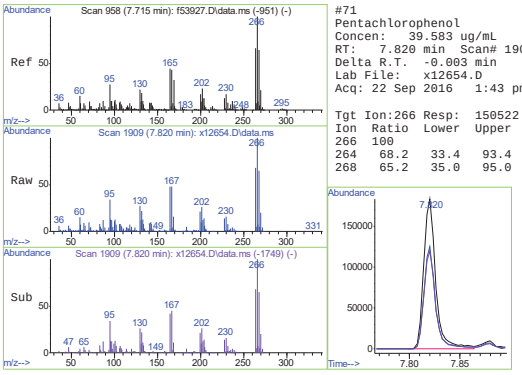
9



#70
Hexachlorobenzene
Concen: 44.734 ug/mL
RT: 7.649 min Scan# 1854
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:284 Resp: 471819

Ion	Ratio	Lower	Upper
284	100		
142	42.4	12.0	72.0
249	31.8	0.5	60.5



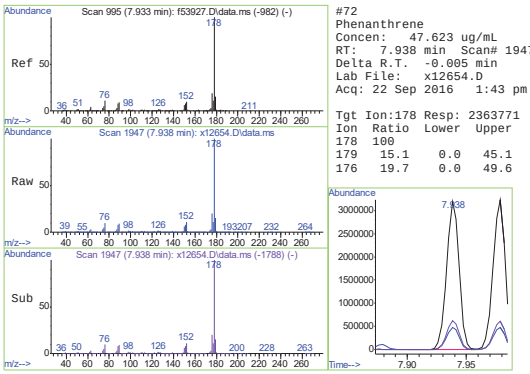
#71
Pentachlorophenol
Concen: 39.583 ug/mL
RT: 7.820 min Scan# 1909
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:266 Resp: 150522

Ion	Ratio	Lower	Upper
266	100		
264	68.2	33.4	93.4
268	65.2	35.0	95.0

9.4.1

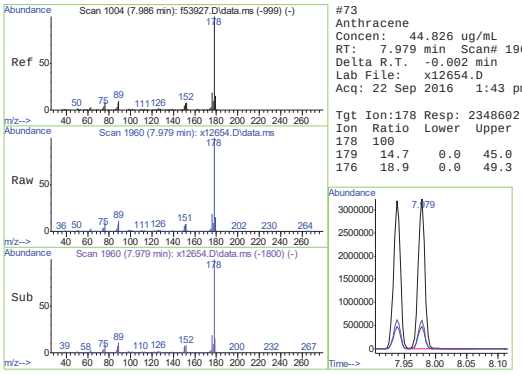
9



#72
Phenanthrene
Concen: 47.623 ug/mL
RT: 7.938 min Scan# 1947
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:178 Resp: 2363771

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.1
176	19.7	0.0	49.6



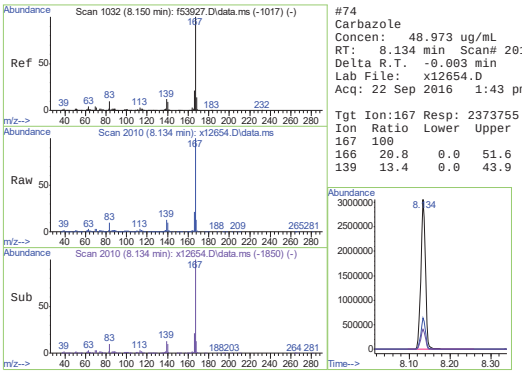
#73
Anthracene
Concen: 44.826 ug/mL
RT: 7.979 min Scan# 1960
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:178 Resp: 2348602

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.0
176	18.9	0.0	49.3

9.4.1

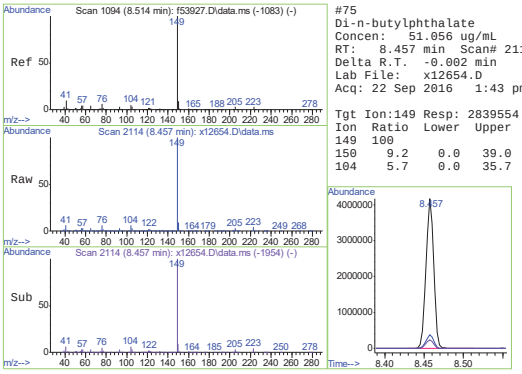
9



#74
Carbazole
Concen: 48.973 ug/mL
RT: 8.134 min Scan# 2010
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:167 Resp: 2373755

Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.0	51.6
139	13.4	0.0	43.9



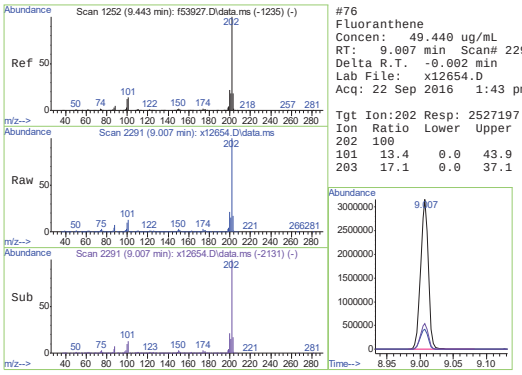
#75
Di-n-butylphthalate
Concen: 51.056 ug/mL
RT: 8.457 min Scan# 2114
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:149 Resp: 2839554

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	39.0
104	5.7	0.0	35.7

9.4.1

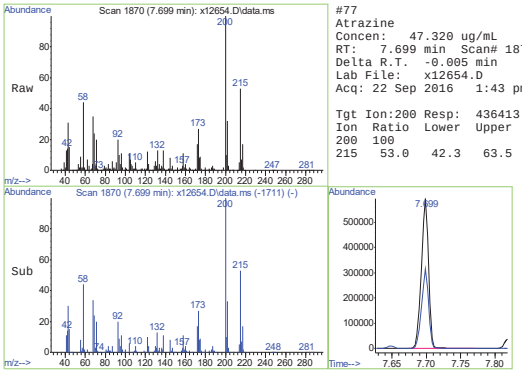
9



#76
Fluoranthene
Concen: 49.440 ug/mL
RT: 9.007 min Scan# 2291
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:202 Resp: 2527197

Ion	Ratio	Lower	Upper
202	100		
101	13.4	0.0	43.9
203	17.1	0.0	37.1



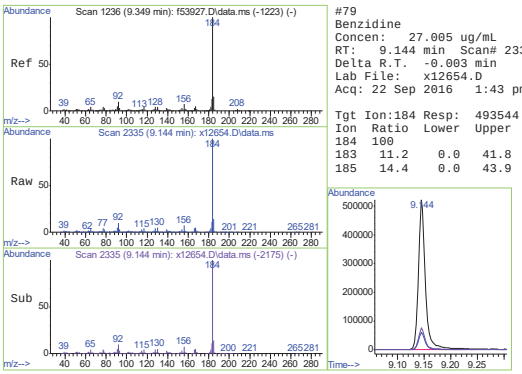
#77
Atrazine
Concen: 47.320 ug/mL
RT: 7.699 min Scan# 1870
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:200 Resp: 436413

Ion	Ratio	Lower	Upper
200	100		
215	53.0	42.3	63.5

9.4.1

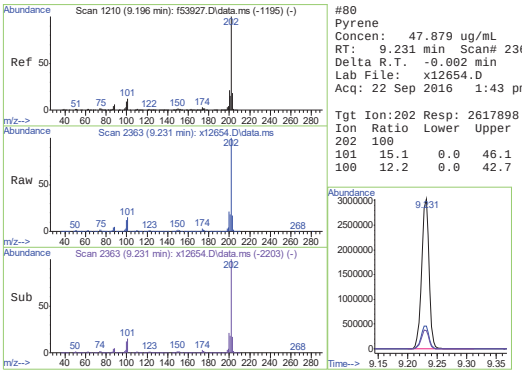
9



#79
Benzidine
Concen: 27.005 ug/mL
RT: 9.144 min Scan# 2335
Delta R.T. -0.003 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:184 Resp: 493544

Ion	Ratio	Lower	Upper
184	100		
183	11.2	0.0	41.8
185	14.4	0.0	43.9



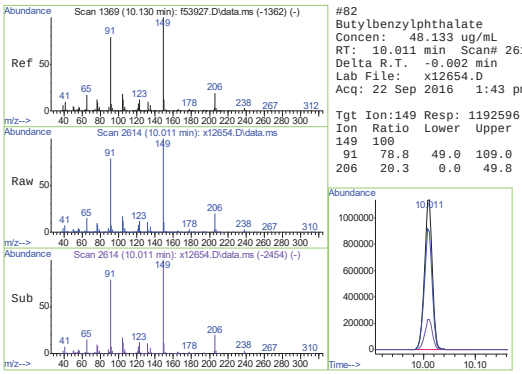
#80
Pyrene
Concen: 47.879 ug/mL
RT: 9.231 min Scan# 2363
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:202 Resp: 2617898

Ion	Ratio	Lower	Upper
202	100		
101	15.1	0.0	46.1
100	12.2	0.0	42.7

9.4.1

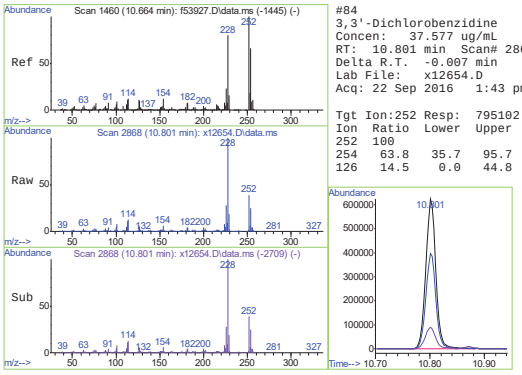
9



#82
Butylbenzylphthalate
Concen: 48.133 ug/mL
RT: 10.011 min Scan# 2614
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:149 Resp: 1192596

Ion	Ratio	Lower	Upper
149	100		
91	78.8	49.0	109.0
206	20.3	0.0	49.8



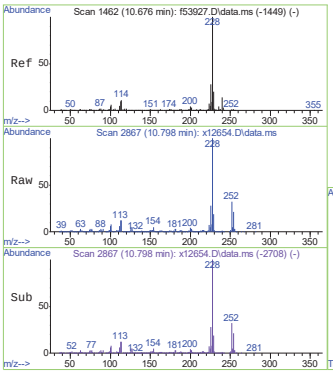
#84
3,3'-Dichlorobenzidine
Concen: 37.577 ug/mL
RT: 10.801 min Scan# 2868
Delta R.T. -0.007 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:252 Resp: 795102

Ion	Ratio	Lower	Upper
252	100		
254	63.8	35.7	95.7
126	14.5	0.0	44.8

9.4.1

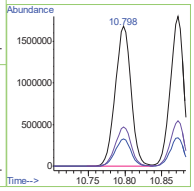
9

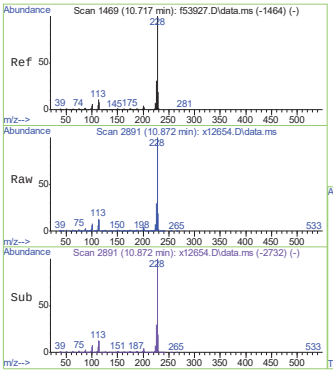


#85
Benzo[a]anthracene
Concen: 47.883 ug/mL
RT: 10.798 min Scan# 2867
Delta R.T. -0.005 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:228 Resp: 2479746

Ion	Ratio	Lower	Upper
228	100		
229	19.5	0.0	49.3
226	28.2	0.0	58.0

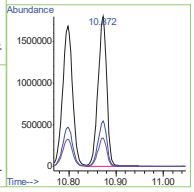




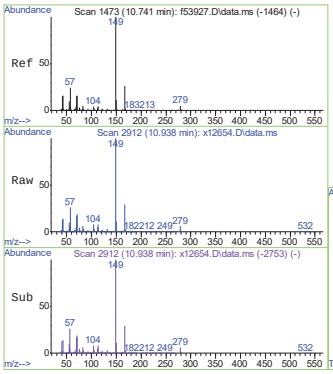
#86
Chrysene
Concen: 45.059 ug/mL
RT: 10.872 min Scan# 2891
Delta R.T. -0.007 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:228 Resp: 2305542

Ion	Ratio	Lower	Upper
228	100		
226	30.4	0.0	60.0
229	19.1	0.0	49.3



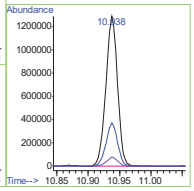
9.4.1 9

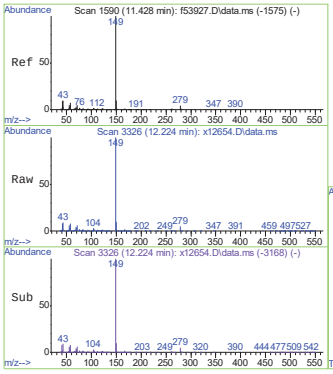


#87
bis(2-Ethylhexyl)phthalate
Concen: 43.473 ug/mL
RT: 10.938 min Scan# 2912
Delta R.T. -0.004 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:149 Resp: 1665974

Ion	Ratio	Lower	Upper
149	100		
167	28.7	0.0	58.5
279	6.0	0.0	35.8

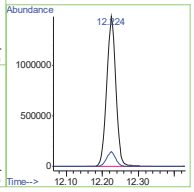




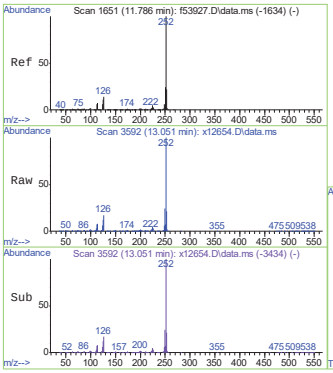
#89
Di-n-octylphthalate
Concen: 41.881 ug/mL
RT: 12.224 min Scan# 3326
Delta R.T. -0.010 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:149 Resp: 2611476

Ion	Ratio	Lower	Upper
149	100		
150	9.8	0.0	39.7



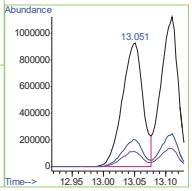
9.4.1 9

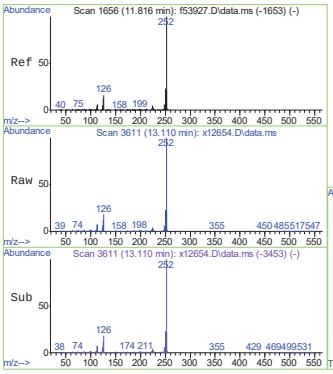


#90
Benzo[b]fluoranthene
Concen: 42.566 ug/mL
RT: 13.051 min Scan# 3592
Delta R.T. -0.009 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:252 Resp: 2132962

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	51.4
125	12.1	0.0	42.8

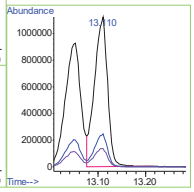




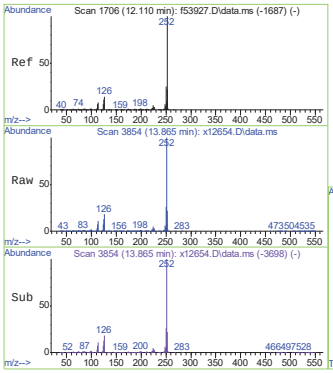
#91
Benzo[k]fluoranthene
Concen: 38.783 ug/mL
RT: 13.110 min Scan# 3611
Delta R.T. -0.009 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:252 Resp: 2160761

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.6
125	12.3	0.0	42.5



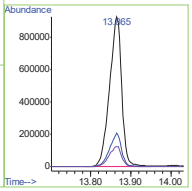
9.4.1 9

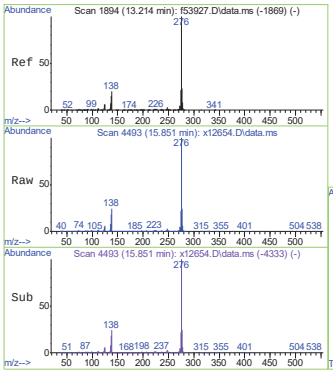


#92
Benzo[a]pyrene
Concen: 39.574 ug/mL
RT: 13.865 min Scan# 3854
Delta R.T. -0.015 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:252 Resp: 1944512

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.3
125	13.4	0.0	43.6

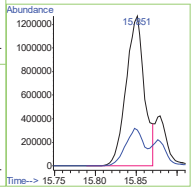




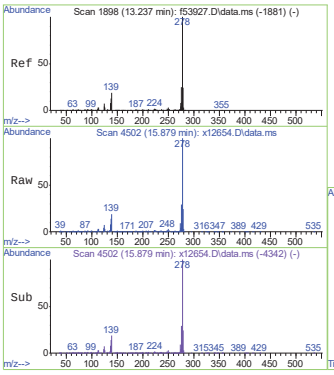
#93
Indeno[1,2,3-cd]pyrene
Concen: 44.977 ug/mL
RT: 15.851 min Scan# 4493
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:276 Resp: 1975491

Ion	Ratio	Lower	Upper
276	100		
138	23.9	0.0	55.4



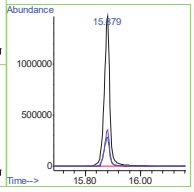
9.4.1 9

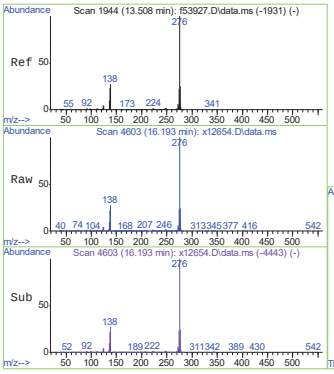


#94
Dibenz[a,h]anthracene
Concen: 49.928 ug/mL
RT: 15.879 min Scan# 4502
Delta R.T. -0.002 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:278 Resp: 2079450

Ion	Ratio	Lower	Upper
278	100		
139	19.2	0.0	50.6
279	24.2	0.0	53.3

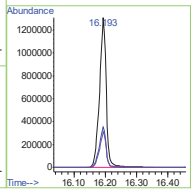




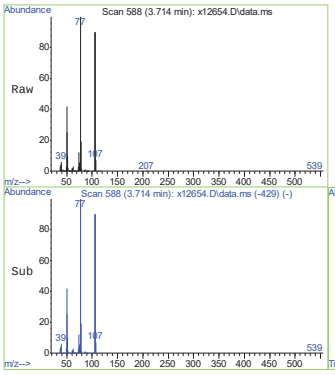
#95
Benzo[g,h,i]perylene
Concen: 48.578 ug/mL
RT: 16.193 min Scan# 4603
Delta R.T. -0.004 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion:276 Resp: 1942936

Ion	Ratio	Lower	Upper
276	100		
138	26.8	0.0	58.6
277	23.8	0.0	53.5



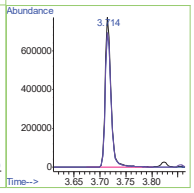
9.4.1 9



#97
Benzaldehyde
Concen: 72.312 ug/mL
RT: 3.714 min Scan# 588
Delta R.T. -0.006 min
Lab File: x12654.D
Acq: 22 Sep 2016 1:43 pm

Tgt Ion: 77 Resp: 608570

Ion	Ratio	Lower	Upper
77	100		
105	89.6	73.3	109.9
106	90.0	72.5	108.7

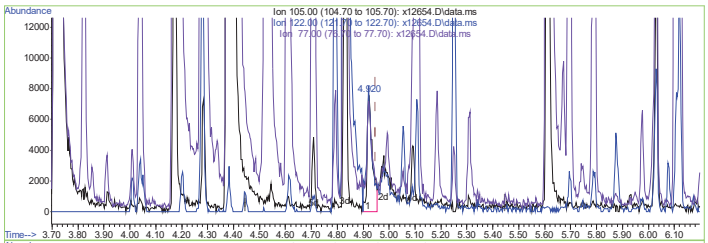


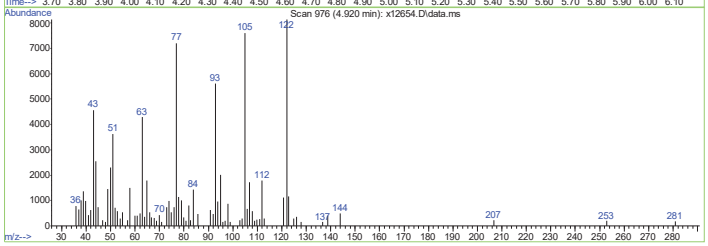
9.4.1 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12654.D
Sample : OP48710-MS
Misc : op48710,msx425,20.38,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:43 pm Operator: AkinA

Quant Time: Sep 22 15:44:46 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12654.D\data.ms

(29) Benzoic acid (T)

4.920min (-0.028) 6.65ug/mL

response 10764

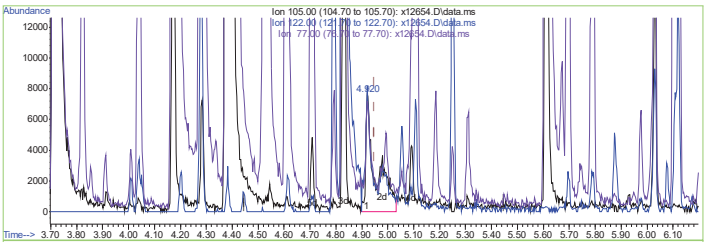
Ion	Exp%	Act%
105.00	100	100
122.00	71.30	87.27
77.00	78.50	70.58
0.00	0.00	0.00

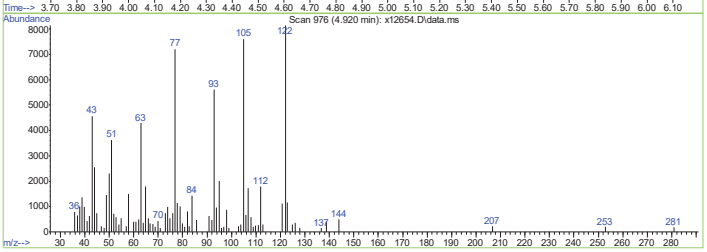
9.4.1.1 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12654.D
Sample : OP48710-MS
Misc : op48710,msx425,20.38,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 22 Sep 2016 1:43 pm Operator: AkinA

Quant Time: Sep 22 15:44:46 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12654.D\data.ms

(29) Benzoic acid (T)

4.920min (-0.028) 7.83ug/mL m

response 19883

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	106.92#
77.00	78.50	94.67
0.00	0.00	0.00

9.4.1.2 9

Manual Integrations
APPROVED
(compounds with "m" flag)
Doug Yargeau
09/23/16 14:46

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12655.D
Sample : OP48710-MSD
Misc : op48710,msx425,20.62,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:08 pm Operator: AkinA

Quant Time: Sep 22 16:01:48 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	543328	40.00	ug/mL	0.00
22) Naphthalene-d8	5.091	136	1984124	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.624	164	1135926	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1802185	40.00	ug/mL	0.00
78) Chrysene-d12	10.829	240	1715936	40.00	ug/mL	0.00
88) Perylene-d12	14.005	264	1492048	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	543328	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	758935	41.21	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 82.42%			
8) Phenol-d5	3.814	99	1007356	42.28	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 84.56%			
23) Nitrobenzene-d5	4.513	82	911986	42.32	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 84.64%			
46) 2-Fluorobiphenyl	6.030	172	1715117	44.09	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 88.18%			
68) 2,4,6-Tribromophenol	7.329	330	215794	46.09	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 92.18%			
81) Terphenyl-d14	9.390	244	1763296	48.71	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 97.42%			
Target Compounds						Qvalue
2) N-nitrosodimethylamine	2.235	74	458705	33.146	ug/mL	98
3) 1,4-Dioxane	2.011	88	194386	21.283	ug/mL	99
4) Pyridine	2.235	79	646311	26.719	ug/mL	100
5) Aniline	3.823	93	851186	30.041	ug/mL	70
7) bis(2-Chloroethyl)ether	3.854	63	546923	39.517	ug/mL	97
9) Phenol	3.823	94	1097054	42.362	ug/mL	90
10) 2-Chlorophenol	3.910	128	741085	39.531	ug/mL	96
11) 1,3-Dichlorobenzene	4.010	146	771260	38.063	ug/mL	99
12) 1,4-Dichlorobenzene	4.053	146	798317	37.503	ug/mL	98
13) 1,2-Dichlorobenzene	4.202	146	755189	38.657	ug/mL	98
14) Benzyl alcohol	4.171	108	549408	43.546	ug/mL	99
15) bis(2-chloroisopropyl)...	4.280	45	865408	44.620	ug/mL	86
16) o-cresol	4.283	108	720929	41.282	ug/mL	97
17) Acetophenone	4.383	105	1162884	41.268	ug/mL	99
18) Hexachloroethane	4.445	117	318046	37.386	ug/mL	99
19) N-Nitroso-di-n-propyla...	4.395	70	595834	46.936	ug/mL	99
20) m+p-cresols	4.404	108	1553438	84.244	ug/mL	99
21) 4-methylphenol	4.404	108	1553438	84.244	ug/mL	99
24) Nitrobenzene	4.529	77	911943	43.120	ug/mL	99
25) Isophorone	4.709	82	1628669	43.948	ug/mL	99
26) 2-Nitrophenol	4.793	139	382463	37.844	ug/mL	99
27) 2,4-Dimethylphenol	4.830	107	803769	42.959	ug/mL	94
28) bis(2-Chloroethoxy)met...	4.896	93	985615	42.493	ug/mL	100
29) Benzoic acid	4.924	105	25893m	8.462	ug/mL	
30) 2,4-Dichlorophenol	4.995	162	627455	43.756	ug/mL	99
31) 1,2,4-Trichlorobenzene	5.054	180	662924	42.378	ug/mL	100
32) Naphthalene	5.110	128	2947932	57.580	ug/mL	96
33) 2,6-Dichlorophenol	5.185	162	641819	44.058	ug/mL	98
34) 4-Chloroaniline	5.181	127	829643	39.539	ug/mL	98
35) Hexachlorobutadiene	5.250	225	384092	42.637	ug/mL	99

9.4.2 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12655.D
Sample : OP48710-MSD
Misc : op48710,msx425,20.62,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:08 pm Operator: AkinA

Quant Time: Sep 22 16:01:48 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.614	107	700689	44.735	ug/mL	99
37) 2-Methylnaphthalene	5.694	142	1538823	45.532	ug/mL	99
38) 1-Methylnaphthalene	5.791	142	1415387	43.041	ug/mL	98
39) 1,2,4,5-Tetrachloroben...	5.878	216	691619	44.292	ug/mL	100
40) Caprolactam	5.452	55	275241	36.153	ug/mL	98
42) Pentachloronitrobenzene	7.879	237	205326	42.494	ug/mL	97
43) Hexachlorocyclopentadiene	5.887	237	109686	23.676	ug/mL	96
44) 2,4,6-Trichlorophenol	5.977	196	433530	45.143	ug/mL	96
45) 2,4,5-Trichlorophenol	6.021	196	488925	46.821	ug/mL	100
47) 2-Chloronaphthalene	6.120	162	1428539	46.268	ug/mL	98
48) Acenaphthylene	6.490	152	1689269	35.839	ug/mL	100
49) Dimethylphthalate	6.422	163	1626701	46.342	ug/mL	99
50) 2,6-Dinitrotoluene	6.493	165	360883	43.512	ug/mL	94
51) Acenaphthene	6.652	153	1485318	46.197	ug/mL	98
52) 2,4-Dinitrophenol	6.717	184	29224	16.222	ug/mL	97
53) Dibenzofuran	6.788	168	2136090	46.501	ug/mL	99
54) 2,4-Dinitrotoluene	6.838	165	475775	47.307	ug/mL	99
55) 4-Nitrophenol	6.795	65	281551	43.259	ug/mL	89
56) 2,3,4,6-Tetrachlorophenol	6.947	232	315371	41.439	ug/mL	99
57) Fluorene	7.093	166	1709193	47.776	ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.087	204	831201	47.794	ug/mL	99
59) Diethylphthalate	7.034	149	1650477	46.339	ug/mL	99
60) 2-nitroaniline	6.257	138	527150	45.709	ug/mL	98
61) 3-nitroaniline	6.621	138	437429	43.705	ug/mL	99
62) 4-nitroaniline	7.171	138	417426	42.655	ug/mL	96
63) 1,1-Biphenyl	6.108	154	1929146	46.484	ug/mL	98
65) 4,6-Dinitro-2-methylph...	7.202	198	176770	31.378	ug/mL#	80
66) n-Nitrosodiphenylamine	7.205	169	1130478	45.427	ug/mL	98
67) 1,2-Diphenylhydrazine	7.227	77	1951420	47.740	ug/mL	100
69) 4-Bromophenyl-phenylether	7.513	248	442343	46.842	ug/mL	97
70) Hexachlorobenzene	7.649	284	478436	45.938	ug/mL	99
71) Pentachlorophenol	7.820	266	154833	40.908	ug/mL	96
72) Phenanthrene	7.938	178	2356676	48.201	ug/mL	100
73) Anthracene	7.979	178	2340574	45.351	ug/mL	99
74) Carbazole	8.134	167	2326048	48.718	ug/mL	99
75) Di-n-butylphthalate	8.457	149	2740824	50.028	ug/mL	100
76) Fluoranthene	9.008	202	2442759	48.513	ug/mL	99
77) Atrazine	7.699	200	443569	48.826	ug/mL	96
79) Benzidine	9.144	184	374465	22.492	ug/mL	98
80) Pyrene	9.231	202	2502076	49.784	ug/mL	99
82) Butylbenzylphthalate	10.008	149	1134872	49.831	ug/mL	99
84) 3,3'-Dichlorobenzidine	10.801	252	743568	38.193	ug/mL	98
85) Benzo[a]anthracene	10.798	228	2280628	47.911	ug/mL	99
86) Chrysene	10.872	228	2168994	46.118	ug/mL	98
87) bis(2-Ethylhexyl)phtha...	10.938	149	1582134	44.870	ug/mL	100
89) Di-n-octylphthalate	12.224	149	2433541	42.558	ug/mL	100
90) Benzo[b]fluoranthene	13.045	252	1990253	43.326	ug/mL	99
91) Benzo[k]fluoranthene	13.107	252	2053341	40.211	ug/mL	99
92) Benzo[a]pyrene	13.862	252	1816663	40.354	ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.852	276	1884239	46.807	ug/mL	100
94) Dibenz[a,h]anthracene	15.880	278	1972340	51.728	ug/mL	98
95) Benzo[g,h,i]perylene	16.194	276	1883222	51.431	ug/mL	98
97) Benzaldehyde	3.714	77	642888	72.093	ug/mL	99

9.4.2 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12655.D
Sample : OP48710-MSD
Misc : op48710,msx425,20.62,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:08 pm Operator: AkinA

Quant Time: Sep 22 16:01:48 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

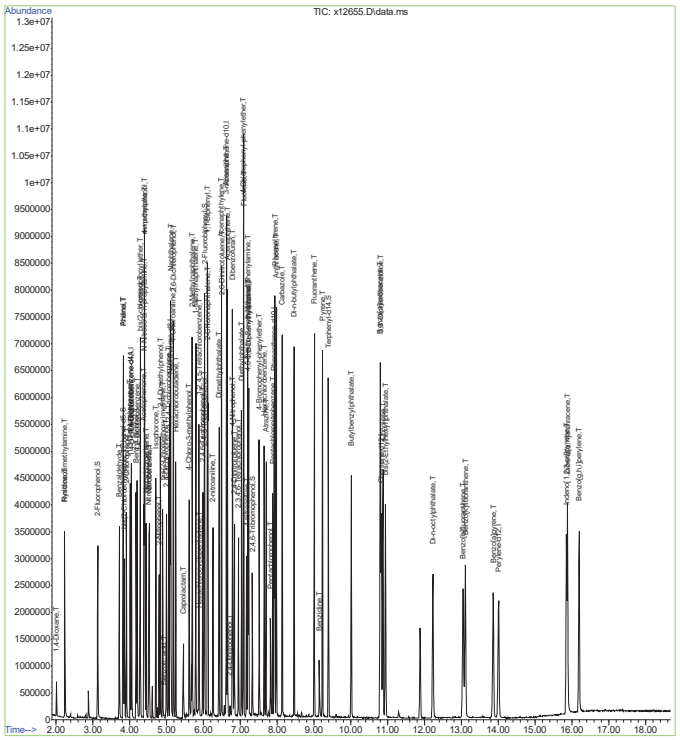
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.4.2 9

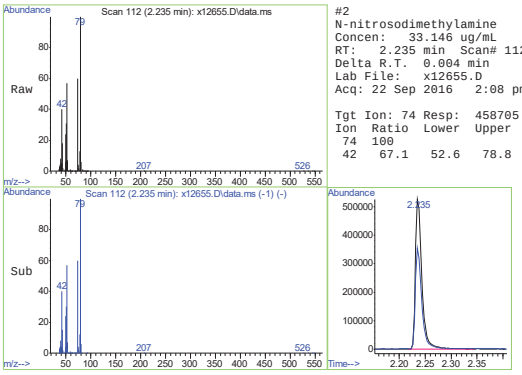
Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12655.D
Sample : OP48710-MSD
Misc : op48710,msx425,20.62,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:08 pm Operator: AkinA

Quant Time: Sep 22 16:01:48 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



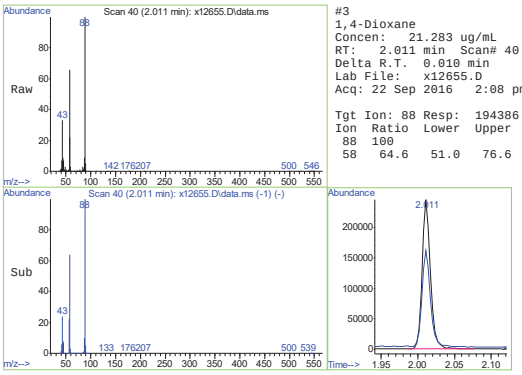
9.4.2 9



#2
N-nitrosodimethylamine
Concen: 33.146 ug/mL
RT: 2.235 min Scan# 112
Delta R.T. 0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 74 Resp: 458705

Ion	Ratio	Lower	Upper
74	100		
42	67.1	52.6	78.8

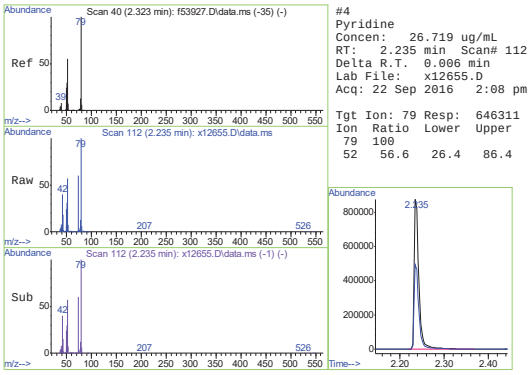


#3
1,4-Dioxane
Concen: 21.283 ug/mL
RT: 2.011 min Scan# 40
Delta R.T. 0.010 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 88 Resp: 194386

Ion	Ratio	Lower	Upper
88	100		
58	64.6	51.0	76.6

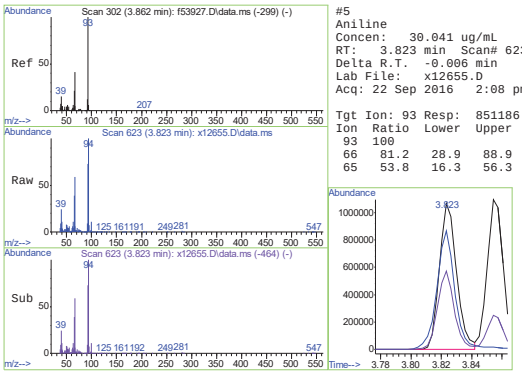
9.4.2 9



#4
Pyridine
Concen: 26.719 ug/mL
RT: 2.235 min Scan# 112
Delta R.T. 0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 79 Resp: 646311

Ion	Ratio	Lower	Upper
79	100		
52	56.6	26.4	86.4

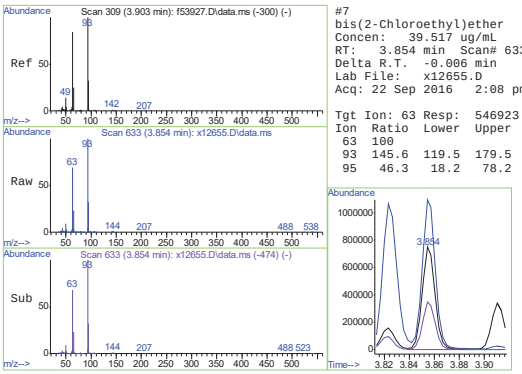


#5
Aniline
Concen: 30.041 ug/mL
RT: 3.823 min Scan# 623
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 93 Resp: 851186

Ion	Ratio	Lower	Upper
93	100		
66	81.2	28.9	88.9
65	53.8	16.3	56.3

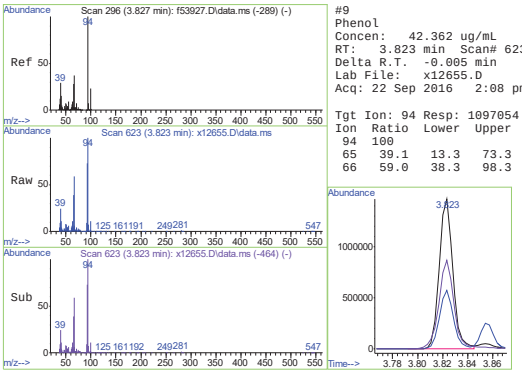
9.4.2 9



#7
bis(2-Chloroethyl)ether
Concen: 39.517 ug/mL
RT: 3.854 min Scan# 633
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 63 Resp: 546923

Ion	Ratio	Lower	Upper
63	100		
93	145.6	119.5	179.5
95	46.3	18.2	78.2

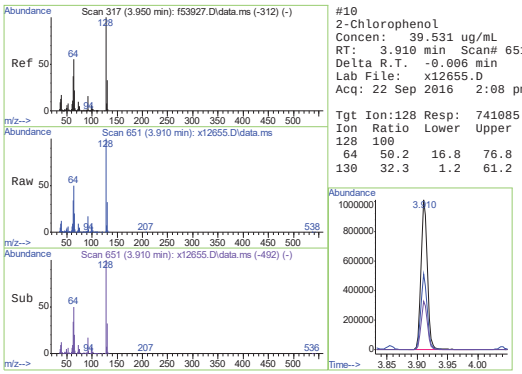


#9
Phenol
Concen: 42.362 ug/mL
RT: 3.823 min Scan# 623
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 94 Resp: 1097054

Ion	Ratio	Lower	Upper
94	100		
65	39.1	13.3	73.3
66	59.0	38.3	98.3

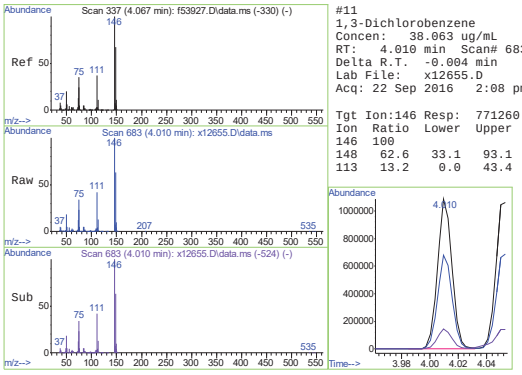
9.4.2 9



#10
2-Chlorophenol
Concen: 39.531 ug/mL
RT: 3.910 min Scan# 651
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:128 Resp: 741085

Ion	Ratio	Lower	Upper
128	100		
64	50.2	16.8	76.8
130	32.3	1.2	61.2

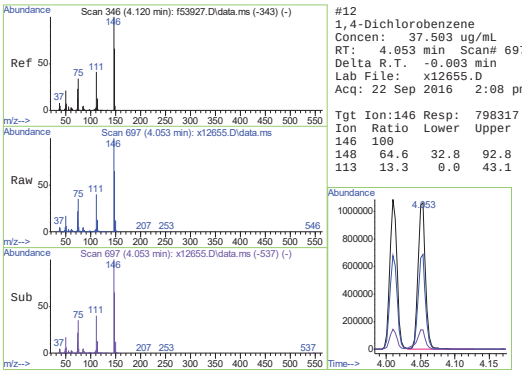


#11
1,3-Dichlorobenzene
Concen: 38.063 ug/mL
RT: 4.010 min Scan# 683
Delta R.T. -0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:146 Resp: 771260

Ion	Ratio	Lower	Upper
146	100		
148	62.6	33.1	93.1
113	13.2	0.0	43.4

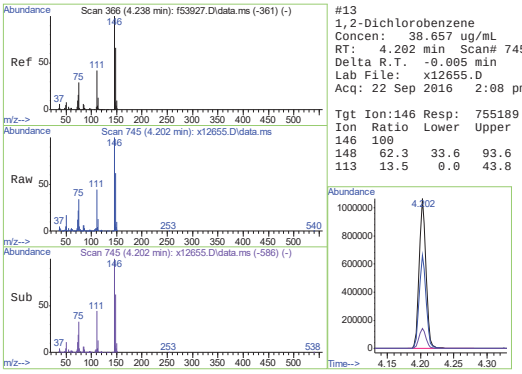
9.4.2 9



#12
1,4-Dichlorobenzene
Concen: 37.503 ug/mL
RT: 4.053 min Scan# 697
Delta R.T. -0.003 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:146 Resp: 798317

Ion	Ratio	Lower	Upper
146	100		
148	64.6	32.8	92.8
113	13.3	0.0	43.1

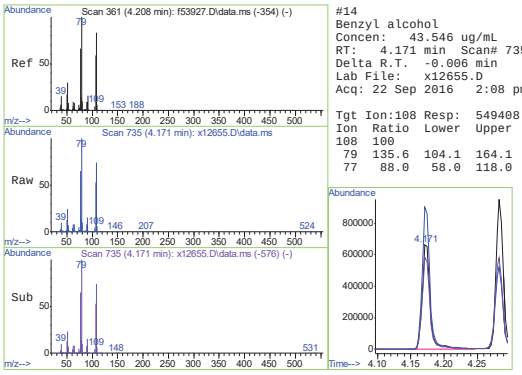


#13
1,2-Dichlorobenzene
Concen: 38.657 ug/mL
RT: 4.202 min Scan# 745
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:146 Resp: 755189

Ion	Ratio	Lower	Upper
146	100		
148	62.3	33.6	93.6
113	13.5	0.0	43.8

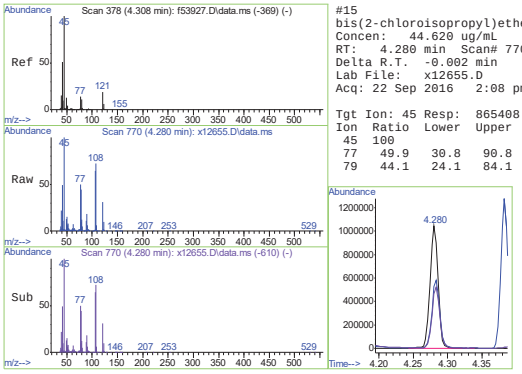
9.4.2 9



#14
Benzyl alcohol
Concen: 43.546 ug/mL
RT: 4.171 min Scan# 735
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:108 Resp: 549408

Ion	Ratio	Lower	Upper
108	100		
79	135.6	104.1	164.1
77	88.0	58.0	118.0

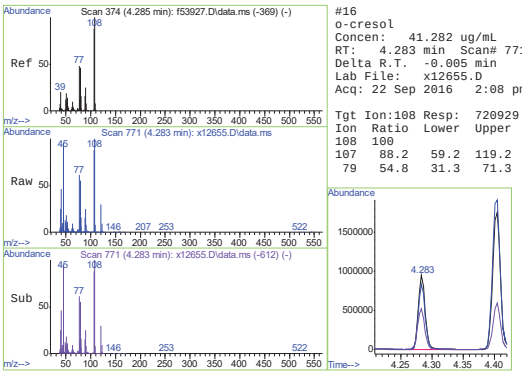


#15
bis(2-chloroisopropyl)ether
Concen: 44.620 ug/mL
RT: 4.280 min Scan# 770
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 45 Resp: 865408

Ion	Ratio	Lower	Upper
45	100		
77	49.9	30.8	90.8
79	44.1	24.1	84.1

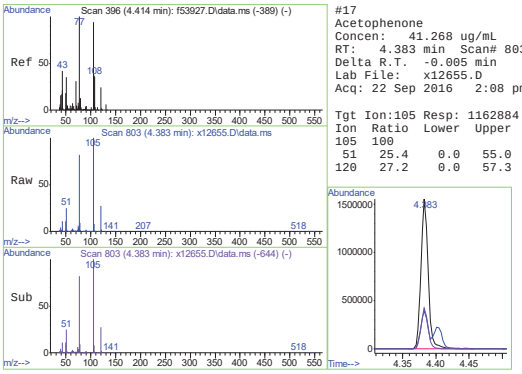
9.4.2 9



#16
o-cresol
Concen: 41.282 ug/mL
RT: 4.283 min Scan# 771
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:108 Resp: 720929

Ion	Ratio	Lower	Upper
108	100		
107	88.2	59.2	119.2
79	54.8	31.3	71.3

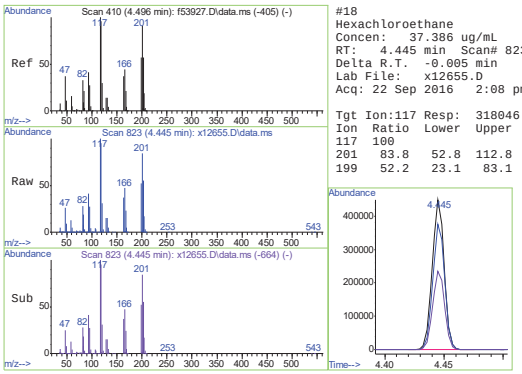


#17
Acetophenone
Concen: 41.268 ug/mL
RT: 4.383 min Scan# 803
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:105 Resp: 1162884

Ion	Ratio	Lower	Upper
105	100		
51	25.4	0.0	55.0
120	27.2	0.0	57.3

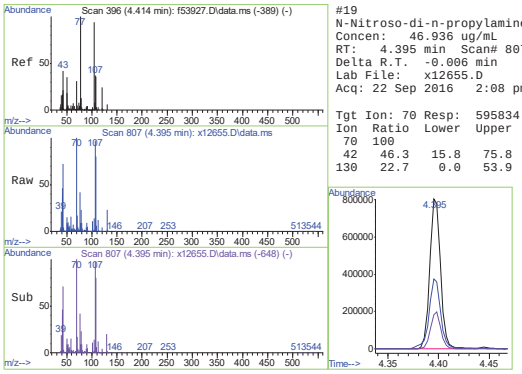
9.4.2 9



#18
Hexachloroethane
Concen: 37.386 ug/mL
RT: 4.445 min Scan# 823
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:117 Resp: 318046

Ion	Ratio	Lower	Upper
117	100		
201	83.8	52.8	112.8
199	52.2	23.1	83.1

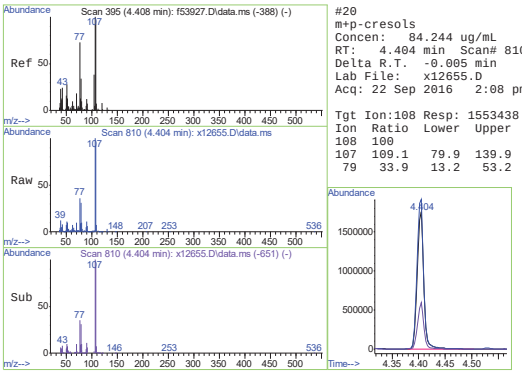


#19
N-Nitroso-di-n-propylamine
Concen: 46.936 ug/mL
RT: 4.395 min Scan# 807
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 70 Resp: 595834

Ion	Ratio	Lower	Upper
70	100		
42	46.3	15.8	75.8
130	22.7	0.0	53.9

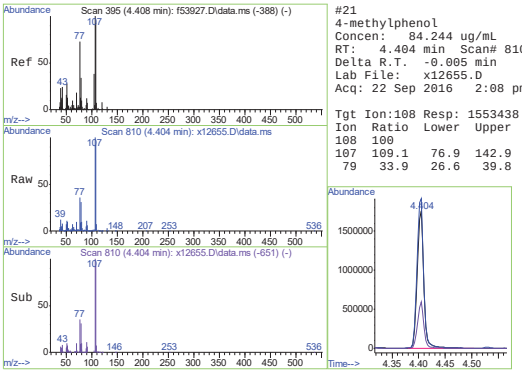
9.4.2 9



#20
m+p-cresols
Concen: 84.244 ug/mL
RT: 4.404 min Scan# 810
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:108 Resp: 1553438

Ion	Ratio	Lower	Upper
108	100		
107	109.1	79.9	139.9
79	33.9	13.2	53.2

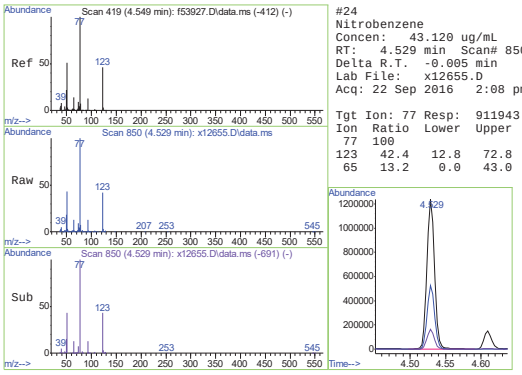


#21
4-methylphenol
Concen: 84.244 ug/mL
RT: 4.404 min Scan# 810
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:108 Resp: 1553438

Ion	Ratio	Lower	Upper
108	100		
107	109.1	76.9	142.9
79	33.9	26.6	39.8

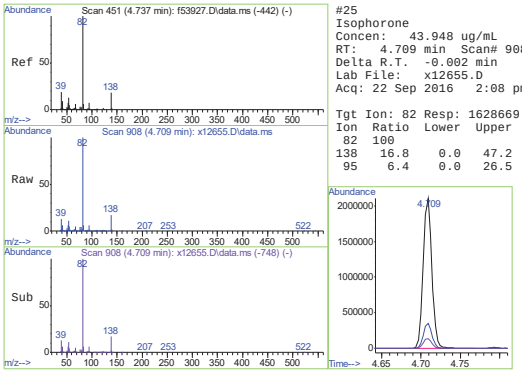
9.4.2 9



#24
Nitrobenzene
Concen: 43.120 ug/mL
RT: 4.529 min Scan# 850
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 77 Resp: 911943

Ion	Ratio	Lower	Upper
77	100		
123	42.4	12.8	72.8
65	13.2	0.0	43.0

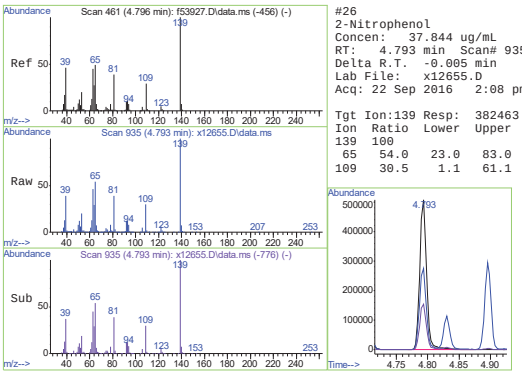


#25
Isophorone
Concen: 43.948 ug/mL
RT: 4.709 min Scan# 908
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 82 Resp: 1628669

Ion	Ratio	Lower	Upper
82	100		
138	16.8	0.0	47.2
95	6.4	0.0	26.5

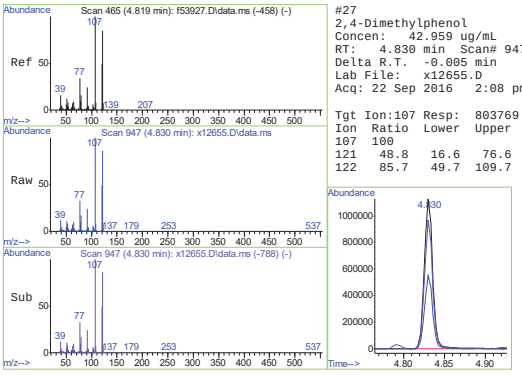
9.4.2 9



#26
2-Nitrophenol
Concen: 37.844 ug/mL
RT: 4.793 min Scan# 935
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:139 Resp: 382463

Ion	Ratio	Lower	Upper
139	100		
65	54.0	23.0	83.0
109	30.5	1.1	61.1

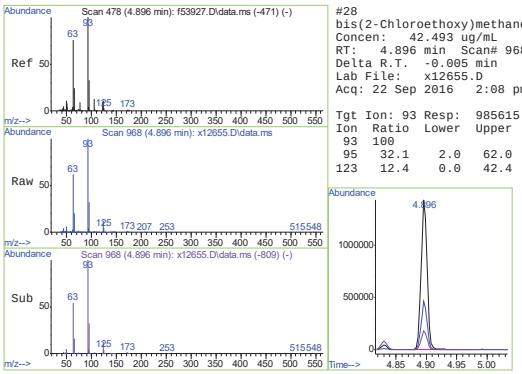


#27
2,4-Dimethylphenol
Concen: 42.959 ug/mL
RT: 4.830 min Scan# 947
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:107 Resp: 803769

Ion	Ratio	Lower	Upper
107	100		
121	48.8	16.6	76.6
122	85.7	49.7	109.7

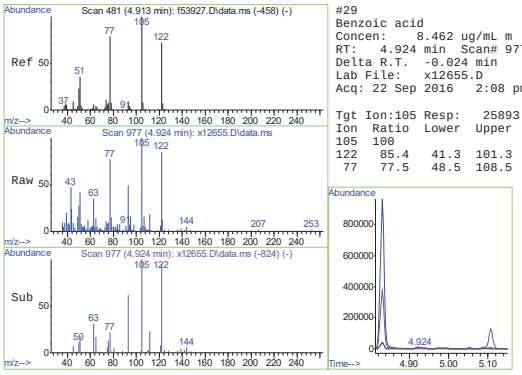
9.4.2 9



#28
bis(2-Chloroethoxy)methane
Concen: 42.493 ug/mL
RT: 4.896 min Scan# 968
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 93 Resp: 985615

Ion	Ratio	Lower	Upper
93	100		
95	32.1	2.0	62.0
123	12.4	0.0	42.4

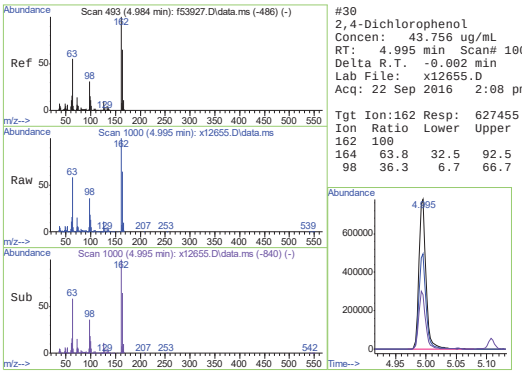


#29
Benzoic acid
Concen: 8.462 ug/mL m
RT: 4.924 min Scan# 977
Delta R.T. -0.024 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:105 Resp: 25893

Ion	Ratio	Lower	Upper
105	100		
122	85.4	41.3	101.3
77	77.5	48.5	108.5

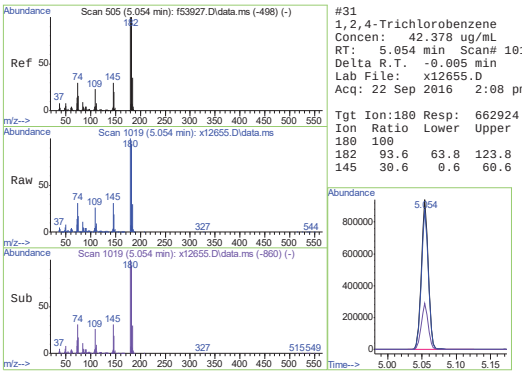
9.4.2 9



#30
2,4-Dichlorophenol
Concen: 43.756 ug/mL
RT: 4.995 min Scan# 1000
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:162 Resp: 627455

Ion	Ratio	Lower	Upper
162	100		
164	63.8	32.5	92.5
98	36.3	6.7	66.7

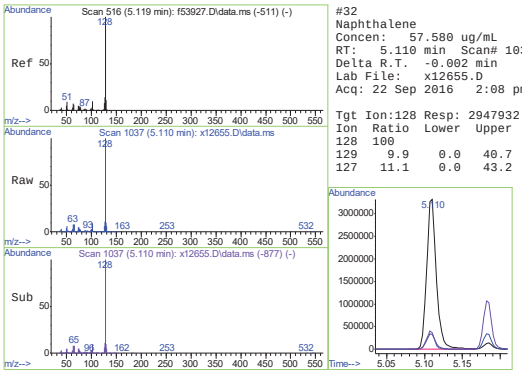


#31
1,2,4-Trichlorobenzene
Concen: 42.378 ug/mL
RT: 5.054 min Scan# 1019
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:180 Resp: 662924

Ion	Ratio	Lower	Upper
180	100		
182	93.6	63.8	123.8
145	30.6	0.6	60.6

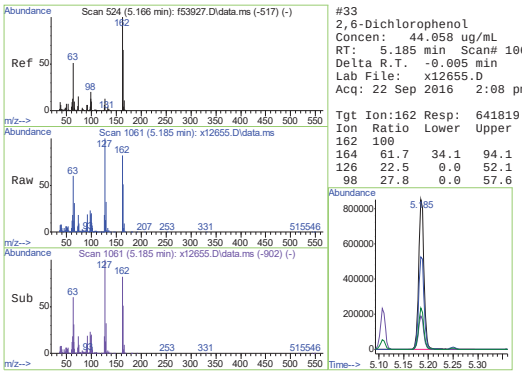
9.4.2 9



#32
Naphthalene
Concen: 57.580 ug/mL
RT: 5.110 min Scan# 1037
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:128 Resp: 2947932

Ion	Ratio	Lower	Upper
128	100		
129	9.9	0.0	40.7
127	11.1	0.0	43.2

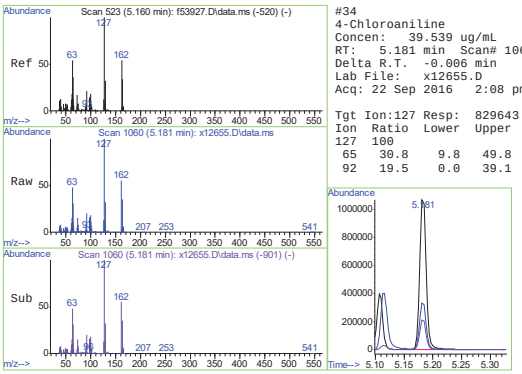


#33
2,6-Dichlorophenol
Concen: 44.058 ug/mL
RT: 5.185 min Scan# 1061
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:162 Resp: 641819

Ion	Ratio	Lower	Upper
162	100		
164	61.7	34.1	94.1
126	22.5	0.0	52.1
98	27.8	0.0	57.6

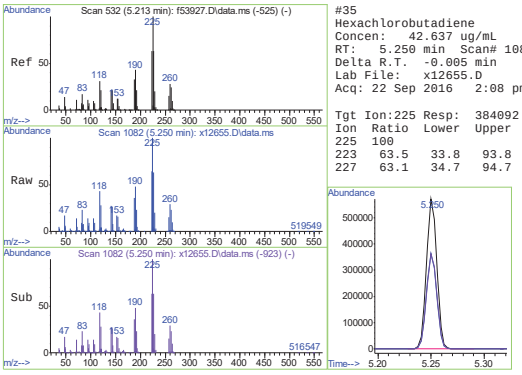
9.4.2 9



#34
4-Chloroaniline
Concen: 39.539 ug/mL
RT: 5.181 min Scan# 1060
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:127 Resp: 829643

Ion	Ratio	Lower	Upper
127	100		
65	30.8	9.8	49.8
92	19.5	0.0	39.1

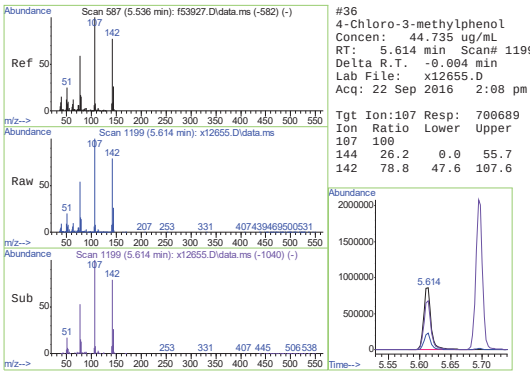


#35
Hexachlorobutadiene
Concen: 42.637 ug/mL
RT: 5.250 min Scan# 1082
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:225 Resp: 384092

Ion	Ratio	Lower	Upper
225	100		
223	63.5	33.8	93.8
227	63.1	34.7	94.7

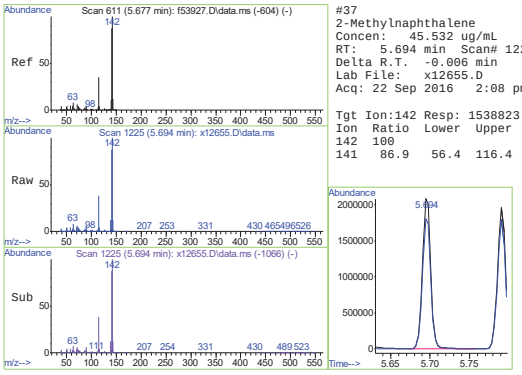
9.4.2 9



#36
4-Chloro-3-methylphenol
Concen: 44.735 ug/mL
RT: 5.614 min Scan# 1199
Delta R.T. -0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:107 Resp: 700689

Ion	Ratio	Lower	Upper
107	100		
144	26.2	0.0	55.7
142	78.8	47.6	107.6

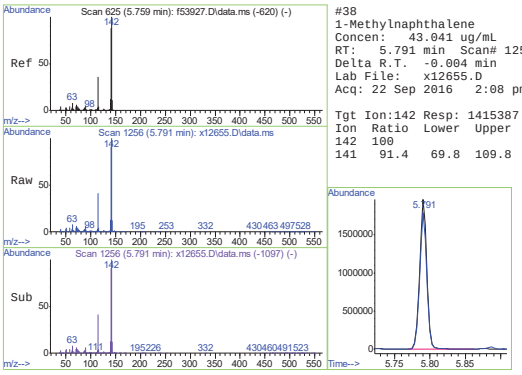


#37
2-Methylnaphthalene
Concen: 45.532 ug/mL
RT: 5.694 min Scan# 1225
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:142 Resp: 1538823

Ion	Ratio	Lower	Upper
142	100		
141	86.9	56.4	116.4

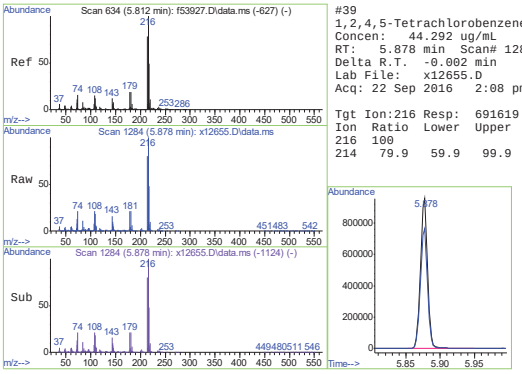
9.4.2 9



#38
1-Methylnaphthalene
Concen: 43.041 ug/mL
RT: 5.791 min Scan# 1256
Delta R.T. -0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:142 Resp: 1415387

Ion	Ratio	Lower	Upper
142	100		
141	91.4	69.8	109.8

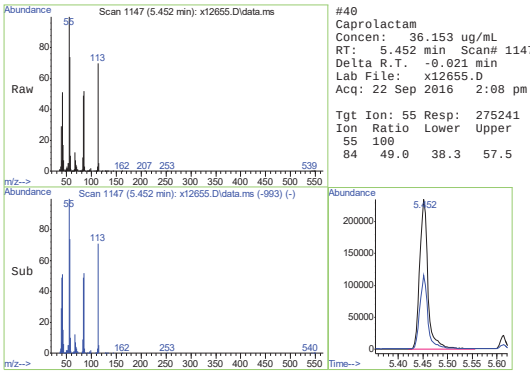


#39
1,2,4,5-Tetrachlorobenzene
Concen: 44.292 ug/mL
RT: 5.878 min Scan# 1284
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:216 Resp: 691619

Ion	Ratio	Lower	Upper
216	100		
214	79.9	59.9	99.9

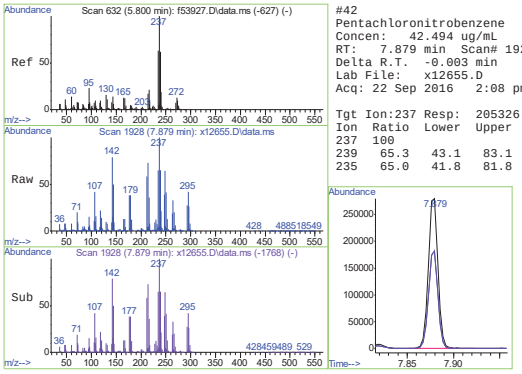
9.4.2 9



#40
Caprolactam
Concen: 36.153 ug/mL
RT: 5.452 min Scan# 1147
Delta R.T. -0.021 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 55 Resp: 275241

Ion	Ratio	Lower	Upper
55	100		
84	49.0	38.3	57.5

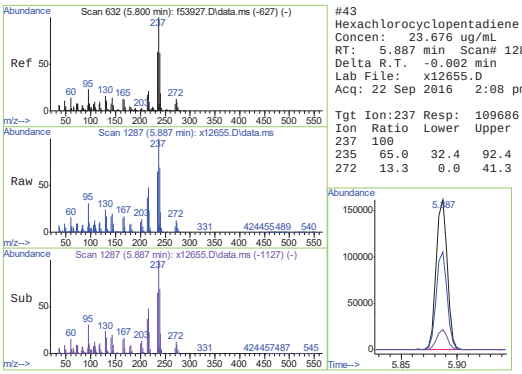


#42
Pentachloronitrobenzene
Concen: 42.494 ug/mL
RT: 7.879 min Scan# 1928
Delta R.T. -0.003 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:237 Resp: 205326

Ion	Ratio	Lower	Upper
237	100		
239	65.3	43.1	83.1
235	65.0	41.8	81.8

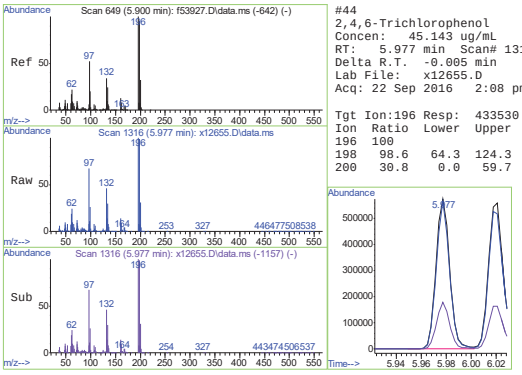
9.4.2 9



#43
Hexachlorocyclopentadiene
Concen: 23.676 ug/mL
RT: 5.887 min Scan# 1287
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:237 Resp: 109686

Ion	Ratio	Lower	Upper
237	100		
235	65.0	32.4	92.4
272	13.3	0.0	41.3

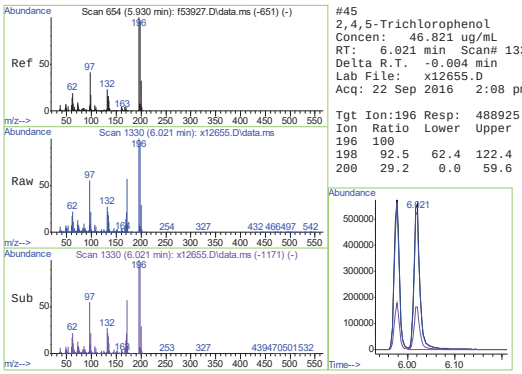


#44
2,4,6-Trichlorophenol
Concen: 45.143 ug/mL
RT: 5.977 min Scan# 1316
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:196 Resp: 433530

Ion	Ratio	Lower	Upper
196	100		
198	98.6	64.3	124.3
200	30.8	0.0	59.7

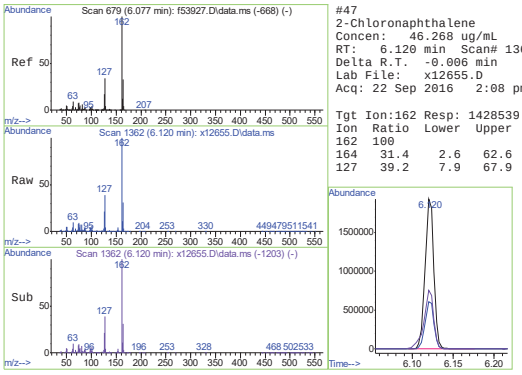
9.4.2 9



#45
2,4,5-Trichlorophenol
Concen: 46.821 ug/mL
RT: 6.021 min Scan# 1330
Delta R.T. -0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:196 Resp: 488925

Ion	Ratio	Lower	Upper
196	100		
198	92.5	62.4	122.4
200	29.2	0.0	59.6

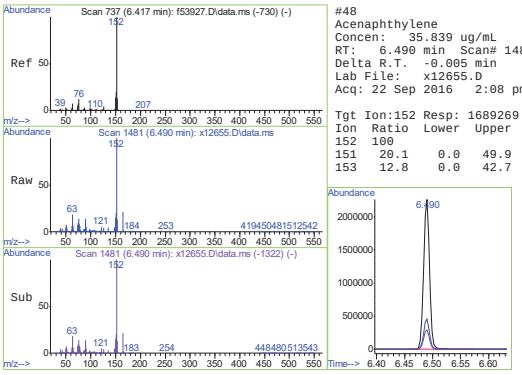


#47
2-Chloronaphthalene
Concen: 46.268 ug/mL
RT: 6.120 min Scan# 1362
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:162 Resp: 1428539

Ion	Ratio	Lower	Upper
162	100		
164	31.4	2.6	62.6
127	39.2	7.9	67.9

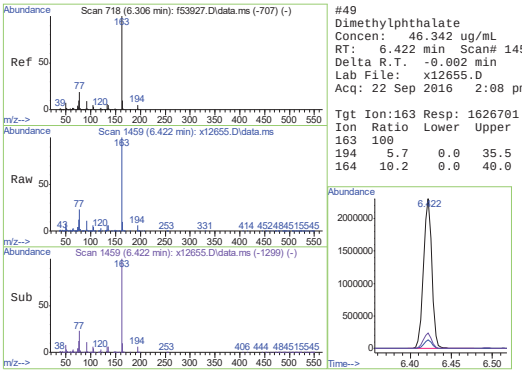
9.4.2 9



#48
Acenaphthylene
Concen: 35.839 ug/mL
RT: 6.490 min Scan# 1481
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:152 Resp: 1689269

Ion	Ratio	Lower	Upper
152	100		
151	20.1	0.0	49.9
153	12.8	0.0	42.7

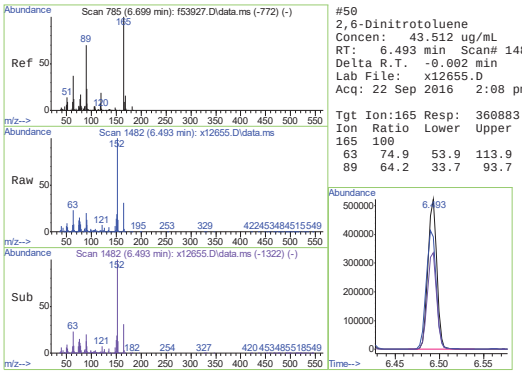


#49
Dimethylphthalate
Concen: 46.342 ug/mL
RT: 6.422 min Scan# 1459
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:163 Resp: 1626701

Ion	Ratio	Lower	Upper
163	100		
194	5.7	0.0	35.5
164	10.2	0.0	40.0

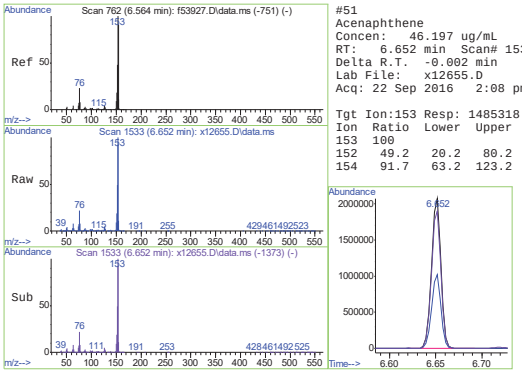
9.4.2 9



#50
2,6-Dinitrotoluene
Concen: 43.512 ug/mL
RT: 6.493 min Scan# 1482
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:165 Resp: 360883

Ion	Ratio	Lower	Upper
165	100		
63	74.9	53.9	113.9
89	64.2	33.7	93.7

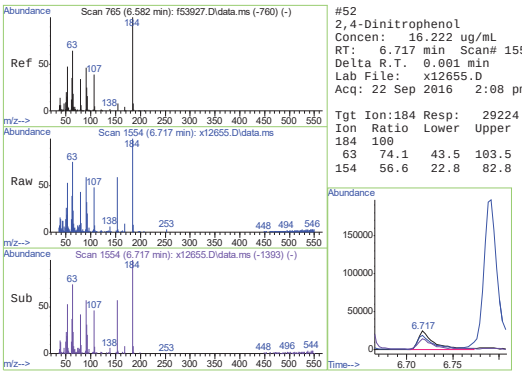


#51
Acenaphthene
Concen: 46.197 ug/mL
RT: 6.652 min Scan# 1533
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:153 Resp: 1485318

Ion	Ratio	Lower	Upper
153	100		
152	49.2	20.2	80.2
154	91.7	63.2	123.2

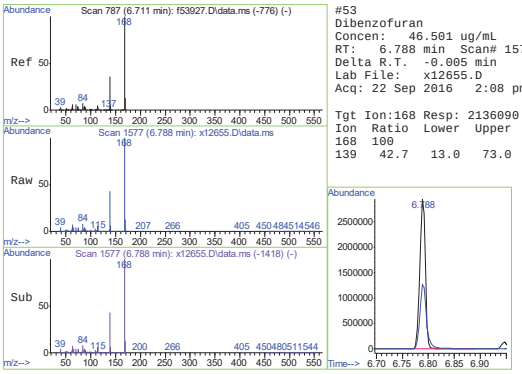
9.4.2 9



#52
2,4-Dinitrophenol
Concen: 16.222 ug/mL
RT: 6.717 min Scan# 1554
Delta R.T. 0.001 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:184 Resp: 29224

Ion	Ratio	Lower	Upper
184	100		
63	74.1	43.5	103.5
154	56.6	22.8	82.8

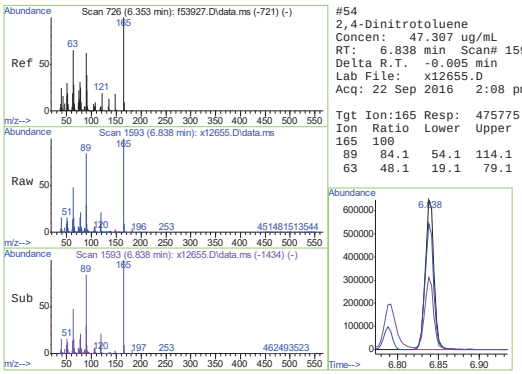


#53
Dibenzofuran
Concen: 46.501 ug/mL
RT: 6.788 min Scan# 1577
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:168 Resp: 2136090

Ion	Ratio	Lower	Upper
168	100		
139	42.7	13.0	73.0

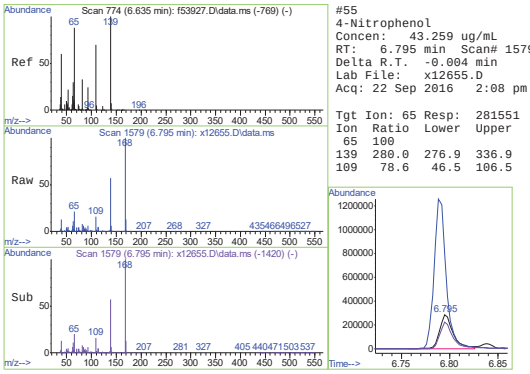
9.4.2 9



#54
2,4-Dinitrotoluene
Concen: 47.307 ug/mL
RT: 6.838 min Scan# 1593
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:165 Resp: 475775

Ion	Ratio	Lower	Upper
165	100		
89	84.1	54.1	114.1
63	48.1	19.1	79.1

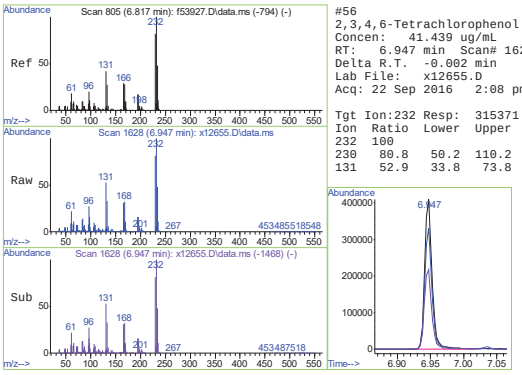


#55
4-Nitrophenol
Concen: 43.259 ug/mL
RT: 6.795 min Scan# 1579
Delta R.T. -0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 65 Resp: 281551

Ion	Ratio	Lower	Upper
65	100		
139	280.0	276.9	336.9
109	78.6	46.5	106.5

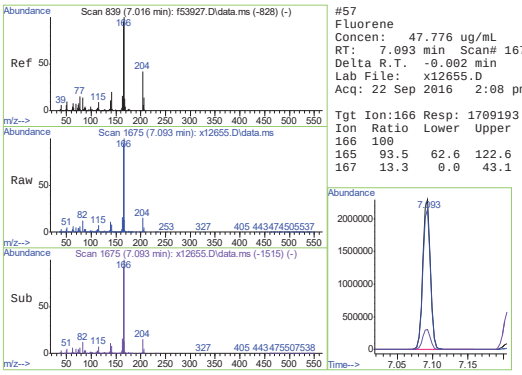
9.4.2 9



#56
2,3,4,6-Tetrachlorophenol
Concen: 41.439 ug/mL
RT: 6.947 min Scan# 1628
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:232 Resp: 315371

Ion	Ratio	Lower	Upper
232	100		
230	80.8	50.2	110.2
131	52.9	33.8	73.8

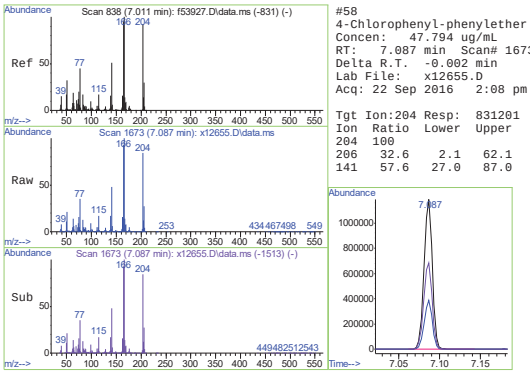


#57
Fluorene
Concen: 47.776 ug/mL
RT: 7.093 min Scan# 1675
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:166 Resp: 1709193

Ion	Ratio	Lower	Upper
166	100		
165	93.5	62.6	122.6
167	13.3	0.0	43.1

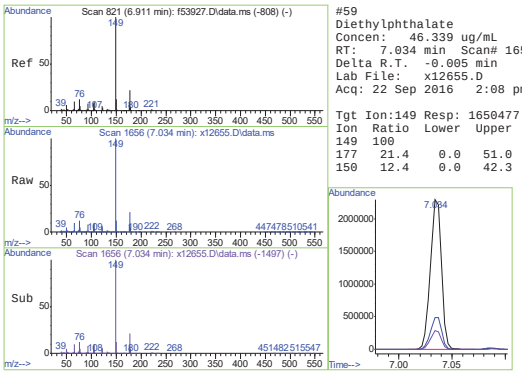
9.4.2 9



#58
4-Chlorophenyl-phenylether
Concen: 47.794 ug/mL
RT: 7.087 min Scan# 1673
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:204 Resp: 831201

Ion	Ratio	Lower	Upper
204	100		
206	32.6	2.1	62.1
141	57.6	27.0	87.0

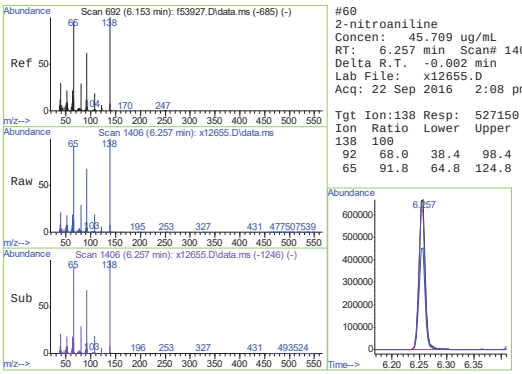


#59
Diethylphthalate
Concen: 46.339 ug/mL
RT: 7.034 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:149 Resp: 1650477

Ion	Ratio	Lower	Upper
149	100		
177	21.4	0.0	51.0
150	12.4	0.0	42.3

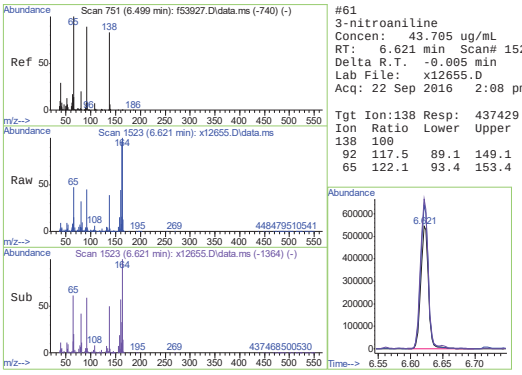
9.4.2 9



#60
2-nitroaniline
Concen: 45.709 ug/mL
RT: 6.257 min Scan# 1406
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:138 Resp: 527150

Ion	Ratio	Lower	Upper
138	100		
92	68.0	38.4	98.4
65	91.8	64.8	124.8

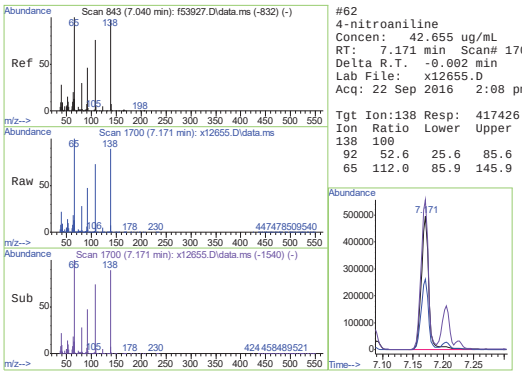


#61
3-nitroaniline
Concen: 43.705 ug/mL
RT: 6.621 min Scan# 1523
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:138 Resp: 437429

Ion	Ratio	Lower	Upper
138	100		
92	117.5	89.1	149.1
65	122.1	93.4	153.4

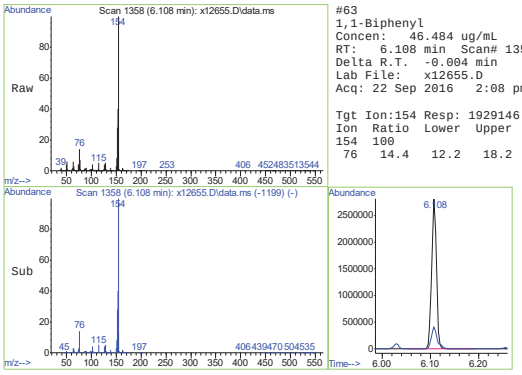
9.4.2 9



#62
4-nitroaniline
Concen: 42.655 ug/mL
RT: 7.171 min Scan# 1700
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:138 Resp: 417426

Ion	Ratio	Lower	Upper
138	100		
92	52.6	25.6	85.6
65	112.0	85.9	145.9

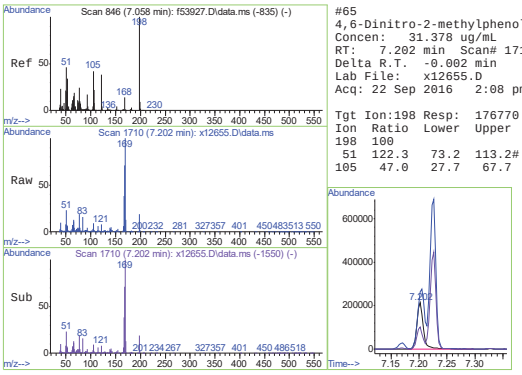


#63
1,1-Biphenyl
Concen: 46.484 ug/mL
RT: 6.108 min Scan# 1358
Delta R.T. -0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:154 Resp: 1929146

Ion	Ratio	Lower	Upper
154	100		
76	14.4	12.2	18.2

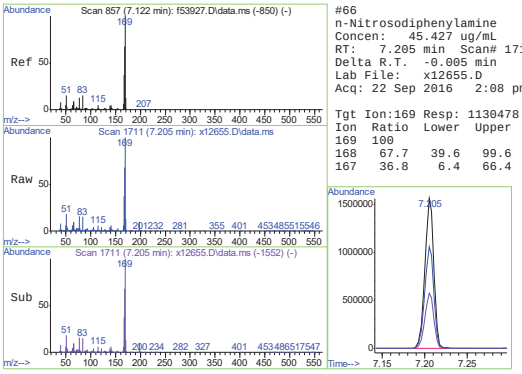
9.4.2 9



#65
4,6-Dinitro-2-methylphenol
Concen: 31.378 ug/mL
RT: 7.202 min Scan# 1710
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:198 Resp: 176770

Ion	Ratio	Lower	Upper
198	100		
51	122.3	73.2	113.2#
105	47.0	27.7	67.7

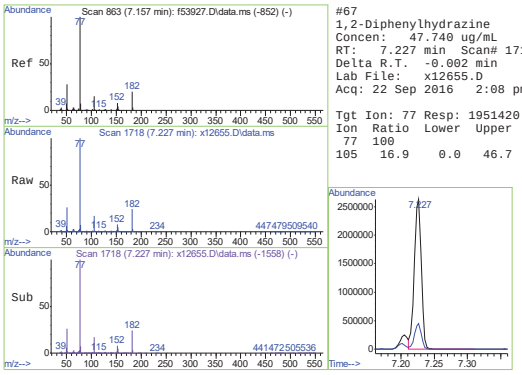


#66
n-Nitrosodiphenylamine
Concen: 45.427 ug/mL
RT: 7.205 min Scan# 1711
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:169 Resp: 1130478

Ion	Ratio	Lower	Upper
169	100		
168	67.7	39.6	99.6
167	36.8	6.4	66.4

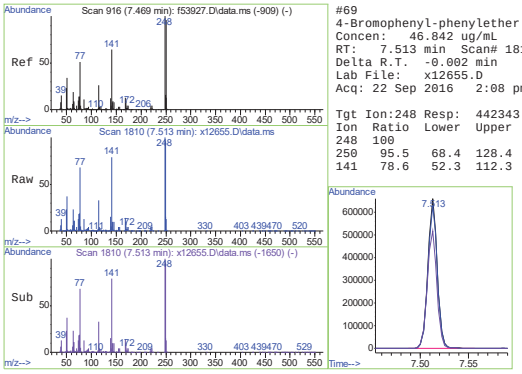
9.4.2 9



#67
1,2-Diphenylhydrazine
Concen: 47.740 ug/mL
RT: 7.227 min Scan# 1718
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 77 Resp: 1951420

Ion	Ratio	Lower	Upper
77	100		
105	16.9	0.0	46.7

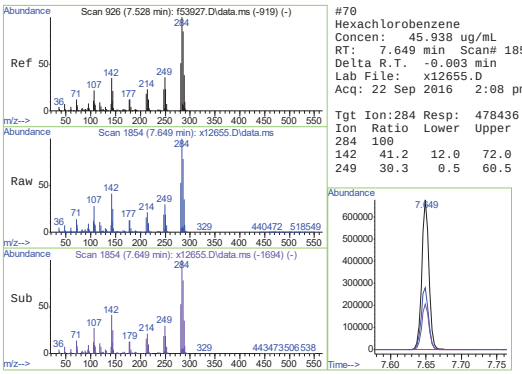


#69
4-Bromophenyl-phenylether
Concen: 46.842 ug/mL
RT: 7.513 min Scan# 1810
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:248 Resp: 442343

Ion	Ratio	Lower	Upper
248	100		
250	95.5	68.4	128.4
141	78.6	52.3	112.3

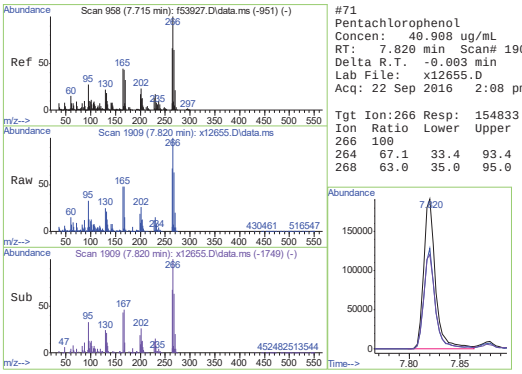
9.4.2 9



#70
Hexachlorobenzene
Concen: 45.938 ug/mL
RT: 7.649 min Scan# 1854
Delta R.T. -0.003 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:284 Resp: 478436

Ion	Ratio	Lower	Upper
284	100		
142	41.2	12.0	72.0
249	30.3	0.5	60.5

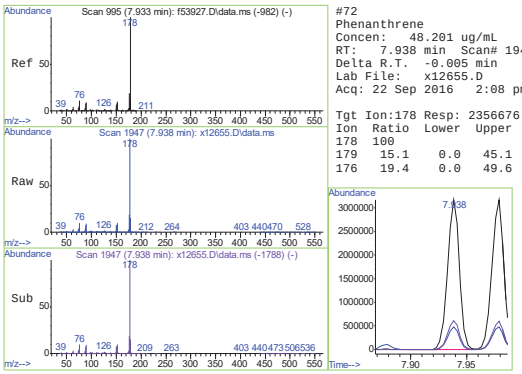


#71
Pentachlorophenol
Concen: 40.908 ug/mL
RT: 7.820 min Scan# 1909
Delta R.T. -0.003 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:266 Resp: 154833

Ion	Ratio	Lower	Upper
266	100		
264	67.1	33.4	93.4
268	63.0	35.0	95.0

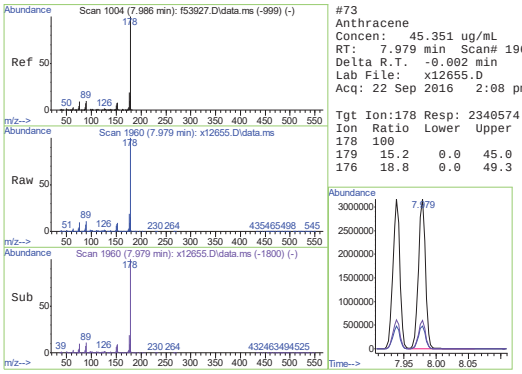
9.4.2 9



#72
Phenanthrene
Concen: 48.201 ug/mL
RT: 7.938 min Scan# 1947
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:178 Resp: 2356676

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.1
176	19.4	0.0	49.6

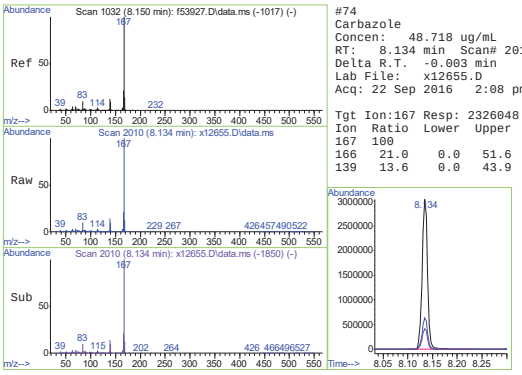


#73
Anthracene
Concen: 45.351 ug/mL
RT: 7.979 min Scan# 1960
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:178 Resp: 2340574

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.0
176	18.8	0.0	49.3

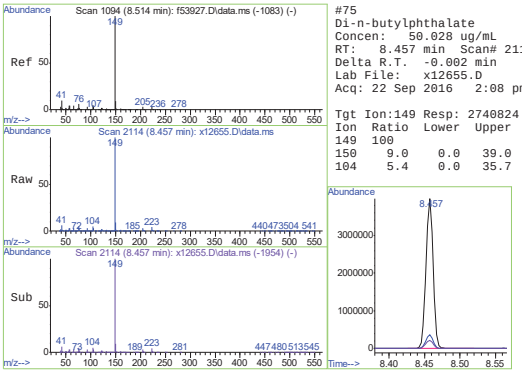
9.4.2 9



#74
Carbazole
Concen: 48.718 ug/mL
RT: 8.134 min Scan# 2010
Delta R.T. -0.003 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:167 Resp: 2326048

Ion	Ratio	Lower	Upper
167	100		
166	21.0	0.0	51.6
139	13.6	0.0	43.9



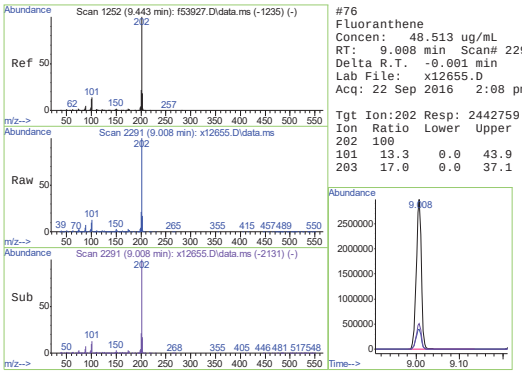
#75
Di-n-butylphthalate
Concen: 50.028 ug/mL
RT: 8.457 min Scan# 2114
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:149 Resp: 2740824

Ion	Ratio	Lower	Upper
149	100		
150	9.0	0.0	39.0
104	5.4	0.0	35.7

9.4.2

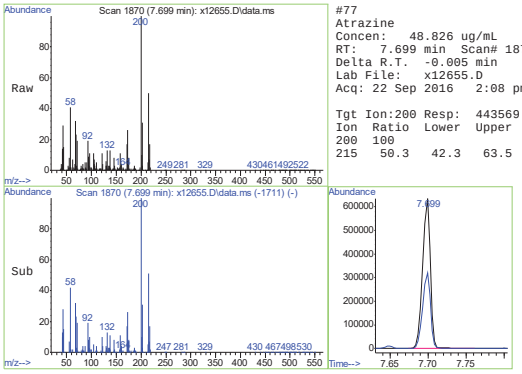
9



#76
Fluoranthene
Concen: 48.513 ug/mL
RT: 9.008 min Scan# 2291
Delta R.T. -0.001 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:202 Resp: 2442759

Ion	Ratio	Lower	Upper
202	100		
101	13.3	0.0	43.9
203	17.0	0.0	37.1



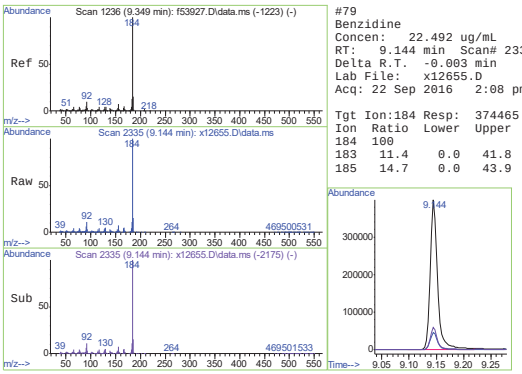
#77
Atrazine
Concen: 48.826 ug/mL
RT: 7.699 min Scan# 1870
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:200 Resp: 443569

Ion	Ratio	Lower	Upper
200	100		
215	50.3	42.3	63.5

9.4.2

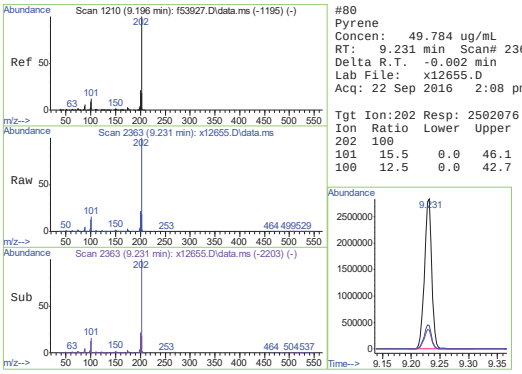
9



#79
Benzidine
Concen: 22.492 ug/mL
RT: 9.144 min Scan# 2335
Delta R.T. -0.003 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:184 Resp: 374465

Ion	Ratio	Lower	Upper
184	100		
183	11.4	0.0	41.8
185	14.7	0.0	43.9



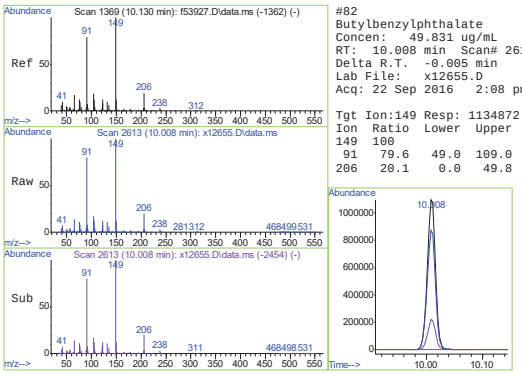
#80
Pyrene
Concen: 49.784 ug/mL
RT: 9.231 min Scan# 2363
Delta R.T. -0.002 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:202 Resp: 2502076

Ion	Ratio	Lower	Upper
202	100		
101	15.5	0.0	46.1
100	12.5	0.0	42.7

9.4.2

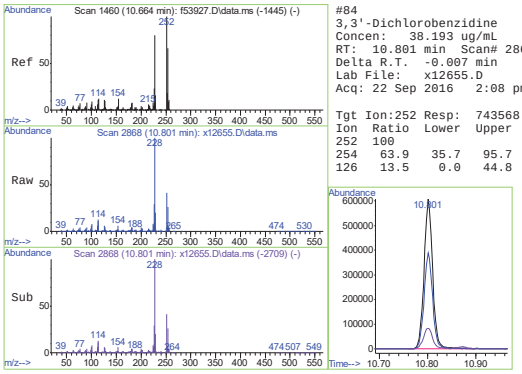
9



#82
Butylbenzylphthalate
Concen: 49.831 ug/mL
RT: 10.008 min Scan# 2613
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:149 Resp: 1134872

Ion	Ratio	Lower	Upper
149	100		
91	79.6	49.0	109.0
206	20.1	0.0	49.8



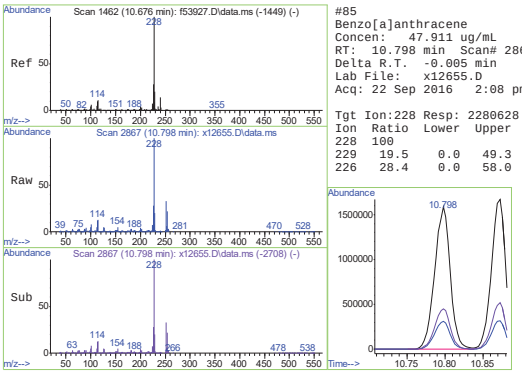
#84
3,3'-Dichlorobenzidine
Concen: 38.193 ug/mL
RT: 10.801 min Scan# 2868
Delta R.T. -0.007 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:252 Resp: 743568

Ion	Ratio	Lower	Upper
252	100		
254	63.9	35.7	95.7
126	13.5	0.0	44.8

9.4.2

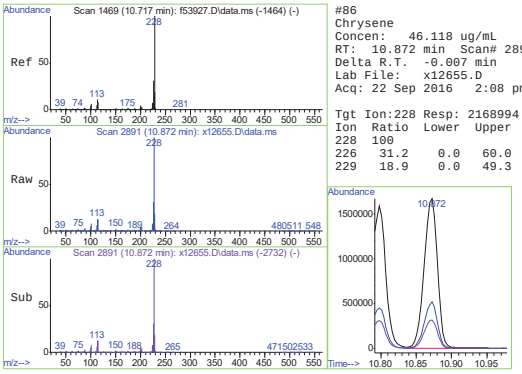
9



#85
Benzo[a]anthracene
Concen: 47.911 ug/mL
RT: 10.798 min Scan# 2867
Delta R.T. -0.005 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:228 Resp: 2280628

Ion	Ratio	Lower	Upper
228	100		
229	19.5	0.0	49.3
226	28.4	0.0	58.0

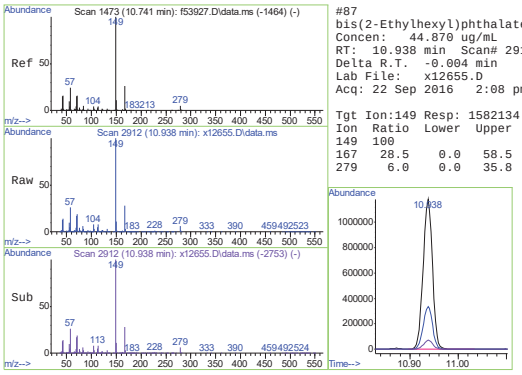


#86
Chrysene
Concen: 46.118 ug/mL
RT: 10.872 min Scan# 2891
Delta R.T. -0.007 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:228 Resp: 2168994

Ion	Ratio	Lower	Upper
228	100		
226	31.2	0.0	60.0
229	18.9	0.0	49.3

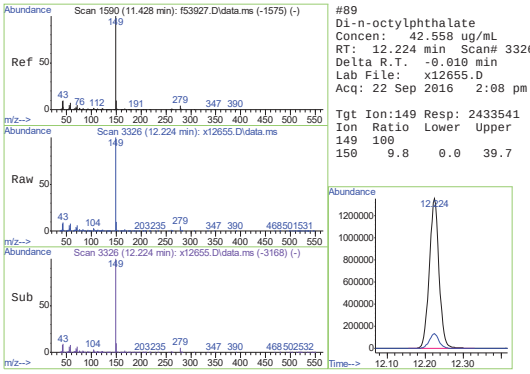
9.4.2 9



#87
bis(2-Ethylhexyl)phthalate
Concen: 44.870 ug/mL
RT: 10.938 min Scan# 2912
Delta R.T. -0.004 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:149 Resp: 1582134

Ion	Ratio	Lower	Upper
149	100		
167	28.5	0.0	58.5
279	6.0	0.0	35.8

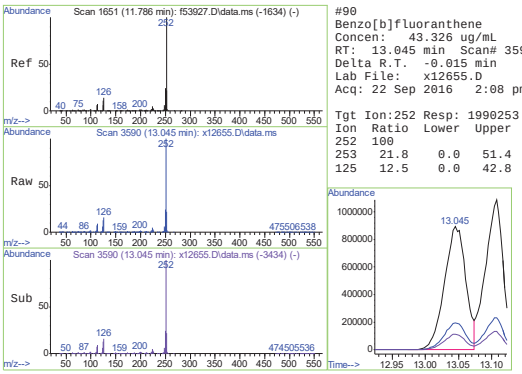


#89
Di-n-octylphthalate
Concen: 42.558 ug/mL
RT: 12.224 min Scan# 3326
Delta R.T. -0.010 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:149 Resp: 2433541

Ion	Ratio	Lower	Upper
149	100		
150	9.8	0.0	39.7

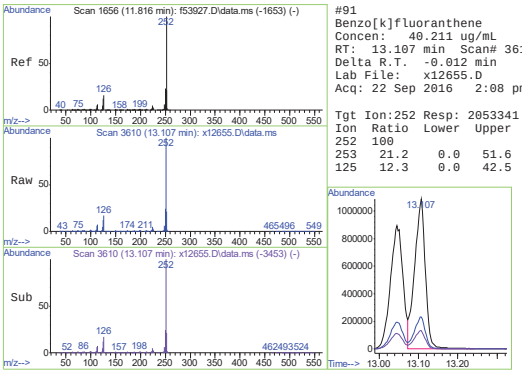
9.4.2 9



#90
Benzo[b]fluoranthene
Concen: 43.326 ug/mL
RT: 13.045 min Scan# 3590
Delta R.T. -0.015 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:252 Resp: 1990253

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.4
125	12.5	0.0	42.8

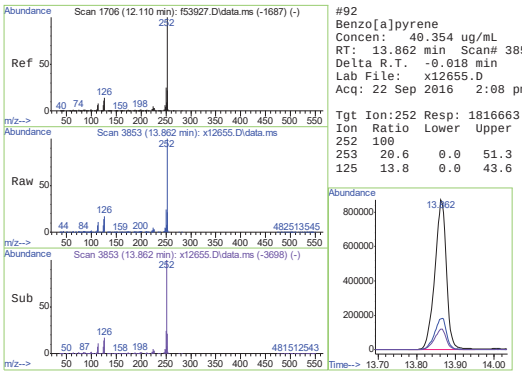


#91
Benzo[k]fluoranthene
Concen: 40.211 ug/mL
RT: 13.107 min Scan# 3610
Delta R.T. -0.012 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:252 Resp: 2053341

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.6
125	12.3	0.0	42.5

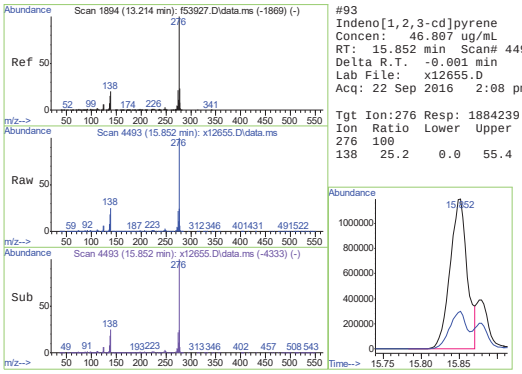
9.4.2 9



#92
Benzo[a]pyrene
Concen: 40.354 ug/mL
RT: 13.862 min Scan# 3853
Delta R.T. -0.018 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:252 Resp: 1816663

Ion	Ratio	Lower	Upper
252	100		
253	20.6	0.0	51.3
125	13.8	0.0	43.6

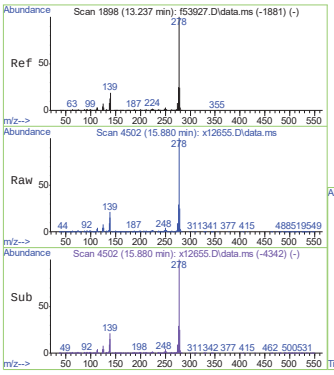


#93
Indeno[1,2,3-cd]pyrene
Concen: 46.807 ug/mL
RT: 15.852 min Scan# 4493
Delta R.T. -0.001 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:276 Resp: 1884239

Ion	Ratio	Lower	Upper
276	100		
138	25.2	0.0	55.4

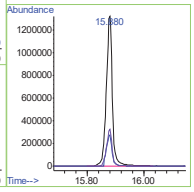
9.4.2 9

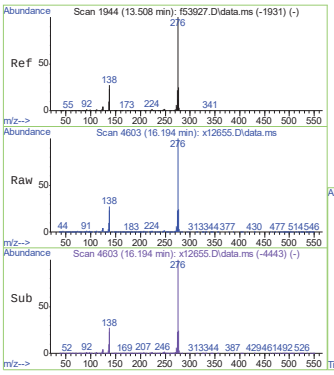


#94
Dibenz[a,h]anthracene
Concen: 51.728 ug/mL
RT: 15.880 min Scan# 4502
Delta R.T. -0.001 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:278 Resp: 1972340

Ion	Ratio	Lower	Upper
278	100		
139	20.8	0.0	50.6
279	24.8	0.0	53.3

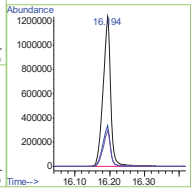




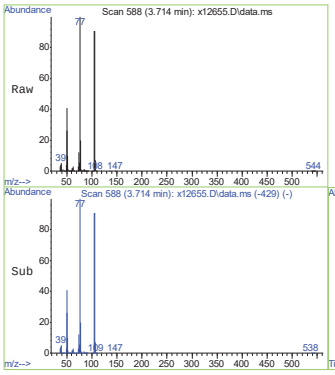
#95
Benzo[g,h,i]perylene
Concen: 51.431 ug/mL
RT: 16.194 min Scan# 4603
Delta R.T. -0.003 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion:276 Resp: 1883222

Ion	Ratio	Lower	Upper
276	100		
138	27.1	0.0	58.6
277	24.0	0.0	53.5



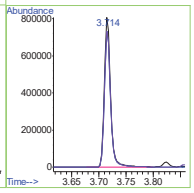
9.4.2 9



#97
Benzaldehyde
Concen: 72.093 ug/mL
RT: 3.714 min Scan# 588
Delta R.T. -0.006 min
Lab File: x12655.D
Acq: 22 Sep 2016 2:08 pm

Tgt Ion: 77 Resp: 642888

Ion	Ratio	Lower	Upper
77	100		
105	90.8	73.3	109.9
106	91.1	72.5	108.7

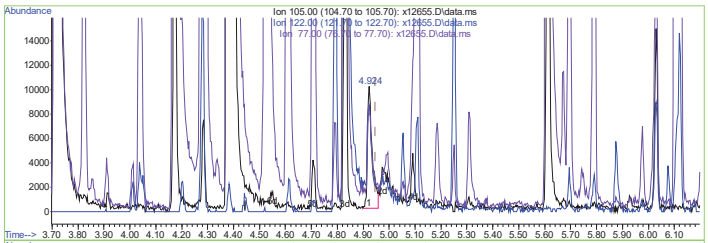


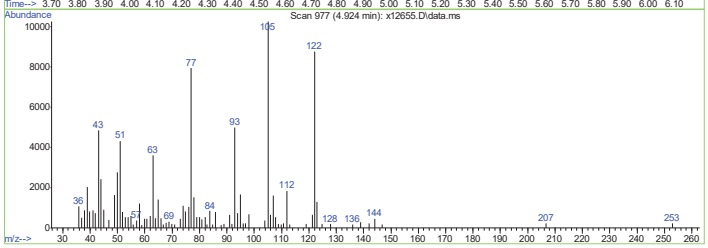
9.4.2 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12655.D
Sample : OP48710-MSD
Misc : op48710,msx425,20.62,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:08 pm Operator: AkinA

Quant Time: Sep 22 16:00:54 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12655.D\data.ms

(29) Benzoic acid (T)

4.924min (-0.024) 6.86ug/mL

response 12916

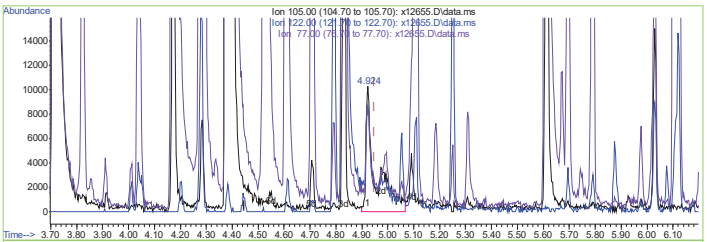
Ion	Exp%	Act%
105.00	100	100
122.00	71.30	69.26
77.00	78.50	59.25
0.00	0.00	0.00

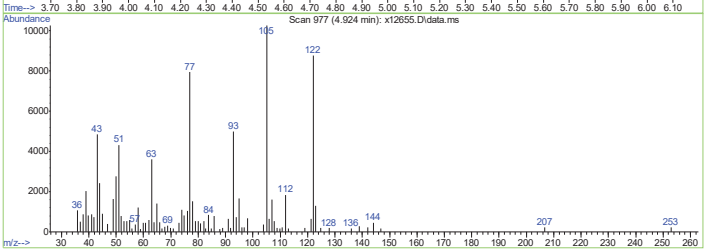
9.4.2.1 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12655.D
Sample : OP48710-MSD
Misc : op48710,msx425,20.62,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:08 pm Operator: AkinA

Quant Time: Sep 22 16:00:54 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12655.D\data.ms

(29) Benzoic acid (T)

4.924min (-0.024) 8.46ug/mL m

response 25893

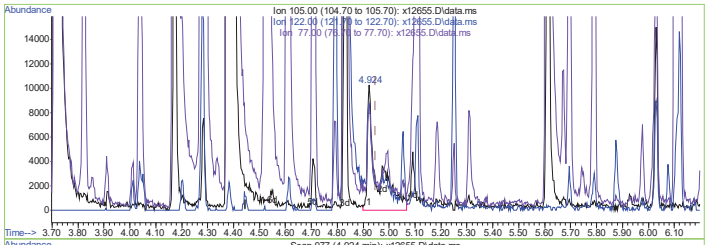
Ion	Exp%	Act%
105.00	100	100
122.00	71.30	85.43
77.00	78.50	77.47
0.00	0.00	0.00

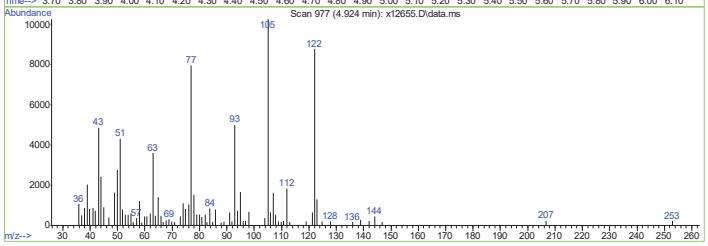
9.4.2.2 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12655.D
Sample : OP48710-MSD
Misc : op48710,msx425,20.62,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 22 Sep 2016 2:08 pm Operator: AkinA

Quant Time: Sep 22 16:00:54 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12655.D\data.ms

(29) Benzoic acid (T)

4.924min (-0.024) 8.46ug/mL m

response 25893

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	85.43
77.00	78.50	77.47
0.00	0.00	0.00

9.4.2.3

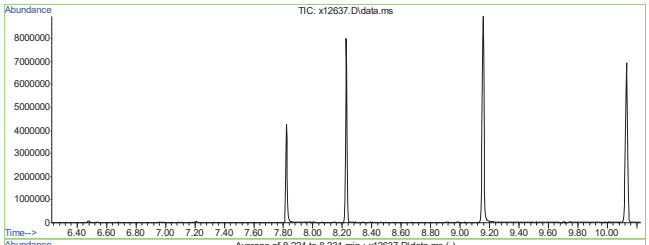
9

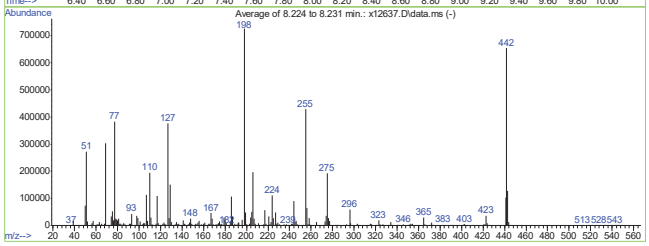
X160921_8270.m Thu Sep 22 16:02:08 2016 Page: 1

X12655.D edits: Benzoic acid

DFTPP
Data File : C:\msdchem\1\data\X160921\x12637.D Vial: 2
Acq On : 21 Sep 2016 2:16 pm Operator: AkinA
Sample : DFTPP Inst : MSX
Misc : op48431,msx424,,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : X:\1\methods\dftppeval.m (RTE Integrator)
Title : DFTPP and Tune Evaluation





9.5.1

9

AutoFind: Scans 2039, 2040, 2041; Background Corrected with Scan 2031

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.4	271327	PASS
68	69	0.00	2	1.8	5395	PASS
69	198	0.00	100	41.8	302677	PASS
70	69	0.00	2	0.6	1860	PASS
127	198	40	60	51.9	375957	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	724736	PASS
199	198	5	9	6.7	48677	PASS
275	198	10	30	26.5	192000	PASS
365	198	1	100	4.0	29109	PASS
441	443	0.01	100	80.5	102147	PASS
442	198	40	100	90.2	653483	PASS
443	442	17	23	19.4	126835	PASS

x12637.D dftppeval.m Wed Sep 21 15:42:00 2016

X12637.D: MSX424-DFTPP Instrument Performance Check (DFTPP) page 1 of 3

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	87	47.90	346	59.80	248	69.95	1860
36.95	1118	48.90	1699	60.95	3252	70.90	234
37.95	3192	49.95	72599	62.00	4031	71.90	136
38.95	17703	50.95	271327	63.00	11617	73.00	2721
39.90	789	52.00	13821	63.95	1571	74.00	33800
40.95	632	52.90	623	65.00	5825	75.00	52701
41.80	66	54.90	1243	65.85	437	76.00	19395
42.70	51	56.00	7937	66.80	172	77.00	382677
43.90	36	57.00	17699	67.00	161	78.00	25952
44.90	463	57.90	787	68.00	5395	79.00	23312
46.85	27	58.85	240	69.00	302677	80.00	18072

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.00	26053	91.95	6351	103.00	4705	114.05	179
82.00	6735	93.00	42627	104.00	9036	114.95	598
83.00	5495	93.95	2658	105.00	8979	115.95	5878
83.85	554	94.95	897	105.95	2847	117.00	109315
84.95	4381	96.00	2135	107.00	113384	117.95	8072
85.90	7612	96.90	960	108.00	17268	118.95	848
87.00	3357	98.00	35304	109.00	883	119.95	1270
87.90	1869	99.00	27221	110.00	194837	120.85	573
88.80	182	99.90	2244	111.00	29688	121.95	7224
89.00	463	101.00	14290	112.00	3961	123.00	10885
90.95	5610	101.85	878	112.90	1359	123.90	5139

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
124.95	5032	137.00	7183	147.95	26045	158.90	2737
127.00	375957	137.95	1345	148.95	5377	159.95	6549
128.00	27600	138.90	826	149.90	1475	161.00	9721
129.00	149717	139.95	1884	151.00	2119	161.95	2764
129.95	12504	140.90	18717	151.90	1444	162.90	699
130.85	2204	141.95	5950	152.95	6280	163.95	1140
131.95	1446	142.90	4472	154.00	4857	164.90	6972
132.90	548	143.90	1416	155.00	11163	166.00	5945
133.95	4377	144.90	958	156.00	16868	167.00	45069
135.00	12623	146.00	3440	156.95	3079	168.00	24536
135.95	5113	147.00	10237	157.90	3599	168.95	3659

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.90	1182	181.00	9222	189.85	1305	202.95	5980
170.95	1481	181.90	1589	190.95	3349	204.00	29781
171.90	3559	182.60	226	192.00	10334	205.00	50339
172.95	5092	182.90	453	193.00	10258	206.00	197141
173.95	8569	183.40	262	193.90	2416	206.95	26051
175.00	15707	183.95	2224	194.95	888	207.95	6553
175.95	4221	185.00	14670	196.00	21437	208.90	1990
176.95	6753	186.00	107227	197.90	724736	210.00	2436
177.95	2617	187.00	31421	198.95	48677	210.20	1023
178.95	29928	187.95	3114	199.95	3959	211.00	7971
180.00	20011	188.95	7119	201.35	2901	211.60	738

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
212.80	167	224.00	111328	233.95	3140	245.00	11666
212.95	451	225.00	27923	234.95	3413	245.95	17800
213.85	245	225.95	3173	235.95	2443	246.95	3871
214.90	2120	227.00	47837	236.95	4124	247.85	874

9.5.1

9

dftppeval.m Wed Sep 21 15:41:44 2016 Page: 0

X12637.D: MSX424-DFTPP Instrument Performance Check (DFTPP) page 2 of 3

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
215.95	4569	227.95	6717	237.80	530	248.95	2904
216.90	56176	228.95	10275	238.95	1727	249.90	643
218.00	7131	229.90	1053	239.90	1488	250.85	715
218.85	587	230.95	3978	240.90	2717	251.85	838
221.00	34019	231.80	583	242.00	6277	252.95	1910
221.90	4755	232.80	141	243.00	7195	255.00	428331
223.00	12151	232.95	552	244.00	90781	256.00	64219

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
257.00	4892	269.85	627	281.90	384	291.95	851
258.00	26277	270.95	1105	283.00	2220	292.95	3570
258.95	4555	271.95	1193	283.90	1437	293.95	963
259.90	865	273.00	14038	284.95	3096	294.80	375
260.85	830	274.00	35760	285.95	483	296.00	59323
262.85	228	275.00	192000	287.75	132	296.95	8503
263.90	1029	276.00	26269	288.00	75	297.90	679
265.00	11824	276.95	17632	288.80	132	299.00	70
265.85	1688	277.90	2870	288.95	495	300.80	235
266.85	282	278.90	680	289.95	619	300.95	659
268.00	99	280.85	196	290.95	319	301.95	983

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
303.00	7048	312.00	69	324.00	3631	335.00	3192
303.95	1827	312.85	668	324.85	346	335.90	391
304.80	90	314.00	2815	325.85	455	338.70	202
304.95	196	314.95	6891	326.95	3841	338.90	137
307.80	674	316.00	3402	327.95	1937	339.50	109
308.80	105	316.90	663	328.80	174	339.90	212
308.95	410	318.90	54	329.00	175	340.95	2279
309.95	854	319.95	220	329.90	62	341.80	333
310.70	58	320.95	1858	331.95	1375	342.00	291
310.90	253	322.00	664	333.00	1837	345.95	4875
311.75	124	323.00	18834	334.00	12020	346.95	901

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
349.85	191	360.80	54	382.95	2719	403.00	5195
350.90	123	364.95	29109	383.90	669	404.00	2001
352.00	5692	365.95	4427	384.85	198	404.85	312
353.00	3966	366.75	306	389.95	1473	409.90	117
354.00	5794	369.85	651	390.95	967	414.80	190
354.95	1168	371.00	1377	391.95	558	420.95	5169
355.90	53	372.00	9617	392.90	85	422.00	4806
356.80	61	372.95	2529	394.90	53	423.00	35992
357.70	51	373.95	268	396.85	147	424.00	7394
358.00	76	376.80	116	400.90	763	424.90	793
358.90	437	376.95	224	402.00	4034	426.00	65

Average of 8.224 to 8.231 min.: x12637.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
438.90	53	525.20	52	539.30	68	549.50	82
441.05	102147	528.10	100	539.70	50	549.70	60
442.00	653483	529.50	51	540.90	62		
443.00	126835	531.30	57	542.20	95		
444.00	11683	532.30	53	542.70	206		
444.95	615	532.90	70	543.20	54		
512.90	52	534.70	101	544.40	66		
517.70	77	536.40	57	544.80	58		
518.10	58	537.20	65	545.10	66		
521.30	63	537.40	69	545.90	72		
522.20	92	539.00	59	546.70	83		

9.5.1

9

dftppeval.m Wed Sep 21 15:41:44 2016 Page: 1

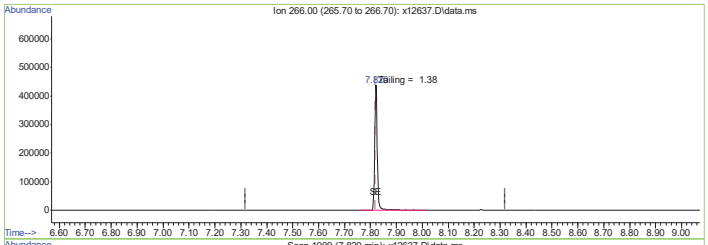
X12637.D: MSX424-DFTPP Instrument Performance Check (DFTPP) page 3 of 3

Tune Report: X12637.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12637.D
Sample : DFTPP
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 2:16 pm Operator: AkinA

Quant Time: Sep 21 15:41:17 2016
Quant Method : X:\1\methods\dftppeval.m
Quant Title : DFTPP and Tune Evaluation



9.5.1.1

9

TIC: x12637.D\data.ms

(2) Pentachlorophenol

7.820min (+0.000) 117.01

response 306622

Ion	Exp%	Act%
266.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

dftppeval.m Wed Sep 21 15:41:27 2016 Page: 1

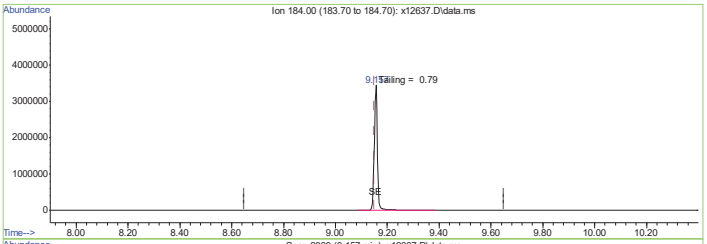
X12637.D edits: Pentachlorophenol

Tune Report: X12637.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12637.D
Sample : DFTPP
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 2:16 pm Operator: AkinA

Quant Time: Sep 21 15:41:17 2016
Quant Method : X:\1\methods\dftppeval.m
Quant Title : DFTPP and Tune Evaluation



9.5.1.2

9

TIC: x12637.D\data.ms

(3) Benzidine

9.157min (+0.007) 424.12

response 2929021

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

dftppeval.m Wed Sep 21 15:41:34 2016 Page: 1

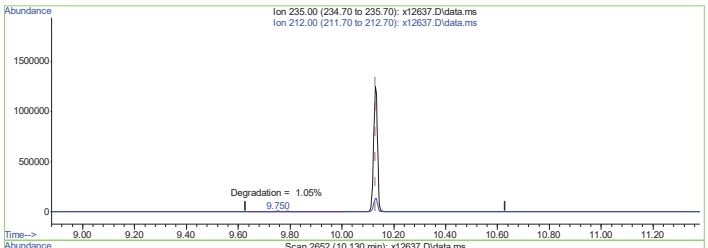
X12637.D edits: Benzidine

Tune Report: X12637.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12637.D
Sample : DFTPP
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 2:16 pm Operator: AkinA

Quant Time: Sep 21 15:41:17 2016
Quant Method : X:\1\methods\dftppeval.m
Quant Title : DFTPP and Tune Evaluation



9.5.1.3

9

TIC: x12637.D\data.ms

(4) DDT

10.130min (-0.000) 193.29

response 1264321

Ion	Exp%	Act%
235.00	100	100
212.00	10.20	10.98
0.00	0.00	0.00
0.00	0.00	0.00

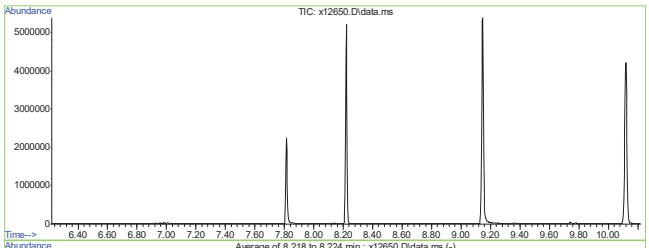
dftppeval.m Wed Sep 21 15:41:44 2016 Page: 1

X12637.D edits: DDT

Tune Report: X12650.D

DFTPP
Data File : C:\msdchem\1\data\X160922\x12650.D Vial: 2
Acq On : 22 Sep 2016 11:49 am Operator: AkinA
Sample : DFTPP Inst : MSX
Misc : op48431,msx425,,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : X:\1\methods\dftppeval.m (RTE Integrator)
Title : DFTPP and Tune Evaluation



9.5.2

9

AutoFind: Scans 2037, 2038, 2039; Background Corrected with Scan 2029

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.5	179767	PASS
68	69	0.00	2	1.7	3286	PASS
69	198	0.00	100	42.3	197760	PASS
70	69	0.00	2	0.6	1209	PASS
127	198	40	60	52.8	246720	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	467008	PASS
199	198	5	9	6.9	31997	PASS
275	198	10	30	25.9	120824	PASS
365	198	1	100	4.0	18685	PASS
441	443	0.01	100	78.8	64643	PASS
442	198	40	100	90.1	420800	PASS
443	442	17	23	19.5	82061	PASS

x12650.D dftppeval.m Thu Sep 22 15:30:46 2016

X12650.D: MSX425-DFTPP Instrument Performance Check (DFTPP) page 1 of 3

Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	194	50.95	179767	63.00	7210	75.00	34376
36.85	775	52.00	8901	64.00	1056	76.00	12429
38.00	2527	52.95	411	65.00	3949	77.00	253483
38.95	11861	54.95	1158	65.90	359	78.00	17979
39.85	564	55.90	4907	66.95	250	79.00	15527
40.85	370	57.00	11970	68.00	3286	79.95	11463
44.85	307	57.85	514	68.95	197760	81.00	16289
46.85	312	58.80	270	69.90	1209	81.95	4412
47.85	132	59.80	81	70.80	127	82.95	4159
48.90	1498	60.90	2146	72.95	1406	83.85	223
49.95	48098	61.90	2627	74.00	23003	84.90	3356

Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.90	5054	98.00	21191	108.90	2415	117.00	68763
86.95	2304	99.00	18222	109.95	123267	117.95	5329
87.95	989	99.90	1735	110.95	18924	118.90	638
88.90	417	100.90	8970	111.90	2301	119.85	1061
90.90	3542	101.85	560	112.95	713	120.85	295
91.95	4096	102.90	2929	113.70	158	121.90	4668
93.00	27816	103.95	5409	114.00	84	122.95	7023
93.95	1965	104.95	5706	114.20	64	123.90	3616
94.90	475	106.00	1978	114.60	218	124.90	3186
95.95	1170	107.00	72901	114.95	242	127.00	246720
97.00	598	108.00	11697	115.95	4008	128.00	18253

Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
128.95	95760	139.85	1338	150.95	1697	161.90	1773
129.90	8134	140.90	12575	151.85	902	162.90	575
130.90	1925	141.95	3972	152.90	4202	163.85	613
131.95	794	142.90	2675	153.90	3278	164.95	4592
132.85	290	143.95	732	154.95	7336	165.95	3708
133.90	2882	144.90	642	156.00	10975	167.00	27848
134.90	7055	145.90	2362	156.95	1952	167.95	16352
135.95	3533	146.90	7008	157.90	2120	168.90	2464
136.95	4675	148.00	17169	158.95	1646	169.85	1011
137.90	915	148.90	3589	159.90	4020	170.85	1172
138.90	465	149.95	1118	160.90	6013	171.85	2410

Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.95	3054	183.85	1392	194.90	930	207.90	4109
173.95	5571	185.00	8998	195.95	12936	208.90	1492
175.00	10318	186.00	68968	197.90	467008	209.95	2269
175.90	2497	187.00	18730	198.90	31997	210.90	5386
176.95	4257	187.95	2075	199.95	2830	212.80	392
177.95	1653	188.90	4096	201.35	1844	214.00	102
178.90	18930	189.85	663	202.95	3484	214.85	1530
179.95	13710	190.90	1930	204.00	19535	215.95	2946
180.95	6529	191.95	6597	205.00	32261	216.90	34152
181.95	915	192.95	7453	206.00	123581	217.90	4611
182.75	587	193.95	1478	206.95	16628	218.85	364

Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
219.70	166	230.95	2697	242.00	3727	251.85	479
220.95	22325	231.85	428	243.00	4117	252.90	1187
221.70	1253	232.85	578	244.00	57309	254.95	269717
222.95	8055	233.90	1925	245.00	7094	256.00	39581

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
224.00	73016	234.90	2122	245.95	10585	256.90	3414
225.00	18038	235.90	1657	246.90	2304	257.95	16145
225.95	2041	236.95	2783	247.75	527	258.95	2864
226.95	30816	237.90	522	248.95	1761	259.80	580
227.95	4752	238.85	1340	249.80	201	260.85	506
228.90	6550	239.90	1157	250.00	162	262.80	190
229.85	694	240.95	1984	250.80	389	263.85	538

Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
264.95	6722	276.95	10325	288.85	480	301.95	704
265.95	1345	277.90	2282	289.90	472	302.95	4015
266.70	135	278.90	467	290.85	297	303.95	1212
267.70	130	280.90	269	291.95	449	304.90	223
269.75	285	281.70	99	292.90	2265	307.85	463
270.85	577	281.85	146	293.90	638	308.90	451
271.95	695	282.95	1329	294.90	535	309.85	557
272.90	8634	283.95	911	295.95	37795	311.80	82
274.00	21829	284.95	1854	296.95	4873	312.90	300
275.00	120824	285.85	185	297.85	411	313.95	1932
275.95	16522	287.80	71	300.80	451	314.90	4655

Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.95	2295	328.90	186	346.90	628	369.80	57
316.85	321	331.90	967	349.80	61	369.95	302
319.80	78	332.95	1090	350.85	113	370.90	937
320.95	1249	334.00	7765	351.95	3369	372.00	6359
321.90	533	334.95	1888	352.95	2136	372.90	1446
323.00	11738	335.90	179	354.00	3327	373.70	60
324.00	1884	339.00	129	354.90	648	376.60	55
324.80	258	339.90	67	358.85	267	376.95	124
325.70	197	340.95	1180	365.00	18685	382.90	1553
326.90	2236	341.90	350	365.95	2704	383.95	685
327.90	1130	345.95	2987	366.90	146	384.90	214

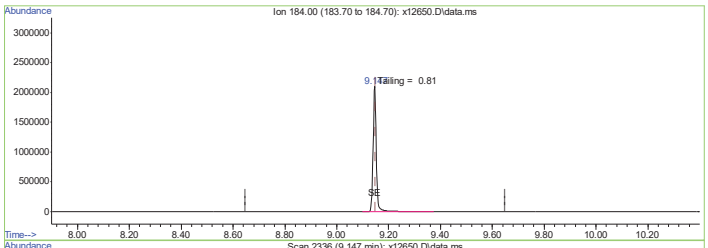
Average of 8.218 to 8.224 min.: x12650.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
389.80	201	414.90	64	444.00	7217		
389.95	516	421.00	2767	444.85	589		
390.85	513	422.05	2910	523.00	61		
391.60	81	423.00	22213	523.80	63		
391.85	325	424.00	5346	526.60	62		
400.70	255	424.90	690	532.60	61		
401.95	2546	438.80	59	533.00	58		
402.95	3335	439.10	59	535.30	53		
403.85	1267	441.00	64643	543.70	70		
404.80	86	442.00	420800				
405.00	87	443.00	82061				

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12650.D
Sample : DFTPP
Misc : op48431,msx425,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 22 Sep 2016 11:49 am Operator: AkinA

Quant Time: Sep 22 15:30:53 2016
Quant Method : X:\1\methods\dftppeval.m
Quant Title : DFTPP and Tune Evaluation



TIC: x12650.D\data.ms

(3) Benzidine

9.147min (-0.003) 264.67

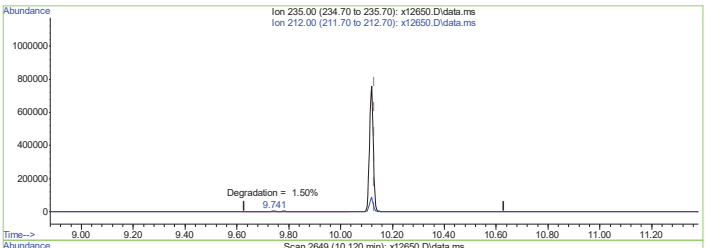
response 1827868

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12650.D
Sample : DFTPP
Misc : op48431,msx425,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 22 Sep 2016 11:49 am Operator: AkinA

Quant Time: Sep 22 15:30:53 2016
Quant Method : X:\1\methods\dftppeval.m
Quant Title : DFTPP and Tune Evaluation



TIC: x12650.D\data.ms

(4) DDT

10.120min (-0.010) 119.68

response 782842

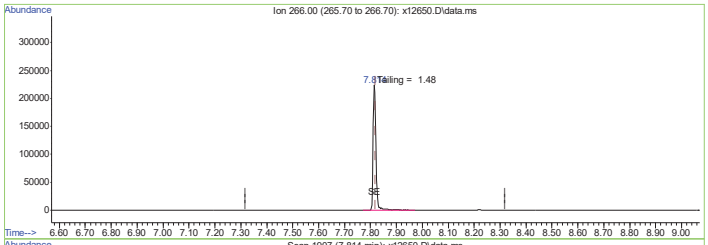
Ion	Exp%	Act%
235.00	100	100
212.00	10.20	11.10
0.00	0.00	0.00
0.00	0.00	0.00

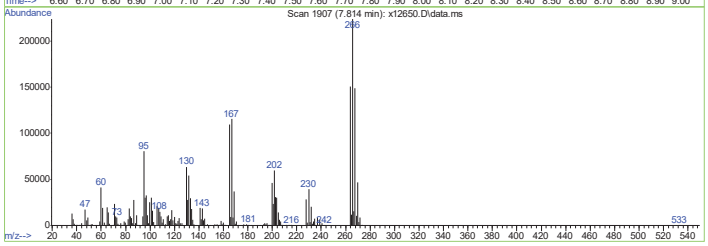
Tune Report: X12650.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12650.D
Sample : DFTPP
Misc : op48431,msx425,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 22 Sep 2016 11:49 am Operator: AkinA

Quant Time: Sep 22 15:30:53 2016
Quant Method : X:\1\methods\dftppeval.m
Quant Title : DFTPP and Tune Evaluation





TIC: x12650.D\data.ms

(2) Pentachlorophenol

7.814min (-0.006) 63.54

response 166506

Ion	Exp%	Act%
266.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Cal Report: X12638.D

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:36:00 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.041	152	440820	40.00 ug/mL	0.00
22) Naphthalene-d8	5.094	136	1679792	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.630	164	942456	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.926	188	1572677	40.00 ug/mL	0.00
78) Chrysene-d12	10.841	240	1416984	40.00 ug/mL	0.00
88) Perylene-d12	14.030	264	1220391	40.00 ug/mL	0.00
96) 1,4-Dichlorobenzene-d4A	4.041	152	440820	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	3.130	112	26171	1.79 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 3.58%#		
8) Phenol-d5	3.817	99	36551	2.16 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 4.32%#		
23) Nitrobenzene-d5	4.519	82	32165	2.06 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 4.12%#		
46) 2-Fluorobiphenyl	6.036	172	58509	1.84 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 3.68%#		
68) 2,4,6-Tribromophenol	7.335	330	4853	1.38 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 2.76%#		
81) Terphenyl-d14	9.402	244	49403	1.51 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 3.02%#		
Target Compounds					Qvalue
2) N-nitrosodimethylamine	2.235	74	22388	2.103 ug/mL	88
3) 1,4-Dioxane	1.999	88	17257	2.409 ug/mL	100
4) Pyridine	2.238	79	39021	2.062 ug/mL	94
5) Aniline	3.826	93	37484	1.776 ug/mL	81
7) bis(2-Chloroethyl)ether	3.860	63	23120	2.156 ug/mL	87
9) Phenol	3.826	94	38990	2.135 ug/mL	91
10) 2-Chlorophenol	3.913	128	27167	1.823 ug/mL	93
11) 1,3-Dichlorobenzene	4.013	146	31227	2.027 ug/mL	96
12) 1,4-Dichlorobenzene	4.053	146	33445	2.051 ug/mL	93
13) 1,2-Dichlorobenzene	4.205	146	30511	2.016 ug/mL	94
14) Benzyl alcohol	4.177	108	16902m	1.868 ug/mL	
15) bis(2-chloroisopropyl)...	4.280	45	35833	2.110 ug/mL	61
16) o-cresol	4.286	108	25665	1.917 ug/mL	99
17) Acetophenone	4.386	105	40946	1.953 ug/mL	95
18) Hexachloroethane	4.448	117	13138	1.966 ug/mL	93
19) N-Nitroso-di-n-propyla...	4.395	70	20315	2.183 ug/mL	85
20) m+p-cresols	4.404	108	54820	3.956 ug/mL	94
21) 4-methylphenol	4.404	108	54820	3.956 ug/mL	94
24) Nitrobenzene	4.535	77	31332	2.097 ug/mL	93
25) Isophorone	4.709	82	57860	2.198 ug/mL	96
26) 2-Nitrophenol	4.799	139	10691	1.447 ug/mL	94
27) 2,4-Dimethylphenol	4.833	107	28865	2.103 ug/mL	96
28) bis(2-Chloroethoxy)met...	4.899	93	37371	2.225 ug/mL	99
30) 2,4-Dichlorophenol	5.001	162	18776	1.764 ug/mL	88
31) 1,2,4-Trichlorobenzene	5.057	180	23873	2.069 ug/mL	97
32) Naphthalene	5.110	128	84999	2.130 ug/mL	99
33) 2,6-Dichlorophenol	5.191	162	20725	1.935 ug/mL	91
34) 4-Chloroaniline	5.191	127	27599	1.675 ug/mL	90
35) Hexachlorobutadiene	5.253	225	13244	2.094 ug/mL	92
36) 4-Chloro-3-methylphenol	5.617	107	22651	1.906 ug/mL	93

9.6.1
9

Cal Report: X12638.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:36:00 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 2-Methylnaphthalene	5.700	142	51660	2.000 ug/mL	97
38) 1-Methylnaphthalene	5.797	142	51856	2.061 ug/mL	98
39) 1,2,4,5-Tetrachloroben...	5.881	216	21943	2.021 ug/mL	94
40) Caprolactam	5.436	55	10213	1.601 ug/mL	97
42) Pentachloronitrobenzene	7.882	237	4590	1.597 ug/mL	89
44) 2,4,6-Trichlorophenol	5.983	196	12545	1.577 ug/mL	92
45) 2,4,5-Trichlorophenol	6.027	196	14192m	1.617 ug/mL	
47) 2-Chloronaphthalene	6.126	162	46130	1.744 ug/mL	98
48) Acenaphthylene	6.496	152	68982	1.694 ug/mL	98
49) Dimethylphthalate	6.425	163	51968	1.807 ug/mL	97
50) 2,6-Dinitrotoluene	6.496	165	7697	1.234 ug/mL#	57
51) Acenaphthene	6.655	153	50618	1.810 ug/mL	98
53) Dibenzofuran	6.794	168	70481	1.827 ug/mL	95
54) 2,4-Dinitrotoluene	6.847	165	9507	1.063 ug/mL	79
55) 4-Nitrophenol	6.819	65	5963	1.165 ug/mL#	10
56) 2,3,4,6-Tetrachlorophenol	6.956	232	7290	1.165 ug/mL	98
57) Fluorene	7.099	166	53990	1.784 ug/mL	93
58) 4-Chlorophenyl-phenyle...	7.093	204	25163	1.814 ug/mL	93
59) Diethylphthalate	7.037	149	50678	1.664 ug/mL	97
60) 2-nitroaniline	6.263	138	10779	1.127 ug/mL#	70
61) 3-nitroaniline	6.630	138	11364	1.422 ug/mL#	45
62) 4-nitroaniline	7.171	138	9591	1.160 ug/mL	96
63) 1,1-Biphenyl	6.111	154	64962	1.833 ug/mL	95
66) n-Nitrosodiphenylamine	7.211	169	36889	1.678 ug/mL	96
67) 1,2-Diphenylhydrazine	7.230	77	62419	1.981 ug/mL	95
69) 4-Bromophenyl-phenylether	7.522	248	12290	1.737 ug/mL	89
70) Hexachlorobenzene	7.655	284	13693	1.833 ug/mL	92
72) Phenanthrene	7.944	178	76914	1.896 ug/mL	98
73) Anthracene	7.985	178	74813	1.698 ug/mL	98
74) Carbazole	8.143	167	71140	1.734 ug/mL	99
75) Di-n-butylphthalate	8.467	149	71223	1.490 ug/mL	99
76) Fluoranthene	9.020	202	69449	1.740 ug/mL	99
77) Atrazine	7.699	200	10629	1.396 ug/mL	97
79) Benzidine	9.160	184	13211	1.094 ug/mL	97
80) Pyrene	9.241	202	73701	1.494 ug/mL	95
82) Butylbenzylphthalate	10.024	149	26470	1.123 ug/mL	91
83) 3,3-Dimethylbenzidine	9.999	212	17881	1.619 ug/mL	100
84) 3,3'-Dichlorobenzidine	10.816	252	18906	1.437 ug/mL	92
85) Benzo[a]anthracene	10.810	228	62044	1.556 ug/mL	98
86) Chrysene	10.879	228	68552	1.672 ug/mL	97
87) bis(2-Ethylhexyl)phtha...	10.956	149	29756	0.800 ug/mL	93
89) Di-n-octylphthalate	12.243	149	34982	0.571 ug/mL	96
90) Benzo[b]fluoranthene	13.057	252	48592	1.273 ug/mL	99
91) Benzo[k]fluoranthene	13.116	252	57750m	1.447 ug/mL	
92) Benzo[a]pyrene	13.881	252	41191	1.210 ug/mL	96
93) Indeno[1,2,3-cd]pyrene	15.855	276	37393m	1.171 ug/mL	
94) Dibenz[a,h]anthracene	15.883	278	46615	1.395 ug/mL	97
95) Benzo[g,h,i]perylene	16.196	276	51670	1.511 ug/mL	93
97) Benzaldehyde	3.724	77	4755	2.859 ug/mL#	78

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

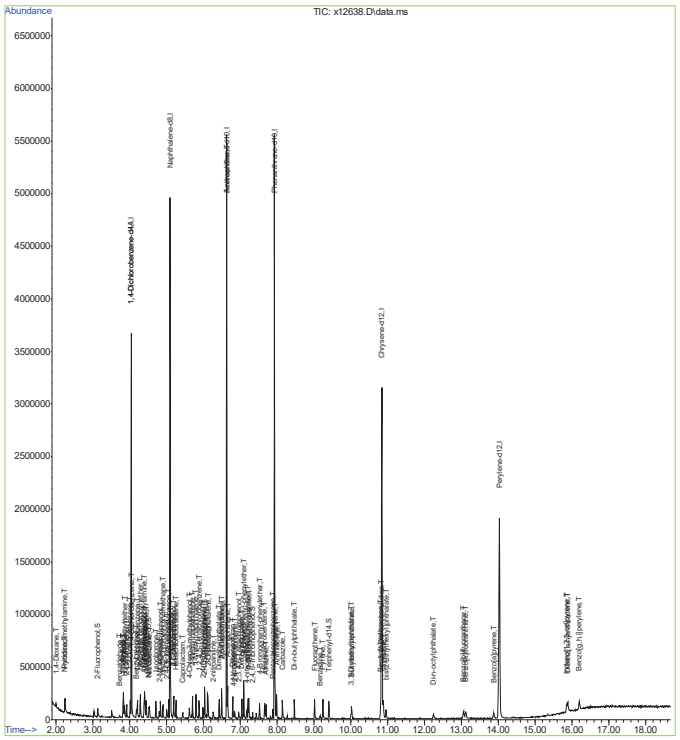
9.6.1
9

Cal Report: X12638.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:36:00 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

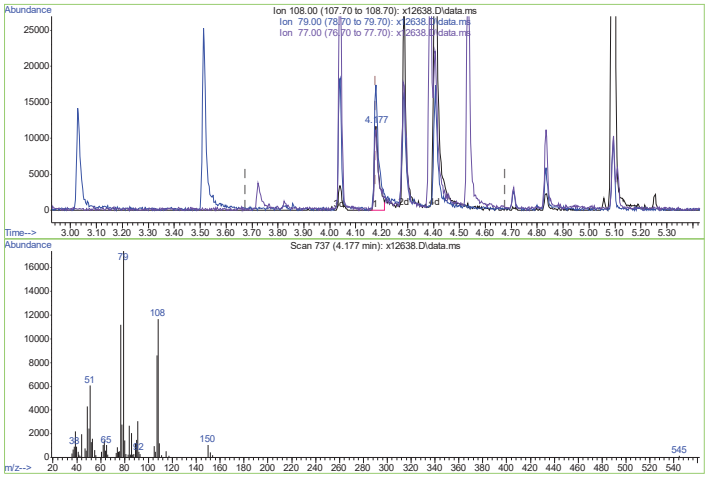


Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.1

9

TIC: x12638.D\data.ms

(14) Benzyl alcohol (T)

4.177min (+0.001) 1.56ug/mL

response 14117

Ion	Exp%	Act%
108.00	100	100
79.00	134.10	147.49
77.00	88.00	93.31
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:32:48 2016 Page: 1

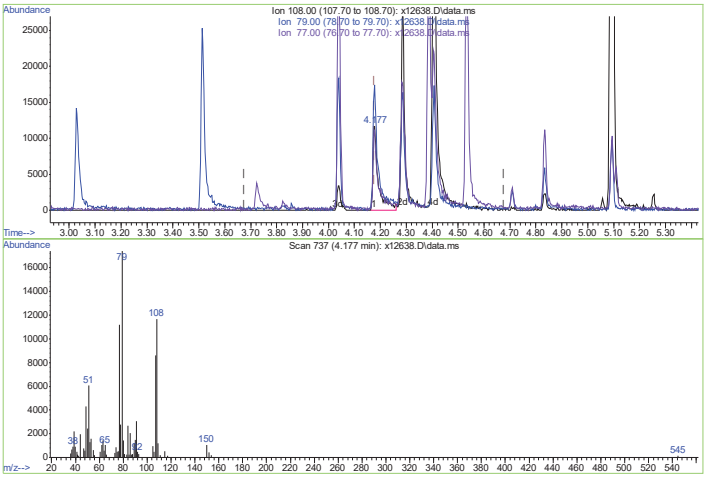
X12638.D edits: Benzyl alcohol

Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.2

9

TIC: x12638.D\data.ms

(14) Benzyl alcohol (T)

4.177min (+0.001) 1.87ug/mL m

response 16902

Ion	Exp%	Act%
108.00	100	100
79.00	134.10	148.92
77.00	88.00	95.74
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:33:05 2016 Page: 1

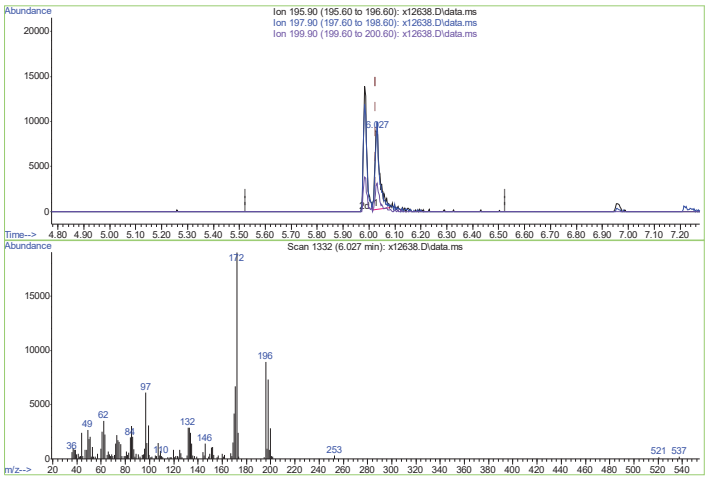
X12638.D edits: Benzyl alcohol

Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.3

9

TIC: x12638.D\data.ms

(45) 2,4,5-Trichlorophenol (T)

6.027min (+0.001) 1.35ug/mL

response 11807

Ion	Exp%	Act%
195.90	100	100
197.90	92.40	79.20
199.90	29.60	33.32
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:34:17 2016 Page: 1

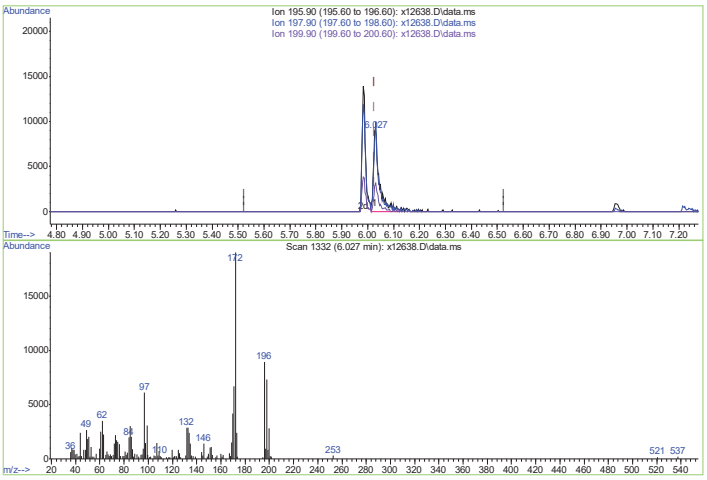
X12638.D edits: 2,4,5-Trichlorophenol

Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.4

9

TIC: x12638.D\data.ms

(45) 2,4,5-Trichlorophenol (T)

6.027min (+0.001) 1.62ug/mL m

response 14192

Ion	Exp%	Act%
195.90	100	100
197.90	92.40	81.51
199.90	29.60	31.66
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:34:28 2016 Page: 1

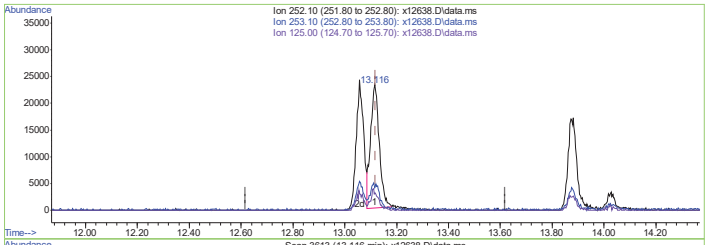
X12638.D edits: 2,4,5-Trichlorophenol

Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.5

9

TIC: x12638.D\data.ms

(91) Benzo[k]fluoranthene (T)

13.116min (-0.002) 1.34ug/mL

response 53661

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	16.60
125.00	12.50	13.34
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:35:31 2016 Page: 1

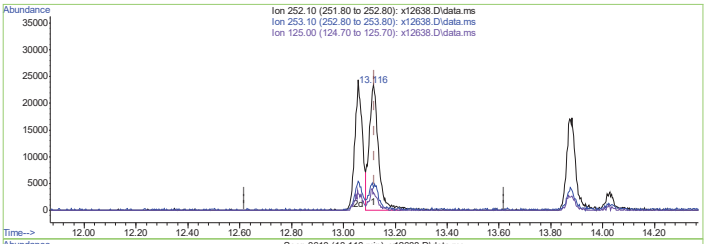
X12638.D edits: Benzo[k]fluoranthene

Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.6

9

TIC: x12638.D\data.ms

(91) Benzo[k]fluoranthene (T)

13.116min (-0.002) 1.45ug/mL m

response 57750

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	17.90
125.00	12.50	14.03
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:35:50 2016 Page: 1

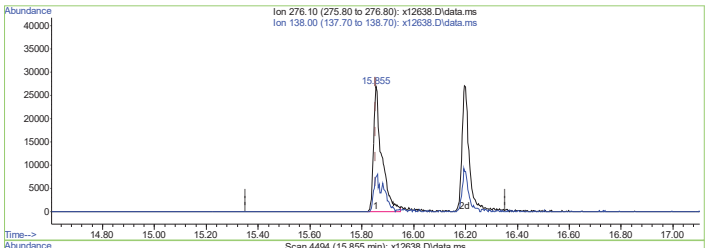
X12638.D edits: Benzo[k]fluoranthene

Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.7

9

TIC: x12638.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.855min (+0.001) 1.84ug/mL

response 58876

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	27.84
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:35:56 2016 Page: 1

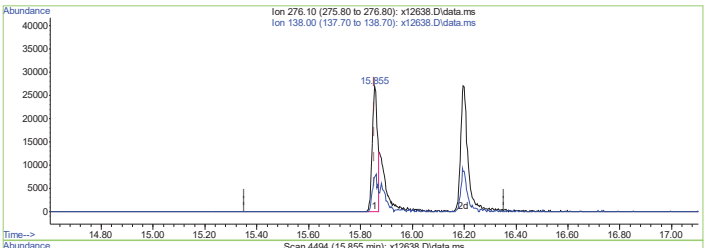
X12638.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12638.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 08:32:29 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1.8

9

TIC: x12638.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.855min (+0.001) 1.17ug/mL m

response 37393

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	27.84
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:36:06 2016 Page: 1

X12638.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12639.D

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:32:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	428995	40.00	ug/mL	0.00
22) Naphthalene-d8	5.091	136	1641864	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.623	164	945884	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.916	188	1568795	40.00	ug/mL	0.00
78) Chrysene-d12	10.826	240	1472156	40.00	ug/mL	0.00
88) Perylene-d12	14.008	264	1255110	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	428995	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.130	112	68008	4.79	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 9.58%#			
8) Phenol-d5	3.814	99	93010	5.64	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 11.28%#			
23) Nitrobenzene-d5	4.516	82	84261	5.53	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 11.06%#			
46) 2-Fluorobiphenyl	6.030	172	152235	4.76	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 9.52%#			
68) 2,4,6-Tribromophenol	7.329	330	14192	4.03	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 8.06%#			
81) Terphenyl-d14	9.390	244	135493	4.00	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 8.00%#			
Target Compounds						Qvalue
2) N-nitrosodimethylamine	2.235	74	53157	5.131	ug/mL	94
3) 1,4-Dioxane	2.005	88	38315	5.496	ug/mL	95
4) Pyridine	2.238	79	94387	5.126	ug/mL	96
5) Aniline	3.826	93	103956	5.060	ug/mL	97
7) bis(2-Chloroethyl)ether	3.857	63	54795	5.250	ug/mL	97
9) Phenol	3.823	94	108160	6.085	ug/mL	95
10) 2-Chlorophenol	3.913	128	69440	4.788	ug/mL	95
11) 1,3-Dichlorobenzene	4.010	146	76739	5.118	ug/mL	100
12) 1,4-Dichlorobenzene	4.050	146	81554	5.140	ug/mL	98
13) 1,2-Dichlorobenzene	4.205	146	74938	5.089	ug/mL	98
14) Benzyl alcohol	4.174	108	44904	5.099	ug/mL	96
15) bis(2-chloroisopropyl)...	4.280	45	84991	5.142	ug/mL	91
16) o-cresol	4.283	108	66959	5.140	ug/mL	98
17) Acetophenone	4.383	105	107409	5.264	ug/mL	99
18) Hexachloroethane	4.445	117	32991	5.072	ug/mL	91
19) N-Nitroso-di-n-propyla...	4.392	70	53516	5.909	ug/mL	90
20) m+p-cresols	4.401	108	145833	10.814	ug/mL	100
21) 4-methylphenol	4.401	108	145833	10.814	ug/mL	100
24) Nitrobenzene	4.529	77	82916	5.676	ug/mL	96
25) Isophorone	4.706	82	145827	5.668	ug/mL	97
26) 2-Nitrophenol	4.796	139	31879	4.414	ug/mL	94
27) 2,4-Dimethylphenol	4.830	107	73490	5.478	ug/mL	99
28) bis(2-Chloroethoxy)met...	4.895	93	92807	5.654	ug/mL	97
29) Benzoic acid	4.930	105	6577m	0.734	ug/mL	
30) 2,4-Dichlorophenol	4.998	162	52642	5.060	ug/mL	97
31) 1,2,4-Trichlorobenzene	5.054	180	60060	5.327	ug/mL	95
32) Naphthalene	5.107	128	208984	5.358	ug/mL	99
33) 2,6-Dichlorophenol	5.188	162	56558	5.403	ug/mL	99
34) 4-Chloroaniline	5.184	127	77303	4.799	ug/mL	92
35) Hexachlorobutadiene	5.250	225	33215	5.373	ug/mL	99

9.6.2 9

Cal Report: X12639.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:32:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.610	107	58694	5.052	ug/mL	92
37) 2-Methylnaphthalene	5.694	142	133760	5.299	ug/mL	99
38) 1-Methylnaphthalene	5.791	142	128424	5.222	ug/mL	97
39) 1,2,4,5-Tetrachloroben...	5.878	216	56598	5.334	ug/mL	97
40) Caprolactam	5.433	55	29274	4.695	ug/mL	89
42) Pentachloronitrobenzene	7.873	237	13294	4.609	ug/mL	98
43) Hexachlorocyclopentadiene	5.887	237	4133	0.626	ug/mL	97
44) 2,4,6-Trichlorophenol	5.977	196	33599	4.208	ug/mL	99
45) 2,4,5-Trichlorophenol	6.021	196	36176	4.107	ug/mL	96
47) 2-Chloronaphthalene	6.120	162	121449	4.575	ug/mL	97
48) Acenaphthylene	6.490	152	184941	4.525	ug/mL	98
49) Dimethylphthalate	6.418	163	135816	4.706	ug/mL	100
50) 2,6-Dinitrotoluene	6.490	165	24917m	3.981	ug/mL	
51) Acenaphthene	6.648	153	130664	4.655	ug/mL	98
53) Dibenzofuran	6.788	168	181326	4.684	ug/mL	94
54) 2,4-Dinitrotoluene	6.838	165	32068	3.571	ug/mL	89
55) 4-Nitrophenol	6.807	65	16835	3.277	ug/mL#	22
56) 2,3,4,6-Tetrachlorophenol	6.950	232	21644	3.446	ug/mL	98
57) Fluorene	7.090	166	138165	4.548	ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.087	204	64257	4.614	ug/mL	93
59) Diethylphthalate	7.031	149	137750	4.505	ug/mL	97
60) 2-nitroaniline	6.257	138	34183	3.562	ug/mL	95
61) 3-nitroaniline	6.620	138	33117	4.130	ug/mL	81
62) 4-nitroaniline	7.164	138	31124	3.751	ug/mL	91
63) 1,1-Biphenyl	6.108	154	167659	4.713	ug/mL	99
65) 4,6-Dinitro-2-methylph...	7.202	198	6596	1.403	ug/mL#	1
66) n-Nitrosodiphenylamine	7.202	169	98203	4.478	ug/mL	97
67) 1,2-Diphenylhydrazine	7.223	77	172467	5.487	ug/mL	98
69) 4-Bromophenyl-phenylether	7.512	248	33281	4.714	ug/mL	97
70) Hexachlorobenzene	7.649	284	34473	4.627	ug/mL	93
71) Pentachlorophenol	7.826	266	2557	0.686	ug/mL	80
72) Phenanthrene	7.935	178	198569	4.908	ug/mL	99
73) Anthracene	7.976	178	204424	4.652	ug/mL	99
74) Carbazole	8.134	167	192199	4.695	ug/mL	99
75) Di-n-butylphthalate	8.457	149	206055	4.321	ug/mL	99
76) Fluoranthene	9.004	202	188337	4.731	ug/mL	97
77) Atrazine	7.693	200	32927	4.336	ug/mL	94
79) Benzidine	9.147	184	35052	2.793	ug/mL	97
80) Pyrene	9.228	202	197673	3.857	ug/mL	95
82) Butylbenzylphthalate	10.008	149	84544	3.451	ug/mL	92
83) 3,3-Dimethylbenzidine	9.986	212	45370	3.955	ug/mL	100
84) 3,3'-Dichlorobenzidine	10.801	252	56708	4.148	ug/mL	98
85) Benzo[a]anthracene	10.791	228	171497	4.140	ug/mL	98
86) Chrysene	10.863	228	180360	4.234	ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.941	149	102674	2.656	ug/mL	95
89) Di-n-octylphthalate	12.221	149	130060	2.063	ug/mL	98
90) Benzo[b]fluoranthene	13.032	252	147038	3.746	ug/mL	100
91) Benzo[k]fluoranthene	13.091	252	162177	3.951	ug/mL	99
92) Benzo[a]pyrene	13.853	252	128226	3.661	ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.839	276	130766m	3.983	ug/mL	
94) Dibenz[a,h]anthracene	15.870	278	138639	4.035	ug/mL	97
95) Benzo[g,h,i]perylene	16.184	276	143206	4.071	ug/mL	97
97) Benzaldehyde	3.721	77	11989	7.406	ug/mL	95

9.6.2 9

Cal Report: X12639.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:32:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

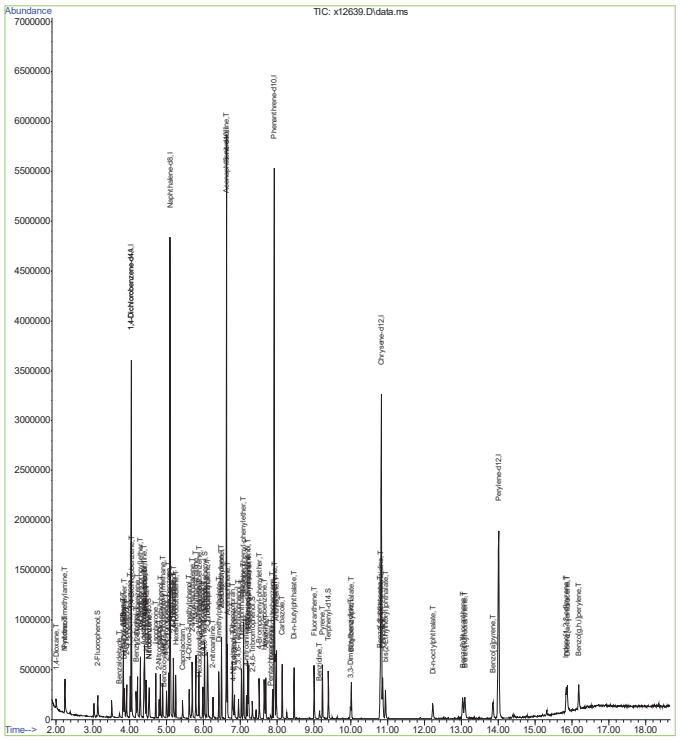
9.6.2 9

Cal Report: X12639.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:32:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



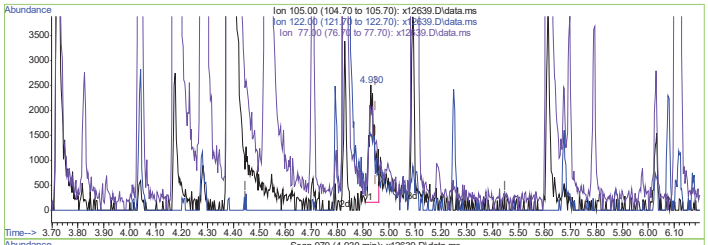
9.6.2 9

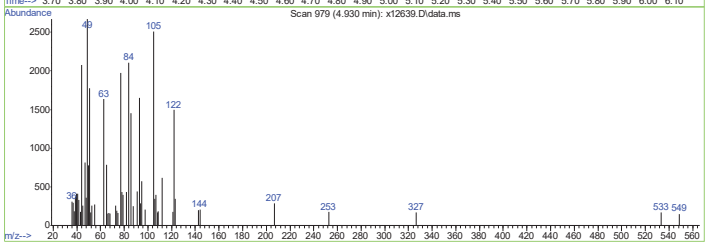
Cal Report: X12639.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:26:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12639.D\data.ms

(29) Benzoic acid (T)

4.930min (-0.019) 0.38ug/mL

response 3414

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	42.82
77.00	78.50	71.62
0.00	0.00	0.00

9.6.2.1

9

X160921_8270.m Thu Sep 22 08:27:34 2016 Page: 1

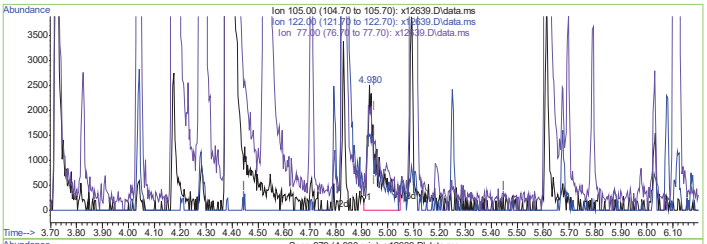
X12639.D edits: Benzoic acid

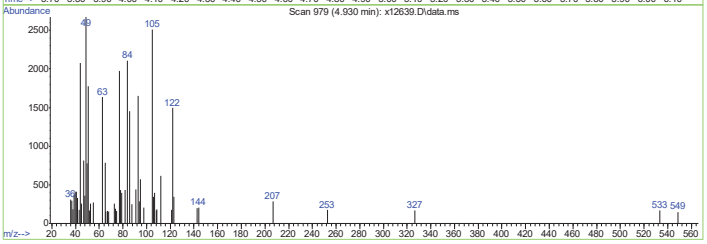
Cal Report: X12639.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:26:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12639.D\data.ms

(29) Benzoic acid (T)

4.930min (-0.019) 0.73ug/mL m

response 6577

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	59.55
77.00	78.50	78.68
0.00	0.00	0.00

9.6.2.2

9

X160921_8270.m Thu Sep 22 08:27:42 2016 Page: 1

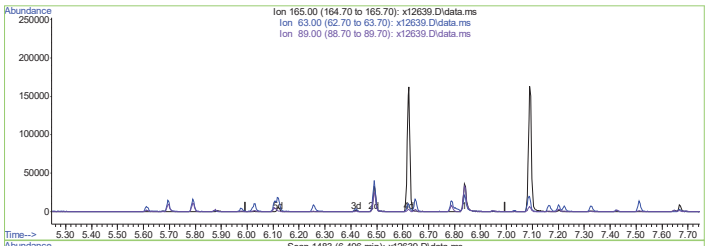
X12639.D edits: Benzoic acid

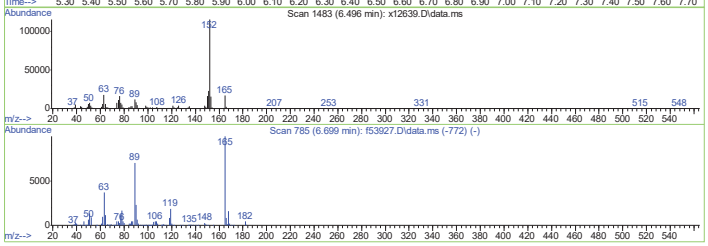
Cal Report: X12639.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:26:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12639.D\data.ms

(50) 2,6-Dinitrotoluene (T)

6.495min 0.00ug/mL d

response 0

Ion	Exp%	Act%
165.00	100	0.00
63.00	83.90	0.00
89.00	63.70	0.00
0.00	0.00	0.00

9.6.2.3

9

X160921_8270.m Thu Sep 22 08:30:28 2016 Page: 1

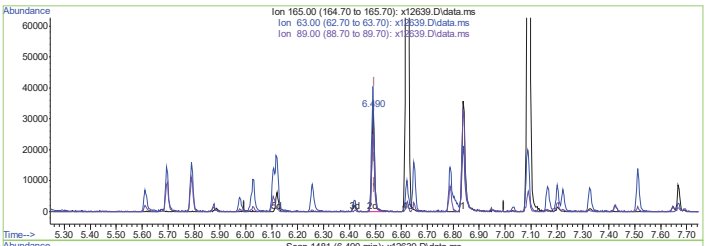
X12639.D edits: 2,6-Dinitrotoluene

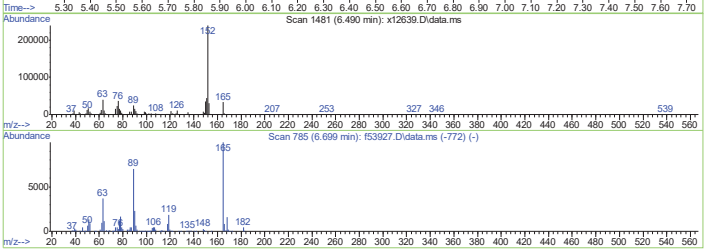
Cal Report: X12639.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:26:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12639.D\data.ms

(50) 2,6-Dinitrotoluene (T)

6.490min (-0.006) 3.98ug/mL m

response 24917

Ion	Exp%	Act%
165.00	100	100
63.00	83.90	122.32#
89.00	63.70	75.87
0.00	0.00	0.00

9.6.2.4

9

X160921_8270.m Thu Sep 22 08:30:33 2016 Page: 1

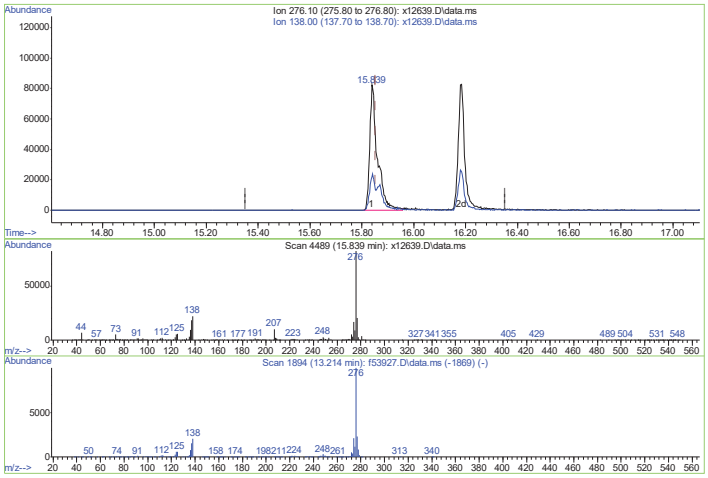
X12639.D edits: 2,6-Dinitrotoluene

Cal Report: X12639.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:26:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.2.5

9

TIC: x12639.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.839min (-0.014) 5.22ug/mL

response 171307

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	26.91
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:32:03 2016 Page: 1

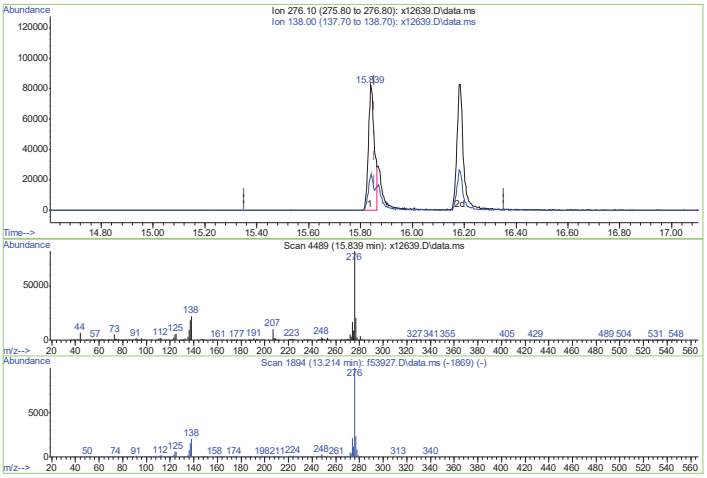
X12639.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12639.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12639.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 08:26:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.2.6

9

TIC: x12639.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.839min (-0.014) 3.98ug/mL m

response 130766

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	26.91
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:32:12 2016 Page: 1

X12639.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12640.D

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:26:05 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.038	152	404048	40.00 ug/mL	0.00
22) Naphthalene-d8	5.088	136	1545305	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.621	164	900813	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1517766	40.00 ug/mL	0.00
78) Chrysene-d12	10.823	240	1505532	40.00 ug/mL	-0.01
88) Perylene-d12	14.009	264	1323671	40.00 ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	404048	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	3.127	112	136757	10.23 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 20.46%#		
8) Phenol-d5	3.811	99	185416	11.94 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 23.88%#		
23) Nitrobenzene-d5	4.513	82	165216	11.52 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 23.04%#		
46) 2-Fluorobiphenyl	6.030	172	303945	9.97 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 19.94%#		
68) 2,4,6-Tribromophenol	7.326	330	31342	9.20 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 18.40%#		
81) Terphenyl-d14	9.387	244	288454	8.32 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 16.64%#		
Target Compounds					Qvalue
2) N-nitrosodimethylamine	2.229	74	106581	10.923 ug/mL	95
3) 1,4-Dioxane	1.996	88	66547	10.134 ug/mL	99
4) Pyridine	2.229	79	184293	10.627 ug/mL	97
5) Aniline	3.823	93	221786	11.462 ug/mL	96
7) bis(2-Chloroethyl)ether	3.854	63	105618	10.743 ug/mL	96
9) Phenol	3.820	94	201469	12.034 ug/mL	94
10) 2-Chlorophenol	3.910	128	138974	10.174 ug/mL	94
11) 1,3-Dichlorobenzene	4.010	146	151064	10.697 ug/mL	98
12) 1,4-Dichlorobenzene	4.050	146	159052	10.642 ug/mL	99
13) 1,2-Dichlorobenzene	4.203	146	146897	10.592 ug/mL	100
14) Benzyl alcohol	4.171	108	90975	10.968 ug/mL	98
15) bis(2-chloroisopropyl)...	4.280	45	161718	10.389 ug/mL	94
16) o-cresol	4.280	108	135029	11.005 ug/mL	98
17) Acetophenone	4.383	105	212452	11.054 ug/mL	97
18) Hexachloroethane	4.445	117	63826	10.419 ug/mL	96
19) N-Nitroso-di-n-propyla...	4.392	70	104790	12.286 ug/mL	92
20) m+p-cresols	4.401	108	288610	22.722 ug/mL	99
21) 4-methylphenol	4.401	108	288610	22.722 ug/mL	99
24) Nitrobenzene	4.529	77	167417	12.177 ug/mL	100
25) Isophorone	4.706	82	291841	12.053 ug/mL	99
26) 2-Nitrophenol	4.793	139	67086	9.870 ug/mL	98
27) 2,4-Dimethylphenol	4.830	107	145951	11.560 ug/mL	98
28) bis(2-Chloroethoxy)met...	4.896	93	183560	11.882 ug/mL	100
29) Benzoic acid	4.933	105	23197m	2.750 ug/mL	
30) 2,4-Dichlorophenol	4.995	162	109234	11.156 ug/mL	98
31) 1,2,4-Trichlorobenzene	5.054	180	118383	11.155 ug/mL	99
32) Naphthalene	5.107	128	405057	11.034 ug/mL	99
33) 2,6-Dichlorophenol	5.185	162	111365	11.303 ug/mL	99
34) 4-Chloroaniline	5.182	127	163090	10.757 ug/mL	95
35) Hexachlorobutadiene	5.250	225	66714	11.465 ug/mL	100

9.6.3

9

X160921_8270.m Thu Sep 22 11:18:43 2016 Page: 1

X12640.D: MSX424-IC424 Initial Calibration (10) page 1 of 4

Cal Report: X12640.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:26:05 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.611	107	122222	11.177 ug/mL	99
37) 2-Methylnaphthalene	5.694	142	264895	11.150 ug/mL	99
38) 1-Methylnaphthalene	5.791	142	259430	11.209 ug/mL	100
39) 1,2,4,5-Tetrachloroben...	5.875	216	116482	11.663 ug/mL	97
40) Caprolactam	5.436	55	59464	10.133 ug/mL	98
42) Pentachloronitrobenzene	7.873	237	30384	11.060 ug/mL	99
43) Hexachlorocyclopentadiene	5.887	237	15663	2.491 ug/mL	100
44) 2,4,6-Trichlorophenol	5.977	196	69234	9.106 ug/mL	98
45) 2,4,5-Trichlorophenol	6.018	196	75383	8.987 ug/mL	97
47) 2-Chloronaphthalene	6.120	162	243069	9.615 ug/mL	97
48) Acenaphthylene	6.490	152	373242	9.589 ug/mL	99
49) Dimethylphthalate	6.419	163	273097	9.936 ug/mL	99
50) 2,6-Dinitrotoluene	6.490	165	54066	9.071 ug/mL	76
51) Acenaphthene	6.649	153	256188	9.584 ug/mL	99
52) 2,4-Dinitrophenol	6.723	184	7178m	2.120 ug/mL	
53) Dibenzofuran	6.788	168	362308	9.826 ug/mL	93
54) 2,4-Dinitrotoluene	6.838	165	72838	8.517 ug/mL	97
55) 4-Nitrophenol	6.798	65	40132	8.203 ug/mL#	35
56) 2,3,4,6-Tetrachlorophenol	6.947	232	46943	7.847 ug/mL	96
57) Fluorene	7.090	166	287217	9.927 ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.084	204	133133	10.039 ug/mL	95
59) Diethylphthalate	7.031	149	279647	9.604 ug/mL	98
60) 2-nitroaniline	6.254	138	78280	8.565 ug/mL	97
61) 3-nitroaniline	6.621	138	72649	9.513 ug/mL	99
62) 4-nitroaniline	7.165	138	67434	8.533 ug/mL	99
63) 1,1-Biphenyl	6.105	154	327468	9.666 ug/mL	97
65) 4,6-Dinitro-2-methylph...	7.199	198	21293	4.682 ug/mL#	1
66) n-Nitrosodiphenylamine	7.202	169	199974	9.425 ug/mL	98
67) 1,2-Diphenylhydrazine	7.224	77	348237	11.451 ug/mL	99
69) 4-Bromophenyl-phenylether	7.513	248	67675	9.909 ug/mL	99
70) Hexachlorobenzene	7.646	284	72857	10.107 ug/mL	93
71) Pentachlorophenol	7.820	266	11275	3.127 ug/mL	97
72) Phenanthrene	7.935	178	403183	10.299 ug/mL	99
73) Anthracene	7.976	178	422428	9.936 ug/mL	99
74) Carbazole	8.131	167	394065	9.950 ug/mL	100
75) Di-n-butylphthalate	8.454	149	437356	9.479 ug/mL	99
76) Fluoranthene	9.005	202	400324	10.395 ug/mL	98
77) Atrazine	7.693	200	71294	9.704 ug/mL	96
79) Benzidine	9.144	184	100861	7.857 ug/mL	98
80) Pyrene	9.225	202	422636	8.063 ug/mL	96
82) Butylbenzylphthalate	10.008	149	193070	7.707 ug/mL	96
83) 3,3-Dimethylbenzidine	9.984	212	125104	10.664 ug/mL	100
84) 3,3'-Dichlorobenzidine	10.798	252	134953	9.652 ug/mL	98
85) Benzo[a]anthracene	10.792	228	382181	9.022 ug/mL	99
86) Chrysene	10.863	228	393651	9.037 ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.935	149	246001	6.222 ug/mL	98
89) Di-n-octylphthalate	12.221	149	356487	5.362 ug/mL	99
90) Benzo[b]fluoranthene	13.033	252	338596	8.179 ug/mL	99
91) Benzo[k]fluoranthene	13.092	252	359040	8.294 ug/mL	99
92) Benzo[a]pyrene	13.853	252	308128	8.343 ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.839	276	291039m	8.405 ug/mL	
94) Dibenz[a,h]anthracene	15.867	278	316508	8.735 ug/mL	98
95) Benzo[g,h,i]perylene	16.181	276	329577	8.884 ug/mL	99
97) Benzaldehyde	3.718	77	40734	26.716 ug/mL	98

9.6.3

9

X160921_8270.m Thu Sep 22 11:18:43 2016 Page: 2

X12640.D: MSX424-IC424 Initial Calibration (10) page 2 of 4

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:26:05 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

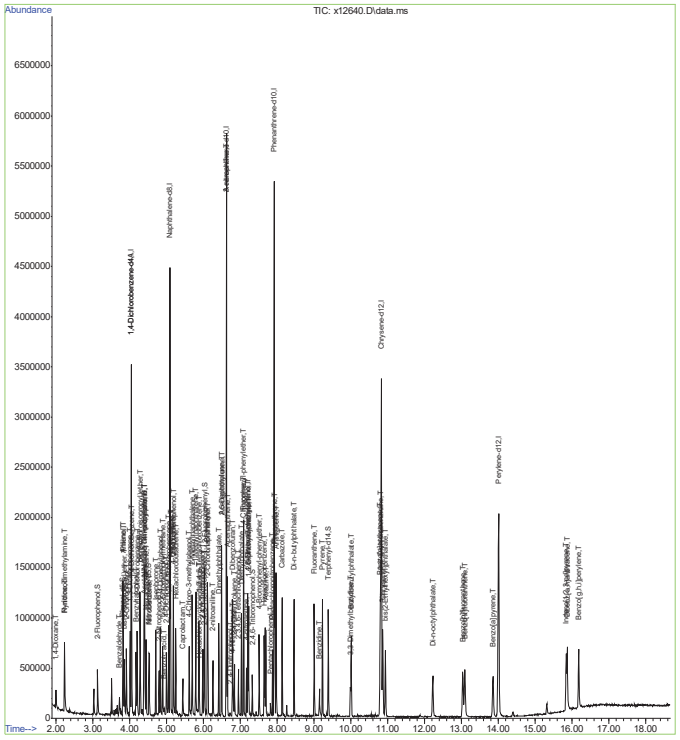
9.6.3

9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:26:05 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



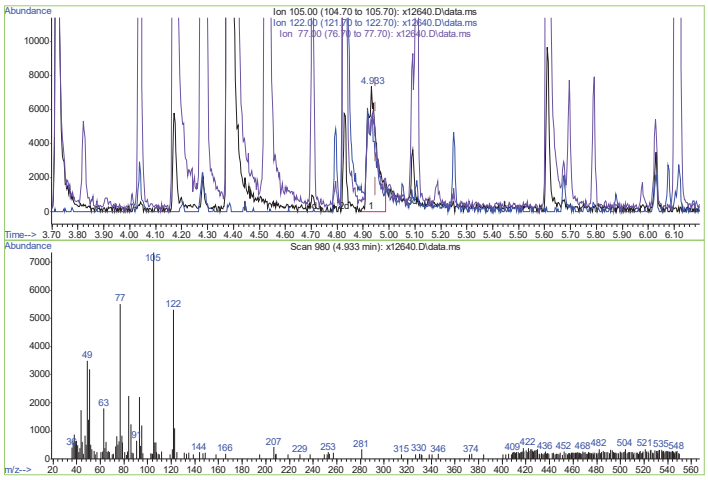
9.6.3

9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.3.1

9

TIC: x12640.D\data.ms

(29) Benzoic acid (T)

4.933min (-0.015) 2.19ug/mL

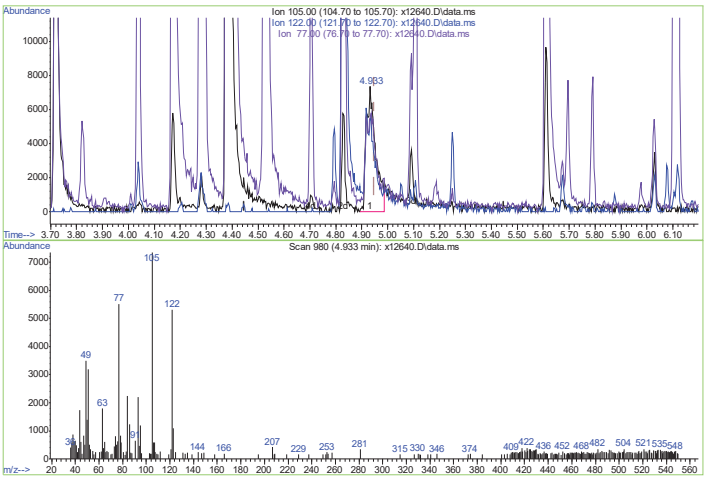
response 18470

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	52.20
77.00	78.50	65.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.3.2

9

TIC: x12640.D\data.ms

(29) Benzoic acid (T)

4.933min (-0.015) 2.19ug/mL

response 18470

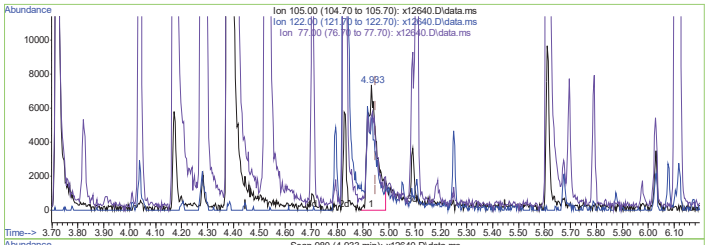
Ion	Exp%	Act%
105.00	100	100
122.00	71.30	52.20
77.00	78.50	65.80
0.00	0.00	0.00

Cal Report: X12640.D

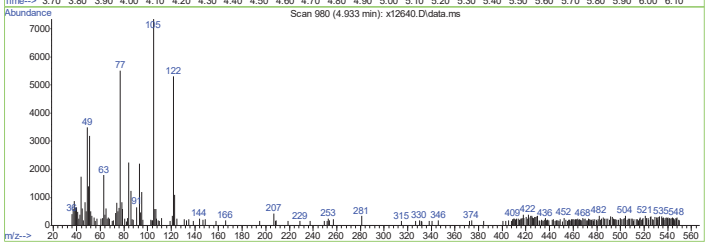
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.3.3



TIC: x12640.D\data.ms

(29) Benzoic acid (T)

4.933min (-0.015) 2.19ug/mL

response 18470

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	52.20
77.00	78.50	65.80
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:23:41 2016 Page: 1

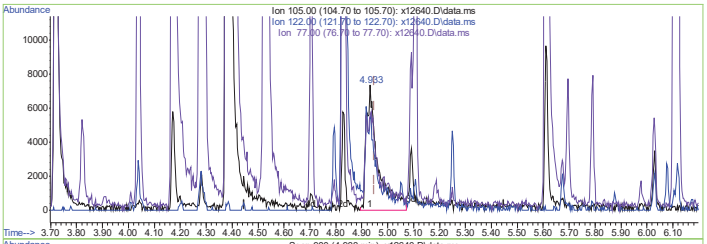
X12640.D edits: Benzoic acid

Cal Report: X12640.D

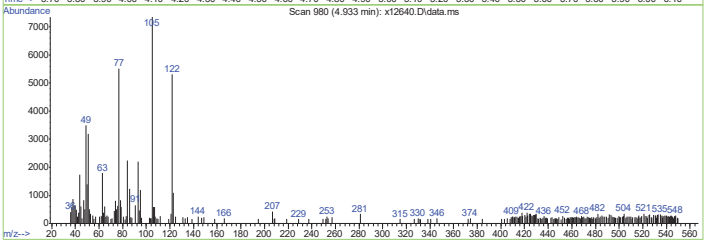
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.3.4



TIC: x12640.D\data.ms

(29) Benzoic acid (T)

4.933min (-0.015) 2.75ug/mL m

response 23197

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	72.38
77.00	78.50	75.11
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:23:52 2016 Page: 1

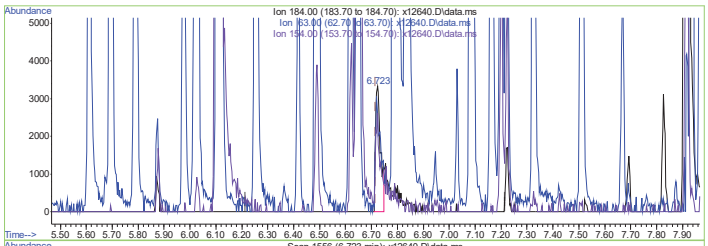
X12640.D edits: Benzoic acid

Cal Report: X12640.D

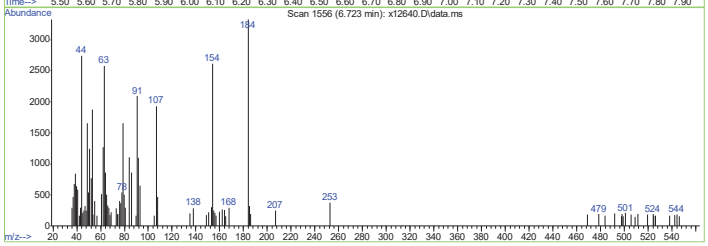
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.3.5



TIC: x12640.D\data.ms

(52) 2,4-Dinitrophenol (T)

6.723min (+0.007) 1.31ug/mL

response 4436

Ion	Exp%	Act%
184.00	100	100
63.00	73.50	70.58
154.00	52.80	71.99
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:24:42 2016 Page: 1

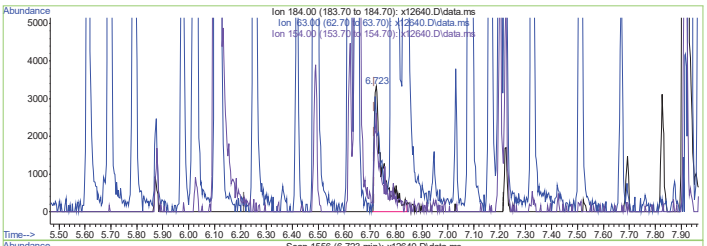
X12640.D edits: 2,4-Dinitrophenol

Cal Report: X12640.D

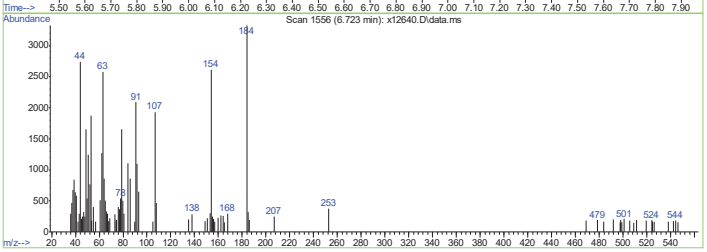
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.3.6



TIC: x12640.D\data.ms

(52) 2,4-Dinitrophenol (T)

6.723min (+0.007) 2.12ug/mL m

response 7178

Ion	Exp%	Act%
184.00	100	100
63.00	73.50	77.53
154.00	52.80	78.67
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:25:05 2016 Page: 1

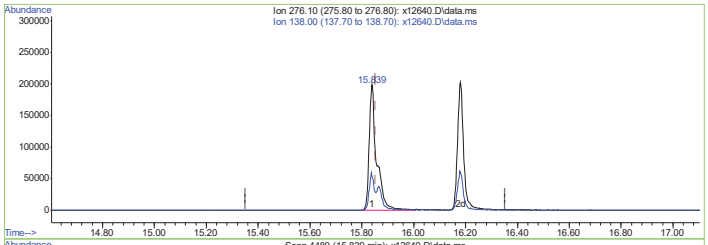
X12640.D edits: 2,4-Dinitrophenol

Cal Report: X12640.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12640.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.839min (-0.014) 11.44ug/mL

response 396164

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	27.07
0.00	0.00	0.00
0.00	0.00	0.00

9.6.3.7

9

X160921_8270.m Thu Sep 22 08:25:52 2016 Page: 1

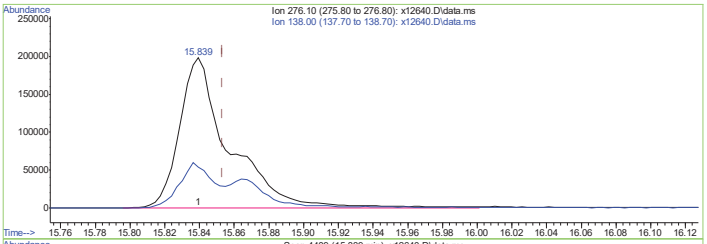
X12640.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12640.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12640.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.839min (-0.014) 11.44ug/mL

response 396164

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	27.07
0.00	0.00	0.00
0.00	0.00	0.00

9.6.3.8

9

X160921_8270.m Thu Sep 22 08:25:56 2016 Page: 1

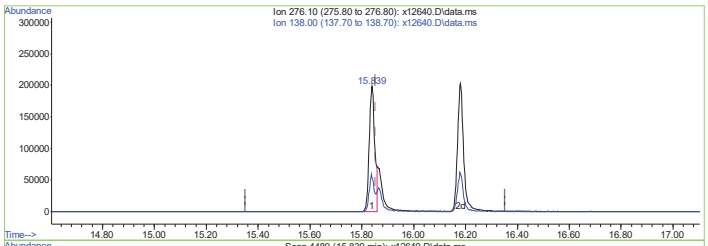
X12640.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12640.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12640.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 08:21:09 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12640.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.839min (-0.014) 8.41ug/mL m

response 291039

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	27.07
0.00	0.00	0.00
0.00	0.00	0.00

9.6.3.9

9

X160921_8270.m Thu Sep 22 08:26:10 2016 Page: 1

X12640.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12641.D

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:20:42 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.038	152	450120	40.00 ug/mL	0.00
22) Naphthalene-d8	5.091	136	1684495	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.624	164	965070	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.916	188	1572437	40.00 ug/mL	0.00
78) Chrysene-d12	10.826	240	1497800	40.00 ug/mL	0.00
88) Perylene-d12	14.008	264	1290207	40.00 ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	450120	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	3.127	112	306983	20.61 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 41.22%		
8) Phenol-d5	3.811	99	413116	23.88 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 47.76%		
23) Nitrobenzene-d5	4.513	82	371490	23.76 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 47.52%		
46) 2-Fluorobiphenyl	6.030	172	664349	20.35 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 40.70%		
68) 2,4,6-Tribromophenol	7.326	330	68192	19.33 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 38.66%		
81) Terphenyl-d14	9.387	244	619169	17.95 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 35.90%		
Target Compounds					Qvalue
2) N-nitrosodimethylamine	2.229	74	235635	21.678 ug/mL	96
3) 1,4-Dioxane	1.999	88	148269	20.268 ug/mL	100
4) Pyridine	2.229	79	408661	21.152 ug/mL	99
5) Aniline	3.823	93	516100	23.942 ug/mL	96
7) bis(2-Chloroethyl)ether	3.854	63	231331	21.122 ug/mL	97
9) Phenol	3.820	94	450589	24.160 ug/mL	99
10) 2-Chlorophenol	3.910	128	307806	20.227 ug/mL	97
11) 1,3-Dichlorobenzene	4.010	146	332034	21.105 ug/mL	99
12) 1,4-Dichlorobenzene	4.050	146	351417	21.107 ug/mL	99
13) 1,2-Dichlorobenzene	4.202	146	317487	20.549 ug/mL	99
14) Benzyl alcohol	4.171	108	214169	23.178 ug/mL	98
15) bis(2-chloroisopropyl)...	4.280	45	336152	19.384 ug/mL	91
16) o-cresol	4.283	108	296842	21.717 ug/mL	100
17) Acetophenone	4.383	105	472092	22.050 ug/mL	97
18) Hexachloroethane	4.445	117	140423	20.577 ug/mL	98
19) N-Nitroso-di-n-propyla...	4.395	70	228617	24.060 ug/mL	94
20) m+p-cresols	4.401	108	641233	45.316 ug/mL	100
21) 4-methylphenol	4.401	108	641233	45.316 ug/mL	100
24) Nitrobenzene	4.529	77	369922	24.683 ug/mL	100
25) Isophorone	4.706	82	638204	24.179 ug/mL	97
26) 2-Nitrophenol	4.793	139	153342	20.696 ug/mL	96
27) 2,4-Dimethylphenol	4.830	107	318536	23.145 ug/mL	97
28) bis(2-Chloroethoxy)met...	4.895	93	395469	23.484 ug/mL	99
29) Benzoic acid	4.926	105	80664m	8.772 ug/mL	
30) 2,4-Dichlorophenol	4.995	162	241814	22.655 ug/mL	98
31) 1,2,4-Trichlorobenzene	5.054	180	259954	22.472 ug/mL	98
32) Naphthalene	5.107	128	863455	21.577 ug/mL	100
33) 2,6-Dichlorophenol	5.184	162	251742	23.439 ug/mL	98
34) 4-Chloroaniline	5.181	127	371471	22.478 ug/mL	96
35) Hexachlorobutadiene	5.250	225	148291	23.379 ug/mL	98

9.6.4

9

X160921_8270.m Thu Sep 22 11:18:46 2016 Page: 1

X12641.D: MSX424-IC424 Initial Calibration (20) page 1 of 4

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:20:42 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.610	107	265129	22.243 ug/mL	100
37) 2-Methylnaphthalene	5.694	142	580470	22.415 ug/mL	100
38) 1-Methylnaphthalene	5.791	142	564410	22.371 ug/mL	99
39) 1,2,4,5-Tetrachloroben...	5.878	216	252529	23.196 ug/mL	97
40) Caprolactam	5.446	55	131394	20.541 ug/mL	97
42) Pentachloronitrobenzene	7.873	237	68732	23.354 ug/mL	98
43) Hexachlorocyclopentadiene	5.887	237	56977	8.460 ug/mL	99
44) 2,4,6-Trichlorophenol	5.977	196	155642	19.108 ug/mL	98
45) 2,4,5-Trichlorophenol	6.017	196	168793	18.783 ug/mL	98
47) 2-Chloronaphthalene	6.120	162	519570	19.184 ug/mL	100
48) Acenaphthylene	6.490	152	810559	19.438 ug/mL	99
49) Dimethylphthalate	6.418	163	586265	19.911 ug/mL	99
50) 2,6-Dinitrotoluene	6.490	165	128718	20.157 ug/mL	86
51) Acenaphthene	6.648	153	541394	18.906 ug/mL	98
52) 2,4-Dinitrophenol	6.717	184	29273	8.069 ug/mL	99
53) Dibenzofuran	6.788	168	777103	19.673 ug/mL	95
54) 2,4-Dinitrotoluene	6.835	165	161508	17.629 ug/mL	95
55) 4-Nitrophenol	6.794	65	97447	18.592 ug/mL#	79
56) 2,3,4,6-Tetrachlorophenol	6.947	232	109728	17.122 ug/mL	99
57) Fluorene	7.090	166	610904	19.708 ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.084	204	289559	20.381 ug/mL	98
59) Diethylphthalate	7.031	149	595985	19.106 ug/mL	100
60) 2-nitroaniline	6.254	138	177223	18.099 ug/mL	96
61) 3-nitroaniline	6.620	138	162682	19.884 ug/mL	99
62) 4-nitroaniline	7.164	138	148448	17.533 ug/mL	97
63) 1,1-Biphenyl	6.108	154	705650	19.442 ug/mL	97
65) 4,6-Dinitro-2-methylph...	7.195	198	72281	15.342 ug/mL#	82
66) n-Nitrosodiphenylamine	7.202	169	424899	19.331 ug/mL	99
67) 1,2-Diphenylhydrazine	7.223	77	731924	23.230 ug/mL	97
69) 4-Bromophenyl-phenylether	7.512	248	149630	21.146 ug/mL	97
70) Hexachlorobenzene	7.646	284	158399	21.210 ug/mL	94
71) Pentachlorophenol	7.817	266	39896	10.680 ug/mL	96
72) Phenanthrene	7.935	178	831936	20.513 ug/mL	99
73) Anthracene	7.976	178	895369	20.329 ug/mL	100
74) Carbazole	8.131	167	817827	19.932 ug/mL	98
75) Di-n-butylphthalate	8.454	149	970546	20.303 ug/mL	100
76) Fluoranthene	9.004	202	855458	21.441 ug/mL	99
77) Atrazine	7.693	200	149726	19.670 ug/mL	100
79) Benzidine	9.144	184	264783	20.734 ug/mL	99
80) Pyrene	9.225	202	895075	17.165 ug/mL	98
82) Butylbenzylphthalate	10.005	149	413741	16.601 ug/mL	97
83) 3,3-Dimethylbenzidine	9.980	212	279137	23.917 ug/mL	100
84) 3,3'-Dichlorobenzidine	10.798	252	298948	21.492 ug/mL	98
85) Benzo[a]anthracene	10.795	228	805275	19.107 ug/mL	99
86) Chrysene	10.866	228	799638	18.452 ug/mL	100
87) bis(2-Ethylhexyl)phtha...	10.934	149	550422	13.994 ug/mL	99
89) Di-n-octylphthalate	12.221	149	844934	13.039 ug/mL	100
90) Benzo[b]fluoranthene	13.039	252	718104	17.797 ug/mL	99
91) Benzo[k]fluoranthene	13.095	252	752277	17.829 ug/mL	99
92) Benzo[a]pyrene	13.856	252	656873	18.246 ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.839	276	620467m	18.384 ug/mL	
94) Dibenz[a,h]anthracene	15.870	278	655049	18.547 ug/mL	99
95) Benzo[g,h,i]perylene	16.184	276	652088	18.034 ug/mL	99
97) Benzaldehyde	3.717	77	178987	105.377 ug/mL	98

9.6.4 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:20:42 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)

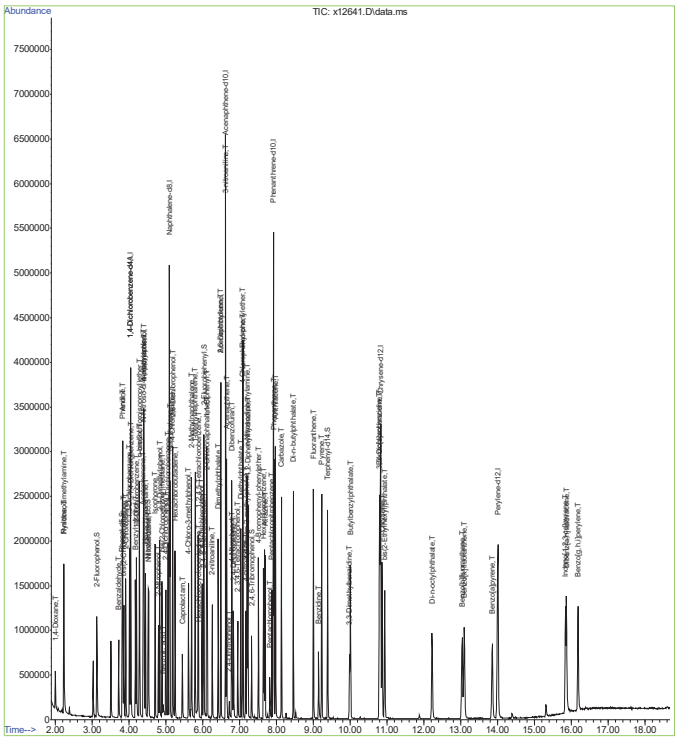
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.6.4 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:20:42 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

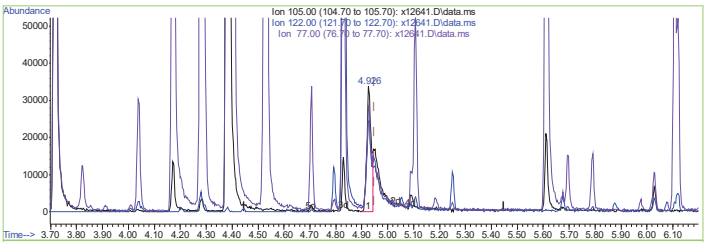


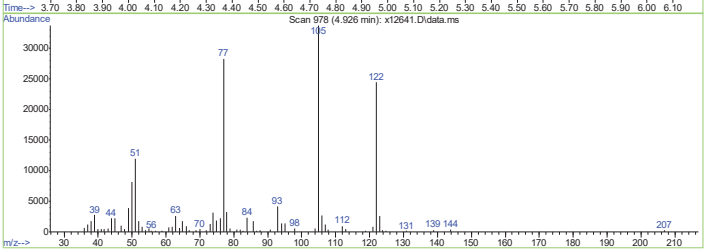
9.6.4 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:17:56 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12641.D\data.ms

(29) Benzoic acid (T)

4.926min (-0.022) 4.37ug/mL

response 40166

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	67.32
77.00	78.50	81.27
0.00	0.00	0.00

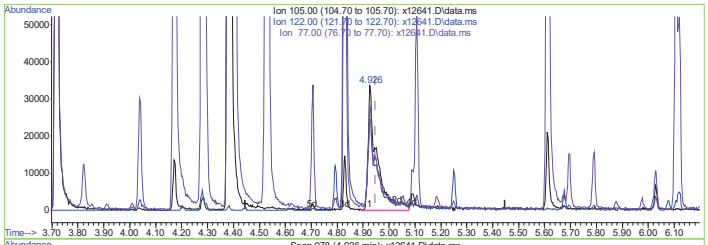
9.6.4.1 9

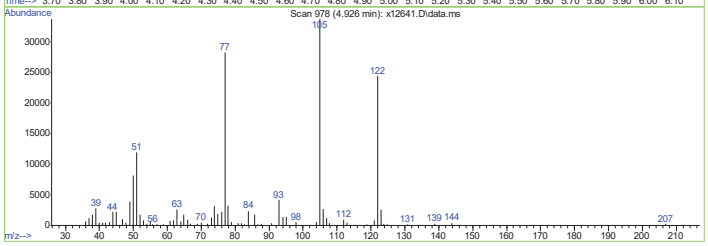
Cal Report: X12641.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:17:56 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12641.D\data.ms

(29) Benzoic acid (T)

4.926min (-0.022) 8.77ug/mL m

response 80664

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	72.52
77.00	78.50	83.81
0.00	0.00	0.00

9.6.4.2

9

X160921_8270.m Thu Sep 22 08:18:38 2016 Page: 1

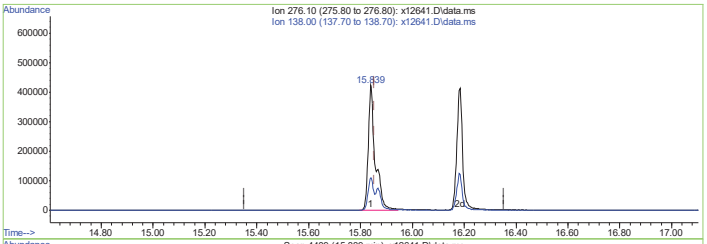
X12641.D edits: Benzoic acid

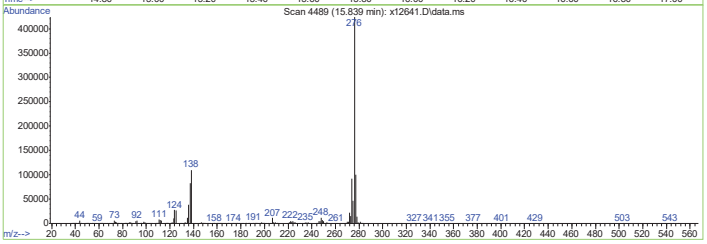
Cal Report: X12641.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:17:56 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12641.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.839min (-0.014) 23.58ug/mL

response 795811

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	25.88
0.00	0.00	0.00
0.00	0.00	0.00

9.6.4.3

9

X160921_8270.m Thu Sep 22 08:20:37 2016 Page: 1

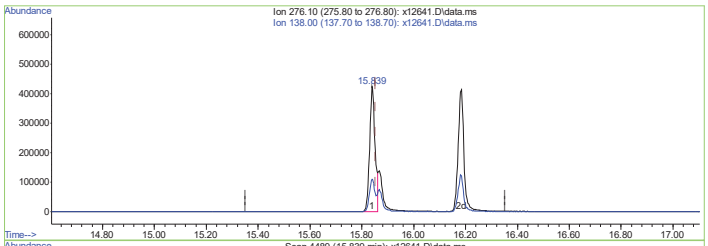
X12641.D edits: Indeno[1,2,3-cd]pyrene

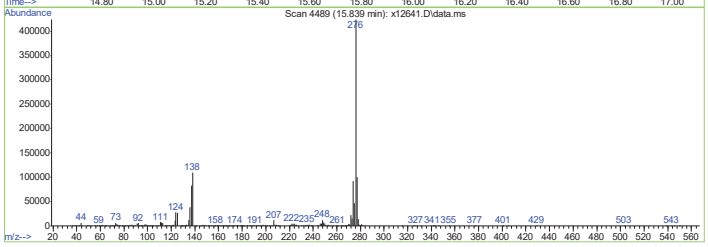
Cal Report: X12641.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12641.D
Sample : IC424-20
Misc : op48431,msx424,,,,1,1
ALS Vial : 4 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:11 pm Operator: AkinA

Quant Time: Sep 22 08:17:56 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12641.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.839min (-0.014) 18.38ug/mL m

response 620467

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	25.88
0.00	0.00	0.00
0.00	0.00	0.00

9.6.4.4

9

X160921_8270.m Thu Sep 22 08:20:47 2016 Page: 1

X12641.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12642.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12642.D
Sample : ICC424-50
Misc : op48431,msx424,,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:36 pm Operator: AkinA

Quant Time: Sep 22 08:14:21 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.041	152	435659	40.00 ug/mL	0.00
22) Naphthalene-d8	5.091	136	1655191	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.624	164	952570	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1540446	40.00 ug/mL	0.00
78) Chrysene-d12	10.826	240	1533912	40.00 ug/mL	0.00
88) Perylene-d12	14.009	264	1305309	40.00 ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.041	152	435659	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	3.127	112	785809	54.50 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 109.00%		
8) Phenol-d5	3.814	99	1019742	60.90 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 121.80%		
23) Nitrobenzene-d5	4.516	82	953053	62.03 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 124.06%		
46) 2-Fluorobiphenyl	6.030	172	1730982	53.72 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 107.44%		
68) 2,4,6-Tribromophenol	7.329	330	208163	60.23 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 120.46%		
81) Terphenyl-d14	9.390	244	1758760	49.80 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 99.60%		
Target Compounds					Qvalue
2) N-nitrosodimethylamine	2.229	74	579810	55.113 ug/mL	100
3) 1,4-Dioxane	1.999	88	365131	51.570 ug/mL	100
4) Pyridine	2.229	79	1015629	54.313 ug/mL	100
5) Aniline	3.826	93	1296785	62.154 ug/mL	100
7) bis(2-Chloroethyl)ether	3.857	63	575752	54.315 ug/mL	100
9) Phenol	3.823	94	1133917	62.817 ug/mL	100
10) 2-Chlorophenol	3.913	128	793878	53.901 ug/mL	100
11) 1,3-Dichlorobenzene	4.010	146	854028	56.086 ug/mL	100
12) 1,4-Dichlorobenzene	4.053	146	893355	55.438 ug/mL	100
13) 1,2-Dichlorobenzene	4.202	146	809657	54.145 ug/mL	100
14) Benzyl alcohol	4.174	108	554747	62.028 ug/mL	100
15) bis(2-chloroisopropyl)...	4.280	45	790202	47.079 ug/mL	100
16) o-cresol	4.283	108	751348	56.792 ug/mL	100
17) Acetophenone	4.386	105	1203902	58.097 ug/mL	100
18) Hexachloroethane	4.445	117	358381	54.258 ug/mL	100
19) N-Nitroso-di-n-propyla...	4.398	70	551385	59.954 ug/mL	100
20) m+p-cresols	4.404	108	1629383	118.971 ug/mL	100
21) 4-methylphenol	4.404	108	1629383	118.971 ug/mL	100
24) Nitrobenzene	4.532	77	940679	63.879 ug/mL	100
25) Isophorone	4.709	82	1633283	62.974 ug/mL	100
26) 2-Nitrophenol	4.793	139	419233	57.583 ug/mL	100
27) 2,4-Dimethylphenol	4.830	107	820424	60.667 ug/mL	100
28) bis(2-Chloroethoxy)met...	4.899	93	1008787	60.966 ug/mL	100
29) Benzoic acid	4.948	105	325800	36.057 ug/mL	100
30) 2,4-Dichlorophenol	4.995	162	643468	61.353 ug/mL	100
31) 1,2,4-Trichlorobenzene	5.054	180	678975	59.734 ug/mL	100
32) Naphthalene	5.110	128	2208396	56.164 ug/mL	100
33) 2,6-Dichlorophenol	5.188	162	655392	62.103 ug/mL	100
34) 4-Chloroaniline	5.185	127	981446	60.438 ug/mL	100
35) Hexachlorobutadiene	5.253	225	396362	63.596 ug/mL	100

9.6.5

9

X160921_8270.m Thu Sep 22 11:18:49 2016 Page: 1

X12642.D: MSX424-ICC424 Initial Calibration (50) page 1 of 4

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12642.D
Sample : ICC424-50
Misc : op48431,msx424,,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:36 pm Operator: AkinA

Quant Time: Sep 22 08:14:21 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.614	107	695727	59.401 ug/mL	100
37) 2-Methylnaphthalene	5.697	142	1488724	58.505 ug/mL	100
38) 1-Methylnaphthalene	5.791	142	1430261	57.695 ug/mL	100
39) 1,2,4,5-Tetrachloroben...	5.878	216	691051	64.600 ug/mL	100
40) Caprolactam	5.471	55	347030	55.212 ug/mL	99
42) Pentachloronitrobenzene	7.879	237	195982	67.465 ug/mL	100
43) Hexachlorocyclopentadiene	5.887	237	234777	35.317 ug/mL	100
44) 2,4,6-Trichlorophenol	5.977	196	438573	54.549 ug/mL	100
45) 2,4,5-Trichlorophenol	6.021	196	473273	53.355 ug/mL	100
47) 2-Chloronaphthalene	6.123	162	1366572	51.120 ug/mL	100
48) Acenaphthylene	6.490	152	2134254	51.853 ug/mL	100
49) Dimethylphthalate	6.422	163	1548962	53.296 ug/mL	100
50) 2,6-Dinitrotoluene	6.493	165	355213	56.356 ug/mL	100
51) Acenaphthene	6.652	153	1400127	49.534 ug/mL	100
52) 2,4-Dinitrophenol	6.714	184	141184	39.427 ug/mL	100
53) Dibenzofuran	6.788	168	2036218	52.226 ug/mL	100
54) 2,4-Dinitrotoluene	6.838	165	453074	50.102 ug/mL	100
55) 4-Nitrophenol	6.795	65	278253	53.784 ug/mL	100
56) 2,3,4,6-Tetrachlorophenol	6.947	232	321946	50.895 ug/mL	100
57) Fluorene	7.093	166	1615583	52.803 ug/mL	100
58) 4-Chlorophenyl-phenyle...	7.087	204	793350	56.573 ug/mL	100
59) Diethylphthalate	7.037	149	1584141	51.450 ug/mL	100
60) 2-nitroaniline	6.257	138	486324	50.318 ug/mL	100
61) 3-nitroaniline	6.624	138	427572	52.946 ug/mL	100
62) 4-nitroaniline	7.171	138	410985	49.177 ug/mL	100
63) 1,1-Biphenyl	6.108	154	1834816	51.216 ug/mL	100
65) 4,6-Dinitro-2-methylph...	7.202	198	258479	56.003 ug/mL	100
66) n-Nitrosodiphenylamine	7.205	169	1161127	53.922 ug/mL	100
67) 1,2-Diphenylhydrazine	7.227	77	1848722	59.894 ug/mL	100
69) 4-Bromophenyl-phenylether	7.513	248	416514	60.086 ug/mL	100
70) Hexachlorobenzene	7.649	284	447890	61.220 ug/mL	100
71) Pentachlorophenol	7.820	266	167838	45.861 ug/mL	100
72) Phenanthrene	7.938	178	2210152	55.628 ug/mL	100
73) Anthracene	7.979	178	2397182	55.556 ug/mL	100
74) Carbazole	8.134	167	2190844	54.503 ug/mL	100
75) Di-n-butylphthalate	8.454	149	2634560	56.258 ug/mL	100
76) Fluoranthene	9.004	202	2323442	59.445 ug/mL	100
77) Atrazine	7.699	200	408441	54.773 ug/mL	100
79) Benzidine	9.144	184	746663	57.092 ug/mL	100
80) Pyrene	9.228	202	2413257	45.190 ug/mL	100
82) Butylbenzylphthalate	10.008	149	1135539	44.490 ug/mL	100
83) 3,3-Dimethylbenzidine	9.984	212	680351	56.922 ug/mL	100
84) 3,3'-Dichlorobenzidine	10.801	252	874591	61.396 ug/mL	100
85) Benzo[a]anthracene	10.798	228	2345465	54.342 ug/mL	100
86) Chrysene	10.872	228	2209501	49.784 ug/mL	100
87) bis(2-Ethylhexyl)phtha...	10.935	149	1583144	39.301 ug/mL	100
89) Di-n-octylphthalate	12.224	149	2588006	39.475 ug/mL	100
90) Benzo[b]fluoranthene	13.048	252	2059790	50.457 ug/mL	100
91) Benzo[k]fluoranthene	13.107	252	2115163	49.550 ug/mL	100
92) Benzo[a]pyrene	13.866	252	1901547	52.209 ug/mL	100
93) Indeno[1,2,3-cd]pyrene	15.849	276	1757242	51.463 ug/mL	100
94) Dibenz[a,h]anthracene	15.877	278	1840256	51.503 ug/mL	100
95) Benzo[g,h,i]perylene	16.190	276	1672392	45.716 ug/mL	100
97) Benzaldehyde	3.718	77	389415	236.874 ug/mL	100

9.6.5 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12642.D
Sample : ICC424-50
Misc : op48431,msx424,,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:36 pm Operator: AkinA

Quant Time: Sep 22 08:14:21 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)

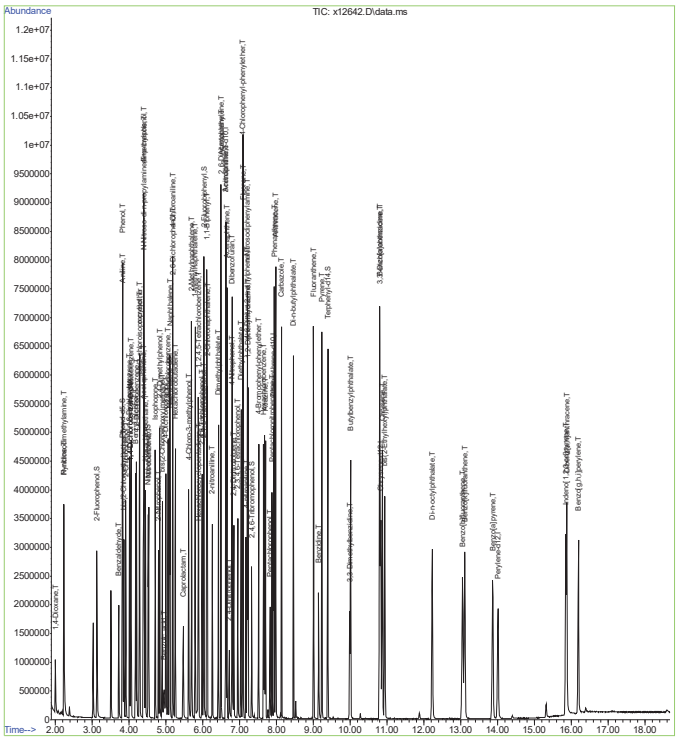
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.6.5 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12642.D
Sample : ICC424-50
Misc : op48431,msx424,,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:36 pm Operator: AkinA

Quant Time: Sep 22 08:14:21 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

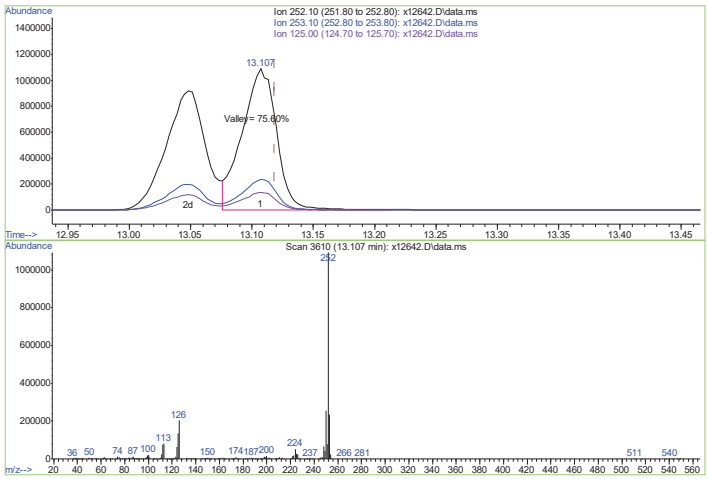


9.6.5 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12642.D
Sample : ICC424-50
Misc : op48431,msx424,,,,1,1
ALS Vial : 5 Sample Multiplier: 1
Acq On : 21 Sep 2016 5:36 pm Operator: AkinA

Quant Time: Sep 22 08:14:21 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12642.D\data.ms

(91) Benzo[k]fluoranthene (T)

13.107min (-0.012) 49.55ug/mL

response 2115163

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	21.56
125.00	12.50	12.45
0.00	0.00	0.00

9.6.5.1 9

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12643.D
Sample : IC424-80
Misc : op48431,msx424,,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:01 pm Operator: AkinA

Quant Time: Sep 22 08:43:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	437451	40.00	ug/mL	0.00
22) Naphthalene-d8	5.094	136	1654769	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.624	164	960876	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.920	188	1561873	40.00	ug/mL	0.00
78) Chrysene-d12	10.829	240	1601365	40.00	ug/mL	0.00
88) Perylene-d12	14.015	264	1350432	40.00	ug/mL	0.00
96) 1,4-Dichlorobenzene-d4A	4.038	152	437451	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.124	112	1268973	87.69	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 175.38%#			
8) Phenol-d5	3.814	99	1594145	81.56	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 163.12%#			
23) Nitrobenzene-d5	4.516	82	1510595	86.00	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 172.00%#			
46) 2-Fluorobiphenyl	6.033	172	2779967	86.24	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 172.48%#			
68) 2,4,6-Tribromophenol	7.329	330	367656	114.40	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 228.80%#			
81) Terphenyl-d14	9.390	244	3006627	95.21	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 190.42%#			
Target Compounds						Qvalue
2) N-nitrosodimethylamine	2.223	74	906292	80.086	ug/mL	99
3) 1,4-Dioxane	1.989	88	565435	74.167	ug/mL	98
4) Pyridine	2.219	79	1572139	79.547	ug/mL	98
5) Aniline	3.826	93	1996277	86.845	ug/mL	94
7) bis(2-Chloroethyl)ether	3.857	63	903735	79.435	ug/mL	98
9) Phenol	3.823	94	1732221	80.282	ug/mL	99
10) 2-Chlorophenol	3.913	128	1272381	86.453	ug/mL	98
11) 1,3-Dichlorobenzene	4.010	146	1341813	83.048	ug/mL	100
12) 1,4-Dichlorobenzene	4.053	146	1399898	81.900	ug/mL	100
13) 1,2-Dichlorobenzene	4.202	146	1301354	83.406	ug/mL	99
14) Benzyl alcohol	4.174	108	893191	91.251	ug/mL	99
15) bis(2-chloroisopropyl)...	4.280	45	1178244	69.451	ug/mL	93
16) o-cresol	4.286	108	1189737	84.352	ug/mL	98
17) Acetophenone	4.386	105	1928818	85.847	ug/mL	99
18) Hexachloroethane	4.445	117	569865	83.367	ug/mL	99
19) N-Nitroso-di-n-propyla...	4.401	70	830813	76.191	ug/mL	96
20) m+p-cresols	4.408	108	2486582	163.516	ug/mL	100
21) 4-methylphenol	4.408	108	2486582	163.516	ug/mL	100
24) Nitrobenzene	4.532	77	1488806	85.512	ug/mL	99
25) Isophorone	4.712	82	2571290	83.947	ug/mL	99
26) 2-Nitrophenol	4.796	139	692809	99.570	ug/mL	97
27) 2,4-Dimethylphenol	4.833	107	1309081	85.327	ug/mL	97
28) bis(2-Chloroethoxy)met...	4.899	93	1604827	83.267	ug/mL	99
29) Benzoic acid	4.961	105	657206	184.012	ug/mL	98
30) 2,4-Dichlorophenol	4.995	162	1055175	93.710	ug/mL	98
31) 1,2,4-Trichlorobenzene	5.057	180	1099944	87.455	ug/mL	98
32) Naphthalene	5.110	128	3497484	81.742	ug/mL	100
33) 2,6-Dichlorophenol	5.188	162	1041969	88.297	ug/mL	99
34) 4-Chloroaniline	5.185	127	1556558	92.093	ug/mL	99
35) Hexachlorobutadiene	5.253	225	650761	91.472	ug/mL	98

9.6.6 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12643.D
Sample : IC424-80
Misc : op48431,msx424,,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:01 pm Operator: AkinA

Quant Time: Sep 22 08:43:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.617	107	1134715	90.043	ug/mL	100
37) 2-Methylnaphthalene	5.697	142	2351983	84.572	ug/mL	99
38) 1-Methylnaphthalene	5.794	142	2281999	84.188	ug/mL	100
39) 1,2,4,5-Tetrachloroben...	5.878	216	1146067	94.077	ug/mL	100
40) Caprolactam	5.489	55	554725	90.371	ug/mL	99
42) Pentachloronitrobenzene	7.879	237	334305	106.757	ug/mL	100
43) Hexachlorocyclopentadiene	5.887	237	466126	184.908	ug/mL	98
44) 2,4,6-Trichlorophenol	5.980	196	725938	97.565	ug/mL	99
45) 2,4,5-Trichlorophenol	6.021	196	794738	97.931	ug/mL	98
47) 2-Chloronaphthalene	6.123	162	2201808	86.309	ug/mL	99
48) Acenaphthylene	6.490	152	3354250	85.584	ug/mL	99
49) Dimethylphthalate	6.425	163	2514497	87.521	ug/mL	100
50) 2,6-Dinitrotoluene	6.496	165	577451	101.925	ug/mL	90
51) Acenaphthene	6.652	153	2240844	83.070	ug/mL	99
52) 2,4-Dinitrophenol	6.717	184	290048	171.584	ug/mL	94
53) Dibenzofuran	6.791	168	3247454	84.931	ug/mL	97
54) 2,4-Dinitrotoluene	6.841	165	748803	103.107	ug/mL	96
55) 4-Nitrophenol	6.798	65	460590	108.601	ug/mL#	63
56) 2,3,4,6-Tetrachlorophenol	6.947	232	550698	109.795	ug/mL	99
57) Fluorene	7.093	166	2593500	86.892	ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.087	204	1283753	91.041	ug/mL	98
59) Diethylphthalate	7.037	149	2580764	88.821	ug/mL	100
60) 2-nitroaniline	6.257	138	801544	101.658	ug/mL	99
61) 3-nitroaniline	6.627	138	698097	94.349	ug/mL	94
62) 4-nitroaniline	7.177	138	678068	99.461	ug/mL	97
63) 1,1-Biphenyl	6.111	154	2921106	83.817	ug/mL	94
65) 4,6-Dinitro-2-methylph...	7.205	198	476757	154.593	ug/mL	85
66) n-Nitrosodiphenylamine	7.211	169	1865960	90.494	ug/mL	98
67) 1,2-Diphenylhydrazine	7.227	77	2806066m	80.168	ug/mL	
69) 4-Bromophenyl-phenylether	7.513	248	712667	100.175	ug/mL	95
70) Hexachlorobenzene	7.649	284	764739	100.333	ug/mL	98
71) Pentachlorophenol	7.820	266	335632	190.315	ug/mL	99
72) Phenanthrene	7.941	178	3591656	87.449	ug/mL	100
73) Anthracene	7.982	178	3877149	90.418	ug/mL	98
74) Carbazole	8.137	167	3551489	89.148	ug/mL	99
75) Di-n-butylphthalate	8.457	149	4288827	96.150	ug/mL	100
76) Fluoranthene	9.008	202	3854123	95.030	ug/mL	98
77) Atrazine	7.705	200	682585	97.821	ug/mL	99
79) Benzidine	9.144	184	1313015	118.155	ug/mL	99
80) Pyrene	9.231	202	4015728	88.126	ug/mL	98
82) Butylbenzylphthalate	10.011	149	1906374	95.593	ug/mL	97
83) 3,3-Dimethylbenzidine	9.983	212	1204274	96.484	ug/mL	100
84) 3,3'-Dichlorobenzidine	10.807	252	1537365	107.333	ug/mL	98
85) Benzo[a]anthracene	10.801	228	4038446	98.480	ug/mL	100
86) Chrysene	10.879	228	3813062	91.342	ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.938	149	2693581	105.386	ug/mL	99
89) Di-n-octylphthalate	12.228	149	4530228	124.814	ug/mL	100
90) Benzo[b]fluoranthene	13.057	252	3540793	102.175	ug/mL	99
91) Benzo[k]fluoranthene	13.120	252	3654992	97.928	ug/mL	99
92) Benzo[a]pyrene	13.878	252	3267415	105.034	ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.852	276	2754861	93.479	ug/mL	98
94) Dibenz[a,h]anthracene	15.883	278	2940968	91.748	ug/mL	98
95) Benzo[g,h,i]perylene	16.197	276	2549551	78.807	ug/mL	97
97) Benzaldehyde	3.714	77	529762	102.937	ug/mL	99

9.6.6 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12643.D
Sample : IC424-80
Misc : op48431,msx424,,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:01 pm Operator: AkinA

Quant Time: Sep 22 08:43:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

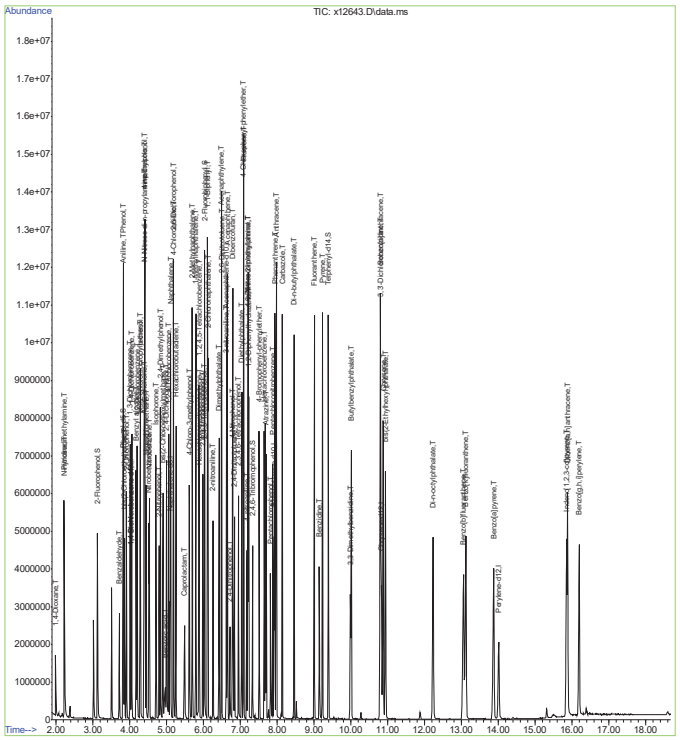
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.6.6 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12643.D
Sample : IC424-80
Misc : op48431,msx424,,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:01 pm Operator: AkinA

Quant Time: Sep 22 08:43:07 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



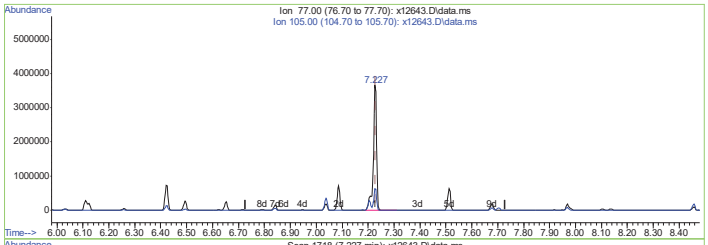
9.6.6 9

Cal Report: X12643.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12643.D
Sample : IC424-80
Misc : op48431,msx424,,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:01 pm Operator: AkinA

Quant Time: Sep 22 08:41:01 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.1

9

TIC: x12643.D\data.ms

(67) 1,2-Diphenylhydrazine (T)

7.227min (-0.002) 91.42ug/mL

response 3199974

Ion	Exp%	Act%
77.00	100	100
105.00	16.70	17.22
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:43:02 2016 Page: 1

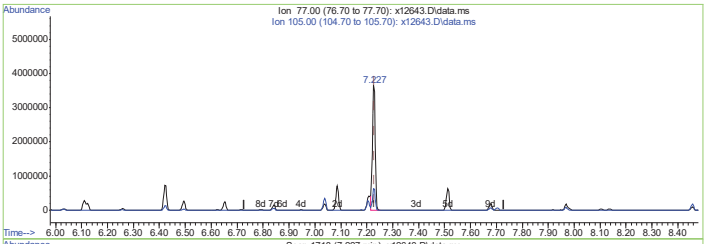
X12643.D edits: 1,2-Diphenylhydrazine

Cal Report: X12643.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12643.D
Sample : IC424-80
Misc : op48431,msx424,,,,1,1
ALS Vial : 6 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:01 pm Operator: AkinA

Quant Time: Sep 22 08:41:01 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.2

9

TIC: x12643.D\data.ms

(67) 1,2-Diphenylhydrazine (T)

7.227min (-0.002) 80.17ug/mL m

response 2806066

Ion	Exp%	Act%
77.00	100	100
105.00	16.70	17.25
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:49:47 2016 Page: 1

X12643.D edits: 1,2-Diphenylhydrazine

Cal Report: X12644.D

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:52:26 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.041	152	459673	40.00 ug/mL	0.00
22) Naphthalene-d8	5.094	136	1672833	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.624	164	950045	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.923	188	1534892	40.00 ug/mL	0.00
78) Chrysene-d12	10.835	240	1618267	40.00 ug/mL	0.00
88) Perylene-d12	14.012	264	1307108	40.00 ug/mL	0.00
96) 1,4-Dichlorobenzene-d4A	4.041	152	459673	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	3.127	112	1961033	126.92 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 253.84%#		
8) Phenol-d5	3.820	99	2347938	113.94 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 227.88%#		
23) Nitrobenzene-d5	4.519	82	2293941	127.60 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 255.20%#		
46) 2-Fluorobiphenyl	6.036	172	4130424	127.93 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 255.86%#		
68) 2,4,6-Tribromophenol	7.332	330	619350	182.99 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 365.98%#		
81) Terphenyl-d14	9.393	244	4655142	141.39 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 282.78%#		
Target Compounds					Qvalue
2) N-nitrosodimethylamine	2.229	74	1378316	115.888 ug/mL	98
3) 1,4-Dioxane	1.999	88	878210	110.973 ug/mL	97
4) Pyridine	2.226	79	2415328	116.413 ug/mL	97
5) Aniline	3.829	93	2828481	115.454 ug/mL	85
7) bis(2-Chloroethyl)ether	3.861	63	1362748	114.125 ug/mL	94
9) Phenol	3.829	94	2450595	108.022 ug/mL	98
10) 2-Chlorophenol	3.913	128	2015025	128.566 ug/mL	97
11) 1,3-Dichlorobenzene	4.013	146	2119667	124.062 ug/mL	100
12) 1,4-Dichlorobenzene	4.053	146	2208444	122.472 ug/mL	99
13) 1,2-Dichlorobenzene	4.206	146	2040999	123.610 ug/mL	98
14) Benzyl alcohol	4.181	108	1371417	130.281 ug/mL	96
15) bis(2-chloroisopropyl)...	4.280	45	1676009	96.129 ug/mL	69
16) o-cresol	4.289	108	1786484	119.454 ug/mL	96
17) Acetophenone	4.392	105	2909663	121.758 ug/mL	98
18) Hexachloroethane	4.448	117	877567	121.325 ug/mL	90
19) N-Nitroso-di-n-propyla...	4.404	70	1165094	102.495 ug/mL	98
20) m+p-cresols	4.414	108	3581391	223.306 ug/mL	99
21) 4-methylphenol	4.414	108	3581391	223.306 ug/mL	99
24) Nitrobenzene	4.535	77	2203715	123.786 ug/mL	98
25) Isophorone	4.718	82	3820761	122.386 ug/mL	99
26) 2-Nitrophenol	4.796	139	1068685	145.981 ug/mL	96
27) 2,4-Dimethylphenol	4.837	107	1972995	125.816 ug/mL	98
28) bis(2-Chloroethoxy)met...	4.902	93	2387762	121.724 ug/mL	99
29) Benzoic acid	4.976	105	1112912m	244.630 ug/mL	
30) 2,4-Dichlorophenol	4.998	162	1608390	137.375 ug/mL	99
31) 1,2,4-Trichlorobenzene	5.057	180	1710435	132.468 ug/mL	100
32) Naphthalene	5.113	128	5200253	119.791 ug/mL	100
33) 2,6-Dichlorophenol	5.191	162	1561191	128.644 ug/mL	98
34) 4-Chloroaniline	5.191	127	2256441	128.814 ug/mL	93
35) Hexachlorobutadiene	5.253	225	1009883	137.141 ug/mL	99

9.6.7

9

X160921_8270.m Thu Sep 22 11:18:55 2016 Page: 1

X12644.D: MSX424-IC424 Initial Calibration (120) page 1 of 4

Cal Report: X12644.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:52:26 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.620	107	1684641	129.528 ug/mL	98
37) 2-Methylnaphthalene	5.701	142	3543698	124.858 ug/mL	99
38) 1-Methylnaphthalene	5.794	142	3421253	123.775 ug/mL	100
39) 1,2,4,5-Tetrachloroben...	5.881	216	1784148	140.746 ug/mL	99
40) Caprolactam	5.511	55	817464	128.950 ug/mL	97
42) Pentachloronitrobenzene	7.886	237	514395	157.368 ug/mL	99
43) Hexachlorocyclopentadiene	5.890	237	815407	259.178 ug/mL	98
44) 2,4,6-Trichlorophenol	5.983	196	1130209	148.207 ug/mL	99
45) 2,4,5-Trichlorophenol	6.027	196	1225976	147.290 ug/mL	97
47) 2-Chloronaphthalene	6.126	162	3297113	129.022 ug/mL	98
48) Acenaphthylene	6.493	152	4984266	127.145 ug/mL	100
49) Dimethylphthalate	6.428	163	3787189	131.265 ug/mL	99
50) 2,6-Dinitrotoluene	6.499	165	870517	148.617 ug/mL	85
51) Acenaphthene	6.655	153	3324786	123.866 ug/mL	99
52) 2,4-Dinitrophenol	6.720	184	490738	228.282 ug/mL	93
53) Dibenzofuran	6.795	168	4837538	126.658 ug/mL	100
54) 2,4-Dinitrotoluene	6.847	165	1127848	149.856 ug/mL	91
55) 4-Nitrophenol	6.804	65	692981	155.965 ug/mL#	26
56) 2,3,4,6-Tetrachlorophenol	6.950	232	897866	170.470 ug/mL	97
57) Fluorene	7.099	166	3735552	124.791 ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.090	204	1916429	134.368 ug/mL	99
59) Diethylphthalate	7.043	149	3878808	132.581 ug/mL	99
60) 2-nitroaniline	6.263	138	1207791	148.239 ug/mL	93
61) 3-nitroaniline	6.630	138	1043143	138.451 ug/mL	96
62) 4-nitroaniline	7.186	138	1027843	146.544 ug/mL	92
63) 1,1-Biphenyl	6.114	154	4312717	124.171 ug/mL#	90
65) 4,6-Dinitro-2-methylph...	7.211	198	758058	210.815 ug/mL#	76
66) n-Nitrosodiphenylamine	7.214	169	2777991	134.161 ug/mL	99
67) 1,2-Diphenylhydrazine	7.230	77	3946001m	114.677 ug/mL	
69) 4-Bromophenyl-phenylether	7.516	248	1110834	152.478 ug/mL	94
70) Hexachlorobenzene	7.652	284	1223773	156.740 ug/mL	94
71) Pentachlorophenol	7.823	266	586468	265.242 ug/mL	98
72) Phenanthrene	7.945	178	5321003	129.818 ug/mL	99
73) Anthracene	7.985	178	5712393	132.679 ug/mL	99
74) Carbazole	8.140	167	5237975	131.291 ug/mL	100
75) Di-n-butylphthalate	8.461	149	6366481	140.510 ug/mL	99
76) Fluoranthene	9.011	202	5830955	141.858 ug/mL	97
77) Atrazine	7.712	200	1020478	143.488 ug/mL	99
79) Benzidine	9.147	184	1790074	147.664 ug/mL	99
80) Pyrene	9.234	202	6051087	129.218 ug/mL	95
82) Butylbenzylphthalate	10.015	149	2893025	139.036 ug/mL	94
83) 3,3-Dimethylbenzidine	9.987	212	1643405	125.965 ug/mL	100
84) 3,3'-Dichlorobenzidine	10.810	252	2353011	153.805 ug/mL	95
85) Benzo[a]anthracene	10.804	228	6292135	144.115 ug/mL	99
86) Chrysene	10.885	228	5846876	135.400 ug/mL	97
87) bis(2-Ethylhexyl)phtha...	10.941	149	4220112	155.179 ug/mL	98
89) Di-n-octylphthalate	12.237	149	7087628	184.519 ug/mL	99
90) Benzo[b]fluoranthene	13.067	252	5444147	155.139 ug/mL	98
91) Benzo[k]fluoranthene	13.135	252	5702142	152.158 ug/mL	98
92) Benzo[a]pyrene	13.890	252	4996791	157.724 ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.861	276	4225742m	144.096 ug/mL	
94) Dibenz[a,h]anthracene	15.889	278	4530805	142.542 ug/mL	97
95) Benzo[g,h,i]perylene	16.206	276	4042634	129.422 ug/mL	96
97) Benzaldehyde	3.718	77	717948	126.704 ug/mL	96

9.6.7

9

X160921_8270.m Thu Sep 22 11:18:55 2016 Page: 2

X12644.D: MSX424-IC424 Initial Calibration (120) page 2 of 4

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:52:26 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

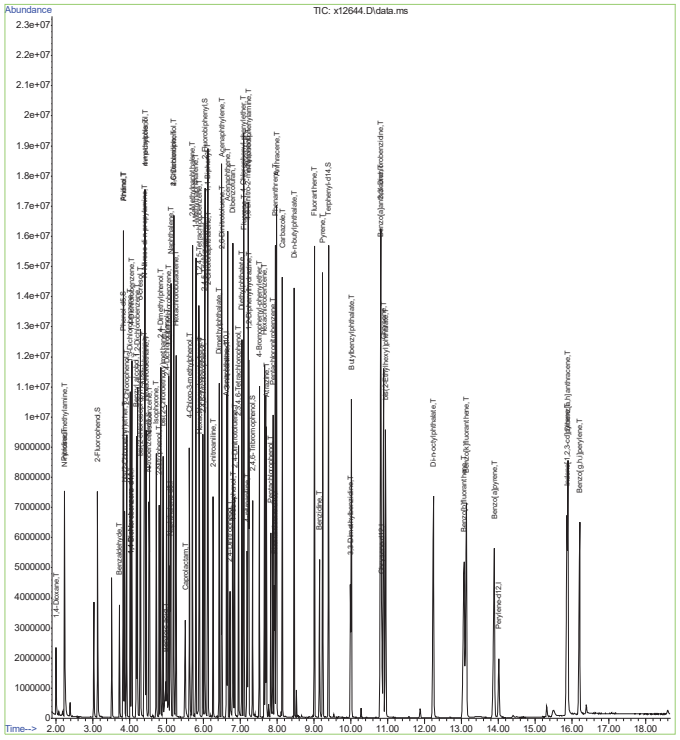
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.67 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:52:26 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

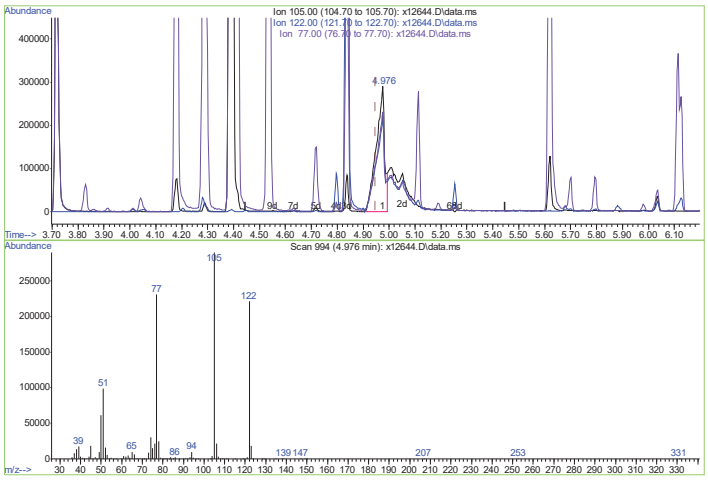


9.67 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:50:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.67 1 9

TIC: x12644.D\data.ms

(29) Benzoic acid (T)

4.976min (+0.028) 142.31ug/mL

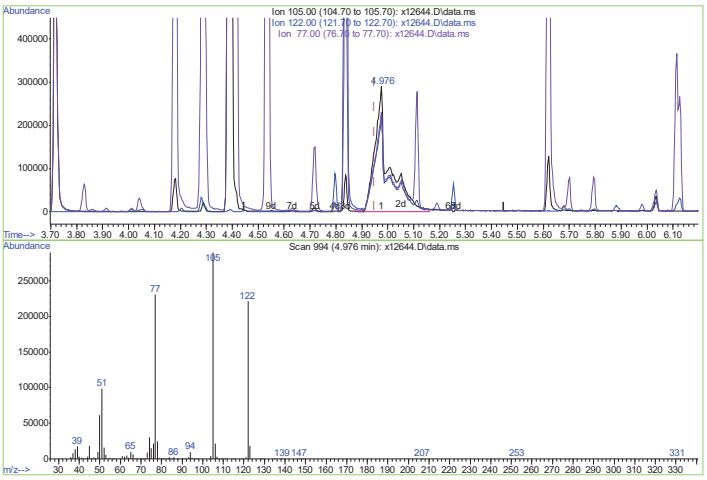
response 647417

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	73.63
77.00	78.50	78.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:50:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.67 2 9

TIC: x12644.D\data.ms

(29) Benzoic acid (T)

4.976min (+0.028) 244.63ug/mL m

response 1112912

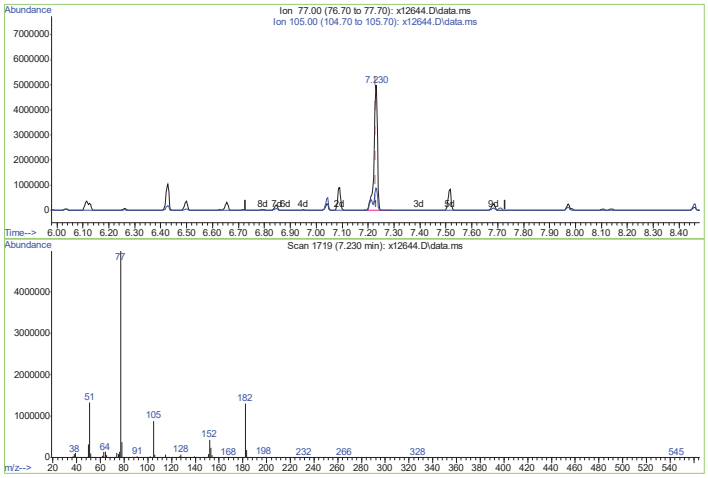
Ion	Exp%	Act%
105.00	100	100
122.00	71.30	76.30
77.00	78.50	79.68
0.00	0.00	0.00

Cal Report: X12644.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:50:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.673

9

TIC: x12644.D\data.ms

(67) 1,2-Diphenylhydrazine (T)

7.230min (+0.001) 130.40ug/mL

response 4487058

Ion	Exp%	Act%
77.00	100	100
105.00	16.70	17.59
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:51:50 2016 Page: 1

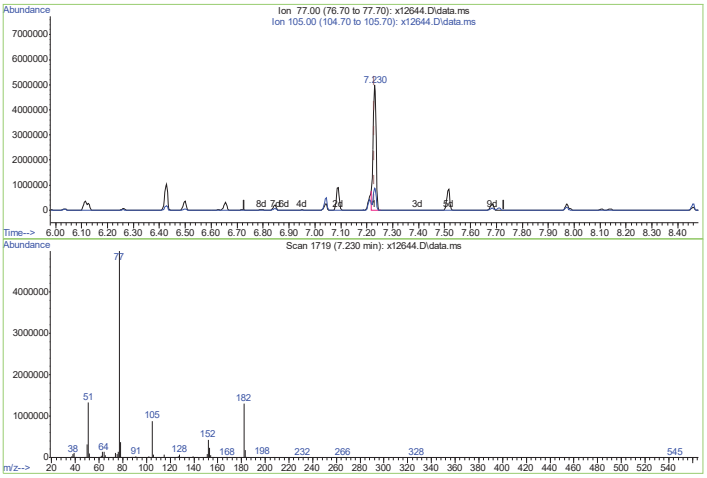
X12644.D edits: 1,2-Diphenylhydrazine

Cal Report: X12644.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:50:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.674

9

TIC: x12644.D\data.ms

(67) 1,2-Diphenylhydrazine (T)

7.230min (+0.001) 114.68ug/mL m

response 3946001

Ion	Exp%	Act%
77.00	100	100
105.00	16.70	17.62
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:51:58 2016 Page: 1

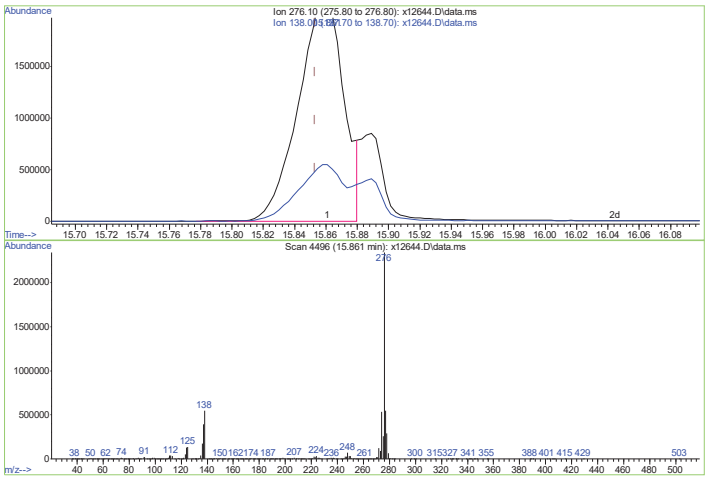
X12644.D edits: 1,2-Diphenylhydrazine

Cal Report: X12644.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:50:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.675

9

TIC: x12644.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.861min (+0.008) 149.11ug/mL

response 4372931

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	23.33
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:52:19 2016 Page: 1

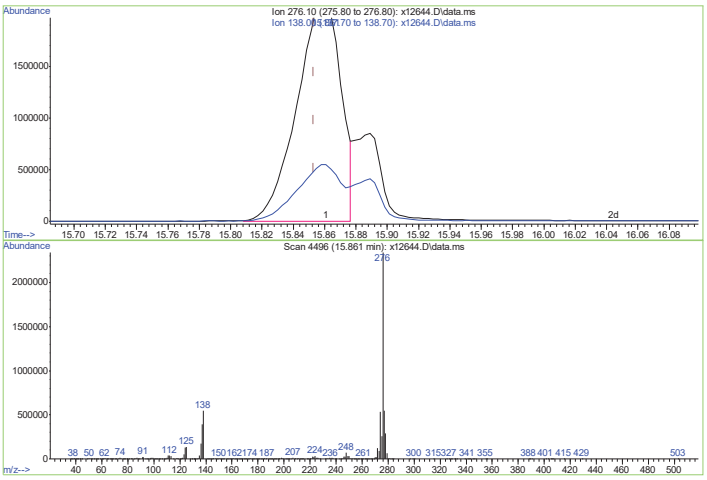
X12644.D edits: Indeno[1,2,3-cd]pyrene

Cal Report: X12644.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12644.D
Sample : IC424-120
Misc : op48431,msx424,,,,1,1
ALS Vial : 7 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:26 pm Operator: AkinA

Quant Time: Sep 22 08:50:32 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.676

9

TIC: x12644.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.861min (+0.008) 144.10ug/mL m

response 4225742

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	23.33
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:52:31 2016 Page: 1

X12644.D edits: Indeno[1,2,3-cd]pyrene

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:56:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.041	152	449145	40.00	ug/mL	0.00
22) Naphthalene-d8	5.094	136	1601600	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.623	164	916785	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.923	188	1454928	40.00	ug/mL	0.00
78) Chrysene-d12	10.838	240	1607154	40.00	ug/mL	0.00
88) Perylene-d12	14.015	264	1247056	40.00	ug/mL	0.00
96) 1,4-Dichlorobenzene-d4A	4.041	152	449145	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.127	112	2437391	160.13	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 320.26%#			
8) Phenol-d5	3.820	99	2820332	141.09	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 282.18%#			
23) Nitrobenzene-d5	4.522	82	2812029	161.91	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 323.82%#			
46) 2-Fluorobiphenyl	6.036	172	4990691	158.69	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 317.38%#			
68) 2,4,6-Tribromophenol	7.335	330	802134	232.58	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 465.16%#			
81) Terphenyl-d14	9.396	244	5844031	174.29	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 348.58%#			
Target Compounds						Qvalue
2) N-nitrosodimethylamine	2.232	74	1691128	146.238	ug/mL	98
3) 1,4-Dioxane	1.999	88	1096816	143.386	ug/mL	95
4) Pyridine	2.222	79	2986914	147.968	ug/mL	98
5) Aniline	3.829	93	3315403	139.255	ug/mL	87
7) bis(2-Chloroethyl)ether	3.863	63	1668622	144.023	ug/mL	95
9) Phenol	3.832	94	2929563	134.073	ug/mL	93
10) 2-Chlorophenol	3.916	128	2509494	162.214	ug/mL	96
11) 1,3-Dichlorobenzene	4.013	146	2652593	158.128	ug/mL	99
12) 1,4-Dichlorobenzene	4.056	146	2732321	154.621	ug/mL	100
13) 1,2-Dichlorobenzene	4.205	146	2524182	155.787	ug/mL	97
14) Benzyl alcohol	4.184	108	1689105	162.236	ug/mL	96
15) bis(2-chloroisopropyl)...	4.280	45	1984562	119.901	ug/mL	61
16) o-cresol	4.292	108	2122523	145.345	ug/mL	95
17) Acetophenone	4.395	105	3609933	154.280	ug/mL	97
18) Hexachloroethane	4.448	117	1073414	151.640	ug/mL	88
19) N-Nitroso-di-n-propyla...	4.407	70	1251858	115.108	ug/mL	97
20) m+p-cresols	4.417	108	4269513	275.187	ug/mL	99
21) 4-methylphenol	4.417	108	4269513	275.187	ug/mL	99
24) Nitrobenzene	4.538	77	2675872	156.288	ug/mL	97
25) Isophorone	4.721	82	4718962	157.433	ug/mL	97
26) 2-Nitrophenol	4.799	139	1326171	183.533	ug/mL	95
27) 2,4-Dimethylphenol	4.839	107	2399657	158.731	ug/mL	96
28) bis(2-Chloroethoxy)met...	4.905	93	2887642	153.439	ug/mL	99
29) Benzoic acid	4.985	105	1466200m	286.950	ug/mL	
30) 2,4-Dichlorophenol	5.001	162	2001870	174.968	ug/mL	99
31) 1,2,4-Trichlorobenzene	5.060	180	2111510	168.305	ug/mL	99
32) Naphthalene	5.113	128	6359745	153.055	ug/mL	100
33) 2,6-Dichlorophenol	5.194	162	1904497	162.243	ug/mL	97
34) 4-Chloroaniline	5.191	127	2699099	159.266	ug/mL	94
35) Hexachlorobutadiene	5.256	225	1250228	173.784	ug/mL	99

9.6.8 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:56:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.623	107	2079082	165.093	ug/mL	97
37) 2-Methylnaphthalene	5.700	142	4309625	157.687	ug/mL	100
38) 1-Methylnaphthalene	5.797	142	4204099	158.151	ug/mL	100
39) 1,2,4,5-Tetrachloroben...	5.881	216	2205024	177.305	ug/mL	98
40) Caprolactam	5.520	55	995937	162.361	ug/mL	94
42) Pentachloronitrobenzene	7.888	237	641779	194.795	ug/mL	98
43) Hexachlorocyclopentadiene	5.890	237	1055282	291.285	ug/mL	98
44) 2,4,6-Trichlorophenol	5.983	196	1410197	185.406	ug/mL	98
45) 2,4,5-Trichlorophenol	6.027	196	1507969	181.834	ug/mL	98
47) 2-Chloronaphthalene	6.129	162	4005549	160.705	ug/mL	100
48) Acenaphthylene	6.496	152	6003218	157.355	ug/mL	99
49) Dimethylphthalate	6.428	163	4690765	166.252	ug/mL	100
50) 2,6-Dinitrotoluene	6.502	165	1069582	182.992	ug/mL	79
51) Acenaphthene	6.658	153	4097260	157.458	ug/mL	98
52) 2,4-Dinitrophenol	6.723	184	640786	261.671	ug/mL	93
53) Dibenzofuran	6.794	168	5886301	158.452	ug/mL	97
54) 2,4-Dinitrotoluene	6.850	165	1414669	188.100	ug/mL	88
55) 4-Nitrophenol	6.807	65	856298	191.514	ug/mL#	21
56) 2,3,4,6-Tetrachlorophenol	6.953	232	1130298	209.781	ug/mL	96
57) Fluorene	7.099	166	4450012	153.178	ug/mL	98
58) 4-Chlorophenyl-phenyle...	7.090	204	2302011	164.445	ug/mL	99
59) Diethylphthalate	7.046	149	4730691	165.092	ug/mL	98
60) 2-nitroaniline	6.263	138	1494360	183.883	ug/mL	91
61) 3-nitroaniline	6.633	138	1272549	171.264	ug/mL	96
62) 4-nitroaniline	7.192	138	1272191	182.204	ug/mL	92
63) 1,1-Biphenyl	6.117	154	5182845	153.873	ug/mL#	88
65) 4,6-Dinitro-2-methylph...	7.217	198	940175	244.937	ug/mL#	73
66) n-Nitrosodiphenylamine	7.217	169	3362137	168.456	ug/mL	98
67) 1,2-Diphenylhydrazine	7.233	77	4498094m	138.786	ug/mL	
69) 4-Bromophenyl-phenylether	7.515	248	1414809	197.250	ug/mL	92
70) Hexachlorobenzene	7.655	284	1563794	202.443	ug/mL	90
71) Pentachlorophenol	7.826	266	777856	308.837	ug/mL	99
72) Phenanthrene	7.947	178	6500422	165.376	ug/mL	99
73) Anthracene	7.988	178	6933411	167.363	ug/mL	99
74) Carbazole	8.143	167	6413426	167.339	ug/mL	99
75) Di-n-butylphthalate	8.460	149	7335200	166.717	ug/mL	96
76) Fluoranthene	9.014	202	7258584	181.571	ug/mL	96
77) Atrazine	7.714	200	1239384	178.845	ug/mL	99
79) Benzidine	9.147	184	2097885	168.696	ug/mL	99
80) Pyrene	9.237	202	7592866	161.491	ug/mL	93
82) Butylbenzylphthalate	10.017	149	3633865	171.951	ug/mL	91
83) 3,3-Dimethylbenzidine	9.989	212	1928317	147.776	ug/mL	100
84) 3,3'-Dichlorobenzidine	10.816	252	2988298	189.072	ug/mL	96
85) Benzo[a]anthracene	10.810	228	7823851	177.946	ug/mL	100
86) Chrysene	10.891	228	7471095	171.073	ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.944	149	5303133	188.459	ug/mL	98
89) Di-n-octylphthalate	12.240	149	9090999	230.376	ug/mL	99
90) Benzo[b]fluoranthene	13.076	252	7090345	203.276	ug/mL	99
91) Benzo[k]fluoranthene	13.147	252	7121709	191.845	ug/mL	98
92) Benzo[a]pyrene	13.896	252	6301538	199.526	ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.864	276	5810228m	201.876	ug/mL	
94) Dibenz[a,h]anthracene	15.895	278	5915328	189.963	ug/mL	97
95) Benzo[g,h,i]perylene	16.212	276	5421701	179.912	ug/mL	95
97) Benzaldehyde	3.717	77	764405	136.972	ug/mL	99

9.6.8 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:56:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

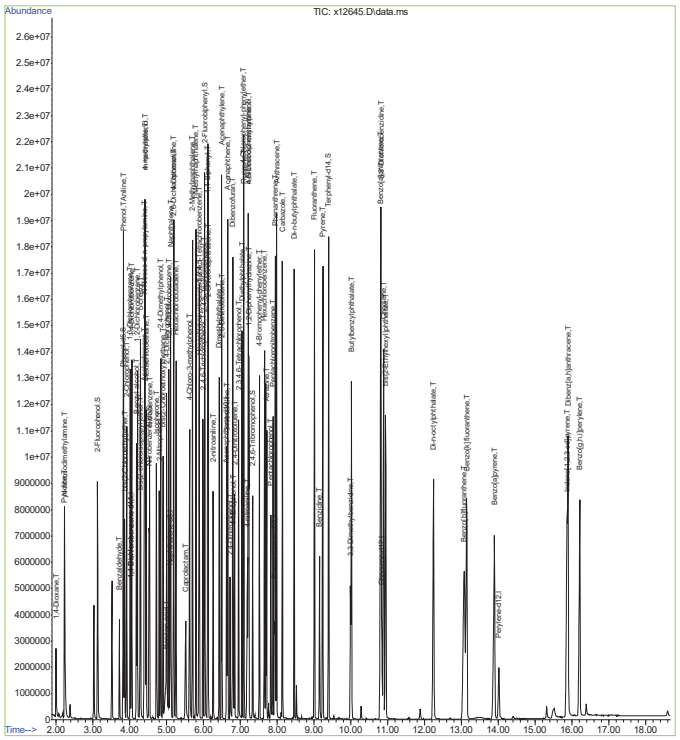
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.6.8 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:56:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



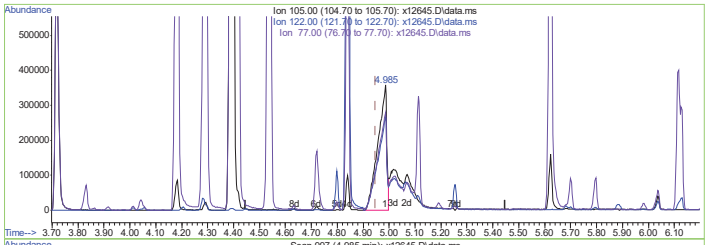
9.6.8 9

Cal Report: X12645.D

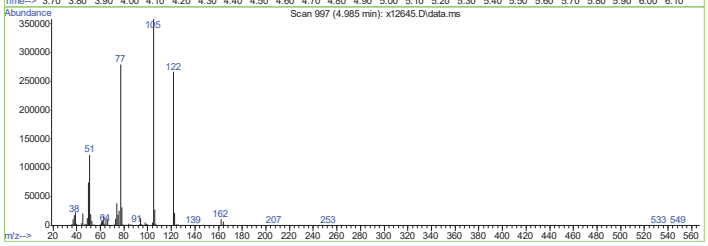
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:53:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.8.1



TIC: x12645.D\data.ms

(29) Benzoic acid (T)

4.985min (+0.037) 168.03ug/mL

response 858559

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	71.92
77.00	78.50	76.98
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:54:20 2016 Page: 1

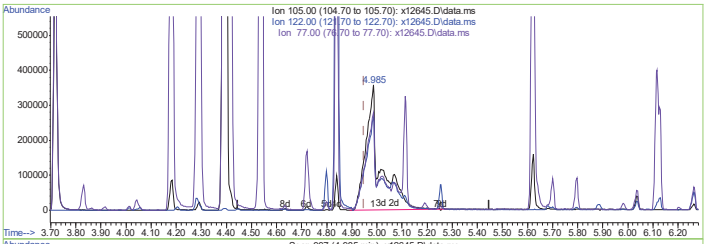
X12645.D edits: Benzoic acid

Cal Report: X12645.D

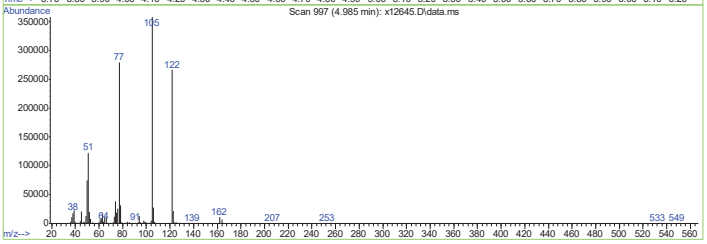
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:53:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.8.2



TIC: x12645.D\data.ms

(29) Benzoic acid (T)

4.985min (+0.037) 286.95ug/mL m

response 1466200

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	74.32
77.00	78.50	78.15
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:54:30 2016 Page: 1

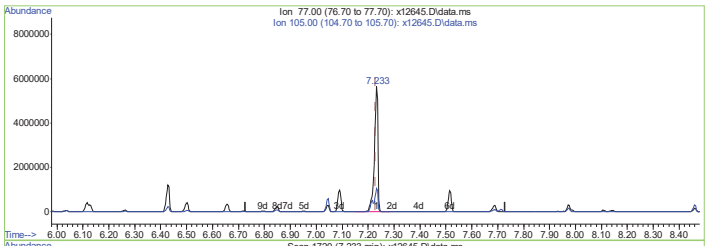
X12645.D edits: Benzoic acid

Cal Report: X12645.D

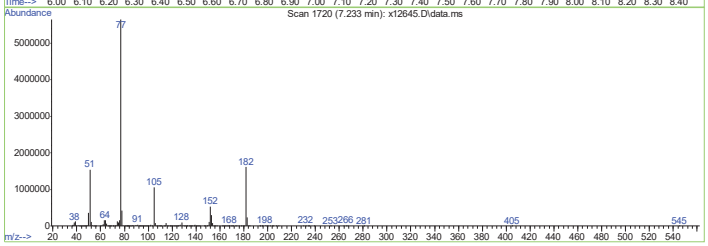
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:53:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.8.3



TIC: x12645.D\data.ms

(67) 1,2-Diphenylhydrazine (T)

7.233min (+0.004) 161.93ug/mL

response 5248353

Ion	Exp%	Act%
77.00	100	100
105.00	16.70	18.56
0.00	0.00	0.00
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 08:55:24 2016 Page: 1

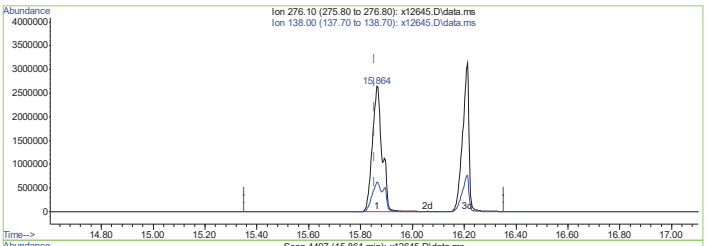
X12645.D edits: 1,2-Diphenylhydrazine

Cal Report: X12645.D

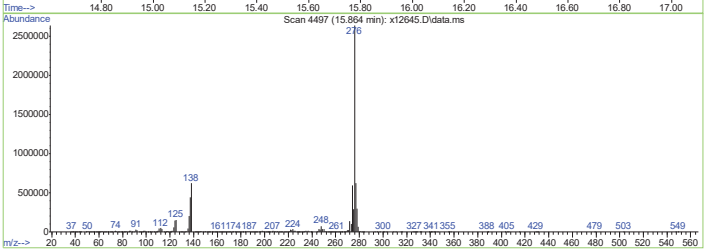
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:53:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.8.4



TIC: x12645.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.864min (+0.011) 240.77ug/mL

response 6929579

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	23.57
0.00	0.00	0.00
0.00	0.00	0.00

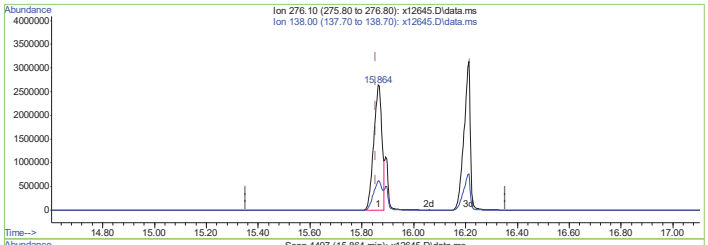
X160921_8270.m Thu Sep 22 08:56:15 2016 Page: 1

X12645.D edits: Indeno[1,2,3-cd]pyrene

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12645.D
Sample : IC424-160
Misc : op48431,msx424,,,,1,1
ALS Vial : 8 Sample Multiplier: 1
Acq On : 21 Sep 2016 6:51 pm Operator: AkinA

Quant Time: Sep 22 08:53:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12645.D\data.ms

(93) Indeno[1,2,3-cd]pyrene (T)

15.864min (+0.011) 201.88ug/mL m

response 5810228

Ion	Exp%	Act%
276.10	100	100
138.00	25.40	23.57
0.00	0.00	0.00
0.00	0.00	0.00

9.6.8.5 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12646.D
Sample : ICV424-50,MEGA
Misc : op48431,msx424,,,,1,1
ALS Vial : 9 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:16 pm Operator: AkinA

Quant Time: Sep 22 11:23:37 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.038	152	477246	40.00 ug/mL	0.00
22) Naphthalene-d8	5.091	136	1795581	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.624	164	1037815	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1695248	40.00 ug/mL	0.00
78) Chrysene-d12	10.826	240	1682048	40.00 ug/mL	0.00
88) Perylene-d12	14.012	264	1478968	40.00 ug/mL	0.00
96) 1,4-Dichlorobenzene-d4A	4.038	152	477246	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	0.000	112	0	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130			Recovery = 0.00%#	
8) Phenol-d5	0.000	99	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130			Recovery = 0.00%#	
23) Nitrobenzene-d5	0.000	82	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130			Recovery = 0.00%#	
46) 2-Fluorobiphenyl	0.000	172	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130			Recovery = 0.00%#	
68) 2,4,6-Tribromophenol	0.000	330	0	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130			Recovery = 0.00%#	
81) Terphenyl-d14	0.000	244	0	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130			Recovery = 0.00%#	
Target Compounds					Qvalue
2) N-nitrosodimethylamine	2.229	74	614863	50.583 ug/mL	100
4) Pyridine	2.226	79	1074167	50.555 ug/mL	100
5) Aniline	3.826	93	1422544	57.159 ug/mL	94
7) bis(2-Chloroethyl)ether	3.857	63	627181	51.590 ug/mL	97
9) Phenol	3.823	94	1199949	52.751 ug/mL	94
10) 2-Chlorophenol	3.910	128	847910	51.493 ug/mL	99
11) 1,3-Dichlorobenzene	4.010	146	944864	53.087 ug/mL	100
12) 1,4-Dichlorobenzene	4.053	146	971160	51.940 ug/mL	98
13) 1,2-Dichlorobenzene	4.205	146	890639	51.903 ug/mL	100
14) Benzyl alcohol	4.174	108	592729	53.485 ug/mL	99
16) o-cresol	4.283	108	810053	52.809 ug/mL	97
18) Hexachloroethane	4.445	117	387815	51.899 ug/mL	98
19) N-Nitroso-di-n-propyla...	4.395	70	656595	58.884 ug/mL	97
20) m+p-cresols	4.401	108	858970	53.032 ug/mL	99
21) 4-methylphenol	4.401	108	858970	53.032 ug/mL	99
24) Nitrobenzene	4.529	77	1009971	52.769 ug/mL	97
25) Isophorone	4.709	82	1833454	54.669 ug/mL	99
26) 2-Nitrophenol	4.793	139	446327	48.479 ug/mL	99
27) 2,4-Dimethylphenol	4.830	107	886320	52.346 ug/mL	98
28) bis(2-Chloroethoxy)met...	4.899	93	1083277	51.608 ug/mL	99
30) 2,4-Dichlorophenol	4.995	162	681181	52.491 ug/mL	97
31) 1,2,4-Trichlorobenzene	5.054	180	757112	53.482 ug/mL	99
32) Naphthalene	5.110	128	2385111	51.479 ug/mL	100
34) 4-Chloroaniline	5.181	127	1043474	54.952 ug/mL	99
35) Hexachlorobutadiene	5.253	225	437998	53.727 ug/mL	99
36) 4-Chloro-3-methylphenol	5.607	107	739331	52.158 ug/mL	100
37) 2-Methylnaphthalene	5.697	142	1554535	50.827 ug/mL	99
38) 1-Methylnaphthalene	5.791	142	1453956	48.857 ug/mL	100
43) Hexachlorocyclopentadiene	5.887	237	266685	50.023 ug/mL	98
44) 2,4,6-Trichlorophenol	5.974	196	458317	52.194 ug/mL	99

9.6.9 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12646.D
Sample : ICV424-50,MEGA
Misc : op48431,msx424,,,,1,1
ALS Vial : 9 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:16 pm Operator: AkinA

Quant Time: Sep 22 11:23:37 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) 2,4,5-Trichlorophenol	6.014	196	467147	48.926 ug/mL	99
47) 2-Chloronaphthalene	6.120	162	1490901	52.811 ug/mL	99
48) Acenaphthylene	6.490	152	2375599	55.121 ug/mL	100
49) Dimethylphthalate	6.425	163	1679385	52.324 ug/mL	99
50) 2,6-Dinitrotoluene	6.493	165	401557	52.717 ug/mL	98
51) Acenaphthene	6.652	153	1527838	51.971 ug/mL	99
52) 2,4-Dinitrophenol	6.714	184	159632	48.838 ug/mL	95
53) Dibenzofuran	6.791	168	2155722	51.324 ug/mL	94
54) 2,4-Dinitrotoluene	6.841	165	512289	55.709 ug/mL	92
55) 4-Nitrophenol	6.798	65	289790	48.402 ug/mL#	53
56) 2,3,4,6-Tetrachlorophenol	6.947	232	368524	51.814 ug/mL	99
57) Fluorene	7.093	166	1769591	54.097 ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.087	204	852206	53.592 ug/mL	99
59) Diethylphthalate	7.034	149	1749067	53.707 ug/mL	100
60) 2-nitroaniline	6.257	138	518049	49.038 ug/mL	97
61) 3-nitroaniline	6.624	138	475014	51.755 ug/mL	97
62) 4-nitroaniline	7.171	138	427098	47.599 ug/mL	98
65) 4,6-Dinitro-2-methylph...	7.202	198	271455	47.298 ug/mL	95
69) 4-Bromophenyl-phenylether	7.512	248	474206	53.383 ug/mL	93
70) Hexachlorobenzene	7.649	284	504247	50.969 ug/mL	98
71) Pentachlorophenol	7.817	266	163585	44.694 ug/mL	97
72) Phenanthrene	7.938	178	2485911	54.051 ug/mL	100
73) Anthracene	7.976	178	2573632	53.012 ug/mL	99
74) Carbazole	8.134	167	2365220	52.663 ug/mL	99
75) Di-n-butylphthalate	8.454	149	2872640	55.742 ug/mL	100
76) Fluoranthene	9.004	202	2626807	55.459 ug/mL	99
80) Pyrene	9.228	202	2679915	54.397 ug/mL	99
82) Butylbenzylphthalate	10.005	149	1239846	55.537 ug/mL	99
85) Benzo[a]anthracene	10.798	228	2441380	52.321 ug/mL	100
86) Chrysene	10.869	228	2381287	51.652 ug/mL	99
87) bis(2-Ethylhexyl)phtha...	10.934	149	1744387	50.294 ug/mL	99
89) Di-n-octylphthalate	12.221	149	2802737	48.734 ug/mL	100
90) Benzo[b]fluoranthene	13.048	252	2211859	48.177 ug/mL	99
91) Benzo[k]fluoranthene	13.107	252	2296746	45.220 ug/mL	99
92) Benzo[a]pyrene	13.865	252	2182389	48.592 ug/mL	99
93) Indeno[1,2,3-cd]pyrene	15.845	276	1965560	49.193 ug/mL	99
94) Dibenz[a,h]anthracene	15.876	278	2102310	55.624 ug/mL	98
95) Benzo[g,h,i]perylene	16.187	276	1894514	52.197 ug/mL	98

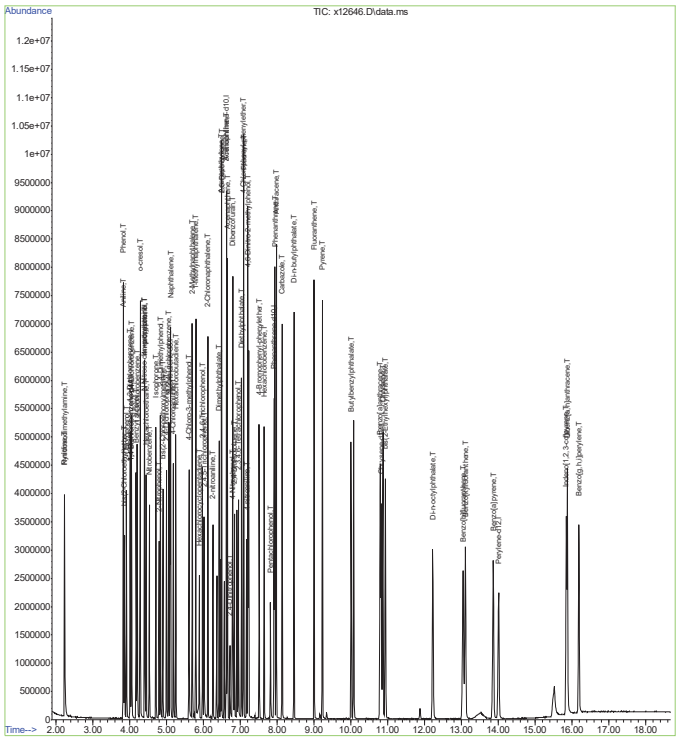
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.6.9 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12646.D
Sample : ICV424-50,MEGA
Misc : op48431,msx424,,,,1,1
ALS Vial : 9 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:16 pm Operator: AkinA

Quant Time: Sep 22 11:23:37 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.9 9

Cal Report: X12647.D

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau
09/23/16 14:18

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12647.D
Sample : ICV424-50,8270
Misc : op48431,msx424,,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:40 pm Operator: AkinA

Quant Time: Sep 22 11:53:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.041	152	508675	40.00	ug/mL	0.00
22) Naphthalene-d8	5.091	136	1915740	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.624	164	1104579	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1790376	40.00	ug/mL	0.00
78) Chrysene-d12	10.826	240	1743238	40.00	ug/mL	0.00
88) Perylene-d12	14.009	264	1513620	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.041	152	508675	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.127	112	873877	50.69	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 101.38%			
8) Phenol-d5	3.814	99	1110024	49.77	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 99.54%			
23) Nitrobenzene-d5	4.516	82	1033052	49.65	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 99.30%			
46) 2-Fluorobiphenyl	6.030	172	1836796	48.52	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 97.04%			
68) 2,4,6-Tribromophenol	7.326	330	226094	48.27	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 96.54%			
81) Terphenyl-d14	9.387	244	1863972	50.69	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 101.38%			
Target Compounds						Qvalue
3) 1,4-Dioxane	2.002	88	425830	49.800	ug/mL	99
15) bis(2-chloroisopropyl)...	4.280	45	1044055	57.498	ug/mL	76
17) Acetophenone	4.386	105	1471909	55.793	ug/mL	100
29) Benzoic acid	4.948	105	318471m	42.156	ug/mL	
33) 2,6-Dichlorophenol	5.188	162	745432	52.997	ug/mL	99
39) 1,2,4,5-Tetrachloroben...	5.878	216	870193	57.718	ug/mL	99
42) Pentachloronitrobenzene	7.876	237	253083	53.435	ug/mL	96
63) 1,1-Biphenyl	6.108	154	2330678	57.707	ug/mL	98
66) n-Nitrosodiphenylamine	7.205	169	1359725	55.000	ug/mL	99
67) 1,2-Diphenylhydrazine	7.224	77	2273149	55.977	ug/mL	100
79) Benzidine	9.141	184	601823	35.060	ug/mL	99
84) 3,3'-Dichlorobenzidine	10.798	252	766456	38.720	ug/mL	98

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

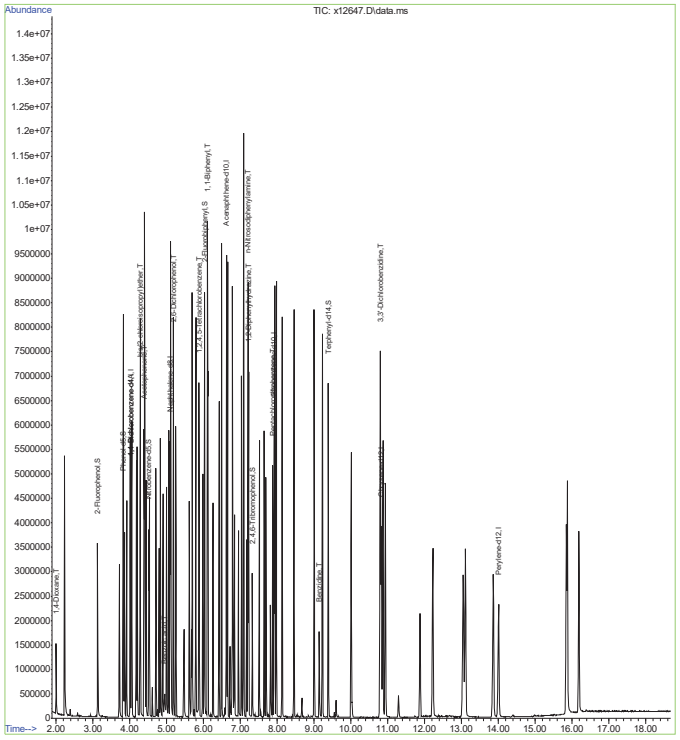
9.6.10 9

Cal Report: X12647.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12647.D
Sample : ICV424-50,8270
Misc : op48431,msx424,,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:40 pm Operator: AkinA

Quant Time: Sep 22 11:53:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



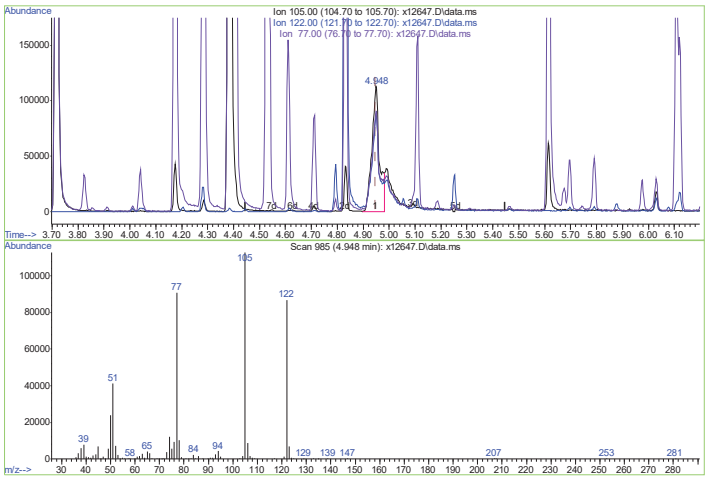
9.6.10 9

Cal Report: X12647.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12647.D
Sample : ICV424-50,8270
Misc : op48431,msx424,,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:40 pm Operator: AkinA

Quant Time: Sep 22 11:27:23 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12647.D\data.ms

(29) Benzoic acid (T)

4.948min (+0.000) 32.66ug/mL

response 229826

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	73.53
77.00	78.50	78.29
0.00	0.00	0.00

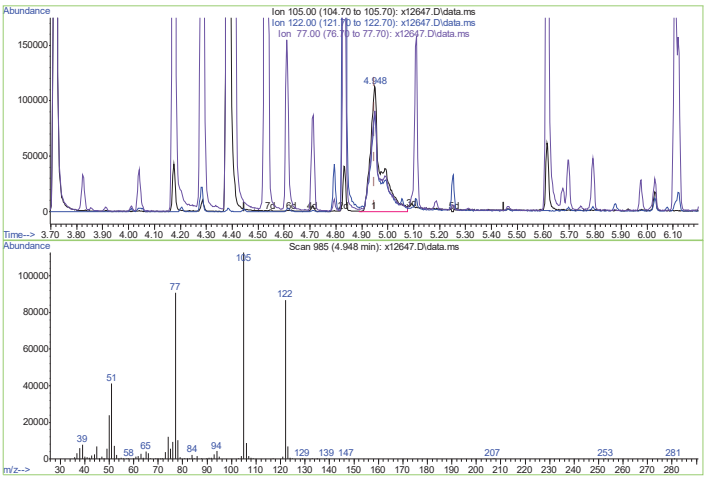
9.6.10.1 9

Cal Report: X12647.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12647.D
Sample : ICV424-50,8270
Misc : op48431,msx424,,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:40 pm Operator: AkinA

Quant Time: Sep 22 11:27:23 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12647.D\data.ms

(29) Benzoic acid (T)

4.948min (+0.000) 42.16ug/mL m

response 318471

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	77.05
77.00	78.50	80.37
0.00	0.00	0.00

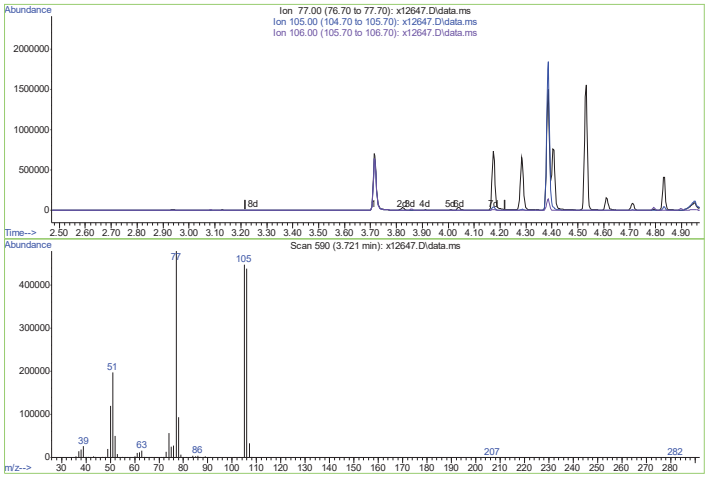
9.6.10.2 9

Cal Report: X12647.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12647.D
Sample : ICV424-50,8270
Misc : op48431,msx424,,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:40 pm Operator: AkinA

Quant Time: Sep 22 11:35:49 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12647.D\data.ms

(97) Benzaldehyde (T)

3.720min 0.00ug/mL d

response 0

Ion	Exp%	Act%
77.00	100	0.00
105.00	91.60	0.00
106.00	90.60	0.00
0.00	0.00	0.00

9.6.10.3

9

X160921_8270.m Thu Sep 22 11:42:45 2016 Page: 1

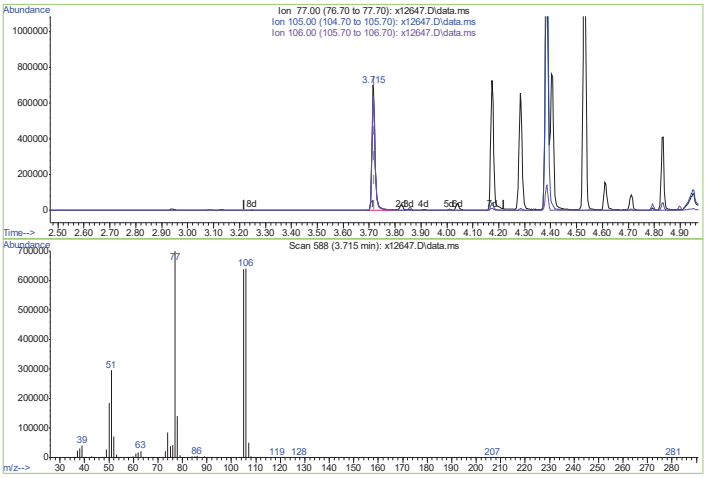
X12647.D edits: Benzaldehyde

Cal Report: X12647.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12647.D
Sample : ICV424-50,8270
Misc : op48431,msx424,,,,1,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 21 Sep 2016 7:40 pm Operator: AkinA

Quant Time: Sep 22 11:35:49 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12647.D\data.ms

(97) Benzaldehyde (T)

3.715min (-0.006) 72.08ug/mL m

response 601800

Ion	Exp%	Act%
77.00	100	100
105.00	91.60	91.18
106.00	90.60	91.43
0.00	0.00	0.00

9.6.10.4

9

X160921_8270.m Thu Sep 22 11:42:58 2016 Page: 1

X12647.D edits: Benzaldehyde

Cal Report: X12648.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12648.D
Sample : ICV424-50,3,3DMB
Misc : op48431,msx424,,,,1,1
ALS Vial : 11 Sample Multiplier: 1
Acq On : 21 Sep 2016 8:04 pm Operator: AkinA

Quant Time: Sep 22 11:32:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.044	152	420915	40.00 ug/mL	0.00
22) Naphthalene-d8	5.091	136	1645616	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.620	164	963840	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.913	188	1652035	40.00 ug/mL	0.00
78) Chrysene-d12	10.816	240	1556763	40.00 ug/mL	-0.02
88) Perylene-d12	14.002	264	1337297	40.00 ug/mL	-0.02
96) 1,4-Dichlorobenzene-d4A	4.044	152	420915	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	0.000	112	0	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
8) Phenol-d5	0.000	99	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
46) 2-Fluorobiphenyl	0.000	172	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
68) 2,4,6-Tribromophenol	0.000	330	0	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
81) Terphenyl-d14	0.000	244	0	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
Target Compounds					Qvalue
83) 3,3-Dimethylbenzidine	9.980	212	1606947	124.528 ug/mL	100

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

9.6.11

9

X160921_8270.m Thu Sep 22 12:21:55 2016 Page: 1

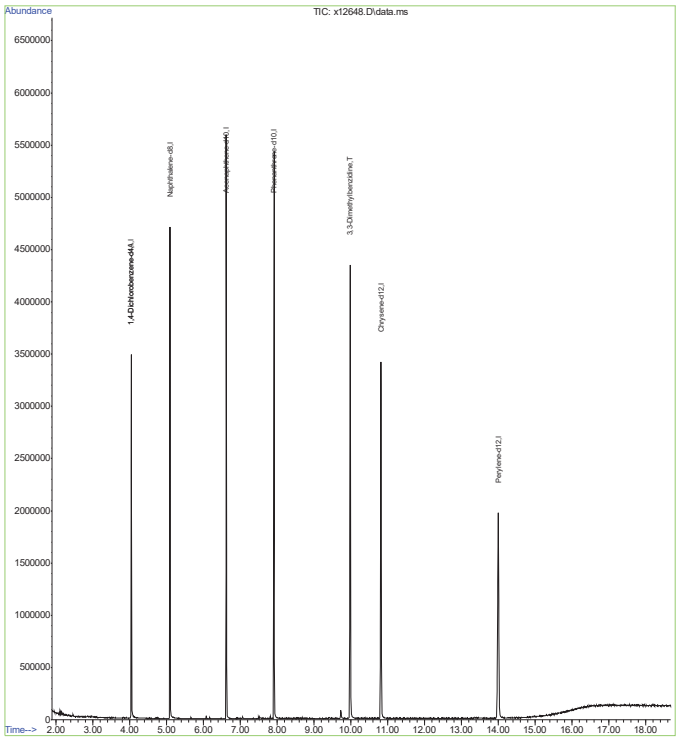
X12648.D: MSX424-ICV424 Initial Calibration Verification (50) page 1 of 2

Cal Report: X12648.D

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12648.D
Sample : ICV424-50,3,3DMB
Misc : op48431,msx424,,,,1,1
ALS Vial : 11 Sample Multiplier: 1
Acq On : 21 Sep 2016 8:04 pm Operator: AkinA

Quant Time: Sep 22 11:32:45 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.11

9

X160921_8270.m Thu Sep 22 12:21:55 2016 Page: 2

X12648.D: MSX424-ICV424 Initial Calibration Verification (50) page 2 of 2

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12649.D
Sample : ICV424-50,BENZALD
Misc : op48431,msx424,,,,1,1
ALS Vial : 12 Sample Multiplier: 1
Acq On : 21 Sep 2016 8:29 pm Operator: AkinA

Quant Time: Sep 22 11:40:53 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	431300	40.00	ug/mL	0.00
22) Naphthalene-d8	5.088	136	1669460	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.620	164	959676	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.913	188	1664931	40.00	ug/mL	0.00
78) Chrysene-d12	10.816	240	1520101	40.00	ug/mL	-0.02
88) Perylene-d12	13.999	264	1314430	40.00	ug/mL	-0.02
96) 1,4-Dichlorobenzene-d4A	4.038	152	431300	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	0.000	112	0	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
23) Nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
46) 2-Fluorobiphenyl	0.000	172	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
68) 2,4,6-Tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
81) Terphenyl-d14	0.000	244	0	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
40) Caprolactam	5.443	55	355615	55.515	ug/mL	98
77) Atrazine	7.696	200	496015	59.100	ug/mL	99
97) Benzaldehyde	3.714	77	750090	Below Cal		99

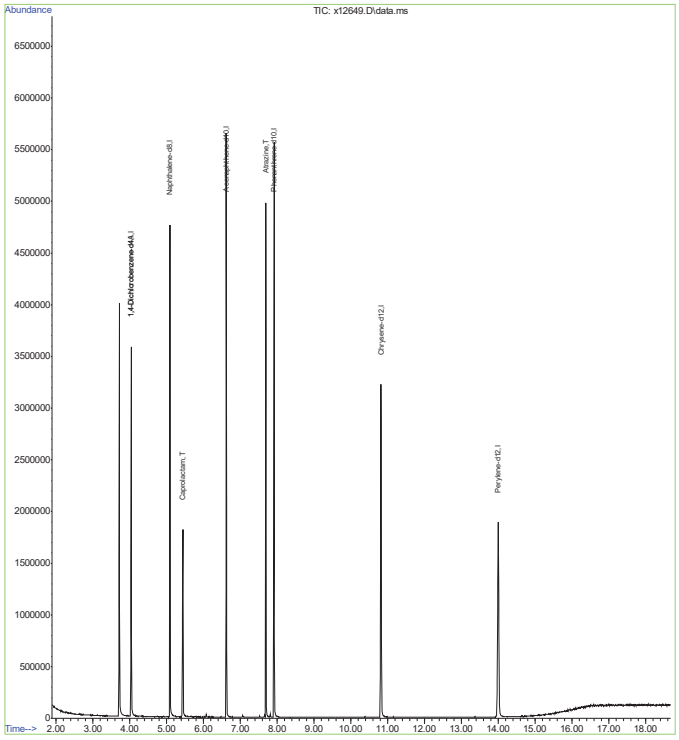
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.6.12 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12649.D
Sample : ICV424-50,BENZALD
Misc : op48431,msx424,,,,1,1
ALS Vial : 12 Sample Multiplier: 1
Acq On : 21 Sep 2016 8:29 pm Operator: AkinA

Quant Time: Sep 22 11:40:53 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.6.12 9

Manual Integrations APPROVED (compounds with "m" flag)
Doug Yargeau 09/23/16 14:46

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12651.D
Sample : CC424-50
Misc : op48431,msx425,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA

Quant Time: Sep 22 12:34:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	467349	40.00	ug/mL	0.00
22) Naphthalene-d8	5.091	136	1766250	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.624	164	1001757	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1601409	40.00	ug/mL	0.00
78) Chrysene-d12	10.829	240	1585332	40.00	ug/mL	0.00
88) Perylene-d12	14.008	264	1353519	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	467349	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	3.127	112	821032	51.83	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 103.66%			
8) Phenol-d5	3.814	99	1064953	51.97	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 103.94%			
23) Nitrobenzene-d5	4.516	82	1016798	53.01	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 106.02%			
46) 2-Fluorobiphenyl	6.030	172	1841770	53.65	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 107.30%			
68) 2,4,6-Tribromophenol	7.329	330	218944	51.70	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 103.40%			
81) Terphenyl-d14	9.390	244	1825122	54.57	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 109.14%			
Target Compounds						Qvalue
2) N-nitrosodimethylamine	2.229	74	616433	51.786	ug/mL	100
3) 1,4-Dioxane	1.999	88	385729	49.099	ug/mL	100
4) Pyridine	2.226	79	1063073	51.092	ug/mL	99
5) Aniline	3.823	93	1363663	55.953	ug/mL	92
7) bis(2-Chloroethyl)ether	3.854	63	613303	51.517	ug/mL	98
9) Phenol	3.823	94	1195566	53.672	ug/mL	97
10) 2-Chlorophenol	3.910	128	836107	51.851	ug/mL	98
11) 1,3-Dichlorobenzene	4.010	146	892627	51.214	ug/mL	100
12) 1,4-Dichlorobenzene	4.053	146	943441	51.526	ug/mL	99
13) 1,2-Dichlorobenzene	4.202	146	855986	50.939	ug/mL	99
14) Benzyl alcohol	4.174	108	587799	54.163	ug/mL	99
15) bis(2-chloroisopropyl)...	4.280	45	841897	50.465	ug/mL	92
16) o-cresol	4.283	108	802707	53.438	ug/mL	99
17) Acetophenone	4.386	105	1289053	53.183	ug/mL	98
18) Hexachloroethane	4.445	117	383076	52.351	ug/mL	100
19) N-Nitroso-di-n-propyla...	4.398	70	588304	53.877	ug/mL	100
20) m+p-cresols	4.404	108	1729210	109.021	ug/mL	99
21) 4-methylphenol	4.404	108	1729210	109.021	ug/mL	99
24) Nitrobenzene	4.529	77	1006106	53.440	ug/mL	99
25) Isophorone	4.709	82	1739313	52.723	ug/mL	100
26) 2-Nitrophenol	4.793	139	444039	49.018	ug/mL	99
27) 2,4-Dimethylphenol	4.830	107	863880	51.868	ug/mL	97
28) bis(2-Chloroethoxy)met...	4.896	93	1086130	52.603	ug/mL	99
29) Benzoic acid	4.945	105	285199m	41.200	ug/mL	
30) 2,4-Dichlorophenol	4.995	162	688087	53.904	ug/mL	99
31) 1,2,4-Trichlorobenzene	5.054	180	732433	52.598	ug/mL	99
32) Naphthalene	5.107	128	2365389	51.901	ug/mL	100
33) 2,6-Dichlorophenol	5.188	162	696480	53.708	ug/mL	99
34) 4-Chloroaniline	5.185	127	1042313	55.803	ug/mL	99
35) Hexachlorobutadiene	5.250	225	428359	53.417	ug/mL	98

9.6.13 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12651.D
Sample : CC424-50
Misc : op48431,msx425,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA

Quant Time: Sep 22 12:34:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 4-Chloro-3-methylphenol	5.613	107	747190	53.588	ug/mL	100
37) 2-Methylnaphthalene	5.694	142	1566079	52.054	ug/mL	98
38) 1-Methylnaphthalene	5.791	142	1523300	52.037	ug/mL	99
39) 1,2,4,5-Tetrachloroben...	5.878	216	740046	53.240	ug/mL	100
40) Caprolactam	5.471	55	364873	53.838	ug/mL	98
42) Pentachloronitrobenzene	7.879	237	208971	48.780	ug/mL	97
43) Hexachlorocyclopentadiene	5.887	237	242411	47.723	ug/mL	97
44) 2,4,6-Trichlorophenol	5.977	196	462600	54.578	ug/mL	99
45) 2,4,5-Trichlorophenol	6.021	196	505820	54.883	ug/mL	97
47) 2-Chloronaphthalene	6.120	162	1445689	53.053	ug/mL	100
48) Acenaphthylene	6.490	152	2243197	53.922	ug/mL	99
49) Dimethylphthalate	6.422	163	1635579	52.794	ug/mL	100
50) 2,6-Dinitrotoluene	6.493	165	373332	50.815	ug/mL	98
51) Acenaphthene	6.652	153	1488115	52.442	ug/mL	98
52) 2,4-Dinitrophenol	6.714	184	140388	45.552	ug/mL	98
53) Dibenzofuran	6.788	168	2130983	52.561	ug/mL	99
54) 2,4-Dinitrotoluene	6.838	165	469950	52.944	ug/mL	99
55) 4-Nitrophenol	6.795	65	286682	49.548	ug/mL	88
56) 2,3,4,6-Tetrachlorophenol	6.947	232	335163	49.079	ug/mL	98
57) Fluorene	7.093	166	1696471	53.729	ug/mL	99
58) 4-Chlorophenyl-phenyle...	7.087	204	843596	54.960	ug/mL	99
59) Diethylphthalate	7.034	149	1666774	53.022	ug/mL	100
60) 2-nitroaniline	6.257	138	516594	50.621	ug/mL	98
61) 3-nitroaniline	6.620	138	454072	51.262	ug/mL	98
62) 4-nitroaniline	7.171	138	435982	50.274	ug/mL	96
63) 1,1-Biphenyl	6.108	154	1943593	53.063	ug/mL	99
65) 4,6-Dinitro-2-methylph...	7.202	198	261633	48.116	ug/mL	97
66) n-Nitrosodiphenylamine	7.205	169	1205925	54.534	ug/mL	99
67) 1,2-Diphenylhydrazine	7.227	77	1913072	52.669	ug/mL	99
69) 4-Bromophenyl-phenylether	7.513	248	441253	52.585	ug/mL	96
70) Hexachlorobenzene	7.649	284	470075	50.358	ug/mL	98
71) Pentachlorophenol	7.820	266	172519	48.609	ug/mL	98
72) Phenanthrene	7.938	178	2301608	52.976	ug/mL	100
73) Anthracene	7.979	178	2509619	54.723	ug/mL	99
74) Carbazole	8.134	167	2267454	53.444	ug/mL	99
75) Di-n-butylphthalate	8.457	149	2733535	56.151	ug/mL	100
76) Fluoranthene	9.008	202	2410604	53.877	ug/mL	99
77) Atrazine	7.699	200	425917	52.761	ug/mL	99
79) Benzidine	9.144	184	694295	44.546	ug/mL	100
80) Pyrene	9.228	202	2526154	54.404	ug/mL	100
82) Butylbenzylphthalate	10.008	149	1167455	55.485	ug/mL	98
83) 3,3-Dimethylbenzidine	9.983	212	614865	46.789	ug/mL	100
84) 3,3'-Dichlorobenzidine	10.801	252	884983	48.571	ug/mL	98
85) Benzo[a]anthracene	10.798	228	2415339	54.921	ug/mL	100
86) Chrysene	10.872	228	2283815	52.560	ug/mL	98
87) bis(2-Ethylhexyl)phtha...	10.935	149	1623912	49.694	ug/mL	99
89) Di-n-octylphthalate	12.224	149	2629485	49.838	ug/mL	99
90) Benzo[b]fluoranthene	13.048	252	2088704	49.596	ug/mL	99
91) Benzo[k]fluoranthene	13.107	252	2235085	48.008	ug/mL	100
92) Benzo[a]pyrene	13.866	252	1961621	47.751	ug/mL	100
93) Indeno[1,2,3-cd]pyrene	15.848	276	1856974	50.743	ug/mL	99
94) Dibenz[a,h]anthracene	15.876	278	1945095	56.235	ug/mL	99
95) Benzo[g,h,i]perylene	16.193	276	1799124	54.163	ug/mL	97
97) Benzaldehyde	3.718	77	369812	43.933	ug/mL	98

9.6.13 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12651.D
Sample : CC424-50
Misc : op48431,msx425,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA

Quant Time: Sep 22 12:34:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

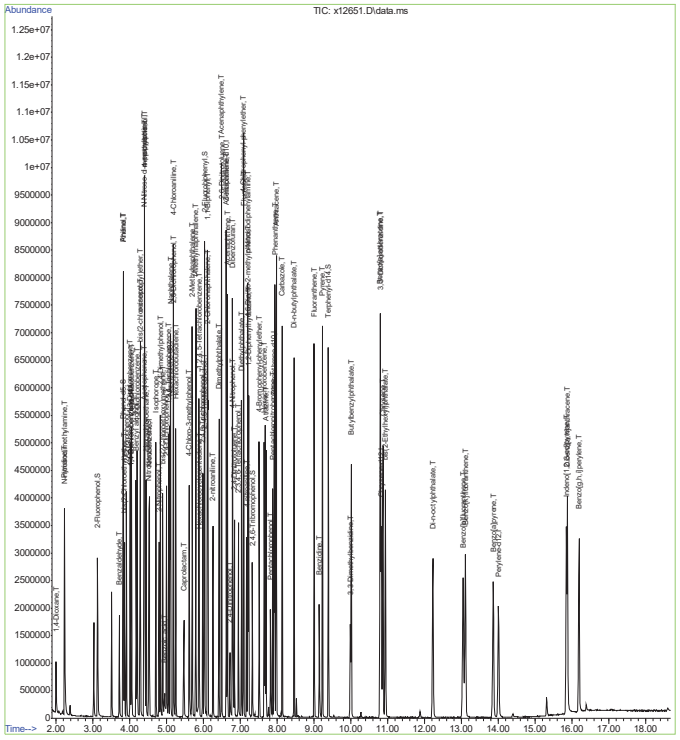
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.6.13 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160922\x12651.D
Sample : CC424-50
Misc : op48431,msx425,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA

Quant Time: Sep 22 12:34:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

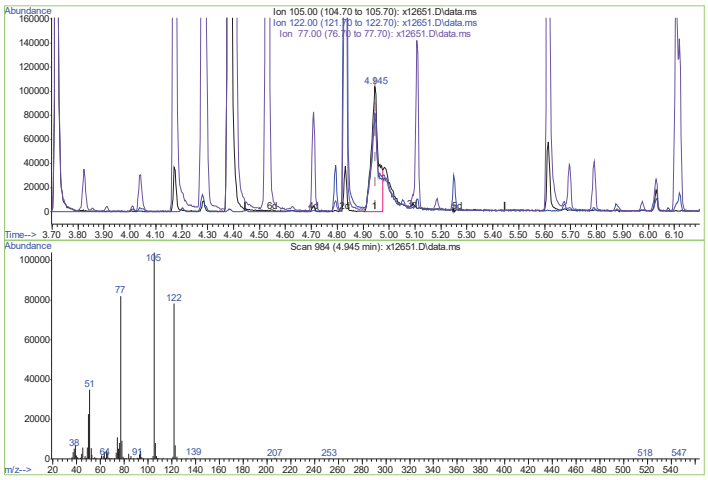


9.6.13 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12651.D
Sample : CC424-50
Misc : op48431,msx425,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA

Quant Time: Sep 22 12:33:51 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12651.D\data.ms

(29) Benzoic acid (T)

4.945min (-0.003) 30.70ug/mL

response 195546

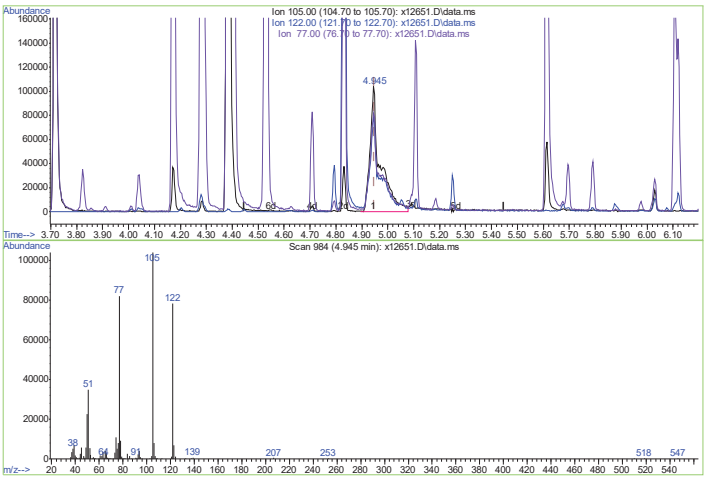
Ion	Exp%	Act%
105.00	100	100
122.00	71.30	72.10
77.00	78.50	77.22
0.00	0.00	0.00

9.6.13.1 9

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12651.D
Sample : CC424-50
Misc : op48431,msx425,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA

Quant Time: Sep 22 12:33:51 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



TIC: x12651.D\data.ms

(29) Benzoic acid (T)

4.945min (-0.003) 41.20ug/mL m

response 285199

Ion	Exp%	Act%
105.00	100	100
122.00	71.30	75.25
77.00	78.50	78.90
0.00	0.00	0.00

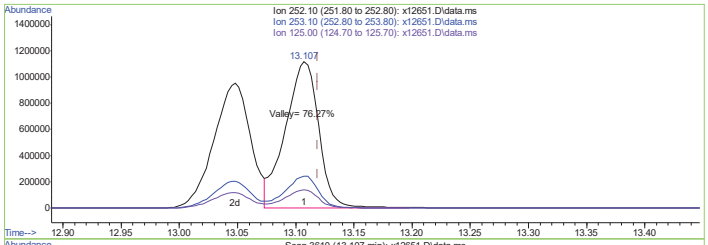
9.6.13.2 9

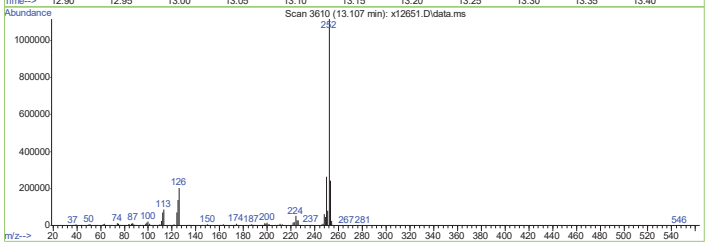
Cal Report: X12651.D

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160922\x12651.D
Sample : CC424-50
Misc : op48431,msx425,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 22 Sep 2016 12:14 pm Operator: AkinA

Quant Time: Sep 22 12:34:19 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





TIC: x12651.D\data.ms

(91) Benzo[k]fluoranthene (T)

13.107min (-0.012) 48.01ug/mL

response 2235085

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	21.78
125.00	12.50	12.40
0.00	0.00	0.00

9.6.13.3

X160921_8270.m Thu Sep 22 12:36:10 2016 Page: 1

X12651.D edits: Benzo[k]fluoranthene

SGS Accutest

Instrument: GCMS X

GCMS Analysis Log - Extractables

Run Date: 9/21/16 Analyst Signature:

Standard Data

Lot #	Description	Conc
MSS2023	DFTPP	50 ng/µL
2046	A86270 CAL STD	2-160
2067	A86270 Mega Mix ICV	50
2060	ICV	50
2068	3,3 Dimethylbenzidine ICV	50
2069	Benzaldehyde ICV	50

Column Information: Front Rtx-5MS
Rear
Sequence File: X160921
Quantitation Methods: DFTPPEQUIL.M
X160921 8270.M
Instrument Run Batches: MSX424
Data Acquisition Methods: X8270BK.M Inj. Vol: 1µL
Inj. Vol:

ICAL verified: 9/21/16 Sequence loaded initial: Sequence verified initial:

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Data Process Initials	Comments
2	X12636	DFTPP	MSS2023	N/A	N/A	N/A		failed
2	37	DFTPP		N/A				OK
1	38	IC424-2	MSS2046	A86270 CAL				
2	39	-5						
3	X12640	-10						
4	X12641	-20						
5	42	ICC424-50						
6	43	IC424-80						
7	44	-120						
8	45	-160						
9	46	ICV424-50	MSS2067					Mega Mix
10	47	-50	MSS2060					8270 STD ICV
11	48	-50	MSS2068					3,3 DMBenzidine
12	49	-50	MSS2069					Benzald

MS002-06
Date: 6/22/16 Dilution Solvent: N/A Lot: N/A Review:

3 of 50

9.7.1

Instrument Run Log MSX424 page 1 of 28

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12638v.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 10:55:31 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.041	152	440820	40.00 ug/mL	0.00
22) Naphthalene-d8	5.094	136	1679792	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.630	164	942456	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.926	188	1372677	40.00 ug/mL	0.00
78) Chrysene-d12	10.841	240	1416984	40.00 ug/mL	0.00
88) Perylene-d12	14.030	264	1220391	40.00 ug/mL	0.01
96) 1,4-Dichlorobenzene-d4A	4.041	152	440820	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	0.000	112	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery =	0.00%#	
8) Phenol-d5	0.000	99	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery =	0.00%#	
23) Nitrobenzene-d5	0.000	82	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery =	0.00%#	
46) 2-Fluorobiphenyl	0.000	172	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery =	0.00%#	
68) 2,4,6-Tribromophenol	7.335	330	5007m	1.43 ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery =	2.86%#	
81) Terphenyl-d14	0.000	244	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery =	0.00%#	
Target Compounds					Qvalue
26) 2-Nitrophenol	4.799	139	10691	2.323 ug/mL	94
42) Pentachloronitrobenzene	7.882	237	4590	2.554 ug/mL	89
50) 2,6-Dinitrotoluene	6.496	165	7697	2.168 ug/mL#	57
60) 2-nitroaniline	6.263	138	10779	2.297 ug/mL#	70
61) 3-nitroaniline	6.630	138	11364	2.143 ug/mL#	45
62) 4-nitroaniline	7.171	138	9591	2.262 ug/mL	96
87) bis(2-Ethylhexyl)phtha...	10.956	149	29756	2.381 ug/mL	93
89) Di-n-octylphthalate	12.243	149	34982	2.493 ug/mL	96
90) Benzo[b]fluoranthene	13.057	252	48592	2.232 ug/mL	99
91) Benzo[k]fluoranthene	13.116	252	53661	2.453 ug/mL	93
92) Benzo[a]pyrene	13.881	252	41191	2.563 ug/mL	96
93) Indeno[1,2,3-cd]pyrene	15.855	276	37393m	2.356 ug/mL	

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

9.7.1

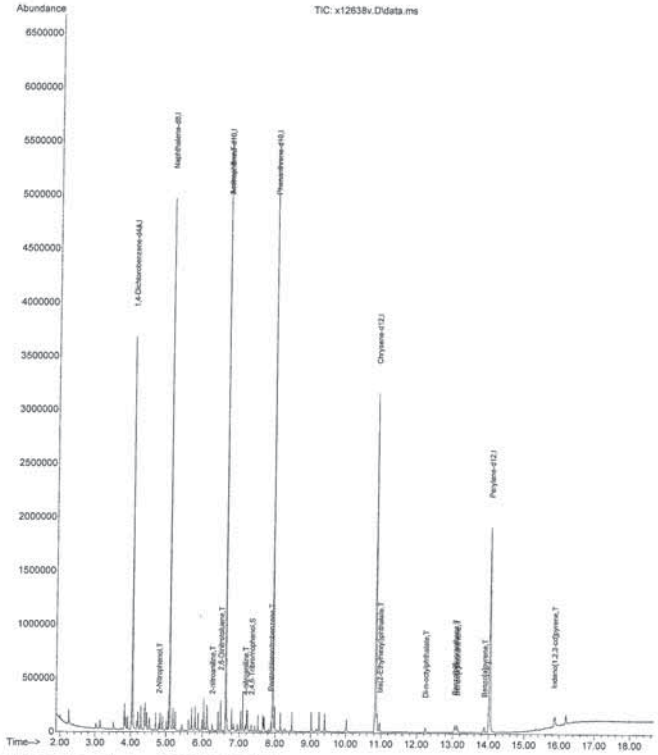
X160921_8270.m Thu Sep 22 10:56:42 2016 Page: 1

Instrument Run Log MSX424 page 2 of 28

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12638v.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 10:55:31 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



9.7.1

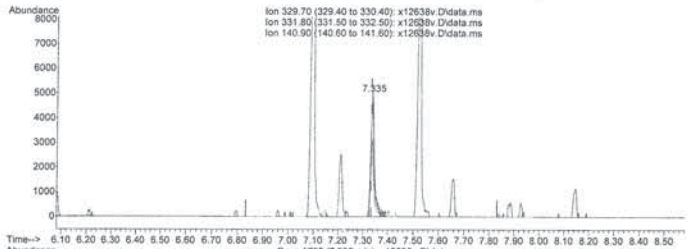
X160921_8270.m Thu Sep 22 10:56:42 2016 Page: 2

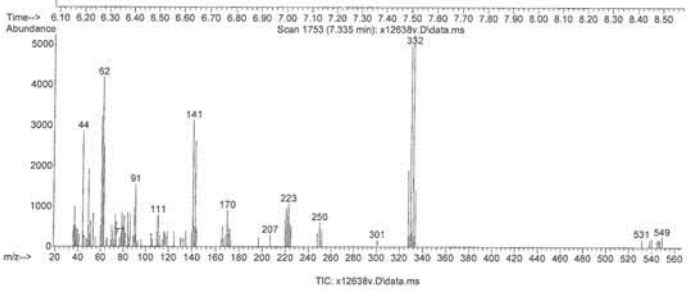
Instrument Run Log MSX424 page 3 of 28

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\X160921\x12638v.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 10:55:31 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270





(68) 2,4,6-Tribromophenol (S)

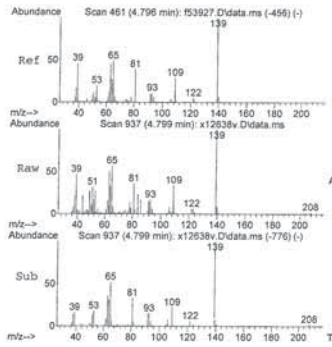
7.335min (+0.003) 1.43ug/mL m

response 5007

Ion	Exp%	Act%
329.70	100	100
331.80	96.10	105.12
140.90	43.00	62.85
0.00	0.00	0.00

X160921_8270.m Thu Sep 22 10:57:21 2016 Page: 1

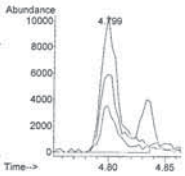
9.7.1 9

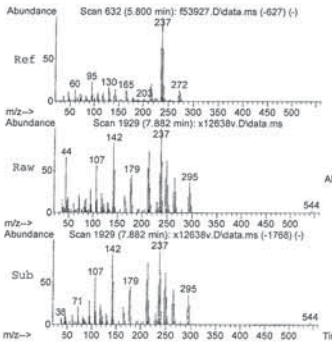


#26
2-Nitrophenol
Concen: 2.323 ug/mL
RT: 4.799 min Scan# 937
Delta R.T. 0.001 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:139 Resp: 10691

Ion	Ratio	Lower	Upper
139	100		
65	57.0	23.0	83.0
109	34.2	1.1	61.1

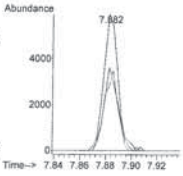




#42
Pentachloronitrobenzene
Concen: 2.554 ug/mL
RT: 7.882 min Scan# 1929
Delta R.T. 0.000 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

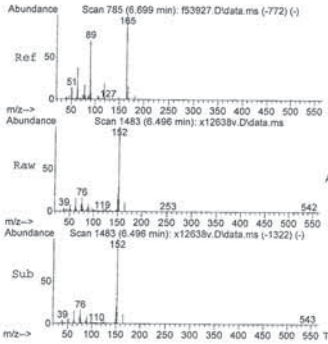
Tgt Ion:237 Resp: 4590

Ion	Ratio	Lower	Upper
237	100		
239	61.1	43.1	83.1
235	47.4	41.8	81.8



x12638v.D X160921_8270.m Thu Sep 22 10:55:07 2016 Page 3

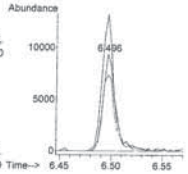
9.7.1 9

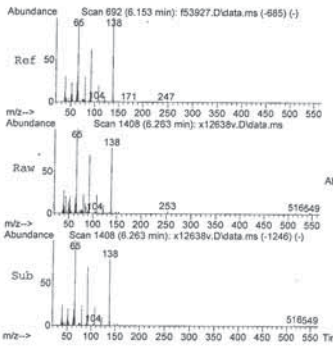


#50
2,6-Dinitrotoluene
Concen: 2.168 ug/mL
RT: 6.496 min Scan# 1483
Delta R.T. 0.001 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:165 Resp: 7697

Ion	Ratio	Lower	Upper
165	100		
63	140.4	53.9	113.9#
89	77.7	33.7	93.7

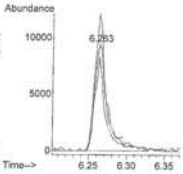




#60
2-nitroaniline
Concen: 2.297 ug/mL
RT: 6.263 min Scan# 1408
Delta R.T. 0.004 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

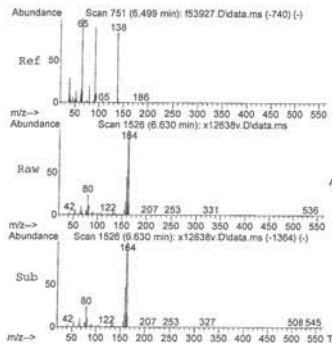
Tgt Ion:138 Resp: 10779

Ion	Ratio	Lower	Upper
138	100		
92	87.8	38.4	98.4
65	128.0	64.8	124.8#



x12638v.D X160921_8270.m Thu Sep 22 10:55:07 2016 Page 4

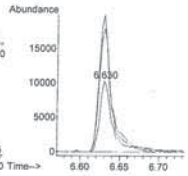
9.7.1 9

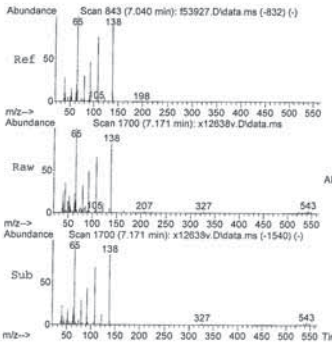


#61
3-nitroaniline
Concen: 2.143 ug/mL
RT: 6.630 min Scan# 1526
Delta R.T. 0.004 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:138 Resp: 11364

Ion	Ratio	Lower	Upper
138	100		
92	192.3	89.1	149.1#
65	173.6	93.4	153.4#

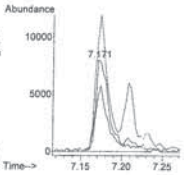




#62
4-nitroaniline
Concen: 2.262 ug/mL
RT: 7.171 min Scan# 1700
Delta R.T. -0.002 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

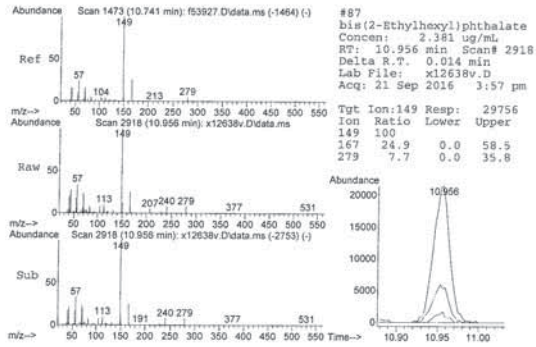
Tgt Ion:138 Resp: 9591

Ion	Ratio	Lower	Upper
138	100		
92	60.0	25.6	85.6
65	119.0	85.9	145.9



x12638v.D X160921_8270.m Thu Sep 22 10:55:07 2016 Page 5

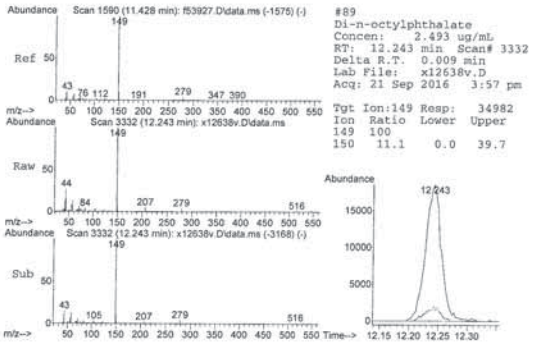
9.7.1 9



#87
bis(2-Ethylhexyl)phthalate
Concen: 2.381 ug/mL
RT: 10.956 min Scan# 2918
Delta R.T. 0.014 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:149 Resp: 29756

Ion	Ratio	Lower	Upper
149	100		
167	24.9	0.0	58.5
279	7.7	0.0	35.8



#89
Di-n-octylphthalate
Concen: 2.493 ug/mL
RT: 12.243 min Scan# 3332
Delta R.T. 0.009 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

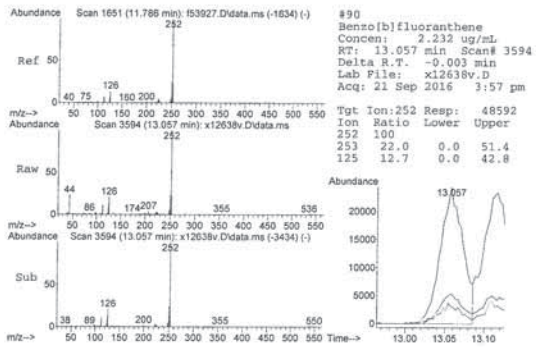
Tgt Ion:149 Resp: 34982

Ion	Ratio	Lower	Upper
149	100		
150	11.1	0.0	39.7

9.7.1

9

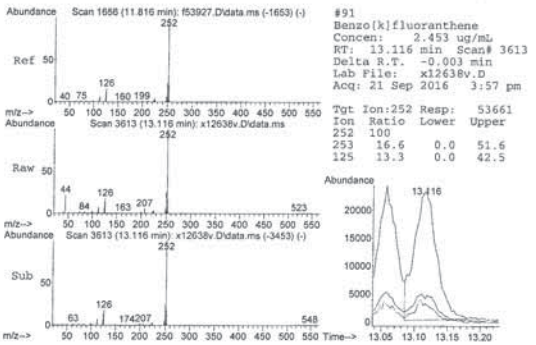
x12638v.D X160921_8270.m Thu Sep 22 10:55:08 2016 Page 6



#90
Benzo[b]fluoranthene
Concen: 2.232 ug/mL
RT: 13.057 min Scan# 3594
Delta R.T. -0.003 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:252 Resp: 48592

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.4
125	12.7	0.0	42.8



#91
Benzo[k]fluoranthene
Concen: 2.453 ug/mL
RT: 13.116 min Scan# 3613
Delta R.T. -0.003 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

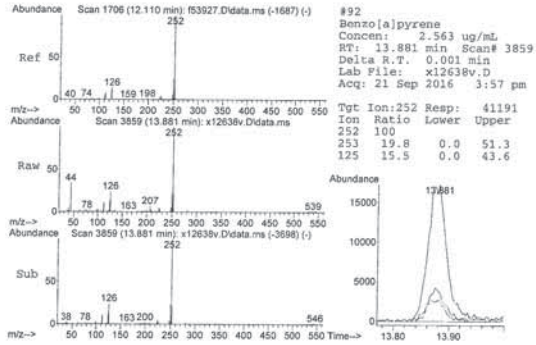
Tgt Ion:252 Resp: 53661

Ion	Ratio	Lower	Upper
252	100		
253	16.6	0.0	51.6
125	13.3	0.0	42.5

9.7.1

9

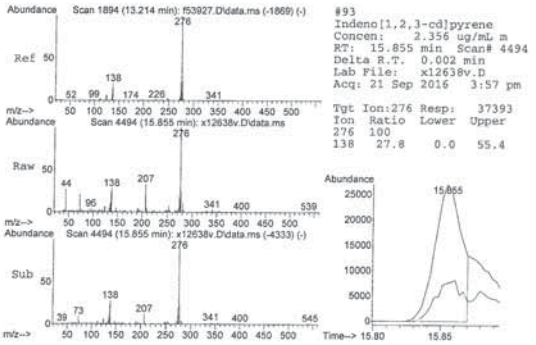
x12638v.D X160921_8270.m Thu Sep 22 10:55:08 2016 Page 7



#92
Benzo[a]pyrene
Concen: 2.563 ug/mL
RT: 13.881 min Scan# 3859
Delta R.T. 0.001 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:252 Resp: 41191

Ion	Ratio	Lower	Upper
252	100		
253	19.8	0.0	51.3
125	15.5	0.0	43.6



#93
Indeno[1,2,3-cd]pyrene
Concen: 2.356 ug/mL m
RT: 15.855 min Scan# 4494
Delta R.T. 0.002 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:276 Resp: 37393

Ion	Ratio	Lower	Upper
276	100		
138	27.8	0.0	55.4

9.7.1

9

x12638v.D X160921_8270.m Thu Sep 22 10:55:09 2016 Page 8

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12638v.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 10:55:31 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.041	152	440820	40.00	ug/mL	0.00
22) Naphthalene-d8	5.094	136	1679792	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.630	164	942456	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.926	188	1572677	40.00	ug/mL	0.00
78) Chrysene-d12	10.841	240	1416984	40.00	ug/mL	0.00
88) Perylene-d12	14.030	264	1220391	40.00	ug/mL	0.01
96) 1,4-Dichlorobenzene-d4A	4.041	152	440820	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	0.000	112	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
46) 2-Fluorobiphenyl	0.000	172	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
68) 2,4,6-Tribromophenol	7.335	330	5007m	1.43	ug/mL	0.00
Spiked Amount 50.000	Range 30 - 130		Recovery = 2.86%#			
81) Terphenyl-d14	0.000	244	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#			
Target Compounds						Qvalue
26) 2-Nitrophenol	4.799	139	10691	2.323	ug/mL	94
42) Pentachloronitrobenzene	7.882	237	4590	2.554	ug/mL	89
50) 2,6-Dinitrotoluene	6.496	165	7697	2.168	ug/mL#	57
60) 2-nitroaniline	6.263	138	10779	2.297	ug/mL#	70
61) 3-nitroaniline	6.630	138	11364	2.143	ug/mL#	45
62) 4-nitroaniline	7.171	138	9591	2.262	ug/mL	96
87) bis(2-Ethylhexyl)phtha...	10.956	149	29756	2.381	ug/mL	93
89) Di-n-octylphthalate	12.243	149	34982	2.493	ug/mL	96
90) Benzo[b]fluoranthene	13.057	252	48592	2.232	ug/mL	99
91) Benzo[k]fluoranthene	13.116	252	53661	2.453	ug/mL	93
92) Benzo[a]pyrene	13.881	252	41191	2.563	ug/mL	96
93) Indeno[1,2,3-cd]pyrene	15.855	276	37393m	2.356	ug/mL	

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

9.7.1

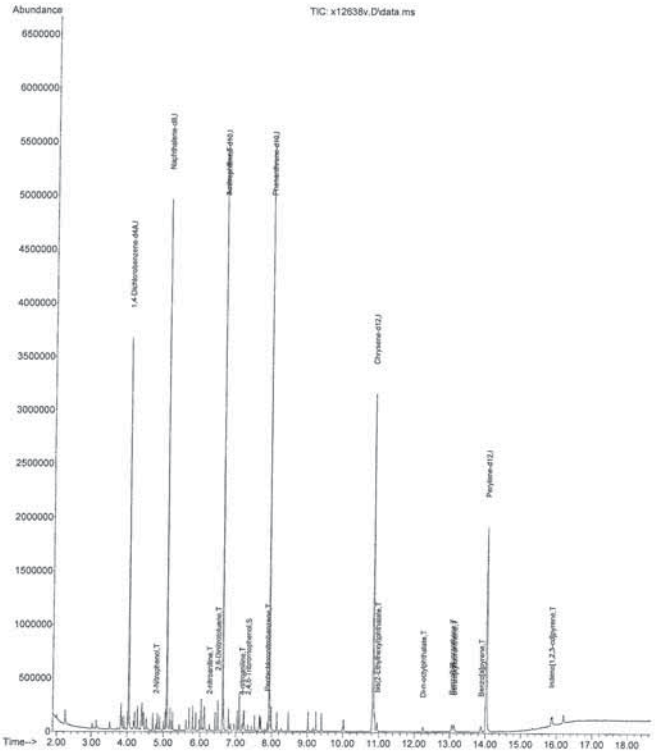
9

X160921_8270.m Thu Sep 22 10:55:43 2016 Page: 1

Quantitation Report (QT Reviewed)

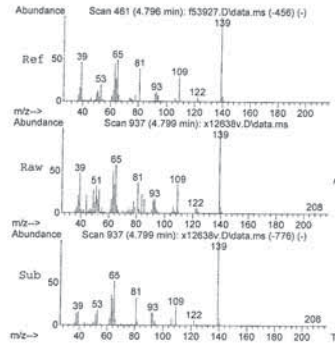
Data File: C:\msdchem\1\data\X160921\x12638v.D
Sample : IC424-2
Misc : op48431,msx424,,,,1,1
ALS Vial : 1 Sample Multiplier: 1
Acq On : 21 Sep 2016 3:57 pm Operator: AkinA

Quant Time: Sep 22 10:55:31 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



X160921_8270.m Thu Sep 22 10:55:44 2016 Page: 2

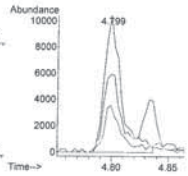
9.7.1 9

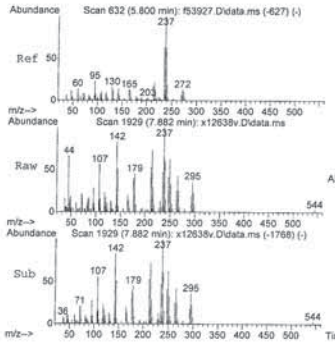


#26
2-Nitrophenol
Concen: 2.323 ug/mL
RT: 4.799 min Scan# 937
Delta R.T. 0.001 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:139 Resp: 10691

Ion	Ratio	Lower	Upper
139	100		
65	57.0	23.0	83.0
109	34.2	1.1	61.1

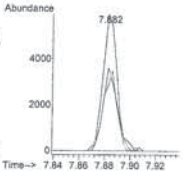




#42
Pentachloronitrobenzene
Concen: 2.554 ug/mL
RT: 7.882 min Scan# 1929
Delta R.T. 0.000 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

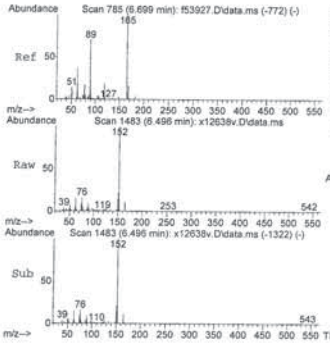
Tgt Ion:237 Resp: 4590

Ion	Ratio	Lower	Upper
237	100		
239	61.1	43.1	83.1
235	47.4	41.8	81.8



x12638v.D X160921_8270.m Thu Sep 22 10:55:44 2016 Page 3

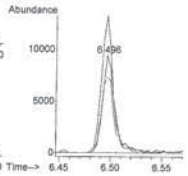
9.7.1 9

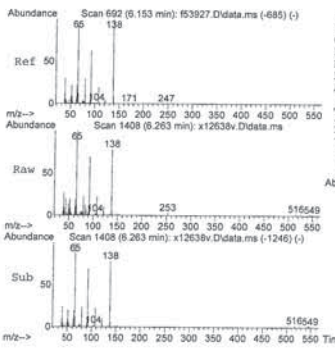


#50
2,6-Dinitrotoluene
Concen: 2.168 ug/mL
RT: 6.496 min Scan# 1483
Delta R.T. 0.001 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:165 Resp: 7697

Ion	Ratio	Lower	Upper
165	100		
63	140.4	53.9	113.9#
89	77.7	33.7	93.7

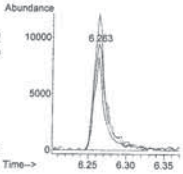




#60
2-nitroaniline
Concen: 2.297 ug/mL
RT: 6.263 min Scan# 1408
Delta R.T. 0.004 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

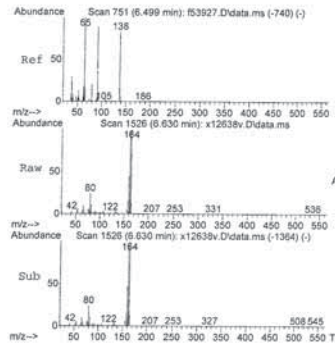
Tgt Ion:138 Resp: 10779

Ion	Ratio	Lower	Upper
138	100		
92	87.8	38.4	98.4
65	128.0	64.8	124.8#



x12638v.D X160921_8270.m Thu Sep 22 10:55:45 2016 Page 4

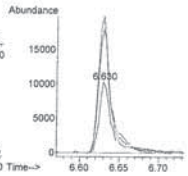
9.7.1 9

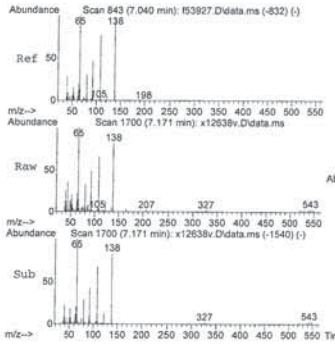


#61
3-nitroaniline
Concen: 2.143 ug/mL
RT: 6.630 min Scan# 1526
Delta R.T. 0.004 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:138 Resp: 11364

Ion	Ratio	Lower	Upper
138	100		
92	192.3	89.1	149.1#
65	173.6	93.4	153.4#

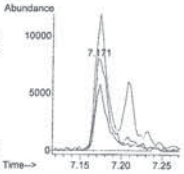




#62
4-nitroaniline
Concen: 2.262 ug/mL
RT: 7.171 min Scan# 1700
Delta R.T. -0.002 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

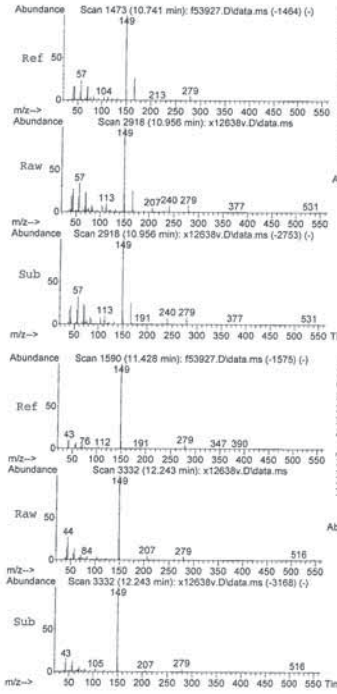
Tgt Ion:138 Resp: 9591

Ion	Ratio	Lower	Upper
138	100		
92	60.0	25.6	85.6
65	119.0	85.9	145.9



x12638v.D X160921_8270.m Thu Sep 22 10:55:45 2016 Page 5

9.7.1 9



#87
bis(2-Ethylhexyl)phthalate
Concen: 2.381 ug/mL
RT: 10.956 min Scan# 2918
Delta R.T. 0.014 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:149 Resp: 29756

Ion	Ratio	Lower	Upper
149	100		
167	24.9	0.0	58.5
279	7.7	0.0	35.8

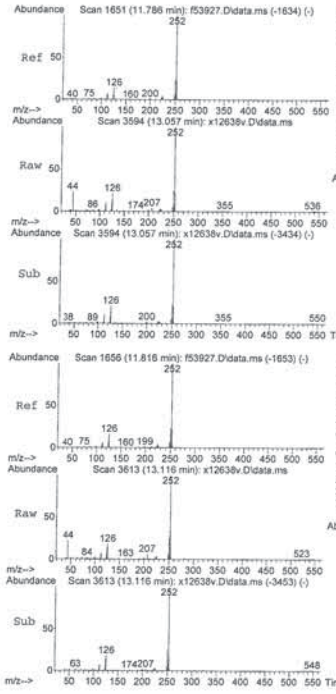
#89
Di-n-octylphthalate
Concen: 2.493 ug/mL
RT: 12.243 min Scan# 3332
Delta R.T. 0.009 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:149 Resp: 34982

Ion	Ratio	Lower	Upper
149	100		
150	11.1	0.0	39.7

x12638v.D X160921_8270.m Thu Sep 22 10:55:45 2016 Page 6

9.7.1 9



#90
Benzo[b]fluoranthene
Concen: 2.232 ug/mL
RT: 13.057 min Scan# 3594
Delta R.T. -0.003 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:252 Resp: 48592

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.4
125	12.7	0.0	42.8

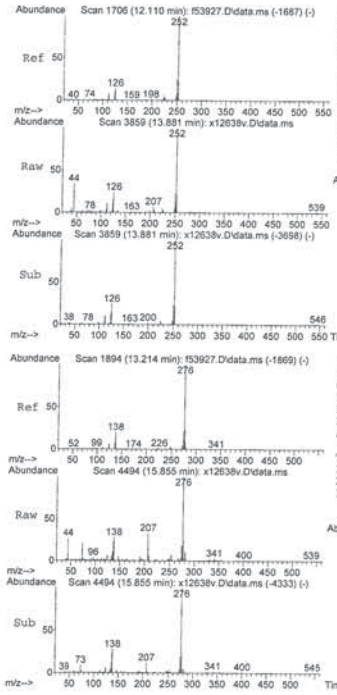
#91
Benzo[k]fluoranthene
Concen: 2.453 ug/mL
RT: 13.116 min Scan# 3613
Delta R.T. -0.003 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:252 Resp: 53661

Ion	Ratio	Lower	Upper
252	100		
253	16.6	0.0	51.6
125	13.3	0.0	42.5

x12638v.D X160921_8270.m Thu Sep 22 10:55:46 2016 Page 7

9.7.1 9



#92
Benzo[a]pyrene
Concen: 2.563 ug/mL
RT: 13.881 min Scan# 3859
Delta R.T. 0.001 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:252 Resp: 41191

Ion	Ratio	Lower	Upper
252	100		
253	19.8	0.0	51.3
125	15.5	0.0	43.6

#93
Indeno[1,2,3-cd]pyrene
Concen: 2.356 ug/mL m
RT: 15.855 min Scan# 4494
Delta R.T. 0.002 min
Lab File: x12638v.D
Acq: 21 Sep 2016 3:57 pm

Tgt Ion:276 Resp: 37393

Ion	Ratio	Lower	Upper
276	100		
138	27.8	0.0	55.4

x12638v.D X160921_8270.m Thu Sep 22 10:55:46 2016 Page 8

9.7.1 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12639v.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 11:06:38 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.038	152	428995	40.00	ug/mL	0.00
22) Naphthalene-d8	5.091	136	1641864	40.00	ug/mL	0.00
41) Acenaphthene-d10	6.623	164	945884	40.00	ug/mL	0.00
64) Phenanthrene-d10	7.916	188	1568795	40.00	ug/mL	0.00
78) Chrysene-d12	10.826	240	1472156	40.00	ug/mL	0.00
88) Perylene-d12	14.008	264	1255110	40.00	ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	428995	40.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-Fluorophenol	0.000	112	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery	=	0.00%#	
8) Phenol-d5	0.000	99	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery	=	0.00%#	
23) Nitrobenzene-d5	0.000	82	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery	=	0.00%#	
46) 2-Fluorobiphenyl	0.000	172	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery	=	0.00%#	
68) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery	=	0.00%#	
81) Terphenyl-d14	0.000	244	0d	0.00	ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery	=	0.00%#	
Target Compounds						Qvalue
29) Benzoic acid	4.930	105	4369m	5.902	ug/mL	
43) Hexachlorocyclopentadiene	5.887	237	4133	6.276	ug/mL	97
55) 4-Nitrophenol	6.807	65	16835	5.269	ug/mL#	22
56) 2,3,4,6-Tetrachlorophenol	6.950	232	21644	5.440	ug/mL	98
65) 4,6-Dinitro-2-methylph...	7.202	198	6596	6.071	ug/mL#	1
70) Hexachlorobenzene	7.649	284	34473	5.291	ug/mL	93
71) Pentachlorophenol	7.826	266	2557	6.199	ug/mL	80
84) 3,3'-Dichlorobenzidine	10.801	252	56708	5.389	ug/mL	98
97) Benzaldehyde	3.721	77	11989	5.289	ug/mL	95

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

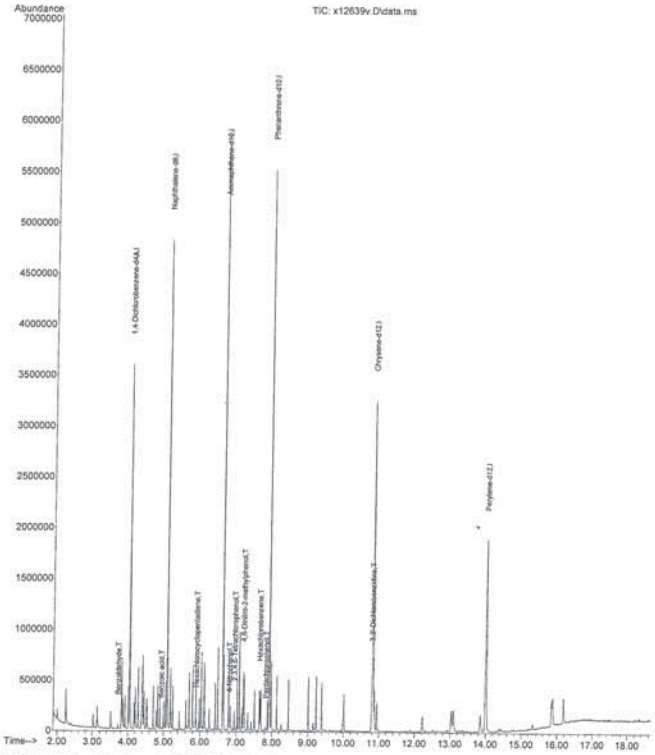
X160921_8270.m Thu Sep 22 11:07:50 2016 Page: 1

9.7.1 9

Quantitation Report (QT Reviewed)

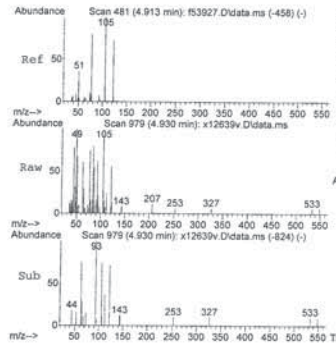
Data File: C:\msdchem\1\data\X160921\x12639v.D
Sample : IC424-5
Misc : op48431,msx424,,,,1,1
ALS Vial : 2 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:21 pm Operator: AkinA

Quant Time: Sep 22 11:06:38 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



X160921_8270.m Thu Sep 22 11:07:50 2016 Page: 2

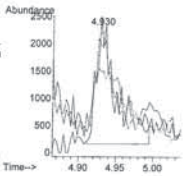
9.7.1 9

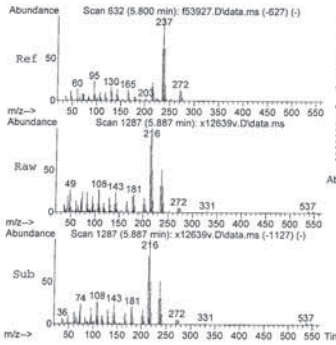


#29
Benzoic acid
Concen: 5.902 ug/mL m
RT: 4.930 min Scan# 979
Delta R.T. -0.018 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

Tgt Ion:105 Resp: 4369

Ion	Ratio	Lower	Upper
105	100		
122	59.5	41.3	101.3
77	78.7	48.5	108.5

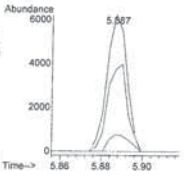




#43
Hexachlorocyclopentadiene
Concen: 6.276 ug/mL
RT: 5.887 min Scan# 1287
Delta R.T. -0.002 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

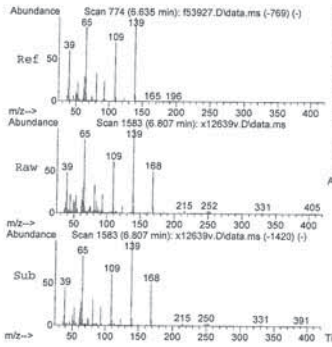
Tgt Ion:237 Resp: 4133

Ion	Ratio	Lower	Upper
237	100		
235	60.1	32.4	92.4
272	12.2	0.0	41.3



x12639v.D X160921_8270.m Thu Sep 22 11:07:51 2016 Page 3

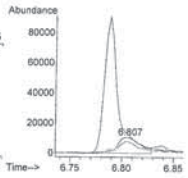
9.7.1 9

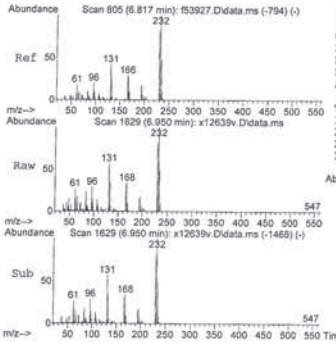


#55
4-Nitrophenol
Concen: 5.269 ug/mL
RT: 6.807 min Scan# 1583
Delta R.T. 0.008 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

Tgt Ion: 65 Resp: 16835

Ion	Ratio	Lower	Upper
65	100		
139	115.0	276.9	336.9#
109	70.6	46.5	106.5

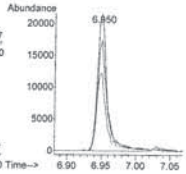




#56
2,3,4,6-Tetrachlorophenol
Concen: 5.440 ug/mL
RT: 6.950 min Scan# 1629
Delta R.T. 0.001 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

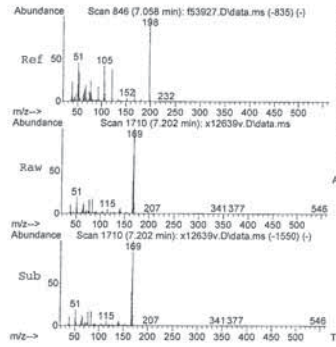
Tgt Ion:232 Resp: 21644

Ion	Ratio	Lower	Upper
232	100		
230	80.9	50.2	110.2
131	56.6	33.8	73.8



x12639v.D X160921_8270.m Thu Sep 22 11:07:51 2016 Page 4

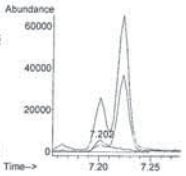
9.7.1 9

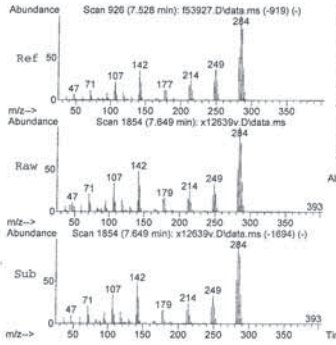


#65
4,6-Dinitro-2-methylphenol
Concen: 6.071 ug/mL
RT: 7.202 min Scan# 1710
Delta R.T. -0.002 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

Tgt Ion:198 Resp: 6596

Ion	Ratio	Lower	Upper
198	100		
51	432.7	73.2	113.2#
105	58.0	27.7	67.7

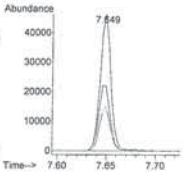




#70
Hexachlorobenzene
Concen: 5.291 ug/mL
RT: 7.649 min Scan# 1854
Delta R.T. -0.003 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

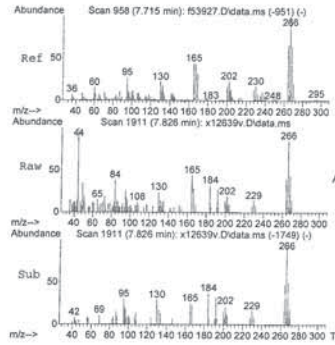
Tgt Ion:284 Resp: 34473

Ion	Ratio	Lower	Upper
284	100		
142	47.6	12.0	72.0
249	32.6	0.5	60.5



x12639v.D X160921_8270.m Thu Sep 22 11:07:51 2016 Page 5

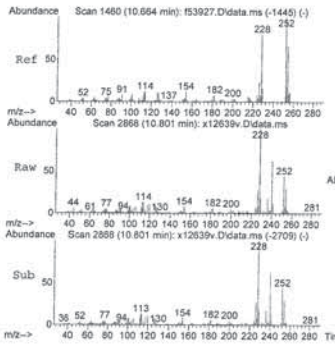
9.7.1 9



#71
Pentachlorophenol
Concen: 6.199 ug/mL
RT: 7.826 min Scan# 1911
Delta R.T. 0.003 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

Tgt Ion:266 Resp: 2557

Ion	Ratio	Lower	Upper
266	100		
264	46.9	33.4	93.4
268	50.4	35.0	95.0



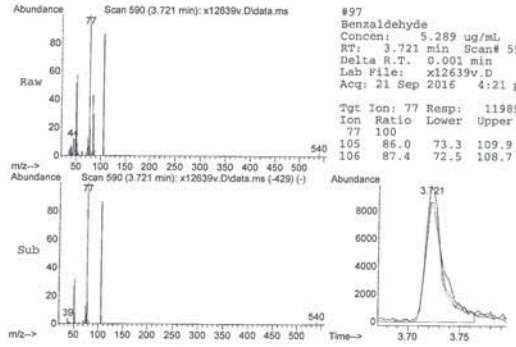
#84
3,3'-Dichlorobenzidine
Concen: 5.389 ug/mL
RT: 10.801 min Scan# 2868
Delta R.T. -0.007 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

Tgt Ion:252 Resp: 56708

Ion	Ratio	Lower	Upper
252	100		
254	65.5	35.7	95.7
126	19.0	0.0	44.8

x12639v.D X160921_8270.m Thu Sep 22 11:07:52 2016 Page 6

9.7.1 9



#97
Benzaldehyde
Concen: 5.289 ug/mL
RT: 3.721 min Scan# 590
Delta R.T. 0.001 min
Lab File: x12639v.D
Acq: 21 Sep 2016 4:21 pm

Tgt Ion: 77 Resp: 11989

Ion	Ratio	Lower	Upper
77	100		
105	86.0	73.3	109.9
106	87.4	72.5	108.7

x12639v.D X160921_8270.m Thu Sep 22 11:07:52 2016 Page 7

9.7.1 9

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\X160921\x12640v.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 11:11:02 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.038	152	404048	40.00 ug/mL	0.00
22) Naphthalene-d8	5.088	136	1545305	40.00 ug/mL	0.00
41) Acenaphthene-d10	6.621	164	900813	40.00 ug/mL	0.00
64) Phenanthrene-d10	7.917	188	1517766	40.00 ug/mL	0.00
78) Chrysene-d12	10.823	240	1505532	40.00 ug/mL	-0.01
88) Perylene-d12	14.009	264	1323671	40.00 ug/mL	-0.01
96) 1,4-Dichlorobenzene-d4A	4.038	152	404048	40.00 ug/mL	0.00
System Monitoring Compounds					
6) 2-Fluorophenol	0.000	112	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
8) Phenol-d5	0.000	99	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
46) 2-Fluorobiphenyl	0.000	172	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
68) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
81) Terphenyl-d14	0.000	244	0d	0.00 ug/mL	
Spiked Amount 50.000	Range 30 - 130		Recovery = 0.00%#		
Target Compounds					Qvalue
52) 2,4-Dinitrophenol	6.723	184	4436	10.469 ug/mL	87

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

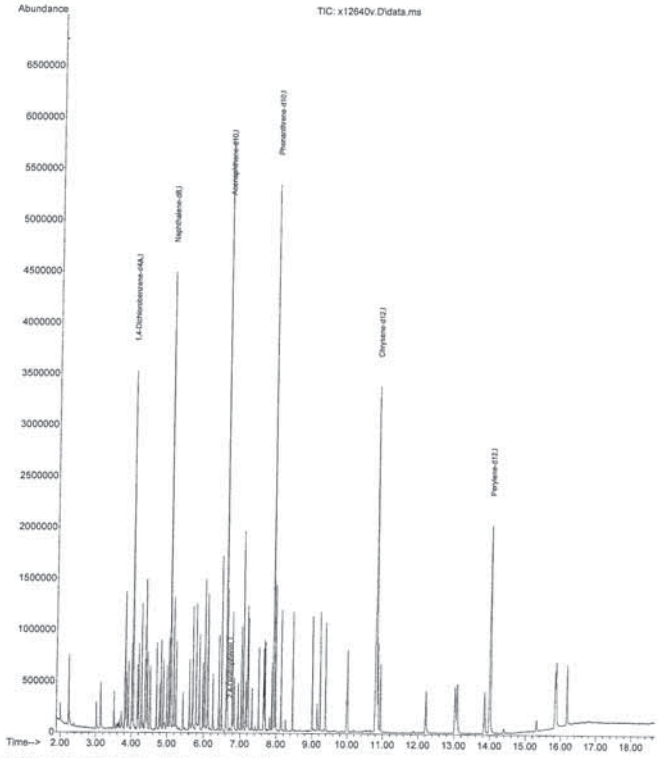
X160921_8270.m Thu Sep 22 11:11:41 2016 Page: 1

9.7.1 9

Quantitation Report (QT Reviewed)

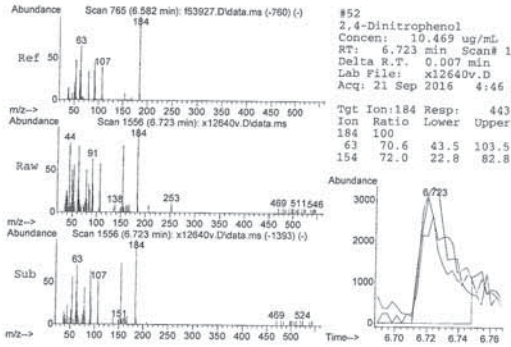
Data File: C:\msdchem\1\data\X160921\x12640v.D
Sample : IC424-10
Misc : op48431,msx424,,,,1,1
ALS Vial : 3 Sample Multiplier: 1
Acq On : 21 Sep 2016 4:46 pm Operator: AkinA

Quant Time: Sep 22 11:11:02 2016
Quant Method : X:\1\methods\X160921_8270.m
Quant Title : SW-864 Method 8270



X160921_8270.m Thu Sep 22 11:11:42 2016 Page: 2

9.7.1 9



#52
2,4-Dinitrophenol
Concen: 10.469 ug/mL
RT: 6.723 min Scan# 1556
Delta R.T. 0.007 min
Lab File: x12640v.D
Acq: 21 Sep 2016 4:46 pm

Tgt Ion:184 Resp: 4436

Ion	Ratio	Lower	Upper
184	100		
63	70.6	43.5	103.5
154	72.0	22.8	82.8

x12640v.D X160921_8270.m Thu Sep 22 11:11:42 2016 Page 3

9.7.1 9

SGS Accutest

Instrument: GCMS X

GCMS Analysis Log - Extractables

Run Date: 9/22/16

Analyst Signature:

Standard Data

Lot #	Description	Conc
MSS2066	DFTPP	50 ng/mL
2046	A8270 CAL STD	50
1961	A8270 INT STD	4000

Column Information: Front RTX-5MS
Rear
Sequence File: X160922
Quantitation Methods: DFTPP2VAL
X160921_8270.M
Instrument Run Batches: MSX 425
X8270BK.M
Inj. Vol: 1uL
Data Acquisition Methods:
Inj. Vol:

ICAL verified: 9/21/16 Sequence loaded initial: Sequence verified initial:

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Data Process Initials	Comments
2	X12650	DFTPP	MSS2066	8270	N/A	N/A		11:49
3	51	SC 424-50	MSS2046					
3	52	OP48710-MS	OP48710	A8270TCL	S			
4	53	-MS						
5	54	-MS						
6	55	-MSD						
7	56	MK47774-1						
8	57	-2						
9	58	-3						
10	59	-4						
11	X12660	-5						
12	61	-6				1:20		
13	62	MK47774-7			S	1:50		Elevated RL due to matrix
14	63	-8	OP48710		S	N/A		
27	64	-6			S	N/A		
15	65	MK47775-1		A8270STAR				
16	66	-2						
17	67	-3						
18	68	-4						
19	69	-5						
20	X12670	-6						
21	X12671	-7						
22	72	-8						
23	73	-9						
24	74	-10						
25	75	-11						
26	76	-12			S			10:59
1	X12677	MLK	N/A	N/A	N/A	N/A	N/A	Cleanup Blank
	78							
	79							
	X12680-92							

9/23/16

MS002-06
Date: 6/22/16 Dilution Solvent: FISHER DCM Lot: 164449 Review:

4 of 50

9.7.2 9

Analysis Method: A8270TCL 8270STAR

Extraction Log - Soils

Extraction Method (check one): Microwave SW3546 Microwave ID: 1D Waste Dilution SW3580A

ASE SW 3545A Soxtec/ss SW3550C* Shaker SW3540C MSE EPA 3570

Spike ID	Lot #	Conc. (ug/ml)	Amt. (ml)
ACID	7826	500	100
BNE	7827	500	100
1Nitro	7842	1000	5
8133	7845	4000	25

Sample #	Sample Wt. (grams)	Final Extract Volume (mL)	Comments
OP48710 MB	20.66	1.0	
OP48710 BS	NA		
OP48710 BSD	20.26	1.0	
MK47774-2 MS	20.28	1.0	
-2 MSD	20.62		
MK47774-1	20.19	1.0	WET SAND
-2	20.86		
-3	20.97		
-4	20.90		
-5	20.70		
-6	20.13		
-7	20.49		
-8	20.61		
MK47775-1	20.37		
-2	20.28		
-3	20.08		
-4	20.35		
-5	20.24		
-6	20.49		
-7	20.45		
-8	20.62		
-9	20.54		
-10	20.47		
-11	20.47		
-12	20.39		

Clean up Methods: Check
Copper: 3660B
Silica: 3630
Florisil: 3620
Acid: 3665

SGS ACCUTEST - MARLBOROUGH
form: OP017-03
rev Date: 3/23/16

Supervisor Approval: PJ 9/20/16

Tray # GC-28

Equipment Range	ID	Temp (°C)	Press/Flow
Ultrasonic bath			
Bath (55-71°C)		44	
Waterbath Temp °C		55	
METAP (32-38 °C)			
Vortex			
Balance ID			
Nanocomm Horn	ACC-11		
Minutes XL 2020	N/A		

SOLVENT	LOT #	BRAND	INITIALS	DATE	TIME
1:1 HEXANE/ ACETONE	164449	Fisher	GDF	9/16/16	2200
1:1 METH CHLOR/ ACETONE	164446	Fisher	GD	9/20/16	1700
HEXANE Only		Fisher			
ETHER		Fisher			
ACETONITRILE		Fisher			
ACETONE		Fisher			
DCM	164449	Fisher			

REAGENT	LOT #	BRAND
SPE MeO		
SILICA GEL		
SODIUM SULFATE		
FILTER PAPER	9-0-37	Fisher
COPPER	9-6-383	Fisher
FLORISIL		
SULFURIC ACID		
HYDROMATRIX		
SAND		
0.45um Teflon Filter		

Extracted by:	GDF
Spike Witness:	GD
Concentrated by:	PJ
Fractionated by:	
Received by:	AJR

Volume (ml):	
9/20/16	1700

FILTERED BY: PJ 9/20/16

9/20/16 PJ 9/20/16 1546

9.8.1 9

SGS ACCUTEST New England

Section 10

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

10

Raw Data: BK61730.D

Method Blank Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48709-MB	BK61730.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936

The QC reported here applies to the following samples: **Method:** SW846 8082A

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	3.3	ug/kg	
11104-28-2	Aroclor 1221	ND	33	14	ug/kg	
11141-16-5	Aroclor 1232	ND	33	10	ug/kg	
53469-21-9	Aroclor 1242	ND	33	7.5	ug/kg	
12672-29-6	Aroclor 1248	ND	33	5.6	ug/kg	
11097-69-1	Aroclor 1254	ND	33	14	ug/kg	
11096-82-5	Aroclor 1260	ND	33	3.0	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	82%	25-145%
877-09-8	Tetrachloro-m-xylene	81%	25-145%
2051-24-3	Decachlorobiphenyl	107%	25-179%
2051-24-3	Decachlorobiphenyl	108%	25-179%

10.1.1 10

Raw Data: BK61731.D

Blank Spike Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48709-BS	BK61731.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936

The QC reported here applies to the following samples: **Method:** SW846 8082A

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	262	234	89	47-144
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	262	250	95	45-156

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	89%	25-145%
877-09-8	Tetrachloro-m-xylene	84%	25-145%
2051-24-3	Decachlorobiphenyl	104%	25-179%
2051-24-3	Decachlorobiphenyl	104%	25-179%

10.2.1 10

* = Outside of Control Limits.

Raw Data: BK61732.D BK61733.D

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48709-MS	BK61732.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936
OP48709-MSD	BK61733.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936
MC47774-2	BK61735.D	1	09/20/16	TA	09/15/16	OP48709	GBK1936

The QC reported here applies to the following samples: **Method:** SW846 8082A

MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7, MC47774-8

CAS No.	Compound	MC47774-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		311	271	87	324	243	75	11	24-164/50
11104-28-2	Aroclor 1221	ND			ND			ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND			ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND			ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND			ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND			ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		311	298	96	324	275	85	8	19-177/50

CAS No.	Surrogate Recoveries	MS	MSD	MC47774-2	Limits
877-09-8	Tetrachloro-m-xylene	88%	76%	88%	25-145%
877-09-8	Tetrachloro-m-xylene	85%	81%	86%	25-145%
2051-24-3	Decachlorobiphenyl	109%	92%	106%	25-179%
2051-24-3	Decachlorobiphenyl	112%	93%	107%	25-179%

10.3.1 10

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Method: SW846 8082A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
MC47774-1	BK61734.D	88	87	101	102
MC47774-2	BK61735.D	88	86	106	107
MC47774-3	BK61736.D	86	86	95	96
MC47774-4	BK61739.D	90	88	104	105
MC47774-5	BK61740.D	109	107	120	123
MC47774-6	BK61741.D	73	63	102	89
MC47774-7	BK61742.D	80	67	103	70
MC47774-8	BK61743.D	80	80	89	84
OP48709-BS	BK61731.D	89	84	104	104
OP48709-MB	BK61730.D	82	81	107	108
OP48709-MS	BK61732.D	88	85	109	112
OP48709-MSD	BK61733.D	76	81	92	93

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	25-145%
S2 = Decachlorobiphenyl	25-179%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

10.4.1 10

GC Surrogate Retention Time Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Check Std: GBK1936-CC1936 **Injection Date:** 09/20/16
Lab File ID: BK61726.D **Injection Time:** 16:24
Instrument ID: GCBK **Method:** SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.49	2.44	9.67	10.21

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP48716-MS	BK61727.D	09/20/16	16:40	2.49	2.44	9.67	10.21
OP48716-MSD	BK61728.D	09/20/16	17:12	2.49	2.43	9.68	10.21
MC47472-24	BK61729.D	09/20/16	17:28	2.49	2.44	9.67	10.21
OP48709-MB	BK61730.D	09/20/16	17:44	2.49	2.44	9.67	10.21
OP48709-BS	BK61731.D	09/20/16	17:59	2.49	2.44	9.67	10.21
OP48709-MS	BK61732.D	09/20/16	18:15	2.49	2.44	9.67	10.21
OP48709-MSD	BK61733.D	09/20/16	18:31	2.49	2.44	9.67	10.21
MC47774-1	BK61734.D	09/20/16	18:47	2.49	2.44	9.67	10.21
MC47774-2	BK61735.D	09/20/16	19:03	2.49	2.44	9.67	10.21
MC47774-3	BK61736.D	09/20/16	19:19	2.49	2.44	9.67	10.21

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

10.5.1 10

GC Surrogate Retention Time Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Check Std: GBK1936-CC1936 **Injection Date:** 09/21/16
Lab File ID: BK61738.D **Injection Time:** 07:48
Instrument ID: GCBK **Method:** SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.49	2.44	9.68	10.22

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
MC47774-4	BK61739.D	09/21/16	08:03	2.49	2.44	9.67	10.22
MC47774-5	BK61740.D	09/21/16	08:19	2.49	2.44	9.67	10.22
MC47774-6	BK61741.D	09/21/16	08:35	2.49	2.44	9.67	10.21
MC47774-7	BK61742.D	09/21/16	08:51	2.49	2.45	9.67	10.22
MC47774-8	BK61743.D	09/21/16	09:07	2.49	2.44	9.67	10.22
ZZZZZZ	BK61744.D	09/21/16	09:23	2.49	2.44	9.67	10.22
GBK1936-ECC1936	BK61745.D	09/21/16	09:39	2.49	2.44	9.67	10.22

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

10.5.2 10

Raw Data: BK61705.D BK61706.D BK61707.D BK61708.D BK61709.D BK61710.D BK61711.D BK61712.D BK61713.D BK61714.D

Initial Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-ICC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61708.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Response Factor Report GCBK

```
Method       : C:\msdchem\1\METHODS\PC160920.M (ChemStation Integrator)
Title        : PCB,rtx-clpest front,rtx-clpest2-rear
Last Update  : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration

Calibration Files
1   =BK61710.d   2   =BK61709.d   3   =BK61708.d   4   =BK61707.d
5      =BK61706.d    6      =BK61705.d
```

	Compound	1	2	3	4	5	6	Avg	%RSD
1) s	TCMX	4.411	4.384	4.536	4.188	3.868	3.826	4.202 E7	7.07
2)	AR1016-A	1.595	1.593	1.705	1.657	1.646	1.858	1.676 E6	5.89
3)	AR1016-B	3.426	3.388	3.587	3.359	3.221	3.564	3.424 E6	3.98
4)	AR1016-C	1.280	1.273	1.350	1.292	1.256	1.281	1.289 E6	2.50
5)	AR1016-D	5.161	5.307	5.429	5.651	4.802	5.242	5.265 E5	5.40
6)	AR1016-E	1.345	1.343	1.434	1.361	1.300	1.479	1.377 E6	4.80
7)	AR1260-A	1.887	1.887	2.009	1.911	1.873	2.138	1.951 E6	5.35
8)	AR1260-B	2.773	2.762	2.953	2.755	2.657	3.060	2.827 E6	5.28
9)	AR1260-C	2.904	2.884	3.083	2.854	2.696	3.100	2.920 E6	5.19
10)	AR1260-D	4.094	4.411	4.768	4.379	4.022	4.275	4.325 E6	6.15
11)	AR1260-E	1.810	1.772	1.937	1.746	1.587	1.893	1.791 E6	6.89
12)	AR1260-F	1.032	1.021	1.139	1.040	0.954	1.120	1.051 E6	6.48
13) s	DCB	3.078	3.060	3.514	3.013	2.873	3.422	3.160 E7	7.94
14)	AR1221-A			3.567				3.567 E5	0.00
15)	AR1221-B			5.487				5.487 E5	0.00
16)	AR1221-C			9.496				9.496 E5	0.00
17)	AR1232-A			1.089				1.089 E6	0.00
18)	AR1232-B			8.107				8.107 E5	0.00
19)	AR1232-C			1.500				1.500 E6	0.00
20)	AR1232-D			6.105				6.105 E5	0.00
21)	AR1232-E			5.011				5.011 E5	0.00
22)	AR1242-A			7.651				7.651 E5	0.00
23)	AR1242-B			1.376				1.376 E6	0.00
24)	AR1242-C			2.828				2.828 E6	0.00
25)	AR1242-D			1.167				1.167 E6	0.00
26)	AR1242-E			9.705				9.705 E5	0.00
27)	AR1248-A			7.666				7.666 E5	0.00
28)	AR1248-B			1.679				1.679 E6	0.00
29)	AR1248-C			8.692				8.692 E5	0.00
30)	AR1248-D			1.773				1.773 E6	0.00
31)	AR1248-E			1.665				1.665 E6	0.00
32)	AR1254-A			1.376				1.376 E6	0.00
33)	AR1254-B			2.423				2.423 E6	0.00
34)	AR1254-C			2.629				2.629 E6	0.00
35)	AR1254-D			1.689				1.689 E6	0.00
36)	AR1254-E			2.436				2.436 E6	0.00
37)	AR1262-A			1.597				1.597 E6	0.00
38)	AR1262-B			1.988				1.988 E6	0.00
39)	AR1262-C			2.660				2.660 E6	0.00
40)	AR1262-D			2.043				2.043 E6	0.00
41)	AR1262-E			1.584				1.584 E6	0.00
42)	AR1268-A			1.501				1.501 E6	0.00
43)	AR1268-B			1.714				1.714 E6	0.00
44)	AR1268-C			5.471				5.471 E6	0.00
45)	AR1268-D			3.959				3.959 E6	0.00
46)	AR1268-E			1.082				1.082 E7	0.00

10.6.1 10

Initial Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-ICC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61708.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Signal #2

1) s	TCMX	7.928	7.859	8.281	7.383	7.684	7.268	7.734 E7	4.82
2)	AR1016-A	2.782	2.807	3.012	3.012	3.117	3.444	3.029 E6	7.96
3)	AR1016-B	5.573	5.540	5.779	5.503	5.585	7.268	5.875 E6	11.73

```
 ----- Quadratic regression -----                    Coefficient =  0.9987
       Response Ratio = 74475176.20037 + 5299295.61792 *A + 225.25976 *A^2
```

4)	AR1016-C	2.342	2.367	2.455	2.449	2.463	1.874	2.325 E6	9.75
5)	AR1016-D	1.214	1.241	1.337	1.319	1.356	1.601	1.344 E6	10.21

```
 ----- Quadratic regression -----                    Coefficient =  0.9992
       Response Ratio = 9673446.64812 + 1343553.14081 *A + -137.84987 *A^2
```

6)	AR1016-E	1.687	1.710	1.848	1.775	1.759	1.954	1.789 E6	5.48
7)	AR1260-A	3.283	3.299	3.490	3.351	3.388	3.830	3.440 E6	5.95
8)	AR1260-B	3.758	3.772	3.988	3.796	3.764	4.585	3.944 E6	8.26
9)	AR1260-C	4.943	4.962	5.304	5.046	4.980	5.334	5.095 E6	3.48
10)	AR1260-D	6.400	6.326	6.762	6.118	5.855	7.237	6.450 E6	7.59
11)	AR1260-E	4.031	3.980	4.345	4.022	3.825	4.759	4.160 E6	8.14
12)	AR1260-F	1.592	1.566	1.748	1.598	1.585	1.752	1.640 E6	5.24
13) s	DCB	4.552	4.500	4.893	4.067	3.848	4.498	4.393 E7	8.52
14)	AR1221-A			7.628				7.628 E5	0.00
15)	AR1221-B			9.367				9.367 E5	0.00
16)	AR1221-C			2.665				2.665 E6	0.00
17)	AR1232-A			1.862				1.862 E6	0.00
18)	AR1232-B			1.577				1.577 E6	0.00
19)	AR1232-C			2.441				2.441 E6	0.00
20)	AR1232-D			8.039				8.039 E5	0.00
21)	AR1232-E			1.342				1.342 E6	0.00
22)	AR1242-A			1.318				1.318 E6	0.00
23)	AR1242-B			2.416				2.416 E6	0.00
24)	AR1242-C			4.529				4.529 E6	0.00
25)	AR1242-D			1.494				1.494 E6	0.00
26)	AR1242-E			1.869				1.869 E6	0.00
27)	AR1248-A			1.401				1.401 E6	0.00
28)	AR1248-B			3.042				3.042 E6	0.00
29)	AR1248-C			1.824				1.824 E6	0.00
30)	AR1248-D			2.337				2.337 E6	0.00
31)	AR1248-E			3.020				3.020 E6	0.00
32)	AR1254-A			2.813				2.813 E6	0.00
33)	AR1254-B			2.998				2.998 E6	0.00
34)	AR1254-C			4.664				4.664 E6	0.00
35)	AR1254-D			3.013				3.013 E6	0.00
36)	AR1254-E			4.255				4.255 E6	0.00
37)	AR1262-A			2.894				2.894 E6	0.00
38)	AR1262-B			2.966				2.966 E6	0.00
39)	AR1262-C			3.968				3.968 E6	0.00
40)	AR1262-D			4.552				4.552 E6	0.00
41)	AR1262-E			2.390				2.390 E6	0.00
42)	AR1268-A			2.324				2.324 E6	0.00
43)	AR1268-B			2.565				2.565 E6	0.00
44)	AR1268-C			8.097				8.097 E6	0.00
45)	AR1268-D			5.538				5.538 E6	0.00
46)	AR1268-E			1.595				1.595 E7	0.00

(#) = Out of Range

PC160920.M Wed Sep 21 09:09:06 2016

10.6.1 10

Raw Data: BK61715.D

Initial Calibration Verification

Job Number: MC47774 **Sample:** GBK1936-ICV1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61715.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
                    Evaluate Continuing Calibration Report

  Data File : C:\msdchem\1\DATA\BK...20\BK61715.d\ECD1A.ch Vial: 111
  Acq On    : 20 Sep 2016   1:16 pm                    Operator: thomasa
  Sample    : icv1936-500,a16/60                       Inst    : GCBK
  Misc      : op48716,gbk1936,1000,,,5,,w              Multiplr: 1.00
  IntFile   : EVENTS.E

  Data File : C:\msdchem\1\DATA\BK160920\BK61715.d\ECD2B.ch Vial: 111
  Acq On    : 20 Sep 2016   1:16 pm                    Operator: thomasa
  Sample    : icv1935-500,a16/60                       Inst    : GCBK
  Misc      : op48716,gbk1936,1000,,,5,,w              Multiplr: 1.00
  IntFile   : EVENTS2.E

  Method       : C:\msdchem\1\METHODS\PC160920.M (ChemStation Integrator)
  Title        : PCB,rtx-clpest front,rtx-clpest2-rear
  Last Update  : Tue Sep 20 13:51:16 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.000  Min. Rel. Area :  85%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%     Max. Rel. Area : 115%

        Compound                AvgRF   CCRF      %Dev Area% Dev(min)RT Window
  ---------------------------------------------------------------------------
  1 s   TCMX                   42.022  43.283 E6  -3.0   95   0.00    2.39- 2.59
  2     AR1016-A                1.676   1.583 E6   5.5   93   0.00    3.05- 3.25
  3     AR1016-B                3.424   3.260 E6   4.8   91   0.00    3.52- 3.72
  4     AR1016-C                1.289   1.248 E6   3.2   92   0.00    3.73- 3.79
  5     AR1016-D              526.524 478.755 E3   9.1   88   0.00    3.93- 3.99
  6     AR1016-E                1.377   1.301 E6   5.5   91   0.00    4.19- 4.25
  7     AR1260-A                1.951   1.829 E6   6.3   91   0.00    5.64- 5.84
  8     AR1260-B                2.827   2.618 E6   7.4   89   0.00    6.03- 6.23
  9     AR1260-C                2.920   2.726 E6   6.6   88   0.00    6.43- 6.63
 10     AR1260-D                4.325   4.176 E6   3.4   88   0.00    7.41- 7.61
 11     AR1260-E                1.791   1.629 E6   9.0  84#   0.00    7.84- 8.04
 12     AR1260-F                1.051   0.984 E6   6.4   86   0.00    8.81- 9.01
 13 s   DCB                   31.600  30.353 E6   3.9   86   0.00    9.57- 9.77
 14     AR1221-A                         ----------NA----------
 15     AR1221-B                         ----------NA----------
 16     AR1221-C                         ----------NA----------
 17     AR1232-A                         ----------NA----------
 18     AR1232-B                         ----------NA----------
 19     AR1232-C                         ----------NA----------
 20     AR1232-D                         ----------NA----------
 21     AR1232-E                         ----------NA----------
 22     AR1242-A                         ----------NA----------
 23     AR1242-B                         ----------NA----------
 24     AR1242-C                         ----------NA----------
 25     AR1242-D                         ----------NA----------
 26     AR1242-E                         ----------NA----------
 27     AR1248-A                         ----------NA----------
 28     AR1248-B                         ----------NA----------
 29     AR1248-C                         ----------NA----------
 30     AR1248-D                         ----------NA----------
 31     AR1248-E                         ----------NA----------
 32     AR1254-A                         ----------NA----------
 33     AR1254-B                         ----------NA----------
 34     AR1254-C                         ----------NA----------
 35     AR1254-D                         ----------NA----------
 36     AR1254-E                         ----------NA----------
```

10.6.2 10

Initial Calibration Verification

Job Number: MC47774 **Sample:** GBK1936-ICV1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61715.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
 37     AR1262-A                         ----------NA----------
 38     AR1262-B                         ----------NA----------
 39     AR1262-C                         ----------NA----------
 40     AR1262-D                         ----------NA----------
 41     AR1262-E                         ----------NA----------
 42     AR1268-A                         ----------NA----------
 43     AR1268-B                         ----------NA----------
 44     AR1268-C                         ----------NA----------
 45     AR1268-D                         ----------NA----------
 46     AR1268-E                         ----------NA----------

*****  Signal #2   *****

  1 s   TCMX                    77.336  76.220 E6   1.4   92   0.00    2.34- 2.54
  2     AR1016-A                 3.029   2.775 E6   8.4   92   0.00    3.18- 3.38

            ------------------------ True    Calc.   % Drift  ------------
  3     AR1016-B               500.000 472.202      5.6   91   0.00    3.64- 3.84

            ------------------------ AvgRF   CCRF     % Dev   -------------
  4     AR1016-C                 2.325   2.327 E6  -0.1   95   0.00    3.79- 3.99

            ------------------------ True    Calc.   % Drift  ------------
  5     AR1016-D               500.000 465.017      7.0   90   0.00    4.07- 4.13

            ------------------------ AvgRF   CCRF     % Dev   -------------
  6     AR1016-E                 1.789   1.643 E6   8.2   89   0.00    4.39- 4.45
  7     AR1260-A                 3.440   3.156 E6   8.3   90   0.00    5.96- 6.16
  8     AR1260-B                 3.944   3.576 E6   9.3   90   0.00    6.25- 6.45
  9     AR1260-C                 5.095   4.696 E6   7.8   89   0.00    6.78- 6.98
 10     AR1260-D                 6.450   5.852 E6   9.3   87   0.00    7.74- 7.94
 11     AR1260-E                 4.160   3.709 E6  10.8   85   0.00    8.32- 8.52
 12     AR1260-F                 1.640   1.536 E6   6.3   88   0.00    9.23- 9.43
 13 s   DCB                    43.929  42.625 E6   3.0   87   0.00   10.11-10.31
 14     AR1221-A                         ----------NA----------
 15     AR1221-B                         ----------NA----------
 16     AR1221-C                         ----------NA----------
 17     AR1232-A                         ----------NA----------
 18     AR1232-B                         ----------NA----------
 19     AR1232-C                         ----------NA----------
 20     AR1232-D                         ----------NA----------
 21     AR1232-E                         ----------NA----------
 22     AR1242-A                         ----------NA----------
 23     AR1242-B                         ----------NA----------
 24     AR1242-C                         ----------NA----------
 25     AR1242-D                         ----------NA----------
 26     AR1242-E                         ----------NA----------
 27     AR1248-A                         ----------NA----------
 28     AR1248-B                         ----------NA----------
 29     AR1248-C                         ----------NA----------
 30     AR1248-D                         ----------NA----------
 31     AR1248-E                         ----------NA----------
 32     AR1254-A                         ----------NA----------
 33     AR1254-B                         ----------NA----------
 34     AR1254-C                         ----------NA----------
 35     AR1254-D                         ----------NA----------
 36     AR1254-E                         ----------NA----------
 37     AR1262-A                         ----------NA----------
 38     AR1262-B                         ----------NA----------
 39     AR1262-C                         ----------NA----------
```

10.6.2 10

Initial Calibration Verification

Job Number: MC47774 **Sample:** GBK1936-ICV1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61715.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
 40     AR1262-D                         ----------NA----------
 41     AR1262-E                         ----------NA----------
 42     AR1268-A                         ----------NA----------
 43     AR1268-B                         ----------NA----------
 44     AR1268-C                         ----------NA----------
 45     AR1268-D                         ----------NA----------
 46     AR1268-E                         ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range                SPCC's out = 0  CCC's out = 0
     BK61708.d  PC160920.M       Wed Sep 21 09:08:59 2016
```

10.6.2 10

Raw Data: BK61726.D

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61726.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
                    Evaluate Continuing Calibration Report

  Data File : C:\msdchem\1\DATA\BK...20\BK61726.d\ECD1A.ch Vial: 150
  Acq On    : 20 Sep 2016   4:24 pm                    Operator: thomasa
  Sample    : cc1936-750,a16/60                        Inst    : GCBK
  Misc      : op48716,gbk1936,1000,,,5,,w              Multiplr: 1.00
  IntFile   : EVENTS.E

  Data File : C:\msdchem\1\DATA\BK160920\BK61726.d\ECD2B.ch Vial: 150
  Acq On    : 20 Sep 2016   4:24 pm                    Operator: thomasa
  Sample    : cc1935-750,a16/60                        Inst    : GCBK
  Misc      : op48716,gbk1936,1000,,,5,,w              Multiplr: 1.00
  IntFile   : EVENTS2.E

  Method       : C:\msdchem\1\METHODS\PC160920.M (ChemStation Integrator)
  Title        : PCB,rtx-clpest front,rtx-clpest2-rear
  Last Update  : Wed Sep 21 09:27:22 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.000  Min. Rel. Area :  85%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%     Max. Rel. Area : 115%

        Compound                AvgRF   CCRF      %Dev Area% Dev(min)RT Window
  ---------------------------------------------------------------------------
  1 s   TCMX                   42.022  42.549 E6  -1.3   97   0.00    2.39- 2.59
  2     AR1016-A                1.676   1.550 E6   7.5   97   0.00    3.05- 3.25
  3     AR1016-B                3.424   3.376 E6   1.4  100   0.00    3.52- 3.72
  4     AR1016-C                1.289   1.245 E6   3.4   98   0.00    3.73- 3.79
  5     AR1016-D              526.524 430.246 E3  18.3#  81#  0.00    3.93- 3.99
  6     AR1016-E                1.377   1.306 E6   5.2   97   0.00    4.19- 4.25
  7     AR1260-A                1.951   1.875 E6   3.9   99   0.00    5.65- 5.85
  8     AR1260-B                2.827   2.774 E6   1.9  100   0.00    6.03- 6.23
  9     AR1260-C                2.920   2.904 E6   0.5  101   0.00    6.43- 6.63
 10     AR1260-D                4.325   4.561 E6  -5.5  103   0.00    7.41- 7.61
 11     AR1260-E                1.791   1.819 E6  -1.6  103   0.00    7.84- 8.04
 12     AR1260-F                1.051   1.092 E6  -3.9  107   0.00    8.81- 9.01
 13 s   DCB                   31.600  32.845 E6  -3.9  107   0.00    9.57- 9.77
 14     AR1221-A                         ----------NA----------
 15     AR1221-B                         ----------NA----------
 16     AR1221-C                         ----------NA----------
 17     AR1232-A                         ----------NA----------
 18     AR1232-B                         ----------NA----------
 19     AR1232-C                         ----------NA----------
 20     AR1232-D                         ----------NA----------
 21     AR1232-E                         ----------NA----------
 22     AR1242-A                         ----------NA----------
 23     AR1242-B                         ----------NA----------
 24     AR1242-C                         ----------NA----------
 25     AR1242-D                         ----------NA----------
 26     AR1242-E                         ----------NA----------
 27     AR1248-A                         ----------NA----------
 28     AR1248-B                         ----------NA----------
 29     AR1248-C                         ----------NA----------
 30     AR1248-D                         ----------NA----------
 31     AR1248-E                         ----------NA----------
 32     AR1254-A                         ----------NA----------
 33     AR1254-B                         ----------NA----------
 34     AR1254-C                         ----------NA----------
 35     AR1254-D                         ----------NA----------
 36     AR1254-E                         ----------NA----------
```

10.6.3 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61726.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

37	AR1262-A	----------NA----------							
38	AR1262-B	----------NA----------							
39	AR1262-C	----------NA----------							
40	AR1262-D	----------NA----------							
41	AR1262-E	----------NA----------							
42	AR1268-A	----------NA----------							
43	AR1268-B	----------NA----------							
44	AR1268-C	----------NA----------							
45	AR1268-D	----------NA----------							
46	AR1268-E	----------NA----------							

***** Signal #2 *****

1 s	TCMX	77.336	74.085 E6	4.2	94	0.00	2.34- 2.54		
2	AR1016-A	3.029	2.720 E6	10.2	97	0.00	3.18- 3.38		
	---------- True Calc. % Drift ----------								
3	AR1016-B	750.000	741.169	1.2	99	0.00	3.64- 3.84		
	---------- AvgRF CCRF % Dev ----------								
4	AR1016-C	2.325	2.352 E6	-1.2	99	0.00	3.79- 3.99		
	---------- True Calc. % Drift ----------								
5	AR1016-D	750.000	720.332	4.0	97	0.00	4.07- 4.13		
	---------- AvgRF CCRF % Dev ----------								
6	AR1016-E	1.789	1.634 E6	8.7	96	0.00	4.39- 4.45		
7	AR1260-A	3.440	3.229 E6	6.1	98	0.00	5.96- 6.16		
8	AR1260-B	3.944	3.763 E6	4.6	100	0.00	6.25- 6.45		
9	AR1260-C	5.095	4.985 E6	2.2	100	0.00	6.78- 6.98		
10	AR1260-D	6.450	6.518 E6	-1.1	103	0.00	7.74- 7.94		
11	AR1260-E	4.160	4.139 E6	0.5	104	0.00	8.32- 8.52		
12	AR1260-F	1.640	1.678 E6	-2.3	107	0.00	9.23- 9.43		
13 s	DCB	43.929	46.266 E6	-5.3	103	0.00	10.11-10.31		
14	AR1221-A	----------NA----------							
15	AR1221-B	----------NA----------							
16	AR1221-C	----------NA----------							
17	AR1232-A	----------NA----------							
18	AR1232-B	----------NA----------							
19	AR1232-C	----------NA----------							
20	AR1232-D	----------NA----------							
21	AR1232-E	----------NA----------							
22	AR1242-A	----------NA----------							
23	AR1242-B	----------NA----------							
24	AR1242-C	----------NA----------							
25	AR1242-D	----------NA----------							
26	AR1242-E	----------NA----------							
27	AR1248-A	----------NA----------							
28	AR1248-B	----------NA----------							
29	AR1248-C	----------NA----------							
30	AR1248-D	----------NA----------							
31	AR1248-E	----------NA----------							
32	AR1254-A	----------NA----------							
33	AR1254-B	----------NA----------							
34	AR1254-C	----------NA----------							
35	AR1254-D	----------NA----------							
36	AR1254-E	----------NA----------							
37	AR1262-A	----------NA----------							
38	AR1262-B	----------NA----------							
39	AR1262-C	----------NA----------							

10.6.3 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61726.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

40	AR1262-D	----------NA----------
41	AR1262-E	----------NA----------
42	AR1268-A	----------NA----------
43	AR1268-B	----------NA----------
44	AR1268-C	----------NA----------
45	AR1268-D	----------NA----------
46	AR1268-E	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BK61709.d PC160920.M Wed Sep 21 09:33:10 2016

10.6.3 10

Raw Data: BK61737.D

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61737.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\BK...20\BK61737.d\ECD1A.ch Vial: 150
Signal #2 : C:\msdchem\1\DATA\BK160920\BK61737.d\ECD2B.ch
Acq On    : 20 Sep 2016   7:35 pm                    Operator: thomasa
Sample    : cc1936-750,a16/60                        Inst    : GCBK
Misc      : op48716,gbk1936,1000,,,5,,w              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\msdchem\1\METHODS\PC160920.M (ChemStation Integrator)
Title        : PCB,rtx-clpest front,rtx-clpest2-rear
Last Update  : Wed Sep 21 09:27:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  85%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 115%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 s	TCMX	42.022	44.781 E6	-6.6	102	0.00	2.39- 2.59
2	AR1016-A	1.676	1.654 E6	1.3	104	0.00	3.05- 3.25
3	AR1016-B	3.424	3.547 E6	-3.6	105	0.00	3.52- 3.72
4	AR1016-C	1.289	1.325 E6	-2.8	104	0.00	3.73- 3.79
5	AR1016-D	526.524	545.153 E3	-3.5	103	0.00	3.93- 3.99
6	AR1016-E	1.377	1.412 E6	-2.5	105	0.00	4.19- 4.25
7	AR1260-A	1.951	2.001 E6	-2.6	106	0.00	5.65- 5.85
8	AR1260-B	2.827	2.972 E6	-5.1	108	0.00	6.03- 6.23
9	AR1260-C	2.920	3.105 E6	-6.3	108	0.00	6.43- 6.63
10	AR1260-D	4.325	4.894 E6	-13.2	111	0.00	7.41- 7.61
11	AR1260-E	1.791	1.984 E6	-10.8	112	0.00	7.85- 8.05
12	AR1260-F	1.051	1.176 E6	-11.9	115#	0.00	8.81- 9.01
13 s	DCB	31.600	35.292 E6	-11.7	115#	0.00	9.57- 9.77
14	AR1221-A	----------NA----------					
15	AR1221-B	----------NA----------					
16	AR1221-C	----------NA----------					
17	AR1232-A	----------NA----------					
18	AR1232-B	----------NA----------					
19	AR1232-C	----------NA----------					
20	AR1232-D	----------NA----------					
21	AR1232-E	----------NA----------					
22	AR1242-A	----------NA----------					
23	AR1242-B	----------NA----------					
24	AR1242-C	----------NA----------					
25	AR1242-D	----------NA----------					
26	AR1242-E	----------NA----------					
27	AR1248-A	----------NA----------					
28	AR1248-B	----------NA----------					
29	AR1248-C	----------NA----------					
30	AR1248-D	----------NA----------					
31	AR1248-E	----------NA----------					
32	AR1254-A	----------NA----------					
33	AR1254-B	----------NA----------					
34	AR1254-C	----------NA----------					
35	AR1254-D	----------NA----------					
36	AR1254-E	----------NA----------					
37	AR1262-A	----------NA----------					
38	AR1262-B	----------NA----------					
39	AR1262-C	----------NA----------					
40	AR1262-D	----------NA----------					
41	AR1262-E	----------NA----------					

10.6.4 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61737.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

42	AR1268-A	----------NA----------							
43	AR1268-B	----------NA----------							
44	AR1268-C	----------NA----------							
45	AR1268-D	----------NA----------							
46	AR1268-E	----------NA----------							

***** Signal #2 *****

1 s	TCMX	77.336	80.184 E6	-3.7	102	0.00	2.34- 2.54		
2	AR1016-A	3.029	2.889 E6	4.6	103	0.00	3.18- 3.38		
	---------- True Calc. % Drift ----------								
3	AR1016-B	750.000	774.996	-3.3	104	0.00	3.64- 3.84		
	---------- AvgRF CCRF % Dev ----------								
4	AR1016-C	2.325	2.443 E6	-5.1	103	0.00	3.79- 3.99		
	---------- True Calc. % Drift ----------								
5	AR1016-D	750.000	773.013	-3.1	104	0.00	4.07- 4.13		
	---------- AvgRF CCRF % Dev ----------								
6	AR1016-E	1.789	1.798 E6	-0.5	105	0.00	4.39- 4.45		
7	AR1260-A	3.440	3.463 E6	-0.7	105	0.00	5.96- 6.16		
8	AR1260-B	3.944	4.047 E6	-2.6	107	0.00	6.25- 6.45		
9	AR1260-C	5.095	5.356 E6	-5.1	108	0.00	6.78- 6.98		
10	AR1260-D	6.450	7.020 E6	-8.8	111	0.00	7.74- 7.94		
11	AR1260-E	4.160	4.471 E6	-7.5	112	0.00	8.32- 8.52		
12	AR1260-F	1.640	1.832 E6	-11.7	117#	0.00	9.23- 9.43		
13 s	DCB	43.929	50.392 E6	-14.7	112	0.00	10.11-10.31		
14	AR1221-A	----------NA----------							
15	AR1221-B	----------NA----------							
16	AR1221-C	----------NA----------							
17	AR1232-A	----------NA----------							
18	AR1232-B	----------NA----------							
19	AR1232-C	----------NA----------							
20	AR1232-D	----------NA----------							
21	AR1232-E	----------NA----------							
22	AR1242-A	----------NA----------							
23	AR1242-B	----------NA----------							
24	AR1242-C	----------NA----------							
25	AR1242-D	----------NA----------							
26	AR1242-E	----------NA----------							
27	AR1248-A	----------NA----------							
28	AR1248-B	----------NA----------							
29	AR1248-C	----------NA----------							
30	AR1248-D	----------NA----------							
31	AR1248-E	----------NA----------							
32	AR1254-A	----------NA----------							
33	AR1254-B	----------NA----------							
34	AR1254-C	----------NA----------							
35	AR1254-D	----------NA----------							
36	AR1254-E	----------NA----------							
37	AR1262-A	----------NA----------							
38	AR1262-B	----------NA----------							
39	AR1262-C	----------NA----------							
40	AR1262-D	----------NA----------							
41	AR1262-E	----------NA----------							
42	AR1268-A	----------NA----------							
43	AR1268-B	----------NA----------							
44	AR1268-C	----------NA----------							

10.6.4 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61737.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
 45     AR1268-D                          ----------NA----------
 46     AR1268-E                          ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     BK61709.d  PC160920.M       Wed Sep 21 11:40:04 2016
```

10.6.4 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61738.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
                    Evaluate Continuing Calibration Report

  Signal #1 : C:\msdchem\1\DATA\BK...20\BK61738.d\ECD1A.ch Vial: 149
  Signal #2 : C:\msdchem\1\DATA\BK160920\BK61738.d\ECD2B.ch
  Acq On    : 21 Sep 2016   7:48 am                    Operator: thomasa
  Sample    : cc1936-750,a16/60                        Inst    : GCBK
  Misc      : op48709,gbk1936,15,,,10,,s               Multiplr: 1.00
  IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

  Method       : C:\msdchem\1\METHODS\PC160920.M (ChemStation Integrator)
  Title        : PCB,rtx-clpest front,rtx-clpest2-rear
  Last Update  : Wed Sep 21 09:27:22 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.000  Min. Rel. Area :  85%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%     Max. Rel. Area : 115%

        Compound                 AvgRF   CCRF      %Dev Area% Dev(min)RT Window
  ---------------------------------------------------------------------------
  1 s   TCMX                    42.022  44.755 E6  -6.5  102   0.00    2.39- 2.59
  2     AR1016-A                 1.676   1.619 E6   3.4  102   0.01    3.06- 3.26
  3     AR1016-B                 3.424   3.490 E6  -1.9  103   0.01    3.53- 3.73
  4     AR1016-C                 1.289   1.285 E6   0.3  101   0.01    3.75- 3.81
  5     AR1016-D               526.524 478.263 E3   9.2   90   0.01    3.94- 4.00
  6     AR1016-E                 1.377   1.366 E6   0.8  102   0.01    4.20- 4.26
  7     AR1260-A                 1.951   1.945 E6   0.3  103   0.01    5.66- 5.86
  8     AR1260-B                 2.827   2.835 E6  -0.3  103   0.01    6.04- 6.24
  9     AR1260-C                 2.920   2.976 E6  -1.9  103   0.02    6.44- 6.64
 10     AR1260-D                 4.325   4.632 E6  -7.1  105   0.01    7.42- 7.62
 11     AR1260-E                 1.791   1.850 E6  -3.3  104   0.02    7.86- 8.06
 12     AR1260-F                 1.051   1.101 E6  -4.8  108   0.00    8.82- 9.02
 13 s   DCB                     31.600  33.415 E6  -5.7  109   0.01    9.58- 9.78
 14     AR1221-A                          ----------NA----------
 15     AR1221-B                          ----------NA----------
 16     AR1221-C                          ----------NA----------
 17     AR1232-A                          ----------NA----------
 18     AR1232-B                          ----------NA----------
 19     AR1232-C                          ----------NA----------
 20     AR1232-D                          ----------NA----------
 21     AR1232-E                          ----------NA----------
 22     AR1242-A                          ----------NA----------
 23     AR1242-B                          ----------NA----------
 24     AR1242-C                          ----------NA----------
 25     AR1242-D                          ----------NA----------
 26     AR1242-E                          ----------NA----------
 27     AR1248-A                          ----------NA----------
 28     AR1248-B                          ----------NA----------
 29     AR1248-C                          ----------NA----------
 30     AR1248-D                          ----------NA----------
 31     AR1248-E                          ----------NA----------
 32     AR1254-A                          ----------NA----------
 33     AR1254-B                          ----------NA----------
 34     AR1254-C                          ----------NA----------
 35     AR1254-D                          ----------NA----------
 36     AR1254-E                          ----------NA----------
 37     AR1262-A                          ----------NA----------
 38     AR1262-B                          ----------NA----------
 39     AR1262-C                          ----------NA----------
 40     AR1262-D                          ----------NA----------
 41     AR1262-E                          ----------NA----------
```

10.6.5 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61738.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
 42     AR1268-A                          ----------NA----------
 43     AR1268-B                          ----------NA----------
 44     AR1268-C                          ----------NA----------
 45     AR1268-D                          ----------NA----------
 46     AR1268-E                          ----------NA----------

 *****  Signal #2   *****

  1 s   TCMX                    77.336  76.678 E6   0.9   98   0.00    2.34- 2.54
  2     AR1016-A                 3.029   2.821 E6   6.9  100   0.00    3.17- 3.37

            ----------------------- True    Calc.   % Drift  ------------
  3     AR1016-B                750.000 758.761     -1.2  102   0.00    3.64- 3.84

            ----------------------- AvgRF   CCRF     % Dev   ------------
  4     AR1016-C                 2.325   2.453 E6  -5.5  104   0.00    3.78- 3.98

            ----------------------- True    Calc.   % Drift  ------------
  5     AR1016-D                750.000 747.824      0.3  101   0.00    4.07- 4.13

            ----------------------- AvgRF   CCRF     % Dev   ------------
  6     AR1016-E                 1.789   1.696 E6   5.2   99   0.00    4.39- 4.45
  7     AR1260-A                 3.440   3.356 E6   2.4  102   0.00    5.96- 6.16
  8     AR1260-B                 3.944   3.907 E6   0.9  104   0.00    6.25- 6.45
  9     AR1260-C                 5.095   5.236 E6  -2.8  106   0.00    6.78- 6.98
 10     AR1260-D                 6.450   6.682 E6  -3.6  106   0.00    7.74- 7.94
 11     AR1260-E                 4.160   4.259 E6  -2.4  107   0.00    8.32- 8.52
 12     AR1260-F                 1.640   1.735 E6  -5.8  111   0.00    9.24- 9.44
 13 s   DCB                     43.929  47.926 E6  -9.1  106   0.00   10.12-10.32
 14     AR1221-A                          ----------NA----------
 15     AR1221-B                          ----------NA----------
 16     AR1221-C                          ----------NA----------
 17     AR1232-A                          ----------NA----------
 18     AR1232-B                          ----------NA----------
 19     AR1232-C                          ----------NA----------
 20     AR1232-D                          ----------NA----------
 21     AR1232-E                          ----------NA----------
 22     AR1242-A                          ----------NA----------
 23     AR1242-B                          ----------NA----------
 24     AR1242-C                          ----------NA----------
 25     AR1242-D                          ----------NA----------
 26     AR1242-E                          ----------NA----------
 27     AR1248-A                          ----------NA----------
 28     AR1248-B                          ----------NA----------
 29     AR1248-C                          ----------NA----------
 30     AR1248-D                          ----------NA----------
 31     AR1248-E                          ----------NA----------
 32     AR1254-A                          ----------NA----------
 33     AR1254-B                          ----------NA----------
 34     AR1254-C                          ----------NA----------
 35     AR1254-D                          ----------NA----------
 36     AR1254-E                          ----------NA----------
 37     AR1262-A                          ----------NA----------
 38     AR1262-B                          ----------NA----------
 39     AR1262-C                          ----------NA----------
 40     AR1262-D                          ----------NA----------
 41     AR1262-E                          ----------NA----------
 42     AR1268-A                          ----------NA----------
 43     AR1268-B                          ----------NA----------
 44     AR1268-C                          ----------NA----------
```

10.6.5 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-CC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61738.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
 45     AR1268-D                          ----------NA----------
 46     AR1268-E                          ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     BK61709.d  PC160920.M       Wed Sep 21 09:40:10 2016
```

10.6.5 10

Raw Data: BK61745.D

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-ECC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61745.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

```
                    Evaluate Continuing Calibration Report

  Signal #1 : C:\msdchem\1\DATA\BK...20\BK61745.d\ECD1A.ch Vial: 149
  Signal #2 : C:\msdchem\1\DATA\BK160920\BK61745.d\ECD2B.ch
  Acq On    : 21 Sep 2016   9:39 am                    Operator: thomasa
  Sample    : ecc1936-750,a16/60                       Inst    : GCBK
  Misc      : op48709,gbk1936,15,,,10,,s               Multiplr: 1.00
  IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

  Method       : C:\msdchem\1\METHODS\PC160920.M (ChemStation Integrator)
  Title        : PCB,rtx-clpest front,rtx-clpest2-rear
  Last Update  : Wed Sep 21 09:27:22 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.000  Min. Rel. Area :  80%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  20%     Max. Rel. Area : 120%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 s	TCMX	42.022	38.390 E6	8.6	88	0.00	2.39- 2.59
2	AR1016-A	1.676	1.392 E6	16.9	87	0.00	3.06- 3.26
3	AR1016-B	3.424	3.079 E6	10.1	91	0.00	3.52- 3.72
4	AR1016-C	1.289	1.144 E6	11.2	90	0.00	3.74- 3.80
5	AR1016-D	526.524	454.725 E3	13.6	86	0.00	3.94- 4.00
6	AR1016-E	1.377	1.166 E6	15.3	87	0.00	4.19- 4.25
7	AR1260-A	1.951	1.642 E6	15.8	87	0.00	5.65- 5.85
8	AR1260-B	2.827	2.481 E6	12.2	90	0.00	6.03- 6.23
9	AR1260-C	2.920	2.586 E6	11.4	90	0.00	6.43- 6.63
10	AR1260-D	4.325	4.034 E6	6.7	91	0.00	7.41- 7.61
11	AR1260-E	1.791	1.736 E6	3.1	98	0.00	7.85- 8.05
12	AR1260-F	1.051	0.972 E6	7.5	95	0.00	8.81- 9.01
13 s	DCB	31.600	30.773 E6	2.6	101	0.00	9.57- 9.77
14	AR1221-A		----------NA----------				
15	AR1221-B		----------NA----------				
16	AR1221-C		----------NA----------				
17	AR1232-A		----------NA----------				
18	AR1232-B		----------NA----------				
19	AR1232-C		----------NA----------				
20	AR1232-D		----------NA----------				
21	AR1232-E		----------NA----------				
22	AR1242-A		----------NA----------				
23	AR1242-B		----------NA----------				
24	AR1242-C		----------NA----------				
25	AR1242-D		----------NA----------				
26	AR1242-E		----------NA----------				
27	AR1248-A		----------NA----------				
28	AR1248-B		----------NA----------				
29	AR1248-C		----------NA----------				
30	AR1248-D		----------NA----------				
31	AR1248-E		----------NA----------				
32	AR1254-A		----------NA----------				
33	AR1254-B		----------NA----------				
34	AR1254-C		----------NA----------				
35	AR1254-D		----------NA----------				
36	AR1254-E		----------NA----------				
37	AR1262-A		----------NA----------				
38	AR1262-B		----------NA----------				
39	AR1262-C		----------NA----------				
40	AR1262-D		----------NA----------				
41	AR1262-E		----------NA----------				

10.6.6 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-ECC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61745.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

42	AR1268-A		----------NA----------				
43	AR1268-B		----------NA----------				
44	AR1268-C		----------NA----------				
45	AR1268-D		----------NA----------				
46	AR1268-E		----------NA----------				

***** Signal #2 *****

1 s	TCMX	77.336	68.666 E6	11.2	87	0.00	2.34- 2.54
2	AR1016-A	3.029	2.529 E6	16.5	90	0.00	3.18- 3.38
		---------- True	Calc.	% Drift	----------		
3	AR1016-B	750.000	705.382	5.9	94	0.00	3.64- 3.84
		---------- AvgRF	CCRF	% Dev	----------		
4	AR1016-C	2.325	2.176 E6	6.4	92	0.00	3.79- 3.99
		---------- True	Calc.	% Drift	----------		
5	AR1016-D	750.000	661.721	11.8	90	0.00	4.08- 4.14
		---------- AvgRF	CCRF	% Dev	----------		
6	AR1016-E	1.789	1.499 E6	16.2	88	0.00	4.39- 4.45
7	AR1260-A	3.440	2.932 E6	14.8	89	0.00	5.97- 6.17
8	AR1260-B	3.944	3.400 E6	13.8	90	0.00	6.25- 6.45
9	AR1260-C	5.095	4.488 E6	11.9	90	0.00	6.78- 6.98
10	AR1260-D	6.450	5.928 E6	8.1	94	0.00	7.74- 7.94
11	AR1260-E	4.160	3.838 E6	7.7	96	0.00	8.32- 8.52
12	AR1260-F	1.640	1.523 E6	7.1	97	0.00	9.24- 9.44
13 s	DCB	43.929	41.605 E6	5.3	92	0.00	10.12-10.32
14	AR1221-A		----------NA----------				
15	AR1221-B		----------NA----------				
16	AR1221-C		----------NA----------				
17	AR1232-A		----------NA----------				
18	AR1232-B		----------NA----------				
19	AR1232-C		----------NA----------				
20	AR1232-D		----------NA----------				
21	AR1232-E		----------NA----------				
22	AR1242-A		----------NA----------				
23	AR1242-B		----------NA----------				
24	AR1242-C		----------NA----------				
25	AR1242-D		----------NA----------				
26	AR1242-E		----------NA----------				
27	AR1248-A		----------NA----------				
28	AR1248-B		----------NA----------				
29	AR1248-C		----------NA----------				
30	AR1248-D		----------NA----------				
31	AR1248-E		----------NA----------				
32	AR1254-A		----------NA----------				
33	AR1254-B		----------NA----------				
34	AR1254-C		----------NA----------				
35	AR1254-D		----------NA----------				
36	AR1254-E		----------NA----------				
37	AR1262-A		----------NA----------				
38	AR1262-B		----------NA----------				
39	AR1262-C		----------NA----------				
40	AR1262-D		----------NA----------				
41	AR1262-E		----------NA----------				
42	AR1268-A		----------NA----------				
43	AR1268-B		----------NA----------				
44	AR1268-C		----------NA----------				

10.6.6 10

Continuing Calibration Summary

Job Number: MC47774 **Sample:** GBK1936-ECC1936
Account: PLUMNYB Plumley Engineering, P.C. **Lab FileID:** BK61745.D
Project: Market Basket, 63 Gates Avenue, Geneva, NY

45	AR1268-D		----------NA----------				
46	AR1268-E		----------NA----------				

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 BK61709.d  PC160920.M       Wed Sep 21 09:58:48 2016
```

10.6.6 10

SGS ACCUTEST New England

Section 11

GC Semi-volatiles

Raw Data

11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61734.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:47 pm
Operator : thomasa
Sample : mc47774-1,op48709
Misc : op48709,gbk1936,15.64,,,10,,s
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:05 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.486	2.440	1478.3E6	2700.9E6	35.180	34.924
Spiked Amount 40.000			Recovery =		87.95%	87.31%
13) s DCB	9.668	10.213	1280.4E6	1788.6E6	40.519	40.716
Spiked Amount 40.000			Recovery =		101.30%	101.79%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

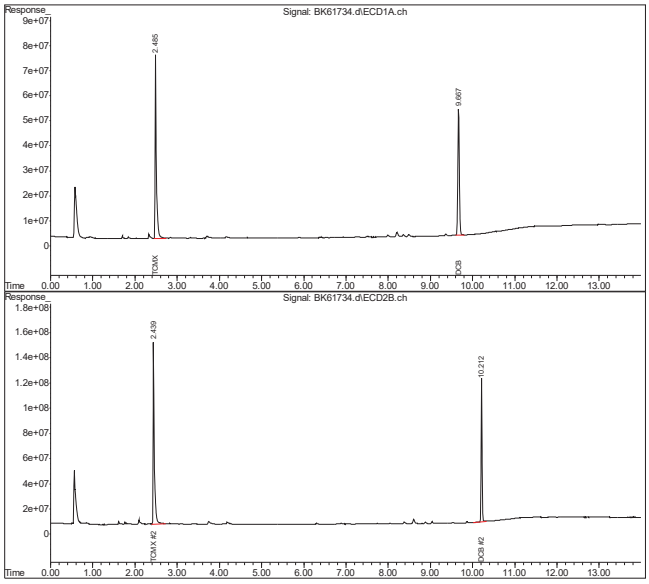
11.1.1 11

Quantitation Report (QT Reviewed)

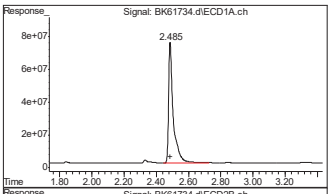
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61734.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:47 pm
Operator : thomasa
Sample : mc47774-1,op48709
Misc : op48709,gbk1936,15.64,,,10,,s
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:05 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

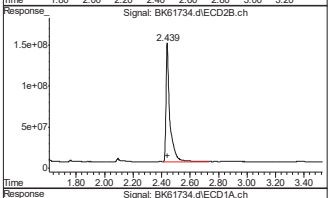


11.1.1 11



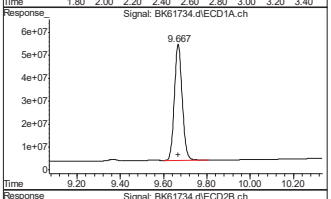
#1 TCMX

R.T.: 2.486 min
Delta R.T.: 0.000 min
Response: 1478313944
Conc: 35.18 ng/ml



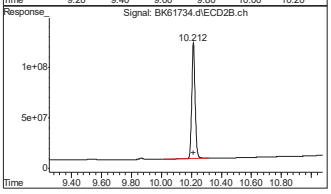
#1 TCMX

R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 2700924278
Conc: 34.92 ng/ml



#13 DCB

R.T.: 9.668 min
Delta R.T.: 0.000 min
Response: 1280412077
Conc: 40.52 ng/ml



#13 DCB

R.T.: 10.213 min
Delta R.T.: -0.001 min
Response: 1788582911
Conc: 40.72 ng/ml

11.1.1 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61735.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 7:03 pm
Operator : thomasa
Sample : mc47774-2,op48709
Misc : op48709,gbk1936,15.54,,,10,,s
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:17 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.488	2.441	1480.3E6	2671.3E6	35.226	34.541
Spiked Amount 40.000			Recovery =		88.06%	86.35%
13) s DCB	9.668	10.214	1335.7E6	1883.7E6	42.268	42.882
Spiked Amount 40.000			Recovery =		105.67%	107.21%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

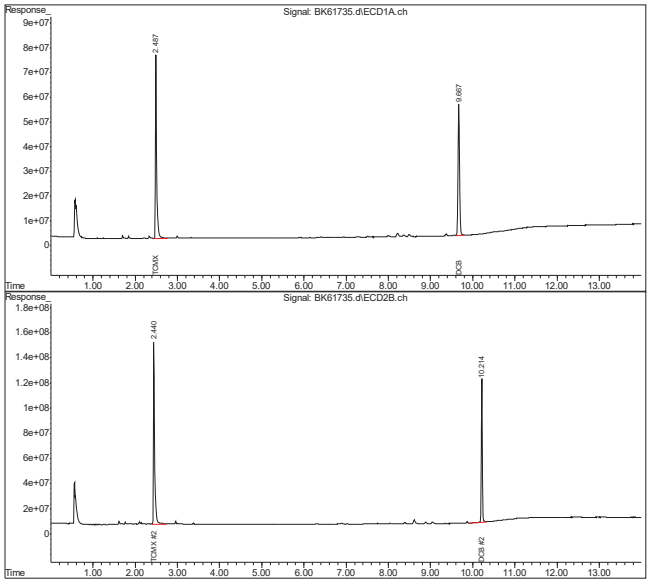
11.1.2 11

Quantitation Report (QT Reviewed)

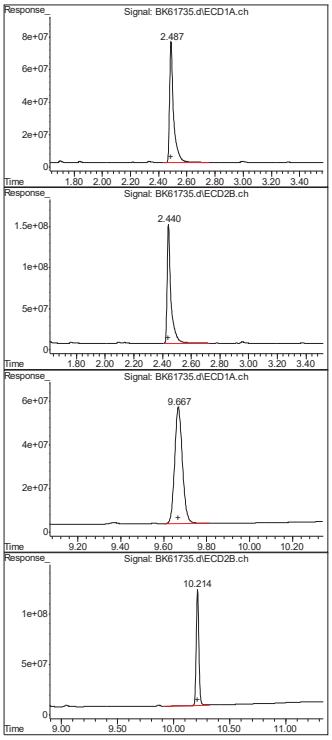
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61735.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 7:03 pm
Operator : thomasa
Sample : mc47774-2,op48709
Misc : op48709,gbk1936,15.54,,,10,,s
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:17 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.1.2 11



#1 TCMX
R.T.: 2.488 min
Delta R.T.: 0.002 min
Response: 1480257377
Conc: 35.23 ng/ml

#1 TCMX
R.T.: 2.441 min
Delta R.T.: 0.001 min
Response: 2671279616
Conc: 34.54 ng/ml

#13 DCB
R.T.: 9.668 min
Delta R.T.: 0.000 min
Response: 1335688351
Conc: 42.27 ng/ml

#13 DCB
R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 1883747733
Conc: 42.88 ng/ml

11.1.2 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61736.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 7:19 pm
Operator : thomasa
Sample : mc47774-3,op48709
Misc : op48709,gbk1936,15.71,,,10,,s
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:29 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.489	2.442	1446.2E6	2670.0E6	34.415	34.524
Spiked Amount 40.000			Recovery =		86.04%	86.31%
13) s DCB	9.670	10.214	1203.4E6	1689.7E6	38.081	38.464
Spiked Amount 40.000			Recovery =		95.20%	96.16%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

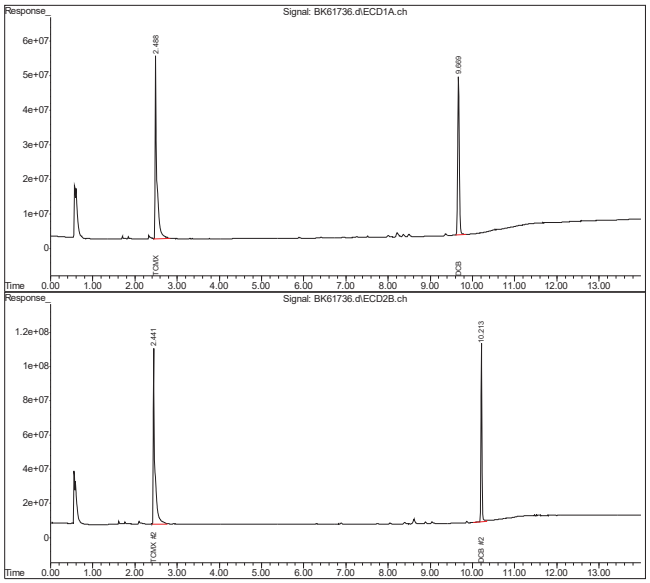
11.1.3 11

Quantitation Report (QT Reviewed)

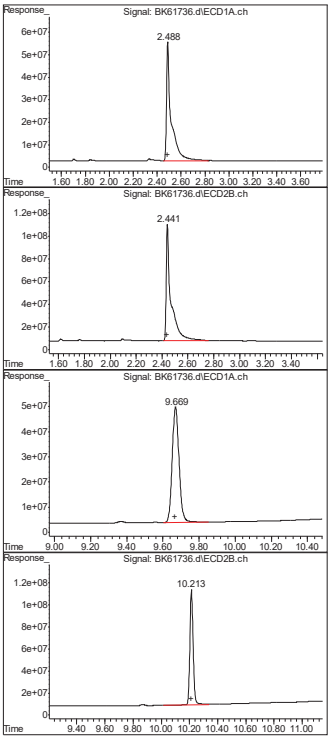
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61736.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 7:19 pm
Operator : thomasa
Sample : mc47774-3,op48709
Misc : op48709,gbk1936,15.71,,,10,,s
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:29 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.1.3 11



#1 TCMX

R.T.: 2.489 min
Delta R.T.: 0.003 min
Response: 1446190741
Conc: 34.42 ng/ml

#1 TCMX

R.T.: 2.442 min
Delta R.T.: 0.002 min
Response: 2669961755
Conc: 34.52 ng/ml

#13 DCB

R.T.: 9.670 min
Delta R.T.: 0.003 min
Response: 1203376892
Conc: 38.08 ng/ml

#13 DCB

R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 1689661060
Conc: 38.46 ng/ml

11.1.3 11

BK61736.d PC160920.M Wed Sep 21 09:46:30 2016 Page 4

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61739.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:03 am
Operator : thomasa
Sample : mc47774-4,op48709
Misc : op48709,gbk1936,15.78,,,10,,s
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:40:44 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.487	2.441	1504.6E6	2725.6E6	35.806	35.243
Spiked Amount 40.000			Recovery =		89.51%	88.11%
13) s DCB	9.674	10.216	1311.2E6	1845.2E6	41.494	42.004m
Spiked Amount 40.000			Recovery =		103.74%	105.01%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.1.4 11

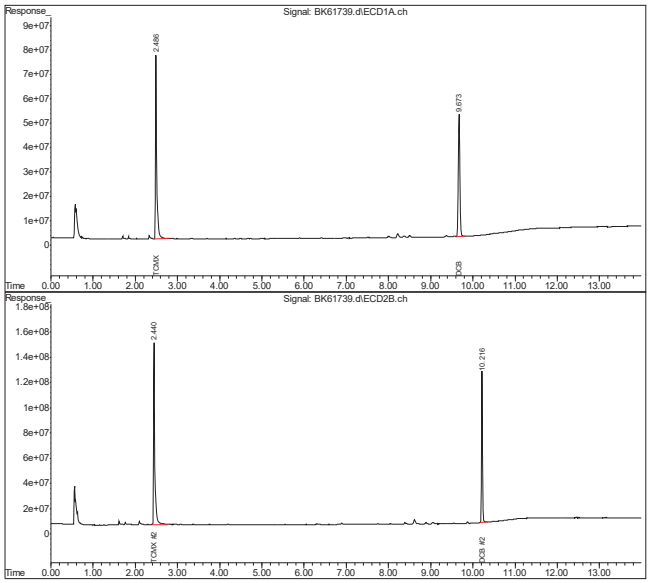
PC160920.M Wed Sep 21 09:46:42 2016 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61739.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:03 am
Operator : thomasa
Sample : mc47774-4,op48709
Misc : op48709,gbk1936,15.78,,,10,,s
ALS Vial : 21 Sample Multiplier: 1

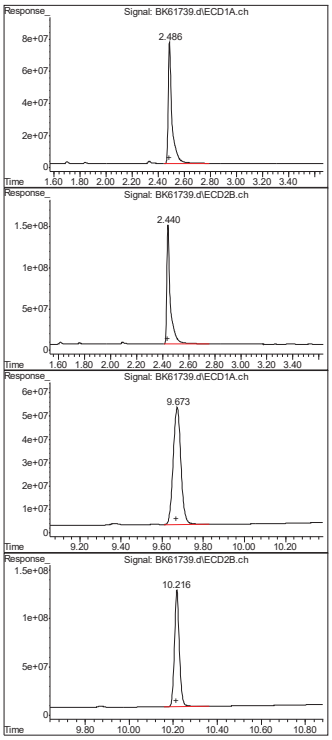
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:40:44 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.1.4 11

PC160920.M Wed Sep 21 09:46:42 2016 Page: 2



#1 TCMX

R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 1504643357
Conc: 35.81 ng/ml

#1 TCMX

R.T.: 2.441 min
Delta R.T.: 0.002 min
Response: 2725585016
Conc: 35.24 ng/ml

#13 DCB

R.T.: 9.674 min
Delta R.T.: 0.006 min
Response: 1311226466
Conc: 41.49 ng/ml

#13 DCB

R.T.: 10.216 min
Delta R.T.: 0.002 min
Response: 1845186990
Conc: 42.00 ng/ml m

11.1.4 11

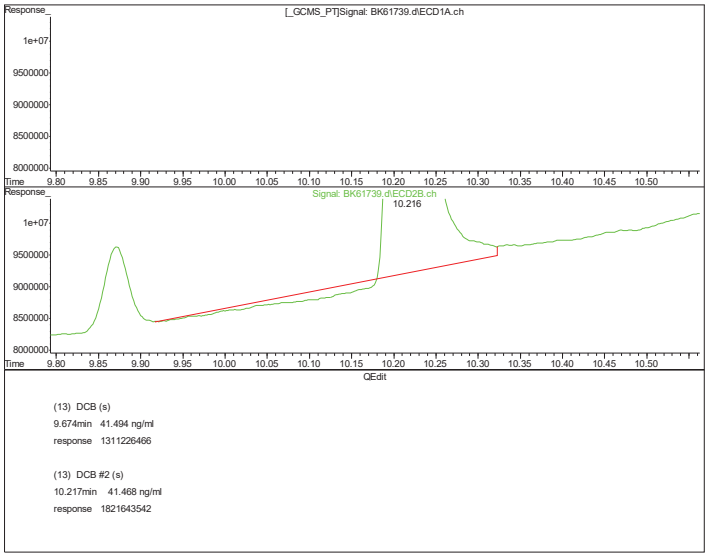
BK61739.d PC160920.M Wed Sep 21 09:46:42 2016 Page 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61739.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:03 am
Operator : thomasa
Sample : mc47774-4,op48709
Misc : op48709,gbk1936,15.78,,,10,,s
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:11:58 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.674min 41.494 ng/ml
response 1311226466

(13) DCB #2 (s)
10.217min 41.468 ng/ml
response 1821643542

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:40:42 2016 Page: 1

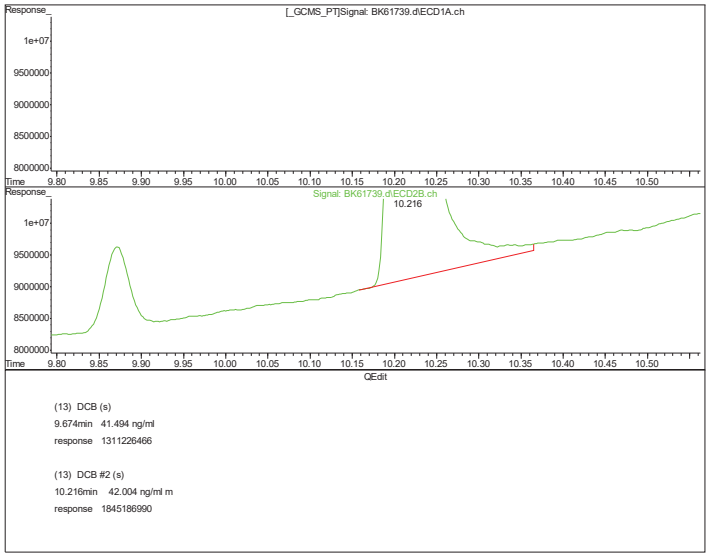
11.1.4.1 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61739.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:03 am
Operator : thomasa
Sample : mc47774-4,op48709
Misc : op48709,gbk1936,15.78,,,10,,s
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:11:58 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.674min 41.494 ng/ml
response 1311226466

(13) DCB #2 (s)
10.216min 42.004 ng/ml m
response 1845186990

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:40:46 2016 Page: 1

11.1.4.2 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61740.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:19 am
Operator : thomasa
Sample : mc47774-5,op48709
Misc : op48709,gbk1936,15.02,,,10,,s
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:40:58 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.489	2.443	1828.2E6	3298.3E6	43.506	42.649
Spiked Amount 40.000			Recovery =		108.77%	106.62%
13) s DCB	9.672	10.216	1515.9E6	2161.3E6	47.971	49.200
Spiked Amount 40.000			Recovery =		119.93%	123.00%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

PC160920.M Wed Sep 21 09:46:46 2016 Page: 1

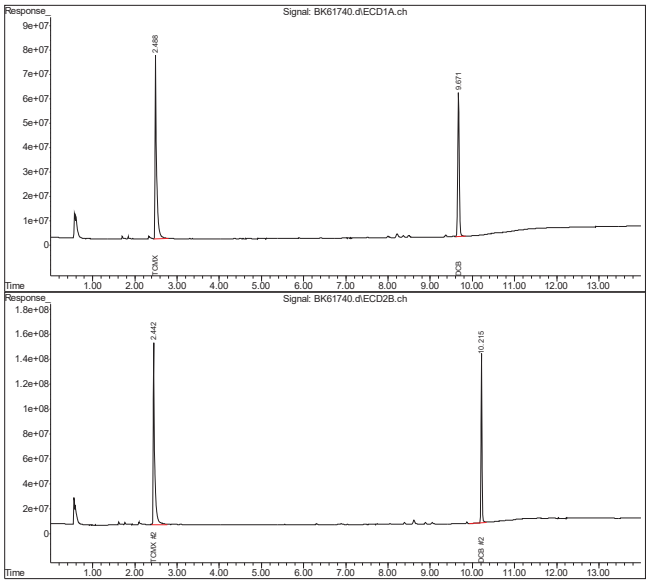
11.1.5 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61740.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:19 am
Operator : thomasa
Sample : mc47774-5,op48709
Misc : op48709,gbk1936,15.02,,,10,,s
ALS Vial : 22 Sample Multiplier: 1

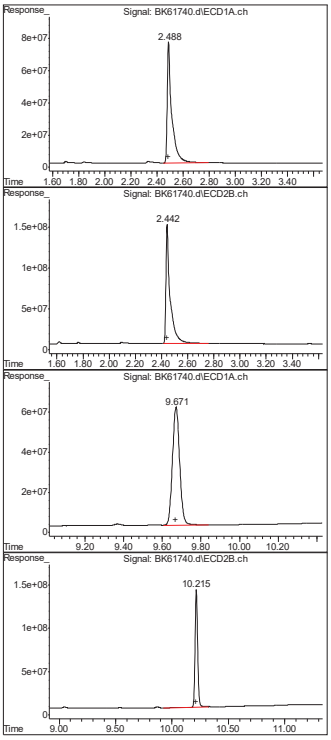
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:40:58 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



PC160920.M Wed Sep 21 09:46:46 2016 Page: 2

11.1.5 11



#1 TCMX

R.T.: 2.489 min
Delta R.T.: 0.003 min
Response: 1828200932
Conc: 43.51 ng/ml

#1 TCMX

R.T.: 2.443 min
Delta R.T.: 0.003 min
Response: 3298331384
Conc: 42.65 ng/ml

#13 DCB

R.T.: 9.672 min
Delta R.T.: 0.004 min
Response: 1515886880
Conc: 47.97 ng/ml

#13 DCB

R.T.: 10.216 min
Delta R.T.: 0.001 min
Response: 2161300017
Conc: 49.20 ng/ml

11.1.5 11

BK61740.d PC160920.M Wed Sep 21 09:46:46 2016 Page 4

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri 09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61741.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:35 am
Operator : thomasa
Sample : mc47774-6,op48709
Misc : op48709,gbk1936,15.93,,,10,,s
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:41:45 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.489	2.443	1229.1E6	1945.9E6	29.249	25.162
	Spiked Amount 40.000			Recovery	=	73.12%	62.91%
13) s	DCB	9.667	10.214	1285.8E6	1568.4E6	40.689m	35.703m
	Spiked Amount 40.000			Recovery	=	101.72%	89.26%
	Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.1.6 11

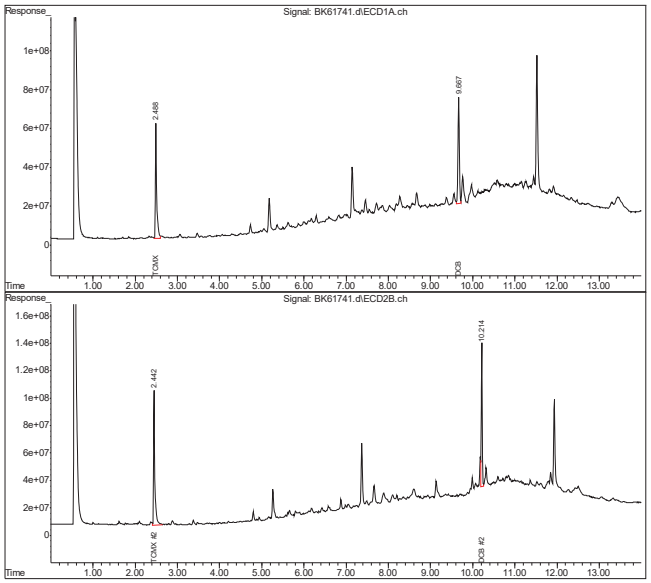
PC160920.M Wed Sep 21 09:46:50 2016 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61741.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:35 am
Operator : thomasa
Sample : mc47774-6,op48709
Misc : op48709,gbk1936,15.93,,,10,,s
ALS Vial : 23 Sample Multiplier: 1

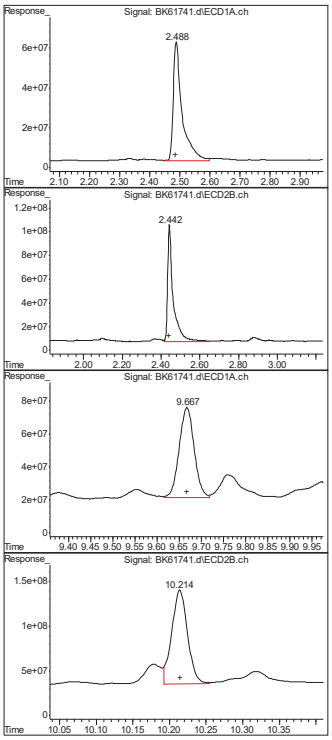
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:41:45 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.1.6 11

PC160920.M Wed Sep 21 09:46:50 2016 Page: 2



#1 TCMX

R.T.: 2.489 min
Delta R.T.: 0.000 min
Response: 1229088564
Conc: 29.25 ng/ml

#1 TCMX

R.T.: 2.443 min
Delta R.T.: 0.003 min
Response: 1945923454
Conc: 25.16 ng/ml

#13 DCB

R.T.: 9.667 min
Delta R.T.: 0.000 min
Response: 1285784388
Conc: 40.69 ng/ml m

#13 DCB

R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 1568386859
Conc: 35.70 ng/ml m

11.1.6 11

BK61741.d PC160920.M Wed Sep 21 09:46:50 2016 Page 4

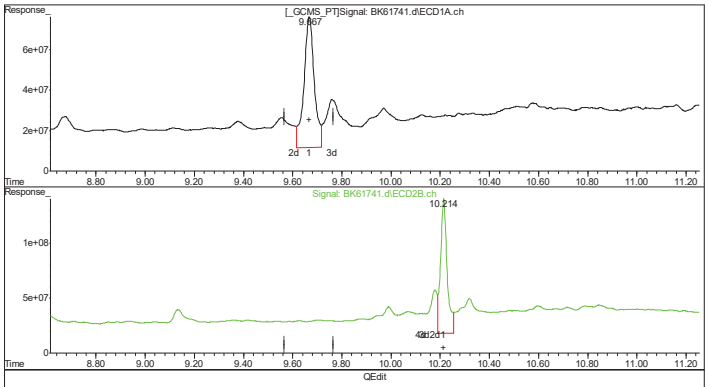
Sample Results: **BK61741.D**

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61741.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:35 am
Operator : thomasa
Sample : mc47774-6,op48709
Misc : op48709,gbk1936,15.93,,,10,,s
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:12:08 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.668min 59.842 ng/ml
response 1891009159

(13) DCB #2 (s)
10.214min 52.147 ng/ml
response 2290727980

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:41:13 2016 Page: 1

11.1.6.1 11

BK61741.D edits: DCB

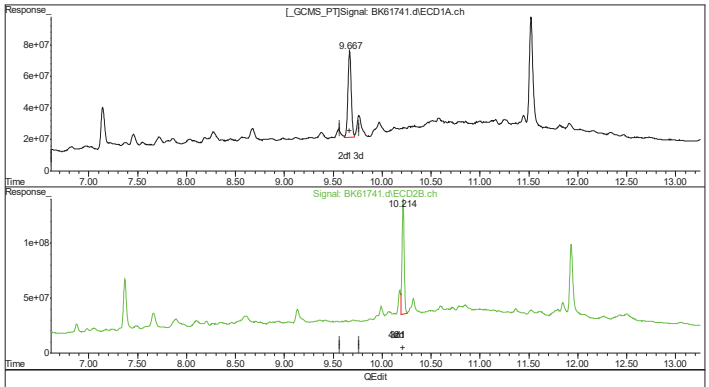
Sample Results: **BK61741.D**

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61741.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:35 am
Operator : thomasa
Sample : mc47774-6,op48709
Misc : op48709,gbk1936,15.93,,,10,,s
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:12:08 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.667min 40.689 ng/ml m
response 1285784388

(13) DCB #2 (s)
10.214min 35.703 ng/ml m
response 1568386859

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:41:20 2016 Page: 1

11.1.6.2 11

BK61741.D edits: DCB

Sample Results: **BK61742.D**

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61742.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:51 am
Operator : thomasa
Sample : mc47774-7,op48709
Misc : op48709,gbk1936,15.38,,,10,,s
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:24:59 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.493	2.447	1347.7E6	2067.9E6	32.072	26.739
Spiked Amount 40.000			Recovery =		80.18%	66.85%
13) s DCB	9.674	10.219	1300.0E6	1228.0E6	41.138m	27.954m#
Spiked Amount 40.000			Recovery =		102.84%	69.88%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

PC160920.M Wed Sep 21 09:46:54 2016 Page: 1

11.1.7 11

BK61742.D: MC47774-7 SMALL PILE page 1 of 3

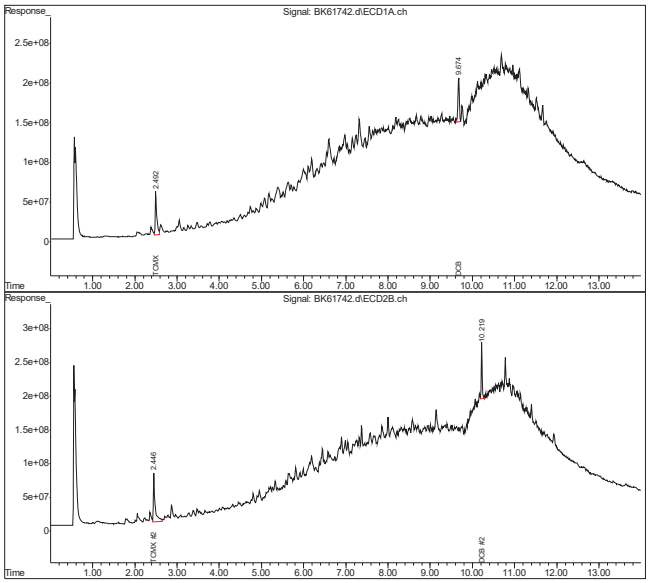
Sample Results: **BK61742.D**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61742.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:51 am
Operator : thomasa
Sample : mc47774-7,op48709
Misc : op48709,gbk1936,15.38,,,10,,s
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:24:59 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

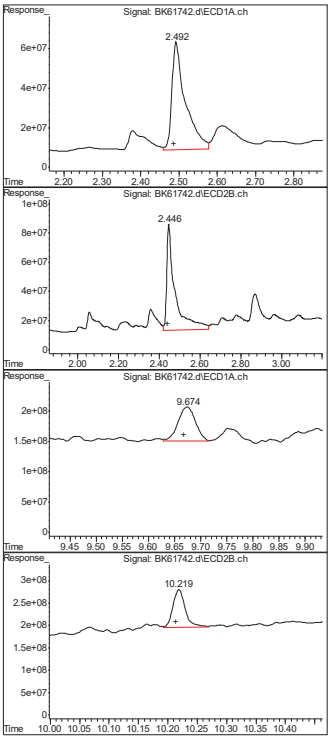
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



PC160920.M Wed Sep 21 09:46:54 2016 Page: 2

11.1.7 11

BK61742.D: MC47774-7 SMALL PILE page 2 of 3



#1 TCMX

R.T.: 2.493 min
Delta R.T.: 0.007 min
Response: 1347730961
Conc: 32.07 ng/ml

#1 TCMX

R.T.: 2.447 min
Delta R.T.: 0.007 min
Response: 2067861327
Conc: 26.74 ng/ml

#13 DCB

R.T.: 9.674 min
Delta R.T.: 0.007 min
Response: 1299980065
Conc: 41.14 ng/ml m

#13 DCB

R.T.: 10.219 min
Delta R.T.: 0.004 min
Response: 1227998314
Conc: 27.95 ng/ml m

11.1.7 11

BK61742.d PC160920.M Wed Sep 21 09:46:54 2016 Page 4

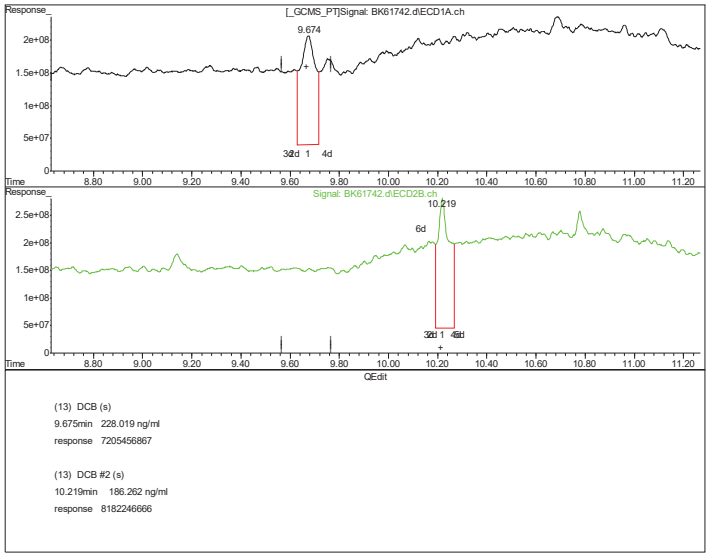
BK61742.D: MC47774-7 SMALL PILE page 3 of 3

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61742.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:51 am
Operator : thomasa
Sample : mc47774-7,op48709
Misc : op48709,gbk1936,15.38,,,10,,s
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:12:16 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.675min 228.019 ng/ml
response 7205456867

(13) DCB #2 (s)
10.219min 186.262 ng/ml
response 8182246666

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:24:17 2016 Page: 1

11.1.7.1 11

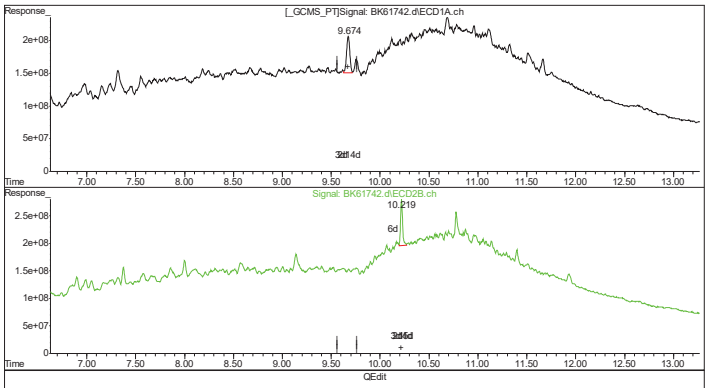
BK61742.D edits: DCB

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61742.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 8:51 am
Operator : thomasa
Sample : mc47774-7,op48709
Misc : op48709,gbk1936,15.38,,,10,,s
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:12:16 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.674min 41.138 ng/ml m
response 1299980065

(13) DCB #2 (s)
10.219min 27.954 ng/ml m
response 1227998314

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:24:28 2016 Page: 1

11.1.7.2 11

BK61742.D edits: DCB

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61743.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:07 am
Operator : thomasa
Sample : mc47774-8,op48709
Misc : op48709,gbk1936,15.47,,,10,,s
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:25:30 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.489	2.444	1350.2E6	2470.3E6	32.132	31.942
Spiked Amount	40.000		Recovery	=	80.33%	79.86%
13) s DCB	9.671	10.216	1122.2E6	1467.6E6	35.513	33.409m
Spiked Amount	40.000		Recovery	=	88.78%	83.52%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

PC160920.M Wed Sep 21 09:46:58 2016 Page: 1

11.1.8 11

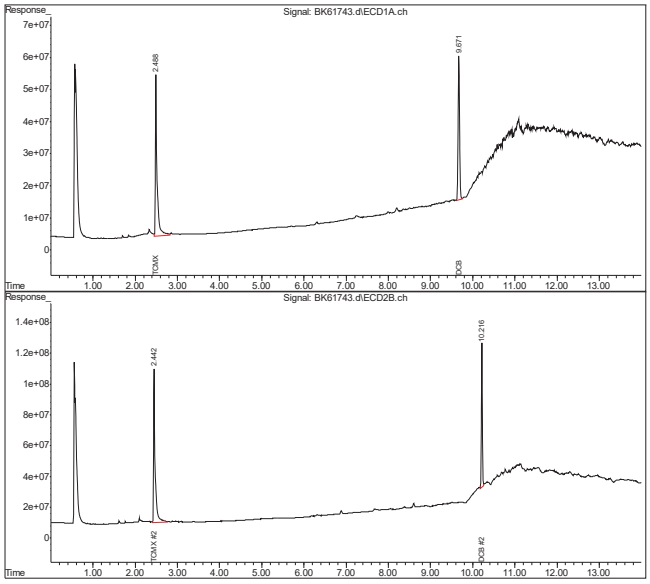
BK61743.D: MC47774-8 FIELD DUPE page 1 of 3

Quantitation Report (QT Reviewed)

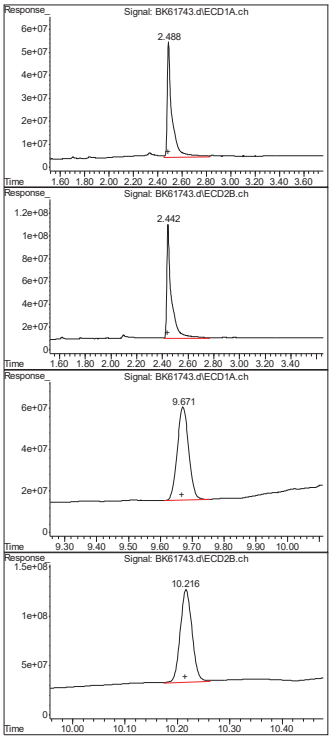
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61743.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:07 am
Operator : thomasa
Sample : mc47774-8,op48709
Misc : op48709,gbk1936,15.47,,,10,,s
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:25:30 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.1.8 11



#1 TCMX
R.T.: 2.489 min
Delta R.T.: 0.003 min
Response: 1350242773
Conc: 32.13 ng/ml

#1 TCMX
R.T.: 2.444 min
Delta R.T.: 0.004 min
Response: 2470252293
Conc: 31.94 ng/ml

#13 DCB
R.T.: 9.671 min
Delta R.T.: 0.004 min
Response: 1122222971
Conc: 35.51 ng/ml

#13 DCB
R.T.: 10.216 min
Delta R.T.: 0.002 min
Response: 1467597271
Conc: 33.41 ng/ml m

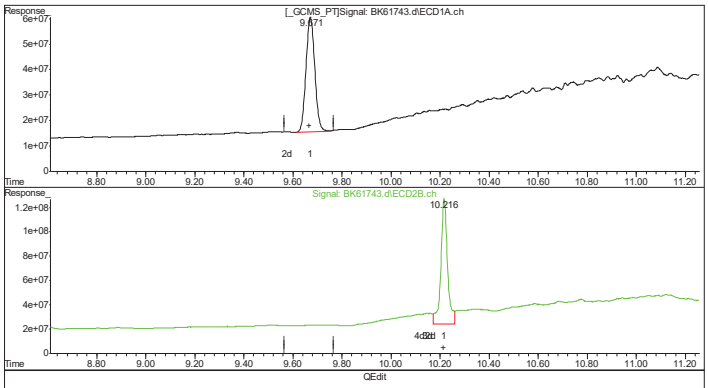
11.1.8 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61743.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:07 am
Operator : thomasa
Sample : mc47774-8,op48709
Misc : op48709,gbk1936,15.47,,,10,,s
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:25:09 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.671min 35.513 ng/ml
response 1122222971

(13) DCB #2 (s)
10.217min 44.190 ng/ml
response 1941193452

11.1.8.1 11

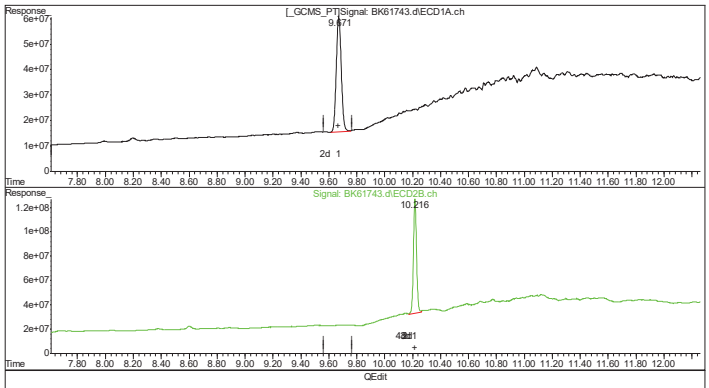
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61743.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:07 am
Operator : thomasa
Sample : mc47774-8,op48709
Misc : op48709,gbk1936,15.47,,,10,,s
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:25:09 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.671min 35.513 ng/ml
response 1122222971

(13) DCB #2 (s)
10.216min 33.409 ng/ml m
response 1467597271

11.1.8.2 11

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61730.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 5:44 pm
Operator : thomasa
Sample : op48709-mb
Misc : op48709,gbk1936,15.38,,,10,,s
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:34:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.487	2.440	1370.3E6	2518.2E6	32.610	32.561
Spiked Amount 40.000			Recovery =		81.53%	81.40%
13) s DCB	9.668	10.214	1347.2E6	1895.5E6	42.632	43.148
Spiked Amount 40.000			Recovery =		106.58%	107.87%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

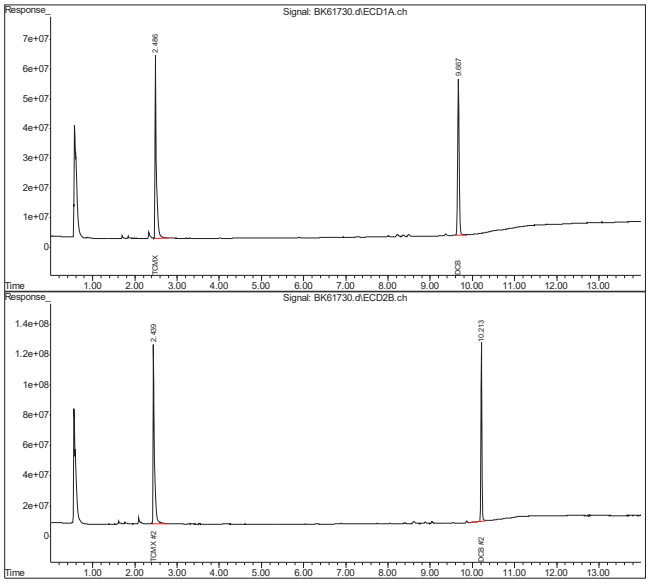
11.2.1 11

Quantitation Report (QT Reviewed)

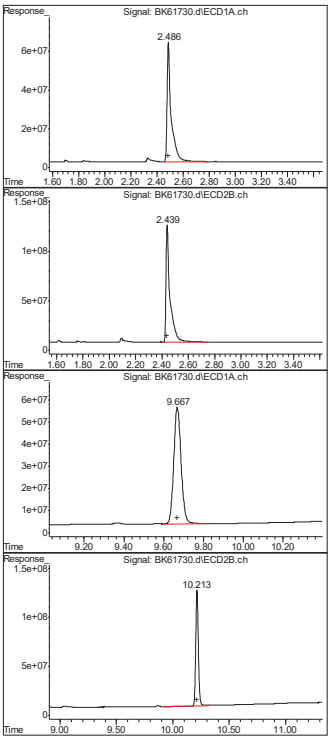
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61730.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 5:44 pm
Operator : thomasa
Sample : op48709-mb
Misc : op48709,gbk1936,15.38,,,10,,s
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:34:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.2.1 11



#1 TCMX
R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 1370328453
Conc: 32.61 ng/ml

#1 TCMX
R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 2518169676
Conc: 32.56 ng/ml

#13 DCB
R.T.: 9.668 min
Delta R.T.: 0.000 min
Response: 1347190394
Conc: 42.63 ng/ml

#13 DCB
R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 1895452499
Conc: 43.15 ng/ml

11.2.1 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61731.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 5:59 pm
Operator : thomasa
Sample : op48709-bs
Misc : op48709,gbk1936,15.25,,,10,,s
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:38:05 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
System Monitoring Compounds						
1) s TCMX	2.487	2.441	1488.3E6	2601.6E6	35.418	33.640
Spiked Amount 40.000			Recovery =		88.55%	84.10%
13) s DCB	9.667	10.214	1313.1E6	1827.0E6	41.554	41.590
Spiked Amount 40.000			Recovery =		103.89%	103.98%
Target Compounds						
2) AR1016-A	3.151	3.275	587.9E6	1054.7E6	350.864	348.236
3) AR1016-B	3.621	3.739	1241.1E6	2020.5E6	362.445	361.660
4) AR1016-C	3.763	3.886	466.2E6	893.9E6	361.737	384.532
5) AR1016-D	3.961	4.101	183.1E6	477.2E6	347.797	361.395
6) AR1016-E	4.216	4.421	498.5E6	647.4E6	362.043	361.910
7) AR1260-A	5.747	6.062	713.3E6	1246.0E6	365.588	362.197
8) AR1260-B	6.129	6.349	1040.0E6	1454.0E6	367.928	368.667
9) AR1260-C	6.528	6.880	1090.8E6	1920.2E6	373.559	376.889
10) AR1260-D	7.511	7.837	1718.0E6	2439.7E6	397.255	378.266
11) AR1260-E	7.943	8.420	688.5E6	1598.7E6	384.489	384.270
12) AR1260-F	8.909	9.335	420.3E6	674.6E6	399.874	411.398

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

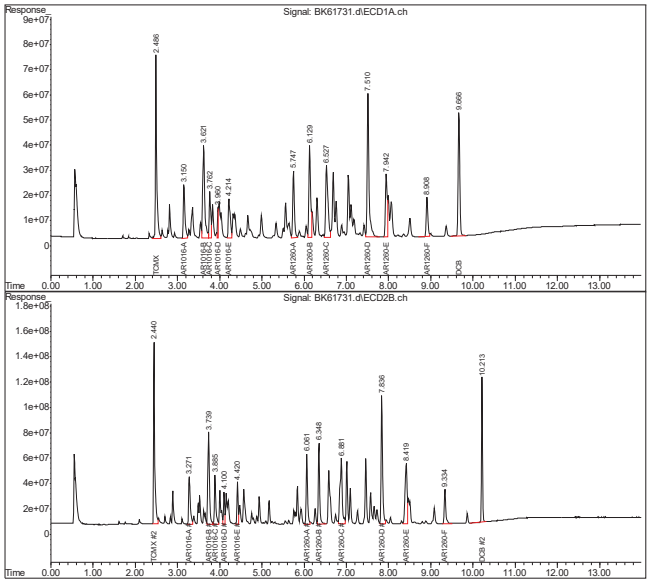
11.3.1 11

Quantitation Report (QT Reviewed)

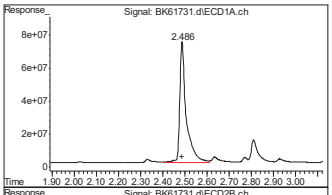
```
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61731.d
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 20 Sep 2016   5:59 pm
Operator  : thomasa
Sample    : op48709-bs
Misc      : op48709,gbk1936,15.25,,,10,,s
ALS Vial  : 15   Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:38:05 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title  : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

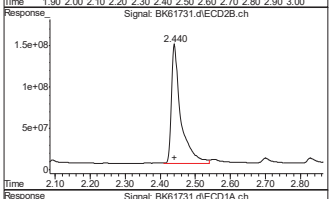


11.3.1 11



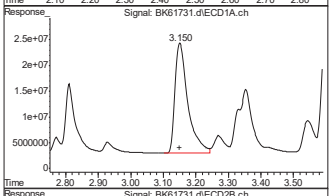
#1 TCMX

R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 1488325706
Conc: 35.42 ng/ml



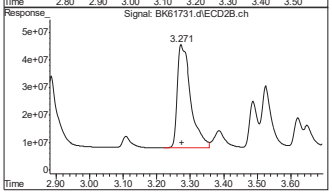
#1 TCMX

R.T.: 2.441 min
Delta R.T.: 0.001 min
Response: 2601572775
Conc: 33.64 ng/ml



#2 AR1016-A

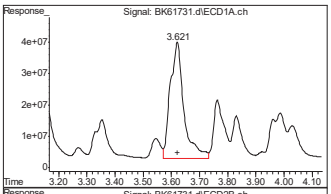
R.T.: 3.151 min
Delta R.T.: 0.000 min
Response: 587929645
Conc: 350.86 ng/ml



#2 AR1016-A

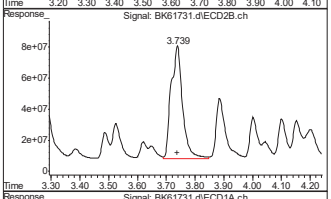
R.T.: 3.275 min
Delta R.T.: 0.000 min
Response: 1054738976
Conc: 348.24 ng/ml

11.3.1 11



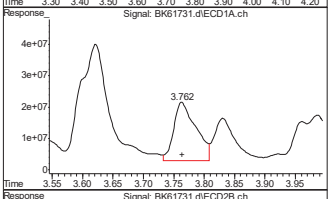
#3 AR1016-B

R.T.: 3.621 min
Delta R.T.: 0.000 min
Response: 1241136521
Conc: 362.44 ng/ml



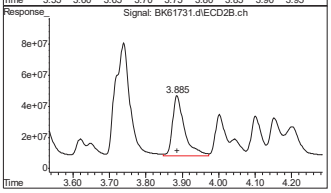
#3 AR1016-B

R.T.: 3.739 min
Delta R.T.: 0.000 min
Response: 2020484466
Conc: 361.66 ng/ml



#4 AR1016-C

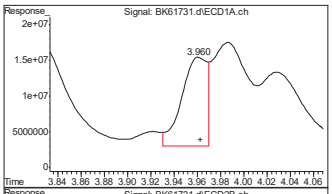
R.T.: 3.763 min
Delta R.T.: 0.000 min
Response: 466215992
Conc: 361.74 ng/ml



#4 AR1016-C

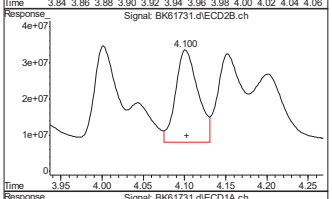
R.T.: 3.886 min
Delta R.T.: 0.000 min
Response: 893944938
Conc: 384.53 ng/ml

11.3.1 11



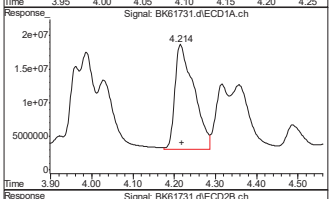
#5 AR1016-D

R.T.: 3.961 min
Delta R.T.: -0.002 min
Response: 183123505
Conc: 347.80 ng/ml



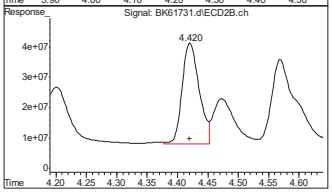
#5 AR1016-D

R.T.: 4.101 min
Delta R.T.: -0.001 min
Response: 477222866
Conc: 361.40 ng/ml



#6 AR1016-E

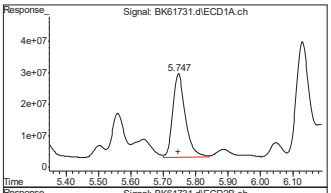
R.T.: 4.216 min
Delta R.T.: -0.002 min
Response: 498509439
Conc: 362.04 ng/ml



#6 AR1016-E

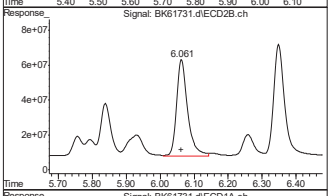
R.T.: 4.421 min
Delta R.T.: 0.000 min
Response: 647388903
Conc: 361.91 ng/ml

11.3.1 11



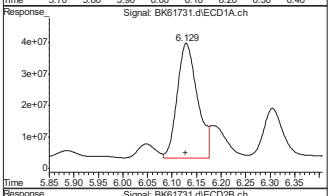
#7 AR1260-A

R.T.: 5.747 min
Delta R.T.: 0.001 min
Response: 713257811
Conc: 365.59 ng/ml



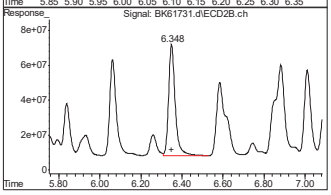
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 1245978125
Conc: 362.20 ng/ml



#8 AR1260-B

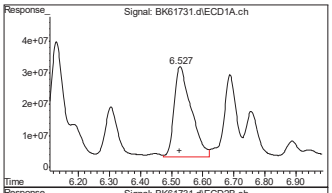
R.T.: 6.129 min
Delta R.T.: 0.001 min
Response: 1039982200
Conc: 367.93 ng/ml



#8 AR1260-B

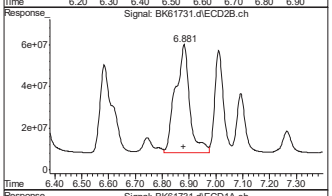
R.T.: 6.349 min
Delta R.T.: 0.000 min
Response: 1453974287
Conc: 368.67 ng/ml

11.3.1 11



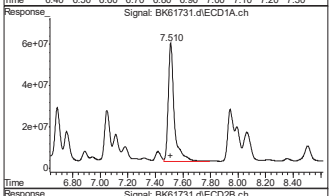
#9 AR1260-C

R.T.: 6.528 min
Delta R.T.: 0.002 min
Response: 1090817836
Conc: 373.56 ng/ml



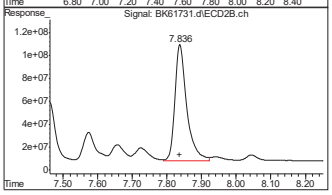
#9 AR1260-C

R.T.: 6.880 min
Delta R.T.: 0.000 min
Response: 1920238083
Conc: 376.89 ng/ml



#10 AR1260-D

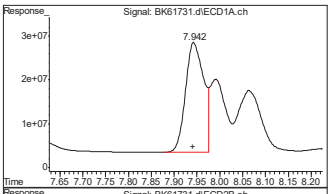
R.T.: 7.511 min
Delta R.T.: 0.002 min
Response: 1718004427
Conc: 397.25 ng/ml



#10 AR1260-D

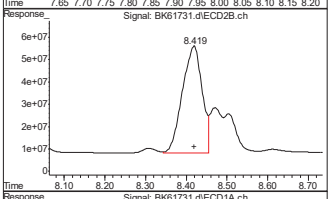
R.T.: 7.837 min
Delta R.T.: 0.000 min
Response: 2439744110
Conc: 378.27 ng/ml

11.3.1 11



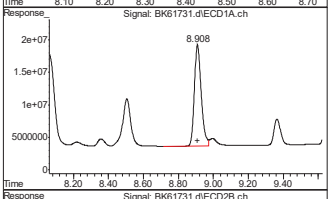
#11 AR1260-E

R.T.: 7.943 min
Delta R.T.: 0.001 min
Response: 688519187
Conc: 384.49 ng/ml



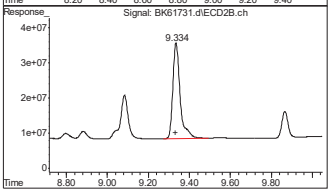
#11 AR1260-E

R.T.: 8.420 min
Delta R.T.: 0.000 min
Response: 1598674845
Conc: 384.27 ng/ml



#12 AR1260-F

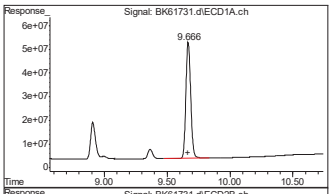
R.T.: 8.909 min
Delta R.T.: 0.000 min
Response: 420332948
Conc: 399.87 ng/ml



#12 AR1260-F

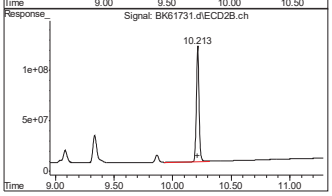
R.T.: 9.335 min
Delta R.T.: 0.002 min
Response: 674643124
Conc: 411.40 ng/ml

11.3.1 11



#13 DCB

R.T.: 9.667 min
Delta R.T.: 0.000 min
Response: 1313117305
Conc: 41.55 ng/ml



#13 DCB

R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 1826984364
Conc: 41.59 ng/ml

11.3.1 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61732.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:15 pm
Operator : thomasa
Sample : op48709-ms
Misc : op48709,gbk1936,15.84,,,10,,s
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:38:20 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.487	2.440	1472.5E6	2618.0E6	35.041	33.852
	Spiked Amount 40.000			Recovery =		87.60%	84.63%
13) s	DCB	9.667	10.214	1383.0E6	1961.9E6	43.764	44.662
	Spiked Amount 40.000			Recovery =		109.41%	111.65%
	Target Compounds						
2)	AR1016-A	3.151	3.277	569.6E6	1042.8E6	339.948	344.285
3)	AR1016-B	3.622	3.738	1209.1E6	1993.5E6	353.089	356.722
4)	AR1016-C	3.765	3.886	455.5E6	880.2E6	353.415	378.600
5)	AR1016-D	3.964	4.102	178.8E6	470.3E6	339.576	355.850
6)	AR1016-E	4.219	4.420	486.0E6	635.5E6	352.940	355.246
7)	AR1260-A	5.748	6.062	703.2E6	1226.3E6	360.419	356.489
8)	AR1260-B	6.129	6.348	1036.2E6	1438.7E6	366.574	364.798
9)	AR1260-C	6.528	6.879	1089.6E6	1925.8E6	373.147	377.980
10)	AR1260-D	7.511	7.837	1717.8E6	2460.6E6	397.213	381.504
11)	AR1260-E	7.946	8.420	701.3E6	1642.0E6	391.647	394.695
12)	AR1260-F	8.912	9.334	431.6E6	690.7E6	410.612	421.182

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

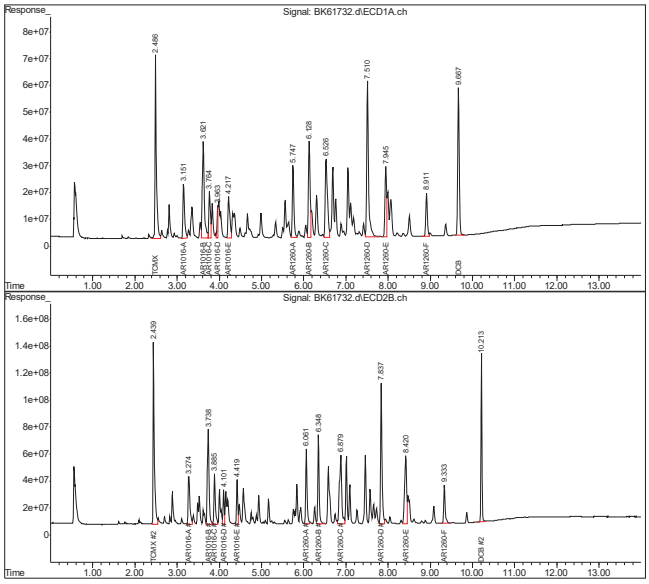
11.4.1 11

Quantitation Report (QT Reviewed)

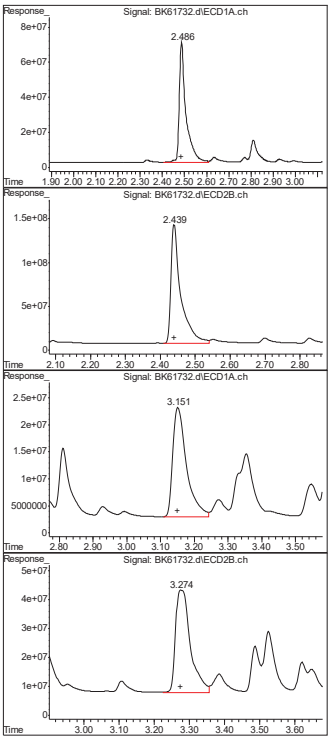
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61732.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:15 pm
Operator : thomasa
Sample : op48709-ms
Misc : op48709,gbk1936,15.84,,,10,,s
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:38:20 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.4.1 11



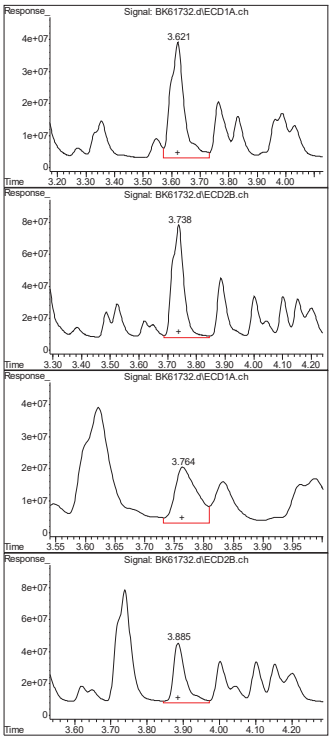
#1 TCMX
R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 1472484470
Conc: 35.04 ng/ml

#1 TCMX
R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 2617955637
Conc: 33.85 ng/ml

#2 AR1016-A
R.T.: 3.151 min
Delta R.T.: 0.001 min
Response: 569639130
Conc: 339.95 ng/ml

#2 AR1016-A
R.T.: 3.277 min
Delta R.T.: 0.002 min
Response: 1042772845
Conc: 344.29 ng/ml

11.4.1 11



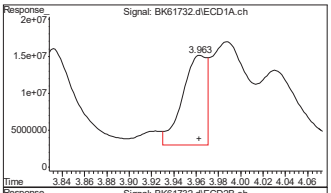
#3 AR1016-B
R.T.: 3.622 min
Delta R.T.: 0.000 min
Response: 1209099611
Conc: 353.09 ng/ml

#3 AR1016-B
R.T.: 3.738 min
Delta R.T.: 0.000 min
Response: 1993515072
Conc: 356.72 ng/ml

#4 AR1016-C
R.T.: 3.765 min
Delta R.T.: 0.000 min
Response: 455490863
Conc: 353.42 ng/ml

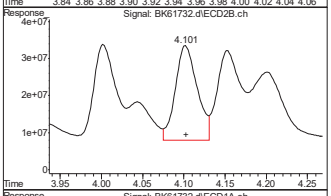
#4 AR1016-C
R.T.: 3.886 min
Delta R.T.: 0.000 min
Response: 880156500
Conc: 378.60 ng/ml

11.4.1 11



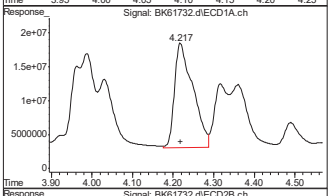
#5 AR1016-D

R.T.: 3.964 min
Delta R.T.: 0.001 min
Response: 178795248
Conc: 339.58 ng/ml



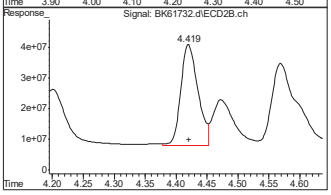
#5 AR1016-D

R.T.: 4.102 min
Delta R.T.: 0.000 min
Response: 470320717
Conc: 355.85 ng/ml



#6 AR1016-E

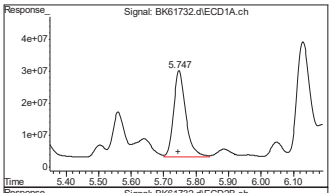
R.T.: 4.219 min
Delta R.T.: 0.000 min
Response: 485975128
Conc: 352.94 ng/ml



#6 AR1016-E

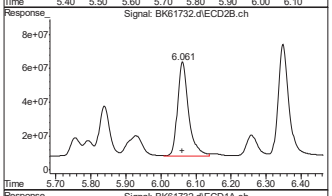
R.T.: 4.420 min
Delta R.T.: 0.000 min
Response: 635468315
Conc: 355.25 ng/ml

11.4.1 11



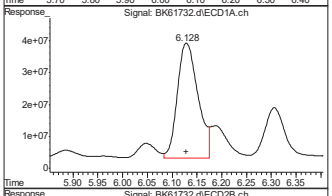
#7 AR1260-A

R.T.: 5.748 min
Delta R.T.: 0.002 min
Response: 703171885
Conc: 360.42 ng/ml



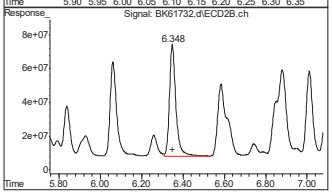
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 1226341483
Conc: 356.49 ng/ml



#8 AR1260-B

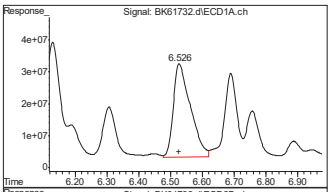
R.T.: 6.129 min
Delta R.T.: 0.000 min
Response: 1036155025
Conc: 366.57 ng/ml



#8 AR1260-B

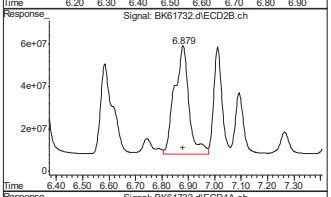
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 1438715522
Conc: 364.80 ng/ml

11.4.1 11



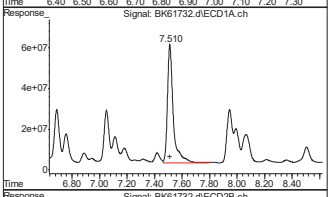
#9 AR1260-C

R.T.: 6.528 min
Delta R.T.: 0.002 min
Response: 1089616326
Conc: 373.15 ng/ml



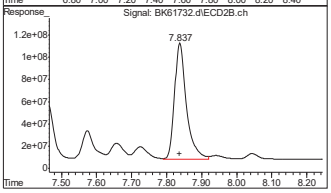
#9 AR1260-C

R.T.: 6.879 min
Delta R.T.: 0.000 min
Response: 1925796354
Conc: 377.98 ng/ml



#10 AR1260-D

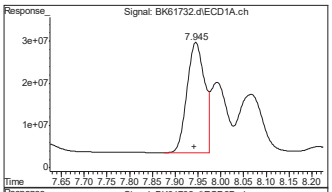
R.T.: 7.511 min
Delta R.T.: 0.002 min
Response: 1717826174
Conc: 397.21 ng/ml



#10 AR1260-D

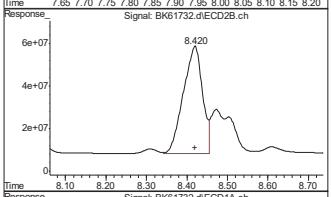
R.T.: 7.837 min
Delta R.T.: 0.000 min
Response: 2460625553
Conc: 381.50 ng/ml

11.4.1 11



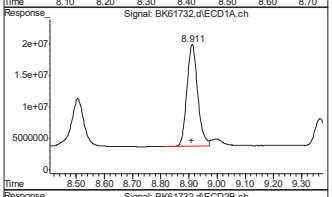
#11 AR1260-E

R.T.: 7.946 min
Delta R.T.: 0.004 min
Response: 701337788
Conc: 391.65 ng/ml



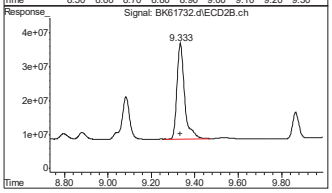
#11 AR1260-E

R.T.: 8.420 min
Delta R.T.: 0.001 min
Response: 1642045640
Conc: 394.70 ng/ml



#12 AR1260-F

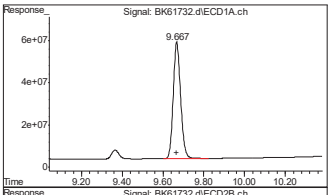
R.T.: 8.912 min
Delta R.T.: 0.003 min
Response: 431620387
Conc: 410.61 ng/ml



#12 AR1260-F

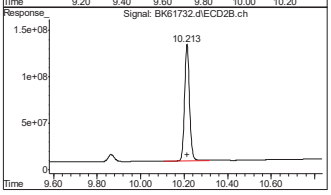
R.T.: 9.334 min
Delta R.T.: 0.001 min
Response: 690687071
Conc: 421.18 ng/ml

11.4.1 11



#13 DCB

R.T.: 9.667 min
Delta R.T.: 0.000 min
Response: 1382960454
Conc: 43.76 ng/ml



#13 DCB

R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 1961936479
Conc: 44.66 ng/ml

11.4.1 11

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
09/21/16 12:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61733.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:31 pm
Operator : thomasa
Sample : op48709-msd
Misc : op48709,gbk1936,15.22,,,10,,s
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:38:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.488	2.442	1275.8E6	2491.9E6	30.360	32.221
	Spiked Amount 40.000			Recovery	=	75.90%	80.55%
13) s	DCB	9.668	10.213	1165.0E6	1641.9E6	36.867	37.376
	Spiked Amount 40.000			Recovery	=	92.17%	93.44%
	Target Compounds						
2)	AR1016-A	3.155	3.281	498.8E6	918.3E6	297.644	303.188
3)	AR1016-B	3.624	3.740	1058.5E6	1779.0E6	309.101	317.378
4)	AR1016-C	3.766	3.887	400.0E6	797.2E6	310.356	342.916
5)	AR1016-D	3.972	4.103	146.8E6	414.1E6	278.795m	310.909
6)	AR1016-E	4.221	4.422	415.4E6	539.2E6	301.713	301.412
7)	AR1260-A	5.747	6.063	610.7E6	1103.3E6	313.031	320.724
8)	AR1260-B	6.130	6.349	1110.6E6	1251.3E6	392.912	317.269
9)	AR1260-C	6.531	6.881	926.9E6	1652.7E6	317.441	324.381
10)	AR1260-D	7.512	7.838	1471.3E6	2074.7E6	340.205	321.661
11)	AR1260-E	7.945	8.418	590.5E6	1386.7E6	329.743	333.316
12)	AR1260-F	8.911	9.334	361.2E6	584.0E6	343.585	356.151

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

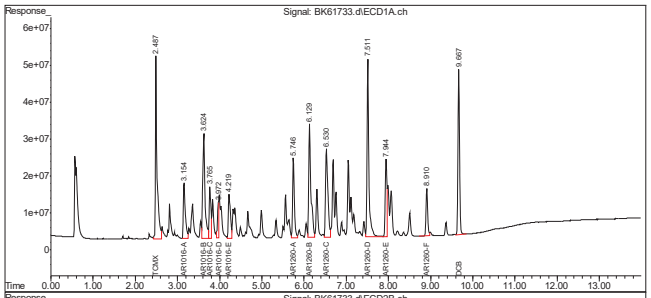
11.4.2 11

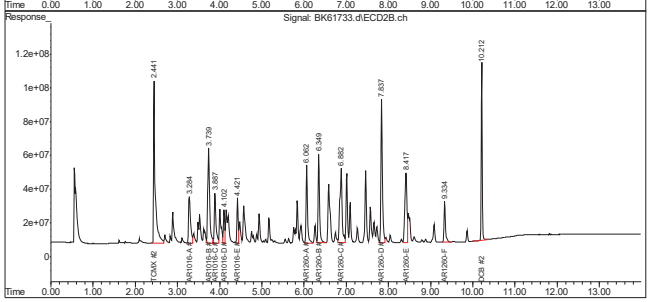
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61733.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:31 pm
Operator : thomasa
Sample : op48709-msd
Misc : op48709,gbk1936,15.22,,,10,,s
ALS Vial : 17 Sample Multiplier: 1

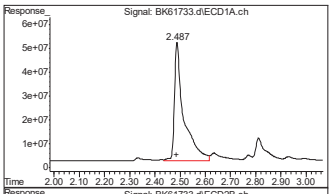
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:38:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



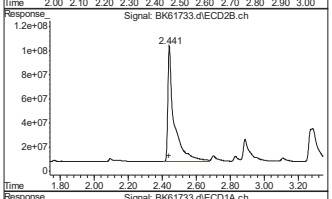


11.4.2 11



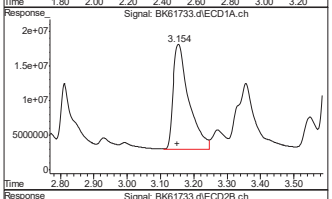
#1 TCMX

R.T.: 2.488 min
Delta R.T.: 0.002 min
Response: 1275789494
Conc: 30.36 ng/ml



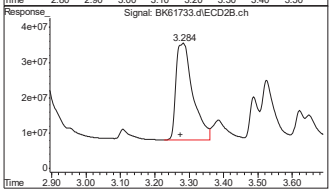
#1 TCMX

R.T.: 2.442 min
Delta R.T.: 0.002 min
Response: 2491876131
Conc: 32.22 ng/ml



#2 AR1016-A

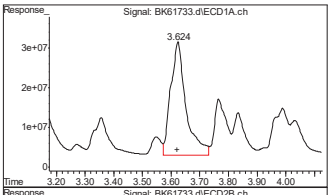
R.T.: 3.155 min
Delta R.T.: 0.004 min
Response: 498751145
Conc: 297.64 ng/ml



#2 AR1016-A

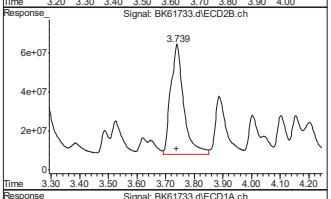
R.T.: 3.281 min
Delta R.T.: 0.006 min
Response: 918296216
Conc: 303.19 ng/ml

11.4.2 11



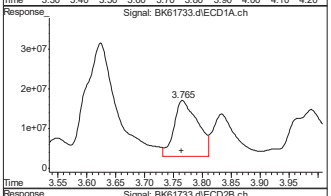
#3 AR1016-B

R.T.: 3.624 min
Delta R.T.: 0.002 min
Response: 1058469167
Conc: 309.10 ng/ml



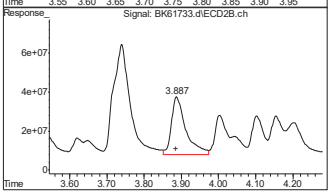
#3 AR1016-B

R.T.: 3.740 min
Delta R.T.: 0.002 min
Response: 1779047489
Conc: 317.38 ng/ml



#4 AR1016-C

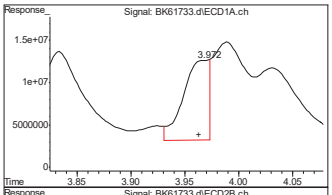
R.T.: 3.766 min
Delta R.T.: 0.002 min
Response: 399994759
Conc: 310.36 ng/ml



#4 AR1016-C

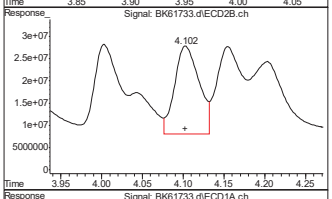
R.T.: 3.887 min
Delta R.T.: 0.001 min
Response: 797197919
Conc: 342.92 ng/ml

11.4.2 11



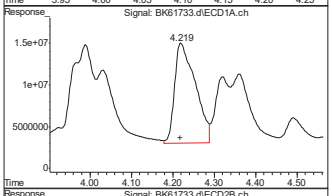
#5 AR1016-D

R.T.: 3.972 min
Delta R.T.: 0.009 min
Response: 146792447
Conc: 278.80 ng/ml m



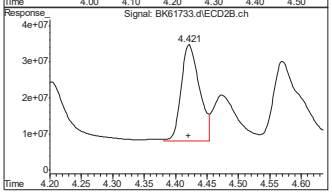
#5 AR1016-D

R.T.: 4.103 min
Delta R.T.: 0.000 min
Response: 414071246
Conc: 310.91 ng/ml



#6 AR1016-E

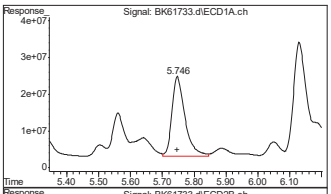
R.T.: 4.221 min
Delta R.T.: 0.003 min
Response: 415439323
Conc: 301.71 ng/ml



#6 AR1016-E

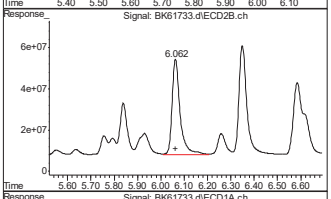
R.T.: 4.422 min
Delta R.T.: 0.001 min
Response: 539169118
Conc: 301.41 ng/ml

11.4.2 11



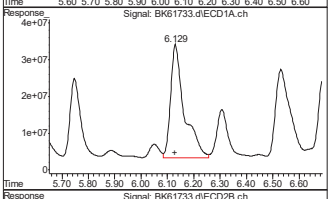
#7 AR1260-A

R.T.: 5.747 min
Delta R.T.: 0.001 min
Response: 610717990
Conc: 313.03 ng/ml



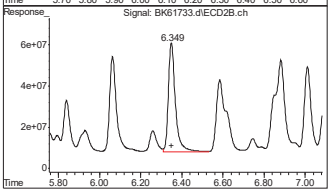
#7 AR1260-A

R.T.: 6.063 min
Delta R.T.: 0.001 min
Response: 1103308583
Conc: 320.72 ng/ml



#8 AR1260-B

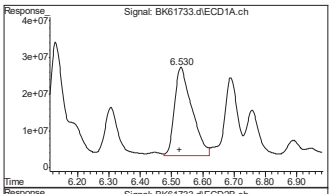
R.T.: 6.130 min
Delta R.T.: 0.002 min
Response: 1110602091
Conc: 392.91 ng/ml



#8 AR1260-B

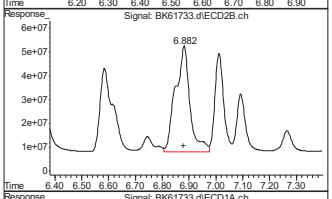
R.T.: 6.349 min
Delta R.T.: 0.000 min
Response: 1251267487
Conc: 317.27 ng/ml

11.4.2 11



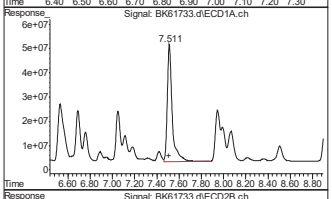
#9 AR1260-C

R.T.: 6.531 min
Delta R.T.: 0.005 min
Response: 926949073
Conc: 317.44 ng/ml



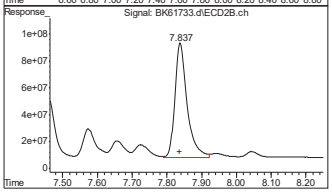
#9 AR1260-C

R.T.: 6.881 min
Delta R.T.: 0.000 min
Response: 1652711036
Conc: 324.38 ng/ml



#10 AR1260-D

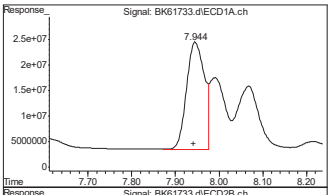
R.T.: 7.512 min
Delta R.T.: 0.002 min
Response: 1471283591
Conc: 340.21 ng/ml



#10 AR1260-D

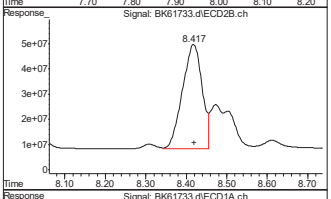
R.T.: 7.838 min
Delta R.T.: 0.001 min
Response: 2074651425
Conc: 321.66 ng/ml

11.4.2 11



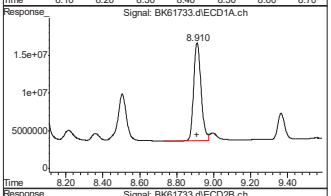
#11 AR1260-E

R.T.: 7.945 min
Delta R.T.: 0.003 min
Response: 590482509
Conc: 329.74 ng/ml



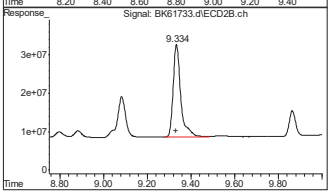
#11 AR1260-E

R.T.: 8.418 min
Delta R.T.: -0.001 min
Response: 1386691825
Conc: 333.32 ng/ml



#12 AR1260-F

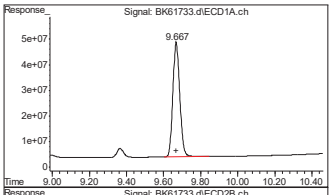
R.T.: 8.911 min
Delta R.T.: 0.001 min
Response: 361163994
Conc: 343.59 ng/ml



#12 AR1260-F

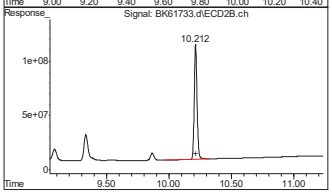
R.T.: 9.334 min
Delta R.T.: 0.002 min
Response: 584043501
Conc: 356.15 ng/ml

11.4.2 11



#13 DCB

R.T.: 9.668 min
Delta R.T.: 0.000 min
Response: 1165018629
Conc: 36.87 ng/ml



#13 DCB

R.T.: 10.213 min
Delta R.T.: -0.002 min
Response: 1641886534
Conc: 37.38 ng/ml

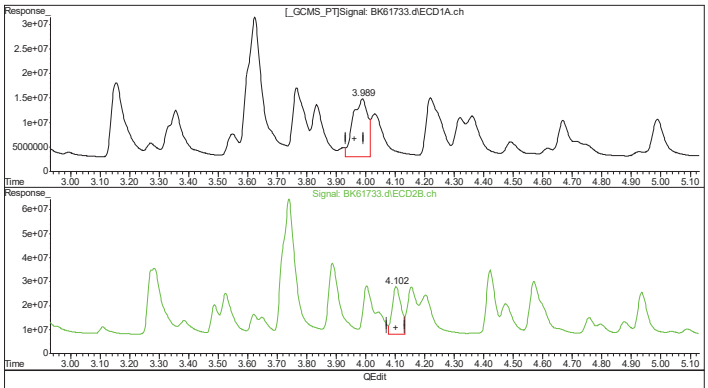
11.4.2 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61733.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:31 pm
Operator : thomasa
Sample : op48709-msd
Misc : op48709,gbk1936,15.22,,,10,,s
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:11:19 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(5) AR1016-D
3.989min 776.419 ng/ml
response 408803213

(5) AR1016-D #2
4.103min 310.909 ng/ml
response 414071246

11.4.2.1 11

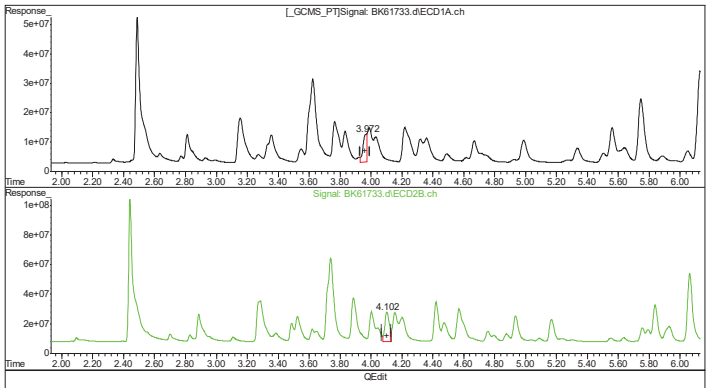
(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:38:36 2016 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61733.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 6:31 pm
Operator : thomasa
Sample : op48709-msd
Misc : op48709,gbk1936,15.22,,,10,,s
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:11:19 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(5) AR1016-D
3.972min 278.795 ng/ml m
response 146792447

(5) AR1016-D #2
4.103min 310.909 ng/ml
response 414071246

11.4.2.2 11

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:38:45 2016 Page: 1

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1936-50,a16/60 (Sig #1); ic1935-50,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:44:59 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.491	2.435	306.1E6	581.4E6	7.391	7.265
	Spiked Amount 40.000			Recovery	=	18.48%	18.16%
13) s	DCB	9.673	10.216	273.8E6	359.8E6	7.708	6.780m
	Spiked Amount 40.000			Recovery	=	19.27%	16.95%
	Target Compounds						
2)	AR1016-A	3.160	3.279	92899431	172.2E6	57.144m	57.351m
3)	AR1016-B	3.631	3.734	178.2E6	363.4E6	58.412	69.062
4)	AR1016-C	3.774	3.881	64055125	93684031	52.861m	41.493m
5)	AR1016-D	3.972	4.097	26212292	80030756	43.866m	60.684m#
6)	AR1016-E	4.229	4.417	73939804	97677077	54.545	53.889m
7)	AR1260-A	5.755	6.058	106.9E6	191.5E6	54.645	53.802m
8)	AR1260-B	6.138	6.347	153.0E6	229.2E6	54.900	56.268
9)	AR1260-C	6.537	6.878	155.0E6	266.7E6	52.903	51.285m
10)	AR1260-D	7.518	7.835	213.8E6	361.9E6	46.286	53.040
11)	AR1260-E	7.950	8.419	94639360	237.9E6	51.005	52.686
12)	AR1260-F	8.916	9.332	56021087	87596366	48.760	47.141m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

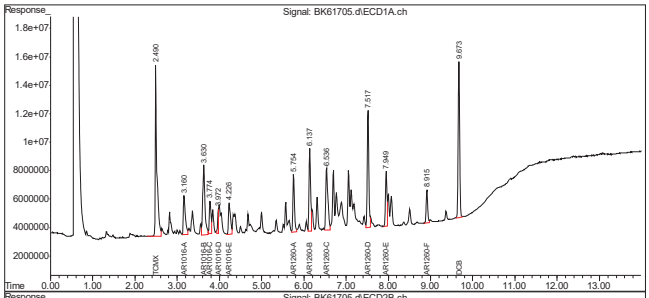
11.5.1 11

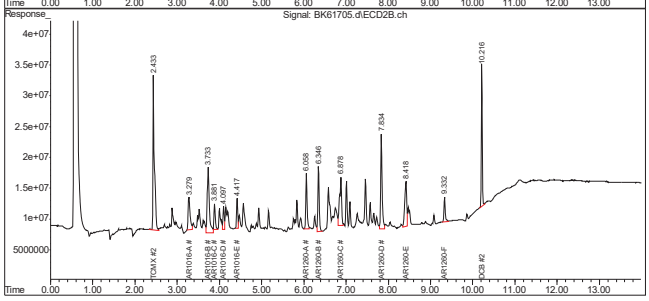
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1936-50,a16/60 (Sig #1); ic1935-50,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

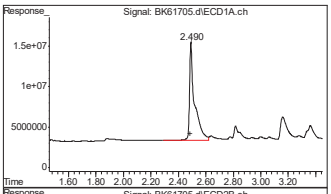
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:44:59 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

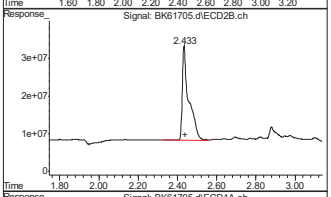




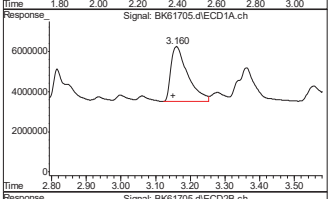
11.5.1 11



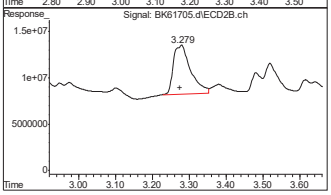
#1 TCMX
R.T.: 2.491 min
Delta R.T.: 0.005 min
Response: 306087153
Conc: 7.39 ng/ml



#1 TCMX
R.T.: 2.435 min
Delta R.T.: -0.005 min
Response: 581416124
Conc: 7.27 ng/ml

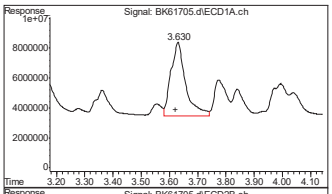


#2 AR1016-A
R.T.: 3.160 min
Delta R.T.: 0.010 min
Response: 92899431
Conc: 57.14 ng/ml m

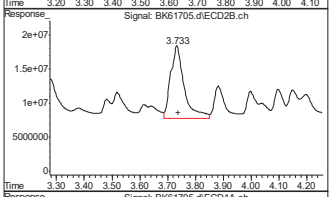


#2 AR1016-A
R.T.: 3.279 min
Delta R.T.: 0.003 min
Response: 172187699
Conc: 57.35 ng/ml m

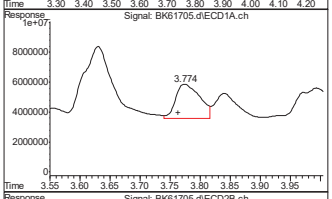
11.5.1 11



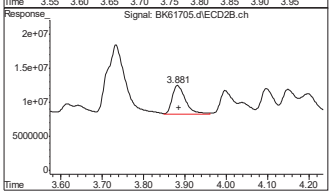
#3 AR1016-B
R.T.: 3.631 min
Delta R.T.: 0.009 min
Response: 178197508
Conc: 58.41 ng/ml



#3 AR1016-B
R.T.: 3.734 min
Delta R.T.: -0.005 min
Response: 363386827
Conc: 69.06 ng/ml

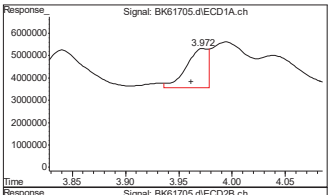


#4 AR1016-C
R.T.: 3.774 min
Delta R.T.: 0.010 min
Response: 64055125
Conc: 52.86 ng/ml m



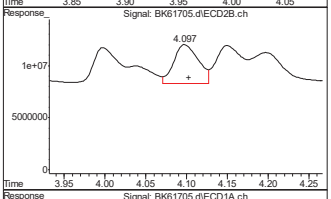
#4 AR1016-C
R.T.: 3.881 min
Delta R.T.: -0.005 min
Response: 93684031
Conc: 41.49 ng/ml m

11.5.1 11



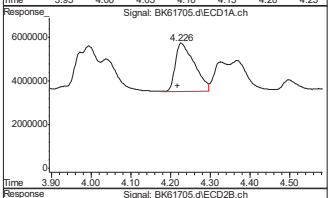
#5 AR1016-D

R.T.: 3.972 min
Delta R.T.: 0.010 min
Response: 26212292
Conc: 43.87 ng/ml m



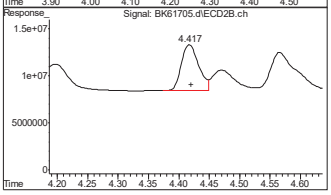
#5 AR1016-D

R.T.: 4.097 min
Delta R.T.: -0.006 min
Response: 80030756
Conc: 60.68 ng/ml m



#6 AR1016-E

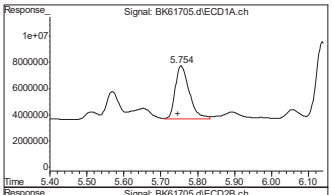
R.T.: 4.229 min
Delta R.T.: 0.011 min
Response: 73939804
Conc: 54.55 ng/ml



#6 AR1016-E

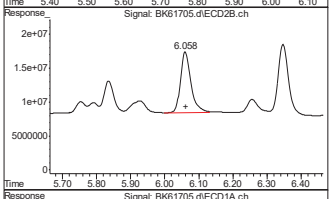
R.T.: 4.417 min
Delta R.T.: -0.004 min
Response: 97677077
Conc: 53.89 ng/ml m

11.5.1 11



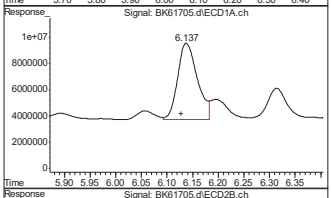
#7 AR1260-A

R.T.: 5.755 min
Delta R.T.: 0.009 min
Response: 106923188
Conc: 54.65 ng/ml



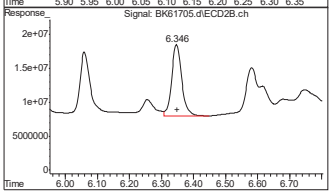
#7 AR1260-A

R.T.: 6.058 min
Delta R.T.: -0.003 min
Response: 191497317
Conc: 53.80 ng/ml m



#8 AR1260-B

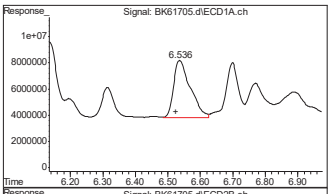
R.T.: 6.138 min
Delta R.T.: 0.009 min
Response: 153014849
Conc: 54.90 ng/ml



#8 AR1260-B

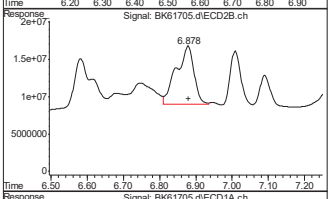
R.T.: 6.347 min
Delta R.T.: -0.002 min
Response: 229248354
Conc: 56.27 ng/ml

11.5.1 11



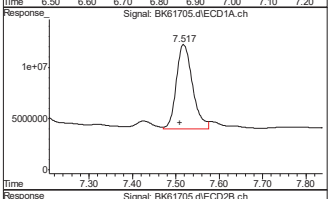
#9 AR1260-C

R.T.: 6.537 min
Delta R.T.: 0.011 min
Response: 154982740
Conc: 52.90 ng/ml



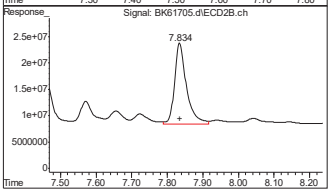
#9 AR1260-C

R.T.: 6.878 min
Delta R.T.: -0.002 min
Response: 266707911
Conc: 51.29 ng/ml m



#10 AR1260-D

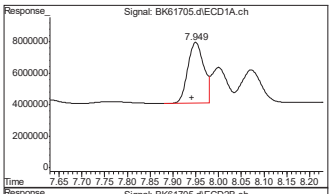
R.T.: 7.518 min
Delta R.T.: 0.009 min
Response: 213761982
Conc: 46.29 ng/ml



#10 AR1260-D

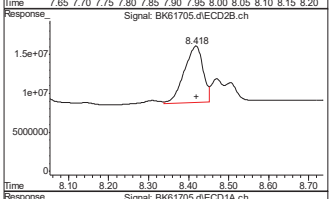
R.T.: 7.835 min
Delta R.T.: -0.002 min
Response: 361870627
Conc: 53.04 ng/ml

11.5.1 11



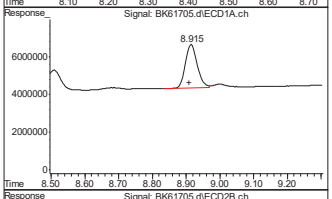
#11 AR1260-E

R.T.: 7.950 min
Delta R.T.: 0.009 min
Response: 94639360
Conc: 51.01 ng/ml



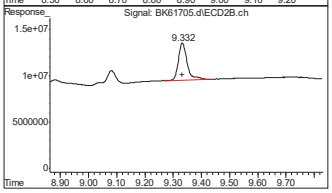
#11 AR1260-E

R.T.: 8.419 min
Delta R.T.: 0.000 min
Response: 237935876
Conc: 52.69 ng/ml



#12 AR1260-F

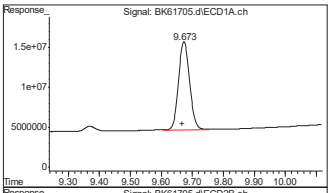
R.T.: 8.916 min
Delta R.T.: 0.006 min
Response: 56021087
Conc: 48.76 ng/ml



#12 AR1260-F

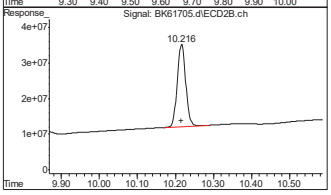
R.T.: 9.332 min
Delta R.T.: -0.001 min
Response: 87596366
Conc: 47.14 ng/ml m

11.5.1 11



#13 DCB

R.T.: 9.673 min
Delta R.T.: 0.006 min
Response: 273773827
Conc: 7.71 ng/ml



#13 DCB

R.T.: 10.216 min
Delta R.T.: 0.000 min
Response: 359839028
Conc: 6.78 ng/ml m

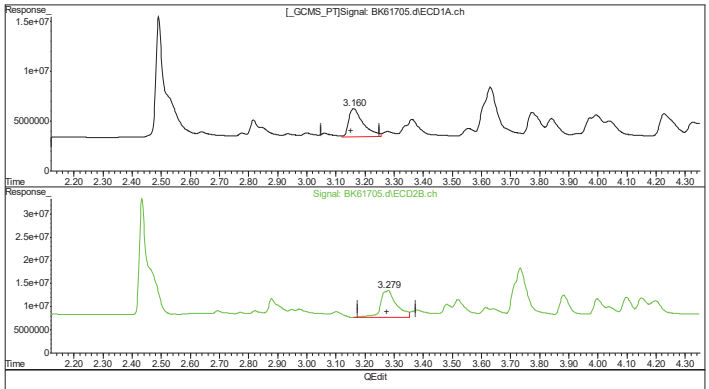
11.5.1 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



QEdit

(2) AR1016-A
3.161min 60.489 ng/ml
response 98337960

(2) AR1016-A #2
3.278min 73.984 ng/ml
response 222128254

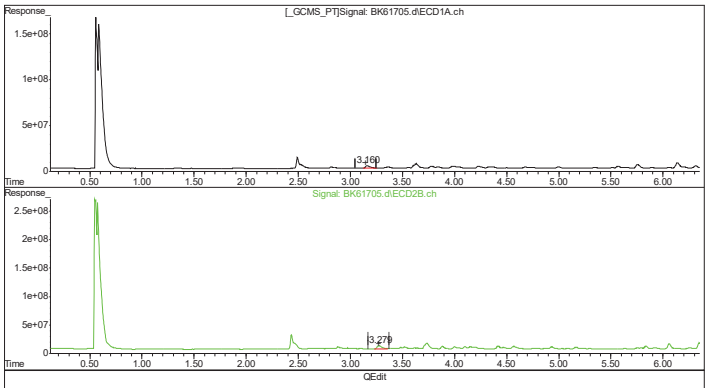
11.5.1.1 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



QEdit

(2) AR1016-A
3.160min 57.144 ng/ml m
response 92899431

(2) AR1016-A #2
3.279min 57.351 ng/ml m
response 172187699

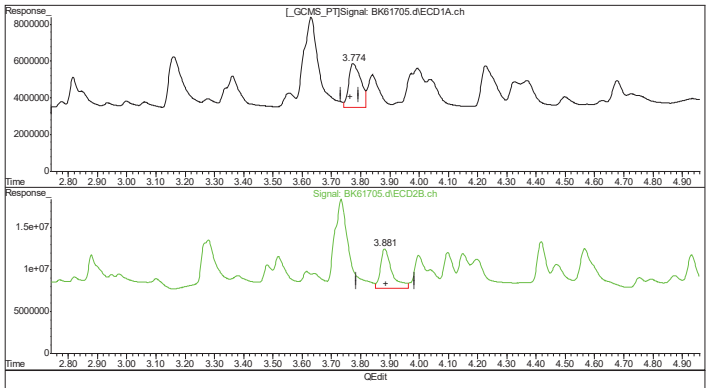
11.5.1.2 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



QEdit

(4) AR1016-C
3.775min 56.935 ng/ml
response 68991594

(4) AR1016-C #2
3.882min 56.062 ng/ml
response 126578828

11.5.1.3 11

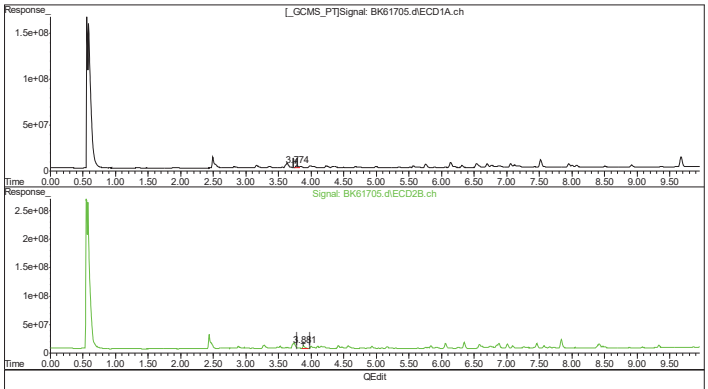
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(4) AR1016-C
3.774min 52.861 ng/ml m
response 64055125

(4) AR1016-C #2
3.881min 41.493 ng/ml m
response 93684031

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:43:40 2016

Page: 1

11.5.1.4 11

BK61705.D edits: AR1016-C

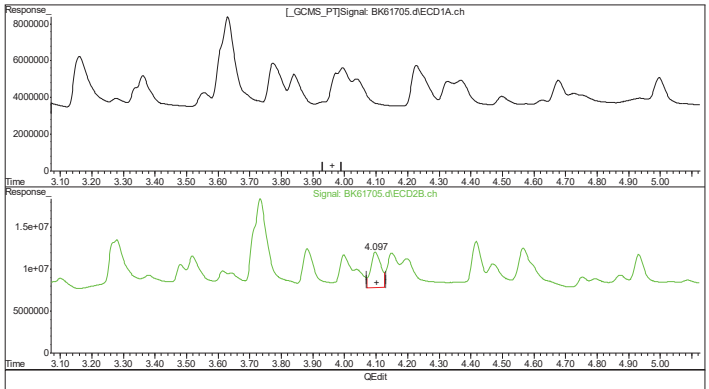
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(5) AR1016-D
0.000min 0.000 ng/ml
response 0

(5) AR1016-D #2
4.098min 71.666 ng/ml
response 94513231

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:43:44 2016

Page: 1

11.5.1.5 11

BK61705.D edits: AR1016-D

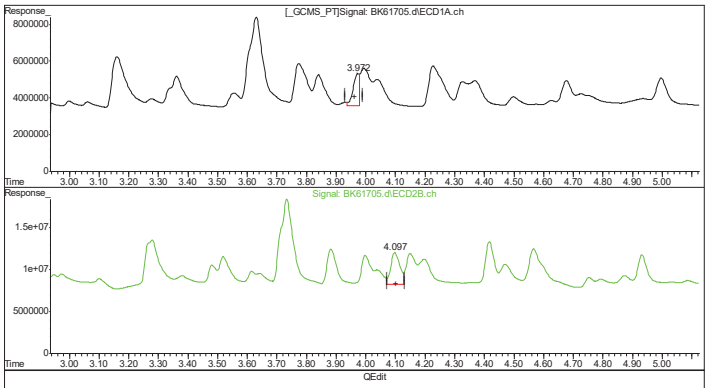
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(5) AR1016-D
3.972min 43.866 ng/ml m
response 26212292

(5) AR1016-D #2
4.097min 60.684 ng/ml m
response 80030756

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:01 2016

Page: 1

11.5.1.6 11

BK61705.D edits: AR1016-D

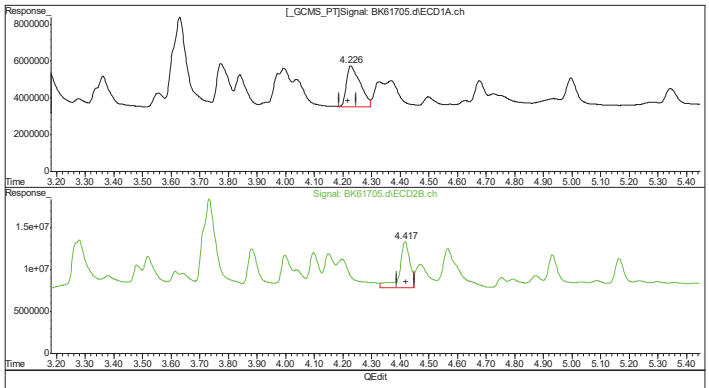
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(6) AR1016-E
4.229min 54.545 ng/ml
response 73939804

(6) AR1016-E #2
4.418min 76.627 ng/ml
response 138891598

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:05 2016

Page: 1

11.5.1.7 11

BK61705.D edits: AR1016-E

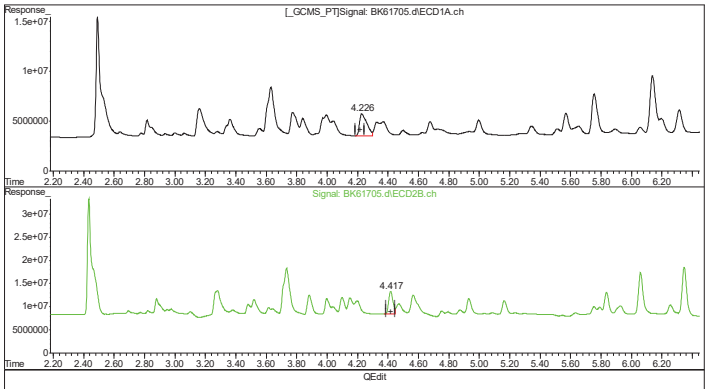
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(6) AR1016-E
4.229min 54.545 ng/ml
response 73939804

(6) AR1016-E #2
4.417min 53.889 ng/ml m
response 97677077

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:11 2016

Page: 1

11.5.1.8

11

BK61705.D edits: AR1016-E

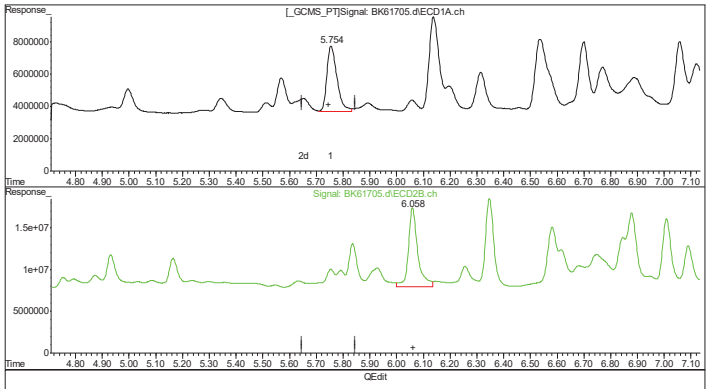
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(7) AR1260-A
5.755min 54.645 ng/ml
response 106923188

(7) AR1260-A #2
6.059min 64.335 ng/ml
response 228989992

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:15 2016

Page: 1

11.5.1.9

11

BK61705.D edits: AR1260-A

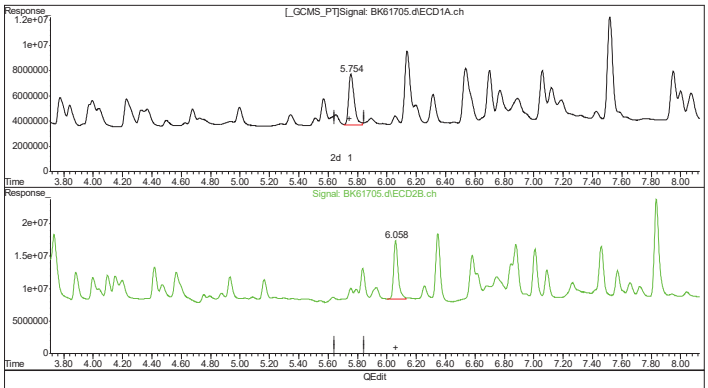
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(7) AR1260-A
5.755min 54.645 ng/ml
response 106923188

(7) AR1260-A #2
6.058min 53.802 ng/ml m
response 191497317

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:20 2016

Page: 1

11.5.1.10

11

BK61705.D edits: AR1260-A

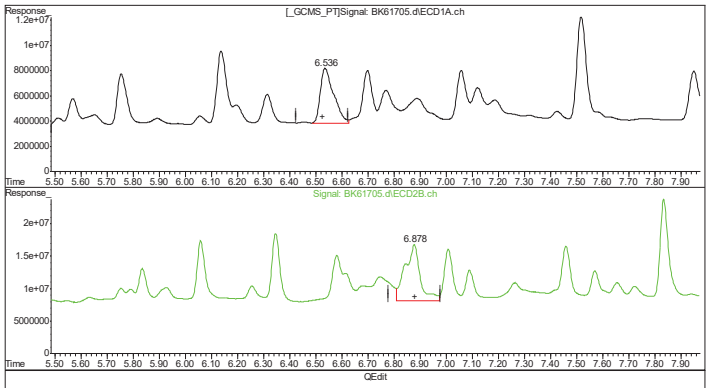
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(9) AR1260-C
6.537min 52.903 ng/ml
response 154982740

(9) AR1260-C #2
6.877min 68.206 ng/ml
response 354702962

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:25 2016

Page: 1

11.5.1.11

11

BK61705.D edits: AR1260-C

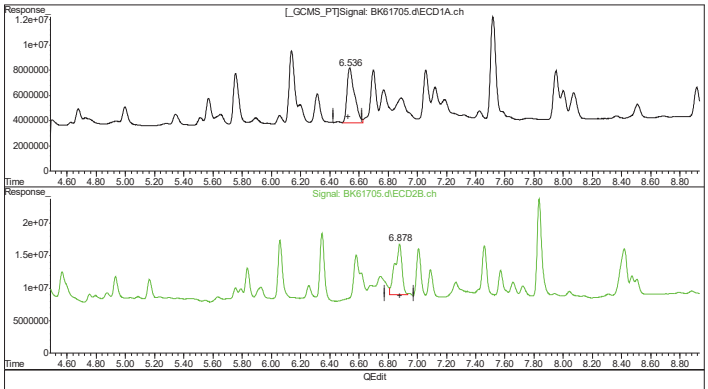
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(9) AR1260-C
6.537min 52.903 ng/ml
response 154982740

(9) AR1260-C #2
6.878min 51.285 ng/ml m
response 266707911

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:31 2016 Page: 1

11.5.1.12 11

BK61705.D edits: AR1260-C

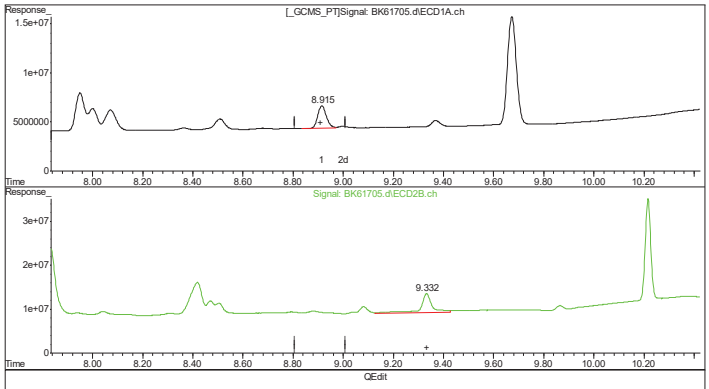
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(12) AR1260-F
8.916min 48.760 ng/ml
response 56021087

(12) AR1260-F #2
9.333min 71.122 ng/ml
response 132157136

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:37 2016 Page: 1

11.5.1.13 11

BK61705.D edits: AR1260-F

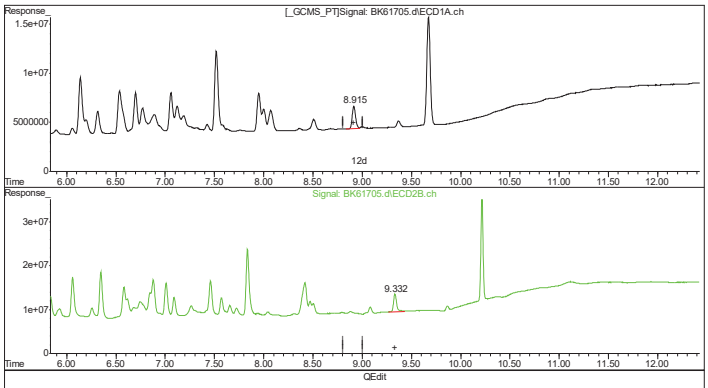
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(12) AR1260-F
8.916min 48.760 ng/ml
response 56021087

(12) AR1260-F #2
9.332min 47.141 ng/ml m
response 87596366

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:43 2016 Page: 1

11.5.1.14 11

BK61705.D edits: AR1260-F

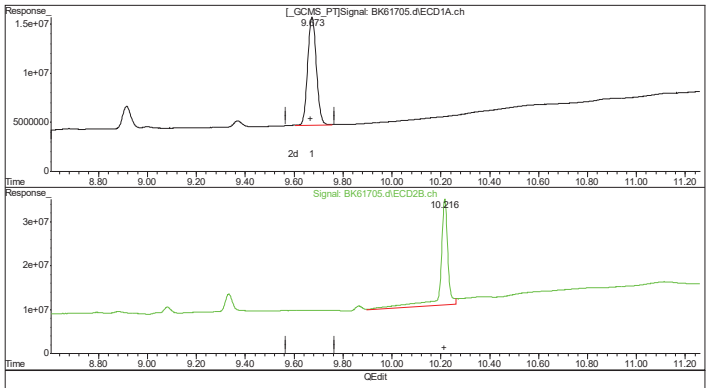
Cal Report: BK61705.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.673min 7.708 ng/ml
response 273773827

(13) DCB #2 (s)
10.216min 9.565 ng/ml
response 507658056

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:44:47 2016 Page: 1

11.5.1.15 11

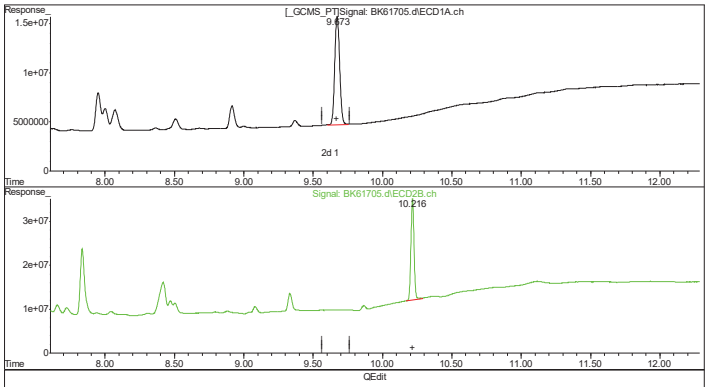
BK61705.D edits: DCB

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61705.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:38 am
Operator : thomasa
Sample : ic1935-50,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 101 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:00 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.673min 7.708 ng/ml
response 273773827

(13) DCB #2 (s)
10.216min 6.780 ng/ml m
response 359839028

(+) = Expected Retention Time

11.5.1.16 11

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri 09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61706.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:53 am
Operator : thomasa
Sample : ic1936-100,a16/60 (Sig #1); ic1935-100,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:45:34 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.487	2.441	618.9E6	1229.4E6	14.944	15.362
	Spiked Amount 40.000			Recovery	=	37.36%	38.41%
13) s	DCB	9.665	10.213	459.7E6	615.6E6	12.944m	11.599m
	Spiked Amount 40.000			Recovery	=	32.36%	29.00%
	Target Compounds						
2)	AR1016-A	3.153	3.280	164.6E6	311.7E6	101.268	103.820
3)	AR1016-B	3.623	3.740	322.1E6	558.5E6	105.587	106.146
4)	AR1016-C	3.765	3.887	125.6E6	246.3E6	103.669	109.081
5)	AR1016-D	3.964	4.104	48017885	135.6E6	80.357	102.799 #
6)	AR1016-E	4.219	4.421	130.0E6	175.9E6	95.930	97.049
7)	AR1260-A	5.746	6.062	187.3E6	338.8E6	95.719	95.200
8)	AR1260-B	6.129	6.348	265.7E6	376.4E6	95.333	92.395
9)	AR1260-C	6.527	6.879	269.6E6	498.0E6	92.025	95.754
10)	AR1260-D	7.510	7.837	402.2E6	585.5E6	87.093	85.812
11)	AR1260-E	7.941	8.418	158.7E6	382.5E6	85.512	84.706
12)	AR1260-F	8.908	9.334	95436634	158.5E6	83.068	85.293

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

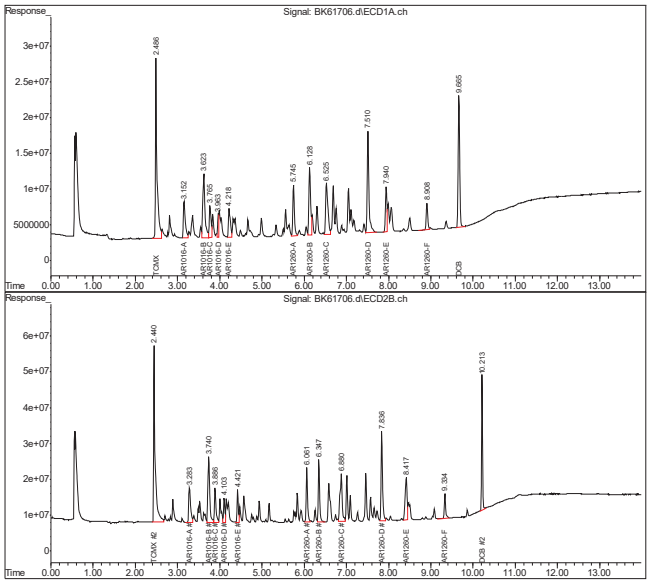
11.5.2 11

Quantitation Report (QT Reviewed)

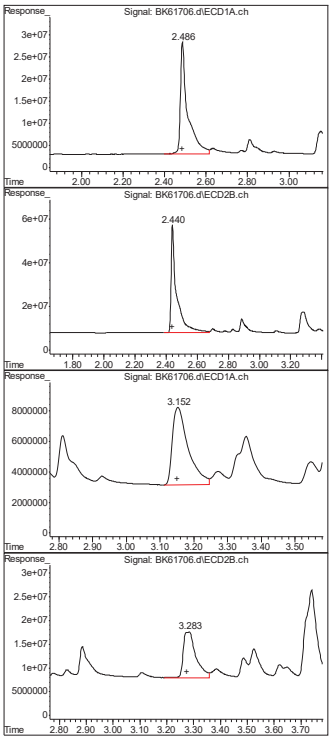
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61706.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:53 am
Operator : thomasa
Sample : ic1936-100,a16/60 (Sig #1); ic1935-100,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:45:34 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.5.2 11



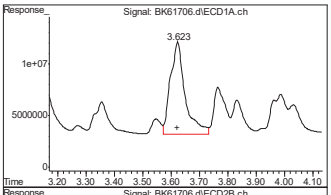
#1 TCMX
R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 618870938
Conc: 14.94 ng/ml

#1 TCMX
R.T.: 2.441 min
Delta R.T.: 0.001 min
Response: 1229397650
Conc: 15.36 ng/ml

#2 AR1016-A
R.T.: 3.153 min
Delta R.T.: 0.003 min
Response: 164632903
Conc: 101.27 ng/ml

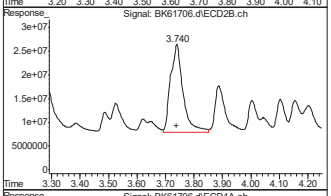
#2 AR1016-A
R.T.: 3.280 min
Delta R.T.: 0.005 min
Response: 311705117
Conc: 103.82 ng/ml

11.5.2 11



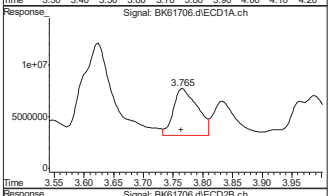
#3 AR1016-B

R.T.: 3.623 min
Delta R.T.: 0.002 min
Response: 322111875
Conc: 105.59 ng/ml



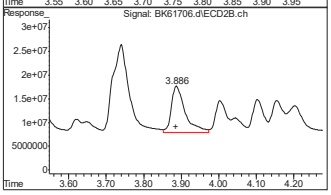
#3 AR1016-B

R.T.: 3.740 min
Delta R.T.: 0.002 min
Response: 558508530
Conc: 106.15 ng/ml



#4 AR1016-C

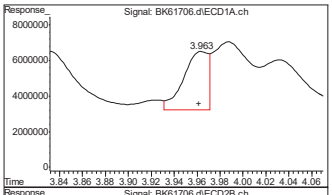
R.T.: 3.765 min
Delta R.T.: 0.002 min
Response: 125622963
Conc: 103.67 ng/ml



#4 AR1016-C

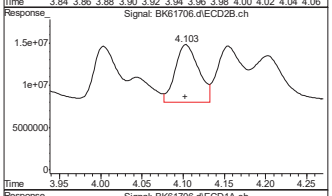
R.T.: 3.887 min
Delta R.T.: 0.000 min
Response: 246287330
Conc: 109.08 ng/ml

11.5.2 11



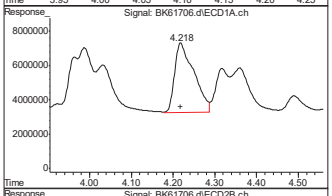
#5 AR1016-D

R.T.: 3.964 min
Delta R.T.: 0.002 min
Response: 48017885
Conc: 80.36 ng/ml



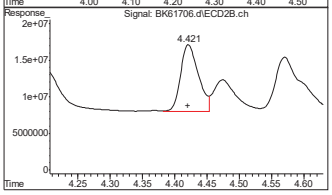
#5 AR1016-D

R.T.: 4.104 min
Delta R.T.: 0.000 min
Response: 135572120
Conc: 102.80 ng/ml



#6 AR1016-E

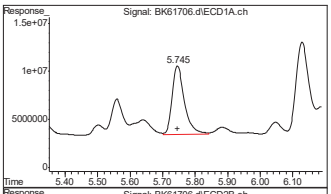
R.T.: 4.219 min
Delta R.T.: 0.001 min
Response: 130039485
Conc: 95.93 ng/ml



#6 AR1016-E

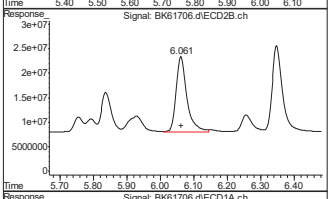
R.T.: 4.421 min
Delta R.T.: 0.000 min
Response: 175906929
Conc: 97.05 ng/ml

11.5.2 11



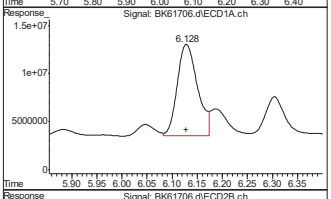
#7 AR1260-A

R.T.: 5.746 min
Delta R.T.: 0.000 min
Response: 187291005
Conc: 95.72 ng/ml



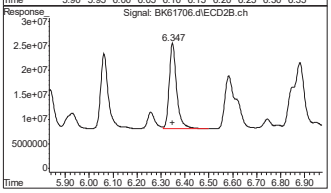
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 338847331
Conc: 95.20 ng/ml



#8 AR1260-B

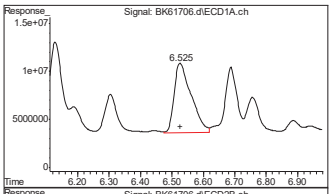
R.T.: 6.129 min
Delta R.T.: 0.000 min
Response: 265708991
Conc: 95.33 ng/ml



#8 AR1260-B

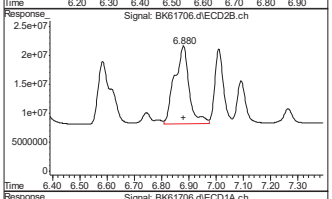
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 376442450
Conc: 92.40 ng/ml

11.5.2 11



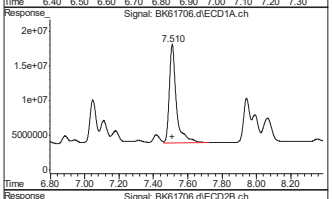
#9 AR1260-C

R.T.: 6.527 min
Delta R.T.: 0.000 min
Response: 269592705
Conc: 92.02 ng/ml



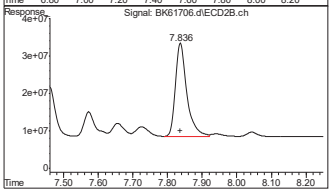
#9 AR1260-C

R.T.: 6.879 min
Delta R.T.: 0.000 min
Response: 497967475
Conc: 95.75 ng/ml



#10 AR1260-D

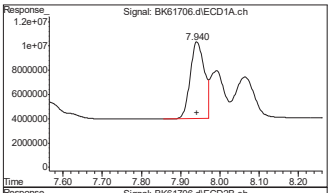
R.T.: 7.510 min
Delta R.T.: 0.001 min
Response: 402224810
Conc: 87.09 ng/ml



#10 AR1260-D

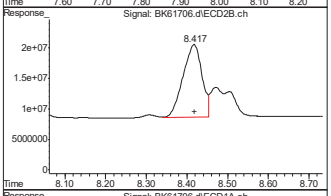
R.T.: 7.837 min
Delta R.T.: 0.000 min
Response: 585461619
Conc: 85.81 ng/ml

11.5.2 11



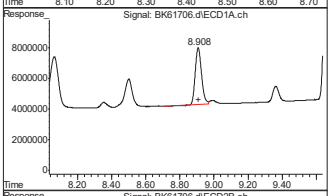
#11 AR1260-E

R.T.: 7.941 min
Delta R.T.: 0.000 min
Response: 158665808
Conc: 85.51 ng/ml



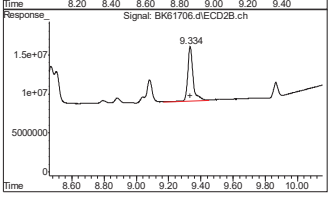
#11 AR1260-E

R.T.: 8.418 min
Delta R.T.: -0.001 min
Response: 382539413
Conc: 84.71 ng/ml



#12 AR1260-F

R.T.: 8.908 min
Delta R.T.: -0.001 min
Response: 95436634
Conc: 83.07 ng/ml

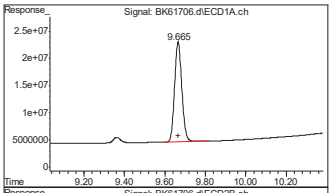


#12 AR1260-F

R.T.: 9.334 min
Delta R.T.: 0.002 min
Response: 158488128
Conc: 85.29 ng/ml

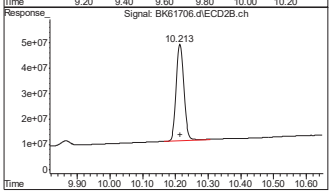
11.5.2 11

BK61706.d PC160920.M Wed Sep 21 09:44:17 2016 Page 9



#13 DCB

R.T.: 9.665 min
Delta R.T.: -0.002 min
Response: 459723048
Conc: 12.94 ng/ml m



#13 DCB

R.T.: 10.213 min
Delta R.T.: -0.002 min
Response: 615634409
Conc: 11.60 ng/ml m

11.5.2 11

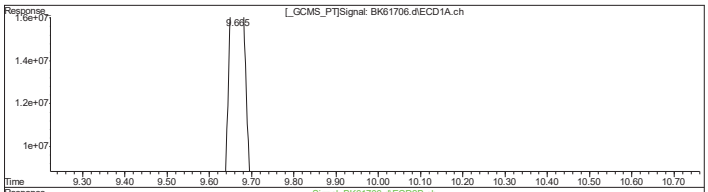
BK61706.d PC160920.M Wed Sep 21 09:44:17 2016 Page 10

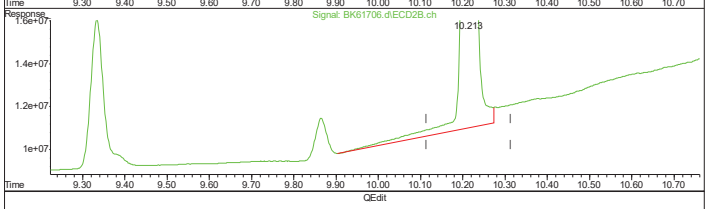
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61706.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:53 am
Operator : thomasa
Sample : ic1935-100,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:06 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





(13) DCB (s)
9.666min 12.860 ng/ml
response 456760576

(13) DCB #2 (s)
10.214min 12.570 ng/ml
response 667127217

11.5.2.1 11

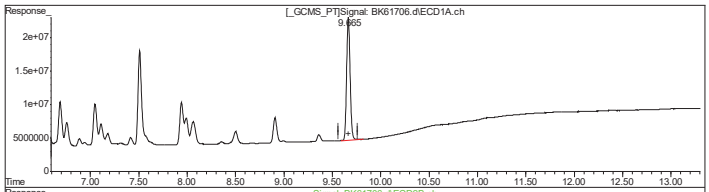
(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:45:19 2016 Page: 1

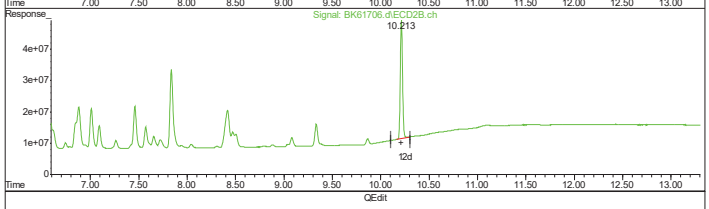
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61706.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 10:53 am
Operator : thomasa
Sample : ic1935-100,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:06 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





(13) DCB (s)
9.665min 12.944 ng/ml m
response 459723048

(13) DCB #2 (s)
10.213min 11.599 ng/ml m
response 615634409

11.5.2.2 11

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:45:28 2016 Page: 1

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61707.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:09 am
Operator : thomasa
Sample : ic1936-250,a16/60 (Sig #1); ic1935-250,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 103 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:46:07 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.487	2.441	1675.1E6	2953.1E6	40.449	36.901
	Spiked Amount 40.000			Recovery =	101.12%	92.25%	
13) s	DCB	9.666	10.216	1205.1E6	1626.9E6	33.929	30.652m
	Spiked Amount 40.000			Recovery =	84.82%	76.63%	
	Target Compounds						
2)	AR1016-A	3.150	3.276	414.2E6	752.9E6	254.774	250.766
3)	AR1016-B	3.622	3.739	839.9E6	1375.6E6	275.305	261.441
4)	AR1016-C	3.764	3.886	323.1E6	612.2E6	266.625	271.128
5)	AR1016-D	3.963	4.102	141.3E6	329.7E6	236.424	250.000
6)	AR1016-E	4.218	4.421	340.2E6	443.8E6	250.999	244.837
7)	AR1260-A	5.745	6.062	477.8E6	837.7E6	244.175	235.346
8)	AR1260-B	6.129	6.349	688.6E6	949.0E6	247.071	232.935
9)	AR1260-C	6.527	6.880	713.6E6	1261.6E6	243.588	242.591
10)	AR1260-D	7.511	7.837	1094.7E6	1529.5E6	237.023	224.185
11)	AR1260-E	7.943	8.419	436.5E6	1005.4E6	235.254	222.623
12)	AR1260-F	8.910	9.335	260.1E6	399.4E6	226.360	214.938

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

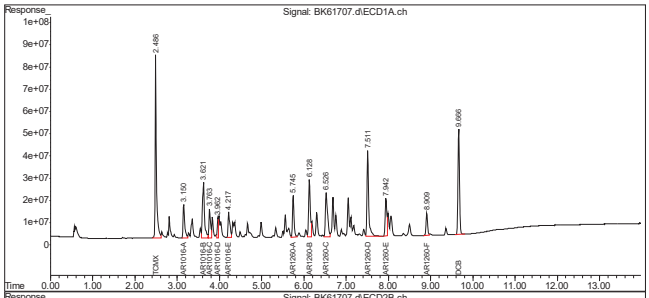
11.5.3 11

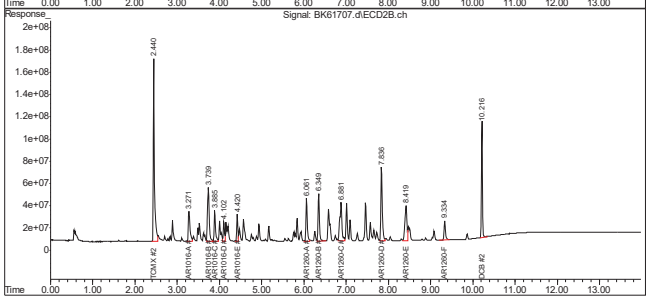
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61707.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:09 am
Operator : thomasa
Sample : ic1936-250,a16/60 (Sig #1); ic1935-250,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 103 Sample Multiplier: 1

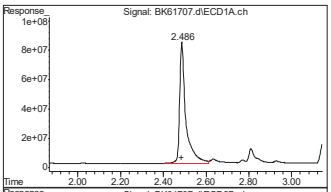
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:46:07 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

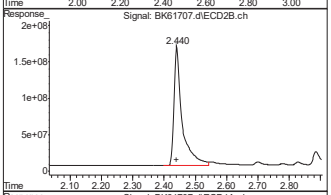




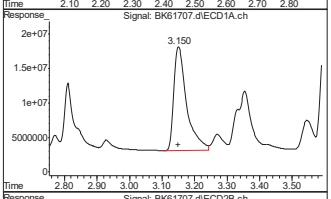
11.5.3 11



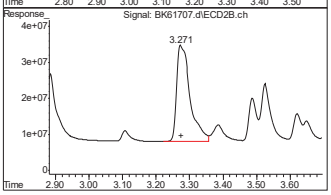
#1 TCMX
R.T.: 2.487 min
Delta R.T.: 0.000 min
Response: 1675104930
Conc: 40.45 ng/ml



#1 TCMX
R.T.: 2.441 min
Delta R.T.: 0.001 min
Response: 2953138812
Conc: 36.90 ng/ml

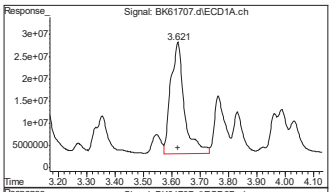


#2 AR1016-A
R.T.: 3.150 min
Delta R.T.: 0.000 min
Response: 414188467
Conc: 254.77 ng/ml

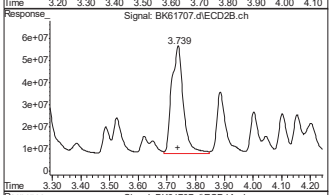


#2 AR1016-A
R.T.: 3.276 min
Delta R.T.: 0.000 min
Response: 752891163
Conc: 250.77 ng/ml

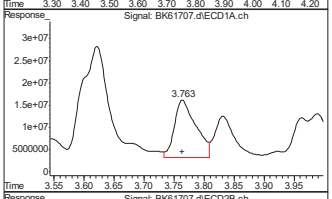
11.5.3 11



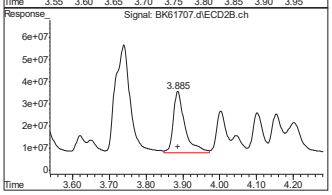
#3 AR1016-B
R.T.: 3.622 min
Delta R.T.: 0.000 min
Response: 839869066
Conc: 275.31 ng/ml



#3 AR1016-B
R.T.: 3.739 min
Delta R.T.: 0.000 min
Response: 1375633189
Conc: 261.44 ng/ml

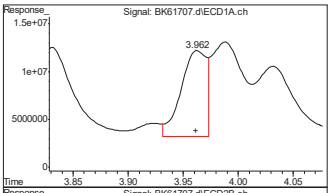


#4 AR1016-C
R.T.: 3.764 min
Delta R.T.: 0.000 min
Response: 323088243
Conc: 266.62 ng/ml



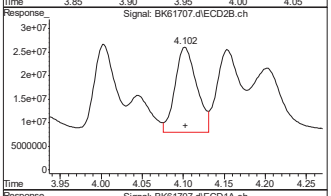
#4 AR1016-C
R.T.: 3.886 min
Delta R.T.: 0.000 min
Response: 612161040
Conc: 271.13 ng/ml

11.5.3 11



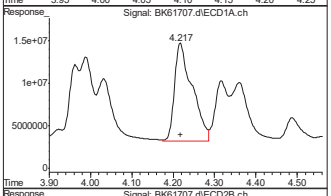
#5 AR1016-D

R.T.: 3.963 min
Delta R.T.: 0.001 min
Response: 141277446
Conc: 236.42 ng/ml



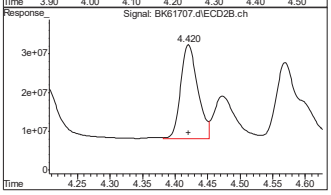
#5 AR1016-D

R.T.: 4.102 min
Delta R.T.: 0.000 min
Response: 329702007
Conc: 250.00 ng/ml



#6 AR1016-E

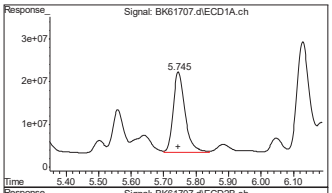
R.T.: 4.218 min
Delta R.T.: 0.000 min
Response: 340245832
Conc: 251.00 ng/ml



#6 AR1016-E

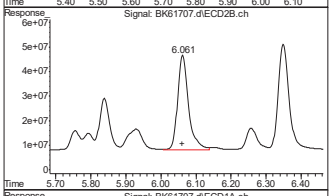
R.T.: 4.421 min
Delta R.T.: 0.000 min
Response: 443782559
Conc: 244.84 ng/ml

11.5.3 11



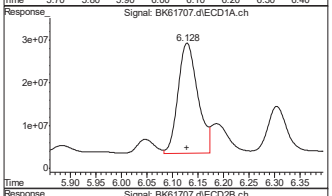
#7 AR1260-A

R.T.: 5.745 min
Delta R.T.: 0.000 min
Response: 477772645
Conc: 244.17 ng/ml



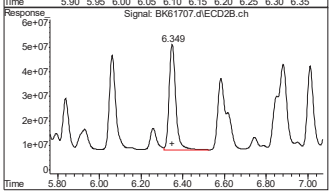
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 837668967
Conc: 235.35 ng/ml



#8 AR1260-B

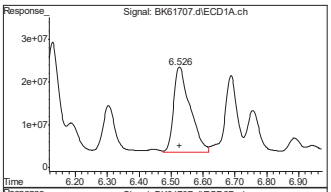
R.T.: 6.129 min
Delta R.T.: 0.000 min
Response: 688628113
Conc: 247.07 ng/ml



#8 AR1260-B

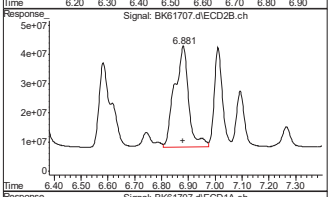
R.T.: 6.349 min
Delta R.T.: 0.000 min
Response: 949037409
Conc: 232.94 ng/ml

11.5.3 11



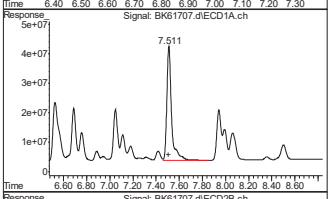
#9 AR1260-C

R.T.: 6.527 min
Delta R.T.: 0.000 min
Response: 713608992
Conc: 243.59 ng/ml



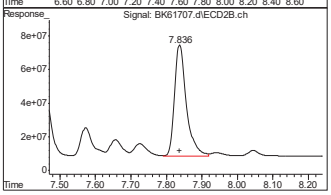
#9 AR1260-C

R.T.: 6.880 min
Delta R.T.: 0.000 min
Response: 1261590564
Conc: 242.59 ng/ml



#10 AR1260-D

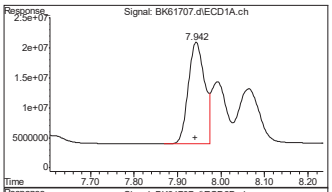
R.T.: 7.511 min
Delta R.T.: 0.002 min
Response: 1094650593
Conc: 237.02 ng/ml



#10 AR1260-D

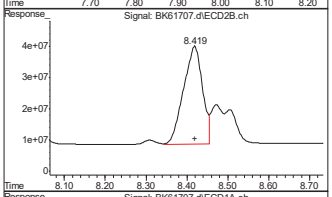
R.T.: 7.837 min
Delta R.T.: 0.000 min
Response: 1529521006
Conc: 224.18 ng/ml

11.5.3 11



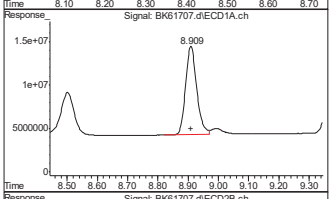
#11 AR1260-E

R.T.: 7.943 min
Delta R.T.: 0.002 min
Response: 436508714
Conc: 235.25 ng/ml



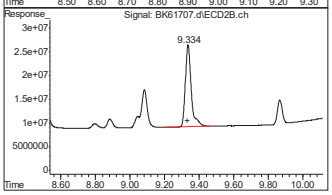
#11 AR1260-E

R.T.: 8.419 min
Delta R.T.: 0.000 min
Response: 1005387357
Conc: 222.62 ng/ml



#12 AR1260-F

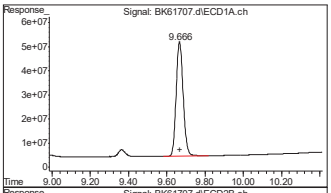
R.T.: 8.910 min
Delta R.T.: 0.000 min
Response: 260065703
Conc: 226.36 ng/ml



#12 AR1260-F

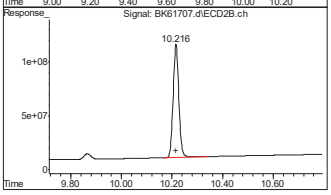
R.T.: 9.335 min
Delta R.T.: 0.002 min
Response: 399391230
Conc: 214.94 ng/ml

11.5.3 11



#13 DCB

R.T.: 9.666 min
Delta R.T.: -0.001 min
Response: 1205088714
Conc: 33.93 ng/ml



#13 DCB

R.T.: 10.216 min
Delta R.T.: 0.000 min
Response: 1626850905
Conc: 30.65 ng/ml m

11.5.3 11

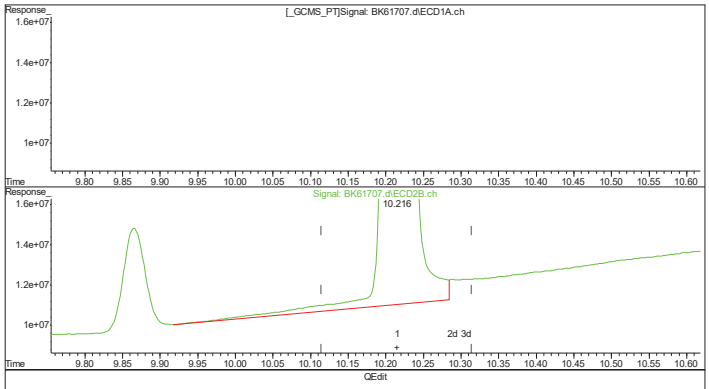
BK61707.d PC160920.M Wed Sep 21 09:44:22 2016 Page 10

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61707.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:09 am
Operator : thomasa
Sample : ic1935-250,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 103 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:12 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.666min 33.929 ng/ml
response 1205088714

(13) DCB #2 (s)
10.216min 31.666 ng/ml
response 1680638105

11.5.3.1 11

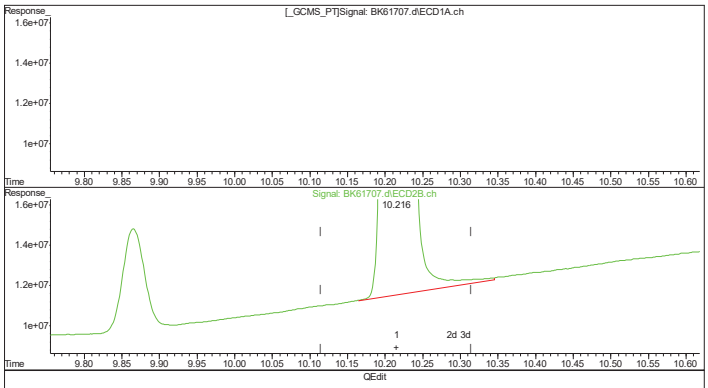
(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:45:55 2016 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61707.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:09 am
Operator : thomasa
Sample : ic1935-250,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 103 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:12 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.666min 33.929 ng/ml
response 1205088714

(13) DCB #2 (s)
10.216min 30.652 ng/ml m
response 1626850905

11.5.3.2 11

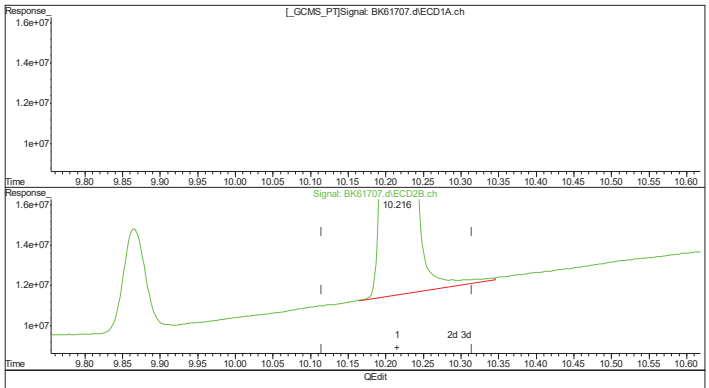
(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:45:58 2016 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61707.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:09 am
Operator : thomasa
Sample : ic1935-250,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 103 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:12 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.666min 33.929 ng/ml
response 1205088714

(13) DCB #2 (s)
10.216min 30.652 ng/ml m
response 1626850905

11.5.3.3 11

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:46:00 2016 Page: 1

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61708.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:25 am
Operator : thomasa
Sample : icc1936-500,a16/60 (Sig #1); icc1935-500,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:46:35 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.486	2.440	2177.2E6	3974.8E6	52.572	49.667
	Spiked Amount 40.000			Recovery =	131.43%	124.17%	
13) s	DCB	9.667	10.214	1686.6E6	2348.4E6	47.487	44.247m
	Spiked Amount 40.000			Recovery =	118.72%	110.62%	
	Target Compounds						
2)	AR1016-A	3.150	3.275	852.6E6	1506.0E6	524.459	501.591
3)	AR1016-B	3.622	3.738	1793.5E6	2889.6E6	587.894	549.168
4)	AR1016-C	3.764	3.886	674.9E6	1227.5E6	556.983	543.643
5)	AR1016-D	3.963	4.103	271.4E6	668.6E6	454.227	506.965
6)	AR1016-E	4.218	4.420	716.8E6	923.8E6	528.759	509.641
7)	AR1260-A	5.746	6.062	1004.6E6	1744.8E6	513.420	490.196
8)	AR1260-B	6.128	6.349	1476.3E6	1993.8E6	529.663	489.355
9)	AR1260-C	6.526	6.880	1541.3E6	2652.2E6	526.129	509.992
10)	AR1260-D	7.509	7.837	2383.8E6	3381.0E6	516.164	495.557
11)	AR1260-E	7.941	8.419	968.4E6	2172.5E6	521.905	481.055
12)	AR1260-F	8.909	9.333	569.4E6	873.9E6	495.565	470.304

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

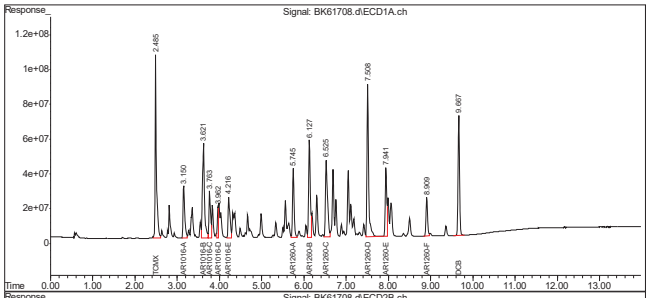
11.5.4 11

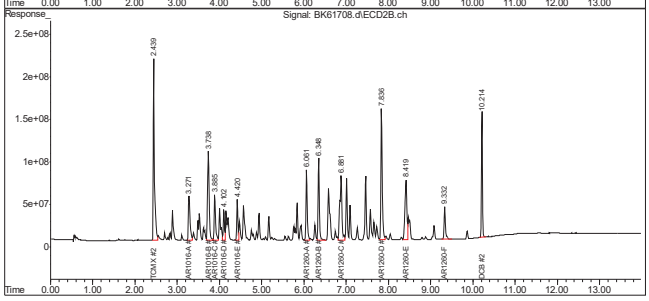
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61708.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:25 am
Operator : thomasa
Sample : icc1936-500,a16/60 (Sig #1); icc1935-500,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 104 Sample Multiplier: 1

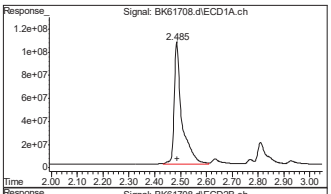
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:46:35 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

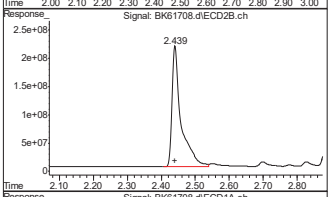




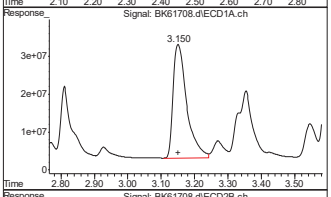
11.5.4 11



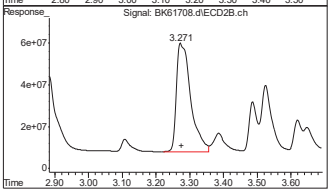
#1 TCMX
R.T.: 2.486 min
Delta R.T.: 0.000 min
Response: 2177152732
Conc: 52.57 ng/ml



#1 TCMX
R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 3974782379
Conc: 49.67 ng/ml

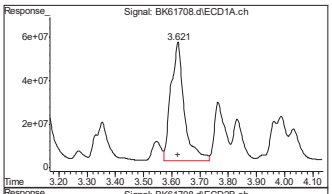


#2 AR1016-A
R.T.: 3.150 min
Delta R.T.: 0.000 min
Response: 852617581
Conc: 524.46 ng/ml

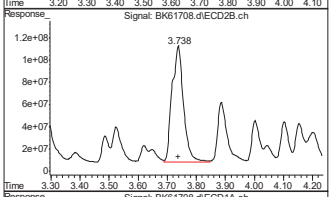


#2 AR1016-A
R.T.: 3.275 min
Delta R.T.: 0.000 min
Response: 1505960714
Conc: 501.59 ng/ml

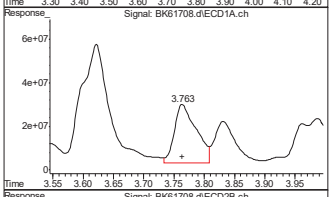
11.5.4 11



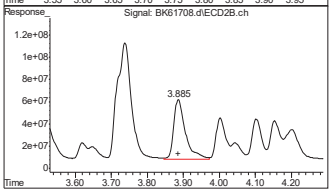
#3 AR1016-B
R.T.: 3.622 min
Delta R.T.: 0.000 min
Response: 1793476460
Conc: 587.89 ng/ml



#3 AR1016-B
R.T.: 3.738 min
Delta R.T.: 0.000 min
Response: 2889573801
Conc: 549.17 ng/ml

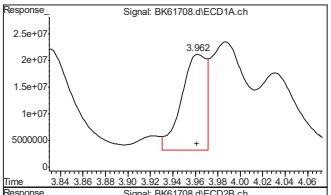


#4 AR1016-C
R.T.: 3.764 min
Delta R.T.: 0.000 min
Response: 674936047
Conc: 556.98 ng/ml



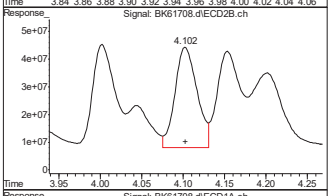
#4 AR1016-C
R.T.: 3.886 min
Delta R.T.: 0.000 min
Response: 1227453494
Conc: 543.64 ng/ml

11.5.4 11



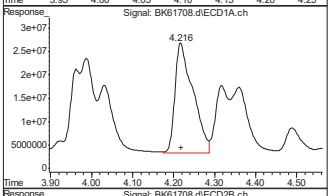
#5 AR1016-D

R.T.: 3.963 min
Delta R.T.: 0.001 min
Response: 271427973
Conc: 454.23 ng/ml



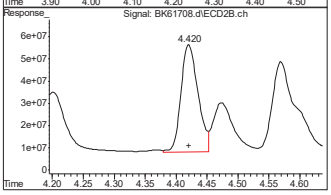
#5 AR1016-D

R.T.: 4.103 min
Delta R.T.: 0.000 min
Response: 668589216
Conc: 506.97 ng/ml



#6 AR1016-E

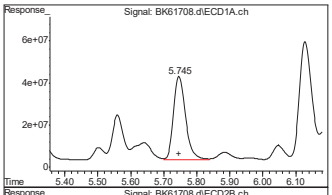
R.T.: 4.218 min
Delta R.T.: 0.000 min
Response: 716767748
Conc: 528.76 ng/ml



#6 AR1016-E

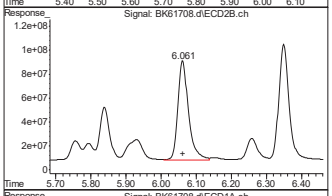
R.T.: 4.420 min
Delta R.T.: 0.000 min
Response: 923755503
Conc: 509.64 ng/ml

11.5.4 11



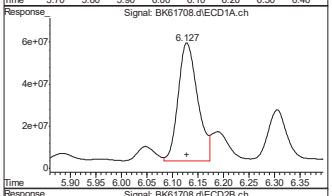
#7 AR1260-A

R.T.: 5.746 min
Delta R.T.: 0.000 min
Response: 1004599750
Conc: 513.42 ng/ml



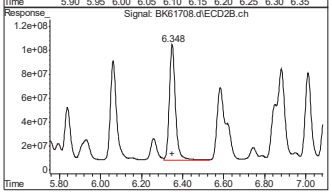
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 1744761880
Conc: 490.20 ng/ml



#8 AR1260-B

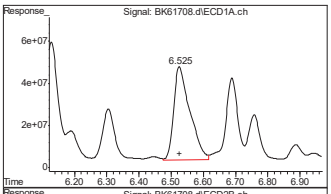
R.T.: 6.128 min
Delta R.T.: 0.000 min
Response: 1476259495
Conc: 529.66 ng/ml



#8 AR1260-B

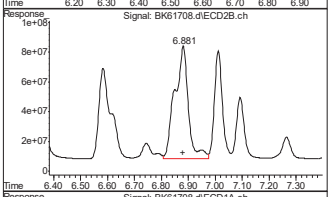
R.T.: 6.349 min
Delta R.T.: 0.000 min
Response: 1993753783
Conc: 489.35 ng/ml

11.5.4 11



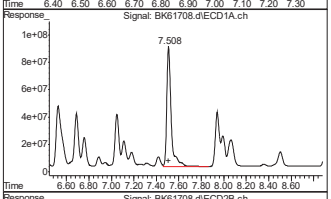
#9 AR1260-C

R.T.: 6.526 min
Delta R.T.: 0.000 min
Response: 1541335069
Conc: 526.13 ng/ml



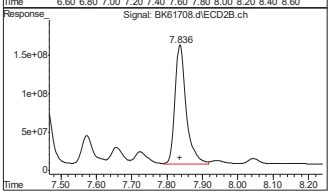
#9 AR1260-C

R.T.: 6.880 min
Delta R.T.: 0.000 min
Response: 2652202421
Conc: 509.99 ng/ml



#10 AR1260-D

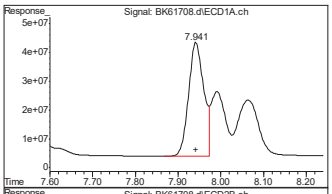
R.T.: 7.509 min
Delta R.T.: 0.000 min
Response: 2383811596
Conc: 516.16 ng/ml



#10 AR1260-D

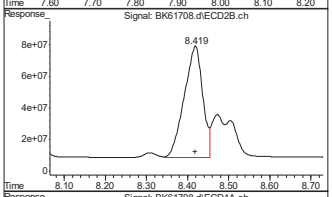
R.T.: 7.837 min
Delta R.T.: 0.000 min
Response: 3380980839
Conc: 495.56 ng/ml

11.5.4 11



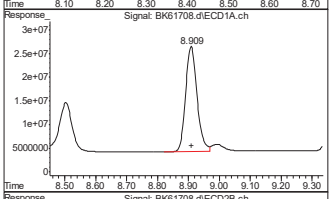
#11 AR1260-E

R.T.: 7.941 min
Delta R.T.: 0.000 min
Response: 968386059
Conc: 521.91 ng/ml



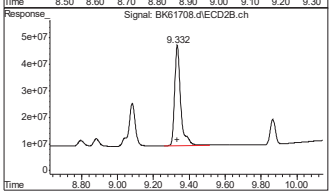
#11 AR1260-E

R.T.: 8.419 min
Delta R.T.: 0.000 min
Response: 2172490278
Conc: 481.05 ng/ml



#12 AR1260-F

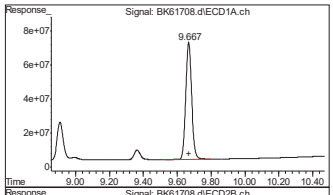
R.T.: 8.909 min
Delta R.T.: 0.000 min
Response: 569355935
Conc: 495.56 ng/ml



#12 AR1260-F

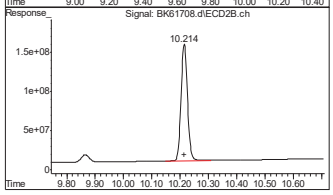
R.T.: 9.333 min
Delta R.T.: 0.000 min
Response: 873902937
Conc: 470.30 ng/ml

11.5.4 11



#13 DCB

R.T.: 9.667 min
Delta R.T.: 0.000 min
Response: 1686619313
Conc: 47.49 ng/ml



#13 DCB

R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 2348400251
Conc: 44.25 ng/ml m

11.5.4 11

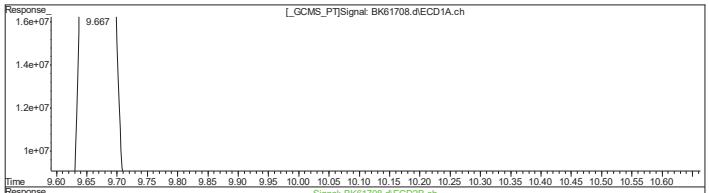
BK61708.d PC160920.M Wed Sep 21 09:44:27 2016 Page 10

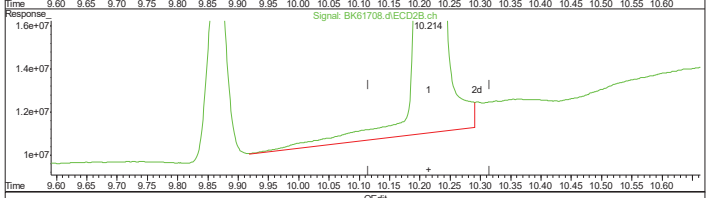
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61708.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:25 am
Operator : thomasa
Sample : icc1935-500,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:18 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





(13) DCB (s)
9.667min 47.487 ng/ml
response 1686619313

(13) DCB #2 (s)
10.215min 45.862 ng/ml
response 2434106136

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:46:25 2016 Page: 1

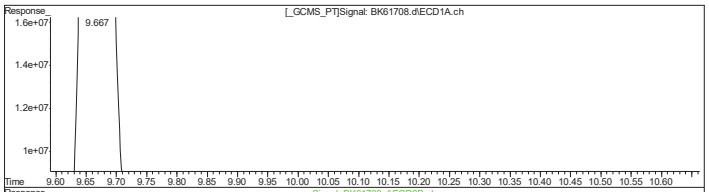
11.5.4.1 11

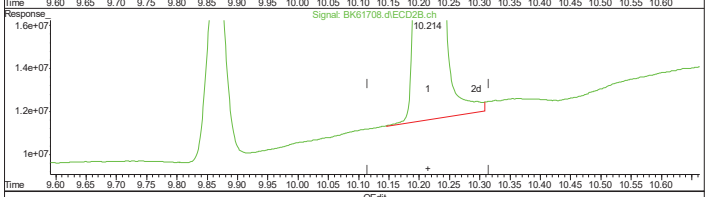
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61708.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:25 am
Operator : thomasa
Sample : icc1935-500,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:18 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





(13) DCB (s)
9.667min 47.487 ng/ml
response 1686619313

(13) DCB #2 (s)
10.214min 44.247 ng/ml m
response 2348400251

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:46:29 2016 Page: 1

11.5.4.2 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61709.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:41 am
Operator : thomasa
Sample : ic1936-750,a16/60 (Sig #1); ic1935-750,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 105 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:46:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.486	2.440	2455.1E6	4400.8E6	59.283	54.991
	Spiked Amount 40.000			Recovery	=	148.21%	137.48%
13) s	DCB	9.666	10.216	1713.9E6	2520.1E6	48.254	47.482
	Spiked Amount 40.000			Recovery	=	120.64%	118.71%
	Target Compounds						
2)	AR1016-A	3.150	3.275	1194.7E6	2105.2E6	734.865	701.188
3)	AR1016-B	3.622	3.739	2541.1E6	4155.1E6	832.957	789.683
4)	AR1016-C	3.764	3.886	955.1E6	1774.9E6	788.185	786.120
5)	AR1016-D	3.963	4.102	398.0E6	930.4E6	666.066	705.498
6)	AR1016-E	4.218	4.420	1007.3E6	1282.7E6	743.054	707.689
7)	AR1260-A	5.746	6.062	1415.1E6	2474.4E6	723.225	695.190
8)	AR1260-B	6.129	6.348	2071.3E6	2829.0E6	743.147	694.356
9)	AR1260-C	6.526	6.879	2162.8E6	3721.4E6	738.279	715.584
10)	AR1260-D	7.510	7.837	3308.1E6	4744.8E6	716.296	695.447
11)	AR1260-E	7.941	8.419	1329.3E6	2984.9E6	716.431	660.946
12)	AR1260-F	8.908	9.334	765.8E6	1174.1E6	666.572	631.875

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.5.5 11

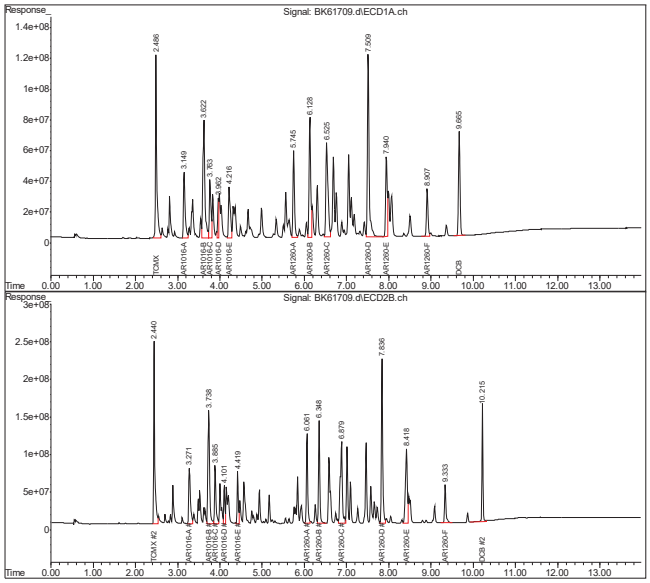
PC160920.M Wed Sep 21 09:44:30 2016 Page: 1

Quantitation Report (QT Reviewed)

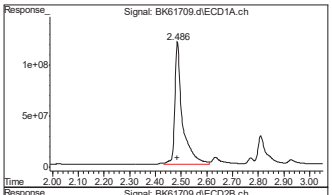
```
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61709.d
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 20 Sep 2016  11:41 am
Operator  : thomasa
Sample    : ic1936-750,a16/60 (Sig #1); ic1935-750,a16/60 (Sig #2)
Misc      : op48716,gbk1936,1000,,,5,,w
ALS Vial  : 105   Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:46:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title  : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

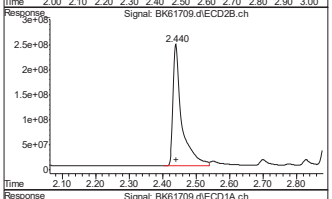


11.5.5 11



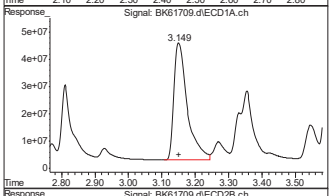
#1 TCMX

R.T.: 2.486 min
Delta R.T.: 0.000 min
Response: 2455068155
Conc: 59.28 ng/ml



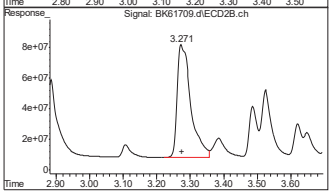
#1 TCMX

R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 4400827943
Conc: 54.99 ng/ml



#2 AR1016-A

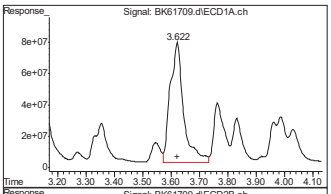
R.T.: 3.150 min
Delta R.T.: 0.000 min
Response: 1194677102
Conc: 734.87 ng/ml



#2 AR1016-A

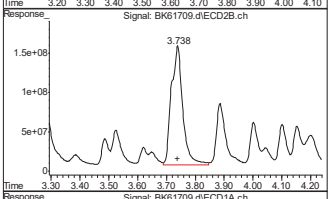
R.T.: 3.275 min
Delta R.T.: 0.000 min
Response: 2105222992
Conc: 701.19 ng/ml

11.5.5 11



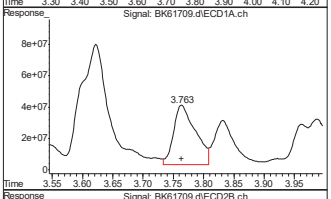
#3 AR1016-B

R.T.: 3.622 min
Delta R.T.: 0.000 min
Response: 2541085663
Conc: 832.96 ng/ml



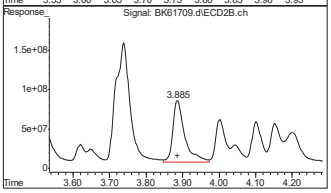
#3 AR1016-B

R.T.: 3.739 min
Delta R.T.: 0.000 min
Response: 4155095193
Conc: 789.68 ng/ml



#4 AR1016-C

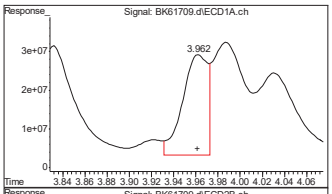
R.T.: 3.764 min
Delta R.T.: 0.000 min
Response: 955099356
Conc: 788.18 ng/ml



#4 AR1016-C

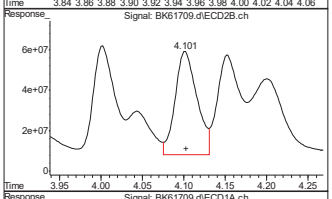
R.T.: 3.886 min
Delta R.T.: 0.000 min
Response: 1774923943
Conc: 786.12 ng/ml

11.5.5 11



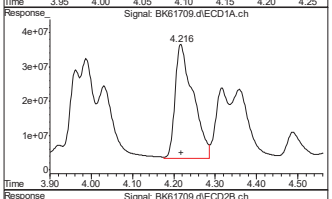
#5 AR1016-D

R.T.: 3.963 min
Delta R.T.: 0.000 min
Response: 398014209
Conc: 666.07 ng/ml



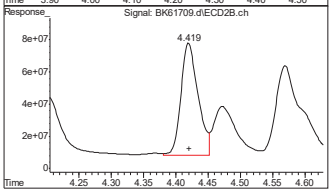
#5 AR1016-D

R.T.: 4.102 min
Delta R.T.: 0.000 min
Response: 930415807
Conc: 705.50 ng/ml



#6 AR1016-E

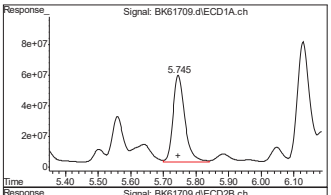
R.T.: 4.218 min
Delta R.T.: 0.000 min
Response: 1007258407
Conc: 743.05 ng/ml



#6 AR1016-E

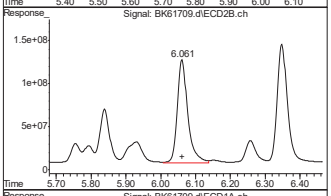
R.T.: 4.420 min
Delta R.T.: 0.000 min
Response: 1282731712
Conc: 707.69 ng/ml

11.5.5 11



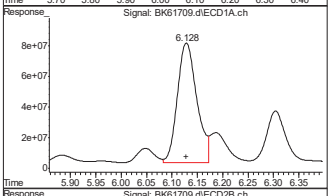
#7 AR1260-A

R.T.: 5.746 min
Delta R.T.: 0.000 min
Response: 1415122083
Conc: 723.22 ng/ml



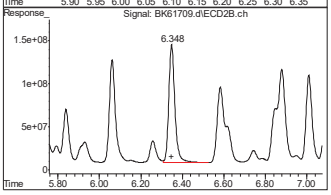
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 2474399988
Conc: 695.19 ng/ml



#8 AR1260-B

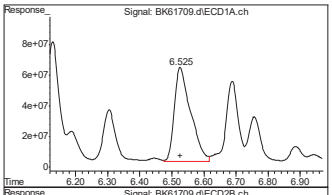
R.T.: 6.129 min
Delta R.T.: 0.000 min
Response: 2071273011
Conc: 743.15 ng/ml



#8 AR1260-B

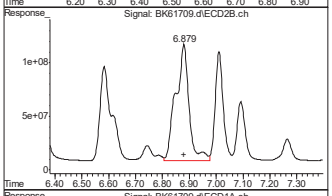
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 2828981653
Conc: 694.36 ng/ml

11.5.5 11



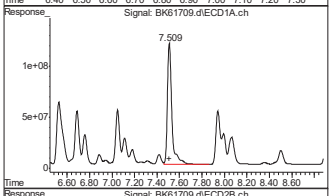
#9 AR1260-C

R.T.: 6.526 min
Delta R.T.: 0.000 min
Response: 2162843711
Conc: 738.28 ng/ml



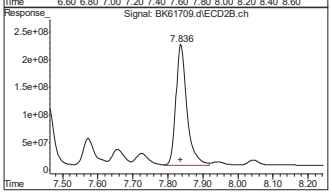
#9 AR1260-C

R.T.: 6.879 min
Delta R.T.: 0.000 min
Response: 3721376723
Conc: 715.58 ng/ml



#10 AR1260-D

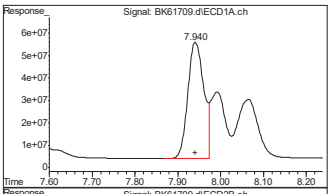
R.T.: 7.510 min
Delta R.T.: 0.000 min
Response: 3308088566
Conc: 716.30 ng/ml



#10 AR1260-D

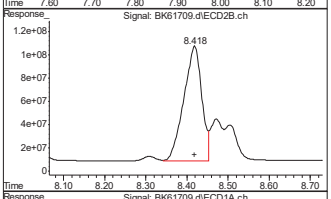
R.T.: 7.837 min
Delta R.T.: 0.000 min
Response: 4744754203
Conc: 695.45 ng/ml

11.5.5 11



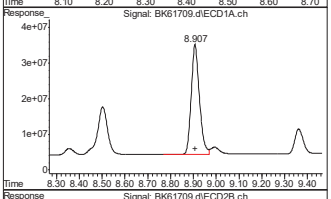
#11 AR1260-E

R.T.: 7.941 min
Delta R.T.: 0.000 min
Response: 1329325043
Conc: 716.43 ng/ml



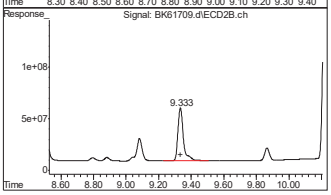
#11 AR1260-E

R.T.: 8.419 min
Delta R.T.: 0.000 min
Response: 2984897495
Conc: 660.95 ng/ml



#12 AR1260-F

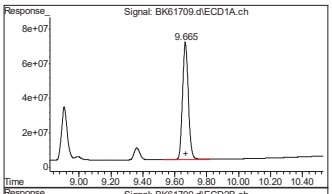
R.T.: 8.908 min
Delta R.T.: -0.002 min
Response: 765826789
Conc: 666.57 ng/ml



#12 AR1260-F

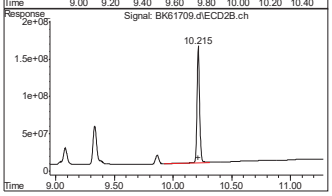
R.T.: 9.334 min
Delta R.T.: 0.000 min
Response: 1174130266
Conc: 631.88 ng/ml

11.5.5 11



#13 DCB

R.T.: 9.666 min
Delta R.T.: -0.001 min
Response: 1713861198
Conc: 48.25 ng/ml



#13 DCB

R.T.: 10.216 min
Delta R.T.: 0.000 min
Response: 2520063907
Conc: 47.48 ng/ml

11.5.5 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61710.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:57 am
Operator : thomasa
Sample : ic1936-1000,a16/60 (Sig #1); ic1935-1000,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 106 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:47:13 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.488	2.442	3529.1E6	6342.5E6	85.219	79.254
	Spiked Amount 40.000			Recovery	=	213.05%	198.14%
13) s	DCB	9.666	10.216	2462.2E6	3641.4E6	69.322	68.609
	Spiked Amount 40.000			Recovery	=	173.31%	171.52%
	Target Compounds						
2)	AR1016-A	3.152	3.277	1594.8E6	2781.6E6	980.971	926.461
3)	AR1016-B	3.623	3.740	3426.5E6	5573.0E6	1123.179	1059.152
4)	AR1016-C	3.765	3.887	1279.9E6	2341.9E6	1056.251	1037.239
5)	AR1016-D	3.964	4.103	516.1E6	1214.0E6	863.628	920.495
6)	AR1016-E	4.219	4.421	1344.9E6	1687.3E6	992.126	930.898
7)	AR1260-A	5.746	6.062	1887.4E6	3282.5E6	964.601	922.234
8)	AR1260-B	6.130	6.348	2773.5E6	3758.2E6	995.081	922.426
9)	AR1260-C	6.528	6.880	2903.9E6	4943.4E6	991.250	950.558
10)	AR1260-D	7.509	7.837	4093.7E6	6400.4E6	886.395	938.122
11)	AR1260-E	7.941	8.419	1809.7E6	4031.2E6	975.349	892.632
12)	AR1260-F	8.908	9.333	1032.1E6	1591.6E6	898.347	856.533

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

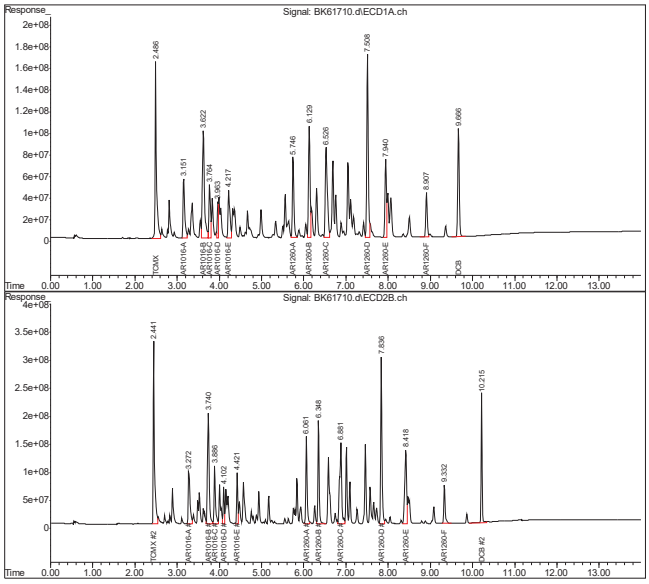
11.5.6 11

Quantitation Report (QT Reviewed)

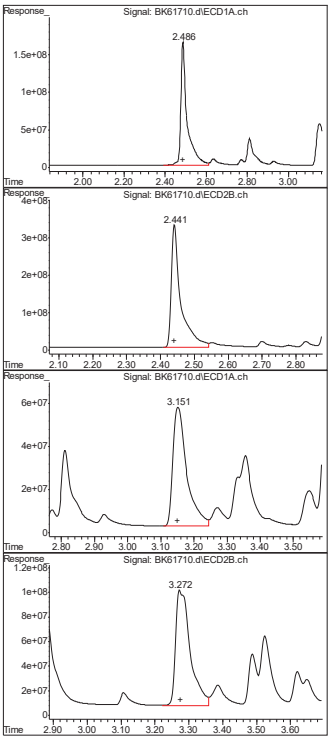
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61710.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 11:57 am
Operator : thomasa
Sample : ic1936-1000,a16/60 (Sig #1); ic1935-1000,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 106 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:47:13 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.5.6 11



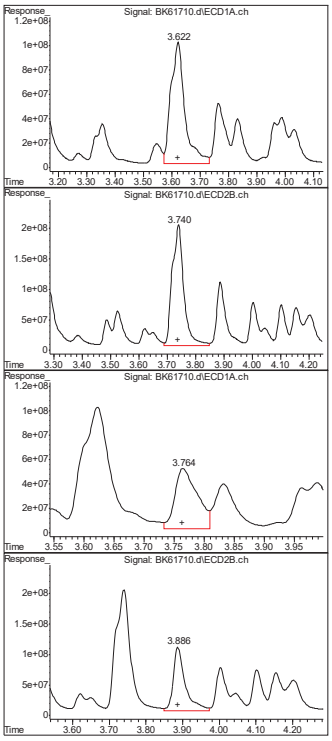
#1 TCMX
R.T.: 2.488 min
Delta R.T.: 0.002 min
Response: 3529147553
Conc: 85.22 ng/ml

#1 TCMX
R.T.: 2.442 min
Delta R.T.: 0.002 min
Response: 6342514446
Conc: 79.25 ng/ml

#2 AR1016-A
R.T.: 3.152 min
Delta R.T.: 0.002 min
Response: 1594772975
Conc: 980.97 ng/ml

#2 AR1016-A
R.T.: 3.277 min
Delta R.T.: 0.001 min
Response: 2781575957
Conc: 926.46 ng/ml

11.5.6 11



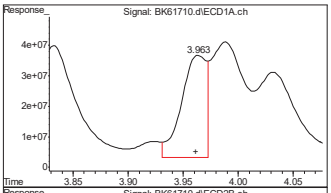
#3 AR1016-B
R.T.: 3.623 min
Delta R.T.: 0.000 min
Response: 3426460223
Conc: 1123.18 ng/ml

#3 AR1016-B
R.T.: 3.740 min
Delta R.T.: 0.002 min
Response: 5572964701
Conc: 1059.15 ng/ml

#4 AR1016-C
R.T.: 3.765 min
Delta R.T.: 0.001 min
Response: 1279933767
Conc: 1056.25 ng/ml

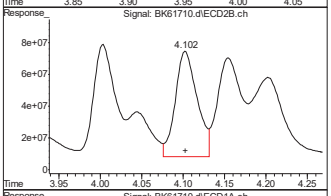
#4 AR1016-C
R.T.: 3.887 min
Delta R.T.: 0.001 min
Response: 2341908730
Conc: 1037.24 ng/ml

11.5.6 11



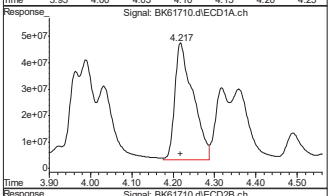
#5 AR1016-D

R.T.: 3.964 min
Delta R.T.: 0.002 min
Response: 516069437
Conc: 863.63 ng/ml



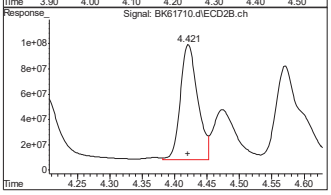
#5 AR1016-D

R.T.: 4.103 min
Delta R.T.: 0.000 min
Response: 1213954975
Conc: 920.50 ng/ml



#6 AR1016-E

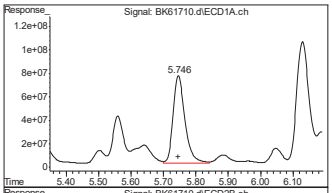
R.T.: 4.219 min
Delta R.T.: 0.000 min
Response: 1344892396
Conc: 992.13 ng/ml



#6 AR1016-E

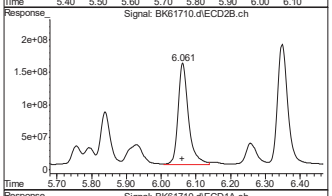
R.T.: 4.421 min
Delta R.T.: 0.000 min
Response: 1687311372
Conc: 930.90 ng/ml

11.5.6 11



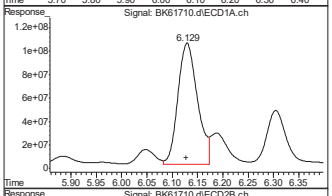
#7 AR1260-A

R.T.: 5.746 min
Delta R.T.: 0.000 min
Response: 1887419166
Conc: 964.60 ng/ml



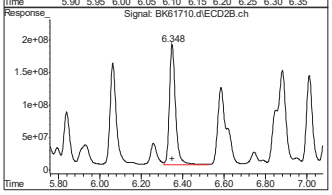
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 3282518228
Conc: 922.23 ng/ml



#8 AR1260-B

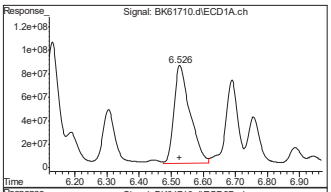
R.T.: 6.130 min
Delta R.T.: 0.002 min
Response: 2773455256
Conc: 995.08 ng/ml



#8 AR1260-B

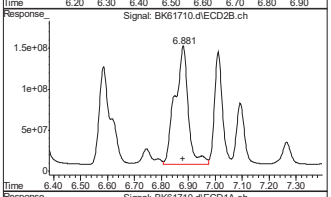
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 3758195926
Conc: 922.43 ng/ml

11.5.6 11



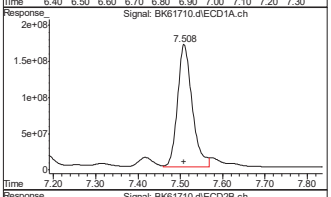
#9 AR1260-C

R.T.: 6.528 min
Delta R.T.: 0.002 min
Response: 2903942210
Conc: 991.25 ng/ml



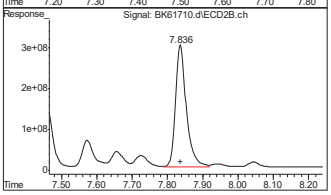
#9 AR1260-C

R.T.: 6.880 min
Delta R.T.: 0.000 min
Response: 4943352341
Conc: 950.56 ng/ml



#10 AR1260-D

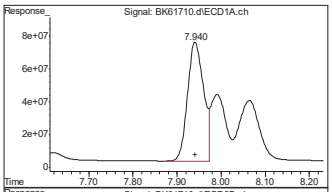
R.T.: 7.509 min
Delta R.T.: 0.000 min
Response: 4093660193
Conc: 886.39 ng/ml



#10 AR1260-D

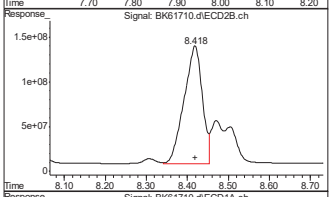
R.T.: 7.837 min
Delta R.T.: 0.000 min
Response: 6400423397
Conc: 938.12 ng/ml

11.5.6 11



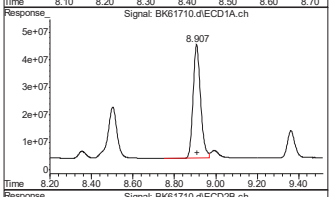
#11 AR1260-E

R.T.: 7.941 min
Delta R.T.: 0.000 min
Response: 1809743346
Conc: 975.35 ng/ml



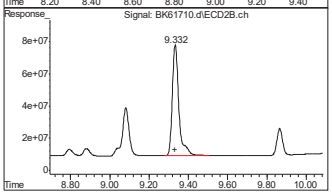
#11 AR1260-E

R.T.: 8.419 min
Delta R.T.: 0.000 min
Response: 4031209398
Conc: 892.63 ng/ml



#12 AR1260-F

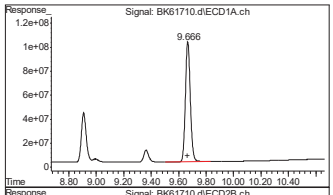
R.T.: 8.908 min
Delta R.T.: -0.002 min
Response: 1032113847
Conc: 898.35 ng/ml



#12 AR1260-F

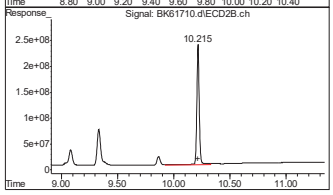
R.T.: 9.333 min
Delta R.T.: 0.000 min
Response: 1591581395
Conc: 856.53 ng/ml

11.5.6 11



#13 DCB

R.T.: 9.666 min
Delta R.T.: -0.001 min
Response: 2462154136
Conc: 69.32 ng/ml



#13 DCB

R.T.: 10.216 min
Delta R.T.: 0.000 min
Response: 3641383406
Conc: 68.61 ng/ml

11.5.6 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61711.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:13 pm
Operator : thomasa
Sample : ic1936-500,a21/54 (Sig #1); ic1935-500,a21/54 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 107 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:48:22 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.486	2.441	2273.4E6	4103.1E6	54.897	51.271
	Spiked Amount 40.000			Recovery	=	137.24%	128.18%
13) s	DCB	9.668	10.216	1417.2E6	2009.8E6	39.902	37.867
	Spiked Amount 40.000			Recovery	=	99.76%	94.67%
	Target Compounds						
14)	AR1221-A	2.022f	2.063f	178.3E6	381.4E6	513.675	591.938
15)	AR1221-B	2.635f	2.700	274.3E6	468.4E6	525.988	533.036
16)	AR1221-C	2.810f	2.885	474.8E6	1332.5E6	584.429	517.601
32)	AR1254-A	4.666f	4.935	688.1E6	1406.6E6	496.014	468.095
33)	AR1254-B	4.985f	5.167	1211.7E6	1499.1E6	446.689	461.055
34)	AR1254-C	5.503f	5.794	1314.3E6	2332.2E6	482.288	461.608
35)	AR1254-D	5.878f	6.100	844.4E6	1506.4E6	473.305	456.411
36)	AR1254-E	6.528f	6.882	1218.0E6	2127.3E6	454.898	431.086

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

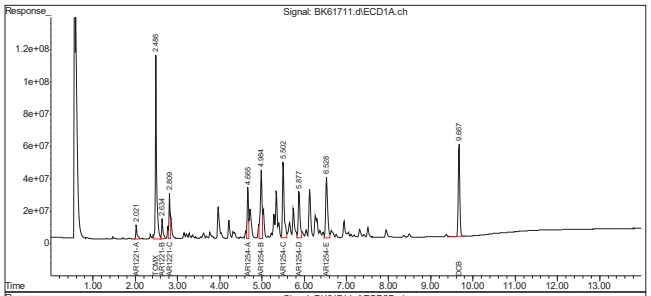
11.5.7 11

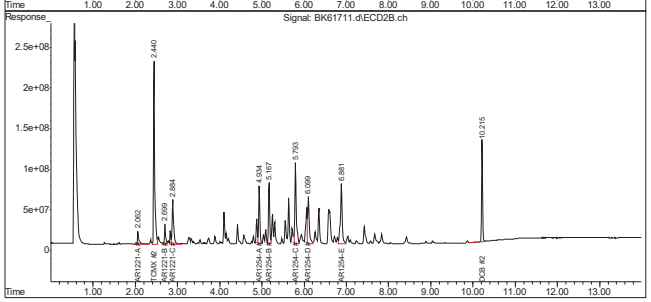
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61711.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:13 pm
Operator : thomasa
Sample : ic1936-500,a21/54 (Sig #1); ic1935-500,a21/54 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 107 Sample Multiplier: 1

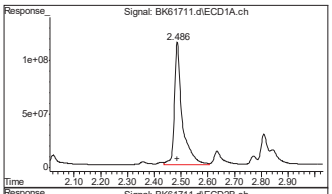
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:48:22 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



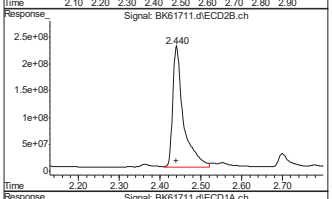


11.5.7 11



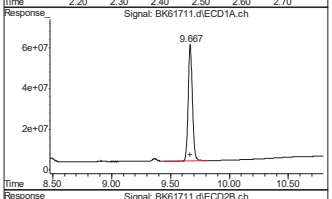
#1 TCMX

R.T.: 2.486 min
Delta R.T.: 0.000 min
Response: 2273414973
Conc: 54.90 ng/ml



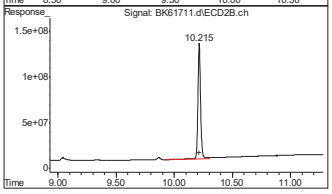
#1 TCMX

R.T.: 2.441 min
Delta R.T.: 0.000 min
Response: 4103126104
Conc: 51.27 ng/ml



#13 DCB

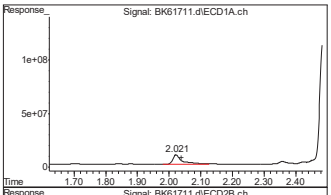
R.T.: 9.668 min
Delta R.T.: 0.000 min
Response: 1417208558
Conc: 39.90 ng/ml



#13 DCB

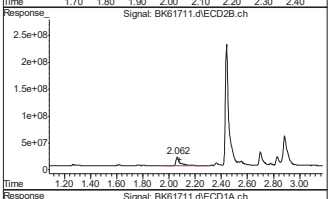
R.T.: 10.216 min
Delta R.T.: 0.000 min
Response: 2009786469
Conc: 37.87 ng/ml

11.5.7 11



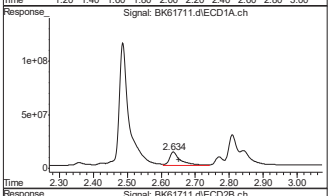
#14 AR1221-A

R.T.: 2.022 min
Delta R.T.: -0.018 min
Response: 178336941
Conc: 513.67 ng/ml



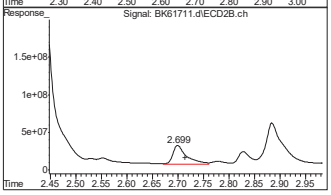
#14 AR1221-A

R.T.: 2.063 min
Delta R.T.: -0.016 min
Response: 381387086
Conc: 591.94 ng/ml



#15 AR1221-B

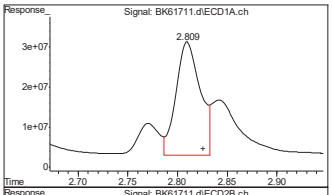
R.T.: 2.635 min
Delta R.T.: -0.016 min
Response: 274349086
Conc: 525.99 ng/ml



#15 AR1221-B

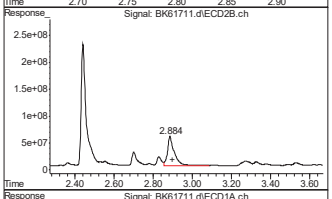
R.T.: 2.700 min
Delta R.T.: -0.014 min
Response: 468371460
Conc: 533.04 ng/ml

11.5.7 11



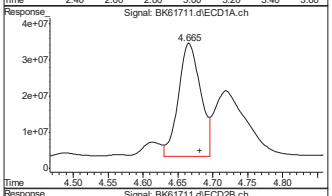
#16 AR1221-C

R.T.: 2.810 min
Delta R.T.: -0.016 min
Response: 474816123
Conc: 584.43 ng/ml



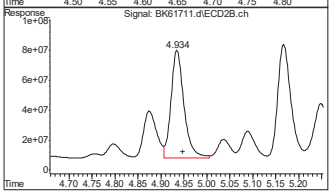
#16 AR1221-C

R.T.: 2.885 min
Delta R.T.: -0.013 min
Response: 1332486034
Conc: 517.60 ng/ml



#32 AR1254-A

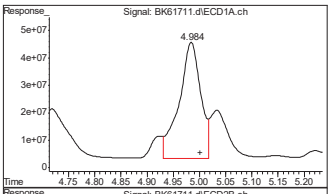
R.T.: 4.666 min
Delta R.T.: -0.016 min
Response: 688105992
Conc: 496.01 ng/ml



#32 AR1254-A

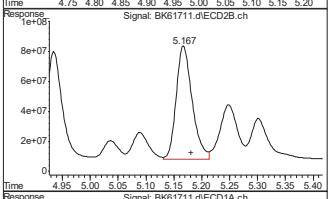
R.T.: 4.935 min
Delta R.T.: -0.013 min
Response: 1406603820
Conc: 468.09 ng/ml

11.5.7 11



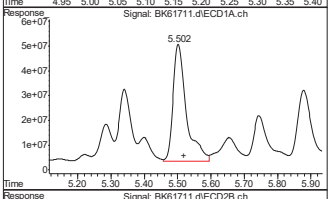
#33 AR1254-B

R.T.: 4.985 min
Delta R.T.: -0.017 min
Response: 1211726887
Conc: 446.69 ng/ml



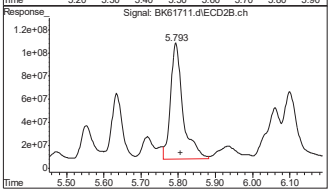
#33 AR1254-B

R.T.: 5.167 min
Delta R.T.: -0.014 min
Response: 1499131105
Conc: 461.05 ng/ml



#34 AR1254-C

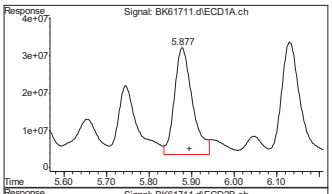
R.T.: 5.503 min
Delta R.T.: -0.016 min
Response: 1314301208
Conc: 482.29 ng/ml



#34 AR1254-C

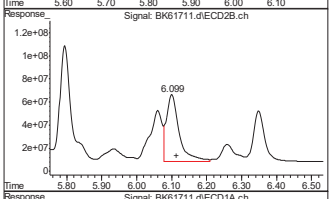
R.T.: 5.794 min
Delta R.T.: -0.012 min
Response: 2332180338
Conc: 461.61 ng/ml

11.5.7 11



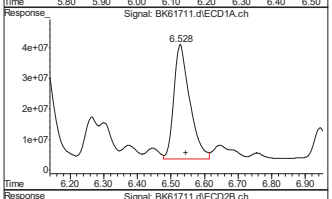
#35 AR1254-D

R.T.: 5.878 min
Delta R.T.: -0.018 min
Response: 844416188
Conc: 473.31 ng/ml



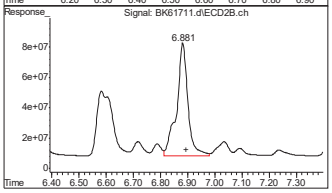
#35 AR1254-D

R.T.: 6.100 min
Delta R.T.: -0.014 min
Response: 1506422394
Conc: 456.41 ng/ml



#36 AR1254-E

R.T.: 6.528 min
Delta R.T.: -0.016 min
Response: 1218006829
Conc: 454.90 ng/ml



#36 AR1254-E

R.T.: 6.882 min
Delta R.T.: -0.013 min
Response: 2127311172
Conc: 431.09 ng/ml

11.5.7 11

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri 09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61712.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:28 pm
Operator : thomasa
Sample : ic1936-500,a32/62 (Sig #1); ic1935-500,a32/62 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:49:05 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.486	2.441	2208.3E6	3992.2E6	53.325	49.885
	Spiked Amount 40.000			Recovery = 133.31%		124.71%	
13) s	DCB	9.668	10.215	1519.4E6	2153.6E6	42.778	40.576
	Spiked Amount 40.000			Recovery = 106.95%		101.44%	
	Target Compounds						
17)	AR1232-A	2.810f	2.886	544.3E6	931.2E6	592.782	572.959
18)	AR1232-B	3.150	3.274	405.4E6	788.6E6	556.971	533.585
19)	AR1232-C	3.621f	3.739	750.0E6	1220.7E6	582.407	550.884
20)	AR1232-D	4.218f	4.420	305.2E6	402.0E6	543.558	522.034
21)	AR1232-E	4.750	4.936	250.5E6	670.8E6	525.729	537.806
37)	AR1262-A	5.746f	6.060f	798.5E6	1447.0E6	525.917	482.162m
38)	AR1262-B	6.127	6.349	994.2E6	1483.1E6	536.702	487.676
39)	AR1262-C	6.689	7.010	1330.1E6	1984.2E6	511.790	455.667
40)	AR1262-D	7.993	8.404	1021.3E6	2275.9E6	477.166	454.234
41)	AR1262-E	8.908f	9.333	792.1E6	1195.0E6	484.883	448.769

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

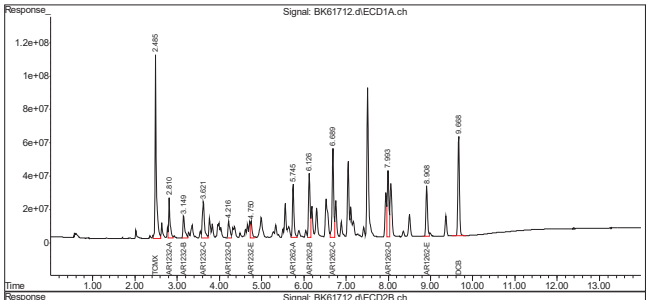
11.5.8 11

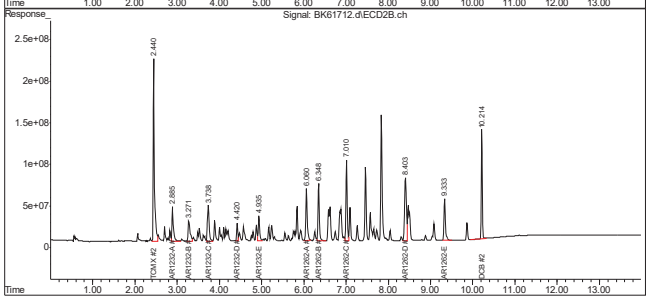
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61712.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:28 pm
Operator : thomasa
Sample : ic1936-500,a32/62 (Sig #1); ic1935-500,a32/62 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 108 Sample Multiplier: 1

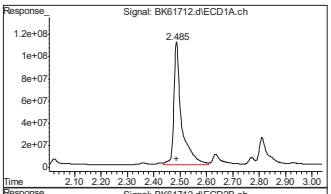
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:49:05 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

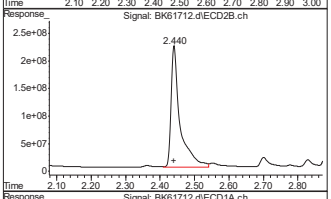




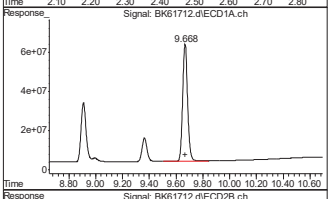
11.5.8 11



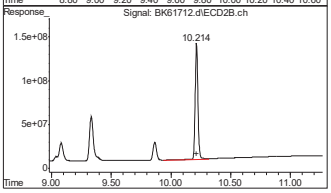
#1 TCMX
R.T.: 2.486 min
Delta R.T.: 0.000 min
Response: 2208335484
Conc: 53.33 ng/ml



#1 TCMX
R.T.: 2.441 min
Delta R.T.: 0.000 min
Response: 3992165143
Conc: 49.88 ng/ml

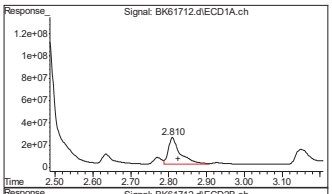


#13 DCB
R.T.: 9.668 min
Delta R.T.: 0.000 min
Response: 1519354419
Conc: 42.78 ng/ml

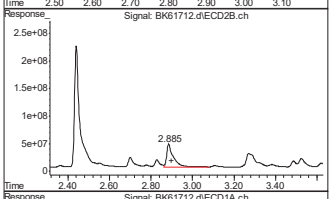


#13 DCB
R.T.: 10.215 min
Delta R.T.: 0.000 min
Response: 2153552665
Conc: 40.58 ng/ml

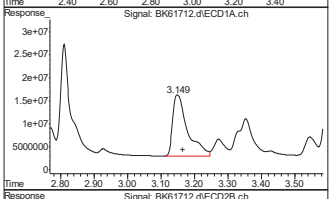
11.5.8 11



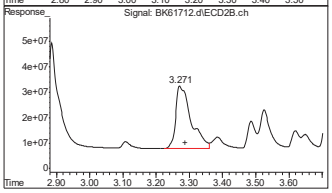
#17 AR1232-A
R.T.: 2.810 min
Delta R.T.: -0.016 min
Response: 544268279
Conc: 592.78 ng/ml



#17 AR1232-A
R.T.: 2.886 min
Delta R.T.: -0.014 min
Response: 931153428
Conc: 572.96 ng/ml

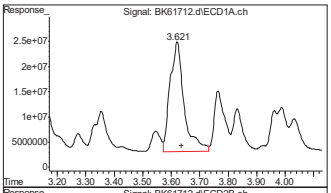


#18 AR1232-B
R.T.: 3.150 min
Delta R.T.: -0.015 min
Response: 405360966
Conc: 556.97 ng/ml



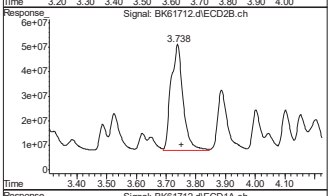
#18 AR1232-B
R.T.: 3.274 min
Delta R.T.: -0.014 min
Response: 788645530
Conc: 533.59 ng/ml

11.5.8 11



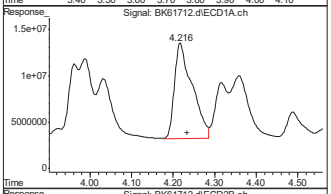
#19 AR1232-C

R.T.: 3.621 min
Delta R.T.: -0.016 min
Response: 749958592
Conc: 582.41 ng/ml



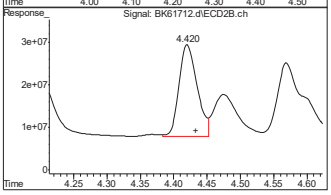
#19 AR1232-C

R.T.: 3.739 min
Delta R.T.: -0.013 min
Response: 1220660571
Conc: 550.88 ng/ml



#20 AR1232-D

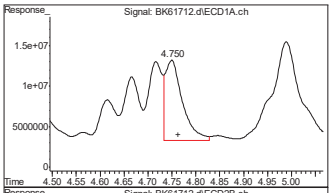
R.T.: 4.218 min
Delta R.T.: -0.016 min
Response: 305234374
Conc: 543.56 ng/ml



#20 AR1232-D

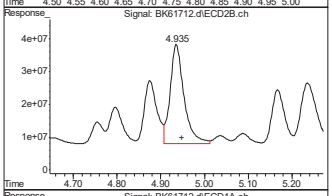
R.T.: 4.420 min
Delta R.T.: -0.013 min
Response: 401961246
Conc: 522.03 ng/ml

11.5.8 11



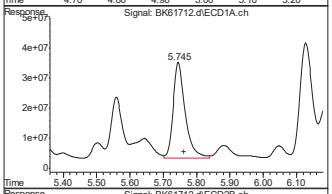
#21 AR1232-E

R.T.: 4.750 min
Delta R.T.: -0.014 min
Response: 250544388
Conc: 525.73 ng/ml



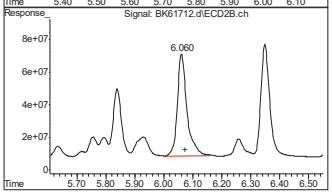
#21 AR1232-E

R.T.: 4.936 min
Delta R.T.: -0.012 min
Response: 670828601
Conc: 537.81 ng/ml



#37 AR1262-A

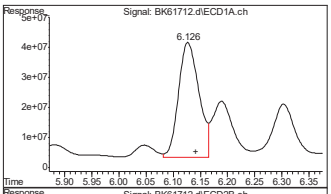
R.T.: 5.746 min
Delta R.T.: -0.016 min
Response: 798483138
Conc: 525.92 ng/ml



#37 AR1262-A

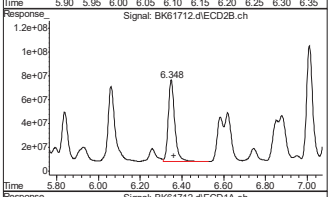
R.T.: 6.060 min
Delta R.T.: -0.014 min
Response: 1446991928
Conc: 482.16 ng/ml m

11.5.8 11



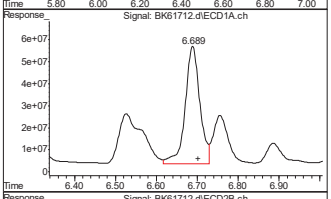
#38 AR1262-B

R.T.: 6.127 min
Delta R.T.: -0.015 min
Response: 994198995
Conc: 536.70 ng/ml



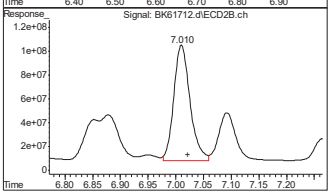
#38 AR1262-B

R.T.: 6.349 min
Delta R.T.: -0.012 min
Response: 1483107025
Conc: 487.68 ng/ml



#39 AR1262-C

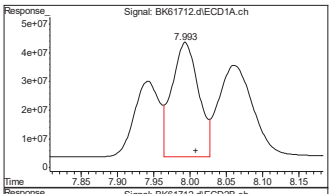
R.T.: 6.689 min
Delta R.T.: -0.014 min
Response: 1330052390
Conc: 511.79 ng/ml



#39 AR1262-C

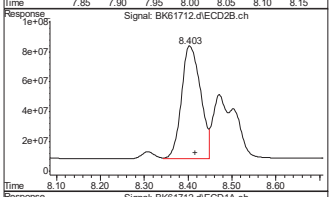
R.T.: 7.010 min
Delta R.T.: -0.012 min
Response: 1984229165
Conc: 455.67 ng/ml

11.5.8 11



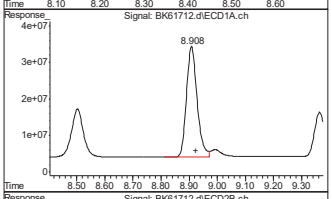
#40 AR1262-D

R.T.: 7.993 min
Delta R.T.: -0.015 min
Response: 1021274534
Conc: 477.17 ng/ml



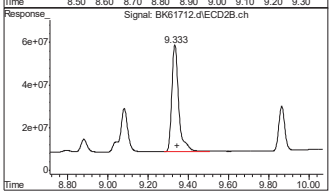
#40 AR1262-D

R.T.: 8.404 min
Delta R.T.: -0.013 min
Response: 2275862741
Conc: 454.23 ng/ml



#41 AR1262-E

R.T.: 8.908 min
Delta R.T.: -0.016 min
Response: 792140326
Conc: 484.88 ng/ml



#41 AR1262-E

R.T.: 9.333 min
Delta R.T.: -0.013 min
Response: 1195011959
Conc: 448.77 ng/ml

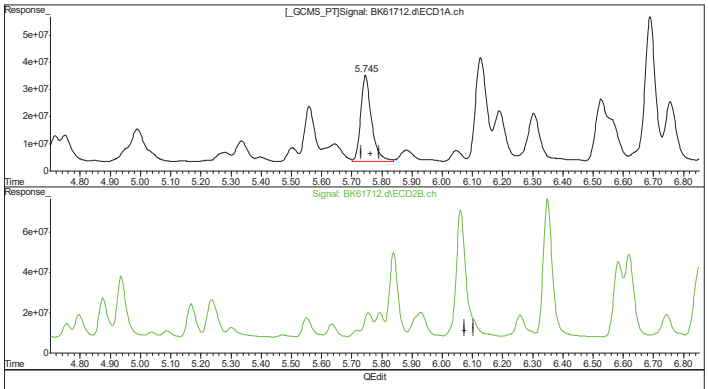
11.5.8 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61712.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:28 pm
Operator : thomasa
Sample : ic1935-500,a32/62
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:42 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(37) AR1262-A
5.746min 525.917 ng/ml
response 798483138

(37) AR1262-A #2
0.000min 0.000 ng/ml
response 0

11.5.8.1 11

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:49:03 2016 Page: 1

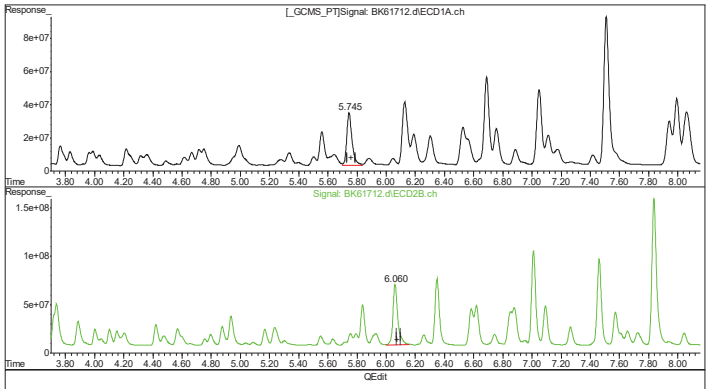
BK61712.D edits: AR1262-A

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61712.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:28 pm
Operator : thomasa
Sample : ic1935-500,a32/62
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:42 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(37) AR1262-A
5.746min 525.917 ng/ml
response 798483138

(37) AR1262-A #2
6.060min 482.162 ng/ml m
response 1446991928

11.5.8.2 11

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:49:08 2016 Page: 1

BK61712.D edits: AR1262-A

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri 09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1936-500,a42/68 (Sig #1); ic1935-500,a42/68 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:50:13 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.486	2.439	2247.2E6	4003.1E6	54.264	50.021
	Spiked Amount 40.000			Recovery	=	135.66%	125.05%
13) s	DCB	9.667	10.214	2437.4E6	3453.5E6	68.626	65.068
	Spiked Amount 40.000			Recovery	=	171.57%	162.67%
	Target Compounds						
22)	AR1242-A	2.810f	2.884	382.5E6	659.0E6	586.468	589.718
23)	AR1242-B	3.151	3.275	688.2E6	1207.8E6	531.510	500.059
24)	AR1242-C	3.621f	3.737	1414.1E6	2264.7E6	552.496	523.784
25)	AR1242-D	4.218	4.419	583.5E6	746.9E6	511.246	488.074
26)	AR1242-E	4.750	4.935	485.3E6	934.6E6	542.656	515.252
42)	AR1268-A	6.689	7.011	750.6E6	1162.1E6	494.324	460.970
43)	AR1268-B	7.042f	7.462f	856.9E6	1282.4E6	488.018	450.562m
44)	AR1268-C	7.993f	8.399f	2735.7E6	4048.7E6	452.715	407.949m
45)	AR1268-D	8.354f	8.878f	1979.6E6	2768.8E6	429.235	388.132m
46)	AR1268-E	9.362f	9.862f	5410.5E6	7975.2E6	432.221	387.255m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.5.9 11

PC160920.M Wed Sep 21 09:44:50 2016 Page: 1

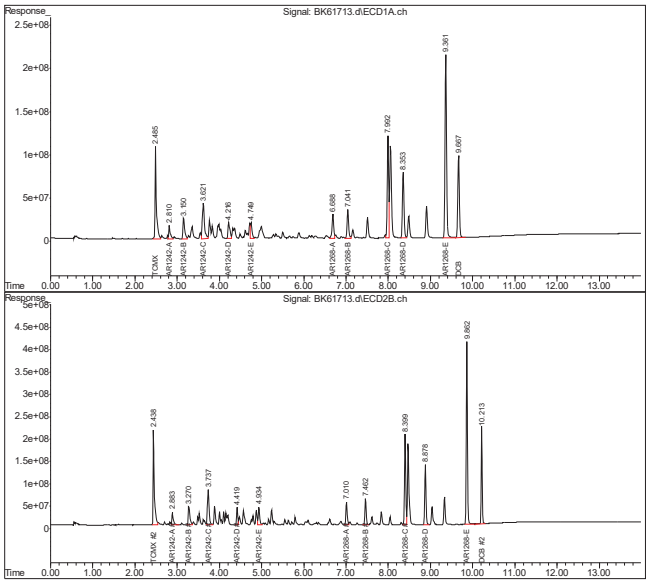
BK61713.D: GBK1936-IC1936 Initial Calibration (500) page 1 of 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1936-500,a42/68 (Sig #1); ic1935-500,a42/68 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:50:13 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

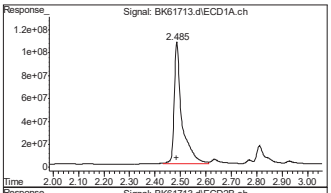
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.5.9 11

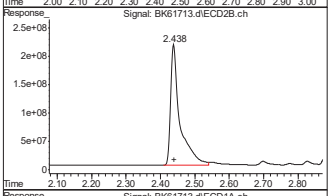
PC160920.M Wed Sep 21 09:44:50 2016 Page: 2

BK61713.D: GBK1936-IC1936 Initial Calibration (500) page 2 of 8



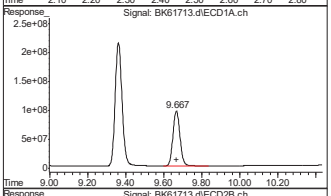
#1 TCMX

R.T.: 2.486 min
Delta R.T.: 0.000 min
Response: 2247218058
Conc: 54.26 ng/ml



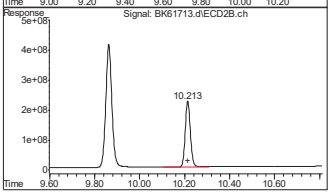
#1 TCMX

R.T.: 2.439 min
Delta R.T.: 0.000 min
Response: 4003105143
Conc: 50.02 ng/ml



#13 DCB

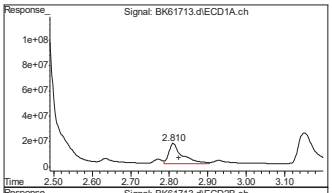
R.T.: 9.667 min
Delta R.T.: 0.000 min
Response: 2437426773
Conc: 68.63 ng/ml



#13 DCB

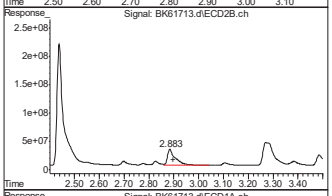
R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 3453480807
Conc: 65.07 ng/ml

11.5.9 11



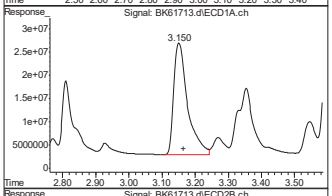
#22 AR1242-A

R.T.: 2.810 min
Delta R.T.: -0.015 min
Response: 382547069
Conc: 586.47 ng/ml



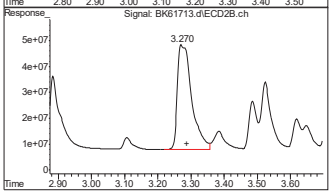
#22 AR1242-A

R.T.: 2.884 min
Delta R.T.: -0.015 min
Response: 658983431
Conc: 589.72 ng/ml



#23 AR1242-B

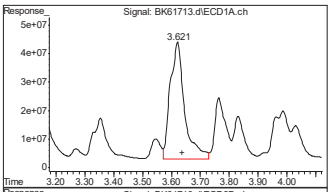
R.T.: 3.151 min
Delta R.T.: -0.014 min
Response: 688202991
Conc: 531.51 ng/ml



#23 AR1242-B

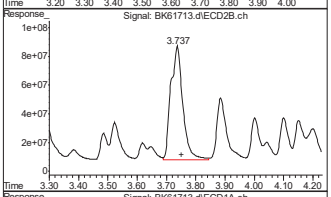
R.T.: 3.275 min
Delta R.T.: -0.013 min
Response: 1207832942
Conc: 500.06 ng/ml

11.5.9 11



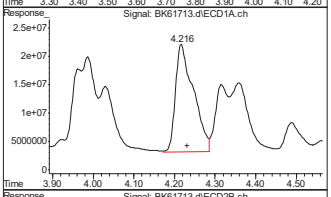
#24 AR1242-C

R.T.: 3.621 min
Delta R.T.: -0.015 min
Response: 1414094847
Conc: 552.50 ng/ml



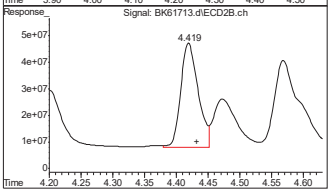
#24 AR1242-C

R.T.: 3.737 min
Delta R.T.: -0.014 min
Response: 2264695180
Conc: 523.78 ng/ml



#25 AR1242-D

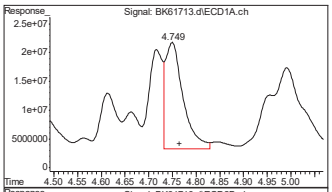
R.T.: 4.218 min
Delta R.T.: -0.015 min
Response: 583480037
Conc: 511.25 ng/ml



#25 AR1242-D

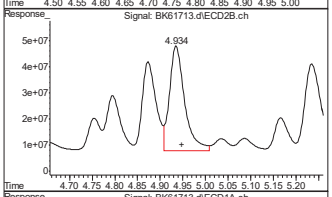
R.T.: 4.419 min
Delta R.T.: -0.013 min
Response: 746912731
Conc: 488.07 ng/ml

11.5.9 11



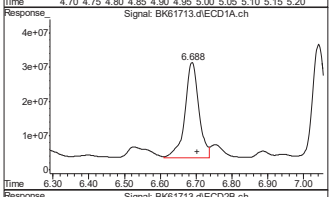
#26 AR1242-E

R.T.: 4.750 min
Delta R.T.: -0.015 min
Response: 485251824
Conc: 542.66 ng/ml



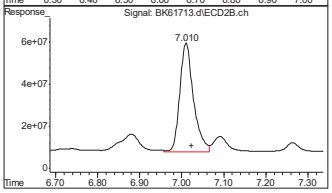
#26 AR1242-E

R.T.: 4.935 min
Delta R.T.: -0.013 min
Response: 934575141
Conc: 515.25 ng/ml



#42 AR1268-A

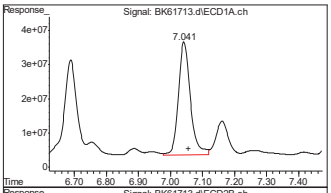
R.T.: 6.689 min
Delta R.T.: -0.014 min
Response: 750582386
Conc: 494.32 ng/ml



#42 AR1268-A

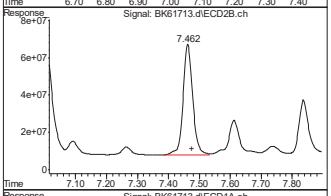
R.T.: 7.011 min
Delta R.T.: -0.012 min
Response: 1162094620
Conc: 460.97 ng/ml

11.5.9 11



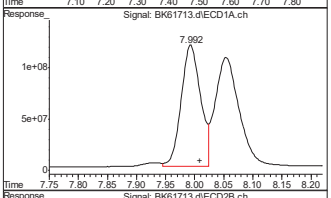
#43 AR1268-B

R.T.: 7.042 min
Delta R.T.: -0.013 min
Response: 856927223
Conc: 488.02 ng/ml



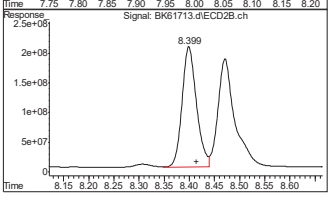
#43 AR1268-B

R.T.: 7.462 min
Delta R.T.: -0.013 min
Response: 1282394116
Conc: 450.56 ng/ml m



#44 AR1268-C

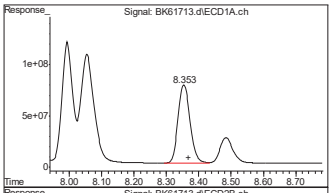
R.T.: 7.993 min
Delta R.T.: -0.016 min
Response: 2735713378
Conc: 452.71 ng/ml



#44 AR1268-C

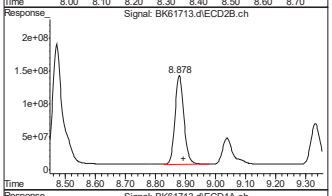
R.T.: 8.399 min
Delta R.T.: -0.015 min
Response: 4048725599
Conc: 407.95 ng/ml m

11.5.9 11



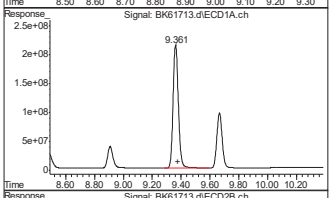
#45 AR1268-D

R.T.: 8.354 min
Delta R.T.: -0.016 min
Response: 1979552236
Conc: 429.24 ng/ml



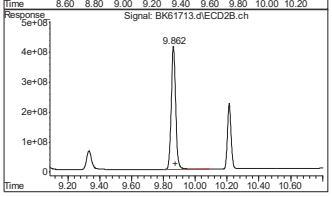
#45 AR1268-D

R.T.: 8.878 min
Delta R.T.: -0.014 min
Response: 2768802658
Conc: 388.13 ng/ml m



#46 AR1268-E

R.T.: 9.362 min
Delta R.T.: -0.016 min
Response: 5410541298
Conc: 432.22 ng/ml



#46 AR1268-E

R.T.: 9.862 min
Delta R.T.: -0.014 min
Response: 7975196700
Conc: 387.25 ng/ml m

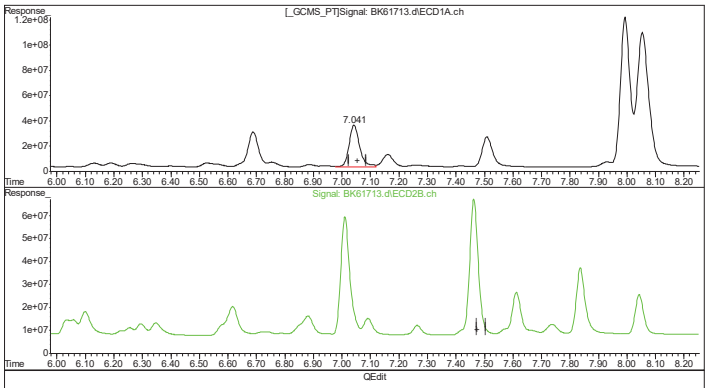
11.5.9 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(43) AR1268-B
7.042min 488.018 ng/ml
response 856927223

(43) AR1268-B #2
0.000min 0.000 ng/ml
response 0

11.5.9.1 11

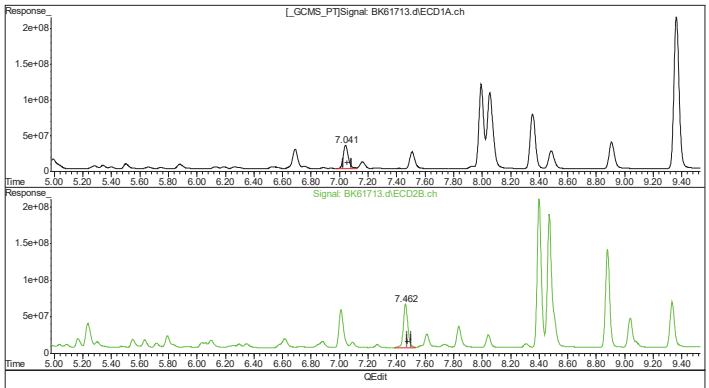
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(43) AR1268-B
7.042min 488.018 ng/ml
response 856927223

(43) AR1268-B #2
7.462min 450.562 ng/ml m
response 1282394116

11.5.9.2 11

(+) = Expected Retention Time

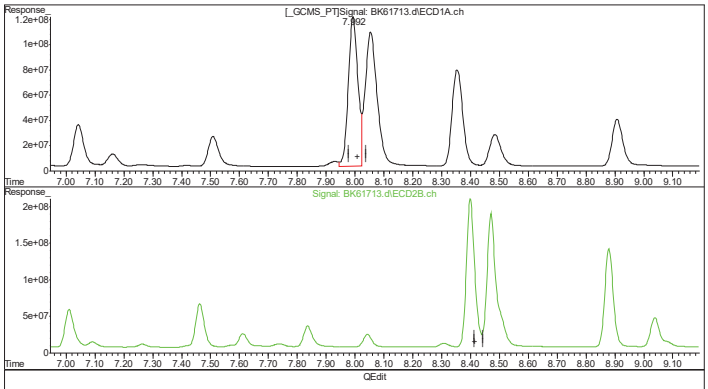
Cal Report: BK61713.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(44) AR1268-C
7.993min 452.715 ng/ml
response 2735713378

(44) AR1268-C #2
0.000min 0.000 ng/ml
response 0

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:49:51 2016

11.5.9.3 11

BK61713.D edits: AR1268-C

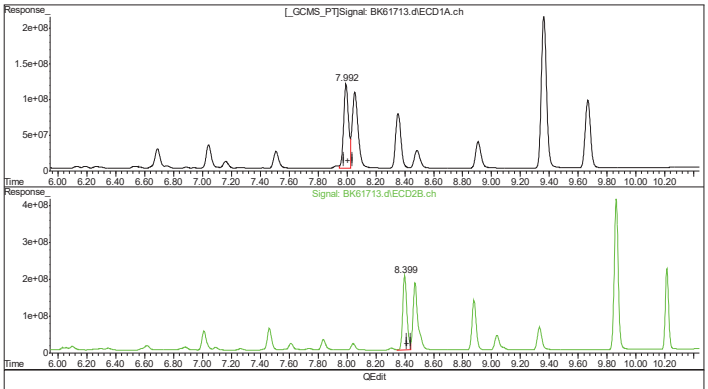
Cal Report: BK61713.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(44) AR1268-C
7.993min 452.715 ng/ml
response 2735713378

(44) AR1268-C #2
8.399min 407.949 ng/ml m
response 4048725599

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:49:59 2016

11.5.9.4 11

BK61713.D edits: AR1268-C

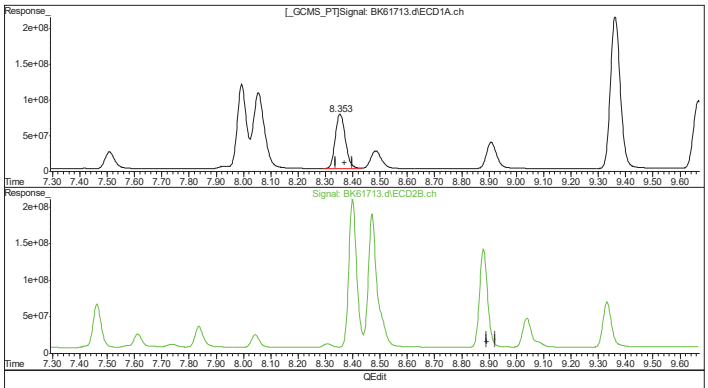
Cal Report: BK61713.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(45) AR1268-D
8.354min 429.235 ng/ml
response 1979552236

(45) AR1268-D #2
0.000min 0.000 ng/ml
response 0

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:50:02 2016

11.5.9.5 11

BK61713.D edits: AR1268-D

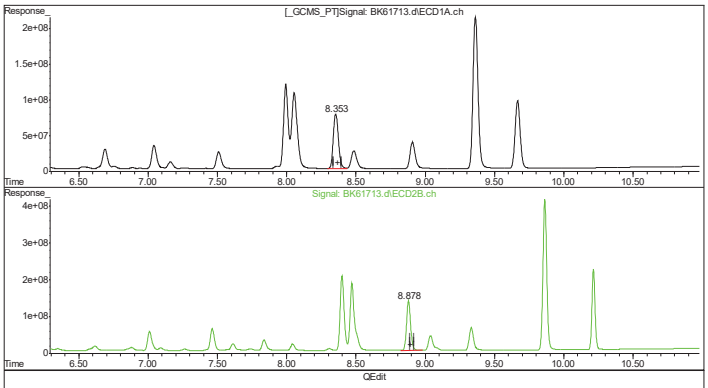
Cal Report: BK61713.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(45) AR1268-D
8.354min 429.235 ng/ml
response 1979552236

(45) AR1268-D #2
8.878min 388.132 ng/ml m
response 2768802658

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:50:07 2016

11.5.9.6 11

BK61713.D edits: AR1268-D

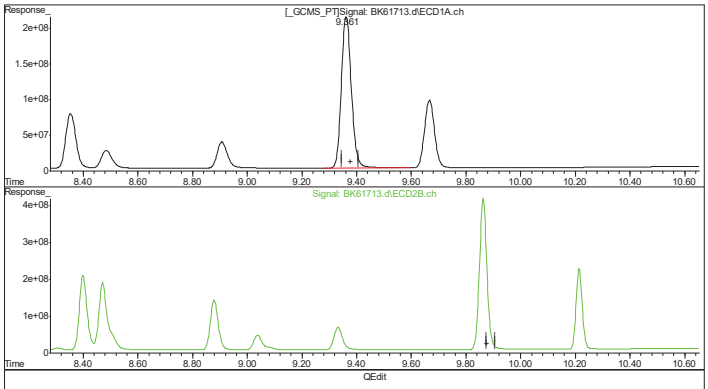
Cal Report: BK61713.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(46) AR1268-E
9.362min 432.221 ng/ml
response 5410541298

(46) AR1268-E #2
0.000min 0.000 ng/ml
response 0

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:50:10 2016 Page: 1

11.5.9.7 11

BK61713.D edits: AR1268-E

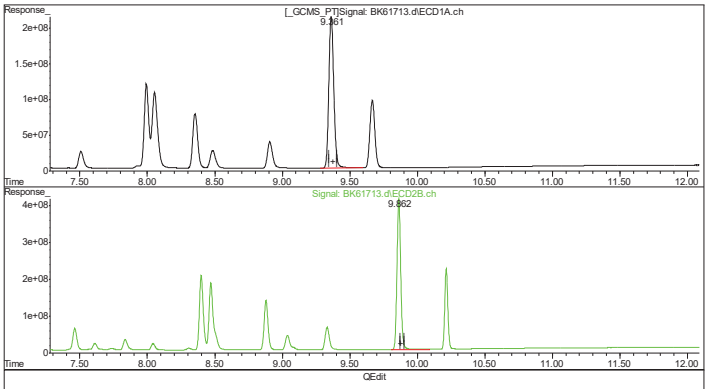
Cal Report: BK61713.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61713.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 12:44 pm
Operator : thomasa
Sample : ic1935-500,a42/68
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 109 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:48 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(46) AR1268-E
9.362min 432.221 ng/ml
response 5410541298

(46) AR1268-E #2
9.862min 387.255 ng/ml m
response 7975196700

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:50:16 2016 Page: 1

11.5.9.8 11

BK61713.D edits: AR1268-E

Cal Report: BK61714.D

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61714.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:00 pm
Operator : thomasa
Sample : ic1936-500,a1248 (Sig #1); ic1935-500,a1248 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:50:59 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.485	2.440	2018.4E6	4022.0E6	48.738	50.257
	Spiked Amount 40.000			Recovery =		121.85%	125.64%
13) s	DCB	9.666	10.214	1473.7E6	2102.5E6	41.492	39.613
	Spiked Amount 40.000			Recovery =		103.73%	99.03%
	Target Compounds						
27)	AR1248-A	3.148f	3.273f	383.3E6	700.6E6	550.133	530.511
28)	AR1248-B	3.620f	3.737f	839.6E6	1521.2E6	464.913	515.924m
29)	AR1248-C	3.961f	4.101	434.6E6	912.0E6	540.484m	504.356
30)	AR1248-D	4.217f	4.420f	886.6E6	1168.3E6	526.572	502.340
31)	AR1248-E	4.749f	4.936	832.4E6	1510.0E6	770.952	513.697 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

PC160920.M Wed Sep 21 09:44:55 2016 Page: 1

11.5.10 11

BK61714.D: GBK1936-IC1936 Initial Calibration (500) page 1 of 6

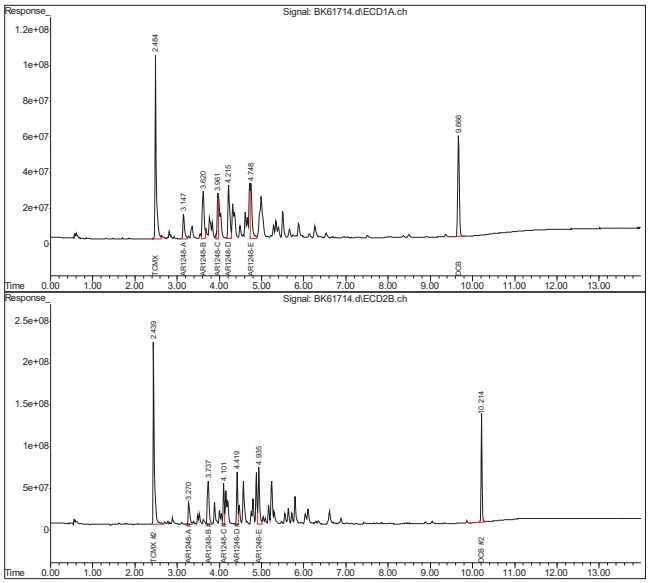
Cal Report: BK61714.D

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61714.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:00 pm
Operator : thomasa
Sample : ic1936-500,a1248 (Sig #1); ic1935-500,a1248 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:50:59 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

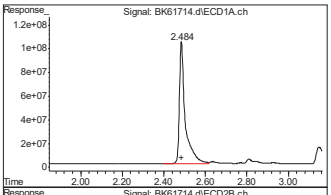
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



PC160920.M Wed Sep 21 09:44:55 2016 Page: 2

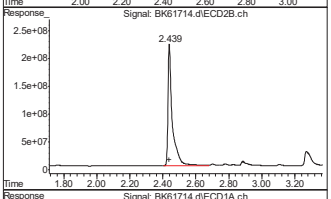
11.5.10 11

BK61714.D: GBK1936-IC1936 Initial Calibration (500) page 2 of 6



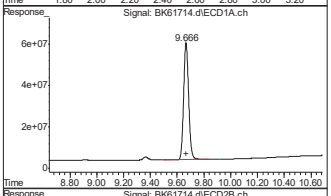
#1 TCMX

R.T.: 2.485 min
Delta R.T.: 0.000 min
Response: 2018370403
Conc: 48.74 ng/ml



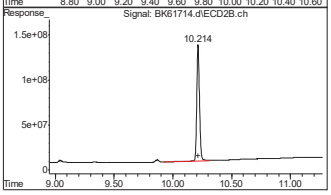
#1 TCMX

R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 4021956963
Conc: 50.26 ng/ml



#13 DCB

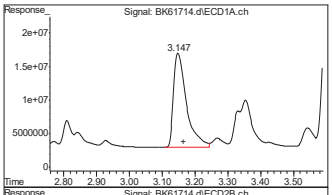
R.T.: 9.666 min
Delta R.T.: 0.000 min
Response: 1473696784
Conc: 41.49 ng/ml



#13 DCB

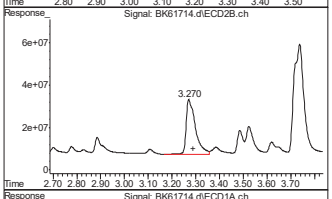
R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 2102457367
Conc: 39.61 ng/ml

11.5.10 11



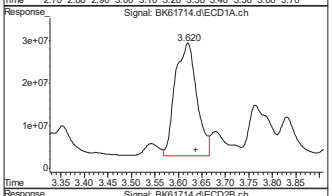
#27 AR1248-A

R.T.: 3.148 min
Delta R.T.: -0.017 min
Response: 383290422
Conc: 550.13 ng/ml



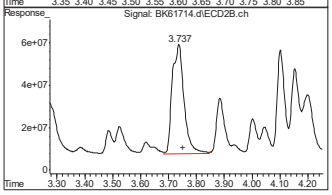
#27 AR1248-A

R.T.: 3.273 min
Delta R.T.: -0.015 min
Response: 700594560
Conc: 530.51 ng/ml



#28 AR1248-B

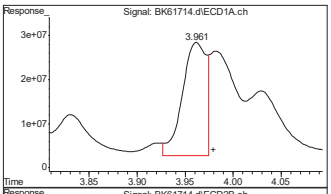
R.T.: 3.620 min
Delta R.T.: -0.017 min
Response: 839637207
Conc: 464.91 ng/ml



#28 AR1248-B

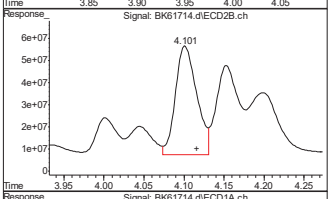
R.T.: 3.737 min
Delta R.T.: -0.015 min
Response: 1521218007
Conc: 515.92 ng/ml m

11.5.10 11



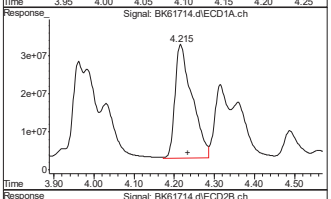
#29 AR1248-C

R.T.: 3.961 min
Delta R.T.: -0.018 min
Response: 434610325
Conc: 540.48 ng/ml m



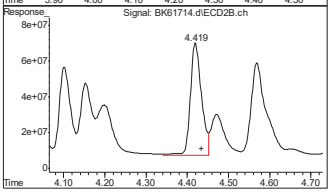
#29 AR1248-C

R.T.: 4.101 min
Delta R.T.: -0.015 min
Response: 912032851
Conc: 504.36 ng/ml



#30 AR1248-D

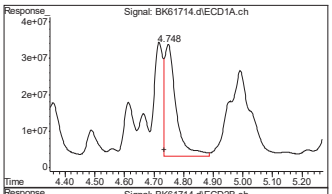
R.T.: 4.217 min
Delta R.T.: -0.018 min
Response: 886606866
Conc: 526.57 ng/ml



#30 AR1248-D

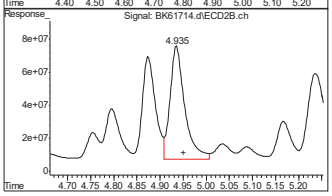
R.T.: 4.420 min
Delta R.T.: -0.015 min
Response: 1168316057
Conc: 502.34 ng/ml

11.5.10 11



#31 AR1248-E

R.T.: 4.749 min
Delta R.T.: 0.015 min
Response: 832411895
Conc: 770.95 ng/ml



#31 AR1248-E

R.T.: 4.936 min
Delta R.T.: -0.015 min
Response: 1509951385
Conc: 513.70 ng/ml

11.5.10 11

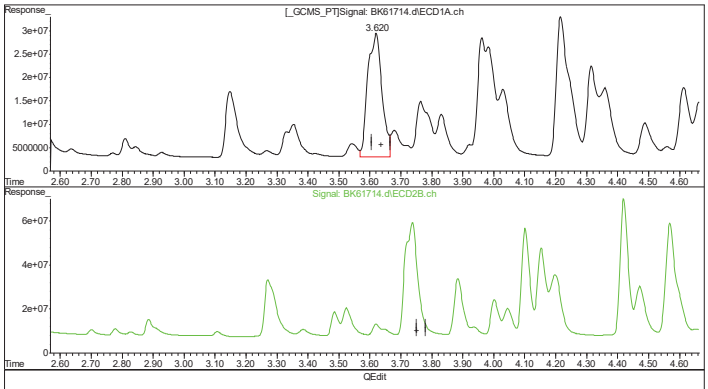
Cal Report: BK61714.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61714.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:00 pm
Operator : thomasa
Sample : ic1935-500,a1248
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.5.10.1

11

(28) AR1248-B
3.620min 464.913 ng/ml
response 839637207

(28) AR1248-B #2
0.000min 0.000 ng/ml
response 0

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:50:42 2016

Page: 1

BK61714.D edits: AR1248-B

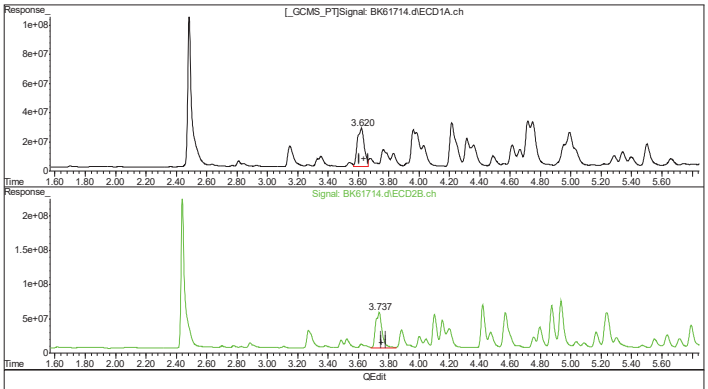
Cal Report: BK61714.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61714.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:00 pm
Operator : thomasa
Sample : ic1935-500,a1248
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.5.10.2

11

(28) AR1248-B
3.620min 464.913 ng/ml
response 839637207

(28) AR1248-B #2
3.737min 515.924 ng/ml m
response 1521218007

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:50:48 2016

Page: 1

BK61714.D edits: AR1248-B

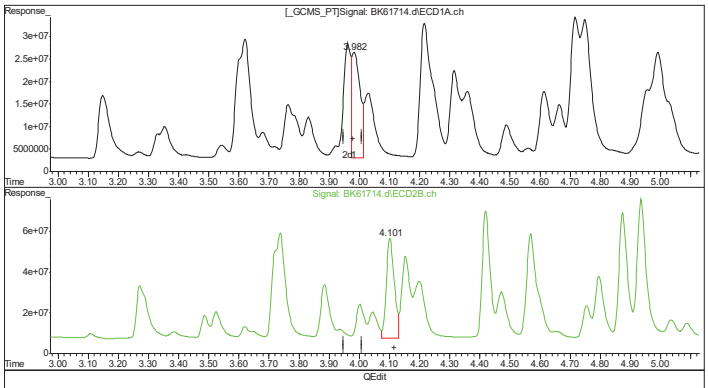
Cal Report: BK61714.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61714.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:00 pm
Operator : thomasa
Sample : ic1935-500,a1248
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.5.10.3

11

(29) AR1248-C
3.983min 551.817 ng/ml
response 443722908

(29) AR1248-C #2
4.101min 504.356 ng/ml
response 912032851

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:50:53 2016

Page: 1

BK61714.D edits: AR1248-C

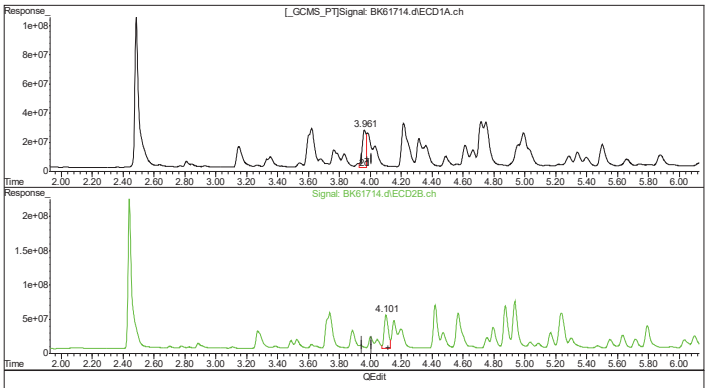
Cal Report: BK61714.D

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61714.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:00 pm
Operator : thomasa
Sample : ic1935-500,a1248
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:42:54 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:41:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



11.5.10.4

11

(29) AR1248-C
3.961min 540.484 ng/ml m
response 434610325

(29) AR1248-C #2
4.101min 504.356 ng/ml
response 912032851

(+) = Expected Retention Time
PC160920.M Tue Sep 20 13:51:01 2016

Page: 1

BK61714.D edits: AR1248-C

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61715.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:16 pm
Operator : thomasa
Sample : icv1936-500,a16/60 (Sig #1); icv1935-500,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 111 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:51:44 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.487	2.440	2077.6E6	3658.5E6	49.441	47.307
	Spiked Amount 40.000			Recovery =		123.60%	118.27%
13) s	DCB	9.666	10.213	1456.9E6	2046.0E6	46.105	46.576
	Spiked Amount 40.000			Recovery =		115.26%	116.44%
	Target Compounds						
2)	AR1016-A	3.151	3.275	791.5E6	1387.7E6	472.326	458.180
3)	AR1016-B	3.621	3.739	1630.0E6	2627.0E6	475.999	472.202
4)	AR1016-C	3.763	3.886	624.2E6	1163.3E6	484.307	500.402
5)	AR1016-D	3.963	4.101	239.4E6	604.6E6	454.638	465.017
6)	AR1016-E	4.218	4.420	650.5E6	821.3E6	472.410	459.157
7)	AR1260-A	5.745	6.060	914.3E6	1577.8E6	468.610	458.659
8)	AR1260-B	6.127	6.348	1309.1E6	1787.8E6	463.125	453.321
9)	AR1260-C	6.526	6.878	1362.9E6	2347.9E6	466.719	460.820
10)	AR1260-D	7.508	7.835	2087.9E6	2925.8E6	482.781	453.626
11)	AR1260-E	7.941	8.418	814.6E6	1854.4E6	454.880	445.745
12)	AR1260-F	8.908	9.333	492.0E6	768.0E6	468.040	468.304

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

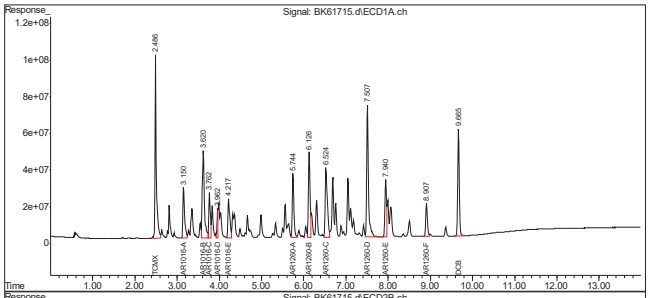
11.5.11 11

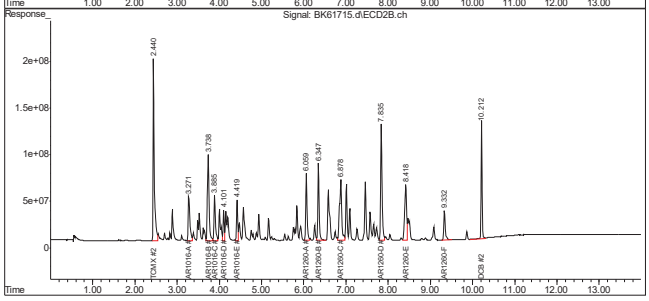
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61715.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 1:16 pm
Operator : thomasa
Sample : icv1936-500,a16/60 (Sig #1); icv1935-500,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 111 Sample Multiplier: 1

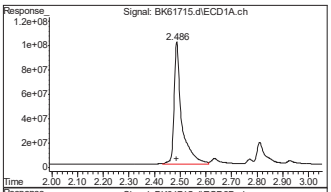
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 20 13:51:44 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

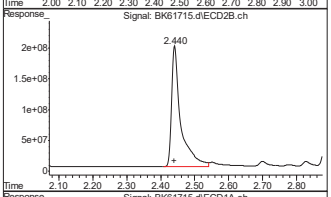




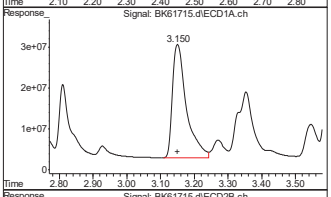
11.5.11 11



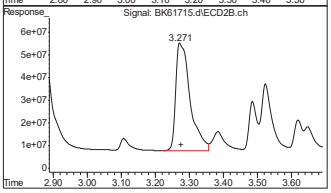
#1 TCMX
R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 2077573823
Conc: 49.44 ng/ml



#1 TCMX
R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 3658546802
Conc: 47.31 ng/ml

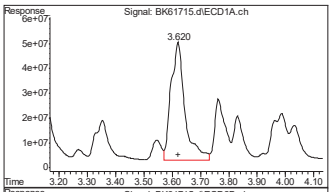


#2 AR1016-A
R.T.: 3.151 min
Delta R.T.: 0.000 min
Response: 791459662
Conc: 472.33 ng/ml

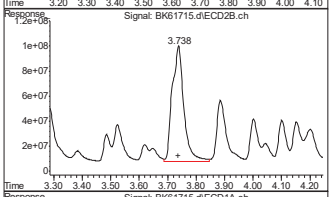


#2 AR1016-A
R.T.: 3.275 min
Delta R.T.: 0.000 min
Response: 1387738631
Conc: 458.18 ng/ml

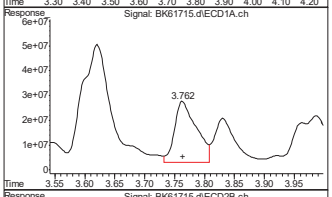
11.5.11 11



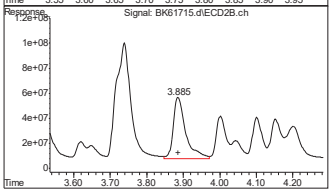
#3 AR1016-B
R.T.: 3.621 min
Delta R.T.: 0.000 min
Response: 1629984186
Conc: 476.00 ng/ml



#3 AR1016-B
R.T.: 3.739 min
Delta R.T.: 0.000 min
Response: 2627039627
Conc: 472.20 ng/ml

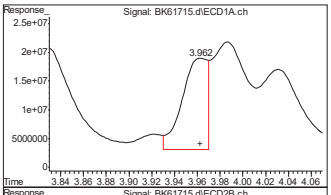


#4 AR1016-C
R.T.: 3.763 min
Delta R.T.: 0.000 min
Response: 624187707
Conc: 484.31 ng/ml



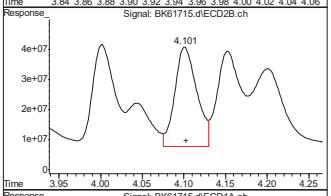
#4 AR1016-C
R.T.: 3.886 min
Delta R.T.: 0.000 min
Response: 1163317108
Conc: 500.40 ng/ml

11.5.11 11



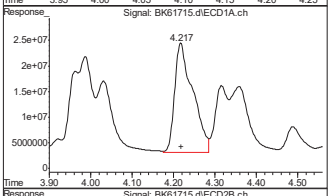
#5 AR1016-D

R.T.: 3.963 min
Delta R.T.: 0.000 min
Response: 239377694
Conc: 454.64 ng/ml



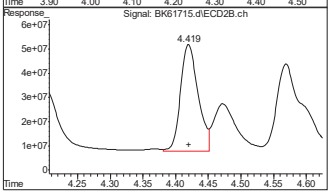
#5 AR1016-D

R.T.: 4.101 min
Delta R.T.: -0.001 min
Response: 604639201
Conc: 465.02 ng/ml



#6 AR1016-E

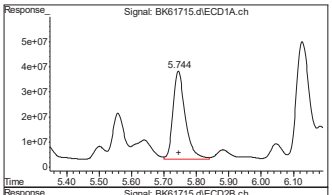
R.T.: 4.218 min
Delta R.T.: 0.000 min
Response: 650478777
Conc: 472.41 ng/ml



#6 AR1016-E

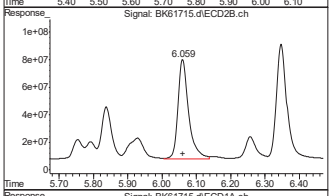
R.T.: 4.420 min
Delta R.T.: 0.000 min
Response: 821345030
Conc: 459.16 ng/ml

11.5.11 11



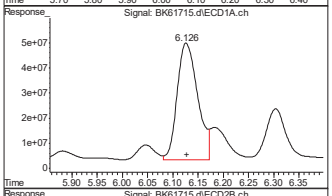
#7 AR1260-A

R.T.: 5.745 min
Delta R.T.: -0.001 min
Response: 914252102
Conc: 468.61 ng/ml



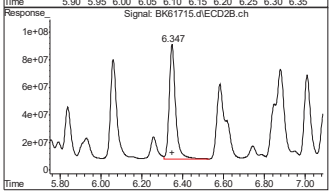
#7 AR1260-A

R.T.: 6.060 min
Delta R.T.: -0.002 min
Response: 1577812198
Conc: 458.66 ng/ml



#8 AR1260-B

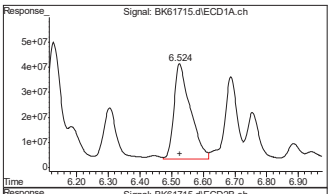
R.T.: 6.127 min
Delta R.T.: -0.002 min
Response: 1309066978
Conc: 463.13 ng/ml



#8 AR1260-B

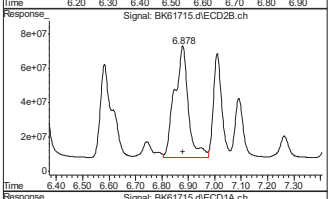
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 1787838661
Conc: 453.32 ng/ml

11.5.11 11



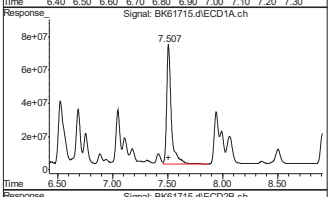
#9 AR1260-C

R.T.: 6.526 min
Delta R.T.: 0.000 min
Response: 1362853731
Conc: 466.72 ng/ml



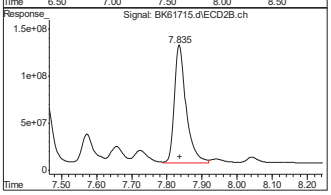
#9 AR1260-C

R.T.: 6.878 min
Delta R.T.: -0.002 min
Response: 2347861364
Conc: 460.82 ng/ml



#10 AR1260-D

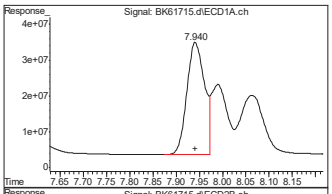
R.T.: 7.508 min
Delta R.T.: -0.001 min
Response: 2087879844
Conc: 482.78 ng/ml



#10 AR1260-D

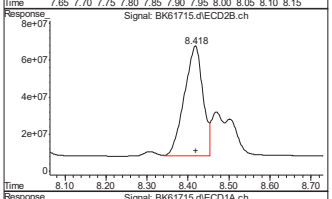
R.T.: 7.835 min
Delta R.T.: -0.001 min
Response: 2925798365
Conc: 453.63 ng/ml

11.5.11 11



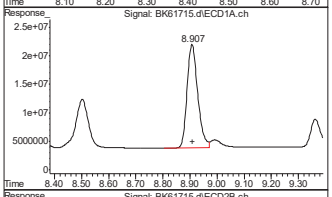
#11 AR1260-E

R.T.: 7.941 min
Delta R.T.: 0.000 min
Response: 814570507
Conc: 454.88 ng/ml



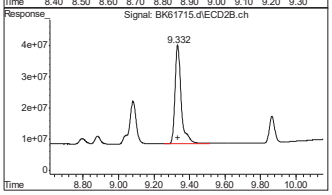
#11 AR1260-E

R.T.: 8.418 min
Delta R.T.: 0.000 min
Response: 1854424941
Conc: 445.74 ng/ml



#12 AR1260-F

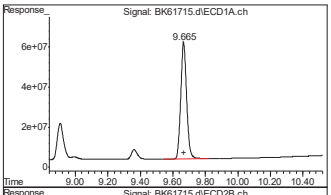
R.T.: 8.908 min
Delta R.T.: -0.002 min
Response: 491986672
Conc: 468.04 ng/ml



#12 AR1260-F

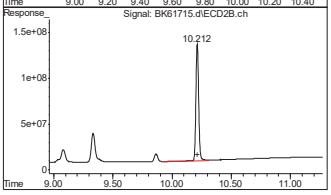
R.T.: 9.333 min
Delta R.T.: 0.000 min
Response: 767961560
Conc: 468.30 ng/ml

11.5.11 11



#13 DCB

R.T.: 9.666 min
Delta R.T.: -0.001 min
Response: 1456938710
Conc: 46.11 ng/ml



#13 DCB

R.T.: 10.213 min
Delta R.T.: -0.001 min
Response: 2046002040
Conc: 46.58 ng/ml

11.5.11 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61726.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 4:24 pm
Operator : thomasa
Sample : cc1936-750,a16/60 (Sig #1); cc1935-750,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 150 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:32:58 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.487	2.440	2382.8E6	4148.8E6	56.703	53.646
	Spiked Amount 40.000			Recovery	= 141.76%	134.12%	
13) s	DCB	9.667	10.215	1839.3E6	2590.9E6	58.206	58.980
	Spiked Amount 40.000			Recovery	= 145.52%	147.45%	
	Target Compounds						
2)	AR1016-A	3.153	3.279	1162.2E6	2039.9E6	693.603	673.512
3)	AR1016-B	3.623	3.739	2531.9E6	4125.9E6	739.386	741.169
4)	AR1016-C	3.764	3.887	934.1E6	1764.4E6	724.783	758.945
5)	AR1016-D	3.965	4.102	322.7E6	906.0E6	612.857	720.332
6)	AR1016-E	4.219	4.421	979.2E6	1225.2E6	711.167	684.901
7)	AR1260-A	5.747	6.062	1405.9E6	2421.5E6	720.632	703.927
8)	AR1260-B	6.130	6.349	2080.6E6	2822.4E6	736.071	715.652
9)	AR1260-C	6.527	6.880	2178.3E6	3738.5E6	745.967	733.755
10)	AR1260-D	7.510	7.836	3421.1E6	4888.6E6	791.058	757.952
11)	AR1260-E	7.942	8.418	1364.3E6	3104.0E6	761.869	746.091
12)	AR1260-F	8.909	9.334	818.7E6	1258.7E6	778.852	767.581

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

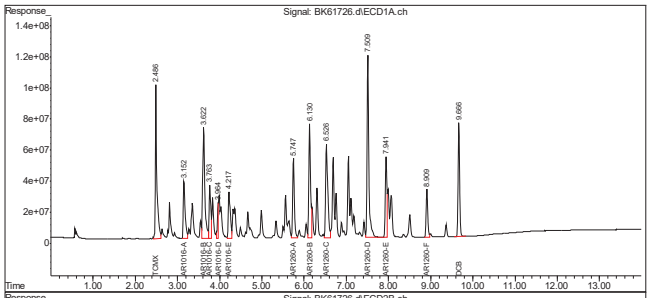
11.5.12 11

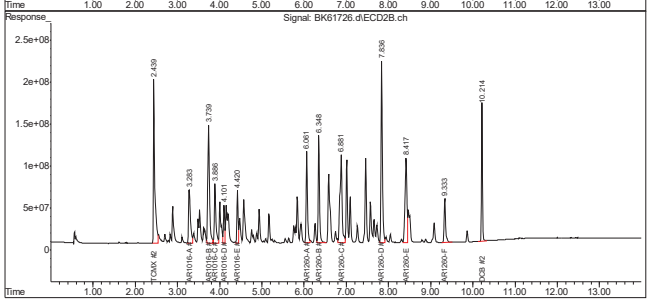
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61726.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 4:24 pm
Operator : thomasa
Sample : cc1936-750,a16/60 (Sig #1); cc1935-750,a16/60 (Sig #2)
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 150 Sample Multiplier: 1

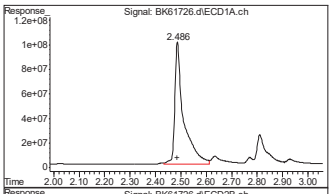
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:32:58 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



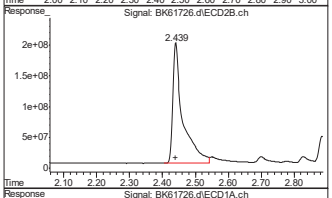


11.5.12 11



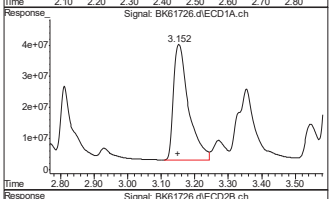
#1 TCMX

R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 2382759584
Conc: 56.70 ng/ml



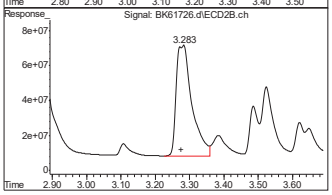
#1 TCMX

R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 4148772430
Conc: 53.65 ng/ml



#2 AR1016-A

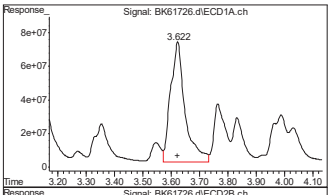
R.T.: 3.153 min
Delta R.T.: 0.002 min
Response: 1162246116
Conc: 693.60 ng/ml



#2 AR1016-A

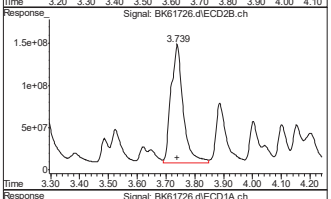
R.T.: 3.279 min
Delta R.T.: 0.004 min
Response: 2039936771
Conc: 673.51 ng/ml

11.5.12 11



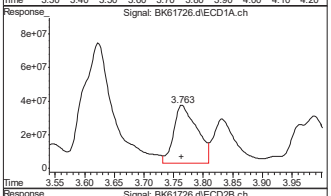
#3 AR1016-B

R.T.: 3.623 min
Delta R.T.: 0.000 min
Response: 2531913395
Conc: 739.39 ng/ml



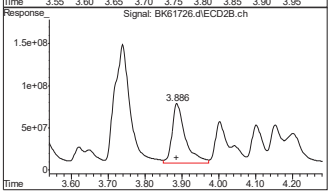
#3 AR1016-B

R.T.: 3.739 min
Delta R.T.: 0.000 min
Response: 4125893690
Conc: 741.17 ng/ml



#4 AR1016-C

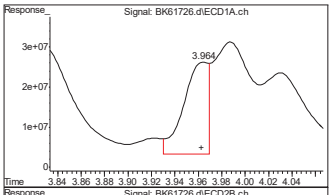
R.T.: 3.764 min
Delta R.T.: 0.000 min
Response: 93411979 5
Conc: 724.78 ng/ml



#4 AR1016-C

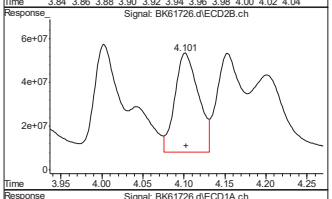
R.T.: 3.887 min
Delta R.T.: 0.000 min
Response: 1764367553
Conc: 758.95 ng/ml

11.5.12 11



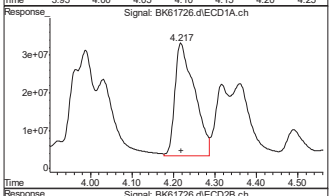
#5 AR1016-D

R.T.: 3.965 min
Delta R.T.: 0.002 min
Response: 322684270
Conc: 612.86 ng/ml



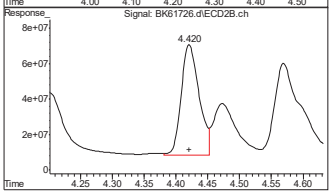
#5 AR1016-D

R.T.: 4.102 min
Delta R.T.: 0.000 min
Response: 905950421
Conc: 720.33 ng/ml



#6 AR1016-E

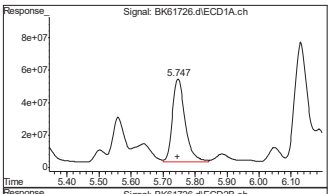
R.T.: 4.219 min
Delta R.T.: 0.000 min
Response: 97923129 6
Conc: 711.17 ng/ml



#6 AR1016-E

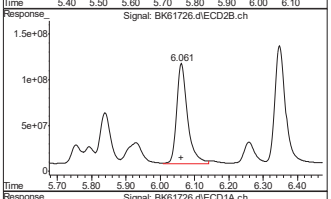
R.T.: 4.421 min
Delta R.T.: 0.000 min
Response: 1225159056
Conc: 684.90 ng/ml

11.5.12 11



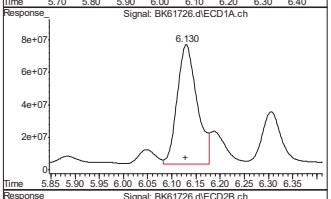
#7 AR1260-A

R.T.: 5.747 min
Delta R.T.: 0.001 min
Response: 1405942059
Conc: 720.63 ng/ml



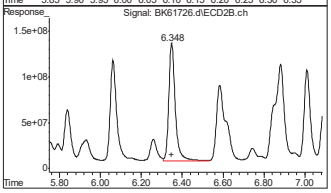
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 2421549221
Conc: 703.93 ng/ml



#8 AR1260-B

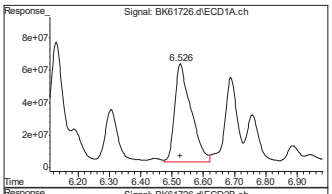
R.T.: 6.130 min
Delta R.T.: 0.002 min
Response: 2080574901
Conc: 736.07 ng/ml



#8 AR1260-B

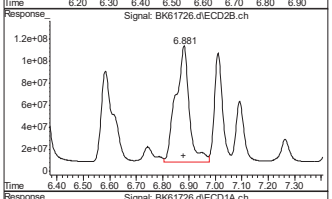
R.T.: 6.349 min
Delta R.T.: 0.000 min
Response: 2822436886
Conc: 715.65 ng/ml

11.5.12 11



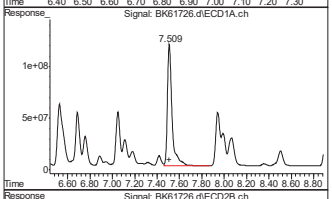
#9 AR1260-C

R.T.: 6.527 min
Delta R.T.: 0.001 min
Response: 2178276645
Conc: 745.97 ng/ml



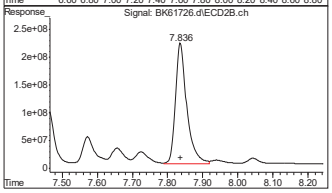
#9 AR1260-C

R.T.: 6.880 min
Delta R.T.: 0.000 min
Response: 3738453260
Conc: 733.75 ng/ml



#10 AR1260-D

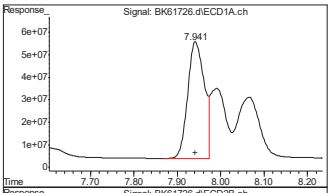
R.T.: 7.510 min
Delta R.T.: 0.000 min
Response: 3421084768
Conc: 791.06 ng/ml



#10 AR1260-D

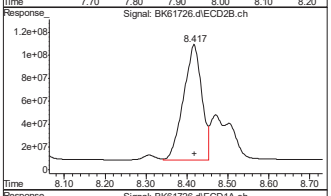
R.T.: 7.836 min
Delta R.T.: 0.000 min
Response: 4888640440
Conc: 757.95 ng/ml

11.5.12 11



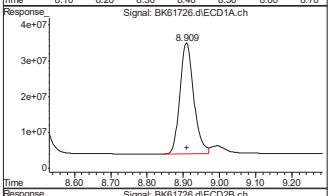
#11 AR1260-E

R.T.: 7.942 min
Delta R.T.: 0.000 min
Response: 1364308574
Conc: 761.87 ng/ml



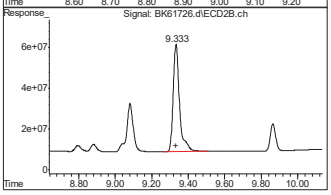
#11 AR1260-E

R.T.: 8.418 min
Delta R.T.: -0.002 min
Response: 3103951138
Conc: 746.09 ng/ml



#12 AR1260-F

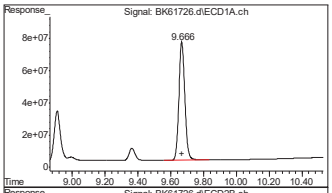
R.T.: 8.909 min
Delta R.T.: 0.000 min
Response: 818700039
Conc: 778.85 ng/ml



#12 AR1260-F

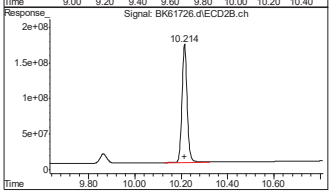
R.T.: 9.334 min
Delta R.T.: 0.000 min
Response: 1258739023
Conc: 767.58 ng/ml

11.5.12 11



#13 DCB

R.T.: 9.667 min
Delta R.T.: 0.000 min
Response: 1839336001
Conc: 58.21 ng/ml



#13 DCB

R.T.: 10.215 min
Delta R.T.: 0.000 min
Response: 2590891870
Conc: 58.98 ng/ml

11.5.12 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61737.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 7:35 pm
Operator : thomasa
Sample : cc1936-750,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 150 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:47 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.487	2.440	2507.7E6	4490.3E6	59.677	58.062
	Spiked Amount 40.000			Recovery	=	149.19%	145.16%
13) s	DCB	9.668	10.214	1976.3E6	2821.9E6	62.542	64.239
	Spiked Amount 40.000			Recovery	=	156.35%	160.60%
	Target Compounds						
2)	AR1016-A	3.150	3.276	1240.6E6	2166.7E6	740.342	715.359
3)	AR1016-B	3.622	3.739	2660.3E6	4316.7E6	776.879	774.996
4)	AR1016-C	3.764	3.886	994.0E6	1832.6E6	771.239	788.284
5)	AR1016-D	3.963	4.102	408.9E6	965.9E6	776.535	773.013
6)	AR1016-E	4.218	4.420	1059.0E6	1348.6E6	769.094	753.921
7)	AR1260-A	5.747	6.063	1500.7E6	2597.2E6	769.191	754.976
8)	AR1260-B	6.130	6.350	2228.7E6	3035.0E6	788.464	769.552
9)	AR1260-C	6.528	6.880	2328.9E6	4016.6E6	797.550	788.355
10)	AR1260-D	7.513	7.838	3670.7E6	5265.1E6	848.776	816.317
11)	AR1260-E	7.946	8.419	1488.0E6	3353.1E6	830.967	805.973
12)	AR1260-F	8.910	9.334	882.1E6	1373.9E6	839.154	837.787

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

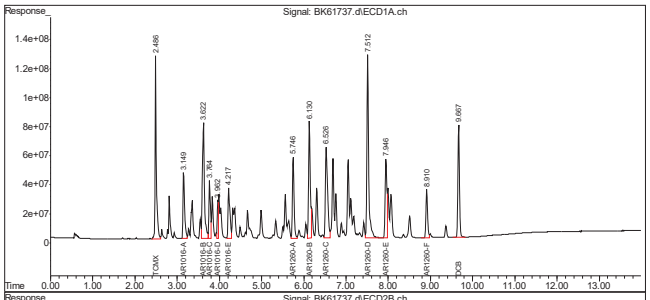
11.5.13 11

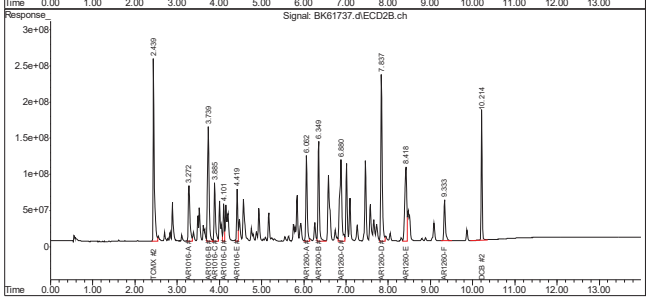
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61737.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2016 7:35 pm
Operator : thomasa
Sample : cc1936-750,a16/60
Misc : op48716,gbk1936,1000,,,5,,w
ALS Vial : 150 Sample Multiplier: 1

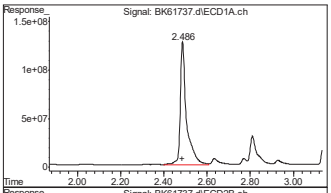
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:39:47 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



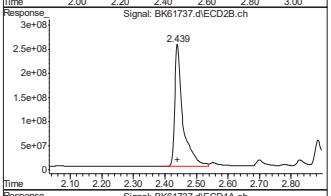


11.5.13 11



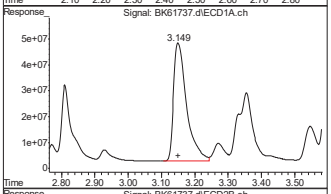
#1 TCMX

R.T.: 2.487 min
Delta R.T.: 0.001 min
Response: 2507739340
Conc: 59.68 ng/ml



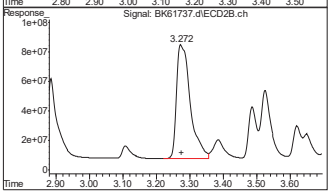
#1 TCMX

R.T.: 2.440 min
Delta R.T.: 0.000 min
Response: 4490294427
Conc: 58.06 ng/ml



#2 AR1016-A

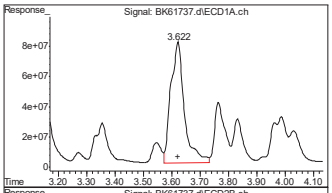
R.T.: 3.150 min
Delta R.T.: 0.000 min
Response: 1240564743
Conc: 740.34 ng/ml



#2 AR1016-A

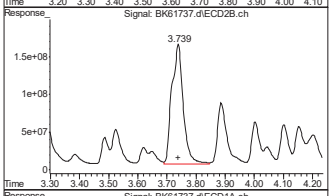
R.T.: 3.276 min
Delta R.T.: 0.000 min
Response: 2166684236
Conc: 715.36 ng/ml

11.5.13 11



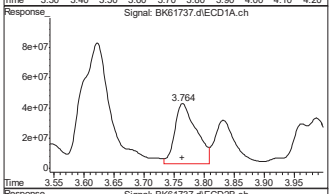
#3 AR1016-B

R.T.: 3.622 min
Delta R.T.: 0.000 min
Response: 2660301382
Conc: 776.88 ng/ml



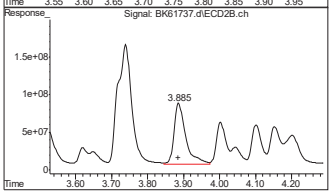
#3 AR1016-B

R.T.: 3.739 min
Delta R.T.: 0.000 min
Response: 4316705644
Conc: 775.00 ng/ml



#4 AR1016-C

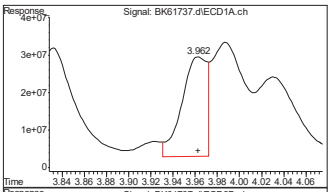
R.T.: 3.764 min
Delta R.T.: 0.000 min
Response: 993992813
Conc: 771.24 ng/ml



#4 AR1016-C

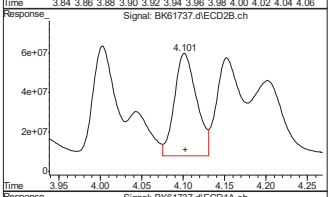
R.T.: 3.886 min
Delta R.T.: 0.000 min
Response: 1832572521
Conc: 788.28 ng/ml

11.5.13 11



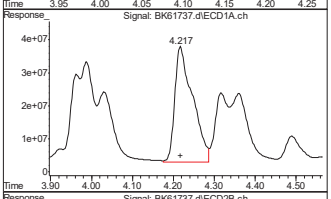
#5 AR1016-D

R.T.: 3.963 min
Delta R.T.: 0.000 min
Response: 408864663
Conc: 776.54 ng/ml



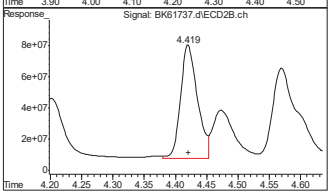
#5 AR1016-D

R.T.: 4.102 min
Delta R.T.: 0.000 min
Response: 965885397
Conc: 773.01 ng/ml



#6 AR1016-E

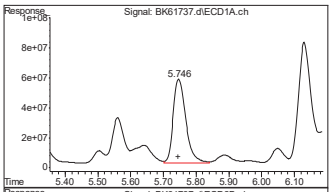
R.T.: 4.218 min
Delta R.T.: 0.000 min
Response: 1058993107
Conc: 769.09 ng/ml



#6 AR1016-E

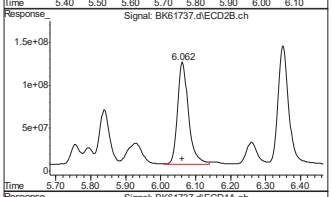
R.T.: 4.420 min
Delta R.T.: 0.000 min
Response: 1348623620
Conc: 753.92 ng/ml

11.5.13 11



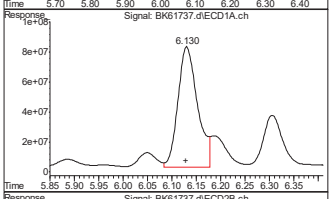
#7 AR1260-A

R.T.: 5.747 min
Delta R.T.: 0.000 min
Response: 1500681081
Conc: 769.19 ng/ml



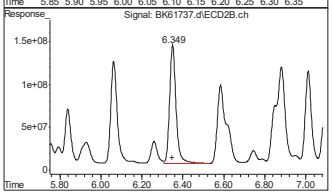
#7 AR1260-A

R.T.: 6.063 min
Delta R.T.: 0.000 min
Response: 2597159922
Conc: 754.98 ng/ml



#8 AR1260-B

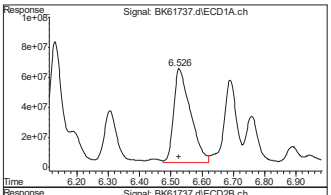
R.T.: 6.130 min
Delta R.T.: 0.002 min
Response: 2228669762
Conc: 788.46 ng/ml



#8 AR1260-B

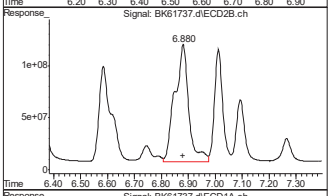
R.T.: 6.350 min
Delta R.T.: 0.001 min
Response: 3035011935
Conc: 769.55 ng/ml

11.5.13 11



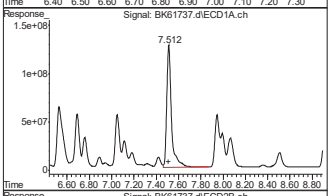
#9 AR1260-C

R.T.: 6.528 min
Delta R.T.: 0.002 min
Response: 2328900772
Conc: 797.55 ng/ml



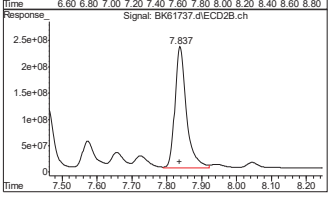
#9 AR1260-C

R.T.: 6.880 min
Delta R.T.: 0.000 min
Response: 4016640795
Conc: 788.35 ng/ml



#10 AR1260-D

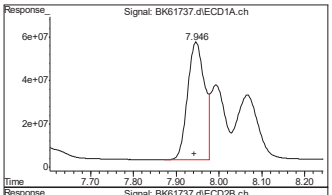
R.T.: 7.513 min
Delta R.T.: 0.004 min
Response: 3670696274
Conc: 848.78 ng/ml



#10 AR1260-D

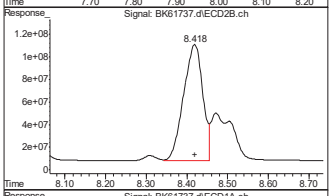
R.T.: 7.838 min
Delta R.T.: 0.001 min
Response: 5265086861
Conc: 816.32 ng/ml

11.5.13 11



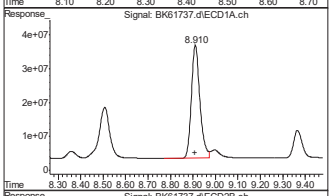
#11 AR1260-E

R.T.: 7.946 min
Delta R.T.: 0.005 min
Response: 1488044414
Conc: 830.97 ng/ml



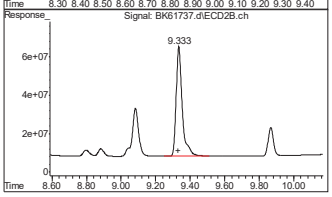
#11 AR1260-E

R.T.: 8.419 min
Delta R.T.: 0.000 min
Response: 3353076174
Conc: 805.97 ng/ml



#12 AR1260-F

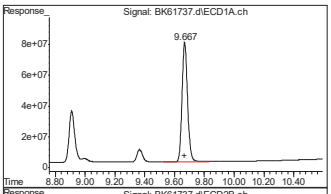
R.T.: 8.910 min
Delta R.T.: 0.000 min
Response: 882087488
Conc: 839.15 ng/ml



#12 AR1260-F

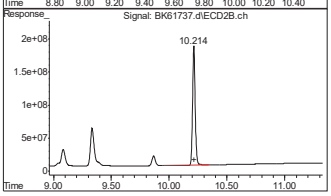
R.T.: 9.334 min
Delta R.T.: 0.000 min
Response: 1373869003
Conc: 837.79 ng/ml

11.5.13 11



#13 DCB

R.T.: 9.668 min
Delta R.T.: 0.000 min
Response: 1976324873
Conc: 62.54 ng/ml



#13 DCB

R.T.: 10.214 min
Delta R.T.: 0.000 min
Response: 2821940349
Conc: 64.24 ng/ml

11.5.13 11

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61738.d
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 21 Sep 2016   7:48 am
Operator  : thomasa
Sample    : cc1936-750,a16/60
Misc      : op48709,gbk1936,15,,,10,,s
ALS Vial  : 149   Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:40:08 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title  : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :

      Compound         RT#1      RT#2    Resp#1   Resp#2   ng/ml    ng/ml
 ---------------------------------------------------------------------------

  System Monitoring Compounds
 1) s   TCMX        2.494     2.436  2506.3E6 4294.0E6   59.643    55.523
  Spiked Amount   40.000                Recovery      =  149.11%   138.81%
13) s   DCB         9.679    10.217  1871.3E6 2683.8E6   59.217    61.096
  Spiked Amount   40.000                Recovery      =  148.04%   152.74%

  Target Compounds
 2)     AR1016-A        3.161     3.274  1214.5E6 2115.6E6  724.762   698.495
 3)     AR1016-B        3.633     3.736  2617.2E6 4225.1E6  764.285   758.761
 4)     AR1016-C        3.775     3.883   963.8E6 1839.7E6  747.832   791.347
 5)     AR1016-D        3.975     4.100   358.7E6  937.3E6  681.255   747.824
 6)     AR1016-E        4.230     4.419  1024.3E6 1272.2E6  743.898   711.177
 7)     AR1260-A        5.759     6.062  1458.8E6 2516.8E6  747.700   731.621
 8)     AR1260-B        6.142     6.351  2126.5E6 2930.0E6  752.308   742.921
 9)     AR1260-C        6.542     6.881  2232.1E6 3927.1E6  764.398   770.775
10)     AR1260-D        7.524     7.839  3474.0E6 5011.4E6  803.286   776.981
11)     AR1260-E        7.957     8.421  1387.7E6 3194.5E6  774.907   767.847
12)     AR1260-F        8.919     9.337   826.0E6 1301.3E6  785.806   793.522
 ---------------------------------------------------------------------------

  (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25%  (m)=manual int.
```

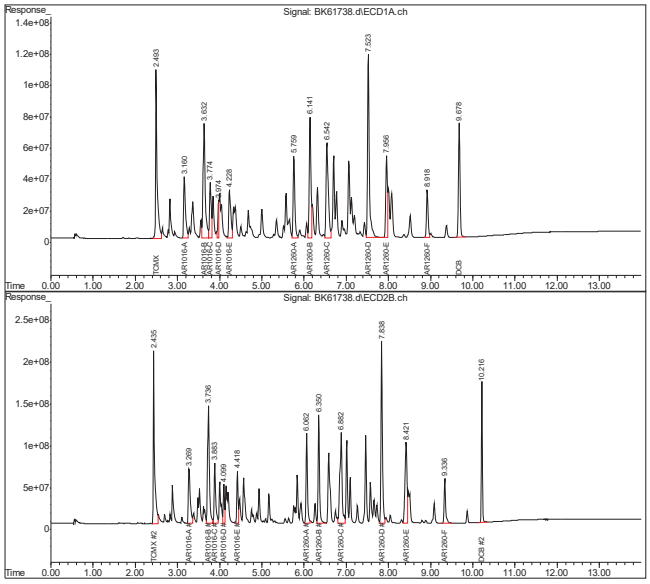
11.5.14 11

Quantitation Report (QT Reviewed)

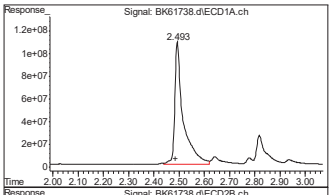
```
Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61738.d
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 21 Sep 2016   7:48 am
Operator  : thomasa
Sample    : cc1936-750,a16/60
Misc      : op48709,gbk1936,15,,,10,,s
ALS Vial  : 149   Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:40:08 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title  : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Tue Sep 20 13:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

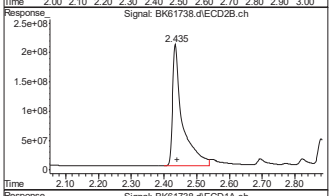


11.5.14 11



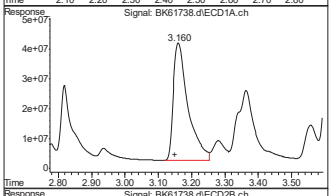
#1 TCMX

R.T.: 2.494 min
Delta R.T.: 0.008 min
Response: 2506303291
Conc: 59.64 ng/ml



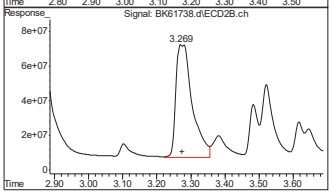
#1 TCMX

R.T.: 2.436 min
Delta R.T.: -0.004 min
Response: 4293961979
Conc: 55.52 ng/ml



#2 AR1016-A

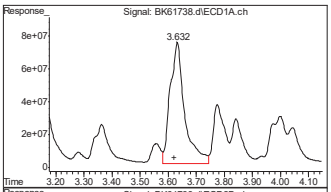
R.T.: 3.161 min
Delta R.T.: 0.011 min
Response: 1214457542
Conc: 724.76 ng/ml



#2 AR1016-A

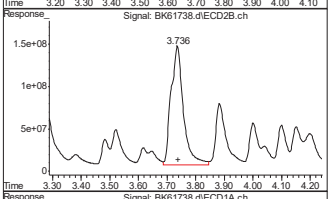
R.T.: 3.274 min
Delta R.T.: -0.001 min
Response: 2115604428
Conc: 698.49 ng/ml

11.5.14 11



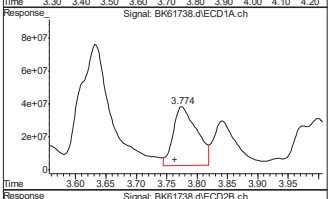
#3 AR1016-B

R.T.: 3.633 min
Delta R.T.: 0.011 min
Response: 2617175709
Conc: 764.28 ng/ml



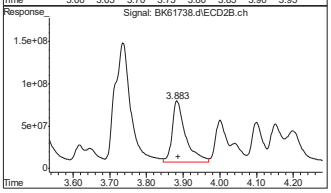
#3 AR1016-B

R.T.: 3.736 min
Delta R.T.: -0.002 min
Response: 4225058956
Conc: 758.76 ng/ml



#4 AR1016-C

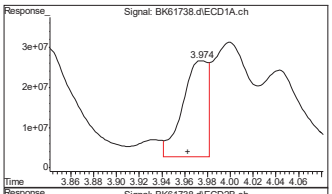
R.T.: 3.775 min
Delta R.T.: 0.011 min
Response: 963824860
Conc: 747.83 ng/ml



#4 AR1016-C

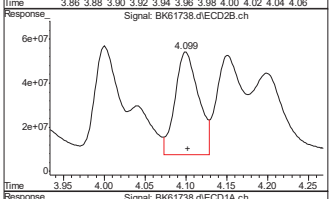
R.T.: 3.883 min
Delta R.T.: -0.003 min
Response: 1839695388
Conc: 791.35 ng/ml

11.5.14 11



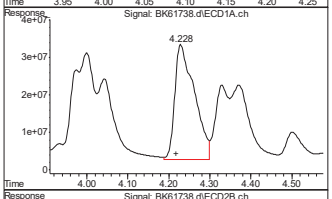
#5 AR1016-D

R.T.: 3.975 min
Delta R.T.: 0.012 min
Response: 358697373
Conc: 681.26 ng/ml



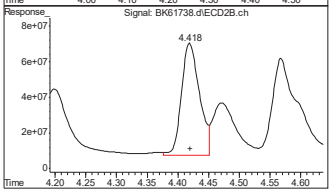
#5 AR1016-D

R.T.: 4.100 min
Delta R.T.: -0.003 min
Response: 937323456
Conc: 747.82 ng/ml



#6 AR1016-E

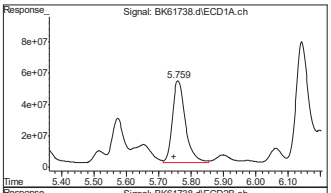
R.T.: 4.230 min
Delta R.T.: 0.012 min
Response: 1024299719
Conc: 743.90 ng/ml



#6 AR1016-E

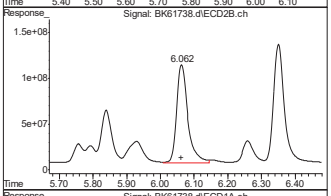
R.T.: 4.419 min
Delta R.T.: -0.001 min
Response: 1272161954
Conc: 711.18 ng/ml

11.5.14 11



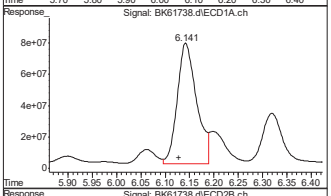
#7 AR1260-A

R.T.: 5.759 min
Delta R.T.: 0.014 min
Response: 1458751865
Conc: 747.70 ng/ml



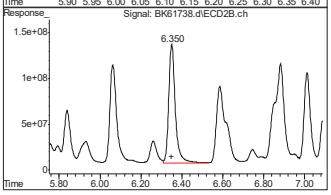
#7 AR1260-A

R.T.: 6.062 min
Delta R.T.: 0.000 min
Response: 2516817957
Conc: 731.62 ng/ml



#8 AR1260-B

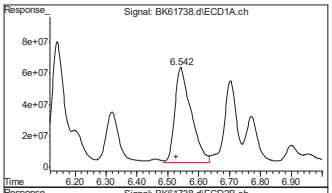
R.T.: 6.142 min
Delta R.T.: 0.014 min
Response: 2126469876
Conc: 752.31 ng/ml



#8 AR1260-B

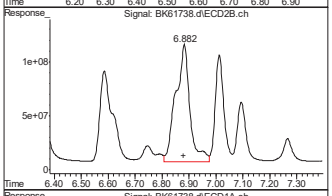
R.T.: 6.351 min
Delta R.T.: 0.002 min
Response: 2929985733
Conc: 742.92 ng/ml

11.5.14 11



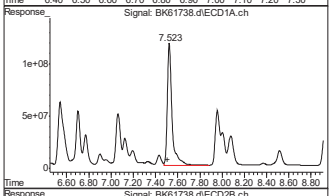
#9 AR1260-C

R.T.: 6.542 min
Delta R.T.: 0.016 min
Response: 2232096008
Conc: 764.40 ng/ml



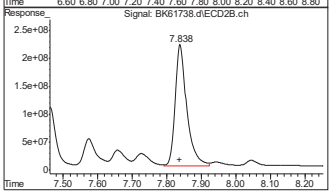
#9 AR1260-C

R.T.: 6.881 min
Delta R.T.: 0.002 min
Response: 3927071805
Conc: 770.78 ng/ml



#10 AR1260-D

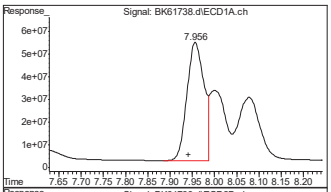
R.T.: 7.524 min
Delta R.T.: 0.014 min
Response: 3473964362
Conc: 803.29 ng/ml



#10 AR1260-D

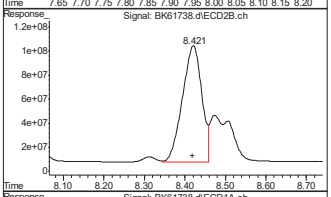
R.T.: 7.839 min
Delta R.T.: 0.003 min
Response: 5011377540
Conc: 776.98 ng/ml

11.5.14 11



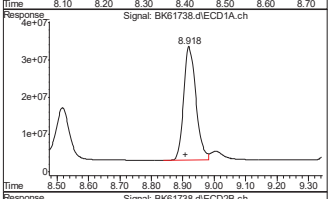
#11 AR1260-E

R.T.: 7.957 min
Delta R.T.: 0.015 min
Response: 1387656352
Conc: 774.91 ng/ml



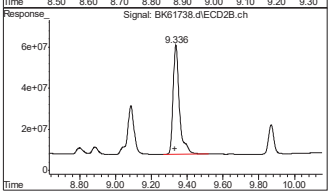
#11 AR1260-E

R.T.: 8.421 min
Delta R.T.: 0.002 min
Response: 3194462093
Conc: 767.85 ng/ml



#12 AR1260-F

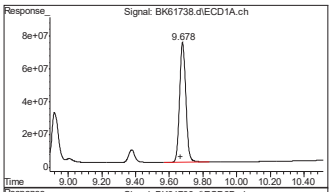
R.T.: 8.919 min
Delta R.T.: 0.010 min
Response: 826010019
Conc: 785.81 ng/ml



#12 AR1260-F

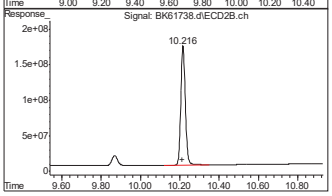
R.T.: 9.337 min
Delta R.T.: 0.004 min
Response: 1301279706
Conc: 793.52 ng/ml

11.5.14 11



#13 DCB

R.T.: 9.679 min
Delta R.T.: 0.011 min
Response: 1871264662
Conc: 59.22 ng/ml



#13 DCB

R.T.: 10.217 min
Delta R.T.: 0.002 min
Response: 2683848234
Conc: 61.10 ng/ml

11.5.14 11

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
09/21/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61745.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:39 am
Operator : thomasa
Sample : ecc1936-750,a16/60
Misc : op48709,gbk1936,15,,,10,,s
ALS Vial : 149 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:58:20 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Wed Sep 21 09:27:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
1) s	TCMX	2.489	2.444	2149.9E6	3845.3E6	51.161	49.721
	Spiked Amount 40.000			Recovery =		127.90%	124.30%
13) s	DCB	9.671	10.217	1723.3E6	2329.9E6	54.535	53.038m
	Spiked Amount 40.000			Recovery =		136.34%	132.60%
	Target Compounds						
2)	AR1016-A	3.155	3.283	1043.6E6	1896.4E6	622.824	626.138
3)	AR1016-B	3.625	3.743	2309.2E6	3924.6E6	674.360	705.382
4)	AR1016-C	3.767	3.890	858.4E6	1631.7E6	665.998	701.876
5)	AR1016-D	3.965	4.106	341.0E6	838.4E6	647.727m	661.721
6)	AR1016-E	4.221	4.424	874.9E6	1124.5E6	635.376	628.632
7)	AR1260-A	5.750	6.067	1231.8E6	2198.7E6	631.383	639.134
8)	AR1260-B	6.132	6.354	1861.1E6	2549.8E6	658.424	646.519
9)	AR1260-C	6.531	6.884	1939.3E6	3366.2E6	664.140	660.685
10)	AR1260-D	7.514	7.842	3025.4E6	4446.3E6	699.554	689.362
11)	AR1260-E	7.945	8.422	1302.3E6	2878.3E6	727.225	691.843
12)	AR1260-F	8.910	9.338	729.3E6	1142.5E6	693.758	696.720

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

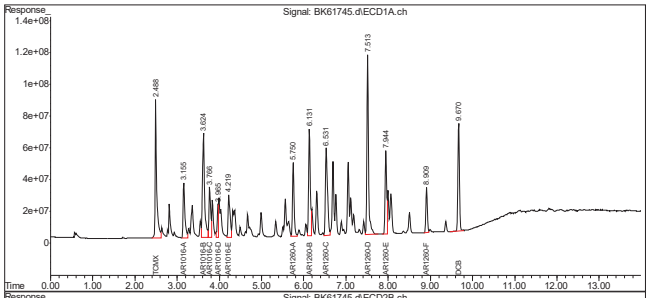
11.5.15 11

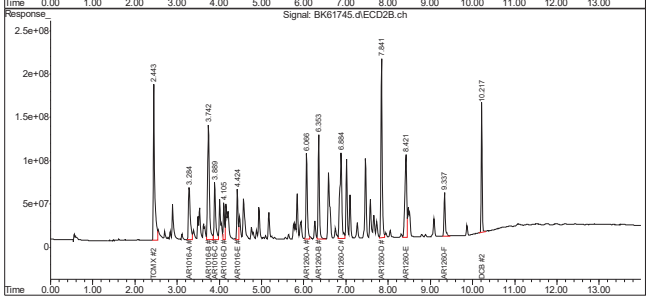
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61745.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:39 am
Operator : thomasa
Sample : ecc1936-750,a16/60
Misc : op48709,gbk1936,15,,,10,,s
ALS Vial : 149 Sample Multiplier: 1

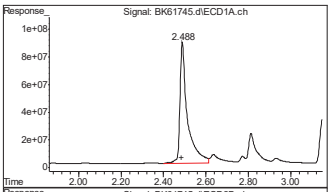
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:58:20 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Wed Sep 21 09:27:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

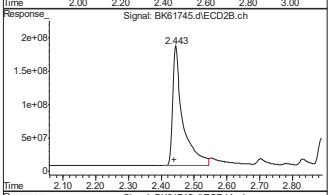




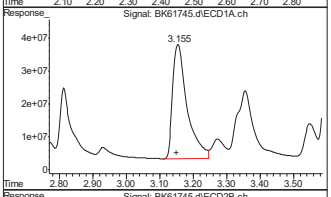
11.5.15 11



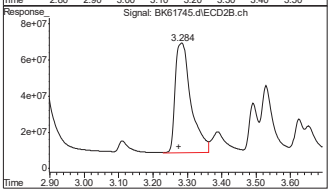
#1 TCMX
R.T.: 2.489 min
Delta R.T.: 0.003 min
Response: 2149865841
Conc: 51.16 ng/ml



#1 TCMX
R.T.: 2.444 min
Delta R.T.: 0.004 min
Response: 3845278121
Conc: 49.72 ng/ml

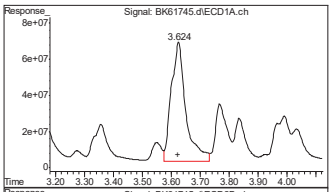


#2 AR1016-A
R.T.: 3.155 min
Delta R.T.: 0.005 min
Response: 1043643163
Conc: 622.82 ng/ml

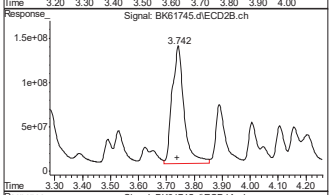


#2 AR1016-A
R.T.: 3.283 min
Delta R.T.: 0.008 min
Response: 1896449928
Conc: 626.14 ng/ml

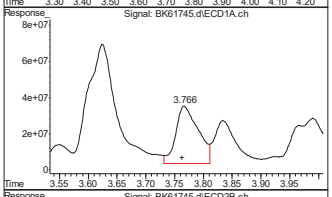
11.5.15 11



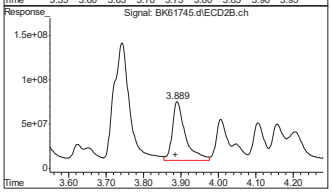
#3 AR1016-B
R.T.: 3.625 min
Delta R.T.: 0.003 min
Response: 2309243164
Conc: 674.36 ng/ml



#3 AR1016-B
R.T.: 3.743 min
Delta R.T.: 0.005 min
Response: 3924583811
Conc: 705.38 ng/ml

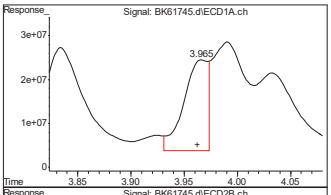


#4 AR1016-C
R.T.: 3.767 min
Delta R.T.: 0.003 min
Response: 858355090
Conc: 666.00 ng/ml



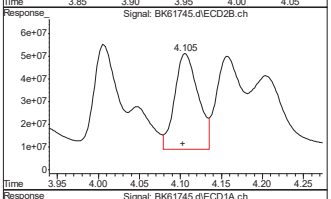
#4 AR1016-C
R.T.: 3.890 min
Delta R.T.: 0.004 min
Response: 1631696434
Conc: 701.88 ng/ml

11.5.15 11



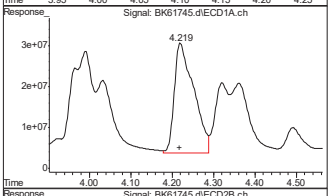
#5 AR1016-D

R.T.: 3.965 min
Delta R.T.: 0.003 min
Response: 341044018
Conc: 647.73 ng/ml m



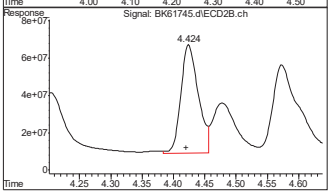
#5 AR1016-D

R.T.: 4.106 min
Delta R.T.: 0.003 min
Response: 838369633
Conc: 661.72 ng/ml



#6 AR1016-E

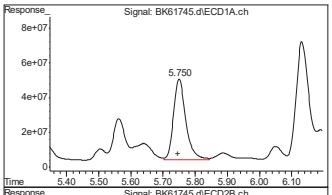
R.T.: 4.221 min
Delta R.T.: 0.003 min
Response: 874872085
Conc: 635.38 ng/ml



#6 AR1016-E

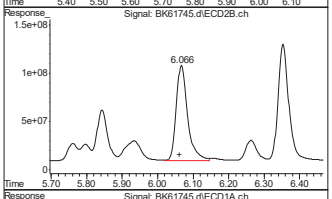
R.T.: 4.424 min
Delta R.T.: 0.004 min
Response: 1124503632
Conc: 628.63 ng/ml

11.5.15 11



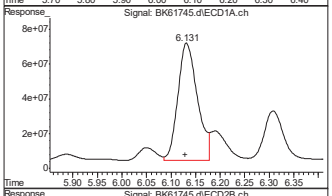
#7 AR1260-A

R.T.: 5.750 min
Delta R.T.: 0.004 min
Response: 1231819498
Conc: 631.38 ng/ml



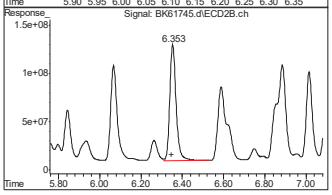
#7 AR1260-A

R.T.: 6.067 min
Delta R.T.: 0.005 min
Response: 2198655529
Conc: 639.13 ng/ml



#8 AR1260-B

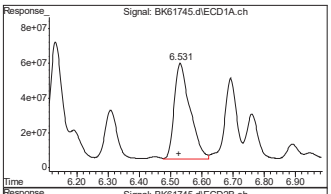
R.T.: 6.132 min
Delta R.T.: 0.003 min
Response: 1861099480
Conc: 658.42 ng/ml



#8 AR1260-B

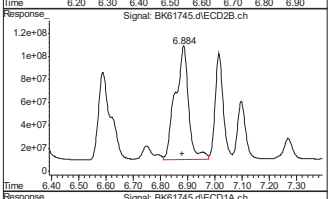
R.T.: 6.354 min
Delta R.T.: 0.005 min
Response: 2549787889
Conc: 646.52 ng/ml

11.5.15 11



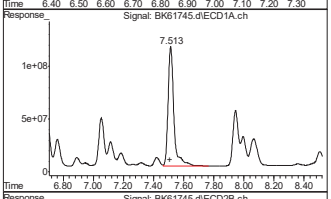
#9 AR1260-C

R.T.: 6.531 min
Delta R.T.: 0.005 min
Response: 1939336235
Conc: 664.14 ng/ml



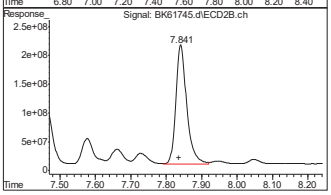
#9 AR1260-C

R.T.: 6.884 min
Delta R.T.: 0.004 min
Response: 3366164348
Conc: 660.68 ng/ml



#10 AR1260-D

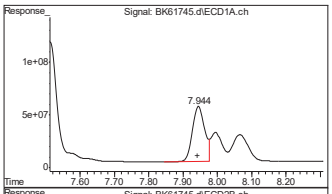
R.T.: 7.514 min
Delta R.T.: 0.005 min
Response: 3025355441
Conc: 699.55 ng/ml



#10 AR1260-D

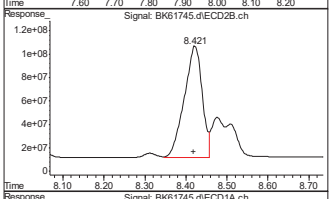
R.T.: 7.842 min
Delta R.T.: 0.005 min
Response: 4446253543
Conc: 689.36 ng/ml

11.5.15 11



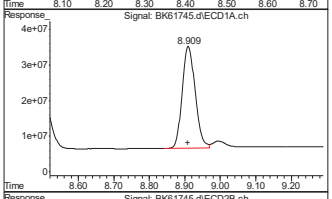
#11 AR1260-E

R.T.: 7.945 min
Delta R.T.: 0.004 min
Response: 1302269318
Conc: 727.22 ng/ml



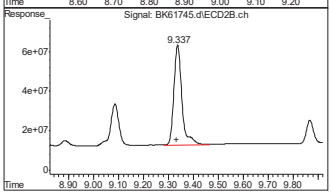
#11 AR1260-E

R.T.: 8.422 min
Delta R.T.: 0.002 min
Response: 2878266011
Conc: 691.84 ng/ml



#12 AR1260-F

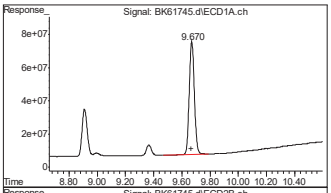
R.T.: 8.910 min
Delta R.T.: 0.000 min
Response: 729252851
Conc: 693.76 ng/ml



#12 AR1260-F

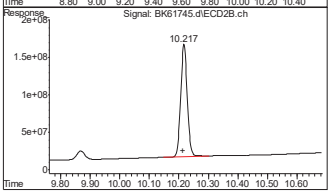
R.T.: 9.338 min
Delta R.T.: 0.005 min
Response: 1142536169
Conc: 696.72 ng/ml

11.5.15 11



#13 DCB

R.T.: 9.671 min
Delta R.T.: 0.003 min
Response: 1723312206
Conc: 54.53 ng/ml



#13 DCB

R.T.: 10.217 min
Delta R.T.: 0.003 min
Response: 2329881989
Conc: 53.04 ng/ml m

11.5.15 11

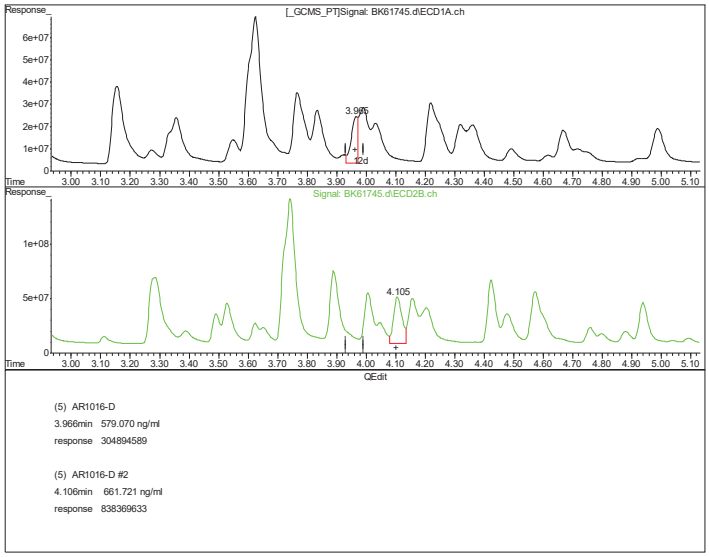
BK61745.d PC160920.M Wed Sep 21 09:58:57 2016 Page 10

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61745.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:39 am
Operator : thomasa
Sample : ecc1936-750,a16/60
Misc : op48709,gbk1936,15,,,10,,s
ALS Vial : 149 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:57:29 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Wed Sep 21 09:27:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(5) AR1016-D
3.966min 579.070 ng/ml
response 304894589

(5) AR1016-D #2
4.106min 661.721 ng/ml
response 838369633

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:57:44 2016 Page: 1

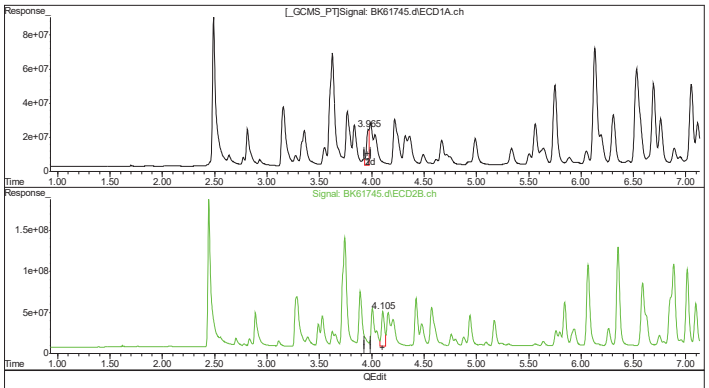
11.5.15.1 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61745.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:39 am
Operator : thomasa
Sample : ecc1936-750,a16/60
Misc : op48709,gbk1936,15,,,10,,s
ALS Vial : 149 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:57:29 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Wed Sep 21 09:27:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(5) AR1016-D
3.965min 647.727 ng/ml m
response 341044018

(5) AR1016-D #2
4.106min 661.721 ng/ml
response 838369633

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:58:01 2016 Page: 1

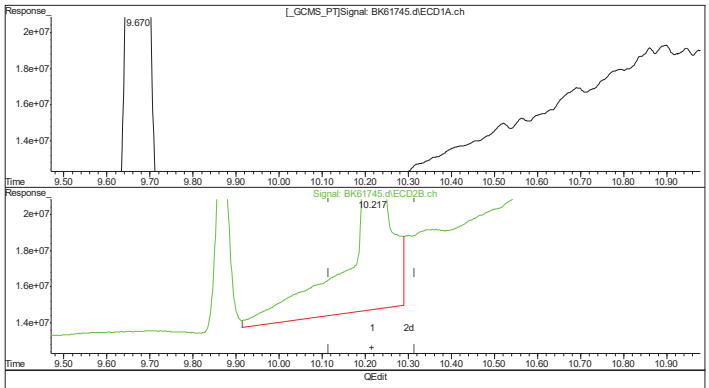
11.5.15.2 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61745.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:39 am
Operator : thomasa
Sample : ecc1936-750,a16/60
Misc : op48709,gbk1936,15,,,10,,s
ALS Vial : 149 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:57:29 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Wed Sep 21 09:27:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



(13) DCB (s)
9.671min 54.535 ng/ml
response 1723312206

(13) DCB #2 (s)
10.218min 62.317 ng/ml
response 2737481651

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:58:09 2016 Page: 1

11.5.15.3 11

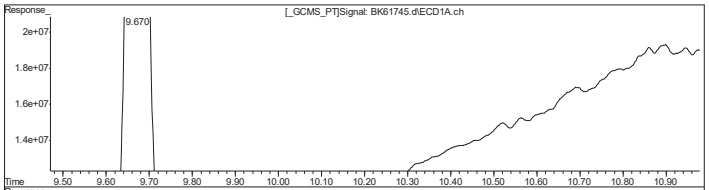
Cal Report: BK61745.D

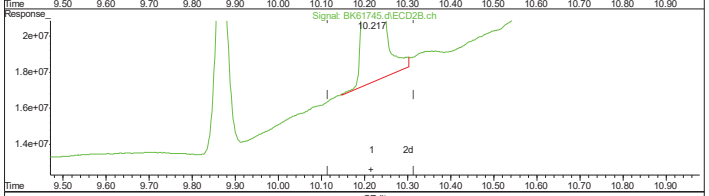
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\BK160920\
Data File : BK61745.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2016 9:39 am
Operator : thomasa
Sample : ecc1936-750,a16/60
Misc : op48709,gbk1936,15,,,10,,s
ALS Vial : 149 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 21 09:57:29 2016
Quant Method : C:\msdchem\1\METHODS\PC160920.M
Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
QLast Update : Wed Sep 21 09:27:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





(13) DCB (s)
9.671min 54.535 ng/ml
response 1723312206

(13) DCB #2 (s)
10.217min 53.038 ng/ml m
response 2329881989

(+) = Expected Retention Time
PC160920.M Wed Sep 21 09:58:13 2016

Page: 1

11.5.15.4 11

BK61745.D edits: DCB

SGS Accutest, Inc. Page 1 of 2 Instrument: GC 31 (BK)

GC Analysis Log - Extractables

Run Date: 9.20.16 Analyst Signature:

Standard Data

Lot #	Description	Conc
G518232	A16/60	750 ng/ml

Column Information: Front: Pest RTX-5 Alternate:
Rear : Pest2 RTX-5 Alternate:
Sequence File: 160920 S
Quantitation Methods: PC160920 M
Instrument Run Batches: GBK 1936
Data Acquisition Methods: GC31 PCB Inj. Vol: 1ml
Inj. Vol:

Date of ICAL: 9.20.16 ICAL Verified ✓ Sample positions verified against sequence: ✓

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Comments
101	BK61705	IC1936-50	N/A	P8082	N/A	N/A	(G518288 A16/60
102	06	-100					(89
103	07	-250					90
104	08	IC1936-500					91
105	09	IC1936-750					92
106	10	-1000					93
107	11	-500					A21/54 94
108	12	-500					A32/62 95
109	13	-500					A42/68 96
110	14	-500					A 12/48 97
111	15	IC1936-500					A16/60 98
1	16	OP48732-MB	OP48732			O	
2	17	-BS					
3	18	-MS					
4	19	-MSD					
5	20	mc47806-3					
6	21	mc47868-2					
7	22	OP48716-MB	OP48716	P8082	W		
8	23	-BS		P8082			MOSCE spike
9	24	mc47777-5					re-ext
10	25	mc47783-1					
150	26	cc1936-750	N/A		N/A		OK
11	27	OP48716-MS	OP48716		W		low rec spike recal
12	28	-MSD					
13	29	mc47477-24					
14	30	OP48709-MB	OP48709	P8082	S		
15	31	-BS					

MTX = Matrix: Designate W for water, S for soil, O for oil. Dilution Solvent: N/A Lot#: N/A

GC014-01
Date: 9/15/10

Review:

22

11.6.1 11

Instrument Run Log GBK1936 page 1 of 2

SGS Accutest, Inc. Page 2 of 2 Instrument: GC 31 (BK)

GC Analysis Log - Extractables

Run Date: 9.20.16 Analyst Signature:

Standard Data

Lot #	Description	Conc
	see pg. 1	

Column Information: Front: Pest RTX-5 Alternate:
Rear : Pest2 RTX-5 Alternate:
Sequence File:
Quantitation Methods:
Instrument Run Batches: see pg. 1
Data Acquisition Methods: Inj. Vol:
Inj. Vol:

Date of ICAL: ICAL Verified Sample positions verified against sequence:

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Comments
16	BK61732	OP48709-MS	OP48709	P8082	S	N/A	
17	33	-MSD					
18	34	mc47777-1					
19	35	-2					
20	36	-3					
150	37	cc1936-750	N/A		N/A		ok
149	38	-750					ok (restart 9/21/16)
21	39	mc47777-4	OP48709		S		
22	40	-5					
23	41	-6					
24	42	-7					
25	43	-8					
26	44	mc47788-1					
149	45	cc1936-750	N/A		N/A		

MTX = Matrix: Designate W for water, S for soil, O for oil. Dilution Solvent: N/A Lot#: N/A

GC014-01
Date: 9/15/10

Review:

23

11.6.1 11

Instrument Run Log GBK1936 page 2 of 2

Extraction Log - Soils

Analysis Method: P8082REP
Extraction Method (check one): Microwave SW3546 Microwave ID 1 ☐ 300 Waste Dilution SW3580A
ASE SW 3545A Sonication SW3550C* Soxhlet SW3540C MSE EPA 3570

BATCH # OP48709 | INITIALS: KJ/CD | DATE: 9/19/16 | TIME: 22:00

Extracted by: KJ/CD
Spike Witness: AJ
Concentrated by: AJ 9/20/16 16:15
Fractionated by: MD 9/26/16 16:30
Received by:

Tray # E-028

Spike ID	Lot #	Conc. (ug/ml)	Amt. (ul)	Sample #	Sample Bottle #	Sample Wet Wt. (gram)	Final Extract Volume (mL)	Comments
PCB	77761	400	100	OP48709 MB	N/A	15.38	10.0	
				OP48709 BS	N/A	15.25	10.0	
				BSD				
				MC47774-2 MS	1	15.84	10.0	Soil
				MSD		15.22		
					1	15.34	10.0	
					1	15.64		
					1	15.54		
					1	15.71		
					1	15.78		
					1	15.02		
					1	15.93		
					1	15.38		
					1	15.47		

Surrogate: PCB Lot # 7819 Conc. 4.0 Amt. 400

Supervisor Approval:

SOXHLET only: Start date / Start Time / End date / End Time

Clean up Methods: Check
Copper: 3660B ✓
Silica: 3630
Florisil: 3620
Acid: 3665 ✓

	Reagent	Lot #	Initials
1	1:1 HEXANE/	162237	
2	ACETONE	162165	
3	1:1 METH CHLOR/		
4	ACETONE		
5	HEXANE Only	163237	
6	ETHER		
7	ACETONITRILE		
8	ACETONE		
9	DCM		
10	SPE MTG		
11	SILICA GEL		
12	SODIUM SULFATE	157477	RJ 9/20/16
13	FILTER PAPER	96962337	Fisher
14	COPPER	062718AH-U	Acros
15	FLORISIL	162138	RJ
16	SULFURIC ACID		
17	HYDROMATRIX		
18	SAND		
19	0.45um Teflon Filter		
20	FILTERED BY	Initials: AJ	9/20/16

Comments:

SGS ACCUTEST - MARLBOROUGH
Form: OP017.03
Rev Date: 2/23/16

11.7.1 11

Prep Log OP48709 page 1 of 1

SGS ACCUTEST New England

Section 12

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

12

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
Analyst: EAL Run ID: MA19462
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:49	MA19462-STD1	1		STD1
09:57	MA19462-STD2	1		STD2
10:02	ZZZZZZ	1		RINSECONF
10:11	MA19462-ICV1	1		
10:20	MA19462-ICB1	1		
10:24	MA19462-ICCV1	1		
10:33	MA19462-CCB1	1		
10:38	MA19462-CRI1	1		
10:43	MA19462-CRIB1	1		
10:48	MA19462-ICSA1	1		
10:52	MA19462-ICSAB1	1		
10:57	MA19462-SIC11	1		
11:02	MA19462-SIC21	1		
11:07	MA19462-SIC31	1		
11:12	MA19462-CCV1	1		
11:17	MA19462-CCB2	1		
11:22	MP26774-MB1	1		
11:22	MP26774-MB1	1		
11:27	MP26774-B1	1		
11:27	MP26774-B1	1		
11:32	MP26774-S1	1		
11:32	MP26774-S1	1		
11:37	MP26774-S2	1		
11:37	MP26774-S2	1		
11:42	MC47540-3	1		(sample used for QC only; not part of login MC47774)
11:42	MC47540-3	1		(sample used for QC only; not part of login MC47774)
11:46	MP26774-SD1	5		
11:46	MP26774-SD1	5		
11:51	MP26772-MB1	1		
11:56	MP26772-LB1	1		
12:02	MP26772-B1	1		
12:06	MP26772-B2	1		
12:11	MA19462-CCV2	1		

Page 1

12.1 12

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
Analyst: EAL Run ID: MA19462
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:16	MA19462-CCB3	1		
12:21	MP26772-S1	1		
12:26	MP26772-S2	1		
12:31	MC47788-1	1		(sample used for QC only; not part of login MC47774)
12:36	MP26772-SD1	5		
---------->	Last reportable sample/prep for job MC47774			
12:41	ZZZZZZ	1		
12:47	MA19462-CRI2	1		
12:52	MA19462-CRIB2	1		
12:57	MA19462-ICSA2	1		
13:02	MA19462-ICSAB2	1		
13:07	MA19462-CCV3	1		
13:12	MA19462-CCB4	1		
---------->	Last reportable CCB for job MC47774			
13:17	ZZZZZZ	1		FOR IEC CAL.
13:22	ZZZZZZ	1		FOR IEC CAL.
13:27	ZZZZZZ	1		FOR IEC CAL.
13:32	ZZZZZZ	1		FOR IEC CAL.
13:37	ZZZZZZ	1		FOR IEC CAL.
13:42	ZZZZZZ	1		FOR IEC CAL.
13:47	MA19462-CCV4	1		
13:52	MA19462-CCB5	1		

Refer to raw data for calibration curve and standards.

Page 2

12.1 12

INTERNAL STANDARD SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
Analyst: EAL Run ID: MA19462
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:49	MA19462-STD1	5483 R	199730 R	10685 R	11732 R
09:57	MA19462-STD2	5276	191890	10714	10737
10:02	ZZZZZZ	5432	198310	10786	11621
10:11	MA19462-ICV1	5433	199420	11342	11218
10:20	MA19462-ICB1	5551	205480	11325	11848
10:24	MA19462-ICCV1	5468	201870	11228	11248
10:33	MA19462-CCB1	5579	206770	11340	11881
10:38	MA19462-CRI1	5512	205620	11449	11549
10:43	MA19462-CRIB1	5488	205890	11368	11493
10:48	MA19462-ICSA1	4848	180020	10779	9171
10:52	MA19462-ICSAB1	4864	180300	10800	9194
10:57	MA19462-SIC11	5541	207820	11302	11730
11:02	MA19462-SIC21	5447	206310	11272	11647
11:07	MA19462-SIC31	5536	207230	11317	11744
11:12	MA19462-CCV1	5449	202800	11290	11208
11:17	MA19462-CCB2	5544	207630	11267	11829
11:22	MP26774-MB1	No results reported for the elements associated with this internal standard.			
11:22	MP26774-MB1	5673	211650	11629	12147
11:27	MP26774-B1	No results reported for the elements associated with this internal standard.			
11:27	MP26774-B1	5571	207910	11574	11322
11:32	MP26774-S1	No results reported for the elements associated with this internal standard.			
11:32	MP26774-S1	5339	199820	11566	10532
11:37	MP26774-S2	No results reported for the elements associated with this internal standard.			
11:37	MP26774-S2	5349	199280	11452	10545
11:42	MC47540-3	No results reported for the elements associated with this internal standard.			
11:42	MC47540-3	5436	203290	11655	10931
11:46	MP26774-SD1	No results reported for the elements associated with this internal standard.			
11:46	MP26774-SD1	5494	203820	11512	11467
11:51	MP26772-MB1	5467	206140	11343	11667
11:56	MP26772-LB1	4834	177360	10957	9127
12:02	MP26772-B1	4898	180280	11072	9041
12:06	MP26772-B2	4885	177910	10937	9043
12:11	MA19462-CCV2	5518	205590	11396	11350

Page 1

12.1.1 12

INTERNAL STANDARD SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
Analyst: EAL Run ID: MA19462
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:16	MA19462-CCB3	5566	206430	11278	11896
12:21	MP26772-S1	4862	181140	11119	8933
12:26	MP26772-S2	4919	181440	11040	9045
12:31	MC47788-1	4806	177330	10883	8910
12:36	MP26772-SD1	5302	196070	11173	10412
12:41	ZZZZZZ	4815	177600	10992	8954
12:47	MA19462-CRI2	5493	203570	11169	11562
12:52	MA19462-CRIB2	5514	205670	11230	11600
12:57	MA19462-ICSA2	4891	180950	10887	9278
13:02	MA19462-ICSAB2	4880	181780	10995	9262
13:07	MA19462-CCV3	5500	205330	11488	11341
13:12	MA19462-CCB4	5579	209370	11451	11924
13:17	ZZZZZZ	5489	204530	11341	11664
13:22	ZZZZZZ	5614	200110	11823	10760
13:27	ZZZZZZ	5209	191360	11043	10097
13:32	ZZZZZZ	5555	206910	11256	11808
13:37	ZZZZZZ	5538	208390	11311	11861
13:42	ZZZZZZ	5578	209030	11370	11932
13:47	MA19462-CCV4	5484	203810	11277	11313
13:52	MA19462-CCB5	5570	208890	11354	11896

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

12.1.1
12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA19462 Units: ug/l

Time:			10:20		10:33		11:17		12:16	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	11								
Antimony	6.0	1.3								
Arsenic	4.0	1.5	0.80	<4.0	0.30	<4.0	0.70	<4.0	0.60	<4.0
Barium	50	.19	0.30	<50	0.30	<50	0.30	<50	0.20	<50
Beryllium	4.0	.16								
Bismuth	50	.95								
Boron	100	9.7								
Cadmium	4.0	.19	0.30	<4.0	0.20	<4.0	0.20	<4.0	0.20	<4.0
Calcium	5000	7.6								
Chromium	10	.39	0.50	<10	0.50	<10	0.60	<10	0.30	<10
Cobalt	50	.21								
Copper	25	.55								
Gold	50	.91								
Iron	100	1.9								
Lead	5.0	1.1	0.10	<5.0	0.30	<5.0	0.0	<5.0	0.40	<5.0
Lithium	500	1.3								
Magnesium	5000	25								
Manganese	15	.11								
Molybdenum	100	.17								
Nickel	40	.33	anr							
Palladium	50	1.9								
Platinum	50	3.1								
Potassium	5000	27								
Selenium	10	1.8	1.0	<10	1.0	<10	3.0	<10	2.7	<10
Silicon	100	6.3								
Silver	5.0	.27	0.20	<5.0	0.10	<5.0	0.20	<5.0	-0.10	<5.0
Sodium	5000	5.1								
Sulfur	50	2.2								
Strontium	10	.079								
Thallium	5.0	1.3								
Tin	100	.8								
Titanium	50	.32								
Tungsten	100	3.3								

12.1.2
12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA19462 Units: ug/l

Time:			10:20		10:33		11:17		12:16	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Vanadium	10	.37								
Zinc	20	1.2								
Zirconium	50	.32								

(*) Outside of QC limits
(anr) Analyte not requested

12.1.2
12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA19462 Units: ug/l

Time:			13:12	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Aluminum	200	11		
Antimony	6.0	1.3		
Arsenic	4.0	1.5	0.60	<4.0
Barium	50	.19	0.20	<50
Beryllium	4.0	.16		
Bismuth	50	.95		
Boron	100	9.7		
Cadmium	4.0	.19	0.30	<4.0
Calcium	5000	7.6		
Chromium	10	.39	0.70	<10
Cobalt	50	.21		
Copper	25	.55		
Gold	50	.91		
Iron	100	1.9		
Lead	5.0	1.1	0.40	<5.0
Lithium	500	1.3		
Magnesium	5000	25		
Manganese	15	.11		
Molybdenum	100	.17		
Nickel	40	.33	anr	
Palladium	50	1.9		
Platinum	50	3.1		
Potassium	5000	27		
Selenium	10	1.8	2.4	<10
Silicon	100	6.3		
Silver	5.0	.27	-0.20	<5.0
Sodium	5000	5.1		
Sulfur	50	2.2		
Strontium	10	.079		
Thallium	5.0	1.3		
Tin	100	.8		
Titanium	50	.32		
Tungsten	100	3.3		

12.1.2
12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA19462 Units: ug/l

Time:			13:12	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Vanadium	10	.37		
Zinc	20	1.2		
Zirconium	50	.32		

(*) Outside of QC limits
(anr) Analyte not requested

12.1.2 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:24	
Sample ID:	ICCV	ICCV1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic	2000	1970	98.5
Barium	2000	2060	103.0
Beryllium			
Bismuth			
Boron			
Cadmium	2000	1930	96.5
Calcium			
Chromium	2000	1940	97.0
Cobalt			
Copper			
Gold			
Iron			
Lead	2000	1940	97.0
Lithium			
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Palladium			
Platinum			
Potassium			
Selenium	2000	2000	100.0
Silicon			
Silver	250	241	96.4
Sodium			
Sulfur			
Strontium			
Thallium			
Tin			
Titanium			
Tungsten			

12.1.3 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:24	
Sample ID:	ICCV	ICCV1	
Metal	True	Results	% Rec
Vanadium			
Zinc			
Zirconium			

(*) Outside of QC limits
(anr) Analyte not requested

12.1.3 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:11			11:12			12:11	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	2000	100.0	2000	1890	94.5	2000	1890	94.5
Barium	2000	2000	100.0	2000	2000	100.0	2000	1970	98.5
Beryllium									
Bismuth									
Boron									
Cadmium	2000	1980	99.0	2000	1860	93.0	2000	1850	92.5
Calcium									
Chromium	2000	1970	98.5	2000	1860	93.0	2000	1850	92.5
Cobalt									
Copper									
Gold									
Iron									
Lead	2000	1960	98.0	2000	1880	94.0	2000	1870	93.5
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	2000	2010	100.5	2000	1930	96.5	2000	1920	96.0
Silicon									
Silver	250	246	98.4	250	234	93.6	250	231	92.4
Sodium									
Sulfur									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									

12.1.4 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:11			11:12			12:11	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Vanadium									
Zinc									
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

12.1.4 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA19462 Units: ug/l

Time:		13:07	
Sample ID:	CCV	CCV3	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic	2000	1880	94.0
Barium	2000	1950	97.5
Beryllium			
Bismuth			
Boron			
Cadmium	2000	1860	93.0
Calcium			
Chromium	2000	1850	92.5
Cobalt			
Copper			
Gold			
Iron			
Lead	2000	1860	93.0
Lithium			
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Palladium			
Platinum			
Potassium			
Selenium	2000	1910	95.5
Silicon			
Silver	250	232	92.8
Sodium			
Sulfur			
Strontium			
Thallium			
Tin			
Titanium			
Tungsten			

12.1.4 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA19462 Units: ug/l

Time:		13:07	
Sample ID:	CCV	CCV3	
Metal	True	Results	% Rec
Vanadium			
Zinc			
Zirconium			

(*) Outside of QC limits
(anr) Analyte not requested

12.1.4 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA19462 Units: ug/l

Time:			10:38		12:47	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	200	200				
Antimony	6.0	10				
Arsenic	4.0	10	4.2	105.0	4.0	100.0
Barium	50	50	51.6	103.2	51.2	102.4
Beryllium	4.0	4.0				
Bismuth	50	50				
Boron	100	100				
Cadmium	4.0	4.0	3.8	95.0	3.7	92.5
Calcium	5000	5000				
Chromium	10	10	9.5	95.0	9.4	94.0
Cobalt	50	50				
Copper	25	25				
Gold	50	50				
Iron	100	100				
Lead	5.0	10	4.8	96.0	5.2	104.0
Lithium	500	500				
Magnesium	5000	5000				
Manganese	15	15				
Molybdenum	100	100				
Nickel	40	40	anr			
Palladium	50	50				
Platinum	50	50				
Potassium	5000	5000				
Selenium	10	10	10.1	101.0	10.9	109.0
Silicon	100	100				
Silver	5.0	5.0	4.6	92.0	4.7	94.0
Sodium	5000	5000				
Sulfur	50	50				
Strontium	10	10				
Thallium	5.0	10				
Tin	100	100				
Titanium	50	50				
Tungsten	100	100				

12.1.5 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA19462 Units: ug/l

Time:			10:38		12:47	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Vanadium	10	10				
Zinc	20	20				
Zirconium	50	50				

(*) Outside of QC limits
(anr) Analyte not requested

12.1.5 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:43		12:52	
Sample ID:	CRIB	CRIB1		CRIB2	
Metal	True	Results	% Rec	Results	% Rec
Aluminum	200				
Antimony	6.0				
Arsenic	10	10.7	107.0	9.9	99.0
Barium	500	524	104.8	516	103.2
Beryllium	4.0				
Bismuth	50				
Boron	100				
Cadmium	4.0	3.8	95.0	3.7	92.5
Calcium	5000				
Chromium	10	9.3	93.0	9.4	94.0
Cobalt	50				
Copper	25				
Gold	50				
Iron	100				
Lead	10	9.3	93.0	10.1	101.0
Lithium	500				
Magnesium	5000				
Manganese	15				
Molybdenum	100				
Nickel	40				
Palladium	50				
Platinum	50				
Potassium	5000				
Selenium	25	26.9	107.6	26.0	104.0
Silicon	100				
Silver	5.0	4.8	96.0	5.0	100.0
Sodium	5000				
Sulfur	50				
Strontium	10				
Thallium	5.0				
Tin	100				
Titanium	50				
Tungsten	100				

12.1.6 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:43		12:52	
Sample ID:	CRIB	CRIB1		CRIB2	
Metal	True	Results	% Rec	Results	% Rec
Vanadium	10				
Zinc	100				
Zirconium	50				

(*) Outside of QC limits
(anr) Analyte not requested

12.1.6 12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA19462 Units: ug/l

Time:			10:48		10:52		12:57		13:02	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	512000	102.4	512000	102.4	498000	99.6	498000	99.6
Antimony		500	-1.5		528	105.6	-0.50		524	104.8
Arsenic		500	1.0		505	101.0	2.0		497	99.4
Barium		500	3.0		518	103.6	3.1		494	98.8
Beryllium		500	-0.10		501	100.2	-0.10		479	95.8
Bismuth		500	3.0		529	105.8	2.9		521	104.2
Boron		500	0.20		484	96.8	-2.5		481	96.2
Cadmium		1000	-0.40		968	96.8	-0.40		969	96.9
Calcium	500000	500000	451000	90.2	446000	89.2	425000	85.0	428000	85.6
Chromium		500	5.7		452	90.4	5.5		448	89.6
Cobalt		500	-2.2		475	95.0	-1.9		470	94.0
Copper		500	1.8		530	106.0	1.5		515	103.0
Gold		500	-2.2		475	95.0	-1.3		475	95.0
Iron	200000	200000	188000	94.0	188000	94.0	180000	90.0	180000	90.0
Lead		1000	0.80		942	94.2	0.50		925	92.5
Lithium		500	26.8		539	107.8	25.5		529	105.8
Magnesium	500000	500000	525000	105.0	526000	105.2	499000	99.8	496000	99.2
Manganese		500	1.7		477	95.4	1.4		470	94.0
Molybdenum		500	3.1		477	95.4	2.6		473	94.6
Nickel		1000	18.4		981	98.1	18.5		961	96.1
Palladium		500	-13		508	101.6	-13		504	100.8
Platinum		500	0.0		504	100.8	5.2		501	100.2
Potassium			99.3		77.2		96.6		91.3	
Selenium		500	0.40		515	103.0	0.40		502	100.4
Silicon		500	5.0		504	100.8	3.3		494	98.8
Silver		1000	0.60		975	97.5	-0.80		969	96.9
Sodium			81.0		71.6		239		198	
Sulfur		500	11.1		492	98.4	12.1		491	98.2
Strontium		500	0.40		492	98.4	0.40		480	96.0
Thallium		500	2.8		499	99.8	2.2		485	97.0
Tin		500	0.40		474	94.8	0.40		465	93.0
Titanium		500	1.1		480	96.0	0.90		472	94.4
Tungsten		500	24.8		483	96.6	11.5		471	94.2

12.1.7 12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA19462 Units: ug/l

Time:			10:48		10:52		12:57		13:02	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Vanadium		500	0.70		458	91.6	0.90		453	90.6
Zinc		1000	1.4		856	85.6	1.2		849	84.9
Zirconium		500	7.7		440	88.0	6.2		436	87.2

(*) Outside of QC limits
(anr) Analyte not requested

12.1.7 12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 2 - SIC Standards

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:57			11:02			11:07	
Sample ID:	SIC1	SIC11		SIC2	SIC21		SIC3	SIC31	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic		0.20			1.5			1.1	
Barium	10000	10400	104.0		1.5			0.0	
Beryllium	10000								
Bismuth									
Boron									
Cadmium	10000	9060	90.6		1.1			1.0	
Calcium									
Chromium		0.10		10000	9310	93.1		1.0	
Cobalt				10000					
Copper				10000					
Gold									
Iron									
Lead		-0.40			0.20			1.0	
Lithium									
Magnesium									
Manganese				10000					
Molybdenum							10000		
Nickel		2.4		10000	9700	97.0		2.5	
Palladium									
Platinum									
Potassium									
Selenium		-0.10			-0.10			3.6	
Silicon	10000								
Silver		0.70			0.60			1.9	
Sodium									
Sulfur									
Strontium									
Thallium	10000								
Tin	10000								
Titanium							10000		
Tungsten									

12.1.8 12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 2 - SIC Standards

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M1.ICP Date Analyzed: 09/16/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA19462 Units: ug/l

Time:		10:57			11:02			11:07	
Sample ID:	SIC1	SIC11		SIC2	SIC21		SIC3	SIC31	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Vanadium							10000		
Zinc									
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

12.1.8 12

Raw Data: MA19466

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
Analyst: EAL Run ID: MA19466
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:46	MA19466-STD1	1		STD1
14:51	MA19466-STD2	1		STD2
14:56	MA19466-ICV1	1		
15:01	MA19466-ICB1	1		
15:06	MA19466-CCV1	1		
15:10	MA19466-CCB1	1		
15:15	MA19466-CRI1	1		
15:20	MA19466-CRIB1	1		
15:25	MA19466-ICSA1	1		
15:30	MA19466-ICSAB1	1		
15:35	ZZZZZZ	1		FOR IEC CAL.
15:40	ZZZZZZ	1		FOR IEC CAL.
15:45	ZZZZZZ	1		FOR IEC CAL.
15:50	ZZZZZZ	1		FOR IEC CAL.
15:55	ZZZZZZ	1		FOR IEC CAL.
16:00	ZZZZZZ	1		FOR IEC CAL.
16:05	MA19466-CCV2	1		
16:10	MA19466-CCB2	1		
16:15	MP26768-MB1	1		
16:20	MP26768-B1	1		
16:25	MP26768-B2	1		
16:30	MP26768-S1	1		
16:34	MP26768-S2	1		
16:39	MC47789-3	1		(sample used for QC only; not part of login MC47774)
16:44	MP26768-SD1	5		
16:49	ZZZZZZ	1		
16:54	ZZZZZZ	1		
16:59	ZZZZZZ	1		
17:04	MA19466-CCV3	1		
17:09	MA19466-CCB3	1		
17:14	ZZZZZZ	1		
17:19	ZZZZZZ	1		
17:24	ZZZZZZ	1		

12.2 12

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
Analyst: EAL Run ID: MA19466
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:29	ZZZZZZ	1		
17:34	ZZZZZZ	1		
17:39	ZZZZZZ	1		
17:44	ZZZZZZ	1		
17:49	ZZZZZZ	1		
17:54	ZZZZZZ	1		
17:59	ZZZZZZ	1		
18:04	MA19466-CCV4	1		
18:08	MA19466-CCB4	1		
18:13	ZZZZZZ	1		
18:18	ZZZZZZ	1		
18:23	ZZZZZZ	1		
18:28	ZZZZZZ	1		
18:33	ZZZZZZ	1		
18:38	ZZZZZZ	1		
18:43	MC47774-6	1		
18:49	MC47774-7	1		
---------->	Last reportable sample/prep for job MC47774			
18:54	ZZZZZZ	1		
18:59	ZZZZZZ	1		
19:04	MA19466-CCV5	1		
19:09	MA19466-CCB5	1		
19:14	MA19466-CRI2	1		
19:19	MA19466-CRIB2	1		
19:24	MA19466-ICSA2	1		
19:29	MA19466-ICSAB2	1		
19:34	MA19466-CCV6	1		
19:38	MA19466-CCB6	1		
---------->	Last reportable CCB for job MC47774			
	Refer to raw data for calibration curve and standards.			

12.2 12

INTERNAL STANDARD SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
Analyst: EAL Run ID: MA19466
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:46	MA19466-STD1	5639 R	210790 R	11377 R	12028 R
14:51	MA19466-STD2	5474	203210	11381	11106
14:56	MA19466-ICV1	5517	205600	11357	11384
15:01	MA19466-ICB1	5568	208620	11398	11920
15:06	MA19466-CCV1	5527	205810	11306	11387
15:10	MA19466-CCB1	5590	208890	11420	11959
15:15	MA19466-CRI1	5540	206720	11336	11690
15:20	MA19466-CRIB1	5557	207610	11361	11728
15:25	MA19466-ICSA1	4947	183350	10939	9402
15:30	MA19466-ICSAB1	4941	182530	10981	9390
15:35	ZZZZZZ	5517	206330	11376	11738
15:40	ZZZZZZ	5612	199530	11691	10775
15:45	ZZZZZZ	5242	192640	11115	10187
15:50	ZZZZZZ	5530	208000	11167	11799
15:55	ZZZZZZ	5619	209370	11358	11977
16:00	ZZZZZZ	5616	209110	11322	12065
16:05	MA19466-CCV2	5514	205830	11387	11409
16:10	MA19466-CCB2	5603	209310	11393	12015
16:15	MP26768-MB1	5542	208010	11227	11910
16:20	MP26768-B1	5480	205440	11383	11226
16:25	MP26768-B2	5396	201960	11207	11069
16:30	MP26768-S1	5407	203310	11304	11074
16:34	MP26768-S2	5414	202770	11268	11087
16:39	MC47789-3	5550	208350	11353	11918
16:44	MP26768-SD1	5544	209170	11404	11924
16:49	ZZZZZZ	5432	202180	11189	11167
16:54	ZZZZZZ	5469	204360	10973	11291
16:59	ZZZZZZ	5514	206700	11257	11809
17:04	MA19466-CCV3	5534	205870	11256	11455
17:09	MA19466-CCB3	5620	210580	11277	12057
17:14	ZZZZZZ	5601	211190	11403	11995
17:19	ZZZZZZ	5534	208030	11310	11818
17:24	ZZZZZZ	5521	207970	11353	11856

12.2.1 12

INTERNAL STANDARD SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
Analyst: EAL Run ID: MA19466
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
17:29	ZZZZZZ	5435	204790	11294	11327
17:34	ZZZZZZ	5434	206960	11219	11586
17:39	ZZZZZZ	5450	204400	11215	11408
17:44	ZZZZZZ	5332	202050	11252	11014
17:49	ZZZZZZ	5392	201600	11117	11124
17:54	ZZZZZZ	5477	206400	11366	11540
17:59	ZZZZZZ	5561	209020	11349	11873
18:04	MA19466-CCV4	5504	205540	11333	11393
18:08	MA19466-CCB4	5602	210980	11359	12009
18:13	ZZZZZZ	5555	208190	11390	11702
18:18	ZZZZZZ	5267	197780	11082	10713
18:23	ZZZZZZ	5464	205050	11346	11290
18:28	ZZZZZZ	5437	203360	11230	11331
18:33	ZZZZZZ	5477	205900	11283	11649
18:38	ZZZZZZ	5430	203970	11196	11361
18:43	MC47774-6	4673	175960	10774	8741
18:49	MC47774-7	4611	173930	10740	8651
18:54	ZZZZZZ	4860	179880	10962	9124
18:59	ZZZZZZ	4902	180820	10964	9170
19:04	MA19466-CCV5	5549	207130	11252	11476
19:09	MA19466-CCB5	5625	210980	11297	12039
19:14	MA19466-CRI2	5561	208680	11227	11770
19:19	MA19466-CRIB2	5592	209710	11283	11809
19:24	MA19466-ICSA2	4908	182550	10849	9349
19:29	MA19466-ICSAB2	4891	182700	10858	9310
19:34	MA19466-CCV6	5524	205480	11262	11413
19:38	MA19466-CCB6	5662	211710	11302	12118

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

12.2.1 12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA19466 Units: ug/l

Time:			15:01		15:10		16:10		17:09	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	11								
Antimony	6.0	1.3								
Arsenic	4.0	1.5	1.5	<4.0	1.9	<4.0	1.7	<4.0	1.8	<4.0
Barium	50	.19	0.40	<50	0.40	<50	0.40	<50	0.50	<50
Beryllium	4.0	.16								
Bismuth	50	.95								
Boron	100	9.7								
Cadmium	4.0	.19	0.60	<4.0	0.70	<4.0	0.40	<4.0	0.40	<4.0
Calcium	5000	7.6								
Chromium	10	.39	0.20	<10	0.30	<10	0.30	<10	0.30	<10
Cobalt	50	.21								
Copper	25	.55	anr							
Gold	50	.91								
Iron	100	1.9								
Lead	5.0	1.1	0.30	<5.0	0.60	<5.0	-0.40	<5.0	-0.70	<5.0
Lithium	500	1.3								
Magnesium	5000	25								
Manganese	15	.11								
Molybdenum	100	.17								
Nickel	40	.33	anr							
Palladium	50	1.9								
Platinum	50	3.1								
Potassium	5000	27								
Selenium	10	1.8	0.80	<10	2.4	<10	1.3	<10	1.3	<10
Silicon	100	6.3								
Silver	5.0	.27	-0.40	<5.0	-0.30	<5.0	-0.50	<5.0	-0.40	<5.0
Sodium	5000	5.1								
Sulfur	50	2.2								
Strontium	10	.079								
Thallium	5.0	1.3								
Tin	100	.8								
Titanium	50	.32								
Tungsten	100	3.3								

12.2.2 12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP — Date Analyzed: 09/16/16 — Methods: SW846 6010C
QC Limits: result < RL — Run ID: MA19466 — Units: ug/l

Time:			15:01		15:10		16:10		17:09	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Vanadium	10	.37								
Zinc	20	1.2	anr							
Zirconium	50	.32								

(*) Outside of QC limits
(anr) Analyte not requested

12.2.2 12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP — Date Analyzed: 09/16/16 — Methods: SW846 6010C
QC Limits: result < RL — Run ID: MA19466 — Units: ug/l

Time:			18:08		19:09		19:38	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	11						
Antimony	6.0	1.3						
Arsenic	4.0	1.5	0.80	<4.0	1.9	<4.0	1.4	<4.0
Barium	50	.19	0.40	<50	0.50	<50	0.30	<50
Beryllium	4.0	.16						
Bismuth	50	.95						
Boron	100	9.7						
Cadmium	4.0	.19	0.30	<4.0	0.30	<4.0	0.50	<4.0
Calcium	5000	7.6						
Chromium	10	.39	0.40	<10	0.30	<10	0.30	<10
Cobalt	50	.21						
Copper	25	.55	anr					
Gold	50	.91						
Iron	100	1.9						
Lead	5.0	1.1	0.30	<5.0	0.0	<5.0	0.60	<5.0
Lithium	500	1.3						
Magnesium	5000	25						
Manganese	15	.11						
Molybdenum	100	.17						
Nickel	40	.33	anr					
Palladium	50	1.9						
Platinum	50	3.1						
Potassium	5000	27						
Selenium	10	1.8	1.3	<10	1.6	<10	1.6	<10
Silicon	100	6.3						
Silver	5.0	.27	-0.40	<5.0	-0.20	<5.0	-0.40	<5.0
Sodium	5000	5.1						
Sulfur	50	2.2						
Strontium	10	.079						
Thallium	5.0	1.3						
Tin	100	.8						
Titanium	50	.32						
Tungsten	100	3.3						

12.2.2 12

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP — Date Analyzed: 09/16/16 — Methods: SW846 6010C
QC Limits: result < RL — Run ID: MA19466 — Units: ug/l

Time:			18:08		19:09		19:38	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Vanadium	10	.37						
Zinc	20	1.2	anr					
Zirconium	50	.32						

(*) Outside of QC limits
(anr) Analyte not requested

12.2.2 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP — Date Analyzed: 09/16/16 — Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery — Run ID: MA19466 — Units: ug/l

Time:		14:56			15:06			16:05	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	2000	100.0	2000	2030	101.5	2000	2030	101.5
Barium	2000	2000	100.0	2000	2000	100.0	2000	2030	101.5
Beryllium									
Bismuth									
Boron									
Cadmium	2000	2010	100.5	2000	2020	101.0	2000	2020	101.0
Calcium									
Chromium	2000	2010	100.5	2000	2030	101.5	2000	2020	101.0
Cobalt									
Copper	anr								
Gold									
Iron									
Lead	2000	1980	99.0	2000	2000	100.0	2000	1990	99.5
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	2000	2000	100.0	2000	2020	101.0	2000	2020	101.0
Silicon									
Silver	250	250	100.0	250	251	100.4	250	250	100.0
Sodium									
Sulfur									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									

12.2.3 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA19466 Units: ug/l

Time:		14:56			15:06			16:05	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Vanadium									
Zinc	anr								
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

12.2.3 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA19466 Units: ug/l

Time:		17:04			18:04			19:04	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	2030	101.5	2000	2020	101.0	2000	2000	100.0
Barium	2000	2060	103.0	2000	2030	101.5	2000	2050	102.5
Beryllium									
Bismuth									
Boron									
Cadmium	2000	2030	101.5	2000	2020	101.0	2000	1990	99.5
Calcium									
Chromium	2000	2050	102.5	2000	2020	101.0	2000	2010	100.5
Cobalt									
Copper	anr								
Gold									
Iron									
Lead	2000	1990	99.5	2000	1990	99.5	2000	1970	98.5
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	2000	2020	101.0	2000	2010	100.5	2000	1990	99.5
Silicon									
Silver	250	253	101.2	250	250	100.0	250	249	99.6
Sodium									
Sulfur									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									

12.2.3 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA19466 Units: ug/l

Time:		17:04			18:04			19:04	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Vanadium									
Zinc	anr								
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

12.2.3 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA19466 Units: ug/l

Time:		19:34	
Sample ID:	CCV	CCV6	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic	2000	2030	101.5
Barium	2000	2030	101.5
Beryllium			
Bismuth			
Boron			
Cadmium	2000	2020	101.0
Calcium			
Chromium	2000	2030	101.5
Cobalt			
Copper	anr		
Gold			
Iron			
Lead	2000	1990	99.5
Lithium			
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Palladium			
Platinum			
Potassium			
Selenium	2000	2020	101.0
Silicon			
Silver	250	252	100.8
Sodium			
Sulfur			
Strontium			
Thallium			
Tin			
Titanium			
Tungsten			

12.2.3 12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA19466 Units: ug/l

Time:		19:34		
Sample ID:	CCV	CCV6		
Metal	True	Results	% Rec	
Vanadium				
Zinc	anr			
Zirconium				

(*) Outside of QC limits
(anr) Analyte not requested

12.2.3 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA19466 Units: ug/l

Time:			15:15		19:14	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	200	200				
Antimony	6.0	10				
Arsenic	4.0	10	4.8	120.0	4.3	107.5
Barium	50	50	51.8	103.6	52.3	104.6
Beryllium	4.0	4.0				
Bismuth	50	50				
Boron	100	100				
Cadmium	4.0	4.0	4.2	105.0	4.3	107.5
Calcium	5000	5000				
Chromium	10	10	10.1	101.0	10.1	101.0
Cobalt	50	50				
Copper	25	25	anr			
Gold	50	50				
Iron	100	100				
Lead	5.0	10	4.7	94.0	4.7	94.0
Lithium	500	500				
Magnesium	5000	5000				
Manganese	15	15				
Molybdenum	100	100				
Nickel	40	40	anr			
Palladium	50	50				
Platinum	50	50				
Potassium	5000	5000				
Selenium	10	10	11.9	119.0	11.7	117.0
Silicon	100	100				
Silver	5.0	5.0	4.6	92.0	4.9	98.0
Sodium	5000	5000				
Sulfur	50	50				
Strontium	10	10				
Thallium	5.0	10				
Tin	100	100				
Titanium	50	50				
Tungsten	100	100				

12.2.4 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA19466 Units: ug/l

Time:			15:15		19:14	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Vanadium	10	10				
Zinc	20	20	anr			
Zirconium	50	50				

(*) Outside of QC limits
(anr) Analyte not requested

12.2.4 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA19466 Units: ug/l

Time:		15:20		19:19	
Sample ID:	CRIB	CRIB1		CRIB2	
Metal	True	Results	% Rec	Results	% Rec
Aluminum	200				
Antimony	6.0				
Arsenic	10	11.7	117.0	11.6	116.0
Barium	500	520	104.0	517	103.4
Beryllium	4.0				
Bismuth	50				
Boron	100				
Cadmium	4.0	4.3	107.5	4.2	105.0
Calcium	5000				
Chromium	10	9.9	99.0	9.9	99.0
Cobalt	50				
Copper	25				
Gold	50				
Iron	100				
Lead	10	9.8	98.0	9.6	96.0
Lithium	500				
Magnesium	5000				
Manganese	15				
Molybdenum	100				
Nickel	40				
Palladium	50				
Platinum	50				
Potassium	5000				
Selenium	25	26.1	104.4	25.9	103.6
Silicon	100				
Silver	5.0	4.8	96.0	4.4	88.0
Sodium	5000				
Sulfur	50				
Strontium	10				
Thallium	5.0				
Tin	100				
Titanium	50				
Tungsten	100				

12.2.5 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA19466 Units: ug/l

Time:		15:20		19:19	
Sample ID:	CRIB	CRIB1		CRIB2	
Metal	True	Results	% Rec	Results	% Rec
Vanadium	10				
Zinc	100				
Zirconium	50				

(*) Outside of QC limits
(anr) Analyte not requested

12.2.5 12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA19466 Units: ug/l

Time:			15:25		15:30		19:24		19:29	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	518000	103.6	518000	103.6	519000	103.8	516000	103.2
Antimony		500	-0.30		540	108.0	-2.0		543	108.6
Arsenic		500	0.40		528	105.6	-0.90		528	105.6
Barium		500	3.3		501	100.2	3.4		503	100.6
Beryllium		500	-0.10		485	97.0	-0.20		483	96.6
Bismuth		500	2.1		522	104.4	3.2		526	105.2
Boron		500	1.8		517	103.4	-0.20		520	104.0
Cadmium		1000	0.10		1050	105.0	0.10		1060	106.0
Calcium	500000	500000	463000	92.6	466000	93.2	463000	92.6	463000	92.6
Chromium		500	6.1		487	97.4	6.1		484	96.8
Cobalt		500	-1.5		502	100.4	-1.5		505	101.0
Copper		500	0.80		511	102.2	0.50		508	101.6
Gold		500	1.1		520	104.0	1.5		516	103.2
Iron	200000	200000	186000	93.0	186000	93.0	186000	93.0	185000	92.5
Lead		1000	1.6		985	98.5	2.4		988	98.8
Lithium		500	25.2		555	111.0	26.7		558	111.6
Magnesium	500000	500000	505000	101.0	500000	100.0	505000	101.0	500000	100.0
Manganese		500	1.1		496	99.2	1.1		492	98.4
Molybdenum		500	3.2		503	100.6	3.1		506	101.2
Nickel		1000	18.8		986	98.6	18.9		991	99.1
Palladium		500	-12		525	105.0	-13		522	104.4
Platinum		500	7.1		525	105.0	5.2		525	105.0
Potassium			95.6		76.1		128		85.5	
Selenium		500	-0.30		533	106.6	1.2		529	105.8
Silicon		500	5.6		501	100.2	5.9		505	101.0
Silver		1000	-1.7		1050	105.0	-2.6		1040	104.0
Sodium			87.1		71.8		173		141	
Sulfur		500	13.2		532	106.4	11.7		534	106.8
Strontium		500	0.70		514	102.8	0.70		512	102.4
Thallium		500	0.90		488	97.6	3.8		491	98.2
Tin		500	2.0		478	95.6	1.0		480	96.0
Titanium		500	1.0		498	99.6	1.3		496	99.2
Tungsten		500	23.0		513	102.6	16.7		510	102.0

12.2.6 12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: SB091616M2.ICP Date Analyzed: 09/16/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA19466 Units: ug/l

Time:			15:25		15:30		19:24		19:29	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Vanadium		500	0.80		496	99.2	0.60		493	98.6
Zinc		1000	0.40		940	94.0	0.40		944	94.4
Zirconium		500	7.0		468	93.6	6.8		463	92.6

(*) Outside of QC limits
(anr) Analyte not requested

12.2.6 12

Raw Data: MA19470

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: H3092016M1.CSV Date Analyzed: 09/20/16 Methods: SW846 7470A
Analyst: EAL Run ID: MA19470
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:11	MA19470-STD1	1		STDA
10:14	MA19470-STD2	1		STDB
10:16	MA19470-STD3	1		STDC
10:18	MA19470-STD4	1		STDD
10:20	MA19470-STD5	1		STDE
10:23	MA19470-STD6	1		STDF
10:25	MA19470-STD7	1		STDG
10:28	MA19470-STD8	1		STDH
10:30	MA19470-STD9	1		STDI
10:34	MA19470-ICV1	1		
10:37	MA19470-ICB1	1		
10:39	MA19470-CCV1	1		
10:42	MA19470-CCB1	1		
10:44	MA19470-CRI1	1		
10:46	MP26769-MB1	1		
10:49	MP26769-B1	1		
10:51	MP26769-B2	1		
10:53	MP26769-S1	1		
10:56	MP26769-S2	1		
10:58	MC47789-3	1		(sample used for QC only; not part of login MC47774)
11:01	ZZZZZZ	1		
11:03	ZZZZZZ	1		
11:06	ZZZZZZ	1		
11:08	MA19470-CCV2	1		
11:10	MA19470-CCB2	1		
11:13	ZZZZZZ	1		
11:15	ZZZZZZ	1		
11:17	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:22	ZZZZZZ	1		
11:24	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:28	ZZZZZZ	1		

12.3 12

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: H3092016M1.CSV Date Analyzed: 09/20/16 Methods: SW846 7470A
Analyst: EAL Run ID: MA19470
Parameters: Hg

	Sample Description	Dilution Factor	PS Recov	Comments
11:31	ZZZZZZ	1		
11:33	ZZZZZZ	1		
11:35	MA19470-CCV3	1		
11:37	MA19470-CCB3	1		
11:40	ZZZZZZ	1		
11:42	ZZZZZZ	1		
11:44	ZZZZZZ	1		
11:47	ZZZZZZ	1		
11:49	ZZZZZZ	1		
11:51	ZZZZZZ	1		
11:53	MP26773-MB1	1		
11:56	MP26773-LB1	1		
11:58	MP26773-B1	1		
12:00	MP26773-B2	1		
12:03	MA19470-CCV4	1		
12:05	ZZZZZZ	1		DNR: SEE RERUN FOR CCB.
12:08	MA19470-CCB4	1		
12:11	MP26773-S1	1		
12:13	MP26773-S2	1		
12:16	MC47788-1	1		(sample used for QC only; not part of login MC47774)
12:18	MC47774-6	1		
12:20	MC47774-7	1		
----------> Last reportable sample/prep for job MC47774				
12:23	ZZZZZZ	1		
12:25	ZZZZZZ	1		
12:27	ZZZZZZ	1		DNR: SEE RERUN FOR CRI.
12:34	MA19470-CRI2	1		
12:36	MA19470-CCV5	1		
12:39	MA19470-CCB5	1		
----------> Last reportable CCB for job MC47774				

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: H3092016M1.CSV Date Analyzed: 09/20/16 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA19470 Units: ug/l

Time:			10:37		10:42		11:10		11:37	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.038	-0.056	<0.20	-0.074	<0.20	-0.091	<0.20	-0.072	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: H3092016M1.CSV Date Analyzed: 09/20/16 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA19470 Units: ug/l

Time:			12:08		12:39	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Mercury	0.20	.038	-0.037	<0.20	-0.059	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: H3092016M1.CSV Date Analyzed: 09/20/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA19470 Units: ug/l

Time:		10:34			10:39			11:08	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	4	4.1	102.5	3	3.1	103.3	3.0	3.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: H3092016M1.CSV Date Analyzed: 09/20/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA19470 Units: ug/l

Time:		11:35			12:03			12:36	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3.0	3.0	100.0	3.0	3.0	100.0	3	3.1	103.3

(*) Outside of QC limits
(anr) Analyte not requested

12.3.2 12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

File ID: H3092016M1.CSV Date Analyzed: 09/20/16 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA19470 Units: ug/l

Time:			10:44		12:34	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Mercury	0.20		0.26	130.0	0.26	130.0

(*) Outside of QC limits
(anr) Analyte not requested

12.3.3 12

Prep Log: MP26772

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.011	.025		
Antimony	0.0060	.0013	.0012		
Arsenic	0.010	.0015	.002	0.00030	<0.010
Barium	0.50	.00019	.00057	0.00010	<0.50
Beryllium	0.0040	.00016	.00034		
Bismuth	0.050	.00095	.0018		
Boron	0.10	.0097	.0023		
Cadmium	0.0040	.00019	.0003	-0.00010	<0.0040
Calcium	5.0	.0076	.018		
Chromium	0.010	.00039	.0011	0.00020	<0.010
Cobalt	0.050	.00021	.00041		
Copper	0.025	.00055	.0042		
Gold	0.050	.00091	.0013		
Iron	0.10	.0019	.016		
Lead	0.010	.0011	.0011	-0.00030	<0.010
Lithium	0.50	.0013	.0018		
Magnesium	5.0	.025	.056		
Manganese	0.015	.00011	.00041		
Molybdenum	0.10	.00017	.016		
Nickel	0.040	.00033	.00035		
Palladium	0.050	.0019	.0014		
Platinum	0.050	.0031	.0047		
Potassium	5.0	.027	.078		
Selenium	0.025	.0018	.0034	0.0015	<0.025
Silicon	0.10	.0063	.03		
Silver	0.0050	.00027	.0014	0.0	<0.0050
Sodium	5.0	.0051	.035		
Sulfur	0.050	.0022	.0033		
Strontium	0.010	.000079	.00017		
Thallium	0.0050	.0013	.0018		
Tin	0.10	.0008	.0022		
Titanium	0.050	.00032	.00099		
Tungsten	0.10	.0033	.023		

12.4.1 12

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	RL	IDL	MDL	MB raw	final
Vanadium	0.010	.00037	.0004		
Zinc	0.10	.0012	.001		
Zirconium	0.050	.00032	.0026		

Associated samples MP26772: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

12.4.1 12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	MC47788-1 Original	MS	Spikelot MPICP7	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.0	0.53	0.50	106.0	75-125
Barium	0.17	2.2	2.0	101.5	75-125
Beryllium					
Bismuth					
Boron					
Cadmium	0.00040	0.50	0.50	99.9	75-125
Calcium					
Chromium	0.0042	0.46	0.50	91.2	75-125
Cobalt					
Copper					
Gold					
Iron					
Lead	0.020	1.0	1.0	98.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	anr				
Palladium					
Platinum					
Potassium					
Selenium	0.0	0.54	0.50	108.0	75-125
Silicon					
Silver	0.0	0.19	0.20	95.0	75-125
Sodium					
Sulfur					
Strontium					
Thallium					
Tin					
Titanium					
Tungsten					

12.4.2 12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	MC47788-1 Original	MS	Spikelot MPICP7	% Rec	QC Limits
Vanadium					
Zinc					
Zirconium					

Associated samples MP26772: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

12.4.2 12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	MC47788-1 Original	MSD	Spikelot MPICP7	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0	0.53	0.50	106.0	0.0	20
Barium	0.17	2.2	2.0	101.5	0.0	20
Beryllium						
Bismuth						
Boron						
Cadmium	0.00040	0.50	0.50	99.9	0.0	20
Calcium						
Chromium	0.0042	0.45	0.50	89.2	2.2	20
Cobalt						
Copper						
Gold						
Iron						
Lead	0.020	1.0	1.0	98.0	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Palladium						
Platinum						
Potassium						
Selenium	0.0	0.53	0.50	106.0	1.9	20
Silicon						
Silver	0.0	0.19	0.20	95.0	0.0	20
Sodium						
Sulfur						
Strontium						
Thallium						
Tin						
Titanium						
Tungsten						

12.4.2 12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	MC47788-1 Original	MSD	Spikelot MPICP7	% Rec	MSD RPD	QC Limit
Vanadium						
Zinc						
Zirconium						

Associated samples MP26772: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

12.4.2 12

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16 09/16/16

Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	0.54	0.50	108.0	80-120	0.54	0.50	108.0	0.0	20
Barium	2.0	2.0	100.0	80-120	2.0	2.0	100.0	0.0	20
Beryllium									
Bismuth									
Boron									
Cadmium	0.50	0.50	100.0	80-120	0.50	0.50	100.0	0.0	20
Calcium									
Chromium	0.46	0.50	92.0	80-120	0.47	0.50	94.0	2.2	20
Cobalt									
Copper									
Gold									
Iron									
Lead	0.99	1.0	99.0	80-120	0.99	1.0	99.0	0.0	20
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium	0.55	0.50	110.0	80-120	0.54	0.50	108.0	1.8	20
Silicon									
Silver	0.19	0.20	95.0	80-120	0.19	0.20	95.0	0.0	20
Sodium									
Sulfur									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16 09/16/16

Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
Vanadium									
Zinc									
Zirconium									

Associated samples MP26772: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: ug/l

Prep Date: 09/16/16

Metal	MC47788-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	171	167	2.6	0-10
Beryllium				
Bismuth				
Boron				
Cadmium	0.400	0.00	100.0(a)	0-10
Calcium				
Chromium	4.20	4.40	4.8	0-10
Cobalt				
Copper				
Gold				
Iron				
Lead	19.8	18.7	5.6	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Sulfur				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26772 Methods: SW846 6010C
Matrix Type: LEACHATE Units: ug/l

Prep Date: 09/16/16

Metal	MC47788-1 Original	SDL 1:5	%DIF	QC Limits
Vanadium				
Zinc				
Zirconium				

Associated samples MP26772: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26773 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.00020	.000038	.000034	-0.000045	<0.00020

Associated samples MP26773: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

12.5.1 12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26773 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	MC47788-1 Original MS	Spikelot HGRWS1	% Rec	QC Limits
Mercury	0.0	0.0033	0.0030	110.0	75-125

Associated samples MP26773: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

12.5.2 12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26773 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16

Metal	MC47788-1 Original MSD	Spikelot HGRWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.0033	0.0030	110.0	0.0

Associated samples MP26773: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

12.5.2 12

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

QC Batch ID: MP26773 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 09/16/16 09/16/16

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	0.0033	0.0030	110.0	80-120	0.0032	0.0030	106.7	3.1	

Associated samples MP26773: MC47774-6, MC47774-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

12.5.3 12

SGS ACCUTEST New England

Section 13

Metals Analysis

Raw Data

13

Inst QC: MA19462

Sample Name: STD1 Acquired: 9/16/2016 9:49:52 Type: Cal
Method: Accutest2(v310) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0001**	**.0002**	**.0000**	**.0000**	**.0006**	**.0008**	**.0001**	**-.0001**	**.0061**
Stddev	.0000	.0002	.0000	.0000	.0000	.0004	.0001	.0000	.0002
%RSD	.5912	87.49	.0517	85.99	2.031	72.97	160.4	5.677	2.529
#1	-.0001	.0003	.0000	.0000	.0006	.0008	-.0000	-.0001	.0060
#2	-.0001	.0001	.0000	.0000	.0006	.0003	.0002	-.0002	.0062

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0004**	**.0000**	**.0000**	**.0009**	**.0004**	**.0004**	**.0027**	**-.0001**	**.0002**
Stddev	.0000	.0000	.0000	.0000	.0001	.0006	.0003	.0000	.0000
%RSD	9.487	36.58	56.59	.0668	19.10	163.3	10.60	8.472	1.915
#1	.0004	.0000	.0000	.0009	.0003	.0008	.0025	-.0001	.0002
#2	.0005	.0000	.0000	.0009	.0005	-.0001	.0029	-.0001	.0002

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**-.0012**	**-.0001**	**-.0002**	**-.0001**	**-.0000**	**-.0000**	**-.0005**	**.0001**
Stddev	.0000	.0001	.0000	.0001	.0000	.0000	.0000	.0001	.0000
%RSD	13.76	12.55	.3762	21.04	1.180	.1997	88.18	16.99	27.70
#1	.0003	-.0011	-.0001	-.0002	-.0001	-.0000	-.0000	-.0004	.0001
#2	.0002	-.0013	-.0001	-.0003	-.0001	-.0000	-.0000	-.0005	.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0081**	**.0002**	**-.0012**	**.0000**	**-.0002**	**.0001**	**.0022**	**.0003**	**-.0001**
Stddev	.0000	.0000	.0001	.0000	.0000	.0000	.0000	.0001	.0000
%RSD	.0063	30.10	7.350	40.90	8.015	3.283	1.590	36.49	83.70
#1	.0081	.0002	-.0012	.0000	-.0002	.0001	.0021	.0003	-.0001
#2	.0081	.0001	-.0013	.0000	-.0001	.0001	.0022	.0004	-.0000

Raw Data MA19462 page 1 of 79

Sample Name: STD1 Acquired: 9/16/2016 9:49:52 Type: Cal
Method: Accutest2(v310) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11792.**	**6482.8**	**199730.**	**10685.**
Stddev	17.	2.8	525.	14.
%RSD	.14279	.05175	.26269	.13269
#1	11744.	5485.0	199360.	10695.
#2	11720.	5480.9	200110.	10675.

Raw Data MA19462 page 2 of 79

Sample Name: STD2 Acquired: 9/16/2016 9:57:41 Type: Cal
Method: Accutest2(v310) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0609**	**.6237**	**.3529**	**.0780**	**.6228**	**9.178**	**7.488**	**.0867**	**1.037**
Stddev	.0001	.0028	.0007	.0001	.0011	.038	.033	.0011	.005
%RSD	.2944	.4543	.1931	.0662	.1754	.4147	.4408	.1552	.4893
#1	.0510	.6217	.3534	.0780	.6233	9.149	7.464	.0874	1.033
#2	.0508	.6257	.3524	.0780	.6218	9.203	7.511	.0859	1.040

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.097**	**1.464**	**.2923**	**.0000**	**1.099**	**.8277**	**2.804**	**.1199**	**1.437**
Stddev	.005	.002	.0003	.0002	.009	.0009	.013	.0009	.009
%RSD	.1748	.1527	.1126	.0249	.8253	.1126	.4547	.7284	.6590
#1	3.101	1.466	.2920	.6667	1.093	.8270	2.795	.1193	1.430
#2	3.093	1.463	.2925	.6664	1.106	.8283	2.813	.1206	1.444

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.629**	**2.252**	**1.187**	**-.4670**	**.1367**	**.0204**	**.1764**	**.5097**	**.2367**
Stddev	.004	.009	.002	.0012	.0001	.0000	.0003	.0007	.0006
%RSD	.1477	.3812	.1792	.2550	.0433	.1923	.1849	.1454	.2506
#1	2.632	2.246	1.188	.4685	.1367	.0204	.1764	.5092	.2371
#2	2.626	2.258	1.185	.4668	.1367	.0204	.1759	.5082	.2363

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8014**	**.5584**	**12.65**	**.4995**	**.1701**	**.3648**	**1.034**	**2.839**	**1.038**
Stddev	.0011	.0010	.06	.0004	.0006	.0002	.007	.008	.001
%RSD	.1338	.1715	.4803	.0807	.3710	.0590	.6442	.2683	.0779
#1	.8021	.5591	12.61	.4992	.1705	.3650	1.029	2.844	1.038
#2	.8006	.5577	12.70	.4998	.1696	.3647	1.039	2.834	1.037

Raw Data MA19462 page 3 of 79

Sample Name: STD2 Acquired: 9/16/2016 9:57:41 Type: Cal
Method: Accutest2(v310) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10737.**	**5275.7**	**191890.**	**10714.**
Stddev	1.	.3	503.	10.
%RSD	.01182	.00639	.26208	.09635
#1	10738.	5275.9	192240.	10721.
#2	10736.	5275.5	191530.	10706.

Raw Data MA19462 page 4 of 79

13.1

13

Inst QC: MA19462

Sample Name: RINSECONF Acquired: 9/16/2016 10:02:32 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0042**	**F .0033**	**.0039**	**.0050**	**.0009**	**F .0008**	**.0028**	**.0049**
Stddev	.0000	.0019	.0004	.0010	.0004	.0002	.0000	.0000	.0017
%RSD	18.06	45.47	12.05	26.55	8.001	21.98	5.358	1.590	35.76
#1	.0001	.0055	.0036	.0046	.0052	.0010	.0008	.0028	.0061
#2	.0001	.0028	.0030	.0032	.0047	.0008	.0009	.0029	.0036
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.0030				.0005		
Low Limit			-.0030				-.0005		

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**F .0024**	**.0023**	**F .0012**	**.0008**	**F .0154**	**-.0009**	**.0008**	**.0152**	**.0012**
Stddev	.0001	.0001	.0002	.0005	.0036	.0010	.0003	.0074	.0004
%RSD	3.469	4.431	20.24	63.85	23.39	17.84	35.03	48.47	30.32
#1	.0025	.0023	.0011	.0005	.0179	-.0066	.0006	.0100	.0010
#2	.0023	.0022	.0014	.0012	.0129	-.0051	.0009	.0204	.0015
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0006		.0012		.0100				
Low Limit	-.0006		-.0012		-.0100				

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037**	**.0084**	**.0026**	**.0018**	**.0029**	**-.0023**	**.0025**	**.0021**	**.0044**
Stddev	.0005	.0017	.0000	.0001	.0013	.0018	.0006	.0014	.0008
%RSD	12.53	19.98	.1358	3.341	43.53	78.14	23.35	65.63	19.02
#1	.0040	.0072	.0025	.0018	.0020	-.0036	.0029	.0031	.0038
#2	.0033	.0096	.0025	.0019	.0038	-.0010	.0021	.0011	.0050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19462 page 5 of 79

Sample Name: RINSECONF Acquired: 9/16/2016 10:02:32 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0030**	**.0018**	**.0007**	**.0042**	**F .0028**	**F .0016**	**F .0013**	**F .0024**	**.0027**
Stddev	.0006	.0002	.0001	.0001	.0009	.0001	.0042	.0000	.0002
%RSD	19.05	12.20	15.10	3.490	33.26	7.009	13.33	1.098	8.137
#1	.0034	.0019	.0006	.0041	.0032	.0015	.0342	.0024	.0026
#2	.0026	.0016	.0008	.0043	.0020	.0017	.0283	.0025	.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass
High Limit					.0020	.0010	.0010	.0020	
Low Limit					-.0020	-.0010	-.0010	-.0020	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11621.**	**5491.7**	**198310.**	**10786.**
Stddev	25.	11.4	536.	64.
%RSD	.21298	.20985	.27030	.59558
#1	11639.	5439.8	198590.	10740.
#2	11604.	5423.7	197930.	10831.

Raw Data MA19462 page 6 of 79

Sample Name: ICV Acquired: 9/16/2016 10:11:20 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2463**	**9.934**	**1.907**	**1.975**	**1.986**	**2.001**	**2.001**	**2.061**	**9.887**
Stddev	.0013	.039	.003	.005	.001	.002	.003	.005	.016
%RSD	.5149	.3962	.1454	.4568	.0475	.1097	.1485	.2404	.1567
#1	.2449	9.891	1.998	1.966	1.985	2.000	1.998	2.065	9.885
#2	.2471	9.968	1.993	1.976	1.985	2.003	2.004	2.056	9.903
#3	.2471	9.943	1.999	1.984	1.987	1.999	2.000	2.061	9.872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.976**	**1.988**	**1.968**	**1.973**	**9.981**	**9.841**	**2.005**	**9.807**	**2.024**
Stddev	.005	.005	.010	.012	.010	.032	.004	.018	.012
%RSD	.2362	.2502	.5011	.6134	.0967	.3266	.1904	.1786	.5904
#1	1.980	1.971	1.958	1.961	9.971	9.853	2.001	9.792	2.011
#2	1.971	1.962	1.970	1.971	9.982	9.865	2.009	9.826	2.025
#3	1.977	1.971	1.977	1.985	9.990	9.804	2.005	9.803	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.998**	**9.888**	**1.988**	**1.989**	**2.006**	**2.036**	**2.010**	**2.009**	**2.012**
Stddev	.004	.006	.005	.005	.010	.010	.005	.002	.003
%RSD	.1764	.0629	.2475	.2606	.5148	.4918	.2385	.1162	.1312
#1	1.998	9.868	1.987	1.960	1.995	2.030	2.011	2.009	2.009
#2	1.992	9.873	1.981	1.953	2.007	2.030	2.005	2.006	2.011
#3	1.998	9.861	1.991	1.963	2.016	2.048	2.015	2.011	2.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19462 page 7 of 79

Sample Name: ICV Acquired: 9/16/2016 10:11:20 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2008**	**2.037**	**2.031**	**2.000**	**2.018**	**1.988**	**2.007**	**1.967**	**1.992**
Stddev	.004	.004	.004	.004	.012	.007	.009	.013	.006
%RSD	.1816	.2051	.1967	.5749	.3584	.4635	.6551	.3203	.5226
#1	2.011	2.037	2.028	1.990	2.016	1.978	1.997	1.968	1.982
#2	2.004	2.034	2.035	1.999	2.012	1.989	2.002	1.960	1.991
#3	2.010	2.042	2.030	2.013	2.026	1.996	2.022	1.973	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11218.**	**5433.2**	**199420.**	**11342.**
Stddev	33.	13.8	1043.	44.
%RSD	.29067	.25431	.52299	.38420
#1	11190.	5419.2	200600.	11339.
#2	11254.	5446.8	199030.	11299.
#3	11210.	5433.7	198620.	11386.

Raw Data MA19462 page 8 of 79

13.1

13

Inst QC: MA19462

Sample Name: ICB Acquired: 9/16/2016 10:20:17 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0107**	**.0008**	**.0010**	**.0020**	**.0003**	**.0001**	**.0011**	**.0074**
Stddev	.0001	.0004	.0005	.0006	.0001	.0001	.0000	.0003	.0008
%RSD	79.19	4.017	112.0	54.96	6.260	25.66	85.84	31.00	10.90
#1	.0001	-.0104	.0002	.0014	.0021	.0004	.0000	.0013	.0080
#2	.0002	-.0110	.0015	.0006	.0019	.0003	.0001	.0009	.0069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0001**	**.0005**	**.0006**	**.0034**	**.0099**	**-.0005**	**.0228**	**.0003**
Stddev	.0000	.0000	.0001	.0001	.0003	.0013	.0004	.0126	.0001
%RSD	12.36	13.43	18.47	12.11	9.078	12.97	93.74	55.51	24.63
#1	.0003	.0001	.0004	.0007	.0032	.0090	-.0002	.0138	.0002
#2	.0003	.0001	.0005	.0005	.0036	.0108	-.0008	.0315	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0008**	**.0001**	**.0001**	**.0022**	**-.0016**	**.0011**	**.0000**	**.0010**
Stddev	.0001	.0004	.0000	.0000	.0003	.0005	.0001	.0001	.0010
%RSD	8.840	65.79	24.86	590.0	15.64	34.86	5.627	598.4	102.5
#1	.0008	.0008	.0001	-.0002	.0024	-.0012	.0011	.0001	.0017
#2	.0007	.0003	.0001	.0004	.0019	-.0019	.0012	-.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19462 page 9 of 79

Sample Name: ICB Acquired: 9/16/2016 10:20:17 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**-.0002**	**-.0001**	**.0011**	**.0009**	**.0001**	**F .0197**	**.0002**	**.0011**
Stddev	.0001	.0003	.0000	.0002	.0001	.0003	.0016	.0000	.0001
%RSD	23.86	120.3	66.59	15.53	6.650	198.0	8.267	6.129	8.918
#1	.0005	-.0000	-.0001	.0012	.0009	-.0001	.0208	.0002	.0012
#2	.0007	-.0004	-.0000	.0009	.0010	.0003	.0185	.0002	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11948.**	**5951.0**	**205480.**	**11535.**
Stddev	21.	12.8	386.	12.
%RSD	.17419	.22978	.18777	.10561
#1	11833.	5941.9	205210.	11533.
#2	11862.	5960.0	205750.	11316.

Raw Data MA19462 page 10 of 79

Sample Name: ICCV Acquired: 9/16/2016 10:24:32 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2407**	**9.946**	**1.971**	**1.930**	**1.948**	**2.056**	**2.035**	**2.064**	**9.807**
Stddev	.0007	.047	.005	.006	.004	.007	.006	.004	.040
%RSD	.2965	.4743	.2810	.2939	.1968	.3628	.3025	.1825	.4027
#1	.2405	9.875	1.978	1.930	1.951	2.045	2.026	2.064	9.747
#2	.2412	9.972	1.967	1.935	1.943	2.057	2.037	2.059	9.826
#3	.2413	9.972	1.966	1.932	1.943	2.062	2.039	2.066	9.827
#4	.2398	9.963	1.972	1.922	1.945	2.058	2.039	2.068	9.827
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.928**	**1.940**	**1.941**	**2.002**	**10.18**	**10.04**	**1.983**	**10.16**	**1.989**
Stddev	.002	.003	.005	.003	.04	.03	.004	.07	.006
%RSD	.1008	.1461	.3447	.1588	.4239	.2666	.1986	.6579	.3152
#1	1.930	1.940	1.940	2.000	10.09	10.00	1.979	10.06	1.989
#2	1.927	1.939	1.943	2.004	10.15	10.05	1.988	10.19	1.991
#3	1.926	1.937	1.946	2.005	10.16	10.05	1.984	10.17	1.995
#4	1.929	1.944	1.935	1.998	10.19	10.06	1.982	10.21	1.980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19462 page 11 of 79

Sample Name: ICCV Acquired: 9/16/2016 10:24:32 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.984**	**9.974**	**1.983**	**1.941**	**1.977**	**1.989**	**1.989**	**1.995**	**1.998**
Stddev	.003	.026	.005	.001	.004	.007	.002	.001	.004
%RSD	.1589	.2617	.2285	.0604	.2035	.3376	.1088	.0445	.1746
#1	1.968	9.939	1.991	1.942	1.975	2.006	1.971	1.996	2.003
#2	1.962	9.973	1.990	1.940	1.980	2.003	1.967	1.996	1.996
#3	1.962	9.998	1.990	1.940	1.980	1.992	1.968	1.994	1.997
#4	1.965	9.988	1.999	1.941	1.972	1.994	1.971	1.996	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.012**	**2.039**	**2.034**	**1.998**	**2.042**	**1.968**	**1.978**	**1.924**	**1.947**
Stddev	.004	.006	.006	.005	.004	.006	.009	.003	.003
%RSD	.1876	.2749	.3084	.2340	.1926	.2932	.4574	.1274	.1735
#1	2.014	2.038	2.016	1.994	2.040	1.957	1.968	1.925	1.947
#2	2.008	2.035	2.026	1.998	2.038	1.962	1.975	1.922	1.948
#3	2.010	2.036	2.030	2.001	2.043	1.963	1.980	1.922	1.951
#4	2.017	2.047	2.026	1.990	2.047	1.951	1.989	1.927	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19462 page 12 of 79

13.1

13

Inst QC: MA19462

Sample Name: ICCV Acquired: 9/16/2016 10:24:32 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11248.**	**5467.8**	**201870.**	**11228.**
Stddev	22.	8.0	784.	31.
%RSD	.19299	.14671	.38858	.27257
#1	11262.	5470.0	201800.	11242.
#2	11254.	5472.1	201360.	11241.
#3	11260.	5473.3	201320.	11246.
#4	11215.	5456.0	203000.	11182.

Sample Name: CCB Acquired: 9/16/2016 10:33:49 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0120**	**.0003**	**.0010**	**.0026**	**.0003**	**.0001**	**.0013**	**.0117**
Stddev	.0003	.0071	.0007	.0004	.0007	.0000	.0000	.0006	.0019
%RSD	366.7	59.36	217.2	34.30	26.11	12.38	2.482	48.22	15.78
#1	-.0001	-.0170	.0008	.0013	.0031	.0003	.0001	.0009	.0104
#2	.0003	-.0069	-.0002	.0008	.0021	.0003	.0001	.0018	.0130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0002**	**.0005**	**.0012**	**.0048**	**.0001**	**-.0002**	**.0005**	**.0003**
Stddev	.0000	.0000	.0002	.0001	.0008	.0016	.0023	.0011	.0000
%RSD	5.833	3.406	47.70	4.347	16.29	1329.	1401.	211.4	15.86
#1	.0002	.0002	.0006	.0012	.0053	.0012	.0015	-.0003	.0002
#2	.0002	.0002	.0003	.0013	.0042	-.0010	-.0018	.0013	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0006**	**.0004**	**.0003**	**.0019**	**-.0017**	**.0020**	**.0012**	**.0010**
Stddev	.0000	.0027	.0001	.0002	.0002	.0008	.0004	.0009	.0000
%RSD	2.904	435.1	24.35	92.11	10.60	43.87	19.50	72.94	2.062
#1	.0008	.0026	.0005	.0004	.0021	-.0023	.0017	.0019	.0010
#2	.0008	-.0013	.0003	.0001	.0018	-.0012	.0023	.0006	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 9/16/2016 10:33:49 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0003**	**-.0000**	**.0012**	**.0001**	**.0005**	F **.0232**	**.0004**	**.0012**
Stddev	.0003	.0003	.0001	.0000	.0001	.0001	.0019	.0000	.0001
%RSD	68.88	104.7	191.6	3.763	113.3	12.92	8.337	12.48	6.210
#1	.0006	-.0005	-.0001	.0012	.0000	.0005	.0246	.0004	.0013
#2	.0002	-.0001	.0000	.0011	.0001	.0006	.0218	.0004	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11881.**	**5578.6**	**206770.**	**11340.**
Stddev	20.	10.9	373.	61.
%RSD	.16950	.19456	.18052	.53865
#1	11895.	5586.3	206510.	11384.
#2	11867.	5570.9	207040.	11297.

Sample Name: CRI Acquired: 9/16/2016 10:38:10 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046**	**.1933**	**.0042**	**.0475**	**.1023**	**.0516**	**.0041**	**.0538**	**4.915**
Stddev	.0001	.0058	.0002	.0007	.0003	.0003	.0001	.0003	.023
%RSD	1.421	2.981	3.784	1.467	.2636	.5728	2.116	.5400	.4673
#1	.0046	.1893	.0041	.0470	.1025	.0514	.0040	.0536	4.899
#2	.0045	.1974	.0043	.0480	.1021	.0518	.0041	.0540	4.931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0038**	**.0485**	**.0095**	**.0259**	**.1041**	**5.005**	**.4875**	**5.174**	**.0152**
Stddev	.0000	.0000	.0000	.0003	.0001	.038	.0027	.090	.0002
%RSD	.4397	.0596	.3718	1.190	.0895	.7512	.5513	1.734	1.218
#1	.0038	.0485	.0096	.0257	.1042	5.031	.4856	5.110	.0151
#2	.0038	.0485	.0095	.0262	.1041	4.978	.4894	5.237	.0153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0985**	**5.083**	**.0407**	**.0048**	**.0501**	**.0506**	**.0508**	**.0045**	**.0101**
Stddev	.0002	.017	.0002	.0006	.0003	.0032	.0015	.0007	.0001
%RSD	.1926	.3247	.5067	12.19	.6719	6.341	3.001	14.48	1.097
#1	.0983	5.071	.0408	.0044	.0503	.0529	.0519	.0050	.0102
#2	.0986	5.095	.0405	.0052	.0498	.0483	.0498	.0041	.0100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

13.1

13

SGS ACCUTEST
MC47774

Inst QC: MA19462

Sample Name: CRI Acquired: 9/16/2016 10:38:10 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0946**	**.1025**	**.0102**	**.0499**	**.0051**	**.0098**	F **.0273**	**.0198**	**.0387**
Stddev	.0002	.0000	.0000	.0000	.0009	.0000	.0013	.0000	.0010
%RSD	.2095	.0440	.3208	.0272	18.63	.4943	4.624	.0031	2.675
#1	.0945	.1025	.0102	.0499	.0044	.0098	.0282	.0198	.0380
#2	.0947	.1025	.0102	.0499	.0058	.0098	.0264	.0198	.0395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.1000		
Range							-30.00%		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11549.**	**5512.4**	**205620.**	**11449.**
Stddev	8.	5.0	315.	11.
%RSD	.06675	.09036	.15309	.09582
#1	11554.	5516.0	205840.	11457.
#2	11543.	5508.9	205400.	11442.

Sample Name: CRIB Acquired: 9/16/2016 10:43:06 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**.1921**	**.0107**	**.0464**	**.1002**	**.5240**	**.0041**	**.0533**	**4.889**
Stddev	.0001	.0012	.0001	.0010	.0006	.0013	.0000	.0000	.016
%RSD	3.075	.6079	.9184	2.130	.6411	.2420	.9496	.0527	.3198
#1	.0047	.1913	.0108	.0457	.1006	.5231	.0040	.0533	4.878
#2	.0049	.1929	.0106	.0471	.0997	.5249	.0041	.0532	4.900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0038**	**.0484**	**.0093**	**.0263**	**.1060**	**5.053**	**.4849**	**5.202**	**.0154**
Stddev	.0001	.0004	.0004	.0003	.0023	.014	.0028	.003	.0001
%RSD	2.568	.7580	4.216	1.188	2.207	.2722	.5814	.0496	.4394
#1	.0039	.0487	.0096	.0261	.1043	5.044	.4829	5.200	.0154
#2	.0038	.0482	.0091	.0266	.1076	5.063	.4869	5.204	.0155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0985**	**5.091**	**.0408**	**.0093**	**.0499**	**.0483**	**.0487**	**.0062**	**.0269**
Stddev	.0004	.015	.0000	.0003	.0001	.0016	.0003	.0004	.0011
%RSD	.3602	.2898	.0801	3.622	.1239	3.219	.5463	6.272	4.079
#1	.0987	5.080	.0407	.0095	.0499	.0494	.0488	.0064	.0277
#2	.0982	5.101	.0408	.0091	.0498	.0472	.0485	.0059	.0262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CRIB Acquired: 9/16/2016 10:43:06 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1018**	**.1036**	**.0102**	**.0500**	**.0049**	**.0097**	F **.0214**	**.1015**	**.0423**
Stddev	.0014	.0010	.0001	.0003	.0003	.0001	.0005	.0006	.0010
%RSD	1.372	.9455	.5015	.5580	6.675	.7979	2.326	.5480	2.343
#1	.1028	.1043	.0102	.0498	.0047	.0098	.0217	.1019	.0416
#2	.1008	.1029	.0102	.0502	.0052	.0096	.0210	.1012	.0430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.1000		
Range							-30.00%		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11493.**	**5487.6**	**205890.**	**11368.**
Stddev	45.	17.4	269.	60.
%RSD	.39176	.31731	.13080	.52441
#1	11461.	5475.3	206080.	11326.
#2	11524.	5500.0	205700.	11410.

Sample Name: ICSA Acquired: 9/16/2016 10:48:01 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**512.3**	**.0010**	**-.0022**	**.0002**	**.0030**	**-.0001**	**.0030**	**450.6**
Stddev	.0001	1.1	.0008	.0010	.0003	.0001	.0000	.0005	.3
%RSD	20.09	.2218	84.66	46.63	146.4	3.854	7.967	16.37	.0703
#1	.0006	511.5	.0004	-.0030	-.0000	.0029	-.0001	.0034	450.3
#2	.0007	513.1	.0016	-.0015	.0004	.0031	-.0001	.0027	450.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0022**	**.0057**	**.0018**	**188.4**	**.0993**	**.0268**	**525.2**	**.0017**
Stddev	.0005	.0002	.0002	.0003	.2	.0090	.0010	.1	.0000
%RSD	127.8	9.799	4.028	18.53	.1181	9.046	3.837	.0229	2.801
#1	-.0000	-.0021	.0055	.0021	188.3	.0930	.0261	525.1	.0017
#2	-.0007	-.0024	.0058	.0016	188.6	.1057	.0275	525.3	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.0810**	**.0184**	**.0008**	**-.0130**	**.0000**	**.0111**	**-.0015**	**.0004**
Stddev	.0001	.0001	.0006	.0016	.0013	.0014	.0003	.0008	.0029
%RSD	1.962	.1352	3.525	205.3	9.644	2896.	2.949	56.01	759.8
#1	.0031	.0809	.0189	-.0004	-.0121	.0010	.0113	-.0021	-.0017
#2	.0032	.0811	.0179	.0020	-.0139	-.0009	.0109	-.0009	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

13.1

13

SGS ACCUTEST
MC47774

Inst QC: MA19462

Sample Name: ICSA Acquired: 9/16/2016 10:48:01 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**.0004**	**.0004**	**.0011**	**.0028**	**.0007**	**.0248**	**.0014**	**.0077**
Stddev	.0006	.0001	.0000	.0002	.0004	.0004	.0029	.0006	.0006
%RSD	11.12	19.78	11.48	20.35	12.53	57.97	11.65	42.09	7.995
#1	.0054	.0004	.0004	.0013	.0026	.0010	.0269	.0019	.0082
#2	.0046	.0005	.0004	.0010	.0031	.0004	.0228	.0010	.0073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9170.8**	**4848.0**	**180020.**	**10779.**
Stddev	197.4	112.8	1150.	75.
%RSD	2.1527	2.3258	.63853	.69639
#1	9031.2	4768.3	180830.	10726.
#2	9310.4	4927.8	179200.	10832.

Sample Name: ICSAB Acquired: 9/16/2016 10:52:57 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9749**	**512.0**	**.5054**	**.4746**	**.4837**	**.5175**	**.5008**	**.5290**	**446.1**
Stddev	.0003	3.5	.0006	.0009	.0013	.0038	.0029	.0017	3.7
%RSD	.0342	.6742	.1205	.1828	.2649	.7271	.5834	.3177	.8373
#1	.9751	509.6	.5049	.4740	.4846	.5149	.4987	.5278	443.4
#2	.9746	514.5	.5058	.4752	.4828	.5202	.5029	.5302	448.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9678**	**.4749**	**.4521**	**.5298**	**188.2**	**.0772**	**.5394**	**526.0**	**.4766**
Stddev	.0001	.0005	.0016	.0006	1.1	.0041	.0023	2.7	.0004
%RSD	.0065	.0999	.3490	.1168	.5719	5.349	.4320	.5063	.0871
#1	.9678	.4746	.4510	.5302	187.4	.0743	.5377	524.1	.4763
#2	.9678	.4753	.4533	.5293	189.0	.0801	.5410	527.9	.4769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4770**	**.0716**	**.9806**	**.9415**	**.5079**	**.5036**	**.4924**	**.5283**	**.5145**
Stddev	.0000	.0066	.0013	.0001	.0016	.0000	.0033	.0016	.0030
%RSD	.0040	9.154	.1310	.0122	.3172	.0047	.6651	.3019	.5889
#1	.4770	.0670	.9797	.9414	.5067	.5036	.4901	.5272	.5124
#2	.4770	.0762	.9815	.9416	.5090	.5035	.4947	.5294	.5167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICSAB Acquired: 9/16/2016 10:52:57 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5041**	**.4741**	**.4922**	**.4800**	**.4990**	**.4580**	**.4834**	**.8564**	**.4396**
Stddev	.0013	.0010	.0035	.0009	.0016	.0012	.0023	.0002	.0065
%RSD	.2638	.2141	.7080	.1884	.3287	.2722	.4688	.0234	1.472
#1	.5032	.4748	.4898	.4794	.4978	.4572	.4817	.8566	.4350
#2	.5051	.4734	.4947	.4806	.5001	.4589	.4850	.8563	.4442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9194.0**	**4864.4**	**180300.**	**10800.**
Stddev	.2	3.1	262.	7.
%RSD	.00253	.06448	.14518	.06255
#1	9194.2	4862.2	180480.	10795.
#2	9193.8	4866.6	180110.	10804.

Sample Name: SIC1 Acquired: 9/16/2016 10:57:47 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0605**	**.0002**	**.0019**	**-.0078**	**10.37**	**10.36**	**.0005**	**.0359**
Stddev	.0001	.0181	.0001	.0002	.0001	.05	.05	.0005	.0013
%RSD	20.84	29.85	57.78	9.923	.9038	.4764	.4725	102.6	3.689
#1	.0006	.0732	.0003	.0018	-.0078	10.33	10.32	.0001	.0349
#2	.0008	.0477	.0001	.0021	-.0077	10.40	10.39	.0009	.0368
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.063**	**-.0009**	**.0001**	**.0014**	**.0513**	**.0309**	**-.0001**	**.0826**	**-.0007**
Stddev	.036	.0000	.0000	.0001	.0051	.0022	.0000	.0027	.0000
%RSD	.3939	5.100	46.29	5.196	9.943	7.239	48.91	3.290	5.104
#1	9.089	-.0009	.0001	.0015	.0549	.0293	-.0000	.0845	-.0007
#2	9.038	-.0009	.0001	.0013	.0477	.0325	-.0001	.0806	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0244**	**.0024**	**-.0004**	**.0030**	**-.0023**	**.0001**	**-.0003**	**-.0001**
Stddev	.0001	.0002	.0001	.0003	.0004	.0016	.0021	.0002	.0003
%RSD	56.69	.6801	4.646	59.34	13.48	71.55	1907.	75.05	418.4
#1	.0003	.0245	.0023	-.0002	.0027	-.0035	-.0013	-.0001	-.0003
#2	.0001	.0242	.0024	-.0006	.0033	-.0011	.0016	-.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

13.1

13

SGS ACCUTEST
MC47774

Inst QC: MA19462

Sample Name: SIC1 Acquired: 9/16/2016 10:57:47 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.471**	**10.16**	**.0007**	**.0009**	**10.46**	**.0001**	**.0074**	**.0004**	**.0223**
Stddev	.037	.04	.0000	.0001	.04	.0001	.0017	.0000	.0060
%RSD	.3960	.4173	1.459	11.41	.3716	52.17	22.55	4.447	26.90
#1	9.497	10.19	.0007	.0009	10.48	.0001	.0085	.0003	.0266
#2	9.444	10.13	.0007	.0008	10.43	.0001	.0062	.0004	.0181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11730.**	**5540.5**	**207820.**	**11302.**
Stddev	22.	13.6	270.	2.
%RSD	.18895	.24598	.13015	.01439
#1	11714.	5530.9	207630.	11303.
#2	11746.	5550.2	208010.	11301.

Sample Name: SIC2 Acquired: 9/16/2016 11:02:44 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0075**	**.0015**	**-.0054**	**-.0011**	**.0015**	**.0013**	**-.0055**	**.0013**
Stddev	.0000	.0032	.0003	.0005	.0007	.0001	.0000	.0005	.0015
%RSD	7.579	43.25	17.10	8.665	62.21	4.783	.7826	9.671	112.0
#1	.0006	.0097	.0013	-.0058	-.0016	.0015	.0013	-.0059	.0024
#2	.0006	.0052	.0017	-.0051	-.0006	.0016	.0013	-.0052	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**9.496**	**9.314**	**10.21**	**.0166**	**.0042**	**.0003**	**.0489**	**9.510**
Stddev	.0004	.016	.024	.08	.0009	.0066	.0003	.0139	.011
%RSD	35.58	.1656	.2541	.7860	5.637	158.5	133.2	28.42	.1121
#1	.0008	9.507	9.297	10.27	.0173	.0089	.0005	.0588	9.502
#2	.0013	9.485	9.331	10.15	.0159	-.0005	.0000	.0391	9.517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0133**	**9.699**	**.0002**	**-.0057**	**-.0007**	**.0177**	**.0027**	**-.0001**
Stddev	.0000	.0023	.026	.0008	.0004	.0004	.0007	.0010	.0001
%RSD	6.900	17.28	.2706	435.5	6.241	53.97	4.245	36.94	77.20
#1	.0006	.0149	9.717	-.0004	-.0060	-.0004	.0171	.0020	-.0001
#2	.0006	.0117	9.680	.0007	-.0054	-.0010	.0182	.0034	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: SIC2 Acquired: 9/16/2016 11:02:44 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0022**	**-.0003**	**.0015**	**.0023**	**-.0018**	**.0089**	**.0127**	**-.0016**
Stddev	.0021	.0001	.0000	.0000	.0000	.0001	.0003	.0001	.0001
%RSD	146.0	5.537	6.447	.5894	.5605	4.465	3.304	.6514	8.609
#1	.0029	.0021	-.0003	.0015	.0023	-.0019	.0091	.0126	-.0015
#2	-.0000	.0023	-.0002	.0015	.0023	-.0017	.0087	.0127	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11647.**	**5446.7**	**206310.**	**11272.**
Stddev	11.	11.0	584.	74.
%RSD	.09694	.20249	.28317	.65863
#1	11655.	5454.5	206730.	11325.
#2	11639.	5438.9	205900.	11220.

Sample Name: SIC3 Acquired: 9/16/2016 11:07:52 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.0272**	**.0011**	**-.0050**	**.0001**	**.0000**	**.0008**	**-.0005**	**.0290**
Stddev	.0001	.0125	.0008	.0001	.0007	.0002	.0001	.0008	.0004
%RSD	6.551	45.79	68.94	2.699	792.6	546.1	16.15	186.5	1.432
#1	.0019	.0184	.0017	-.0049	-.0004	.0001	.0008	-.0011	.0293
#2	.0018	.0360	.0006	-.0051	.0006	-.0001	.0009	.0001	.0287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0006**	**.0010**	**.0008**	**-.0044**	**-.0135**	**.0006**	**-.0183**	**.0004**
Stddev	.0003	.0008	.0002	.0003	.0003	.0137	.0007	.0070	.0000
%RSD	34.54	123.3	18.57	37.04	7.971	101.7	121.2	38.09	6.735
#1	.0007	.0001	.0011	.0010	-.0041	-.0232	.0001	-.0232	.0004
#2	.0012	.0011	.0008	.0006	-.0046	-.0038	.0011	-.0133	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.490**	**.0455**	**.0025**	**.0010**	**-.0016**	**-.0108**	**-.0215**	**-.0007**	**.0036**
Stddev	.003	.0070	.0006	.0003	.0009	.0001	.0018	.0007	.0005
%RSD	.0329	15.42	23.23	28.46	57.63	1.377	8.516	106.6	13.59
#1	9.492	.0405	.0021	.0012	-.0010	-.0109	-.0202	-.0002	.0032
#2	9.488	.0504	.0029	.0008	-.0023	-.0107	-.0228	-.0012	.0039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

13.1

13

SGS ACCUTEST
MC47774

Inst QC: MA19462

Zoom In Zoom Out

Sample Name: SIC3 Acquired: 9/16/2016 11:07:52 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0362**	**-.0059**	**-.0003**	**9.375**	**-.0012**	**9.237**	**.0083**	**-.0009**	**-.0036**
Stddev	.0008	.0002	.0001	.018	.0007	.024	.0006	.0001	.0006
%RSD	2.332	3.034	39.47	.1974	55.16	.2542	7.522	8.176	16.24
#1	-.0368	-.0060	-.0003	9.388	-.0007	9.254	.0088	-.0009	-.0032
#2	-.0356	-.0057	-.0002	9.362	-.0017	9.220	.0079	-.0010	-.0041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11744.**	**5535.5**	**207230.**	**11317.**
Stddev	6.	4.9	331.	10.
%RSD	.04959	.08774	.15965	.09251
#1	11748.	5532.1	207000.	11324.
#2	11740.	5539.0	207470.	11310.

Raw Data MA19462 page 29 of 79

Zoom In Zoom Out

Sample Name: CCV Acquired: 9/16/2016 11:12:50 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2336**	**9.657**	**1.891**	**1.835**	**1.870**	**2.002**	**2.003**	**2.052**	**9.361**
Stddev	.0002	.084	.000	.003	.004	.015	.017	.000	.083
%RSD	.0931	.8670	.0217	.1780	.1848	.7493	.8291	.0055	.8834
#1	.2335	9.598	1.892	1.833	1.868	1.991	1.991	2.051	9.302
#2	.2338	9.717	1.891	1.838	1.873	2.013	2.015	2.052	9.419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.855**	**1.871**	**1.860**	**2.013**	**9.881**	**9.717**	**1.920**	**10.07**	**1.948**
Stddev	.004	.001	.000	.001	.075	.061	.013	.14	.002
%RSD	.2096	.0420	.0124	.0659	.7638	.6304	.6901	1.391	.1073
#1	1.852	1.871	1.860	2.014	9.828	9.674	1.910	9.970	1.949
#2	1.857	1.872	1.860	2.012	9.935	9.761	1.929	10.17	1.946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.906**	**9.841**	**1.961**	**1.879**	**1.949**	**1.957**	**1.879**	**1.948**	**1.929**
Stddev	.002	.077	.001	.000	.001	.002	.003	.002	.003
%RSD	.0887	.7812	.0380	.0089	.0378	.0761	.1533	.0893	.1415
#1	1.905	9.786	1.961	1.879	1.949	1.958	1.877	1.949	1.931
#2	1.907	9.895	1.960	1.879	1.948	1.956	1.881	1.947	1.927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19462 page 30 of 79

Zoom In Zoom Out

Sample Name: CCV Acquired: 9/16/2016 11:12:50 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.989**	**2.012**	**1.922**	**1.946**	**2.041**	**1.868**	**1.852**	**1.825**	**1.883**
Stddev	.001	.002	.014	.002	.002	.001	.020	.002	.002
%RSD	.0647	.0906	.7446	.1177	.0913	.0533	1.052	.0880	.0888
#1	1.988	2.010	1.912	1.948	2.043	1.868	1.838	1.824	1.881
#2	1.990	2.013	1.932	1.944	2.040	1.869	1.866	1.827	1.884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11208.**	**5449.0**	**202800.**	**11290.**
Stddev	7.	5.3	530.	6.
%RSD	.06116	.09724	.26141	.05617
#1	11212.	5452.7	202420.	11295.
#2	11203.	5445.3	203170.	11286.

Raw Data MA19462 page 31 of 79

Zoom In Zoom Out

Sample Name: CCB Acquired: 9/16/2016 11:17:42 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0047**	**.0007**	**.0018**	**.0008**	**.0003**	**.0003**	**.0008**	**.0164**
Stddev	.0003	.0017	.0005	.0002	.0003	.0001	.0002	.0009	.0009
%RSD	133.5	37.30	72.63	11.45	37.54	40.20	70.26	113.7	5.470
#1	.0005	-.0034	.0010	.0020	.0011	.0002	.0002	.0002	.0158
#2	.0000	-.0059	.0003	.0017	.0006	.0004	.0005	.0015	.0170
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0002**	**.0006**	**.0014**	**.0060**	**.0001**	**-.0008**	**.0190**	**.0006**
Stddev	.0001	.0000	.0000	.0001	.0025	.0157	.0014	.0085	.0001
%RSD	43.82	3.077	4.489	10.48	41.88	22370.	178.7	44.55	11.61
#1	.0003	.0002	.0007	.0015	.0042	.0112	.0002	.0130	.0006
#2	.0001	.0002	.0006	.0013	.0078	-.0110	-.0018	.0250	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015**	**.0069**	**.0001**	**-.0000**	**.0023**	**-.0036**	**.0009**	**-.0003**	**.0030**
Stddev	.0002	.0010	.0001	.0001	.0004	.0016	.0003	.0004	.0005
%RSD	11.15	14.00	97.63	9120.	15.42	43.46	29.68	151.0	18.30
#1	.0016	.0076	.0000	-.0001	.0021	-.0048	.0011	-.0006	.0026
#2	.0014	.0062	.0002	.0001	.0026	-.0025	.0007	.0000	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19462 page 32 of 79

Inst QC: MA19462

Zoom In Zoom Out

Sample Name: CCB Acquired: 9/16/2016 11:17:42 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0000**	**.0001**	**.0026**	**.0010**	**.0009**	F **.0149**	**.0002**	**.0016**
Stddev	.0007	.0001	.0001	.0000	.0013	.0000	.0023	.0001	.0002
%RSD	110.9	283.2	105.7	1.347	129.5	.3394	15.38	30.62	10.55
#1	-.0001	-.0000	.0000	.0026	.0001	.0009	.0165	.0003	.0017
#2	-.0011	.0001	.0002	.0026	.0019	.0009	.0132	.0002	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11829.**	**5543.9**	**207630.**	**11267.**
Stddev	32.	18.2	413.	36.
%RSD	.26916	.32753	.19894	.32114
#1	11807.	5531.1	207920.	11292.
#2	11852.	5556.8	207340.	11241.

Raw Data MA19462 page 33 of 79

Zoom In Zoom Out

Sample Name: MP26774-MB1 Acquired: 9/16/2016 11:22:43 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**-.0024**	**.0010**	**.0006**	**-.0003**	**.0003**	**.0000**	**.0006**	**.0268**
Stddev	.0004	.0003	.0003	.0003	.0000	.0002	.0001	.0000	.0012
%RSD	27840.	14.12	26.17	52.63	6.709	74.24	229.3	3.371	4.457
#1	-.0003	-.0027	.0012	.0004	-.0002	.0001	-.0000	.0006	.0276
#2	.0003	-.0022	.0008	.0008	-.0003	.0004	.0001	.0006	.0259

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0005**	**.0014**	**.0028**	**-.0170**	**.0006**	**.0030**	**.0006**
Stddev	.0002	.0001	.0003	.0000	.0015	.0147	.0012	.0011	.0000
%RSD	424.6	96.33	70.53	1.646	53.34	86.07	195.8	35.33	5.092
#1	.0002	.0002	.0007	.0014	.0018	-.0274	.0015	.0023	.0005
#2	-.0001	.0000	.0002	.0013	.0039	-.0067	-.0002	.0038	.0006

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0088**	**.0002**	**.0005**	**.0021**	**-.0009**	**.0053**	**-.0000**	**.0005**
Stddev	.0002	.0071	.0001	.0000	.0002	.0015	.0006	.0000	.0007
%RSD	37.35	81.24	42.42	2.313	10.36	179.9	11.97	75.18	147.0
#1	.0008	.0138	.0003	.0005	.0022	.0002	.0058	-.0001	-.0000
#2	.0004	.0037	.0002	.0005	.0019	-.0019	.0049	-.0000	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0106**	**-.0005**	**-.0001**	**.0010**	**.0014**	**.0005**	**-.0033**	**.0012**	**.0002**
Stddev	.0005	.0001	.0000	.0002	.0001	.0000	.0006	.0001	.0002
%RSD	4.720	25.97	28.96	19.61	6.135	4.039	17.59	4.091	119.6
#1	.0109	-.0006	-.0000	.0009	.0015	.0005	-.0029	.0013	.0000
#2	.0102	-.0004	-.0001	.0012	.0014	.0004	-.0038	.0012	.0003

Raw Data MA19462 page 34 of 79

Zoom In Zoom Out

Sample Name: MP26774-MB1 Acquired: 9/16/2016 11:22:43 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**12147.**	**5672.6**	**211650.**	**11629.**
Stddev	4.	4.5	110.	45.
%RSD	.02905	.08007	.05211	.38763
#1	12144.	5675.8	211730.	11661.
#2	12149.	5669.4	211580.	11598.

Raw Data MA19462 page 35 of 79

Zoom In Zoom Out

Sample Name: MP26774-B1 Acquired: 9/16/2016 11:27:45 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1758**	**9.845**	**.5032**	**-.0004**	**.9975**	**1.973**	**.4950**	**-.0000**	**23.86**
Stddev	.0009	.126	.0008	.0002	.0026	.020	.0043	.0012	.19
%RSD	.5017	1.279	.1622	47.55	.2607	1.007	.8677	5698.	.8041
#1	.1764	9.756	.5037	-.0006	.9956	1.959	.4919	.0009	23.72
#2	.1752	9.934	.5026	-.0003	.9993	1.987	.4980	-.0009	23.99

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4856**	**.4832**	**.4601**	**.4894**	**9.936**	**24.99**	**.0005**	**25.26**	**.4939**
Stddev	.0001	.0008	.0009	.0003	.128	.16	.0009	.20	.0008
%RSD	.0218	.1576	.1937	.0522	1.291	.6303	183.0	.7885	.1526
#1	.4855	.4826	.4607	.4896	9.846	24.88	-.0001	25.12	.4945
#2	.4857	.4837	.4594	.4893	10.03	25.11	.0011	25.40	.4934

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4685**	**25.05**	**.4955**	**.9751**	**.0015**	**-.0017**	**.0074**	**.5103**	**.5028**
Stddev	.0003	.21	.0009	.0014	.0006	.0011	.0003	.0003	.0018
%RSD	.0560	.8250	.1842	.1472	38.71	68.06	4.351	.0548	.3601
#1	.4687	24.90	.4949	.9761	.0011	-.0025	.0072	.5105	.5015
#2	.4683	25.20	.4962	.9740	.0019	-.0009	.0076	.5101	.5041

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081**	**.9866**	**.4820**	**.4754**	**.5190**	**.4681**	**.0016**	**.4748**	**.0088**
Stddev	.0005	.0022	.0044	.0007	.0003	.0001	.0001	.0007	.0002
%RSD	6.317	.2185	.9214	.1452	.0644	.0162	4.200	.1517	2.157
#1	.0085	.9851	.4788	.4749	.5193	.4681	.0015	.4753	.0086
#2	.0078	.9882	.4851	.4759	.5188	.4682	.0016	.4743	.0089

Raw Data MA19462 page 36 of 79

Inst QC: MA19462

Zoom In Zoom Out

Sample Name: MP26774-B1 Acquired: 9/16/2016 11:27:45 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11322.**	**5571.4**	**207910.**	**11574.**
Stddev	2.	3.1	464.	17.
%RSD	.01389	.05493	.22305	.14947
#1	11324.	5569.2	207580.	11586.
#2	11321.	5573.6	208240.	11561.

Raw Data MA19462 page 37 of 79

Zoom In Zoom Out

Sample Name: MP26774-S1 Acquired: 9/16/2016 11:32:31 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1812**	**10.74**	**.5293**	**-.0001**	**1.084**	**2.303**	**.5031**	**.0006**	**68.65**
Stddev	.0004	.09	.0041	.0001	.007	.021	.0039	.0001	.48
%RSD	.2009	.8609	.7703	219.4	.6251	.9165	.7788	10.25	.7013
#1	.1815	10.67	.5264	.0000	1.079	2.288	.5003	.0006	68.31
#2	.1809	10.80	.5322	-.0002	1.088	2.318	.5059	.0005	68.99

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4983**	**.5005**	**.4700**	**.5322**	**12.00**	**29.54**	**.0189**	**32.55**	**.6119**
Stddev	.0036	.0038	.0033	.0017	.12	.16	.0019	.23	.0024
%RSD	.7221	.7496	.7017	.3159	.9928	.5275	10.11	.7139	.4001
#1	.4958	.4979	.4723	.5334	11.91	29.43	.0175	32.39	.6137
#2	.5009	.5032	.4676	.5310	12.08	29.65	.0202	32.72	.6102

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4846**	**163.8**	**.5160**	**1.025**	**-.0001**	**-.0045**	**16.20**	**.5255**	**.5186**
Stddev	.0035	.8	.0037	.005	.0003	.0011	.10	.0074	.0028
%RSD	.7306	.5074	.7160	.5009	362.1	25.42	.6172	1.413	.5354
#1	.4821	163.2	.5134	1.021	.0001	-.0037	16.12	.5203	.5167
#2	.4871	164.4	.5186	1.028	-.0003	-.0053	16.27	.5308	.5206

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.850**	**.9903**	**.9103**	**.5055**	**.5163**	**.4826**	**.0034**	**.5343**	**-.0003**
Stddev	.050	.0083	.0077	.0012	.0072	.0015	.0008	.0041	.0000
%RSD	.8469	.8368	.8497	.2360	1.401	.3019	23.75	.7689	6.243
#1	5.815	.9844	.9048	.5063	.5111	.4836	.0039	.5314	-.0003
#2	5.885	.9962	.9158	.5046	.5214	.4815	.0028	.5372	-.0003

Raw Data MA19462 page 38 of 79

Zoom In Zoom Out

Sample Name: MP26774-S1 Acquired: 9/16/2016 11:32:31 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10532.**	**5338.7**	**199820.**	**11566.**
Stddev	72.	34.2	309.	100.
%RSD	.68806	.63988	.15463	.86421
#1	10583.	5362.8	199610.	11637.
#2	10481.	5314.5	200040.	11495.

Raw Data MA19462 page 39 of 79

Zoom In Zoom Out

Sample Name: MP26774-S2 Acquired: 9/16/2016 11:37:17 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1818**	**10.77**	**.5301**	**-.0004**	**1.082**	**2.281**	**.5007**	**.0008**	**66.86**
Stddev	.0002	.07	.0021	.0008	.005	.007	.0027	.0008	.16
%RSD	.1175	.6597	.3956	200.5	.4224	.3176	.5384	105.0	.2366
#1	.1820	10.72	.5287	.0002	1.079	2.276	.4988	.0014	66.75
#2	.1817	10.82	.5316	-.0010	1.085	2.286	.5027	.0002	66.97

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5004**	**.5038**	**.4737**	**.5323**	**11.99**	**29.36**	**.0203**	**32.54**	**.6111**
Stddev	.0014	.0021	.0015	.0006	.08	.00	.0001	.21	.0005
%RSD	.2885	.4248	.3151	.1139	.6661	.0080	.3513	.6508	.0873
#1	.4994	.5023	.4748	.5327	11.94	29.36	.0204	32.39	.6115
#2	.5014	.5054	.4727	.5319	12.05	29.36	.0203	32.69	.6107

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4861**	**158.6**	**.5203**	**1.030**	**.0004**	**-.0024**	**15.64**	**.5278**	**.5184**
Stddev	.0019	.4	.0025	.005	.0008	.0026	.07	.0020	.0021
%RSD	.3865	.2551	.4829	.5208	176.3	110.5	.4510	.3744	.3986
#1	.4847	158.3	.5186	1.026	.0010	-.0005	15.59	.5264	.5169
#2	.4874	158.9	.5221	1.034	-.0001	-.0043	15.69	.5292	.5199

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.699**	**.9988**	**.8884**	**.5090**	**.5223**	**.4834**	**.0026**	**.5378**	**-.0016**
Stddev	.026	.0030	.0042	.0020	.0026	.0007	.0004	.0017	.0001
%RSD	.4601	.2996	.4680	.3891	.5026	.1420	16.08	.3136	6.281
#1	5.680	.9967	.8855	.5076	.5205	.4839	.0029	.5366	-.0017
#2	5.718	1.001	.8914	.5104	.5242	.4829	.0023	.5390	-.0015

Raw Data MA19462 page 40 of 79

Inst QC: MA19462

Zoom In Zoom Out

Sample Name: MP26774-S2 Acquired: 9/16/2016 11:37:17 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10545.**	**5349.3**	**199280.**	**11452.**
Stddev	44.	18.2	125.	16.
%RSD	.41768	.34022	.06257	.13747
#1	10576.	5362.2	199190.	11463.
#2	10514.	5336.4	199370.	11440.

Raw Data MA19462 page 41 of 79

Zoom In Zoom Out

Sample Name: MC47540-3 Acquired: 9/16/2016 11:42:02 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.5304**	**.0041**	**.0001**	**.0661**	**.2644**	**.0001**	**.0016**	**41.70**
Stddev	.0002	.0096	.0006	.0004	.0003	.0025	.0001	.0007	.15
%RSD	145.1	1.811	13.96	734.4	.5267	.9520	85.72	42.59	.3579
#1	-.0000	.5372	.0045	-.0002	.0658	.2626	.0000	.0011	41.60
#2	.0003	.5236	.0037	.0003	.0663	.2661	.0001	.0021	41.81

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0012**	**.0026**	**.0273**	**1.714**	**3.578**	**.0185**	**6.745**	**.1082**
Stddev	.0000	.0000	.0001	.0003	.023	.008	.0001	.032	.0003
%RSD	4.363	2.582	3.983	1.237	1.338	.2270	.5781	.4681	.2730
#1	.0002	.0013	.0025	.0275	1.698	3.583	.0185	6.723	.1080
#2	.0002	.0012	.0027	.0270	1.730	3.572	.0184	6.768	.1084

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0088**	**129.6**	**.0071**	**.0273**	**.0005**	**-.0030**	**15.26**	**.0003**	**.0005**
Stddev	.0001	.5	.0001	.0009	.0005	.0013	.04	.0008	.0011
%RSD	1.068	.3852	.7959	3.357	92.09	42.39	.2689	235.9	211.0
#1	.0088	129.3	.0071	.0267	.0002	-.0038	15.23	.0009	-.0003
#2	.0087	130.0	.0070	.0280	.0009	-.0021	15.29	-.0002	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.202**	**.0024**	**.3905**	**.0163**	**.0023**	**.0018**	**-.0026**	**.0550**	**-.0028**
Stddev	.008	.0010	.0016	.0007	.0001	.0002	.0002	.0001	.0000
%RSD	.1562	39.64	.4095	4.583	4.596	8.396	6.132	.1088	1.644
#1	5.196	.0031	.3893	.0158	.0024	.0017	-.0028	.0550	-.0028
#2	5.208	.0018	.3916	.0169	.0023	.0019	-.0025	.0551	-.0028

Raw Data MA19462 page 42 of 79

Zoom In Zoom Out

Sample Name: MC47540-3 Acquired: 9/16/2016 11:42:02 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10931.**	**5435.9**	**203290.**	**11655.**
Stddev	39.	29.9	1018.	32.
%RSD	.35921	.54933	.50083	.27624
#1	10959.	5457.0	204010.	11677.
#2	10903.	5414.8	202570.	11632.

Raw Data MA19462 page 43 of 79

Zoom In Zoom Out

Sample Name: MP26774-SD1 Acquired: 9/16/2016 11:46:57 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 5.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment: 5X

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.5311**	**.0046**	**-.0022**	**.0680**	**.2690**	**-.0007**	**.0023**	**41.62**
Stddev	.0004	.0261	.0018	.0017	.0035	.0061	.0003	.0015	.89
%RSD	98.38	4.917	38.36	75.92	5.091	2.268	42.56	62.70	2.145
#1	-.0001	.5496	.0034	-.0010	.0656	.2733	-.0005	.0034	42.26
#2	-.0006	.5126	.0059	-.0034	.0705	.2647	-.0009	.0013	40.99

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0007**	**.0028**	**.0325**	**1.754**	**3.572**	**.0184**	**6.889**	**.1138**
Stddev	.0003	.0011	.0003	.0014	.032	.163	.0018	.237	.0000
%RSD	52.23	145.1	12.13	4.446	1.816	4.559	9.718	3.440	.0071
#1	-.0009	-.0000	.0026	.0335	1.776	3.687	.0172	7.057	.1138
#2	-.0004	.0015	.0030	.0314	1.731	3.457	.0197	6.722	.1138

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0089**	**131.0**	**.0068**	**.0280**	**.0060**	**-.0194**	**14.96**	**.0034**	**.0071**
Stddev	.0006	2.6	.0006	.0024	.0030	.0026	.03	.0021	.0058
%RSD	6.408	1.957	9.302	8.561	49.16	13.48	.2082	62.30	81.13
#1	.0094	132.8	.0063	.0263	.0081	-.0175	14.98	.0049	.0030
#2	.0085	129.2	.0072	.0297	.0039	-.0212	14.94	.0019	.0112

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.279**	**.0073**	**.3971**	**.0194**	**.0028**	**.0013**	**-.0005**	**.0583**	**-.0039**
Stddev	.009	.0007	.0083	.0039	.0003	.0003	.0040	.0013	.0003
%RSD	.1736	9.957	2.082	20.31	9.057	25.12	765.3	2.146	6.465
#1	5.286	.0067	.4029	.0166	.0029	.0011	-.0034	.0592	-.0041
#2	5.273	.0078	.3913	.0221	.0026	.0015	.0023	.0574	-.0037

Raw Data MA19462 page 44 of 79

Inst QC: MA19462

Sample Name: MP26774-SD1 Acquired: 9/16/2016 11:46:57 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 5.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment: 5X

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11467.**	**5493.7**	**203820.**	**11512.**
Stddev	43.	21.6	45.	168.
%RSD	.37372	.39291	.02196	1.4607
#1	11437.	5478.5	203790.	11393.
#2	11498.	5509.0	203850.	11631.

Raw Data MA19462 page 45 of 79

Sample Name: MP26772-MB1 Acquired: 9/16/2016 11:51:55 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0065**	**.0003**	**-.0006**	**.0001**	**.0001**	**-.0001**	**.0009**	**.0281**
Stddev	.0001	.0023	.0005	.0001	.0005	.0000	.0000	.0013	.0036
%RSD	634.3	35.33	153.6	16.71	347.4	27.39	37.84	149.9	12.79
#1	-.0000	-.0049	-.0000	-.0005	.0005	.0001	-.0001	.0018	.0307
#2	.0001	-.0081	.0007	-.0006	-.0002	.0000	-.0001	-.0001	.0256

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0004**	**.0002**	**.0011**	**.0045**	**-.0068**	**-.0008**	**-.0190**	**-.0001**
Stddev	.0000	.0001	.0001	.0003	.0016	.0003	.0003	.0168	.0000
%RSD	37.17	22.64	39.68	25.59	36.00	4.061	44.48	88.08	38.79
#1	-.0001	-.0003	.0003	.0009	.0034	-.0070	-.0005	-.0072	-.0001
#2	-.0000	-.0004	.0002	.0013	.0057	-.0066	-.0010	-.0309	-.0000

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.0345**	**-.0002**	**-.0003**	**.0009**	**-.0021**	**.0068**	**-.0005**	**.0015**
Stddev	.0001	.0047	.0001	.0001	.0002	.0009	.0001	.0000	.0016
%RSD	546.9	13.58	31.63	33.73	17.04	44.36	1.665	.5290	108.1
#1	-.0001	.0378	-.0001	-.0002	.0010	-.0015	.0069	-.0005	.0026
#2	.0000	.0311	-.0002	-.0004	.0008	-.0028	.0067	-.0005	.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0242**	**-.0002**	**-.0002**	**-.0002**	**-.0005**	**-.0001**	**.0060**	**.0008**	**-.0001**
Stddev	.0012	.0002	.0000	.0000	.0000	.0000	.0012	.0000	.0000
%RSD	5.097	122.0	11.98	7.796	3.764	26.94	19.11	5.696	14.31
#1	.0251	-.0000	-.0002	-.0002	-.0005	-.0002	.0068	.0009	-.0001
#2	.0233	-.0004	-.0002	-.0002	-.0005	-.0001	.0052	.0008	-.0001

Raw Data MA19462 page 46 of 79

Sample Name: MP26772-MB1 Acquired: 9/16/2016 11:51:55 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11667.**	**5466.6**	**206140.**	**11343.**
Stddev	288.	138.1	766.	71.
%RSD	2.4684	2.5267	.37139	.62723
#1	11464.	5368.9	206680.	11393.
#2	11871.	5564.2	205600.	11293.

Raw Data MA19462 page 47 of 79

Sample Name: MP26772-LB1 Acquired: 9/16/2016 11:56:56 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**-.0054**	**-.0003**	**-.0007**	**.0373**	**.0001**	**-.0001**	**.0001**	**.0378**
Stddev	.0000	.0057	.0009	.0005	.0004	.0000	.0000	.0007	.0028
%RSD	30.83	104.9	287.8	66.17	1.009	19.67	30.56	748.6	7.512
#1	-.0001	-.0014	-.0010	-.0010	.0376	.0002	-.0001	.0006	.0398
#2	-.0000	-.0094	.0003	-.0004	.0370	.0001	-.0002	-.0004	.0358

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0004**	**.0007**	**.0020**	**.0070**	**.1251**	**.0003**	**-.0042**	**.0002**
Stddev	.0001	.0001	.0001	.0002	.0013	.0201	.0000	.0015	.0000
%RSD	62.93	27.53	11.95	9.833	18.03	16.04	8.694	34.68	5.958
#1	-.0001	-.0004	.0007	.0022	.0061	.1109	.0003	-.0032	.0002
#2	-.0003	-.0003	.0008	.0019	.0079	.1393	.0003	-.0053	.0002

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	F **1269.**	**.0061**	**-.0012**	**-.0001**	**-.0066**	**.0211**	**-.0014**	**-.0006**
Stddev	.0001	17.	.0002	.0005	.0006	.0006	.0003	.0005	.0001
%RSD	20.34	1.311	2.528	41.96	691.5	8.343	1.338	38.60	22.17
#1	.0005	1281.	.0060	-.0015	.0004	-.0070	.0209	-.0018	-.0005
#2	.0007	1257.	.0062	-.0008	-.0005	-.0062	.0213	-.0010	-.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0613**	**.0002**	**-.0000**	**-.0001**	**.0003**	**.0001**	**.0040**	**-.0001**	**-.0001**
Stddev	.0004	.0000	.0001	.0001	.0002	.0000	.0005	.0000	.0001
%RSD	.6564	1.071	185.8	221.1	75.63	40.09	12.26	.8088	104.5
#1	.0610	.0002	.0000	.0000	.0005	.0001	.0037	-.0001	-.0002
#2	.0616	.0002	-.0001	-.0002	.0001	.0001	.0044	-.0001	-.0000

Raw Data MA19462 page 48 of 79

13.1

13

Inst QC: MA19462

Sample Name: MP26772-LB1 Acquired: 9/16/2016 11:56:56 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9126.5**	**4834.4**	**177360.**	**10957.**
Stddev	15.6	6.8	46.	3.
%RSD	.17048	.14046	.02616	.02840
#1	9137.5	4839.2	177390.	10959.
#2	9115.5	4829.6	177320.	10955.

Raw Data MA19462 page 49 of 79

Sample Name: MP26772-B1 Acquired: 9/16/2016 12:02:02 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1880**	**9.986**	**.5412**	**-.0011**	**.9911**	**2.005**	**.5035**	**-.0003**	**23.59**
Stddev	.0003	.055	.0023	.0003	.0008	.008	.0026	.0003	.12
%RSD	.1521	.5535	.4240	26.18	.0837	.4107	.5083	99.65	.4960
#1	.1882	9.947	.5428	-.0009	.9905	1.999	.5017	-.0001	23.51
#2	.1878	10.02	.5396	-.0013	.9917	2.011	.5053	-.0004	23.67

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5023**	**.5089**	**.4637**	**.5168**	**10.00**	**26.69**	**.0057**	**24.77**	**.4924**
Stddev	.0000	.0009	.0003	.0007	.10	.05	.0017	.01	.0009
%RSD	.0004	.1816	.0744	.1299	1.011	.1714	29.55	.0238	.1820
#1	.5023	.5082	.4639	.5163	9.929	26.66	.0045	24.78	.4930
#2	.5023	.5095	.4635	.5172	10.07	26.72	.0069	24.77	.4917

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4681**	F **1236.**	**.5273**	**.9913**	**.0004**	**-.0066**	**.0231**	**.5247**	**.5478**
Stddev	.0001	.	.0002	.0011	.0001	.0002	.0015	.0015	.0001
%RSD	.0277	.0187	.0302	.1151	36.06	2.662	6.493	.2885	.0239
#1	.4682	1236.	.5272	.9921	.0003	-.0065	.0242	.5236	.5478
#2	.4680	1236.	.5274	.9905	.0005	-.0068	.0221	.5258	.5477

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0626**	**.9497**	**.4864**	**.4874**	**.5002**	**.4774**	**.0090**	**.4745**	**.0032**
Stddev	.0012	.0004	.0025	.0001	.0013	.0004	.0005	.0008	.0000
%RSD	1.857	.0471	.5215	.0291	.2561	.0758	5.931	.1584	.4618
#1	.0618	.9500	.4847	.4873	.4993	.4777	.0093	.4740	.0032
#2	.0634	.9494	.4882	.4875	.5011	.4772	.0086	.4751	.0032

Raw Data MA19462 page 50 of 79

Sample Name: MP26772-B1 Acquired: 9/16/2016 12:02:02 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9040.6**	**4897.5**	**180280.**	**11072.**
Stddev	4.5	3.0	174.	7.
%RSD	.04964	.06122	.09669	.05970
#1	9037.4	4895.3	180160.	11067.
#2	9043.7	4899.6	180410.	11077.

Raw Data MA19462 page 51 of 79

Sample Name: MP26772-B2 Acquired: 9/16/2016 12:06:55 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1919**	**9.975**	**.5371**	**-.0008**	**.9911**	**2.020**	**.5032**	**-.0003**	**23.61**
Stddev	.0003	.087	.0045	.0004	.0080	.019	.0039	.0002	.12
%RSD	.1637	.8724	.8337	49.69	.8097	.9285	.7835	51.97	.5163
#1	.1917	9.914	.5402	-.0010	.9968	2.007	.5004	-.0005	23.52
#2	.1921	10.04	.5339	-.0005	.9854	2.033	.5060	-.0002	23.69

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5014**	**.5044**	**.4700**	**.5222**	**10.02**	**26.85**	**.0052**	**24.90**	**.4952**
Stddev	.0026	.0017	.0003	.0019	.08	.24	.0009	.25	.0010
%RSD	.5150	.3434	.0549	.3685	.7661	.8919	17.02	.9994	.1966
#1	.5033	.5057	.4702	.5236	9.963	26.68	.0058	24.72	.4958
#2	.4996	.5032	.4698	.5209	10.07	27.02	.0046	25.07	.4945

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4673**	F **1258.**	**.5210**	**.9866**	**.0005**	**-.0048**	**.0202**	**.5215**	**.5441**
Stddev	.0031	6.	.0026	.0043	.0003	.0018	.0016	.0051	.0026
%RSD	.6683	.4964	.5026	.4331	55.38	37.99	7.859	.9861	.4694
#1	.4695	1262.	.5228	.9896	.0003	-.0061	.0213	.5251	.5459
#2	.4651	1253.	.5191	.9835	.0007	-.0035	.0190	.5179	.5423

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0604**	**.9425**	**.4892**	**.4948**	**.4925**	**.4845**	**.0071**	**.4732**	**.0014**
Stddev	.0015	.0042	.0053	.0026	.0008	.0011	.0000	.0024	.0001
%RSD	2.438	.4415	1.086	.5335	.1557	.2266	.1094	.5017	9.284
#1	.0615	.9455	.4855	.4966	.4930	.4853	.0071	.4748	.0014
#2	.0594	.9396	.4930	.4929	.4920	.4837	.0071	.4715	.0013

Raw Data MA19462 page 52 of 79

13.1

13

Inst QC: MA19462

Sample Name: MP26772-B2 Acquired: 9/16/2016 12:06:55 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9043.4**	**4885.0**	**177910.**	**10937.**
Stddev	40.1	25.9	54.	18.
%RSD	.44393	.52944	.03061	.16119
#1	9015.0	4866.7	177870.	10950.
#2	9071.8	4903.3	177950.	10925.

Raw Data MA19462 page 53 of 79

Sample Name: CCV Acquired: 9/16/2016 12:11:48 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2312**	**9.570**	**1.886**	**1.820**	**1.863**	**1.973**	**1.966**	**2.018**	**9.284**
Stddev	.0002	.067	.008	.004	.007	.009	.009	.009	.020
%RSD	.1062	.6985	.4354	.1935	.3592	.4666	.4526	.4608	.2175
#1	.2310	9.523	1.880	1.818	1.858	1.966	1.959	2.011	9.270
#2	.2314	9.617	1.892	1.823	1.867	1.979	1.972	2.025	9.298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.848**	**1.863**	**1.847**	**1.959**	**9.721**	**9.650**	**1.911**	**9.803**	**1.919**
Stddev	.008	.008	.002	.001	.067	.033	.008	.016	.004
%RSD	.4115	.4295	.1078	.0590	.6866	.3399	.4001	.1643	.2074
#1	1.843	1.857	1.846	1.959	9.673	9.626	1.905	9.792	1.916
#2	1.853	1.868	1.848	1.960	9.768	9.673	1.916	9.815	1.921
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.891**	**9.949**	**1.937**	**1.866**	**1.914**	**1.926**	**1.872**	**1.928**	**1.924**
Stddev	.009	.020	.006	.007	.004	.013	.006	.007	.005
%RSD	.4830	.1970	.3250	.3654	.2303	.6865	.3176	.3694	.2840
#1	1.885	9.935	1.933	1.861	1.911	1.916	1.868	1.923	1.920
#2	1.898	9.962	1.942	1.871	1.917	1.935	1.877	1.933	1.928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19462 page 54 of 79

Sample Name: CCV Acquired: 9/16/2016 12:11:48 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.962**	**1.986**	**1.914**	**1.912**	**2.009**	**1.856**	**1.855**	**1.828**	**1.858**
Stddev	.008	.008	.007	.003	.006	.004	.020	.007	.004
%RSD	.4184	.3848	.3647	.1667	.2808	.2290	1.087	.3853	.1878
#1	1.956	1.981	1.909	1.910	2.005	1.853	1.840	1.823	1.856
#2	1.967	1.992	1.919	1.914	2.013	1.859	1.869	1.833	1.861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11350.**	**5518.0**	**205590.**	**11396.**
Stddev	40.	19.7	222.	7.
%RSD	.34836	.35673	.10782	.06207
#1	11378.	5531.9	205740.	11391.
#2	11322.	5504.1	205430.	11401.

Raw Data MA19462 page 55 of 79

Sample Name: CCB Acquired: 9/16/2016 12:16:34 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0148**	**.0006**	**.0017**	**.0018**	**.0002**	**.0002**	**.0009**	**.0166**
Stddev	.0000	.0003	.0001	.0004	.0004	.0001	.0000	.0003	.0007
%RSD	39.53	1.793	24.82	23.25	21.80	38.17	17.21	33.76	4.008
#1	-.0001	-.0146	.0006	.0020	.0020	.0003	.0002	.0011	.0162
#2	-.0001	-.0150	.0005	.0014	.0015	.0002	.0002	.0007	.0171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0003**	**.0012**	**.0074**	**-.0081**	**.0011**	**.0011**	**.0002**
Stddev	.0000	.0001	.0000	.0001	.0009	.0106	.0002	.0030	.0000
%RSD	13.16	93.62	14.40	6.459	12.24	132.1	19.97	283.6	8.944
#1	.0002	.0001	.0002	.0012	.0080	-.0005	.0010	-.0011	.0002
#2	.0002	.0000	.0003	.0013	.0067	-.0156	.0013	.0032	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.1477**	**.0002**	**.0004**	**.0012**	**-.0021**	**.0014**	**-.0001**	**.0027**
Stddev	.0000	.0084	.0000	.0004	.0003	.0016	.0007	.0006	.0002
%RSD	6.334	5.688	7.255	107.2	22.43	76.97	52.28	503.6	6.434
#1	.0006	.1418	.0002	.0001	.0010	-.0010	.0009	.0003	.0028
#2	.0007	.1537	.0002	.0007	.0014	-.0033	.0019	-.0005	.0026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19462 page 56 of 79

13.1

13

Inst QC: MA19462

Sample Name: CCB Acquired: 9/16/2016 12:16:34 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0012**	**-.0000**	**.0001**	**.0016**	**.0002**	**.0004**	F **.0120**	**.0001**	**.0016**
Stddev	.0007	.0001	.0001	.0000	.0003	.0002	.0022	.0000	.0001
%RSD	60.28	882.6	139.3	2.558	125.4	44.01	18.36	27.20	5.610
#1	-.0018	.0001	.0001	.0016	.0004	.0003	.0135	.0001	.0017
#2	-.0007	-.0001	.0000	.0015	.0000	.0006	.0104	.0001	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11896.**	**5565.9**	**206430.**	**11278.**
Stddev	57.	24.1	1070.	71.
%RSD	.47922	.43369	.51825	.63323
#1	11855.	5548.8	207190.	11328.
#2	11936.	5583.0	205680.	11227.

Raw Data MA19462 page 57 of 79

Sample Name: MP26772-S1 Acquired: 9/16/2016 12:21:36 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1877**	**10.73**	**.5327**	**-.0007**	**1.025**	**2.183**	**.4935**	**.0017**	**139.7**
Stddev	.0004	.04	.0020	.0001	.002	.004	.0013	.0000	.6
%RSD	.2140	.3656	.3814	15.47	.1497	.1866	.2588	2.392	.4254
#1	.1874	10.71	.5313	-.0008	1.024	2.180	.4926	.0016	139.3
#2	.1880	10.76	.5342	-.0007	1.026	2.185	.4944	.0017	140.1

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5003**	**.9095**	**.4557**	**.5217**	**9.900**	**29.97**	**.0101**	**27.67**	**1.237**
Stddev	.0010	.0016	.0020	.0009	.061	.02	.0003	.07	.004
%RSD	.2015	.1799	.4451	.1705	.6158	.0813	3.375	.2399	.3643
#1	.4996	.9084	.4572	.5223	9.857	29.95	.0099	27.62	1.240
#2	.5011	.9107	.4543	.5211	9.943	29.99	.0104	27.71	1.233

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4610**	F **1263.**	**.5220**	**1.005**	**.0001**	**-.0042**	**2.987**	**.5204**	**.5385**
Stddev	.0012	27.	.0006	.002	.0019	.0006	.004	.0016	.0051
%RSD	.2505	2.107	.1084	.2089	2153.	15.16	.1201	.3101	.9526
#1	.4601	1282.	.5216	1.004	.0014	-.0047	2.984	.5192	.5349
#2	.4618	1244.	.5224	1.007	-.0012	-.0038	2.989	.5215	.5422

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.51**	**.9205**	**.8420**	**.4822**	**.4872**	**.4702**	**.0173**	**.5350**	**.0062**
Stddev	.01	.0007	.0020	.0007	.0014	.0004	.0011	.0008	.0017
%RSD	.0726	.0802	.2357	.1421	.2907	.0940	6.213	.1409	28.04
#1	10.51	.9200	.8406	.4827	.4862	.4705	.0181	.5344	.0074
#2	10.52	.9210	.8434	.4817	.4882	.4699	.0165	.5355	.0050

Raw Data MA19462 page 58 of 79

Sample Name: MP26772-S1 Acquired: 9/16/2016 12:21:36 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8932.5**	**4861.8**	**181140.**	**11119.**
Stddev	15.6	9.5	445.	11.
%RSD	.17505	.19466	.24574	.10311
#1	8943.6	4868.5	180820.	11111.
#2	8921.5	4855.1	181450.	11127.

Raw Data MA19462 page 59 of 79

Sample Name: MP26772-S2 Acquired: 9/16/2016 12:26:29 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1866**	**10.68**	**.5275**	**-.0004**	**1.013**	**2.161**	**.4886**	**.0005**	**134.1**
Stddev	.0002	.07	.0017	.0003	.001	.014	.0032	.0000	.9
%RSD	.1154	.6423	.3207	66.25	.1013	.6490	.6491	1.685	.6734
#1	.1868	10.63	.5287	-.0002	1.013	2.151	.4864	.0004	133.4
#2	.1865	10.73	.5263	-.0007	1.014	2.171	.4909	.0005	134.7

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4951**	**.8846**	**.4535**	**.5151**	**9.812**	**29.69**	**.0133**	**27.36**	**1.193**
Stddev	.0004	.0006	.0004	.0006	.051	.19	.0013	.30	.002
%RSD	.0830	.0689	.0974	.1214	.5152	.6397	10.17	1.096	.1371
#1	.4948	.8842	.4532	.5147	9.776	29.55	.0123	27.15	1.192
#2	.4954	.8850	.4538	.5155	9.848	29.82	.0142	27.57	1.194

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4576**	F **1198.**	**.5155**	**.9972**	**-.0021**	**-.0047**	**2.829**	**.5129**	**.5288**
Stddev	.0003	4.	.0008	.0010	.0002	.0018	.002	.0006	.0009
%RSD	.0577	.3024	.1534	.1011	7.450	39.33	.0795	.1225	.1677
#1	.4574	1195.	.5149	.9965	-.0023	-.0034	2.827	.5133	.5295
#2	.4578	1200.	.5160	.9979	-.0020	-.0059	2.830	.5124	.5282

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.976**	**.9145**	**.8227**	**.4791**	**.4810**	**.4677**	**.0120**	**.5281**	**-.0040**
Stddev	.014	.0014	.0042	.0004	.0027	.0004	.0007	.0002	.0001
%RSD	.1392	.1523	.5096	.0744	.5556	.0955	5.554	.0306	3.360
#1	9.986	.9135	.8197	.4788	.4791	.4674	.0124	.5282	-.0039
#2	9.967	.9155	.8256	.4793	.4829	.4680	.0115	.5280	-.0041

Raw Data MA19462 page 60 of 79

13.1

13

Sample Name: MP26772-S2 Acquired: 9/16/2016 12:26:29 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9045.0**	**4919.1**	**181440.**	**11040.**
Stddev	7.6	8.7	66.	68.
%RSD	.08446	.17784	.03650	.61494
#1	9039.6	4912.9	181390.	11088.
#2	9050.4	4925.3	181490.	10992.

Sample Name: MC47788-1 Acquired: 9/16/2016 12:31:21 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.8609**	**-.0002**	**-.0005**	**.0430**	**.1710**	**.0004**	**.0018**	**116.1**
Stddev	.0001	.0024	.0008	.0004	.0003	.0014	.0001	.0016	.8
%RSD	21.78	.2787	340.1	76.09	.5997	.8383	28.51	85.75	.7099
#1	-.0003	.8592	-.0008	-.0007	.0428	.1700	.0003	.0029	115.5
#2	-.0004	.8626	.0003	-.0002	.0432	.1720	.0004	.0007	116.7

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.4143**	**.0042**	**.0107**	**.1641**	**3.651**	**.0135**	**3.567**	**.7676**
Stddev	.0000	.0016	.0000	.0005	.0037	.030	.0005	.055	.0027
%RSD	13.48	.3742	.8865	4.272	2.271	.8318	3.745	1.547	.3498
#1	.0004	.4154	.0043	.0111	.1615	3.629	.0139	3.528	.7657
#2	.0003	.4132	.0042	.0104	.1668	3.672	.0131	3.606	.7695

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	F **1210.**	**.0136**	**.0198**	**-.0007**	**-.0085**	**2.990**	**-.0008**	**-.0002**
Stddev	.0000	5.	.0001	.0003	.0010	.0027	.014	.0004	.0014
%RSD	5.925	.4515	.6641	1.438	141.2	31.42	.4605	55.87	740.7
#1	.0007	1214.	.0136	.0200	-.0014	-.0104	2.999	-.0011	.0008
#2	.0008	1206.	.0135	.0196	-.0000	-.0066	2.980	-.0005	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.24**	**.0001**	**.3632**	**.0019**	**.0023**	**.0007**	**.0073**	**.0758**	**-.0066**
Stddev	.03	.0003	.0019	.0003	.0006	.0001	.0006	.0003	.0002
%RSD	.2803	252.2	.5208	14.41	26.31	19.86	8.711	.3787	2.497
#1	10.26	.0003	.3619	.0017	.0027	.0006	.0078	.0760	-.0068
#2	10.22	-.0001	.3646	.0021	.0019	.0008	.0069	.0756	-.0065

Sample Name: MC47788-1 Acquired: 9/16/2016 12:31:21 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8909.8**	**4805.5**	**177330.**	**10883.**
Stddev	14.5	1.6	535.	67.
%RSD	.16236	.03368	.30178	.61478
#1	8899.6	4804.3	177710.	10931.
#2	8920.0	4806.6	176960.	10836.

Sample Name: MP26772-SD1 Acquired: 9/16/2016 12:36:22 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 5.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment: 5X

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0015**	**.8047**	**.0035**	**-.0017**	**.0445**	**.1666**	**-.0003**	**.0032**	**115.1**
Stddev	.0008	.0225	.0047	.0028	.0016	.0011	.0002	.0009	.7
%RSD	52.25	2.801	135.1	165.0	3.680	.6693	92.73	26.68	.5954
#1	-.0020	.8206	.0002	-.0037	.0434	.1658	-.0004	.0026	114.6
#2	-.0009	.7888	.0067	.0003	.0457	.1673	-.0001	.0039	115.6

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.4041**	**.0044**	**.0136**	**.1565**	**3.516**	**.0241**	**3.605**	**.7615**
Stddev	.0004	.0024	.0001	.0004	.0005	.081	.0086	.081	.0004
%RSD	138.4	.5848	2.692	2.699	.3221	2.297	35.81	2.257	.0486
#1	-.0000	.4024	.0045	.0138	.1562	3.459	.0180	3.662	.7613
#2	-.0006	.4057	.0044	.0133	.1569	3.573	.0302	3.547	.7618

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**1403.**	**.0114**	**.0187**	**.0058**	**-.0116**	**2.840**	**-.0020**	**.0046**
Stddev	.0004	4.	.0003	.0041	.0020	.0115	.010	.0024	.0014
%RSD	75.85	.2823	2.268	21.67	33.81	99.10	.3469	119.9	29.55
#1	.0009	1400.	.0116	.0216	.0044	-.0197	2.833	-.0003	.0037
#2	.0003	1405.	.0112	.0158	.0072	-.0035	2.847	-.0038	.0056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.968**	**-.0029**	**.3626**	**.0013**	**.0019**	**.0014**	**.0025**	**.0762**	**-.0073**
Stddev	.050	.0010	.0018	.0013	.0054	.0002	.0017	.0011	.0004
%RSD	.5043	34.67	.4900	106.4	279.5	14.80	69.22	1.483	5.877
#1	9.932	-.0036	.3613	.0003	.0057	.0013	.0037	.0754	-.0076
#2	10.00	-.0022	.3638	.0022	-.0019	.0016	.0013	.0770	-.0070

Sample Name: MP26772-SD1 Acquired: 9/16/2016 12:36:22 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 5.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment: 5X

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10412.**	**5302.3**	**196070.**	**11173.**
Stddev	17.	12.6	157.	12.
%RSD	.16502	.23744	.07996	.11141
#1	10424.	5311.2	196180.	11164.
#2	10400.	5293.4	195960.	11181.

Sample Name: MC47581-9R Acquired: 9/16/2016 12:41:27 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.5517**	**-.0002**	**-.0008**	**.2368**	**1.248**	**.0003**	**.0009**	**103.6**
Stddev	.0000	.0102	.0007	.0006	.0010	.000	.0001	.0002	.1
%RSD	12.91	1.848	451.4	74.95	.4043	.0158	23.14	20.42	.0664
#1	-.0003	.5445	-.0006	-.0012	.2361	1.248	.0002	.0010	103.6
#2	-.0003	.5590	.0003	-.0004	.2374	1.248	.0003	.0007	103.7

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0090**	**.0080**	**.0032**	**.0353**	**.0713**	**3.950**	**.0115**	**2.415**	**.8197**
Stddev	.0001	.0000	.0001	.0005	.0008	.027	.0001	.056	.0035
%RSD	1.090	.3565	4.121	1.333	1.169	.6915	1.207	2.330	.4235
#1	.0089	.0080	.0033	.0350	.0719	3.931	.0116	2.455	.8221
#2	.0090	.0080	.0032	.0356	.0707	3.970	.0114	2.375	.8172

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	F **1264.**	**.0095**	**7.310**	**.0004**	**-.0044**	**1.302**	**.0118**	**-.0022**
Stddev	.0000	1.	.0002	.010	.0015	.0022	.003	.0002	.0001
%RSD	5.194	.0886	2.309	.1334	377.5	50.48	.2297	1.962	3.282
#1	.0007	1263.	.0094	7.303	-.0006	-.0029	1.300	.0120	-.0022
#2	.0008	1265.	.0097	7.317	.0014	-.0060	1.304	.0116	-.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.405**	**.0000**	**.4447**	**.0006**	**.0023**	**.0007**	**.0485**	**7.334**	**-.0026**
Stddev	.017	.0004	.0011	.0001	.0003	.0002	.0000	.004	.0000
%RSD	.3818	1820.	.2484	9.287	13.06	26.78	.0198	.0501	.8158
#1	4.394	-.0003	.4439	.0007	.0021	.0006	.0485	7.332	-.0025
#2	4.417	.0003	.4455	.0006	.0025	.0008	.0485	7.337	-.0026

Sample Name: MC47581-9R Acquired: 9/16/2016 12:41:27 Type: Unk
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8953.6**	**4815.0**	**177600.**	**10992.**
Stddev	13.3	7.2	445.	51.
%RSD	.14876	.14957	.25056	.46551
#1	8963.0	4820.1	177290.	10956.
#2	8944.2	4809.9	177920.	11029.

Sample Name: CRI Acquired: 9/16/2016 12:47:40 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**.1941**	**.0040**	**.0447**	**.0984**	**.0512**	**.0041**	**.0528**	**4.838**
Stddev	.0004	.0014	.0012	.0011	.0005	.0001	.0000	.0001	.022
%RSD	7.702	.7155	29.46	2.479	.4629	.2273	.1478	.1068	.4499
#1	.0044	.1951	.0048	.0439	.0987	.0513	.0041	.0529	4.822
#2	.0049	.1931	.0032	.0455	.0981	.0511	.0041	.0528	4.853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037**	**.0474**	**.0094**	**.0261**	**.1027**	**5.005**	**.4896**	**5.098**	**.0152**
Stddev	.0003	.0003	.0000	.0004	.0018	.026	.0001	.039	.0000
%RSD	7.847	.5982	.0462	1.353	1.778	.5169	.0175	.7615	.2101
#1	.0035	.0476	.0094	.0263	.1014	5.023	.4895	5.071	.0152
#2	.0040	.0472	.0094	.0258	.1040	4.987	.4896	5.126	.0152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0967**	**5.315**	**.0399**	**.0052**	**.0488**	**.0463**	**.0494**	**.0058**	**.0109**
Stddev	.0004	.017	.0001	.0011	.0005	.0001	.0003	.0000	.0011
%RSD	.4248	.3116	.2180	21.41	1.083	.1375	.5270	.1237	10.25
#1	.0970	5.327	.0400	.0044	.0484	.0462	.0493	.0058	.0101
#2	.0965	5.303	.0399	.0059	.0492	.0463	.0496	.0058	.0117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CRI Acquired: 9/16/2016 12:47:40 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0928**	**.1001**	**.0102**	**.0490**	**.0049**	**.0097**	F **.0083**	**.0204**	F **.0342**
Stddev	.0004	.0003	.0000	.0000	.0003	.0002	.0005	.0002	.0007
%RSD	.4762	.3116	.2328	.0701	5.891	2.142	6.119	.8068	2.048
#1	.0925	.1004	.0101	.0490	.0047	.0098	.0087	.0205	.0337
#2	.0931	.0999	.0102	.0491	.0051	.0095	.0080	.0202	.0347
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
Value							.1000		.0500
Range							-30.00%		-30.00%

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11562.**	**5492.5**	**203570.**	**11169.**
Stddev	33.	20.2	315.	14.
%RSD	.28675	.36765	.15459	.12742
#1	11539.	5478.2	203350.	11159.
#2	11585.	5506.7	203790.	11179.

Sample Name: CRIB Acquired: 9/16/2016 12:52:38 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**.1816**	**.0099**	**.0452**	**.0963**	**.5160**	**.0040**	**.0520**	**4.828**
Stddev	.0005	.0021	.0004	.0010	.0000	.0033	.0000	.0003	.029
%RSD	9.757	1.137	4.480	2.323	.0386	.6482	.7346	.6077	.6078
#1	.0054	.1801	.0102	.0444	.0963	.5136	.0040	.0522	4.807
#2	.0047	.1831	.0095	.0459	.0964	.5184	.0040	.0518	4.848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037**	**.0476**	**.0094**	**.0260**	**.1045**	**5.009**	**.4854**	**5.136**	**.0152**
Stddev	.0001	.0001	.0000	.0002	.0006	.000	.0013	.041	.0000
%RSD	3.541	.2224	.0316	.6230	.5995	.0019	.2658	.7937	.2009
#1	.0038	.0477	.0094	.0259	.1041	5.009	.4845	5.107	.0152
#2	.0036	.0475	.0094	.0261	.1050	5.009	.4863	5.164	.0153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0967**	**5.124**	**.0398**	**.0101**	**.0490**	**.0450**	**.0490**	**.0050**	**.0260**
Stddev	.0004	.021	.0001	.0001	.0003	.0017	.0003	.0000	.0002
%RSD	.3982	.3993	.1584	.8672	.6943	3.685	.5949	.8232	.9174
#1	.0970	5.110	.0398	.0101	.0488	.0461	.0488	.0050	.0259
#2	.0964	5.138	.0397	.0100	.0493	.0438	.0492	.0050	.0262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CRIB Acquired: 9/16/2016 12:52:38 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0978**	**.1006**	**.0100**	**.0490**	**.0040**	**.0095**	F **.0098**	**.0992**	**.0382**
Stddev	.0004	.0001	.0001	.0003	.0003	.0000	.0002	.0002	.0007
%RSD	.4020	.1044	1.167	.5902	7.135	.4613	2.010	.2195	1.808
#1	.0976	.1006	.0099	.0488	.0038	.0095	.0099	.0994	.0377
#2	.0981	.1005	.0101	.0492	.0042	.0095	.0096	.0991	.0387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.1000		
Range							-30.00%		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11600.**	**5513.8**	**205670.**	**11230.**
Stddev	5.	7.1	272.	12.
%RSD	.04315	.12930	.13239	.10732
#1	11604.	5518.9	205470.	11221.
#2	11597.	5508.8	205860.	11238.

Sample Name: ICSA Acquired: 9/16/2016 12:57:34 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**497.6**	**.0020**	**-.0013**	**-.0025**	**.0031**	**-.0001**	**.0029**	**424.8**
Stddev	.0007	6.4	.0005	.0004	.0006	.0001	.0000	.0004	5.1
%RSD	80.29	1.281	24.99	28.86	23.29	1.971	36.55	15.01	1.192
#1	-.0013	493.0	.0024	-.0010	-.0021	.0031	-.0001	.0032	421.2
#2	-.0004	502.1	.0017	-.0015	-.0030	.0032	-.0001	.0026	428.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0019**	**.0055**	**.0015**	**179.6**	**.0966**	**.0255**	**498.8**	**.0014**
Stddev	.0003	.0002	.0001	.0002	2.2	.0039	.0007	5.0	.0001
%RSD	91.89	9.634	1.816	14.33	1.199	4.022	2.597	1.011	3.951
#1	-.0001	-.0018	.0056	.0014	178.1	.0993	.0260	495.2	.0014
#2	-.0006	-.0020	.0055	.0017	181.2	.0938	.0251	502.4	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**.2394**	**.0185**	**.0005**	**-.0129**	**.0052**	**.0121**	**-.0005**	**.0004**
Stddev	.0000	.0023	.0001	.0008	.0009	.0033	.0007	.0002	.0028
%RSD	1.883	.9511	.7753	154.4	7.272	63.48	6.053	35.81	662.0
#1	.0026	.2378	.0186	-.0000	-.0136	.0075	.0116	-.0007	-.0015
#2	.0026	.2411	.0184	.0010	-.0123	.0028	.0126	-.0004	.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICSA Acquired: 9/16/2016 12:57:34 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**.0004**	**.0004**	**.0009**	**.0022**	**.0009**	**.0115**	**.0012**	**.0062**
Stddev	.0013	.0001	.0000	.0000	.0008	.0001	.0012	.0001	.0002
%RSD	38.38	23.31	11.01	1.718	38.02	11.55	10.38	5.094	3.339
#1	.0024	.0005	.0004	.0009	.0016	.0010	.0123	.0013	.0064
#2	.0042	.0003	.0005	.0010	.0028	.0009	.0107	.0012	.0061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9277.5**	**4890.9**	**180950.**	**10887.**
Stddev	.2	1.2	547.	51.
%RSD	.00252	.02494	.30238	.46391
#1	9277.7	4890.0	180570.	10922.
#2	9277.4	4891.8	181340.	10851.

Sample Name: ICSAB Acquired: 9/16/2016 13:02:33 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9687**	**498.0**	**.4972**	**.4748**	**.4813**	**.4940**	**.4790**	**.5205**	**428.2**
Stddev	.0009	3.5	.0021	.0004	.0005	.0037	.0033	.0007	9.2
%RSD	.0937	.7000	.4239	.0779	.1035	.7512	.6875	.1278	2.139
#1	.9694	495.6	.4957	.4745	.4810	.4914	.4767	.5210	421.8
#2	.9681	500.5	.4987	.4751	.4817	.4966	.4813	.5201	434.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9693**	**.4704**	**.4478**	**.5151**	**179.5**	**.0913**	**.5285**	**495.6**	**.4700**
Stddev	.0042	.0018	.0024	.0005	1.4	.0076	.0023	3.3	.0014
%RSD	.4348	.3737	.5259	.0961	.8004	8.376	.4293	.6570	.3028
#1	.9663	.4691	.4494	.5147	178.4	.0859	.5269	493.3	.4710
#2	.9723	.4716	.4461	.5154	180.5	.0967	.5301	497.9	.4690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4729**	**.1982**	**.9611**	**.9250**	**.5043**	**.5014**	**.4905**	**.5235**	**.5021**
Stddev	.0014	.0070	.0024	.0060	.0004	.0010	.0045	.0030	.0001
%RSD	.2873	3.521	.2519	.6454	.0763	.1988	.9274	.5825	.0289
#1	.4720	.1933	.9594	.9207	.5041	.5021	.4873	.5213	.5020
#2	.4739	.2031	.9628	.9292	.5046	.5007	.4937	.5256	.5022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICSAB Acquired: 9/16/2016 13:02:33 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4936**	**.4647**	**.4797**	**.4718**	**.4847**	**.4525**	**.4710**	**.8494**	**.4357**
Stddev	.0003	.0017	.0034	.0025	.0012	.0014	.0029	.0017	.0055
%RSD	.0538	.3626	.7157	.5356	.2409	.3122	.6118	.2056	1.258
#1	.4934	.4635	.4773	.4735	.4856	.4535	.4690	.8482	.4319
#2	.4938	.4659	.4821	.4700	.4839	.4515	.4731	.8506	.4396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9262.0**	**4880.0**	**181780.**	**10995.**
Stddev	38.0	24.4	968.	29.
%RSD	.41028	.49952	.53230	.26536
#1	9288.9	4897.3	181090.	11015.
#2	9235.2	4862.8	182460.	10974.

Sample Name: CCV Acquired: 9/16/2016 13:07:25 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2315**	**9.533**	**1.881**	**1.828**	**1.869**	**1.950**	**1.935**	**2.021**	**9.250**
Stddev	.0005	.177	.003	.001	.001	.034	.035	.003	.156
%RSD	.1960	1.859	.1826	.0589	.0349	1.717	1.814	.1462	1.683
#1	.2312	9.407	1.879	1.827	1.870	1.926	1.910	2.023	9.140
#2	.2319	9.658	1.884	1.828	1.869	1.973	1.960	2.019	9.360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.857**	**1.863**	**1.847**	**1.954**	**9.589**	**9.555**	**1.893**	**9.689**	**1.916**
Stddev	.002	.003	.001	.004	.176	.128	.035	.095	.003
%RSD	.0842	.1747	.0443	.1797	1.837	1.339	1.828	.9792	.1724
#1	1.856	1.861	1.846	1.951	9.465	9.465	1.868	9.622	1.914
#2	1.859	1.866	1.847	1.956	9.714	9.646	1.917	9.756	1.919
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.893**	**9.580**	**1.929**	**1.863**	**1.921**	**1.938**	**1.883**	**1.928**	**1.907**
Stddev	.002	.151	.003	.003	.006	.004	.000	.003	.006
%RSD	.0775	1.573	.1331	.1317	.3345	.2123	.0158	.1403	.3107
#1	1.892	9.473	1.927	1.861	1.916	1.935	1.883	1.930	1.903
#2	1.894	9.686	1.931	1.865	1.925	1.941	1.884	1.926	1.912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Inst QC: MA19462

Zoom In / Zoom Out

Sample Name: CCV Acquired: 9/16/2016 13:07:25 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.862**	**1.860**	**1.899**	**1.911**	**1.897**	**1.858**	**1.899**	**1.859**	**1.879**
Stddev	.000	.005	.034	.002	.001	.000	.012	.002	.001
%RSD	.0167	.2687	1.770	.1047	.0643	.0235	.6606	.0954	.0648
#1	1.952	1.976	1.875	1.910	1.996	1.858	1.860	1.828	1.879
#2	1.952	1.984	1.923	1.912	1.997	1.859	1.878	1.831	1.880
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11341.**	**5499.0**	**205330.**	**11488.**
Stddev	4.	1.5	281.	98.
%RSD	.03192	.02783	.13666	.85201
#1	11343.	5498.8	205130.	11557.
#2	11338.	5500.9	205530.	11418.

Raw Data MA19462 page 77 of 79

Zoom In / Zoom Out

Sample Name: CCB Acquired: 9/16/2016 13:12:11 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0132**	**.0008**	**.0010**	**.0008**	**.0002**	**.0002**	**.0010**	**.0047**
Stddev	.0002	.0050	.0007	.0010	.0006	.0000	.0000	.0005	.0009
%RSD	76.29	37.51	104.9	90.95	102.7	6.331	12.25	43.42	2.616
#1	-.0003	.0167	.0002	.0017	.0011	.0002	.0002	.0007	.0340
#2	-.0001	.0097	.0011	.0004	.0002	.0002	.0002	.0014	.0353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0004**	**.0007**	**.0012**	F **.0173**	**-.0163**	**.0010**	**.0241**	**.0003**
Stddev	.0002	.0002	.0001	.0002	.0013	.0084	.0003	.0044	.0000
%RSD	67.57	39.02	9.638	19.20	7.664	51.40	32.84	18.07	10.76
#1	.0002	.0003	.0006	.0010	.0163	-.0104	.0012	.0210	.0003
#2	.0005	.0005	.0007	.0014	.0182	-.0223	.0008	.0272	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.0100				
Low Limit					-.0100				

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0043**	**.0006**	**.0004**	**.0014**	**-.0008**	**-.0004**	**.0002**	**.0024**
Stddev	.0000	.0062	.0001	.0009	.0008	.0010	.0016	.0007	.0005
%RSD	3.860	9.579	14.77	197.7	57.71	129.9	382.5	308.1	19.73
#1	.0009	.0686	.0004	.0011	.0019	-.0001	-.0016	-.0003	.0021
#2	.0009	.0599	.0005	-.0002	.0008	-.0015	.0007	.0007	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19462 page 78 of 79

Zoom In / Zoom Out

Sample Name: CCB Acquired: 9/16/2016 13:12:11 Type: QC
Method: Accutest2(v310) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**-.0003**	**.0000**	**.0013**	**.0007**	**.0004**	F **.0111**	**.0007**	**.0010**
Stddev	.0004	.0003	.0001	.0000	.0003	.0001	.0018	.0002	.0001
%RSD	50.21	106.9	185.7	1.920	38.51	26.17	16.60	24.21	6.693
#1	-.0005	-.0001	-.0000	.0013	.0009	.0005	.0124	.0006	.0017
#2	-.0011	-.0005	.0001	.0013	.0005	.0003	.0098	.0009	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11924.**	**5579.3**	**209370.**	**11451.**
Stddev	9.	6.3	113.	3.
%RSD	.07532	.11323	.05389	.02420
#1	11917.	5574.8	209290.	11453.
#2	11930.	5583.7	209450.	11449.

Raw Data MA19462 page 79 of 79

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-In-fit?
Ag 328.068 {103}	☒	9	Fe	-0.000278	0.000000	No
			Mn	0.000138	0.000000	No
			Ti	-0.000350	0.000000	No
			V	-0.000065	0.000000	No
			Cu	-0.000033	0.000000	No
			Mo	0.000012	0.000000	No
			Zr	0.002215	0.000000	No
			Al	-0.000003	0.000000	No
			Ca	-0.000002	0.000000	No
Al 396.152 { 85}	☒	5	Mo	0.036205	0.000000	No
			Mn	-0.000006	0.000000	No
			Ca	0.000022	0.000000	No
			Zn	0.000160	0.000000	No
			Zr	0.007549	0.000000	No
As 189.042 {478}	☒	16	Fe	-0.000005	0.000000	No
			Mg	-0.000002	0.000000	No
			Ca	-0.000004	0.000000	No
			Na	0.000000	0.000000	No
			Mn	0.000031	0.000000	No
			Co	-0.000978	0.000000	No
			Cr	0.000627	0.000000	No
			Mo	0.001967	0.000000	No
			Ti	0.000040	0.000000	No
			V	0.000072	0.000000	No
			Al	0.000003	0.000000	No
			Pd	0.024527	0.000000	No
			Zr	-0.000109	0.000000	No
			B	0.000039	0.000000	No
			W	0.001552	0.000000	No
			Pt	-0.000619	0.000000	No
Au 242.795 {139}	☒	5	Fe	0.000186	0.000000	No
			Mn	0.004749	0.000000	No
			W	-0.000213	0.000000	No
			Pt	-0.001128	0.000000	No
			Co	-0.000857	0.000000	No
B 208.959 {462}	☒	5	Si	0.000474	0.000000	No
			Mo	0.015973	0.000000	No
			V	0.000195	0.000000	No
			Pt	0.001906	0.000000	No
			Sn	0.000984	0.000000	No
Ba 455.403 { 74}	☒	1	Ca	0.000000	0.000000	No
Be 313.042 {108}	☒	4	Ti	-0.000342	0.000000	No
			V	0.000141	0.000000	No
			Cd	0.000094	0.000000	No
			Pb	0.000007	0.000000	No
Bi 223.061 {451}	☒	7	Fe	0.000027	0.000000	No
			Co	-0.003204	0.000000	No
			Cr	0.001126	0.000000	No
			Ti	-0.002473	0.000000	No
			V	-0.000516	0.000000	No
			Cu	-0.001505	0.000000	No
			W	-0.002644	0.000000	No
Ca 317.933 {106}	☒	4	Al	0.000068	0.000000	No
			Mg	0.000032	0.000000	No
			Cu	0.004589	0.000000	No
			Ti	0.005072	0.000000	No
Cd 228.802 {448}	☒	8	Fe	0.000010	0.000000	No

Interfering Element Correction (IEC) MA19462 page 1 of 4

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-In-fit?
			Mg	0.000002	0.000000	No
			Co	-0.002261	0.000000	No
			Ni	-0.000105	0.000000	No
			V	0.000018	0.000000	No
			As	0.001012	0.000000	No
			W	-0.000046	0.000000	No
			Pt	-0.006194	0.000000	No
Co 228.616 {448}	☒	4	Fe	0.000017	0.000000	No
			Mo	-0.000462	0.000000	No
			Ti	0.002059	0.000000	No
			Mg	0.000003	0.000000	No
Cr 267.716 {126}	☒	6	Cu	0.000024	0.000000	No
			Al	0.000004	0.000000	No
			Fe	-0.000011	0.000000	No
			Mn	0.000122	0.000000	No
			W	0.000134	0.000000	No
			Pt	0.007181	0.000000	No
Cu 324.754 {104}2	☒	8	Fe	-0.000085	0.000000	No
			Co	-0.000600	0.000000	No
			Mo	0.000151	0.000000	No
			V	-0.000135	0.000000	No
			Zr	-0.001600	0.000000	No
			Mn	0.000035	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	0.000052	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	2	Na	0.000059	0.000000	No
			Fe	-0.000552	0.000000	No
Li 670.784 { 50}	☒	2	Ca	0.000024	0.000000	No
			Na	0.000002	0.000000	No
Mg 279.079 {121}	☒	3	Fe	-0.000076	0.000000	No
			Mo	-0.009670	0.000000	No
			Mn	-0.003659	0.000000	No
Mn 257.610 {131}	☒	3	Fe	-0.000023	0.000000	No
			Ca	0.000001	0.000000	No
			Si	0.000051	0.000000	No
Mo 202.030 {467}	☒	8	Al	0.000000	0.000000	No
			Mg	0.000000	0.000000	No
			Ca	0.000001	0.000000	No
			Na	-0.000000	0.000000	No
			Mn	-0.000046	0.000000	No
			Co	-0.000036	0.000000	No
			Cu	0.000033	0.000000	No
			Ni	0.000010	0.000000	No
Na 589.592 { 57}	☒	2	Al	0.000151	0.000000	No
			Pb	0.010029	0.000000	No
Ni 231.604 {446}	☒	4	Co	-0.000711	0.000000	No
			Mo	-0.000041	0.000000	No
			Fe	0.000027	0.000000	No
			Ca	-0.000001	0.000000	No
Pb 220.353 {453}	☒	14	Fe	0.000026	0.000000	No
			Al	-0.000082	0.000000	No
			Si	0.000073	0.000000	No
			Co	-0.000140	0.000000	No
			Cu	0.000253	0.000000	No
			Ni	0.000053	0.000000	No

Interfering Element Correction (IEC) MA19462 page 2 of 4

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-In-fit?
			Mo	-0.001469	0.000000	No
			Mg	0.000004	0.000000	No
			Ca	-0.000012	0.000000	No
			Mn	0.000077	0.000000	No
			S	0.000002	0.000000	No
			Ti	-0.000077	0.000000	No
			V	-0.000128	0.000000	No
			W	-0.003393	0.000000	No
Pd 340.458 { 99}	☒	5	Fe	-0.000187	0.000000	No
			Ca	-0.000020	0.000000	No
			Co	-0.002813	0.000000	No
			Ti	-0.000744	0.000000	No
			Zr	-0.103001	0.000000	No
Pt 265.945 {127}	☒	7	Fe	-0.000150	0.000000	No
			Al	-0.000025	0.000000	No
			Mn	-0.000574	0.000000	No
			Cr	0.003958	0.000000	No
			Mo	-0.001576	0.000000	No
			V	0.000359	0.000000	No
			W	-0.001720	0.000000	No
S 182.034 {485}	☒	8	Fe	0.000019	0.000000	No
			Al	-0.000020	0.000000	No
			Mg	0.000014	0.000000	No
			Ca	-0.000042	0.000000	No
			Mn	0.002245	0.000000	No
			Mo	-0.001444	0.000000	No
			Ti	0.000205	0.000000	No
			W	-0.018576	0.000000	No
Sb 206.833 {463}	☒	14	Fe	0.000021	0.000000	No
			Al	-0.000031	0.000000	No
			Mg	0.000000	0.000000	No
			Ca	-0.000001	0.000000	No
			Cr	0.011634	0.000000	No
			Ni	-0.000498	0.000000	No
			Mo	-0.003749	0.000000	No
			Cu	-0.000006	0.000000	No
			Sn	-0.010692	0.000000	No
			Zr	-0.000420	0.000000	No
			Ti	-0.000102	0.000000	No
			V	-0.001290	0.000000	No
			W	0.000594	0.000000	No
			Pt	-0.001317	0.000000	No
Se 196.090 {472}	☒	14	Fe	-0.000137	0.000000	No
			Al	-0.000007	0.000000	No
			Mg	0.000003	0.000000	No
			Ca	-0.000006	0.000000	No
			Na	0.000003	0.000000	No
			Co	-0.000182	0.000000	No
			Ni	-0.000070	0.000000	No
			Mn	0.000636	0.000000	No
			Sn	0.000060	0.000000	No
			Pd	-0.000730	0.000000	No
			V	0.000044	0.000000	No
			Mo	-0.000097	0.000000	No
			Ti	-0.000162	0.000000	No
			W	0.008674	0.000000	No
Si 212.412 {459}	☒	7	Al	0.000004	0.000000	No

Interfering Element Correction (IEC) MA19462 page 3 of 4

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	0.017999	0.000000	No
			Ti	0.012805	0.000000	No
			V	0.002993	0.000000	No
			Ni	-0.000131	0.000000	No
			Pb	-0.000577	0.000000	No
			S	0.000107	0.000000	No
Sn 189.989 {478}	☒	1	Ti	-0.001019	0.000000	No
Sr 407.771 { 83}	☒	1	Ca	0.000004	0.000000	No
Ti 334.904 {101}	☒	3	Mo	0.000196	0.000000	No
			Ca	0.000004	0.000000	No
			Al	0.000001	0.000000	No
Tl 190.856 {477}	☒	11	Al	-0.000013	0.000000	No
			Mg	-0.000008	0.000000	No
			Ca	-0.000001	0.000000	No
			Na	-0.000003	0.000000	No
			Mn	0.000783	0.000000	No
			Co	0.005549	0.000000	No
			Cr	0.000261	0.000000	No
			Ti	-0.002568	0.000000	No
			V	-0.038883	0.000000	No
			Fe	0.000012	0.000000	No
			Mo	0.000049	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000008	0.000000	No
			Mn	-0.000483	0.000000	No
			Cr	-0.001691	0.000000	No
			Mo	-0.008342	0.000000	No
			Ti	0.000242	0.000000	No
W 207.911 {462}	☒	6	Co	-0.000470	0.000000	No
			Cr	-0.001109	0.000000	No
			Cu	0.001158	0.000000	No
			Ni	-0.000440	0.000000	No
			Ti	-0.000892	0.000000	No
			V	0.000394	0.000000	No
Y 224.306 {451}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {464}	☒	8	Mg	0.000002	0.000000	No
			Al	0.000001	0.000000	No
			Ca	0.000001	0.000000	No
			Na	0.000000	0.000000	No
			Cr	-0.000528	0.000000	No
			Ti	-0.000051	0.000000	No
			Fe	0.000007	0.000000	No
			Pd	0.000025	0.000000	No
Zr 339.198 { 99}	☒	6	Fe	-0.000035	0.000000	No
			Ti	0.000184	0.000000	No
			V	0.000391	0.000000	No
			Mo	0.000594	0.000000	No
			S	-0.000027	0.000000	No
			Si	0.000679	0.000000	No

13.1.1 13

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000130	0.101611	0.000000	1.000000
Al 396.152 { 85}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000205	0.030902	0.000000	1.000000
As 189.042 {478}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000019	0.085895	0.000000	1.000000
Au 242.795 {139}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000006	0.019431	0.000000	1.000000
B 208.959 {462}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000608	0.152508	0.000000	1.000000
Ba 455.403 { 74}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000556	2.293783	0.000000	1.000000
Be 313.042 {108}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000078	1.872120	0.000000	1.000000
Bi 223.061 {451}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000148	0.173274	0.000000	1.000000
Ca 317.933 {106}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.006120	0.051422	0.000000	1.000000
Cd 228.802 {448}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000424	0.780048	0.000000	1.000000
Co 228.616 {448}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000028	0.365410	0.000000	1.000000
Cr 267.716 {126}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000012	0.072527	0.000000	1.000000
Cu 324.754 {104}2	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000876	0.166839	0.000000	1.000000
Fe 259.940 {130}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000397	0.054948	0.000000	1.000000
In 230.606 {446}*	9/16/2016 14:26:43	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000370	0.041385	0.000000	1.000000
Li 670.784 { 50}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.002701	0.700194	0.000000	1.000000
Mg 279.079 {121}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000099	0.006018	0.000000	1.000000
Mn 257.610 {131}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000180	0.359211	0.000000	1.000000
Mo 202.030 {467}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000272	0.657150	0.000000	1.000000
Na 589.592 { 57}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.001179	0.112398	0.000000	1.000000
Ni 231.604 {446}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000103	0.296938	0.000000	1.000000
Pb 220.353 {453}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000239	0.117558	0.000000	1.000000
Pd 340.458 { 99}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000149	0.038337	0.000000	1.000000
Pt 265.945 {127}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000037	0.005113	0.000000	1.000000
S 182.034 {485}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000026	0.044842	0.000000	1.000000
Sb 206.833 {463}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000471	0.128043	0.000000	1.000000
Se 196.090 {472}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000064	0.058721	0.000000	1.000000
Si 212.412 {459}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.008149	0.191927	0.000000	1.000000
Sn 189.989 {478}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000166	0.139707	0.000000	1.000000
Sr 407.771 { 83}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.001239	3.163853	0.000000	1.000000
Ti 334.904 {101}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000019	0.124834	0.000000	1.000000
Tl 190.856 {477}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000156	0.044094	0.000000	1.000000
V 292.402 {115}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000069	0.092136	0.000000	1.000000
W 207.911 {462}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.002152	0.258363	0.000000	1.000000
Y 224.306 {451}*	9/16/2016 14:26:43	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	9/16/2016 14:26:43	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	9/16/2016 14:26:43	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {464}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	0.000341	0.709999	0.000000	1.000000
Zr 339.198 { 99}	9/16/2016 14:26:43	9/16/2016 10:02:29	Linear	1/Conc	-0.000052	0.258964	0.000000	1.000000

13.1.2 13

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	1.000000	0.000000	0.000395	0.001316	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	1.000000	0.000000	0.012678	0.042260	OK.	1.000000	0.000000	1	0
As 189.042 {478}	1.000000	0.000000	0.001021	0.003402	OK.	1.000000	0.000000	1	0
Au 242.795 {139}	1.000000	0.000000	0.000846	0.002820	OK.	1.000000	0.000000	1	0
B 208.959 {462}	1.000000	0.000000	0.000537	0.001790	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	1.000000	0.000000	0.000237	0.000790	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	1.000000	0.000000	0.000104	0.000346	OK.	1.000000	0.000000	1	0
Bi 223.061 {451}	1.000000	0.000000	0.001065	0.003551	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	1.000000	0.000000	0.004184	0.013947	OK.	1.000000	0.000000	1	0
Cd 228.802 {448}	1.000000	0.000000	0.000139	0.000462	OK.	1.000000	0.000000	1	0
Co 228.616 {448}	1.000000	0.000000	0.000160	0.000533	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	1.000000	0.000000	0.000294	0.000980	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}2	1.000000	0.000000	0.000315	0.001049	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	1.000000	0.000000	0.002449	0.008162	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	1.000000	0.000000	0.027899	0.092996	OK.	1.000000	0.000000	1	0
Li 670.784 { 50}	1.000000	0.000000	0.001649	0.005498	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	1.000000	0.000000	0.026985	0.089950	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	1.000000	0.000000	0.000050	0.000166	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	1.000000	0.000000	0.000157	0.000524	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	1.000000	0.000000	0.008812	0.029373	OK.	1.000000	0.000000	1	0
Ni 231.604 {446}	1.000000	0.000000	0.000228	0.000759	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	1.000000	0.000000	0.000814	0.002715	OK.	1.000000	0.000000	1	0
Pd 340.458 { 99}	1.000000	0.000000	0.001077	0.003589	OK.	1.000000	0.000000	1	0
Pt 265.945 {127}	1.000000	0.000000	0.003699	0.012332	OK.	1.000000	0.000000	1	0
S 182.034 {485}	1.000000	0.000000	0.001790	0.005968	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	1.000000	0.000000	0.000936	0.003120	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	1.000000	0.000000	0.001605	0.005350	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	1.000000	0.000000	0.000613	0.002044	OK.	1.000000	0.000000	1	0
Sn 189.989 {478}	1.000000	0.000000	0.000502	0.001673	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	1.000000	0.000000	0.000111	0.000370	OK.	1.000000	0.000000	1	0
Ti 334.904 {101}	1.000000	0.000000	0.000295	0.000985	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	1.000000	0.000000	0.001012	0.003372	OK.	1.000000	0.000000	1	0
V 292.402 {115}	1.000000	0.000000	0.000292	0.000975	OK.	1.000000	0.000000	1	0
W 207.911 {462}	1.000000	0.000000	0.000797	0.002657	OK.	1.000000	0.000000	1	0
Y 224.306 {451}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {464}	1.000000	0.000000	0.000125	0.000417	OK.	1.000000	0.000000	1	0
Zr 339.198 { 99}	1.000000	0.000000	0.000147	0.000490	OK.	1.000000	0.000000	1	0

13.1.2 13

Inst QC: MA19466

Zoom In ▶ Zoom Out

Sample Name: STD1 Acquired: 9/16/2016 14:46:30 Type: Cal
Method: Accutest2(v311) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0001**	**-.0002**	**-.0000**	**-.0000**	**.0003**	**.0002**	**.0001**	**-.0001**	**.0069**
Stddev	.0000	.0002	.0000	.0000	.0001	.0001	.0000	.0001	.0000
%RSD	12.92	71.68	149.7	54.58	26.47	29.07	28.80	120.5	.1557
#1	-.0001	-.0004	-.0000	-.0000	.0002	.0003	.0001	-.0001	.0069
#2	-.0001	-.0001	.0000	-.0000	.0003	.0002	.0001	-.0000	.0069

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**-.0001**	**.0000**	**.0010**	**.0004**	**.0001**	**.0016**	**-.0000**	**.0002**
Stddev	.0000	.0000	.0000	.0000	.0001	.0010	.0001	.0000	.0000
%RSD	16.59	29.29	19.75	2.322	23.24	679.6	9.097	2.965	8.897
#1	.0002	-.0001	.0000	.0010	.0004	-.0005	.0017	-.0000	.0002
#2	.0003	-.0000	.0000	.0010	.0003	.0008	.0015	-.0000	.0002

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**.0018**	**-.0001**	**-.0002**	**-.0001**	**-.0001**	**.0000**	**-.0005**	**.0000**
Stddev	.0001	.0002	.0000	.0000	.0000	.0000	.0001	.0001	.0000
%RSD	20.34	13.63	2.484	10.55	5.689	4.450	880.8	22.80	16.66
#1	.0003	.0019	-.0001	-.0002	-.0001	-.0000	.0001	-.0004	.0000
#2	.0003	.0016	-.0001	-.0002	-.0001	-.0001	-.0001	-.0006	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0078**	**.0001**	**-.0018**	**-.0000**	**-.0002**	**.0001**	**.0017**	**.0011**	**-.0001**
Stddev	.0000	.0001	.0001	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	.2725	85.22	5.541	64.09	20.43	1.850	2.477	.8702	17.62
#1	.0078	.0000	-.0018	-.0000	-.0002	.0001	.0017	.0011	-.0001
#2	.0078	.0001	-.0019	-.0000	-.0001	.0001	.0016	.0011	-.0001

Raw Data MA19466 page 1 of 120

Zoom In ▶ Zoom Out

Sample Name: STD1 Acquired: 9/16/2016 14:46:30 Type: Cal
Method: Accutest2(v311) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**12029.**	**5639.3**	**210700.**	**11977.**
Stddev	12.	6.1	623.	44.
%RSD	.10222	.10767	.29536	.38822
#1	12037.	5643.6	210340.	11345.
#2	12020.	5635.0	211230.	11408.

Raw Data MA19466 page 2 of 120

Zoom In ▶ Zoom Out

Sample Name: STD2 Acquired: 9/16/2016 14:51:32 Type: Cal
Method: Accutest2(v311) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0472**	**.5955**	**.3325**	**.0717**	**.5841**	**5.954**	**7.287**	**.6726**	**.5573**
Stddev	.0001	.0055	.0002	.0000	.0002	.081	.056	.0008	.0066
%RSD	.2285	.9313	.0496	.0273	.0305	.8987	.7664	.1116	.6879
#1	.0472	.5915	.3324	.0717	.5840	8.897	7.247	.6732	.9526
#2	.0471	.5994	.3326	.0717	.5842	9.011	7.326	.6721	.9619

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.888**	**1.571**	**.2686**	**.6558**	**1.046**	**.7990**	**2.684**	**.1154**	**1.353**
Stddev	.001	.001	.0006	.0017	.009	.0070	.023	.0006	.002
%RSD	.0395	.0796	.2220	.2604	.8729	.8790	.8505	.5073	.1307
#1	2.867	1.372	.2690	.6570	1.039	.7940	2.667	.1150	1.355
#2	2.869	1.370	.2682	.6546	1.052	.8040	2.700	.1158	1.352

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.477**	**2.195**	**1.140**	**.4302**	**.1303**	**.0193**	**.1648**	**.4876**	**.2261**
Stddev	.002	.015	.002	.0004	.0003	.0000	.0003	.0001	.0001
%RSD	.0839	.6775	.1357	.0859	.2308	.1276	.1951	.0145	.0517
#1	2.475	2.184	1.141	.4395	.1305	.0193	.1646	.4876	.2262
#2	2.478	2.205	1.139	.4390	.1301	.0193	.1650	.4877	.2260

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.7796**	**.5346**	**11.90**	**.4707**	**.1668**	**.3349**	**.9703**	**2.576**	**.9734**
Stddev	.0001	.0009	.10	.0008	.0003	.0004	.0056	.003	.0019
%RSD	.0083	.1672	.8398	.1606	.1790	.1327	.5695	.1171	.1969
#1	.7796	.5352	11.83	.4712	.1668	.3352	.9723	2.574	.9748
#2	.7796	.5340	11.97	.4701	.1664	.3346	.9802	2.579	.9721

Raw Data MA19466 page 3 of 120

Zoom In ▶ Zoom Out

Sample Name: STD2 Acquired: 9/16/2016 14:51:32 Type: Cal
Method: Accutest2(v311) Mode: IR Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11106.**	**5473.6**	**203210.**	**11361.**
Stddev	12.	2.6	481.	7.
%RSD	.11092	.04825	.23668	.05966
#1	11097.	5471.7	202870.	11385.
#2	11114.	5475.5	203550.	11376.

Raw Data MA19466 page 4 of 120

13.2 13

Inst QC: MA19466

Sample Name: ICV Acquired: 9/16/2016 14:56:23 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2499**	**10.02**	**1.998**	**2.003**	**2.004**	**1.997**	**1.998**	**2.043**	**10.08**
Stddev	.0008	.07	.002	.008	.001	.011	.011	.002	.03
%RSD	.3172	.6503	.0847	.4061	.0398	.5651	.5355	.1135	.3041
#1	.2493	9.971	1.997	1.998	2.004	1.989	1.990	2.044	10.05
#2	.2505	10.06	1.999	2.009	2.003	2.005	2.005	2.041	10.10
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.006**	**1.985**	**2.011**	**1.966**	**10.05**	**9.872**	**2.016**	**9.889**	**2.042**
Stddev	.000	.002	.004	.001	.09	.027	.009	.114	.005
%RSD	.0072	.0899	.1823	.0458	.8985	.2740	.4714	1.157	.2472
#1	2.006	1.984	2.009	1.965	9.982	9.853	2.009	9.808	2.038
#2	2.006	1.987	2.014	1.967	10.11	9.891	2.023	9.969	2.045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.010**	**9.908**	**1.990**	**1.977**	**2.021**	**2.046**	**2.012**	**2.000**	**1.998**
Stddev	.002	.044	.002	.002	.001	.005	.006	.001	.002
%RSD	.0725	.4403	.0925	.1063	.0328	.2600	.2964	.0489	.0978
#1	2.009	9.877	1.988	1.976	2.021	2.042	2.017	1.999	1.997
#2	2.011	9.939	1.991	1.978	2.020	2.049	2.008	2.001	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICV Acquired: 9/16/2016 14:56:23 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.995**	**2.047**	**2.045**	**2.025**	**2.011**	**2.030**	**2.039**	**2.015**	**2.007**
Stddev	.001	.000	.009	.003	.005	.005	.002	.000	.002
%RSD	.0327	.0157	.4649	.1473	.2667	.2386	.1186	.0088	.1101
#1	1.996	2.047	2.038	2.023	2.007	2.026	2.037	2.015	2.005
#2	1.995	2.047	2.051	2.027	2.014	2.033	2.041	2.015	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11384.**	**5516.5**	**205600.**	**11357.**
Stddev	8.	1.6	744.	50.
%RSD	.07287	.02897	.36210	.44387
#1	11390.	5517.6	206130.	11393.
#2	11378.	5515.4	205070.	11322.

Sample Name: ICB Acquired: 9/16/2016 15:01:08 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0086**	**.0015**	**.0025**	**.0053**	**.0004**	**.0002**	**.0003**	**-.0073**
Stddev	.0003	.0029	.0000	.0001	.0005	.0002	.0000	.0000	.0025
%RSD	77.95	33.45	2.560	4.131	8.807	47.69	12.13	13.57	33.79
#1	-.0005	.0065	.0014	.0026	.0056	.0006	.0002	.0003	-.0090
#2	-.0002	.0106	.0015	.0025	.0050	.0003	.0002	.0004	-.0055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0006**	**.0006**	**.0002**	**.0001**	**.0069**	**.0077**	**.0011**	**.0131**	**.0002**
Stddev	.0002	.0001	.0001	.0002	.0006	.0166	.0024	.0000	.0000
%RSD	30.24	23.37	80.04	235.9	8.094	215.4	207.1	.0211	12.46
#1	.0005	.0005	.0003	-.0000	.0065	-.0040	-.0005	.0131	.0002
#2	.0008	.0007	.0001	.0002	.0073	.0194	.0028	.0131	.0003
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0006								
Low Limit	-.0006								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0096**	**.0005**	**.0003**	**.0005**	**.0026**	**-.0009**	**.0009**	**.0008**
Stddev	.0001	.0097	.0001	.0008	.0004	.0011	.0001	.0001	.0004
%RSD	7.456	101.1	26.10	279.5	83.32	41.20	15.56	6.538	49.29
#1	.0012	-.0027	.0004	.0009	.0002	.0018	-.0010	.0010	.0011
#2	.0010	-.0165	.0005	-.0003	.0008	.0034	-.0008	.0009	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICB Acquired: 9/16/2016 15:01:08 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0022**	**.0005**	**.0003**	**.0023**	**.0015**	**.0006**	F **.0216**	**-.0008**	**.0021**
Stddev	.0003	.0002	.0000	.0003	.0002	.0001	.0026	.0002	.0001
%RSD	13.37	47.91	11.95	13.78	14.03	18.02	12.08	24.91	5.185
#1	.0020	.0003	.0002	.0026	.0013	.0006	.0234	-.0010	.0021
#2	.0024	.0007	.0003	.0021	.0016	.0005	.0197	-.0007	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11920.**	**5568.4**	**208620.**	**11398.**
Stddev	69.	38.8	856.	9.
%RSD	.57657	.69734	.41043	.08075
#1	11969.	5595.8	209220.	11405.
#2	11871.	5540.9	208010.	11392.

Inst QC: MA19466

Sample Name: CCV Acquired: 9/16/2016 15:06:09 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2511**	**10.06**	**2.025**	**2.015**	**2.020**	**2.004**	**2.009**	**2.061**	**10.15**
Stddev	.0003	.12	.001	.004	.001	.020	.018	.001	.10
%RSD	.1131	1.156	.0575	.2026	.0575	1.017	.9155	.0426	1.014
#1	.2513	9.982	2.025	2.012	2.019	1.990	1.996	2.060	10.07
#2	.2509	10.15	2.026	2.018	2.021	2.019	2.022	2.061	10.22
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.022**	**2.009**	**2.028**	**1.979**	**10.10**	**9.947**	**2.015**	**9.983**	**2.054**
Stddev	.001	.005	.005	.004	.12	.103	.016	.140	.006
%RSD	.0476	.2494	.2474	.1759	1.190	1.031	.7865	1.402	.2967
#1	2.021	2.006	2.025	1.977	10.02	9.874	2.004	9.884	2.049
#2	2.022	2.013	2.032	1.982	10.19	10.02	2.027	10.08	2.058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.028**	**9.934**	**2.016**	**2.001**	**2.029**	**2.056**	**2.040**	**2.027**	**2.023**
Stddev	.003	.061	.005	.004	.004	.007	.009	.003	.004
%RSD	.1263	.6105	.2384	.1921	.1820	.3334	.4556	.1594	.2062
#1	2.026	9.891	2.012	1.998	2.027	2.052	2.034	2.025	2.020
#2	2.030	9.976	2.019	2.004	2.032	2.061	2.047	2.030	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 9/16/2016 15:06:09 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**2.069**	**2.053**	**2.037**	**2.035**	**2.045**	**2.046**	**2.042**	**2.020**
Stddev	.002	.003	.020	.005	.003	.005	.012	.005	.001
%RSD	.0883	.1574	.9513	.2556	.1583	.2633	.5964	.2665	.0608
#1	2.017	2.067	2.039	2.033	2.033	2.041	2.038	2.038	2.019
#2	2.019	2.072	2.067	2.040	2.037	2.049	2.055	2.045	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11387.**	**5527.1**	**205810.**	**11306.**
Stddev	16.	2.0	694.	77.
%RSD	.14198	.03664	.33700	.68050
#1	11399.	5528.5	206300.	11361.
#2	11376.	5525.7	205320.	11252.

Sample Name: CCB Acquired: 9/16/2016 15:10:53 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0044**	**.0019**	**.0024**	**.0047**	**.0004**	**.0002**	**.0010**	**-.0079**
Stddev	.0004	.0005	.0007	.0006	.0002	.0001	.0001	.0003	.0022
%RSD	145.0	12.22	37.25	26.60	4.571	18.94	56.55	29.75	27.41
#1	.0000	.0047	.0014	.0028	.0046	.0005	.0002	.0008	-.0063
#2	-.0006	.0040	.0024	.0019	.0049	.0003	.0001	.0012	-.0094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0007**	**.0008**	**.0003**	**.0001**	**.0070**	**.0182**	**.0020**	**.0107**	**.0001**
Stddev	.0005	.0004	.0000	.0005	.0020	.0005	.0004	.0031	.0000
%RSD	63.52	56.48	5.810	384.2	27.87	2.653	20.60	28.71	26.48
#1	.0004	.0005	.0003	-.0002	.0084	.0185	.0023	.0085	.0001
#2	.0011	.0011	.0004	.0005	.0056	.0178	.0017	.0129	.0002
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0006								
Low Limit	-.0006								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**-.0130**	**.0009**	**.0006**	**.0011**	**.0045**	**-.0015**	**.0018**	**.0024**
Stddev	.0002	.0010	.0003	.0006	.0000	.0047	.0017	.0010	.0007
%RSD	20.09	7.313	30.38	98.19	2.266	104.8	113.3	54.55	29.49
#1	.0008	-.0137	.0007	.0002	.0010	.0078	-.0027	.0025	.0029
#2	.0011	-.0123	.0011	.0010	.0011	.0012	-.0003	.0011	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 9/16/2016 15:10:53 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**.0007**	**.0002**	**.0019**	**.0011**	**.0006**	F **.0203**	**-.0005**	**.0019**
Stddev	.0004	.0002	.0001	.0002	.0007	.0001	.0013	.0004	.0002
%RSD	18.64	26.55	34.21	10.42	70.49	26.90	6.402	75.42	9.721
#1	.0020	.0006	.0003	.0020	.0016	.0007	.0212	-.0008	.0020
#2	.0026	.0008	.0002	.0018	.0005	.0005	.0194	-.0003	.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11959.**	**5590.1**	**208890.**	**11420.**
Stddev	16.	6.5	81.	4.
%RSD	.13325	.11657	.03882	.03118
#1	11970.	5594.7	208830.	11422.
#2	11948.	5585.5	208950.	11417.

Inst QC: MA19466

Sample Name: CRI Acquired: 9/16/2016 15:15:54 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046**	**.2140**	**.0048**	**.0508**	**.1102**	**.0518**	**.0041**	**.0535**	**5.197**
Stddev	.0001	.0008	.0005	.0002	.0009	.0003	.0001	.0005	.047
%RSD	2.116	.3900	10.96	.3536	.8285	.5229	1.660	.9791	.9021
#1	.0047	.2146	.0051	.0510	.1108	.0516	.0041	.0539	5.163
#2	.0045	.2134	.0044	.0507	.1095	.0520	.0042	.0531	5.230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0042**	**.0507**	**.0101**	**.0250**	**.1059**	**5.129**	**.5102**	**5.146**	**.0158**
Stddev	.0000	.0003	.0001	.0001	.0015	.030	.0012	.093	.0002
%RSD	.8054	.6811	1.103	.2010	1.427	.5800	.2419	1.803	1.040
#1	.0042	.0505	.0100	.0250	.1049	5.151	.5093	5.080	.0159
#2	.0042	.0510	.0101	.0249	.1070	5.108	.5111	5.211	.0157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1031**	**5.137**	**.0412**	**.0047**	**.0508**	**.0530**	**.0495**	**.0068**	**.0119**
Stddev	.0001	.007	.0004	.0004	.0008	.0021	.0015	.0003	.0003
%RSD	.0690	.1417	.9059	9.161	1.648	3.957	3.031	3.858	2.619
#1	.1031	5.132	.0409	.0051	.0514	.0545	.0484	.0066	.0116
#2	.1032	5.142	.0414	.0044	.0502	.0515	.0505	.0070	.0121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CRI Acquired: 9/16/2016 15:15:54 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0962**	**.1046**	**.0110**	**.0525**	**.0049**	**.0108**	F **.0233**	**.0208**	**.0424**
Stddev	.0004	.0000	.0000	.0004	.0000	.0001	.0009	.0001	.0010
%RSD	.4186	.0439	.2490	.7346	.5187	.9729	3.955	.6994	2.260
#1	.0959	.1046	.0110	.0527	.0049	.0107	.0239	.0207	.0417
#2	.0965	.1047	.0110	.0522	.0049	.0109	.0226	.0209	.0431
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.1000		
Range							-30.00%		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11690.**	**5539.8**	**206720.**	**11336.**
Stddev	6.	2.1	1359.	44.
%RSD	.05430	.03836	.65757	.38426
#1	11695.	5538.2	205760.	11366.
#2	11686.	5541.3	207680.	11305.

Sample Name: CRIB Acquired: 9/16/2016 15:20:48 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**.2157**	**.0117**	**.0504**	**.1066**	**.5202**	**.0040**	**.0523**	**5.172**
Stddev	.0001	.0050	.0003	.0011	.0018	.0024	.0001	.0009	.039
%RSD	2.810	2.321	2.744	2.129	1.675	.4638	1.586	1.630	.7467
#1	.0049	.2121	.0119	.0496	.1078	.5185	.0040	.0529	5.144
#2	.0047	.2192	.0114	.0512	.1053	.5219	.0041	.0517	5.199
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043**	**.0508**	**.0099**	**.0249**	**.1089**	**5.150**	**.5085**	**5.107**	**.0160**
Stddev	.0001	.0008	.0001	.0002	.0024	.004	.0013	.033	.0000
%RSD	1.267	1.637	1.338	.8437	2.242	.0672	.2492	.6430	.0701
#1	.0043	.0514	.0099	.0251	.1072	5.148	.5076	5.083	.0160
#2	.0042	.0502	.0100	.0248	.1106	5.153	.5094	5.130	.0160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1027**	**5.113**	**.0407**	**.0098**	**.0511**	**.0508**	**.0505**	**.0065**	**.0261**
Stddev	.0016	.016	.0006	.0007	.0007	.0018	.0009	.0000	.0006
%RSD	1.518	.3036	1.482	6.932	1.436	3.624	1.786	.2912	2.184
#1	.1038	5.102	.0411	.0094	.0516	.0495	.0499	.0065	.0265
#2	.1016	5.124	.0403	.0103	.0506	.0521	.0512	.0065	.0257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CRIB Acquired: 9/16/2016 15:20:48 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1015**	**.1043**	**.0109**	**.0518**	**.0057**	**.0106**	F **.0198**	**.1083**	**.0440**
Stddev	.0016	.0014	.0000	.0002	.0003	.0002	.0008	.0016	.0006
%RSD	1.578	1.377	.2540	.4499	5.220	1.752	3.870	1.477	1.430
#1	.1026	.1053	.0109	.0520	.0059	.0108	.0204	.1094	.0436
#2	.1003	.1033	.0109	.0517	.0055	.0105	.0193	.1072	.0445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.1000		
Range							-30.00%		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11728.**	**5557.0**	**207610.**	**11361.**
Stddev	144.	69.5	248.	76.
%RSD	1.2267	1.2504	.11960	.66849
#1	11627.	5507.9	207440.	11415.
#2	11830.	5606.1	207790.	11307.

Inst QC: MA19466

Sample Name: ICSA Acquired: 9/16/2016 15:25:44 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0017**	**517.8**	**.0004**	**.0011**	**.0018**	**.0033**	**-.0001**	**.0021**	**463.3**
Stddev	.0001	2.4	.0002	.0010	.0011	.0000	.0001	.0003	4.4
%RSD	4.677	.4676	47.41	90.19	61.46	.4725	80.57	12.05	.9571
#1	-.0017	516.1	.0006	.0018	.0010	.0032	-.0002	.0023	460.2
#2	-.0018	519.5	.0003	.0004	.0025	.0033	-.0001	.0019	466.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0015**	**.0061**	**.0008**	**186.1**	**.0956**	**.0252**	**504.6**	**.0011**
Stddev	.0001	.0001	.0002	.0001	1.0	.0214	.0008	1.9	.0001
%RSD	107.0	8.055	3.894	16.17	.5357	22.35	3.330	.3753	5.624
#1	.0000	-.0014	.0059	.0007	185.4	.0805	.0258	503.3	.0011
#2	.0002	-.0015	.0063	.0009	186.8	.1107	.0246	506.0	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032**	**.0871**	**.0188**	**.0016**	**-.0122**	**.0071**	**.0132**	**-.0003**	**-.0003**
Stddev	.0000	.0044	.0002	.0012	.0001	.0006	.0023	.0008	.0014
%RSD	.6103	5.081	1.266	73.69	.9252	8.459	17.15	298.1	513.9
#1	.0033	.0839	.0186	.0008	-.0122	.0066	.0116	-.0008	-.0012
#2	.0032	.0902	.0189	.0024	-.0121	.0075	.0148	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICSA Acquired: 9/16/2016 15:25:44 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0056**	**.0020**	**.0007**	**.0010**	**.0009**	**.0008**	**.0230**	**.0004**	**.0070**
Stddev	.0007	.0004	.0001	.0001	.0007	.0002	.0000	.0002	.0005
%RSD	12.05	20.73	7.385	10.34	70.59	21.93	.1229	38.17	6.613
#1	.0051	.0023	.0006	.0009	.0014	.0007	.0231	.0003	.0073
#2	.0061	.0017	.0007	.0011	.0005	.0009	.0230	.0005	.0066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9401.8**	**4947.1**	**183350.**	**10939.**
Stddev	16.0	7.6	193.	5.
%RSD	.17000	.15306	.10503	.04267
#1	9413.1	4952.5	183210.	10935.
#2	9390.5	4941.8	183490.	10942.

Sample Name: ICSAB Acquired: 9/16/2016 15:30:41 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.047**	**517.6**	**.5282**	**.5198**	**.5173**	**.5009**	**.4850**	**.5218**	**466.3**
Stddev	.001	3.5	.0023	.0004	.0003	.0031	.0052	.0010	.6
%RSD	.0563	.6684	.4331	.0678	.0602	.6276	1.082	.1992	.1318
#1	1.048	515.2	.5265	.5201	.5176	.4986	.4813	.5211	465.8
#2	1.047	520.1	.5298	.5196	.5171	.5031	.4887	.5226	466.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.053**	**.5022**	**.4868**	**.5106**	**185.8**	**.0761**	**.5550**	**500.2**	**.4961**
Stddev	.003	.0006	.0004	.0004	1.3	.0040	.0040	2.9	.0001
%RSD	.3020	.1225	.0794	.0870	.7038	5.285	.7151	.5703	.0138
#1	1.055	.5026	.4865	.5109	184.9	.0789	.5522	498.2	.4961
#2	1.051	.5017	.4870	.5102	186.7	.0733	.5578	502.2	.4960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5025**	**.0718**	**.9859**	**.9846**	**.5250**	**.5246**	**.5316**	**.5400**	**.5325**
Stddev	.0004	.0033	.0003	.0018	.0015	.0051	.0016	.0021	.0026
%RSD	.0773	4.632	.0266	.1783	.2817	.9811	.2978	.3798	.4955
#1	.5027	.0694	.9861	.9859	.5240	.5282	.5327	.5385	.5343
#2	.5022	.0741	.9858	.9834	.5261	.5210	.5304	.5414	.5306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICSAB Acquired: 9/16/2016 15:30:41 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5014**	**.4780**	**.5135**	**.4975**	**.4876**	**.4956**	**.5128**	**.9402**	**.4677**
Stddev	.0025	.0020	.0030	.0005	.0017	.0003	.0017	.0014	.0069
%RSD	.4988	.4209	.5867	.0906	.3515	.0703	.3267	.1508	1.472
#1	.5032	.4794	.5114	.4978	.4864	.4958	.5139	.9412	.4628
#2	.4997	.4765	.5157	.4972	.4888	.4953	.5116	.9392	.4726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9389.5**	**4941.1**	**182530.**	**10981.**
Stddev	16.6	13.4	323.	10.
%RSD	.17651	.27196	.17674	.09141
#1	9377.8	4931.6	182300.	10974.
#2	9401.3	4950.6	182760.	10988.

Inst QC: MA19466

Sample Name: 200PPMFECONF Acquired: 9/16/2016 15:35:32 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0757	.0008	.0032	.0030	.0025	.0000	.0007	.0808
Stddev	.0006	.0069	.0006	.0002	.0000	.0001	.0000	.0004	.0051
%RSD	1038.	9.101	76.99	5.428	.6465	3.647	63.27	49.55	6.269
#1	-.0004	.0806	.0012	.0033	.0030	.0024	.0000	.0005	.0844
#2	.0005	.0709	.0004	.0030	.0030	.0026	.0000	.0010	.0773
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0012	.0016	-.0031	201.9	.0910	.0004	.0758	.0001
Stddev	.0002	.0002	.0002	.0000	1.7	.0122	.0005	.0346	.0001
%RSD	49.19	16.18	10.02	1.443	.8626	13.44	126.8	45.64	78.93
#1	.0002	-.0013	.0017	-.0031	200.7	.0823	.0000	.1003	.0000
#2	.0005	-.0010	.0015	-.0032	203.2	.0996	.0007	.0514	.0001
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0012	.0024	-.0003	.0003	-.0043	.0025	-.0040	.0012	-.0001
Stddev	.0002	.0052	.0001	.0002	.0007	.0003	.0002	.0003	.0009
%RSD	16.12	215.2	36.39	57.23	15.36	10.16	5.942	27.11	1195.
#1	-.0013	.0060	-.0004	.0002	-.0047	.0026	-.0042	.0015	-.0007
#2	-.0010	-.0013	-.0003	.0004	-.0038	.0023	-.0038	.0010	.0005
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0054	.0017	.0001	.0004	-.0010	.0001	.0076	-.0021	.0189
Stddev	.0005	.0000	.0000	.0001	.0004	.0003	.0002	.0004	.0015
%RSD	9.603	2.846	43.40	23.79	40.61	246.6	2.977	19.10	7.814
#1	-.0050	.0017	.0000	.0004	-.0013	-.0001	.0078	-.0024	.0200
#2	-.0058	.0017	.0001	.0003	-.0007	.0003	.0075	-.0018	.0179

Raw Data MA19466 page 21 of 120

Sample Name: 200PPMFECONF Acquired: 9/16/2016 15:35:32 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11738.	5516.9	206330.	11376.
Stddev	15.	6.9	39.	61.
%RSD	.12828	.12527	.01867	.53956
#1	11727.	5512.0	206360.	11419.
#2	11748.	5521.8	206300.	11333.

Raw Data MA19466 page 22 of 120

Sample Name: 500PPMALCONF Acquired: 9/16/2016 15:40:30 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	491.2	.0000	.0005	.0008	.0008	.0000	.0011	.0178
Stddev	.0001	1.4	.0015	.0002	.0001	.0000	.0001	.0010	.0001
%RSD	6.714	.2854	63810.	33.55	9.895	1.396	403.2	90.70	.6299
#1	.0011	490.2	-.0011	.0006	.0007	.0008	-.0000	.0018	.0179
#2	.0010	492.2	.0011	.0004	.0008	.0008	.0001	.0004	.0177
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0003	.0004	.0037	.1337	.0128	.0006	.0231	.0004
Stddev	.0002	.0000	.0002	.0003	.0013	.0044	.0008	.0281	.0000
%RSD	23.65	2.005	35.93	7.267	.9931	34.28	117.2	122.0	5.296
#1	.0009	.0003	.0003	.0035	.1328	.0159	.0001	.0032	.0004
#2	.0006	.0003	.0005	.0039	.1347	.0097	.0012	.0430	.0004
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0266	-.0002	-.0002	.0005	.0075	-.0009	.0022	.0016
Stddev	.0002	.0003	.0000	.0021	.0011	.0012	.0012	.0006	.0001
%RSD	25.30	1.077	5.306	1080.	214.2	16.04	131.3	28.49	3.120
#1	.0008	.0268	-.0002	-.0017	.0013	.0084	-.0018	.0018	.0017
#2	.0005	.0264	-.0002	.0013	-.0003	.0067	-.0001	.0027	.0016
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0000	-.0002	.0006	.0008	.0006	.0002	.0143	-.0007	.0017
Stddev	.0003	.0006	.0001	.0001	.0001	.0003	.0003	.0000	.0001
%RSD	759.3	349.0	17.94	15.58	23.52	145.6	2.418	3.531	6.438
#1	-.0003	.0003	.0005	.0007	.0005	.0004	.0140	-.0008	.0018
#2	.0002	-.0006	.0006	.0009	.0007	-.0000	.0145	-.0007	.0016

Raw Data MA19466 page 23 of 120

Sample Name: 500PPMALCONF Acquired: 9/16/2016 15:40:30 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10775.	5611.6	199530.	11691.
Stddev	22.	15.3	216.	47.
%RSD	.20645	.27298	.10841	.40090
#1	10791.	5622.5	199380.	11658.
#2	10759.	5600.8	199680.	11724.

Raw Data MA19466 page 24 of 120

13.2 | 13

Inst QC: MA19466

Sample Name: 500PPMNACONF Acquired: 9/16/2016 15:45:27 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.1380	-.0001	.0003	.0041	.0002	-.0001	.0002	.0658
Stddev	.0001	.0069	.0004	.0001	.0002	.0000	.0000	.0006	.0011
%RSD	12.92	5.031	571.1	39.28	5.648	23.22	71.08	267.8	1.647
#1	-.0006	.1429	.0002	.0004	.0043	.0002	-.0001	-.0002	.0650
#2	-.0007	.1331	-.0004	.0002	.0040	.0002	-.0000	.0006	.0666
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0001	.0024	-.0001	.0289	-.0117	.0008	.0206	.0007
Stddev	.0000	.0002	.0001	.0001	.0002	.0108	.0001	.0050	.0000
%RSD	152.1	385.5	2.179	161.4	.7358	92.00	16.19	24.18	5.982
#1	-.0000	.0001	.0025	-.0001	.0290	-.0193	.0009	.0171	.0007
#2	.0001	-.0002	.0024	.0000	.0287	-.0041	.0007	.0241	.0007
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F 482.2	.0015	-.0008	-.0008	-.0025	.0071	-.0001	-.0001
Stddev	.0001	6.4	.0001	.0001	.0001	.0014	.0028	.0000	.0011
%RSD	37.10	1.337	3.457	7.521	12.10	55.23	40.07	45.15	984.2
#1	.0002	477.6	.0016	-.0007	-.0007	-.0035	.0091	-.0001	.0007
#2	.0003	486.7	.0015	-.0008	-.0009	-.0015	.0051	-.0001	-.0009
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0141	.0002	.0001	.0001	.0006	.0001	.0036	.0225	.0009
Stddev	.0006	.0004	.0001	.0000	.0003	.0001	.0002	.0001	.0000
%RSD	4.006	150.9	41.30	8.341	50.62	90.08	4.281	.3133	2.305
#1	.0137	.0005	.0002	.0001	.0004	.0000	.0037	.0225	.0009
#2	.0145	-.0000	.0001	.0001	.0008	.0001	.0035	.0224	.0010

Raw Data MA19466 page 25 of 120

Sample Name: 500PPMNACONF Acquired: 9/16/2016 15:45:27 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10187.	5242.0	192640.	11115.
Stddev	3.	5.8	719.	25.
%RSD	.02749	.10983	.37347	.22801
#1	10189.	5246.1	193150.	11132.
#2	10185.	5237.9	192130.	11097.

Raw Data MA19466 page 26 of 120

Sample Name: 20PPMMNCONF Acquired: 9/16/2016 15:50:34 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0472	.0004	.0046	.0008	-.0000	-.0001	.0011	-.0042
Stddev	.0001	.0042	.0004	.0007	.0001	.0000	.0001	.0004	.0021
%RSD	36.19	8.867	93.95	15.96	13.43	163.7	75.80	40.90	50.45
#1	-.0003	.0442	.0006	.0052	.0007	.0000	-.0001	.0014	-.0057
#2	-.0004	.0501	.0001	.0041	.0008	-.0000	-.0000	.0008	-.0027
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0001	.0049	-.0006	.0068	.0145	.0017	.0255	F 18.95
Stddev	.0001	.0001	.0003	.0001	.0017	.0077	.0012	.0107	.05
%RSD	59.43	48.11	5.504	21.18	25.49	52.83	71.51	41.94	.2594
#1	.0001	-.0002	.0051	-.0007	.0056	.0091	.0025	.0330	18.91
#2	.0001	-.0001	.0047	-.0005	.0080	.0199	.0008	.0179	18.98
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	.1961	.0188	-.0004	.0002	-.0006	.0250	-.0003	-.0005
Stddev	.0000	.0026	.0002	.0008	.0005	.0012	.0007	.0000	.0011
%RSD	.4132	1.339	1.223	170.2	279.0	203.3	2.801	9.908	218.3
#1	.0043	.1942	.0186	.0001	-.0002	-.0015	.0245	-.0003	-.0012
#2	.0042	.1979	.0189	-.0010	.0005	.0003	.0255	-.0003	.0003
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	-.0000	.0000	.0001	.0103	.0012	.0020	-.0010	.0005
Stddev	.0003	.0001	.0001	.0001	.0003	.0000	.0001	.0000	.0000
%RSD	14.40	349.8	669.9	95.01	2.997	1.340	4.915	1.078	6.509
#1	.0017	-.0001	-.0000	.0000	.0105	.0013	.0019	-.0010	.0005
#2	.0020	.0000	.0001	.0002	.0101	.0012	.0021	-.0010	.0004

Raw Data MA19466 page 27 of 120

Sample Name: 20PPMMNCONF Acquired: 9/16/2016 15:50:34 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11799.	5529.6	208000.	11167.
Stddev	108.	52.6	267.	11.
%RSD	.91884	.95173	.12831	.09605
#1	11875.	5566.8	208190.	11174.
#2	11722.	5492.4	207810.	11159.

Raw Data MA19466 page 28 of 120

13.2 | 13

Inst QC: MA19466

Sample Name: 50PPMSICONF Acquired: 9/16/2016 15:55:39 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0222	-.0010	.0026	.0012	.0002	-.0001	.0002	.0013
Stddev	.0002	.0013	.0008	.0004	.0002	.0000	.0000	.0003	.0067
%RSD	100.9	5.801	80.72	16.84	18.91	20.75	20.13	142.4	530.9
#1	-.0001	.0213	-.0015	.0029	.0013	.0003	-.0001	.0004	-.0035
#2	-.0004	.0231	-.0004	.0023	.0010	.0002	-.0001	-.0000	.0060
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0004	.0084	-.0001	.0113	.0041	.0012	-.0015	.0007
Stddev	.0001	.0001	.0001	.0002	.0002	.0075	.0005	.0005	.0000
%RSD	44.48	33.45	1.141	223.8	1.823	183.2	41.30	31.29	3.807
#1	.0003	-.0003	.0085	-.0002	.0115	-.0012	.0016	-.0018	.0007
#2	.0001	-.0005	.0084	.0001	.0112	.0094	.0009	-.0011	.0007
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063	.0444	.0119	-.0000	.0006	.0003	.0011	.0003	.0009
Stddev	.0000	.0026	.0002	.0005	.0005	.0035	.0008	.0002	.0002
%RSD	.2558	5.895	1.630	6173.	93.97	1346.	71.95	77.67	27.09
#1	.0063	.0462	.0120	-.0003	.0010	-.0022	.0005	.0001	.0007
#2	.0063	.0425	.0118	.0003	.0002	.0027	.0017	.0004	.0010
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 45.46	.0000	-.0000	.0016	-.0003	-.0001	.0038	.0000	.0015
Stddev	.06	.0001	.0001	.0001	.0012	.0001	.0003	.0000	.0046
%RSD	.1316	304.4	591.5	8.116	365.9	70.79	8.694	2.375	303.4
#1	45.42	-.0001	.0000	.0015	-.0012	-.0002	.0040	.0000	.0048
#2	45.50	.0002	-.0001	.0017	.0005	-.0001	.0036	.0000	-.0017

Raw Data MA19466 page 29 of 120

Sample Name: 50PPMSICONF Acquired: 9/16/2016 15:55:39 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11977.	5618.9	209370.	11358.
Stddev	1.	.1	880.	86.
%RSD	.01239	.00171	.42022	.75592
#1	11976.	5618.8	208750.	11419.
#2	11978.	5619.0	209990.	11298.

Raw Data MA19466 page 30 of 120

Sample Name: 50PPMSCONF Acquired: 9/16/2016 16:00:39 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0114	.0007	.0008	.0007	.0000	-.0002	-.0001	-.0043
Stddev	.0001	.0046	.0010	.0002	.0001	.0002	.0000	.0003	.0006
%RSD	29.59	40.33	144.0	30.56	13.36	1042.	17.51	395.7	14.34
#1	-.0005	.0082	.0014	.0006	.0006	.0002	-.0001	.0001	-.0047
#2	-.0003	.0147	-.0000	.0010	.0007	-.0001	-.0002	-.0003	-.0039
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	.0004	-.0004	.0037	-.0024	.0010	.0003	.0007
Stddev	.0001	.0000	.0003	.0000	.0025	.0043	.0007	.0090	.0001
%RSD	816.6	198.7	74.70	2.787	66.74	176.0	67.33	3358.	7.518
#1	.0001	-.0000	.0006	-.0004	.0054	-.0055	.0015	.0066	.0007
#2	-.0001	.0000	.0002	-.0004	.0020	.0006	.0005	-.0061	.0007
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0183	.0007	.0000	.0002	.0006	F 49.43	.0003	.0018
Stddev	.0000	.0057	.0001	.0006	.0002	.0007	.07	.0002	.0003
%RSD	.3298	31.20	14.56	1215.	103.0	123.4	.1343	60.84	17.41
#1	.0003	.0224	.0008	-.0004	.0003	.0011	49.39	.0002	.0015
#2	.0003	.0143	.0006	.0004	.0000	.0001	49.48	.0004	.0020
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083	.0000	-.0001	-.0001	.0005	.0001	.0013	-.0008	.0013
Stddev	.0023	.0002	.0000	.0002	.0010	.0000	.0004	.0000	.0000
%RSD	27.81	2862.	34.12	176.7	185.5	31.45	30.95	.3600	1.669
#1	.0066	.0002	-.0001	-.0003	.0012	.0001	.0011	-.0008	.0013
#2	.0099	-.0002	-.0001	.0000	-.0002	.0001	.0016	-.0007	.0013

Raw Data MA19466 page 31 of 120

Sample Name: 50PPMSCONF Acquired: 9/16/2016 16:00:39 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	12065.	5615.7	209110.	11322.
Stddev	25.	16.5	522.	50.
%RSD	.20682	.29450	.24968	.43768
#1	12047.	5604.0	208740.	11287.
#2	12083.	5627.4	209480.	11357.

Raw Data MA19466 page 32 of 120

13.2 | 13

Inst QC: MA19466

Sample Name: CCV Acquired: 9/16/2016 16:05:39 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2502	10.01	2.031	2.006	2.018	2.034	2.000	2.047	10.07
Stddev	.0020	.06	.001	.000	.004	.014	.009	.003	.03
%RSD	.8060	.5855	.0599	.0162	.1881	.6843	.4769	.1473	.2994
#1	.2516	9.971	2.030	2.007	2.015	2.024	1.993	2.045	10.05
#2	.2488	10.05	2.031	2.006	2.021	2.044	2.007	2.049	10.09
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.022	1.996	2.024	1.959	10.10	10.10	2.016	10.03	2.020
Stddev	.004	.002	.001	.007	.09	.02	.013	.10	.001
%RSD	.1781	.0924	.0380	.3463	.8947	.1830	.6415	.9596	.0250
#1	2.019	1.995	2.025	1.963	10.03	10.08	2.007	9.962	2.020
#2	2.024	1.998	2.024	1.954	10.16	10.11	2.025	10.10	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.027	9.928	1.994	1.987	1.997	2.027	2.062	2.024	2.022
Stddev	.003	.020	.001	.003	.006	.004	.007	.005	.005
%RSD	.1682	.1991	.0426	.1236	.2825	.2118	.3342	.2374	.2463
#1	2.024	9.914	1.995	1.989	2.001	2.030	2.057	2.020	2.025
#2	2.029	9.942	1.994	1.985	1.993	2.024	2.067	2.027	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19466 page 33 of 120

Sample Name: CCV Acquired: 9/16/2016 16:05:39 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.018	2.049	2.072	2.030	2.006	2.044	2.025	2.040	1.990
Stddev	.002	.004	.013	.001	.001	.001	.015	.004	.003
%RSD	.0893	.2122	.6232	.0561	.0315	.0574	.7609	.1850	.1366
#1	2.017	2.046	2.062	2.031	2.006	2.045	2.014	2.037	1.992
#2	2.019	2.053	2.081	2.029	2.007	2.043	2.036	2.042	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11409.	5513.6	205830.	11387.
Stddev	.	5.4	432.	25.
%RSD	.00207	.09747	.20966	.21843
#1	11409.	5517.4	206130.	11370.
#2	11409.	5509.8	205520.	11405.

Raw Data MA19466 page 34 of 120

Sample Name: CCB Acquired: 9/16/2016 16:10:23 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0019	.0017	.0022	.0029	.0004	.0000	-.0002	-.0105
Stddev	.0001	.0119	.0003	.0007	.0004	.0002	.0000	.0006	.0028
%RSD	16.67	610.1	17.73	31.07	13.55	51.83	114.2	269.3	26.90
#1	-.0005	.0103	.0015	.0027	.0032	.0003	.0000	-.0007	-.0125
#2	-.0004	-.0064	.0019	.0017	.0026	.0006	.0001	.0002	-.0085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0003	.0003	.0001	.0064	.0253	.0020	.0063	.0001
Stddev	.0001	.0001	.0004	.0002	.0009	.0060	.0001	.0086	.0000
%RSD	37.98	39.30	137.0	300.0	14.23	23.78	7.055	136.2	13.68
#1	.0003	.0002	.0000	-.0001	.0071	.0296	.0019	.0002	.0001
#2	.0005	.0003	.0005	.0002	.0058	.0211	.0021	.0123	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0019	.0002	-.0004	-.0002	.0015	.0041	.0006	.0013
Stddev	.0001	.0012	.0000	.0004	.0007	.0023	.0005	.0002	.0001
%RSD	12.74	60.81	21.04	93.11	430.9	152.6	11.16	28.80	9.857
#1	.0007	-.0011	.0002	-.0007	.0004	.0031	.0038	.0005	.0013
#2	.0005	-.0027	.0001	-.0002	-.0007	-.0001	.0044	.0007	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19466 page 35 of 120

Sample Name: CCB Acquired: 9/16/2016 16:10:23 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0031	.0004	.0002	.0017	.0002	.0003	F .0122	-.0010	.0018
Stddev	.0003	.0001	.0001	.0003	.0003	.0001	.0016	.0001	.0003
%RSD	9.261	24.18	66.67	18.78	139.4	46.43	12.93	5.451	16.16
#1	.0029	.0004	.0001	.0019	.0000	.0002	.0134	-.0011	.0020
#2	.0033	.0003	.0003	.0014	.0005	.0004	.0111	-.0010	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	12015.	5603.4	209310.	11393.
Stddev	24.	8.8	496.	46.
%RSD	.20339	.15671	.23715	.40277
#1	12032.	5609.6	209660.	11426.
#2	11998.	5597.2	208960.	11361.

Raw Data MA19466 page 36 of 120

13.2 | 13

Inst QC: MA19466

Sample Name: MP26768-MB1 Acquired: 9/16/2016 16:15:25 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0017**	**.0005**	**.0005**	**.0015**	**.0001**	**.0000**	**-.0002**	**.0057**
Stddev	.0001	.0028	.0003	.0005	.0003	.0001	.0000	.0005	.0023
%RSD	23.76	161.4	62.27	85.10	22.77	109.2	13690.	239.2	39.96
#1	-.0005	.0037	.0008	.0009	.0017	.0000	-.0000	-.0005	.0041
#2	-.0006	-.0002	.0003	.0002	.0012	.0002	.0000	.0001	.0073

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**.0002**	**.0001**	**.0082**	**.0120**	**.0006**	**-.0016**	**.0002**
Stddev	.0001	.0001	.0001	.0001	.0011	.0266	.0010	.0279	.0000
%RSD	88.24	290.8	86.21	68.24	13.94	221.0	167.5	1710.	10.60
#1	.0000	.0001	.0001	.0000	.0074	.0309	.0013	.0181	.0002
#2	.0002	-.0000	.0003	.0001	.0090	-.0068	-.0001	-.0214	.0002

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.0072**	**-.0003**	**-.0003**	**-.0005**	**.0005**	**.0047**	**.0001**	**.0019**
Stddev	.0001	.0010	.0001	.0005	.0006	.0006	.0005	.0006	.0008
%RSD	830.1	13.54	25.09	197.5	118.8	112.6	11.14	423.7	41.90
#1	.0001	.0065	-.0004	.0001	-.0010	.0001	.0044	-.0003	.0014
#2	-.0001	.0079	-.0003	-.0007	-.0001	.0010	.0051	.0006	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0359**	**.0001**	**-.0000**	**.0007**	**-.0004**	**-.0001**	**.0134**	**-.0003**	**.0006**
Stddev	.0003	.0002	.0000	.0000	.0005	.0003	.0010	.0000	.0001
%RSD	.7619	206.1	650.9	4.097	124.8	223.8	7.531	4.895	17.11
#1	.0357	.0003	.0000	.0007	-.0000	.0001	.0141	-.0003	.0006
#2	.0361	-.0000	-.0000	.0007	-.0007	-.0003	.0127	-.0003	.0007

Raw Data MA19466 page 37 of 120

Sample Name: MP26768-MB1 Acquired: 9/16/2016 16:15:25 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11910.**	**5541.8**	**208010.**	**11227.**
Stddev	25.	11.4	24.	61.
%RSD	.21151	.20633	.01163	.54145
#1	11893.	5533.8	207990.	11270.
#2	11928.	5549.9	208030.	11184.

Raw Data MA19466 page 38 of 120

Sample Name: MP26768-B1 Acquired: 9/16/2016 16:20:26 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1863**	**10.21**	**.5299**	**-.0003**	**1.041**	**2.027**	**.5012**	**.0001**	**25.41**
Stddev	.0002	.07	.0014	.0002	.005	.013	.0020	.0005	.16
%RSD	.1032	.6972	.2573	89.86	.5168	.6483	.4041	389.7	.6240
#1	.1862	10.16	.5290	-.0004	1.038	2.018	.4998	-.0002	25.30
#2	.1864	10.26	.5309	-.0001	1.045	2.036	.5026	.0005	25.52

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5203**	**.5151**	**.5038**	**.4946**	**10.27**	**25.74**	**.0019**	**25.38**	**.5199**
Stddev	.0010	.0016	.0009	.0009	.07	.10	.0004	.21	.0012
%RSD	.2002	.3138	.1716	.1828	.7275	.4054	21.78	.8440	.2218
#1	.5196	.5140	.5032	.4940	10.22	25.67	.0016	25.23	.5191
#2	.5210	.5163	.5044	.4953	10.32	25.82	.0022	25.53	.5207

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5085**	**25.53**	**.5074**	**1.020**	**.0012**	**.0030**	**.0076**	**.5262**	**.5111**
Stddev	.0026	.09	.0016	.004	.0001	.0012	.0020	.0007	.0018
%RSD	.5106	.3702	.3219	.3656	4.938	40.84	26.21	.1299	.3466
#1	.5067	25.46	.5063	1.018	.0012	.0021	.0090	.5257	.5098
#2	.5104	25.60	.5086	1.023	.0011	.0039	.0062	.5267	.5123

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0351**	**1.023**	**.5163**	**.5112**	**.5124**	**.5177**	**.0152**	**.5170**	**.0156**
Stddev	.0000	.003	.0035	.0017	.0032	.0007	.0007	.0025	.0018
%RSD	.1310	.3223	.6745	.3319	.6215	.1295	4.759	.4786	11.56
#1	.0351	1.021	.5139	.5100	.5102	.5173	.0157	.5152	.0169
#2	.0352	1.025	.5188	.5124	.5147	.5182	.0147	.5187	.0143

Raw Data MA19466 page 39 of 120

Sample Name: MP26768-B1 Acquired: 9/16/2016 16:20:26 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11226.**	**5479.5**	**205440.**	**11383.**
Stddev	28.	15.2	448.	18.
%RSD	.25214	.27711	.21807	.15577
#1	11246.	5490.3	205760.	11370.
#2	11206.	5468.8	205120.	11395.

Raw Data MA19466 page 40 of 120

13.2

13

Inst QC: MA19466

Sample Name: MP26768-B2 Acquired: 9/16/2016 16:25:13 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1895**	**10.42**	**.5382**	**.0001**	**1.058**	**2.065**	**.5099**	**-.0011**	**25.91**
Stddev	.0002	.09	.0005	.0017	.001	.012	.0029	.0009	.20
%RSD	.0864	.8961	.0933	1168.	.0686	.5562	.5686	86.04	.7865
#1	.1894	10.35	.5385	-.0011	1.059	2.056	.5078	-.0017	25.77
#2	.1896	10.49	.5378	.0014	1.058	2.073	.5119	-.0004	26.06

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5279**	**.5221**	**.5130**	**.5015**	**10.46**	**26.21**	**.0024**	**25.83**	**.5282**
Stddev	.0001	.0001	.0018	.0005	.08	.14	.0013	.10	.0013
%RSD	.0115	.0259	.3482	.0940	.8069	.5493	53.85	.4057	.2430
#1	.5279	.5222	.5117	.5019	10.40	26.11	.0015	25.76	.5273
#2	.5279	.5220	.5142	.5012	10.52	26.31	.0033	25.91	.5291

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5163**	**26.01**	**.5133**	**1.032**	**-.0000**	**.0009**	**.0081**	**.5352**	**.5181**
Stddev	.0008	.14	.0008	.002	.0009	.0035	.0013	.0014	.0024
%RSD	.1526	.5283	.1482	.1531	29540.	409.8	15.62	.2653	.4639
#1	.5169	25.91	.5138	1.033	.0006	-.0016	.0090	.5362	.5198
#2	.5158	26.10	.5128	1.031	-.0007	.0033	.0072	.5342	.5164

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0370**	**1.033**	**.5267**	**.5196**	**.5171**	**.5260**	**.0128**	**.5241**	**.0041**
Stddev	.0009	.004	.0027	.0011	.0010	.0005	.0001	.0003	.0001
%RSD	2.323	.3579	.5164	.2133	.1976	.0917	.5493	.0646	1.867
#1	.0376	1.035	.5247	.5188	.5178	.5257	.0129	.5243	.0041
#2	.0364	1.030	.5286	.5204	.5164	.5264	.0128	.5239	.0040

Raw Data MA19466 page 41 of 120

Sample Name: MP26768-B2 Acquired: 9/16/2016 16:25:13 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11069.**	**5395.5**	**201960.**	**11207.**
Stddev	21.	8.9	893.	20.
%RSD	.18539	.16514	.44209	.17551
#1	11054.	5389.2	202590.	11221.
#2	11083.	5401.8	201330.	11193.

Raw Data MA19466 page 42 of 120

Sample Name: MP26768-S1 Acquired: 9/16/2016 16:30:00 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1910**	**10.60**	**.5427**	**-.0000**	**1.067**	**2.083**	**.5094**	**-.0006**	**27.03**
Stddev	.0003	.09	.0001	.0001	.003	.016	.0043	.0001	.18
%RSD	.1495	.8836	.0178	365.7	.3177	.7757	.8400	9.415	.6726
#1	.1908	10.54	.5427	-.0001	1.065	2.071	.5064	-.0007	26.90
#2	.1912	10.67	.5428	.0000	1.069	2.094	.5124	-.0006	27.15

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5324**	**.5280**	**.5157**	**.5018**	**10.45**	**26.80**	**.0024**	**25.93**	**.5411**
Stddev	.0012	.0008	.0001	.0012	.11	.15	.0004	.31	.0006
%RSD	.2211	.1440	.0117	.2445	1.065	.5651	16.68	1.206	.1087
#1	.5316	.5275	.5157	.5027	10.37	26.69	.0026	25.71	.5415
#2	.5332	.5286	.5156	.5009	10.53	26.91	.0021	26.15	.5407

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5196**	**26.56**	**.5168**	**1.041**	**-.0007**	**-.0003**	**.7164**	**.5357**	**.5207**
Stddev	.0017	.18	.0009	.001	.0002	.0005	.0068	.0026	.0004
%RSD	.3221	.6740	.1646	.1079	31.59	161.3	.9537	.4888	.0769
#1	.5184	26.43	.5162	1.040	-.0005	.0000	.7116	.5339	.5204
#2	.5208	26.68	.5174	1.042	-.0008	-.0007	.7212	.5376	.5210

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.295**	**1.038**	**.5379**	**.5223**	**.5215**	**.5307**	**.0116**	**.6074**	**.0006**
Stddev	.003	.005	.0042	.0001	.0016	.0000	.0006	.0019	.0000
%RSD	.2534	.4815	.7798	.0097	.2980	.0046	5.554	.3074	1.329
#1	1.293	1.035	.5349	.5223	.5204	.5307	.0111	.6061	.0006
#2	1.298	1.042	.5409	.5224	.5226	.5307	.0120	.6087	.0006

Raw Data MA19466 page 43 of 120

Sample Name: MP26768-S1 Acquired: 9/16/2016 16:30:00 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11074.**	**5407.0**	**203310.**	**11304.**
Stddev	.	2.2	823.	46.
%RSD	.00038	.04140	.40501	.40284
#1	11074.	5408.6	202730.	11336.
#2	11074.	5405.4	203890.	11271.

Raw Data MA19466 page 44 of 120

13.2

13

Inst QC: MA19466

Sample Name: MP26768-S2 Acquired: 9/16/2016 16:34:46 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1913**	**10.63**	**.5422**	**.0005**	**1.069**	**2.087**	**.5107**	**.0003**	**27.19**
Stddev	.0002	.10	.0016	.0007	.004	.021	.0043	.0013	.24
%RSD	.1306	.9720	.3019	142.3	.3359	.9906	.8473	397.3	.8998
#1	.1915	10.56	.5410	.0010	1.066	2.072	.5077	-.0006	27.01
#2	.1911	10.70	.5434	-.0000	1.071	2.101	.5138	.0013	27.36

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5328**	**.5283**	**.5165**	**.5015**	**10.49**	**26.84**	**.0029**	**25.85**	**.5425**
Stddev	.0011	.0010	.0000	.0006	.12	.14	.0004	.31	.0004
%RSD	.1993	.1820	.0037	.1240	1.105	.5186	13.52	1.211	.0684
#1	.5321	.5276	.5165	.5019	10.41	26.74	.0027	25.63	.5427
#2	.5336	.5290	.5166	.5010	10.57	26.93	.0032	26.08	.5422

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5191**	**26.64**	**.5166**	**1.038**	**.0001**	**-.0000**	**.7197**	**.5363**	**.5197**
Stddev	.0017	.24	.0007	.001	.0012	.0014	.0015	.0014	.0007
%RSD	.3301	.8993	.1280	.1194	2221.	8743.	.2074	.2533	.1320
#1	.5179	26.47	.5162	1.037	.0009	.0010	.7187	.5353	.5201
#2	.5203	26.81	.5171	1.039	-.0008	-.0010	.7208	.5373	.5192

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.293**	**1.036**	**.5398**	**.5232**	**.5188**	**.5309**	**.0110**	**.6081**	**.0001**
Stddev	.001	.002	.0054	.0000	.0047	.0006	.0008	.0016	.0000
%RSD	.0369	.1982	1.004	.0009	.9093	.1146	7.450	.2701	25.25
#1	1.292	1.034	.5359	.5232	.5155	.5304	.0105	.6070	.0000
#2	1.293	1.037	.5436	.5232	.5222	.5313	.0116	.6093	.0001

Raw Data MA19466 page 45 of 120

Sample Name: MP26768-S2 Acquired: 9/16/2016 16:34:46 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11087.**	**5414.3**	**202770.**	**11268.**
Stddev	1.	.6	111.	1.
%RSD	.00929	.01126	.05478	.00708
#1	11087.	5414.8	202850.	11267.
#2	11088.	5413.9	202690.	11269.

Raw Data MA19466 page 46 of 120

Sample Name: MC47789-3 Acquired: 9/16/2016 16:39:34 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.1832**	**-.0002**	**.0002**	**.0064**	**.0158**	**.0001**	**.0001**	**1.069**
Stddev	.0004	.0014	.0005	.0001	.0001	.0000	.0001	.0006	.007
%RSD	97.88	.7744	213.4	53.10	1.036	.0301	60.23	925.7	.6557
#1	-.0001	.1822	-.0006	.0003	.0065	.0158	.0002	-.0004	1.065
#2	-.0006	.1842	.0001	.0002	.0064	.0158	.0001	.0005	1.074

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0013**	**.0003**	**-.0000**	**.0131**	**.5694**	**.0022**	**.1305**	**.0106**
Stddev	.0001	.0002	.0000	.0003	.0039	.0008	.0001	.0087	.0000
%RSD	36.38	12.37	13.66	1185.	30.09	.1354	4.988	6.690	.0485
#1	.0005	.0014	.0003	.0002	.0159	.5688	.0023	.1244	.0106
#2	.0003	.0012	.0004	-.0002	.0103	.5699	.0021	.1367	.0106

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.5986**	**.0002**	**-.0005**	**.0001**	**-.0009**	**.6981**	**.0012**	**.0017**
Stddev	.0002	.0036	.0001	.0000	.0004	.0017	.0018	.0002	.0010
%RSD	308.0	.5982	50.73	8.703	361.0	187.4	.2513	18.87	56.51
#1	.0002	.5961	.0003	-.0005	-.0002	.0003	.6968	.0013	.0010
#2	-.0001	.6012	.0001	-.0006	.0004	-.0021	.6993	.0010	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.260**	**.0005**	**.0084**	**.0011**	**-.0009**	**.0001**	**.0038**	**.0824**	**-.0008**
Stddev	.003	.0006	.0001	.0001	.0002	.0001	.0002	.0000	.0000
%RSD	.2106	107.2	1.564	11.14	26.52	111.9	6.583	.0242	5.316
#1	1.258	.0001	.0083	.0012	-.0007	.0002	.0040	.0824	-.0008
#2	1.262	.0009	.0085	.0010	-.0010	.0000	.0036	.0824	-.0008

Raw Data MA19466 page 47 of 120

Sample Name: MC47789-3 Acquired: 9/16/2016 16:39:34 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11918.**	**5550.0**	**208350.**	**11353.**
Stddev	24.	9.8	331.	50.
%RSD	.20217	.17725	.15884	.44294
#1	11901.	5543.0	208590.	11317.
#2	11935.	5557.0	208120.	11388.

Raw Data MA19466 page 48 of 120

13.2

13

Inst QC: MA19466

Sample Name: MP26768-SD1 Acquired: 9/16/2016 16:44:33 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 5.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment: 5X

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0020**	**.2349**	**.0033**	**.0019**	**.0146**	**.0169**	**-.0004**	**.0005**	**1.203**
Stddev	.0002	.0025	.0062	.0003	.0023	.0004	.0000	.0047	.008
%RSD	8.308	1.048	186.7	13.15	15.93	2.599	8.525	894.8	.6645
#1	-.0021	.2366	.0077	.0017	.0129	.0166	-.0004	-.0028	1.197
#2	-.0019	.2331	-.0011	.0021	.0162	.0173	-.0004	.0039	1.208

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0008**	**.0005**	**-.0017**	**.0287**	**.6636**	**.0013**	**.1949**	**.0114**
Stddev	.0004	.0002	.0006	.0001	.0009	.1798	.0003	.0148	.0001
%RSD	59.17	24.64	121.1	8.565	3.257	27.10	22.93	7.576	1.065
#1	.0004	.0007	.0009	-.0016	.0281	.5365	.0015	.2053	.0115
#2	.0009	.0010	.0001	-.0018	.0294	.7908	.0011	.1845	.0113

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.5977**	**.0008**	**-.0017**	**-.0009**	**-.0079**	**.7468**	**.0015**	**.0077**
Stddev	.0006	.0048	.0002	.0018	.0060	.0002	.0097	.0015	.0019
%RSD	83.67	.7951	20.69	101.6	693.6	2.962	1.304	105.5	24.21
#1	-.0012	.5944	.0009	-.0030	-.0051	-.0081	.7399	.0025	.0091
#2	-.0003	.6011	.0006	-.0005	.0034	-.0078	.7537	.0004	.0064

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.320**	**.0084**	**.0086**	**.0008**	**.0017**	**-.0013**	**.0045**	**.1199**	**-.0011**
Stddev	.023	.0012	.0008	.0001	.0006	.0010	.0003	.0016	.0002
%RSD	1.728	13.78	9.477	11.95	33.08	79.05	7.116	1.312	19.08
#1	1.304	.0092	.0080	.0009	.0013	-.0020	.0047	.1188	-.0010
#2	1.336	.0076	.0091	.0007	.0021	-.0006	.0042	.1210	-.0013

Raw Data MA19466 page 49 of 120

Sample Name: MP26768-SD1 Acquired: 9/16/2016 16:44:33 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 5.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment: 5X

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11924.**	**5543.7**	**209170.**	**11404.**
Stddev	92.	46.7	708.	5.
%RSD	.77472	.84328	.33860	.04246
#1	11989.	5576.8	208670.	11401.
#2	11859.	5510.7	209670.	11408.

Raw Data MA19466 page 50 of 120

Sample Name: MC47768-13 Acquired: 9/16/2016 16:49:33 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.2264**	**.0009**	**.0005**	**.0576**	**.0598**	**.0000**	**-.0000**	**13.06**
Stddev	.0004	.0030	.0003	.0005	.0002	.0003	.0000	.0004	.06
%RSD	90.63	1.342	34.71	100.9	.4148	.4897	136.9	14220.	.4848
#1	-.0001	.2242	.0012	.0001	.0577	.0596	.0001	-.0003	13.02
#2	-.0007	.2285	.0007	.0008	.0574	.0601	.0000	.0002	13.11

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0002**	**.0159**	**.0038**	**.7921**	**2.029**	**.0001**	**2.808**	**.0218**
Stddev	.0001	.0001	.0001	.0001	.0097	.016	.0009	.038	.0002
%RSD	17.27	43.10	.4923	3.864	1.219	.7898	1187.	1.356	.8891
#1	.0003	-.0003	.0159	.0039	.7852	2.018	.0007	2.782	.0217
#2	.0004	-.0001	.0158	.0037	.7989	2.041	-.0006	2.835	.0219

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**97.95**	**.0022**	**.0015**	**-.0004**	**-.0004**	**5.552**	**.0001**	**.0019**
Stddev	.0001	.34	.0001	.0002	.0000	.0016	.008	.0007	.0002
%RSD	294.2	.3467	3.802	14.08	6.406	360.0	.1382	864.8	8.213
#1	.0001	97.71	.0023	.0014	-.0004	.0007	5.558	.0006	.0020
#2	-.0000	98.19	.0021	.0017	-.0004	-.0016	5.547	-.0004	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.077**	**-.0002**	**.0678**	**.0091**	**.0001**	**.0029**	**.0018**	**.0002**	**-.0027**
Stddev	.002	.0000	.0007	.0000	.0002	.0001	.0002	.0000	.0001
%RSD	.0364	2.491	1.073	.3370	260.4	3.267	11.03	10.97	5.566
#1	4.075	-.0002	.0672	.0091	-.0001	.0028	.0016	.0002	-.0028
#2	4.078	-.0002	.0683	.0091	.0003	.0030	.0019	.0002	-.0026

Raw Data MA19466 page 51 of 120

Sample Name: MC47768-13 Acquired: 9/16/2016 16:49:33 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11167.**	**5432.3**	**202180.**	**11189.**
Stddev	14.	3.6	57.	2.
%RSD	.12559	.06588	.02813	.01392
#1	11177.	5434.9	202130.	11188.
#2	11157.	5429.8	202220.	11190.

Raw Data MA19466 page 52 of 120

13.2

13

Inst QC: MA19466

Sample Name: MC47768-15 Acquired: 9/16/2016 16:54:30 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0987**	**.0007**	**.0003**	**.0610**	**.1150**	**-.0001**	**-.0004**	**15.04**
Stddev	.0001	.0015	.0001	.0002	.0001	.0062	.0000	.0005	.81
%RSD	27.23	1.550	20.68	49.29	.0843	5.361	13.54	111.5	5.403
#1	-.0003	.0977	.0006	.0002	.0609	.1194	-.0001	-.0007	15.62
#2	-.0004	.0998	.0008	.0004	.0610	.1107	-.0001	-.0001	14.47

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0003**	**.0016**	**.0014**	**.1575**	**2.689**	**.0017**	**3.292**	**.0136**
Stddev	.0001	.0001	.0002	.0002	.0107	.145	.0017	.226	.0001
%RSD	22.36	27.57	14.52	14.34	6.808	5.384	95.94	6.850	.5868
#1	.0003	-.0004	.0015	.0016	.1651	2.792	.0006	3.452	.0136
#2	.0005	-.0002	.0018	.0013	.1499	2.587	.0029	3.133	.0135

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**80.95**	**.0016**	**-.0006**	**.0004**	**-.0007**	**4.611**	**.0009**	**.0028**
Stddev	.0000	4.43	.0001	.0005	.0007	.0014	.025	.0005	.0005
%RSD	405.4	5.469	4.610	86.78	169.8	203.9	.5344	61.69	18.33
#1	.0000	84.08	.0016	-.0010	.0009	.0003	4.594	.0013	.0024
#2	-.0000	77.82	.0015	-.0002	-.0001	-.0017	4.628	.0005	.0032

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.459**	**-.0001**	**.0660**	**.0053**	**.0002**	**.0006**	**.0035**	**.0007**	**-.0022**
Stddev	.003	.0001	.0037	.0000	.0011	.0001	.0006	.0001	.0001
%RSD	.0951	125.7	5.596	.8610	524.0	21.32	16.33	9.462	2.373
#1	3.461	-.0001	.0686	.0052	-.0006	.0005	.0031	.0006	-.0023
#2	3.456	-.0000	.0634	.0053	.0010	.0007	.0039	.0007	-.0022

Raw Data MA19466 page 53 of 120

Sample Name: MC47768-15 Acquired: 9/16/2016 16:54:30 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11291.**	**5469.0**	**204360.**	**10973.**
Stddev	3.	6.4	110.	554.
%RSD	.02472	.11765	.05370	5.0491
#1	11293.	5473.6	204280.	10581.
#2	11289.	5464.5	204440.	11365.

Raw Data MA19466 page 54 of 120

Sample Name: MC47789-1 Acquired: 9/16/2016 16:59:29 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0231**	**-.0000**	**.0002**	**.0152**	**.0224**	**-.0001**	**.0003**	**9.671**
Stddev	.0002	.0070	.0001	.0005	.0005	.0001	.0000	.0007	.084
%RSD	39.10	30.26	215.1	276.8	3.573	.3796	68.47	211.2	.8640
#1	-.0003	.0182	.0000	-.0002	.0156	.0223	-.0001	.0008	9.612
#2	-.0005	.0281	-.0001	.0006	.0148	.0224	-.0000	-.0002	9.730

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0004**	**.0001**	**-.0002**	**.0035**	**1.532**	**.0011**	**1.422**	**.0191**
Stddev	.0000	.0000	.0001	.0002	.0002	.021	.0006	.026	.0001
%RSD	15.70	13.00	122.9	69.50	5.357	1.379	49.77	1.858	.6643
#1	.0002	-.0003	.0002	-.0001	.0034	1.517	.0015	1.404	.0190
#2	.0002	-.0004	.0000	-.0003	.0036	1.547	.0007	1.441	.0192

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**3.162**	**-.0002**	**-.0001**	**-.0003**	**-.0024**	**3.373**	**.0007**	**.0013**
Stddev	.0000	.023	.0000	.0002	.0011	.0025	.017	.0001	.0009
%RSD	22.27	.7376	13.36	160.3	374.1	106.0	.4886	15.22	67.39
#1	-.0001	3.146	-.0003	-.0003	.0005	-.0006	3.385	.0008	.0019
#2	-.0002	3.179	-.0002	.0000	-.0011	-.0041	3.362	.0006	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.188**	**-.0005**	**.0482**	**.0005**	**-.0007**	**.0001**	**.0030**	**-.0007**	**-.0027**
Stddev	.022	.0003	.0002	.0000	.0003	.0000	.0004	.0000	.0003
%RSD	.5247	55.33	.3576	7.196	40.86	10.08	12.41	5.190	9.360
#1	4.203	-.0007	.0480	.0005	-.0009	.0001	.0033	-.0007	-.0026
#2	4.172	-.0003	.0483	.0005	-.0005	.0001	.0027	-.0007	-.0029

Raw Data MA19466 page 55 of 120

Sample Name: MC47789-1 Acquired: 9/16/2016 16:59:29 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11809.**	**5514.3**	**206700.**	**11257.**
Stddev	41.	20.6	357.	43.
%RSD	.35035	.37347	.17261	.38497
#1	11780.	5499.7	206950.	11288.
#2	11839.	5528.9	206450.	11226.

Raw Data MA19466 page 56 of 120

13.2 13

Inst QC: MA19466

Sample Name: CCV Acquired: 9/16/2016 17:04:28 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2532**	**10.11**	**2.032**	**2.024**	**2.020**	**2.056**	**2.020**	**2.049**	**10.19**
Stddev	.0009	.05	.002	.008	.004	.011	.010	.001	.07
%RSD	.3441	.5259	.1051	.3933	.2038	.5255	.5145	.0622	.6396
#1	.2526	10.08	2.031	2.018	2.017	2.048	2.013	2.048	10.14
#2	.2538	10.15	2.034	2.029	2.023	2.064	2.028	2.050	10.24
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.028**	**2.000**	**2.046**	**1.978**	**10.20**	**10.24**	**2.031**	**10.22**	**2.036**
Stddev	.005	.004	.006	.001	.10	.03	.008	.08	.002
%RSD	.2267	.2133	.3042	.0677	.9424	.2550	.4134	.8194	.0916
#1	2.025	1.997	2.042	1.977	10.13	10.22	2.025	10.16	2.034
#2	2.031	2.003	2.050	1.979	10.27	10.26	2.037	10.28	2.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.033**	**10.05**	**1.996**	**1.990**	**2.016**	**2.042**	**2.056**	**2.027**	**2.022**
Stddev	.005	.05	.002	.005	.000	.004	.002	.004	.005
%RSD	.2410	.4561	.0850	.2666	.0126	.2056	.0903	.1721	.2523
#1	2.030	10.02	1.995	1.986	2.017	2.045	2.055	2.025	2.018
#2	2.037	10.08	1.997	1.993	2.016	2.039	2.058	2.030	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19466 page 57 of 120

Sample Name: CCV Acquired: 9/16/2016 17:04:28 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.011**	**2.054**	**2.087**	**2.050**	**2.007**	**2.066**	**2.028**	**2.049**	**2.007**
Stddev	.005	.002	.013	.007	.001	.005	.018	.005	.003
%RSD	.2468	.1193	.6101	.3553	.0606	.2300	.8726	.2267	.1280
#1	2.008	2.052	2.078	2.045	2.006	2.063	2.015	2.046	2.005
#2	2.015	2.056	2.096	2.055	2.008	2.069	2.040	2.052	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11455.**	**5534.1**	**205870.**	**11256.**
Stddev	36.	17.5	653.	21.
%RSD	.31382	.31610	.31704	.18755
#1	11481.	5546.4	206330.	11270.
#2	11430.	5521.7	205410.	11241.

Raw Data MA19466 page 58 of 120

Sample Name: CCB Acquired: 9/16/2016 17:09:13 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0001**	**.0018**	**.0024**	**.0034**	**.0005**	**.0002**	**.0001**	**-.0045**
Stddev	.0003	.0074	.0003	.0004	.0003	.0000	.0000	.0005	.0007
%RSD	85.14	5696.	16.40	15.22	9.740	9.352	9.223	344.7	15.73
#1	-.0002	-.0054	.0021	.0027	.0037	.0004	.0002	-.0002	-.0050
#2	-.0006	.0051	.0016	.0021	.0032	.0005	.0002	.0005	-.0040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0003**	**.0003**	**.0002**	**.0067**	**.0230**	**.0021**	**-.0035**	**.0002**
Stddev	.0001	.0000	.0001	.0002	.0008	.0162	.0002	.0015	.0000
%RSD	21.52	1.349	23.95	92.52	11.74	70.62	11.91	43.66	22.17
#1	.0003	.0003	.0003	.0003	.0061	.0344	.0019	-.0024	.0002
#2	.0004	.0003	.0004	.0001	.0073	.0115	.0022	-.0046	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**-.0079**	**.0003**	**-.0007**	**.0009**	**.0012**	**-.0009**	**.0009**	**.0013**
Stddev	.0001	.0079	.0002	.0002	.0001	.0013	.0009	.0008	.0002
%RSD	10.81	100.2	56.55	35.44	14.85	113.0	98.44	86.22	12.34
#1	.0007	-.0023	.0002	-.0005	.0008	.0021	-.0016	.0004	.0014
#2	.0006	-.0135	.0004	-.0008	.0010	.0002	-.0003	.0015	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19466 page 59 of 120

Sample Name: CCB Acquired: 9/16/2016 17:09:13 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021**	**.0001**	**.0003**	**.0018**	**.0000**	**.0003**	F **.0108**	**-.0009**	**.0019**
Stddev	.0001	.0001	.0000	.0002	.0001	.0001	.0017	.0000	.0002
%RSD	3.841	78.32	9.238	13.49	1613.	23.04	16.17	2.670	9.973
#1	.0021	.0000	.0003	.0020	.0001	.0003	.0120	-.0009	.0021
#2	.0022	.0001	.0002	.0016	-.0001	.0004	.0095	-.0009	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**12057.**	**5619.8**	**210580.**	**11277.**
Stddev	24.	7.8	131.	178.
%RSD	.20280	.13953	.06201	1.5743
#1	12075.	5625.4	210670.	11403.
#2	12040.	5614.3	210490.	11151.

Raw Data MA19466 page 60 of 120

13.2 13

Inst QC: MA19466

Sample Name: MC47789-2 Acquired: 9/16/2016 17:14:14 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.1966**	**.0007**	**.0004**	**.0048**	**.0153**	**.0001**	**.0000**	**1.016**
Stddev	.0001	.0020	.0005	.0005	.0003	.0002	.0000	.0007	.007
%RSD	24.52	.9971	67.95	123.9	6.026	1.630	40.69	1994.	.6674
#1	-.0006	.1980	.0004	.0008	.0050	.0151	.0001	-.0005	1.011
#2	-.0004	.1953	.0011	.0001	.0046	.0154	.0000	.0005	1.020

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0013**	**.0002**	**.0002**	**.0152**	**.5510**	**.0020**	**.1302**	**.0106**
Stddev	.0000	.0001	.0002	.0002	.0000	.0069	.0011	.0275	.0002
%RSD	8.456	6.448	79.81	91.90	.2186	1.244	53.56	21.10	1.424
#1	.0003	.0012	.0003	.0004	.0152	.5559	.0012	.1108	.0105
#2	.0003	.0014	.0001	.0001	.0151	.5462	.0027	.1496	.0107

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.5982**	**.0002**	**-.0000**	**.0007**	**.0002**	**.6583**	**.0007**	**.0024**
Stddev	.0001	.0027	.0000	.0000	.0003	.0005	.0005	.0005	.0024
%RSD	197.8	.4457	7.772	90.75	41.53	224.8	.0720	65.30	98.42
#1	.0000	.5963	.0002	-.0001	.0005	-.0001	.6587	.0004	.0041
#2	-.0001	.6001	.0002	-.0000	.0009	.0005	.6580	.0010	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.229**	**-.0000**	**.0080**	**.0009**	**-.0006**	**.0001**	**.0138**	**.0857**	**-.0000**
Stddev	.006	.0001	.0001	.0002	.0000	.0002	.0008	.0002	.0000
%RSD	.4703	297.8	.7084	17.61	5.177	202.1	5.560	.2747	514.0
#1	1.225	.0000	.0080	.0010	-.0006	.0002	.0143	.0855	-.0000
#2	1.233	-.0001	.0081	.0008	-.0006	-.0000	.0132	.0859	.0000

Raw Data MA19466 page 61 of 120

Sample Name: MC47789-2 Acquired: 9/16/2016 17:14:14 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11995.**	**5600.5**	**211190.**	**11403.**
Stddev	33.	21.5	648.	22.
%RSD	.27651	.38315	.30683	.18943
#1	12018.	5615.7	211650.	11418.
#2	11971.	5585.4	210730.	11388.

Raw Data MA19466 page 62 of 120

Sample Name: MC47789-4 Acquired: 9/16/2016 17:19:12 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.2480**	**.0005**	**.0007**	**.0161**	**.0264**	**.0002**	**.0003**	**5.182**
Stddev	.0001	.0033	.0005	.0007	.0004	.0004	.0001	.0007	.064
%RSD	15.41	1.340	88.72	107.5	2.513	1.417	38.32	214.0	1.229
#1	-.0007	.2503	.0009	.0002	.0158	.0262	.0002	.0008	5.137
#2	-.0005	.2456	.0002	.0012	.0164	.0267	.0001	-.0002	5.227

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0002**	**.0001**	**.0001**	**.0066**	**.3906**	**.0016**	**.6211**	**.0460**
Stddev	.0000	.0000	.0003	.0001	.0013	.0065	.0006	.0156	.0000
%RSD	3.578	11.71	189.7	48.10	18.93	1.673	37.26	2.515	.0396
#1	.0012	.0003	-.0000	.0002	.0075	.3860	.0020	.6322	.0460
#2	.0011	.0002	.0003	.0001	.0057	.3952	.0012	.6101	.0461

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**3.028**	**.0000**	**-.0005**	**.0005**	**.0017**	**1.507**	**.0006**	**.0016**
Stddev	.0001	.005	.0001	.0002	.0001	.0004	.001	.0007	.0011
%RSD	74.66	.1722	256.5	35.53	21.22	23.37	.0703	124.0	67.77
#1	-.0001	3.024	-.0000	-.0006	.0004	.0014	1.508	.0011	.0024
#2	-.0002	3.032	.0001	-.0004	.0006	.0020	1.506	.0001	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.462**	**-.0001**	**.0372**	**.0004**	**-.0010**	**.0001**	**.0077**	**.0134**	**-.0027**
Stddev	.002	.0002	.0006	.0001	.0002	.0002	.0002	.0001	.0000
%RSD	.0442	412.8	1.509	37.09	21.57	209.9	2.225	.4712	.3982
#1	4.461	.0001	.0368	.0003	-.0011	.0002	.0078	.0134	-.0026
#2	4.464	-.0002	.0376	.0005	-.0008	-.0000	.0076	.0135	-.0027

Raw Data MA19466 page 63 of 120

Sample Name: MC47789-4 Acquired: 9/16/2016 17:19:12 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11818.**	**5533.5**	**208030.**	**11310.**
Stddev	7.	2.7	451.	11.
%RSD	.05708	.04852	.21677	.09491
#1	11813.	5531.6	208350.	11318.
#2	11823.	5535.4	207710.	11302.

Raw Data MA19466 page 64 of 120

13.2 13

Inst QC: MA19466

Sample Name: MC47789-5 Acquired: 9/16/2016 17:24:10 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0489**	**.0015**	**.0010**	**.0108**	**.0052**	**-.0001**	**.0001**	**2.015**
Stddev	.0004	.0023	.0002	.0005	.0001	.0001	.0001	.0009	.011
%RSD	112.0	4.758	14.11	48.60	1.233	2.056	49.51	1103.	.5445
#1	-.0006	.0506	.0013	.0013	.0109	.0052	-.0002	.0007	2.007
#2	-.0001	.0473	.0016	.0006	.0107	.0051	-.0001	-.0005	2.023

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0002**	**.0002**	**.0014**	**.0119**	**.5721**	**.0011**	**.2724**	**.0074**
Stddev	.0000	.0000	.0001	.0002	.0020	.0005	.0002	.0276	.0001
%RSD	31.00	21.84	35.75	15.51	16.85	.0924	15.46	10.12	.7523
#1	.0001	-.0002	.0001	.0013	.0134	.5725	.0012	.2529	.0074
#2	.0001	-.0003	.0002	.0016	.0105	.5717	.0010	.2919	.0073

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**1.603**	**.0001**	**-.0003**	**-.0013**	**.0021**	**1.104**	**.0006**	**.0010**
Stddev	.0001	.012	.0002	.0006	.0012	.0012	.001	.0008	.0011
%RSD	24.85	.7544	347.2	227.2	95.29	58.75	.0430	138.0	109.4
#1	-.0003	1.595	.0002	.0002	-.0022	.0030	1.104	.0000	.0002
#2	-.0002	1.612	-.0001	-.0007	-.0004	.0012	1.104	.0012	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.852**	**.1220**	**.0146**	**.0007**	**-.0005**	**.0002**	**.0064**	**.0019**	**-.0009**
Stddev	.001	.0004	.0001	.0002	.0001	.0001	.0005	.0001	.0000
%RSD	.0629	.2886	.3574	29.37	14.35	46.53	8.553	5.223	2.433
#1	1.853	.1217	.0145	.0005	-.0005	.0001	.0068	.0020	-.0009
#2	1.851	.1222	.0146	.0008	-.0006	.0002	.0060	.0019	-.0009

Raw Data MA19466 page 65 of 120

Sample Name: MC47789-5 Acquired: 9/16/2016 17:24:10 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11856.**	**5521.3**	**207970.**	**11353.**
Stddev	2.	1.4	426.	52.
%RSD	.02011	.02522	.20493	.45915
#1	11858.	5522.3	207660.	11316.
#2	11854.	5520.4	208270.	11390.

Raw Data MA19466 page 66 of 120

Sample Name: MC47789-6 Acquired: 9/16/2016 17:29:11 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0234**	**.0014**	**-.0005**	**.0100**	**.0633**	**-.0001**	**.0004**	**64.74**
Stddev	.0002	.0085	.0002	.0007	.0002	.0018	.0001	.0006	1.66
%RSD	73.39	36.40	12.02	137.4	2.367	2.830	49.28	133.8	2.564
#1	-.0001	.0294	.0016	-.0010	.0098	.0620	-.0002	.0000	63.57
#2	-.0004	.0174	.0013	-.0000	.0102	.0646	-.0001	.0008	65.91

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0003**	**.0019**	**.0003**	**.0820**	**2.779**	**.0039**	**10.32**	**.0047**
Stddev	.0002	.0000	.0002	.0004	.0017	.058	.0007	.27	.0000
%RSD	95.71	3.672	9.026	118.3	2.098	2.081	17.39	2.587	.1221
#1	.0004	-.0003	.0020	.0006	.0807	2.738	.0034	10.13	.0047
#2	.0001	-.0003	.0017	.0001	.0832	2.820	.0044	10.51	.0047

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**12.66**	**.0003**	**.0002**	**-.0005**	**.0015**	F **63.99**	**.0009**	**.0020**
Stddev	.0002	.29	.0003	.0010	.0003	.0004	.03	.0003	.0010
%RSD	172.2	2.252	123.3	461.9	76.72	27.81	.0433	32.09	50.69
#1	-.0000	12.46	.0005	-.0005	-.0007	.0012	64.01	.0007	.0013
#2	.0002	12.87	.0000	.0009	-.0002	.0018	63.97	.0012	.0027

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.451**	**.0000**	**.2124**	**.0013**	**-.0008**	**.0001**	**.0057**	**.0027**	**-.0011**
Stddev	.008	.0003	.0052	.0002	.0001	.0003	.0006	.0000	.0000
%RSD	.1872	911.0	2.437	18.05	14.41	207.5	10.97	1.672	1.585
#1	4.457	.0003	.2087	.0014	-.0009	-.0001	.0061	.0027	-.0011
#2	4.446	-.0002	.2160	.0011	-.0007	.0003	.0052	.0027	-.0011

Raw Data MA19466 page 67 of 120

Sample Name: MC47789-6 Acquired: 9/16/2016 17:29:11 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11327.**	**5434.9**	**204790.**	**11294.**
Stddev	35.	20.1	75.	160.
%RSD	.31185	.36908	.03654	1.4178
#1	11302.	5420.7	204840.	11407.
#2	11352.	5449.1	204730.	11181.

Raw Data MA19466 page 68 of 120

13.2 13

Sample Name: MC47789-7 Acquired: 9/16/2016 17:34:09 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0605**	**-.0002**	**.0004**	**.0087**	**.0167**	**-.0001**	**.0006**	**3.218**
Stddev	.0001	.0040	.0010	.0001	.0004	.0002	.0001	.0009	.037
%RSD	10.27	6.663	549.2	14.91	4.813	1.481	69.90	147.9	1.166
#1	-.0005	.0634	-.0009	.0004	.0084	.0165	-.0001	-.0000	3.191
#2	-.0005	.0577	.0005	.0003	.0090	.0168	-.0000	.0013	3.244

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0002**	**-.0000**	**.0001**	**.0092**	**.8083**	**.0007**	**.9197**	**.0148**
Stddev	.0000	.0000	.0002	.0002	.0004	.0113	.0004	.0448	.0001
%RSD	19.82	6.708	839.4	168.1	4.878	1.393	54.71	4.872	.4661
#1	.0001	-.0002	.0001	-.0000	.0089	.8004	.0004	.8880	.0148
#2	.0002	-.0002	-.0001	.0002	.0095	.8163	.0010	.9514	.0147

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**9.567**	**-.0002**	**-.0005**	**-.0002**	**-.0010**	**1.340**	**.0003**	**.0028**
Stddev	.0000	.065	.0002	.0003	.0003	.0003	.025	.0003	.0010
%RSD	16.29	.6806	80.93	52.70	123.9	30.28	1.848	114.8	36.16
#1	-.0001	9.521	-.0001	-.0003	-.0004	-.0012	1.323	.0005	.0021
#2	-.0002	9.613	-.0003	-.0007	-.0000	-.0008	1.358	.0001	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.559**	**.0002**	**.0372**	**.0006**	**-.0005**	**.0001**	**.0046**	**-.0003**	**-.0023**
Stddev	.068	.0001	.0004	.0002	.0001	.0001	.0004	.0000	.0001
%RSD	1.914	57.62	.9513	31.53	26.89	61.91	8.401	1.032	4.587
#1	3.511	.0001	.0370	.0008	-.0004	.0002	.0043	-.0002	-.0022
#2	3.607	.0003	.0375	.0005	-.0006	.0001	.0049	-.0003	-.0024

Raw Data MA19466 page 69 of 120

Sample Name: MC47789-7 Acquired: 9/16/2016 17:34:09 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11586.**	**5433.8**	**206960.**	**11219.**
Stddev	177.	83.2	1238.	12.
%RSD	1.5271	1.5316	.59818	.10552
#1	11711.	5492.6	206090.	11210.
#2	11461.	5374.9	207840.	11227.

Raw Data MA19466 page 70 of 120

Sample Name: MC47789-8 Acquired: 9/16/2016 17:39:09 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0271**	**.0009**	**.0003**	**.0146**	**.0586**	**-.0001**	**.0000**	**51.94**
Stddev	.0004	.0014	.0003	.0002	.0004	.0007	.0001	.0003	.29
%RSD	205.0	5.305	30.09	48.86	2.606	1.248	49.88	1624.	.5666
#1	-.0005	.0281	.0007	.0005	.0149	.0581	-.0001	-.0002	51.73
#2	.0001	.0261	.0010	.0002	.0143	.0591	-.0001	.0002	52.15

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0003**	**.0007**	**.0004**	**.0205**	**3.751**	**.0041**	**6.466**	**.0096**
Stddev	.0001	.0000	.0002	.0003	.0007	.040	.0006	.083	.0000
%RSD	21.21	5.232	22.84	71.54	3.568	1.062	15.29	1.286	.3332
#1	.0003	-.0003	.0006	.0006	.0210	3.723	.0036	6.407	.0096
#2	.0002	-.0002	.0009	.0002	.0200	3.779	.0045	6.525	.0096

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**11.86**	**-.0003**	**-.0001**	**-.0005**	**-.0032**	**43.49**	**.0007**	**.0017**
Stddev	.0000	.06	.0000	.0000	.0009	.0020	.13	.0007	.0001
%RSD	230.4	.5174	4.932	28.94	168.2	62.74	.2896	99.19	8.754
#1	.0000	11.82	-.0003	-.0001	-.0012	-.0046	43.40	.0011	.0018
#2	-.0000	11.90	-.0003	-.0001	.0001	-.0018	43.58	.0002	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.612**	**-.0007**	**.2004**	**.0016**	**-.0010**	**.0002**	**.0039**	**.0181**	**-.0019**
Stddev	.005	.0002	.0015	.0004	.0002	.0001	.0006	.0003	.0001
%RSD	.1016	22.77	.7415	21.62	23.40	41.25	16.10	1.385	2.987
#1	4.609	-.0006	.1993	.0014	-.0009	.0001	.0035	.0179	-.0018
#2	4.615	-.0008	.2014	.0019	-.0012	.0002	.0044	.0182	-.0019

Raw Data MA19466 page 71 of 120

Sample Name: MC47789-8 Acquired: 9/16/2016 17:39:09 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11408.**	**5450.1**	**204400.**	**11215.**
Stddev	11.	10.5	42.	12.
%RSD	.09545	.19242	.02047	.10363
#1	11400.	5442.6	204370.	11207.
#2	11415.	5457.5	204430.	11223.

Raw Data MA19466 page 72 of 120

13.2 13

Sample Name: MC47789-9 Acquired: 9/16/2016 17:44:07 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0664**	**.0009**	**.0000**	**.0492**	**.0188**	**-.0001**	**.0002**	**42.47**
Stddev	.0000	.0023	.0010	.0012	.0010	.0001	.0001	.0002	.37
%RSD	10.07	3.477	111.8	6344.	2.096	.3568	58.54	109.8	.8811
#1	-.0003	.0681	.0016	.0008	.0485	.0188	-.0002	.0000	42.21
#2	-.0003	.0648	.0002	-.0008	.0500	.0189	-.0001	.0004	42.74

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0005**	**.0013**	**-.0001**	**.0509**	**2.888**	**.0056**	**13.42**	**.0008**
Stddev	.0000	.0000	.0002	.0001	.0023	.041	.0017	.10	.0000
%RSD	21.30	9.709	13.61	82.13	4.485	1.421	31.14	.7495	1.074
#1	.0002	-.0005	.0014	-.0000	.0492	2.859	.0069	13.35	.0008
#2	.0001	-.0005	.0012	-.0002	.0525	2.917	.0044	13.49	.0007

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**54.46**	**-.0002**	**-.0010**	**-.0006**	**-.0011**	**4.118**	**.0004**	**.0034**
Stddev	.0001	.28	.0000	.0004	.0005	.0019	.069	.0004	.0010
%RSD	85.27	.5164	20.76	41.60	84.57	167.5	1.669	114.2	28.79
#1	-.0002	54.26	-.0002	-.0013	-.0009	.0002	4.070	.0006	.0027
#2	-.0001	54.66	-.0001	-.0007	-.0002	-.0025	4.167	.0001	.0041

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.005**	**-.0002**	**.2785**	**.0046**	**.0003**	**.0005**	**.0040**	**.0002**	**-.0060**
Stddev	.146	.0001	.0020	.0001	.0003	.0001	.0010	.0001	.0000
%RSD	1.626	56.52	.7068	1.710	99.99	26.40	23.77	32.52	.3049
#1	8.901	-.0001	.2771	.0046	.0001	.0005	.0034	.0002	-.0060
#2	9.108	-.0003	.2799	.0045	.0005	.0004	.0047	.0002	-.0060

Raw Data MA19466 page 73 of 120

Sample Name: MC47789-9 Acquired: 9/16/2016 17:44:07 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11014.**	**5332.4**	**202050.**	**11252.**
Stddev	142.	66.3	188.	31.
%RSD	1.2859	1.2425	.09305	.27573
#1	11114.	5379.3	201920.	11274.
#2	10914.	5285.6	202190.	11230.

Raw Data MA19466 page 74 of 120

Sample Name: MC47789-10 Acquired: 9/16/2016 17:49:06 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0514**	**.0005**	**.0000**	**.0487**	**.0186**	**-.0000**	**-.0005**	**42.41**
Stddev	.0004	.0059	.0005	.0001	.0001	.0001	.0000	.0003	.42
%RSD	65.16	11.41	101.2	302.1	.1315	.5515	185.5	64.41	.9840
#1	-.0008	.0473	.0001	.0001	.0486	.0186	.0000	-.0007	42.12
#2	-.0003	.0555	.0009	-.0000	.0487	.0187	-.0000	-.0003	42.71

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0005**	**.0014**	**.0002**	**.0418**	**2.884**	**.0053**	**13.41**	**.0007**
Stddev	.0000	.0001	.0002	.0001	.0013	.030	.0004	.08	.0001
%RSD	18.69	20.70	14.96	72.39	3.220	1.031	6.989	.5609	7.466
#1	.0003	-.0004	.0012	.0001	.0409	2.863	.0051	13.36	.0007
#2	.0002	-.0006	.0015	.0002	.0428	2.905	.0056	13.46	.0008

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**54.29**	**.0000**	**-.0005**	**-.0012**	**-.0004**	**4.083**	**.0006**	**.0019**
Stddev	.0001	.43	.0001	.0009	.0011	.0015	.002	.0000	.0003
%RSD	70.98	.7987	428.3	164.6	94.80	401.7	.0356	1.059	16.99
#1	-.0002	53.98	.0001	.0001	-.0020	-.0015	4.082	.0006	.0017
#2	-.0001	54.59	-.0000	-.0011	-.0004	.0007	4.084	.0006	.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.879**	**-.0004**	**.2759**	**.0040**	**-.0004**	**.0005**	**.0025**	**.0064**	**-.0060**
Stddev	.011	.0000	.0032	.0001	.0004	.0003	.0012	.0000	.0001
%RSD	.1209	6.674	1.157	1.446	90.05	55.85	47.97	.1452	.9315
#1	8.871	-.0004	.2737	.0040	-.0007	.0006	.0033	.0064	-.0060
#2	8.886	-.0004	.2782	.0040	-.0002	.0003	.0016	.0064	-.0059

Raw Data MA19466 page 75 of 120

Sample Name: MC47789-10 Acquired: 9/16/2016 17:49:06 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11124.**	**5391.8**	**201600.**	**11117.**
Stddev	1.	6.3	322.	22.
%RSD	.00948	.11760	.15968	.19762
#1	11125.	5387.3	201370.	11133.
#2	11124.	5396.3	201830.	11102.

Raw Data MA19466 page 76 of 120

13.2 13

Sample Name: MC47789-11 Acquired: 9/16/2016 17:54:06 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0485**	**.0003**	**.0009**	**.2536**	**.0081**	**-.0001**	**-.0003**	**15.62**
Stddev	.0000	.0024	.0005	.0007	.0001	.0000	.0001	.0003	.15
%RSD	11.46	4.929	194.5	74.25	.0417	.4322	117.0	91.17	.9433
#1	-.0004	.0469	.0007	.0014	.2536	.0081	-.0000	-.0001	15.51
#2	-.0005	.0502	-.0001	.0004	.2537	.0082	-.0002	-.0005	15.72

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0011**	**.0004**	**.0408**	**3.115**	**.0051**	**4.421**	**.0094**
Stddev	.0002	.0001	.0001	.0000	.0022	.029	.0002	.081	.0000
%RSD	126.2	63.69	11.93	11.85	5.304	.9258	3.276	1.842	.2102
#1	.0002	.0002	.0012	.0003	.0393	3.094	.0052	4.364	.0095
#2	.0000	.0001	.0010	.0004	.0423	3.135	.0050	4.479	.0094

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**21.20**	**.0003**	**-.0001**	**-.0009**	**.0020**	**5.791**	**.0003**	**.0032**
Stddev	.0001	.17	.0001	.0004	.0003	.0001	.007	.0005	.0006
%RSD	106.5	.7806	23.98	493.2	35.07	5.288	.1225	154.1	18.43
#1	-.0000	21.08	.0003	.0002	-.0011	.0019	5.786	.0007	.0036
#2	-.0002	21.32	.0004	-.0004	-.0007	.0021	5.796	-.0000	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.83**	**-.0007**	**.1309**	**.0026**	**-.0002**	**.0005**	**.0018**	**-.0000**	**-.0093**
Stddev	.09	.0002	.0007	.0002	.0004	.0001	.0005	.0001	.0001
%RSD	.6675	28.69	.5048	8.551	171.0	11.40	28.05	4168.	.7523
#1	13.77	-.0009	.1304	.0027	-.0005	.0005	.0022	.0001	-.0092
#2	13.90	-.0006	.1313	.0024	.0000	.0004	.0014	-.0001	-.0093

Raw Data MA19466 page 77 of 120

Sample Name: MC47789-11 Acquired: 9/16/2016 17:54:06 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11540.**	**5476.9**	**206400.**	**11366.**
Stddev	21.	7.2	591.	98.
%RSD	.18379	.13157	.28612	.86142
#1	11555.	5482.0	205980.	11435.
#2	11525.	5471.8	206810.	11296.

Raw Data MA19466 page 78 of 120

Sample Name: MC47789-12 Acquired: 9/16/2016 17:59:05 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0322**	**-.0002**	**.0008**	**.0232**	**.0016**	**-.0001**	**.0006**	**4.709**
Stddev	.0001	.0087	.0014	.0007	.0001	.0000	.0000	.0002	.060
%RSD	32.86	27.13	611.9	96.41	.5558	.6948	18.50	27.02	1.281
#1	-.0003	.0384	.0008	.0002	.0233	.0016	-.0001	.0007	4.667
#2	-.0004	.0260	-.0012	.0013	.0231	.0016	-.0001	.0005	4.752

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0002**	**.0009**	**-.0001**	**.0196**	**.8671**	**.0028**	**1.399**	**-.0002**
Stddev	.0000	.0000	.0000	.0002	.0001	.0129	.0005	.054	.0000
%RSD	40.87	8.924	1.943	155.2	.5131	1.486	19.05	3.844	11.90
#1	.0001	-.0002	.0009	-.0003	.0197	.8580	.0032	1.361	-.0002
#2	.0001	-.0002	.0009	.0000	.0196	.8762	.0024	1.437	-.0002

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**6.285**	**-.0001**	**-.0003**	**-.0005**	**.0005**	**2.561**	**-.0006**	**.0022**
Stddev	.0002	.020	.0001	.0011	.0001	.0002	.012	.0016	.0011
%RSD	134.5	.3233	131.3	327.0	25.97	39.69	.4795	273.0	48.70
#1	-.0000	6.270	-.0000	-.0011	-.0006	.0007	2.552	-.0017	.0029
#2	-.0002	6.299	-.0002	.0004	-.0004	.0004	2.569	.0005	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.878**	**.0002**	**.0273**	**.0019**	**-.0003**	**.0003**	**.0020**	**-.0011**	**-.0046**
Stddev	.016	.0003	.0001	.0001	.0000	.0003	.0001	.0000	.0000
%RSD	.2357	159.8	.2640	4.261	1.194	114.1	5.269	3.114	.1802
#1	6.867	.0004	.0273	.0019	-.0003	.0005	.0019	-.0011	-.0046
#2	6.890	-.0000	.0274	.0018	-.0003	.0001	.0021	-.0011	-.0046

Raw Data MA19466 page 79 of 120

Sample Name: MC47789-12 Acquired: 9/16/2016 17:59:05 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11873.**	**5561.0**	**209020.**	**11349.**
Stddev	42.	18.6	425.	20.
%RSD	.35438	.33374	.20330	.17481
#1	11903.	5574.1	208720.	11363.
#2	11844.	5547.9	209320.	11335.

Raw Data MA19466 page 80 of 120

13.2 13

Sample Name: CCV Acquired: 9/16/2016 18:04:06 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2498**	**9.935**	**2.015**	**1.995**	**2.013**	**2.025**	**1.987**	**2.047**	**9.973**
Stddev	.0003	.048	.003	.005	.003	.013	.013	.007	.090
%RSD	.1029	.4872	.1242	.2404	.1346	.6442	.6353	.3363	.9013
#1	.2500	9.901	2.013	1.999	2.011	2.016	1.978	2.042	9.909
#2	.2496	9.970	2.016	1.992	2.015	2.034	1.996	2.052	10.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**1.991**	**2.017**	**1.966**	**10.02**	**10.04**	**2.000**	**9.963**	**2.015**
Stddev	.004	.004	.001	.008	.07	.07	.011	.118	.000
%RSD	.1859	.2258	.0382	.4019	.6658	.7163	.5403	1.185	.0022
#1	2.015	1.988	2.018	1.972	9.969	9.987	1.993	9.880	2.015
#2	2.020	1.994	2.017	1.961	10.06	10.09	2.008	10.05	2.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.022**	**9.907**	**1.994**	**1.985**	**1.998**	**2.023**	**2.036**	**2.015**	**2.009**
Stddev	.004	.036	.006	.004	.005	.001	.005	.004	.002
%RSD	.2081	.3609	.2825	.1928	.2632	.0398	.2718	.2059	.1093
#1	2.019	9.882	1.990	1.982	2.002	2.024	2.040	2.012	2.007
#2	2.025	9.932	1.998	1.988	1.994	2.022	2.032	2.018	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19466 page 81 of 120

Sample Name: CCV Acquired: 9/16/2016 18:04:06 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.028**	**2.051**	**2.050**	**2.029**	**2.009**	**2.038**	**2.021**	**2.030**	**1.992**
Stddev	.005	.006	.014	.001	.002	.003	.013	.003	.004
%RSD	.2623	.3152	.6696	.0544	.0875	.1347	.6653	.1448	.1875
#1	2.024	2.046	2.041	2.030	2.008	2.040	2.012	2.028	1.995
#2	2.032	2.055	2.060	2.028	2.011	2.037	2.031	2.032	1.990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11393.**	**5504.4**	**205540.**	**11333.**
Stddev	22.	9.0	404.	1.
%RSD	.19575	.16296	.19642	.00504
#1	11408.	5510.7	205820.	11333.
#2	11377.	5498.0	205250.	11333.

Raw Data MA19466 page 82 of 120

Sample Name: CCB Acquired: 9/16/2016 18:08:53 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0046**	**.0008**	**.0021**	**.0024**	**.0004**	**.0002**	**.0003**	**-.0076**
Stddev	.0003	.0020	.0002	.0001	.0000	.0001	.0000	.0000	.0054
%RSD	75.48	43.30	32.88	6.680	.1723	13.63	4.813	15.21	71.77
#1	-.0002	.0060	.0009	.0021	.0024	.0003	.0002	.0003	-.0114
#2	-.0007	.0032	.0006	.0020	.0024	.0004	.0002	.0004	-.0037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0003**	**.0004**	**.0001**	**.0054**	**.0136**	**.0007**	**-.0051**	**.0002**
Stddev	.0000	.0002	.0001	.0002	.0014	.0021	.0013	.0255	.0000
%RSD	1.138	69.81	33.94	134.7	26.27	15.14	185.1	497.2	2.258
#1	.0003	.0002	.0003	.0000	.0044	.0122	.0016	-.0232	.0002
#2	.0003	.0004	.0005	.0003	.0064	.0151	-.0002	.0129	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**-.0144**	**.0001**	**.0003**	**.0005**	**.0023**	**-.0013**	**.0008**	**.0013**
Stddev	.0000	.0032	.0000	.0008	.0010	.0008	.0009	.0001	.0006
%RSD	3.560	22.02	8.859	282.0	183.9	35.11	70.90	14.83	45.13
#1	.0006	-.0121	.0001	-.0003	-.0002	.0028	-.0019	.0009	.0009
#2	.0006	-.0166	.0002	.0008	.0012	.0017	-.0006	.0007	.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19466 page 83 of 120

Sample Name: CCB Acquired: 9/16/2016 18:08:53 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0090**	**.0002**	**.0002**	**.0017**	**.0003**	**.0004**	F **.0113**	**-.0008**	**.0019**
Stddev	.0005	.0004	.0000	.0000	.0001	.0000	.0008	.0000	.0001
%RSD	5.071	177.5	7.546	1.688	30.74	.3894	7.145	4.461	4.336
#1	.0093	.0005	.0003	.0017	.0002	.0004	.0118	-.0008	.0020
#2	.0087	-.0001	.0002	.0018	.0004	.0004	.0107	-.0008	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**12009.**	**5601.5**	**210980.**	**11359.**
Stddev	31.	22.4	80.	2.
%RSD	.25863	.40046	.03772	.01891
#1	12031.	5617.3	210920.	11360.
#2	11987.	5585.6	211030.	11357.

Raw Data MA19466 page 84 of 120

13.2 13

Sample Name: MC47789-13 Acquired: 9/16/2016 18:13:54 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0102**	**.0008**	**.0007**	**.1799**	**.0089**	**-.0000**	**-.0002**	**13.15**
Stddev	.0000	.0052	.0007	.0003	.0003	.0001	.0000	.0000	.07
%RSD	33.67	51.25	81.36	41.51	.1761	1.170	420.1	22.34	.5082
#1	-.0001	.0065	.0013	.0009	.1801	.0088	.0000	-.0002	13.11
#2	-.0000	.0139	.0003	.0005	.1796	.0089	-.0000	-.0002	13.20
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0004**	**.0002**	**.0495**	**3.322**	**.0045**	**3.340**	**.0700**
Stddev	.0001	.0001	.0001	.0000	.0012	.006	.0004	.035	.0003
%RSD	32.97	165.9	14.30	8.425	2.474	.1830	9.353	1.039	.3708
#1	.0002	.0001	.0004	.0002	.0504	3.317	.0048	3.316	.0702
#2	.0003	-.0000	.0005	.0002	.0486	3.326	.0042	3.365	.0698
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**21.55**	**.0003**	**.0001**	**-.0004**	**.0010**	**6.154**	**.0002**	**.0015**
Stddev	.0001	.05	.0002	.0011	.0002	.0012	.011	.0006	.0001
%RSD	88.31	.2423	72.29	2194.	46.23	111.5	.1830	348.1	3.460
#1	.0001	21.51	.0004	-.0008	-.0005	.0019	6.146	.0006	.0015
#2	.0000	21.58	.0001	.0009	-.0003	.0002	6.162	-.0003	.0016
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.90**	**-.0002**	**.1468**	**.0010**	**-.0007**	**.0002**	**.0106**	**-.0007**	**-.0067**
Stddev	.00	.0001	.0005	.0000	.0007	.0001	.0004	.0000	.0001
%RSD	.0195	64.38	.3739	1.584	100.7	36.25	3.953	1.366	1.587
#1	10.90	-.0001	.1464	.0010	-.0002	.0002	.0109	-.0007	-.0068
#2	10.91	-.0003	.1472	.0011	-.0012	.0003	.0103	-.0007	-.0066

Sample Name: MC47789-13 Acquired: 9/16/2016 18:13:54 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11702.**	**5555.0**	**208190.**	**11390.**
Stddev	2.	9.8	1398.	.
%RSD	.01330	.17584	.67160	.00239
#1	11703.	5548.1	207200.	11390.
#2	11700.	5561.9	209180.	11390.

Sample Name: MC47789-14 Acquired: 9/16/2016 18:18:53 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0524**	**.0007**	**.0043**	**.1194**	**.1711**	**-.0002**	**.0011**	**60.29**
Stddev	.0001	.0023	.0004	.0002	.0004	.0011	.0001	.0008	.39
%RSD	17.55	4.354	56.79	3.825	.3409	.6347	35.92	76.89	.6540
#1	-.0007	.0540	.0010	.0042	.1197	.1704	-.0002	.0017	60.01
#2	-.0009	.0508	.0004	.0044	.1192	.1719	-.0001	.0005	60.57
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0064**	**.0011**	**.0010**	**1.213**	**42.57**	**.0063**	**10.53**	**14.95**
Stddev	.0000	.0000	.0002	.0004	.015	.15	.0008	.04	.02
%RSD	2.314	.5407	17.78	40.43	1.240	.3486	12.26	.4097	.1120
#1	.0010	.0064	.0012	.0007	1.202	42.47	.0058	10.50	14.93
#2	.0010	.0064	.0009	.0013	1.223	42.68	.0068	10.56	14.96
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**99.26**	**.0036**	**-.0004**	**-.0008**	**-.0022**	**27.20**	**.0002**	**.0006**
Stddev	.0001	.49	.0003	.0004	.0002	.0035	.04	.0001	.0017
%RSD	9.126	.4922	8.340	97.06	22.29	156.9	.1551	23.10	312.3
#1	.0012	98.91	.0038	-.0001	-.0010	.0002	27.23	.0002	-.0007
#2	.0011	99.61	.0034	-.0007	-.0007	-.0047	27.17	.0003	.0018
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.466**	**-.0007**	**.6753**	**.0023**	**.0073**	**.0018**	**.0072**	**.0033**	**-.0040**
Stddev	.010	.0004	.0035	.0000	.0009	.0003	.0005	.0001	.0000
%RSD	.1341	61.26	.5156	1.028	11.67	17.81	6.533	3.371	.3822
#1	7.473	-.0004	.6729	.0023	.0067	.0020	.0075	.0033	-.0040
#2	7.459	-.0010	.6778	.0022	.0079	.0016	.0069	.0032	-.0040

Sample Name: MC47789-14 Acquired: 9/16/2016 18:18:53 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10713.**	**5266.9**	**197780.**	**11082.**
Stddev	18.	7.0	1.	47.
%RSD	.16723	.13273	.00056	.41967
#1	10700.	5262.0	197780.	11115.
#2	10726.	5271.9	197780.	11049.

Sample Name: MC47789-15 Acquired: 9/16/2016 18:23:57 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0077**	**.0009**	**.0001**	**.0357**	**.0211**	**-.0001**	**.0002**	**19.38**
Stddev	.0000	.0016	.0012	.0006	.0002	.0002	.0000	.0008	.26
%RSD	7.355	21.18	135.5	685.3	.4349	.9317	26.40	379.1	1.337
#1	-.0004	.0089	.0017	.0005	.0356	.0210	-.0001	-.0004	19.20
#2	-.0005	.0066	.0000	-.0003	.0358	.0212	-.0002	.0008	19.57
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0004**	**.0013**	**-.0001**	**.0251**	**2.660**	**.0037**	**5.248**	**.0040**
Stddev	.0001	.0001	.0003	.0001	.0011	.026	.0008	.114	.0003
%RSD	88.59	27.31	21.00	169.1	4.387	.9870	22.83	2.165	7.541
#1	.0002	-.0005	.0015	.0000	.0243	2.641	.0031	5.168	.0042
#2	.0000	-.0003	.0011	-.0001	.0259	2.678	.0043	5.329	.0038
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**64.07**	**.0000**	**-.0003**	**-.0009**	**-.0019**	**5.510**	**.0004**	**.0012**
Stddev	.0000	.87	.0001	.0010	.0002	.0005	.018	.0008	.0003
%RSD	80.55	1.359	219.2	365.3	19.61	24.94	.3304	217.5	24.39
#1	-.0000	63.46	-.0000	.0004	-.0008	-.0023	5.497	.0009	.0010
#2	-.0001	64.69	.0001	-.0010	-.0010	-.0016	5.523	-.0002	.0014
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.375**	**-.0005**	**.1500**	**.0011**	**-.0004**	**.0004**	**.0057**	**-.0007**	**-.0054**
Stddev	.007	.0000	.0025	.0001	.0007	.0001	.0001	.0000	.0000
%RSD	.0885	3.186	1.650	12.98	196.4	30.09	2.079	2.832	.4905
#1	8.370	-.0005	.1483	.0010	.0001	.0003	.0058	-.0007	-.0054
#2	8.380	-.0005	.1518	.0012	-.0009	.0005	.0056	-.0007	-.0054

Sample Name: MC47789-15 Acquired: 9/16/2016 18:23:57 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11290.**	**5464.0**	**205050.**	**11346.**
Stddev	3.	1.3	1021.	54.
%RSD	.02725	.02382	.49791	.47535
#1	11287.	5464.9	204330.	11384.
#2	11292.	5463.1	205770.	11308.

Sample Name: MC47789-16 Acquired: 9/16/2016 18:28:56 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0039**	**.0007**	**.0003**	**.0482**	**.0744**	**-.0001**	**.0002**	**38.16**
Stddev	.0001	.0105	.0003	.0005	.0006	.0003	.0001	.0011	.22
%RSD	17.31	266.6	46.23	159.7	1.171	.4464	114.2	463.2	.5842
#1	-.0007	.0114	.0009	.0007	.0478	.0741	-.0000	-.0006	38.00
#2	-.0006	-.0035	.0005	-.0000	.0486	.0746	-.0002	.0011	38.32
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0002**	**.0007**	**.0003**	**.0087**	**5.977**	**.0032**	**8.618**	**.9522**
Stddev	.0001	.0001	.0000	.0000	.0014	.016	.0009	.093	.0018
%RSD	20.94	58.10	3.269	13.69	15.74	.2624	28.78	1.077	.1882
#1	.0003	.0001	.0008	.0003	.0077	5.966	.0038	8.553	.9509
#2	.0002	.0003	.0007	.0003	.0096	5.988	.0025	8.684	.9535
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**31.45**	**.0002**	**-.0003**	**-.0010**	**.0026**	**7.321**	**.0005**	**.0021**
Stddev	.0001	.12	.0002	.0003	.0001	.0018	.002	.0001	.0006
%RSD	9.446	.3874	78.87	84.36	5.667	68.33	.0201	28.54	26.20
#1	.0006	31.36	.0004	-.0005	-.0010	.0039	7.320	.0006	.0017
#2	.0007	31.54	.0001	-.0001	-.0010	.0013	7.322	.0004	.0025
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.93**	**-.0004**	**.2666**	**.0008**	**-.0001**	**.0007**	**.0047**	**.0072**	**-.0078**
Stddev	.00	.0005	.0014	.0000	.0003	.0000	.0000	.0001	.0000
%RSD	.0061	105.2	.5255	3.188	178.8	2.900	.2474	1.143	.1104
#1	11.93	-.0008	.2656	.0008	-.0003	.0007	.0047	.0072	-.0078
#2	11.93	-.0001	.2676	.0008	.0000	.0007	.0047	.0071	-.0078

Sample Name: MC47789-16 Acquired: 9/16/2016 18:28:56 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11331.**	**5436.9**	**203360.**	**11230.**
Stddev	11.	7.7	358.	41.
%RSD	.10096	.14177	.17588	.36525
#1	11323.	5431.4	203610.	11259.
#2	11339.	5442.3	203110.	11201.

Sample Name: MC47789-17 Acquired: 9/16/2016 18:33:55 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0257**	**-.0007**	**.0006**	**.0472**	**.0101**	**-.0000**	**-.0004**	**6.808**
Stddev	.0001	.0037	.0009	.0004	.0005	.0001	.0000	.0004	.073
%RSD	23.62	14.30	128.4	64.24	1.074	1.156	77.54	117.5	1.073
#1	-.0005	.0231	-.0014	.0003	.0476	.0101	-.0000	-.0001	6.757
#2	-.0004	.0283	-.0001	.0009	.0469	.0102	-.0001	-.0007	6.860
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0002**	**.0004**	**.0004**	**.0600**	**2.269**	**.0011**	**.5904**	**.0491**
Stddev	.0000	.0001	.0002	.0004	.0004	.016	.0008	.0106	.0000
%RSD	17.29	63.01	59.45	103.9	.6931	.7126	73.39	1.791	.0463
#1	.0002	.0001	.0002	.0007	.0597	2.257	.0016	.5979	.0492
#2	.0003	.0003	.0005	.0001	.0603	2.280	.0005	.5829	.0491
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**16.54**	**.0006**	**-.0002**	**-.0005**	**.0020**	**10.66**	**.0002**	**.0012**
Stddev	.0001	.07	.0001	.0005	.0006	.0019	.02	.0000	.0014
%RSD	179.5	.4271	25.97	322.1	119.7	96.58	.1753	6.578	112.5
#1	-.0001	16.49	.0007	.0002	-.0010	.0006	10.65	.0002	.0002
#2	.0000	16.59	.0005	-.0005	-.0001	.0034	10.68	.0002	.0022
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.610**	**-.0001**	**.0628**	**.0013**	**-.0005**	**.0003**	**.0035**	**.0071**	**-.0047**
Stddev	.003	.0003	.0006	.0003	.0008	.0002	.0003	.0000	.0001
%RSD	.0430	335.0	.9116	23.31	139.9	58.93	8.360	.2869	2.460
#1	7.608	-.0003	.0624	.0015	-.0000	.0005	.0037	.0071	-.0048
#2	7.613	.0001	.0632	.0010	-.0011	.0002	.0033	.0071	-.0046

Sample Name: MC47789-17 Acquired: 9/16/2016 18:33:55 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11649.**	**5477.1**	**205900.**	**11283.**
Stddev	4.	.9	83.	11.
%RSD	.03734	.01632	.04044	.10064
#1	11646.	5476.5	205840.	11291.
#2	11652.	5477.7	205960.	11275.

Sample Name: MC47789-18 Acquired: 9/16/2016 18:38:55 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**1.813**	**.0014**	**.0003**	**.1281**	**.0312**	**-.0000**	**.0010**	**36.81**
Stddev	.0001	.031	.0003	.0004	.0006	.0001	.0001	.0001	.14
%RSD	38.39	1.733	18.38	118.8	.4449	.3523	364.8	5.757	.3833
#1	-.0002	1.791	.0012	.0006	.1277	.0311	-.0001	.0009	36.71
#2	-.0004	1.835	.0016	.0001	.1285	.0313	.0000	.0010	36.91
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0004**	**.0020**	**.0010**	**1.563**	**4.994**	**.0038**	**3.652**	**.1476**
Stddev	.0001	.0001	.0001	.0001	.008	.004	.0001	.053	.0002
%RSD	130.6	27.67	4.061	7.001	.5388	.0701	2.021	1.441	.1325
#1	.0000	.0003	.0020	.0010	1.557	4.996	.0039	3.615	.1477
#2	.0001	.0005	.0021	.0009	1.569	4.991	.0038	3.689	.1475
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**21.09**	**.0012**	**.0002**	**-.0004**	**-.0006**	**18.62**	**.0002**	**.0023**
Stddev	.0002	.08	.0000	.0006	.0012	.0004	.06	.0002	.0010
%RSD	52.72	.3902	3.714	354.0	285.1	63.36	.3222	152.0	41.94
#1	.0006	21.03	.0012	-.0003	-.0013	-.0008	18.58	-.0000	.0030
#2	.0003	21.15	.0012	.0006	.0004	-.0003	18.67	.0003	.0016
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.792**	**-.0007**	**.1680**	**.1000**	**-.0002**	**.0035**	**.0039**	**.0242**	**-.0042**
Stddev	.002	.0004	.0005	.0016	.0005	.0002	.0003	.0001	.0000
%RSD	.0260	52.31	.3169	1.615	318.7	5.423	7.575	.4299	.2346
#1	7.791	-.0010	.1676	.1012	.0002	.0034	.0037	.0241	-.0042
#2	7.793	-.0005	.1684	.0989	-.0005	.0037	.0041	.0243	-.0042

Sample Name: MC47789-18 Acquired: 9/16/2016 18:38:55 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11361.**	**5429.7**	**203970.**	**11196.**
Stddev	11.	1.1	107.	9.
%RSD	.09753	.02048	.05270	.07675
#1	11369.	5428.9	203900.	11190.
#2	11353.	5430.5	204050.	11203.

Sample Name: MC47774-6 Acquired: 9/16/2016 18:43:54 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0765**	**.0006**	**-.0010**	**.1328**	**.5861**	**-.0001**	**.0019**	**518.0**
Stddev	.0002	.0065	.0004	.0002	.0015	.0033	.0000	.0001	4.7
%RSD	405.5	8.497	70.38	23.68	1.132	.5658	28.32	5.243	.9024
#1	-.0001	.0811	.0009	-.0012	.1339	.5838	-.0001	.0020	514.7
#2	.0002	.0719	.0003	-.0008	.1318	.5885	-.0001	.0019	521.3
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**.0200**	**.0007**	**.0101**	**.0548**	**2.468**	**.0350**	**13.15**	**4.886**
Stddev	.0001	.0000	.0002	.0001	.0025	.040	.0010	.13	.010
%RSD	3.298	.0850	24.52	.9527	4.511	1.627	2.899	1.007	.2062
#1	.0017	.0199	.0006	.0102	.0530	2.440	.0343	13.05	4.893
#2	.0018	.0200	.0008	.0100	.0565	2.496	.0358	13.24	4.879
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	F **1275.**	**.0436**	**6.582**	**-.0031**	**-.0006**	**1.293**	**-.0011**	**.0019**
Stddev	.0000	5.	.0005	.021	.0002	.0014	.001	.0000	.0004
%RSD	6.053	.3727	1.050	.3130	7.408	228.7	.0480	3.900	18.91
#1	.0002	1271.	.0433	6.568	-.0033	.0004	1.292	-.0010	.0017
#2	.0002	1278.	.0440	6.597	-.0030	-.0016	1.293	-.0011	.0022
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.575**	**.0001**	**1.287**	**.0013**	**.0056**	**.0014**	**.0038**	**.0484**	**-.0011**
Stddev	.001	.0001	.008	.0000	.0007	.0004	.0004	.0000	.0001
%RSD	.0507	148.8	.6014	2.290	11.83	28.21	10.17	.0147	7.427
#1	2.576	.0002	1.282	.0013	.0051	.0017	.0035	.0484	-.0011
#2	2.575	-.0000	1.293	.0014	.0061	.0012	.0041	.0484	-.0012

Sample Name: MC47774-6 Acquired: 9/16/2016 18:43:54 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8741.3**	**4672.5**	**175960.**	**10774.**
Stddev	19.2	11.0	366.	50.
%RSD	.21976	.23518	.20776	.46830
#1	8754.9	4680.3	175700.	10809.
#2	8727.7	4664.8	176220.	10738.

Sample Name: MC47774-7 Acquired: 9/16/2016 18:49:08 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0605**	**.0014**	**-.0018**	**.1594**	**.6561**	**-.0001**	**.0024**	F **642.0**
Stddev	.0001	.0092	.0012	.0009	.0004	.0015	.0000	.0004	8.3
%RSD	18.12	15.26	85.12	52.72	.2545	.2301	15.68	15.53	1.291
#1	.0004	.0540	.0023	-.0011	.1591	.6551	-.0001	.0021	636.1
#2	.0006	.0671	.0006	-.0025	.1597	.6572	-.0001	.0027	647.8
Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032**	**.0039**	**.0013**	**.0279**	**.0530**	**6.346**	**.0573**	**12.17**	**2.296**
Stddev	.0000	.0000	.0000	.0004	.0011	.014	.0013	.01	.004
%RSD	1.194	.6464	3.160	1.509	2.015	.2152	2.211	.0605	.1625
#1	.0032	.0039	.0013	.0276	.0522	6.356	.0564	12.16	2.299
#2	.0032	.0039	.0014	.0282	.0537	6.336	.0582	12.17	2.294
Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	F **1274.**	**.0617**	**.5913**	**-.0032**	**-.0023**	**3.920**	**.0002**	**.0032**
Stddev	.0002	20.	.0001	.0023	.0002	.0020	.009	.0007	.0010
%RSD	20.98	1.598	.2266	.3931	6.717	86.13	.2407	357.3	32.20
#1	.0006	1289.	.0616	.5897	-.0033	-.0009	3.913	-.0003	.0025
#2	.0009	1260.	.0618	.5930	-.0030	-.0036	3.927	.0007	.0040
Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.840**	**.0001**	**2.513**	**.0016**	**.0035**	**.0016**	**.0038**	**.0724**	**-.0021**
Stddev	.000	.0002	.010	.0001	.0015	.0001	.0003	.0002	.0000
%RSD	.0116	235.1	.3895	4.516	42.90	4.761	7.582	.2941	.8431
#1	3.841	-.0001	2.506	.0016	.0024	.0016	.0036	.0726	-.0021
#2	3.840	.0002	2.520	.0015	.0045	.0015	.0040	.0723	-.0021

Sample Name: MC47774-7 Acquired: 9/16/2016 18:49:08 Type: Unk
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8650.5**	**4611.4**	**173930.**	**10740.**
Stddev	14.7	1.6	288.	25.
%RSD	.17017	.03409	.16582	.22992
#1	8660.9	4612.5	173720.	10722.
#2	8640.0	4610.3	174130.	10757.

Inst QC: MA19466

Sample Name: MC47792-1A   Acquired: 9/16/2016 18:54:16   Type: Unk
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.3533**	**.0016**	**-.0006**	**.1031**	**.3642**	**.0002**	**.0003**	**60.32**
Stddev	.0003	.0041	.0001	.0010	.0008	.0031	.0001	.0010	.20
%RSD	76.95	1.171	8.321	162.7	.7663	.8618	30.19	331.4	.3296
#1	-.0007	.3562	.0017	-.0013	.1026	.3619	.0002	-.0004	60.18
#2	-.0002	.3504	.0015	.0001	.1037	.3664	.0001	.0010	60.46

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**.0122**	**.0012**	**.0141**	**.0339**	**8.495**	**.0132**	**3.219**	**.7432**
Stddev	.0001	.0001	.0001	.0001	.0003	.054	.0004	.008	.0019
%RSD	5.490	1.098	5.158	.5734	.7744	.6349	3.259	.2461	.2542
#1	.0025	.0121	.0011	.0142	.0337	8.457	.0129	3.213	.7419
#2	.0027	.0122	.0012	.0141	.0340	8.533	.0135	3.224	.7446

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	F **1281.**	**.0080**	**.0361**	**-.0004**	**-.0018**	**1.404**	**-.0005**	**.0026**
Stddev	.0002	15.	.0001	.0008	.0003	.0021	.006	.0005	.0002
%RSD	45.16	1.182	1.313	2.088	82.73	117.9	.4616	116.2	6.337
#1	.0003	1292.	.0081	.0366	-.0007	-.0033	1.399	-.0008	.0027
#2	.0006	1270.	.0079	.0355	-.0002	-.0003	1.408	-.0001	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.584**	**.0008**	**.3224**	**.0011**	**.0020**	**.0008**	**.0027**	**.0708**	**-.0026**
Stddev	.037	.0003	.0007	.0002	.0001	.0001	.0000	.0005	.0001
%RSD	.8039	37.87	.2296	15.81	4.088	16.35	1.617	.6744	3.005
#1	4.558	.0006	.3219	.0009	.0021	.0009	.0027	.0704	-.0026
#2	4.610	.0010	.3229	.0012	.0019	.0007	.0027	.0711	-.0025

Raw Data MA19466 page 101 of 120

Sample Name: MC47792-1A   Acquired: 9/16/2016 18:54:16   Type: Unk
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9124.4**	**4859.7**	**179880.**	**10962.**
Stddev	42.4	23.5	511.	4.
%RSD	.46425	.48353	.28380	.03841
#1	9154.4	4876.3	180240.	10965.
#2	9094.5	4843.1	179520.	10959.

Raw Data MA19466 page 102 of 120

Sample Name: MC47792-2A   Acquired: 9/16/2016 18:59:20   Type: Unk
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.4232**	**.0009**	**.0002**	**.1122**	**.3876**	**.0002**	**.0008**	**110.3**
Stddev	.0004	.0047	.0004	.0001	.0005	.0012	.0000	.0009	.4
%RSD	103.9	1.112	50.74	41.44	.4338	.3199	4.869	114.6	.3971
#1	-.0007	.4199	.0012	.0002	.1118	.3868	.0002	.0002	110.0
#2	-.0001	.4266	.0006	.0003	.1125	.3885	.0002	.0015	110.6

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021**	**.0118**	**.0021**	**.0205**	**.0569**	**8.962**	**.0163**	**3.589**	**1.025**
Stddev	.0000	.0000	.0002	.0000	.0028	.029	.0002	.003	.001
%RSD	.3075	.0729	7.981	.1777	4.886	.3235	1.373	.0713	.0687
#1	.0021	.0118	.0022	.0205	.0589	8.941	.0161	3.587	1.026
#2	.0021	.0118	.0019	.0205	.0550	8.982	.0165	3.591	1.025

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	F **1201.**	**.0095**	**.0321**	**-.0013**	**-.0028**	**2.712**	**-.0002**	**.0009**
Stddev	.0003	12.	.0002	.0007	.0002	.0009	.004	.0001	.0012
%RSD	50.31	1.026	2.251	2.234	17.51	30.21	.1588	42.44	139.2
#1	.0004	1209.	.0096	.0326	-.0012	-.0022	2.715	-.0003	.0017
#2	.0008	1192.	.0093	.0316	-.0015	-.0034	2.709	-.0002	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.740**	**.0009**	**.4367**	**.0010**	**.0018**	**.0012**	**.0024**	**.0835**	**-.0039**
Stddev	.006	.0010	.0014	.0000	.0010	.0003	.0003	.0003	.0001
%RSD	.0908	112.9	.3228	3.581	58.74	24.61	12.14	.3178	2.058
#1	6.736	.0002	.4357	.0010	.0010	.0014	.0022	.0837	-.0038
#2	6.745	.0015	.4377	.0011	.0025	.0010	.0026	.0834	-.0039

Raw Data MA19466 page 103 of 120

Sample Name: MC47792-2A   Acquired: 9/16/2016 18:59:20   Type: Unk
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9169.5**	**4901.8**	**180820.**	**10964.**
Stddev	8.5	2.2	387.	17.
%RSD	.09285	.04479	.21399	.15738
#1	9163.5	4900.3	180550.	10951.
#2	9175.5	4903.4	181090.	10976.

Raw Data MA19466 page 104 of 120

13.2 13

Inst QC: MA19466

Sample Name: CCV   Acquired: 9/16/2016 19:04:24   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2489**	**9.982**	**1.999**	**1.980**	**1.988**	**2.048**	**2.001**	**2.025**	**10.01**
Stddev	.0005	.045	.001	.003	.004	.005	.003	.001	.04
%RSD	.1939	.4489	.0226	.1415	.1737	.2240	.1538	.0629	.3934
#1	.2492	9.950	1.999	1.978	1.990	2.045	1.999	2.024	9.982
#2	.2486	10.01	1.999	1.982	1.985	2.051	2.003	2.026	10.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.992**	**1.970**	**2.009**	**1.964**	**10.10**	**10.20**	**2.013**	**10.11**	**2.005**
Stddev	.000	.001	.001	.000	.07	.02	.003	.06	.001
%RSD	.0162	.0289	.0441	.0184	.6524	.2074	.1291	.5646	.0713
#1	1.992	1.970	2.009	1.964	10.05	10.19	2.011	10.07	2.006
#2	1.992	1.971	2.008	1.964	10.15	10.22	2.015	10.15	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.005**	**10.35**	**1.977**	**1.968**	**1.981**	**2.007**	**2.013**	**1.999**	**1.993**
Stddev	.000	.02	.002	.003	.001	.012	.000	.002	.001
%RSD	.0215	.2135	.0812	.1478	.0634	.5846	.0202	.0806	.0289
#1	2.005	10.33	1.976	1.966	1.980	2.015	2.014	1.998	1.993
#2	2.004	10.36	1.979	1.970	1.982	1.999	2.013	2.000	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19466 page 105 of 120

Sample Name: CCV   Acquired: 9/16/2016 19:04:24   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.995**	**2.040**	**2.059**	**2.023**	**1.996**	**2.031**	**2.001**	**2.012**	**1.975**
Stddev	.003	.000	.004	.001	.004	.000	.012	.000	.001
%RSD	.1431	.0017	.1747	.0232	.2218	.0123	.6202	.0208	.0296
#1	1.993	2.040	2.057	2.023	1.993	2.031	1.992	2.012	1.975
#2	1.997	2.040	2.062	2.024	1.999	2.031	2.010	2.011	1.975
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11476.**	**5549.3**	**207130.**	**11252.**
Stddev	6.	.6	258.	36.
%RSD	.05149	.01045	.12441	.32250
#1	11480.	5548.9	206950.	11278.
#2	11472.	5549.8	207320.	11227.

Raw Data MA19466 page 106 of 120

Sample Name: CCB   Acquired: 9/16/2016 19:09:13   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0001**	**.0019**	**.0020**	**.0027**	**.0005**	**.0001**	**.0006**	**.0002**
Stddev	.0001	.0130	.0001	.0004	.0001	.0000	.0000	.0008	.0018
%RSD	45.51	13860.	7.336	19.05	3.616	6.810	37.97	117.5	805.8
#1	-.0003	.0093	.0018	.0017	.0027	.0005	.0002	.0012	.0015
#2	-.0002	-.0091	.0020	.0022	.0028	.0005	.0001	.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0001**	**.0003**	**-.0000**	**.0056**	**.0257**	**.0029**	**.0024**	**.0002**
Stddev	.0000	.0001	.0002	.0001	.0028	.0173	.0002	.0049	.0000
%RSD	6.013	98.15	74.06	243.6	49.93	67.23	5.330	201.0	7.876
#1	.0003	.0000	.0001	.0000	.0076	.0379	.0030	.0059	.0001
#2	.0003	.0002	.0004	-.0001	.0036	.0135	.0028	-.0010	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.1400**	**.0002**	**-.0000**	**.0014**	**-.0002**	**.0001**	**.0002**	**.0016**
Stddev	.0001	.0046	.0001	.0004	.0011	.0008	.0011	.0002	.0023
%RSD	10.63	3.293	72.60	1699.	81.70	498.0	799.2	94.30	143.5
#1	.0004	.1368	.0001	-.0003	.0021	-.0008	-.0006	.0003	-.0000
#2	.0005	.1433	.0003	.0003	.0006	.0004	.0009	.0001	.0032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19466 page 107 of 120

Sample Name: CCB   Acquired: 9/16/2016 19:09:13   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**-.0000**	**.0002**	**.0016**	**.0003**	**.0002**	F **.0098**	**-.0008**	**.0017**
Stddev	.0004	.0001	.0001	.0001	.0005	.0001	.0013	.0000	.0002
%RSD	14.53	216.1	29.33	4.541	152.4	35.64	13.06	4.194	14.65
#1	.0031	-.0001	.0002	.0017	-.0000	.0002	.0107	-.0009	.0019
#2	.0025	.0000	.0003	.0016	.0007	.0001	.0089	-.0008	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**12039.**	**5625.0**	**210980.**	**11297.**
Stddev	56.	24.5	473.	36.
%RSD	.46754	.43599	.22425	.31894
#1	12079.	5642.4	211320.	11323.
#2	11999.	5607.7	210650.	11272.

Raw Data MA19466 page 108 of 120

13.2 13

Inst QC: MA19466

Sample Name: CRI   Acquired: 9/16/2016 19:14:15   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0049**	**.2175**	**.0043**	**.0499**	**.1075**	**.0523**	**.0042**	**.0529**	**5.133**
Stddev	.0001	.0034	.0005	.0009	.0004	.0001	.0000	.0002	.024
%RSD	2.761	1.558	11.70	1.892	.3417	.2466	.6149	.3796	.4615
#1	.0048	.2151	.0040	.0493	.1072	.0522	.0042	.0527	5.116
#2	.0050	.2199	.0047	.0506	.1077	.0523	.0041	.0530	5.150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043**	**.0502**	**.0101**	**.0247**	**.1036**	**5.211**	**.5090**	**5.079**	**.0155**
Stddev	.0000	.0002	.0000	.0000	.0006	.024	.0001	.016	.0001
%RSD	.9356	.3007	.1146	.1792	.5511	.4578	.0250	.3165	.4120
#1	.0043	.0503	.0101	.0247	.1040	5.228	.5089	5.068	.0156
#2	.0043	.0501	.0101	.0248	.1032	5.194	.5091	5.091	.0155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1020**	**5.142**	**.0406**	**.0047**	**.0502**	**.0525**	**.0525**	**.0068**	**.0117**
Stddev	.0002	.002	.0002	.0005	.0004	.0004	.0007	.0000	.0001
%RSD	.1576	.0349	.5731	9.949	.8619	.8154	1.391	.3426	.7845
#1	.1019	5.141	.0407	.0050	.0499	.0528	.0520	.0068	.0117
#2	.1022	5.143	.0404	.0043	.0505	.0522	.0530	.0068	.0116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19466 page 109 of 120

Sample Name: CRI   Acquired: 9/16/2016 19:14:15   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0950**	**.1033**	**.0109**	**.0519**	**.0046**	**.0108**	F **.0147**	**.0205**	**.0417**
Stddev	.0011	.0005	.0000	.0002	.0002	.0000	.0008	.0000	.0012
%RSD	1.172	.4510	.1022	.4010	3.986	.2426	5.167	.0396	2.946
#1	.0958	.1029	.0110	.0518	.0048	.0107	.0152	.0205	.0408
#2	.0942	.1036	.0109	.0521	.0045	.0108	.0142	.0205	.0425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.1000		
Range							-30.00%		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11770.**	**5560.5**	**208680.**	**11227.**
Stddev	18.	9.4	386.	68.
%RSD	.14995	.16848	.18502	.60254
#1	11782.	5567.1	208950.	11179.
#2	11757.	5553.9	208400.	11274.

Raw Data MA19466 page 110 of 120

Sample Name: CRIB   Acquired: 9/16/2016 19:19:13   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**.2171**	**.0116**	**.0494**	**.1050**	**.5172**	**.0040**	**.0518**	**5.101**
Stddev	.0002	.0069	.0004	.0012	.0007	.0030	.0001	.0006	.045
%RSD	3.909	3.197	3.772	2.379	.6267	.5779	2.032	1.177	.8783
#1	.0043	.2122	.0119	.0486	.1046	.5151	.0040	.0522	5.069
#2	.0045	.2220	.0113	.0503	.1055	.5193	.0039	.0514	5.132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0042**	**.0505**	**.0099**	**.0245**	**.1067**	**5.131**	**.5046**	**5.100**	**.0159**
Stddev	.0002	.0001	.0001	.0003	.0020	.016	.0046	.062	.0000
%RSD	3.956	.2455	1.412	1.350	1.829	.3122	.9045	1.224	.1295
#1	.0043	.0504	.0100	.0247	.1053	5.119	.5013	5.056	.0158
#2	.0041	.0506	.0098	.0242	.1081	5.142	.5078	5.144	.0159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1021**	**5.103**	**.0404**	**.0096**	**.0496**	**.0523**	**.0501**	**.0060**	**.0259**
Stddev	.0001	.013	.0003	.0004	.0002	.0010	.0014	.0003	.0019
%RSD	.1228	.2567	.7893	3.671	.4903	1.850	2.810	5.662	7.452
#1	.1020	5.094	.0402	.0093	.0495	.0530	.0491	.0058	.0272
#2	.1022	5.113	.0407	.0098	.0498	.0516	.0511	.0062	.0245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19466 page 111 of 120

Sample Name: CRIB   Acquired: 9/16/2016 19:19:13   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1015**	**.1043**	**.0108**	**.0516**	**.0052**	**.0105**	F **.0142**	**.1075**	**.0437**
Stddev	.0003	.0005	.0001	.0001	.0006	.0001	.0000	.0001	.0006
%RSD	.2605	.4915	1.273	.2316	11.62	.7028	.1570	.0602	1.265
#1	.1017	.1039	.0107	.0517	.0048	.0105	.0143	.1076	.0433
#2	.1013	.1046	.0109	.0515	.0056	.0106	.0142	.1075	.0441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.1000		
Range							-30.00%		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11809.**	**5591.9**	**209710.**	**11283.**
Stddev	5.	.6	223.	7.
%RSD	.03980	.01043	.10622	.06304
#1	11812.	5592.3	209860.	11288.
#2	11806.	5591.5	209550.	11278.

Raw Data MA19466 page 112 of 120

13.2 13

Inst QC: MA19466

Sample Name: ICSA   Acquired: 9/16/2016 19:24:11   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0026**	**519.1**	**-.0009**	**.0015**	**-.0002**	**.0034**	**-.0002**	**.0032**	**462.9**
Stddev	.0002	2.7	.0005	.0014	.0003	.0002	.0000	.0003	2.6
%RSD	6.321	.5149	51.27	90.82	134.1	5.233	6.330	9.813	.5723
#1	-.0025	517.2	-.0006	.0005	-.0004	.0033	-.0001	.0034	461.1
#2	-.0028	521.0	-.0013	.0025	-.0000	.0036	-.0002	.0030	464.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0015**	**.0061**	**.0005**	**186.0**	**.1284**	**.0267**	**505.4**	**.0011**
Stddev	.0000	.0001	.0004	.0001	.9	.0023	.0000	2.5	.0001
%RSD	28.84	8.739	6.139	22.19	.4763	1.767	.0968	.4932	7.308
#1	.0001	-.0015	.0058	.0004	185.3	.1300	.0267	503.6	.0012
#2	.0001	-.0014	.0064	.0006	186.6	.1268	.0267	507.1	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.1732**	**.0189**	**.0024**	**-.0129**	**.0052**	**.0117**	**-.0020**	**.0012**
Stddev	.0002	.0031	.0001	.0008	.0000	.0012	.0012	.0015	.0014
%RSD	6.740	1.801	.4033	31.52	.0443	22.40	9.897	75.01	115.3
#1	.0030	.1710	.0188	.0030	-.0129	.0043	.0109	-.0009	.0023
#2	.0033	.1754	.0189	.0019	-.0129	.0060	.0125	-.0031	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19466 page 113 of 120

Sample Name: ICSA   Acquired: 9/16/2016 19:24:11   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0059**	**.0010**	**.0007**	**.0013**	**.0038**	**.0006**	**.0167**	**.0004**	**.0068**
Stddev	.0010	.0000	.0000	.0004	.0006	.0000	.0019	.0001	.0004
%RSD	16.76	4.207	2.191	33.30	17.04	4.396	11.47	16.32	5.779
#1	.0066	.0010	.0007	.0016	.0043	.0006	.0181	.0005	.0071
#2	.0052	.0010	.0007	.0010	.0034	.0007	.0154	.0004	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9349.2**	**4908.0**	**182550.**	**10849.**
Stddev	15.0	10.8	469.	4.
%RSD	.16044	.21927	.25668	.03892
#1	9338.6	4900.4	182880.	10852.
#2	9359.8	4915.7	182210.	10846.

Raw Data MA19466 page 114 of 120

Sample Name: ICSAB   Acquired: 9/16/2016 19:29:11   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.041**	**516.1**	**.5282**	**.5156**	**.5198**	**.5027**	**.4831**	**.5261**	**462.5**
Stddev	.004	.9	.0093	.0014	.0079	.0004	.0007	.0112	6.0
%RSD	.3407	.1704	1.766	.2787	1.528	.0701	.1490	2.120	1.302
#1	1.038	515.5	.5216	.5146	.5141	.5024	.4826	.5182	458.3
#2	1.043	516.7	.5348	.5167	.5254	.5029	.4836	.5340	466.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.061**	**.5050**	**.4840**	**.5080**	**184.9**	**.0855**	**.5583**	**500.0**	**.4921**
Stddev	.018	.0078	.0027	.0021	.4	.0101	.0023	.5	.0022
%RSD	1.661	1.550	.5533	.4063	.2050	11.78	.4186	.1026	.4512
#1	1.048	.4995	.4821	.5065	184.7	.0926	.5567	499.6	.4905
#2	1.073	.5105	.4859	.5094	185.2	.0783	.5600	500.4	.4936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5061**	**.1413**	**.9911**	**.9883**	**.5217**	**.5245**	**.5339**	**.5426**	**.5292**
Stddev	.0098	.0019	.0159	.0126	.0021	.0092	.0115	.0099	.0124
%RSD	1.930	1.312	1.604	1.275	.4114	1.756	2.152	1.820	2.350
#1	.4992	.1400	.9799	.9794	.5202	.5180	.5257	.5356	.5204
#2	.5130	.1426	1.002	.9972	.5232	.5310	.5420	.5496	.5380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19466 page 115 of 120

Sample Name: ICSAB   Acquired: 9/16/2016 19:29:11   Type: QC
Method: Accutest2(v311)   Mode: CONC   Corr. Factor: 1.000000
User: EAL   Custom ID1:   Custom ID2:   Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5045**	**.4799**	**.5124**	**.4955**	**.4912**	**.4931**	**.5101**	**.9441**	**.4628**
Stddev	.0092	.0075	.0004	.0025	.0077	.0028	.0117	.0158	.0081
%RSD	1.826	1.563	.0834	.5032	1.559	.5687	2.290	1.675	1.757
#1	.4980	.4746	.5121	.4937	.4858	.4911	.5019	.9329	.4571
#2	.5110	.4852	.5127	.4973	.4966	.4951	.5184	.9553	.4686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9309.7**	**4891.2**	**182700.**	**10858.**
Stddev	106.0	64.4	1045.	61.
%RSD	1.1386	1.3163	.57175	.55947
#1	9384.7	4936.7	183440.	10815.
#2	9234.8	4845.6	181970.	10901.

Raw Data MA19466 page 116 of 120

13.2 13

Inst QC: MA19466

Zoom In / Zoom Out

Sample Name: CCV Acquired: 9/16/2016 19:34:04 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2519**	**10.25**	**2.025**	**2.013**	**2.017**	**2.033**	**2.008**	**2.053**	**10.25**
Stddev	.0001	.05	.000	.007	.001	.012	.012	.001	.03
%RSD	.0524	.4938	.0047	.3740	.0318	.6029	.5984	.0428	.3175
#1	.2518	10.21	2.025	2.008	2.018	2.024	1.999	2.054	10.22
#2	.2520	10.28	2.024	2.019	2.017	2.042	2.016	2.052	10.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.024**	**2.002**	**2.031**	**1.970**	**10.14**	**10.14**	**2.037**	**10.11**	**2.037**
Stddev	.000	.000	.003	.003	.08	.00	.018	.00	.002
%RSD	.0152	.0002	.1620	.1434	.7641	.0352	.8621	.0173	.0792
#1	2.024	2.002	2.028	1.968	10.09	10.14	2.024	10.12	2.036
#2	2.024	2.002	2.033	1.972	10.20	10.15	2.049	10.11	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.028**	**10.02**	**2.001**	**1.992**	**2.018**	**2.049**	**2.049**	**2.021**	**2.018**
Stddev	.001	.06	.001	.004	.002	.007	.001	.002	.004
%RSD	.0314	.6040	.0497	.1792	.1046	.3461	.0224	.1023	.1831
#1	2.025	9.977	2.000	1.989	2.017	2.044	2.049	2.019	2.015
#2	2.026	10.06	2.001	1.994	2.020	2.054	2.049	2.022	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA19466 page 117 of 120

Zoom In / Zoom Out

Sample Name: CCV Acquired: 9/16/2016 19:34:04 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.012**	**2.054**	**2.074**	**2.096**	**2.010**	**2.060**	**2.059**	**2.037**	**2.019**
Stddev	.003	.004	.013	.007	.001	.003	.010	.000	.000
%RSD	.1601	.2008	.6197	.3344	.0544	.1445	.4940	.0101	.0180
#1	2.010	2.057	2.065	2.031	2.016	2.048	2.032	2.037	2.019
#2	2.014	2.051	2.083	2.041	2.017	2.052	2.046	2.037	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11413.**	**5523.8**	**205480.**	**11282.**
Stddev	9.	1.9	200.	11.
%RSD	.07782	.03406	.09711	.09698
#1	11419.	5525.2	205340.	11270.
#2	11406.	5522.5	205630.	11254.

Raw Data MA19466 page 118 of 120

Zoom In / Zoom Out

Sample Name: CCB Acquired: 9/16/2016 19:38:52 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Au2427	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0182**	**.0014**	**.0023**	**.0030**	**.0003**	**.0001**	**.0003**	**.0091**
Stddev	.0002	.0046	.0002	.0012	.0002	.0001	.0000	.0006	.0045
%RSD	57.47	25.39	16.82	51.69	5.273	34.71	3.505	181.8	49.85
#1	-.0005	.0215	.0015	.0032	.0031	.0003	.0001	.0008	.0123
#2	-.0002	.0149	.0012	.0015	.0029	.0002	.0001	-.0001	.0059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0006**	**.0003**	**.0004**	**F .0142**	**.0248**	**.0018**	**.0093**	**.0001**
Stddev	.0001	.0001	.0004	.0003	.0009	.0068	.0004	.0092	.0000
%RSD	14.90	15.59	125.8	88.62	6.164	27.31	27.78	98.64	41.92
#1	.0006	.0005	.0000	.0001	.0148	.0200	.0013	.0028	.0001
#2	.0005	.0004	.0006	.0006	.0136	.0296	.0019	.0158	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.0100				
Low Limit					-.0100				

Elem	Mo2020	Na5895	Ni2316	Pb2203	Pd3404	Pt2659	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0199**	**.0004**	**.0006**	**.0007**	**.0012**	**-.0003**	**.0011**	**.0018**
Stddev	.0001	.0070	.0001	.0015	.0004	.0006	.0012	.0005	.0006
%RSD	18.82	35.22	19.21	260.9	51.30	47.84	361.4	48.10	35.08
#1	.0008	.0249	.0003	-.0005	.0010	.0008	-.0011	.0015	.0020
#2	.0006	.0150	.0004	.0016	.0005	.0016	.0005	.0007	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA19466 page 119 of 120

Zoom In / Zoom Out

Sample Name: CCB Acquired: 9/16/2016 19:38:52 Type: QC
Method: Accutest2(v311) Mode: CONC Corr. Factor: 1.000000
User: EAL Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**.0007**	**.0002**	**.0015**	**.0008**	**.0004**	**F .0113**	**-.0008**	**.0019**
Stddev	.0003	.0001	.0001	.0002	.0000	.0002	.0022	.0000	.0000
%RSD	13.53	16.62	41.89	12.90	5.987	52.50	19.83	1.330	.4833
#1	.0027	.0008	.0002	.0017	.0008	.0005	.0128	-.0008	.0016
#2	.0022	.0006	.0001	.0014	.0007	.0002	.0097	-.0008	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0010		
Low Limit							-.0010		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**12118.**	**5662.3**	**211710.**	**11302.**
Stddev	7.	.4	634.	13.
%RSD	.05633	.00631	.29946	.11246
#1	12123.	5662.6	212150.	11293.
#2	12114.	5662.1	211260.	11311.

Raw Data MA19466 page 120 of 120

13.2 13

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-In-fit?
Ag 328.068 {103}	☒	9	Fe	-0.000289	0.000000	No
			Mn	0.000138	0.000000	No
			Ti	-0.000350	0.000000	No
			V	-0.000065	0.000000	No
			Cu	-0.000033	0.000000	No
			Mo	0.000012	0.000000	No
			Zr	0.002215	0.000000	No
			Al	-0.000003	0.000000	No
			Ca	-0.000002	0.000000	No
Al 396.152 { 85}	☒	5	Mo	0.036205	0.000000	No
			Mn	-0.000006	0.000000	No
			Ca	0.000022	0.000000	No
			Zn	0.000160	0.000000	No
			Zr	0.007549	0.000000	No
As 189.042 {478}	☒	16	Fe	-0.000005	0.000000	No
			Mg	-0.000002	0.000000	No
			Ca	-0.000004	0.000000	No
			Na	0.000000	0.000000	No
			Mn	0.000031	0.000000	No
			Co	-0.000978	0.000000	No
			Cr	0.000627	0.000000	No
			Mo	0.001967	0.000000	No
			Ti	0.000040	0.000000	No
			V	0.000072	0.000000	No
			Al	0.000007	0.000000	No
			Pd	0.024527	0.000000	No
			Zr	-0.000109	0.000000	No
			B	0.000039	0.000000	No
			W	0.001552	0.000000	No
			Pt	-0.000619	0.000000	No
Au 242.795 {139}	☒	5	Fe	0.000186	0.000000	No
			Mn	0.004749	0.000000	No
			W	-0.000213	0.000000	No
			Pt	-0.001128	0.000000	No
			Co	-0.000857	0.000000	No
B 208.959 {462}	☒	5	Si	0.000474	0.000000	No
			Mo	0.015973	0.000000	No
			V	0.000195	0.000000	No
			Pt	0.001906	0.000000	No
			Sn	0.000984	0.000000	No
Ba 455.403 { 74}	☒	1	Ca	0.000000	0.000000	No
Be 313.042 {108}	☒	4	Ti	-0.000342	0.000000	No
			V	0.000141	0.000000	No
			Cd	0.000094	0.000000	No
			Pb	0.000007	0.000000	No
Bi 223.061 {451}	☒	7	Fe	0.000027	0.000000	No
			Co	-0.003204	0.000000	No
			Cr	0.001126	0.000000	No
			Ti	-0.002473	0.000000	No
			V	-0.000516	0.000000	No
			Cu	-0.001505	0.000000	No
			W	-0.002644	0.000000	No
Ca 317.933 {106}	☒	4	Al	0.000068	0.000000	No
			Mg	0.000032	0.000000	No
			Cu	0.004589	0.000000	No
			Ti	0.005072	0.000000	No
Cd 228.802 {448}	☒	8	Fe	0.000010	0.000000	No

13.2.1 13

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-In-fit?
			Mg	0.000002	0.000000	No
			Co	-0.002261	0.000000	No
			Ni	-0.000105	0.000000	No
			V	0.000018	0.000000	No
			As	0.001012	0.000000	No
			W	-0.000046	0.000000	No
			Pt	-0.006194	0.000000	No
Co 228.616 {448}	☒	4	Fe	0.000017	0.000000	No
			Mo	-0.000462	0.000000	No
			Ti	0.002059	0.000000	No
			Mg	0.000003	0.000000	No
Cr 267.716 {126}	☒	6	Cu	0.000024	0.000000	No
			Al	0.000004	0.000000	No
			Fe	-0.000011	0.000000	No
			Mn	0.000122	0.000000	No
			W	0.000134	0.000000	No
			Pt	0.007181	0.000000	No
Cu 324.754 {104}2	☒	8	Fe	-0.000085	0.000000	No
			Co	-0.000600	0.000000	No
			Mo	0.000151	0.000000	No
			V	-0.000135	0.000000	No
			Zr	-0.001600	0.000000	No
			Mn	0.000035	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	0.000052	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	2	Na	0.000059	0.000000	No
			Fe	-0.000552	0.000000	No
Li 670.784 { 50}	☒	2	Ca	0.000024	0.000000	No
			Na	0.000002	0.000000	No
Mg 279.079 {121}	☒	3	Fe	-0.000076	0.000000	No
			Mo	-0.009670	0.000000	No
			Mn	-0.003659	0.000000	No
Mn 257.610 {131}	☒	3	Fe	-0.000023	0.000000	No
			Ca	0.000001	0.000000	No
			Si	0.000051	0.000000	No
Mo 202.030 {467}	☒	8	Al	0.000000	0.000000	No
			Mg	0.000000	0.000000	No
			Ca	0.000001	0.000000	No
			Na	-0.000000	0.000000	No
			Mn	-0.000046	0.000000	No
			Co	-0.000036	0.000000	No
			Cu	0.000033	0.000000	No
			Ni	0.000010	0.000000	No
Na 589.592 { 57}	☒	2	Al	0.000151	0.000000	No
			Pb	0.010029	0.000000	No
Ni 231.604 {446}	☒	4	Co	-0.000711	0.000000	No
			Mo	-0.000041	0.000000	No
			Fe	0.000027	0.000000	No
			Ca	-0.000001	0.000000	No
Pb 220.353 {453}	☒	14	Fe	0.000026	0.000000	No
			Al	-0.000082	0.000000	No
			Si	0.000042	0.000000	No
			Co	-0.000140	0.000000	No
			Cu	0.000253	0.000000	No
			Ni	0.000053	0.000000	No

13.2.1 13

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-In-fit?
			Mo	-0.001469	0.000000	No
			Mg	0.000004	0.000000	No
			Ca	-0.000012	0.000000	No
			Mn	0.000077	0.000000	No
			S	-0.000010	0.000000	No
			Ti	-0.000077	0.000000	No
			V	-0.000128	0.000000	No
			W	-0.003393	0.000000	No
Pd 340.458 { 99}	☒	5	Fe	-0.000187	0.000000	No
			Ca	-0.000020	0.000000	No
			Co	-0.002813	0.000000	No
			Ti	-0.000744	0.000000	No
			Zr	-0.103001	0.000000	No
Pt 265.945 {127}	☒	7	Fe	-0.000150	0.000000	No
			Al	-0.000025	0.000000	No
			Mn	-0.000574	0.000000	No
			Cr	0.003958	0.000000	No
			Mo	-0.001576	0.000000	No
			V	0.000359	0.000000	No
			W	-0.001720	0.000000	No
S 182.034 {485}	☒	8	Fe	0.000019	0.000000	No
			Al	-0.000020	0.000000	No
			Mg	0.000014	0.000000	No
			Ca	-0.000042	0.000000	No
			Mn	0.002245	0.000000	No
			Mo	-0.001444	0.000000	No
			Ti	0.000205	0.000000	No
			W	-0.018576	0.000000	No
Sb 206.833 {463}	☒	14	Fe	0.000021	0.000000	No
			Al	-0.000031	0.000000	No
			Mg	0.000000	0.000000	No
			Ca	-0.000001	0.000000	No
			Cr	0.011634	0.000000	No
			Ni	-0.000498	0.000000	No
			Mo	-0.003749	0.000000	No
			Cu	-0.000006	0.000000	No
			Sn	-0.010692	0.000000	No
			Zr	-0.000420	0.000000	No
			Ti	-0.000102	0.000000	No
			V	-0.001290	0.000000	No
			W	0.000594	0.000000	No
			Pt	-0.001317	0.000000	No
Se 196.090 {472}	☒	14	Fe	-0.000137	0.000000	No
			Al	-0.000007	0.000000	No
			Mg	0.000003	0.000000	No
			Ca	-0.000006	0.000000	No
			Na	0.000003	0.000000	No
			Co	-0.000182	0.000000	No
			Ni	-0.000070	0.000000	No
			Mn	0.000636	0.000000	No
			Sn	0.000060	0.000000	No
			Pd	-0.000730	0.000000	No
			V	0.000044	0.000000	No
			Mo	-0.000097	0.000000	No
			Ti	-0.000162	0.000000	No
			W	0.008674	0.000000	No
Si 212.412 {459}	☒	7	Al	0.000004	0.000000	No

13.2.1 13

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	0.017999	0.000000	No
			Ti	0.012805	0.000000	No
			V	0.002993	0.000000	No
			Ni	-0.000131	0.000000	No
			Pb	-0.000577	0.000000	No
			S	0.000107	0.000000	No
Sn 189.989 {478}	☒	1	Ti	-0.001019	0.000000	No
Sr 407.771 { 83}	☒	1	Ca	0.000004	0.000000	No
Ti 334.904 {101}	☒	3	Mo	0.000196	0.000000	No
			Ca	0.000004	0.000000	No
			Al	0.000001	0.000000	No
Tl 190.856 {477}	☒	11	Al	-0.000013	0.000000	No
			Mg	-0.000008	0.000000	No
			Ca	-0.000001	0.000000	No
			Na	-0.000003	0.000000	No
			Mn	0.000783	0.000000	No
			Co	0.005549	0.000000	No
			Cr	0.000261	0.000000	No
			Ti	-0.002568	0.000000	No
			V	-0.038883	0.000000	No
			Fe	0.000012	0.000000	No
			Mo	0.000049	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000008	0.000000	No
			Mn	-0.000483	0.000000	No
			Cr	-0.001691	0.000000	No
			Mo	-0.008342	0.000000	No
			Ti	0.000242	0.000000	No
W 207.911 {462}	☒	6	Co	-0.000470	0.000000	No
			Cr	-0.001109	0.000000	No
			Cu	0.001158	0.000000	No
			Ni	-0.000440	0.000000	No
			Ti	-0.000892	0.000000	No
			V	0.000394	0.000000	No
Y 224.306 {451}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {464}	☒	8	Mg	0.000002	0.000000	No
			Al	0.000001	0.000000	No
			Ca	0.000001	0.000000	No
			Na	0.000000	0.000000	No
			Cr	-0.000528	0.000000	No
			Ti	-0.000051	0.000000	No
			Fe	0.000007	0.000000	No
			Pd	0.000025	0.000000	No
Zr 339.198 { 99}	☒	6	Fe	-0.000035	0.000000	No
			Ti	0.000184	0.000000	No
			V	0.000391	0.000000	No
			Mo	0.000594	0.000000	No
			S	-0.000027	0.000000	No
			Si	0.000679	0.000000	No

13.2.1 13

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000095	0.094173	0.000000	1.000000
Al 396.152 { 85}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000233	0.029525	0.000000	1.000000
As 189.042 {478}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000018	0.080938	0.000000	1.000000
Au 242.795 {139}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000005	0.017859	0.000000	1.000000
B 208.959 {462}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000281	0.143156	0.000000	1.000000
Ba 455.403 { 74}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000236	2.238457	0.000000	1.000000
Be 313.042 {108}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000069	1.821879	0.000000	1.000000
Bi 223.061 {451}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000067	0.169718	0.000000	1.000000
Ca 317.933 {106}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.006924	0.047421	0.000000	1.000000
Cd 228.802 {448}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000262	0.722331	0.000000	1.000000
Co 228.616 {448}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000058	0.342129	0.000000	1.000000
Cr 267.716 {126}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000014	0.066657	0.000000	1.000000
Cu 324.754 {104}2	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000992	0.164125	0.000000	1.000000
Fe 259.940 {130}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000360	0.052274	0.000000	1.000000
In 230.606 {446}*	9/19/2016 9:22:46	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000144	0.039963	0.000000	1.000000
Li 670.784 { 50}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.001628	0.670394	0.000000	1.000000
Mg 279.079 {121}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000046	0.005789	0.000000	1.000000
Mn 257.610 {131}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000188	0.338333	0.000000	1.000000
Mo 202.030 {467}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000300	0.619138	0.000000	1.000000
Na 589.592 { 57}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.001767	0.109414	0.000000	1.000000
Ni 231.604 {446}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000128	0.285155	0.000000	1.000000
Pb 220.353 {453}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000224	0.110431	0.000000	1.000000
Pd 340.458 { 99}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000108	0.036534	0.000000	1.000000
Pt 265.945 {127}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000051	0.004842	0.000000	1.000000
S 182.034 {485}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000010	0.041938	0.000000	1.000000
Sb 206.833 {463}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000531	0.122759	0.000000	1.000000
Se 196.090 {472}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000045	0.056099	0.000000	1.000000
Si 212.412 {459}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.007804	0.186745	0.000000	1.000000
Sn 189.989 {478}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000077	0.133766	0.000000	1.000000
Sr 407.771 { 83}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.001845	2.974507	0.000000	1.000000
Ti 334.904 {101}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000015	0.117644	0.000000	1.000000
Tl 190.856 {477}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000165	0.043196	0.000000	1.000000
V 292.402 {115}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.000059	0.084570	0.000000	1.000000
W 207.911 {462}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.001668	0.243985	0.000000	1.000000
Y 224.306 {451}*	9/19/2016 9:22:46	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	9/19/2016 9:22:46	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	9/19/2016 9:22:46	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {464}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	0.001142	0.644143	0.000000	1.000000
Zr 339.198 { 99}	9/19/2016 9:22:46	9/16/2016 14:56:20	Linear	1/Conc	-0.000062	0.242975	0.000000	1.000000

13.2.2 13

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-Int	Slope factor	Offset
Ag 328.068 {103}	1.000000	0.000000	0.000387	0.001292	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	1.000000	0.000000	0.011996	0.039986	OK.	1.000000	0.000000	1	0
As 189.042 {478}	1.000000	0.000000	0.001023	0.003410	OK.	1.000000	0.000000	1	0
Au 242.795 {139}	1.000000	0.000000	0.000837	0.002791	OK.	1.000000	0.000000	1	0
B 208.959 {462}	1.000000	0.000000	0.000538	0.001795	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	1.000000	0.000000	0.000220	0.000735	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	1.000000	0.000000	0.000096	0.000319	OK.	1.000000	0.000000	1	0
Bi 223.061 {451}	1.000000	0.000000	0.001017	0.003391	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	1.000000	0.000000	0.004076	0.013588	OK.	1.000000	0.000000	1	0
Cd 228.802 {448}	1.000000	0.000000	0.000140	0.000468	OK.	1.000000	0.000000	1	0
Co 228.616 {448}	1.000000	0.000000	0.000160	0.000534	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	1.000000	0.000000	0.000291	0.000970	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}2	1.000000	0.000000	0.000292	0.000973	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	1.000000	0.000000	0.002333	0.007777	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	1.000000	0.000000	0.026347	0.087823	OK.	1.000000	0.000000	1	0
Li 670.784 { 50}	1.000000	0.000000	0.001571	0.005237	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	1.000000	0.000000	0.025382	0.084608	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	1.000000	0.000000	0.000048	0.000160	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	1.000000	0.000000	0.000157	0.000523	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	1.000000	0.000000	0.008224	0.027413	OK.	1.000000	0.000000	1	0
Ni 231.604 {446}	1.000000	0.000000	0.000222	0.000742	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	1.000000	0.000000	0.000814	0.002713	OK.	1.000000	0.000000	1	0
Pd 340.458 { 99}	1.000000	0.000000	0.001022	0.003408	OK.	1.000000	0.000000	1	0
Pt 265.945 {127}	1.000000	0.000000	0.003561	0.011868	OK.	1.000000	0.000000	1	0
S 182.034 {485}	1.000000	0.000000	0.001818	0.006058	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	1.000000	0.000000	0.000919	0.003062	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	1.000000	0.000000	0.001585	0.005285	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	1.000000	0.000000	0.000593	0.001975	OK.	1.000000	0.000000	1	0
Sn 189.989 {478}	1.000000	0.000000	0.000495	0.001651	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	1.000000	0.000000	0.000108	0.000360	OK.	1.000000	0.000000	1	0
Ti 334.904 {101}	1.000000	0.000000	0.000286	0.000954	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	1.000000	0.000000	0.000975	0.003251	OK.	1.000000	0.000000	1	0
V 292.402 {115}	1.000000	0.000000	0.000291	0.000971	OK.	1.000000	0.000000	1	0
W 207.911 {462}	1.000000	0.000000	0.000792	0.002639	OK.	1.000000	0.000000	1	0
Y 224.306 {451}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {464}	1.000000	0.000000	0.000130	0.000434	OK.	1.000000	0.000000	1	0
Zr 339.198 { 99}	1.000000	0.000000	0.000142	0.000474	OK.	1.000000	0.000000	1	0

13.2.2 13

Inst QC: MA19470

MA19470

Method: Accutest Operator: EAL Date of Analysis: 20 Sep 2016 10:11:44

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
STDA - 1	20 Sep 2016 10:11:51	S	ug/l	-	11	1.000	1.000
STDB - 1	20 Sep 2016 10:14:07	S	ug/l	-	1171	1.000	1.000
STDC - 1	20 Sep 2016 10:16:22	S	ug/l	-	2300	1.000	1.000
STDD - 1	20 Sep 2016 10:18:40	S	ug/l	-	4815	1.000	1.000
STDE - 1	20 Sep 2016 10:20:58	S	ug/l	-	9638	1.000	1.000
STDF - 1	20 Sep 2016 10:23:16	S	ug/l	-	14455	1.000	1.000
STDG - 1	20 Sep 2016 10:25:44	S	ug/l	-	18858	1.000	1.000
STDH - 1	20 Sep 2016 10:28:15	S	ug/l	-	23626	1.000	1.000
STDI - 1	20 Sep 2016 10:30:52	S	ug/l	-	27520	1.000	1.000
ICV - 1	20 Sep 2016 10:34:52	U	ug/l	4.1097	19256	1.000	1.000
ICB - 1	20 Sep 2016 10:37:09	U	ug/l	-0.0563	-68	1.000	1.000
CCV - 1	20 Sep 2016 10:39:47	U	ug/l	3.1398	14757	1.000	1.000
CCB - 1	20 Sep 2016 10:42:01	U	ug/l	-0.0742	-151	1.000	1.000
CRI - 1	20 Sep 2016 10:44:30	U	ug/l	0.2570	1385	1.000	1.000
MP26769-MB1 - 1	20 Sep 2016 10:46:45	U	ug/l	-0.0707	-135	1.000	1.000
MP26769-B1 - 1	20 Sep 2016 10:49:01	U	ug/l	3.1671	14884	1.000	1.000
MP26769-B2 - 1	20 Sep 2016 10:51:16	U	ug/l	3.0630	14401	1.000	1.000
MP26769-S1 - 1	20 Sep 2016 10:53:49	U	ug/l	3.1283	14704	1.000	1.000
MP26769-S2 - 1	20 Sep 2016 10:56:22	U	ug/l	2.9852	14040	1.000	1.000
MC47789-3 - 1	20 Sep 2016 10:58:56	U	ug/l	-0.1013	-277	1.000	1.000
MC47789-1 - 1	20 Sep 2016 11:01:31	U	ug/l	-0.0071	160	1.000	1.000
MC47789-2 - 1	20 Sep 2016 11:03:47	U	ug/l	0.0192	282	1.000	1.000
MC47789-4 - 1	20 Sep 2016 11:06:01	U	ug/l	-0.0296	56	1.000	1.000
CCV - 1	20 Sep 2016 11:08:15	U	ug/l	2.9546	13898	1.000	1.000
CCB - 1	20 Sep 2016 11:10:30	U	ug/l	-0.0914	-231	1.000	1.000
MC47789-5 - 1	20 Sep 2016 11:13:03	U	ug/l	-0.0509	-43	1.000	1.000
MC47789-6 - 1	20 Sep 2016 11:15:17	U	ug/l	-0.0451	-16	1.000	1.000
MC47789-7 - 1	20 Sep 2016 11:17:31	U	ug/l	-0.0468	-24	1.000	1.000
MC47789-8 - 1	20 Sep 2016 11:19:45	U	ug/l	-0.0444	-13	1.000	1.000
MC47789-9 - 1	20 Sep 2016 11:22:00	U	ug/l	-0.0664	-115	1.000	1.000
MC47789-10 - 1	20 Sep 2016 11:24:15	U	ug/l	-0.0824	-189	1.000	1.000
MC47789-11 - 1	20 Sep 2016 11:26:31	U	ug/l	-0.0681	-123	1.000	1.000
MC47789-12 - 1	20 Sep 2016 11:28:47	U	ug/l	-0.0324	43	1.000	1.000
MC47789-13 - 1	20 Sep 2016 11:31:02	U	ug/l	-0.0212	95	1.000	1.000
MC47789-14 - 1	20 Sep 2016 11:33:17	U	ug/l	-0.0173	113	1.000	1.000
CCV - 1	20 Sep 2016 11:35:31	U	ug/l	3.0296	14246	1.000	1.000
CCB - 1	20 Sep 2016 11:37:46	U	ug/l	-0.0720	-141	1.000	1.000
MC47789-15 - 1	20 Sep 2016 11:40:18	U	ug/l	-0.0326	42	1.000	1.000
MC47789-16 - 1	20 Sep 2016 11:42:32	U	ug/l	0.0023	204	1.000	1.000
MC47789-17 - 1	20 Sep 2016 11:44:46	U	ug/l	-0.0086	153	1.000	1.000
MC47789-18 - 1	20 Sep 2016 11:47:01	U	ug/l	-0.0276	65	1.000	1.000
MC47789-19 - 1	20 Sep 2016 11:49:16	U	ug/l	-0.0302	53	1.000	1.000
MC47789-20 - 1	20 Sep 2016 11:51:31	U	ug/l	-0.0408	4	1.000	1.000
MP26773-MB1 - 1	20 Sep 2016 11:53:46	U	ug/l	-0.0449	-15	1.000	1.000
MP26773-LB1 - 1	20 Sep 2016 11:56:01	U	ug/l	-0.0457	-19	1.000	1.000
MP26773-B1 - 1	20 Sep 2016 11:58:17	U	ug/l	3.3062	15529	1.000	1.000
MP26773-B2 - 1	20 Sep 2016 12:00:31	U	ug/l	3.2068	15068	1.000	1.000
CCV - 1	20 Sep 2016 12:03:03	U	ug/l	2.9774	14004	1.000	1.000
CCB - 1	20 Sep 2016 12:05:35	U	ug/l	-0.1227	-376	1.000	1.000
CCB - 1	20 Sep 2016 12:08:09	U	ug/l	-0.0371	21	1.000	1.000
MP26773-S1 - 1	20 Sep 2016 12:11:24	U	ug/l	3.2859	15435	1.000	1.000
MP26773-S2 - 1	20 Sep 2016 12:13:39	U	ug/l	3.2609	15319	1.000	1.000
MC47788-1 - 1	20 Sep 2016 12:16:10	U	ug/l	-0.0718	-140	1.000	1.000
MC47774-6 - 1	20 Sep 2016 12:18:43	U	ug/l	-0.0224	89	1.000	1.000
MC47774-7 - 1	20 Sep 2016 12:20:58	U	ug/l	-0.0173	113	1.000	1.000
MC47792-1A - 1	20 Sep 2016 12:23:13	U	ug/l	-0.0319	45	1.000	1.000
MC47792-2A - 1	20 Sep 2016 12:25:28	U	ug/l	-0.0315	47	1.000	1.000
CRI - 1	20 Sep 2016 12:27:44	U	ug/l	0.2761	1474	1.000	1.000

Page : 1

13.3 13

Inst QC: MA19470

MA19470

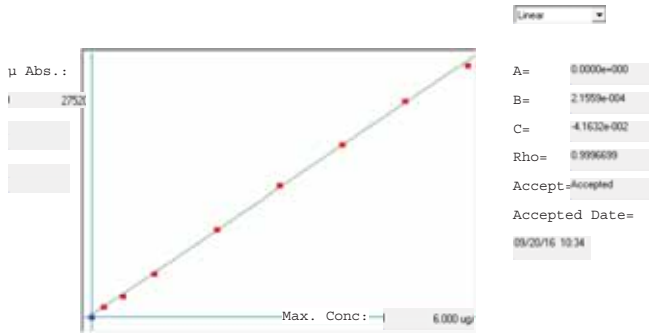
Method: Accutest Operator: EAL Date of Analysis: 20 Sep 2016 10:11:44

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
CRI - 1	20 Sep 2016 12:34:31	U	ug/l	0.2570	1385	1.000	1.000
CCV - 1	20 Sep 2016 12:36:46	U	ug/l	3.0736	14450	1.000	1.000
CCB - 1	20 Sep 2016 12:39:03	U	ug/l	-0.0591	-81	1.000	1.000

13.3 13

Page : 2

Accutest



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
STDA	0.000	-0.039	-0.039	11	0.000	11				
STDB	0.200	0.211	0.011	1171	0.0 %	1171				
STDC	0.500	0.454	-0.046	2300	0.0 %	2300				
STDD	1.000	0.996	-0.004	4815	0.0 %	4815				
STDE	2.000	2.036	0.036	9638	0.0 %	9638				
STDF	3.000	3.075	0.075	14455	0.0 %	14455				
STDG	4.000	4.024	0.024	18858	0.0 %	18858				
STDH	5.000	5.052	0.052	23626	0.0 %	23626				
STDI	6.000	5.891	-0.109	27520	0.0 %	27520				

13.3.1 13

Prep QC: MP26772

SGS ACCUTEST

Date: 09/16/16
Time 8:45

Name:	ERICM1
MP Batch ID:	MP26772
QC Sample ID:	MC47788-1
Reagent Lot #	
1:1 HNO3	
1:1 HCl	RGT-49046-METALS
Conc HNO3	VENDOR-16883
Conc HCl	
H2O2	
LCS Lot #	
Boiling Chips Lot #	

Aqueous EPA 200.7/ 200.8			
Aqueous SW846 3010A	●	TCLP	
Soil SW846 3050B			
Dig Tube Lot #	J246757-9884/J246264-9884		
ML Used	Spike Lot#		
0.5	METSTK-1338-METALS		
Spike ID	MPICP7		

Dig Block ID:	2	Therm ID	GN015	Temp. C	95	Factor	-1	Corrected Temp. C	94
Dig Block ID:		Therm ID		Temp. C		Factor		Corrected Temp. C	
Balance ID:	N/A	Repipetor ID	1	Filter Paper Lot #				pH Paper Lot #	

Note: (A)Serial dilution shown for QC purposes only (not a seperate digestion). (B) For DW samples <1NTU, measure pH prior to analysis.

Bot#	Sample #	Initial ML	Final ML			1:1 HNO3 ML	Conc. HNO3 ML	1:1 HCl ML	H2O2 ML	Block ID	Comment
	MP26772-LB1	50	50				3	5		2	LB1 @ 09/16/16
	MP26772-MB1	50	50				3	5		2	
	MP26772-B1	50	50				3	5		2	
	MP26772-S1	50	50				3	5		2	
	MP26772-SD1	50	50				3	5		2	
	MP26772-B2	50	50				3	5		2	
	MP26772-S2	50	50				3	5		2	
	MC47581-9R	50	50				3	5		2	
	MC47774-6	50	50				3	5		2	
	MC47774-7	50	50				3	5		2	
	MC47788-1	50	50				3	5		2	
	MC47792-1A	50	50				3	5		2	
	MC47792-2A	50	50				3	5		2	

Protected Worksheet MMP003-06 (04/13/16) QC Review EAL Date: 09/16/16

(Format edits must be done by Dept. Manager)

13.4.1 13

Prep QC: MP26773

SGS ACCUTEST

Date: 09/16/16

Name:	ERICM1
MP Batch ID:	MP26773
QC Sample ID:	MC47788-1
Reagent Lot #	
Pot.Permanganate	RGT--49049-HG
Pot. Persulfate	RGT-48801-HG
Hydroxylamine.SO4	RGT-49179-HG
Stannous Chloride	RGT-49346-HG
Aqua Regia	N/A
Conc. HNO3	VENDOR-16883
Conc. H2SO4	VENDOR-16691

HG AQ: SW846 7470A	●	TCLP	
HG AQ: EPA 245.1			
Soil- SW846 7471B			
Dig Tube Lot #	1501179		
Boiling Chips Lot #	N/A		
Filter Paper Lot #	N/A		
LCS Lot #	N/A		
ML Used	Spike Lot#		
0.6	METSTD-42251-HG-1		
Spike ID	HGRWS1		

Note: A) EPA 245.1 DW, calibration standards are prepared without heating. B) Stannous sulfate may be used in place of stannous chloride.

Dig Block ID:	1	Therm ID	GN011	Temp. C	95	Factor	-1	Corrected Temp C	94
Dig Block ID:	4	Therm ID	GN017	Temp. C	94	Factor	-1	Corrected Temp C	93
Dig Block ID:	1	Start Time	9:30	End Time	11:30	Balance ID	N/A	pH Paper Lot #	
Dig Block ID:	4	Start Time	10:15	End Time	12:15	Pipet ID	1		

Block ID	Sample #	Initial ML	Final ML	H2SO4 ML	HNO3 ML	Aqua Regia ML	Pot. Perm ML	Pot. Pers ML	Hydrox ML	Comment ML of	Comment Lot#	
1	RB	20	20	1	0.5	N/A	3	1.6	1.2			
1	STD#1	20	20	1	0.5	N/A	3	1.6	1.2	4	METSTD-42251-	HG-3
1	STD#2	20	20	1	0.5	N/A	3	1.6	1.2	10	METSTD-42251-	HG-3
1	STD#3	20	20	1	0.5	N/A	3	1.6	1.2	2	METSTD-42251-	HG-2
1	STD#4	20	20	1	0.5	N/A	3	1.6	1.2	4	METSTD-42251-	HG-2
1	STD#5	20	20	1	0.5	N/A	3	1.6	1.2	6	METSTD-42251-	HG-2
1	STD#6	20	20	1	0.5	N/A	3	1.6	1.2	8	METSTD-42251-	HG-2
1	STD#7	20	20	1	0.5	N/A	3	1.6	1.2	10	METSTD-42251-	HG-2
1	STD#8	20	20	1	0.5	N/A	3	1.6	1.2	12	METSTD-42251-	HG-2
1	ICV	20	20	1	0.5	N/A	3	1.6	1.2	8	METSTD-42252-	HG-2
1	CCV	20	20	1	0.5	N/A	3	1.6	1.2	6	METSTD-42251-	HG-2
1	CRI	20	20	1	0.5	N/A	3	1.6	1.2	4	METSTD-42251-	HG-3
1	ICB	20	20	1	0.5	N/A	3	1.6	1.2			
1	CCB	20	20	1	0.5	N/A	3	1.6	1.2			
Bot #										Block ID	Comment	
	MP26773-LB1	20	20	1	0.5	N/A	3	1.6	1.2	4	LB1 @ 09/16/16	
	MP26773-MB1	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MP26773-B1	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MP26773-S1	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MP26773-B2	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MP26773-S2	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MC47774-6	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MC47774-7	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MC47788-1	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MC47792-1A	20	20	1	0.5	N/A	3	1.6	1.2	4		
	MC47792-2A	20	20	1	0.5	N/A	3	1.6	1.2	4		

13.4.2 13

Prep QC: MP26773

Additional Comment:

Protected Worksheet MMA015-07 (04/13/16) QC Review EAL Date: 09/20/16

(Format edits must be done by Dept. Manager)

13.4.2 13

SGS ACCUTEST New England

Section 14

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Percent Solids Raw Data Summary

14

Raw Data: GN54841

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC47774
Account: PLUMNYB - Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Ignitability (Flashpoint)	GN54841	MC47774-6	Deg. F	>230	>230	0.0	0-20%
Solids, Percent	GN54842	MC47774-2	%	81.1	81.1	0.0	0-5%
Solids, Percent	GN54843	MC47775-2	%	75.3	74.8	0.7	0-5%

Associated Samples:
Batch GN54841: MC47774-6, MC47774-7
Batch GN54842: MC47774-1, MC47774-2, MC47774-3, MC47774-4, MC47774-5, MC47774-6, MC47774-7
Batch GN54843: MC47774-8
(*) Outside of QC limits

Page 1

14.1 14

Percent Solids Raw Data Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MC47774-1 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: BOTTOM

Wet Weight (Total)	26.013	g
Tare Weight	18.837	g
Dry Weight (Total)	24.758	g
Solids, Percent	82.5	%

Sample: MC47774-2 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: NORTH

Wet Weight (Total)	30.792	g
Tare Weight	23.416	g
Dry Weight (Total)	29.395	g
Solids, Percent	81.1	%

Sample: MC47774-3 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: SOUTH

Wet Weight (Total)	29.577	g
Tare Weight	20.744	g
Dry Weight (Total)	28.005	g
Solids, Percent	82.2	%

Sample: MC47774-4 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: WEST

Wet Weight (Total)	33.689	g
Tare Weight	26.893	g
Dry Weight (Total)	32.321	g
Solids, Percent	79.9	%

Sample: MC47774-5 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: EAST

Wet Weight (Total)	27.624	g
Tare Weight	21.241	g
Dry Weight (Total)	26.388	g
Solids, Percent	80.6	%

Sample: MC47774-6 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: LARGE PILE

Wet Weight (Total)	30.873	g
Tare Weight	24.074	g
Dry Weight (Total)	29.54	g
Solids, Percent	80.4	%

14.2 14

Percent Solids Raw Data Summary

Job Number: MC47774
Account: PLUMNYB Plumley Engineering, P.C.
Project: Market Basket, 63 Gates Avenue, Geneva, NY

Sample: MC47774-7 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: SMALL PILE

Wet Weight (Total)	26.521	g
Tare Weight	20.103	g
Dry Weight (Total)	25.617	g
Solids, Percent	85.9	%

Sample: MC47774-8 **Analyzed:** 15-SEP-16 by CF **Method:** SM 2540G-97 MOD
ClientID: FIELD DUPE

Wet Weight (Total)	33.092	g
Tare Weight	26.981	g
Dry Weight (Total)	31.874	g
Solids, Percent	80.1	%

General Chemistry

Raw Data

QC Reports: GN54841

SGS ACCUTEST

FLASHPOINT/IGNITIBILITY
Method: SW 846 1020A

Corrected FP= F + 0.42 (101.3- Kpa)
Instrument: Setaflash 1

GN 54841
MATRIX: Soil

Sample Desc.	Bot #	Pre Test	Rep 1	Rep 2	Rep 3	Kpa	Results	Comments	Init./Date	QCRev./Date
MC47774-6 D1	2	>23°F	>23°F			101.7	>23°F		BF 9-15-16	09/15/16
MC47774-6	2	>23°F	>23°F				>23°F			
MC47774-7	2	>23°F	>23°F				>23°F			
MC47792-1	1	>23°F	>23°F				>23°F			
MC47792-2	1	>23°F	>23°F				>23°F			
MC47806-5	2	>23°F	>23°F			101.1	>23°F		BF 9-19-16	09/19/16
~~MC47806~~		HS	9/21/16							
MC47927-1	1	>23°F	>23°F			101.1	>23°F		BF 9-22-16	09/23/16
MC47942-1	1	>23°F	>23°F				>23°F			
MC47942-2	1	>23°F	>23°F				>23°F			
MC47942-3	1	>23°F	>23°F				>23°F			
MC47944-1	1	>23°F	>23°F				>23°F			
INIT. CHK1 P-Xylene	–	80°F	80°F	80°F		101.7	80°F	LOT# 13083	BF 9-15-16	09/15/16
END CHK1 n-hexane	–	98°F	98°F	98°F			98°F	LOT# 13309		
INIT. CHK2 P-Xylene	–	80°F	80°F	80°F		101.1	80°F	LOT# 13083	BF 9-19-16	09/19/16
END CHK2 n-hexane	–	98°F	98°F	98°F			98°F	LOT# 13309		
INIT. CHK3 P-Xylene	–	80°F	80°F	80°F		101.0	80°F	LOT# 13083	BF 9-22-16	09/26/16
END CHK3 n-hexane	–	98°F	98°F	98°F			98°F	LOT# 13309		
INIT. CHK4								LOT#		
END CHK4								LOT#		

GN030-04 (9/22/06)

31

APPENDIX I

DUSRS FOR ALL ENDPOINT SAMPLES

From: Karen Storne
Re: Geneva Market Basket DUSR
File: 1740/30852.007.002
Date: December 2, 2004

cc: D Meixell
S Spiegel

A usability review of analytical data was performed for the analyses that were performed for the Market Basket Property Site located in Geneva, New York. The samples were analyzed using United States Environmental Protection Agency (USEPA) methods and modified method guidance and deliverables guidance provided in New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP). The following table summarizes the analysis performed for this investigation.

Table 1-1. *Analytical methods and references*

Parameter	Method	Reference
VOCs	USEPA Method 5030A/5030B/8260B	1, 2
SVOCs	USEPA Method 6520C/3550B/8270C	1, 2
Metals	USEPA Method 3005B/6010B	1, 2
Mercury	USEPA Method 7470A/7471A	1, 2
Percent Total Solids	2540-G	3

Note:
1. United States Environmental Protection Agency (USEPA). 1996. *Test Methods for Evaluating Solid Weste Physicel/Chemical Methods (SW-846)*, 3rd Edition. Washington, D.C., 1986 as updated through December 1996.
2. New York State Department of Environmental Conservation (NYSDEC). 1995. *Analytical Services Protocol (ASP) Methods, October 1995 Revisions* (modified). Albany, NY.
3. American Water Works Association (AWWA), American Public Health Association (APHA) and Water Environment Federation (WEF). 1992. *Standard Methods for the Examination of Water and Wastewater*, 18th Edition. Washington, D.C.

The samples collected for this investigation are summarized in Table 1-2, presented in Attachment A.

O'Brien & Gere Laboratories, Inc. of Syracuse, New York performed the analyses and provided the laboratory data packages, which contained NYSDEC ASP summary forms for quality control analysis and supportive raw data.

The data usability review included evaluating the following parameters (where applicable):

- Chain-of-custody records
- Sample collection
- Holding times
- Sample preservation
- Percent solids
- Blank analysis
- Calibrations
- Surrogate recovery
- Gas chromatography/mass spectrometry (GC/MS) tuning criteria
- Matrix spike/matrix spike duplicate (MS/MSD) analyses
- Laboratory control sample (LCS)/matrix spike blank (MSB) analysis
- Internal standards performance
- Contract required detection limit (CRDL) analysis
- Inductively Coupled Plasma (ICP) interference check sample analysis
- ICP serial dilution analysis
- Field duplicate analysis
- Target analyte identification, quantitation and reported detection limits.
- Documentation completeness.

The laboratories performed the analyses using USEPA methods and modified New York State Department of Environmental Conservation (NYSDEC) methods. Data affected by excursions from the QA/QC criteria previously listed were qualified based on the approach provided in the following documents as well as professional judgment:

- United States Environmental Protection Agency (USEPA). 1992. *USEPA Region II Evaluation of Metals Data for the CLP Program, SOP HW-2* Revision 11, (modified for SW-846 methods). New York, NY.

- United States Environmental Protection Agency (USEPA). 1995. *USEPA Region II Validating Semivolatile Organic Compounds by SW-846 Method 8270B, SOP HW-22.* New York, NY.

- United States Environmental Protection Agency (USEPA). 1999b. *USEPA Region II Standard Operating Procedure For the Validation of Organic Data Acquired Using SW-846 Method 8260B, SOP HW-24.* New York, NY.

Evaluation of organic and inorganic data for the holding time parameter was performed utilizing the validation holding times from date of collection.

Evaluation of organic data for the calibration parameter was performed utilizing the validation criteria.

Laboratory established control limits were used to assess MS/MSD, LCS/MSB, and laboratory duplicate data.

Qualification of organic data for MS/MSD analyses was performed only when both MS and MSD percent recoveries were outside of laboratory control limits.

For organic analyses, qualification of data associated with MS/MSD or field duplicate excursions was limited to the unspiked sample or the field duplicate pair, respectively.

Field duplicate data were evaluated against relative percent difference (RPD) criteria of less than 100 percent for soils and 50 percent for aqueous samples when results were greater than five times the reporting limit. When sample results for field duplicate pairs were less than five times the reporting limit, the data were evaluated using control limits of plus or minus two times the reporting limit for soils and aqueous samples.

In accordance with the USEPA guidance, results for samples submitted for organic analyses impacted by cooler temperatures of greater than 10°C, would have been qualified as approximate. Inorganic results would not have been qualified for elevated cooler temperatures. Cooler temperature excursions were not found in this sampling event.

In accordance with the USEPA guidance, results for samples submitted for organic and inorganic analyses impacted by percent solids of 50 percent or less, would have been qualified as approximate. Percent solids excursions were not found in this sampling event.

In the case that excursions were detected in quality control samples, samples associated with the quality control sample matrix were qualified for the excursion.

The following sections of this memorandum presents the results of the comparison of the analytical data to the QA/QC criteria specified in USEPA and modified NYSDEC ASP Methods, and the qualifiers assigned to the data when the QA/QC criteria were not met. Excursions that resulted in the qualification of samples and additional observations are described in the following sections.

CHAIN OF CUSTODY RECORDS

The chain-of-custody record associated with samples collected 7/21/04 and 7/22/04 was incomplete; the date, time and individual involved in relinquishing samples were not documented on the record. The samples were received by the laboratory on 7/23/04. However, the field collection individual did sign an after-hours laboratory custody record, indicating that the samples were relinquished to the laboratory security guard on 7/22/04 at 17:50. The Project Manager was informed of the incomplete custody record issue.

SAMPLE COLLECTION

Equipment blanks were not required for this investigation since dedicated equipment was used to collect the soil and ground water samples.

A trip blank was not included in the sample cooler used to ship the soil samples collected for this investigation. A trip blank was included in the sample cooler used for the aqueous samples and target analytes were not detected in that trip blank.

A field duplicate was not included with the soil samples collected for this investigation. A field duplicate was included in the ground water samples collected for this investigation. The ground water field duplicate met validation criteria.

VOLATILE ORGANIC COMPOUND AND METHANOL DATA EVALUATION SUMMARY

Excursions from quality control criteria and additional observations are summarized below.

I. Holding times, sample preservation and percent solids

The validation holding time criterion of 14 days from collection for preserved aqueous samples and 10 days from collection for soil samples for volatile organic analyses was met. Percent solids were greater than 50; therefore, qualification of sample results was not required.

II. Blank analysis

Trip blanks and method blanks were analyzed to evaluate the potential of introduced concentrations of target analytes. A trip blank was not included in the sample cooler used for the soil samples collected for this investigation. Therefore, contamination of samples during sample shipment could not be evaluated for the soil samples. A trip blank was included in the sample cooler used for the aqueous samples and target analytes were not detected in that trip blank. Several target analytes were detected in the method blanks above the method detection limit (MDL) concentration but below the practical quantitation limit (PQL). As a result of the method blank contamination, the results for impacted target analytes in the associated samples were qualified; detected results less than the PQLs were raised to the PQL concentration and qualified as non-detected (U) and results greater than the PQL were reported at the sample concentration level as non-detected (U).

III. Calibrations

Initial calibration data were evaluated using the USEPA Region II validation criteria. Target analyte results in the initial calibration analyses of 6/24/04 and 7/7/04 exceeded the validation criterion of 15 percent relative standard deviation. Therefore, detected target analytes in the associated samples were qualified as approximate (J).

Calibration verification data were evaluated using the USEPA Region II validation criteria. Target analyte results in the calibration verification analyses of 7/22/04, 7/23/04, 7/26/04, and 7/27/04 exceeded the validation criterion of 20 percent deviation. Therefore, detected and non-detected target analytes in the associated samples were qualified as approximate (UJ, J).

IV. GC/MS instrument check

GC/MS instrument checks met the validation criteria; therefore, qualification of sample results was not required.

V. Surrogate recoveries

The surrogate recoveries for sample SB-2 (3'-4') and the dilution analysis of that sample were outside of the laboratory control limits. Therefore, the results for target analytes in sample SB-2 (3'-4') were qualified as approximate (UJ, J). Qualification of remaining sample results was not required.

VI. MS/MSD analysis

The laboratory used spikes containing the complete target analyte list to generate the MS/MSD data. The MS/MSD results met validation criteria with the following exception; the recovery for 1,2,3-trichlorobenzene was less tban the lower laboratory control limit in the MS/MSD sample SB-16 (2'-4'). Tberefore the non-detected result for 1,2,3-trichlorobenzene in tbe unspiked sample SB-16 (2'-4') was qualified as approximate (UJ).

VII. LCS analysis

The laboratory used spikes containing the complete target analyte list to generate the LCS data. The LCS results met validation criteria; therefore, qualification of sample results was not required.

VIII. Internal standards performance

The recovery for internal standards in samples SB-4 (5'-7'), SB-11 (1'-3'), SB-3 (1'-3'), and SB-2 (15'-16') were outside of the validation criteria. Therefore, the results for target analytes associated with the internal standards were qualified as approximate (UJ, J).

IX. Field duplicates

A field duplicate pair was collected for sample DUP-1 [MW-7] for ground water samples. Target analytes met field duplicate validation criteria for the ground water sample; therefore, qualification of sample results was not required. A field duplicate was not included in the soil samples collected for this investigation. Therefore, field collection precision could not be evaluated for soil sample collection.

X. Target analyte quantitation, identification and reported detection limits

Samples MW-10, SB-2 (3'-4'), SB-2 (15'-16'), and SB-13 (2'-4') were analyzed at dilutions due to the detection of high concentrations of target analytes. The target analytes with concentrations that exceeded the upper calibration range were reported from the higher dilution analysis and the remaining results were reported from the less diluted analysis for the final sample result.

The level of dilution chosen by the laboratory targeted the highest concentrations of the target analytes found in sample SB-2 (3'-4'). Bromobenzene, 2-chlorotoluene and 4-chlorotoluene results were originally detected at concentrations that were greater than the upper calibration limits in the undiluted analyses. As a result of the level of dilution performed, the results for these analytes were reported as non-detected in the dilution analysis. As a result, the concentrations for these analytes were reported from the undiluted analyses, and were qualified as approximate (J).

The qualifier "J" was applied by the laboratory when the analyte concentration was greater than the MDL but less than the PQL. This qualifier has been retained during the validation process to indicate that the result is considered to be approximate.

XI. Overall assessment

- As a result of method blank contamination, the results for impacted target analytes in the associated samples were qualified as non-detected (U).
- As a result of calibration excursions, results for target analytes were qualified as approximate (UJ, J).
- Results for target analytes in sample SB-2 (3'-4') were qualified as approximate (UJ, J) due to surrogate recovery excursions.
- The non-detected result for 1,2,3-trichlorobenzene in the unspiked MS/MSD sample SB-16 (2'-4') was qualified as approximate (UJ) due to MS/MSD recovery excursions.
- The results for target analytes in samples SB-4 (5'-7'), SB-11 (1'-3'), SB-3 (1'-3'), and SB-2 (15'-16') were qualified as approximate (UJ, J) due to internal standard recovery excursions.
- The concentrations of bromobenzene, 2-chlorotoluene and 4-chlorotoluene in the undiluted analyses in sample SB-2 (3'-4') were reported as approximate (J) due an analysis excursion.
- The analyte concentrations reported by the laboratory that were greater than the MDL but less than the laboratory PQL, were qualified as approximate (J).

SEMIVOLATILE ORGANIC COMPOUND DATA EVALUATION SUMMARY

Excursions from quality control criteria and additional observations are summarized below.

I. Holding times, sample preservation and percent solids

The validation holding time criteria of 7 days from collection to extraction for aqueous samples and 14 days from collection to extraction for soil samples and 40 days from extraction to analysis for semivolatile organic analyses were met. Percent solids were greater than 50; therefore, qualification of sample results was not required.

II. Blank analysis

Method blanks were analyzed to evaluate the potential of introduced concentrations of target analytes. Bis (2-ethylhexyl) phthalate was detected in the method blank PB080504W1 above the MDL concentration but below the PQL. As a result of the method blank contamination, the results for bis (2-ethylhexyl) phthalate in the associated samples were qualified; detected results less than the PQLs were raised to the PQL concentration and qualified as non-detected (U).

III. Calibrations

Initial calibration data were evaluated using the USEPA Region II validation criteria. Target analyte results in the initial calibration analyses met the validation criterion of 15 percent relative standard deviation and response factors of greater than or equal to 0.05. Therefore, qualification of sample results was not required.

Calibration verification data were evaluated using the USEPA Region II validation criteria. Target analyte results in the calibration verification analyses of 8/8/04, 8/9/04, 8/10/04, 8/13/04, and 8/23/04 exceeded the validation criterion of 20 percent deviation. Therefore, detected and non-detected target analytes in the associated samples were qualified as approximate (UJ, J).

IV. GC/MS instrument check

GC/MS instrument checks met the validation criteria; therefore, qualification of sample results was not required.

V. Surrogate recoveries

The surrogate recoveries for phenolics in sample MW-10 were greater than the upper laboratory control limits. Therefore, the detected results for phenolic target analytes in sample MW-10 were qualified as approximate (J). Qualification of remaining sample results was not required.

VI. MS/MSD analysis

The laboratory used spikes containing the complete target analyte list to generate the MS/MSD data. Tbe MS/MSD results met validation criteria; therefore, qualification of sample results was not required.

VII. LCS analysis

The laboratory used spikes containing the complete target analyte list to generate the LCS data. The recoveries for 2,4-dimethylphenol, phenanthrene, and anthracene were less than the lower laboratory control limits in the LCS L072304S2. Therefore, the results for these target analytes in associated samples were qualified as approximate (UJ, J). Qualification of remaining sample results was not required.

VIII. Internal standards performance

Internal standards were within the validation criteria; therefore, qualification of sample results was not required.

IX. Field duplicates

A field duplicate pair was collected for sample DUP-1 [MW-7] for ground water samples. Target analytes met field duplicate validation criteria for the ground water sample; therefore, qualification of sample results was not required. A field duplicate was not included in the soil samples collected for this investigation. Therefore, field collection precision could not be evaluated for soil sample collection.

X. Target analyte quantitation, identification and reported detection limits

Samples MW-10, SB-2 (3'-4') and SB-2 (15'-16') were analyzed at dilutions due to the detection of high concentrations of target analytes. The target analytes with concentrations that exceeded the upper calibration range were reported from the higher dilution analysis and the remaining results were reported from the less diluted analysis for the final sample result.

The qualifier "J" was applied by the laboratory when the analyte concentration was greater than the MDL but less than the PQL. This qualifier has been retained during the validation process to indicate that the result is considered to be approximate.

XI. Overall assessment

- Due to method blank contamination, the results for bis (2-ethylhexyl) phthalate in the associated samples were qualified as non-detected (U).
- Detected and non-detected target analytes in samples were qualified as approximate (UJ, J) due to calibration verification excursions.
- Detected results for phenolic target analytes in sample MW-10 were qualified as approximate (J) due to surrogate recovery excursions.
- Results for 2,4-dimethylphenol, phenanthrene, and anthracene were qualified as approximate (UJ, J) due to LCS recovery excursions.
- The analyte concentrations reported by the laboratory that were greater than the MDL but less than the laboratory PQL, were qualified as approximate (J).

METAL (INCLUDING MERCURY) DATA EVALUATION SUMMARY

Excursions from quality control criteria and additional observations are summarized below.

I. Holding times, sample preservation and percent solids

The validation holding time criterion of 180 days from collection for metal analyses and 28 days from collection for mercury samples were met. Percent solids were greater than 50; therefore, qualification of sample results was not required.

II. Blank analysis

Method blanks and calibration blanks were analyzed to evaluate the potential of introduced concentrations of target analytes. Target analytes were not detected in the blanks above the PQL concentration; therefore, qualification of sample results was not required.

III. Calibrations

Initial and calibration verification data met the validation criteria; therefore, qualification of sample results was not required.

IV. MS/MSD analysis

The MS/MSD results met validation criteria; therefore, qualification of sample results was not required.

V. LCS/MSB analysis

The LCS/MSB results met validation criteria; therefore, qualification of sample results was not required.

VI. CRDL analysis

CRDL analyses met the validation criteria; therefore, qualification of sample results was not required.

VII. ICP interference check sample analysis

ICP interference check samples analyses met the validation criteria; therefore, qualification of sample results was not required

VIII. ICP serial dilution analysis

The results for zinc in the serial dilution analysis for ground water samples and the results for chromium in the serial dilution analyses for soil samples were outside of the validation criterion of 10 percent difference. Therefore, results in the associated samples were qualified as approximate (J) when sample results were greater than ten times the instrument detection limit (IDL) concentration or greater than the PQL when ten times the IDL was less than the PQL.

IX. Field duplicate analysis

A field duplicate pair was collected for sample DUP-1 [MW-7] for ground water samples. Target analytes met field duplicate validation criteria for the ground water sample; therefore, qualification of sample results was not required. A field duplicate was not included in the soil samples collected for this investigation. Therefore, field collection precision could not be evaluated for soil sample collection.

X. Target analyte quantitation and reported detection limits

Sample SB-11 (1'-3') was analyzed at a dilution due to the detection of high concentrations of iron. The iron result that exceeded the upper calibration range was reported from the higher dilution analysis and the remaining results were reported from the less diluted analysis for the final sample result with the following exception. Since the elevated iron concentration impacted other elements due to interelement correction factors, the diluted results for the other impacted elements were reported.

In the associated laboratory quality control data, the qualifier "J" was applied by the laboratory when the analyte concentration was greater than the IDL but less than the PQL.

XI. Overall data assessment

- Results for zinc in ground water samples and chromium in soil samples were qualified as approximate (J) due to serial dilution excursions.
- The analyte concentrations reported by the laboratory that were greater than the IDL but less than the laboratory PQL, were qualified as approximate (J).

DATA USABILITY

Overall data usability with respect to completeness is 100 percent for the VOC, SVOC, and metal data. Based on the review performed, the data were determined to be usable for qualitative and quantitative purposes.

ATTACHMENT A

Cross Reference List of Validated Sample Results

Table 1-2 Cross Reference List

Sample Matrix	Collection Date	Client Identification	Laboratory Identification	Laboratory	Analysis Requested
Soil	7/19/2004	SB-1 (1'-3')	E3440	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/19/2004	SB-2 (3'-4')	E3441	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/19/2004	SB-2 (15'-16')	E3442	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/19/2004	SB-3 (1'-3')	E3443	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/19/2004	SB-4 (5'-7')	E3444	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/19/2004	SB-5 (7'-9')	E3445	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/19/2004	SB-6 (7'-9')	E3446	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-7 (3'-5')	E3447	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-8 (3'-4')	E3448	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-8 (9'-11')	E3449	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-9 (1'-3')	E3450	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-10 (1'-3')	E3451	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-11 (1'-3')	E3452	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-12 (6'-8')	E3453	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-13 (2'-4')	E3454	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-13 (14'-16')	E3455	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/20/2004	SB-14 (4'-6')	E3456	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/21/2004	SB-15 (2-4')	E3592	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/21/2004	SB-16 (2-4'), MS/MSD	E3593	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/21/2004	SB-17 (6-8')	E3594	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/21/2004	SB-18 (1-3')	E3595	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/21/2004	SB-19 (1-3')	E3596	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/22/2004	SB-20 (6-8')	E3597	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/22/2004	SB-20 (13-15')	E3598	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/22/2004	SB-21 (1-3')	E3599	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Soil	7/22/2004	SB-22 (2-4')	E3600	OBG Labs	Metals, VOCs, SVOCs, Percent solids
Groundwater	8/2/2004	MW-1R	E3915	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/2/2004	MW-5	E3916	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/2/2004	MW-9	E3917	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/2/2004	MW-2	E3918	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/2/2004	MW-3R	E3919	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/2/2004	MW-6	E3920	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/3/2004	MW-8, MS/MSD	E3921	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/3/2004	MW-7	E3922	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/3/2004	DUP 1 [MW-7]	E3923	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/3/2004	MW-4	E3924	OBG Labs	Metals, VOCs, SVOCs
Groundwater	8/3/2004	MW-10	E3925	OBG Labs	Metals, VOCs, SVOCs
Aqueous	8/2/2004	QC Trip Blank	E3926	OBG Labs	VOCs

Table 1-2 Cross Reference List

Notes:
The location in parenthesis indicate the sample location collected as the field duplicate.
MS/MSD indicates matrix spike/matrix spike duplicate.
VOCs indicates volatile organic compounds.
SVOCs indicates semivolatile organic compounds.
Metals include beryllium, chromium, copper, iron, mercury, nickel, zinc

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

December 22, 2016

David Meixell
Plumley Engineering, PC
8232 Loop Rd
Baldwinville, NY 13027

RE: **D**ata **U**sability **S**ummary **R**eport for the Market Basket Analytical Data
SGS Accutest SDG No. MC47774

Dear Mr. Meixell:

Review has been completed for the data package generated by SGS Accutest that pertains to samples collected 09/12/16 at the Market Basket site. Seven aqueous samples and a field duplicate were processed for the earlier TCL volatile and semivolatile analytes and TCL Aroclor PCBs by the USEPA SW846 methods 8260C, 8270D, and 8082A. Data pertaining to the leachate analyses reported in the data package did not require validation.

The data package submitted contains full deliverables for validation, and this usability report is generated from review of the summary form information, with full review of sample raw data, and limited review of associated QC raw data. The reported summary forms have been reviewed for application of validation qualifiers, using guidance from the USEPA Region 2 validation SOPs, the USEPA National Functional Guidelines for Data Review, the specific laboratory methodologies, and professional judgment, as affects the usability of the data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate
* Preparation and Calibration/Blanks
* Laboratory Control Samples
* Calibration/Low Level Standards
* Sample Result Verification

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c). The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found within the laboratory data package.

In summary, sample results are usable either as reported or with minor qualification..

Data completeness, representativeness, accuracy, precision, sensitivity, and the analytical method comparability are acceptable.

Included with this narrative are listings of sample identifications covered in this report and the laboratory EDD edited to reflect the validation qualifications recommended in this report.

The following text discusses quality issues of concern.

Chain-of-Custodies

The custody form should have stated the location at which the matrix spikes were collected.

The volatile fractions of the samples were not collected according to method 5035, and were not preserved by the laboratory within 48 hours. There may be a low bias to the sample volatile reported results.

Field Duplicate Evaluations

The field duplicate evaluation was performed on North and shows acceptable correlations.

Volatile Analyses by EPA8260C

Due to sample matrix, SMALL PILE exhibited a low recovery for one internal standard and one elevated recovery for one surrogate standard. Therefore, results for 1,1,2,2-tetrachloroethane and methylene chloride in that sample have been qualified as estimated, with low and high biases, respectively.

All of the detections of toluene and carbon disulfide, and the acetone results flagged with the laboratory "B" flag, are considered external contamination due to detection of those compounds in associated blanks. Those sample detections have been edited to reflect non-detection. The remaining acetone detections and the methylene chloride detections in the samples should be used with caution, as they are also suspect as laboratory contamination.

Matrix spikes of North show recoveries and correlations within laboratory acceptance ranges. Calibration standards show responses within validation action guidelines.

Tentatively Identified Compounds (TICs) are overly characterized; not all match the reported identification.

Semivolatiles by EPA 8270D

Due to presence in the associated method blank, the detections of di-n-butylphthalate in the samples are considered external contamination and have been edited to reflect non-detection.

Matrix spikes of North show recoveries and correlations within laboratory acceptance ranges.

Holding times were met. Surrogate and internal standard responses are compliant. Calibration standards show responses within validation action guidelines.

Small Pile was processed at fiftyfold dilution due to matrix interferences. Reporting limits are proportionally elevated, and detected concentrations are below the adjusted reporting limits and therefore estimated values. Review of the raw data indicates a lessor dilution may have successfully been performed.

Tentatively Identified Compounds (TICs) are overly characterized; not all match the reported identification.

TCL Aroclor PCBs by EPA Method 8082A

Holding times were met. Blanks show no contamination. Surrogate recoveries are acceptable. Calibration standards show acceptable responses.

Matrix spikes of North show recoveries and correlations within laboratory acceptance ranges.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs

Sample Summary

Plumley Engineering, P.C.

Job No: MC47774

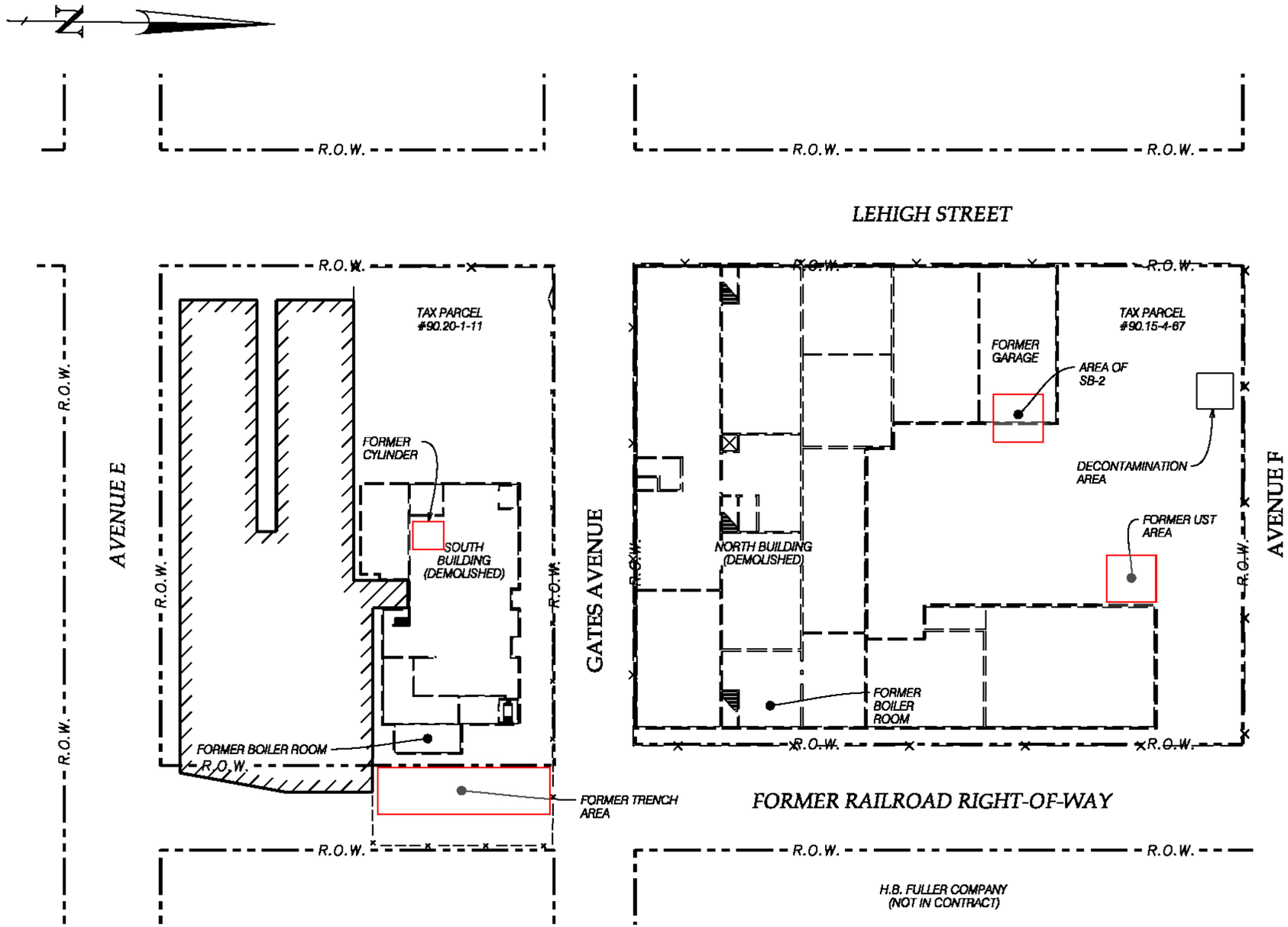
Market Basket, 63 Gates Avenue, Geneva, NY
Project No: 2016018

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC47774-1	09/12/16	09:15 DM	09/14/16	SO	Soil	BOTTOM
MC47774-2	09/12/16	09:35 DM	09/14/16	SO	Soil	NORTH
MC47774-3	09/12/16	09:45 DM	09/14/16	SO	Soil	SOUTH
MC47774-4	09/12/16	09:55 DM	09/14/16	SO	Soil	WEST
MC47774-5	09/12/16	10:10 DM	09/14/16	SO	Soil	EAST
MC47774-6	09/12/16	10:45 DM	09/14/16	SO	Soil	LARGE PILE
MC47774-7	09/12/16	10:55 DM	09/14/16	SO	Soil	SMALL PILE
MC47774-8	09/12/16	09:35 DM	09/14/16	SO	Soil	FIELD DUPE

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

APPENDIX J

EC AS-BUILT DRAWINGS, DOCUMENTATION, AND DRAWINGS



Key

R.O.W. — Right of Way

Areas of Excavation

Plan View

1" = 60'
SCALE 30 0 30 60 FEET

Basemap Reference:

"City of Geneva, Former Market Basket Property, Environmental Resoration Program, Ontario County, New York"; Prepared by: Obrien Gere Engineers, Inc.; Dated: January 2009; File No.: 1740.30852.101.

STATE OF NEW YORK
DAVID K. MERRILL
LICENSED PROFESSIONAL ENGINEER

12-12-16

PLUMLEY ENGINEERING
Civil and Environmental Engineering

PLUMLEY ENGINEERING, P.C.
8252 LOOP ROAD
BALDWINSVILLE, NY 13027

TELEPHONE: (315) 638-8587
FAX: (315) 638-9740
WWW.PLUMLEYENG.COM

REVISIONS:	DATE:	BY:

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PROJECT: MARKET BASKET PROPERTY
ENVIRONMENTAL RESTORATION PROGRAM

DWG. TITLE: EXCAVATION AS-BUILT

CLIENT: CITY GENEVA

LOCATION: CITY OF GENEVA, ONTARIO COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2016018
FILE NAME.:	EV01P
SCALE:	AS NOTED
DATE:	DEC. 2016
ENG'D BY:	DKM
DRAWN BY:	JMD
CHECKED BY:	DKM

SHEET NO.: FIGURE 6

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APPENDIX K

IMPORTED MATERIALS DOCUMENTATION

2002 MALCURIA IMPORTED FILL

January 5, 2009

Mr. Gregory B. MacLean, P.E.
NYSDEC - Region 8
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, NY 14414-9519

Re: Market Basket ERP Site (B00018-8)

File: 1740/30852

Dear Greg:

Attached is a summary table of the analytical results from the surface soil samples that were collected on the southern block of the Market basket site in Geneva, New York. This table also includes the respective soil cleanup objectives (SCOs) for the detected constituents. As documented by the analytical results, each of the four samples exceeded several SCOs. However, two soil samples that were collected at a depth of approximately two feet in the trench that was located in this same area had only one minor exceedance of acetone in one sample (58 µg/Kg, with an SCO of 50 µg/Kg for unrestricted use).

Based on these results, the City is proposing to remove soil in this area to a depth of approximately two feet, to be followed by the collection of five soil samples for confirmation. This action will be a continuation of the previously approved Remedial Action Work Plan (RAWP), and the excavation and sampling procedures will be conducted in accordance with the RAWP, including the screening of the excavation visually and with a photoionization detector (PID).

Please confirm that the Department concurs with this continued remedial activity.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

David K. Meixell, P.E.
Senior Project Engineer

cc: Gordon P. Eddington - City of Geneva

I:\Geneva-C.1740\30852.Brownfields-Pro\08 Remediation\DECLetSouthBlock.doc

Summary of Surface Soil Analytical Results
Protection of Human Health - Commercial Use
Former Market Basket Site
Geneva, New York
(mg/Kg), dry weight

Constituent	MBSS-1	MBSS-2	MBSS-3	MBSS-4	SCO
Volatile Organic Compounds					
Trichloroethene	<0.0029	0.0022J	<0.0031	<0.0032	200
Semivolatile Organic Compounds					
1,1-Biphenyl	<3.9	<4.4	<0.83	0.15 J	NL
2-Methylnaphthalene	<3.9	<4.4	0.15 J	1.100	NL
4-Methylphenol	<3.9	<4.4	<0.83	0.31 J	NL
Acenaphthene	1.4 J	0.5 J	0.16 J	0.19 J	500
Acenaphthylene	<3.9	<4.4	0.23 J	0.32 J	500
Acetophenone	<3.9	<4.4	<0.83	0.14 J	NL
Anthracene	1.7 J	1.1 J	0.26 J	0.52 J	500
Benzaldehyde	<3.9	<4.4	0.15 J	<0.86	NL
Benzo[a]anthracene	**9.6**	5.4	1.8	1.9	5.6
Benzo[a]pyrene	**10**	**5.1**	**1.8**	**2.2**	1
Benzo[b]fluoranthene	**17**	**9.3**	3.9	4.3	5.6
Benzo[g,h,i]perylene	3.2 J	1.7 J	0.87	1.7	500
Benzo[k]fluoranthene	6.2	3.2 J	1.2	1.4	56
bis(2-chloroethyl)ether	<3.9	<4.4	<0.83	0.087 J	NL
bis(2-ethylhexyl)phthalate	0.67 J	<4.4	1.6	0.29 J	NL
Carbazole	1.5 J	0.71 J	0.19 J	0.35 J	NL
Chrysene	**10**	5.5	1.9	2.5	5.6
Dibenz[a,h]anthracene	**0.99 J**	**0.62 J**	0.28 J	0.4 J	0.56
Dibenzofuran	<3.9	<4.4	0.12 J	0.28 J	NL
Fluoranthene	**21**	**11**	3.1	3.2	500
Fluorene	0.71 J	0.47 J	0.11 J	0.2 J	500
Indeno[1,2,3-cd]pyrene	2 J	0.96 J	0.3 J	0.52 J	5.6
Naphthalene	<3.9	<4.4	0.27 J	0.74 J	500
Phenanthrene	**11**	5.8	1.5	2.6	500
Phenol	<3.9	<4.4	<0.83	0.094 J	500
Pyrene	**18**	**11**	4.5	8.2	500
Metals					
Beryllium	0.32 J	0.39 J	0.65 J	0.29 J	590
Chromium	29	97	65	430	1,500
Copper	91	**460**	220	**2,000**	270
Iron	16,000	24,000	31,000	120,000	NL
Nickel	23	46	38	170	310
Zinc	260	530	990	5,200	10,000
Mercury	0.083 J	0.19	0.30	**3.8**	2.8

NL: Not Listed
Bold type indicates exceedances

Paul R. Malcuria

754 Lake Rd.
Phelps, New York 14532

Phone 716-733-7815

October 23, 2002

Mr. Gordon Eddington
Department of Public Works
City of Geneva
Castle St. Geneva, New York 14456

Dear Gordie:,

Here is the invoice for the state approved topsoil hauled by Riccelli Enterprises on October 22. 2002 from Gates Rd. in Geneva to the Market Basket site in Geneva, Glenwood Cemetery in Geneva and the Chamber of Commerce Lake Front site in Geneva.

As you know I gave the City an excellent price on the topsoil and I paid all cost for the loader to load the trucks. The trucking fee will be billed by Riccelli Enterprises.

Truck #	Gates Rd. Site	Glenwood Cemetery	Chamber of Commerce
71	6	1	1
86	13		
95	4		
79	11	1	1
76	10	2	1
97	13		
61	10	1	2
Total loads	67	5	5

Total 77 loads @ 20 yds. per load= 1540 yds. @ $8.00 per yd. = Total $12,320.00

As I stated above I gave the city an excellent price. The normal price for state approved topsoil would be $15.00 per yd. for material only.

It was a pleasure doing business with the city as always.

Paul Malcuria

Paul

2013 HANSON AGGREGATES
IMPORTED FILL

Date Issued: December 13, 2013

Pace Analytical e-Report

Report prepared for:
CITY OF GENEVA
47 CASTLE ST
GENEVA, NY 14456
CONTACT: GORDON EDDINGTON

Project ID: MARKET BASKET
Sampling Date(s): December 03, 2013
Lab Report ID: 13120067
Client Service Contact: Peggy Siegfried (518) 346-4592 ext. 3838

Analysis Included:
VOCs by GCMS
SVOCs by GCMS
PCB Analysis
Pesticide Analysis (Solid)
Mercury Analysis
Metals by ICP (Custom)
Herbicides - Subcontracted
Hexavalent Chromium
Cyanide (Solid)

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is responsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Dan Pfalzer
Laboratory Director

Certifications: New York (EPA: NY00906, ELAP: 11078), New Jersey (NY026), Connecticut (PH-0337), Massachusetts (M-NY906), Virgi nia (1884)

Pace Analytical Services, Inc.| 2190 Technology Drive | Schenectady, NY 12308
Phone: 518.346.4592 | internet: www.pacelabs.com

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Table of Contents

Section 1: CASE NARRATIVE 4

Section 2: QUALIFIERS 8

Section 3: SAMPLE CHAIN OF CUSTODY 10

Section 4: SAMPLE RECEIPT 12

Section 5: GC/MS Volatiles 16

Section 6: GC/MS Semivolatiles 21

Section 7: GC - PCB 26

Section 8: GC - Pesticides 29

Section 9: Mercury 32

Section 10: Metals - ICP 35

Section 11: Wet Chemistry - Cyanide 38

Section 12: Quality Control Samples (Field) 41

Section 13: Quality Control Samples (Lab) 46

Section 14: Subcontract Analysis 65

CASE NARRATIVE

December 13, 2013

CASE NARRATIVE

This data package (SDG ID: 13120067) consists of 2 soil samples received on 12/04/2013. The samples are from Project Name: MARKET BASKET.

This sample delivery group consists of the following samples:

1

Lab Sample ID	Client ID	Collection Date
AQ41891	COMPOSITE 1	12/03/2013 17:15
AQ41892	COMPOSITE 2	12/03/2013 17:30

Sample Delivery and Receipt Conditions

(1.) All samples were delivered to the laboratory via FEDEX delivery service on 12/04/2013.

(2.) All samples were received at the laboratory intact and within holding times.

(3.) All samples were received at the laboratory properly preserved with any exceptions listed below:

Volatile Organics Analysis

Analysis for Volatile Organics was performed by method SW-846 8260C. The following technical and administrative items were noted for the analysis:

(1.) All solid samples for Volatile Organic Analysis were not collected by Pace Analytical and were collected in bulk containers and not in accordance with Method 5035/5035A. All results below 200 ppb should be considered as potentially biased low.

(2.) The percent recovery of Bromomethane was below established qualtiy control limits in the associated continuing calibration verification (LAB ID: AQ41891, AQ41892). Analytical results for this analyte may be biased low.

(3.) The percent recovery of 1,4-Dioxane was above established qualtiy control limits in the associated continuing calibration verification (LAB ID: AQ41891, AQ41892). This analyte was not detected in the samples; therefore data is not impacted by the possible high bias.

(4.) The percent recovery of Bromomethane was below established qualtiy control limits in the associated laboratory control sample (LAB ID: AQ41891, AQ41892). Analytical results for this analyte may be biased low.

(5.) The percent recovery of 1,4-Dioxane was above established qualtiy control limits in the associated laboratory control sample (LAB ID: AQ41891, AQ41892). This analyte was not detected in the samples; therefore data is not impacted by the possible high bias.

Semivolatile Organics Analysis

Analysis for Semivolatile Organics was performed by method SW-846 8270D. Samples were extracted by Accelerated Solvent Extraction (EPA Method 3545A). The following technical and administrative items were noted for the analysis:

(1.) The percent recovery of Hexachlorocyclopentadiene was below established qualtiy control limits in the associated continuing calibration verification (LAB ID: AQ41891, AQ41892). Analytical resutls for this analyte may be biased low.

(2.) The percent recoveries of 4-Chloro-3-methylphenol, 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol were above established qualtiy control limits in the associated continuing calibration verification (LAB ID: AQ41891, AQ41892). These analytes were not detected in the samples; therefore data is not impacted by the possible high bias.

1

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by method SW-846 8082A. Samples were extracted by Accelerated Solvent Extraction (EPA Method 3545A). The following technical and administrative items were noted for the analysis:

(1.) All quality assurance parameters were met for the analysis.

Pesticide Analysis

Analysis for pesticides was performed by method SW-846 8081B. Samples were extracted by Accelerated Solvent Extraction (EPA Method 3545A). The following technical and administrative items were noted for the analysis:

(1.) All quality assurance parameters were met for the analysis.

Mercury Analysis

Analysis for mercury was performed by method SW-846 7471B. The following technical and administrative items were noted for the analysis:

(1.) All quality assurance parameters were met for the analysis.

Metals Analysis by ICP

Analysis for metals was performed by method SW-846 6010C. The following technical and administrative items were noted for the analysis:

(1.) The relative percent difference between the sample and the duplicate sample was outside quality acceptance limits for sample (LAB ID: AQ41892D). Please see associated duplicate form for details.

(2.) The percent recovery of Manganese was below established quality control limits in the matrix spike sample.

Cyanide Analysis

Analysis for cyanide was performed by method SW-846 9014. Preparation was performed by method SW-846 9010C. The following technical and administrative items were noted for the analysis:

(1.) All quality assurance parameters were met for the analysis.

Subcontract Analysis

Please see the Phoenix Environmental Laboratory report for quality assurance details relating to the Herbicides and Trivalent Chromium, and Hexavalent Chromium analysis.

Respectfully submitted,

Peggy Siegfried
Project Manager

1

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QUALIFIERS

Qualifier Definitions

Organic Laboratory Qualifiers

B - Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.

D - Surrogate recovery not evaluated against control limits due to sample dilution.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

P - Indicates relative percent difference (RPD) between primary and secondary gas chromatograph (GC) column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary gas chromatograph (GC) column analysis exceeds 25 %.

U - Denotes analyte not detected at concentration greater than the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

Z - Chromatographic interference due to polychlorinated biphenyl (PCB) co-elution.

* - Value not within control limits.

Inorganic Laboratory Qualifiers

B - Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

U - Denotes analyte not detected at concentration greater than the Practical Quantitation Limit (PQL). PQLs are adjusted for sample weight/volume and dilution factors.

* - Value not within control limits.

SAMPLE CHAIN OF CUSTODY

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www.pacelabs.com

<13120067P1>

131270571

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

1791201

Section A Required Client Information:

Company: GORDON EDDINGTON
Address:
Email To: gedding1@yahoo.com
Phone: (315) 277-0162 Fax:
Requested Due Date/TAT: 5 DAYS

Section B Required Project Information:

Report To:
Copy To:
Purchase Order No.:
Project Name: MARKET BASKET
Project Number:

Section C Invoice Information:

Attention: WILL CZAPLAK
Company Name: CITY OF GENEVA
Address: 45 DOGAN AVE
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOC-8260	SVOC-8270	PCB-8082	PEST-8081	HERB-8151	Cn	As, Ba, Be, Cd, Cr	Cr(6), Cr3, Cu, Pb, Mn	Hg, Ni, Se, Ag, Zn	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	COMPOSITE 1/GRABS 1,2,3,4	SL				12/3/13	17:15		3	3									X	X	X	X	X	X	X	X			AQ41891
2																													
3	COMPOSITE 2/GRABS 5,6,7,8	SL				12/3/13	17:30		3	3									X	X	X	X	X	X	X	X			AQ41892
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	PACE	12/3/13	18:00	VIA Fedex						
	VIA Fedex	12/4/13	9:51	Pace	12/4/13	9:51	5.8	Y	Y	Y
							(IR)			

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: JAMES MURPHY
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 12/3/13

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLE RECEIPT

4

SAMPLE RECEIPT REPORT
13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

CLIENT: CITY OF GENEVA
PROJECT: MARKET BASKET
LRF: 13120067
REPORT: ANALYTICAL REPORT
EDD: NO
LRF TAT: 1 WEEK

RECEIVED DATE: 12/4/2013 09:51
SHIPPED VIA: FEDEX
SHIPPING ID: 797303258504
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: YES
COOLER STATUS: CHILLED
TEMPERATURE(S): [5] 8 (IR) °C

SAMPLE SEALS INTACT: NA
[1,2] **SAMPLES PRESERVED PER METHOD GUIDANCE:** NO
[3] **SAMPLES REC'D IN HOLDTIME:** YES
DISPOSAL: BY LAB (45 DAYS)
COC DISCREPANCY: NO

COMMENTS:
SAMPLES NOT PROPERLY PRESERVED PER COLLECTION METHOD 5035

CLIENT ID (LAB ID)	TAT-DUE Date[4]	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUESTED
COMPOSITE 1 (AQ41891)	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 6010C	Metals by ICP (Custom)	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 7196A	Hexavalent Chromium	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 7471B	Mercury Analysis	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 8081B	Pesticide Analysis (Solid)	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 8082A	PCB Analysis	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 8151A	Herbicides - Subcontracted	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 8260C	VOCs by GCMS	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 8270D	SVOCs by GCMS	
	1 WEEK 12-11-13	12/3/2013 17:15	Soil	SW-846 9014	Cyanide (Solid)	
COMPOSITE 2 (AQ41892)	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 6010C	Metals by ICP (Custom)	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 7196A	Hexavalent Chromium	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 7471B	Mercury Analysis	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 8081B	Pesticide Analysis (Solid)	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 8082A	PCB Analysis	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 8151A	Herbicides - Subcontracted	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 8260C	VOCs by GCMS	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 8270D	SVOCs by GCMS	
	1 WEEK 12-11-13	12/3/2013 17:30	Soil	SW-846 9014	Cyanide (Solid)	

[1]The pH preservation check of Oil and Grease (Method 1664) is performed as soon as possible after sample receipt and may not be included in this report
[2]The pH preservation check of aqueous volatile samples is not performed until after the analysis of the sample to maintain zero headspace and is not included in this report.
[3]Samples received for pH analysis are not marked as a hold time exceedance here. SW-846 methods suggests analysis to be done within 15 minutes of sample collection. Because of transportation time it is not possible for the laboratory to perform the test in that time. Sample Certificates of Analysis reports are noted as such.
[4]Samples arriving at the laboratory after 4:00 pm are assigned a due date as if they arrived the following business day unless other arrangements have been made
[5]All samples which require thermal preservation shall be considered acceptable when received greater than 6 degrees Celsius if they are collected on the same day as received and there is evidence that the chilling process has begun, such as arrival on ice Control limits are between 0-6 Degrees Celsius. Control limits do not apply for metals analysis.

Reporting Parameters and Lists

SW-846 6010C - Metals by ICP (Custom) - (mg/kg)

Arsenic
Barium
Beryllium
Cadmium
Chromium
Copper
Lead
Manganese
Nickel
Selenium
Silver
Zinc

SW-846 7471B - Mercury Analysis - (mg/kg)

Mercury

SW-846 8081B - Pesticide Analysis (Solid) - (ug/g)

Aldrin
alpha Chlordane
alpha-BHC
beta-BHC
Chlordane
delta-BHC
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
gamma Chlordane
gamma-BHC
Heptachlor
Heptachlor epoxide

SW-846 8081B - Pesticide Analysis (Solid) - (ug/g)

Hexachlorobenzene
Methoxychlor
p,p'-DDD
p,p'-DDE
p,p'-DDT
Toxaphene

SW-846 8082A - PCB Analysis - (ug/g)

Aroclor 1016
Aroclor 1221
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Total PCB Amount > RL

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Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Continued...

SW-846 8260C - VOCs by GCMS - (ug/kg)

1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,4-Dichlorobenzene
1,4-Dioxane
2,2-Dichloropropane
2-Butanone
2-Chloroethylvinylether
2-Chlorotoluene
2-Hexanone
4-Chlorotoluene
4-Isopropyltoluene
4-Methyl-2-pentanone
Acetone
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Carbon Disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
m&p-Xylene
Methylene Chloride
Methyl-tert-butyl-ether (MTBE)
Naphthalene
n-Butylbenzene
n-Propylbenzene
o-Xylene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Tetrachloroethene
Toluene

SW-846 8260C - VOCs by GCMS - (ug/kg)

trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Trichlorofluoromethane
Vinyl Acetate
Vinyl Chloride

SW-846 8270D - SVOCs by GCMS - (ug/kg)

1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3&4-Methylphenol
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl-phenylether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl-phenylether
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
bis(2-chloroethoxy)methane
bis(2-chloroethyl)ether
bis(2-Chloroisopropyl)ether
bis(2-Ethylhexyl)phthalate
Butylbenzylphthalate
Carbazole
Chrysene
Dibenz(a,h)anthracene
Dibenzofuran
Diethylphthalate
Dimethylphthalate
Di-n-butylphthalate
Di-n-octylphthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitroso-di-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene

4

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Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Continued...

SW-846 8270D - SVOCs by GCMS - (ug/kg)

Phenol
Pyrene

SW-846 9014 - Cyanide (Solid) - (mg/kg)

Cyanide

4

GC/MS Volatiles

5

Pace Analytical®

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-26	EPA Method 8260C	12/12/2013 19:37	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-26	EPA Method 8260C	12/12/2013 19:37	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	2168	EPA 5035A-L	12/11/2013 14:10	BH	4.95 g	10.0 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
1,1,1,2-Tetrachloroethane	630-20-6	ND	2.12	1.00	U	MS08-1589-26
1,1,1-Trichloroethane	71-55-6	ND	2.12	1.00	U	MS08-1589-26
1,1,2,2-Tetrachloroethane	79-34-5	ND	2.12	1.00	U	MS08-1589-26
1,1,2-Trichloroethane	79-00-5	ND	2.12	1.00	U	MS08-1589-26
1,1-Dichloroethane	75-34-3	ND	2.12	1.00	U	MS08-1589-26
1,1-Dichloroethene	75-35-4	ND	2.12	1.00	U	MS08-1589-26
1,1-Dichloropropene	563-58-6	ND	2.12	1.00	U	MS08-1589-26
1,2,3-Trichlorobenzene	87-61-6	ND	2.12	1.00	U	MS08-1589-26
1,2,3-Trichloropropane	96-18-4	ND	2.12	1.00	U	MS08-1589-26
1,2,4-Trichlorobenzene	120-82-1	ND	2.12	1.00	U	MS08-1589-26
1,2,4-Trimethylbenzene	95-63-6	ND	2.12	1.00	U	MS08-1589-26
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.12	1.00	U	MS08-1589-26
1,2-Dibromoethane	106-93-4	ND	2.12	1.00	U	MS08-1589-26
1,2-Dichlorobenzene	95-50-1	ND	2.12	1.00	U	MS08-1589-26
1,2-Dichloroethane	107-06-2	ND	2.12	1.00	U	MS08-1589-26
1,2-Dichloropropane	78-87-5	ND	2.12	1.00	U	MS08-1589-26
1,3,5-Trimethylbenzene	108-67-8	ND	2.12	1.00	U	MS08-1589-26
1,3-Dichlorobenzene	541-73-1	ND	2.12	1.00	U	MS08-1589-26
1,3-Dichloropropane	142-28-9	ND	2.12	1.00	U	MS08-1589-26
1,4-Dichlorobenzene	106-46-7	ND	2.12	1.00	U	MS08-1589-26
1,4-Dioxane	123-91-1	ND	21.2	1.00	U	MS08-1590-26
2,2-Dichloropropane	594-20-7	ND	2.12	1.00	U	MS08-1589-26
2-Butanone	78-93-3	ND	2.12	1.00	U	MS08-1589-26
2-Chloroethylvinylether	110-75-8	ND	2.12	1.00	U	MS08-1589-26
2-Chlorotoluene	95-49-8	ND	2.12	1.00	U	MS08-1589-26
2-Hexanone	591-78-6	ND	2.12	1.00	U	MS08-1589-26
4-Chlorotoluene	106-43-4	ND	2.12	1.00	U	MS08-1589-26
4-Isopropyltoluene	99-87-6	ND	2.12	1.00	U	MS08-1589-26
4-Methyl-2-pentanone	108-10-1	ND	2.12	1.00	U	MS08-1589-26
Acetone	67-64-1	ND	10.6	1.00	U	MS08-1589-26
Benzene	71-43-2	ND	2.12	1.00	U	MS08-1589-26
Bromobenzene	108-86-1	ND	2.12	1.00	U	MS08-1589-26
Bromochloromethane	74-97-5	ND	2.12	1.00	U	MS08-1589-26
Bromodichloromethane	75-27-4	ND	2.12	1.00	U	MS08-1589-26
Bromoform	75-25-2	ND	2.12	1.00	U	MS08-1589-26
Bromomethane	74-83-9	ND	2.12	1.00	U	MS08-1589-26
Carbon Disulfide	75-15-0	ND	2.12	1.00	U	MS08-1589-26
Carbon Tetrachloride	56-23-5	ND	2.12	1.00	U	MS08-1589-26
Chlorobenzene	108-90-7	ND	2.12	1.00	U	MS08-1589-26
Chloroethane	75-00-3	ND	2.12	1.00	U	MS08-1589-26
Chloroform	67-66-3	ND	2.12	1.00	U	MS08-1589-26
Chloromethane	74-87-3	ND	2.12	1.00	U	MS08-1589-26
cis-1,2-Dichloroethene	156-59-2	ND	2.12	1.00	U	MS08-1589-26

5

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Pace Analytical®

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-26	EPA Method 8260C	12/12/2013 19:37	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-26	EPA Method 8260C	12/12/2013 19:37	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	2168	EPA 5035A-L	12/11/2013 14:10	BH	4.95 g	10.0 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
cis-1,3-Dichloropropene	10061-01-5	ND	2.12	1.00	U	MS08-1589-26
Dibromochloromethane	124-48-1	ND	2.12	1.00	U	MS08-1589-26
Dibromomethane	74-95-3	ND	2.12	1.00	U	MS08-1589-26
Dichlorodifluoromethane	75-71-8	ND	2.12	1.00	U	MS08-1589-26
Ethylbenzene	100-41-4	ND	2.12	1.00	U	MS08-1589-26
Hexachlorobutadiene	87-68-3	ND	2.12	1.00	U	MS08-1589-26
Isopropylbenzene	98-82-8	ND	2.12	1.00	U	MS08-1589-26
m&p-Xylene	136777-61-2	ND	2.12	1.00	U	MS08-1589-26
Methylene Chloride	75-09-2	ND	10.6	1.00	U	MS08-1589-26
Methyl-tert-butyl-ether (MTBE)	1634-04-4	ND	2.12	1.00	U	MS08-1589-26
Naphthalene	91-20-3	ND	2.12	1.00	U	MS08-1589-26
n-Butylbenzene	104-51-8	ND	2.12	1.00	U	MS08-1589-26
n-Propylbenzene	103-65-1	ND	2.12	1.00	U	MS08-1589-26
o-Xylene	95-47-6	ND	2.12	1.00	U	MS08-1589-26
sec-Butylbenzene	135-98-8	ND	2.12	1.00	U	MS08-1589-26
Styrene	100-42-5	ND	2.12	1.00	U	MS08-1589-26
tert-Butylbenzene	98-06-6	ND	2.12	1.00	U	MS08-1589-26
Tetrachloroethene	127-18-4	ND	2.12	1.00	U	MS08-1589-26
Toluene	108-88-3	ND	2.12	1.00	U	MS08-1589-26
trans-1,2-Dichloroethene	156-60-5	ND	2.12	1.00	U	MS08-1589-26
trans-1,3-Dichloropropene	10061-02-6	ND	2.12	1.00	U	MS08-1589-26
Trichloroethene	79-01-6	ND	2.12	1.00	U	MS08-1589-26
Trichlorofluoromethane	75-69-4	ND	2.12	1.00	U	MS08-1589-26
Vinyl Acetate	108-05-4	ND	2.12	1.00	U	MS08-1589-26
Vinyl Chloride	75-01-4	ND	2.12	1.00	U	MS08-1589-26

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Bromofluorobenzene	460-00-4	110	45.4-170		MS08-1589-26
Dibromofluoromethane	1868-53-7	99.7	79.3-122		MS08-1589-26
toluene-d8	2037-26-5	101	77.0-133		MS08-1589-26
1,2-Dichloroethane-d4	17060-07-0	102	80.9-116		MS08-1589-26

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

5

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Pace Analytical®

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-27	EPA Method 8260C	12/12/2013 20:06	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-27	EPA Method 8260C	12/12/2013 20:06	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	2168	EPA 5035A-L	12/11/2013 14:11	BH	4.91 g	10.0 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
1,1,1,2-Tetrachloroethane	630-20-6	ND	2.13	1.00	U	MS08-1589-27
1,1,1-Trichloroethane	71-55-6	ND	2.13	1.00	U	MS08-1589-27
1,1,2,2-Tetrachloroethane	79-34-5	ND	2.13	1.00	U	MS08-1589-27
1,1,2-Trichloroethane	79-00-5	ND	2.13	1.00	U	MS08-1589-27
1,1-Dichloroethane	75-34-3	ND	2.13	1.00	U	MS08-1589-27
1,1-Dichloroethene	75-35-4	ND	2.13	1.00	U	MS08-1589-27
1,1-Dichloropropene	563-58-6	ND	2.13	1.00	U	MS08-1589-27
1,2,3-Trichlorobenzene	87-61-6	ND	2.13	1.00	U	MS08-1589-27
1,2,3-Trichloropropane	96-18-4	ND	2.13	1.00	U	MS08-1589-27
1,2,4-Trichlorobenzene	120-82-1	ND	2.13	1.00	U	MS08-1589-27
1,2,4-Trimethylbenzene	95-63-6	ND	2.13	1.00	U	MS08-1589-27
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.13	1.00	U	MS08-1589-27
1,2-Dibromoethane	106-93-4	ND	2.13	1.00	U	MS08-1589-27
1,2-Dichlorobenzene	95-50-1	ND	2.13	1.00	U	MS08-1589-27
1,2-Dichloroethane	107-06-2	ND	2.13	1.00	U	MS08-1589-27
1,2-Dichloropropane	78-87-5	ND	2.13	1.00	U	MS08-1589-27
1,3,5-Trimethylbenzene	108-67-8	ND	2.13	1.00	U	MS08-1589-27
1,3-Dichlorobenzene	541-73-1	ND	2.13	1.00	U	MS08-1589-27
1,3-Dichloropropane	142-28-9	ND	2.13	1.00	U	MS08-1589-27
1,4-Dichlorobenzene	106-46-7	ND	2.13	1.00	U	MS08-1589-27
1,4-Dioxane	123-91-1	ND	21.3	1.00	U	MS08-1590-27
2,2-Dichloropropane	594-20-7	ND	2.13	1.00	U	MS08-1589-27
2-Butanone	78-93-3	ND	2.13	1.00	U	MS08-1589-27
2-Chloroethylvinylether	110-75-8	ND	2.13	1.00	U	MS08-1589-27
2-Chlorotoluene	95-49-8	ND	2.13	1.00	U	MS08-1589-27
2-Hexanone	591-78-6	ND	2.13	1.00	U	MS08-1589-27
4-Chlorotoluene	106-43-4	ND	2.13	1.00	U	MS08-1589-27
4-Isopropyltoluene	99-87-6	ND	2.13	1.00	U	MS08-1589-27
4-Methyl-2-pentanone	108-10-1	ND	2.13	1.00	U	MS08-1589-27
Acetone	67-64-1	ND	10.6	1.00	U	MS08-1589-27
Benzene	71-43-2	ND	2.13	1.00	U	MS08-1589-27
Bromobenzene	108-86-1	ND	2.13	1.00	U	MS08-1589-27
Bromochloromethane	74-97-5	ND	2.13	1.00	U	MS08-1589-27
Bromodichloromethane	75-27-4	ND	2.13	1.00	U	MS08-1589-27
Bromoform	75-25-2	ND	2.13	1.00	U	MS08-1589-27
Bromomethane	74-83-9	ND	2.13	1.00	U	MS08-1589-27
Carbon Disulfide	75-15-0	ND	2.13	1.00	U	MS08-1589-27
Carbon Tetrachloride	56-23-5	ND	2.13	1.00	U	MS08-1589-27
Chlorobenzene	108-90-7	ND	2.13	1.00	U	MS08-1589-27
Chloroethane	75-00-3	ND	2.13	1.00	U	MS08-1589-27
Chloroform	67-66-3	ND	2.13	1.00	U	MS08-1589-27
Chloromethane	74-87-3	ND	2.13	1.00	U	MS08-1589-27
cis-1,2-Dichloroethene	156-59-2	ND	2.13	1.00	U	MS08-1589-27

5

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Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-27	EPA Method 8260C	12/12/2013 20:06	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-27	EPA Method 8260C	12/12/2013 20:06	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	2168	EPA 5035A-L	12/11/2013 14:11	BH	4.91 g	10.0 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
cis-1,3-Dichloropropene	10061-01-5	ND	2.13	1.00	U	MS08-1589-27
Dibromochloromethane	124-48-1	ND	2.13	1.00	U	MS08-1589-27
Dibromomethane	74-95-3	ND	2.13	1.00	U	MS08-1589-27
Dichlorodifluoromethane	75-71-8	ND	2.13	1.00	U	MS08-1589-27
Ethylbenzene	100-41-4	ND	2.13	1.00	U	MS08-1589-27
Hexachlorobutadiene	87-68-3	ND	2.13	1.00	U	MS08-1589-27
Isopropylbenzene	98-82-8	ND	2.13	1.00	U	MS08-1589-27
m&p-Xylene	136777-61-2	ND	2.13	1.00	U	MS08-1589-27
Methylene Chloride	75-09-2	ND	10.6	1.00	U	MS08-1589-27
Methyl-tert-butyl-ether (MTBE)	1634-04-4	ND	2.13	1.00	U	MS08-1589-27
Naphthalene	91-20-3	ND	2.13	1.00	U	MS08-1589-27
n-Butylbenzene	104-51-8	ND	2.13	1.00	U	MS08-1589-27
n-Propylbenzene	103-65-1	ND	2.13	1.00	U	MS08-1589-27
o-Xylene	95-47-6	ND	2.13	1.00	U	MS08-1589-27
sec-Butylbenzene	135-98-8	ND	2.13	1.00	U	MS08-1589-27
Styrene	100-42-5	ND	2.13	1.00	U	MS08-1589-27
tert-Butylbenzene	98-06-6	ND	2.13	1.00	U	MS08-1589-27
Tetrachloroethene	127-18-4	ND	2.13	1.00	U	MS08-1589-27
Toluene	108-88-3	ND	2.13	1.00	U	MS08-1589-27
trans-1,2-Dichloroethene	156-60-5	ND	2.13	1.00	U	MS08-1589-27
trans-1,3-Dichloropropene	10061-02-6	ND	2.13	1.00	U	MS08-1589-27
Trichloroethene	79-01-6	ND	2.13	1.00	U	MS08-1589-27
Trichlorofluoromethane	75-69-4	ND	2.13	1.00	U	MS08-1589-27
Vinyl Acetate	108-05-4	ND	2.13	1.00	U	MS08-1589-27
Vinyl Chloride	75-01-4	ND	2.13	1.00	U	MS08-1589-27

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Bromofluorobenzene	460-00-4	98.0	45.4-170		MS08-1589-27
Dibromofluoromethane	1868-53-7	104	79.3-122		MS08-1589-27
toluene-d8	2037-26-5	98.8	77.0-133		MS08-1589-27
1,2-Dichloroethane-d4	17060-07-0	104	80.9-116		MS08-1589-27

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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GC/MS Semivolatiles

6

Pace Analytical®

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS09-178-8	EPA Method 8270D	12/10/2013 13:04	RMS	NA	NA	N/A
Prep 1:	25233	EPA 3545A	12/06/2013 11:52	DSD	30.3 g	1.00 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
1,2,4-Trichlorobenzene	120-82-1	ND	345	1.00	U	MS09-178-8
1,2-Dichlorobenzene	95-50-1	ND	345	1.00	U	MS09-178-8
1,3-Dichlorobenzene	541-73-1	ND	345	1.00	U	MS09-178-8
1,4-Dichlorobenzene	106-46-7	ND	345	1.00	U	MS09-178-8
2,4,5-Trichlorophenol	95-95-4	ND	345	1.00	U	MS09-178-8
2,4,6-Trichlorophenol	88-06-2	ND	345	1.00	U	MS09-178-8
2,4-Dichlorophenol	120-83-2	ND	345	1.00	U	MS09-178-8
2,4-Dimethylphenol	105-67-9	ND	345	1.00	U	MS09-178-8
2,4-Dinitrophenol	51-28-5	ND	345	1.00	U	MS09-178-8
2,4-Dinitrotoluene	121-14-2	ND	345	1.00	U	MS09-178-8
2,6-Dinitrotoluene	606-20-2	ND	345	1.00	U	MS09-178-8
2-Chloronaphthalene	91-58-7	ND	173	1.00	U	MS09-178-8
2-Chlorophenol	95-57-8	ND	345	1.00	U	MS09-178-8
2-Methylnaphthalene	91-57-6	ND	173	1.00	U	MS09-178-8
2-Methylphenol	95-48-7	ND	345	1.00	U	MS09-178-8
2-Nitroaniline	88-74-4	ND	345	1.00	U	MS09-178-8
2-Nitrophenol	88-75-5	ND	345	1.00	U	MS09-178-8
3&4-Methylphenol*	108-39-4/106-44-5	ND	345	1.00	U	MS09-178-8
3,3'-Dichlorobenzidine	91-94-1	ND	345	1.00	U	MS09-178-8
3-Nitroaniline	99-09-2	ND	345	1.00	U	MS09-178-8
4,6-Dinitro-2-methylphenol	534-52-1	ND	345	1.00	U	MS09-178-8
4-Bromophenyl-phenylether	101-55-3	ND	345	1.00	U	MS09-178-8
4-Chloro-3-methylphenol	59-50-7	ND	345	1.00	U	MS09-178-8
4-Chloroaniline	106-47-8	ND	345	1.00	U	MS09-178-8
4-Chlorophenyl-phenylether	7005-72-3	ND	345	1.00	U	MS09-178-8
4-Nitroaniline	100-01-6	ND	345	1.00	U	MS09-178-8
4-Nitrophenol	100-02-7	ND	345	1.00	U	MS09-178-8
Acenaphthene	83-32-9	ND	173	1.00	U	MS09-178-8
Acenaphthylene	208-96-8	ND	173	1.00	U	MS09-178-8
Anthracene	120-12-7	ND	173	1.00	U	MS09-178-8
Benzo(a)anthracene	56-55-3	ND	173	1.00	U	MS09-178-8
Benzo(a)pyrene	50-32-8	ND	173	1.00	U	MS09-178-8
Benzo(b)fluoranthene	205-99-2	ND	173	1.00	U	MS09-178-8
Benzo(g,h,i)perylene	191-24-2	ND	173	1.00	U	MS09-178-8
Benzo(k)fluoranthene	207-08-9	ND	173	1.00	U	MS09-178-8
bis(2-chloroethoxy)methane	111-91-1	ND	345	1.00	U	MS09-178-8
bis(2-chloroethyl)ether	111-44-4	ND	345	1.00	U	MS09-178-8
bis(2-Chloroisopropyl)ether	108-60-1	ND	345	1.00	U	MS09-178-8
bis(2-Ethylhexyl)phthalate	117-81-7	ND	345	1.00	U	MS09-178-8
Butylbenzylphthalate	85-68-7	ND	345	1.00	U	MS09-178-8
Carbazole	86-74-8	ND	173	1.00	U	MS09-178-8
Chrysene	218-01-9	ND	173	1.00	U	MS09-178-8
Dibenz(a,h)anthracene	53-70-3	ND	173	1.00	U	MS09-178-8
Dibenzofuran	132-64-9	ND	173	1.00	U	MS09-178-8

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Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS09-178-8	EPA Method 8270D	12/10/2013 13:04	RMS	NA	NA	N/A
Prep 1:	25233	EPA 3545A	12/06/2013 11:52	DSD	30.3 g	1.00 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
Diethylphthalate	84-66-2	ND	345	1.00	U	MS09-178-8
Dimethylphthalate	131-11-3	ND	345	1.00	U	MS09-178-8
Di-n-butylphthalate	84-74-2	ND	345	1.00	U	MS09-178-8
Di-n-octylphthalate	117-84-0	ND	345	1.00	U	MS09-178-8
Fluoranthene	206-44-0	ND	173	1.00	U	MS09-178-8
Fluorene	86-73-7	ND	173	1.00	U	MS09-178-8
Hexachlorobenzene	118-74-1	ND	345	1.00	U	MS09-178-8
Hexachlorobutadiene	87-68-3	ND	345	1.00	U	MS09-178-8
Hexachlorocyclopentadiene	77-47-4	ND	345	1.00	U	MS09-178-8
Hexachloroethane	67-72-1	ND	345	1.00	U	MS09-178-8
Indeno(1,2,3-cd)pyrene	193-39-5	ND	173	1.00	U	MS09-178-8
Isophorone	78-59-1	ND	345	1.00	U	MS09-178-8
Naphthalene	91-20-3	ND	173	1.00	U	MS09-178-8
Nitrobenzene	98-95-3	ND	345	1.00	U	MS09-178-8
N-Nitroso-di-n-propylamine	621-64-7	ND	345	1.00	U	MS09-178-8
N-Nitrosodiphenylamine	86-30-6	ND	345	1.00	U	MS09-178-8
Pentachlorophenol	87-86-5	ND	345	1.00	U	MS09-178-8
Phenanthrene	85-01-8	ND	173	1.00	U	MS09-178-8
Phenol	108-95-2	ND	345	1.00	U	MS09-178-8
Pyrene	129-00-0	ND	173	1.00	U	MS09-178-8

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
2,4,6-Tribromophenol	118-79-6	89.0	19.0-122		MS09-178-8
2-Fluorobiphenyl	321-60-8	65.1	30.0-115		MS09-178-8
2-Fluorophenol	367-12-4	80.0	25.0-121		MS09-178-8
Terphenyl-d14	1718-51-0	84.7	18.0-137		MS09-178-8
Nitrobenzene-d5	4165-60-0	81.6	23.0-120		MS09-178-8
Phenol-d6	13127-88-3	81.6	24.0-113		MS09-178-8

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
*3&4-Methylphenol is reported as a co-elution of 3-Methylphenol and 4-Methylphenol. 3-Methylphenol was not a calibration component in the initial calibration curve.

6

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Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS09-178-9	EPA Method 8270D	12/10/2013 13:38	RMS	NA	NA	N/A
Prep 1:	25233	EPA 3545A	12/06/2013 11:53	DSD	30.0 g	1.00 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
1,2,4-Trichlorobenzene	120-82-1	ND	348	1.00	U	MS09-178-9
1,2-Dichlorobenzene	95-50-1	ND	348	1.00	U	MS09-178-9
1,3-Dichlorobenzene	541-73-1	ND	348	1.00	U	MS09-178-9
1,4-Dichlorobenzene	106-46-7	ND	348	1.00	U	MS09-178-9
2,4,5-Trichlorophenol	95-95-4	ND	348	1.00	U	MS09-178-9
2,4,6-Trichlorophenol	88-06-2	ND	348	1.00	U	MS09-178-9
2,4-Dichlorophenol	120-83-2	ND	348	1.00	U	MS09-178-9
2,4-Dimethylphenol	105-67-9	ND	348	1.00	U	MS09-178-9
2,4-Dinitrophenol	51-28-5	ND	348	1.00	U	MS09-178-9
2,4-Dinitrotoluene	121-14-2	ND	348	1.00	U	MS09-178-9
2,6-Dinitrotoluene	606-20-2	ND	348	1.00	U	MS09-178-9
2-Chloronaphthalene	91-58-7	ND	174	1.00	U	MS09-178-9
2-Chlorophenol	95-57-8	ND	348	1.00	U	MS09-178-9
2-Methylnaphthalene	91-57-6	ND	174	1.00	U	MS09-178-9
2-Methylphenol	95-48-7	ND	348	1.00	U	MS09-178-9
2-Nitroaniline	88-74-4	ND	348	1.00	U	MS09-178-9
2-Nitrophenol	88-75-5	ND	348	1.00	U	MS09-178-9
3&4-Methylphenol*	108-39-4/106-44-5	ND	348	1.00	U	MS09-178-9
3,3'-Dichlorobenzidine	91-94-1	ND	348	1.00	U	MS09-178-9
3-Nitroaniline	99-09-2	ND	348	1.00	U	MS09-178-9
4,6-Dinitro-2-methylphenol	534-52-1	ND	348	1.00	U	MS09-178-9
4-Bromophenyl-phenylether	101-55-3	ND	348	1.00	U	MS09-178-9
4-Chloro-3-methylphenol	59-50-7	ND	348	1.00	U	MS09-178-9
4-Chloroaniline	106-47-8	ND	348	1.00	U	MS09-178-9
4-Chlorophenyl-phenylether	7005-72-3	ND	348	1.00	U	MS09-178-9
4-Nitroaniline	100-01-6	ND	348	1.00	U	MS09-178-9
4-Nitrophenol	100-02-7	ND	348	1.00	U	MS09-178-9
Acenaphthene	83-32-9	ND	174	1.00	U	MS09-178-9
Acenaphthylene	208-96-8	ND	174	1.00	U	MS09-178-9
Anthracene	120-12-7	ND	174	1.00	U	MS09-178-9
Benzo(a)anthracene	56-55-3	ND	174	1.00	U	MS09-178-9
Benzo(a)pyrene	50-32-8	ND	174	1.00	U	MS09-178-9
Benzo(b)fluoranthene	205-99-2	ND	174	1.00	U	MS09-178-9
Benzo(g,h,i)perylene	191-24-2	ND	174	1.00	U	MS09-178-9
Benzo(k)fluoranthene	207-08-9	ND	174	1.00	U	MS09-178-9
bis(2-chloroethoxy)methane	111-91-1	ND	348	1.00	U	MS09-178-9
bis(2-chloroethyl)ether	111-44-4	ND	348	1.00	U	MS09-178-9
bis(2-Chloroisopropyl)ether	108-60-1	ND	348	1.00	U	MS09-178-9
bis(2-Ethylhexyl)phthalate	117-81-7	ND	348	1.00	U	MS09-178-9
Butylbenzylphthalate	85-68-7	ND	348	1.00	U	MS09-178-9
Carbazole	86-74-8	ND	174	1.00	U	MS09-178-9
Chrysene	218-01-9	ND	174	1.00	U	MS09-178-9
Dibenz(a,h)anthracene	53-70-3	ND	174	1.00	U	MS09-178-9
Dibenzofuran	132-64-9	ND	174	1.00	U	MS09-178-9

6

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Pace Analytical®

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS09-178-9	EPA Method 8270D	12/10/2013 13:38	RMS	NA	NA	N/A
Prep 1:	25233	EPA 3545A	12/06/2013 11:53	DSD	30.0 g	1.00 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
Diethylphthalate	84-66-2	ND	348	1.00	U	MS09-178-9
Dimethylphthalate	131-11-3	ND	348	1.00	U	MS09-178-9
Di-n-butylphthalate	84-74-2	ND	348	1.00	U	MS09-178-9
Di-n-octylphthalate	117-84-0	ND	348	1.00	U	MS09-178-9
Fluoranthene	206-44-0	ND	174	1.00	U	MS09-178-9
Fluorene	86-73-7	ND	174	1.00	U	MS09-178-9
Hexachlorobenzene	118-74-1	ND	348	1.00	U	MS09-178-9
Hexachlorobutadiene	87-68-3	ND	348	1.00	U	MS09-178-9
Hexachlorocyclopentadiene	77-47-4	ND	348	1.00	U	MS09-178-9
Hexachloroethane	67-72-1	ND	348	1.00	U	MS09-178-9
Indeno(1,2,3-cd)pyrene	193-39-5	ND	174	1.00	U	MS09-178-9
Isophorone	78-59-1	ND	348	1.00	U	MS09-178-9
Naphthalene	91-20-3	ND	174	1.00	U	MS09-178-9
Nitrobenzene	98-95-3	ND	348	1.00	U	MS09-178-9
N-Nitroso-di-n-propylamine	621-64-7	ND	348	1.00	U	MS09-178-9
N-Nitrosodiphenylamine	86-30-6	ND	348	1.00	U	MS09-178-9
Pentachlorophenol	87-86-5	ND	348	1.00	U	MS09-178-9
Phenanthrene	85-01-8	ND	174	1.00	U	MS09-178-9
Phenol	108-95-2	ND	348	1.00	U	MS09-178-9
Pyrene	129-00-0	ND	174	1.00	U	MS09-178-9

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
2,4,6-Tribromophenol	118-79-6	83.3	19.0-122		MS09-178-9
2-Fluorobiphenyl	321-60-8	67.8	30.0-115		MS09-178-9
2-Fluorophenol	367-12-4	82.5	25.0-121		MS09-178-9
Terphenyl-d14	1718-51-0	82.4	18.0-137		MS09-178-9
Nitrobenzene-d5	4165-60-0	85.3	23.0-120		MS09-178-9
Phenol-d6	13127-88-3	84.5	24.0-113		MS09-178-9

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
*3&4-Methylphenol is reported as a co-elution of 3-Methylphenol and 4-Methylphenol. 3-Methylphenol was not a calibration component in the initial calibration curve.

6

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GC - PCB

7

Pace Analytical®

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-1768-17	SW-846 8082A (PCB)	12/10/2013 12:29	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	25232	EPA 3545A	12/06/2013 11:46	DSD	10.4 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0502	1.00	U	GC20F-1768-17
Aroclor 1221	11104-28-2	ND	0.0502	1.00	U	GC20F-1768-17
Aroclor 1232	11141-16-5	ND	0.0502	1.00	U	GC20F-1768-17
Aroclor 1242	53469-21-9	ND	0.0502	1.00	U	GC20F-1768-17
Aroclor 1248	12672-29-6	ND	0.0502	1.00	U	GC20F-1768-17
Aroclor 1254	11097-69-1	ND	0.0502	1.00	U	GC20F-1768-17
Aroclor 1260	11096-82-5	ND	0.0502	1.00	U	GC20F-1768-17
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20F-1768-17

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	75.7	60.0-140		GC20F-1768-17
Decachlorobiphenyl	2051-24-3	107	60.0-140		GC20F-1768-17

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

7

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Analytical Sample Results

Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-1768-18	SW-846 8082A (PCB)	12/10/2013 12:41	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	25232	EPA 3545A	12/06/2013 11:46	DSD	10.4 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0504	1.00	U	GC20F-1768-18
Aroclor 1221	11104-28-2	ND	0.0504	1.00	U	GC20F-1768-18
Aroclor 1232	11141-16-5	ND	0.0504	1.00	U	GC20F-1768-18
Aroclor 1242	53469-21-9	ND	0.0504	1.00	U	GC20F-1768-18
Aroclor 1248	12672-29-6	ND	0.0504	1.00	U	GC20F-1768-18
Aroclor 1254	11097-69-1	ND	0.0504	1.00	U	GC20F-1768-18
Aroclor 1260	11096-82-5	ND	0.0504	1.00	U	GC20F-1768-18
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20F-1768-18

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	83.3	60.0-140		GC20F-1768-18
Decachlorobiphenyl	2051-24-3	111	60.0-140		GC20F-1768-18

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

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PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

7

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GC - Pesticides

8

Pace Analytical®

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
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Phone: 518.346.4592
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Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC19F-1850-14	SW-846 Method 8081B, Pesticides	12/09/2013 18:05	JKA	NA	NA	Phenomenex, Zebron ZB-1, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	25231	EPA 3545A	12/06/2013 11:43	DSD	10.0 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aldrin	309-00-2	ND	0.00261	1.00	U	GC19F-1850-14
alpha Chlordane	5103-71-9	ND	0.00261	1.00	U	GC19F-1850-14
alpha-BHC	319-84-6	ND	0.00261	1.00	U	GC19F-1850-14
beta-BHC	319-85-7	ND	0.00261	1.00	U	GC19F-1850-14
Chlordane	57-74-9	ND	0.131	1.00	U	GC19F-1850-14
delta-BHC	319-86-8	ND	0.00261	1.00	U	GC19F-1850-14
Dieldrin	60-57-1	ND	0.00261	1.00	U	GC19F-1850-14
Endosulfan I	959-98-8	ND	0.00261	1.00	U	GC19F-1850-14
Endosulfan II	33213-65-9	ND	0.00261	1.00	U	GC19F-1850-14
Endosulfan sulfate	1031-07-8	ND	0.00261	1.00	U	GC19F-1850-14
Endrin	72-20-8	ND	0.00261	1.00	U	GC19F-1850-14
Endrin aldehyde	7421-93-4	ND	0.00261	1.00	U	GC19F-1850-14
Endrin ketone	53494-70-5	ND	0.00261	1.00	U	GC19F-1850-14
gamma Chlordane	5103-74-2	ND	0.00261	1.00	U	GC19F-1850-14
gamma-BHC	58-89-9	ND	0.00261	1.00	U	GC19F-1850-14
Heptachlor	76-44-8	ND	0.00261	1.00	U	GC19F-1850-14
Heptachlor epoxide	1024-57-3	ND	0.00261	1.00	U	GC19F-1850-14
Hexachlorobenzene	118-74-1	ND	0.00261	1.00	U	GC19F-1850-14
Methoxychlor	72-43-5	ND	0.00261	1.00	U	GC19F-1850-14
p,p'-DDD	72-54-8	ND	0.00261	1.00	U	GC19F-1850-14
p,p'-DDE	72-55-9	ND	0.00261	1.00	U	GC19F-1850-14
p,p'-DDT	50-29-3	ND	0.00261	1.00	U	GC19F-1850-14
Toxaphene	8001-35-2	ND	0.261	1.00	U	GC19F-1850-14

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	89.1	60.0-140		GC19F-1850-14
Decachlorobiphenyl	2051-24-3	99.3	60.0-140		GC19F-1850-14

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PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Fax: 518.381.6055

Analytical Sample Results

Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC19F-1850-15	SW-846 Method 8081B, Pesticides	12/09/2013 18:37	JKA	NA	NA	Thermoscientific, Zebron ZB-1, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	25231	EPA 3545A	12/06/2013 11:44	DSD	10.0 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aldrin	309-00-2	ND	0.00261	1.00	U	GC19F-1850-15
alpha Chlordane	5103-71-9	ND	0.00261	1.00	U	GC19F-1850-15
alpha-BHC	319-84-6	ND	0.00261	1.00	U	GC19F-1850-15
beta-BHC	319-85-7	ND	0.00261	1.00	U	GC19F-1850-15
Chlordane	57-74-9	ND	0.131	1.00	U	GC19F-1850-15
delta-BHC	319-86-8	ND	0.00261	1.00	U	GC19F-1850-15
Dieldrin	60-57-1	ND	0.00261	1.00	U	GC19F-1850-15
Endosulfan I	959-98-8	ND	0.00261	1.00	U	GC19F-1850-15
Endosulfan II	33213-65-9	ND	0.00261	1.00	U	GC19F-1850-15
Endosulfan sulfate	1031-07-8	ND	0.00261	1.00	U	GC19F-1850-15
Endrin	72-20-8	ND	0.00261	1.00	U	GC19F-1850-15
Endrin aldehyde	7421-93-4	ND	0.00261	1.00	U	GC19F-1850-15
Endrin ketone	53494-70-5	ND	0.00261	1.00	U	GC19F-1850-15
gamma Chlordane	5103-74-2	ND	0.00261	1.00	U	GC19F-1850-15
gamma-BHC	58-89-9	ND	0.00261	1.00	U	GC19F-1850-15
Heptachlor	76-44-8	ND	0.00261	1.00	U	GC19F-1850-15
Heptachlor epoxide	1024-57-3	ND	0.00261	1.00	U	GC19F-1850-15
Hexachlorobenzene	118-74-1	ND	0.00261	1.00	U	GC19F-1850-15
Methoxychlor	72-43-5	ND	0.00261	1.00	U	GC19F-1850-15
p,p'-DDD	72-54-8	ND	0.00261	1.00	U	GC19F-1850-15
p,p'-DDE	72-55-9	ND	0.00261	1.00	U	GC19F-1850-15
p,p'-DDT	50-29-3	ND	0.00261	1.00	U	GC19F-1850-15
Toxaphene	8001-35-2	ND	0.261	1.00	U	GC19F-1850-15

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	89.5	60.0-140		GC19F-1850-15
Decachlorobiphenyl	2051-24-3	96.4	60.0-140		GC19F-1850-15

[1] Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

8

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Mercury

9

Pace Analytical Services, Inc.
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Phone: 518.346.4592
Fax: 518.381.6055

Analytical Sample Results

Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MER1-1438-72	SW-846 7471B	12/06/2013 14:53	CYC	NA	NA	NA
Prep 1:	4195	EPA 7471B	12/06/2013 08:31	CYC	0.203 g	40.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Mercury	7439-97-6	ND	0.0413	1.00	U	MER1-1438-72

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

9

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Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MER1-1438-73	SW-846 7471B	12/06/2013 14:55	CYC	NA	NA	NA
Prep 1:	4195	EPA 7471B	12/06/2013 08:32	CYC	0.199 g	40.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Mercury	7439-97-6	ND	0.0420	1.00	U	MER1-1438-73

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

9

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Metals - ICP

10

Analytical Sample Results

Job Number: 13120067

Pace Analytical Services, Inc.
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Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	ICP2-875-60	SW-846 6010C	12/06/2013 17:20	JS	NA	NA	NA
Prep 1:	4196	EPA 3050B	12/06/2013 08:42	CYC	0.497 g	50.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Arsenic	7440-38-2	3.05	0.527	1.00		ICP2-875-60
Barium	7440-39-3	45.2	0.527	1.00		ICP2-875-60
Beryllium	7440-41-7	ND	0.422	1.00	U	ICP2-875-60
Cadmium	7440-43-9	ND	0.422	1.00	U	ICP2-875-60
Chromium	7440-47-3	6.50	0.527	1.00		ICP2-875-60
Copper	7440-50-8	13.0	0.527	1.00		ICP2-875-60
Lead	7439-92-1	6.05	0.527	1.00		ICP2-875-60
Manganese	7439-96-5	373	0.527	1.00		ICP2-875-60
Nickel	7440-02-0	7.20	0.527	1.00		ICP2-875-60
Selenium	7782-49-2	ND	1.05	1.00	U	ICP2-875-60
Silver	7440-22-4	ND	0.738	1.00	U	ICP2-875-60
Zinc	7440-66-6	32.0	0.527	1.00		ICP2-875-60

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

10

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Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Analytical Sample Results

Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	ICP2-875-61	SW-846 6010C	12/06/2013 17:22	JS	NA	NA	NA
Prep 1:	4196	EPA 3050B	12/06/2013 08:42	CYC	0.501 g	50.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Arsenic	7440-38-2	2.22	0.522	1.00		ICP2-875-61
Barium	7440-39-3	41.8	0.522	1.00		ICP2-875-61
Beryllium	7440-41-7	ND	0.418	1.00	U	ICP2-875-61
Cadmium	7440-43-9	ND	0.418	1.00	U	ICP2-875-61
Chromium	7440-47-3	6.22	0.522	1.00		ICP2-875-61
Copper	7440-50-8	9.03	0.522	1.00		ICP2-875-61
Lead	7439-92-1	3.86	0.522	1.00		ICP2-875-61
Manganese	7439-96-5	385	0.522	1.00		ICP2-875-61
Nickel	7440-02-0	6.08	0.522	1.00		ICP2-875-61
Selenium	7782-49-2	ND	1.04	1.00	U	ICP2-875-61
Silver	7440-22-4	ND	0.731	1.00	U	ICP2-875-61
Zinc	7440-66-6	28.3	0.522	1.00		ICP2-875-61

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Wet Chemistry - Cyanide

11

Analytical Sample Results

Job Number: 13120067

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Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 1
Lab Sample ID: 13120067-01 (AQ41891)

Collection Date: 12/03/2013 17:15
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.5 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	121	SW-846 9014	12/10/2013 16:41	HAG	NA	NA	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Cyanide	57-12-5	ND	2.26	9.01	U	121

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

11

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Analytical Sample Results

Job Number: 13120067

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Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2
Lab Sample ID: 13120067-02 (AQ41892)

Collection Date: 12/03/2013 17:30
Sample Matrix: SOIL
Received Date: 12/04/2013 09:51
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	121	SW-846 9014	12/10/2013 16:41	HAG	NA	NA	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Cyanide	57-12-5	4.04	2.76	11.00		121

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Samples (Field)

12

Pace Analytical®

Quality Control Results
Matrix Spike Sample (MS)
Job Number: 13120067

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Schenectady, NY 12308
Phone: 518.346.4592
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Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2 MS
Lab Sample ID: 13120067-02M (AQ41892M)

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MER1-1438-75	SW-846 7471B	12/06/2013 14:58	CYC	NA	NA	NA
Prep 1:	4195	EPA 7471B	12/06/2013 08:33	CYC	0.208 g	40.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Mercury	7439-97-6	**0.618**	0.0403	1.00		MER1-1438-75

Analyte Spiked	CAS No.	Sample (mg/kg)	Added (mg/kg)	MS (mg/kg)	MS % Rec.	Q[1]	Limits (%)
Mercury	7439-97-6		0.604	0.618	102		75.0-125

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Results
Duplicate Sample
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2 DUP
Lab Sample ID: 13120067-02D (AQ41892D)

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MER1-1438-74	SW-846 7471B	12/06/2013 14:56	CYC	NA	NA	NA
Prep 1:	4195	EPA 7471B	12/06/2013 08:32	CYC	0.192 g	40.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Mercury	7439-97-6	ND	0.0437	1.00	U	MER1-1438-74

Analyte	CAS No.	Duplicate (mg/kg)	Precision: Sample (mg/kg)	RPD	Q[1]	Limits (%)
Mercury	7439-97-6	ND	ND			20

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

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PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Results
Matrix Spike Sample (MS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2 MS
Lab Sample ID: 13120067-02M (AQ41892M)

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	ICP2-875-65	SW-846 6010C	12/06/2013 17:31	JS	NA	NA	NA
Prep 1:	4196	EPA 3050B	12/06/2013 08:44	CYC	0.505 g	50.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Arsenic	7440-38-2	**102**	0.518	1.00		ICP2-875-65
Barium	7440-39-3	**135**	0.518	1.00		ICP2-875-65
Beryllium	7440-41-7	**97.8**	0.414	1.00		ICP2-875-65
Cadmium	7440-43-9	**89.5**	0.414	1.00		ICP2-875-65
Chromium	7440-47-3	**101**	0.518	1.00		ICP2-875-65
Copper	7440-50-8	**111**	0.518	1.00		ICP2-875-65
Lead	7439-92-1	**92.8**	0.518	1.00		ICP2-875-65
Manganese	7439-96-5	**450**	0.518	1.00		ICP2-875-65
Nickel	7440-02-0	**95.4**	0.518	1.00		ICP2-875-65
Selenium	7782-49-2	**102**	1.04	1.00		ICP2-875-65
Silver	7440-22-4	**50.9**	0.725	1.00		ICP2-875-65
Zinc	7440-66-6	**116**	0.518	1.00		ICP2-875-65

Analyte Spiked	CAS No.	Sample (mg/kg)	Added (mg/kg)	MS (mg/kg)	MS % Rec.	Q[1]	Limits (%)
Arsenic	7440-38-2	2.22	104	102	96.3		75.0-125
Barium	7440-39-3	41.8	104	135	90.0		75.0-125
Beryllium	7440-41-7		104	97.8	94.4		75.0-125
Cadmium	7440-43-9		104	89.5	86.4		75.0-125
Chromium	7440-47-3	6.22	104	101	91.9		75.0-125
Copper	7440-50-8	9.03	104	111	98.9		75.0-125
Lead	7439-92-1	3.86	104	92.8	85.9		75.0-125
Manganese	7439-96-5	385	104	450	63.2	*	75.0-125
Nickel	7440-02-0	6.08	104	95.4	86.3		75.0-125
Selenium	7782-49-2		104	102	98.3		75.0-125
Silver	7440-22-4		51.8	50.9	98.3		75.0-125
Zinc	7440-66-6	28.3	104	116	85.1		75.0-125

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Results
Duplicate Sample
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: COMPOSITE 2 DUP
Lab Sample ID: 13120067-02D (AQ41892D)

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: 95.6 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	ICP2-875-64	SW-846 6010C	12/06/2013 17:29	JS	NA	NA	NA
Prep 1:	4196	EPA 3050B	12/06/2013 08:43	CYC	0.498 g	50.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Arsenic	7440-38-2	**2.57**	0.525	1.00		ICP2-875-64
Barium	7440-39-3	**88.9**	0.525	1.00		ICP2-875-64
Beryllium	7440-41-7	ND	0.420	1.00	U	ICP2-875-64
Cadmium	7440-43-9	ND	0.420	1.00	U	ICP2-875-64
Chromium	7440-47-3	**6.17**	0.525	1.00		ICP2-875-64
Copper	7440-50-8	**19.4**	0.525	1.00		ICP2-875-64
Lead	7439-92-1	**5.81**	0.525	1.00		ICP2-875-64
Manganese	7439-96-5	**408**	0.525	1.00		ICP2-875-64
Nickel	7440-02-0	**6.62**	0.525	1.00		ICP2-875-64
Selenium	7782-49-2	ND	1.05	1.00	U	ICP2-875-64
Silver	7440-22-4	ND	0.736	1.00	U	ICP2-875-64
Zinc	7440-66-6	**29.5**	0.525	1.00		ICP2-875-64

Analyte	CAS No.	Duplicate (mg/kg)	Precision: Sample (mg/kg)	RPD	Q[1]	Limits (%)
Arsenic	7440-38-2	2.57	2.22	14.8		20
Barium	7440-39-3	88.9	41.8	72.1	*	20
Beryllium	7440-41-7	ND	ND			20
Cadmium	7440-43-9	ND	ND			20
Chromium	7440-47-3	6.17	6.22	0.780		20
Copper	7440-50-8	19.4	9.03	73.0	*	20
Lead	7439-92-1	5.81	3.86	40.3	*	20
Manganese	7439-96-5	408	385	5.79		20
Nickel	7440-02-0	6.62	6.08	8.43		20
Selenium	7782-49-2	ND	ND			20
Silver	7440-22-4	ND	ND			20
Zinc	7440-66-6	29.5	28.3	4.30		20

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

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PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Samples (Lab)

13

Pace Analytical®

Quality Control Results
Method Blank
Job Number: 13120067

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Phone: 518.346.4592
Fax: 518.381.6055

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41891B)
Lab Sample ID: VBLK-91

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-25	EPA Method 8260C	12/12/2013 19:08	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-25	EPA Method 8260C	12/12/2013 19:08	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	Z168	EPA 5035A-L	12/11/2013 14:08	BH	5.06 g	10.0 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
1,1,1,2-Tetrachloroethane	630-20-6	ND	1.98	1.00	U	MS08-1589-25
1,1,1-Trichloroethane	71-55-6	ND	1.98	1.00	U	MS08-1589-25
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.98	1.00	U	MS08-1589-25
1,1,2-Trichloroethane	79-00-5	ND	1.98	1.00	U	MS08-1589-25
1,1-Dichloroethane	75-34-3	ND	1.98	1.00	U	MS08-1589-25
1,1-Dichloroethene	75-35-4	ND	1.98	1.00	U	MS08-1589-25
1,1-Dichloropropene	563-58-6	ND	1.98	1.00	U	MS08-1589-25
1,2,3-Trichlorobenzene	87-61-6	ND	1.98	1.00	U	MS08-1589-25
1,2,3-Trichloropropane	96-18-4	ND	1.98	1.00	U	MS08-1589-25
1,2,4-Trichlorobenzene	120-82-1	ND	1.98	1.00	U	MS08-1589-25
1,2,4-Trimethylbenzene	95-63-6	ND	1.98	1.00	U	MS08-1589-25
1,2-Dibromo-3-chloropropane	96-12-8	ND	1.98	1.00	U	MS08-1589-25
1,2-Dibromoethane	106-93-4	ND	1.98	1.00	U	MS08-1589-25
1,2-Dichlorobenzene	95-50-1	ND	1.98	1.00	U	MS08-1589-25
1,2-Dichloroethane	107-06-2	ND	1.98	1.00	U	MS08-1589-25
1,2-Dichloropropane	78-87-5	ND	1.98	1.00	U	MS08-1589-25
1,3,5-Trimethylbenzene	108-67-8	ND	1.98	1.00	U	MS08-1589-25
1,3-Dichlorobenzene	541-73-1	ND	1.98	1.00	U	MS08-1589-25
1,3-Dichloropropane	142-28-9	ND	1.98	1.00	U	MS08-1589-25
1,4-Dichlorobenzene	106-46-7	ND	1.98	1.00	U	MS08-1589-25
1,4-Dioxane	123-91-1	ND	19.8	1.00	U	MS08-1590-25
2,2-Dichloropropane	594-20-7	ND	1.98	1.00	U	MS08-1589-25
2-Butanone	78-93-3	ND	1.98	1.00	U	MS08-1589-25
2-Chloroethylvinylether	110-75-8	ND	1.98	1.00	U	MS08-1589-25
2-Chlorotoluene	95-49-8	ND	1.98	1.00	U	MS08-1589-25
2-Hexanone	591-78-6	ND	1.98	1.00	U	MS08-1589-25
4-Chlorotoluene	106-43-4	ND	1.98	1.00	U	MS08-1589-25
4-Isopropyltoluene	99-87-6	ND	1.98	1.00	U	MS08-1589-25
4-Methyl-2-pentanone	108-10-1	ND	1.98	1.00	U	MS08-1589-25
Acetone	67-64-1	ND	9.89	1.00	U	MS08-1589-25
Benzene	71-43-2	ND	1.98	1.00	U	MS08-1589-25
Bromobenzene	108-86-1	ND	1.98	1.00	U	MS08-1589-25
Bromochloromethane	74-97-5	ND	1.98	1.00	U	MS08-1589-25
Bromodichloromethane	75-27-4	ND	1.98	1.00	U	MS08-1589-25
Bromoform	75-25-2	ND	1.98	1.00	U	MS08-1589-25
Bromomethane	74-83-9	ND	1.98	1.00	U	MS08-1589-25
Carbon Disulfide	75-15-0	ND	1.98	1.00	U	MS08-1589-25
Carbon Tetrachloride	56-23-5	ND	1.98	1.00	U	MS08-1589-25
Chlorobenzene	108-90-7	ND	1.98	1.00	U	MS08-1589-25
Chloroethane	75-00-3	ND	1.98	1.00	U	MS08-1589-25
Chloroform	67-66-3	ND	1.98	1.00	U	MS08-1589-25
Chloromethane	74-87-3	ND	1.98	1.00	U	MS08-1589-25
cis-1,2-Dichloroethene	156-59-2	ND	1.98	1.00	U	MS08-1589-25

13

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Quality Control Results
Method Blank
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41891B)
Lab Sample ID: VBLK-91

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-25	EPA Method 8260C	12/12/2013 19:08	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-25	EPA Method 8260C	12/12/2013 19:08	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	2168	EPA 5035A-L	12/11/2013 14:08	BH	5.06 g	10.0 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
cis-1,3-Dichloropropene	10061-01-5	ND	1.98	1.00	U	MS08-1589-25
Dibromochloromethane	124-48-1	ND	1.98	1.00	U	MS08-1589-25
Dibromomethane	74-95-3	ND	1.98	1.00	U	MS08-1589-25
Dichlorodifluoromethane	75-71-8	ND	1.98	1.00	U	MS08-1589-25
Ethylbenzene	100-41-4	ND	1.98	1.00	U	MS08-1589-25
Hexachlorobutadiene	87-68-3	ND	1.98	1.00	U	MS08-1589-25
Isopropylbenzene	98-82-8	ND	1.98	1.00	U	MS08-1589-25
m&p-Xylene	136777-61-2	ND	1.98	1.00	U	MS08-1589-25
Methylene Chloride	75-09-2	ND	9.89	1.00	U	MS08-1589-25
Methyl-tert-butyl-ether (MTBE)	1634-04-4	ND	1.98	1.00	U	MS08-1589-25
Naphthalene	91-20-3	ND	1.98	1.00	U	MS08-1589-25
n-Butylbenzene	104-51-8	ND	1.98	1.00	U	MS08-1589-25
n-Propylbenzene	103-65-1	ND	1.98	1.00	U	MS08-1589-25
o-Xylene	95-47-6	ND	1.98	1.00	U	MS08-1589-25
sec-Butylbenzene	135-98-8	ND	1.98	1.00	U	MS08-1589-25
Styrene	100-42-5	ND	1.98	1.00	U	MS08-1589-25
tert-Butylbenzene	98-06-6	ND	1.98	1.00	U	MS08-1589-25
Tetrachloroethene	127-18-4	ND	1.98	1.00	U	MS08-1589-25
Toluene	108-88-3	ND	1.98	1.00	U	MS08-1589-25
trans-1,2-Dichloroethene	156-60-5	ND	1.98	1.00	U	MS08-1589-25
trans-1,3-Dichloropropene	10061-02-6	ND	1.98	1.00	U	MS08-1589-25
Trichloroethene	79-01-6	ND	1.98	1.00	U	MS08-1589-25
Trichlorofluoromethane	75-69-4	ND	1.98	1.00	U	MS08-1589-25
Vinyl Acetate	108-05-4	ND	1.98	1.00	U	MS08-1589-25
Vinyl Chloride	75-01-4	ND	1.98	1.00	U	MS08-1589-25

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Bromofluorobenzene	460-00-4	104	45.4-170		MS08-1589-25
Dibromofluoromethane	1868-53-7	98.4	79.3-122		MS08-1589-25
toluene-d8	2037-26-5	99.2	77.0-133		MS08-1589-25
1,2-Dichloroethane-d4	17060-07-0	101	80.9-116		MS08-1589-25

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

13

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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ41891L)
Lab Sample ID: LCS-91

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-23	EPA Method 8260C	12/12/2013 18:09	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-23	EPA Method 8260C	12/12/2013 18:09	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	2168	EPA 5035A-L	12/11/2013 14:09	BH	4.99 g	10.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/kg)	LCS (ug/kg)	LCS % Rec.	Q[1]	Limits (%)
1,1,1,2-Tetrachloroethane	630-20-6	80.1	80.8	101		70.0-130
1,1,1-Trichloroethane	71-55-6	80.1	79.1	98.7		70.0-130
1,1,2,2-Tetrachloroethane	79-34-5	80.1	80.7	101		70.0-130
1,1,2-Trichloroethane	79-00-5	80.1	84.7	106		70.0-130
1,1-Dichloroethane	75-34-3	80.1	77.1	96.2		70.0-130
1,1-Dichloroethene	75-35-4	80.1	76.8	95.8		70.0-130
1,1-Dichloropropene	563-58-6	80.1	76.0	94.8		70.0-130
1,2,3-Trichlorobenzene	87-61-6	80.1	72.8	90.8		70.0-130
1,2,3-Trichloropropane	96-18-4	80.1	93.0	116		70.0-130
1,2,4-Trichlorobenzene	120-82-1	80.1	69.2	86.4		70.0-130
1,2,4-Trimethylbenzene	95-63-6	80.1	76.1	95.0		70.0-130
1,2-Dibromo-3-chloropropane	96-12-8	80.1	80.5	101		70.0-130
1,2-Dibromoethane	106-93-4	80.1	82.8	103		70.0-130
1,2-Dichlorobenzene	95-50-1	80.1	74.3	92.7		70.0-130
1,2-Dichloroethane	107-06-2	80.1	78.1	97.5		70.0-130
1,2-Dichloropropane	78-87-5	80.1	75.2	93.8		70.0-130
1,3,5-Trimethylbenzene	108-67-8	80.1	74.9	93.5		70.0-130
1,3-Dichlorobenzene	541-73-1	80.1	80.1	100		70.0-130
1,3-Dichloropropane	142-28-9	80.1	80.3	100		70.0-130
1,4-Dichlorobenzene	106-46-7	80.1	86.9	108		70.0-130
1,4-Dioxane	123-91-1	80.1	141	175	*	70.0-130
2,2-Dichloropropane	594-20-7	80.1	77.7	96.9		70.0-130
2-Butanone	78-93-3	80.1	79.3	99.0		70.0-130
2-Chloroethylvinylether	110-75-8	80.1	78.9	98.5		70.0-130
2-Chlorotoluene	95-49-8	80.1	74.3	92.8		70.0-130
2-Hexanone	591-78-6	80.1	89.2	111		70.0-130
4-Chlorotoluene	106-43-4	80.1	76.8	95.8		70.0-130
4-Isopropyltoluene	99-87-6	80.1	76.1	95.0		70.0-130
4-Methyl-2-pentanone	108-10-1	80.1	89.2	111		70.0-130
Acetone	67-64-1	80.1	91.5	114		70.0-130
Benzene	71-43-2	80.1	77.4	96.6		70.0-130
Bromobenzene	108-86-1	80.1	73.8	92.1		70.0-130
Bromochloromethane	74-97-5	80.1	79.9	99.8		70.0-130
Bromodichloromethane	75-27-4	80.1	76.8	95.9		70.0-130
Bromoform	75-25-2	80.1	80.8	101		70.0-130
Bromomethane	74-83-9	80.1	43.8	54.7	*	70.0-130
Carbon Disulfide	75-15-0	80.1	76.7	95.8		70.0-130
Carbon Tetrachloride	56-23-5	80.1	80.2	100		70.0-130
Chlorobenzene	108-90-7	80.1	80.2	100		70.0-130
Chloroethane	75-00-3	80.1	79.4	99.1		70.0-130
Chloroform	67-66-3	80.1	76.5	95.5		70.0-130
Chloromethane	74-87-3	80.1	64.0	79.9		70.0-130
cis-1,2-Dichloroethene	156-59-2	80.1	77.8	97.1		70.0-130
cis-1,3-Dichloropropene	10061-01-5	80.1	77.6	96.9		70.0-130
Dibromochloromethane	124-48-1	80.1	81.6	102		70.0-130
Dibromomethane	74-95-3	80.1	80.5	101		70.0-130
Dichlorodifluoromethane	75-71-8	80.1	69.0	86.2		70.0-130
Ethylbenzene	100-41-4	80.1	77.3	96.5		70.0-130
Hexachlorobutadiene	87-68-3	80.1	62.5	78.0		70.0-130
Isopropylbenzene	98-82-8	80.1	75.4	94.1		70.0-130

13

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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ41891L)
Lab Sample ID: LCS-91

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS08-1590-23	EPA Method 8260C	12/12/2013 18:09	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Analysis 2:	MS08-1589-23	EPA Method 8260C	12/12/2013 18:09	BH	NA	NA	Restek, Rtx-VMS, 30 m, 0.25 mm ID, 1.40 µm
Prep 1:	2168	EPA 5035A-L	12/11/2013 14:09	BH	4.99 g	10.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/kg)	LCS (ug/kg)	LCS % Rec.	Q[1]	Limits (%)
m&p-Xylene	136777-61-2	160	151	94.2		70.0-130
Methylene Chloride	75-09-2	80.1	83.3	104		70.0-130
Methyl-tert-butyl-ether (MTBE)	1634-04-4	80.1	80.0	99.9		70.0-130
Naphthalene	91-20-3	80.1	76.7	95.7		70.0-130
n-Butylbenzene	104-51-8	80.1	69.8	87.1		70.0-130
n-Propylbenzene	103-65-1	80.1	77.9	97.2		70.0-130
o-Xylene	95-47-6	80.1	79.4	99.1		70.0-130
sec-Butylbenzene	135-98-8	80.1	74.9	93.5		70.0-130
Styrene	100-42-5	80.1	79.2	98.8		70.0-130
tert-Butylbenzene	98-06-6	80.1	80.3	100		70.0-130
Tetrachloroethene	127-18-4	80.1	76.7	95.8		70.0-130
Toluene	108-88-3	80.1	76.5	95.5		70.0-130
trans-1,2-Dichloroethene	156-60-5	80.1	79.8	99.6		70.0-130
trans-1,3-Dichloropropene	10061-02-6	80.1	85.2	106		70.0-130
Trichloroethene	79-01-6	80.1	75.1	93.8		70.0-130
Trichlorofluoromethane	75-69-4	80.1	74.7	93.3		70.0-130
Vinyl Acetate	108-05-4	80.1	77.1	96.3		70.0-130
Vinyl Chloride	75-01-4	80.1	67.2	83.9		70.0-130

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Bromofluorobenzene	460-00-4	105	45.4-170		MS08-1589-23
Dibromofluoromethane	1868-53-7	96.7	79.3-122		MS08-1589-23
toluene-d8	2037-26-5	99.2	77.0-133		MS08-1589-23
1,2-Dichloroethane-d4	17060-07-0	102	80.9-116		MS08-1589-23

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Results
Method Blank
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41891B)
Lab Sample ID: SBLK-88

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS09-178-6	EPA Method 8270D	12/10/2013 12:30	RMS	NA	NA	N/A
Prep 1:	25233	EPA 3545A	12/06/2013 11:51	DSD	30.1 g	1.00 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
1,2,4-Trichlorobenzene	120-82-1	ND	333	1.00	U	MS09-178-6
1,2-Dichlorobenzene	95-50-1	ND	333	1.00	U	MS09-178-6
1,3-Dichlorobenzene	541-73-1	ND	333	1.00	U	MS09-178-6
1,4-Dichlorobenzene	106-46-7	ND	333	1.00	U	MS09-178-6
2,4,5-Trichlorophenol	95-95-4	ND	333	1.00	U	MS09-178-6
2,4,6-Trichlorophenol	88-06-2	ND	333	1.00	U	MS09-178-6
2,4-Dichlorophenol	120-83-2	ND	333	1.00	U	MS09-178-6
2,4-Dimethylphenol	105-67-9	ND	333	1.00	U	MS09-178-6
2,4-Dinitrophenol	51-28-5	ND	333	1.00	U	MS09-178-6
2,4-Dinitrotoluene	121-14-2	ND	333	1.00	U	MS09-178-6
2,6-Dinitrotoluene	606-20-2	ND	333	1.00	U	MS09-178-6
2-Chloronaphthalene	91-58-7	ND	166	1.00	U	MS09-178-6
2-Chlorophenol	95-57-8	ND	333	1.00	U	MS09-178-6
2-Methylnaphthalene	91-57-6	ND	166	1.00	U	MS09-178-6
2-Methylphenol	95-48-7	ND	333	1.00	U	MS09-178-6
2-Nitroaniline	88-74-4	ND	333	1.00	U	MS09-178-6
2-Nitrophenol	88-75-5	ND	333	1.00	U	MS09-178-6
3&4-Methylphenol*	108-39-4/106-44-5	ND	333	1.00	U	MS09-178-6
3,3'-Dichlorobenzidine	91-94-1	ND	333	1.00	U	MS09-178-6
3-Nitroaniline	99-09-2	ND	333	1.00	U	MS09-178-6
4,6-Dinitro-2-methylphenol	534-52-1	ND	333	1.00	U	MS09-178-6
4-Bromophenyl-phenylether	101-55-3	ND	333	1.00	U	MS09-178-6
4-Chloro-3-methylphenol	59-50-7	ND	333	1.00	U	MS09-178-6
4-Chloroaniline	106-47-8	ND	333	1.00	U	MS09-178-6
4-Chlorophenyl-phenylether	7005-72-3	ND	333	1.00	U	MS09-178-6
4-Nitroaniline	100-01-6	ND	333	1.00	U	MS09-178-6
4-Nitrophenol	100-02-7	ND	333	1.00	U	MS09-178-6
Acenaphthene	83-32-9	ND	166	1.00	U	MS09-178-6
Acenaphthylene	208-96-8	ND	166	1.00	U	MS09-178-6
Anthracene	120-12-7	ND	166	1.00	U	MS09-178-6
Benzo(a)anthracene	56-55-3	ND	166	1.00	U	MS09-178-6
Benzo(a)pyrene	50-32-8	ND	166	1.00	U	MS09-178-6
Benzo(b)fluoranthene	205-99-2	ND	166	1.00	U	MS09-178-6
Benzo(g,h,i)perylene	191-24-2	ND	166	1.00	U	MS09-178-6
Benzo(k)fluoranthene	207-08-9	ND	166	1.00	U	MS09-178-6
bis(2-chloroethoxy)methane	111-91-1	ND	333	1.00	U	MS09-178-6
bis(2-chloroethyl)ether	111-44-4	ND	333	1.00	U	MS09-178-6
bis(2-Chloroisopropyl)ether	108-60-1	ND	333	1.00	U	MS09-178-6
bis(2-Ethylhexyl)phthalate	117-81-7	ND	333	1.00	U	MS09-178-6
Butylbenzylphthalate	85-68-7	ND	333	1.00	U	MS09-178-6
Carbazole	86-74-8	ND	166	1.00	U	MS09-178-6
Chrysene	218-01-9	ND	166	1.00	U	MS09-178-6
Dibenz(a,h)anthracene	53-70-3	ND	166	1.00	U	MS09-178-6
Dibenzofuran	132-64-9	ND	166	1.00	U	MS09-178-6

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Quality Control Results
Method Blank
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41891B)
Lab Sample ID: SBLK-88

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS09-178-6	EPA Method 8270D	12/10/2013 12:30	RMS	NA	NA	N/A
Prep 1:	25233	EPA 3545A	12/06/2013 11:51	DSD	30.1 g	1.00 mL	NA

Analyte	CAS No.	Result (ug/kg)	PQL	Dilution Factor	Flags	File ID
Diethylphthalate	84-66-2	ND	333	1.00	U	MS09-178-6
Dimethylphthalate	131-11-3	ND	333	1.00	U	MS09-178-6
Di-n-butylphthalate	84-74-2	ND	333	1.00	U	MS09-178-6
Di-n-octylphthalate	117-84-0	ND	333	1.00	U	MS09-178-6
Fluoranthene	206-44-0	ND	166	1.00	U	MS09-178-6
Fluorene	86-73-7	ND	166	1.00	U	MS09-178-6
Hexachlorobenzene	118-74-1	ND	333	1.00	U	MS09-178-6
Hexachlorobutadiene	87-68-3	ND	333	1.00	U	MS09-178-6
Hexachlorocyclopentadiene	77-47-4	ND	333	1.00	U	MS09-178-6
Hexachloroethane	67-72-1	ND	333	1.00	U	MS09-178-6
Indeno(1,2,3-cd)pyrene	193-39-5	ND	166	1.00	U	MS09-178-6
Isophorone	78-59-1	ND	333	1.00	U	MS09-178-6
Naphthalene	91-20-3	ND	166	1.00	U	MS09-178-6
Nitrobenzene	98-95-3	ND	333	1.00	U	MS09-178-6
N-Nitroso-di-n-propylamine	621-64-7	ND	333	1.00	U	MS09-178-6
N-Nitrosodiphenylamine	86-30-6	ND	333	1.00	U	MS09-178-6
Pentachlorophenol	87-86-5	ND	333	1.00	U	MS09-178-6
Phenanthrene	85-01-8	ND	166	1.00	U	MS09-178-6
Phenol	108-95-2	ND	333	1.00	U	MS09-178-6
Pyrene	129-00-0	ND	166	1.00	U	MS09-178-6

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
2,4,6-Tribromophenol	118-79-6	74.3	19.0-122		MS09-178-6
2-Fluorobiphenyl	321-60-8	56.7	30.0-115		MS09-178-6
2-Fluorophenol	367-12-4	74.8	25.0-121		MS09-178-6
Terphenyl-d14	1718-51-0	81.3	18.0-137		MS09-178-6
Nitrobenzene-d5	4165-60-0	76.9	23.0-120		MS09-178-6
Phenol-d6	13127-88-3	74.1	24.0-113		MS09-178-6

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
*3&4-Methylphenol is reported as a co-elution of 3-Methylphenol and 4-Methylphenol. 3-Methylphenol was not a calibration component in the initial calibration curve.

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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ41891L)
Lab Sample ID: LCS-88

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS09-178-7	EPA Method 8270D	12/10/2013 12:47	RMS	NA	NA	N/A
Prep 1:	25233	EPA 3545A	12/06/2013 11:51	DSD	30.4 g	1.00 mL	NA

Analyte Spiked	CAS No.	Added (ug/kg)	LCS (ug/kg)	LCS % Rec.	Q[1]	Limits (%)
2-Chlorophenol	95-57-8	3290	2030	61.8		25.0-130
2-Methylnaphthalene	91-57-6	3290	1580	48.0		37.0-112
4-Chloro-3-methylphenol	59-50-7	3290	2560	78.0		46.0-112
4-Nitrophenol	100-02-7	3290	2540	77.4		22.0-123
Acenaphthene	83-32-9	3290	1520	46.3		33.0-117
Acenaphthylene	208-96-8	3290	1530	46.6		36.0-112
Anthracene	120-12-7	3290	1810	55.1		33.0-125
Benzo(a)anthracene	56-55-3	3290	1920	58.4		41.0-127
Benzo(a)pyrene	50-32-8	3290	2060	62.6		27.0-127
Benzo(b)fluoranthene	205-99-2	3290	2040	62.0		36.0-126
Benzo(g,h,i)perylene	191-24-2	3290	2390	72.6		25.0-120
Benzo(k)fluoranthene	207-08-9	3290	1970	59.9		44.0-125
Chrysene	218-01-9	3290	2020	61.6		41.0-123
Dibenz(a,h)anthracene	53-70-3	3290	2120	64.5		35.0-118
Fluoranthene	206-44-0	3290	1910	58.1		33.0-118
Fluorene	86-73-7	3290	1530	46.7		29.0-120
Indeno(1,2,3-cd)pyrene	193-39-5	3290	2080	63.4		35.0-113
Naphthalene	91-20-3	3290	1440	43.9		24.0-119
Pentachlorophenol	87-86-5	3290	2190	66.7		4.00-113
Phenanthrene	85-01-8	3290	1770	53.9		41.0-118
Phenol	108-95-2	3290	1940	59.1		35.0-128
Pyrene	129-00-0	3290	1930	58.8		42.0-122

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
2,4,6-Tribromophenol	118-79-6	72.0	19.0-122		MS09-178-7
2-Fluorobiphenyl	321-60-8	49.4	30.0-115		MS09-178-7
2-Fluorophenol	367-12-4	64.7	25.0-121		MS09-178-7
Terphenyl-d14	1718-51-0	66.9	18.0-137		MS09-178-7
Nitrobenzene-d5	4165-60-0	64.4	23.0-120		MS09-178-7
Phenol-d6	13127-88-3	66.2	24.0-113		MS09-178-7

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit): Denotes lowest analyte concentration reportable for the sample.
*3&4-Methylphenol is reported as a co-elution of 3-Methylphenol and 4-Methylphenol. 3-Methylphenol was not a calibration component in the initial calibration curve.

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Quality Control Results
Method Blank
Job Number: 13120067

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Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41891BRR1)
Lab Sample ID: PBLK-01

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-1768-15	SW-846 8082A (PCB)	12/10/2013 12:04	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	25232	EPA 3545A	12/06/2013 11:45	DSD	10.4 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC20F-1768-15
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC20F-1768-15
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC20F-1768-15
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC20F-1768-15
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC20F-1768-15
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC20F-1768-15
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC20F-1768-15
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20F-1768-15

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	96.1	60.0-140		GC20F-1768-15
Decachlorobiphenyl	2051-24-3	119	60.0-140		GC20F-1768-15

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Schenectady, NY 12308
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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ41891LRR1)
Lab Sample ID: LCS-01

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20F-1768-16	SW-846 8082A (PCB)	12/10/2013 12:16	JKA	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	25232	EPA 3545A	12/06/2013 11:45	DSD	10.3 g	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/g)	LCS (ug/g)	LCS % Rec.	Q[1]	Limits (%)
Aroclor 1242	53469-21-9	1.22	0.913	75.1		70.0-130

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	82.0	60.0-140		GC20F-1768-16
Decachlorobiphenyl	2051-24-3	105	60.0-140		GC20F-1768-16

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

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Quality Control Results
Method Blank
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41891B)
Lab Sample ID: PBLK-99

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC19F-1850-12	SW-846 Method 8081B, Pesticides	12/09/2013 17:00	JKA	NA	NA	Phenomenex, Zebron ZB-1, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	25231	EPA 3545A	12/06/2013 11:41	DSD	10.2 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aldrin	309-00-2	ND	0.00250	1.00	U	GC19F-1850-12
alpha Chlordane	5103-71-9	ND	0.00250	1.00	U	GC19F-1850-12
alpha-BHC	319-84-6	ND	0.00250	1.00	U	GC19F-1850-12
beta-BHC	319-85-7	ND	0.00250	1.00	U	GC19F-1850-12
Chlordane	57-74-9	ND	0.125	1.00	U	GC19F-1850-12
delta-BHC	319-86-8	ND	0.00250	1.00	U	GC19F-1850-12
Dieldrin	60-57-1	ND	0.00250	1.00	U	GC19F-1850-12
Endosulfan I	959-98-8	ND	0.00250	1.00	U	GC19F-1850-12
Endosulfan II	33213-65-9	ND	0.00250	1.00	U	GC19F-1850-12
Endosulfan sulfate	1031-07-8	ND	0.00250	1.00	U	GC19F-1850-12
Endrin	72-20-8	ND	0.00250	1.00	U	GC19F-1850-12
Endrin aldehyde	7421-93-4	ND	0.00250	1.00	U	GC19F-1850-12
Endrin ketone	53494-70-5	ND	0.00250	1.00	U	GC19F-1850-12
gamma Chlordane	5103-74-2	ND	0.00250	1.00	U	GC19F-1850-12
gamma-BHC	58-89-9	ND	0.00250	1.00	U	GC19F-1850-12
Heptachlor	76-44-8	ND	0.00250	1.00	U	GC19F-1850-12
Heptachlor epoxide	1024-57-3	ND	0.00250	1.00	U	GC19F-1850-12
Hexachlorobenzene	118-74-1	ND	0.00250	1.00	U	GC19F-1850-12
Methoxychlor	72-43-5	ND	0.00250	1.00	U	GC19F-1850-12
p,p'-DDD	72-54-8	ND	0.00250	1.00	U	GC19F-1850-12
p,p'-DDE	72-55-9	ND	0.00250	1.00	U	GC19F-1850-12
p,p'-DDT	50-29-3	ND	0.00250	1.00	U	GC19F-1850-12
Toxaphene	8001-35-2	ND	0.250	1.00	U	GC19F-1850-12

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	92.9	60.0-140		GC19F-1850-12
Decachlorobiphenyl	2051-24-3	95.4	60.0-140		GC19F-1850-12

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

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PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ41891L)
Lab Sample ID: LCS-99

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC19F-1850-13	SW-846 Method 8081B, Pesticides	12/09/2013 17:33	JKA	NA	NA	Phenomenex, Zebron ZB-1, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	25231	EPA 3545A	12/06/2013 11:42	DSD	10.3 g	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/g)	LCS (ug/g)	LCS % Rec.	Q[1]	Limits (%)
Aldrin	309-00-2	0.0485	0.0478	98.6		70.0-130
alpha Chlordane	5103-71-9	0.0485	0.0485	100		70.0-130
alpha-BHC	319-84-6	0.0485	0.0482	99.4		70.0-130
beta-BHC	319-85-7	0.0485	0.0487	100		70.0-130
delta-BHC	319-86-8	0.0485	0.0480	99.1		70.0-130
Dieldrin	60-57-1	0.0485	0.0506	104		70.0-130
Endosulfan I	959-98-8	0.0485	0.0269	55.5	*	70.0-130
Endosulfan II	33213-65-9	0.0485	0.0340	70.1		70.0-130
Endosulfan sulfate	1031-07-8	0.0485	0.0530	109		70.0-130
Endrin	72-20-8	0.0485	0.0469	96.7		70.0-130
Endrin aldehyde	7421-93-4	0.0485	0.0505	104		70.0-130
Endrin ketone	53494-70-5	0.0485	0.0515	106		70.0-130
gamma Chlordane	5103-74-2	0.0485	0.0485	100		70.0-130
gamma-BHC	58-89-9	0.0485	0.0489	101		70.0-130
Heptachlor	76-44-8	0.0485	0.0492	101		70.0-130
Heptachlor epoxide	1024-57-3	0.0485	0.0493	102		70.0-130
Hexachlorobenzene	118-74-1	0.0485	0.0433	89.3		70.0-130
Methoxychlor	72-43-5	0.0485	0.0494	102		70.0-130
p,p'-DDD	72-54-8	0.0485	0.0521	107		70.0-130
p,p'-DDE	72-55-9	0.0485	0.0461	95.1		70.0-130
p,p'-DDT	50-29-3	0.0485	0.0483	99.7		70.0-130

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	74.6	60.0-140		GC19F-1850-13
Decachlorobiphenyl	2051-24-3	85.6	60.0-140		GC19F-1850-13

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

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Quality Control Results
Method Blank
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41892B)
Lab Sample ID: PBS-60

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MER1-1438-70	SW-846 7471B	12/06/2013 14:49	CYC	NA	NA	NA
Prep 1:	4195	EPA 7471B	12/06/2013 08:30	CYC	0.206 g	40.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Mercury	7439-97-6	ND	0.0389	1.00	U	MER1-1438-70

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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ41892L)
Lab Sample ID: LCS-60

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MERI-1438-71	SW-846 7471B	12/06/2013 14:51	CYC	NA	NA	NA
Prep 1:	4195	EPA 7471B	12/06/2013 08:31	CYC	0.199 g	40 0 mL	NA

Analyte Spiked	CAS No.	Added (mg/kg)	LCS (mg/kg)	LCS % Rec.	Q[1]	Limits (%)
Mercury	7439-97-6	19 9	22 8	115		69 3-130

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

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Quality Control Results
Method Blank
Job Number: 13120067

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Phone: 518.346.4592
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Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ41892B)
Lab Sample ID: PBS-61

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	ICP2-875-58	SW-846 6010C	12/06/2013 17:15	JS	NA	NA	NA
Prep 1:	4196	EPA 3050B	12/06/2013 08:40	CYC	0.491 g	50.0 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Arsenic	7440-38-2	ND	0.509	1.00	U	ICP2-875-58
Barium	7440-39-3	ND	0.509	1.00	U	ICP2-875-58
Beryllium	7440-41-7	ND	0.407	1.00	U	ICP2-875-58
Cadmium	7440-43-9	ND	0.407	1.00	U	ICP2-875-58
Chromium	7440-47-3	ND	0.509	1.00	U	ICP2-875-58
Copper	7440-50-8	ND	0.509	1.00	U	ICP2-875-58
Lead	7439-92-1	ND	0.509	1.00	U	ICP2-875-58
Manganese	7439-96-5	ND	0.509	1.00	U	ICP2-875-58
Nickel	7440-02-0	ND	0.509	1.00	U	ICP2-875-58
Selenium	7782-49-2	ND	1.02	1.00	U	ICP2-875-58
Silver	7440-22-4	ND	0.713	1.00	U	ICP2-875-58
Zinc	7440-66-6	ND	0.509	1.00	U	ICP2-875-58

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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ41892L)
Lab Sample ID: LCS-61

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	ICP2-875-59	SW-846 6010C	12/06/2013 17:17	JS	NA	NA	NA
Prep 1:	4196	EPA 3050B	12/06/2013 08:41	CYC	0.497 g	50.0 mL	NA

Analyte Spiked	CAS No.	Added (mg/kg)	LCS (mg/kg)	LCS % Rec.	Q[1]	Limits (%)
Arsenic	7440-38-2	99.6	100	100		80.8-119
Barium	7440-39-3	310	320	103		83.2-117
Beryllium	7440-41-7	72.3	73.2	101		82.2-118
Cadmium	7440-43-9	182	184	101		81.9-118
Chromium	7440-47-3	136	142	105		80.2-121
Copper	7440-50-8	102	108	106		81.1-119
Lead	7439-92-1	115	113	98.0		81.8-119
Manganese	7439-96-5	323	311	96.3		82.3-117
Nickel	7440-02-0	153	158	103		82.3-118
Selenium	7782-49-2	150	155	103		77.3-123
Silver	7440-22-4	40.4	40.1	99.3		75.0-125
Zinc	7440-66-6	161	160	99.2		80.8-119

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

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Quality Control Results
Method Blank

Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Method Blank (AQ42263B)
Lab Sample ID: BLANK-33

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	121	SW-846 9014	12/10/2013 16:04	HAG	NA	NA	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Cyanide	57-12-5	ND	2.51	1.00	U	121

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Results
Lab Control Sample (LCS)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample (AQ42263L)
Lab Sample ID: LCS-33

Collection Date: N/A
Sample Matrix: SOIL
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	121	SW-846 9014	12/10/2013 16:05	HAG	NA	NA	NA

Analyte Spiked	CAS No.	Added (mg/kg)	LCS (mg/kg)	LCS % Rec.	Q[1]	Limits (%)
Cyanide	57-12-5	67 7	70 2	104		38 4-161

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit) Denotes lowest analyte concentration reportable for the sample

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Quality Control Results
Lab Control Sample - Duplicate (LCSD)
Job Number: 13120067

Client: CITY OF GENEVA
Project: MARKET BASKET
Client Sample ID: Lab Control Sample - Duplicate (AQ42263LCD)
Lab Sample ID: LCSD-33

Collection Date: N/A
Sample Matrix: WATER
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1.	121	SW-846 9014	12/10/2013 16:05	HAG	NA	NA	NA

Analyte Spiked	CAS No.	Added (mg/kg)	LCSD (mg/kg)	LCSD % Rec.	Q[1]	Limits (%)	Precision: LCS % Rec.	Precision: RPD	Precision: Q[1]	Precision: Limits (%)
Cyanide	57-12-5	67 7	60 0	88.6		38.4-161	0 00	16 0		20

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Subcontract Analysis

14

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

SDG Comments

December 11, 2013

SDG I.D.: GBF85285

Please be advised that the NY unrestricted soil criteria for chromium is based on hexavalent chromium and trivalent chromium.

14

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 11, 2013

FOR: Attn: Ms. Peggy Slegfried
Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		12/03/13	17:15
Location Code:	NEASTANY	Received by:	LPB	12/05/13	21:30
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBF85285
Phoenix ID: BF85285

Project ID: 13120067
Client ID: COMPOSITE 1

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Chromium	7.25	0.36	mg/Kg	12/07/13	LK	SW6010
Trivalent Chromium	7.25	0.50	mg/kg	12/09/13	CL	Calculation
Percent Solid	95		%	12/05/13	I	E160.3
Chromium, Hexavalent	< 0.42	0.42	mg/Kg	12/09/13 14:59	CL	SW3060/7196
Soil Extraction for Herbicide	Completed			12/06/13	M/D	SW8151
Total Metals Digest	Completed			12/06/13	Z/AG	SW846 - 3050
Chlorinated Herbicides						
2,4,5-T	ND	44	ug/Kg	12/10/13	CE	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	12/10/13	CE	SW8151
2,4-D	ND	44	ug/Kg	12/10/13	CE	SW8151
2,4-DB	ND	440	ug/Kg	12/10/13	CE	SW8151
Dalapon	ND	44	ug/Kg	12/10/13	CE	SW8151
Dicamba	ND	87	ug/Kg	12/10/13	CE	SW8151
Dichloroprop	ND	44	ug/Kg	12/10/13	CE	SW8151
Dinoseb	ND	87	ug/Kg	12/10/13	CE	SW8151
QA/QC Surrogates						
% DCAA	58		%	12/10/13	CE	30 - 150 %

14

Project ID: 13120067 Phoenix I.D.: BF85285
Client ID: COMPOSITE 1

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

Please be advised that the NY unrestricted soil criteria for chromium is based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
December 11, 2013
Reviewed and Released by: Bobbi Aloisa, Vice President

14

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 11, 2013

FOR: Attn: Ms. Peggy Slegfried
Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		12/03/13	17:30
Location Code:	NEASTANY	Received by:	LPB	12/05/13	21:30
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBF85285
Phoenix ID: BF85286

Project ID: 13120067
Client ID: COMPOSITE 2

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Chromium	7.49	0.38	mg/Kg	12/08/13	LK	SW6010
Trivalent Chromium	7.49	0.50	mg/kg	12/09/13	CL	Calculation
Percent Solid	95		%	12/05/13	I	E160.3
Chromium, Hexavalent	< 0.42	0.42	mg/Kg	12/09/13 14:59	CL	SW3060/7196
Soil Extraction for Herbicide	Completed			12/06/13	M/D	SW8151
Total Metals Digest	Completed			12/06/13	Z/AG	SW846 - 3050
Chlorinated Herbicides						
2,4,5-T	ND	43	ug/Kg	12/10/13	CE	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	12/10/13	CE	SW8151
2,4-D	ND	43	ug/Kg	12/10/13	CE	SW8151
2,4-DB	ND	430	ug/Kg	12/10/13	CE	SW8151
Dalapon	ND	43	ug/Kg	12/10/13	CE	SW8151
Dicamba	ND	87	ug/Kg	12/10/13	CE	SW8151
Dichloroprop	ND	43	ug/Kg	12/10/13	CE	SW8151
Dinoseb	ND	87	ug/Kg	12/10/13	CE	SW8151
QA/QC Surrogates						
% DCAA	59		%	12/10/13	CE	30 - 150 %

14

Project ID: 13120067 Phoenix I.D.: BF85286

Client ID: COMPOSITE 2

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

Please be advised that the NY unrestricted soil criteria for chromium is based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
December 11, 2013
Reviewed and Released by: Bobbi Aloisa, Vice President

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PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

December 11, 2013

QA/QC Data

SDG I.D.: GBF85285

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 261666, QC Sample No: BF85432 (BF85285)												
ICP Metals - Soil												
Chromium	BRL	30.3	24.9	19.6	114	113	0.9	90.4	92.5	2.3	75 - 125	30
QA/QC Batch 261665, QC Sample No: BF85593 (BF85286)												
ICP Metals - Soil												
Chromium	BRL	50.2	50.3	0.20	102	105	2.9	105	97.1	7.8	75 - 125	30
QA/QC Batch 261811, QC Sample No: BF85681 (BF85285, BF85286)												
Hex Chromium - Soil												
Hexavalent Cr	BRL	<0.43	<0.43	NC	101						70 - 130	30
Insoluble Cr					97.2			91.8			70 - 130	30
Soluble Cr					103			78.1			70 - 130	30

14

PHOENIX

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

December 11, 2013

QA/QC Data

SDG I.D.: GBF85285

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 261417, QC Sample No: BF83947 (BF85285, BF85286)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	54	57	5.4	51	46	10.3	40 - 140	30	
2,4,5-TP (Silvex)	ND	68	67	1.5	65	59	9.7	40 - 140	30	
2,4-D	ND	52	56	7.4	68	76	11.1	40 - 140	30	
2,4-DB	ND	62	61	1.6	62	61	1.6	40 - 140	30	
Dalapon	ND	< 40	42	NC	< 10	< 30	NC	40 - 140	30	l,m
Dicamba	ND	76	74	2.7	69	69	0.0	40 - 140	30	
Dichloroprop	ND	57	58	1.7	55	53	3.7	40 - 140	30	
Dinoseb	ND	62	63	1.6	63	59	6.6	40 - 140	30	
% DCAA (Surrogate Rec)	58	59	56	5.2	54	54	0.0	30 - 150	30	

Comment:

Recoveries of < 40% were observed in the LCS/LCSD and < 30% in the MS/MSD due to interference in this portion of the chromatogram.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
December 11, 2013

14

Wednesday, December 11, 2013

Requested Criteria: None

State: NY

Sample Criteria Exceedences Report

GBF85285 - NEASTANY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

NY Temperature Narration

December 11, 2013

SDG I.D.: GBF85285

The samples in this delivery group were received at 4°C.
(Note acceptance criteria is above freezing up to 6°C)

14

Yonkers
Phnx

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

Pace Analytical Services, Inc.
2190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.pacelabs.com

LRF # 13120067
(LAB USE ONLY)

DISPOSAL REQUIREMENTS: (To be filled in by Client)
- ○ RETURN TO CLIENT
- ● DISPOSAL BY RECEIVING LAB
- ○ ARCHIVAL BY RECEIVING LAB

Additional charges incurred for disposal (if hazardous) or archival. Call for details.

CLIENT (REPORTS TO BE SENT TO): PACE

PROJECT#/PROJECT NAME: 13120067

LOCATION (CITY/STATE) ADDRESS: NY

PROJECT MANAGER: Peggy Siegfried

SAMPLED BY: (Please Print)

SAMPLING FIRM:

REQUIRED TURN AROUND TIME: 12/11/2013

NAME OF COURIER (IF USED):

ELECTRONIC RESULTS: Peggy.Siegfried@pacelabs.com
ELECTRONIC RESULTS: Nicole.Johnson@pacelabs.co

ENTER ANALYSIS AND METHOD NUMBER REQUESTED

PRESERVATIVE CODE:
BOTTLE TYPE:
BOTTLE SIZE:

PRESERVATIVE KEY: 0 - ICE; 1 - HCL; 2 - HNO3; 3 - H2SO4; 4 - NaOH; 5 - Zn. Acetate; 6 - MeOH; 7 - NaHSO4; 8 - Other (Na2SO3)

SAMPLE ID	DATE	TIME	MATRIX	GRAB/ COMP	LAB SAMPLE ID (LAB USE ONLY)	NUMBER OF CONTAINERS	Herbicides *	Cr+6/Cr+3 Please report both					REMARKS:
COMPOSITE 1	12/3/13	17:15	S	GRAB	AQ41891	1	X	X		85285			*2,4,5-TP Silvex
COMPOSITE 2	12/3/13	17:30	S	GRAB	AQ41892	1	X	X		85286			only

AMBIENT OR CHILLED: TEMP: COC TAPE: Y N
RECEIVED BROKEN OR LEAKING: Y N COC DISCREPANCIES: Y N
PROPERLY PRESERVED: Y N
RECVD W/I HOLDING TIMES: Y N

OTHER NOTES: Analytical Report [LEVEL-2] EDD: None

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
PRINTED NAME: L. Sarah Hall	PRINTED NAME: Geoff White	PRINTED NAME: Geoff White	PRINTED NAME	PRINTED NAME	PRINTED NAME 12/5/13
COMPANY: PACE	COMPANY: Phoenix Environmental	COMPANY: Phoenix Environmental	COMPANY	COMPANY	COMPANY
DATE/TIME: 12/5/13 1625	DATE/TIME: 5 December 2013 1625	DATE/TIME: 5 December 2013 1625	DATE/TIME	DATE/TIME	DATE/TIME 2130

S:\LOGIN\MOL\COCS

2016 MONTEMORANO BROTHERS IMPORTED FILL

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

October 20, 2016

Kathy McCormack
City of Geneva
47 CASTLE ST
GENEVA, NY 14456

RE: Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Dear Kathy McCormack:
Enclosed are the analytical results for sample(s) received by the laboratory on September 24, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This project was reissued on 10/19/16 to change the reporting format as per client request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wayne Bryce
wayne.bryce@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4088
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
702177001	MONTEMORANO TOPSOIL #610565	EPA 8260C	JEW	46	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
702177002	MONTEMORANO TOPSOIL #610568	EPA 8260C	JEW	46	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
702177003	MONTEMORANO TOPSOIL #610557	EPA 8260C	JEW	46	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
702177004	MONTEMORANO TOPSOIL #610566	EPA 8260C	JEW	46	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
702177005	MONTEMORANO TOPSOIL #610560	EPA 8260C	JEW	46	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
702177006	MONTEMORANO TOPSOIL #610563	EPA 8260C	JEW	46	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
702177007	MONTEMORANO COMP. #563364	EPA 8081B	SJG	23	PASI-PA
		EPA 8082A	SJG	10	PASI-PA
		EPA 6010C	CTS	24	PASI-PA
		EPA 7471B	PJD	1	PASI-PA
		EPA 8270D	EAC	70	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA
702177008	MONTEMORANO COMP. #563374	EPA 8081B	SJG	23	PASI-PA
		EPA 8082A	SJG	10	PASI-PA
		EPA 6010C	CTS	24	PASI-PA
		EPA 7471B	PJD	1	PASI-PA
		EPA 8270D	EAC	70	PASI-PA
		ASTM D2974-87	TAW	1	PASI-PA

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610565 **Lab ID: 702177001** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Acetone	**<13.3**	ug/kg	13.3	1	10/03/16 07:13	10/03/16 12:19	67-64-1	1j
Benzene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	71-43-2	1j
Bromodichloromethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-27-4	1j
Bromoform	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-25-2	1j
Bromomethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	74-83-9	1j
TOTAL BTEX	**<39.8**	ug/kg	39.8	1	10/03/16 07:13	10/03/16 12:19		1j
2-Butanone (MEK)	**<13.3**	ug/kg	13.3	1	10/03/16 07:13	10/03/16 12:19	78-93-3	1j
Carbon disulfide	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-15-0	1j
Carbon tetrachloride	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	56-23-5	1j
Chlorobenzene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	108-90-7	1j
Chloroethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-00-3	1j
Chloroform	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	67-66-3	1j
Chloromethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	74-87-3	1j
Dibromochloromethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	124-48-1	1j
1,2-Dichlorobenzene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	95-50-1	1j
1,3-Dichlorobenzene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	541-73-1	1j
1,4-Dichlorobenzene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	106-46-7	1j
1,1-Dichloroethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-34-3	1j
1,2-Dichloroethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	107-06-2	1j
1,2-Dichloroethene (Total)	**<13.3**	ug/kg	13.3	1	10/03/16 07:13	10/03/16 12:19	540-59-0	1j
1,1-Dichloroethene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-35-4	1j
cis-1,2-Dichloroethene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	156-59-2	1j
trans-1,2-Dichloroethene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	156-60-5	1j
1,2-Dichloropropane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	78-87-5	1j
cis-1,3-Dichloropropene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	10061-01-5	1j
trans-1,3-Dichloropropene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	10061-02-6	1j
Ethylbenzene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	100-41-4	1j
2-Hexanone	**<13.3**	ug/kg	13.3	1	10/03/16 07:13	10/03/16 12:19	591-78-6	1j
Methylene Chloride	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-09-2	1j
4-Methyl-2-pentanone (MIBK)	**<13.3**	ug/kg	13.3	1	10/03/16 07:13	10/03/16 12:19	108-10-1	1j
Methyl-tert-butyl ether	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	1634-04-4	1j
Styrene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	100-42-5	1j
1,1,2,2-Tetrachloroethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	79-34-5	1j
Tetrachloroethene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	127-18-4	1j
Toluene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	108-88-3	1j
1,1,1-Trichloroethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	71-55-6	1j
1,1,2-Trichloroethane	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	79-00-5	1j
Trichloroethene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	79-01-6	1j
Vinyl chloride	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	75-01-4	1j
Xylene (Total)	**<19.9**	ug/kg	19.9	1	10/03/16 07:13	10/03/16 12:19	1330-20-7	1j
m&p-Xylene	**<13.3**	ug/kg	13.3	1	10/03/16 07:13	10/03/16 12:19	179601-23-1	1j
o-Xylene	**<6.6**	ug/kg	6.6	1	10/03/16 07:13	10/03/16 12:19	95-47-6	1j
Surrogates								
Toluene-d8 (S)	109	%	68-135	1	10/03/16 07:13	10/03/16 12:19	2037-26-5	
4-Bromofluorobenzene (S)	113	%	65-146	1	10/03/16 07:13	10/03/16 12:19	460-00-4	

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610565 **Lab ID: 702177001** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	69-137	1	10/03/16 07:13	10/03/16 12:19	17060-07-0	
Dibromofluoromethane (S)	100	%	70-130	1	10/03/16 07:13	10/03/16 12:19	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**31.9**	%	0.10	1		09/29/16 13:48		

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610568 **Lab ID: 702177002** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Acetone	**<15.5**	ug/kg	15.5	1	10/03/16 07:13	10/03/16 12:44	67-64-1	1j
Benzene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	71-43-2	1j
Bromodichloromethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-27-4	1j
Bromoform	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-25-2	1j
Bromomethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	74-83-9	1j
TOTAL BTEX	**<46.4**	ug/kg	46.4	1	10/03/16 07:13	10/03/16 12:44		1j
2-Butanone (MEK)	**<15.5**	ug/kg	15.5	1	10/03/16 07:13	10/03/16 12:44	78-93-3	1j
Carbon disulfide	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-15-0	1j
Carbon tetrachloride	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	56-23-5	1j
Chlorobenzene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	108-90-7	1j
Chloroethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-00-3	1j
Chloroform	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	67-66-3	1j
Chloromethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	74-87-3	1j
Dibromochloromethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	124-48-1	1j
1,2-Dichlorobenzene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	95-50-1	1j
1,3-Dichlorobenzene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	541-73-1	1j
1,4-Dichlorobenzene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	106-46-7	1j
1,1-Dichloroethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-34-3	1j
1,2-Dichloroethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	107-06-2	1j
1,2-Dichloroethene (Total)	**<15.5**	ug/kg	15.5	1	10/03/16 07:13	10/03/16 12:44	540-59-0	1j
1,1-Dichloroethene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-35-4	1j
cis-1,2-Dichloroethene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	156-59-2	1j
trans-1,2-Dichloroethene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	156-60-5	1j
1,2-Dichloropropane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	78-87-5	1j
cis-1,3-Dichloropropene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	10061-01-5	1j
trans-1,3-Dichloropropene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	10061-02-6	1j
Ethylbenzene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	100-41-4	1j
2-Hexanone	**<15.5**	ug/kg	15.5	1	10/03/16 07:13	10/03/16 12:44	591-78-6	1j
Methylene Chloride	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-09-2	1j
4-Methyl-2-pentanone (MIBK)	**<15.5**	ug/kg	15.5	1	10/03/16 07:13	10/03/16 12:44	108-10-1	1j
Methyl-tert-butyl ether	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	1634-04-4	1j
Styrene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	100-42-5	1j
1,1,2,2-Tetrachloroethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	79-34-5	1j
Tetrachloroethene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	127-18-4	1j
Toluene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	108-88-3	1j
1,1,1-Trichloroethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	71-55-6	1j
1,1,2-Trichloroethane	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	79-00-5	1j
Trichloroethene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	79-01-6	1j
Vinyl chloride	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	75-01-4	1j
Xylene (Total)	**<23.2**	ug/kg	23.2	1	10/03/16 07:13	10/03/16 12:44	1330-20-7	1j
m&p-Xylene	**<15.5**	ug/kg	15.5	1	10/03/16 07:13	10/03/16 12:44	179601-23-1	1j
o-Xylene	**<7.7**	ug/kg	7.7	1	10/03/16 07:13	10/03/16 12:44	95-47-6	1j
Surrogates								
Toluene-d8 (S)	108	%	68-135	1	10/03/16 07:13	10/03/16 12:44	2037-26-5	
4-Bromofluorobenzene (S)	117	%	65-146	1	10/03/16 07:13	10/03/16 12:44	460-00-4	

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(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610568 **Lab ID: 702177002** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%	69-137	1	10/03/16 07:13	10/03/16 12:44	17060-07-0	
Dibromofluoromethane (S)	97	%	70-130	1	10/03/16 07:13	10/03/16 12:44	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**30.8**	%	0.10	1		09/29/16 13:49		

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610557 **Lab ID: 702177003** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Acetone	**<13.1**	ug/kg	13.1	1	10/03/16 07:13	10/03/16 13:10	67-64-1	1j
Benzene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	71-43-2	1j
Bromodichloromethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-27-4	1j
Bromoform	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-25-2	1j
Bromomethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	74-83-9	1j
TOTAL BTEX	**<39.2**	ug/kg	39.2	1	10/03/16 07:13	10/03/16 13:10		1j
2-Butanone (MEK)	**<13.1**	ug/kg	13.1	1	10/03/16 07:13	10/03/16 13:10	78-93-3	1j
Carbon disulfide	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-15-0	1j
Carbon tetrachloride	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	56-23-5	1j
Chlorobenzene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	108-90-7	1j
Chloroethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-00-3	1j
Chloroform	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	67-66-3	1j
Chloromethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	74-87-3	1j
Dibromochloromethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	124-48-1	1j
1,2-Dichlorobenzene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	95-50-1	1j
1,3-Dichlorobenzene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	541-73-1	1j
1,4-Dichlorobenzene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	106-46-7	1j
1,1-Dichloroethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-34-3	1j
1,2-Dichloroethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	107-06-2	1j
1,2-Dichloroethene (Total)	**<13.1**	ug/kg	13.1	1	10/03/16 07:13	10/03/16 13:10	540-59-0	1j
1,1-Dichloroethene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-35-4	1j
cis-1,2-Dichloroethene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	156-59-2	1j
trans-1,2-Dichloroethene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	156-60-5	1j
1,2-Dichloropropane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	78-87-5	1j
cis-1,3-Dichloropropene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	10061-01-5	1j
trans-1,3-Dichloropropene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	10061-02-6	1j
Ethylbenzene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	100-41-4	1j
2-Hexanone	**<13.1**	ug/kg	13.1	1	10/03/16 07:13	10/03/16 13:10	591-78-6	1j
Methylene Chloride	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-09-2	1j
4-Methyl-2-pentanone (MIBK)	**<13.1**	ug/kg	13.1	1	10/03/16 07:13	10/03/16 13:10	108-10-1	1j
Methyl-tert-butyl ether	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	1634-04-4	1j
Styrene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	100-42-5	1j
1,1,2,2-Tetrachloroethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	79-34-5	1j
Tetrachloroethene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	127-18-4	1j
Toluene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	108-88-3	1j
1,1,1-Trichloroethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	71-55-6	1j
1,1,2-Trichloroethane	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	79-00-5	1j
Trichloroethene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	79-01-6	1j
Vinyl chloride	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	75-01-4	1j
Xylene (Total)	**<19.6**	ug/kg	19.6	1	10/03/16 07:13	10/03/16 13:10	1330-20-7	1j
m&p-Xylene	**<13.1**	ug/kg	13.1	1	10/03/16 07:13	10/03/16 13:10	179601-23-1	1j
o-Xylene	**<6.5**	ug/kg	6.5	1	10/03/16 07:13	10/03/16 13:10	95-47-6	1j
Surrogates								
Toluene-d8 (S)	103	%	68-135	1	10/03/16 07:13	10/03/16 13:10	2037-26-5	
4-Bromofluorobenzene (S)	106	%	65-146	1	10/03/16 07:13	10/03/16 13:10	460-00-4	

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610557 **Lab ID: 702177003** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	69-137	1	10/03/16 07:13	10/03/16 13:10	17060-07-0	
Dibromofluoromethane (S)	99	%	70-130	1	10/03/16 07:13	10/03/16 13:10	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.2**	%	0.10	1		09/29/16 13:49		

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610566 **Lab ID: 702177004** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Acetone	<12.7	ug/kg	12.7	1	10/03/16 07:13	10/03/16 13:37	67-64-1	1j
Benzene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	71-43-2	1j
Bromodichloromethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-27-4	1j
Bromoform	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-25-2	1j
Bromomethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	74-83-9	1j
TOTAL BTEX	<38.2	ug/kg	38.2	1	10/03/16 07:13	10/03/16 13:37		1j
2-Butanone (MEK)	<12.7	ug/kg	12.7	1	10/03/16 07:13	10/03/16 13:37	78-93-3	1j
Carbon disulfide	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-15-0	1j
Carbon tetrachloride	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	56-23-5	1j
Chlorobenzene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	108-90-7	1j
Chloroethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-00-3	1j
Chloroform	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	67-66-3	1j
Chloromethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	74-87-3	1j
Dibromochloromethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	124-48-1	1j
1,2-Dichlorobenzene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	95-50-1	1j
1,3-Dichlorobenzene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	541-73-1	1j
1,4-Dichlorobenzene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	106-46-7	1j
1,1-Dichloroethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-34-3	1j
1,2-Dichloroethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	107-06-2	1j
1,2-Dichloroethene (Total)	<12.7	ug/kg	12.7	1	10/03/16 07:13	10/03/16 13:37	540-59-0	1j
1,1-Dichloroethene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-35-4	1j
cis-1,2-Dichloroethene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	156-59-2	1j
trans-1,2-Dichloroethene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	156-60-5	1j
1,2-Dichloropropane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	78-87-5	1j
cis-1,3-Dichloropropene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	10061-01-5	1j
trans-1,3-Dichloropropene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	10061-02-6	1j
Ethylbenzene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	100-41-4	1j
2-Hexanone	<12.7	ug/kg	12.7	1	10/03/16 07:13	10/03/16 13:37	591-78-6	1j
Methylene Chloride	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-09-2	1j
4-Methyl-2-pentanone (MIBK)	<12.7	ug/kg	12.7	1	10/03/16 07:13	10/03/16 13:37	108-10-1	1j
Methyl-tert-butyl ether	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	1634-04-4	1j
Styrene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	100-42-5	1j
1,1,2,2-Tetrachloroethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	79-34-5	1j
Tetrachloroethene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	127-18-4	1j
Toluene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	108-88-3	1j
1,1,1-Trichloroethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	71-55-6	1j
1,1,2-Trichloroethane	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	79-00-5	1j
Trichloroethene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	79-01-6	1j
Vinyl chloride	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	75-01-4	1j
Xylene (Total)	<19.1	ug/kg	19.1	1	10/03/16 07:13	10/03/16 13:37	1330-20-7	1j
m&p-Xylene	<12.7	ug/kg	12.7	1	10/03/16 07:13	10/03/16 13:37	179601-23-1	1j
o-Xylene	<6.4	ug/kg	6.4	1	10/03/16 07:13	10/03/16 13:37	95-47-6	1j
Surrogates								
Toluene-d8 (S)	108	%	68-135	1	10/03/16 07:13	10/03/16 13:37	2037-26-5	
4-Bromofluorobenzene (S)	105	%	65-146	1	10/03/16 07:13	10/03/16 13:37	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610566 **Lab ID: 702177004** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	69-137	1	10/03/16 07:13	10/03/16 13:37	17060-07-0	
Dibromofluoromethane (S)	99	%	70-130	1	10/03/16 07:13	10/03/16 13:37	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.4**	%	0.10	1		09/29/16 13:49		

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610560 **Lab ID: 702177005** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Acetone	**<15.0**	ug/kg	15.0	1	10/03/16 07:13	10/03/16 14:03	67-64-1	1j
Benzene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	71-43-2	1j
Bromodichloromethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-27-4	1j
Bromoform	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-25-2	1j
Bromomethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	74-83-9	1j
TOTAL BTEX	**<45.0**	ug/kg	45.0	1	10/03/16 07:13	10/03/16 14:03		1j
2-Butanone (MEK)	**<15.0**	ug/kg	15.0	1	10/03/16 07:13	10/03/16 14:03	78-93-3	1j
Carbon disulfide	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-15-0	1j
Carbon tetrachloride	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	56-23-5	1j
Chlorobenzene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	108-90-7	1j
Chloroethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-00-3	1j
Chloroform	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	67-66-3	1j
Chloromethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	74-87-3	1j
Dibromochloromethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	124-48-1	1j
1,2-Dichlorobenzene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	95-50-1	1j
1,3-Dichlorobenzene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	541-73-1	1j
1,4-Dichlorobenzene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	106-46-7	1j
1,1-Dichloroethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-34-3	1j
1,2-Dichloroethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	107-06-2	1j
1,2-Dichloroethene (Total)	**<15.0**	ug/kg	15.0	1	10/03/16 07:13	10/03/16 14:03	540-59-0	1j
1,1-Dichloroethene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-35-4	1j
cis-1,2-Dichloroethene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	156-59-2	1j
trans-1,2-Dichloroethene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	156-60-5	1j
1,2-Dichloropropane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	78-87-5	1j
cis-1,3-Dichloropropene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	10061-01-5	1j
trans-1,3-Dichloropropene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	10061-02-6	1j
Ethylbenzene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	100-41-4	1j
2-Hexanone	**<15.0**	ug/kg	15.0	1	10/03/16 07:13	10/03/16 14:03	591-78-6	1j
Methylene Chloride	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-09-2	1j
4-Methyl-2-pentanone (MIBK)	**<15.0**	ug/kg	15.0	1	10/03/16 07:13	10/03/16 14:03	108-10-1	1j
Methyl-tert-butyl ether	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	1634-04-4	1j
Styrene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	100-42-5	1j
1,1,2,2-Tetrachloroethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	79-34-5	1j
Tetrachloroethene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	127-18-4	1j
Toluene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	108-88-3	1j
1,1,1-Trichloroethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	71-55-6	1j
1,1,2-Trichloroethane	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	79-00-5	1j
Trichloroethene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	79-01-6	1j
Vinyl chloride	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	75-01-4	1j
Xylene (Total)	**<22.5**	ug/kg	22.5	1	10/03/16 07:13	10/03/16 14:03	1330-20-7	1j
m&p-Xylene	**<15.0**	ug/kg	15.0	1	10/03/16 07:13	10/03/16 14:03	179601-23-1	1j
o-Xylene	**<7.5**	ug/kg	7.5	1	10/03/16 07:13	10/03/16 14:03	95-47-6	1j
Surrogates								
Toluene-d8 (S)	106	%	68-135	1	10/03/16 07:13	10/03/16 14:03	2037-26-5	
4-Bromofluorobenzene (S)	113	%	65-146	1	10/03/16 07:13	10/03/16 14:03	460-00-4	

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610560 **Lab ID: 702177005** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	69-137	1	10/03/16 07:13	10/03/16 14:03	17060-07-0	
Dibromofluoromethane (S)	96	%	70-130	1	10/03/16 07:13	10/03/16 14:03	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**17.1**	%	0.10	1		09/29/16 13:49		

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610563 **Lab ID: 702177006** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Acetone	**<12.5**	ug/kg	12.5	1	10/03/16 07:13	10/03/16 14:29	67-64-1	1j
Benzene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	71-43-2	1j
Bromodichloromethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-27-4	1j
Bromoform	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-25-2	1j
Bromomethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	74-83-9	1j
TOTAL BTEX	**<37.4**	ug/kg	37.4	1	10/03/16 07:13	10/03/16 14:29		1j
2-Butanone (MEK)	**<12.5**	ug/kg	12.5	1	10/03/16 07:13	10/03/16 14:29	78-93-3	1j
Carbon disulfide	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-15-0	1j
Carbon tetrachloride	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	56-23-5	1j
Chlorobenzene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	108-90-7	1j
Chloroethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-00-3	1j
Chloroform	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	67-66-3	1j
Chloromethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	74-87-3	1j
Dibromochloromethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	124-48-1	1j
1,2-Dichlorobenzene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	95-50-1	1j
1,3-Dichlorobenzene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	541-73-1	1j
1,4-Dichlorobenzene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	106-46-7	1j
1,1-Dichloroethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-34-3	1j
1,2-Dichloroethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	107-06-2	1j
1,2-Dichloroethene (Total)	**<12.5**	ug/kg	12.5	1	10/03/16 07:13	10/03/16 14:29	540-59-0	1j
1,1-Dichloroethene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-35-4	1j
cis-1,2-Dichloroethene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	156-59-2	1j
trans-1,2-Dichloroethene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	156-60-5	1j
1,2-Dichloropropane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	78-87-5	1j
cis-1,3-Dichloropropene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	10061-01-5	1j
trans-1,3-Dichloropropene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	10061-02-6	1j
Ethylbenzene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	100-41-4	1j
2-Hexanone	**<12.5**	ug/kg	12.5	1	10/03/16 07:13	10/03/16 14:29	591-78-6	1j
Methylene Chloride	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-09-2	1j
4-Methyl-2-pentanone (MIBK)	**<12.5**	ug/kg	12.5	1	10/03/16 07:13	10/03/16 14:29	108-10-1	1j
Methyl-tert-butyl ether	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	1634-04-4	1j
Styrene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	100-42-5	1j
1,1,2,2-Tetrachloroethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	79-34-5	1j
Tetrachloroethene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	127-18-4	1j
Toluene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	108-88-3	1j
1,1,1-Trichloroethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	71-55-6	1j
1,1,2-Trichloroethane	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	79-00-5	1j
Trichloroethene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	79-01-6	1j
Vinyl chloride	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	75-01-4	1j
Xylene (Total)	**<18.7**	ug/kg	18.7	1	10/03/16 07:13	10/03/16 14:29	1330-20-7	1j
m&p-Xylene	**<12.5**	ug/kg	12.5	1	10/03/16 07:13	10/03/16 14:29	179601-23-1	1j
o-Xylene	**<6.2**	ug/kg	6.2	1	10/03/16 07:13	10/03/16 14:29	95-47-6	1j
Surrogates								
Toluene-d8 (S)	104	%	68-135	1	10/03/16 07:13	10/03/16 14:29	2037-26-5	
4-Bromofluorobenzene (S)	108	%	65-146	1	10/03/16 07:13	10/03/16 14:29	460-00-4	

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO TOPSOIL #610563 **Lab ID: 702177006** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level	Analytical Method: EPA 8260C Preparation Method: EPA 5035A							
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%	69-137	1	10/03/16 07:13	10/03/16 14:29	17060-07-0	
Dibromofluoromethane (S)	100	%	70-130	1	10/03/16 07:13	10/03/16 14:29	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.6**	%	0.10	1		09/29/16 13:49		

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563364 **Lab ID: 702177007** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081B GCS Pesticides	Analytical Method: EPA 8081B Preparation Method: EPA 3546							
Aldrin	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	309-00-2	
alpha-BHC	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	319-84-6	
beta-BHC	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	319-85-7	
delta-BHC	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	319-86-8	
gamma-BHC (Lindane)	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	58-89-9	
alpha-Chlordane	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	5103-71-9	
gamma-Chlordane	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	5103-74-2	
4,4'-DDD	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	72-54-8	
4,4'-DDE	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	72-55-9	
4,4'-DDT	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	50-29-3	
Dieldrin	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	60-57-1	
Endosulfan I	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	959-98-8	
Endosulfan II	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	33213-65-9	
Endosulfan sulfate	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	1031-07-8	
Endrin	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	72-20-8	
Endrin aldehyde	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	7421-93-4	
Endrin ketone	**<5.0**	ug/kg	5.0	1	09/29/16 16:22	10/06/16 03:23	53494-70-5	
Heptachlor	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	76-44-8	
Heptachlor epoxide	**<2.5**	ug/kg	2.5	1	09/29/16 16:22	10/06/16 03:23	1024-57-3	
Methoxychlor	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/06/16 03:23	72-43-5	
Toxaphene	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/06/16 03:23	8001-35-2	
Surrogates								
Tetrachloro-m-xylene (S)	85	%	37-113	1	09/29/16 16:22	10/06/16 03:23	877-09-8	
Decachlorobiphenyl (S)	77	%	39-122	1	09/29/16 16:22	10/06/16 03:23	2051-24-3	
8082A GCS PCB	Analytical Method: EPA 8082A Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/01/16 18:19	12674-11-2	
PCB-1221 (Aroclor 1221)	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/01/16 18:19	11104-28-2	
PCB-1232 (Aroclor 1232)	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/01/16 18:19	11141-16-5	
PCB-1242 (Aroclor 1242)	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/01/16 18:19	53469-21-9	
PCB-1248 (Aroclor 1248)	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/01/16 18:19	12672-29-6	
PCB-1254 (Aroclor 1254)	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/01/16 18:19	11097-69-1	
PCB-1260 (Aroclor 1260)	**<25.0**	ug/kg	25.0	1	09/29/16 16:22	10/01/16 18:19	11096-82-5	
PCB, Total	**<175**	ug/kg	175	1	09/29/16 16:22	10/01/16 18:19	1336-36-3	
Surrogates								
Tetrachloro-m-xylene (S)	51	%	30-107	1	09/29/16 16:22	10/01/16 18:19	877-09-8	
Decachlorobiphenyl (S)	47	%	10-115	1	09/29/16 16:22	10/01/16 18:19	2051-24-3	
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B							
Aluminum	**7700**	mg/kg	11.1	1	10/03/16 10:59	10/04/16 07:58	7429-90-5	M1
Antimony	**<0.67**	mg/kg	0.67	1	10/03/16 10:59	10/04/16 07:58	7440-36-0	M1
Arsenic	**1.7**	mg/kg	0.55	1	10/03/16 10:59	10/04/16 07:58	7440-38-2	
Barium	**57.8**	mg/kg	2.2	1	10/03/16 10:59	10/04/16 07:58	7440-39-3	
Beryllium	**0.25**	mg/kg	0.22	1	10/03/16 10:59	10/04/16 07:58	7440-41-7	
Boron	**<5.5**	mg/kg	5.5	1	10/03/16 10:59	10/04/16 07:58	7440-42-8	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563364 **Lab ID: 702177007** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B							
Cadmium	**<0.33**	mg/kg	0.33	1	10/03/16 10:59	10/04/16 07:58	7440-43-9	
Calcium	**1720**	mg/kg	222	1	10/03/16 10:59	10/04/16 07:58	7440-70-2	M1
Chromium	**8.1**	mg/kg	0.55	1	10/03/16 10:59	10/04/16 07:58	7440-47-3	
Cobalt	**2.0**	mg/kg	1.1	1	10/03/16 10:59	10/04/16 07:58	7440-48-4	
Copper	**4.2**	mg/kg	1.1	1	10/03/16 10:59	10/04/16 07:58	7440-50-8	
Iron	**6950**	mg/kg	11.1	1	10/03/16 10:59	10/04/16 07:58	7439-89-6	M1
Lead	**6.7**	mg/kg	0.55	1	10/03/16 10:59	10/04/16 07:58	7439-92-1	
Magnesium	**1250**	mg/kg	55.4	1	10/03/16 10:59	10/04/16 07:58	7439-95-4	M1
Manganese	**60.4**	mg/kg	1.1	1	10/03/16 10:59	10/04/16 07:58	7439-96-5	
Molybdenum	**<2.2**	mg/kg	2.2	1	10/03/16 10:59	10/04/16 07:58	7439-98-7	
Nickel	**4.5**	mg/kg	2.2	1	10/03/16 10:59	10/04/16 07:58	7440-02-0	
Potassium	**618**	mg/kg	55.4	1	10/03/16 10:59	10/04/16 07:58	7440-09-7	M1
Selenium	**<0.89**	mg/kg	0.89	1	10/03/16 10:59	10/04/16 07:58	7782-49-2	
Silver	**<0.67**	mg/kg	0.67	1	10/03/16 10:59	10/04/16 07:58	7440-22-4	
Sodium	**<554**	mg/kg	554	1	10/03/16 10:59	10/04/16 07:58	7440-23-5	
Thallium	**<2.2**	mg/kg	2.2	1	10/03/16 10:59	10/04/16 07:58	7440-28-0	
Vanadium	**13.8**	mg/kg	1.1	1	10/03/16 10:59	10/04/16 07:58	7440-62-2	
Zinc	**25.8**	mg/kg	1.1	1	10/03/16 10:59	10/04/16 07:58	7440-66-6	
7471B Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B							
Mercury	**<0.15**	mg/kg	0.15	1	09/29/16 09:07	09/29/16 23:33	7439-97-6	
8270D MSSV Microwave	Analytical Method: EPA 8270D Preparation Method: EPA 3546							
Acenaphthene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	83-32-9	
Acenaphthylene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	208-96-8	
Anthracene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	120-12-7	
Benzo(a)anthracene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	56-55-3	
Benzo(a)pyrene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	50-32-8	
Benzo(b)fluoranthene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	205-99-2	
Benzo(g,h,i)perylene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	191-24-2	
Benzo(k)fluoranthene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	207-08-9	
Benzyl alcohol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	100-51-6	
4-Bromophenylphenyl ether	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	101-55-3	
Butylbenzylphthalate	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	85-68-7	
4-Chloro-3-methylphenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	59-50-7	
4-Chloroaniline	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	106-47-8	
bis(2-Chloroethoxy)methane	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	111-91-1	
bis(2-Chloroethyl) ether	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	111-44-4	
bis(2-Chloroisopropyl) ether	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	108-60-1	
2-Chloronaphthalene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	91-58-7	
2-Chlorophenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	95-57-8	
4-Chlorophenylphenyl ether	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	7005-72-3	
Chrysene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	218-01-9	
Dibenz(a,h)anthracene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	53-70-3	
Dibenzofuran	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	132-64-9	

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575 Broad Hollow Road
Melville, NY 11747
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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563364 **Lab ID: 702177007** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Microwave	Analytical Method: EPA 8270D Preparation Method: EPA 3546							
1,2-Dichlorobenzene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	95-50-1	
1,3-Dichlorobenzene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	541-73-1	
1,4-Dichlorobenzene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	106-46-7	
3,3'-Dichlorobenzidine	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	91-94-1	
2,4-Dichlorophenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	120-83-2	
Diethylphthalate	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	84-66-2	
2,4-Dimethylphenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	105-67-9	
Dimethylphthalate	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	131-11-3	
Di-n-butylphthalate	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	84-74-2	
4,6-Dinitro-2-methylphenol	**<1250**	ug/kg	1250	1	09/30/16 13:52	10/06/16 22:16	534-52-1	
2,4-Dinitrophenol	**<1250**	ug/kg	1250	1	09/30/16 13:52	10/06/16 22:16	51-28-5	R1
2,4-Dinitrotoluene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	121-14-2	
2,6-Dinitrotoluene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	606-20-2	
Di-n-octylphthalate	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	117-84-0	
bis(2-Ethylhexyl)phthalate	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	117-81-7	
Fluoranthene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	206-44-0	
Fluorene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	86-73-7	
Hexachloro-1,3-butadiene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	87-68-3	
Hexachlorobenzene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	118-74-1	
Hexachlorocyclopentadiene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	77-47-4	R1
Hexachloroethane	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	67-72-1	
Indeno(1,2,3-cd)pyrene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	193-39-5	
Isophorone	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	78-59-1	
2-Methylnaphthalene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	91-57-6	
2-Methylphenol(o-Cresol)	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1000**	ug/kg	1000	1	09/30/16 13:52	10/06/16 22:16		
Naphthalene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	91-20-3	
2-Nitroaniline	**<1250**	ug/kg	1250	1	09/30/16 13:52	10/06/16 22:16	88-74-4	
3-Nitroaniline	**<1250**	ug/kg	1250	1	09/30/16 13:52	10/06/16 22:16	99-09-2	R1
4-Nitroaniline	**<1250**	ug/kg	1250	1	09/30/16 13:52	10/06/16 22:16	100-01-6	R1
Nitrobenzene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	98-95-3	
2-Nitrophenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	88-75-5	
4-Nitrophenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/18 22:16	100-02-7	
N-Nitroso-di-n-propylamine	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	621-64-7	
N-Nitrosodiphenylamine	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	86-30-6	
Pentachlorophenol	**<1250**	ug/kg	1250	1	09/30/16 13:52	10/06/16 22:16	87-86-5	
Phenanthrene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	85-01-8	
Phenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	108-95-2	
Pyrene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	129-00-0	
1,2,4-Trichlorobenzene	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	120-82-1	
2,4,5-Trichlorophenol	**<1250**	ug/kg	1250	1	09/30/16 13:52	10/06/16 22:16	95-95-4	
2,4,6-Trichlorophenol	**<500**	ug/kg	500	1	09/30/16 13:52	10/06/16 22:16	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	78	%	33-104	1	09/30/16 13:52	10/06/16 22:16	4165-60-0	
2-Fluorobiphenyl (S)	73	%	38-105	1	09/30/16 13:52	10/06/16 22:16	321-60-8	

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575 Broad Hollow Road
Melville, NY 11747
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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563364 **Lab ID: 702177007** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Microwave	Analytical Method: EPA 8270D Preparation Method: EPA 3546							
Surrogates								
Terphenyl-d14 (S)	62	%	33-149	1	09/30/16 13:52	10/06/16 22:16	1718-51-0	
Phenol-d6 (S)	75	%	32-111	1	09/30/16 13:52	10/06/16 22:16	13127-88-3	
2-Fluorophenol (S)	77	%	10-123	1	09/30/16 13:52	10/06/16 22:16	367-12-4	
2,4,6-Tribromophenol (S)	73	%	10-140	1	09/30/16 13:52	10/06/16 22:16	118-79-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**33.7**	%	0.10	1		09/29/16 13:49		

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563374 **Lab ID: 702177008** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081B GCS Pesticides	Analytical Method: EPA 8081B Preparation Method: EPA 3546							
Aldrin	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	309-00-2	
alpha-BHC	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	319-84-6	
beta-BHC	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	319-85-7	
delta-BHC	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	319-86-8	
gamma-BHC (Lindane)	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	58-89-9	
alpha-Chlordane	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	5103-71-9	
gamma-Chlordane	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	5103-74-2	
4,4'-DDD	**<3.9**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	72-54-8	
4,4'-DDE	**7.2**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	72-55-9	
4,4'-DDT	**10.5**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	50-29-3	
Dieldrin	**<3.9**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	60-57-1	
Endosulfan I	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	959-98-8	
Endosulfan II	**<3.9**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	33213-65-9	
Endosulfan sulfate	**<3.9**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	1031-07-8	
Endrin	**<3.9**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	72-20-8	
Endrin aldehyde	**<3.9**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	7421-93-4	
Endrin ketone	**<3.9**	ug/kg	3.9	1	09/29/16 16:22	10/06/16 03:50	53494-70-5	
Heptachlor	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	76-44-8	
Heptachlor epoxide	**<1.9**	ug/kg	1.9	1	09/29/16 16:22	10/06/16 03:50	1024-57-3	
Methoxychlor	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/06/16 03:50	72-43-5	
Toxaphene	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/06/16 03:50	8001-35-2	
Surrogates								
Tetrachloro-m-xylene (S)	65	%	37-113	1	09/29/16 16:22	10/06/16 03:50	877-09-8	
Decachlorobiphenyl (S)	69	%	39-122	1	09/29/16 16:22	10/06/16 03:50	2051-24-3	
8082A GCS PCB	Analytical Method: EPA 8082A Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/01/16 18:34	12674-11-2	
PCB-1221 (Aroclor 1221)	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/01/16 18:34	11104-28-2	
PCB-1232 (Aroclor 1232)	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/01/16 18:34	11141-16-5	
PCB-1242 (Aroclor 1242)	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/01/16 18:34	53469-21-9	
PCB-1248 (Aroclor 1248)	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/01/16 18:34	12672-29-6	
PCB-1254 (Aroclor 1254)	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/01/16 18:34	11097-69-1	
PCB-1260 (Aroclor 1260)	**<19.5**	ug/kg	19.5	1	09/29/16 16:22	10/01/16 18:34	11096-82-5	
PCB, Total	**<136**	ug/kg	136	1	09/29/16 16:22	10/01/16 18:34	1336-36-3	
Surrogates								
Tetrachloro-m-xylene (S)	43	%	30-107	1	09/29/16 16:22	10/01/16 18:34	877-09-8	
Decachlorobiphenyl (S)	58	%	10-115	1	09/29/16 16:22	10/01/16 18:34	2051-24-3	
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B							
Aluminum	**8510**	mg/kg	6.9	1	10/03/16 10:59	10/04/16 08:05	7429-90-5	
Antimony	**<0.41**	mg/kg	0.41	1	10/03/16 10:59	10/04/16 08:05	7440-36-0	
Arsenic	**2.7**	mg/kg	0.34	1	10/03/16 10:59	10/04/16 08:05	7440-38-2	
Barium	**20.8**	mg/kg	1.4	1	10/03/16 10:59	10/04/16 08:05	7440-39-3	
Beryllium	**0.33**	mg/kg	0.14	1	10/03/16 10:59	10/04/16 08:05	7440-41-7	
Boron	**<3.4**	mg/kg	3.4	1	10/03/16 10:59	10/04/16 08:05	7440-42-8	

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563374 **Lab ID: 702177008** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B							
Cadmium	**<0.21**	mg/kg	0.21	1	10/03/16 10:59	10/04/16 08:05	7440-43-9	
Calcium	**911**	mg/kg	138	1	10/03/16 10:59	10/04/16 08:05	7440-70-2	
Chromium	**9.2**	mg/kg	0.34	1	10/03/16 10:59	10/04/16 08:05	7440-47-3	
Cobalt	**6.3**	mg/kg	0.69	1	10/03/16 10:59	10/04/16 08:05	7440-48-4	
Copper	**8.5**	mg/kg	0.69	1	10/03/16 10:59	10/04/16 08:05	7440-50-8	
Iron	**12800**	mg/kg	6.9	1	10/03/16 10:59	10/04/16 08:05	7439-89-6	
Lead	**6.6**	mg/kg	0.34	1	10/03/16 10:59	10/04/16 08:05	7439-92-1	
Magnesium	**1490**	mg/kg	34.4	1	10/03/16 10:59	10/04/16 08:05	7439-95-4	
Manganese	**370**	mg/kg	0.69	1	10/03/16 10:59	10/04/16 08:05	7439-96-5	
Molybdenum	**<1.4**	mg/kg	1.4	1	10/03/16 10:59	10/04/16 08:05	7439-98-7	
Nickel	**6.5**	mg/kg	1.4	1	10/03/16 10:59	10/04/16 08:05	7440-02-0	
Potassium	**631**	mg/kg	34.4	1	10/03/16 10:59	10/04/16 08:05	7440-09-7	
Selenium	**<0.55**	mg/kg	0.55	1	10/03/16 10:59	10/04/16 08:05	7782-49-2	
Silver	**<0.41**	mg/kg	0.41	1	10/03/16 10:59	10/04/16 08:05	7440-22-4	
Sodium	**<344**	mg/kg	344	1	10/03/16 10:59	10/04/16 08:05	7440-23-5	
Thallium	**<1.4**	mg/kg	1.4	1	10/03/16 10:59	10/04/16 08:05	7440-28-0	
Vanadium	**18.5**	mg/kg	0.69	1	10/03/16 10:59	10/04/16 08:05	7440-62-2	
Zinc	**24.0**	mg/kg	0.69	1	10/03/16 10:59	10/04/16 08:05	7440-66-6	
7471B Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B							
Mercury	**<0.11**	mg/kg	0.11	1	09/29/16 09:07	09/29/16 23:35	7439-97-6	
8270D MSSV Microwave	Analytical Method: EPA 8270D Preparation Method: EPA 3546							
Acenaphthene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	83-32-9	
Acenaphthylene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	208-96-8	
Anthracene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	120-12-7	
Benzo(a)anthracene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	56-55-3	
Benzo(a)pyrene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	50-32-8	
Benzo(b)fluoranthene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	205-99-2	
Benzo(g,h,i)perylene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	191-24-2	
Benzo(k)fluoranthene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	207-08-9	
Benzyl alcohol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	100-51-6	
4-Bromophenylphenyl ether	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	101-55-3	
Butylbenzylphthalate	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	85-68-7	
4-Chloro-3-methylphenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	59-50-7	
4-Chloroaniline	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	106-47-8	
bis(2-Chloroethoxy)methane	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	111-91-1	
bis(2-Chloroethyl) ether	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	111-44-4	
bis(2-Chloroisopropyl) ether	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	108-60-1	
2-Chloronaphthalene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	91-58-7	
2-Chlorophenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	95-57-8	
4-Chlorophenylphenyl ether	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	7005-72-3	
Chrysene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	218-01-9	
Dibenz(a,h)anthracene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	53-70-3	
Dibenzofuran	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	132-64-9	

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ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563374 **Lab ID: 702177008** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Microwave	Analytical Method: EPA 8270D Preparation Method: EPA 3546							
1,2-Dichlorobenzene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	95-50-1	
1,3-Dichlorobenzene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	541-73-1	
1,4-Dichlorobenzene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	106-46-7	
3,3'-Dichlorobenzidine	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	91-94-1	
2,4-Dichlorophenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	120-83-2	
Diethylphthalate	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	84-66-2	
2,4-Dimethylphenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	105-67-9	
Dimethylphthalate	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	131-11-3	
Di-n-butylphthalate	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	84-74-2	
4,6-Dinitro-2-methylphenol	**<972**	ug/kg	972	1	09/30/16 13:52	10/06/16 23:16	534-52-1	
2,4-Dinitrophenol	**<972**	ug/kg	972	1	09/30/16 13:52	10/06/16 23:16	51-28-5	
2,4-Dinitrotoluene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	121-14-2	
2,6-Dinitrotoluene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	606-20-2	
Di-n-octylphthalate	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	117-84-0	
bis(2-Ethylhexyl)phthalate	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	117-81-7	
Fluoranthene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	206-44-0	
Fluorene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	86-73-7	
Hexachloro-1,3-butadiene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	87-68-3	
Hexachlorobenzene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	118-74-1	
Hexachlorocyclopentadiene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	77-47-4	
Hexachloroethane	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	67-72-1	
Indeno(1,2,3-cd)pyrene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	193-39-5	
Isophorone	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	78-59-1	
2-Methylnaphthalene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	91-57-6	
2-Methylphenol(o-Cresol)	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<777**	ug/kg	777	1	09/30/16 13:52	10/06/16 23:16		
Naphthalene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	91-20-3	
2-Nitroaniline	**<972**	ug/kg	972	1	09/30/16 13:52	10/06/16 23:16	88-74-4	
3-Nitroaniline	**<972**	ug/kg	972	1	09/30/16 13:52	10/06/16 23:16	99-09-2	
4-Nitroaniline	**<972**	ug/kg	972	1	09/30/16 13:52	10/06/16 23:16	100-01-6	
Nitrobenzene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	98-95-3	
2-Nitrophenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	88-75-5	
4-Nitrophenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	100-02-7	
N-Nitroso-di-n-propylamine	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	621-64-7	
N-Nitrosodiphenylamine	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	86-30-6	
Pentachlorophenol	**<972**	ug/kg	972	1	09/30/16 13:52	10/06/16 23:16	87-86-5	
Phenanthrene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	85-01-8	
Phenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	108-95-2	
Pyrene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	129-00-0	
1,2,4-Trichlorobenzene	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	120-82-1	
2,4,5-Trichlorophenol	**<972**	ug/kg	972	1	09/30/16 13:52	10/06/16 23:16	95-95-4	
2,4,6-Trichlorophenol	**<389**	ug/kg	389	1	09/30/16 13:52	10/06/16 23:16	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	79	%	33-104	1	09/30/16 13:52	10/06/16 23:16	4165-60-0	
2-Fluorobiphenyl (S)	80	%	38-105	1	09/30/16 13:52	10/06/16 23:16	321-60-8	

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(631)694-3040

ANALYTICAL RESULTS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Sample: MONTEMORANO COMP. #563374 **Lab ID: 702177008** Collected: 09/22/16 10:00 Received: 09/24/16 10:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Microwave	Analytical Method: EPA 8270D Preparation Method: EPA 3546							
Surrogates								
Terphenyl-d14 (S)	87	%	33-149	1	09/30/16 13:52	10/06/16 23:16	1718-51-0	
Phenol-d6 (S)	75	%	32-111	1	09/30/16 13:52	10/06/16 23:16	13127-88-3	
2-Fluorophenol (S)	77	%	10-123	1	09/30/16 13:52	10/06/16 23:16	367-12-4	
2,4,6-Tribromophenol (S)	78	%	10-140	1	09/30/16 13:52	10/06/16 23:16	118-79-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.5**	%	0.10	1		09/29/16 13:49		

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

QC Batch: 234831
QC Batch Method: EPA 7471B
Analysis Method: EPA 7471B
Analysis Description: 7471B Mercury
Associated Lab Samples: 702177007, 702177008

METHOD BLANK: 1152574
Matrix: Solid
Associated Lab Samples: 702177007, 702177008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.10	0.10	09/29/16 23:00	

LABORATORY CONTROL SAMPLE: 1152575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.042	<0.10	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1152576 1152577

Parameter	Units	30197120010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Mercury	mg/kg	0.25	.137	.136	0.34	0.38	64	92	80-120	13	M1

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

QC Batch: 235208 | Analysis Method: EPA 6010C
QC Batch Method: EPA 3050B | Analysis Description: 6010C MET
Associated Lab Samples: 702177007, 702177008

METHOD BLANK: 1155311 | Matrix: Solid
Associated Lab Samples: 702177007, 702177008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	mg/kg	<10.0	10.0	10/04/16 07:53	
Antimony	mg/kg	<0.60	0.60	10/04/16 07:53	
Arsenic	mg/kg	<0.50	0.50	10/04/16 07:53	
Barium	mg/kg	<2.0	2.0	10/04/16 07:53	
Beryllium	mg/kg	<0.20	0.20	10/04/16 07:53	
Boron	mg/kg	<5.0	5.0	10/04/16 07:53	
Cadmium	mg/kg	<0.30	0.30	10/04/16 07:53	
Calcium	mg/kg	<200	200	10/04/16 07:53	
Chromium	mg/kg	<0.50	0.50	10/04/16 07:53	
Cobalt	mg/kg	<1.0	1.0	10/04/16 07:53	
Copper	mg/kg	<1.0	1.0	10/04/16 07:53	
Iron	mg/kg	<10.0	10.0	10/04/16 07:53	
Lead	mg/kg	<0.50	0.50	10/04/16 07:53	
Magnesium	mg/kg	<50.0	50.0	10/04/16 07:53	
Manganese	mg/kg	<1.0	1.0	10/04/16 07:53	
Molybdenum	mg/kg	<2.0	2.0	10/04/16 07:53	
Nickel	mg/kg	<2.0	2.0	10/04/16 07:53	
Potassium	mg/kg	<50.0	50.0	10/04/16 07:53	
Selenium	mg/kg	<0.80	0.80	10/04/16 07:53	
Silver	mg/kg	<0.60	0.60	10/04/16 07:53	
Sodium	mg/kg	<500	500	10/04/16 07:53	
Thallium	mg/kg	<2.0	2.0	10/04/16 07:53	
Vanadium	mg/kg	<1.0	1.0	10/04/16 07:53	
Zinc	mg/kg	<1.0	1.0	10/04/16 07:53	

LABORATORY CONTROL SAMPLE: 1155312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	500	476	95	80-120	
Antimony	mg/kg	50	48.5	97	80-120	
Arsenic	mg/kg	50	47.0	94	80-120	
Barium	mg/kg	50	48.2	96	80-120	
Beryllium	mg/kg	50	50.2	100	80-120	
Boron	mg/kg	50	44.5	89	80-120	
Cadmium	mg/kg	50	48.5	97	80-120	
Calcium	mg/kg	500	485	97	80-120	
Chromium	mg/kg	50	51.5	103	80-120	
Cobalt	mg/kg	50	48.5	97	80-120	
Copper	mg/kg	50	48.7	97	80-120	
Iron	mg/kg	500	483	97	80-120	

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

LABORATORY CONTROL SAMPLE: 1155312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	44.8	90	80-120	
Magnesium	mg/kg	500	487	97	80-120	
Manganese	mg/kg	50	49.8	100	80-120	
Molybdenum	mg/kg	50	50.5	101	80-120	
Nickel	mg/kg	50	47.7	95	80-120	
Potassium	mg/kg	500	450	90	80-120	
Selenium	mg/kg	50	47.3	95	80-120	
Silver	mg/kg	25	24.2	97	80-120	
Sodium	mg/kg	500	<500	98	80-120	
Thallium	mg/kg	50	46.6	93	80-120	
Vanadium	mg/kg	50	51.2	102	80-120	
Zinc	mg/kg	50	49.1	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1155313 1155314

Parameter	Units	702177007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Aluminum	mg/kg	7700	581	581	10400	10600	469	499	75-125	2	M1
Antimony	mg/kg	<0.67	58.1	58.1	32.2	33.1	55	57	75-125	3	M1
Arsenic	mg/kg	1.7	58.1	58.1	51.5	52.1	86	87	75-125	1	
Barium	mg/kg	57.8	58.1	58.1	110	112	90	94	75-125	2	
Beryllium	mg/kg	0.25	58.1	58.1	55.2	55.1	95	95	75-125	0	
Boron	mg/kg	<5.5	58.1	58.1	51.3	52.4	84	86	75-125	2	
Cadmium	mg/kg	<0.33	58.1	58.1	52.0	52.9	89	91	75-125	2	
Calcium	mg/kg	1720	581	581	2050	2230	57	89	75-125	9	M1
Chromium	mg/kg	8.1	58.1	58.1	63.5	64.4	95	97	75-125	1	
Cobalt	mg/kg	2.0	58.1	58.1	57.2	58.2	95	97	75-125	2	
Copper	mg/kg	4.2	58.1	58.1	56.7	58.1	91	93	75-125	2	
Iron	mg/kg	6950	581	581	8090	7720	197	133	75-125	5	M1
Lead	mg/kg	6.7	58.1	58.1	56.0	57.3	85	87	75-125	2	
Magnesium	mg/kg	1250	581	581	1890	1990	111	127	75-125	5	M1
Manganese	mg/kg	60.4	58.1	58.1	113	113	91	91	75-125	0	
Molybdenum	mg/kg	<2.2	58.1	58.1	57.7	59.0	99	101	75-125	2	
Nickel	mg/kg	4.5	58.1	58.1	53.2	54.0	84	85	75-125	1	
Potassium	mg/kg	618	581	581	1490	1510	150	154	75-125	1	M1
Selenium	mg/kg	<0.89	58.1	58.1	50.6	51.7	86	88	75-125	2	
Silver	mg/kg	<0.67	29	29	26.4	26.7	91	92	75-125	1	
Sodium	mg/kg	<554	581	581	595	604	92	93	75-125	2	
Thallium	mg/kg	<2.2	58.1	58.1	51.3	52.5	88	91	75-125	2	
Vanadium	mg/kg	13.8	58.1	58.1	70.8	70.4	98	98	75-125	1	
Zinc	mg/kg	25.8	58.1	58.1	79.2	80.6	92	95	75-125	2	

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

QC Batch: 235166 | Analysis Method: EPA 8260C
QC Batch Method: EPA 5035A | Analysis Description: 8260C MSV 5035 Low
Associated Lab Samples: 702177001, 702177002, 702177003, 702177004, 702177005, 702177006

METHOD BLANK: 1155145 | Matrix: Solid
Associated Lab Samples: 702177001, 702177002, 702177003, 702177004, 702177005, 702177006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<5.0	5.0	10/03/16 07:37	
1,1,2,2-Tetrachloroethane	ug/kg	<5.0	5.0	10/03/16 07:37	
1,1,2-Trichloroethane	ug/kg	<5.0	5.0	10/03/16 07:37	
1,1-Dichloroethane	ug/kg	<5.0	5.0	10/03/16 07:37	
1,1-Dichloroethene	ug/kg	<5.0	5.0	10/03/16 07:37	
1,2-Dichlorobenzene	ug/kg	<5.0	5.0	10/03/16 07:37	
1,2-Dichloroethane	ug/kg	<5.0	5.0	10/03/16 07:37	
1,2-Dichloropropane	ug/kg	<5.0	5.0	10/03/16 07:37	
1,3-Dichlorobenzene	ug/kg	<5.0	5.0	10/03/16 07:37	
1,4-Dichlorobenzene	ug/kg	<5.0	5.0	10/03/16 07:37	
2-Butanone (MEK)	ug/kg	<10.0	10.0	10/03/16 07:37	
2-Hexanone	ug/kg	<10.0	10.0	10/03/16 07:37	
4-Methyl-2-pentanone (MIBK)	ug/kg	<10.0	10.0	10/03/16 07:37	
Acetone	ug/kg	<10.0	10.0	10/03/16 07:37	
Benzene	ug/kg	<5.0	5.0	10/03/16 07:37	
Bromodichloromethane	ug/kg	<5.0	5.0	10/03/16 07:37	
Bromoform	ug/kg	<5.0	5.0	10/03/16 07:37	
Bromomethane	ug/kg	<5.0	5.0	10/03/16 07:37	
Carbon disulfide	ug/kg	<5.0	5.0	10/03/16 07:37	
Carbon tetrachloride	ug/kg	<5.0	5.0	10/03/16 07:37	
Chlorobenzene	ug/kg	<5.0	5.0	10/03/16 07:37	
Chloroethane	ug/kg	<5.0	5.0	10/03/16 07:37	
Chloroform	ug/kg	<5.0	5.0	10/03/16 07:37	
Chloromethane	ug/kg	<5.0	5.0	10/03/16 07:37	
cis-1,2-Dichloroethene	ug/kg	<5.0	5.0	10/03/16 07:37	
cis-1,3-Dichloropropene	ug/kg	<5.0	5.0	10/03/16 07:37	
Dibromochloromethane	ug/kg	<5.0	5.0	10/03/16 07:37	
Ethylbenzene	ug/kg	<5.0	5.0	10/03/16 07:37	
m&p-Xylene	ug/kg	<10.0	10.0	10/03/16 07:37	
Methyl-tert-butyl ether	ug/kg	<5.0	5.0	10/03/16 07:37	
Methylene Chloride	ug/kg	<5.0	5.0	10/03/16 07:37	
o-Xylene	ug/kg	<5.0	5.0	10/03/16 07:37	
Styrene	ug/kg	<5.0	5.0	10/03/16 07:37	
Tetrachloroethene	ug/kg	<5.0	5.0	10/03/16 07:37	
Toluene	ug/kg	<5.0	5.0	10/03/16 07:37	
TOTAL BTEX	ug/kg	<30.0	30.0	10/03/16 07:37	
trans-1,2-Dichloroethene	ug/kg	<5.0	5.0	10/03/16 07:37	
trans-1,3-Dichloropropene	ug/kg	<5.0	5.0	10/03/16 07:37	
Trichloroethene	ug/kg	<5.0	5.0	10/03/16 07:37	
Vinyl chloride	ug/kg	<5.0	5.0	10/03/16 07:37	
Xylene (Total)	ug/kg	<15.0	15.0	10/03/16 07:37	

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REPORT OF LABORATORY ANALYSIS

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(631)694-3040

QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

METHOD BLANK: 1155145 Matrix: Solid
Associated Lab Samples: 702177001, 702177002, 702177003, 702177004, 702177005, 702177006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane-d4 (S)	%	100	69-137	10/03/16 07:37	
4-Bromofluorobenzene (S)	%	99	65-146	10/03/16 07:37	
Dibromofluoromethane (S)	%	97	70-130	10/03/16 07:37	
Toluene-d8 (S)	%	102	68-135	10/03/16 07:37	

LABORATORY CONTROL SAMPLE: 1155146

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	20	15.6	78	71-130	
1,1,2,2-Tetrachloroethane	ug/kg	20	17.8	89	66-123	
1,1,2-Trichloroethane	ug/kg	20	17.7	89	75-115	
1,1-Dichloroethane	ug/kg	20	15.6	78	65-126	
1,1-Dichloroethene	ug/kg	20	16.5	82	62-137	
1,2-Dichlorobenzene	ug/kg	20	17.1	85	82-121	
1,2-Dichloroethane	ug/kg	20	17.0	85	67-116	
1,2-Dichloropropane	ug/kg	20	16.1	81	67-119	
1,3-Dichlorobenzene	ug/kg	20	17.1	85	80-124	
1,4-Dichlorobenzene	ug/kg	20	17.0	85	80-126	
2-Butanone (MEK)	ug/kg	20	17.7	88	42-116	
2-Hexanone	ug/kg	20	23.3	117	54-121	
4-Methyl-2-pentanone (MIBK)	ug/kg	20	16.3	81	52-119	
Acetone	ug/kg	20	18.9	95	32-113	
Benzene	ug/kg	20	16.7	83	71-137	
Bromodichloromethane	ug/kg	20	18.6	93	67-121	
Bromoform	ug/kg	20	23.0	115	58-122	
Bromomethane	ug/kg	20	20.0	100	27-164	
Carbon disulfide	ug/kg	20	19.8	99	60-172	
Carbon tetrachloride	ug/kg	20	16.3	81	66-132	
Chlorobenzene	ug/kg	20	16.4	82	80-119	
Chloroethane	ug/kg	20	20.4	102	53-149	
Chloroform	ug/kg	20	16.7	83	70-120	
Chloromethane	ug/kg	20	17.0	85	47-147	
cis-1,2-Dichloroethene	ug/kg	20	16.2	81	64-120	
cis-1,3-Dichloropropene	ug/kg	20	17.0	85	67-123	
Dibromochloromethane	ug/kg	20	18.3	92	67-120	
Ethylbenzene	ug/kg	20	16.6	83	78-126	
m&p-Xylene	ug/kg	40	33.5	84	77-129	
Methyl-tert-butyl ether	ug/kg	20	18.3	91	77-141	
Methylene Chloride	ug/kg	20	10	50	50-125	
o-Xylene	ug/kg	20	17.0	85	80-125	
Styrene	ug/kg	20	17.4	87	79-130	
Tetrachloroethene	ug/kg	20	16.5	82	73-135	
Toluene	ug/kg	20	17.4	87	72-127	
TOTAL BTEX	ug/kg		101			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

LABORATORY CONTROL SAMPLE: 1155146

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/kg	20	15.9	80	64-131	
trans-1,3-Dichloropropene	ug/kg	20	17.2	86	66-116	
Trichloroethene	ug/kg	20	15.8	79	73-125	
Vinyl chloride	ug/kg	20	16.8	84	46-138	
Xylene (Total)	ug/kg	60	50.6	84	80-124	
1,2-Dichloroethane-d4 (S)	%			102	69-137	
4-Bromofluorobenzene (S)	%			101	65-146	
Dibromofluoromethane (S)	%			102	70-130	
Toluene-d8 (S)	%			103	68-135	

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

QC Batch: 234860
QC Batch Method: EPA 3546
Analysis Method: EPA 8081B
Analysis Description: 8081 GCS Pesticides
Associated Lab Samples: 702177007, 702177008

METHOD BLANK: 1152658
Matrix: Solid
Associated Lab Samples: 702177007, 702177008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	ug/kg	<3.3	3.3	10/01/16 05:28	
4,4'-DDE	ug/kg	<3.3	3.3	10/01/16 05:28	
4,4'-DDT	ug/kg	<3.3	3.3	10/01/16 05:28	
Aldrin	ug/kg	<1.7	1.7	10/01/16 05:28	
alpha-BHC	ug/kg	<1.7	1.7	10/01/16 05:28	
alpha-Chlordane	ug/kg	<1.7	1.7	10/01/16 05:28	
beta-BHC	ug/kg	<1.7	1.7	10/01/16 05:28	
delta-BHC	ug/kg	<1.7	1.7	10/01/16 05:28	
Dieldrin	ug/kg	<3.3	3.3	10/01/16 05:28	
Endosulfan I	ug/kg	<1.7	1.7	10/01/16 05:28	
Endosulfan II	ug/kg	<3.3	3.3	10/01/16 05:28	
Endosulfan sulfate	ug/kg	<3.3	3.3	10/01/16 05:28	
Endrin	ug/kg	<3.3	3.3	10/01/16 05:28	
Endrin aldehyde	ug/kg	<3.3	3.3	10/01/16 05:28	
Endrin ketone	ug/kg	<3.3	3.3	10/01/16 05:28	
gamma-BHC (Lindane)	ug/kg	<1.7	1.7	10/01/16 05:28	
gamma-Chlordane	ug/kg	<1.7	1.7	10/01/16 05:28	
Heptachlor	ug/kg	<1.7	1.7	10/01/16 05:28	
Heptachlor epoxide	ug/kg	<1.7	1.7	10/01/16 05:28	
Methoxychlor	ug/kg	<16.7	16.7	10/01/16 05:28	
Toxaphene	ug/kg	<16.7	16.7	10/01/16 05:28	
Decachlorobiphenyl (S)	%	73	39-122	10/01/16 05:28	
Tetrachloro-m-xylene (S)	%	71	37-113	10/01/16 05:28	

LABORATORY CONTROL SAMPLE: 1152659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/kg	26.7	21.4	80	64-119	2j,CL
4,4'-DDE	ug/kg	26.7	24.9	94	50-114	
4,4'-DDT	ug/kg	26.7	25.1	94	68-118	
Aldrin	ug/kg	13.3	11.1	84	50-98	
alpha-BHC	ug/kg	13.3	9.7	72	50-105	2j
alpha-Chlordane	ug/kg	13.3	11.4	85	51-104	
beta-BHC	ug/kg	13.3	11.4	86	49-104	
delta-BHC	ug/kg	13.3	12.2	91	48-113	2j
Dieldrin	ug/kg	26.7	25.0	94	63-112	
Endosulfan I	ug/kg	13.3	10	75	60-108	
Endosulfan II	ug/kg	26.7	22.4	84	51-112	
Endosulfan sulfate	ug/kg	26.7	25.2	94	54-112	
Endrin	ug/kg	26.7	24.7	93	65-114	

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

LABORATORY CONTROL SAMPLE: 1152659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin aldehyde	ug/kg	26.7	23.0	86	53-145	
Endrin ketone	ug/kg	26.7	24.6	92	57-123	
gamma-BHC (Lindane)	ug/kg	13.3	12.0	90	55-112	
gamma-Chlordane	ug/kg	13.3	11.0	82	53-102	
Heptachlor	ug/kg	13.3	11.4	86	59-108	
Heptachlor epoxide	ug/kg	13.3	11.4	85	51-105	
Methoxychlor	ug/kg	133	119	90	64-116	
Decachlorobiphenyl (S)	%			74	39-122	
Tetrachloro-m-xylene (S)	%			70	37-113	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1152660 1152661

Parameter	Units	30197120010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
4,4'-DDD	ug/kg	ND	36.7	36.1	44.0	44.3	83	85	64-119	1	CH
4,4'-DDE	ug/kg	56.9	36.7	36.1	93.0	91.5	98	96	50-114	2	
4,4'-DDT	ug/kg	40.0	36.7	36.1	73.3	70.5	91	85	68-118	4	
Aldrin	ug/kg	ND	18.3	18.1	14.2	14.4	78	80	50-98	1	
alpha-BHC	ug/kg	ND	18.3	18.1	14.9	14.8	81	82	50-105	1	
alpha-Chlordane	ug/kg	ND	18.3	18.1	13.8	14.2	75	78	51-104	3	
beta-BHC	ug/kg	ND	18.3	18.1	16.1	15.8	88	88	49-104	1	
delta-BHC	ug/kg	ND	18.3	18.1	16.0	15.9	87	88	48-113	1	
Dieldrin	ug/kg	ND	36.7	36.1	29.1	29.3	80	81	63-112	1	
Endosulfan I	ug/kg	ND	18.3	18.1	12.8	12.9	70	71	60-108	0	
Endosulfan II	ug/kg	ND	36.7	36.1	25.4	25.2	69	70	51-112	1	
Endosulfan sulfate	ug/kg	ND	36.7	36.1	28.4	28.1	78	78	54-112	1	
Endrin	ug/kg	ND	36.7	36.1	27.7	27.8	76	77	65-114	0	
Endrin aldehyde	ug/kg	ND	36.7	36.1	27.6	26.3	75	73	53-145	5	
Endrin ketone	ug/kg	ND	36.7	36.1	28.4	28.4	78	78	57-123	0	
gamma-BHC (Lindane)	ug/kg	ND	18.3	18.1	14.7	14.5	80	80	55-112	1	
gamma-Chlordane	ug/kg	ND	18.3	18.1	13.5	14.8	74	82	53-102	9	
Heptachlor	ug/kg	ND	18.3	18.1	15.1	15.4	82	85	59-108	2	
Heptachlor epoxide	ug/kg	ND	18.3	18.1	13.1	14.3	71	79	51-105	9	
Methoxychlor	ug/kg	ND	183	181	177	177	96	98	64-116	0	CH
Decachlorobiphenyl (S)	%						72	77	39-122		
Tetrachloro-m-xylene (S)	%						73	75	37-113		

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

QC Batch: 234861 | Analysis Method: EPA 8082A
QC Batch Method: EPA 3546 | Analysis Description: 8082A GCS PCB
Associated Lab Samples: 702177007, 702177008

METHOD BLANK: 1152662 | Matrix: Solid
Associated Lab Samples: 702177007, 702177008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<16.7	16.7	10/01/16 16:16	
PCB-1221 (Aroclor 1221)	ug/kg	<16.7	16.7	10/01/16 16:16	
PCB-1232 (Aroclor 1232)	ug/kg	<16.7	16.7	10/01/16 16:16	
PCB-1242 (Aroclor 1242)	ug/kg	<16.7	16.7	10/01/16 16:16	
PCB-1248 (Aroclor 1248)	ug/kg	<16.7	16.7	10/01/16 16:16	
PCB-1254 (Aroclor 1254)	ug/kg	<16.7	16.7	10/01/16 16:16	
PCB-1260 (Aroclor 1260)	ug/kg	<16.7	16.7	10/01/16 16:16	
Decachlorobiphenyl (S)	%	60	10-115	10/01/16 16:16	
Tetrachloro-m-xylene (S)	%	48	30-107	10/01/16 16:16	

LABORATORY CONTROL SAMPLE: 1152663

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	167	100	60	40-100	
PCB-1260 (Aroclor 1260)	ug/kg	167	99.1	59	41-109	
Decachlorobiphenyl (S)	%			68	10-115	
Tetrachloro-m-xylene (S)	%			43	30-107	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1152664 1152665

Parameter	Units	30197051001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	240	240	153	150	64	63	40-100	2	
PCB-1260 (Aroclor 1260)	ug/kg	ND	240	240	152	158	63	66	41-109	4	
Decachlorobiphenyl (S)	%						51	51	10-115		
Tetrachloro-m-xylene (S)	%						50	43	30-107		

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

QC Batch: 235052 | Analysis Method: EPA 8270D
QC Batch Method: EPA 3546 | Analysis Description: 8270D Solid MSSV Microwave
Associated Lab Samples: 702177007, 702177008

METHOD BLANK: 1153818 | Matrix: Solid
Associated Lab Samples: 702177007, 702177008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<333	333	10/06/16 21:36	
1,2-Dichlorobenzene	ug/kg	<333	333	10/06/16 21:36	
1,3-Dichlorobenzene	ug/kg	<333	333	10/06/16 21:36	
1,4-Dichlorobenzene	ug/kg	<333	333	10/06/16 21:36	
2,4,5-Trichlorophenol	ug/kg	<833	833	10/06/16 21:36	
2,4,6-Trichlorophenol	ug/kg	<333	333	10/06/16 21:36	
2,4-Dichlorophenol	ug/kg	<333	333	10/06/16 21:36	
2,4-Dimethylphenol	ug/kg	<333	333	10/06/16 21:36	
2,4-Dinitrophenol	ug/kg	<833	833	10/06/16 21:36	
2,4-Dinitrotoluene	ug/kg	<333	333	10/06/16 21:36	
2,6-Dinitrotoluene	ug/kg	<333	333	10/06/16 21:36	
2-Chloronaphthalene	ug/kg	<333	333	10/06/16 21:36	
2-Chlorophenol	ug/kg	<333	333	10/06/16 21:36	
2-Methylnaphthalene	ug/kg	<333	333	10/06/16 21:36	
2-Methylphenol(o-Cresol)	ug/kg	<333	333	10/06/16 21:36	
2-Nitroaniline	ug/kg	<833	833	10/06/16 21:36	
2-Nitrophenol	ug/kg	<333	333	10/06/16 21:36	
3&4-Methylphenol(m&p Cresol)	ug/kg	<666	666	10/06/16 21:36	
3,3'-Dichlorobenzidine	ug/kg	<333	333	10/06/16 21:36	
3-Nitroaniline	ug/kg	<833	833	10/06/16 21:36	
4,6-Dinitro-2-methylphenol	ug/kg	<833	833	10/06/16 21:36	
4-Bromophenylphenyl ether	ug/kg	<333	333	10/06/16 21:36	
4-Chloro-3-methylphenol	ug/kg	<333	333	10/06/16 21:36	
4-Chloroaniline	ug/kg	<333	333	10/06/16 21:36	
4-Chlorophenylphenyl ether	ug/kg	<333	333	10/06/16 21:36	
4-Nitroaniline	ug/kg	<833	833	10/06/16 21:36	
4-Nitrophenol	ug/kg	<333	333	10/06/16 21:36	
Acenaphthene	ug/kg	<333	333	10/06/16 21:36	
Acenaphthylene	ug/kg	<333	333	10/06/16 21:36	
Anthracene	ug/kg	<333	333	10/06/16 21:36	
Benzo(a)anthracene	ug/kg	<333	333	10/06/16 21:36	
Benzo(a)pyrene	ug/kg	<333	333	10/06/16 21:36	
Benzo(b)fluoranthene	ug/kg	<333	333	10/06/16 21:36	
Benzo(g,h,i)perylene	ug/kg	<333	333	10/06/16 21:36	
Benzo(k)fluoranthene	ug/kg	<333	333	10/06/16 21:36	
Benzyl alcohol	ug/kg	<333	333	10/06/16 21:36	
bis(2-Chloroethoxy)methane	ug/kg	<333	333	10/06/16 21:36	
bis(2-Chloroethyl) ether	ug/kg	<333	333	10/06/16 21:36	
bis(2-Chloroisopropyl) ether	ug/kg	<333	333	10/06/16 21:36	
bis(2-Ethylhexyl)phthalate	ug/kg	<333	333	10/06/16 21:36	
Butylbenzylphthalate	ug/kg	<333	333	10/06/16 21:36	

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QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

METHOD BLANK: 1153818 Matrix: Solid
Associated Lab Samples: 702177007, 702177008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chrysene	ug/kg	<333	333	10/06/16 21:36	
Di-n-butylphthalate	ug/kg	<333	333	10/06/16 21:36	
Di-n-octylphthalate	ug/kg	<333	333	10/06/16 21:36	
Dibenz(a,h)anthracene	ug/kg	<333	333	10/06/16 21:36	
Dibenzofuran	ug/kg	<333	333	10/06/16 21:36	
Diethylphthalate	ug/kg	<333	333	10/06/16 21:36	
Dimethylphthalate	ug/kg	<333	333	10/06/16 21:36	
Fluoranthene	ug/kg	<333	333	10/06/16 21:36	
Fluorene	ug/kg	<333	333	10/06/16 21:36	
Hexachloro-1,3-butadiene	ug/kg	<333	333	10/06/16 21:36	
Hexachlorobenzene	ug/kg	<333	333	10/06/16 21:36	
Hexachlorocyclopentadiene	ug/kg	<333	333	10/06/16 21:36	
Hexachloroethane	ug/kg	<333	333	10/06/16 21:36	
Indeno(1,2,3-cd)pyrene	ug/kg	<333	333	10/06/16 21:36	
Isophorone	ug/kg	<333	333	10/06/16 21:36	
N-Nitroso-di-n-propylamine	ug/kg	<333	333	10/06/16 21:36	
N-Nitrosodiphenylamine	ug/kg	<333	333	10/06/16 21:36	
Naphthalene	ug/kg	<333	333	10/06/16 21:36	
Nitrobenzene	ug/kg	<333	333	10/06/16 21:36	
Pentachlorophenol	ug/kg	<833	833	10/06/16 21:36	
Phenanthrene	ug/kg	<333	333	10/06/16 21:36	
Phenol	ug/kg	<333	333	10/06/16 21:36	
Pyrene	ug/kg	<333	333	10/06/16 21:36	
2,4,6-Tribromophenol (S)	%	76	10-140	10/06/16 21:36	
2-Fluorobiphenyl (S)	%	83	38-105	10/06/16 21:36	
2-Fluorophenol (S)	%	83	10-123	10/06/16 21:36	
Nitrobenzene-d5 (S)	%	85	33-104	10/06/16 21:36	
Phenol-d6 (S)	%	80	32-111	10/06/16 21:36	
Terphenyl-d14 (S)	%	88	33-149	10/06/16 21:36	

LABORATORY CONTROL SAMPLE: 1153819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	3330	2740	82	51-92	
1,2-Dichlorobenzene	ug/kg	3330	2800	84	61-115	
1,3-Dichlorobenzene	ug/kg	3330	2770	83	60-113	
1,4-Dichlorobenzene	ug/kg	3330	2770	83	63-110	
2,4,5-Trichlorophenol	ug/kg	3330	3560	107	43-133	
2,4,6-Trichlorophenol	ug/kg	3330	2740	82	38-140	
2,4-Dichlorophenol	ug/kg	3330	2850	85	34-92	
2,4-Dimethylphenol	ug/kg	3330	2290	69	30-89	
2,4-Dinitrophenol	ug/kg	3330	1830	55	10-145	
2,4-Dinitrotoluene	ug/kg	3330	2990	90	55-136	
2,6-Dinitrotoluene	ug/kg	3330	3390	102	51-134	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

LABORATORY CONTROL SAMPLE: 1153819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloronaphthalene	ug/kg	3330	3020	91	41-129	
2-Chlorophenol	ug/kg	3330	2910	87	31-121	
2-Methylnaphthalene	ug/kg	3330	2690	81	35-87	
2-Methylphenol(o-Cresol)	ug/kg	3330	3070	92	32-121	
2-Nitroaniline	ug/kg	3330	3120	93	51-135	
2-Nitrophenol	ug/kg	3330	2740	82	51-92	
3&4-Methylphenol(m&p Cresol)	ug/kg	3330	3000	90	37-121	
3,3'-Dichlorobenzidine	ug/kg	3330	3170	95	42-127	
3-Nitroaniline	ug/kg	3330	2720	81	46-158	
4,6-Dinitro-2-methylphenol	ug/kg	3330	3160	95	47-149	
4-Bromophenylphenyl ether	ug/kg	3330	3080	92	62-139	
4-Chloro-3-methylphenol	ug/kg	3330	2850	86	53-95	
4-Chloroaniline	ug/kg	3330	2030	61	24-82	
4-Chlorophenylphenyl ether	ug/kg	3330	3060	92	69-127	
4-Nitroaniline	ug/kg	3330	3240	97	46-155	
4-Nitrophenol	ug/kg	3330	2490	75	57-142	
Acenaphthene	ug/kg	3330	3080	93	45-127	
Acenaphthylene	ug/kg	3330	3210	96	42-126	
Anthracene	ug/kg	3330	2930	88	56-118	
Benzo(a)anthracene	ug/kg	3330	2880	87	87-121	
Benzo(a)pyrene	ug/kg	3330	3100	93	66-118	
Benzo(b)fluoranthene	ug/kg	3330	3130	94	58-134	
Benzo(g,h,i)perylene	ug/kg	3330	2990	90	23-164	
Benzo(k)fluoranthene	ug/kg	3330	3380	101	64-133	
Benzyl alcohol	ug/kg	3330	2580	77	47-138	
bis(2-Chloroethoxy)methane	ug/kg	3330	2800	84	36-92	
bis(2-Chloroethyl) ether	ug/kg	3330	2960	89	31-115	
bis(2-Chloroisopropyl) ether	ug/kg	3330	2960	89	31-123	
bis(2-Ethylhexyl)phthalate	ug/kg	3330	3210	96	59-137	
Butylbenzylphthalate	ug/kg	3330	3220	96	65-134	
Chrysene	ug/kg	3330	3190	96	69-121	
Di-n-butylphthalate	ug/kg	3330	3220	97	64-131	
Di-n-octylphthalate	ug/kg	3330	3150	94	51-147	
Dibenz(a,h)anthracene	ug/kg	3330	2900	87	34-159	
Dibenzofuran	ug/kg	3330	3050	92	70-120	
Diethylphthalate	ug/kg	3330	3110	93	62-124	
Dimethylphthalate	ug/kg		2540			
Fluoranthene	ug/kg	3330	3180	95	63-124	
Fluorene	ug/kg	3330	3100	93	49-124	
Hexachloro-1,3-butadiene	ug/kg	3330	2800	84	27-104	
Hexachlorobenzene	ug/kg	3330	3060	92	49-136	
Hexachlorocyclopentadiene	ug/kg	3330	2560	77	10-121	
Hexachloroethane	ug/kg	3330	2840	85	28-121	
Indeno(1,2,3-cd)pyrene	ug/kg	3330	2950	89	34-159	
Isophorone	ug/kg	3330	2930	88	39-91	
N-Nitroso-di-n-propylamine	ug/kg	3330	3040	91	37-122	
N-Nitrosodiphenylamine	ug/kg	3330	2400	72	36-104	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

LABORATORY CONTROL SAMPLE: 1153819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	3330	2720	82	34-89	
Nitrobenzene	ug/kg	3330	2920	88	36-90	
Pentachlorophenol	ug/kg	3330	3350	101	34-139	
Phenanthrene	ug/kg	3330	3180	95	57-120	
Phenol	ug/kg	3330	2990	90	35-119	
Pyrene	ug/kg	3330	3320	100	64-128	
2,4,6-Tribromophenol (S)	%			83	10-140	
2-Fluorobiphenyl (S)	%			90	38-105	
2-Fluorophenol (S)	%			89	10-123	
Nitrobenzene-d5 (S)	%			85	33-104	
Phenol-d6 (S)	%			88	32-111	
Terphenyl-d14 (S)	%			98	33-149	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1153820 1153821

Parameter	Units	702177007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	<500	5020	4980	3260	3210	65	64	51-92	1	
1,2-Dichlorobenzene	ug/kg	<500	5020	4980	3960	3890	79	78	61-115	2	
1,3-Dichlorobenzene	ug/kg	<500	5020	4980	3860	3850	77	77	60-113	0	
1,4-Dichlorobenzene	ug/kg	<500	5020	4980	3980	3890	79	78	63-110	2	
2,4,5-Trichlorophenol	ug/kg	<1250	5020	4980	4130	3960	82	79	43-133	4	
2,4,6-Trichlorophenol	ug/kg	<500	5020	4980	4840	4720	96	95	38-140	3	
2,4-Dichlorophenol	ug/kg	<500	5020	4980	3350	3190	67	64	34-92	5	
2,4-Dimethylphenol	ug/kg	<500	5020	4980	3000	2930	60	59	30-89	3	
2,4-Dinitrophenol	ug/kg	<1250	5020	4980	2800	1960	56	39	10-145	35	R1
2,4-Dinitrotoluene	ug/kg	<500	5020	4980	4460	4190	89	84	55-136	6	
2,6-Dinitrotoluene	ug/kg	<500	5020	4980	4480	4180	89	84	51-134	7	
2-Chloronaphthalene	ug/kg	<500	5020	4980	4020	3960	80	80	41-129	1	
2-Chlorophenol	ug/kg	<500	5020	4980	3980	3840	79	77	31-121	4	
2-Methylnaphthalene	ug/kg	<500	5020	4980	3240	3150	64	63	35-87	3	
2-Methylphenol(o-Cresol)	ug/kg	<500	5020	4980	4110	3970	82	80	32-121	4	
2-Nitroaniline	ug/kg	<1250	5020	4980	4370	4030	87	81	51-135	8	
2-Nitrophenol	ug/kg	<500	5020	4980	3260	3070	65	62	51-92	6	
3&4-Methylphenol(m&p Cresol)	ug/kg	<1000	5020	4980	4000	3780	80	76	37-121	6	
3,3'-Dichlorobenzidine	ug/kg	<500	5020	4980	3330	3150	66	63	42-127	5	
3-Nitroaniline	ug/kg	<1250	5020	4980	4860	3060	97	61	46-158	46	R1
4,6-Dinitro-2-methylphenol	ug/kg	<1250	5020	4980	4280	3630	85	73	47-149	17	
4-Bromophenylphenyl ether	ug/kg	<500	5020	4980	4110	4170	82	84	62-139	2	
4-Chloro-3-methylphenol	ug/kg	<500	5020	4980	3270	3120	65	63	53-95	5	
4-Chloroaniline	ug/kg	<500	5020	4980	2170	2210	43	44	24-82	2	
4-Chlorophenylphenyl ether	ug/kg	<500	5020	4980	4170	4150	83	83	69-127	0	
4-Nitroaniline	ug/kg	<1250	5020	4980	4740	3660	94	73	46-155	26	R1
4-Nitrophenol	ug/kg	<500	5020	4980	3830	3160	76	63	57-142	19	

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REPORT OF LABORATORY ANALYSIS

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1153820 1153821

Parameter	Units	702177007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Acenaphthene	ug/kg	<500	5020	4980	4080	4080	81	82	45-127	0	
Acenaphthylene	ug/kg	<500	5020	4980	4120	4050	82	81	42-126	2	
Anthracene	ug/kg	<500	5020	4980	3760	3850	75	77	56-118	2	
Benzo(a)anthracene	ug/kg	<500	5020	4980	3900	3870	78	78	67-121	1	
Benzo(a)pyrene	ug/kg	<500	5020	4980	3740	3850	75	77	66-118	3	
Benzo(b)fluoranthene	ug/kg	<500	5020	4980	3600	3880	72	78	58-134	8	
Benzo(g,h,i)perylene	ug/kg	<500	5020	4980	3060	2710	61	54	23-164	12	
Benzo(k)fluoranthene	ug/kg	<500	5020	4980	4110	4310	82	86	64-133	5	
Benzyl alcohol	ug/kg	<500	5020	4980	3720	3590	73	71	47-138	4	
bis(2-Chloroethoxy)methane	ug/kg	<500	5020	4980	3340	3260	67	65	36-92	2	
bis(2-Chloroethyl) ether	ug/kg	<500	5020	4980	3740	3600	74	72	31-115	4	
bis(2-Chloroisopropyl) ether	ug/kg	<500	5020	4980	3980	3880	79	78	31-123	2	
bis(2-Ethylhexyl)phthalate	ug/kg	<500	5020	4980	3440	3290	68	66	59-137	4	
Butylbenzylphthalate	ug/kg	<500	5020	4980	3580	3590	71	72	65-134	0	
Chrysene	ug/kg	<500	5020	4980	3790	3900	75	78	69-121	3	
Di-n-butylphthalate	ug/kg	<500	5020	4980	3550	3830	71	77	64-131	8	
Di-n-octylphthalate	ug/kg	<500	5020	4980	3430	3720	68	75	51-147	8	
Dibenz(a,h)anthracene	ug/kg	<500	5020	4980	3390	3110	67	62	34-159	9	
Dibenzofuran	ug/kg	<500	5020	4980	4130	3980	82	80	70-120	4	
Diethylphthalate	ug/kg	<500	5020	4980	3970	3990	79	80	62-124	0	
Dimethylphthalate	ug/kg	<500			4100	4110				0	
Fluoranthene	ug/kg	<500	5020	4980	4070	4170	81	84	63-124	2	
Fluorene	ug/kg	<500	5020	4980	4150	4090	83	82	49-124	1	
Hexachloro-1,3-butadiene	ug/kg	<500	5020	4980	3340	3260	66	65	27-104	2	
Hexachlorobenzene	ug/kg	<500	5020	4980	4010	4200	80	84	49-136	5	
Hexachlorocyclopentadiene	ug/kg	<500	5020	4980	2970	2010	59	40	10-121	39	R1
Hexachloroethane	ug/kg	<500	5020	4980	3720	3490	74	70	28-121	6	
Indeno(1,2,3-cd)pyrene	ug/kg	<500	5020	4980	3310	3050	66	61	34-159	8	
Isophorone	ug/kg	<500	5020	4980	3330	3300	66	66	39-91	1	
N-Nitroso-di-n-propylamine	ug/kg	<500	5020	4980	4040	3900	73	71	37-122	4	
N-Nitrosodiphenylamine	ug/kg	<500	5020	4980	3180	3060	63	61	36-104	4	
Naphthalene	ug/kg	<500	5020	4980	3240	3150	65	63	34-89	3	
Nitrobenzene	ug/kg	<500	5020	4980	3360	3170	67	64	36-90	6	
Pentachlorophenol	ug/kg	<1250	5020	4980	5030	4260	100	85	34-139	17	
Phenanthrene	ug/kg	<500	5020	4980	4240	4010	84	81	57-120	6	
Phenol	ug/kg	<500	5020	4980	4010	3740	79	75	35-119	7	
Pyrene	ug/kg	<500	5020	4980	4070	3930	81	79	64-128	4	
2,4,6-Tribromophenol (S)	%						81	80	10-140		
2-Fluorobiphenyl (S)	%						77	78	38-105		
2-Fluorophenol (S)	%						80	77	10-123		
Nitrobenzene-d5 (S)	%						65	62	33-104		
Phenol-d6 (S)	%						77	73	32-111		
Terphenyl-d14 (S)	%						75	75	33-149		

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

QC Batch: 234888 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 702177001, 702177002, 702177003, 702177004, 702177005, 702177006, 702177007, 702177008

SAMPLE DUPLICATE: 1152764

Parameter	Units	702177001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	31.9	32.0	0	

SAMPLE DUPLICATE: 1152765

Parameter	Units	702177002 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	30.8	32.5	5	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 235237

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1j	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
2j	This analyte failed the 30 percent low level calibration standard check. Results may be biased high.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MARKET BASKET FILL DIRT
Pace Project No.: 702177

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
702177007	MONTEMORANO COMP. #563364	EPA 3546	234860	EPA 8081B	235134
702177008	MONTEMORANO COMP. #563374	EPA 3546	234860	EPA 8081B	235134
702177007	MONTEMORANO COMP. #563364	EPA 3546	234861	EPA 8082A	235160
702177008	MONTEMORANO COMP. #563374	EPA 3546	234861	EPA 8082A	235160
702177007	MONTEMORANO COMP. #563364	EPA 3050B	235208	EPA 6010C	235308
702177008	MONTEMORANO COMP. #563374	EPA 3050B	235208	EPA 6010C	235308
702177007	MONTEMORANO COMP. #563364	EPA 7471B	234831	EPA 7471B	234954
702177008	MONTEMORANO COMP. #563374	EPA 7471B	234831	EPA 7471B	234954
702177007	MONTEMORANO COMP. #563364	EPA 3546	235052	EPA 8270D	235891
702177008	MONTEMORANO COMP. #563374	EPA 3546	235052	EPA 8270D	235891
702177001	MONTEMORANO TOPSOIL #610565	EPA 5035A	235166	EPA 8260C	235237
702177002	MONTEMORANO TOPSOIL #610568	EPA 5035A	235166	EPA 8260C	235237
702177003	MONTEMORANO TOPSOIL #610557	EPA 5035A	235166	EPA 8260C	235237
702177004	MONTEMORANO TOPSOIL #610566	EPA 5035A	235166	EPA 8260C	235237
702177005	MONTEMORANO TOPSOIL #610560	EPA 5035A	235166	EPA 8260C	235237
702177006	MONTEMORANO TOPSOIL #610563	EPA 5035A	235166	EPA 8260C	235237
702177001	MONTEMORANO TOPSOIL #610565	ASTM D2974-87	234888		
702177002	MONTEMORANO TOPSOIL #610568	ASTM D2974-87	234888		
702177003	MONTEMORANO TOPSOIL #610557	ASTM D2974-87	234888		
702177004	MONTEMORANO TOPSOIL #610566	ASTM D2974-87	234888		
702177005	MONTEMORANO TOPSOIL #610560	ASTM D2974-87	234888		
702177006	MONTEMORANO TOPSOIL #610563	ASTM D2974-87	234888		
702177007	MONTEMORANO COMP. #563364	ASTM D2974-87	234888		
702177008	MONTEMORANO COMP. #563374	ASTM D2974-87	234888		

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"Request Quick Turnaround"

CHAIN-OF-CUSTODY / Analytical Request Dr

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be complet

WO#: 702177

702177 | 2002306

Section A Required Client Information:

Company: City of Geneva
Address: 122 North Genesee St. Geneva, NY 14456
Email To: gedding1@yahoo.com
Phone: 315-271-0162 Fax:
Requested Due Date/TAT: ASAP Expedite

Section B Required Project Information:

Report To: Gordon Eddington
Copy To:
Purchase Order No.:
Project Name: Market Basket Fill Dirt
Project Number:

Section C Invoice Information:

Attention: Gordon Eddington
Company Name: City of Geneva
Address: 122 N. Genesee St
Pace Quote Reference: Geneva, NY 14456
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: ____

WO#: 30197211

20197211

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: VOC-8260C	SVOC-8270	8081/8082 PCB pesticides	Residual Chlorine	Pace Project No./ Lab I.D.
1	Montemorano Topsoil #610565	SL	G	9/22/16	10AM			4	1	X								X				001
2	" " #610568	SL	G	9/22/16	10AM			4	1	X								X				002
3	" " #610557	SL	G	9/22/16	10AM			4	1	X								X				003
4	" " #610566	SL	G	9/22/16	10AM			4	1	X								X				004
5	" " #610560	SL	G	9/22/16	10AM			4	1	X								X				005
6	" " #610563	SL	G	9/22/16	10AM			4	1	X								X				006
7	Montemorano Topsoil composites																					
8	# 563364	SL	G	9/22/16	11AM	composite		4	1	X									X X X X			007
9	# 563374	SL	G	9/22/16	10AM	composite		4	1	X									X X X X			008
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Gordon Eddington	9/23/16	830	Phil Ehr / PACE	9/23/16	830				
	Phil Ehr / PACE	9/23/16	1700	[signature]	9/23/16	1000	4.5	Y	Y	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Direct ship to PA

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Gordon P. Eddington

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 9/22/16

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: City of Geneva Project # 30197211

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 777306637846

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals Intact: ☒ yes ☐ no

Thermometer Used 7 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 4.9 °C Correction Factor: -0.4 °C Final Temp: 4.5 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: AUL 9/24/16

Comments:	Yes	No	N/A		
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:	X			2.	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:	X			4.	
Sample Labels match COC:	X			5.	
-Includes date/time/ID/Analysis Matrix: SL					
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:	X			8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used:	X				
Containers Intact:	X			11.	
Filtered volume received for Dissolved tests			X	12.	
All containers needing preservation have been checked.			X	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.			X		
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed AUL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):			X	14.	
Trip Blank Present:			X	15.	
Trip Blank Custody Seals Present			X		
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Chain of Custody

WO#: 702177

PM: WB Due Date: 09/28/16
CLIENT: GENEVA

Workorder: 702177 **Workorder Name:** MARKET BASKET FILL DIRT **Owner Received Date:** 9/24/2016 **Results Requested By:** 9/28/2016

Report To	Subcontract To
Wayne Bryce Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: CONT						Requested Analysis: See Comments												LAB USE ONLY
1	MONTEMORANO TOPSOIL #610565	PS	9/22/2016 10:00	702177001	Solid	1						X												
2	MONTEMORANO TOPSOIL #610568	PS	9/22/2016 10:00	702177002	Solid	1						X												
3	MONTEMORANO TOPSOIL #610557	PS	9/22/2016 10:00	702177003	Solid	1						X												
4	MONTEMORANO TOPSOIL #610566	PS	9/22/2016 10:00	702177004	Solid	1						X												
5	MONTEMORANO TOPSOIL #610560	PS	9/22/2016 10:00	702177005	Solid	1						X												
6	MONTEMORANO TOPSOIL #610563	PS	9/22/2016 10:00	702177006	Solid	1						X												
7	MONTEMORANO COMP. #563364	PS	9/22/2016 10:00	702177007	Solid	1						X												
8	MONTEMORANO COMP. #563374	PS	9/22/2016 10:00	702177008	Solid	1						X												

Transfers	Released By	Date/Time	Received By	Date/Time
1				
2				
3				

Comments:
001 → 006 - VOCs
007 + 008 - SVOC 8270, Pest/PCB 8081/8082
+ Metals

Cooler Temperature on Receipt °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

(Direct ship to PA)

APPENDIX L

DER-10 APPENDIX 5 ALLOWABLE CONSTITUENT LEVELS FOR IMPORTED FILL OR SOIL SUBDIVISION 5.4(e)

Appendix 5
Allowable Constituent Levels for Imported Fill or Soil
Subdivision 5.4(e)

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375-6.8(a) is the source for unrestricted use and Table 375-6.8(b) is the source for restricted use.

Note: For constituents not included in this table, refer to the contaminant for supplemental soil cleanup objectives (SSCOs) in the Commissioner Policy on *Soil Cleanup Guidance*. If an SSCO is not provided for a constituent, contact the DER PM to determine a site-specific level.

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Metals					
Arsenic	13	16	16	16	13
Barium	350	350	400	400	433
Beryllium	7.2	14	47	47	10
Cadmium	2.5	2.5	4.3	7.5	4
Chromium, Hexavalent[1]	1 [3]	19	19	19	1 [3]
Chromium, Trivalent[1]	30	36	180	1500	41
Copper	50	270	270	270	50
Cyanide	27	27	27	27	NS
Lead	63	400	400	450	63
Manganese	1600	2000	2000	2000	1600
Mercury (total)	0.18	0.73	0.73	0.73	0.18
Nickel	30	130	130	130	30
Selenium	3.9	4	4	4	3.9
Silver	2	8.3	8.3	8.3	2
Zinc	109	2200	2480	2480	109
PCBs/Pesticides					
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8	3.8	NS
4,4'-DDE	0.0033 [3]	1.8	8.9	17	0.0033 [3]
4,4'-DDT	0.0033 [3]	1.7	7.9	47	0.0033 [3]
4,4'-DDD	0.0033 [3]	2.6	13	14	0.0033 [3]
Aldrin	0.005	0.019	0.097	0.19	0.14
Alpha-BHC	0.02	0.02	0.02	0.02	0.04 [4]
Beta-BHC	0.036	0.072	0.09	0.09	0.6
Chlordane (alpha)	0.094	0.91	2.9	2.9	1.3
Delta-BHC	0.04	0.25	0.25	0.25	0.04 [4]
Dibenzofuran	7	14	59	210	NS
Dieldrin	0.005	0.039	0.1	0.1	0.006
Endosulfan I	2.4 [2]	4.8	24	102	NS
Endosulfan II	2.4 [2]	4.8	24	102	NS
Endosulfan sulfate	2.4 [2]	4.8	24	200	NS
Endrin	0.014	0.06	0.06	0.06	0.014
Heptachlor	0.042	0.38	0.38	0.38	0.14
Lindane	0.1	0.1	0.1	0.1	6
Polychlorinated biphenyls	0.1	1	1	1	1

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Semi-volatile Organic Compounds					
Acenaphthene	20	98	98	98	20
Acenaphthylene	100	100	100	107	NS
Anthracene	100	100	100	500	NS
Benzo(a)anthracene	1	1	1	1	NS
Benzo(a)pyrene	1	1	1	1	2.6
Benzo(b)fluoranthene	1	1	1	1.7	NS
Benzo(g,h,i)perylene	100	100	100	500	NS
Benzo(k)fluoranthene	0.8	1	1.7	1.7	NS
Chrysene	1	1	1	1	NS
Dibenz(a,h)anthracene	0.33 [3]	0.33 [3]	0.33 [3]	0.56	NS
Fluoranthene	100	100	100	500	NS
Fluorene	30	100	100	386	30
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	NS
m-Cresol(s)	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	NS
Naphthalene	12	12	12	12	NS
o-Cresol(s)	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	NS
p-Cresol(s)	0.33	0.33	0.33	0.33	NS
Pentachlorophenol	0.8 [3]	0.8 [3]	0.8 [3]	0.8 [3]	0.8 [3]
Phenanthrene	100	100	100	500	NS
Phenol	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	30
Pyrene	100	100	100	500	NS
Volatile Organic Compounds					
1,1,1-Trichloroethane	0.68	0.68	0.68	0.68	NS
1,1-Dichloroethane	0.27	0.27	0.27	0.27	NS
1,1-Dichloroethene	0.33	0.33	0.33	0.33	NS
1,2-Dichlorobenzene	1.1	1.1	1.1	1.1	NS
1,2-Dichloroethane	0.02	0.02	0.02	0.02	10
1,2-Dichloroethene(cis)	0.25	0.25	0.25	0.25	NS
1,2-Dichloroethene(trans)	0.19	0.19	0.19	0.19	NS
1,3-Dichlorobenzene	2.4	2.4	2.4	2.4	NS
1,4-Dichlorobenzene	1.8	1.8	1.8	1.8	20
1,4-Dioxane	0.1 [3]	0.1 [3]	0.1 [3]	0.1 [3]	0.1
Acetone	0.05	0.05	0.05	0.05	2.2
Benzene	0.06	0.06	0.06	0.06	70
Butylbenzene	12	12	12	12	NS
Carbon tetrachloride	0.76	0.76	0.76	0.76	NS
Chlorobenzene	1.1	1.1	1.1	1.1	40
Chloroform	0.37	0.37	0.37	0.37	12
Ethylbenzene	1	1	1	1	NS
Hexachlorobenzene	0.33 [3]	0.33 [3]	1.2	3.2	NS
Methyl ethyl ketone	0.12	0.12	0.12	0.12	100
Methyl tert-butyl ether	0.93	0.93	0.93	0.93	NS
Methylene chloride	0.05	0.05	0.05	0.05	12

Volatile Organic Compounds (continued)					
Propylbenzene-n	3.9	3.9	3.9	3.9	NS
Sec-Butylbenzene	11	11	11	11	NS
Tert-Butylbenzene	5.9	5.9	5.9	5.9	NS
Tetrachloroethene	1.3	1.3	1.3	1.3	2
Toluene	0.7	0.7	0.7	0.7	36
Trichloroethene	0.47	0.47	0.47	0.47	2
Trimethylbenzene-1,2,4	3.6	3.6	3.6	3.6	NS
Trimethylbenzene-1,3,5	8.4	8.4	8.4	8.4	NS
Vinyl chloride	0.02	0.02	0.02	0.02	NS
Xylene (mixed)	0.26	1.6	1.6	1.6	0.26

All concentrations are in parts per million (ppm)
NS = Not Specified

Footnotes:
[1] The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.
[2] The SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.
[3] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.
[4] This SCO is derived from data on mixed isomers of BHC.