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MEMORANDUM

DATE: March 31, 2010

TO: See Distribution List

FROM: FPM Group

RE: Fall 2009 Annual Long-Term Monitoring Report

Six Mile Creek Area of Concern (AOC)

Former Griffiss Air Force Base, Rome, New York

Contract No. F41624-03-D-8601-0027

Revision 1.0 March 2010

FPM Group, Ltd. (FPM) is pleased to submit two (2) copies of the above-referenced Fall 2009 Annual Long-Term Monitoring Report for Six Mile Creek Area of Concern (AOC) at the former Griffiss Air Force Base, Rome, New York.

If you have any questions or require additional information, please call me at 315-336-7721 ext. 202, or e-mail me at g.atik@fpm-group.com.

Very truly yours,

Gaby A. Atik, P.E.

Executive Vice President

Enc.

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Six Mile Creek Area of Concern Long-Term Monitoring Program Former Griffiss Air Force Base Rome, New York

FALL 2009 ANNUAL LONG TERM MONITORING REPORT



Prepared by:

FPM Group, Ltd. 153 Brooks Road Rome, NY 13441

Contract No. F41624-03-D-8601 Delivery Order: 0027

Revision 1.0 March 2010



FALL 2009 ANNUAL LONG-TERM MONITORING REPORT

Prepared for:

Six Mile Creek Area of Concern Long-Term Monitoring Program Former Griffiss Air Force Base Rome, New York

through

The Air Force Center for Engineering and the Environment 3300 Sidney Brooks Brooks City-Base, TX 78235

Prepared by:

FPM Group, Ltd. 153 Brooks Road Rome, NY 13441

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TABLE OF CONTENTS

SECTION		PAGE
1 INTRO	DUCTION	1-1
2 BACK	GROUND	2-1
	IVIRONMENTAL SETTING	
2.1.1	Physiography and Topography	2-1
2.1.2	Geology	
2.1.3	Hydrogeology	2-1
2.1.4	Climate	2-2
2.1.5	Biology	2-2
3 SIX MI	ILE CREEK AOC	3-1
	ΓΕ LOCATION AND HISTORY	
	DROGEOLOGICAL SETTING	
3.3 SU	MMARY OF PREVIOUS INVESTIGATIONS	3-2
3.4 SE	X MILE CREEK LTM PLAN	3-4
4 LTM S	AMPLING ROUNDS	4-1
4.1 FA	LL 2009 SAMPLING	4-1
4.1.1	Field Activities	4-1
4.1.2	Surface Water Results	4-1
4.1.3	Sediments Results	
4.1.4	Conclusions and LTM Optimization Recommendations	4-3
5 REFER	RENCES	5-1
	LIST OF FIGURES	
Figure 1-1	Six Mile Creek Site Location Map	
Figure 2-1	Base Location Map	
Figure 3-1	Six Mile Creek Upper Section Map	
Figure 3-2	Six Mile Creek Lower Section Map	
Č	4	

LIST OF TABLES

Table 3-1	Six Mile Creek LTM Field Activities Rationale
Table 3-2	Six Mile Creek Sampling Locations and Analyses
Table 3-3	Six Mile Creek Sampling Locations Longitude and Latitude
Table 4-1	Six Mile Creek Surface Water Sampling Results
Table 4-2	Six Mile Creek Sediment Sampling Results
Table 4-3	Six Mile Creek Proposed Future LTM Network

APPENDICES

(Appendices B, C, and D are included on CD)

Appendix A	Daily Chemical Quality Control Reports
Appendix B	Validated Laboratory Data
Appendix C	Raw Laboratory Data
Appendix D	Potentially Impacting Site Results and Maps

LIST OF ACRONYMS AND ABBREVIATIONS

AFB Air Force Base

AFCEE Air Force Center for Engineering and the Environment

AFFF Aqueous film-forming foam

AOC Area of Concern

bgs below ground surface

COC contaminant of concern

CQCR Chemical Quality Control Report

CSYA Coal Storage Yard Area

DO Delivery Order

DRMO Defense Reutilization and Marketing Office

E&E Ecology and Environmental, Inc.

EPA U.S. Environmental Protection Agency

FDA Food and Drug Administration

FPM FPM Group, Ltd. **FSP** Field Sampling Plan

ft feet

g. grams

HSP Health and Safety Plan

IRA Interim Remedial Action

IT International Technology Corp.

LAW Law Engineering and Environmental Services, Inc.

LTM Long-Term Monitoring

MSL mean sea level

NYCRR New York Code of Rules and Regulations

NYS New York State

NYSBC New York State Barge Canal

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

OU Operable Unit

PAH polynuclear aromatic hydrocarbon

PCB polychlorinated biphenyl

PISCES passive in-situ chemical extraction sample

QAPP Quality Assurance Project Plan

RA Remedial Action
RI Remedial Investigation
ROD Record of Decision

SI Supplemental Investigation SVOC semi volatile organic compound

USFWS United States Fish and Wildlife Service USACE United States Army Corps of Engineers

VOC volatile organic compound

WSA Weapon Storage Area

1 INTRODUCTION

FPM Group, Ltd. (FPM), under contract with the Air Force Center for Engineering and the Environment (AFCEE), is conducting a long-term monitoring (LTM) program for sediment, surface water, fish tissue, and qualitative benthic macroinvertebrate community analysis at the Six Mile Creek Area of Concern (AOC) at the former Griffiss Air Force Base (AFB), Rome, New York. Please refer to Figure 1-1, for the Six Mile Creek AOC location.

The LTM program is part of the selected remedy as described in the signed Record of Decision (ROD) (Ecology and Environment, Inc. [E&E], December 2003). The LTM program will monitor the presence of contaminants of concern (COCs), assess the potential for migration of COCs and establish an early warning system for assuring compliance with potential COC receptors (human, terrestrial, and aquatic wildlife). The LTM program is conducted in accordance with provisions of the Basic Contract # F41624-03-D-8601 and Delivery Order (DO) # 0027.

Sediment, surface water, and fish tissue samples, as appropriate, were collected in October 2004 and analyzed for their respective COCs as identified during previous investigations. Qualitative benthic macroinvertebrate community analysis was performed at all fish sampling locations. In the Fall 2005, Fall 2006, Fall 2008, and Fall 2009 sampling rounds, only sediment and surface water samples were collected. In Fall 2007, fish tissue sampling and qualitative benthic community analysis were performed in addition to sediment and surface water sampling.

The sampling is being performed in accordance with the following documents: the final LTM Work Plan (WP) for the Three Mile Creek and Six Mile Creek AOCs (FPM, October 2004), Basewide Health and Safety Plan (HSP) (FPM, December 2003), and Basewide Field Sampling Plan (FSP) (FPM, March 2005). Reference is also made to the AFCEE Quality Assurance Project Plan (QAPP), Version 3.1 (AFCEE, August 2001) or later, with project-specific United States Army Corps of Engineers (USACE)-approved variances.

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2 BACKGROUND

2.1 Environmental Setting

2.1.1 Physiography and Topography

The former Griffiss AFB is located in the city of Rome in Oneida County, New York (refer to Figure 2-1). The former Base lies within the Mohawk Valley between the Appalachian plateau and the Adirondack Mountains. A rolling plateau northeast of the former Base reaches an elevation of 1300 feet (ft) above mean sea level (MSL). The New York State Barge Canal (NYSBC) and the Mohawk River valley south of the former Base lie below 430 ft MSL. The topography across the former Base is relatively flat with elevations ranging from 435 ft MSL in the southwest portion to 595 ft MSL in the northwest portion of the former Base.

2.1.2 Geology

Unconsolidated sediments at the former Base consist primarily of glacial till with minor quantities of clay and sand and significant quantities of silt and gravel. The thickness of these sediments ranges from 0 feet in the northeast portion to more than 130 feet in the southern portion of the former Base. The average thickness of the unconsolidated sediments is 25 to 50 feet in the central portion and 100 to 130 ft in the south and southwest portions of the former Base. The bedrock beneath the former Base generally dips from the northeast to the southwest and consists of the black Utica Shale. It is a gray and black carbonaceous unit with a high/medium organic content (Law Engineering and Environmental Services, Inc. [LAW], December 1996). More details on the geologic features were discussed in Sections 3 and 4 of the AOC Long-Term Monitoring Baseline Study (FPM, July 2000).

2.1.3 Hydrogeology

The shallow water table aquifer lies within the unconsolidated sediments, where depth to groundwater ranged from 0 ft below ground surface (bgs) in the southwest portion to 63 ft bgs in the northeast portion of the former Base during the December 1998 synoptic Base-wide water-level measurement of wells (FPM, July 2000). Groundwater across the former Base generally flows from the northeast to the southwest. Several creeks, drainage culverts, and sewers (mostly acting as drains for shallow groundwater), intercept surface water runoff. A comprehensive description of regional and local geology, hydrogeology, and lithology for the former Base was given in Section 4 of the Long-Term Monitoring Baseline Study (FPM, July 2000), and in the Remedial Investigation (RI) prepared by Law (LAW, December 1996), and in the Supplemental Investigation (SI) prepared by E&E (E&E, November 1998).

2.1.4 Climate

The former Griffiss AFB experiences a continental climate characterized by warm, humid, moderately wet summers and cold winters with moderately heavy snowfalls. The mean annual precipitation is 45.6 inches, which includes the mean annual snowfall of 107 inches. The annual evapotranspiration rate is 23 inches. The average temperature during the winter season is 20 degrees Fahrenheit; temperatures during the spring, summer, and fall vary from 31 to 81 degrees Fahrenheit. The prevailing winds are from the southwest, with an average wind speed of 5 knots.

The former Base is located in a region prone to acid precipitation; the annual average pH of precipitation recorded for 1992 at the three closest stations ranged from 4.25 to 4.28. Fluctuations in pH have an inverse correlation to precipitation, such that lower pH levels correlate with higher amounts of precipitation (LAW, December 1996).

2.1.5 Biology

The former Griffiss AFB, covering 3,552 acres of property within the Erie-Ontario ecozone of the Great Lakes Physiographic Province, has been heavily disturbed from an ecological perspective. Although there are a few undisturbed communities within the former Base's boundary, the 1993 Inventory of Rare Plant Species and Significant Natural Communities identified six significant habitats of special concern occurring on the former Base (New York Natural Heritage Program, January 1994). There are five special-concern habitats identified by the Inventory that are adjacent to or within the confines of AOCs at the former Base. These special-concern habitats include: (1) a white-cedar-dominated rich sloping fen adjacent to the Six Mile Creek floodplain; (2) a hemlock-hardwood swamp located in a mature forest occurring hydraulically upgradient of Landfill 1 (Ammo Storage Area); (3) a rich graminoid fen adjacent to the southeast corner of the runway, situated on top of the buried section of Six Mile Creek; (4) a pitch pine-scarlet oak woods at the southeastern edge of Three Mile Creek; and (5) a hemlockhardwood swamp of several acres at the southern end of Three Mile Creek. Three of the five habitats are of concern to the Six Mile Creek AOC (no. 1, 2, and 3), since they are located adjacent to Six Mile Creek or are located on sites that potentially influence Six Mile Creek. LTM activities will be performed strictly in Six Mile Creek or its banks; therefore, disturbance of these adjacent special-concern habitats is not anticipated.

Although no plant or animal species at the former Base has been considered threatened or endangered by the U.S. Department of the Interior, some species listed on the New York State (NYS) Threatened Species List have been identified, with habitats relevant to the AOCs at the former Base. Whorled mountain mint (*Pycnanthemum verticillatum* var *verticillatum*) has been identified in the open wet-meadow wetland at Landfill 7 (no. 5). It also thrives in the white-cedar-dominated rich sloping fen adjacent to the Landfill 1 (no. 1). Significant disturbance of the sites and vegetation is not expected during the execution of the LTM program.

3 SIX MILE CREEK AOC

3.1 Site Location and History

Six Mile Creek, a natural stream bordered by wetlands, enters the former Griffiss AFB from the North and exits to the southeast, intersecting the Base runway. The creek is approximately 8 feet wide and 1.5 feet deep prior to entering the Base and approximately 20 feet wide and 4 feet deep after leaving the former Base. The on-Base portion of the creek is approximately 8,400 feet long, split in an upper and a lower section, plus an additional 7,200 feet within the runway culvert separating both sections (Figure 3-1 and 3-2). The creek continues off Base for approximately 2 miles, ultimately flowing into the New York State Barge Canal.

Prior to Base construction, Six Mile Creek reportedly was used for agricultural irrigation. Currently, the on-Base portion of the creek serves as a surface water runoff and storm water drainage system for the Base. Six Mile Creek enters the Base through a water-control structure that maintains basal flow into the creek channel and diverts floodwaters through a diversion channel into the Mohawk River. A portion of the creek has been culverted.

Surface water runoff from Landfills 1, 2/3, and 7, the Weapon Storage Area (WSA), WSA Landfill, runway, on-Base shops, and Rainbow Creek flows to the creek. Leachate from the same landfills also discharges into the creek. In addition, portions of the On-Base storm water system discharge into the lower portion of the creek. The Base storm water system also received rinse water and washdown, which may have contained oils, solvents, and fuels from various Base shops.

The Six Mile Creek AOC also includes the aqueous film-forming foam (AFFF) lagoon, which is located between the WSA fence line and Perimeter Road. This 50-by-50-foot retention pond, which received aqueous waste overflow from the AFFF system at Building 917, has periodically overflowed, potentially resulting in surface discharges to Six Mile Creek.

Six Mile Creek has been classified as a New York State Department of Environmental Conservation (NYSDEC) Class C stream. The section of Six Mile Creek below the Base Perimeter Road is classified as Class C(t). According to the New York Code of Rules and Regulations (NYCRR) 701, the best usage for Class C stream waters is fishing, where waters shall be suitable for fish propagation and survival. Based on an Aquatic Habitat Assessment, at least 12 species of fish are found in Six Mile Creek (E&E, July 2003).

3.2 Hydrogeological Setting

Six Mile Creek is located in the northeastern part of the former Griffiss AFB. The topography is generally sloping towards the southeast. Six Mile Creek receives greatly varying amounts of inflow from off-Base sources through the Butternut Creek diversion ditch and from surface water

runoff from the watershed. Six Mile Creek also receives more stable amounts of groundwater inflow along its stretch.

3.3 Summary of Previous Investigations

Preliminary studies of Six Mile Creek were performed in 1981 and 1988. Soil, sediment, and fish tissue samples were collected. Numerous metals and polynuclear aromatic hydrocarbons (PAHs) were detected in the sediments. Several metals and polychlorinated biphenyls (PCBs) were detected in the fish tissue samples at levels below the Food and Drug Administration's (FDA's) action level of 2.0 ppm but above the 0.1 ppm level representing risk to piscivorous wildlife. The results of these studies led to the performance of an RI in 1994 and 1995.

The RI was performed to evaluate the nature and extent of environmental contamination at the site and to determine whether remedial action (RA) was necessary to eliminate potential threats to human health and the environment from exposures that might arise under existing or expected future site conditions. The RI included an aquatic survey that evaluated creek habitat, water quality, benthic and drift macroinvertebrate communities, and fish populations at three stations along the northern section of the creek (SMC-FS1, SMC-FS2, and SMC-FS3, similar in location to location 1, 2, as shown in Figure 3-1). At approximately the same three locations, sediment samples were collected for toxicity testing and fish samples were collected for pesticides, PCBs, and metals analyses. Results from the sediment toxicity tests performed as part of the aquatic survey indicated that chemicals were not present at levels acutely toxic to aquatic life; however, the benthic macroinvertebrate community at one station was classified as slightly impaired.

During the RI, surface water samples were collected over several rounds of sampling from 21 locations: 14 from Six Mile Creek, one at the AFFF lagoon, three in the Mohawk River, and three in the Barge Canal. Two volatile organic compounds (VOCs), 14 semi-volatile organic compounds (SVOCs), four pesticides, six metals, cyanide, and sulfide were detected at concentrations above the most stringent criteria for surface water. Sediment samples were collected at two depths below the surface water/sediment interface from the same 21 locations. Three VOCs, 18 SVOCs, 20 pesticides, one PCB and six metals were detected at concentrations above the most stringent criteria for sediment.

In 1995, the NYSDEC conducted a benthic macroinvertebrate community analysis for Six Mile Creek just downstream of the former AFB's boundary at the Route 365 bridge. Due to a significantly impacted benthic macroinvertebrate community, the water quality was assessed as being moderately impacted. Fish population data indicated that fish communities were generally in fair condition and whole-body fish tissue concentrations indicated that PCBs, pesticides and mercury were present at levels exceeding NYSDEC ecological risk guidelines. The concentration of PCBs in fish tissue also exceeded the previously mentioned FDA action level.

Also in 1995, NYSDEC performed passive in situ concentration/extraction sampling (PISCES)

on the lower portion of Six Mile Creek to test for PCBs and other organochlorines. No contaminants were detected. However, naturally occurring conditions, such as below average rainfall and low flow in the stream, may have affected the ability of PISCES samplers to detect contaminants.

As part of a basewide SI performed in June 1997, one water sample was collected from a storm sewer manhole located within the Six Mile Creek culverted section, and two surface water samples were collected from the storm sewer outfalls at the headwaters of Rainbow Creek. No contaminants were detected in these water samples. In addition, ten PISCES samples were collected for pesticides and PCBs analyses from Six Mile Creek, two from unnamed tributaries to the creek, and one from the Rainbow Creek Tributary. No PCBs were detected. The levels of pesticides found in Rainbow Creek and downstream in Six Mile Creek were higher than in the upper portion of Six Mile Creek and the other tributaries. There are no screening criteria for PISCES samples.

IT Corporation performed an Interim Remedial Action (IRA) in 1997 at the Coal Storage Yard Area (CSYA) Operable Unit (OU), which include the CSYA, the Defense Reutilization and Marketing Office (DRMO), and Area of Interest (AOI) 66. Rainbow Creek also underwent an IRA at the same time. PCB contaminated soil at the CSYA OU was removed until cleanup goals were reached (< 1 ppm PCB for soil up to 10 inches and <10 ppm for deeper soils). The Rainbow Creek IRA involved removing 1 ft of sediment over a 1,900-ft stretch of the creek. Results of the confirmatory sampling indicated that 30 of the 39 sampling locations exceeded the site cleanup goal of 0.0386 mg/kg PCB. No additional sediment removal was performed and the USACE recommended alternate engineering controls (geotextile fabric and 1 ft of crushed stone) to isolate contaminated sediments (E&E, July 2003).

In July 1998, additional SI samples were collected, primarily from off-Base locations, to fill data gaps that had been identified in the RI sampling. These included two surface water samples and 12 sediment samples. Three metals were detected above the most stringent criteria for surface water. Ten SVOCs, PCBs, dioxins/furans, and two metals were above the most stringent criteria for sediment.

In July 1999, the habitat quality of the creek was visually inspected by AFRPA, USACE, NYSDEC, Environmental Protection Agency (EPA), and United States Fish and Wildlife Service (USFWS). A brief walkover of the on-Base portion revealed the presence of orange floc (iron oxide) at a few locations above and below the culvert. This was attributed to the presence of leachate seeps with extensive orange floc upstream at Landfill 1. A more extensive walkover of the off-Base portion of the creek revealed an aquatic habitat of relatively high quality. The surrounding habitat is also of high quality for plants and wildlife, including extensive areas of forest, shrub, and emergent wetlands. The presence of cloudiness and some orange floc in the water column was observed. The floc is probably due to leachate seepage from Landfill 1. However, it should be noted that high concentrations of iron were observed in background

conditions (E&E, July 2003).

3.4 Six Mile Creek LTM Plan

The Six Mile Creek LTM Plan is summarized in Table 3-1. Annual sampling is planned for the fall, because the fat content of the fish tissue is the highest and consequently the highest concentration of lipophilic contaminants (e.g. PCBs) can be expected to have accumulated in fish tissue. During the initial sampling round, baseline information for sediment, surface water and fish tissue contaminants are planned. A qualitative benthic macroinvertebrate community analysis was also planned at each fish sample location.

The twelve sediment and surface water sampling locations, described in Table 3-2, were chosen based on the results from previous investigations and following discussions with NYSDEC and EPA personnel. The northing and easting of these locations are provided in Table 3-3. During the sediment sampling, sediment deposition locations in the vicinity of the proposed locations are targeted for sample collection.

The LTM program for the SMC AOC was implemented in October 2004. Initially, the sample locations were staked and inspected for accessibility. Sediment and surface water samples were collected during the first two days and fish tissue collection was performed the last three days. A qualitative benthic macroinvertebrate community analysis was also performed at each fish sampling location.

4 LTM SAMPLING ROUNDS

The LTM events consisted of annual sediment/ surface water sampling and triennial fish sampling (every third year; starting in Fall 2004). In conjunction with the fish sampling, a qualitative benthic macroinvertebrate community evaluation was also performed on a triennial basis.

The following sections provide the Fall 2009 LTM results. Only surface water and sediment sampling were conducted as part of the most recent sampling round. Detailed information pertaining to the Fall 2004, Fall 2005, and Fall 2006 sampling rounds can be found in the Fall 2006 Annual Long Term Monitoring Report, Six Mile Creek Area of Concern, Revision 1.0 (FPM, October 2007). The Fall 2007 sampling round data and discussion are provided in the Fall 2007 Annual Long Term Monitoring Report, Six Mile Creek Area of Concern, Revision 0.0 (FPM, October 2008). Lastly, the Fall 2008 sampling round data and discussion are provided in the Fall 2008 Annual Long Term Monitoring Report, Six Mile Creek Area of Concern, Revision 1.0 (FPM, August 2009).

Locations at this site were sampled according to the above-mentioned LTM sampling plan during the Fall 2004, Fall 2005, Fall 2006, and Fall 2007 sampling rounds. Sampling of the Fall 2008 and Fall 2009 rounds were performed according to the LTM optimization recommended in the Fall 2007 LTM report. During the Fall 2009 sampling round, SMC-1 was sampled in the original sampling location since the SMC weir was operating as intended. In addition, Rainbow Creek (location of SMC-11) was culverted in the fall of 2009. As a result, sampling location SMC-11 was removed from the SMC LTM network.

4.1 Fall 2009 Sampling

4.1.1 Field Activities

On October 1st, sediments and surface water samples were collected at sampling locations SMC-1, -4, and -5. Surface water results are provided in Table 4-1 and sediment results are provided in Table 4-2. Daily Chemical Quality Control Reports (CQCRs) are attached in Appendix A.

4.1.2 Surface Water Results

Sampling locations SMC-1, -4, and -5 were analyzed for target VOCs only. The 2009 VOC results were compared to past sampling rounds and the 1993/4 RI results. The validated lab results are attached in Appendix B and the raw lab data are attached in Appendix C.

VOCs were detected at these sampling locations, but at values below the New York State Surface water Standard.

Results indicate that the limited benzene contamination in the lower section of Six Mile Creek (sample locations SMC-4 and -5) is decreasing. These results are similar to those reported in the 1993/4 RI for the same sampling locations, but they are within one order of magnitude of the benzene exceedances reported in the previous sampling rounds as well as in the previous quarterly Petroleum Spill Sites LTM sampling rounds (September 2004 to September 2009) for sampling locations 782SW-118, -119, and -120. Sampling locations 782SW-118, -119, and -120 are located in the same stretch of SMC as sampling location SMC-4 and upstream of sampling location SMC-5. The petroleum contamination plume at Apron 2 reached SMC between 1994 and 2004 and is the likely source of the benzene detections. The Apron 2 contamination plume is currently undergoing groundwater remediation using horizontal biosparging. A figure illustrating the Petroleum Spill Site LTM surface water sample locations and historical surface water results tables are provided in Appendix D.

4.1.3 Sediments Results

Sediment samples collected at locations SMC-1, -4, and -5 were analyzed for SVOCs, PCBs, and pesticides. The validated and raw lab results are attached in Appendix B and Appendix C, respectively.

SVOC detections were reported at all sampling locations. SVOC exceedances were reported for sampling location SMC-4 only. Twelve SVOC exceedances were reported at this location ranging from 87 F μ g/kg to 1000 μ g/kg. None of the exceedances were over one order of magnitude of the most stringent ecological screening values.

Only one PCB exceedance was reported: Aroclor 1254 exceeded the most stringent ecological screening value (15.96 $\mu g/kg$) at sampling location SMC-4 (72.7 $\mu g/kg$). No PCBs were reported from sampling locations SMC-1 and -5.

Pesticides were reported from sampling location SMC-1 and -4. SMC-1 had an exceedance for dieldrin (0.90 F μ g/kg). The most stringent ecological screening value for dieldrin is 0.02 μ g/kg. SMC-4 had a DDD detection, which did not exceed the most stringent ecological screening value. No pesticide detections were reported for SMC-5.

In summary, SVOC exceedances were reported for sampling location SMC-4. The presence of the SVOC exceedance may be attributed to the culverting activities at Rainbow Creek. SMC-11, the upstream sampling location in Rainbow Creek, historically showed SVOC exceedances during the SMC LTM sampling events. During the culverting activities, the sediments may have been disturbed causing the downstream migration of SVOCs to SMC-4.

A PCB (Aroclor 1254) exceedance was reported for sampling location SMC-4. The PCB concentration reported in the Fall 2009 sampling is within one order of magnitude of the most stringent ecological screening value and the previous SMC-4 PCB detections. This location is

the first sampling location downstream of location Rainbow Creek which was part of the 1997 IRA (IT Corp, July 1998). SMC-11, located in Rainbow Creek, has shown PCB exceedances in all of the previous LTM sampling events. In the fall of 2009, Rainbow Creek was culverted, covering the sampling location.

4.1.4 Conclusions and LTM Optimization Recommendations

Fall 2009 surface water samples were analyzed for target VOCs only. COC detections were reported in this sampling round, but at values below the New York State Surface water Standard The sources of VOC contamination reported during the SMC LTM are currently undergoing active remediation.

The Fall 2009 sediment samples were analyzed for SVOCs, PCBs, and pesticides. SVOC exceedances were reported at SMC-4. SVOC concentrations at this location show a increasing trend, but can be attributed to the culverting activities at Rainbow Creek, upstream of SMC-4. The Fall 2009 PCB concentrations are similar to previous LTM results; these are attributed to residual contamination at Rainbow Creek following the 1997 removal action. The entire creek was culverted in 2009. Geotextile fabric was reinstalled above the relocated soils eliminating the pathways of contamination to downstream receptors.

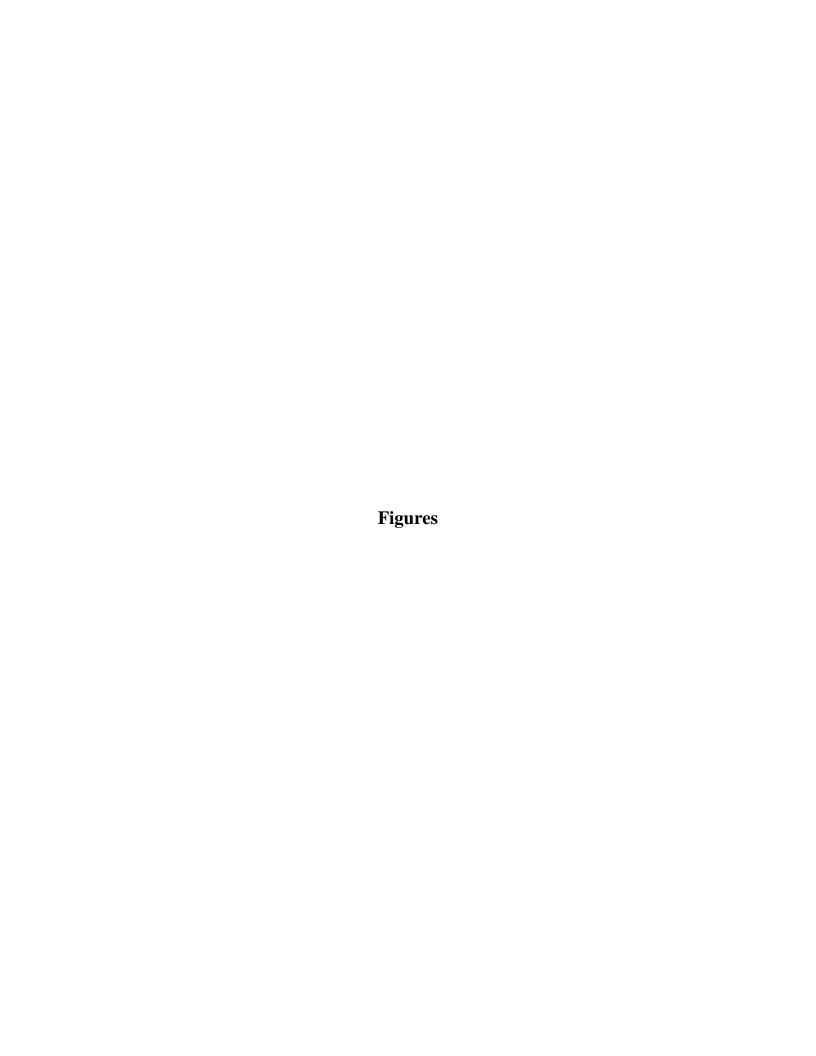
Continued annual surface water and sediment sampling is recommended to monitor contamination degradation and migration. The future LTM sample network for the SMC AOC is shown in Table 4-3. The third round of fish sampling and qualitative benthic community evaluation will be conducted per Table 4-3 in Fall 2010.

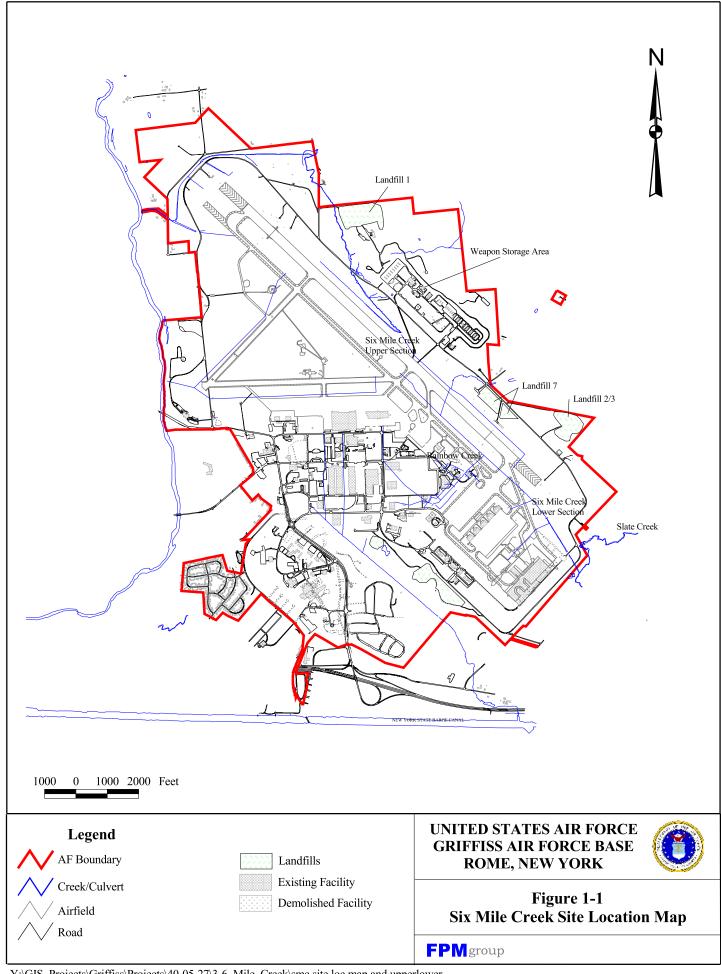
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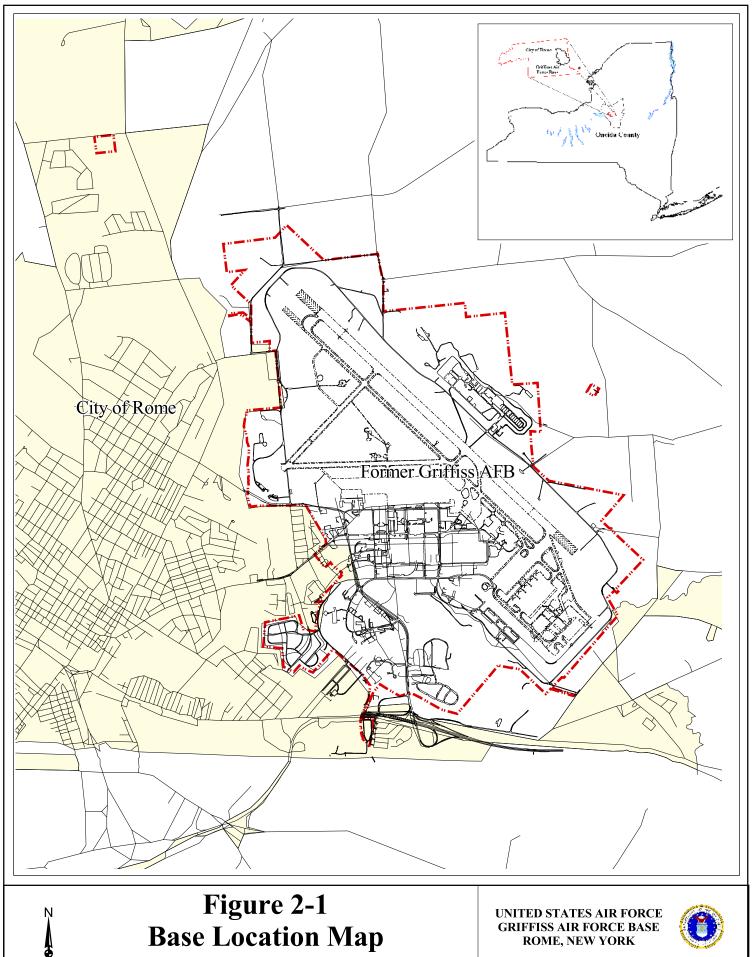
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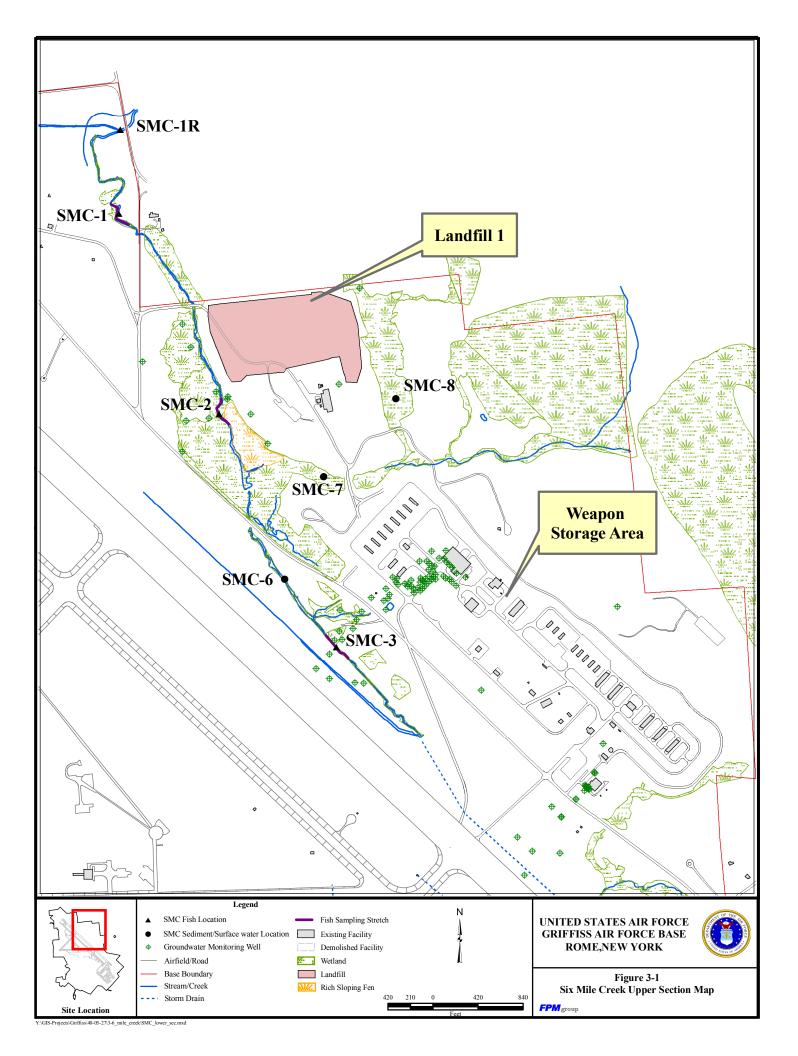


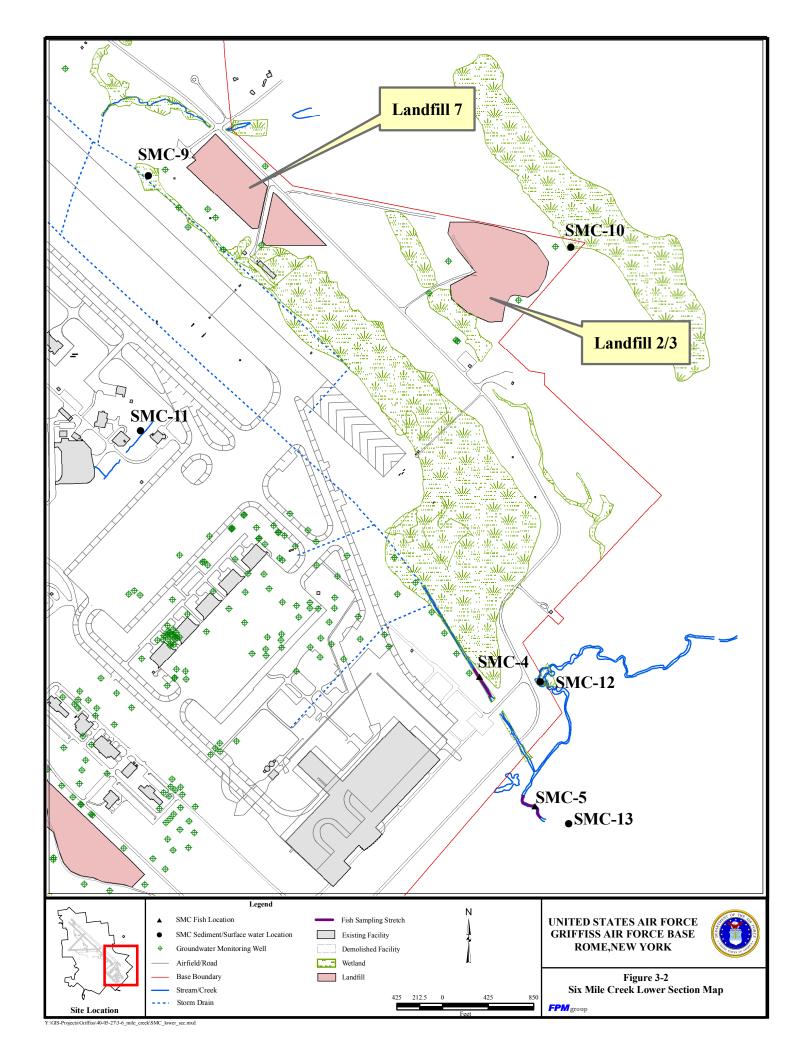




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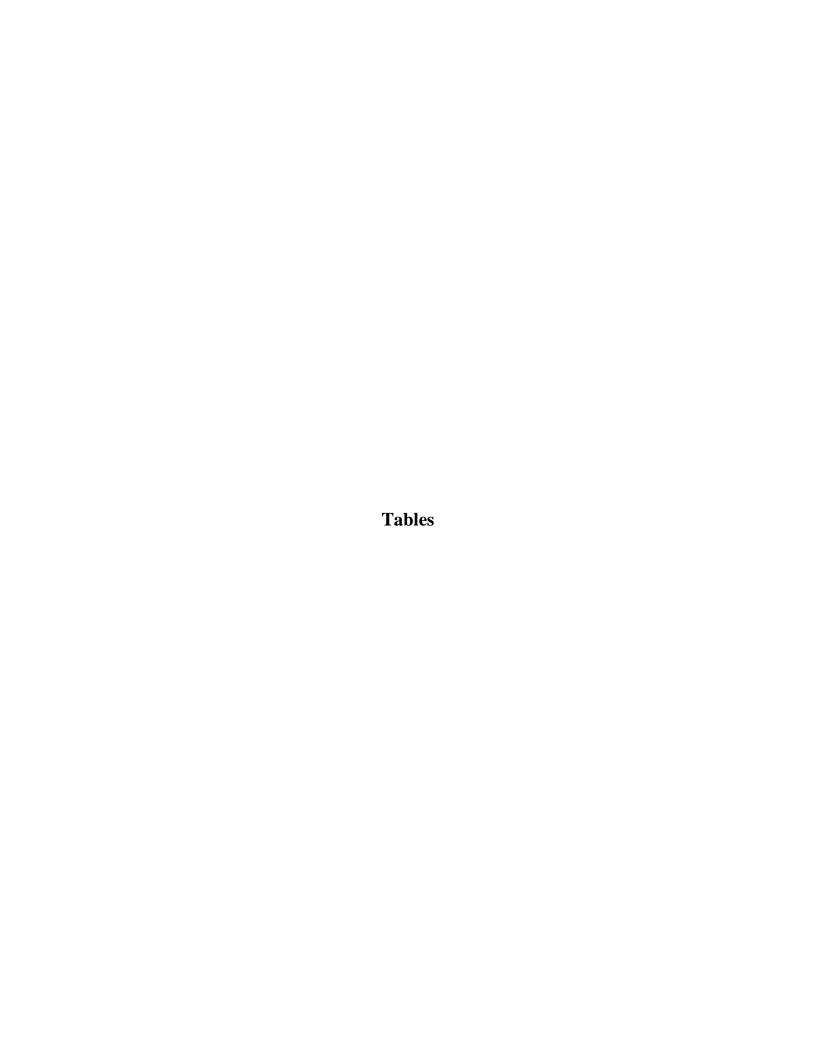


Table 3-1
Six Mile Creek LTM Field Activities Rationale

Matrix	Analysis	Frequency	Rationale
Sediment/ Surface Water	VOCs, SVOCs, metals, pesticides/ PCBs.	Annually ¹	Monitoring of contaminant migration and degradation in Six Mile Creek and adjacent potential source tributaries/ sites. Frequency based on relatively low flow regime and limited sediment transport.
Fish Tissue	Pesticides/PCBs, cadmium and mercury, % lipid.	Every three years ²	Monitoring of fish for pesticides/PCBs, and cadmium and mercury is proposed to identify potential bioaccumulation of contaminants of concern.
Macroinvertebrate Organisms		Every three years ²	The quality of the benthic macroinvertebrate community in SMC will be evaluated applying NYSDEC-approved protocols.

Notes:

¹ An annual frequency for sediment sampling is commensurate with the rate at which changes in sediment quality are expected; that is, insofar as the sources of contamination are remediated. Frequent changes in sediment quality are not expected. Surface water samples are planned for collection at the same rate as sediments.

² A three-year frequency for fish tissue analysis and qualitative benthic macroinvertebrate community evaluation is commensurate with recommendations from NYSDEC personnel.

Table 3-2
Six Mile Creek Sampling Locations and Analyses

Location Number	Location within Six Mile Creek	Detailed Location Description	Sample Matrix	No. of samples per location	Analyses performed per sample	Total No. of Analyses
1	On the northern		Sediment	1	Full suite ¹	5
		downstream of the entrance point of SMC at Butternut	Surface water	1	Full suite ¹	5
		Creek.	Fish Tissue	10 ²	Fish suite ³	40
2	Around the	Appr. 3000 ft	Sediment	1	Full suite ¹	5
	the upper	downstream of the entrance point of SMC on the Base.	Surface water	1	Full suite ¹	5
	section of Sivic.	Sivic on the base.	Fish Tissue	10 ²	Fish suite ³	40
3	Upstream of the	* *	Sediment	1	Full suite ¹	5
	entrance to the culvert of SMC.	upstream of the start of the culvert.	Surface water	1	Full suite ¹	5
			Fish Tissue	10 ²	Fish suite ³	40
4	Upstream of	Appr. 300 ft	Sediment	1	Full suite ¹	5
	Perimeter Road.	upstream of the Base boundary in SMC.	Surface water	1	Full suite ¹	5
			Fish Tissue	10 ²	Fish suite ³	40
5	Downstream of	* *	Sediment	1	Full suite ¹	5
confluence of SMC and Slate Creek.		downstream of Base boundary.	Surface water	1	Full suite ¹	5
	CICCK.		Fish Tissue	10 ²	Fish suite ³	40
6	Downstream of		Sediment	1	Full suite ¹	5
	the wetlands south of LF 1.	downstream of the underpass under Perimeter Road.	Surface water	1	Full suite ¹	5

Notes:

¹ Full suite of analyses includes VOCs (SW 8260), SVOCs (SW 8270), metals (SW 6010B), pesticides (SW 8081) and PCBs (SW 8082).

² Fish samples are collected from the largest specimens available. A combined number of ten samples are collected from both the bottom feeder and predatory species, depending on availability. Fillet samples (5) analysis results are used for human evaluation. The offal samples (5) from the filleted fish are also analyzed so that results can be mathematically combined and used for ecological evaluation. If no fillets are available, 5 'whole fish' (beheaded and eviscerated) are collected and their offal is analyzed also. If no fillets or whole fish are available, 10 composite samples were collected.

³ Fish suite of analyses includes pesticides/PCBs (SW8540C), cadmium and mercury (SW 6010B/ SW7470) and % lipid.

Table 3-2 (Continued)
Six Mile Creek Sampling Locations and Analyses

Location Number	Location within Six Mile Creek	Detailed Location Description	Sample Matrix	No. of samples per location	Analyses performed per sample	Total No. of Analyses
7	In the tributary	Appr. 750 ft	Sediment	1	Full suite ¹	5
	northwest of the Weapons Storage Area.	upstream in the tributary south of Landfill 1.	Surface water	1	Full suite ¹	5
8	In the wetlands	Appr. 500 ft	Sediment	1	Full suite ¹	5
	east of Landfill 1.	southeast of Landfill 1.	Surface water	1	Full suite ¹	5
9	In wetlands	Appr. 750 ft	Sediment	1	Full suite ¹	5
	southwest of Landfill 7.	southwest of Perimeter Road at the northern edge of the wetland.	Surface water	1	Full suite ¹	5
10	In wetlands	Appr. 500 ft	Sediment	1	Full suite ¹	5
	northeast of Landfill 2/3.	northeast of the Landfill 2/3 boundary.	Surface water	1	Full suite ¹	5
11	In Rainbow	Appr. 50 ft	Sediment	1	Full suite ¹	5
	Creek, at the beginning of the culvert.	southwest of the Rainbow Creek culvert.	Surface water	1	Full suite ¹	5
12	In Slate Creek.	Appr. 1000 ft	Sediment	1	Full suite ¹	5
		upstream of the confluence of SMC and Slate Creek.	Surface water	1	Full suite ¹	5

Notes:

1 Full suite of analyses includes VOCs (SW 8260), SVOCs (SW 8270), metals (SW 6010B), pesticides (SW 8081) and PCBs (SW 8082).

3 Fish suite of analyses includes pesticides/PCBs (SW8540C), cadmium and mercury (SW 6010B/ SW7470) and % lipid.

² Fish samples are collected from the largest specimens available. A combined number of ten samples are collected from both the bottom feeder and predatory species, depending on availability. Fillet samples (5) analysis results are used for human evaluation. The offal samples (5) from the filleted fish are also analyzed so that results can be mathematically combined and used for ecological evaluation. If no fillets are available, 5 'whole fish' (beheaded and eviscerated) are collected and their offal is analyzed also. If no fillets or whole fish are available, 10 composite samples were collected.

Table 3-3
Six Mile Creek Sampling Locations
Longitude and Latitude

Sample Location ID	Longitude	Latitude
	(degrees, minutes, seconds)	(degrees, minutes, seconds)
1	75° 24' 53"	43° 14' 50"
2	75° 24' 41"	43° 14' 32"
3	75° 24' 25"	43° 14' 09"
4	75° 23' 07"	43° 12' 54"
5	75° 23' 01"	43° 12' 46"
6	75° 24' 33"	43° 14' 17"
7	75° 24' 28"	43° 14' 26"
8	75° 24' 20"	43° 14' 33"
9	75° 23' 48"	43° 13' 41"
10	75° 22' 55"	43° 13' 34"
11	75° 23' 50"	43° 13' 17"
12	75° 23' 00"	43° 12' 54"

Table 4-1 Six Mile Creek Surface Water Sampling Results

Sample Location NYS SMC-1 SMC-1R SMC-1								
					-			
Surface	RI Results	SMCSW0101A	SMCSW0101E	SMCSW0101F				
Water	(SMCSW-2)	A	A	A				
Standards 1	5/94 - 11/94	10/20/2004	11/24/2008	10/1/2009				
(ppb)	0-1	0-1	0-1	0-1				
5*	U	U	U	U				
5	U	U	U	U				
3	U	U	U	U				
5	U	U	U	U				
3	U	U	0.17 F	U				
50	U	U	U	1.15 F				
1	U	U	U	U				
5	U	U	U	U				
7	U	U	U	U				
	U	U	U	U				
5	U	U	U	U				
10	U	U	U	U				
5*	U	U	U	U				
	U	U	U	U				
5	U	U	U					
10	U	U	U	U				
5	U	U	U	U				
5	0.093 J	U	U	U				
	Water Standards 1 (ppb) 5* 5 3 5 3 5 5 7 5 10 5 * 5 10 5 *	Surface Water Standards (SMCSW-2)	Surface Water Standards (SMCSW-2)	NYS SMC-1 SMC-1R	NYS SINC-1 SMC-1R SINCSW0101E SMCSW0101F SMCS	NYS Surface RI Results (SMCSW-2) A		

For Notes, refer to the end of Table 4-1.

Table 4-1 Six Mile Creek Surface Water Sampling Results

Sample Location	NYS		SMC-4					
	Surface	RI Results	SMCSW0401A	SMCSW0401B		SMCSW0401D	SMCSW0401E	SMCSW0401F
Sample ID	Water	(SMCSW-13)	A	В	A	A	A	A
Date of Collection ²	Standards 1	5/94 - 11/94	10/20/2004	10/20/2005	10/17/2006	10/17/2007	11/24/2008	10/1/2009
Sample Depth (ft bgs)	(ppb)	0-1	0-1	0-1	0-1	0-1	0-1	0-1
VOCs (µg/L)								
1,1,1-trichloroethane	5*	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	U	U	U	0.220 F	0.130 F♦	0.7 F ♦	0.240 F◆
1,2-dichlorobenzene	3	U	U	U	U	U	0.27 F	U
1,3,5-trimethylbenzene	5	U	U	U	U	0.130 F♦	0.27 F	U
1,4-dichlorobenzene	3	U	U	U	U	U	U	U
acetone	50	U	U	4.6 F	2.13 F	4.21 F	1.28 F ♦	1.39 F♦
benzene	1	0.11 J	5.8	2.1	5.92	3.38 ♦	2.53 ♦	0.780 ♦
chlorobenzene	5	U	0.28 F	U	U	U	0.19 F	0.230 F
chloroform	7	U	U	U	U	U	U	U
chloromethane		U	U	U	U	U	U	U
ethylbenzene	5	U	U	U	0.410 F	0,110 F ♦	0.24 F	U
methyl tert-butyl ether	10	U	1.2 F	U	1.28 F	U	0.53 F	0.230 F♦
methylene chloride	5*	U	U	U	0.140 F	U	U	U
methyl ethyl ketone (2-butanone)		U	U	U	U	U	U	6.95 F♦
m,p,-xylene	5	U	U	U	0.890 F	0.340 FC	0.89 F	0.230 F◆
naphthalene	10	U	U	U	0.110 F	0.140 F♦	U	0.110 F◆
trichloroethylene (TCE)	5	U	U	U	U	U	U	U
toluene	5	U	U	U	U	U	U	U

For Notes, refer to the end of Table 4-1.

Table 4-1 Six Mile Creek Surface Water Sampling Results

Sample Location	NYS	SMC-5						
Sumpre Document	Surface	RI Results	SMCSW0501A	SMCSW0501B	SMCSW0501C	SMCSW0501D	SMCSW0501E	SMCSW0501F
Sample ID	Water	(SMCSW-14)	A	В	A	A	A	A
Date of Collection ²	Standards 1	5/94 - 11/94	10/20/2004	10/20/2005	10/17/2006	10/17/2007	11/24/2008	10/1/2009
Sample Depth (ft bgs)	(ppb)	0-1	0-1	0-1	0-1	0-1	0-1	0-1
VOCs (µg/L)								
1,1,1-trichloroethane	5*	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	U	U	U	0.310 F	0.300 F	0.530 F	0.160 F
1,2-dichlorobenzene	3	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	U	U	U	U	0.160 F	U	U
1,4-dichlorobenzene	3	U	U	U	U	U	U	U
acetone	50	U	U	4.3 F	U	U	1.46 F	3.01 F
benzene	1	0.091 J	3.8	3.0	3.61	2.01	1.21	0.67
chlorobenzene	5	U	U	U	U	U	U	0.120 F
chloroform	7	U	U	U	U	U	U	U
chloromethane		U	U	U	U	U	0.37 F	U
ethylbenzene	5	U	0.23 F	U	0.370 F	0.180 F	0.13 F	U
methyl tert-butyl ether	10	U	1.1 F	0.50 F	0.850 F	U	0.24 F	U
methylene chloride	5*	U	U	U	U	U	U	U
methyl ethyl ketone (2-butanone)		U	U	U	U	U	U	3.97 F
m,p,-xylene	5	U	0.64 F	U	0.770 F	0.460 F	0.27 F	U
naphthalene	10	U	U	U	0.160 F	0.150 F	U	U
trichloroethylene (TCE)	5	U	U	U	U	U	U	U
toluene	5	U	U	U	U	U	U	U

For Notes, refer to the end of Table 4-1.

Surface Water:

- B Result is a positive value, however, the analyte was detected in an associated blank above the RL.
- F The analyte was positively identified above the MDL, however, the concentration is below the RL.
- J The analyte was positively identified, but the quantitation is an estimation.
- M A matrix effect was present.
- NA not analyzed
- R The data was rejected because QA/QC criteria were not met during the analysis.
- U The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
- UJ The analyte was analyzed for, but not detected. The quantitation is an approximation.
- UM The analyte was analyzed for, but not detected. A matrix effect was present.
- ¹ The NYS Surface Water Standard for the protection of aquatic life from chronic effects is used if available and if lower than the surface water standard.
- ² The different analyses for the sample locations sampled in the 1993/4 RI were collected at different times between 5/1994 and 11/1994.
 - Indicates an exceedance of the NYS Surface Water Standards.

Table 4-2 Six Mile Creek Sediment Sampling Results

	,				Six N	Aile Creek Sedim		esults			
Sample Location	Most Stringent			SMC-1			SMC-1R		SMO	C-1	
Sample ID	Ecological Screening Value	RI Results (SMCSD-2)	SMCSD0101A A	В	SMCSD0101C A	SMCSD0101D A	SMCSD0101E A	A			
Date of Collection	(μg/Kg) ¹	5/17/1994	10/20/2004	11/30/2005	10/16/2006	10/17/2007	11/24/2008	10/1/2009			
Sample Depth (ft TOIC)	(μg/ K g)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5			
SVOCs (µg/Kg)											
2-methylnaphthalene	65	U	U	U	U		U	U			
acenaphthene	16	U	U	U	U	260 F	U	U			
anthracene	85	42 J	U	U	U		81 F	U			
benzo(a)anthracene	261	190 J	69 F	130 F	19 F	100 F	340 F	53 F			
benzo(a)pyrene	370	U	69 F	140 F	U	UM	250 F	48 F			
benzo(b)fluoranthene		150 J	U	160 F	31 F	UM	350 F	120 F			
benzo(k)fluoranthene	240	120 J	63 F	56 F	U	UM	130 F	29 F			
benzo(g,h,i)perylene	170	U	U	97 F	U	UM	170 F	U			
bis(2-ethylhexyl) phthalate	10453.8	U	U	U	U		U	U	ĺ		
benzyl butyl phthalate	50000	U	U	74 F	U	37 F	U	U			
chrysene	340	260 J	81 F	U	U	UM	320 F	56 F			
dibenz(a,h)anthracene	60	U	81 F	140 F	U	95 F	U	U			
dibenzofuran	2000	U	U	U	U	UM	U	U			
diethyl phthalate	7100	U	U	U	U	UM	U	U			
fluoranthene	600	440 J	160 F	340 F	29 F		710 F	110 F			
fluorene	35	U	U	U	U	210 F	410 F	U			
indeno(1,2,3-c,d)pyrene	200	130 J	U	U	U	UM	310 F	U			
naphthalene	13000	U	U	U	U	U	U	U			
phenanthrene	240	390 J	110 F	240 F	U	180 F	530 F	64 F			
pyrene	490	580 J	130 F	290 F	28 F	260 F	720	110 F			
PCBs (µg/Kg)											
Aroclor 1248	15.96 ³	-	U	U	U	U	UJ	U			
Aroclor 1254	15.96 ³	U	U	U	U	U	UJ	U			
Aroclor 1260	5	-	U	U	U	U	UJ	U			
Pesticides (µg/Kg)											
delta BHC	0.04	U	U	U	0.97 F	U	UJ	U			
gamma BHC (Lindane)	0.05	U	U	U	U	U	UJ	U			
alpha-Chlordane	0.05	U	U	U	U	U	UJ	U	Ì		
p,p'-DDD	2	U	U	U	U	U	UJ	U	Ì		
p,p'-DDE	2	U	U	U	0.31 F	U	UJ	U	Ì		
p,p'-DDT	1	UJ	U	U	0.34 F	UM	UJ	U			
aldrin	0.00	U	U	U	U	U	UJ	U		-	
dieldrin	0.02	U	U	U	U	U	UJ	0.90 F			
alpha endosulfan		U	U	U	U	U	UJ	U			
beta endosulfan		U	U	U	U	U	UJ	U		-	
endosulfan sulfate		U	U	U	U	U	UJ	U		-	
endosulfan II	3.6	U	U	U	U	U	UJ	U	Ì		
endrin	3	U	U	U	U	U	UJ	U			
endrin aldehyde	5*	U	U	U	U	U	UJ	U	İ		
heptachlor	0.04	U	U	U	U	U	UJ	U			
heptachlor epoxide	0.03	U	U	U	U	U	UJ	U	İ		
methoxychlor	31.44	U	4.7 F	U	U	U	UJ	U	İ		
For Notes refer to the end of Table 4-2		-									

For Notes, refer to the end of Table 4-2.

Table 4-2 Six Mile Creek Sediment Sampling Results

Comple I costion					SIX I	Mile Creek Sedim SM		esuits		
Sample Location	Most Stringent	DI D14 -	CMCCD0401 1	CMCCD0401B	CMCCD0401C		-	CMCCD0404E	I	I
Sample ID	Ecological Screening Value	RI Results (SMCSD-13)	SMCSD0401A A	SMCSD0401B B	SMCSD0401C A	A	SMCSD0401E A	A		
Date of Collection	(µg/Kg) 1	5/14/1994	10/20/2004	11/30/2005	10/17/2006	10/17/2007	11/24/2008	10/1/2009		
Sample Depth (ft TOIC)	(μg/Kg)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5		
SVOCs (µg/Kg)										
2-methylnaphthalene	65	U	180 F	U	120 F	290 F ♦	U	58 F♦		
acenaphthene	16	U	U	U	U	U	U	87 F♦		
anthracene	85	U	U	U	U	U	U	150 F♦		
benzo(a)anthracene	261	U	190 F	120 F	83 F	56 F ♦	100 F♦	630 F♦		
benzo(a)pyrene	370	U	420 F	120 F	100 F	U	90 F♦	680 F♦		
benzo(b)fluoranthene		U	460 F	180 F	230 F	U	150 F◆	1700 ♦		
benzo(k)fluoranthene	240	U	250 F	56 F	55 F	U	53 F ♦	650 F♦		
benzo(g,h,i)pervlene	170	U	220 F	110 F	45 F	U	100 F♦	240 F♦		
bis(2-ethylhexyl) phthalate	10453.8	240 J	U	200 F	60 F	90 F♦	93 F♦	37 F♦		
benzyl butyl phthalate	50000	U	U	U	U	850 F◆	U	U		
chrysene	340	U	270 F	150 F	110 F	57 F ♦	120 F◆	1000 ♦		
dibenz(a,h)anthracene	60	U	120 F	U	U	U	U	78 F ♦		
dibenzofuran	2000	U	U	U	U	U	U	66 F♦		
diethyl phthalate	7100	U	U	U	35 F	U	U	U		
fluoranthene	600	U	280 F	220 F	140 F	110 F◆	210 F◆	790 F♦		
fluorene	35	U	U	U	U	U	U	100 F♦		
indeno(1,2,3-c,d)pyrene	200	U	220 F	89 F	U	UM	250 F♦	160 F♦		
naphthalene	13000	U	U	U	U	93 F ♦	110 F◆	92 F♦		
phenanthrene	240	U	130 F	120 F	80 F	68 F♦	130 F◆	740 F♦		
pyrene	490	U	220 F	180 F	190 F	110 F◆	200 F♦	830 F♦		
PCBs (µg/Kg)										
Aroclor 1248	15.96 ³	-	54	9.9 F	U	U	U	U		
Aroclor 1254	15.96 ³	U	61	52	67.1	120 J ♦	14.5 F ♦	72.7		
Aroclor 1260	5	-	U	19 F	U	U	U	U		
Pesticides (µg/Kg)										
delta BHC	0.04	U	U	U	U	U	UJ	U		
gamma BHC (Lindane)	0.05	U	U	U	U	U	UJ	U		
alpha-Chlordane	0.05	U	U	U	0.57 F	UM	UJ	U		
p,p'-DDD	2	U	U	U	1.1 F	0.82 F♦	UJ	1.5 F		
p,p'-DDE	2	U	U	U	U	UM	UJ	U		
p,p'-DDT	1	UJ	18 F	11	16 J	U	UJ	U		
aldrin	0.00	U	U	U	U	U	UJ	U		
dieldrin	0.02	57	U	U	4.6 F	1.6 F♦	1.8 FJ ◆	U		
alpha endosulfan		U	U	U	1.6 F	U	UJ	U		
beta endosulfan		U	U	U	5.4 J	U	UJ	U		
endosulfan sulfate		U	U	U	U	UM	UJ	U		
endosulfan II	3.6	U	U	U	U	2.1 F♦	0.83 F	U		
endrin	3	U	U	U	2.2 F	0.69 F	UJ	U		
endrin aldehyde	5*	U	U	U	1.4 F	U	UJ	U		
heptachlor	0.04	U	U	U	U	U	UJ	U		
heptachlor epoxide	0.03	U	U	U	4.8 J	UM	UJ	U		
methoxychlor	31.44	26 J	U	U	U	U	UJ	U		
For Notice and of Table 4.2	•				•		•		•	•

For Notes, refer to the end of Table 4-2.

Table 4-2 Six Mile Creek Sediment Sampling Results

Sample Location		1			SIX I	Aile Creek Sedin	C-5	csuits		
Sample Location	Most Stringent	DI D 14 -	CMCCDOFOLA	CMCCD0501D	SMCSD0501C		SMCSD0501E	CMCCDOFOIE	I	
Sample ID	Ecological Screening Value	RI Results (SMCSD-14)	SMCSD0501A A	SMCSD0501B B	A	A	A	A		
Date of Collection	(µg/Kg) 1	5/14/1994	10/20/2004	11/30/2005	10/17/2006	10/17/2007	11/24/2008	10/1/2009		
Sample Depth (ft TOIC)	(μg/Kg)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5		
SVOCs (µg/Kg)										
2-methylnaphthalene	65	210 J	84 F	U	U	62 F	U	U		
acenaphthene	16	U	U	U	U	U	U	U		
anthracene	85	U	U	U	26 F	63 F	U	U		
benzo(a)anthracene	261	U	U	U	68 F	26 F	U	U		
benzo(a)pyrene	370	U	U	U	63 F	36 F	U	U		
benzo(b)fluoranthene		55 J	U	71 F	140 F	580 F	U	U		
benzo(k)fluoranthene	240	23 J	U	73 F	34 F	280 F	U	U		
benzo(g,h,i)perylene	170	U	U	U	U	U	U	U		
bis(2-ethylhexyl) phthalate	10453.8	960	U	95 F	U	110 F	69 F	20 F		
benzyl butyl phthalate	50000	U	U	U	U	43 F	U	U		
chrysene	340	U	U	U	65 F	300 F	U	U		
dibenz(a,h)anthracene	60	U	U	U	U	U	U	U		
dibenzofuran	2000	U	U	U	U	U	U	U		
diethyl phthalate	7100	U	U	U	27 F	U	U	U		
fluoranthene	600	88 J	U	77 F	140 F	550 F	U	25 F		
fluorene	35	U	U	U	U	33 F	U	U		
indeno(1,2,3-c,d)pyrene	200	U	U	U	U	46 F	U	U		
naphthalene	13000	U	U	U	U	U	U	U		
phenanthrene	240	U	U	37 F	110 F	350 F	U	19 F		
pyrene	490	U	U	64 F	U	520 F	U	27 F		
PCBs (µg/Kg)										
Aroclor 1248	15.96 ³	-	U	U	U	U	U	U		
Aroclor 1254	15.96 ³	84 J	24 F	U	U	92.6	U	U		
Aroclor 1260	5	-	U	U	19.4 F	U	U	U		
Pesticides (µg/Kg)										
delta BHC	0.04	U	U	U	U	U	UJ	U		
gamma BHC (Lindane)	0.05	U	U	U	U	U	UJ	U		
alpha-Chlordane	0.05	U	U	U	U	U	UJ	U		
p,p'-DDD	2	U	U	U	1.1 F	3.0 F	UJ	U		
p,p'-DDE	2	U	U	U	0.31 F	U	UJ	U		
p,p'-DDT	1	UJ	11 F	U	U	U	UJ	U		
aldrin	0.00	U	U	U	0.28 F	U	UJ	U		
dieldrin	0.02	U	U	4 F	1.3 F	U	UJ	U		
alpha endosulfan		U	U	U	U	U	UJ	U		
beta endosulfan		U	U	U	1.0 F	U	UJ	U		
endosulfan sulfate		U	U	U	U	U	UJ	U		
endosulfan II	3.6	U	U	U	U	11 J	UJ	U		
endrin	3	U	U	U	0.66 F	4.5 F	UJ	U		
endrin aldehyde	5*	U	U	U	0.52 F	U	UJ	U		
heptachlor	0.04	U	U	U	U	U	UJ	U		
heptachlor epoxide	0.03	U	U	U	U	U	UJ	U		
methoxychlor	31.44	UJ	U	U	U	U	UJ	U		
E N-4	•			•	•	•			•	

For Notes, refer to the end of Table 4-2.

Sediment:

- B Result is a positive value, however, the analyte was detected in an associated blank above the RL.
- F The analyte was positively identified above the MDL, however, the concentration is below the RL.
- J The analyte was positively identified, but the quantitation is an estimation.
- M A matrix effect was present.
- NA not analyzed
- R The data was rejected because QA/QC criteria were not met during the analysis.
- U The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
- UJ The analyte was analyzed for, but not detected. The quantitation is an approximation.
- UM The analyte was analyzed for, but not detected. A matrix effect was present.
- BHC hexachlorocyclohexane
- 1 This value is the most stringent criterion for ecological endpoints derived from Table 2-3a in the Final Three Mile Creek Feasibility Study Addendum (E&E, July 2002).
- 2 The most stringent criterion for metals have been derived from Table 2 in Technical Guidance for Screening Contaminated Sediments (NYSDEC, January 1999).
- This analyte was not sampled for in the 1993/4 RI.
- -- No most stringent ecological screening value is known for this compound.
 - Indicates an exceedance of the Most Stringent Ecological Screening Value.

Table 4-3 Six Mile Creek Proposed Future LTM Sampling

		Troposed ruture Er		
Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
SMC-1	Upgradient, FSS Location	Surface Water VOCs/SW8260	Annually for sediment and surface water.	The list of analytes is identical to locations 4 and 5 to allow results comparisons.
		Sediments SVOCs/SW8270, Pesticides/SW8081, PCBs/SW8082	Every three years for fish and benthic macroinvertebrates.	•
		Fish PCBs/SW8082, % lipid.		
SMC-2	Crossgradient, FSS Location	Fish PCBs/SW8082, % lipid.	Every three years for fish and benthic macroinvertebrates.	A third round of fish sampling is needed to confirm the absence of exceedances reported in the 2004 sampling round.
SMC-4	Downgradient, FSS Location	Surface Water	Annually for sediment	Surface water VOC exceedances
SMC-5	Downgradient, FSS Location	VOCs/SW8260	and surface water.	were reported in SMC-4 and 5.
		Sediments SVOCs/SW8270, Pesticides/SW8081, PCBs/SW8082	Every three years for fish and benthic macroinvertebrates.	Sediment samples at SMC-4 and -5 will be sampled for the identical analyses as SMC-11 to monitor potential downgradient contamination migration.
		Fish		
		PCBs/SW8082,		PCB exceedances were reported in
		% lipid.		all fish samples at both sampling
				locations.

Six Mile Creek Proposed Future LTM Sampling

Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
	Rec	ommended LTM Chan	ges	
	Rer	noved Sampling Locati	on	
SMC-11	Crossgradient, SS Location	Surface Water VOCs/SW8260		The sampling location has been eliminated as a result of the culverting of Rainbow Creek.
		Sediments SVOCs/SW8270, Pesticides/SW8081, PCBs/SW8082		_

Six Mile Creek Proposed Future LTM Sampling

Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
	Н	listorical LTM Change	S	
		October 2008		
	Ana	alysis/Frequency Chang	ges	
SMC-1R	Upgradient, FSS Location	Surface Water VOCs/SW8260 Sediments SVOCs/SW8270, Pesticides/SW8081, PCBs/SW8082 Fish PCBs/SW8082, % lipid.	Annually for sediment and surface water. Every three years for fish and benthic macroinvertebrates.	The list of analytes is identical to locations SMC-4 and SMC-5 to allow results comparisons.
SMC-2	Crossgradient, FSS Location	Fish PCBs/SW8082, % lipid.	Every three years for fish and benthic macroinvertebrates.	Little or no exceedances have been reported for these sampling locations and all are attributable to lab contaminants, background conditions or are minor exceedances related to localized conditions not influencing the creek. Fish sampling results did not show any exceedances, but need to be confirmed with one additional sampling round.

Six Mile Creek Proposed Future LTM Sampling

Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
	Ana	alysis/Frequency Chang	ges	
SMC-4 SMC-5	Downgradient, FSS Location Downgradient, FSS Location	Surface Water VOCs/SW8260	Annually for sediment and surface water.	Surface water VOC exceedances were reported in SMC-4 and 5.
		Sediments SVOCs/SW8270, Pesticides/SW8081, PCBs/SW8082 Fish PCBs/SW8082, % lipid.	Every three years for fish and benthic macroinvertebrates.	Sediment samples at SMC-4 and -5 will be sampled for the identical analyses as SMC-11 to monitor potential downgradient contamination migration. PCB exceedances were reported in all fish samples at both sampling locations.
	Ren	noved Sampling Location	ons	
SMC-3	Crossgradient, FSS Location	Surface Water and Sediment VOCs/SW8260, SVOCs/SW8270, Metals/SW6010, Pesticides/SW8081, PCBs/SW8082 Fish Cadmium/SW6010, Mercury/SW7471, Pesticides/SW8081, PCBs/SW8082,% lipid.	Annually for sediment and surface water. Every three years for fish and benthic macroinvertebrates.	Little or no exceedances have been reported for these sampling locations and all are attributable to lab contaminants, background conditions or are minor exceedances related to localized conditions not influencing the creek. Fish sampling results did not show any exceedances.

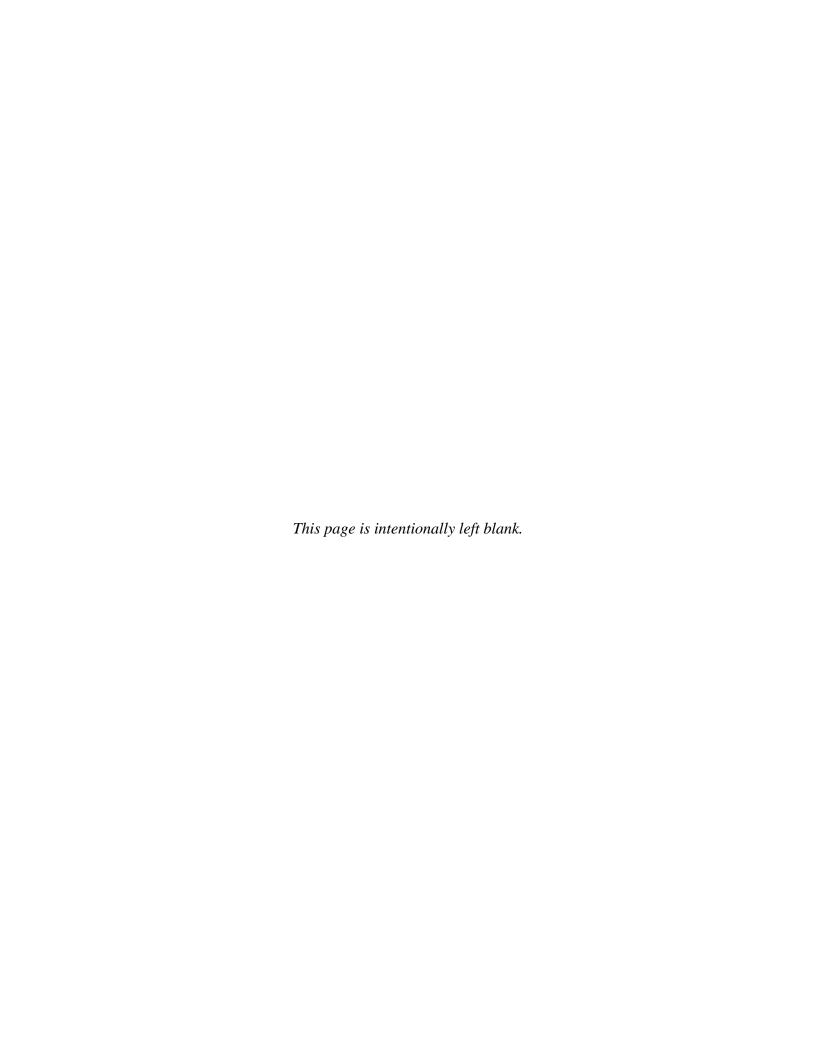
Six Mile Creek Proposed Future LTM Sampling

Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
	Ren	noved Sampling Location	ons	
SMC-6	SS Location	Surface Water and	Annually for sediment	Little or no exceedances have
SMC-7	SS Location	Sediment	and surface water.	been reported for these sampling
SMC-8	SS Location	VOCs/SW8260,		locations and all are attributable to
SMC-9	SS Location	SVOCs/SW8270,		lab contaminants, background
SMC-10	SS Location	Metals/SW6010,		conditions or are minor excee-
SMC-12	SS Location	Pesticides/SW8081,		dances related to localized con-
		PCBs/SW8082		ditions not influencing the creek.
SMCMI-13	Downgradient, MI Location	Benthic	Every three years for	The chemical analysis seems to
		Macroinvertebrates	benthic	indicate that poor benthic
		Cadmium/SW6010,	macroinvertebrates.	macroinvertebrate yields are the
		Mercury/SW7471,		result of poor habitat. No
		Pesticides/SW8081,		additional sample is needed.
		PCBs/SW8082,		Î
		% lipid.		
		March 2006		
	Add	itional Sampling Locati	ions	
SMCMI-13	Downgradient, MI Location	Qualitative benthic	Every three years for	An additional downgradient
	-	community evaluation	benthic	macroinvertebrate sampling
			macroinvertebrates	location was propsed by the
				NYSDEC. Sampling location was
				stituated at the exact location
				NYSDEC sampled in 1996 and
				2000.

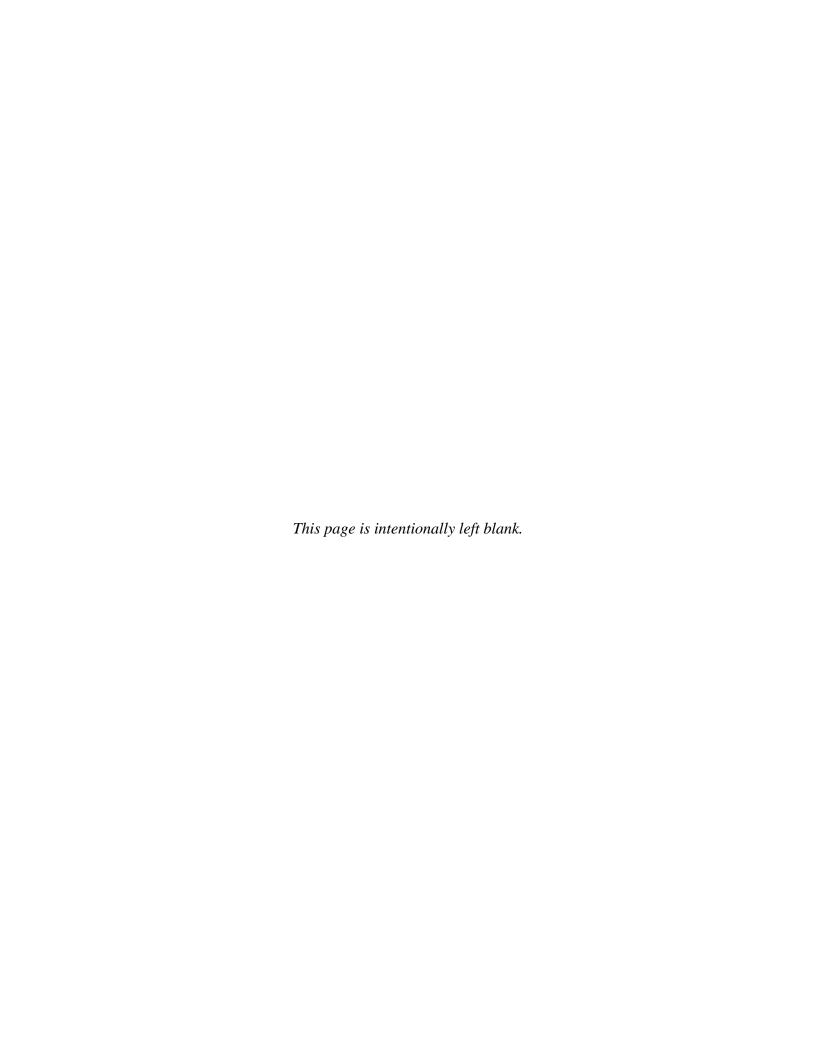
Notes:

FSS = Fish, sediment and surface water.

SS = Sediment and surface water.



Appendix A
Daily Chemical Quality Control Reports



Daily Chemical Quality Control Report

Project/Delivery Order Number: F41624-03-D-8601-0027 Date: 10/01/09

Project Name/Site Number: Griffiss AFB Creek Sites sampling (Six Mile Creek and Three Mile

Creek).

Weather conditions: Temperature: 46 Average barometric reading: 30.0

Wind direction and speed: North-northwest 1.0 mph

Significant wind changes: None.

General description of tasks completed: Surface water sampling at Site Six Mile Creek (SMCFSS-1, -4, and -5) and Site Three Mile Creek (TMCFSS-1, -2, -3, -4, -5, TMCSS-6, -7, and -8). Sediment sampling at Site Six Mile Creek (SMCFSS-1, -4, and -5) and Site Three Mile Creek (TMCFSS-1, -2, -3, -4, -5, TMCSS-6, -7, and -8)

Explain any departures from the SAP or deviations from approved procedures during the day's field activities: None.

Explain any technical problems encountered in the field or field equipment/field analytical instrument malfunction: None.

Corrective actions taken or instructions obtained from AFCEE personnel: No corrective actions necessary.

Sampling shipment completed: √ Yes □ No LSL Courier.

DCQCR Prepared by: Niels van Hoesel, FOM

Date: 2 October 2009

CQCC Signature:

Concordia van Hoerel Date:

ATTACHMENTS:

Checklist	Daily Chemical Quality Control Report Attachments
V.	✓ Field sampling forms
	✓ Equipment Calibration Log
\vee	✓ Copies of COCs
,	✓ SDG Table (See accompanying COCs)
	✓ Daily Health and Safety Meeting Form

WELL PURGING & SAMPLING FORM

Project: _	40-05-	27		_	San	npled by:	L 80	M MC		_
_	and Site Coo	•	EID)	:	54	C				_
	(LOCID):					ell Diamete	r (SDIAM	<u>):</u>		-
	GDATE):			_		eather:	•			
CASING VOLU	JME INFORMAT	TION:								
Casing ID (inch)		1.0	1.5	20	2.2	3.0 4.0	4.3 5.		7.0	
Unit Casing Volun	me (A) (gal/ft)	0.04	0.09	0.16_	0.2	0.37 0.65	0.75 1.	0 1.5	2.0	2.6
PURGING INFO	ORMATION:						<u> </u>	A A		
Measured Well	Depth (B) (TOT	DEPTH	<u> </u>		ft		c d			
Measured Water	r Level Depth (C)) (STATD	EP)			ft.	$\sim \frac{1}{\lambda}$	B		
Length of Static	: Water Column	(B) =	- -	(C)	= (D)	ft. H₂C		ELEVA (MPEI		
	X	(2)	,	(0)	(2)		D			
Casing Water V		x	(D)	_=_	gal	:		♥		
	1	(A)	(D)				STATIC ELEVATION	-	,	
	. / .							3		
Minimum Purge	e∛olume =	ga	ıl (3 well	volume	es)	_			MEAN — SEA	
Minimum Purge	e Volume =	ga	l (3 well	volum	es)	-			MEAN — SEA LEVEL	
	,					- 6 10-	1-09	V	- SEA	
Purge Dat	ze and Meth	od:	2m/	Sec	d Gra	6 10-	1-09 substr	ata is	SEA LEVEL	u/ Sand
Purge Dat	,	od:	2m/	Sec	d Gra	6 10-	1-09 substi	ate is	SEA LEVEL	u/ Sand
Purge Dat Physical A	ze and Meth	od: _S	nents:	Sec	d Gran	o odor	1-09 substi	ate is	SEA LEVEL	u/ Sand
Purge Dat Physical A FIELD M Allowable	te and Meth Appearance EASUREM e Range:	nod: /Comm	nents: ± 0.	<u>Sec</u>	lear, n. ±5%	±1°C	substi		SEA LEVEL	
Purge Dat Physical A FIELD M	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents:		t Granter, No. ± 5% EC	±1°C Temp.	Subs /	D.O.	SEA LEVEL	
Purge Dat Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM e Range:	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
Purge Dat Physical A FIELD M Allowable	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0.	Sec	t Granter, No. ± 5% EC	±1°C Temp.	Turbidity (NTU)	D.O.	SEA LEVEL)
Purge Dat Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
Purge Dat Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
Purge Dat Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
Purge Dat Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
Purge Dat Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
Purge Dat Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
Physical A FIELD M Allowable Time	te and Meth Appearance EASUREM Range: Volum	nod: S Comm MENTS	nents: ± 0. pH	Sec	± 5% EC (mS/cm)	±1°C Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe²⁺, CH₄, H₂S) parameters should be sampled first.

WELL PURGING & SAMPLING FORM

Project: 40-05-2'	7	San	npled by:	DB JL	MC	
Location and Site Code (SIT		52		<u> </u>		
Well No. (LOCID): SMCS	D-13 (SM	<u>પ્ટ-</u> મ) _{We}	ll Diamete	er (SDIAM)):	
Date (LOGDATE):/) -1-09	7	ather:	cloudy	40'	
CASING VOLUME INFORMATION:						
Casing ID (inch) 1.0	1.5 2.0	2,2	3.0 4.0	4.3 5.0		7,0
Unit Casing Volume (A) (gal/ft) 0.04	0.09 0.16	0.2	0.37 0.65	0.75 1.0	1.5	2.0 2.6
PURGING INFORMATION:	/			<u> </u>	A A	
Measured Well Depth (B) (TOTDEPTH)		ft		¢	T	
Measured Water Level Depth (C) (STATD	EP)	f	1. ~	\sim	B	
Length of Static Water Column (D) = (B)	(C)	_=(D)	ft.		ELEVATI (MPELE	
Casing Water Volume (E)	(D) =	gal		STATIC ELEVATION	<u> </u>	
Minimum Purge Volume =g	ul (well volume	es)	_	LEEVATION		MEAN — SEA LEVEL
Purge Date and Method:	SH/Se	of Grat	, /	8-1-09	7	
Purge Date and Method: Physical Appearance/Comm	nents: Cl	ear, no	odis,	subst	at is	sitty, sand
FIELD MEASUREMENTS			•			· · /
Allowable Range:	± 0.1	± 5%	±1°C			
Time Volume	pН	EC	Temp.	Turbidity	D.O.	ORP
Removed (gal)		(mS/cm)	(F or C)	(NTU)	(mg/L)	(mV)
1522 —	8.08	35.8	17.26	0.0	12.12	80
	1					

Sample Time: 1524 Sample ID: SMCSW0401 FNFC

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe²⁺, CH₄, H₂S) parameters should be sampled first.

WELL PURGING & SAMPLING FORM

	40-05-			Sar	npled by:	<u> </u>	W MC	
Location a	nd Site Code ((SITEID):		SMC			
Well No. (LOCID): <u>5</u>	W C20	5-1L	Į W€	ll Diamete	er (SDIAM)	:	
Date (LO	GDATE):	10-1-	09/	We	eather:	cloudy		
			7			/		
<u>CASING VOLU</u>	ME INFORMATION	<u>4:</u>						
asing ID (inch)	1,0		2.0	2.2	3.0 4.0	4.3 5.0		7.0
Jnit Casi <u>ng Volun</u>	ne (A) (gal/ft) 0.04	4 0 09	0.16	0.2	0.37 0.65	0.751.0	1.5	2.0 2.6
PURGING INFO	ORMATION:						A A	
	Depth (R) (TOTDEP	THT VHT		ſt	,	Ç	† †	
	Level Depth (C) (SI	/			ft.	\downarrow		
	Water Column (D) =	/	W.	=	ft.	↑ ↑	B ELEVAT	
		(B)	(C)	(D)	Н₁О		(MPELI	:V)
Casing Water Ve	olume (E) =	x	=	gal			₩	
	(A)	(D)			L	STATIC ELEVATION		
Minimum Purge	/ : Volume =	gal (3 we	ll volume	s)	_	ELEVATION	V	MEAN ── SEA
				•				LEVEL
Purge Dat	e and Method:	: _\	54	/Sed	Grah	10-	1-09	
Physical A	Appearance/Co	mments				10 odm	substr	nte is ro
1 11,5010011			Sec	mt:	•	ı	sod.	nixed in
		TOTAL						
FIELD M	EASUREME).1	± 5%	±1°C			
	EASUREME	± ().1 H	± 5% EC	±1°C	Turbidity	D.O.	ORP
FIELD M Allowable Time	EASUREME? Range:	± (gal)	Н (EC (mS/cm)	Temp. (F or C)	(NTU)	(mg/L)	(mV)
FIELD M Allowable	EASUREMER Range: Volume	± (Н (EC	Temp.	(NTU)		
FIELD M Allowable Time	EASUREMER Range: Volume	± (gal)	Н (EC (mS/cm)	Temp. (F or C)	(NTU)	(mg/L)	(mV)
FIELD M Allowable Time	EASUREMER Range: Volume	± (gal)	Н (EC (mS/cm)	Temp. (F or C)	(NTU)	(mg/L)	(mV)
FIELD M Allowable Time	EASUREMER Range: Volume	± (gal)	Н (EC (mS/cm)	Temp. (F or C)	(NTU)	(mg/L)	(mV)
FIELD M Allowable Time	EASUREMER Range: Volume	± (gal)	Н (EC (mS/cm)	Temp. (F or C)	(NTU)	(mg/L)	(mV)
FIELD M Allowable Time	EASUREMER Range: Volume	± (gal)	Н (EC (mS/cm)	Temp. (F or C)	(NTU)	(mg/L)	(mV)
FIELD M Allowable Time	EASUREMER Range: Volume	± (gal)	Н (EC (mS/cm)	Temp. (F or C)	(NTU)	(mg/L)	(mV)

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe²⁺, CH₄, H₂S) parameters should be sampled first.

Equipment Calibration Log

Instrument Name:	Horiba	#1	
Model Number:			

Date	First Standard Concentration	First Standard Reading	Second Standard Concentration	Second Standard Reading	Comments
63-07	4.00	4,00			
6-2409	4.00	4.00			
9-14	4.00	3.79			
9-15	4.00	3.99			
9-16	4.00	3.97	4.00	3.97	
191	4.00	398	4.00	3.99	
		_			
			_		
				-	
	_				

AFCEE CHAIN OF CUSTODY RECORD

COC#: _1_ SDG#: _234_ Cooler ID#: _A_

Ship to: Pamela Titus	Project Name: Griffiss AFB SMC LTM	Send Results to: Niels van Hoesel
Life Science Laboratories, Inc.	Sampler Name: Niels van Hoesel	FPM Group Ltd.
5000 Brittonfield Pkwy, Suite 200	` '	153 Brooks Road
East Syracuse, NY 13057 Tel: (315)437-0200	12 harry	Rome, NY 13441
Carrier: LSL courier.	Sampler Signature: WWW.	Phone: (315) 336-7721 Ext. 205

	Comments				
ested	SVOCs, PCBs, Pesticides ^{note 2} 8 oz glass jar	1	1	-	-
Analyses requested	VOCs note 1 40 mL vial		1	1	ı
Analys	VOCs ^{note 1} 4 oz glass jar	,	,	-	ι
	# Of Containers	-	1	-	-
	2BD/2ED	0/0.5	0/0.5	0/0.5	0/0.5
	2¥CODE	z	z	FD	z
	ZWCODE	G	G	G	G
	XIATAM	SE	SE	SE	SE
	Time	1554	1526	1526	1/01
	Date 2009	10/1	1/01	1/01	10/1
	LocID	RV-SMCFSS-1	SMCSD-13	SMCSD-13	SMCSD-14
	Field Sample ID	SMCSD0101FA	SMCSD0401FA	SMCSD0401FC	SMCSD0501FA

Date: #2 Released by: (Sig) Mufgletter Time: Company Name: FPM Group Ltd Date: 9/25/09 #2 Received by: (Sig) # 11 March Marc	Date: #2 Released by: (Sig) Mufalat Date: 10/2/09	Special Instructions/Comments: Parameter List: (According to AFCEE QAPP 4.0) Note 1: VOCs: Method SW8260 for AFCEE QAPP 4.0 List. Note 2: SVOCs: Method SW8270 for AFCEE QAPP 4.0 List, PCBs: Method SW8082 for AFCEE QAPP 4.0 List, Pesticides: Method SW8081 for AFCEE QAPP 4.0 List and Mercury: Method SW7471.
	Time: Company Name: FPM Grouf Ltd Date: 9/25/09 #2 Received by: (Sig.) B. M. Dandley.	Surger States
Date: 9/25/09 #2 Received by: (Sig) R // Pro-Mark	, a / war	Date: #2 Released by: (Sig.) Mulgitude

Tricker of (off)	Cane.	"Z (Nelsassa by. (DIB) Margaret	Date: 10/2/09	Date: 10/2/09 #3 Nethand 07: (31g)	Lar
Сотралу Name:	Тіте:	Company Name: FPM Group Ltd	Time: 14:40 Company Name:	Company Name:	Tim
#1 Received by: (Sig) Niels van Hoesel	Date: 9/25/09	#2 Received by: (Sig) Bull Deraldyn-	Date: 62-09	#3 Received by: (Sig)	Dat
Company Name: FPM Group Ltd	Time:	Company Name: Life Science, Calis	Time: /445 Company Name:	Company Name:	Tim
MATRIX	I S	SMCODE	SACODE		
WG = Ground water	B	B = Bailer	N = Normal Sample		
WQ = Water Quality Control Matrix		$G \approx Grab$ (only for EB),	AB = Ambient Blank	*	
SO = Soil		NA = Not Applicable (only for AB/TB)	TB = Trip Blank		
WS = Surface water	PP	PP = Peristaltic Pump	EB = Equipment Blank	unk	
SE = Sediment	31	BP = Bladder Pump	FD = Field Duplicate	8	

CHAIN OF CUSTODY RECORD AFCEE

Phone: (315) 336-7721 Ext. 205 153 Brooks Road Rome, NY 13441 Send Results to: Niels van Hoesel FPM Group Ltd. Project Name: Griffiss AFB SMC LTM Sampler Name: Niels van Hoesel Sampler Signature: Tel: (315)437-0200 5000 Brittonfield Pkwy, Suite 200 East Syracuse, NY 13057 Te Life Science Laboratories, Inc. Ship to: Pamela Titus Carrier: LSL courier.

COC#: _1_ SDG#: _233_ Cooler ID#: _A_

- 1					_
	Comments				
uested	Metals ^{note 5} 250 mL poly bottle HNO3	-	-	-	
Analyses requested	Pesticides ^{note 4} l L amber bottle	_	_	-	,
Anal	PCBs note 3	ı	-	1	1
	SAOCs note 2	-	-	•	1
	VOCs ^{note 1} 40 mL Vials (HCl)	3	3	3	3
	# of Containers	3	3	3	3
	SBD/SED	0/0	0/0	0/0	0/0
	SACODE	Z	Z	FD	z
	2WCODE	ŋ	Ð	g	ß
	XIATAM	MS	WS	WS	WS
	Time	1552	1524	1524	1458
	Date 2008	1/01	1/01	10/1	1/01
	LocID	RV-SMCFSS-1	SMCSD-13	SMCSD-13	SMCSD-14
	Field Sample ID	SMCSW0101FA	SMCSW0401FA	SMCSW0401FC	SMCSW0501FA

Cooler temperature:						1		Date:	Time:	Date:	Time:
Coole								#3 Released by: (Sig)	Company Name:	#3 Received by: (Sig)	Company Name:
							,	Date: 10/2/09	Time: 14,40	Date: 10-2-09	Time: 1445 Company Name:
	ding to AFCEE QAPP 4.0)				++	and Mercury: Method SW7470.	, /	#2 Released by: (Sig) found for	Company Name: FPM Group Ltd	#2 Received by: (Sig) B. R. Oord Am	
oratory:	neter List: (Accor	E QAPP 4.0 List.	EE QAPP 4.0 List.	E QAPP 4.0 List.	PCEE QAPP 4.0 Lis	CEE QAPP 4.0 List	•	Date:	Time:	Date: 10/1/09	Тіте:
Sample Condition Upon Receipt at Laboratory:	Special Instructions/Comments: Parameter List: (According to AFCEE QAPP 4.0)	Note 1: VOCs: Method SW8260 for AFCEE QAPP 4.0 List.	Note 2: SVOCs: Method SW8270 for AFCEE QAPP 4.0 List.	Note 3: PCBs: Method SW8082 for AFCEE QAPP 4.0 List.	Note 4: Pesticides: Method SW8081 for AFCEE QAPP 4.0 List	Note 5: Metals: Method SW6010B for AFCEE QAPP 4.0 List and Mercury: Method SW7470.		#1 Released by: (Sig)	Сотралу Name:	#1 Received by: (Sig) Niels van Hoesel	Company Name: FPM Group Ltd

MATRIX WG = Ground water	WQ = Water Quality Control Matrix	SO = Soil	WS = Surface water
$\frac{MATRIX}{WG = Gro}$	WQ = Wat	SO = Soil	WS = Surf

G = Grab (only for EB).

NA = Not Applicable (only for AB/TB)

PP = Peristaltic Pump SMCODE B = Bailer

SACODE N = Normal Sample AB = Ambient Blank TB = Trip Blank EB = Equipment Blank

BP = Bladder Pump SP = Submersible Pump SS = Split Spoon

FD = Field Duplicate

MS = Matrix Spike

SD = Matrix Spike Duplicate

AFCEE CHAIN OF CUSTODY RECORD

COC#: _2_ SDG#: _234_ Cooler ID#: _A_

Ship to: Pamela Titus	Project Name: Griffiss AFB TMC LTM	Send Results to: Niels van Hoesel
Life Science Laboratories, Inc.	Sampler Name: Niels van Hoesel	FPM Group Ltd.
5000 Brittonfield Pkwy, Suite 200		153 Brooks Road
East Syracuse, NY 13057 Tel: (315)437-0200	11.11	Rome, NY 13441
Carrier: LSL courier.	Sampler Signature: /////////	Phone: (315) 336-7721 Ext. 205

Vial 1463: 5.3 gr., Vial 1464: 5.3 gr., Vial 1465: 5.4 gr. Vial 1451: 5.8 gr., Vial 1452: 6.3 gr., Vial 1453: 5.1 gr. Vial 1454: 4.8 gr., Vial 1455: 4.9 gr., Vial 1456: 5.0 gr. Vial 1460: 4.9 gr., Vial 1462: 6.4 gr., Vial 1461: 5.7 gr. Vial 1472: 5.1 gr., Vial 1474: 4.8 gr., Vial 1473: 5.0 gr. Vial 1478: 5.6 gr., Vial 1479: 5.0 gr., Vial 1480: 5.0 gr. Vial 1457: 5.1 gr., Vial 1458: 5.7 gr., Vial 1459: 6.0 gr. Vial 1475: 5.5 gr., Vial 1476: 4.9 gr., Vial 1477: 4.9 Comments 8 oz glass jar Analyses requested SVOCs, PCBs, Pest., mercury note 2.3 metals, mercury 40 mL vial VOCs note 1 4 oz glass jar AOC² note 1 # of Containers 0/0.5 0/0.5 0/0.5 0/0.5 0/0.5 0/0.5 0/0.5 0/0.5 2BD/2ED 1 **SYCODE** Z Z Z Z Z Z Z Z Ö G **2WCODE** Ö Ö Ö Ö Ö Ö SE SE SE SE SE SE SE**MATRIX** Time 1156 1410 0957 1120 1024 1054 1138 1350 Date 2009 10/1 10/1 10/1 10/1 10/1 10/1 10/1 10/1 **RV-TMCFSS-4 RV-TMCFSS-5 RV-TMCSS-8 RV-TMCSS-7** TMCSW-902 TMCSW-903 TMCSW-13 TMCSW-14 LocID Field Sample ID TMCSD0101DA TMCSD0201DA TMCSD0401DA TMCSD0601DA TMCSD0801DA TMCSD0301DA TMCSD0501DA FMCSD0701DA

			XI.			Date:
Cooler temperature:			ethod SW8081 for AFCEE QAPP 4.0 Lis			Musper Date: 10/2/09 #3 Released by: (Sig)
			List, Pesticides: M			Date: 10/2/09
	(0.1		or AFCEE QAPP 4.0	77471.	, ,	Jacohnsy
	ling to AFCEE QAPP 4.0)		PCBs: Method SW8082 fo	and Mercury: Method SW		#2 Released by: (Sig)
oratory:	eter List: (Accord	E QAPP 4.0 List.	EE QAPP 4.0 List, 1	CEE QAPP 4.0 List		Date:
Sample Condition Upon Receipt at Laboratory:	Special Instructions/Comments: Parameter List: (According to	Note 1: VOCs: Method SW8260 for AFCEE QAPP 4.0 List.	Note 2: SVOCs: Method SW8270 for AFCEE QAPP 4.0 List, PCBs: Method SW8082 for AFCEE QAPP 4.0 List, Pesticides: Method SW8081 for AFCEE QAPP 4.0 List,	Note 3: Metals: Method SW6010B for AFCEE QAPP 4.0 List and Mercury: Method SW7471.		#1 Released by: (Sig)

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	mount	Date: 10/2/09	Monday Date: 10/2/09 #3 Released by. (Sig)	Date:
Company Name;	Time:	Company Name: FPIN Group Ltd	oup Ltd	Time: /4,40 Company Name:	Company Name:	Тіте:
#1 Received by: (Sig) Niels van Hoesel	Date: 9/25/09	#2 Received by: (Sig) BLL Datelon Date: 16-2-69 #3 Received by: (Sig)	1 Oveldon	Date: 16-7-26		Date:
Company Name: FPM Group Ltd	Time: 1200	Company Name: 44	kienee Lahs	y Name: Life Exerce Labs Time: 1445 Company Name:	Company Name:	Time:

MATRIX
WG = Ground water
WQ = Water Quality Control Matrix
SO = Soil
SE = Sediment

SMCODE

B = Bailer
G = Grab

NA = Not Applicable (only for AB/TB)
PP = Peristaltic Pump
BP = Bladder Pump
SP = Submersible Pump
SS = Split Spoon

SACODE

N = Normal Sample

AB = Ambient Blank

TB = Trip Blank

EB = Equipment Blank

FD = Field Duplicate

MS = Matrix Spike

SD = Matrix Spike

Daily Health and Safety Meeting Form

Date: 0 1 0 9 Time : 9.500
Location: FPM office (garage)
Weather Conditions: 40° Edd daudy
Meeting Type: Daily Health and Safety
Personnel Present: Josh Wend Daniel Baldyga
Visitors Present:
Visitor Training:
PPE Required: Modified D
Possible risks, injuries, concerns:
Slip trip fall. leposene to Get water
Anticipated Releases to Environment (if so, describe and detail response action/control measures
implemented): More
Property Damage:
Description (include sequence of events describing step by step how incident happened):
Analysis for, and Implementation of Corrective/Preventative Procedure to Prevent Future
Occurrences (to be formulated by SSHO + FOM, approved by PM, and SSHO implemented):
Report made by (Name): / Wol Win Holyel
SSHP Organization Title: Site Safety and Health Officer

Appendix B Validated Lab Data

AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytica	Method:
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SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Comments:

Prime Contractor:

FPM Group

SMCSW0101FA	0910008-001A
SMCSW0401FA	0910008-002A
SMCSW0401FC	0910008-003A
SMCSW0501FA	0910008-004A

	<u></u>		
for complete hardcopy dat	data package is in compliance with the ness, for other than the conditions deta ta package and in the computer-readab lanager's designee, as verified by the f	iled above. Release le data submitted or	e of the data contained in this
Signature:	genely! Titus	Name:	Pamela J. Titus
Date:	10/19/09	Title:	Project Manager
QAPP 4.0	AFC	EE FORM 0-1	Page 1 of 1

Analytical Method: SVV8260B

Preparatory Method:

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

SF-6

.

Field Sample ID:

SMCSW0101FA

Lab Sample ID: 0910008-001A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7565.D

Date Received:

02-Oct-09

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Sample Size:

10 mL

(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1 1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1	-	U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0,100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethana	0.160	1.00	0.160	1		u U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzane	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		Ü
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1 1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chiorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1	 -	U
Acetone	1.00	10.0	1.15	1		F
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0,100	1		U

Comments:

rollalla

QAPP 4.0

AFCEE FORM 0-2

Page 1 of 12

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

ho/F

SMCSW0101FA

Lab Sample ID:

0910008-001A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7565.D

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

Date Analyzed:

06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

Sample Size:

10 mL

Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U U
Carbon tetrachloride	0.100	1.00	0.100	1		Ü
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1	<u> </u>	U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1 '		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1	-	U
Isopropylbenzene	0.100	1.00	0.100	1		Ü
Methyl tert-butyl ether	0.160	5.00	0.160	1		. U
Methylene chloride	0.160	1.00	0.160	1	<u> </u>	U
n-Butylbenzene	0.100	1.00	0,100	1		
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0,100	1	 _	U
o-Xylene	0.100	1.00	0,100	1		Ü
p-Isopropyltoluene	0.160	1.00	0,160	1		Ü
sec-Butylbenzene	0.160	1.00	0,160	1	·	u
Styrene	0.100	1.00	0.100	1 1		Ū
tert-Butylbenzene	0.100	1.00	0,100	1 1		U
Tetrachloroethene	0.100	1.00	0,100	1 1		u
Toluene	0.100	1.00	0.100	1 1	<u> </u>	U
			0.100			0

Comments:

trans-1,2-Dichloroethene

Trichlorofluoromethane

Trichloroethene

Vinyl chloride

trans-1,3-Dichloropropene

1.00

1.00

1.00

1.00

1.00

0.100

0.160

0.100

0.100

0.330

1

1

1

0.100

0.160

0.100

0.100

0.330

QAPP 4.0

AFCEE FORM 0-2

Page 2 of 12



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Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

0910008-001A

Matrix:

Surface Water

% Solids:

Q

Initial Calibration ID: 1629

File ID:

T7565.D

Date Received:

Field Sample ID:

Date Analyzed: 06-Oct-09

02-Oct-09

Date Extracted:

Concentration Units (ug/L or mg/Kg dry weight): ug/L

SMCSW0101FA

Sample Size: 10 mL

Avelyce	LECTURE CASE OF THE PERSON OF	THE RESERVE THE PARTY OF	Concentration		Continues	e evel (e
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate #	to covern and	Control Links	Qualifier
1,2-Dichloroethane-d4	105	72 - 119	
4-Bromofluorobenzene	96	76 - 119	
Toluene-d8	102	81 - 120	

niema-ski, k d	Area Gourts	Area Colini: imits
1,4-Dichlorobenzene-d4	772235	347175 - 1388700
Chlorobenzene-d5	1041586	415808 - 1663230
Fluorobenzene	2961314	1176246 - 4704984

Comments:	

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FA

Lab Sample ID:

0910008-002A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7566.D

Date Received:

Date Extracted:

Date Analyzed:

06-Oct-09

02-Oct-09

Sample Size:

10 mL

Concentration Units (ug/L or mg/Kg dry weight):

(m+p)-Xylene 0.200 2.00 0.200 U 1,1,1,2-Tetrachloroethane 0.160 0.500 0.160 u 1,1,1-Trichtoroethane 0.100 1.00 0.100 U 1,1,2,2-Tetrachloroethane 0.100 0.500 0.100 1 U 1,1,2-Trichloroethane 0.160 1.00 0,160 1 u 1,1-Dichloroethane 0.100 1.00 0.100 1 U 1,1-Dichloroethene 0.160 1.00 0.160 1 Ü 1,1-Dichloropropene 0.100 1.00 0.100 1 U 1,2,3-Trichlorobenzene 0.100 1.00 0.100 1 Ū 1,2,3-Trichloropropane 0.330 2.00 0.330 1 u 1,2,4-Trichlorobenzene 0.100 1.00 0.100 1 U 1,2,4-Trimethy/Denzene 0.100 1.00 0.100 1 u 1,2-Dibromo-3-chloropropane 1.00 5.00 1.00 1 U 1,2-Dibromoethane 0.160 1.00 0.160 1 Ū 1,2-Dichlorobenzene 0.100 1.00 0.100 1 Ū 1,2-Dichloroethane 0.160 0.500 0.160 1 U 1,2-Dichloropropane 0.160 1.00 0.160 1 Ū 1,3,5-Trimethylbenzene 0.100 1.00 0.100 1 Ū 1,3-Dichlorobenzene 0.100 1.00 0.100 1 U 1,3-Dichloropropane 0.100 0.500 0.100 1 U 1,4-Dichlorobenzena 0.160 0.500 0,160 1 U 1-Chlorohexane 0.160 1.00 0.160 1 Ū 2,2-Dichloropropane 0.330 1.00 0.330 1 U 2-Butanone 1.00 10.0 6.86 F 2-Chlorotoluene 0.100 1.00 0.100 U 4-Chlorotoluene 0.100 1.00 0.100 1 U 4-Methyl-2-pentanone 1.00 10,0 1.00 1 Ū Acetone 1.00 10.0 1.37 1 F Benzene 0.100 0.500 0.750 1 Bromobenzene 0.100 1.00 0.100 1 u Bromochloromethane 0.100 1.00 0.100 1 U Bromodichloromethane 0.100 0.500 0.100 1 Ü

Comments:

QAPP 4.0

AFCEE FORM 0-2

Page 4 of 12

Analytical Method: SW8260B

Preparatory Method:

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FA

Lab Sample ID:

0910008-002A

Matrix:

Surface Water

% Sollds:

Initial Calibration ID: 1629

File (D:

T7566.D

Date Received:

02-Oct-09

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L, or mg/Kg dry weight): ug/L

Sample Size:

10 mL

	To the second	THE PLANT			
Bromoform	0.330	1.00	0.330	1	U
Bromomethane	0.330	3.00	0.330	1	U
Carbon tetrachloride	0.100	1.00	0.100	1	U
Chlorobenzene	0.100	0.500	0.230	1	□ F ·
Chloroethane	0.330	1.00	0.330	1	U
Chloroform	0.100	0.500	0.100	1	U
Chloromethane	0,330	1.00	0.330	1	U
cls-1,2-Dichloroethene	0.100	1.00	0.100	1	U
cis-1,3-Dichloropropene	0.160	0.500	0,160	1	U
Dibromochloromethane	0.100	0.500	D.100	1	U
Dibromomethane	0.160	1.00	0.160	1	U
Dichlorodifluoromethane	0.100	1.00	0,100	1	Ü
Ethylbenzene	0.100	1.00	0.100	1	U
Hexachlorobutadiene	0.100	1.00	0.100	1	U
Isopropylbenzene	0.100	1.00	0.100	1	U
Methyl tert-butyl ether	0.160	5.00	0.200	1	F
Methylene chloride	0.160	1.00	0.160	1	U
n-Butylbenzene	0.100	1.00	0.100	1	U
n-Propylbenzene	0.100	1.00	0.100	1	U
Naphthalene	0.100	1.00	0.100	1	U
o-Xylene	0.100	1.00	0.100	1	U
p-Isopropyltoluene	0.160	1.00	0.160	1	U
sec-Butylbenzene	0.160	1.00	0.160	1	U
Styrene	0.100	1.00	0.100	1	U
tert-Butylbenzene	0.100	1.00	0.100	; 1	U
Tetrachloroethene	0.100	1.00	0.100	1	U
Toluane	0.100	1.00	0.100	1	U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1	U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1	Ü
Trichloroethene	0.100	1.00	0.100	1	U
Trichlorofluoromethane	0.100	1.00	0.100	1	U
Vinyl chloride	0.330	1.00	0.330	1	U

Comments:

QAPP 4.0

AFCEE FORM 0-2

Page 5 of 12

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FA

Lab Sample ID:

0910008-002A Matrix: Surface Water

% Solids:

QAPP 4.0

0

Initial Calibration ID: 1629

File ID:

T7565.D

Date Received:

02-Oct-09

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Sample Size:

10 mL

		RL	eorbei (auch	a shirthing	
Xylenes (total)	0.300	2.00	0.300	1	U

	L HRECOVER THE		and the state of t
1,2-Dichloroethane-d4	104	72 - 119	Communication of the Communica
4-Bromofluorobenzene	94	76 - 119	
Toluene-d9	102	81 - 120	

		Area Count limits	Ottalrier
1,4-Dichlorobenzene-d4	784303	347175 - 1388700	
Chlorobenzene-d5	1032018	415808 - 1663230	
Fluorobenzene	2913319	1176246 - 4704984	

Comments:	
 ·	
	

AFCEE FORM Q-2

Page 6 of 12

Analytical Method: SW8260B

Preparatory Method:

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

Matrix: 0910008-003A

Surface Water

% Solids:

Initial Calibration ID: 1629

File ID:

T7567.D

Date Received:

Field Sample ID:

02-Oct-09

SMCSW0401FC

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 10 mL

				31. Y		
(m+p)-Xylene	0.200	2.00	0.230	1		F
1,1,1,2-Tetrachioroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1 .		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		υ
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.240	1		F
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1 .		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1 "		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		· U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1	-	U
1,3-Dichloropropane	0.100	0.500	0.100	1	_	. U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		iυ
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1 1	-	·U
2-Butanone	1.00	10.0	6.95	1	•	F
2-Chiorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.39	1		F
Benzene	0.100	0.500	0.780	1		
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0,100	0.500	0.100	1		U

Comments	
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Page 7 of 12

Analytical Method: <u>SW8260B</u> Preparatory Method: AAB #: R18463

Lab Name: Life Science Laboratories, Inc. Contract #:

Fleid Sample ID: SMCSW0401FC Lab Sample ID: 0910008-003A Matrix: Surface Water

% Solids: Q Initial Calibration ID: 1629 File ID: 17567.D

Date Received: 02-Oct-09 Date Extracted: Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L Sample Size: 10 mL

Bromoform	0.330	1.00	0.330	1	U
Bromomethane	0.330	3.00	0.330	1	υ
Carbon tetrachloride	0.100	1.00	0.100	1	U
Chlorobenzene	0.100	0.500	0.230	1	F
Chloroethane	0.330	1.00	0.330	1	U
Chloroform	0.100	0.500	0.100	1	U
Chloromethane	0.330	1.00	0.330	1	, n
cis-1,2-Dichloroethene	0.100	1.00	0.100	1	i U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1	υ
Dibromochloromethane	0.100	0.500	0.100	1	
Dibromomethane	0.160	1.00	0.160	1 1	U
Dichlorodifluoromethane	0.100	1.00	0.100	1	u
Ethylbenzene	0.100	1.00	0.100	1	U
Hexachlorobutadiene	0.100	1.00	0.100	1	U
Isopropylbenzene	0.100	1.00	0.100	1	U
Methyl tert-butyl ether	0.160	5.00	0.230	1	F
Methylene chlorida	0.160	1.00	0.160	1	U
n-Butylbenzene	0.100	1.00	0.100	1	
n-Propylbenzene	0.100	1.00	0.100	1	U
Naphthalene	0.100	1.00	0.110	1	F
o-Xylene	0.100	1.00	0.100	1	U
p-Isopropyltoluene	0.160	1.00	0.160	1	U
sec-Butylbenzene	0.160	1.00	0.160	1 .	U
Styrene	0.100	1.00	0.100	1	Ü
tert-Butylbenzene	0.100	1.00	0.100	1 i	
Tetrachloroethene	0.100	1.00	0.100	1	U
Toluene	0.100	1.00	0.100	1	U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1 +	U
trans-1,3-Dichloropropene	0.160	1.00	0.160	- i	U
Trichlomethene	0.100	1.00	0.100	1	U
Trichlorofluoromethane	0.100	1.00	0.100	1	U
Vinyl chloride	0.330	1.00	0.330	1	-

Comments:				
		 	 	
	-	 	 	

QAPP 4.0

AFCEE FORM 0-2

Page 8 of 12

Analytical Method: SW8260B

Preparatory Method:

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FC

Lab Sample ID:

0910008-003A

Matrix:

Surface Water

% Solids:

Q

Initial Calibration ID: 1629

File ID:

T7567.D

Date Received:

02-Oct-09

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

<u>µg/L</u>

Sample Size:

<u>10 mL</u>

Analyja		RE SE	Concentration		SAILOU GURINAL
Xylenes (total)	0.300	2.00	0.300	1	ų U

Surrogate	· Resver	Control limits et aline	No.
1,2-Dichloroethane-d4	105	72 - 119	1
4-Bromofluorobenzene	93	76 - 119	1
Toluene-d8	102	81 - 120	1

internal Sto 2 Area Count : Area Count Emits - Qualities							
1,4-Dichlorobenzene-d4	778675	347175 - 1388700					
Chlorobenzene-d5	1037128	415808 - 1663230					
Fluorobenzene	2946621	1176246 - 4704984					

Comments:				
	 	 	<u> </u>	

Analytical Method: SW8260B

Preparatory Method:

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Fleid Sample ID:

SMCSW0501FA

Lab Sample ID:

0910008-004A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7568.D

Date Received:

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<u>06-Oct-09</u>

Date received.

02-Oct-09

Date Extracted:

Date Analyzed:

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 10 mL

(m+p)-Xylene 0.200 2.00 0.200 U 1,1,1,2-Tetrachloroethane 0.160 0.500 0.160 1 U 1,1,1-Trichloroethane 0.100 1.00 0.100 1 U 1,1,2,2-Tetrachloroethane 0.100 0.500 0.100 1 П 1,1,2-Trichloroethane 0.160 1.00 0.160 1 U 1,1-Dichloroethane 0.100 1.00 0.100 U 1,1-Dichloroethene 0.160 1.00 0.160 1 U 1,1-Dichloropropene 0.100 1.00 0.100 1 U 1,2,3-Trichlorobenzene 0.100 1.00 0.100 1 Ü 1,2,3-Trichloropropane 0.330 2.00 0.330 1 U 1,2,4-Trichlorobenzene 0.100 1.00 0.100 1 Ū 1,2,4-Trimethylbenzene 0.100 1.00 0.160 1 F 1,2-Dibromo-3-chloropropane 1,00 5.00 1 1.00 U 1,2-Dibromoethane 0.160 1.00 0.160 1 U 1,2-Dichlorobenzene 0.100 1.00 0.100 U 1,2-Dichloroethane 0.160 0.500 0.160 1 U 1,2-Dichloropropane 0.160 1.00 0.160 1 U 1,3,5-Trimethylbenzene 0.100 1.00 0.100 1 U 1,3-Dichlorobenzene 0.100 1.00 0.100 1 U 1,3-Dichloropropane 0.100 0.500 0.100 1 U 1,4-Dichlorobenzene 0.160 0.500 0.160 1 U 1-Chlorohexane 0.160 1.00 0.160 U 2,2-Dichloropropene 0.330 ĩ 1.00 0.330 U 2-Butanone 1.00 10.0 3.97 1 F 2-Chlorotoluene 0.100 1.00 0.100 1 U 4-Chlorotoluene 0.100 1.00 0.100 1 U 4-Methyl-2-pentanone 1.00 10.0 1.00 1 U Acetone 1.00 10.0 3.01 1 F Benzene 0.100 0.500 0.670 Bromobenzene 0.100 1.00 0.100 1 U Bromochloromethane 0.100 1.00 0.100 1 U Bromodichloromethane 0.100 0.500 0.100 1

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Comments	

W/W/OI

QAPP 4.0

AFCEE FORM 0-2

Page 10 of 12

Analytical Method: SW8260B Preparatory Method: AAB #: R18463

Lab Name: Life Science Laboratories, Inc. Contract #:

Comments:

Fleid Sample ID: SMCSW0501FA Lab Sample ID: 0910008-004A Matrix: Surface Water

% Solids: 0 Initial Calibration ID: 1629 File ID: 17568.D

Date Received: 02-Oct-09 Date Extracted: Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L Sample Size: 10 ml

						e de la fig
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.120	1		F
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0,100	1		U
Isopropylbenzene	0.100	1.00	0.100	1		U
Methyl terl-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1	FW.H. 4 '8	U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		u
Styrene	0.100	1.00	0.100	1		U
tert-Butylberizene	0.100	1.00	0.100	1		: U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0,100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1 1		Ü

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·		 	

QAPP 4.0 AFCEE FORM O-2 Page 11 of 12

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0501FA

Lab Sample ID:

0910008-004A

0.300

Matrix:

Surface Water

% Solids:

Initial Calibration ID: 1629

RL

2.00

File ID:

T7568.D

Date Received:

Xylenes (total)

Date Analyzed: 06-Oct-09

02-Oct-09 Concentration Units (ug/L or mg/Kg dry weight):

Date Extracted:

na/F

MOL

0.300

Sample Size:

Concentration Dilution , Confirm Cualific

1

<u>10 mL</u>

	Recovery	Control Limits	
1,2-Dichloroethane-d4	105	72 - 119	
4-Bromofluorobenzene	91	76 - 119	
Toluene-d8	100	81 - 120	

	Tajea Goorgia	
1,4-Dichlorobenzene-d4	789445	347175 - 1388700
Chlorobenzene-d5	1035964	415808 - 1663230
Fluorobenzene	2888795	1176246 - 4704984

U

Comments:

QAPP 4.0

AFCEE FORM 0-2

Page 12 of 12

Quality Control Results

AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Prime Contractor:

FPM Group

SMCSD0101FA	0910009-001A
SMCSD0401FA	:0910009-002A
SMCSD0401FC	0910009-003A
SMCSD0501FA	0910009-004A

Comments:			
for complete hardcopy da	data package is in compliance with the terms ness, for other than the conditions detailed a ta package and in the computer-readable da Manager's designee, as verified by the following	bove. Release ta submitted o	e of the data contained in this
Signature:	Ramely Dikes	Name:	Pamela J. Titus
Date:	10/22/08	Title:	Project Manager
n	* AECEE E	OPM O-1	Page 1 of 1

Analytical Method: SW8270C

Preparatory Method: <u>SW3550B</u>

AAB #:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Fleid Sample ID:

SMCSD0101FA

Lab Sample ID:

0910009-001A

Matrix:

Sediment

% Solids:

67.50

initial Calibration ID: 1648

File ID:

N1632.D

Date Received:

Date Extracted:

06-Oct-09

Date Analyzed: 13-Oct-09

02-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 g</u>

1,2,4-Trichlorobenzene	0.020	1.0	0.020	1	Ü
1,2-Dichlorobenzene	0.020	1.0	0.020	1	U
1,3-Dichlorobenzene	0.020	1.0	0.020	1	U
1,4-Dichlorobenzene	0.020	1.0	0.020	1	U
2,4,5-Trichlorophenol	0.059	4.9	0.059	1	U
2,4,6-Trichlorophenol	0.059	0.44	0.059	1	U
2,4-Dichlorophenol	0.020	0.44	0.020	1	U
2,4-Dimethylphenol	0.059	0.44	0.059	1	U
2,4-Dinitrophenol	0.98	4.9	0.98	1	, U
2,4-Dinitrotoluene	0.020	1.0	0.020	1	U
2,6-Dinitrotoluene	0.020	1.0	0.020	1	U
2-Chloronaphthalene	0.020	1.0	0.020	1	U
2-Chlorophenol	0.020	0.44	0.020	1	u
2-Methylnaphthalene	0.020	1.0	0.020	1	U
2-Methylphenol	0.020	0.44	0.020	1	U
2-Nitroaniline	0.020	4.9	0.020	1	U
2-Nitrophenol	0.020	0.44	0.020	1	U
3,3'-Dichlorobenzidine	0.059	1.9	0.059	1	υ
3-Nitroaniline	0.059	4.9	0.059	1	U
4,6-Dinitro-2-methylphenol	0.25	4.9	0.25	1	U
4-Bromophenyl phenyl ether	0.020	1.0	0.020	1	U
4-Chloro-3-methylphenol	0.020	1.9	0.020	1	U
4-Chloroaniline	, 0.020	1.9	0.020	1	U
4-Chlorophenyl phenyl ether	0.020	1.0	0.020	1	. U
4-Methylphenol	0.059	3.0	0.059	1	l U
4-Nitroaniline	0.020	4.9	0.020	1	U
4-Nitrophenol	0.25	2.4	0.25	1	U
Acenaphthene	0.020	1.0	0.020	1	U
Acenaphthylene	0.020	1.0	0.020	1	<u></u>
Anthracene	0.020	1.0	0.020	1	U
Benzo[a]anthracene	0.020	1.0	0.053	1	F
Benzo[a]pyrene	0.020	1.0	0.048	1	F

QAPP 4.0

AFCEE FORM 0-2

Page 1 of 12

Analytical Method: SW8270C Preparatory Method: SW3550B

AAB#: <u>10101</u>

Lab Name:

Field Sample ID:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID: 0910009-001A

Matrix: **Sediment**

% Solids:

67.50

Initial Calibration ID: 1648

File ID:

N1632.D

Date Received:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

SMCSD0101FA

mg/Kg

Sample Size: <u>30 g</u>

Benzo[b]flucranthene	0.020	1.0	0.12	1		F
Benzo[g,h,i]perylene	0.059	1.0	0.059	, 1		υ
Benzo[k]fluoranthene	0.020	1.0	0.029	1		F
Benzoic acid	0.25	7.4	0.25	1		U
Benzyl alcohol	0.020	1.9	0.020	1		U
bis(2-Chloroethoxy)methane	0.020	1.0	0.020	1		U
bis(2-chloroethyl)ether	0.020	1.0	0.020	1		U
bis(2-chloroisopropyl)ether	0.020	1.0	0.020	1		U
bis(2-Ethylhexyl)phthalate	0.020	1.0	0.020	1		U
Butyl benzyl phthalate	0.020	1.0	0.020	1 1		U
Chrysene	0.020	1.0	0.056	1		F
Di-n-butyl phthalate	0.020	1.0	0.020	1		U
Di-n-octyl phthalate	0.020	1.0	0.020	1		
Dibenz[a,h]anthracene	0.059	1.0	0.059	1		. <u>1</u> U
Dibenzofuran	0.020	1.0	0.020	1		U
Diethyl phthalate	0.020	1.0	0.020	1		; U
Dimethyl phthalate	0.020	1.0	0.020	1 1		U
Fluoranthene	0.020	1.0	0.11	1		F
Fluorene	0.020	1.0	0.020	-† - <u>†</u>		U
Hexachlorobenzene	0.020	1.0	0.020	1		U
Hexachlorobutadiene	0.059	1.0	0.059	1		U
Hexachtoroethane	0.059	1.0	0.059	1		
Indeno[1,2,3-cd]pyrene	0.059	1.0	0.059	1		υ
Isophorone	0.020	1.0	0.020	1		U
N-Nitroso-di-n-propylamine	0.020	1.0	0.020			U
N-Nitrosodiphenylamine	0.020	1.0	0.020	<u>i</u> 1		U
Naphthalene	0.020	1.0	0.020	1		u
Nitrobenzene	0,020	1.0	0.020	1		U
Pentachlorophenol	0.49	4.9	0.49	1		U
Phenanthrene	0.020	1.0	0.064	1		F
Phenol	0.020	0.44	0.020	1		U
Ругеле	0.020	1.0	0.11	+		F

Comments:

QAPP 4.0 AFCEE FORM 0-2

19

Analytical Method: SW8270C

Preparatory Method: SW3550B

AAB#:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID: SMCSD0101FA Lab Sample ID:

0910009-001A Matrix: Sediment

% Solids:

67.50

Initial Calibration ID: 1648

File ID:

N1632.D

Date Received:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed: 13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Stze:

<u>30 g</u>

Su rogate 3	Recovery	Sonico Einig partiantes
2,4,6-Tribromophenol	97	36 - 126
2-Fluorobiphenyl	84	43 - 120
2-Fluorophenol	81	37 - 120
Nitrobenzene-d5	85	37 - 120
Phenol-d5	84	40 - 120
Terphenyl-d14	104	32 - 120

inienas 36	LA ESCOURCE E	Alex coin thats the coolie
1,4-Dichlorobenzene-d4	149172	61370 - 245480
Acenaphthene-d10	303969	121827 - 487308
Chrysene-d12	502205	233714 - 934858
Naphthalene-d8	544022	223871 - 895484
Perylene-d12	423635	208094 - 832374
Phenanthrene-d10	496441	204419 - 817676

Comments:			
	·	 	

Analytical Method: SW8270C

Preparatory Method: SW3550B

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

SMCSD0401FA

Lab Sample ID:

0910009-002A

Matrix:

<u>Sediment</u>

% Solids:

<u> 78.40</u>

Initial Calibration ID: 1648

File ID:

N1626.D

Date Received:

Fleid Sample ID:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed: 12-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg Sample Size: <u>30 g</u>

A STATE OF THE STA						
1,2,4-Trichlorobenzene	0.017	0.89	0.017	1		U
1,2-Dichlorobenzene	0.017	0.89	0.017	1		U
1,3-Dichlorobenzene	0.017	0.89	0.017	1		U
1,4-Dichlorobenzene	0.017	0.89	0.017	1		U
2,4,5-Trichlorophenol	0.051	4.2	0.051	1		U
2,4,6-Trichlorophenol	0.051	0.38	0.051	1		υ
2,4-Dichlorophenol	0.017	0.38	0.017	. 1		-) U
2,4-Dimethylphenol	0.051	0.38	0.051	1		i U
2,4-Dinitrophenol	0.84	4.2	0.84	1		U
2,4-Dinitrotoluene	, 0.017	0.89	0.017	1		U
2,6-Dinitrotoluene	0.017	0.89	0.017	1		U
2-Chloronaphthalene	0.017	0.89	0.017	1		U
2-Chlorophenol	0.017	0.38	0.017	1		U
2-Methylnaphthalene	0.017	0.89	0.023	1		F
2-Methylphenol	0.017	0.38	0.017	1		U
2-Nitroanillne	0.017	4.2	0.017	1	- 3	U
2-Nitrophenol	0.017	0.38	0.017	1		U
3,3'-Dichlorobenzidine	0.051	1.7	0.051	1		U
3-Nitroaniline	0.051	4.2	0.051	1		U
4,6-Dinitro-2-methylphenol	0.21	4.2	0.21	; 1		U
4-Bromophenyl phenyl ether	0.017	0.89	0.017	1		. U
4-Chloro-3-methylphenol	0.017	1.7	0.017	1		U
4-Chloroaniline	. 0.017	1.7	0.017	1		U
4-Chlorophenyl phenyl ether	0.017	0.89	0.017	1		U
4-Methylphenol	0.051	2.6	0.051	1		U
4-Nitroaniline	0.017	4.2	0.017	1		U
4-Nitrophenol	0.21	2.0	0.21	1		U
Acenaphthene	0.017	0.89	0.017	1		U
Acenaphthylene	0.017	0.89	0.017	1		Ü
Anthracene	0.017	0.89	0.017	1		υ
Benzo[a]anthracene	0.017	0.89	0.017	1		U
Benzo[a]pyrene	0.017	0.89	0.017	1		, U

Comments:

Page 4 of 12

QAPP 4.0

AFCEE FORM 0-2

Analytical Method: SW8270C

Preparatory Method: SW35508

AAB#:

10101

Lab Name:

Life Science Laboratories, Inc.

SMCSD0401FA

Contract #: Lab Sample ID:

0910009-002A

Matrix:

<u>Sediment</u>

% Solids:

<u>78.40</u>

Initial Calibration ID: 1648

File ID:

N1626.D

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed: 12-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Size:

30 g

ABNO 1						
Benzo[b]fluoranthene	0.017	0.89	0.017	1		U
Benzo[g,h,i]perylene	0.051	0.89	0,051	1		U
Benzo[k]fluoranthene	0.017	0.89	0.017	1	1-7	U
Benzoic acid	i 0.21	6.4	0.21	1		บ
Benzyl alcohol	0.017	1.7	0.017	1		j U
bis(2-Chloroethoxy)methane	0.017	0.89	0.017	1 1		U
bis(2-chloroethyl)ether	0.017	0.89	; 0.017	1		U
bis(2-chloroisopropyl)ether	0.017	0.89	0.017	1		U
bis(2-Ethylhexyl)phthalate	0.017	0.89	0.017	1		υ
Butyl benzyl phthalate	0.017	0.89	0.017	1		U
Chrysene	0.017	0.89	0.017	1		U
Di-n-butyl phthalate	0.017	0.89	0.017	1		U
Di-n-octyl phthalate	0.017	0.89	0.017	1		U
Dibenz[a,h]anthracene	0.051	0.89	0.051	1 1		U
Dibenzofuran	0.017	0.89	0.017	1		U
Diethyl phthalate	. 0.017	0.89	0.017	1		U
Dimethyl phthalate	0.017	0.89	0.017	1		U
Fluoranthene	0.017	0.89	0.017	1		U
Fluorene	0.017	0.89	0.017	1		U
Hexachlorobenzene	0.017	0.89	0.017	1		U
Hexachlorobutadiene	0.051	0.89	0.051	1		υ
Hexachloroethane	j 0.051	0.89	0.051	1		U
Indeno[1,2,3-cd]pyrene	0.051	0.89	0.051	1		U
Isophorone	0.017	0.89	0.017	1		U
N-Nitroso-di-n-propylamine	0.017	0.89	0.017	1		U
N-Nitrosodipherrylamine	0.017	0.89	0.017	1		U
Naphthalene	0.017	0.89	0.045	1		F
Nitrobenzene	0.017	0.89	0.017	1		Ü
Pentachlorophenol	0.42	4.2	0.42	1 1		U
Phenanthrene	0.017	0.89	0.017	1		U
Phenol	0.017	0.38	0.017	1		U
Pyrene	0.017	0.89	0.017	1		U

Comments:

QAPP 4.0

AFCEE FORM 0-2

Page 5 of 12

Analytical Method: SW8270C

Preparatory Method: <u>SW3550B</u>

AAB#:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract #:

<u>Sediment</u>

Field Sample ID: SMCSD0401FA

Lab Sample ID:

0910009-002A

Matrix:

% Solids:

78.40

Initial Calibration ID: 1648

File ID:

N1626.D

Date Received:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed: 12-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Size:

30 g

Suroyae - W.L.	Recovery	s Control link 50	Justifier 1
2,4,6-Tribromophenol	90	36 - 126	
2-Fluorobiphenyl	88	43 - 120	
2-Fluorophenol	85	37 - 120	
Nitrobenzene-d5	83	37 - 120	
Phenol-d5	86	40 - 120	
Terphenyi-d14	102	32 - 120	

	Marie Meditor	Agericoun Limits
1,4-Dichlorobenzene-d4	123826	61370 - 245480
Acenaphthene-d10	250187	121827 - 487308
Chrysene-d12	435845	233714 - 934858
Naphthalene-d8	461267	223871 - 895484
Perylene-d12	380801	208094 - 832374
Phenanthrene-d10	414124	204419 - 817676

Comments:

QAPP 4.0

AFCEE FORM 0-2

Page 6 of 12

Analytical Method: SW8270C Preparatory Method: SW3550B AAB #: 10101

Lab Name: Life Science Laboratories, Inc. Contract #:

Field Sample ID: SMCSD0401FC Lab Sample ID: 0910009-003A Matrix: Sediment

% Solids: <u>77.90</u> Initial Calibration ID: 1648 N1635.D File ID:

Date Received: 02-Oct-09 Date Extracted: 06-Oct-09 Date Analyzed: 13-Oct-09

1,2,4-Trichlorobenzene	0.017	0.90	0.017	1	_	U
1,2-Dichlorobenzene	0.017	0.90	0.017	1		U
1,3-Dichlorobenzene	0.017	0.90	0.017	1		U
1,4-Dichlorobenzene	0.017	0.90	0.017	1	h.d	U
2,4,5-Trichlorophenol	0.051	4.2	0.051	1		U
2,4,6-Trichlorophenol	0.051	0.39	0.051	1		U
2,4-Dichlorophenol	0.017	0.39	0.017	1		U
2,4-Dimethylphenol	0.051	0.39	0.051	1		l U
2,4-Dînitrophenol	0.85	4.2	0.85	1		U
2,4-Dinitrotoluene	0.017	0.90	0.017	1		U
2,6-Dinitrotoluene	0.017	0.90	0.017	1		U
2-Chloronaphthalene	0.017	0.90	0.017	1		U
2-Chlorophenol	0.017	0.39	0.017	1		U
2-Methylnaphthalene	0.017	0.90	0.058	1		F
2-Methylphenol	0.017	0.39	0.017	1		U
2-Nitroaniline	0.017	4.2	0.017	1		U -
2-Nitrophenol	0.017	0.39	0.017	1		U
3,3'-Dichlorobenzidine	0.051	1.7	0.051	1		U
3-Nitroaniline	0.051	4.2	0.051	1		U
4,6-Dinitro-2-methylphenol	0.21	4.2	0.21	1		U
4-Bromophenyl phenyl ether	0.017	0.90	0.017	1		U
4-Chloro-3-methylphenol	0.017	1.7	0.017	1		U
4-Chloroaniline	0.017	1.7	0.017	1		U
4-Chlorophenyl phenyl ether	0.017	0.90	0.017	1	1	- u
4-Methylphenol	0.051	2.6	0.051	1		, U
4-Nitroaniline	0.017	4.2	0.017	1	,	i u
4-Nitrophenol	0.21	2.1	0.21	1		U
Acenaphthene	0.017	0.90	0.087	1		F
Acenaphthylene	0.017	0.90	0.017			U
Anthracene	0.017	0.90	0.15	1		F
Benzo[a]anthracene	0.017	0.90	0.63	1		F
Benzo[a]pyrene	0.017	0.90	0.68	1		F'

Comments:		
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		(UW
QAPP 4.0	AFCEE FORM 0-2	Page 7 of 12

Analytical Method: SW8270C Preparatory Method: SW3550B AAB #: 10101

Lab Name: Life Science Laboratories, Inc. Contract #:

Field Sample ID: SMCSD0401FC Lab Sample ID: 0910009-003A Matrix: Sediment

% Solids: 77.90 Initial Calibration ID: 1648 File ID: N1635.D

Date Received: 02-Oct-09 Date Extracted: 06-Oct-09 Date Analyzed: 13-Oct-09

Benzo[b]fluoranthene	0.017	0.90	1.7	1	
Benzo[g,h,i]perylene	0.051	0.90	0.24	1	F
Benzo[k]fluoranthene	0.017	0.90	0.65	1	F
Benzoic acid	0.21	6.4	0.21	1	U
Benzył alcohol	0.017	1.7	0.017	1	Ü
bis(2-Chloroethoxy)methane	0.017	0.90	0.017	1	U
bis(2-chloroethyl)ether	0.017	0.90	0.017	1	U
bis(2-chloroisopropyl)ether	: 0.017	0.90	0.017	1	U
bis(2-Ethylhexyl)phthalate	0.017	0.90	0.037	1	F
Butyl benzyl phthalate	0.017	0.90	0.017	1	U
Chrysene	0.017	0.90	1.0	1	
Di-n-butyl phthalate	0.017	0.90	0.017	1	U
Di-n-octyl phthalate	0.017	0.90	0.017	1	U
Dibenz[a,h]anthracene	0.051	0.90	0.078	1	F
Dibenzofuran	0.017	0.90	0.066	1 1	F
Diethyl phthalate	0.017	0.90	0.017	1	, n
Dimethyl phthalate	0.017	0.90	0.017	1	į U
Fluoranthene	0.017	0.90	0.79	1	F
Fluorene	0.017	0.90	0.10	1	F
Hexachlorobenzene	0.017	0.90	0.017	1	U
Hexachlorobutadiene	0.051	0.90	0.051	1	U
Hexachloroethane	0.051	0.90	0.051	1	U
Indeno[1,2,3-cd]pyrene	0.051	0.90	0.16	1	F
Isophorone	0.017	0.90	0.017	1	U
N-Nitroso-di-n-propylamine	0.017	0.90	0.017	1	U
N-Nitrosodiphenylamine	0.017	0.90	0.017	1	U
Naphthalene	0.017	0.90	0.092	1	F
Nitrobenzane	0.017	0.90	0.017	1	U
Pentachlorophenol	0.42	4.2	0.42	1	U
Phenanthrene	0.017	0.90	0.74	1 ,	F
Phenol	0.017	0.39	0.017	1	U
Pyrene	0.017	0.90	0.83	1	F

Comments:		
		- WH
QAPP 4.0	AFCEE FORM 0-2	Page 8 of 12

Analytical Method: SW8270C Preparatory Method: SW3550B AAB #: 10101

Lab Name: <u>Life Science Laboratories, Inc.</u> Contract #:

Field Sample ID: SMCSD0401FC Lab Sample ID: 0910009-003A Matrix: Sediment

% Solids: 77.90 Initial Calibration ID: 1648 File ID: N1635.D

Date Received: 02-Oct-09 Date Extracted: 06-Oct-09 Date Analyzed: 13-Oct-09

	Tive-overy	E-Control Limits	
2,4,6-Tribromophenol	102	36 - 126	
2-Fluorobiphenyl	90	43 - 120	
2-Fluorophenol	86	37 - 120	
Nitrobenzene-d5	88	37 - 120	
Phenol-d5	89	40 - 120	
Terphenyl-d14	110	32 - 120	

Imerial 800	Area Gornes III.	
1,4-Dichlorobenzene-d4	146379	61370 - 245480
Acenaphthene-d10	294836	121827 - 487308
Chrysene-d12	444253	233714 - 934858
Naphthalene-d8	546475	223871 - 895484
Perylene-d12	245744	208094 - 832374
Phenanthrene-d10	491022	204419 - 817676

Comments:				
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		- 0		

Analytical Method: SW8270C Preparatory Method: SW3550B AAB #: 10101

Lab Name: <u>Life Science Laboratories, Inc.</u> Contract #:

Field Sample ID: SMCSD0501FA Lab Sample ID: 0910009-004A Matrix: Sediment

% Solids: 78.20 Initial Calibration ID: 1648 File ID: N1631.D

Date Received: 02-Oct-09 Date Extracted: 06-Oct-09 Date Analyzed: 13-Oct-09

1,2,4-Trichlorobenzene	0.017	0.90	0.017	1	U
1,2-Dichlorobenzene	0.017	0.90	0.017	1	U
1,3-Dichlorobenzene	0.017	0.90	0.017	1	Ü
1,4-Dichlorobenzene	0.017	0.90	0.017	1	U
2,4,5-Trichlorophenol	0.051	4.2	0.051	1	U
2,4,6-Trichlorophenol	0.051	0.38	0.051	1	U
2,4-Dichlorophenol	0.017	0.38	0.017	1	U
2,4-Dimethylphenol	0.051	0.38	0.051	1	U
2,4-Dinitrophenol	0.84	4.2	0.84	1	U
2,4-Dinitrotoluene	0.017	0.90	0.017	1	U
2,6-Dinitrotoluene	0.017	0.90	0.017	1	U
2-Chloronaphthalene	0.017	0.90	0.017	1	U
2-Chlorophenol	0.017	0.38	. 0.017	1 1	U
2-Methylnaphthalene	0.017	0.90	0.017	1	U
2-Methylphenol	0.017	0.38	0.017	1	U
2-Nitroaniline	0.017	4.2	0.017	1	
2-Nitrophenol	0.017	0.38	0.017	1	U
3,3´-Dichlorobenzidine	0.051	1.7	0.051	1	- ü
3-Nitroaniline	0.051	4.2	0.051	1	u u
4,6-Dinitro-2-methylphenol	0.21	4.2	0,21	1	U
4-Bromophenyl phenyl ether	0.017	0.90	0.017	1	U
4-Chloro-3-methylphenol	0.017	1.7	0.017	1-1	U
4-Chloroaniline	0.017	1.7	0.017	1	U
4-Chlorophenyl phenyl ether	0.017	0.90	0.017	1	U.
4-Methylphenol	0.051	2.6	0.051	1	U
4-Nitroaniline	0.017	4.2	0.017	1	U
4-Nitrophenol	0.21	2.0	0.21	1	U
Acenaphthene	0.017	0.90	0.017	1	U
Acenaphthylene	0.017	0.90	0.017	1	U
Anthracene	0.017	0.90	0.017	1	U
Benzo[a]anthracene	0.017	0.90	0.017	1	U
Benzo[a]pyrene	0.017	0.90	0.017	1	

Comments:		
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		w/29/09
QAPP 4.0	AFCEE FORM 0-2	Page 10 of 12

Analytical Method: SW8270C Preparatory Method: SW3550B AAB #: 10101

Lab Name: <u>Life Science Laboratories, Inc.</u> Contract #:

Field Sample ID: SMCSD0501FA Lab Sample ID: 0910009-004A Matrix: Sediment

% Solids: 78.20 Initial Calibration ID: 1648 File ID: N1631.D

Date Received: 02-Oct-09 Date Extracted: 06-Oct-09 Date Analyzed: 13-Oct-09

			Total Control of the			
Benzo[b]fluoranthene	0.017	0.90	0.017	1		U
Benzo[g,h,i]perylene	0.051	0.90	0.051	1		U
Benzo[k]fluoranthene	0.017	0.90	0.017	1		U
Benzoic acid	0.21	6.4	0.21	1		U
Benzyl alcohol	0.017	1.7	0.017	1		U
bis(2-Chloroethoxy)methane	0.017	0.90	0.017	1		U
bis(2-chloroethyl)ether	0.017	0.90	0.017	1		U
bis(2-chloroisopropyl)ether	0.017	0.90	0.017	1		U
bis(2-Ethylhexyl)phthalate	0.017	0.90	0.020	1		F
Butyl benzyl phthalate	0.017	0.90	0.017	1		U
Chrysene	0.017	0.90	0.017	1 .		U
Di-n-butyl phthalate	0.017	0.90	0.017	1		U
Di-n-octyl phthalate	0.017	0.90	0.017	1		U
Dibenz[a,h]anthracene	0.051	0.90	0.051	1		U
Dibenzofuran	0.017	0.90	0.017	1		U
Diethyl phthalate	0.017	0.90	0.017	1		U
Dimethyl phthalate	0.017	0.90	0.017	1		U
Fluoranthene	0.017	0.90	0.025	1		F
Fluorene	0.017	0.90	0.017	1		U
Hexachlorobenzene	0.017	0.90	0.017	1		, U
Hexachlorobutadiene	0.051	0.90	0.051	1		Ü
Hexachloroethane	0.051	0.90	0.051	1		. U
Indeno[1,2,3-cd]pyrene	0.051	0.90	0.051	1		U
Isophorone	0.017	0.90	0.017	1		U
N-Nitroso-di-n-propylamine	0.017	0.90	0.017	1		U
N-Nitrosodiphenylamine	0.017	0.90	0.017	1		U
Naphthalene	0.017	0.90	0.017	1		U
Nitrobenzene	0.017	0.90	0.017	1		U
Pentachlorophenol	0.42	4.2	0.42	1	-	U
Phenanthrene	0.017	0.90	0.019	1	· -	F
Phenol	0.017	0,38	0.017	1		U
Pyrene	1 0.017	0.90	0.027	1		F

Comments:		
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OAPP 4.0	AFCEF FORM 0-2	Page 11 of 12

Analytical Method: <u>SW8270C</u> Preparatory Method: <u>SW3550B</u> AAB #:

Lab Name: Life Science Laboratories, Inc. Contract #;

Field Sample ID: SMCSD0501FA Lab Sample ID: 0910009-004A Matrix: Sediment

% Solids: 78.20 Initial Calibration ID: 1648 File ID: N1631.D

Date Received: 02-Oct-09 Date Extracted: 06-Oct-09 Date Analyzed: 13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg Sample Size: 30 g

2,4,6-Tribromophenol	98	36 - 126	
2-Fluorobiphenyl	88	43 - 120	
-Fluorophenol	85	37 - 120	
litrobenzene-d5	B4	37 - 120	
Phenol-d5	89	40 - 120	
Terphenyl-d14	100	32 - 120	

	Aleateomic	Area 50mil mits	Ollalifier
1,4-Dichlorobenzene-d4	134132	61370 - 245480	- Continue
Acenaphthene-d10	276534	121827 - 487308	
Chrysene-d12	474382	233714 - 934858	
Naphthaiene-d8	502062	223871 - 895484	_
Perylene-d12	416587	208094 - 832374	
Phenanthrene-d10	461947	204419 - 817676	

Comments:			
	11	 	

10101

AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytical Method:

SW8081A

AAB#:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Comments:

Prime Contractor:

FPM Group

	isassamid die
SMCSD0101FA	0910009-001A
SMCSD0401FA	0910009-002A
SMCSD0401FC	0910009-003A
SMCSD0501FA	0910009-004A

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for complet hardcopy d	eness, for other than the conditions	detailed above. Release adable data submitted or	s of the contract, both technically and e of the data contained in this n diskette has been authorized by the
Signature:	Panelyf. Sit	Name:	Pamela J. Titus
Date:	10/22/09	Title:	Project Manager
QAPP 4.0	•	AFCEE FORM O-1	Page 1 of 1



Analytical Method: SW8081A

Preparatory Method: SW3550B

AAB#:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

Date Extracted:

0910009-001A

Matrix:

Sediment

% Solids:

SMCSD0101FA

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101547.rst

Date Received:

Field Sample ID:

67,50

09-Oct-09

Date Analyzed:

16-Oct-09

02-Oct-09 Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size: <u>30 q</u>

Analyte	MDL MDL	RL	Concentration	Dilution 1	Confirm-	Qualitier :
alpha-BHC	0.00049	0.0025	0.00049	1	0.00049	U
beta-BHC	0.0012	0.0025	0.0012	1	0.0012	U
delta-BHC	0.00068	0.0025	0.00068	1	0.00068	U
gamma-BHC	0.00055	0.0025	0.00055	1	0.00055	U
alpha-Chlordane	0.00052	0.0025	0.00052	1	0.00052	U
gamma-Chlordane	0.00062	0.0025	0.00062	1	0.00062	Ü
4,4'-DDD	0,00052	0.0049	0.00052	1	0.00052	U
4,4'-DDE	0.00055	0.0049	0.00055	1	0.00055	υ
4,4'-DDT	0.00064	0.0049	0.00064	1	0.00064	U
Aldrin	0.00059	0.0025	0.00059	1	0.00059	U
Dieldrin	0.00062	0.0049	0.00062	1	0.00062	U
Endosulfan I	0.00046	0.0025	0.00046	1	0.00046	U
Endosulfan II	0.00055	0.0049	0.00055	1	0.00055	U
Endosulfan sulfate	0.00092	0.0049	0.00092	1	0.00092	U
Endrin	0.00096	0.0049	0.00096	1	0.00096	U
Endrin aldehyde	0.00070	0.0049	0.00070	1	0.00070	U
Heptachlor	0.00076	0.0025	0.00076	1	0.00076	U
Heptachlor epoxide	0.00067	0.0025	0.00067	1	0.00067	U
Methoxychlor	0.00065	0.025	0.00065	1	0.00065	U
Toxaphene	0.0099	0.15	0.0099	1	0.0099	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	70	56 - 132	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Tetrachloro-m-xylene	67	69 - 124	

Comments:						
	*					
QAPP 4.0	AFCEE FORM 0-2	Page 1 of 2				



Analytical Method: SW8081A

Preparatory Method: SW3550B

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0401FC

Lab Sample ID:

0910009-003A Matrix: **Sediment**

% Solids:

77,90

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101549.rst

Date Received:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed: 16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

30 g

Analyte	MOL	RL	Concentration	Dilution	Confirm -	Qualifler
alpha-BHC	0.00042	0.0022	0.00042	1	0.00042	U
beta-BHC	0.0011	0.0022	0.0011	1	0.0011	U
delta-BHC	0.00059	0.0022	0.00059	1	0.00059	U
gamma-BHC	0.00047	0.0022	0.00047	1	0.00047	U
aipha-Chlordane	0.00045	0.0022	0.00045	1	0.00045	U
gamma-Chlordane	0.00054	0.0022	0.00054	1	0.00054	U
4,4'-DDD	0.00045	0.0042	0.00045	1	0.00045	U
4,4'-DDE	0.00047	0.0042	0.00047	1	0.00047	υ
4,4'-DDT	0.00055	0.0042	0.00055	1	0.00055	U
Aldrin	0.00051	0.0022	0.00051	1	0.00051	U
Dieldrin	0.00054	0.0042	0.00090	1	0.00077	-PJ F
Endosuffan I	0.00040	0.0022	0,00040	1	0.00040	U
Endosulfan II	0.00047	0.0042	0.00047	1	0.00047	U
Endosulfan sulfate	0.00080	0.0042	0.00080	1	0.00080	U
Endrin	0.00083	0.0042	0.00083	1	0.00083	U
Endrin aldehyde	0.00060	0.0042	0.00060	1	0.00060	U
Heptachlor	0.00065	0.0022	0.00065	1	0.00065	U
Heptachlor epoxide	0.00058	0.0022	0.00058	1	0.00058	U
Methoxychlor	0.00056	0.022	0.00056	1	0.00056	U
Toxaphene	0.0086	0.13	0.0086	1	0.0086	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	76	56 - 132	
Tetrachloro-m-xylene	67	69 - 124	

WA 12/09

Comments:	

AFCEE **ORGANIC ANALYSES DATA SHEET 2**

Preparatory Method: SW3550B

RESULTS

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

Analytical Method: SW8081A

SMCSD0101FA

Lab Sample ID:

0910009-001A

Matrix:

Sediment

% Solids:

67.50

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101547.rst

Date Received:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed:

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 q</u>

		F				
alpha-BHC	0.00049	0.0025	0.00049	1/	0.00049	W
beta-BHC	0.0012	0.0025	0.0012	X	0.0012	W
delta-BHC	0.00068	0.0025	0.00068	1	0.00068	IJ
gamma-BHC	0.00055	0.0025	0.00055	1	0.00055	W
alpha-Chlordane	0.00052	0.0025	0.00052	1	0.00052	UJ
gamma-Chlordane	0.00062	0.0025	0.00062	1	0.00062	W
4,4'-DDD	0.00052	0.0049	0.00052	1	0.00052	W
4,4'-DDE	0.00055	0.0049	0.90055	1	0.00055	ÜJ
4,4'-DDT	0.00064	0.0049	Ø.00064	1	0.00064	W
Aldrin	0.00059	0.0025	0.00059	1	0.00059	UJ.
Dieldrin	0.00062	0.0049	0.00062	1	0.00062	UJ
Endosulfan I	0.00046	0.0025	0.00046	1 .	0.00046	IJ
Endosulfan II	0.00055	0.0049	0.00055	1	0.00055	W
Endosulfan sulfate	0.00092	0.00/19	0.00092	1 ,	0.00092	UJ
Endrin	0.00096	0,0049	0.00096	1 1	0.00096	UJ
Endrin aldehyde	0.00070	0.0049	0.00070	1	0.00070	W
Heptachlor	0.00076	0.0025	0.00076	1	0.00076	W
Heptachlor epoxida	0.00067	0.0025	0.00067	1	0.00067	IJ
Methoxychlor	0.00085	0.025	0.00065	1	0.00065	UJ
Toxaphene	0.0099	0.15	0.0099	3	0.0099	IJ

			Qualifier
Decachlorobiphenyl	70	56 - 132	
Tetrachloro-m-xylene	67	69 - 124	•

Comments:

QAPP 4.0

AFCEE FORM 0-2

Page 1 of 2

Analytical Method: SW8081A

Preparatory Method: <u>SW3550B</u>

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

0910009-001A Matrix:

Sediment

% Solids:

SMCSD0101FA

Initial Calibration ID: 1652

File ID:

E:\Gtoct09\H101547.rst

Date Received:

Field Sample ID:

67.50 02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed: 16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Size:

<u>30 g</u>

Recevery Contact Limits Contact Limits Contact Limits							
Decachlorobiphenyl	72	56 - 132					
Tetrachloro-m-xylene	71	69 - 124					

Comments:	
	-

Analytical Method: SW8081A

Preparatory Method: SW3550B

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #: Lab Sample ID:

0910009-002A

Matrix:

Sediment

% Solids:

78.40

Field Sample ID: SMCSD0401FA

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101548.rst

Date Received:

09-Oct-09

Date Analyzed:

16-Oct-09

02-Oct-09

Date Extracted:

Concentration Units (ug/L or mg/Kg dry weight):

ma/Ka

Sample Size:

<u>30 g</u>

		4 2				
alpha-BHC	0.00042	0.0022	0.00042	1	0.00042	U
beta-BHC	0,0011	0.0022	0.0011	. 1	0.0011	U
delta-BHC	0.00059	0.0022	0.00059	1	0.00059	U
gamma-BHC	0.00047	0.0022	0.00047	1	0.00047	U
alpha-Chlordane	0.00045	0.0022	0.00045	1	0.00045	U
gamma-Chlordane	0.00054	0.0022	0.00054	1	0.00054	U
4,4'-DDE	0.00047	0.0042	0.00047	1	0.00047	U
4,4'-DDT	0,00055	0.0042	0.00055	1	0.00055	U
Aldrin	0.00051	0.0022	0.00051	1	0.00051	Ü
Dieldrin	0.00054	0.0042	0.00054	1	0.00054	U
Endosulfan I	0.00040	0.0022	0.00040	1	0.00040	U
Endosulfan II	0.00047	0.0042	0.00047	1	0.00047	U
Endosulfan sulfate	0.00079	0.0042	0.00079	1	0.00079	U
Endrin	0.00083	0.0042	0.00083	1	0.00083	U
Endrin aldehyde	0.00060	0.0042	0.00060	1	0.00060	U
Heptachlor	0,00065	0.0022	0.00065	1	0.00065	Ū
Heptachlor epoxide	0.00057	0.0022	0.00057	1	0.00057	U
Methoxychlor	0.00056	0.022	0.00056	1	0.00056	U
Toxaphene	0.0085	0.13	0.0085	1	0.0085	U

Storrogate		# Teronido El Infe	- Oublifier
Decachlorobiphenyl	74	56 - 132	
Tetrachloro-m-xylene	76	69 - 124	

Comments	B:				
			 	 	 —

QAPP 4.0

AFCEE FORM 0-2

Page 3 of 8

Analytical Method: SW8081A

Preparatory Method: SW35508

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0401FA

Lab Sample ID:

0910009-002A

Matrix:

Sediment

% Solids:

78.40

Initial Calibration ID: 1652

File ID:

E:\Gtoct09\H101548.rst

Date Received:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed: 16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Size:

<u>30 g</u>

ANALYSE AND SERVIC		74 W.	goneenie en	Dibtion	People "	
4,4'-DDD	0.00045	0.0042	0.0015	1	0.00081	-FJ

Surrocate		Control Limits	e - Qualitier :
Decachloroblphenyl	88	56 - 132	
Tetrachloro-m-xylene	81	69 - 124	

1/29/09

Comments:		
QAPP 4.0	AFCEE FORM 0-2	Page 4 of 8

REVISER

Analytical Method: SW8081A

Preparatory Method: SW3550B

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-003A

Matrix:

Sediment

% Solida:

77.90

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101849.rst

Date Received:

Date Analyzed:

Field Sample ID:

02-Oct-09

SMCSD0401FC

Date Extracted:

Lab Sample ID:

09-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

ma/Ka

Sample Size:

				1)		
alpha-BHC	0.00042	0.0022	0.00042	1	0.00042	UJ
beta-BHC	0.0011	0.0022	0.0011	1	0.0011	W
delta-BHC	0.00059	0.0022	0.00059	1 /	0.00059	UJ
gamma-BHC	0,00047	0.0022	0.00047	1/	0.00047	UJ
alpha-Chlordane	0.00045	0.0022	0.00045	1	0.00045	UJ
gamma-Chlordane	0.00054	0.0022	0.00054	1	0.00054	ເນ
4,4'-DDD	0.00045	0.0042	0.00045	1	0.00045	UJ
4,4'-DDE	0.00047	0.0042	0.00047	1	0.00047	UJ.
4,4'-DDT	0.00055	0.0042	0.00055	1	0.00055	ŊJ
Aldrin	0.00051	0.0022	0.00051	1	0.00051	บม
Dieldrin	0.00054	0.0042	Ø.00090	1	0.00077	EJ F
Endosulfan I	0.00040	0.0022	0.00040	- 1	0.00040	UJ
Endosulfan II	0.00047	0.0042	0.00047	1	0.00047	UJ
Endosulfan sulfate	0.00080	0.0042	0.00080	1	0.00080	: UJ
Endrin	0.00083	0.0042	0.00083	1	0.00083	UJ
Endrin aldehyde	0.00060	0.0042	0.00060	1	0.00060	l III
Heptachlor	0.00065	0.0022	0.00065	1	0.00065	W
Heptachlor epoxide	0.00058	0.0022	0.00058	1	0.00058	IJ
Methoxychlor	0.00056	0.022	0,00056	1	0.00056	W
Toxaphene	0.0086	0.13	0.0086	1	0.0086	W

		Control Limits	
Decachlorobiphenyl	76	56 - 132	
Tetrachloro-m-xylene	67	69 - 124	*

REVISED S

Comments:

QAPP 4.0

AFCEE FORM 0-2

Page 2 of 2

Analytical Method: SW8081A

Preparatory Method: <u>SW3550B</u>

AAB#;

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Sediment

Field Sample ID:

SMCSD0401FC

Lab Sample ID:

Matrix: 0910009-003A

% Solids:

77.90

Initial Calibration ID: 1652

File ID:

E:\Gtoct09\H101549.rst

Date Received:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed: 16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

30 g

THE THE THE THE	Escentrary and the	e egorel inies	
Decachlorobiphenyl	108	56 - 132	
Tetrachloro-m-xylene	77	69 - 124	

Comments:		
		
		-
		
QAPP 4.0	AFCEE FORM 0-2	Page 6 of 8

Analytical Method: SW8081A Preparatory Method: SW3550B AAB #: 10117

Lab Name: Life Science Laboratories, Inc. Contract #:

QAPP 4.0

Field Sample ID: SMCSD0501FA Lab Sample ID: 0910009-004A Matrix: Sediment

% Solids: 78.20 Initial Calibration ID: 1652 File ID: <u>E:\Gtoct09\H101550.rst</u>

Date Received: 02-Oct-09 Date Extracted: 09-Oct-09 Date Analyzed: 16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg Sample Size: 30 g

line de la companya de la companya de la companya de la companya de la companya de la companya de la companya						
alpha-BHC	0.00042	0.0022	0.00042	1	0.00042	U
beta-BHC	0.0011	0.0022	0.0011	1	0.0011	U
delta-BHC	0.00059	0.0022	0.00059	1	0.00059	U
gamma-BHC	0.00047	0.0022	0.00047	1	0.00047	U
alpha-Chlordane	0.00045	0.0022	0.00045	1	0.00045	U
gamma-Chlordane	0.00054	0.0022	.0.00054	1	0.00054	_ υ
4,4'-DDD	0.00045	0.0042	0.00045	1	0.00045	ΰ
4,4'-DDE	0.00047	0.0042	0.00047	1 1	0.00047	U
4,4'-DDT	0.00055	0.0042	0.00055	1	0.00055	U
Aldrin	0.00051	0.0022	0.00051	1	0.00051	U
Dieldrin	0.00054	0.0042	0.00054	1	0.00054	U
Endosulfan I	0.00040	0.0022	0.00040	1	0.00040	U
Endosulfan II	0.00047	0.0042	0.00047	1	0.00047	U
Endosulfan sulfate	0.00079	0.0042	0.00079	1	0.00079	U
Endrin	0.00083	0.0042	0.00083	1	0.00083	U
Endrin aldehyde	0.00060	0.0042	0.00060	1	0.00060	U
Heptachlor	0.00065	0.0022	0.00065	1	0.00065	U
Heptachlor epoxide	0.00058	0.0022	0.00058	1	0.00058	U
Methoxychlor	0.00056	0.022	0.00056	1	0.00056	υ
Toxaphene	0.0086	0.13	0.0086	1	0.0086	U

Surrogate	The state of the s	Control Limits	Cualifier
Decachlorobiphenyl	109	56 - 132	
Tetrachloro-m-xylene	79	69 - 124	

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Comments:				
		 		
			·	·
		 		

AFCEE FORM O-2 Page 7 of 8

Analytical Method: SW8081A

Preparatory Method: SW3550B

AAB#:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-004A

Matrix:

Sediment

% Sollds:

QAPP 4.0

78.20

SMCSD0501FA

Initial Calibration ID: 1651

File ID:

E:\Gtodt09\G101550.rst

Date Received:

Fleid Sample ID:

Date Extracted:

Lab Sample ID:

09-Oct-09

Date Analyzed: 16-Oct-09

02-Oct-09 Concentration Units (ug/L or mg/Kg dry weight):

ma/Kg

Sample Size:

<u>30 q</u>

Suropaie		ezinto Pinte	
Decachlorobiphenyl	69	56 - 132	
Tetrachloro-m-xylene	67	69 - 124	*

Comments:				
	 	 	 _	

AFCEE FORM O-2

Page 8 of 8

AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytical Method:

SW8082

AAB#:

10119

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Comments:

Prime Contractor:

FPM Group

SMCSD0101FA	0910009-001A
SMCSD0401FA	0910009-002A
SMCSD0401FC	0910009-003A
SMCSD0501FA	0910009-004A

for complete hardcopy da	ness, for other than the conditions of	detailed above. Release idable data submitted oi	s of the contract, both technically and e of the data contained in this n diskette has been authorized by the
Signature:	- Panelef. Ditu	Name:	Pamela J. Titus
Date:	10/22/09	Title:	Project Manager
QAPP 4.0	A	AFCEE FORM O-1	Page 1 of 1

Analytical Method: SW8082

Preparatory Method: <u>SW3550B</u>

AAB#:

10119

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0101FA

Lab Sample ID:

0910009-001A

Matrix:

<u>Sediment</u>

% Solids:

67.50

Initial Calibration ID: 1650

File ID:

E:\90oct09\C101410.rst

Date Received:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed: 14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

30 g

(Marely)(1)	I WO TO	ERLE	Concentration		្ត្រី (គ្រប់ <u>)</u>	aralner.
Aroclor 1016	0.00324	0.0252	0.00324	1		U
Aroclor 1221	0.00329	0.0252	0.00329	1		U
Aroclor 1232	0.00200	0.0252	0.00200	1		U
Aroclor 1242	0.00271	0.0252	0.00271	1		U
Aroclor 1248	0.00529	0.0252	0.00529	1		U
Aroclor 1254	0.00702	0.0252	0.00702	1		U
Aroclor 1260	0.00296	0.0252	0.00296	1		U

	Felovery		e fallifier
Decachlorobiphenyt	92	58 - 125	

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Commen	ts:							
		 		 	<u> </u>			_
					_	•	P. 10	_
		 _						_

QAPP 4.0

AFCEE FORM 0-2

Page 1 of 4

Analytical Method: SW8082

Preparatory Method: SW3550B

AAB#:

10119

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

0910009-002A Matrix: <u>Sediment</u>

% Solids:

<u>78.40</u>

Initial Calibration ID: 1650

File ID:

E:\90oct09\C101411.rst

Date Received:

Field Sample ID:

02-Oct-09

SMCSD0401FA

Date Extracted:

09-Oct-09

Date Analyzed: 14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Size:

30 a

Analyte		RL A	eoncenialien	p)limitane	Continu	
Aroclor 1016	0.00279	0.0217	0.00279	1		U
Araclor 1221	0.00283	0.0217	0.00283	1		U
Aroclor 1232	0.00172	0.0217	0.00172	1		U
Aroclor 1242	0.00233	0.0217	0.00233	1		
Aroclor 1248	0.00455	0.0217	0.00455	1		U
Arocior 1254	0.00605	0.0217	0.0727	1	A. 449	-
Aroclor 1260	0.00255	0.0217	0.00255	1		U

	and Eggeven'	. Voine amic	
Decachlorobiphenyl	94	58 - 125	

Comments:					

	R				
					

Analytical Method: SW8082

Preparatory Method: SW3550B

AAB#:

10119

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-003A

Matrix:

Sediment

% Solids:

77.90

Initial Calibration ID: 1650

File ID:

E:\90oct09\C101412.rst

Date Received:

Field Sample ID:

02-Oct-09

SMCSD0401FC

Date Extracted:

Lab Sample ID:

09-Oct-09

Date Analyzed: 14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

30 g

			NELTON A PLANTAGE AND
i	Dilution	Corming	
	1		U
	1		U
	1		U

Aroclar 1016	0.00281	0.0218	0.00281	1	U
Arodor 1221	0.00285	0.0218	0.00285	1	U
Arodor 1232	0.00173	0.0218	0.00173	1	U
Arodor 1242	0.00235	0.0218	0.00235	1	U
Arodor 1248	0.00458	0.0218	0.00458	1	U
Arodor 1254	0.00608	0.0218	0.0145	1	F
Aroclor 1260	0.00257	0.0218	0.00257	1	U

Surrogate Surrogate		ecifica (filmits)	Qualifier
Decachlorobiphenyl	89	58 - 125	

Comments:		
		#
QAPP 4.0	AFCEE FORM 0-2	Page 3 of 4

Analytical Method: SW8082

Preparatory Method: SW3550B

AAB #:

10119

Lab Name:

Field Sample ID:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

0910009-004A

Matrix:

Sediment

% Solids:

78.20

initial Calibration ID: 1650

File ID:

E:\90oct09\C101413.rst

Date Received:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed:

14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

SMCSD0501FA

ma/Ka

Sample Size:

<u>30 g</u>

Analyte	A HOE	RL	S contention	E TURNET C	
Aroclor 1016	0.00280	0.0217	0.00280	1	U
Aroclor 1221	0.00284	0.0217	0.00284	1	U -
Aroclor 1232	0.00173	0.0217	0.00173	1	υ
Aroclor 1242	0.00234	0.0217	0.00234	1	U
Arodor 1248	0.00457	0.0217	0.00457	1	U
Aroclor 1254	0.00606	0.0217	0.00606	1	U
Aroclor 1260	0.00256	0.0217	0.00256	1	Ü

	Pecovery		Qualify
Decachlorobiphenyl	101	58 - 125	

Comments:		
1 5-0		
QAPP 4.0	AFCEE FORM 0-2	Page 4 of 4

Life Science Laboratories, Inc.

08-Oct-09

Date:

			Percent	Moisture	32.5	21.6	22.1	21.8	
				Batch ID	R18473	R18473	R18473	R18473	
				Date Analyzed	10/7/2009	10/7/2009	10/7/2009	10/7/2009	
				Date Received	10/2/2009	10/2/2009	10/2/2009	10/2/2009	
				Date Collected	10/1/2009 10/2/2009	10/1/2009	10/1/2009	10/1/2009	
		TM-Sed		Units	wt%	wt%	wt%	wt%	
FPM Group	6000160	Griffiss AFB - SMC LTM-Sed		Lab ID	0910009-001A	0910009-002A	O910009-003A	0910009-004A	
CLIENT:	Lab Order:	Project:		Sample ID	SMCSD0101FA	SMCSD0401FA	SMCSD0401FC	SMCSD0501FA	

Appendix C Raw Lab Data



Monday, October 19, 2009

Niels van Hoesel **FPM Group** 153 Brooks Road Rome, NY 13441

TEL:

Project: GRIFFISS AFB - SMC LTM-SW

RE:

Analytical Results

Order No.: 0910008

Dear Niels van Hoesel:

Life Science Laboratories, Inc. received 4 sample(s) on 10/2/2009 for the analyses presented in the following report. Sample results relate only to the samples as received by the laboratory.

Very truly yours,

Life Science Laboratories, Inc.

Project Manager



Project Management Case Narrative

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from FPM, for the Griffiss AFB-SMC LTM-SW Rome, NY project.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The cooler(s) were received intact. When the cooler(s) were received by the laboratory, the sample custodian(s) opened and inspected the shipment(s) for damage and custody inconsistencies. Chains of custody documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

There were no discrepancies noted upon receipt. The temperature of the iced cooler was -1.2°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1

1) <u>Test Methods for Evaluating Solid Wastes</u>, SW-846 Third Edition, Final Update III, December 1996 (including the QC requirements specified in AFCEE 4.0 + variances).

QUALITY CONTROL

QA/QC results are summarized in the Laboratory Report.

RAW DATA

The raw data is not requested for this report. Life Science Laboratories, Inc. will keep the raw data on file.

Total # of pages in this report:	
1 0	

GC/MS Volatile Organics Case Narrative

Client:

FPM

Project/Order:

Griffiss AFB - SMC LTM-SW

Work Order #:

0910008

Methodology:

8260B

Analyzed/Reviewed by (Initials/Date):

JK 10/9/09

Supervisor/Reviewed by (Initials/Date):

D 10-12-09

QA/QC Review (Initials/Date):

ASTOR IK 10119109

File Name:

G:\Narratives\MSVoa\0910008msvnar.doc

GC/MS Volatile Organics

The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 60 m x 0.25 mm ID capillary column (MS01), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), Restek Rtx-502.2, 60 m x 0.25 mm ID capillary column (MS03) and Restek Rtx-VMS, 60 m x 0.25 mm ID capillary column (MS04), and a Vocarb 3000 adsorbent trap.

There were no excursions to note. All QC results were within established control limits.

Holding Times and Sample Preservation

All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Samples had a pH of ≤ 2 .

Laboratory Control Sample

All spike recoveries met method and/or project specific QC criteria.

Surrogate Standards

All surrogate standard recoveries met method and/or project specific OC criteria.

Internal Standards

All internal standard areas met method and/or project specific QC criteria.

Calibrations

All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks

All preparation blanks met method and/or project specific QC criteria.

Life Science Laboratories, Inc.

Date: 19-Oct-09

CLIENT: Project: Lab Order:	FPM Group Griffiss AFB - SMC LTM-SW 0910008		Work Order Sample Summan			
Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received		
0910008-001A	SMCSW0101FA	RV-SMCFSS-1	10/1/2009	10/2/2009		
0910008-002A	SMCSW0401FA	SMCSD-13	10/1/2009	10/2/2009		
0910008-003A	SMCSW0401FC	SMCSD-13	10/1/2009	10/2/2009		
0910008-004A	SMCSW0501FA	SMCSD-14	10/1/2009	10/2/2009		

Life Science Laboratories, Inc.

0910008 FPM Group Lab Order:

Lab Order:	0210008				1		
Client:	FPM Group				DATI	DATES REPORT	
Project:	Griffiss AFB - SMC LTM-SW	JTM-SW	·				
Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date Prep Date	Prep Date	Analysis Date
0910008-001A	SMCSW0101FA	10/1/2009 3:52:00 PM	Surface Water	Surface Water Volatile Organic Compounds by GC/MS			10/6/2009
0910008-002A	SMCSW0401FA	10/1/2009 3:24:00 PM		Volatile Organic Compounds by GC/MS			10/6/2009
0910008-003A	SMCSW0401FC			Volatile Organic Compounds by GC/MS			10/6/2009
0910008-004A	SMCSW0501FA	10/1/2009 2:58:00 PM		Volatile Organic Compounds by GC/MS			10/6/2009

Chain of Custody

CHAIN OF CUSTODY RECORD AFCEE

COC#: _1_SDG#: _233_ Cooler ID#: _A_

	Project Name: Griffiss AFB SMC LTM	Send Results to: Niels van Hoesel
Life Science Laboratories, Inc.	Sampler Name: Niels van Hoesel	FPM Group Ltd.
5000 Brittonfield Pkwy, Suite 200	•	153 Brooks Road
East Syracuse, NY 13057 Tel: (315)437-0200		Rome, NY 13441
Carrier: LSL courier.	Signature: // par//	Phone: (315) 336-7721 Ext. 205

Analyses requested

	,			
Comments				
Metals ^{noce 5} 250 mL poly bottle HNO3	-	-	_	-
Pesticides ^{note 4} l L amber bottle	-	-	-	-
I Γ supper pottle PCB ² note 3	-	-	-	1
I L amber bottle	,	-	-	ı
VOCs note 1 40 mL Vials (HCl)	3	3	3	3
ersinestro To #	3	3	3	3
SBD/SED	0/0	0/0	0/0	0/0
SACODE	z	Z	FD	z
ZWCODE	Ð	Ð	Ð	ß
XIATAM	WS	WS	SM	WS
Time	10/1 1552	1524	1524	1458
Date 2008	1/01	1/01	1/01	10/1
LociD	RV-SMCFSS-1	SMCSD-13	SMCSD-13	SMCSD-14
Field Sample ID	SMCSW0101FA	SMCSW0401FA	SMCSW0401FC	SMCSW0501FA

Cooler temperature: -\.2 °C	201 100	
Sample Condition Upon Receipt at Laboratory: 1965 (25tm /) 14 (1) 14C7	Special Instructions/Comments: Parameter List: (According to AFCEE QAPP 4.0)	THE STATE OF THE PARTY OF THE P

Note 1: VOCs: Method SW8260 for AFCEE QAPP 4.0 List. Note 2: SVOCs: Method SW8270 for AFCEE QAPP 4.0 List. Note 3: PCBs: Method SW8082 for AFCEE QAPP 4.0 List.

Note 4: Pesticides: Method SW8081 for AFCEE QAPP 4.0 List Note 5: Metals: Method SW6010B for AFCEE QAPP 4.0 List and Mercury: Method SW7470.

Jaic. 10-2-09	Time: 1620	Date: 10/2/29	Time: /62 5		
#2 Keleased by: (5)g) postage Date: 10/2/09 #3 Keleased by: (5)g) R. L. Omalhon Date: (C2-04	Time: 14; 40 Company Name: 4 Fe Seicace Laks Time: 1620	19816	725	s ik ank	
Date: 10/2/09	Time: 14,40	Date: 10-7-09	Time: 1445	SACODE N = Normal Sample AB = Ambient Blank TB = Trip Blank EB = Equipment Blank	
#2 Keleased by: (Sig)	Company Name: FPM Group Ltd	#2 Received by: (Sig) B. M. Ograbbus. Date: (C-2-29 #3 Received by: (Sig)	Company Name: Life Science Lahs Time: 1445 Company Name:	SMCODE B = Bailer G = Grab (only for EB). NA = Not Applicable (only for AB/TB) PP = Peristaltic Pump	
Date:	Time:	Date: 10/1/09	Time:		
#1 Keleased by: (Sig)	Company Name:	#1 Received by: (Sig) Niels van Hoesel	Company Name: FPM Group Ltd	MATRIX WG = Ground water WQ = Water Quality Control Matrix SO = Soil WS = Surface water	

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: FPM		Date and Ti	me Received:	10/2/2009 4:20:00 PM
Work Order Number: 0910008		Received by	r: ads	
Checklist completed by: /O	h/09	Reviewed 	by: Initially	10/2/09 Date
Delivery Meth	od: <u>Courier</u>	•		
Shipping container/cooler in good condition?	Yes 🗹	No	Not Present	
Custody seals intact on shipping container/cooler?	Yes 🗹	No 🗌	Not Present	
Custody seals intact on sample bottles?	Yes	No 🗔	Not Applicable	
Chain of custody present?	Yes 🗹	No 🗌		
Chain of custody signed when relinquished and received?	Yes 🔽	No 🗀		
Chain of custody agrees with sample labels?	Yes 🔽	No 🗌		
Samples in proper container/bottle?	Yes 🗹	No 🗆		
Sample containers intact?	Yes 🔽	No 🗔		
Sufficient sample volume for indicated test?	Yes 🗸	No 🗀		
All samples received within holding time?	Yes 🗹	No 🗀		
Container/Temp Blank temperature in compliance?	Yes 🗸	No 🗆		
Water - VOA vials have zero headspace?	Yes 🗹	No 🗔	No VOA vials submitte	ed 🗆
Water - pH acceptable upon receipt?	Yes 🗌	No 🗀	Not Applicable	

Comments:

Corrective Action:

FAM 09100

Client/Project__

			-		 		т		 	1	 - 1	. 1	 \neg
	Date and Time Returned	NR											
	Analysis	8260			i			:					
Sample Control Record	Date and Time Removed	9 9:50		art.									
ontrol	Date an	10/4/09	`										
nple Co	Removed By	772						ļ					
Sar	Client Samp												
	Frac	A				:							
	Sample ID	400 - 100 · 8000180									7		

Analytical Results

AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytical Method:

SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Comments:

Prime Contractor:

FPM Group

Field Sample ID	Lab Sample ID
SMCSW0101FA	0910008-001A
SMCSW0401FA	0910008-002A
SMCSW0401FC	0910008-003A
SMCSW0501FA	0910008-004A

for completend hardcopy data	ata package is in compliance with the te ess, for other than the conditions detaile package and in the computer-readable mager's designee, as verified by the following	d above. Releas data submitted o	e of the data contained in this
Signature:	Panely Situs	Name:	Pamela J. Titus
Date:	10/19/09	Title:	Project Manager
PP 4.0	AFCEE	FORM O-1	Page 1 of 1

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0101FA

Lab Sample ID: 0910008-001A Matrix:

Surface Water

% Solids:

<u>0</u>

Initial Calibration ID: 1629

File ID:

T7565.D

Date Received:

02-Oct-09

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

µg/L

Sample Size:

10 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1 1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1	·	U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.15	1		F
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Col	nm	en	ts:

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0101FA

Lab Sample ID:

0910008-001A

Matrix:

Surface Water

% Solids:

<u>0</u>

Initial Calibration ID: 1629

File ID:

T7565.D

Date Received:

Date Extracted:

Date Analyzed: 06-Oct-09

02-Oct-09

10 mL

Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>

Sample Size:

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1 '		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.100	1	*	U
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1	·	U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		- · · · · · · · · · · · · · · · · · · ·
	l <u>_</u> _			-		

Comments:

Analytical Method: SW8260B

Preparatory Method:

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0101FA

Lab Sample ID:

0910008-001A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7565.D

Date Received:

02-Oct-09

Date Analyzed:

06-Oct-09

Date Extracted:

Concentration Units (ug/L or mg/Kg dry weight): μg/L

Sample Size:

<u>10 mL</u>

Analyte	MDL	RL.	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	105	72 - 119	
4-Bromofluorobenzene	96	76 - 119	
Toluene-d8	102	81 - 120	

Internal Std	Area Counts	Area Count Limits Qualifier
1,4-Dichlorobenzene-d4	772235	347175 - 1388700
Chlorobenzene-d5	1041586	415808 - 1663230
Fluorobenzene	2961314	1176246 - 4704984

Comments:	

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FA

Lab Sample ID:

0910008-002A Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7566.D

Date Received:

Date Analyzed: 06-Oct-09

02-Oct-09

Date Extracted:

Sample Size:

<u>10 mL</u>

Concentration Units (ug/L or mg/Kg dry weight):

<u>ug/L</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1	SCOOLS COLOR CREAT ESTABLISHED	U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1 1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		บ
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1	,	U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	•	U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	6.86	1		F
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.37	1	-	F
Benzene	0.100	0.500	0.750	1		
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1	,	U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:	

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FA

Lab Sample ID:

0910008-002A Matrix: Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7566.D

Date Received:

Date Extracted:

Date Analyzed:

06-Oct-09

02-Oct-09

Sample Size:

<u>10 mL</u>

Concentration Units (ug/L or mg/Kg dry weight):

μg/L

Analyte MDL RL Concentration Dilution Confirm Qualifier **Bromoform** 0.330 0.330 1.00 U Bromomethane 0.330 3.00 0.330 1 U Carbon tetrachloride 0.100 1.00 0.100 1 U Chlorobenzene 0.100 0.500 0.230 1 F Chloroethane 0.330 0.330 1 U 1.00 Chloroform 0.100 0.100 U 0.500 1 Chloromethane 0.330 1.00 0.330 u 1 cis-1,2-Dichloroethene 0.100 1.00 0.100 1 U cis-1,3-Dichloropropene 0.160 0.500 0.160 1 U Dibromochloromethane 0.100 0.500 0.100 1 U Dibromomethane 0.160 0.160 1 U 1.00 Dichlorodifluoromethane 0.100 1.00 0.100 1 U Ethylbenzene 0.100 1.00 0.100 1 U Hexachlorobutadiene 0.100 1.00 0.100 1 U 0.100 Isopropylbenzene 0.100 1 U 1.00 Methyl tert-butyl ether 0.160 5.00 0.200 1 F Methylene chloride 0.160 1.00 0.160 1 U n-Butylbenzene 0.100 1.00 0.100 1 U n-Propylbenzene 0.100 0.100 U 1.00 1 Naphthalene 0.100 1.00 0.100 U 1 o-Xylene 0.100 1.00 0.100 U 1 p-Isopropyltoluene 0.160 1.00 0.160 1 U sec-Butylbenzene 0.160 1.00 0.160 1 U Styrene 0.100 U 1.00 0.100 1 tert-Butylbenzene 0.100 1.00 0.100 1 U Tetrachloroethene 1.00 U 0.100 0.100 Toluene 0.100 1.00 0.100 U 1 trans-1,2-Dichloroethene 0.100 1.00 0.100 1 U trans-1,3-Dichloropropene 0.160 0.160 U 1.00 1 Trichloroethene 0.100 1.00 0.100 1 U Trichlorofluoromethane U 0.100 1.00 0.100 1 Vinyl chloride 0.330 1.00 0.330 1 U

Comments:	

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FA

Lab Sample ID:

0910008-002A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7566.D

Date Received:

Date Analyzed: 06-Oct-09

02-Oct-09

Date Extracted:

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Sample Size:

10 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	104	72 - 119	
4-Bromofluorobenzene	94	76 - 119	
Toluene-d8	102	81 - 120	

Internal Std	Area Counts	Area Count Limits Qualifler
1,4-Dichlorobenzene-d4	784303	347175 - 1388700
Chlorobenzene-d5	1032018	415808 - 1663230
Fluorobenzene	2913319	1176246 - 4704984

Comments:			
	 	 ·•···	

Analytical Method: SW8260B

Preparatory Method:

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FC

Lab Sample ID:

0910008-003A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7567.D

Date Received:

02-Oct-09

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size:

10 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.230	1	0000101.) 20.004.) 40.000 (0000.00000000000000000000000000	F
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		υ
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1	· ·	IJ
1,2,3-Trichlorobenzene	0.100	1.00	0.100	; 1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.240	1		F
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		· U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		·U
2-Butanone	1.00	10.0	6.95	1		F
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.39	1		F
Benzene	0.100	0.500	0.780	1		
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:		
·	 	

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FC

µg/L

0910008-003A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7567.D

Date Received:

Lab Sample ID:

Date Analyzed: 06-Oct-09

02-Oct-09 Concentration Units (ug/L or mg/Kg dry weight): Date Extracted:

Sample Size:

<u>10 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm Qualifie
Bromoform	0.330	1.00	0.330	1	U
Bromomethane	0.330	3.00	0.330	1	· U
Carbon tetrachloride	0.100	1.00	0.100	1	U
Chlorobenzene	0.100	0.500	0.230	1	F
Chloroethane	0.330	1.00	0.330	1	U
Chloroform	0.100	0.500	0.100	1	: U
Chloromethane	0.330	1.00	0.330	1	' U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1	U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1	U
Dibromochloromethane	0.100	0.500	0.100	1	U
Dibromomethane	0.160	1.00	0.160	1	U
Dichlorodifluoromethane	0.100	1.00	0.100	1	U
Ethylbenzene	0.100	1.00	0.100	1	U
Hexachlorobutadiene	0.100	1.00	0.100	1	U
Isopropylbenzene	0.100	1.00	0.100	1	U
Methyl tert-butyl ether	0.160	5.00	0.230	1	F
Methylene chloride	0.160	1.00	0.160	1	U
n-Butylbenzene	0.100	1.00	0.100	1	U
n-Propylbenzene	0.100	1.00	0.100	1	U
Naphthalene	0.100	1.00	0.110	1	F
o-Xylene	0.100	1.00	0.100	1	U
p-isopropyltoluene	0.160	1.00	0.160	1	U
sec-Butylbenzene	0.160	1.00	0.160	1	U
Styrene	0.100	1.00	0.100	1	U
tert-Butylbenzene	0.100	1.00	0.100	1	U
Tetrachloroethene	0.100	1.00	0.100	1	U
Toluene	0.100	1.00	0.100	1	U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1	U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1	U
Trichloroethene	0.100	1.00	0.100	1	U
			1	1	

Comments:			
	·	 	

1.00

1.00

0.100

0.330

1

0.100

0.330

Trichlorofluoromethane

Vinyl chloride

U

U

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0401FC

Lab Sample ID:

MDL

0.300

0910008-003A

Matrix:

Surface Water

% Solids:

<u>0</u>

Initial Calibration ID: 1629

RL.

2.00

File ID:

T7567.D

Date Received:

Date Analyzed: 06-Oct-09

Xylenes (total)

02-Oct-09

Analyte

Date Extracted:

Sample Size:

<u>10 mL</u>

Concentration Units (ug/L or mg/Kg dry weight): <u>μg/L</u>

Concentration

0.300

Dibation	6	ardiren	The Allkania	Seestifi	H112 R43

Surrogate	Recovery	Control Limits Gualifier
1,2-Dichloroethane-d4	105	72 - 119
4-Bromofluorobenzene	93	76 - 119
Toluene-d8	102	81 - 120

Internal Std	Area Counts	Area Count Limits Qualifier
1,4-Dichlorobenzene-d4	778675	347175 - 1388700
Chlorobenzene-d5	1037128	415808 - 1663230
Fluorobenzene	2946621	1176246 - 4704984

Comments:				

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSW0501FA

Lab Sample ID:

0910008-004A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7568.D

Date Received:

02-Oct-09

Date Extracted:

Date Analyzed: 06-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

μg/L

Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		٠ ٧
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.160	1		F
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	3.97	1		F
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	3.01	1		F
Benzene	0.100	0.500	0.670	1		
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1	<u> </u>	U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:	:
-----------	---

Sample Size:

10 mL

Analytical Method: SW8260B Preparatory Method: AAB #: R18463

Lab Name: <u>Life Science Laboratories, Inc.</u> Contract #:

Concentration Units (ug/L or mg/Kg dry weight):

Field Sample ID: SMCSW0501FA Lab Sample ID: 0910008-004A Matrix: Surface Water

% Solids: 0 Initial Calibration ID: 1629 File ID: T7568.D

Date Received: 02-Oct-09 Date Extracted: Date Analyzed: 06-Oct-09

μg/L

Analyte MDL Concentration Dilution Confirm Qualifier RL **Bromoform** 0.330 1.00 0.330 U 1 U Bromomethane 0.330 3.00 0.330 1 Carbon tetrachloride U 0.100 1.00 0.100 1 Chlorobenzene 0.100 0.120 1 F 0.500 Chloroethane 0.330 1.00 0.330 1 U Chloroform 0.100 0.500 0.100 1 U Chloromethane 0.330 1.00 0.330 1 U cis-1,2-Dichloroethene 0.100 0.100 U 1.00 1 cis-1,3-Dichloropropene 0.160 0.500 0.160 1 U Dibromochloromethane 0.100 1 U 0.500 0.100 Dibromomethane 0.160 0.160 1 U 1.00 Dichlorodifluoromethane 0.100 1.00 0.100 1 U Ethylbenzene 0.100 U 1.00 0.100 1 Hexachlorobutadiene 0.100 1.00 0.100 1 U Isopropylbenzene 0.100 0.100 U 1.00 1 Methyl tert-butyl ether 0.160 5.00 0.160 1 U Methylene chloride 0.160 1.00 0.160 1 U n-Butylbenzene 0.100 0.100 U 1.00 1 n-Propylbenzene 0.100 1.00 0.100 1 U Naphthalene U 0.100 0.100 1 1.00 o-Xylene 0.100 1.00 0.100 1 U p-Isopropyltoluene 0.160 1.00 0.160 1 u sec-Butylbenzene 0.160 u 0.160 1 1.00 Styrene 0.100 0.100 1 U 1.00 tert-Butylbenzene 0.100 1.00 0.100 1 U Tetrachloroethene 0.100 1.00 0.100 1 U Toluene 0.100 1.00 0.100 1 U trans-1,2-Dichloroethene 0.100 U 1.00 0.100 1 trans-1,3-Dichloropropene 0.160 0.160 1 U 1.00 Trichloroethene 0.100 U 1.00 0.100 1 Trichlorofluoromethane 0.100 1.00 0.100 1 U Vinyl chloride U 0.330 1.00 0.330 1

Comments:	

Analytical Method: SW8260B

Preparatory Method:

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

SMCSW0501FA

Lab Sample ID:

0910008-004A

Matrix:

Surface Water

% Solids:

0

Initial Calibration ID: 1629

File ID:

T7568.D

Date Received:

Field Sample ID:

Date Analyzed: 06-Oct-09

Xylenes (total)

02-Oct-09

Date Extracted:

Sample Size:

10 mL

Concentration Units (ug/L or mg/Kg dry weight):

Analyte

μg/L

MDL

0.300

200	0.300	1		
			!	

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	105	72 - 119	
4-Bromofluorobenzene	91	76 - 119	
Toluene-d8	100	81 - 120	

internal Std.	Area Counts	Area Count Limits Qualifier
1,4-Dichlorobenzene-d4	789445	347175 - 1388700
Chlorobenzene-d5	1035964	415808 - 1663230
Fluorobenzene	2888795	1176246 - 4704984

Comments:	

Quality Control Results

AFCEE ORGANIC ANALYSES DATA SHEET 3 INITIAL MULTIPOINT CALIBRATION

Analytical Method:

8260B

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

MS01_11

Date of Initial Calibration:

15-SEP-09

Initial Calibration ID:

<u>1629</u>

Concentration Units (ug/L or mg/kg): ug/L

SEE ATTACHED

Comments:			
	·	 	

```
Method : C:\HPCHEM\1\METHODS\T915VOCW.M (RTE Integrator)
Title : VOC's w/Restek Rtx-VMS, 0.25mm x 60 m, 1.4df
                  : VOC's w/Restek Rtx-VMS, 0.25mm x 60 m, 1.4df
     Last Update : Thu Sep 17 14:40:41 2009
                                                 ICAL # 1629
     Response via : Continuing Calibration
     Calibration Files
            =T7318.D 1.0 =T7319.D 2.0 =T7320.D =T7321.D 20 =T7322.D 30 =T7323.D
     0.5
     10
                     0.5 1.0 2.0 10 20 30 Avg
          Compound
                                -----ISTD------
  1) I
          Fluorobenzene
          Dichlorodifluoromet 0.314 0.336 0.334 0.414 0.427 0.438 0.388
                                                                            14.95
  2)
          Chloromethane 0.293 0.319 0.315 0.360 0.370 0.380 0.347
                                                                            10.98
  3) P
         Vinyl chloride 0.309 0.338 0.337 0.381 0.394 0.396 0.367
                                                                            10.71
  4) CP
                           0.197 0.202 0.194 0.197 0.211 0.217 0.206
0.182 0.176 0.181 0.183 0.184 0.186 0.183
                                                                             6.04
          Bromomethane
  5)
                                                                             2.50
  6)
          Chloroethane
          Trichlorofluorometh 0.545 0.583 0.586 0.636 0.635 0.644 0.609
                                                                             6.19
  7)
  8) CPM 1,1-Dichloroethene 0.216 0.234 0.236 0.250 0.259 0.281 0.252
                                                                            10.56
          Carbon disulfide 0.685 0.775 0.789 0.774 0.758 0.804 0.764
                                                                             4.97
  9)
          1,1,2-Trichloro-1,2 0.259 0.275 0.277 0.300 0.309 0.341 0.302
                                                                            11.43
 10)
         Methyl iodide 0.091 0.114 0.155 0.138 0.143 0.171 0.138 19.66
 11)
                                                                            31.00
                                     0.004 0.004 0.005 0.005 0.007 0.006
 12)
          Acrolein
         Methylene chloride 0.263 0.243 0.242 0.226 0.229 0.249 0.243
                                                                             5.08
 13)
                                     0.061 0.063 0.058 0.057 0.059 0.059
                                                                             4.64
 14)
         Acetone
         trans-1,2-Dichloroe 0.233 0.246 0.256 0.273 0.281 0.308 0.274
                                                                            11.68
 15)
         Methyl acetate 0.161 0.164 0.159 0.170 0.171 0.183 0.171
                                                                            6.36
 16)
         Methyl tert-Butyl e 0.554 0.602 0.621 0.656 0.669 0.733 0.654
                                                                            10.62
 17)
         1,1-Dichloroethane 0.475 0.523 0.523 0.542 0.556 0.602 0.548
 18) P
                                     0.058 0.062 0.066 0.065 0.068 0.064
                                                                             6.06
         Acrylonitrile 0.058 0.062 0.066 0.065 0.068 0.064 Vinyl acetate 0.395 0.429 0.458 0.513 0.545 0.565 0.499
 _9)
                                                                            14.77
 20)
         cis-1,2-Dichloroeth 0.251 0.275 0.279 0.294 0.304 0.332 0.297
                                                                            10.89
 21)
         2,2-Dichloropropane 0.416 0.438 0.450 0.469 0.496 0.548 0.483
                                                                            11.34
 22)
         Bromochloromethane 0.104 0.122 0.123 0.124 0.125 0.136 0.123
                                                                            7.99
 23)
                              0.513 0.570 0.584 0.628 0.646 0.690 0.618
                                                                            10.68

      Cyclohexane
      0.513 0.570 0.584 0.628 0.646 0.690 0.010

      Chloroform
      0.563 0.578 0.567 0.568 0.584 0.633 0.593

 24)
                                                                             6.11
 25) CP
         Carbon tetrachlorid 0.136 0.158 0.173 0.235 0.290 0.346 0.244
 26)
         1,1,1-Trichloroetha 0.380 0.407 0.430 0.449 0.476 0.524 0.457
                                                                            12.67
 27)
         2-Butanone 0.091 0.093 0.096 0.096 0.101 0.096
                                                                            4.82
 28)
         1,1-Dichloropropene 0.337 0.375 0.374 0.398 0.413 0.436 0.395
                                                                             9.08
 29)
         Benzene 1.116 1.176 1.163 1.168 1.183 1.233 1.177
                                                                             3.08
 30) M
         1,2-Dichloroethane- 0.379 0.367 0.348 0.346 0.347 0.372 0.363
                                                                            4.32
 31) S
         1,2-Dichloroethane 0.325 0.367 0.377 0.396 0.408 0.438 0.394
                                                                            10.84
 32)
         Methylcyclohexane 0.454 0.511 0.512 0.544 0.573 0.618 0.548
                                                                            11.31
 33)
         Trichloroethene 0.246 0.278 0.277 0.289 0.298 0.321 0.291 Dibromomethane 0.118 0.135 0.140 0.146 0.149 0.162 0.145
                                                                             9.41
 34) M
                                                                            11.46
 35)
         1,2-Dichloropropane 0.249 0.277 0.281 0.288 0.296 0.317 0.289
                                                                             8.27
 36) CP
         Bromodichloromethan 0.241 0.252 0.273 0.327 0.364 0.412 0.329
                                                                           23.45
37)
                                    0.040 0.042 0.030 0.030 0.030 0.034
38)
         2-Chloroethylvinyl
         cis-1,3-Dichloropro 0.338 0.372 0.389 0.435 0.457 0.498 0.428
                                                                            14.87
39)
40) CPM Toluene 0.532 0.596 0.569 0.588 0.610 0.664 0.604
                                                                             8.21
                                    0.172 0.181 0.206 0.211 0.216 0.200
                                                                             9.48
         4-Methyl-2-pentanon
41)
         trans-1,3-Dichlorop 0.276 0.310 0.326 0.375 0.400 0.434 0.366
                                                                           17.30
42)
         1,1,2-Trichloroetha 0.140 0.156 0.165 0.173 0.175 0.188 0.170
 13)
                           ok @ 9-22-09
(#) = Out of Range ### Number of calibration levels exceeded format
                                                         MS1.
Stalloch
9/17/09
                                                                         Page 1
          T915VOCW.M Thu Sep 17 14:43:36 2009
```

Method : C:\HPCHEM\1\METHODS\T915VOCW.M (RTE Integrator) : VOC's w/Restek Rtx-VMS, 0.25mm x 60 m, 1.4df Title Last Update : Thu Sep 17 14:40:41 2009 Response via : Continuing Calibration Calibration Files 2.0 =T7320.D 1.0 =T7319.D 0.5 =T7318.D30 =T7323.D10 =T7321.D 20 =T7322.D 0.5 1.0 2.0 10 20 30 Avg Compound 0.110 0.120 0.135 0.139 0.143 0.132 10.27 44) 2-Hexanone Chlorobenzene-d5 -----ISTD-----45) I 2.567 2.554 2.413 2.338 2.377 2.451 2.437 3.80 46) S Toluene-d8 Tetrachloroethene 0.686 0.728 0.731 0.709 0.734 0.772 0.731 3.89 47) Dibromochloromethan 0.291 0.312 0.337 0.427 0.502 0.550 0.425 26.72 48) 1,3-Dichloropropane 0.906 0.995 1.028 1.046 1.046 1.059 1.015 5.14 49) 7.68 1,2-Dibromoethane 0.424 0.455 0.504 0.508 0.511 0.529 0.491 50) 1-Chlorohexane 0.782 0.886 0.894 0.926 0.963 1.006 0.922 Chlorobenzene 1.585 1.762 1.737 1.756 1.820 1.912 1.780 Ethylbenzene 2.992 3.195 3.246 3.220 3.326 3.423 3.241 8.37 51) 6.13 52) PM 4.12 53) CP 20.88 1,1,1,2-Tetrachloro 0.400 0.443 0.478 0.577 0.633 0.683 0.556 54)
 (m+p) -Xylene
 1.012 1.116 1.141 1.223 1.289 1.362 1.213

 o-Xylene
 0.950 1.072 1.092 1.169 1.212 1.280 1.150

 Styrene
 1.461 1.636 1.742 1.927 2.009 2.115 1.854
 10.69 55) 10.42 56) 13.33 57) 0.159 0.181 0.240 0.297 0.342 0.261 31.08 58) P Bromoform 1,4-Dichlorobenzene-d ------ISTD------ISTD-----59) I 3.194 3.609 3.522 3.625 3.683 3.808 3.591 5.46 ⁻0) Isopropylbenzene Bromofluorobenzene 0.877 0.813 0.773 0.786 0.812 0.852 0.824 4.69 ر1) S 6.62 0.772 0.875 0.852 0.854 0.878 0.936 0.873 Bromobenzene 62) 5.32 n-Propylbenzene 4.073 4.551 4.551 4.672 4.746 4.827 4.573 63) 1,1,2,2-Tetrachloro 0.616 0.667 0.701 0.715 0.720 0.753 0.701 6.61 64) P 2.803 3.093 3.064 3.119 3.199 3.345 3.136 5.90 2-Chlorotoluene 65) 1,3,5-Trimethylbenz 2.639 2.930 2.957 3.163 3.257 3.417 3.109 9.08 66) 1,2,3-Trichloroprop 0.694 0.768 0.791 0.781 0.767 0.820 0.780 5,85 67) trans-1,4-Dichloro- 0.067 0.068 0.084 0.091 0.103 0.105 0.090 [19.49]68) 2.431 2.742 2.700 2.721 2.778 2.862 2.723 5.17 4-Chlorotoluene tert-Butylbenzene 69) 2.397 2.729 2.719 2.807 2.879 3.008 2.791 7.48 70) 1,2,4-Trimethylbenz 2.536 2.795 2.895 2.983 3.029 3.168 2.935 7.46 71) 6.16 sec-Butylbenzene 3.700 4.182 4.207 4.321 4.410 4.495 4.238 72) p-Isopropyltoluene 2.838 3.321 3.436 3.535 3.657 3.791 3.474 9.38 73) 6.44 1,3-Dichlorobenzene 1.448 1.595 1.578 1.597 1.653 1.739 1.623 74) 1,4-Dichlorobenzene 1.558 1.639 1.631 1.609 1.662 1.750 1.658 4.41 75) 2.732 3.038 3.139 3.206 3.255 3.385 3.159 7.07 76) n-Butylbenzene 1,2-Dichlorobenzene 1.271 1.425 1.413 1.431 1.478 1.556 1.448 6.89 77) 1,2-Dibromo-3-chlor 0.079 0.076 0.076 0.089 0.094 0.103 0.089 13.85 78) Hexachlorobutadiene 0.487 0.506 0.522 0.519 0.548 0.588 0.538 7.84 79) 1,2,4-Trichlorobenz 0.833 0.860 0.908 0.921 0.944 1.021 0.933 8.39 80) 1.165 1.256 1.313 1.443 1.474 1.583 1.407 11.98 81) Naphthalene 1,2,3-Trichlorobenz 0.701 0.791 0.802 0.837 0.842 0.912 0.829 9.07 82)

Response Factor Report #1MS11

```
: C:\HPCHEM\1\METHODS\T915VOCW.M (RTE Integrator)
   Method
                : VOC's w/Restek Rtx-VMS, 0.25mm x 60 m, 1.4df
   Title
   Last Update : Thu Sep 17 14:53:10 2009
   Response via : Continuing Calibration
   Calibration Files
          =T7324.D
        Compound
                              -----ISTD-----
 1) I
        Fluorobenzene
        Dichlorodifluoromet 0.455
 2)
        Chloromethane 0.393
 3) P
 4) CP Vinyl chloride
                            0.415
 5)
        Bromomethane
                            0.228
 6)
        Chloroethane
                            0.191
        Trichlorofluorometh 0.634
 7)
 8) CPM 1,1-Dichloroethene 0.291
        Carbon disulfide
 9)
                            0.765
        1,1,2-Trichloro-1,2 0.351
10)
        Methyl iodide
                            0.155
11)
        Acrolein
                            0.008
12)
        Methylene chloride 0.245
13)
        Acetone
                            0.056
14)
        trans-1,2-Dichloroe 0.320
15)
        Methyl acetate
                            0.188
16)
        Methyl tert-Butyl e 0.747
17)
        1,1-Dichloroethane 0.615
 .) P
        Acrylonitrile
                            0.068
19)
        Vinyl acetate
                            0.591
20)
        cis-1,2-Dichloroeth 0.343
21)
        2,2-Dichloropropane 0.559
22)
        Bromochloromethane 0.130
23)
        Cyclohexane
                            0.693
24)
25) CP Chloroform
        Carbon tetrachlorid 0.371
26)
        1,1,1-Trichloroetha 0.535
27)
                            0.103
        2-Butanone
28)
        1,1-Dichloropropene 0.433
29)
       Benzene
                            1.203
30) M
       1,2-Dichloroethane- 0.382
31) S
       1,2-Dichloroethane
32)
       Methylcyclohexane
                            0.625
33)
       Trichloroethene
                            0.324
34) M
       Dibromomethane
                            0.168
35)
36) CP 1,2-Dichloropropane 0.317
       Bromodichloromethan 0.433
37)
       2-Chloroethylvinyl 0.029
38)
```

(#) = Out of Range ### Number of calibration levels exceeded format T915VOCW.M Thu Sep 17 14:53:13 2009 MS1 ' //

0.671

cis-1,3-Dichloropro 0.504

4-Methyl-2-pentanon 0.216

trans-1,3-Dichlorop 0.440

1,1,2-Trichloroetha 0.190

39)

41)

42)

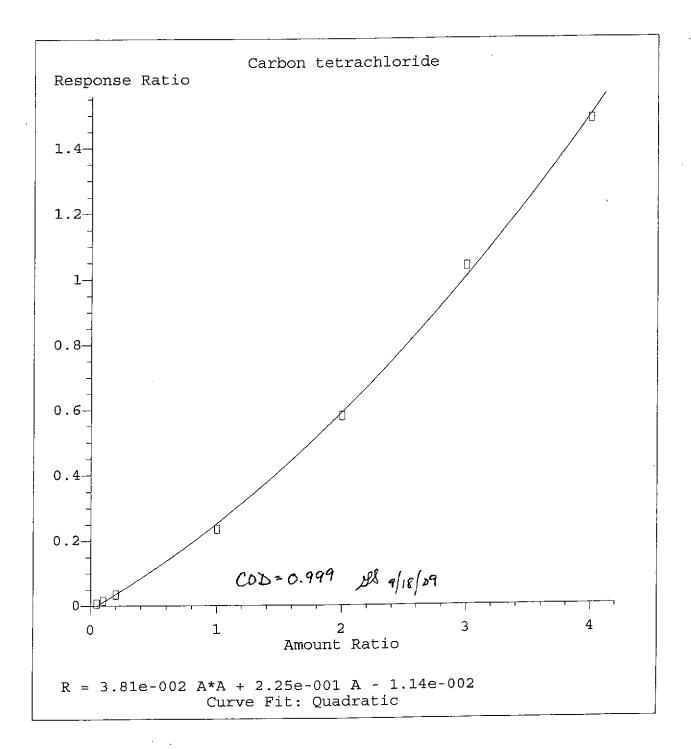
5)

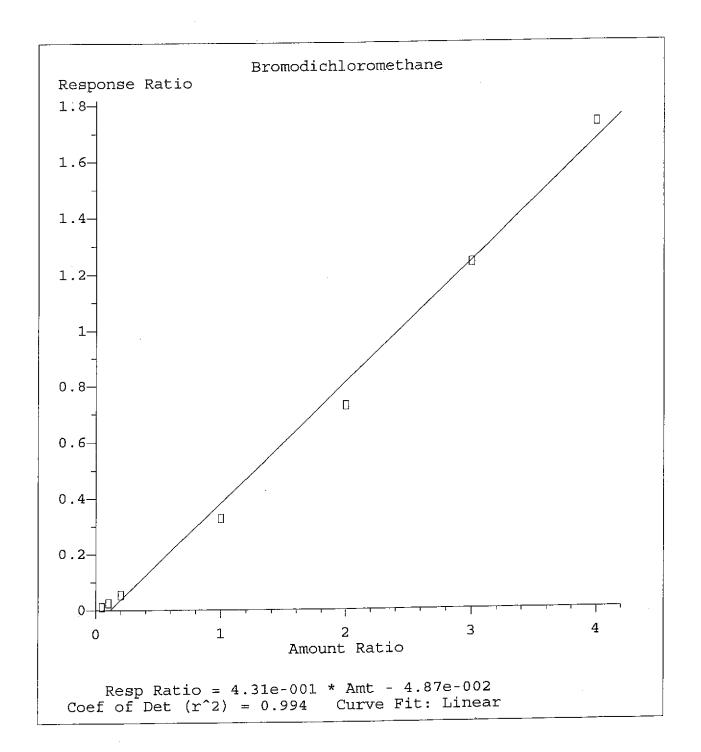
40) CPM Toluene

Page 1

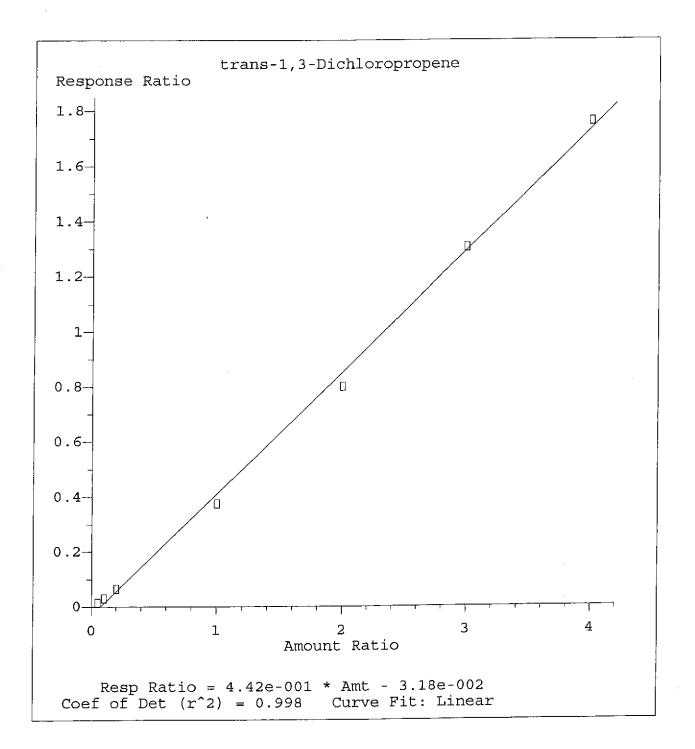
```
: C:\HPCHEM\1\METHODS\T915VOCW.M (RTE Integrator)
                : VOC's w/Restek Rtx-VMS, 0.25mm x 60 m, 1.4df
   Title
   Last Update : Thu Sep 17 14:53:10 2009
   Response via : Continuing Calibration
   Calibration Files
   40
          =T7324.D
        Compound
  ______
44)
        2-Hexanone
                           0.143
        Chlorobenzene-d5 -----ISTD------Toluene-d8 2.356
45) I
46) S
        Tetrachloroethene 0.756
47)
        Dibromochloromethan 0.558
48)
        1,3-Dichloropropane 1.025
49)
        1,2-Dibromoethane
                           0.510
50)
51)
        1-Chlorohexane
                           0.994
        Chlorobenzene
                           1.888
52) PM
        Ethylbenzene
                           3.288
53) CP
        1,1,1,2-Tetrachloro 0.680
54)
        (m+p)-Xylene
55)
                           1.346
                           1.275
        o-Xylene
56)
                           2.087
        Styrene
57)
        Bromoform
                           0.350
58) P
        1,4-Dichlorobenzene-d -----ISTD----
<sup>-</sup>9) I
                           3.696
        Isopropylbenzene
 J)
        Bromofluorobenzene 0.856
61) S
        Bromobenzene
                           0.944
62)
        n-Propylbenzene
                           4.593
63)
        1,1,2,2-Tetrachloro 0.735
64) P
        2-Chlorotoluene
                           3.334
65)
        1,3,5-Trimethylbenz 3.397
66)
        1,2,3-Trichloroprop 0.836
67)
       trans-1,4-Dichloro- 0.109
68)
       4-Chlorotoluene
                           2.826
69)
       tert-Butylbenzene 2.996
70)
       1,2,4-Trimethylbenz 3.140
71)
72)
       sec-Butylbenzene
                           4.353
       p-Isopropyltoluene 3.737
73)
       1,3-Dichlorobenzene 1.753
74)
       1,4-Dichlorobenzene 1.758
75)
76)
       n-Butylbenzene
                           3.357
       1,2-Dichlorobenzene 1.566
77)
       1,2-Dibromo-3-chlor 0.105
78)
       Hexachlorobutadiene 0.600
79)
       1,2,4-Trichlorobenz 1:045
80)
       Naphthalene
81)
       1,2,3-Trichlorobenz 0.921
82)
```

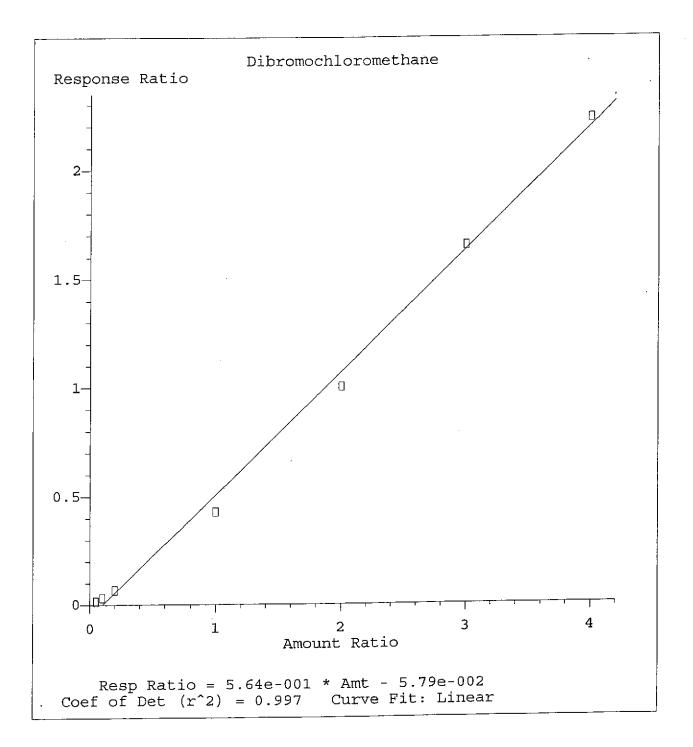
Method

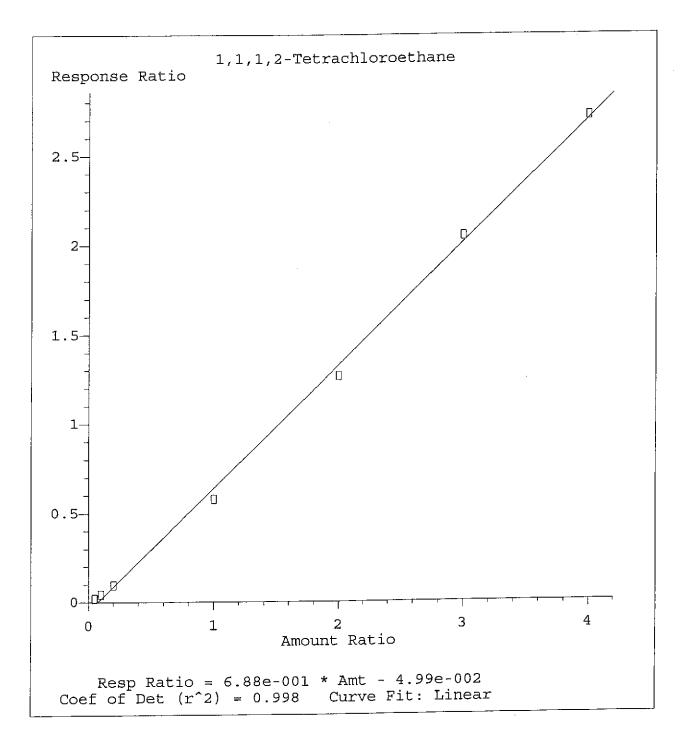


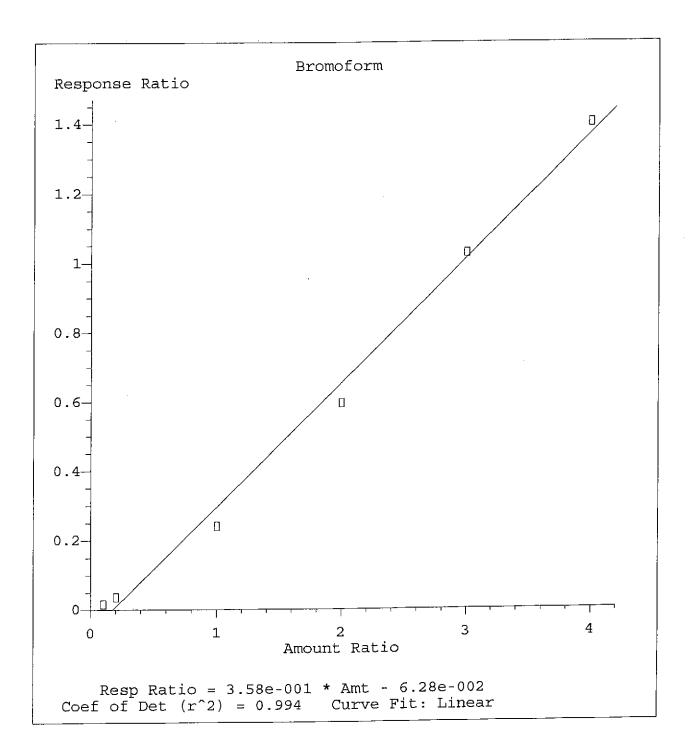


Method Name: C:\HPCHEM\1\METHODS\T915VOCW.M Calibration Table Last Updated: Thu Sep 17 14:49:09 2009









AFCEE ORGANIC ANALYSES DATA SHEET 4 SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method:

SW8260B

AAB#:

R18308

Lab Name:

Life Science Laboratories, In

Contract Number:

Instrument ID:

MS01 11

Initial Calibration ID:

<u>1629</u>

Second Source ID:

2SRC-18308

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D	Q
(m+p)-Xylene	20	19.5	-2.4	
1,1,1,2-Tetrachloroethane	10	9.05	-9.5	
1,1,1-Trichloroethane	10	9.51	-4.9	
1,1,2,2-Tetrachloroethane	10	9.51	-4.9	
1,1,2-Trichloroethane	10	9.51	-4.9	
1,1-Dichloroethane	10	9.39	-6.1	
1,1-Dichloroethene	10	9.66	-3.4	
1,1-Dichloropropene	10	9.72	-2.8	
1,2,3-Trichlorobenzene	10	9.34	-6.6	
1,2,3-Trichloropropane	10	9.52	-4.8	
1,2,4-Trichlorobenzene	10	9.2	-8.0	
1,2,4-Trimethylbenzene	10	9.75	-2.5	
1,2-Dibromo-3-chloropropane	10	9.97	-0.3	
1,2-Dibromoethane	10	9.78	-2.2	
1,2-Dichlorobenzene	10	9.62	-3.8	
1,2-Dichloroethane	10	9.27	-7.3	
1,2-Dichloropropane	10	9.35	-6.5	
1,3,5-Trimethylbenzene	10	9.78	-2.2	
1,3-Dichlorobenzene	10	9.52	-4.8	
1,3-Dichloropropane	10	9.71	-2.9	
1,4-Dichlorobenzene	10	9.4	-6.0	
1-Chlorohexane	10	9.99	-0.1	
2,2-Dichloropropane	10	9.45	-5.5	
2-Butanone	20	18.4	-8.0	
2-Chlorotoluene	10	9.62	-3.8	
4-Chlorotoluene	10	9.71	-2.9	
4-Methyl-2-pentanone	20	17.9	-10.7	
Acetone	20	19.5	-2.3	
Benzene	10	9.56	-4.4	
Bromobenzene	10	9.53	-4.7	
Bromochioromethane	10	9.57	-4.3	
Bromodichloromethane	10	8.55	-14.5	
Bromoform	10	8.87	-11.3	
Bromomethane	10	10.3	3.0	
Carbon tetrachloride	10	9.69	-3.1	

<u> </u>			

Comments:

AFCEE ORGANIC ANALYSES DATA SHEET 4 SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method:

SW8260B

AAB #:

R18308

Lab Name:

Life Science Laboratories, In

Contract Number:

Instrument ID:

MS01 11

Initial Calibration ID:

<u>1629</u>

Second Source ID:

2SRC-18308

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D	Q
Chlorobenzene	10	9.49	-5.1	Q110.WW.0X12V
Chloroethane	10	10.3	3.1	
Chloroform	10	9	-10	
Chloromethane	10	11.1	11.1	
cis-1,2-Dichloroethene	10	9.35	-6.5	
cis-1,3-Dichloropropene	10	9.69	-3.1	
Dibromochloromethane	10	9.02	-9.8	
Dibromomethane	10	9.26	-7.4	
Dichlorodifluoromethane	10	11.6	16.0	
Ethylbenzene	10	9.64	-3.6	
Hexachlorobutadiene	10	9.39	-6.1	
Isopropylbenzene	10	9.82	-1.8	•
Methyl tert-butyl ether	10	9.78	-2.2	
Methylene chloride	10	8.93	-10.7	
n-Butylbenzene	10	9.67	-3.3	
n-Propylbenzene	10	9.94	-0.6	
Naphthalene	10	9.15	-8.5	
o-Xylene	10	9.79	-2.1	
p-Isopropyitoluene	10	9.84	-1.6	
sec-Butylbenzene	10	9.82	-1.8	
Styrene	10	9.94	-0.6	
tert-Butylbenzene	10	9.67	-3.3	
Tetrachloroethene	10	9.45	-5.5	
Toluene	10	9.38	-6.2	
trans-1,2-Dichloroethene	10	9.59	-4.1	
trans-1,3-Dichloropropene	10	8.87	-11.3	
Trichloroethene	10	9.47	-5.3	
Trichlorofluoromethane	10	10.6	5.7	
Vinyl chloride	10	10.9	9.2	
Xylenes (total)	30	29.3	-2.3	

Comments:	

AFCEE ORGANIC ANALYSES DATA SHEET 5A CALIBRATION VERIFICATION - GC/MS ANALYSIS

Analytical Method:

SW8260B

AAB#:

MS01_11_091006

Lab Name:

Life Science Laboratories, In

Contract Number:

Instrument ID:

MS01_11

Initial Calibration ID:

<u>1629</u>

ICV ID:

CCV #1 ID: CCV-18463

CCV #2 ID:

	icv	CC	V #1	CCV#2	
Analyte	RF %D	RF	%D	RF %D	Q
1,1,2,2-Tetrachloroethane *		0.794	13.3		
1,1-Dichloroethane *		0.585	6.8		
Bromoform *		0.259	-10.2		
Chlorobenzene *		1.784	0.2	****	
Chloromethane *		0.36	3.7		
1,1-Dichloroethene #			-7.9		
1,2-Dichloropropane #			8.0		
Chloroform #			5.2		
Ethylbenzene #			1.7		
Toluene #			2.0		
Vinyl chloride #			1.4		
(m+p)-Xylene			-0.1		
1,1,1,2-Tetrachloroethane			-7.4		
1,1,1-Trichloroethane			1.3		
1,1,2-Trichloroethane			12.4		
1,1-Dichloropropene			1.0		
1,2,3-Trichlorobenzene			-0.2		
1,2,3-Trichloropropane			8.7		
1,2,4-Trichlorobenzene			-3.9		
1,2,4-Trimethylbenzene			2.7		
1,2-Dibromo-3-chloropropane			7.9	Security of the control of the contr	İ
1,2-Dibromoethane		200 (0.000	-1.0		†
1,2-Dichlorobenzene			3.9		<u> </u>
1,2-Dichloroethane			11.2		1
1,2-Dichloroethane-d4			4.4		<u> </u>
1,3,5-Trimethylbenzene			3.3	- 100 M	<u> </u>
1,3-Dichlorobenzene		September 1975 1 Septem	2.6		<u> </u>
1,3-Dichloropropane	91 10 848.4		4.7		<u> </u>
1,4-Dichlorobenzene			2.4		†
1-Chlorohexane		Logical City (City of	-4.0		_
2,2-Dichloropropane			1.5	FREE HERRING	+
2-Butanone			3.1		
2-Chlorotoluene			6.0		+

*SPCCs #CCCS

Comments:	

AFCEE ORGANIC ANALYSES DATA SHEET 5A CALIBRATION VERIFICATION - GC/MS ANALYSIS

Analytical Method:

SW8260B

AAB#:

MS01 11 091006

Lab Name:

Life Science Laboratories, In

Contract Number:

Instrument ID:

MS01 11

Initial Calibration ID:

<u>1629</u>

ICV ID:

CCV #1 ID: CCV-18463

CCV #2 ID:

	ICV.	CCV	/1	CC)	/#2	
Analyte	RF %D	RF	%D	RF	%D	Q
4-Bromofluorobenzene			-8.5			
4-Chlorotoluene			4.4			
4-Methyl-2-pentanone			6.0			
Acetone			18.6			
Benzene			4.0			
Bromobenzene			1.0			
Bromochloromethane			4.9			
Bromodichloromethane			-5.3			
Bromomethane			-16.4			
Carbon tetrachloride			13.5			
Chloroethane			17.5			
cis-1,2-Dichloroethene		Na a	-0.7			
cis-1,3-Dichloropropene			1.6			
Dibromochloromethane		10.00	-12.4			
Dibromomethane	ji de Est		3.4			
Dichlorodifluoromethane			8.8			
Hexachlorobutadiene			4.1			
Isopropylbenzene		A CONTROL OF THE CONT	0.7			
Methyl tert-butyl ether			-1.7			
Methylene chloride			2.1		•	
n-Butylbenzene			1.9	di di		
n-Propylbenzene			7.1			
Naphthaleпе			-3.5			
o-Xylene			-0.9			
p-Isopropyltoluene			2.3			
sec-Butylbenzene			6.8			
Styrene			2.0			
tert-Butylbenzene		DESIGNATION OF THE PARTY OF THE	2.4			
Tetrachloroethene			-6.7			
Toluene-d8			-5.9			
trans-1,2-Dichloroethene			-6.2			
trans-1,3-Dichloropropene		PARALON INC.	-1.4			
Trichloroethene			3.1			

*SPCCs #CCCS

Comments:			
	 	-	
	 		

AFCEE ORGANIC ANALYSES DATA SHEET 5A CALIBRATION VERIFICATION - GC/MS ANALYSIS

Analytical Method:

SW8260B

AAB#:

MS01 11 091006

Lab Name:

Life Science Laboratories, In

Contract Number:

Instrument ID:

MS01_11

Initial Calibration ID:

<u>1629</u>

ICV ID:

CCV #1 ID: CCV-18463

CCV #2 ID:

Analyte	ICV RF %D	CCV#1 RF %D	CCV#2	ı o
Trichlorofluoromethane		-0.5		
Xylenes (total)		-0.3		

* SPCCs # CCCS	
Comments:	

QAPP 4.0

AFCEE FORM O-5A

Page 3 of 3

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8260B

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

ug/L

Method Blank ID:

MB-18463

Initial Calibration ID:

<u> 1629</u>

File ID:

T7553.D

Analyte	Method Blank	RL	Q
(m+p)-Xylene	0.200	2.00	U
1,1,1,2-Tetrachloroethane	0.160	0.500	U
1,1,1-Trichloroethane	0.100	1.00	U
1,1,2,2-Tetrachloroethane	0.100	0.500	U
1,1,2-Trichloroethane	0.160	1.00	U
1,1-Dichloroethane	0.100	1.00	U
1,1-Dichloroethene	0.160	1.00	U
1,1-Dichloropropene	0.100	1.00	U
1,2,3-Trichlorobenzene	0.100	1.00	U
1,2,3-Trichloropropane	0.330	2.00	U
1,2,4-Trichlorobenzene	0.100	1.00	U
1,2,4-Trimethylbenzene	0.100	1.00	U
1,2-Dibromo-3-chloropropane	1.00	5.00	U
1,2-Dibromoethane	0.160	1.00	U
1,2-Dichlorobenzene	0.100	1.00	U
1,2-Dichloroethane	0.160	0.500	U
1,2-Dichloropropane	0.160	1.00	U
1,3,5-Trimethylbenzene	0.100	1.00	U
1,3-Dichlorobenzene	0.100	1.00	U
1,3-Dichloropropane	0.100	0.500	U
1,4-Dichlorobenzene	0.160	0.500	U
1-Chlorohexane	0.160	1.00	U
2,2-Dichloropropane	0.330	1.00	U
2-Butanone	1.00	10.0	U
2-Chlorotoluene	0.100	1.00	U
4-Chlorotoluene	0.100	1.00	U
4-Methyl-2-pentanone	1.00	10.0	U
Acetone	1.00	10.0	U
Benzene	0.100	0.500	U
Bromobenzene	0.100	1.00	U
Bromochloromethane	0.100	1.00	U
Bromodichloromethane	0.100	0.500	U
Bromoform	0.330	1.00	U
Bromomethane	0.330	3.00	U
Carbon tetrachloride	0.100	1.00	U

Comm	ents:
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AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8260B

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

<u>μg/L</u>

Method Blank ID:

MB-18463

Initial Calibration ID:

<u>1629</u>

File ID:

T7553.D

Analyte	Method Blank	RL	Q
Chlorobenzene	0.100	0 .500	U
Chloroethane	0.330	1.00	U
Chloroform	0.110	0.500	F
Chloromethane	0.330	1.00	U
cis-1,2-Dichloroethene	0.100	1.00	U
cis-1,3-Dichloropropene	0.160	0.500	U
Dibromochloromethane	0.100	0.500	U
Dibromomethane	0.160	1.00	U
Dichlorodifluoromethane	0.100	1.00	U
Ethylbenzene	0.100	1.00	U
Hexachlorobutadiene	0.100	1.00	U
Isopropylbenzene	0.100	1.00	U.
Methyl tert-butyl ether	0.160	5.00	U
Methylene chloride	0.160	1.00	U
n-Butylbenzene	0.100	1.00	U
n-Propylbenzene	0.100	1.00	U
Naphthalene	0.100	1.00	U
o-Xylene	0.100	1.00	U
p-lsopropyltoluene	0.160	1.00	U
sec-Butylbenzene	0.160	1.00	U
Styrene	0.100	1.00	U
tert-Butylbenzene	0.100	1.00	U
Tetrachloroethene	0.100	1.00	U
Toluene	0.100	1.00	U
trans-1,2-Dichloroethene	0.100	1.00	Ų
trans-1,3-Dichloropropene	0.160	1.00	U
Trichloroethene	0.100	1.00	U
Trichlorofluoromethane	0.100	1.00	U
Vinyl chloride	0.330	1.00	U
Xylenes (total)	0.300	2.00	U

Surrogate	Recovery	Centrol Limits	Qualifier
1,2-Dichloroethane-d4	100	72 - 119	
4-Bromofluorobenzene	96	76 - 119	
Toluene-d8	102	81 - 120	

Comments:

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

μg/L

Method Blank ID:

MB-18463

Initial Calibration ID:

<u>1629</u>

File ID:

T7553.D

Internal Std	Area Counts	Area Count Limits Qualifie	r
1,4-Dichlorobenzene-d4	879413	347175 - 1388700	
Chlorobenzene-d5	1190092	415808 - 1663230	
Fluorobenzene	3368756	1176246 - 4704984	

Comments:	

Analytical Method:

SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCS-18463

Initial Calibration ID:

<u>1629</u>

Concentration Units (mg/L or mg/kg):

μg/L

File ID:

<u>T7550.D</u>

adon onits (mg/L or mg/kg). <u>pg/L</u>	= ''	ie iD:		17550.D	
Analyte	Expected	Found	%R	Control Limits	Q
(m+p)-Хуlепе	20	19.1	95	76 - 128	
1,1,1,2-Tetrachloroethane	10	8.99	90	81 - 129	
1,1,1-Trichloroethane	10	9.88	99	67 - 132	-
1,1,2,2-Tetrachloroethane	10	10.6	106	63 - 128	•
1,1,2-Trichloroethane	10	10.5	105	75 - 125	
1,1-Dichloroethane	10	10.4	104	69 - 133	!
1,1-Dichloroethene	10	9.32	93	68 - 130	:
1,1-Dichloropropene	10	9.79	98	73 - 132	T
1,2,3-Trichlorobenzene	10	9.39	94	67 - 137	
1,2,3-Trichloropropane	10	11.0	110	73 - 12 4	1
1,2,4-Trichlorobenzene	10	9.16	92	66 - 134	
1,2,4-Trimethylbenzene	10	9.96	100	74 - 132	1
1,2-Dibromo-3-chloropropane	10	10.8	108	50 - 132	•
1,2-Dibromoethane	10	9.48	95	80 - 121	-,
1,2-Dichlorobenzene	10	10.2	102	71 - 122	
1,2-Dichloroethane	10	10.6	106	69 - 132	
1,2-Dichloropropane	10	10.2	102	75 - 125	
1,3,5-Trimethylbenzene	10	10.0	100	74 - 131	
1,3-Dichlorobenzene	10	9.92	99	75 - 124	1
1,3-Dichloropropane	10	9.86	99	73 - 126	
1,4-Dichlorobenzene	10	9.86	99	74 - 123	
1-Chlorohexane	10	9.38	94	70 - 125	
2,2-Dichloropropane	10	9.84	98	69 - 137	İ
2-Butanone	20	21.3	107	49 - 136	1
2-Chlorotoluene	10	10.2	102	73 - 126	İ
4-Chlorotoluene	10	10.2	102	74 - 128	İ
4-Methyl-2-pentanone	20	20.2	101	58 - 134	İ
Acetone	20	26.1	131	40 - 135	İ
Benzene	10	9.93	99	81 - 122	
Bromobenzene	10	9.68	97	76 - 124	†
Bromochloromethane	10	10.2	102	65 - 129	
Bromodichloromethane	10	9.40	94	76 - 121	
Bromoform	10	9.01	90	69 - 128	
Bromomethane	10	8.44	84	30 - 141	
Carbon tetrachloride	10	11.9	119	66 - 138	†
Chlorobenzene	10	9.41	94	81 - 122	
Chloroethane	10	11.6	116	58 - 133	
Chloroform	10	10.1	101	69 - 128	
Chloromethane	10	10.9	109	56 - 131	
cis-1,2-Dichloroethene	10	9.58	96	72 - 126	1
cis-1,3-Dichloropropene	10	9.87	99	69 - 131	1
Dibromochloromethane	10	8.81	88	66 - 133	

Com	m	Δr	ıte	
00111	•••	Ο.		٠

Analytical Method:

SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCS-18463

Initial Calibration ID:

<u>1629</u>

Concentration Units (mg/L or mg/kg):

<u>μg/L</u>

File ID:

T7550.D

Analyte	Expected	Found	%R	Control Limits	Q
Dibromomethane	10	10.0	100	76 - 125)pp00000000000000000000000000000000000
Dichlorodifluoromethane	10	11.5	115	30 - 153	
Ethylbenzene	10	9.71	97	73 - 127	
Hexachlorobutadiene	10	9.93	99	67 - 131	
Isopropylbenzene	10	9.90	99	75 - 127	
Methyl tert-butyl ether	10	10.1	101	65 - 123	
Methylene chloride	10	10.5	105	63 - 137	
n-Butylbenzene	10	9.78	98	69 - 137	
п-Propylbenzene	10	10.4	104	72 - 129	
Naphthalene	10	8.65	86	54 - 138	
o-Xylene	10	9.51	95	80 - 121	
p-Isopropyltoluene	10	9.98	100	73 - 130	
sec-Butylbenzene	10	10.3	103	72 - 127	
Styrene	10	9.70	97	65 - 134	
tert-Butylbenzene	10	9.84	98	70 - 129	
Tetrachloroethene	10	8.83	88	66 - 128	
Toluene	10	9.66	97	77 - 122	
trans-1,2-Dichloroethene	10	9.39	94	63 - 137	
trans-1,3-Dichloropropene	10	9.48	95	59 - 135	
Trichloroethene	10	9.87	99	70 - 127	
Trichlorofluoromethane	10	10.4	104	57 - 129	
Vinyl chloride	10	10.6	106	50 - 134	
Xylenes (total)	30	28.6	95	80 - 121	

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	102	72 - 119	
4-Bromofluorobenzene	91	76 - 119	
Toluene-d8	92	81 - 120	

Internal Std	Area Counts	Area Count Limits Qualifier
1,4-Dichlorobenzene-d4	1112507	347175 - 1388700
Chlorobenzene-d5	1343572	415808 - 1663230
Fluorobenzene	3588577	1176246 - 4704984

Comments:		

Analytical Method:

SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-18463

Initial Calibration ID:

<u>1629</u>

Concentration Units (mg/L or mg/kg):

μq/L

File ID:

T7551.D

ation Units (mg/L or mg/kg):	<u>µg/L</u> F	ile ID:		<u>17551.D</u>
Analyte	Expected	Found	%R	Control Limits
(m+p)-Xylene	20	12 POSSESS - 1771-1970 POSSESS - 1771-1982	94	76 - 128
1,1,1,2-Tetrachloroethane	10	9.17	92	81 - 129
1,1,1-Trichloroethane	10	9.97	100	67 - 132
1,1,2,2-Tetrachloroethane	10	10.7	107	63 - 128
1,1,2-Trichloroethane	10	10.4	104	75 - 125
1,1-Dichloroethane	10	10.2	102	69 - 133
1,1-Dichloroethene	10	9.10	91	68 - 130
1,1-Dichloropropene	10	9.87	99	73 - 132
1,2,3-Trichlorobenzene	10	9.30	93	67 - 137
1,2,3-Trichloropropane	10	10.6	106	73 - 124
1,2,4-Trichlorobenzene	10	8.90	89	66 - 134
1,2,4-Trimethylbenzene	10	9.66	97	74 - 132
1,2-Dibromo-3-chloropropane	10			50 - 132
1,2-Dibromoethane	10			80 - 121
1,2-Dichlorobenzene	10			71 - 122
1,2-Dichloroethane	10			69 - 132
1,2-Dichloropropane	10	10.4	104	75 - 125
1,3,5-Trimethylbenzene	10	9.79	98	74 - 131
1,3-Dichlorobenzene	1(75 - 124
1,3-Dichloropropane	10		101	73 - 126
1,4-Dichlorobenzene	10	9.68	97	74 - 123
1-Chlorohexane	1(94	70 - 125
2,2-Dichloropropane	10	9.89	99	69 - 137
2-Butanone	20	21.5	108	49 - 136
2-Chlorotoluene	10			73 - 126
4-Chlorotoluene	10			74 - 128
4-Methyl-2-pentanone	20			58 - 134
Acetone	20			40 - 135
Benzene				81 - 122
Bromobenzene			94	76 - 124
Bromochloromethane	16	9.82	98	65 - 129
Bromodichloromethane	10	9.58	96	76 - 121
Bromoform	10			69 - 128
Bromomethane	10			30 - 141
Carbon tetrachloride	10	+		66 - 138
Chlorobenzene	10	-		81 - 122
Chloroethane	10	1		58 - 133
Chloroform	10			69 - 128
Chloromethane	10			56 - 131
cis-1,2-Dichloroethene	10			72 - 126
cis-1,3-Dichloropropene	10			69 - 131
Dibromochloromethane	10			66 - 133

Comments	•
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Analytical Method:

SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-18463

Initial Calibration ID:

Concentration Units (mg/L or mg/kg):

ug/L

File ID:

T7551.D

<u>1629</u>

Analyte	Expected	Found	%R	Control Limits	Q
Dibromomethane	10	9.96	100	76 - 125	
Dichlorodifluoromethane	10	11.0	110	30 - 153	
Ethylbenzene	10	9.57	96	73 - 127	
Hexachlorobutadiene	10	9.61	96	67 - 131	
Isopropylbenzene	10	9.74	97	75 - 127	
Methyl tert-butyl ether	10	10.3	103	65 - 123	
Methylene chloride	10	9.73	97	63 - 137	
n-Butylbenzene	10	9.65	97	69 - 137	
n-Propylbenzene	10	10.2	102	72 - 129	
Naphthalene	10	9.02	90	54 - 138	
o-Xylene	10	9.39	94	80 - 121	
p-Isopropyltoluene	10	9.72	97	73 - 130	
sec-Butylbenzene	10	10.1	101	72 - 127	
Styrene	10	9.57	96	65 - 134	
tert-Butylbenzene	10	9.71	97	70 - 129	
Tetrachloroethene	10	8:90	89	66 - 128	
Toluene	10	9.71	97	77 - 122	
trans-1,2-Dichloroethene	10	9.17	92	63 - 137	
trans-1,3-Dichloropropene	10	9.45	94	59 - 135	
Trichloroethene	10	9.84	98	70 - 127	
Trichlorofluoromethane	10	9.69	97	57 - 129	
Vinyl chloride	10	10.2	102	50 - 134	
Xylenes (total)	30	28.2	94	80 - 121	

Surrogate	Recovery	Control Limits Qualifier	
1,2-Dichloroethane-d4	101	72 - 119	
4-Bromofluorobenzene	91	76 - 119	
Toluene-d8	94	81 - 120	\Box

Internal Std	Area Counts	Area Count Limits Qualit	ier
1,4-Dichlorobenzene-d4	1121220	347175 - 1388700	
Chlorobenzene-d5	1367015	415808 - 1663230	
Fluorobenzene	3705703	1176246 - 4704984	

Comments:				
	·	 		
·		 		

AFCEE ORGANIC ANALYSES DATA SHEET 9 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method:

SW8260B

AAB#:

R18463

0

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

μg/L

% Solids:

Parent Field Sample ID:

LCSD-18463

MS ID: LCS-18463

MSD ID: LCSD-18463

Calibration ID: 1629

Analyte .	Parent Sample	Spike	Spiked Sample	%R	Duplicate Spiked	%R	%RPD	Control Limits	Control Limits	Ç
	Result	Added	Result		Sample			%R	%RPD	
			Market St.		Result					
(m+p)-Xylene		20.0	19.1	95	18.8	94		76 - 128	20	:
1,1,1,2-Tetrachloroethane		10.0	8.99	90		92	2	81 - 129	20	
1,1,1-Trichloroethane		10.0	9.88	99	9.97	100	1	67 - 132	20	
1,1,2,2-Tetrachloroethane		10.0	10.6	106	10.7	107	1	63 - 128	20	
1,1,2-Trichloroethane		10.0	10.5	105	10.4	104	0	75 - 125	20	
1,1-Dichloroethane		10.0	10.4	104	10.2	102	2	69 - 133	20	
1,1-Dichloroethene		10.0	9.32	93	9.10	91	2	68 - 130	20	
1,1-Dichloropropene		10.0	9.79	98	9.87	99	1	73 - 132	20	
1,2,3-Trichlorobenzene		10.0	9.39	94	9.30	93	1	67 - 137	20	
1,2,3-Trichloropropane		10.0	11.0	110	10.6	106	4	73 - 124	20	
1,2,4-Trichlorobenzene		10.0	9.16	92	8.90	89	3	66 - 134	20	
1,2,4-Trimethylbenzene		10.0	9.96	100	9.66	97	3	74 - 132	20	
,2-Dibromo-3-chloropropane		10.0	10.8	108	10.8	108	0	50 - 132	20	
,2-Dibromoethane		10.0	9.48	95	9.58	96	1	80 - 121	20	
1,2-Dichlorobenzene		10.0	10.2	102	9.84	98	3	71 - 122	20	
,2-Dichloroethane		10.0	10.6	106	10.6	106	0	69 - 132	20	
1,2-Dichloropropane		10.0	10.2	102	10.4	104	1	75 - 125	20	
,3,5-Trimethylbenzene		10.0	10.0	100	9.79	98	2	74 - 131	20	
1,3-Dichlorobenzene		10.0	9.92	99	9.72	97	2	75 - 124	20	
1,3-Dichloropropane		10.0	9.86	99	10.1	101	3	73 - 126	20	
1,4-Dichlorobenzene		10.0	9.86	99	9.68	97	2	74 - 123	20	
1-Chlorohexane		10.0	9.38	94	9.45	94	1	70 - 125	20	
2,2-Dichloropropane		10.0	9.84	98	9.89	99	1	69 - 137	20	
2-Butanone		20.0	21.3	107	21.5	108	1	49 - 136	20	
2-Chlorotoluene	-	10.0	10.2	102	10.0	100	2	73 - 126	20	
1-Chlorotoluene		10.0	10.2	102	9.92	99	2	74 - 128	20	
1-Methyl-2-pentanone		20.0	20.2	101	20.4	102	1	58 - 134	20	
Acetone		20.0	26.1	131	25.2	126	4	40 - 135	20	
Benzene		10.0	9.93	99		99	1	81 - 122	20	
Bromobenzene		10.0	9.68	97	9.45	94	2	76 - 124	20	
Bromochloromethane		10.0	10.2	102	9.82	98	4	65 - 129	20	
Bromodichloromethane		10.0	9.40	94		96	2	76 - 121	20	-
Bromoform		10.0	9.01	90		92	2	69 - 128	20	_
Comments:	I	10.0			J. 13	72	2	09 - 120	<u>د</u> ۷	L

AFCEE ORGANIC ANALYSES DATA SHEET 9 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method:

SW8260B

AAB#:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

_

μg/L

% Solids: <u>0</u>

Parent Field Sample ID:

LCSD-18463

MS ID: LCS-18463

MSD ID: LCSD-18463

Calibration ID: 1629

Parent		Spiked		Duplicate			Control	Control	
Analyte Sample	Spike	Sample	%R	Spiked	%R	%RPD	Limits	Limits	Q
Result	Added	Result		Sample Result			%R	%RPD	
Bromomethane	10.0	8.44	84	9.27	93	9	30 - 141	20	
Carbon tetrachloride	10.0		119	12.3	123	3	66 - 138	20	
Chlorobenzene	10.0	9.41	94	9.38	94	0	81 - 122	20	
Chloroethane	10.0	11.6	116	11.0	110	5	58 - 133	20	
Chloroform	10.0	10.1	101	9.88	99	2	69 - 128	20	
Chloromethane	10.0	10.9	109	10.3	103	5	56 - 131	20	
cis-1,2-Dichloroethene	10.0	9.58	96	9.54	95	0	72 - 126	20	
cis-1,3-Dichloropropene	10.0	9.87	99	10.0	100	1	69 - 131	20	
Dibromochloromethane	10.0	8.81	88	9.21	92	4	66 - 133	20	
Dibromomethane	10.0	10.0	100	9.96	100	1	76 - 125	20	
Dichlorodifluoromethane	10.0	11.5	115	11.0	110	5	30 - 153	20	
Ethylbenzene	10.0	9.71	97	9.57	96	1	73 - 127	20	
Hexachlorobutadiene	10.0	9.93	99	9.61	96	3	67 - 131	20	
Isopropylbenzene	10.0	9.90	99	9.74	97	2	75 - 127	20	
Methyl tert-butyl ether	10.0	10.1	101	10.3	103	3	65 - 123	20	
Methylene chloride	10.0	10.5	105	9.73	97	8	63 - 137	20	
n-Butylbenzene	10.0	9.78	98	9.65	97	1	69 - 137	20	
n-Propylbenzene	10.0	10.4	104	10.2	102	2	72 - 129	20	
Naphthalene	10.0	8.65	86	9.02	90	4	54 - 138	20	
o-Xylene	10.0	9.51	95	9.39	94	1	80 - 121	20	
p-Isopropyltoluene	10.0	9.98	100	9.72	97	. 3	73 - 130	20	
sec-Butylbenzene	10.0	10.3	103	10.1	101	2	72 - 127	20	
Styrene	10.0	9.70	97	9.57	96	1	65 - 134	20	
tert-Butylbenzene	10.0	9.84	98	9.71	97	1	70 - 129	20	
Tetrachloroethene	10.0	8.83	88	8.90	89	1	66 - 128	20	
Toluene	10.0	9.66	97	9.71	97	1	77 - 122	20	
trans-1,2-Dichloroethene	10.0	9.39	94	9.17	92	2	63 - 137	20	
trans-1,3-Dichloropropene	10.0	9.48	95	9.45	94	0	59 - 135	20	
Trichloroethene	10.0	9.87	99	9.84	98	0	70 - 127	20	
Trichlorofluoromethane	10.0	10.4	104	9.69	97	8	57 - 129	20	
Vinyl chloride	10.0	10.6	106	10.2	102	4	50 - 134	20	
Xylenes (total)	30.0	28.6	95	28.2	94	1	80 - 121	20	

Comments:			

AFCEE ORGANIC ANALYSES DATA SHEET 10 HOLDING TIMES

Analytical Method: SW8260B

AAB #:

R18463

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Max. Holding Time E	Time Held Ext		Max. Holding Time A	Time Held Q Anal.
SMC\$W0101FA	0910008-001A	01-Oct-09	02-Oct-09	06-Oct-09			06-Oct-09	14	5.1
SMCSW0401FA	0910008-002A	01-Oct-09	02-Oct-09	06-Oct-09			06-Oct-09	14	5.1
SMCSW0401FC	0910008-003A	01-Oct-09	02-Oct-09	06-Oct-09			06-Oct-09	14	5.1
SMCSW0501FA	0910008-004A	01-Oct-09	02-Oct-09	06-Oct-09			06-Oct-09	14	5.2

AFCEE ORGANIC ANALYSES DATA SHEET 11 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method:

SW8260B

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

MS01 11

Calibration ID: 1629

Field Sample ID/Std ID/ Biank ID/QC Sample ID	Lab Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
TB091509A1	TB091509A1	15-Sep-09	9:47	15-Sep-09	10:30
ICAL 0.5 PPB	ICAL 0.5 PPB	15-Sep-09	10:30	15-Sep-09	11:15
ICAL 1.0 PPB	ICAL 1.0 PPB	15-Sep-09	11:15	15-Sep-09	11:50
ICAL 2.0 PPB	ICAL 2.0 PPB	15-Sep-09	11:50	15-Sep-09	12:24
CAL 10 PPB	ICAL 10 PPB	15-Sep-09	12:24	15-Sep-09	13:06
CAL 20 PPB	ICAL 20 PPB	15-Sep-09	13:06	15-Sep-09	13:53
CAL 30 PPB	ICAL 30 PPB	15-Sep-09	13:53	15-Sep-09	14:41
CAL 40 PPB	ICAL 40 PPB	15-Sep-09	14:41	15-Sep-09	16:57
2SRC-18308	2SRC-18308	15-Sep-09	16:57	15-Sep-09	16:57
TB100609A1	TB100609A1	06-Oct-09	7:54	06-Oct-09	8:28
CCV-18463	CCV-18463	06-Oct-09	8:28	06-Oct-09	9:02
LCS-18463	LCS-18463	06-Oct-09	9:02	06-Oct-09	9:38
LCSD-18463	LCSD-18463	06-Oct-09	9:38	06-Oct-09	10:46
MB-18463	MB-18463	06-Oct-09	10:46	06-Oct-09	17:28
SMCSW0101FA	0910008-001A	06-Oct-09	17:28	06-Oct-09	18:01
SMCSW0401FA	0910008-002A	06-Oct-09	18:01	06-Oct-09	18:35
SMCSW0401FC	0910008-003A	06-Oct-09	18:35	06-Oct-09	19:08
SMCSW0501FA	0910008-004A	06-Oct-09	19:08	06-Oct-09	19:08

Comments:		

AFCEE ORGANIC ANALYSES DATA SHEET 12 INSTRUMENT PERFORMANCE CHECK (BFB or DFTPP)

Analytical Method:

SW8260B

AAB#:

MS01_11_090915A

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

MS01_11

Injection Date/Time:

9/15/2009 9:47:00 AM

Initial Calibration ID:

<u>1629</u>

File ID:

C:\HPCHEM\1\DATA\T7317.D

Compound:

SW8260B

Sample ID:

TB091509A1

Mass		% Relative Abundance Q
	Ion Abundance Criteria	
50	15 - 40% of m/z 95	25.1
75	30 - 60% of m/z 95	57.6
95	Base peak, 100% relative abundance	100
96	5 - 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.5
174	Greater than 50% of m/z 95	71.4
175	5 - 9% of m/z 174	7.2
176	Greater than 95% but less than 101% of m/z 174	97.4
177	5 - 9% of m/z 176	6.6

AFCEE ORGANIC ANALYSES DATA SHEET 12 INSTRUMENT PERFORMANCE CHECK (BFB or DFTPP)

Analytical Method:

SW8260B

AAB #:

MS01 11 091006A

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

MS01_11

Injection Date/Time:

10/6/2009 7:54:00 AM

Initial Calibration ID:

<u>1629</u>

File ID:

C:\HPCHEM\1\DATA\T7548.D

Compound:

SW8260B

Sample ID:

TB100609A1

Mass	Ion Abundance Criteria	% Relative Abundance Q
50	15 - 40% of m/z 95	25.7
75	30 - 60% of m/z 95	56.3
95	Base peak, 100% relative abundance	100
96	5 - 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.7
174	Greater than 50% of m/z 95	80.4
175	5 - 9% of m/z 174	7.2
176	Greater than 95% but less than 101% of m/z 174	97.5
177	5 - 9% of m/z 176	6.8



Thursday, October 22, 2009

Niels van Hoesel FPM Group 153 Brooks Road Rome, NY 13441

TEL:

Project: GRIFFISS AFB - SMC LTM-SED

RE:

Analytical Results

Order No.: 0910009

Dear Niels van Hoesel:

Life Science Laboratories, Inc. received 4 sample(s) on 10/2/2009 for the analyses presented in the following report. Sample results relate only to the samples as received by the laboratory.

Very truly yours,

Life Science Laboratories, Inc.

Project Manager

Laboratory Report

Project Management Case Narrative

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from FPM, for the Griffiss AFB-SMC LTM-Sed-Rome, NY project.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The cooler(s) were received intact. When the cooler(s) were received by the laboratory, the sample custodian(s) opened and inspected the shipment(s) for damage and custody inconsistencies. Chains of custody documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

There were no discrepancies noted upon receipt. The temperature of the iced cooler was -1.4°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Semivolatile Organics	SW8270C	1
Pesticides	SW8081A	1
PCBs	SW8082	1
Percent Moisture	ASTM D2216	2

- 1) <u>Test Methods for Evaluating Solid Wastes</u>, SW-846 Third Edition, Final Update III, December 1996 (including the QC requirements specified in AFCEE 4.0 + variances).
- 2) <u>ASTM</u>

QUALITY CONTROL

QA/QC results are summarized in the Laboratory Report.

RAW DATA

The raw data is not requested for this report. Life Science Laboratories, Inc. will keep the raw data on file.

Total # of pages in this report:	

GC/MS Semi-Volatile Organics Case Narrative

Client ID:

FPM

Project/Order:

Griffiss AFB - SMC LTM-Sed

Work Order #:

0910009

Methodology:

8270C

Analyzed/Reviewed by (Initials/Date):

AM 10-16-0

Supervisor/Reviewed by (Initials/Date):

W 10-10-0-1

QA/QC Review (Initials/Date):

th 10/19/00

File Name:

G:\Narratives\MSSemi\0910009svnar.doc

GC/MS Semi-Volatile Organics

The GC/MS Semi-volatile instruments used a J & W DB-5MS, 30 m x 0.25 mm ID capillary column.

There were no excursions to note. All QC results were within established control limits.

Holding Times and Sample Preservation

All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Sample

All spike recoveries met method and/or project specific QC criteria.

Surrogate Standards

All surrogate standard recoveries met method and/or project specific QC criteria.

Internal Standards

All internal standard areas met method and/or project specific QC criteria.

Calibrations

All initial calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks

All preparation blanks met method and/or project specific QC criteria.

GC Semivolatile Organics Case Narrative - Page 1

Client:

FPM

Project/Order:

Griffiss AFB-SMC LTM-Sed

Work Order:

0910009

Methodology:

8081

Analyzed/Reviewed by (Initials/Date):

Supervisor/Reviewed by (Initials/Date):

QA/QC Review (Initials/Date):

10-20-09 10-20-09 10-20-09 10-20-09

File Name:

G:\Narratives\GCSemi\0910009Pest.doc

Pesticides

Holding Times

All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements.

Laboratory Control Samples

All spike recoveries met method and/or project specific QC criteria.

Surrogates

The following samples did not meet surrogate recovery criteria for Tetrachloro-m-xylene (TCMX):

Sample Description	Sample #	Column	Corrective Action
SMCSD0101FA	0909009-001A	RTX-CLP	1
SMCSD0401FC	0909009-003A	RTX-CLP	1
SMCSD0501FA	0909009-004A	RTX-CLP	1

1. Surrogate recovery marginally exceeded the lower control limit, and met control limits on the confirmation column. All surrogate recoveries met quality control requirements in the associated QC samples (MB, LCS/LCSD, CCV, and PIB). Matrix effects are suspected. No corrective action taken.

Calibrations

All calibrations and calibration verifications met method and/or project specific QC criteria.

Preparation Blanks

All preparation blanks met method and/or project specific QC criteria.

GC Semi-Volatile Organics Case Narrative

Client:

FPM

Project/Order:

Griffiss AFB-SMC LTM-Sed

Work Order. #:

0910009

Methodology:

8082

Analyzed/Reviewed by (Initials/Date):

5180. 10/16/09

Supervisor/Reviewed by (Initials/Date):

(DD) 10-16-09

QA/QC Review (Initials/Date):

Sh 10/19/00

File Name:

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PCBs

There were no excursions to note. All QC results were within established control limits.

Life Science Laboratories, Inc.

Date: 22-Oct-09

CLIENT: Project: Lab Order:	FPM Group Griffiss AFB - SMC LTI 0910009	M-Sed	Work Order Sa	mple Summary
Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0910009-001A	SMCSD0101FA	RV-SMCFSS-1	10/1/2009	10/2/2009
0910009-002A	SMCSD0401FA	SMCSD-13	10/1/2009	10/2/2009
0910009-003A	SMCSD0401FC	SMCSD-13	10/1/2009	10/2/2009
0910009-004A	SMCSD0501FA	SMCSD-14	10/1/2009	10/2/2009

Life Science Laboratories, Inc.

	U910009				DATES	DATES REPORT	
Chent: Project:	FPM Oroup Griffiss AFB - SMC LTM-Sed	LTM-Sed					
Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date Pre	Prep Date	Analysis Date
0910009-001A	SMCSD0101FA	10/1/2009 3:54:00 PM	Sediment	Organochlorine Pesticides by GC/ECD	10/	10/9/2009	10/16/2009
				Organochlorine Pesticides by GC/ECD	. 10%	10/9/2009	10/16/2009
				Percent Moisture			10/7/2009
				Polychlorinated Biphenyls by GC/ECD	10/	10/9/2009	10/14/2009
				Semivolatile Organic Compounds by GC/MS	10/	10/6/2009	10/13/2009
0910009-002A	SMCSD0401FA	10/1/2009 3:26:00 PM		Organochlorine Pesticides by GC/ECD	10/	10/9/2009	10/16/2009
				Organochlorine Pesticides by GC/ECD	10/	10/9/2009	10/16/2009
				Percent Moisture			10/7/2009
				Polychlorinated Biphenyls by GC/ECD	10/6	10/9/2009	10/14/2009
				Semivolatile Organic Compounds by GC/MS	10/6	10/6/2009	10/12/2009
0910009-003A	SMCSD0401FC			Organochlorine Pesticides by GC/ECD	5/01	10/9/2009	10/16/2009
				Organochlorine Pesticides by GC/ECD	10/2	10/9/2009	10/16/2009
				Percent Moisture			10/7/2009
				Polychlorinated Biphenyls by GC/ECD	5/01	10/9/2009	10/14/2009
				Semivolatile Organic Compounds by GC/MS	10/	10/6/2009	10/13/2009
0910009-004A	SMCSD0501FA	10/1/2009 3:00:00 PM		Organochlorine Pesticides by GC/ECD	10%	10/9/2009	10/16/2009
				Organochlorine Pesticides by GC/ECD	10%	10/9/2009	10/16/2009
				Percent Moisture			10/7/2009
				Polychlorinated Biphenyls by GC/ECD	10/6	10/9/2009	10/14/2009
				Semivolatile Organic Compounds by GC/MS	10/	10/6/2009	10/13/2009

Chain of Custody

External Chain of Custody

AFCEE CHAIN OF CUSTODY RECORD

COC#: _1_SDG#: _234_ Cooler ID#: _A_

Ship to: Pamela Titus	Project Name: Griffiss AFB SMC LTM	Send Results to: Niels van Hoesel
Life Science Laboratories, Inc.	Sampler Name: Niels van Hoesel	FPM Group Ltd.
5000 Brittonfield Pkwy, Suite 200		153 Brooks Road
East Syracuse, NY 13057 Tel: (315)437-0200	Land !	Rome, NY 13441
Carrier: LSL courier.	Sampler Signature: WMV	Phone: (315) 336-7721 Ext. 205

Carrier, Lot courier.				Datin	310 101	Sampler Signature.	*	1				FIRME: (515) 550-7721 EAR. 205
									Analys	Analyses requested	sted	
Field Sample ID	LocID	Date 2009	Time	MATRIX	SWCODE	8∀CODE	SBD/SED	# of Containers	VOC ₅ ^{note 1}	VOCs note 1	SVOCs, PCBs, Pesticides ^{note 2} 8 oz glass jar	Comments
SMCSD0101FA	RV-SMCFSS-1	1/01	1554	SE	Ü	z	0/0.5	-	,	ı	1	
SMCSD0401FA	SMCSD-13	10/1	1526	SE	Ð	z	0/0.5	1	1	•	1	
SMCSD0401FC	SMCSD-13	1/01	1526	SE	Ŋ	FD	0/0.5		-	-	1	
SMCSD0501FA	SMCSD-14	1/01	1500	SE	ပ	Z	0/0.5	1		-	1 1	

Cooler temperature: -/, 4' <	9716		Method SW8082 for AFCEE QAPP 4.0 List, Pesticides; Method SW8081 for AFCEE QAPP 4.0 List.			#3 Released by: (Sig) P. M. Oorallas Date: 16-3-59	Time: 14:40 Company Name: Life Science Lang Time: 1620	#2 Received by: (Sig) R. M. Draden Date: 10-204 #3 Received by: (Sig) 12 // Date: 10/409	Company Name: 1/
401/10A		٠	0 List, Pesticides: 1			Date: 10/2/09	Time: 14; 40	Date: 12-54	Time Sticker
 1900d Custody Seal 15TACT/ A	ding to AFCEE QAPP 4.0)		PCBs: Method SW8082 for AFCEE QAPP 4.0	and Mercury: Method SW7471.	1 1	#2 Released by: (Sig) Mulfalist	Company Name: FPM Group Ltd	#2 Received by: (Sig) B. M. Drallyn	Company Name / /
oratory:	ster List: (Accor	3 QAPP 4.0 List.	SE QAPP 4.0 List,	EE QAPP 4.0 List		Date:	Time:	Date: 9/25/09	Time.
Sample Condition Upon Receipt at Laboratory:	Special Instructions/Comments: Parameter List: (According to AFCEE QAPP 4.0)	Note 1: VOCs: Method SW8260 for AFCEE QAPP 4.0 List.	Note 2: SVOCs: Method SW8270 for AFCEE QAPP 4.0 List, PCBs:	Note 3: Metals: Method SW6010B for AFCEE QAPP 4.0 List and Mercury: Method SW7471.		#1 Released by: (Sig)	Company Name:	#1 Received by: (Sig) Niels van Hoesel	Late and Audit of

Company Name:	Time:	Commany Name: FPM Group 1.td Time: 14' 40 Company Name: / 14' C.	Time: 14'40	Time: 14' 40 Company Name: 14' C. 12	
#1 Received by: (Sig) Niels van Hoesel	Date: 9/25/09	#2 Received by: (Sig) 7 M Da allow	Date: 6204	#3 Received by: (Sig)	
Company Name: FPM Group Ltd	Time:	Company Name: Life Science Labs	Time: /445 Company Name:	Company Name:	151
MATRIX	S	SMCODE	SACODE		
WG = Ground water	8	B = Bailer	N = Normal Sample	43	
WQ = Water Quality Control Matrix		G = Grab (only for EB).	AB = Ambient Blank	*	
SO = Soil		NA = Not Applicable (only for AB/TB)	TB = Trip Blank		
WS = Surface water	2	PP = Peristaltic Pump	EB = Equipment Blank	lank	
SE = Sediment	8	BP = Bladder Pump	FD = Field Duplicate	5	

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: FPM		Date and Time Received:	10/2/2009 4:20:00 PM
Work Order Number: 0910009		Received by: ads	
Checklist completed by:	1/2/09	Reviewed by:	16 /5/09 Date
Delivery Metho	d: <u>Courier</u>		
Shipping container/cooler in good condition?	Yes 🗹	No Not Present	
Custody seals intact on shipping container/cooler?	Yes 🔽	No Not Present	
Custody seals intact on sample bottles?	Yes 🗀	No Not Applicable	
Chain of custody present?	Yes 🔽	No	
Chain of custody signed when relinquished and received?	Yes 🔽	No 🗔	
Chain of custody agrees with sample labels?	Yes 🗹	No 🗔	
Samples in proper container/bottle?	Yes 🛂	No 📋	
Sample containers intact?	Yes 🗹	No 🗀	
Sufficient sample volume for indicated test?	Yes 🗹	No 🗆	
All samples received within holding time?	Yes 🗹	No 🗆	
Container/Temp Blank temperature in compliance?	Yes 🗹	No 🗌	
Water - VOA vials have zero headspace?	Yes 🗌	No No VOA vials submit	ted 🗹
Water - nH acceptable upon receipt?	Vec 🗍	No. Not Applicable	

Comments:

Corrective Action:

	Date and Time Returned	5:30	15,00 10/1/09					77					
	Analysis	50E-C8	PINOUST								-		
cord	Date and Time Removed	14:30	(4.°	₹	•					!			
Sample Control Record	Date and Ti	10/5/01	60/2/01	:									
mple C	Removed By	3	H	2		i							
Sar	Client Sample ID											-	
	Frac	3	A										
	Sample ID	-tr 00 6-100-b000160	100 € 100 - 60 00150										

Internal Chain of Custody

GC SEMIVOLATILE ORGANICS SAMPLE CONTROL LOG

8T **1**

KY KY By Date/Time Returned 10/15/09 13:05 Analyzed Method For 8257 5 By Date/Time Removed 60/41/01 فالما 0910509-14-44 88c-81-0100160 Sample Number Date Extracted: Laboratory Removed Relinquished Ŗ EN Refrigerator Date/Time Stored in 60/21/01 19:40 0910009-14-544 0910010-18-588 Sample Number Laboratory Range Client/Job Number QC Batch #: FPW

Reviewed by: (DD) (0-16-09

G:\Logbooks 2006\Organics\SVOA37.SampleControl.doc

GC SEMIVOLATILE ORGANICS SAMPLE CONTROL LOG

OC Batch #:

Analyzed Method For 188 र्द Вy Removed Date/Time 10/9/09 10/15/09 JS: ±1 Date Extracted: \$84-81-0100160 Sample Number Laboratory 81.-600110 84 Removed Relinquished TY J By Refrigerator Date/Time to Infor Stored in 16:20 Sample Number 41-6000160 Laboratory 81 -0100160 → % Range Client/Job Number

X

12:20

By

10/19/09

Date/Time Returned

Reviewed by: (10 | (0 - | 9-09

Date:

55

Analytical Results

AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Comments:

Prime Contractor:

FPM Group

Field Sample ID) Lab Sample ID
SMCSD0101FA	0910009-001A
SMCSD0401FA	0910009-002A
SMCSD0401FC	0910009-003A
SMCSD0501FA	0910009-004A

for completene hardcopy data	ta package is in compliance with the terms ass, for other than the conditions detailed a package and in the computer-readable da nager's designee, as verified by the following	ibove. Releasi ta submitted o	e of the data contained in this
Signature:	Ramely. Tikes	Name:	Pamela J. Titus
Date:	10/20/08	Title:	Project Manager
QAPP 4.0	AFCEE F	ORM O-1	Page 1 of 1

AFCEE **ORGANIC ANALYSES DATA SHEET 2** RESULTS

Analytical Method: SW8270C

SMCSD0101FA

Preparatory Method: <u>SW3550B</u>

AAB #:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Matrix: 0910009-001A

<u>Sediment</u>

% Solids:

Lab Sample ID:

<u>67.50</u>

Initial Calibration ID: 1648

File ID:

N1632.D

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 g</u>

Page 1 of 12

Analyte	MOL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-Trichlorobenzene	0.020	1.0	0.020	1	,	U
1,2-Dichlorobenzene	0.020	1.0	0.020	1		U
1,3-Dichlorobenzene	0.020	1.0	0.020	1		U
1,4-Dichlorobenzene	0.020	1.0	0.020	1		υ
2,4,5-Trichlorophenol	0.059	4.9	0.059	1		U
2,4,6-Trichlorophenol	0.059	0.44	0.059	1		~ U
2,4-Dichlorophenol	0.020	0.44	0.020	1		U
2,4-Dimethylphenol	0.059	0.44	0.059	1		U
2,4-Dinitrophenol	0.98	4.9	0.98	1		U
2,4-Dinitrotoluene	0.020	1.0	0.020	1		U
2,6-Dinitrotoluene	0.020	1.0	0.020	1	<u> </u>	U
2-Chloronaphthalene	0.020	1.0	0.020	1		U
2-Chlorophenol	0.020	0.44	0.020	1		U
2-Methylnaphthalene	0.020	1.0	0.020	1		U
2-Methylphenol	0.020	0.44	0.020	1		บ
2-Nitroaniline	0.020	4.9	0.020	1		U
2-Nitrophenol	0.020	0.44	0.020	1		U
3,3´-Dichlorobenzidine	0.059	1.9	0.059	1		U
3-Nitroaniline	0.059	4.9	0.059	1		U
4,6-Dinitro-2-methylphenol	0.25	4.9	0.25	1		U
4-Bromophenyl phenyl ether	0.020	1.0	0.020	1		บ
4-Chloro-3-methylphenol	0.020	1.9	0.020	1		U
4-Chloroaniline	0.020	1.9	0.020	1		U
4-Chlorophenyl phenyl ether	0.020	1.0	0.020	1		U
4-Methylphenol	0.059	3.0	0.059	1		U
4-Nitroaniline	0.020	4.9	0.020	1		U
4-Nitrophenol	0.25	2.4	0.25	1		U
Acenaphthene	0.020	1.0	0.020	1		U
Acenaphthylene	0.020	1.0	0.020	1		U
Anthracene	0.020	1.0	0.020	1		U
Benzo[a]anthracene	0.020	1.0	0.053	1		F
Benzo[a]pyrene	0.020	1.0	0.048	1 1		F

AFCEE FORM 0-2

Com	mar	ste.
~~	11161	ıw.

AFCEE ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8270C

Preparatory Method: <u>SW3550B</u>

AAB #:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0101FA

Lab Sample ID:

0910009-001A

Matrix:

<u>Sediment</u>

% Solids:

<u>67.50</u>

Initial Calibration ID: 1648

File ID:

N1632.D

Date Received:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 g</u>

Page 2 of 12

Analyte	MDL	B RL	Concentration	Dilution	Confirm	Qualifier
Benzo[b]fluoranthene	0.020	1.0	0.12	1		F
Benzo[g,h,i]perylene	0.059	1.0	0.059	1		U
Benzo[k]fluoranthene	0.020	1.0	0.029	1		F
Benzoic acid	0.25	7.4	0.25	1		U
Benzyl alcohol	0.020	1.9	0.020	1		U
bis(2-Chloroethoxy)methane	0.020	1.0	0.020	1		U
bis(2-chloroethyl)ether	0.020	1.0	0.020	1		Ų
bis(2-chloroisopropyl)ether	0.020	1.0	0.020	1		U
bis(2-Ethylhexyl)phthalate	0.020	1.0	0.020	1		U
Butyl benzyl phthalate	0.020	1.0	0.020	1		U
Chrysene	0.020	1.0	0.056	1		F
Di-n-butyl phthalate	0.020	1.0	0.020	1		U
Di-n-octyl phthalate	0.020	1.0	0.020	1		U
Dibenz[a,h]anthracene	0.059	1.0	0.059	1		U
Dibenzofuran	0.020	1.0	0.020	1		· U
Diethyl phthalate	0.020	1.0	0.020	1		U
Dimethyl phthalate	0.020	1.0	0.020	1		U
Fluoranthene	0.020	1.0	0.11	1		F
Fluorene	0.020	1.0	0.020	1		U
Hexachlorobenzene	0.020	1.0	0.020	1		U
Hexachlorobutadiene	0.059	1.0	0.059	1		U
Hexachloroethane	0.059	1.0	0.059	1		U
Indeno[1,2,3-cd]pyrene	0.059	1.0	0.059	1		U
Isophorone	0.020	1.0	0.020	1		U
N-Nitroso-di-n-propylamine	0.020	1.0	0.020	1		U
N-Nitrosodiphenylamine	0.020	1.0	0.020	1		U
Naphthalene	0.020	1.0	0.020	1		U
Nitrobenzene	0.020	1.0	0.020	1		U
Pentachlorophenol	0.49	4.9	0.49	1		U .
Phenanthrene	0.020	1.0	0.064	1 1		F
Phenol	0.020	0.44	0.020	1		U
Pyrene	0.020	1.0	0.11	1 1		F

Com	

QAPP 4.0

AFCEE FORM 0-2

Analytical Method: SW8270C

SMCSD0101FA

Preparatory Method: SW3550B

AAB#:

10101

Lab Name:

Contract #:

Life Science Laboratories, Inc.

Lab Sample ID:

0910009-001A

Matrix:

<u>Sediment</u>

% Solids:

QAPP 4.0

<u>67.50</u>

Initial Calibration ID: 1648

File ID:

N1632.D

Date Received:

Field Sample ID:

06-Oct-09

Date Analyzed:

02-Oct-09

Date Extracted:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Size:

Surrogate	Recovery	Control Limits Qualifier
2,4,6-Tribromophenol	97	36 - 126
2-Fluorobiphenyl	84	43 - 120
2-Fluorophenol	81	37 - 120
Nitrobenzene-d5	85	37 - 120
Phenol-d5	84	40 - 120
Terphenyl-d14	104	32 - 120

Internal Std	Area Counts	Area Count Limits Qualifie
1,4-Dichlorobenzene-d4	149172	61370 - 245480
Acenaphthene-d10	303969	121827 - 487308
Chrysene-d12	502205	233714 - 934858
Naphthalene-d8	544022	223871 - 895484
Perylene-d12	423635	208094 - 832374
Phenanthrene-d10	496441	204419 - 817676

Comments:			
		 	

Analytical Method: SW8270C

Preparatory Method: SW3550B

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-002A

Matrix: <u>Sediment</u>

% Solids:

Initial Calibration ID: 1648

N1626.D

<u>78.40</u>

File ID:

Date Received:

Field Sample ID:

02-Oct-09

SMCSD0401FA

Date Extracted:

Lab Sample ID:

06-Oct-09

Date Analyzed:

12-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-Trichlorobenzene	0.017	0.89	0.017	1		U
1,2-Dichlorobenzene	0.017	0.89	0.017	1		U
1,3-Dichlorobenzene	0.017	0.89	0.017	1		U
1,4-Dichlorobenzene	0.017	0.89	0.017	1		U
2,4,5-Trichlorophenol	0.051	4.2	0.051	1		U
2,4,6-Trichlorophenol	0.051	0.38	0.051	1		U
2,4-Dichlorophenol	0.017	0.38	0.017	1		U
2,4-Dimethylphenol	0.051	0.38	0.051	1		U
2,4-Dinitrophenol	0.84	4.2	0.84	1		U
2,4-Dinitrotoluene	0.017	0.89	0.017	1		บ
2,6-Dinitrotoluene	0.017	0.89	0.017	1		U
2-Chloronaphthalene	0.017	0.89	0.017	1		U
2-Chlorophenol	0.017	0.38	0.017	1		U
2-Methylnaphthalene	0.017	0.89	0.023	1		F
2-Methylphenol	0.017	0.38	0.017	1		U
2-Nitroaniline	0.017	4.2	0.017	1		U
2-Nitrophenol	0.017	0.38	0.017	1		U
3,3'-Dichlorobenzidine	0.051	1.7	0.051	1		U
3-Nitroaniline	0.051	4.2	0.051	1		U
4,6-Dinitro-2-methylphenol	0.21	4.2	0.21	1		U
4-Bromophenyl phenyl ether	0.017	0.89	0.017	1		U
4-Chloro-3-methylphenol	0.017	1.7	0.017	1		U
4-Chloroaniline	0.017	1.7	0.017	1		U
4-Chlorophenyl phenyl ether	0.017	0.89	0.017	1		U
4-Methylphenol	0.051	2.6	0.051	1		U
4-Nitroaniline	0.017	4.2	0.017	1		U
4-Nitrophenol	0.21	2.0	0.21	1		U
Acenaphthene	0.017	0.89	0.017	1		U
Acenaphthylene	0.017	0.89	0.017	1		U
Anthracene	0.017	0.89	0.017	1		U
Benzo[a]anthracene	0.017	0.89	0.017	1		U
Benzo[a]pyrene	0.017	0.89	0.017	1	<u> </u>	, U

<u> </u>			_	_	_ـ	
Co	m	т	е	n	LS	ï

Analytical Method: SW8270C

Preparatory Method: SW3550B

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #: Lab Sample ID:

0910009-002A Matrix: <u>Sediment</u>

% Solids:

SMCSD0401FA <u>78.40</u>

Initial Calibration ID: 1648

File ID:

N1626.D

Date Received:

Field Sample ID:

Date Analyzed:

02-Oct-09

Date Extracted:

06-Oct-09

12-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size: <u>30 g</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Benzo[b]fluoranthene	0.017	0.89	0.017	1		U
Benzo[g,h,i]perylene	0.051	0.89	0.051	1		U
Benzo[k]fluoranthene	0.017	0.89	0.017	1		U
Benzoic acid	0.21	6.4	0.21	1		U
Benzyl alcohol	0.017	1.7	0.017	1		U
bis(2-Chloroethoxy)methane	0.017	0.89	0.017	1	·	U
bis(2-chloroethyl)ether	0.017	0.89	0.017	1		U
bis(2-chloroisopropyl)ether	0.017	0.89	0.017	1		U
bis(2-Ethylhexyl)phthalate	0.017	0.89	0.017	1		U
Butyl benzyl phthalate	0.017	0.89	0.017	1		U
Chrysene	0.017	0.89	0.017	1		U
Di-n-butyl phthalate	0.017	0.89	0.017	1		U
Di-n-octyl phthalate	0.017	0.89	0.017	1		U
Dibenz[a,h]anthracene	0.051	0.89	0.051	1		U
Dibenzofuran	0.017	0.89	0.017	1		U
Diethyl phthalate	0.017	0.89	0.017	1		U
Dimethyl phthalate	0.017	0.89	0.017	1		U
Fluoranthene	0.017	0.89	0.017	1		U
Fluorene	0.017	0.89	0.017	1		U
Hexachlorobenzene	0.017	0.89	0.017	1		U
Hexachlorobutadiene	0.051	0.89	0.051	1		υ
Hexachloroethane	0.051	0.89	0.051	1		U
Indeno[1,2,3-cd]pyrene	0.051	0.89	0.051	1		U
Isophorone	0.017	0.89	0.017	1		U
N-Nitroso-di-n-propylamine	0.017	0.89	0.017	1		U
N-Nitrosodiphenylamine	0.017	0.89	0.017	1	· · · · · · · · · · · · · · · · ·	U
Naphthalene	0.017	0.89	0.045	1		F
Nitrobenzene	0.017	0.89	0.017	1		U
Pentachlorophenol	0.42	4.2	0.42	1	-	U
Phenanthrene	0.017	0.89	0.017	1		Ü
Phenol	0.017	0.38	0.017	1 ,		U
Pyrene	0.017	0.89	0.017	1		U

Comments:		
·	 	

Analytical Method: SW8270C

Preparatory Method: <u>SW3550B</u>

AAB#:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract #:

<u>Sediment</u>

% Solids:

SMCSD0401FA

Lab Sample ID:

0910009-002A

Matrix:

<u>78.40</u>

Initial Calibration ID: 1648

File ID:

N1626.D

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

12-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol	90	36 - 126	
2-Fluorobiphenyl	88	43 - 120	
2-Fluorophenol	85	37 - 120	
Nitrobenzene-d5	83	37 - 120	
Phenol-d5	86	40 - 120	
Terphenyl-d14	102	32 - 120	

Internal Std	Area Counts	Area Count Limits Qualifie
1,4-Dichlorobenzene-d4	123826	61370 - 245480
Acenaphthene-d10	250187	121827 - 487308
Chrysene-d12	435845	233714 - 934858
Naphthalene-d8	461267	223871 - 895484
Perylene-d12	380801	208094 - 832374
Phenanthrene-d10	414124	204419 - 817676

Comments:	•			
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		 		-

Analytical Method: SW8270C

Preparatory Method: <u>SW3550B</u>

AAB #:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0401FC

Lab Sample ID:

0910009-003A

Matrix:

<u>Sediment</u>

% Solids:

<u>77.90</u>

Initial Calibration ID: 1648

File ID:

N1635.D

Date Received:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-Trichlorobenzene	0.017	0.90	0.017	1		U
1,2-Dichlorobenzene	0.017	0.90	0.017	1		U
1,3-Dichlorobenzene	0.017	0.90	0.017	1		U
1,4-Dichlorobenzene	0.017	0.90	0.017	1		U
2,4,5-Trichlorophenol	0.051	4.2	0.051	1		U
2,4,6-Trichlorophenol	0.051	0.39	0.051	1		U
2,4-Dichlorophenol	0.017	0.39	0.017	1		U
2,4-Dimethylphenol	0.051	0.39	0.051	1		U
2,4-Dinitrophenol	0.85	4.2	0.85	1		U
2,4-Dinitrotoluene	0.017	0.90	0.017	1		U
2,6-Dinitrotoluene	0.017	0.90	0.017	1		U
2-Chloronaphthalene	0.017	0.90	0.017	1		U
2-Chlorophenol	0.017	0.39	0.017	1		U
2-Methylnaphthalene	0.017	0.90	0.058	1		F
2-Methylphenol	0.017	0.39	0.017	1		U
2-Nitroaniline	0.017	4.2	0.017	1		U
2-Nitrophenol	0.017	0.39	0.017	1	-	U
3,3'-Dichlorobenzidine	0.051	1.7	0.051	1		U
3-Nitroaniline	0.051	4.2	0.051	1		U
4,6-Dinitro-2-methylphenol	0.21	4.2	0.21	1		U
4-Bromophenyl phenyl ether	0.017	0.90	0.017	1		U
4-Chloro-3-methylphenol	0.017	1.7	0.017	1		บ
4-Chloroaniline	0.017	1.7	0.017	1		U
4-Chlorophenyl phenyl ether	0.017	0.90	0.017	1		U
4-Methylphenol	0.051	2.6	0.051	1		Ų
4-Nitroaniline	0.017	4.2	0.017	1	,	U
4-Nitrophenol	0.21	2.1	0.21	1		U
Acenaphthene	0.017	0.90	0.087	1		F
Acenaphthylene	0.017	0.90	0.017	1		U
Anthracene	0.017	0.90	0.15	, 1		F
Benzo[a]anthracene	0.017	0.90	0.63	1		F
Benzo[a]pyrene	0.017	0.90	0.68	1		F '

Comments:			
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Analytical Method: SW8270C

Preparatory Method: <u>SW3550B</u>

AAB #:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-003A Matrix: **Sediment**

% Solids:

<u>77.90</u>

Initial Calibration ID: 1648

File ID:

N1635.D

Date Received:

Lab Sample ID:

Date Analyzed:

Field Sample ID:

02-Oct-09

SMCSD0401FC

Date Extracted:

06-Oct-09

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 q</u>

	MDL	RL.	Concentration	Dilution	Confirm	Qualifier
Benzo[b]fluoranthene	0.017	0.90	1.7	1		:
Benzo[g,h,i]perylene	0.051	0.90	0.24	1		F
Benzo[k]fluoranthene	0.017	0.90	0.65	1		F
Benzoic acid	0.21	6.4	0.21	1		U
Benzyl alcohol	0.017	1.7	0.017	1		U
bis(2-Chloroethoxy)methane	0.017	0.90	0.017	1		U
bis(2-chloroethyl)ether	0.017	0.90	0.017	1		U
bis(2-chloroisopropyl)ether	0.017	0.90	0.017	1		U
bis(2-Ethylhexyl)phthalate	0.017	0.90	0.037	1		F
Butyl benzyl phthalate	0.017	0.90	0.017	1		U
Chrysene	0.017	0.90	1.0	1		
Di-n-butyl phthalate	0.017	0.90	0.017	1		U
Di-n-octyl phthalate	0.017	0.90	0.017	1		U
Dibenz[a,h]anthracene	0.051	0.90	0.078	1		F
Dibenzofuran	0.017	0.90	0.066	1		F
Diethyl phthalate	0.017	0.90	0.017	1		U
Dimethyl phthalate	0.017	0.90	0.017	1		U
Fluoranthene	0.017	0.90	0.79	1		F
Fluorene	0.017	0.90	0.10	1		F
Hexachlorobenzene	0.017	0.90	0.017	1		U
Hexachlorobutadiene	0.051	0.90	0.051	1		U
Hexachloroethane	0.051	0.90	0.051	1		U
Indeno[1,2,3-cd]pyrene	0.051	0.90	0.16	1	-	F
Isophorone	0.017	0.90	0.017	1		U
N-Nitroso-di-n-propylamine	0.017	0.90	0.017	1		U
N-Nitrosodiphenylamine	0.017	0.90	0.017	1		U
Naphthalene	0.017	0.90	0.092	1		F
Nitrobenzene	0.017	0.90	0.017	1		U
Pentachlorophenol	0.42	4.2	0.42	1	·	U
Phenanthrene	0.017	0.90	0.74	1		F
Phenol	0.017	0.39	0.017	1		U
Pyrene	0.017	0.90	0.83	1		F

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Comments:

Analytical Method: SW8270C

SMCSD0401FC

Preparatory Method: SW3550B

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

0910009-003A

Matrix:

<u>Sediment</u>

% Solids:

<u>77.90</u>

Initial Calibration ID: 1648

File ID:

N1635.D

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Surrogate	Recovery	Control Limits Qualifier
2,4,6-Tribromophenol	102	36 - 126
2-Fluorobiphenyl	90	43 - 120
2-Fluorophenol	86	37 - 120
Nitrobenzene-d5	88	37 - 120
Phenol-d5	89	40 - 120
Terphenyl-d14	110	32 - 120

Internal Std	Area Counts	Area Count Limits Qualific
1,4-Dichlorobenzene-d4	146379	61370 - 245480
Acenaphthene-d10	294836	121827 - 487308
Chrysene-d12	444253	233714 - 934858
Naphthalene-d8	546475	223871 - 895484
Perylene-d12	245744	208094 - 832374
Phenanthrene-d10	491022	204419 - 817676

Comments:	
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Analytical Method: SW8270C

Preparatory Method: SW3550B

AAB#:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Lab Sample ID:

0910009-004A

Matrix:

<u>Sediment</u>

% Solids:

<u>78.20</u>

Initial Calibration ID: 1648

File ID:

N1631.D

Date Received:

Field Sample ID:

02-Oct-09

SMCSD0501FA

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Sample Size:

<u>30 g</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-Trichlorobenzene	0.017	0.90	0.017	1		U
1,2-Dichlorobenzene	0.017	0.90	0.017	1	· ·	U
1,3-Dichlorobenzene	0.017	0.90	0.017	1		U
1,4-Dichlorobenzene	0.017	0.90	0.017	1		U
2,4,5-Trichlorophenol	0.051	4.2	0.051	1		U
2,4,6-Trichlorophenol	0.051	0.38	0.051	1		U
2,4-Dichlorophenol	0.017	0.38	0.017	1		U
2,4-Dimethylphenol	0.051	0.38	0.051	1		U
2,4-Dinitrophenol	0.84	4.2	0.84	1		U
2,4-Dinitrotoluene	0.017	0.90	0.017	1		U
2,6-Dinitrotoluene	0.017	0.90	0.017	1		U
2-Chloronaphthalene	0.017	0.90	0.017	1		U
2-Chlorophenol	0.017	0.38	0.017	1		U
2-Methylnaphthalene	0.017	0.90	0.017	1		U
2-Methylphenol	0.017	0.38	0.017	1		U
2-Nitroaniline	0.017	4.2	0.017	1		U
2-Nitrophenol	0.017	0.38	0.017	1		U
3,3'-Dichlorobenzidine	0.051	1.7	0.051	1		U
3-Nitroaniline	0.051	4.2	0.051	1		U
4,6-Dinitro-2-methylphenol	0.21	4.2	0.21	1		U
4-Bromophenyl phenyl ether	0.017	0.90	0.017	1		U
4-Chloro-3-methylphenol	0.017	1.7	0.017	1		U
4-Chloroaniline	0.017	1.7	0.017	1		U
4-Chlorophenyl phenyl ether	0.017	0.90	0.017	1		U
4-Methylphenol	0.051	2.6	0.051	1		U
4-Nitroaniline	0.017	4.2	0.017	1		U
4-Nitrophenol	0.21	2.0	0.21	1		U
Acenaphthene	0.017	0.90	0.017	1	-	U
Acenaphthylene	0.017	0.90	0.017	1		U
Anthracene	0.017	0.90	0.017	1		U
Benzo[a]anthracene	0.017	0.90	0.017	1		U
Benzo[a]pyrene	0.017	0.90	0.017	1		U

Comments:

Analytical Method: SW8270C

Preparatory Method: SW3550B

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

<u>Sediment</u>

Field Sample ID:

SMCSD0501FA

Lab Sample ID:

0910009-004A

Matrix:

% Solids:

<u>78.20</u>

Initial Calibration ID: 1648

File ID:

N1631.D

Date Received:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Benzo[b]fluoranthene	0.017	0.90	0.017	1		U
Benzo[g,h,i]perylene	0.051	0.90	0.051	1		U
Benzo[k]fluoranthene	0.017	0.90	0.017	1		U
Benzoic acid	0.21	6.4	0.21	1		U
Benzyl alcohol	0.017	1.7	0.017	1		U
bis(2-Chloroethoxy)methane	0.017	0.90	0.017	1	··	U
bis(2-chloroethyl)ether	0.017	0.90	0.017	1		U
bis(2-chloroisopropyl)ether	0.017	0.90	0.017	1		U
bis(2-Ethylhexyl)phthalate	0.017	0.90	0.020	1		F
Butyl benzyl phthalate	0.017	0.90	0.017	1		U
Chrysene	0.017	0.90	0.017	1 ,		U
Di-n-butyl phthalate	0.017	0.90	0.017	1		U
Di-n-octyl phthalate	0.017	0.90	0.017	1		U
Dibenz[a,h]anthracene	0.051	0.90	0.051	1		U
Dibenzofuran	0.017	0.90	0.017	1		U
Diethyl phthalate	0.017	0.90	0.017	1		U
Dimethyl phthalate	0.017	0.90	0.017	1		U
Fluoranthene	0.017	0.90	0.025	1		F
Fluorene	0.017	0.90	0.017	1		U
Hexachlorobenzene	0.017	0.90	0.017	1	:	U
Hexachlorobutadiene	0.051	0.90	0.051	1		U
Hexachloroethane	0.051	0.90	0.051	1		U
Indeno[1,2,3-cd]pyrene	0.051	0.90	0.051	1		U
Isophorone	0.017	0.90	0.017	1	·	U
N-Nitroso-di-n-propylamine	0.017	0.90	0.017	1		U
N-Nitrosodiphenylamine	0.017	0.90	0.017	1		U
Naphthalene	0.017	0.90	0.017	, 1		U
Nitrobenzene	0.017	0.90	0.017	1		U
Pentachlorophenol	0.42	4.2	0.42	1		U
Phenanthrene	0.017	0.90	0.019	1		F
Phenol	0.017	0.38	0.017	1		U
Pyrene	0.017	0.90	0.027	1		F

Comments:	

Analytical Method: SW8270C

Preparatory Method: SW3550B

AAB #:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

SMCSD0501FA

Lab Sample ID:

0910009-004A

Matrix:

<u>Sediment</u>

% Solids:

<u>78.20</u>

Initial Calibration ID: 1648

File ID:

N1631.D

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

06-Oct-09

Date Analyzed:

13-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol	98	36 - 126	
2-Fluorobiphenyl	88	43 - 120	
2-Fluorophenol	85	37 - 120	
Nitrobenzene-d5	84	37 - 120	
Phenol-d5	89	40 - 120	
Terphenyl-d14	100	32 - 120	

Internal Std	Area Counts	Area Gount Limits Q	ualifier
1,4-Dichlorobenzene-d4	134132	61370 - 245480	
Acenaphthene-d10	276534	121827 - 487308	
Chrysene-d12	474382	233714 - 934858	
Naphthalene-d8	502062	223871 - 895484	
Perylene-d12	416587	208094 - 832374	
Phenanthrene-d10	461947	204419 - 817676	

Comments:			
		 	
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AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Comments:

Prime Contractor:

FPM Group

Field Sample ID	Lab Sample ID
SMCSD0101FA	0910009-001A
SMCSD0401FA	0910009-002A
SMCSD0401FC	0910009-003A
SMCSD0501FA	0910009-004A

			
			s of the contract, both technically and
hardcopy da	eness, for other than the conditions ata package and in the computer-re Manager's designee, as verified by	adable data submitted o	e of the data contained in this n diskette has been authorized by the
	-		
Signature:	Samely, Jis	Name:	Pamela J. Titus
Date:	10/22/09	Title:	Project Manager
PP 4.0		AFCEE FORM 0-1	Page 1 of 1



Analytical Method: SW8081A

Preparatory Method: SW3550B

AAB#:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0101FA

Lab Sample ID:

0910009-001A

Matrix:

Sediment

% Solids:

QAPP 4.0

67.50

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101547.rst

Date Received:

02-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

Date Extracted:

mg/Kg

09-Oct-09

Date Analyzed:

16-Oct-09

Sample Size:

30 g

Page 1 of 2

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
alpha-BHC	0.00049	0.0025	0.00049	1	0.00049	U
beta-BHC	0.0012	0.0025	0.0012	1	0.0012	U
delta-BHC	0.00068	0.0025	0.00068	1	0.00068	U
gamma-BHC	0.00055	0.0025	0.00055	1	0.00055	U
alpha-Chlordane	0.00052	0.0025	0.00052	1	0.00052	U
gamma-Chlordane	0.00062	0.0025	0.00062	1	0.00062	U
4,4´-DDD	0.00052	0.0049	0.00052	1	0.00052	U
4,4´-DDE	0.00055	0.0049	0.00055	1	0.00055	U
4,4'-DDT	0.00064	0.0049	0.00064	1	0.00064	U
Aldrin	0.00059	0.0025	0.00059	1	0.00059	U
Dieldrin	0.00062	0.0049	0.00062	1	0.00062	U
Endosulfan I	0.00046	0.0025	0.00046	1	0.00046	U
Endosulfan II	0.00055	0.0049	0.00055	1	0.00055	U
Endosulfan sulfate	0.00092	0.0049	0.00092	1	0.00092	· U
Endrin	0.00096	0.0049	0.00096	1	0.00096	U
Endrin aldehyde	0.00070	0.0049	0.00070	1	0.00070	U
Heptachlor	0.00076	0.0025	0.00076	1	0.00076	U
Heptachlor epoxide	0.00067	0.0025	0.00067	1	0.00067	U
Methoxychlor	0.00065	0.025	0.00065	1	0.00065	U
Toxaphene	0.0099	0.15	0.0099	1	0.0099	U

	Surrogate	Recovery	Control Limits	Qualifier	
ĺ	Decachlorobiphenyl	70	56 - 132		
ļ	Tetrachloro-m-xylene	67	69 - 124	*	

Comments:			
	· · ·	 	

AFCEE FORM 0-2

Analytical Method: SW8081A

SMCSD0101FA

Preparatory Method: <u>SW3550B</u>

AAB #:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-001A

Matrix:

<u>Sediment</u>

% Solids:

67.50

Initial Calibration ID: 1652

File ID:

E:\Gtoct09\H101547.rst

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

Lab Sample ID:

09-Oct-09

Date Analyzed: 16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	72	56 - 132	
Tetrachloro-m-xylene	71	69 - 124	

Comments:			
	 	 	

Analytical Method: SW8081A

SMCSD0401FA

Preparatory Method: SW3550B

AAB #:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-002A

Matrix:

<u>Sediment</u>

% Solids:

<u>78.40</u>

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101548.rst

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

Lab Sample ID:

09-Oct-09

Date Analyzed:

16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

<u>mg/Kg</u>

Sample Size:

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
alpha-BHC	0.00042	0.0022	0.00042	1	0.00042	U
beta-BHC	0.0011	0.0022	0.0011	. 1	0.0011	U
delta-BHC	0.00059	0.0022	0.00059	1	0.00059	U
gamma-BHC	0.00047	0.0022	0.00047	1	0.00047	U
alpha-Chlordane	0.00045	0.0022	0.00045	1	0.00045	U
gamma-Chlordane	0.00054	0.0022	0.00054	1	0.00054	U
4,4´-DDE	0.00047	0.0042	0.00047	1	0.00047	U
4,4'-DDT	0.00055	0.0042	0.00055	1	0.00055	U
Aldrin	0.00051	0.0022	0.00051	1	0.00051	U
Dieldrin	0.00054	0.0042	0.00054	1	0.00054	U
Endosulfan I	0.00040	0.0022	0.00040	1	0.00040	U
Endosulfan II	0.00047	0.0042	0.00047	1	0.00047	U
Endosulfan sulfate	0.00079	0.0042	0.00079	1	0.00079	U
Endrin	0.00083	0.0042	0.00083	1	0.00083	U
Endrin aldehyde	0.00060	0.0042	0.00060	1	0.00060	U
Heptachlor	0.00065	0.0022	0.00065	1	0.00065	U
Heptachlor epoxide	0.00057	0.0022	0.00057	1	0.00057	U
Methoxychlor	0.00056	0.022	0.00056	1	0.00056	U
Toxaphene	0.0085	0.13	0.0085	1	0.0085	Ü

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	74	56 - 132	
Tetrachloro-m-xylene	76	69 - 124	

Comments:	

Analytical Method: SW8081A

SMCSD0401FA

Preparatory Method: SW3550B

AAB#:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-002A

Matrix:

<u>Sediment</u>

% Solids:

<u> 78.40</u>

Initial Calibration ID: 1652

File ID:

E:\Gtoct09\H101548.rst

Date Received:

Field Sample ID:

Date Analyzed:

02-Oct-09

Date Extracted:

Lab Sample ID:

09-Oct-09

16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
4,4'-DDD	0.00045	0.0042	0.0015	1	0.00081	FJ

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	88	56 - 132	
Tetrachloro-m-xylene	81	69 - 124	

Comments:	



Analytical Method: SW8081A

Preparatory Method: <u>SW3550B</u>

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0401FC

Lab Sample ID:

0910009-003A

Matrix:

<u>Sediment</u>

% Solids:

<u>77.90</u>

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101549.rst

Date Received:

QAPP 4.0

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed:

16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 g</u>

Page 2 of 2

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
alpha-BHC	0.00042	0.0022	0.00042	1	0.00042	U
beta-BHC	0.0011	0.0022	0.0011	1	0.0011	U
delta-BHC	0.00059	0.0022	0.00059	1	0.00059	U
gamma-BHC	0.00047	0.0022	0.00047	1	0.00047	U
alpha-Chlordane	0.00045	0.0022	0.00045	1 1	0.00045	U
gamma-Chlordane	0.00054	0.0022	0.00054	1	0.00054	U
4,4'-DDD	0.00045	0.0042	0.00045	1	0.00045	U
4,4'-DDE	0.00047	0.0042	0.00047	1	0.00047	U
4,4'-DDT	0.00055	0.0042	0.00055	1	0.00055	U
Aldrin	0.00051	0.0022	0.00051	1	0.00051	U
Dieldrin	0.00054	0.0042	0.00090	1	0.00077	FJ
Endosulfan I	0.00040	0.0022	0.00040	1	0.00040	U
Endosulfan II	0.00047	0.0042	0.00047	1	0.00047	U
Endosulfan sulfate	0.00080	0.0042	0.00080	1	0.00080	U
Endrin	0.00083	0.0042	0.00083	1	0.00083	U
Endrin aldehyde	0.00060	0.0042	0.00060	1	0.00060	U
Heptachlor	0.00065	0.0022	0.00065	1	0.00065	U
Heptachlor epoxide	0.00058	0.0022	0.00058	1	0.00058	U
Methoxychlor	0.00056	0.022	0.00056	1	0.00056	U
Toxaphene	0.0086	0.13	0.0086	: 1	0.0086	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	76	56 - 132	
Tetrachloro-m-xylene	67	69 - 124	*

Comments:				
water	 	 		

AFCEE FORM O-2

Analytical Method: SW8081A

Preparatory Method: SW3550B

AAB#:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-003A

Matrix:

<u>Sediment</u>

% Solids:

QAPP 4.0

<u>77.90</u>

Initial Calibration ID: 1652

File ID:

E:\Gtoct09\H101549.rst

Date Received:

Date Analyzed:

16-Oct-09

Field Sample ID:

02-Oct-09

SMCSD0401FC

Date Extracted:

Lab Sample ID:

09-Oct-09

Page 6 of 8

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size: <u>30 g</u>

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	108	56 - 132	
Tetrachloro-m-xylene	77	69 - 124	

Comments:	

AFCEE FORM 0-2

Analytical Method: SW8081A

SMCSD0501FA

Preparatory Method: <u>SW3550B</u>

AAB#:

10117

Lab Name:

Life Science Laboratories, Inc.

Lab Sample ID:

Contract #:

0910009-004A

Matrix:

<u>Sediment</u>

% Solids:

QAPP 4.0

78.20

Initial Calibration ID: 1652

File ID:

E:\Gtoct09\H101550.rst

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed:

16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 g</u>

Page 7 of 8

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
alpha-BHC	0.00042	0.0022	0.00042	1	0.00042	U
beta-BHC	0.0011	0.0022	0.0011	1	0.0011	U
delta-BHC	0.00059	0.0022	0.00059	1	0.00059	U
gamma-BHC	0.00047	0.0022	0.00047	1	0.00047	υ
alpha-Chlordane	0.00045	0.0022	0.00045	1	0.00045	U
gamma-Chlordane	0.00054	0.0022	0.00054	1	0.00054	υ
4,4'-DDD	0.00045	0.0042	0.00045	1	0.00045	U
4,4'-DDE	0.00047	0.0042	0.00047	1	0.00047	U
4,4´-DDT	0.00055	0.0042	0.00055	1	0.00055	U
Aldrin	0.00051	0.0022	0.00051	1	0.00051	U
Dieldrin	0.00054	0.0042	0.00054	1	0.00054	U
Endosulfan I	0.00040	0.0022	0.00040	1	0.00040	U
Endosulfan II	0.00047	0.0042	0.00047	1	0.00047	U
Endosulfan sulfate	0.00079	0.0042	0.00079	1	0.00079	U
Endrin	0.00083	0.0042	0.00083	1	0.00083	U
Endrin aldehyde	0.00060	0.0042	0.00060	1	0.00060	. U
Heptachlor	0.00065	0.0022	0.00065	1	0.00065	U
Heptachlor epoxide	0.00058	0.0022	0.00058	1	0.00058	U
Methoxychlor	0.00056	0.022	0.00056	1	0.00056	U
Toxaphene	0.0086	0.13	0.0086	1	0.0086	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	109	56 - 132	
Tetrachloro-m-xylene	79	69 - 124	

Comments:	

AFCEE FORM Q-2

Analytical Method: SW8081A

Preparatory Method: <u>SW3550B</u>

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

SMCSD0501FA

Lab Sample ID:

0910009-004A

Matrix:

<u>Sediment</u>

% Solids:

78.20

Initial Calibration ID: 1651

File ID:

E:\Gtoct09\G101550.rst

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed:

16-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	69	56 - 132	
Tetrachloro-m-xylene	67	69 - 124	*

Comments:		
······································	 	

AFCEE ORGANIC ANALYSES DATA PACKAGE

Analytical Method:

<u>SW8082</u>

AAB #:

10119

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Comments:

Prime Contractor:

FPM Group

Field Sample ID	Lab Sample ID
SMCSD0101FA	0910009-001A
SMCSD0401FA	0910009-002A
SMCSD0401FC	0910009-003A
SMCSD0501FA	0910009-004A

for complet hardcopy d	eness, for other than the cond	litions detailed above. Releas iter-readable data submitted o	is of the contract, both technically and e of the data contained in this in diskette has been authorized by the
Laboratory	Mariager 3 designee, as verme	ed by the following signature.	
Signature:	- Kanelef. a	Itus Name:	Pamela J. Titus
Date:	10/22/09	Title:	Project Manager
4.0	1 - 1	AFCEE FORM 0-1	Page 1 of 1

Analytical Method: SW8082

Preparatory Method: SW3550B

AAB #:

<u>10119</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

0910009-001A

Matrix:

<u>Sediment</u>

% Solids:

SMCSD0101FA <u>67.50</u>

Initial Calibration ID: 1650

File ID:

E:\90oct09\C101410.rst

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

Lab Sample ID:

09-Oct-09

Date Analyzed:

14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Analyte	MDL	RL	Concentration	Dilution	Confirm Qualifier
Aroclor 1016	0.00324	0.0252	0.00324	1	U
Aroclor 1221	0.00329	0.0252	0.00329	1	U
Aroclor 1232	0.00200	0.0252	0.00200	1	U
Aroclor 1242	0.00271	0.0252	0.00271	1	Ü
Aroclor 1248	0.00529	0.0252	0.00529	1	U
Aroclor 1254	0.00702	0.0252	0.00702	1	U
Aroclor 1260	0.00296	0.0252	0.00296	1	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	92	58 - 125	

Comments:	

Analytical Method: SW8082

Preparatory Method: <u>SW3550B</u>

AAB #:

10119

Lab Name:

Life Science Laboratories, Inc.

SMCSD0401FA

Contract #:

Lab Sample ID:

0910009-002A

Matrix:

<u>Sediment</u>

% Solids:

<u> 78.40</u>

Initial Calibration ID: 1650

File ID:

E:\90oct09\C101411.rst

Date Received:

Field Sample ID:

09-Oct-09

Date Analyzed:

02-Oct-09

Date Extracted:

14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Analyte	MDL	RL.	Concentration	Dilution	Confirm	Qualifier
Aroclor 1016	0.00279	0.0217	0.00279	1		U
Araclor 1221	0.00283	0.0217	0.00283	1	-	U
Aroclor 1232	0.00172	0.0217	0.00172	1		U
Aroclor 1242	0.00233	0.0217	0.00233	1		U
Aroclor 1248	0.00455	0.0217	0.00455	1		U
Aroclor 1254	0.00605	0.0217	0.0727	1		
Aroclor 1260	0.00255	0.0217	0.00255	1		U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	94	58 - 125	

Comments:	
•	

Analytical Method: SW8082

Preparatory Method: SW3550B

AAB#:

<u>10119</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Matrix:

<u>Sediment</u>

% Solids:

SMCSD0401FC

Lab Sample ID:

0910009-003A

File ID:

E:\90oct09\C101412.rst

<u>77.90</u>

Initial Calibration ID: 1650

Date Analyzed:

Date Received:

Field Sample ID:

02-Oct-09

Date Extracted:

09-Oct-09

14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

Analyte	MOL	RL	Concentration	Dilution 0	Confirm Qualifier
Aroclor 1016	0.00281	0.0218	0.00281	1	U
Aroclor 1221	0.00285	0.0218	0.00285	1	U
Aroclor 1232	0.00173	0.0218	0.00173	1	U
Aroclor 1242	0.00235	0.0218	0.00235	1	U
Aroclor 1248	0.00458	0.0218	0.00458	1	U
Aroclor 1254	0.00608	0.0218	0.0145	1	F
Aroclor 1260	0.00257	0.0218	0.00257	1	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	89	58 - 125	

Comments:		
	 · · · ·	

Analytical Method: SW8082

Preparatory Method: SW3550B

AAB #:

<u>10119</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID:

SMCSD0501FA

Lab Sample ID:

0910009-004A

Matrix:

<u>Sediment</u>

% Solids:

QAPP 4.0

<u> 78.20</u>

Initial Calibration ID: 1650

File ID:

E:\90oct09\C101413.rst

Date Received:

02-Oct-09

Date Extracted:

09-Oct-09

Date Analyzed:

14-Oct-09

Concentration Units (ug/L or mg/Kg dry weight):

mg/Kg

Sample Size:

<u>30 g</u>

Page 4 of 4

Analyte	MDE	RL	Concentration	Dilution	Confirm Qualifier
Aroclor 1016	0.00280	0.0217	0.00280	1	U
Aroclor 1221	0.00284	0.0217	0.00284	1	U
Aroclor 1232	0.00173	0.0217	0.00173	1	U
Aroclor 1242	0.00234	0.0217	0.00234	1	U
Aroclor 1248	0.00457	0.0217	0.00457	1	U
Aroclor 1254	0.00606	0.0217	0.00606	1	U
Aroclor 1260	0.00256	0.0217	0.00256	1	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	101	58 - 125	

Comments:		

AFCEE FORM 0-2

Life Science Laboratories, Inc.

08-Oct-09 Date:

FPM Group 0910009

CLIENT: Lab Order:

Griffiss AFB - SMC LTM-Sed Project:

	,				
Percent	lyoisture	32.5	21.6	22.1	21.8
	Batch ID	R18473	R18473	R18473	R18473
	Date Analyzed	10/7/2009	10/7/2009	10/7/2009	10/7/2009
	Date Received	10/2/2009	10/2/2009	10/2/2009	10/2/2009
	Date Collected	10/1/2009	10/1/2009	10/1/2009	10/1/2009
	Units	wt%	wt%	wt%	wt%
	Lab ID	0910009-001A	0910009-002A	0910009-003A	0910009-004A
	Sample ID	SMCSD0101FA	SMCSD0401FA	SMCSD0401FC	SMCSD0501FA

Quality Control Results

GC/MS Semivolatile Organics Data

AFCEE ORGANIC ANALYSES DATA SHEET 3 INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method:

8270

AAB#:

Lab Name: Life Science Laboratories, Inc.

Contract #:

Instrument ID: HP5972 GCMS#5

Date of Initial Calibration: 09OCT2009

Initial Calibration ID: 1648

Concentration Units (ug/L or mg/kg): ug/mL

SEE ATTACHED

Comments:				
	 		-	

```
: C:\HPCHEM\1\METHODS\NO09FULL.M (RTE Integrator) /648
    Method
                   : BNA's w/J\&W DB-5MS .25mm x 30m 0.5df
   Last Update : Mon Oct 12 07:29:36 2009
    Response via : Initial Calibration
    Calibration Files
    160 = N1591.D 120 = N1592.D 80
60 = N1594.D 50 = N1595.D 40
                                                                 =N1593.D
                                                                =N1596.D
         Compound
                             160 120 80 60 50 40 Avg
                                                                                             8RSD
          1,4-Dichlorobenzene-d ------ISTD------
 1) I
 2) T
          1,4-Dioxane 0.574 0.546 0.554 0.540 0.541 0.539 0.530 6.42
          N-nitrosodimethylam 0.846 0.818 0.834 0.804 0.814 0.801 0.788
 3) T
                                                                                           6.83

      Pyridine
      1.426
      1.391
      1.411
      1.390
      1.369
      1.383
      1.359
      4.59

      2-Fluorophenol
      1.271
      1.205
      1.249
      1.220
      1.216
      1.211
      1.195
      5.25

      Phenol—d5
      1.602
      1.536
      1.594
      1.555
      1.543
      1.595
      1.543
      3.88

      Phenol
      1.635
      1.589
      1.669
      1.605
      1.634
      1.655
      1.621
      2.35

      Aniline
      1.984
      1.929
      1.975
      1.956
      1.944
      1.965
      1.929
      2.77

 4) T
 5) S
 6) S
 7) MC
 8) T
 9) T
          bis(2-Chloroethyl)e 1.294 1.317 1.345 1.355 1.343 1.355 1.330 1.72
10) S
                                                                                 0.000 - 1.00
          2-Chlorophenol-d4
                                  1.290 1.315 1.344 1.318 1.326 1.319 1.297
11) M
          2-Chlorophenol
                                                                                           3.15
          1,3-Dichlorobenzene 1.361 1.421 1.470 1.453 1.447 1.449 1.421
                                                                                          2.69
12) T
          1,4-Dichlorobenzene 1.314 1.373 1.454 1.443 1.425 1.434 1.404
13) MC
                                                                                           3.15
          Benzyl alcohol 0.866 0.850 0.843 0.817 0.825 0.827 0.813
14) T
                                                                                          6.02
15) S
          1,2-Dichlorobenzene
                                                                                 0.000 - 1.00
          1,2-Dichlorobenzene 1.224 1.279 1.322 1.306 1.266 1.281 1.272 2.58
16) T
<sup>1</sup>7) T
          2-Methylphenol 1.068 1.113 1.131 1.125 1.129 1.122 1.111
                                                                                          2.58
          2,2'-oxybis(1-chlor 1.603 1.650 1.701 1.723 1.687 1.712 1.689
 3) T
                                                                                          2.28
          bis(2-Chloroisoprop 1.603 1.650 1.701 1.723 1.687 1.712 1.689
19) T
                                                                                          2.28
20) T
          4-Methylphenol 1.220 1.232 1.237 1.229 1.235 1.237 1.214
                                                                                         3.27
21) T
         (3+4)-Methylphenol 1.220 1.232 1.237 1.229 1.235 1.237 1.214
                                                                                         3.27
                                                                                         4.91
22) MP N-Nitroso-di-n-prop 0.737 0.837 0.859 0.825 0.841 0.846 0.815
         Hexachloroethane 0.607 0.634 0.645 0.645 0.640 0.636 0.626
23) T
         Naphthalene-d8
Nitrobenzene-d5
Nitrobenzene

Nitrobenzene

0.359 0.348 0.358 0.350 0.349 0.347 0.348
Nitrobenzene

0.351 0.343 0.362 0.352 0.347 0.348 0.346
Isophorone

0.685 0.649 0.665 0.648 0.642 0.647 0.644
2-Nitrophenol

0.219 0.214 0.226 0.219 0.217 0.215 0.210

2,4-Dimethylphenol

0.351 0.349 0.353 0.346 0.344 0.345 0.344
24) I
                                    ----ISTD-----
25) S
                                                                                           2.54
26) T
                                                                                           2.92
27) T
                                                                                           3.91
28) TC
                                                                                           7.01
29) T
                                                                                           2.46
          Benzoic acid 0.207 0.209 0.190 0.151 0.139 0.130 0.155 33.52
30) T
31) T
         bis(2-Chloroethoxy) 0.436 0.422 0.446 0.441 0.440 0.442 0.437
32) TC
          2,4-Dichlorophenol 0.310 0.304 0.318 0.304 0.301 0.301 0.296
                                                                                         6.00
         1,2,4-Trichlorobenz 0.323 0.325 0.341 0.333 0.328 0.326 0.325
33) M
                                                                                           2.69
         Naphthalene 0.833 0.848 0.920 0.902 0.891 0.910 0.894 3.62 4-Chloroaniline 0.417 0.413 0.420 0.415 0.406 0.412 0.410 1.64
34) T
35) T
36) TC Hexachlorobutadiene 0.207 0.207 0.216 0.206 0.202 0.202 0.200
                                                                                         5.31
                                                                                         5.14
37) MC
          4-Chloro-3-methylph 0.304 0.296 0.307 0.300 0.296 0.294 0.291
         2-Methylnaphthalene 0.579 0.581 0.639 0.629 0.609 0.619 0.607
38) T
                                      ----ISTD-----
39) I
         Acenaphthene-d10
                                                                                 0.000 - 1.00
40) T
         1,2,4,5-Tetrachloro
         Hexachlorocyclopent 0.324 0.314 0.272 0.224 0.200 0.188 0.210 | 45.57
1) TP
```

(#) = Out of Range ### Number of calibration levels exceeded format ### NO09FULL.M Mon Oct 12 07:29:51 2009

Mal. Loda Page 1

Method : C:\HPCHEM\1\METHODS\NO09FULL.M (RTE Integrator) / (48)

Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Last Update : Mon Oct 12 07:29:36 2009

Response via: Initial Calibration

Calibration Files

160 =N1591.D 120 =N1592.D 80 =N1593.D 60 =N1594.D 50 =N1595.D 40 =N1596.D

60	=N1594.D 50	=N.	1595.0		4 U	=NTO9	ע.ט		
	Compound	160	120	80	60	50	40	Avg	%RSD
42) TC 43) T 44) S 45) T 46) T 47) T 48) T 50) T 51) TCM 52) TP 53) MP 54) M 55) T 56) T 57) T 58) T 59) T	2,4,6-Trichlorophen 2,4,5-Trichlorophen 2-Fluorobiphenyl 2-Chloronaphthalene 2-Nitroaniline Dimethyl phthalate 2,6-Dinitrotoluene Acenaphthylene 3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol 2,4-Dinitrotoluene Dibenzofuran Diethyl phthalate 4-Chlorophenyl phen Fluorene 4-Nitroaniline 1,2-Diphenylhydrazi 2,4,6-Tribromopheno	0.396 1.131 1.005 0.339 1.235 0.302 1.541 0.325 0.902 0.206 0.145 0.404 1.403 1.109 0.557 1.053 0.353 1.098	0.408 1.138 1.042 0.339 1.278 0.335 1.598 0.380 0.932 0.208 0.155 0.453 1.469 1.266 0.597 1.124 0.372 1.216	0.391 1.209 1.069 0.346 1.276 0.375 0.967 0.183 0.146 0.453 1.530 1.316 0.625 1.189 0.382 1.316	0.376 1.192 1.051 0.332 1.271 0.333 1.591 0.356 0.946 0.154 0.133 0.441 1.488 1.304 0.601 1.155 0.372 1.306	0.373 1.182 1.063 0.332 1.275 0.331 1.605 0.370 0.146 0.134 0.445 1.489 1.322 0.604 1.167 0.374 1.322	0.381 1.219 1.057 0.331 1.285 0.333 1.634 0.366 0.972 0.141 0.134 0.448 1.501 1.335 0.611 1.205 0.379 1.345	0.366 1.177 1.042 0.324 1.250 0.321 1.583 0.352 0.950 0.161 0.137 0.429 1.472 1.270 0.589 1.141 0.361 1.288	8.94 9.74 2.80 2.62 7.12 3.10 7.00 2.84 7.32 2.47 25.50 10.18 6.18 2.68 5.52 4.41 4.16 6.82 6.37 15.03
62) I 63) T 64) TC 65) T 66) T 67) MC 68) T 70) T 71) T 72) TC 73) I 74) T 75) M 76) S 77) T 78) T 79) T 80) T 81) T 82) TC 3) T	Phenanthrene-d10 4,6-Dinitro-2-methy n-Nitrosodiphenylam 4-Bromophenyl pheny Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butyl phthalat Fluoranthene Chrysene-d12 Benzidine Pyrene Terphenyl-d14 Butyl benzyl phthal 3,3'-Dichlorobenzid Benzo[a]anthracene bis(2-Ethylhexyl)ph Chrysene Di-n-octyl phthalat Indeno[1,2,3-cd]pyr	0.197 0.518 0.264 0.337 0.149 0.944 0.962 0.965 1.315 1.129 0.493 0.950 0.552 0.542 0.985 0.754 0.879 1.322	0.200 0.514 0.259 0.336 0.135 0.967 0.978 0.957 1.346 1.136 	0.195 0.513 0.251 0.323 0.116 1.008 1.029 0.981 1.421 1.155 0.545 1.019 0.555 0.996 0.743 0.935 1.452	0.180 0.499 0.234 0.302 0.097 0.998 0.999 0.971 1.416 1.120 -ISTD 0.555 0.991 0.657 0.602 0.534 0.980 0.788 0.944 1.510	0.176 0.511 0.231 0.298 0.089 0.993 1.007 0.949 1.447 1.127 0.565 0.999 0.657 0.586 0.522 0.986 0.829 0.913 1.497	0.512 0.231 0.302 0.088 1.002 1.033 0.969 1.450 1.134 0.573 1.016 0.656 0.656 0.527 0.990 0.847 0.934 1.532	0.181 0.503 0.232 0.301 0.105 0.978 0.998 0.943 1.380 1.102 0.542 0.991 0.637 0.576 0.503 0.976 0.790 0.901 1.429	10.70 2.78 10.35 9.21 27.74# 2.52 2.32 3.61 4.31 4.65 4.86 3.35 5.66 4.86 12.30 2.61 4.87 4.54 6.35 11.62

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\NO09FULL.M (RTE Integrator)//648
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Last Update : Mon Oct 12 07:29:36 2009

Response via : Initial Calibration

Calibration Files

89) T

=N1591.D 120 =N1594.D 50 =N1592.D 80 =N1595.D 40 160 =N1593.D =N1596.D 60

160 120 80 60 50 40 Avg Compound %RSD

84) I Perylene-d12 ----ISTD----85) T Benzo[b]fluoranthen 1.469 1.403 1.198 1.148 1.090 1.108 1.147 [16.32] 86) T Benzo[k] fluoranthen 0.815 0.940 1.084 1.092 1.121 1.075 1.016 87) TC Benzo[a]pyrene 1.091 1.118 1.089 1.070 1.045 1.029 1.021 8.45 88) T Dibenz[a,h]anthrace 1.018 1.057 1.073 1.053 1.018 0.990 0.965 11.94

Benzo[g,h,i]perylen 0.945 0.984 0.993 0.968 0.930 0.932 0.912 8.87

```
: C:\HPCHEM\1\METHODS\NO09FULL.M (RTE Integrator)/
   Method
               : BNA's w/J\&W DB-5MS .25mm x 30m 0.5df
   Title
   Last Update : Mon Oct 12 07:33:07 2009
   Response via: Initial Calibration
   Calibration Files
   20 =N1597.D 10 - =N1598.D 5.0 =N1599.D
   1.0
        =N1600.D
                                 10 5.0 1.0
                              20
        Compound
        1,4-Dichlorobenzene-d ------ISTD-----ISTD-----
 1) I
 2) T
        1,4-Dioxane 0.519 0.503 0.457
 3) T N-nitrosodimethylam 0.771 0.730 0.678
 4) T Pyridine 1.345 1.276 1.240
5) S 2-Fluorophenol 1.187 1.132 1.064
6) S Phenol-d5 1.562 1.486 1.416
7) MC Phenol 1.650 1.598 1.550
8) T Aniline 1.919 1.871 1.819
       bis(2-Chloroethyl)e 1.345 1.313 1.305
 9) T
10) S 2-Chlorophenol-d4
                            1.297 1.252 1.214
      2-Chlorophenol
11) M
        1,3-Dichlorobenzene 1.412 1.406 1.367
12) T
       1,4-Dichlorobenzene 1.425 1.395 1.375
13) MC
                            0.820 0.759 0.709
14) T
        Benzyl alcohol
15) S
        1,2-Dichlorobenzene
16) T
        1,2-Dichlorobenzene 1.290 1.252 1.230
       2-Methylphenol 1.148 1.102 1.063
 ) T
18) T 2,2'-oxybis(1-chlor 1.716 1.701 1.703
        bis(2-Chloroisoprop 1.716 1.701 1.703
19) T
        4-Methylphenol 1.243 1.172 1.125 (3+4)-Methylphenol 1.243 1.172 1.125
20) T
21) T
        N-Nitroso-di-n-prop 0.824 0.800 0.767
22) MP
       Hexachloroethane 0.629 0.594 0.608
23) T
-----ISTD-----
        2,4-Dimethylphenol 0.345 0.325 0.337
29) T
        Benzoic acid 0.063
30) T
31) T
        bis(2-Chloroethoxy) 0.439 0.440 0.429
32) TC 2,4-Dichlorophenol 0.287 0.279 0.260
        1,2,4-Trichlorobenz 0.321 0.316 0.312
33) M
       Naphthalene 0.924 0.904 0.917 4-Chloroaniline 0.401 0.407 0.402
34) T
35) T
36) TC Hexachlorobutadiene 0.193 0.188 0.183
37) MC 4-Chloro-3-methylph 0.286 0.270 0.264
38) T
        2-Methylnaphthalene 0.617 0.600 0.590
                              ----ISTD-----
39) I Acenaphthene-dl0
40) T 1,2,4,5-Tetrachloro
 ) TP Hexachlorocyclopent 0.110 0.049
```

(#) = Out of Range ### Number of calibration levels exceeded format ###
NO09FULL.M Mon Oct 12 07:34:47 2009

Page 1

```
Method
   Title
   Last Update : Mon Oct 12 07:33:07 2009
   Response via: Initial Calibration
   Calibration Files 🦈
                                           5.0 =N1599.D
         =N1597.D 10 - =N1598.D
   20
   1.0
          =N1600.D
                             20 10 5.0 1.0
                                                                 Avq
                                                                         %RSD
       Compound
42) TC 2,4,6-Trichlorophen 0.344 0.330 0.299
        2,4,5-Trichlorophen 0.350 0.327 0.297
43) T
        2-Fluorobiphenyl
                            1.204 1.176 1.141
44) S
45) T
        2-Chloronaphthalene 1.052 1.052 0.988
46) T
      2-Nitroaniline 0.321 0.301 0.273
      Dimethyl phthalate 1.249 1.217 1.167
47) T
48) T
      2,6-Dinitrotoluene 0.322 0.310 0.272
       Acenaphthylene 1.600 1.567 1.489
49) T
50) T 3-Nitroaniline
51) TCM Acenaphthene
                            0.354 0.340 0.301
                          0.962 0.951 0.942
52) TP 2,4-Dinitrophenol 0.092
      4-Nitrophenol 0.111
53) MP
       2,4-Dinitrotoluene 0.426 0.415 0.375
54) M
       Dibenzofuran 1.491 1.453 1.425
55) T
       Diethyl phthalate 1.297 1.262 1.220
56) T
57) T
       4-Chlorophenyl phen 0.585 0.576 0.545
       4-Nitroaniline
                            1.157 1.129 1.093
58) T
                            0.364 0.352 0.302
`) T
       1,2-Diphenylhydrazi 1.353 1.342 1.294
JJ) T
61) S
       2,4,6-Tribromopheno 0.216 0.189 0.170
                              -----ISTD-----
62) I
       Phenanthrene-d10
       4,6-Dinitro-2-methy 0.144
63) T
       n-Nitrosodiphenylam 0.497 0.486 0.478
64) TC
       4-Bromophenyl pheny 0.217 0.202 0.195
65) T
       Hexachlorobenzene 0.283 0.264 0.264
66) T
67) MC
      Pentachlorophenol 0.065

      Phenanthrene
      0.984
      0.958
      0.945

      Anthracene
      1.000
      0.985
      0.985

      Carbazole
      0.898
      0.905
      0.896

68) T
69) T
70) T
       Di-n-butyl phthalat 1.396 1.339 1.288
71) T
      Fluoranthene 1.079 1.034 1.006
72) TC
                             ----ISTD-----
73) I
       Chrysene-d12
74) T
                           0.532
       Benzidine
                           0.987 0.970 0.941
75) M
       Pyrene
       Terphenyl-d14 0.614 0.596 0.572
76) S
77) T
       Butyl benzyl phthal 0.570 0.561 0.520
78) T
       3,3'-Dichlorobenzid 0.436 0.430 0.408
       Benzo[a]anthracene 0.956 0.944 0.935
79) T
       bis(2-Ethylhexyl)ph 0.829 0.800 0.750
80) T
81) T
       Chrysene 0.879 0.860 0.827
       Di-n-octyl phthalat 1.482 1.398 1.262
82) TC
 ) T
       Indeno[1,2,3-cd]pyr 0.963 0.878 0.779
```

^{(#) =} Out of Range ### Number of calibration levels exceeded format NO09FULL.M Mon Oct 12 07:34:52 2009

Response Factor Report #5MS26

Method : C:\HPCHEM\1\METHODS\N009FULL.M (RTE Integrator) / (648 title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Last Update : Mon Oct 12 07:33:07 2009

Response via : Initial Calibration

Calibration Files

20 =N1597.D 10 =N1598.D 5.0 =N1599.D

1.0 =N1600.D

20 10 5.0 1.0 %RSD Avq Compound

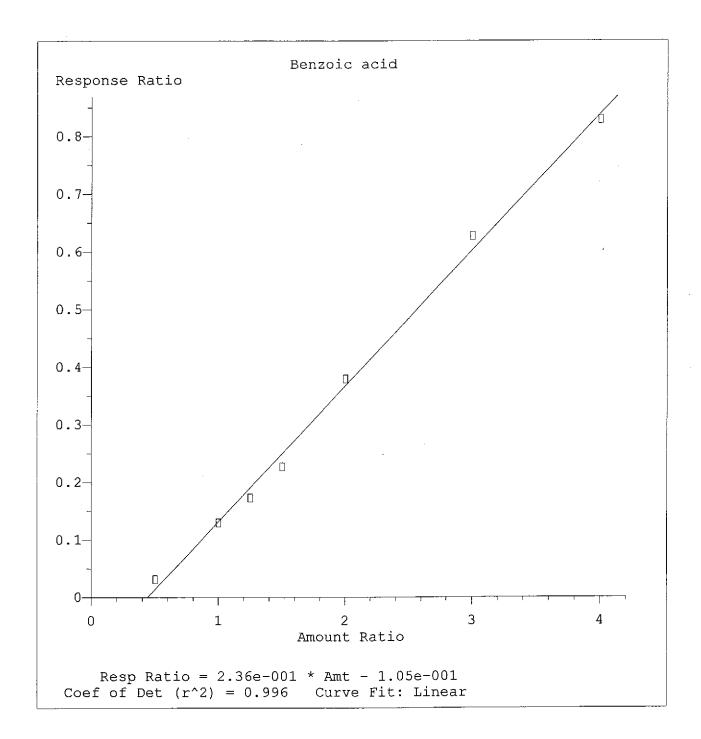
Perylene-d12 84) I

------ISTD----------

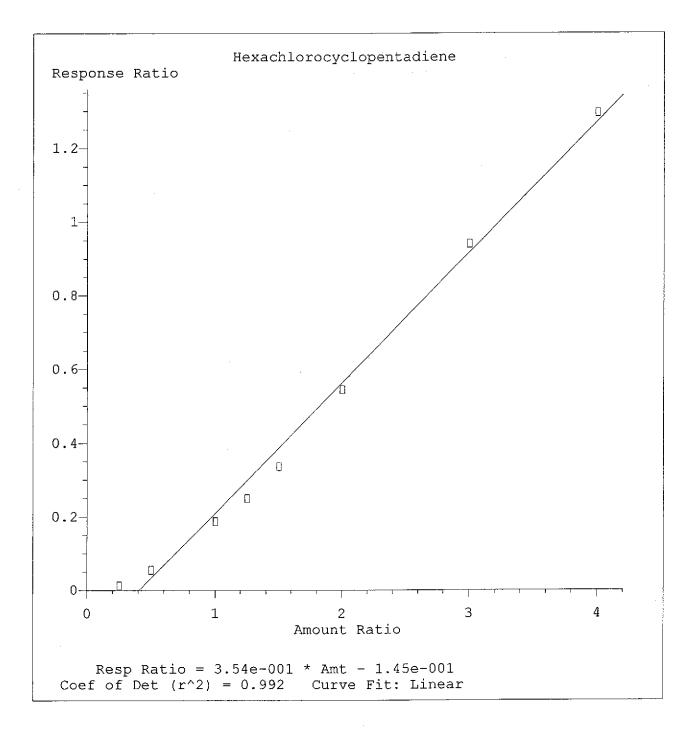
85) T Benzo[b]fluoranthen 1.044 0.941 0.922 86) T Benzo[k]fluoranthen 1.020 1.003 0.990

87) TC Benzo[a]pyrene 0.969 0.907 0.873 Dibenz[a,h]anthrace 0.917 0.814 0.748 88) T

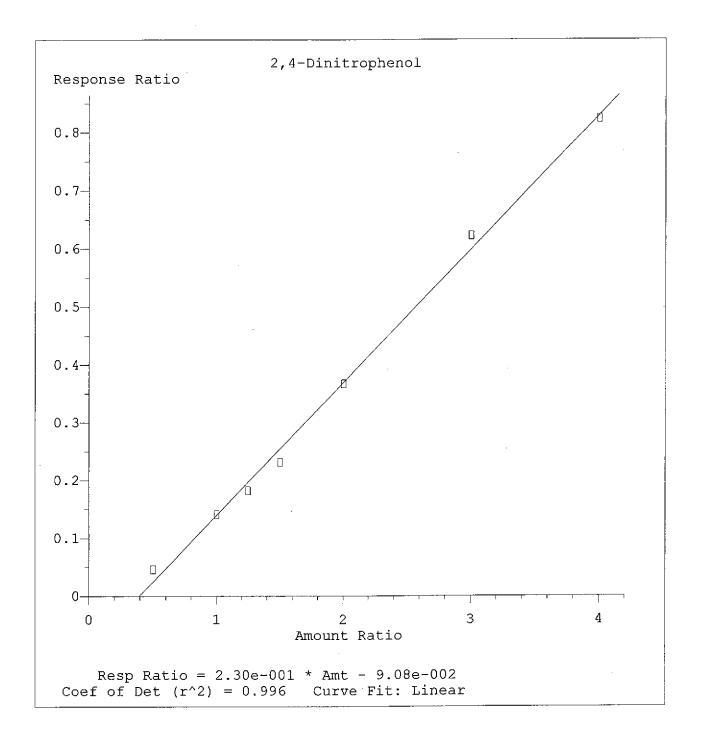
89) T Benzo[g,h,i]perylen 0.891 0.807 0.756



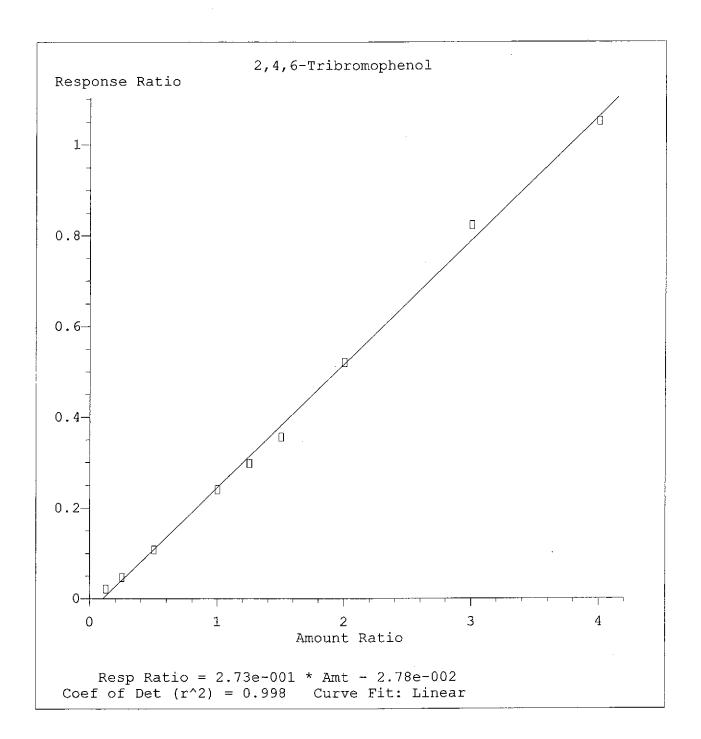
Method Name: C:\HPCHEM\1\METHODS\NO09FULL.M Calibration Table Last Updated: Mon Oct 12 07:33:07 2009



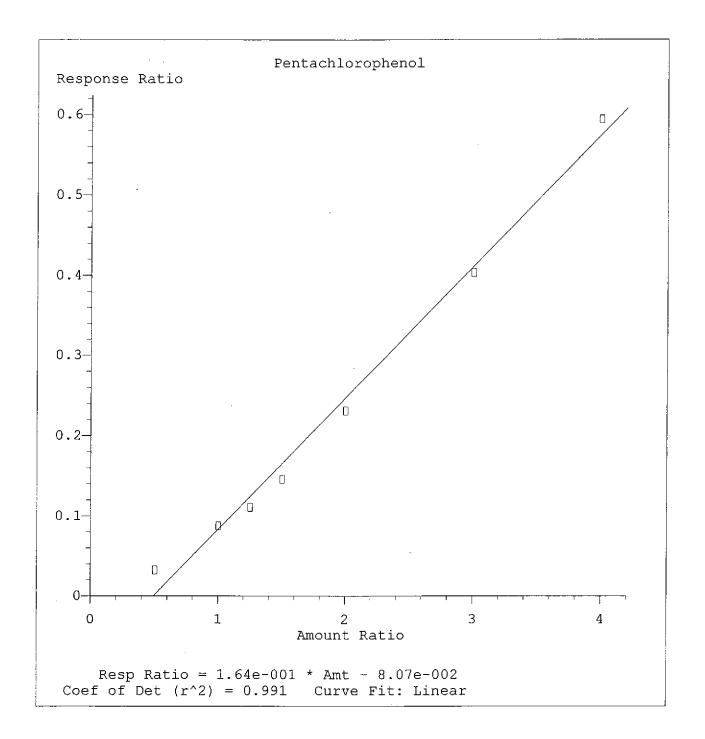
Method Name: C:\HPCHEM\1\METHODS\NO09FULL.M Calibration Table Last Updated: Mon Oct 12 07:33:07 2009



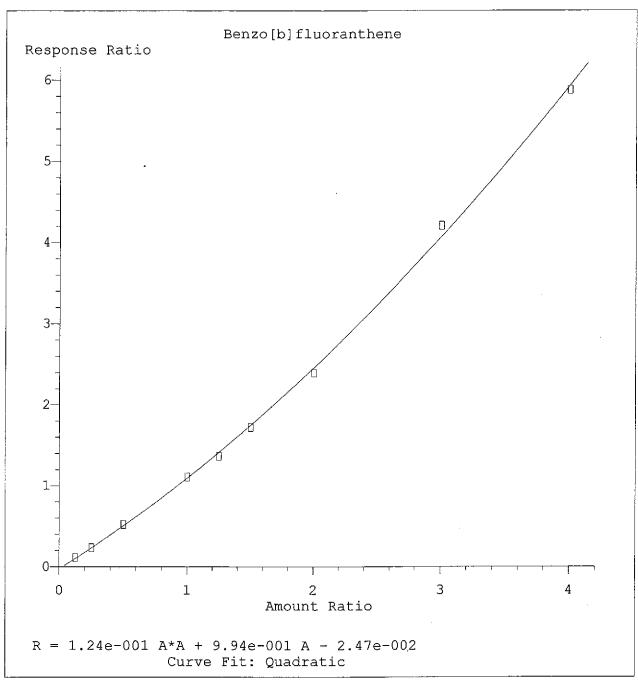
Method Name: C:\HPCHEM\1\METHODS\NO09FULL.M Calibration Table Last Updated: Mon Oct 12 07:33:07 2009



Method Name: C:\HPCHEM\1\METHODS\N009FULL.M Calibration Table Last Updated: Mon Oct 12 07:33:07 2009



Method Name: C:\HPCHEM\1\METHODS\NO09FULL.M Calibration Table Last Updated: Mon Oct 12 07:33:07 2009



COD= 0,999

Method Name: C:\HPCHEM\1\METHODS\NO09FULL.M Calibration Table Last Updated: Mon Oct 12 07:33:07 2009

AFCEE ORGANIC ANALYSES DATA SHEET 4 SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method:

SW8270C

AAB#:

R18505

Lab Name:

Life Science Laboratories, In

Contract Number:

Instrument ID:

MS05 26

Initial Calibration ID:

<u>1648</u>

Second Source ID:

ICV-100909

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D	Q
1,2,4-Trichlorobenzene	50000	49000	-1.1	the framework over
1,2-Dichlorobenzene	50000	50000	0.3	
1,3-Dichlorobenzene	50000	51000	1.1	
1,4-Dichlorobenzene	50000	50000	0.1	
2,4,5-Trichlorophenol	50000	53000	5.3	
2,4,6-Trichlorophenol	50000	52000	3.2	
2,4-Dichlorophenol	50000	52000	3.5	
2,4-Dimethylphenol	50000	45000	-10.2	
2,4-Dinitrophenol	50000	47000	-6.8	
2,4-Dinitrotoluene	50000	50000	0.3	
2,6-Dinitrotoluene	50000	51000	2.3	
2-Chloronaphthalene	50000	50000	0.6	
2-Chlorophenol	50000	51000	2.9	
2-Methylnaphthalene	50000	52000	3.5	
2-Methylphenol	50000	51000	2.5	
2-Nitroaniline	50000	51000	1.8	
2-Nitrophenol	50000	51000	1.9	
3,3'-Dichlorobenzidine	50000	44000	-12.9	
3-Nitroaniline	50000	52000	4.3	
4,6-Dinitro-2-methylphenol	50000	49000	-2.7	
4-Bromophenyl phenyl ether	50000	49000	-1.2	
4-Chloro-3-methylphenol	50000	51000	2.5	
4-Chloroaniline	50000	50000	-0.7	
4-Chlorophenyl phenyl ether	50000	51000	1.5	
4-Methylphenol	50000	52000	3.6	
4-Nitroaniline	50000	51000	2.9	
4-Nitrophenol	50000	48000	-3.1	
Acenaphthene	50000	52000	3.8	
Acenaphthylene	50000	52000	3.2	
Anthracene	50000	52000	3.0	
Benzo[a]anthracene	50000	51000	2.4	
Benzo[a]pyrene	50000	51000	2.4	
Benzo[b]fluoranthene	50000	50000	-0.4	
Benzo[g,h,i]perylene	50000	53000	6.2	
Benzo[k]fluoranthene	50000	55000	9.2	

Comments:

AFCEE ORGANIC ANALYSES DATA SHEET 4 SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method:

SW8270C

AAB #:

R18505

Lab Name:

Life Science Laboratories, In

Contract Number:

instrument ID:

MS05 26

Initial Calibration ID:

<u>1648</u>

Second Source ID:

ICV-100909

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D Q
Benzoic acid	50000	45000	-10.1
Benzyl alcohol	50000	51000	1.9
bis(2-Chloroethoxy)methane	50000	50000	-1.0
bis(2-chloroethyl)ether	50000	50000	0.2
bis(2-chloroisopropyl)ether	50000	49000	-1.2
bis(2-Ethylhexyl)phthalate	50000	52000	3.8
Butyl benzyl phthalate	50000	51000	2.8
Chrysene	50000	47000	-6.9
Di-n-butyl phthalate	50000	51000	2.2
Di-n-octyl phthalate	50000	52000	3.4
Dibenz[a,h]anthracene	50000	53000	6.5
Dibenzofuran	50000	51000	2.6
Diethyl phthalate	50000	51000	1.7
Dimethyl phthalate	50000	51000	1.9
Fluoranthene	50000	51000	2.8
Fluorene	50000	53000	6.4
Hexachlorobenzene	50000	49000	-2.7
Hexachlorobutadiene	50000	49000	-1.8
Hexachloroethane	50000	49000	-1.2
Indeno[1,2,3-cd]pyrene	50000	53000	6.3
Isophorone	50000	49000	-2.6
N-Nitroso-di-n-propylamine	50000	49000	-1.1
N-Nitrosodiphenylamine	50000	50000	-0.3
Naphthalene	50000	51000	1.4
Nitrobenzene	50000	48000	-3.5
Pentachlorophenol	50000	47000	-5.4
Phenanthrene	50000	52000	3.7
Phenol	50000	51000	2.9
Pyrene	50000	53000	5.8

Comments:		
	 ···	 -

AFCEE ORGANIC ANALYSES DATA SHEET 5 CALIBRATION VERIFICATION

Analytical Method: 8270C AAB #:

Lab Name: Life Science Laboratories, Inc.

Contract #:

Instrument ID: HP5972 GCMS#5(26) Initial Calibration ID: 1648

ICV ID: ICV-100909 CCV #1 ID: CC101209A5 CCV #2 ID:

SEE ATTACHED

Comments:

Vial: 2

Data File : C:\HPCHEM\1\DATA\N1611.D Acq On : 12 Oct 2009 7:28

Operator: MEG Sample : CC101209A5 Misc : CCV ,8270WAF_40CAL, Inst : #5MS26 Multiplr: 1.00

MS Integration Params: RTEINT.P

: C:\HPCHEM\1\METHODS\NO09AF40.M (RTE Integrator) Method

Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Last Update : Mon Oct 12 07:33:07 2009 Response via : Multiple Level Calibration

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

Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I 2 S 3 S 4 MC 5 T 6 M 7 T 8 MC 9 T 10 T 11 T 12 T 13 T	1,4-Dichlorobenzene-d4 2-Fluorophenol Phenol-d5 Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene Benzyl alcohol 1,2-Dichlorobenzene 2-Methylphenol bis(2-Chloroisopropyl)ether 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane	1.000 1.195 1.543 1.621 1.330 1.297 1.421 1.404 0.813 1.272 1.111 1.689 1.214 0.815 0.626	1.000 1.235 1.585 1.661 1.359 1.306 1.439 1.422 0.810 1.272 1.131 1.721 1.222 0.814 0.634	0.0 3.3 2.7 2.5 2.2 0.7 1.3 1.3 -0.4 0.0 1.8 1.9 0.7 -0.1	107 108 110 109 108 105 106 107 105 107 107 109 106 103 106	-0.03 -0.05 -0.03 -0.02 -0.02 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03
16 I 17 S 18 T 19 T 20 TC 21 T 22 T 23 T 24 TC 25 M 26 T 27 T 28 TC 29 MC 30 T	Naphthalene-d8 Nitrobenzene-d5 Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Benzoic acid bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-methylphenol 2-Methylnaphthalene	1.000 0.348 0.346 0.644 0.210 0.344 0.155 0.437 0.296 0.325 0.894 0.410 0.200 0.291 0.607	1.000 0.350 0.344 0.647 0.211 0.349 0.113 0.437 0.299 0.324 0.905 0.408 0.192 0.299 0.616	0.0 0.6 -0.6 0.5 0.5 1.5 -27.1# 0.0 1.0 -0.3 1.2 -0.5 -4.0 2.7 1.5	104 104 103 105 101 106 85 103 103 103 105 105	-0.03 -0.03 -0.01 -0.03 -0.03 -0.02 -0.03 -0.03 -0.02 -0.03 -0.03 -0.03 -0.03
31 I 32 TC 33 T 34 S 35 T 36 T 37 T	Acenaphthene-d10 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Fluorobiphenyl 2-Chloronaphthalene 2-Nitroaniline Dimethyl phthalate 2,6-Dinitrotoluene Acenaphthylene	1.000 0.360 0.366 1.177 1.042 0.324 1.250 0.321 1.583	1.000 0.353 0.372 1.196 1.051 0.330 1.257 0.333 1.576	0.0 -1.9 1.6 1.6 0.9 1.9 0.6 3.7 -0.4	104 105 104 106	-0.03 -0.03 -0.03 -0.03 -0.03 -0.01 -0.01 -0.03

^{(#) =} Out of Range

N1611.D NO09AF40.M Tue Oct 13 09:20:30 2009

Vlai. _ Operator: MEG #5MS Data File : C:\HPCHEM\1\DATA\N1611.D Acq On : 12 Oct 2009 7:28
Sample : CC101209A5
Misc : CCV ,8270WAF_40CAL, Inst : #5MS26 Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\NO09AF40.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Last Update : Mon Oct 12 07:33:07 2009 Response via : Multiple Level Calibration

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

Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42 43 44 45 46 47	TCM TP MP M T	3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol 2,4-Dinitrotoluene Dibenzofuran Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene	0.352 0.950 0.161 0.137 0.429 1.472 1.270 0.589 1.141	0.357 0.948 0.133 0.126 0.427 1.481 1.308 0.589 1.152	1.4 -0.2 -17.4 -8.0 -0.5 0.6 3.0 0.0	105 104 102 104	-0.01 -0.03 -0.03 -0.02 -0.02 -0.02 -0.01 -0.02 -0.02
49 50		4-Nitroaniline 2,4,6-Tribromophenol	0.361 0.232	0.358 0.217	-0.8 -6.5	101 96	0.00 -0.01
54 55 56	T TC T MC T T T	Phenanthrene-d10 4,6-Dinitro-2-methylphenol n-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene	1.000 0.181 0.503 0.232 0.301 0.105 0.978 0.998 1.380 1.102	1.000 0.173 0.499 0.225 0.288 0.087 0.978 0.998 1.432 1.089	0.0 -4.4 -0.8 -3.0 -4.3 -17.1 0.0 0.0 3.8 -1.2	102 100 99 99 98 100 100 101 101 98	-0.03 0.00 -0.01 -0.03 -0.02 -0.04 -0.02 -0.02 -0.02 -0.02
61 62 63 64 65 66 67 68 69 70	M T T T T T TC	Chrysene-d12 Pyrene Terphenyl-d14 Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo[a]anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Indeno[1,2,3-cd]pyrene	1.000 0.991 0.637 0.576 0.503 0.976 0.790 0.901 1.429 1.013	1.000 1.031 0.660 0.616 0.503 0.984 0.821 0.932 1.526 1.046	0.0 4.0 3.6 6.9 0.0 0.8 3.9 3.4 6.8 3.3	97 100 97 102 93 97 96 99	-0.01 -0.02 -0.02 -0.01 0.00 -0.02 -0.01 -0.01 -0.01
	T T	Perylene-d12 Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Dibenz[a,h]anthracene Benzo[g,h,i]perylene	1.000 1.147 1.016 1.021 0.965 0.912	1.000 1.087 1.123 1.059 1.023 0.974	0.0 -5.2 10.5 3.7 6.0 6.8	96 95 96 97 96 100	-0.03 -0.01 0.00 -0.01 0.00 -0.01

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\NO09AF40.M (RTE Integrator)

Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Last Update : Mon Oct 12 07:33:07 2009
Response via : Multiple Level Calibration

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

Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
	 I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	107	-0.03
	S	2-Fluorophenol	50.000	51.658	3.3	108	-0.05
3		Phenol-d5	50.000	51.352	2.7	110	-0.03
	MC	Phenol	50.000	51.230	2.5 2.1	109 108	-0.02 -0.02
5	T	bis(2-Chloroethyl)ether	50.000	51.071	0.7	105	-0.02
	M	2-Chlorophenol	50.000 50.000	50.355 50.641	1.3	105	-0.03
7 8	T MC	1,3-Dichlorobenzene 1,4-Dichlorobenzene	50.000	50.645	1.3	107	-0.03
9	T T	Benzyl alcohol	50.000	49.815	-0.4	105	-0.02
10		1,2-Dichlorobenzene	50.000	49.983	-0.0	107	-0.03
11		2-Methylphenol	50.000	50.897	1.8	107	-0.03
12		bis(2-Chloroisopropyl)ether	50.000	50.949	1.9	109	-0.03
13		4-Methylphenol	50.000	50.326	0.7	106	-0.01
	MP	N-Nitroso-di-n-propylamine	50.000	49.959	-0.1	103	0.00
	T	Hexachloroethane	50.000	50.610	1.2	106	-0.03
						404	
16		Naphthalene-d8	40.000	40.000	0.0	104	-0.03
17		Nitrobenzene-d5	50.000	50.363	0.7	104	-0.03
18		Nitrobenzene	50.000	49.667	-0.7	103 105	-0.03 -0.01
19		Isophorone	50.000	50.225	0.5 0.7		-0.01
	TC	2-Nitrophenol	50.000	50.349		101 106	-0.03
21		2,4-Dimethylphenol	50.000	50.737	1.5 -16.6	85	0.05
22		Benzoic acid	50.000	41.703 49.976	-0.0	103	-0.02
23		bis (2-Chloroethoxy) methane	50.000 50.000	50.404	0.8	103	-0.02
25	TC	2,4-Dichlorophenol 1,2,4-Trichlorobenzene	50.000	49.817	-0.4	103	-0.03
26		Naphthalene	50.000	50.581	1.2	106	-0.02
27		4-Chloroaniline	50.000	49.789	-0.4	105	-0.03
	TC	Hexachlorobutadiene	50.000	47.819	-4.4	99	-0.03
	MC	4-Chloro-3-methylphenol	50.000	51.407	2.8	105	-0.03
30		2-Methylnaphthalene	50.000	50.710	1.4	105	-0.03
-	•	2					
31	I	Acenaphthene-d10	40.000	40.000	0.0	105	-0.03
	TC	2,4,6-Trichlorophenol	50.000	49.086	-1.8	104	-0.03
33		2,4,5-Trichlorophenol	50.000	50.778	1.6	105	-0.03
34		2-Fluorobiphenyl	50.000	50.797	1.6	106	-0.03
35		2-Chloronaphthalene	50.000	50.410	0.8	104	-0.03
36		2-Nitroaniline	50.000	51.029	2.1	105	-0.03
37		Dimethyl phthalate	50.000	50.258	0.5	104	-0.01
~ ¬	T	2,6-Dinitrotoluene	50.000	51.920	3.8	106	-0.01
	Т	Acenaphthylene	50.000	49.778	-0.4	103	-0.03

^{(#) =} Out of Range

N1611.D N009AF40.M Tue Oct 13 09:20:19 2009

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Vial: 2 Data File : C:\HPCHEM\1\DATA\N1611.D Acq On : 12 Oct 2009 7:28 Operator: MEG Sample : CC101209A5 Misc : CCV ,8270WAF_40CAL, Inst : #5MS26 Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\N009AF40.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Mon Oct 12 07:33:07 2009 Response via : Multiple Level Calibration

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

Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40 T 41 TCM 42 TP 43 MP 44 M 45 T 46 T 47 T 48 T 49 T 50 S	3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol 2,4-Dinitrotoluene Dibenzofuran Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene 4-Nitroaniline 2,4,6-Tribromophenol	50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	50.737 49.889 44.753 45.937 49.756 50.316 51.501 50.003 50.486 49.543 43.901	1.5 -0.2 -10.5 -8.1 -0.5 0.6 3.0 0.0 1.0 -0.9 -12.2	102 102 96 98 101 105 104 102 104 101 96	-0.01 -0.03 -0.03 -0.02 -0.02 -0.02 -0.01 -0.02 -0.02 0.00 -0.01
51 I F2 T TC 54 T 55 T 56 MC 57 T 58 T 59 T 60 TC	Phenanthrene-d10 4,6-Dinitro-2-methylphenol n-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene	40.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	40.000 47.759 49.599 48.514 47.844 46.339 50.036 50.001 51.891 49.420	0.0 -4.5 -0.8 -3.0 -4.3 -7.3 0.1 0.0 3.8 -1.2	102 100 99 99 98 100 100 101 101 98	-0.03 0.00 -0.01 -0.03 -0.02 -0.04 -0.02 -0.02 -0.02 -0.02
61 I 62 M 63 S 64 T 65 T 66 T 67 T 68 T 69 TC 70 T	Chrysene-d12 Pyrene Terphenyl-d14 Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo[a]anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Indeno[1,2,3-cd]pyrene	40.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	40.000 52.046 51.774 53.513 49.986 50.415 51.983 51.754 53.383 51.633	0.0 4.1 3.5 7.0 -0.0 0.8 4.0 3.5 6.8 3.3	97 100 97 102 93 97 96 99	-0.01 -0.02 -0.02 -0.01 0.00 -0.02 -0.01 -0.01 -0.01
71 I 72 T 73 T 74 TC 75 T	Perylene-d12 Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Dibenz[a,h]anthracene Benzo[g,h,i]perylene	40.000 50.000 50.000 50.000 50.000	40.000 48.387 55.304 51.862 52.998 53.423	0.0 -3.2 10.6 3.7 6.0 6.8	96 95 96 97 96 100	-0.03 -0.01 0.00 -0.01 0.00 -0.01

AFCEE ORGANIC ANALYSES DATA SHEET 5 CALIBRATION VERIFICATION

Analytical Method: 8270C AAB #:

Lab Name: Life Science Laboratories, Inc.

Contract #:

Instrument ID: HP5972 GCMS#5(26) Initial Calibration ID: 1648

ICV ID: ICV-100909 CCV #1 ID: CC101309A5 CCV #2 ID:

SEE ATTACHED

Comments:				
	<u>.</u>			
		<u> </u>		

Data File : C:\HPCHEM\1\DATA\N1630.D Vial: 2 Acq On : 13 Oct 2009 8:03 Operator: MEG Sample : CC101309A5 Misc : CCV ,8270SAF_40CAL, Inst : #5MS26 Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\NO09AF40.M (RTE Integrator)

Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df Last Update : Tue Oct 13 09:21:12 2009 Response via : Multiple Level Calibration

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

Max. RRF Dev: 25% Max. Rel. Area: 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I		1,4-Dichlorobenzene-d4	1.000	1.000	0.0	135	0.02
2 S		2-Fluorophenol		1.223	2.3	136	0.02
3 S		Phenol-d5	1.543	1.616	4.7	142	0.02
4 M		Phenol		1.678	3.5	139	0.02
5 T		bis(2-Chloroethyl)ether	1.330	1.366	2.7	138	0.02
6 M		2-Chlorophenol	1.297	1.308	0.8	133	0.02
7 T		1,3-Dichlorobenzene	1.421	1.417	-0.3	133	0.02
	IC	1,4-Dichlorobenzene	1.404	1.419	1.1	135	0.02
9 T		Benzyl alcohol	0.813	0.831	2.2	136	0.02
10 T		1,2-Dichlorobenzene	1.272	1.257	-1.2	1.34	0.02
11 T		2-Methylphenol	1.111	1.119	0.7	134	0.02
12 T		bis(2-Chloroisopropyl)ether	1.689	1.625	-3.8	130	0.02
13 T		4-Methylphenol	1.214	1.219	0.4	134	0.02
14 M		N-Nitroso-di-n-propylamine	0.815	0.818	0.4		0.02
15 T		Hexachloroethane	0.626	0.629	0.5	133	0.02
16 I	=	Naphthalene-d8	1.000	1.000	0.0	131	0.02
17 S		Nitrobenzene-d5	0.348	0.347	-0.3	130	0.02
18 T			0.346	0.343	-0.9	129	0.02
19 T		Isophorone	0.644	0.648	0.6	132	0.02
20 T		2-Nitrophenol	0.210	0.217	3.3	131	0.02
20 I		2,4-Dimethylphenol	0.344	0.337	-2.0	128	0.03
21 T		Benzoic acid	0.155	0.145	-6.5	137	0.04
23 T		bis(2-Chloroethoxy)methane	0.133	0.441	0.9	131	0.02
	C	2,4-Dichlorophenol	0.296	0.306	3.4	133	0.02
25 M		1,2,4-Trichlorobenzene	0.325	0.326	0.3	130	0.02
25 M		Naphthalene	0.894	0.897	0.3	132	0.02
27 T		4-Chloroaniline	0.410	0.412	0.5	133	0.02
	C	Hexachlorobutadiene	0.200	0.197	-1.5		0.02
29 M		4-Chloro-3-methylphenol	0.200	0.306	5.2		0.02
30 T		2-Methylnaphthalene	0.607	0.610	0.5	131	0.02
JO 1	•	2 Methylhaphthalene	:	0.010	0.0	101	0.02
31 I	-	Acenaphthene-d10	1.000	1.000	0.0	132	0.02
32 T	.c	2,4,6-Trichlorophenol	0.360	0.375	4.2	138	0.02
33 T	<u>,</u>	2,4,5-Trichlorophenol	0.366	0.393	7.4	139	0.02
34 S	3	2-Fluorobiphenyl	1.177	1.205	2.4	134	0.02
35 T		2-Chloronaphthalene	1.042	1.059	1.6	131	0.02
36 T		2-Nitroaniline	0.324	0.329	1.5	131	0.02
37 T		Dimethyl phthalate	1.250	1.268	1.4	131	0.02
38 T	1	2,6-Dinitrotoluene	0.321	0.346	7.8	138	0.02
39 T		Acenaphthylene	1.583	1.618	2.2	133	0,02
			-	- -	- -		

(#) = Out of Range

N1630.D N009AF40.M Wed Oct 14 07:16:10 2009

Mach 10/14/09 Page 1

Vial: 2 Operator: MEG Data File : C:\HPCHEM\1\DATA\N1630.D Acq On : 13 Oct 2009 8:03 Sample : CC101309A5 Misc : CCV ,8270SAF_40CAL, Inst : #5MS26 Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\NO09AF40.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df

Last Update : Tue Oct 13 09:21:12 2009 Response via : Multiple Level Calibration

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

Max. RRF Dev: 25% Max. Rel. Area: 200%

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	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40 T 41 TCM 42 TP 43 MP 44 M 45 T 46 T 47 T 48 T 49 T 50 S	2,4-Dinitrophenol	0.352 0.950 0.161 0.137 0.429 1.472 1.270 0.589 1.141 0.361 0.232	0.378 0.964 0.135 0.135 0.440 1.500 1.334 0.598 1.175 0.378 0.229	7.4 1.5 -16.1 -1.5 2.6 1.9 5.0 1.5 3.0 4.7 -1.3	130 122 133 130 133 131 131 133 133	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
51 I 52 T 53 TC 54 T 55 T 56 MC 57 T 58 T 59 T 60 TC	Phenanthrene-d10 4,6-Dinitro-2-methylphenol n-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene	1.000 0.181 0.503 0.232 0.301 0.105 0.978 0.998 1.380 1.102	1.000 0.165 0.506 0.225 0.294 0.096 0.986 1.010 1.400 1.100	0.0 -8.8 0.6 -3.0 -2.3 -8.6 0.8 1.2 1.4	130 121 129 126 128 141 129 130 126 127	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
61 I 62 M 63 S 64 T 65 T 66 T 67 T 68 T 69 TC 70 T	Chrysene-d12 Pyrene Terphenyl-d14 Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo[a]anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Indeno[1,2,3-cd]pyrene	1.000 0.991 0.637 0.576 0.503 0.976 0.790 0.901 1.429 1.013	1.000 1.063 0.675 0.622 0.538 0.998 0.775 0.926 1.499 1.102	0.0 7.3 6.0 8.0 7.0 2.3 -1.9 2.8 4.9 8.8	119 127 122 127 123 121 111 121 119 126	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
71 I 72 T 73 T 74 TC 75 T 76 T	Perylene-d12 Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Dibenz[a,h]anthracene Benzo[g,h,i]perylene	1.000 1.147 1.016 1.021 0.965 0.912	1.000 1.113 1.118 1.060 1.063 1.007	0.0 -3.0 10.0 3.8 10.2 10.4	119 121 119 121 124 129	0.02 0.02 0.02 0.02 0.04 0.04

Data File : C:\HPCHEM\1\DATA\N1630.D Vial: 2 Acq On : 13 Oct 2009 8:03 Operator: MEG Sample : CC101309A5
Misc : CCV ,8270SAF_40CAL,
MS Integration Params: RTEINT.P Inst : #5MS26 Multiplr: 1.00

: C:\HPCHEM\1\METHODS\NO09AF40.M (RTE Integrator) Method

Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 13 09:21:12 2009 Response via: Multiple Level Calibration

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

Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I 2 S 3 S 4 MC 5 T 6 M 7 T 8 MC 9 T 10 T 11 T 12 T 13 T 14 MP	1,4-Dichlorobenzene-d4 2-Fluorophenol Phenol-d5 Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene Benzyl alcohol 1,2-Dichlorobenzene 2-Methylphenol bis(2-Chloroisopropyl)ether 4-Methylphenol N-Nitroso-di-n-propylamine	40.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	40.000 51.186 52.352 51.778 51.363 50.405 49.892 50.537 51.095 49.388 50.359 48.114 50.195 50.172	0.0 2.4 4.7 3.6 2.7 0.8 -0.2 1.1 2.2 -1.2 0.7 -3.8 0.4 0.3	139 138 133 135 136 134 134 130 134 132	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
15 T 16 I 17 S 18 T 19 T 20 TC 21 T 22 T 23 T 24 TC 25 M 26 T 27 T 28 TC 29 MC 30 T	Naphthalene-d8 Nitrobenzene-d5 Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Benzoic acid bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-methylphenol 2-Methylnaphthalene	50.000 40.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	50.234 40.000 49.876 49.648 50.285 51.703 49.035 48.507 50.472 51.730 50.148 50.148 50.206 49.165 52.611 50.250	0.5 0.0 -0.2 -0.7 0.6 3.4 -1.9 -3.0 0.9 3.5 0.3 0.4 -1.7 5.2 0.5	133 131 130 129 132 131 128 137 131 133 130 132 133 128 135 131	0.02 0.02 0.02 0.02 0.02 0.03 0.04 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
31 I 32 TC 33 T 34 S 35 T 36 T 37 T 38 T 39 T	Acenaphthene-d10 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Fluorobiphenyl 2-Chloronaphthalene 2-Nitroaniline Dimethyl phthalate 2,6-Dinitrotoluene Acenaphthylene	40.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	40.000 52.072 53.660 51.189 50.801 50.837 50.719 53.946 51.102	0.0 4.1 7.3 2.4 1.6 1.7 1.4 7.9 2.2	132 138 139 134 131 131 131 133 138	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02

^{(#) =} Out of Range

N1630.D N009AF40.M Wed Oct 14 07:16:22 2009

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Page 1

Vial: 2 Operator: MEG Data File : C:\HPCHEM\1\DATA\N1630.D Acq On : 13 Oct 2009 8:03 Sample : CC101309A5
Misc : CCV ,8270SAF_40CAL,
MS Integration Params: RTEINT.P Inst : #5MS26 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\N009AF40.M (RTE Integrator)
Title : BNA's w/J&W DB-5MS .25mm x 30m 0.5df
Last Update : Tue Oct 13 09:21:12 2009

Response via : Multiple Level Calibration

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

Max. RRF Dev: 25% Max. Rel. Area: 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40 T 41 TCM 42 TP 43 MP 44 M 45 T 46 T 47 T 48 T 49 T 50 S	3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol 2,4-Dinitrotoluene Dibenzofuran Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene 4-Nitroaniline 2,4,6-Tribromophenol	50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	53.687 50.719 45.014 49.342 51.313 50.962 52.499 50.758 51.474 52.331 46.089	7.4 1.4 -10.0 -1.3 2.6 1.9 5.0 1.5 2.9 4.7 -7.8	133 130 133 133 131 133 133	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
51 I 52 T 53 TC 54 T 55 T 56 MC 57 T 58 T 59 T 60 TC	Phenanthrene-d10 4,6-Dinitro-2-methylphenol n-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene	40.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	40.000 45.534 50.305 48.579 48.799 49.105 50.437 50.639 50.737 49.890	0.0 -8.9 0.6 -2.8 -2.4 -1.8 0.9 1.3 1.5 -0.2	126 128	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
61 I 62 M 63 S 64 T 65 T 66 T 67 T 68 T 69 TC 70 T	Chrysene-d12 Pyrene Terphenyl-d14 Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo[a]anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Indeno[1,2,3-cd]pyrene	40.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000	40.000 53.662 52.923 54.032 53.432 51.099 49.078 51.394 52.443 54.389	0.0 7.3 5.8 8.1 6.9 2.2 -1.8 2.8 4.9 8.8	111 121 119	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
71 I 72 T 73 T 74 TC 75 T 76 T	Perylene-d12 Benzo[b] fluoranthene Benzo[k] fluoranthene Benzo[a]pyrene Dibenz[a,h]anthracene Benzo[g,h,i]perylene	40.000 50.000 50.000 50.000 50.000 50.000	40.000 49.389 55.045 51.890 55.032 55.211	0.0 -1.2 10.1 3.8 10.1 10.4		0.02 0.02 0.02 0.02 0.04 0.04

^{(#) =} Out of Range SPCC's out = 0 CCC's out = 0 N1630.D N009AF40.M Wed Oct 14 07:16:23 2009

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8270C

AAB #:

10101

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

mg/Kg

Method Blank ID:

MB-10101

Initial Calibration ID:

<u>1648</u>

File ID:

N1615.D

Analyte	Method Blank	alluling RL	Q.
1,2,4-Trichlorobenzene	0.013	0.70	U
1,2-Dichlorobenzene	0.013	0.70	U
1,3-Dichlorobenzene	0.013	0.70	U
1,4-Dichlorobenzene	0.013	0.70	U
2,4,5-Trichlorophenol	0.040	3.3	U
2,4,6-Trichlorophenol	0.040	0.30	U
2,4-Dichlorophenol	0.013	0.30	u
2,4-Dimethylphenol	0.040	0.30	U
2,4-Dinitrophenol	0.66	3.3	IJ
2,4-Dinitrotoluene	0.013	0.70	U ·
2,6-Dinitrotoluene	0.013	0.70	U
2-Chloronaphthalene	0.013	0.70	U
2-Chlorophenol	0.013	0.30	U
2-Methylnaphthalene	0.013	0.70	Ü
2-Methylphenol	0.013	0.30	U
2-Nitroaniline	0.013	3.3	U
2-Nitrophenol	0.013	0.30	U
3,3'-Dichlorobenzidine	0.040	1.3	U
3-Nitroaniline	0.040	3.3	U
4,6-Dinitro-2-methylphenol	0.17	3.3	U
4-Bromophenyl phenyl ether	0.013	0.70	U
4-Chloro-3-methylphenol	0.013	1.3	U
4-Chloroaniline	0.013	1.3	U
4-Chlorophenyl phenyl ether	0.013	0.70	U
4-Methylphenol	0.040	2.0	U
4-Nitroaπiline	0.013	3.3	U
4-Nitrophenol	0.17	1.6	U
Acenaphthene	0.013	0.70	U
Acenaphthylene	0.013	0.70	U
Anthracene	0.013	0.70	U
Benzo[a]anthracene	0.013	0.70	U
Benzo[a]pyrene	0.013	0.70	U
Benzo[b]fluoranthene	0.013	0.70	U
Benzo[g,h,i]peryleпe	0.040	0.70	U
Benzo[k]fluoranthene	0.013	0.70	U

Comments:

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

mg/Kg

Method Blank ID:

MB-10101

Initial Calibration ID:

<u>1648</u>

File ID:

N1615.D

Analyte	Method Blank	RL	l a
Benzoic acid	0.17	5.0	U
Benzyl alcohol	0.013	1.3	U
bis(2-Chloroethoxy)methane	0.013	0.70	U
bis(2-chloroethyl)ether	0.013	0.70	U
bis(2-chloroisopropyl)ether	0.013	0.70	υ
bis(2-Ethylhexyl)phthalate	0.013	0.70	U
Butyl benzyl phthalate	0.013	0.70	U
Chrysene	0.013	0.70	Ų
Di-n-butyl phthalate	0.013	0.70	U
Di-n-octyl phthalate	0.013	0.70	U
Dibenz[a,h]anthracene	0.040	0.70	U
Dibenzofuran	0.013	0.70	Ü
Diethyl phthalate	0.013	0.70	U
Dimethyl phthalate	0.013	0.70	U
Fluoranthene	0.013	0.70	U
Fluorene	0.013	0.70	U
Hexachlorobenzene	0.013	0.70	U
Hexachlorobutadiene	0.040	0.70	U
Hexachloroethane	0.040	0.70	U
Indeno[1,2,3-cd]pyrene	0.040	0.70	U
Isophorone	0.013	0.70	υ
N-Nitroso-di-n-propylamine	0.013	0.70	U
N-Nitrosodiphenylamine	0.013	0.70	Ū
Naphthalene	0.013	0.70	U
Nitrobenzene	0.013	0.70	U
Pentachlorophenol	0.33	3.3	U
Phenanthrene	0.013	0.70	U
Phenol	0.013	0.30	U
Pyrene	0.013	0.70	U

Surrogate	Recovery	Control Limits Qua	alifier
2,4,6-Tribromophenol	71	36 - 126	
2-Fluorobiphenyl	91	43 - 120	
2-Fluorophenol	85	37 - 120	
Nitrobenzene-d5	85	37 - 120	

Comments:

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

mg/Kg

Method Blank ID:

MB-10101

Initial Calibration ID:

<u>1648</u>

File ID:

N1615.D

Surrogate	Recovery	Control Limits	Qualifier
Phenol-d5	86	40 - 120	
Terphenyl-d14	108	32 - 120	

Internal Std	Area Counts	Area Count Limits Qualifier
1,4-Dichlorobenzene-d4	86142	61370 - 245480
Acenaphthene-d10	172980	121827 - 487308
Chrysene-d12	289011	233714 - 934858
Naphthalene-d8	317143	223871 - 895484
Perylene-d12	253535	208094 - 832374
Phenanthrene-d10	279532	204419 - 817676

Comments:	

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCS-10101

Initial Calibration ID:

<u>1648</u>

Concentration Units (mg/L or mg/kg):

<u>mg/Kg</u>

File ID:

N1616.D

ation onits (ing/L or ing/kg):	måvzā	• •	IĘ ID:		N1010.D	
Analyte		Expected	Found	%R	Control Limits	C
1,2,4-Trichlorobenzene		1.667	1.4	87	44 - 125	
1,2-Dichlorobenzene		1.667	1.4	86	45 - 125	
1,3-Dichlorobenzene		1.667	1.4	83	39 - 125	
1,4-Dichlorobenzene		1.667	1.4	84	35 - 125	-
2,4,5-Trichlorophenol		1.667	1.5	92	49 - 125	
2,4,6-Trichlorophenol	- · · · · · · · · · · · · · · · · · · ·	1.667	1.5	89	43 - 125	
2,4-Dichlorophenol		1.667	1.6	93	45 - 125	
2,4-Dimethylphenol	•	1.667	1.5	91	32 - 125	
2,4-Dinitrophenol		1.667	0.95	57	25 - 132	
2,4-Dinitrotoluene		1.667	1.6	94	48 - 125	
2,6-Dinitrotoluene		1.667	1.5	93	48 - 125	
2-Chloronaphthalene		1.667	1.5	88	45 - 125	
2-Chiorophenol		1.667	1.5	93	44 - 125	
2-Methylnaphthalene		1.667		93	47 - 125	
2-Methylphenol		1.667	1.6	93	40 - 125	
2-Nitroaniline		1.667	1.5	93	44 - 125	
2-Nitrophenol		1.667	1.5	89	42 - 125	
3,3'-Dichlorobenzidine		1.667	0.96	58	25 - 128	
3-Nitroaniline		1.667	1.1	67	27 - 125	
4,6-Dinitro-2-methylphenol		1.667	1.2	72	29 - 137	
4-Bromophenyl phenyl ether		1.667	1.4	87	46 - 125	1
4-Chloro-3-methylphenol		1.667	1.6	95	46 - 125	
4-Chloroaniline		1.667	0.90	54	25 - 125	
4-Chlorophenyl phenyl ether		1.667	1.5	92	47 - 125	:
4-Methylphenol		1.667	1.6	95	41 - 125	İ
4-Nitroaniline		1.667	1.5	92	34 - 125	
4-Nitrophenol		1.667	1.7	99	25 - 138	
Acenaphthene		1.667	1.5	92	46 - 125	-
Acenaphthylene		1.667	1.5	91	44 - 125	
Anthracene		1.667	1.6	97	53 - 125	1
Benzo[a]anthracene		1.667	1.6	98	52 - 125	
Benzo[a]pyrene		1.667	1.6	97	50 - 125	
Benzo[b]fluoranthene		1.667	1.6	95	45 - 125	
Benzo[g,h,i]perylene		1.667	1.7	103	38 - 126	
Benzo[k]fluoranthene		1.667	1.7	100	45 - 125	-
Benzoic acid		1.667	0.96	58	25 - 125	
Benzyl alcohol		1.667		92	25 - 125	
bis(2-Chloroethoxy)methane		1.667	1.5	88	43 - 125	
bis(2-chloroethyl)ether		1.667	1.4	87	38 - 125	- -
bis(2-chloroisopropyl)ether		1.667		88	25 - 125	
bis(2-Ethylhexyl)phthalate		1.667		105	47 - 127	
Butyl benzyl phthalate		1.667		102	49 - 125	-

Comments:		

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCS-10101

Initial Calibration ID:

<u>1648</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

N1616.D

Analyte	Expected	Found	%R	Control Limits	Q
Chrysene	1.667	1.6	97	53 - 125	
Di-n-butyl phthalate	1.667	1.6	98	56 - 125	
Di-n-octyl phthalate	1.667	1.7	104	41 - 132	
Dibenz[a,h]anthracene	1.667	1.7	102	41 - 125	
Dibenzofuran	1.667	1.5	93	51 - 125	:
Diethyl phthalate	1.667	1.6	95	50 - 125	
Dimethyl phthalate	1.667	1.5	92	49 - 125	
Fluoranthene	1.667	1.6	96	54 - 125	
Fluorene	1.667	1.6	96	49 - 125	
Hexachlorobenzene	1.667	1.5	87	47 - 125	L
Hexachlorobutadiene	1.667	1.4	82	40 - 125	
Hexachloroethane	1.667	1.4	85	34 - 125	
Indeno[1,2,3-cd]pyrene	1.667	1.7	105	38 - 125	
Isophorone	1.667	1.4	85	43 - 125	
N-Nitroso-di-n-propylamine	1.667	1.5	88	40 - 125	
N-Nitrosodiphenylamine	1.667	1.6	94	49 - 125	
Naphthalene	1.667	1.5	89	40 - 125	
Nitrobenzene	1.667	1.4	86	41 - 125	
Pentachlorophenol	1.667	1.4	86	25 - 125	
Phenanthrene	1.667	1.6	96	50 - 125	
Phenol	1.667	1.5	92	39 - 125	
Pyrene	1.667	1.7	103	46 - 125	

Surrogate	Recovery	Control Limits Qualif
2,4,6-Tribromophenol	93	36 - 126
2-Fluorobiphenyl	90	43 - 120
2-Fluorophenol	89	37 - 120
Nitrobenzene-d5	86	37 - 120
Phenol-d5	90	40 - 120
Terphenyl-d14	103	32 - 120

Internal Std	Area Counts	Area Count Limits Qualifier
1,4-Dichlorobenzene-d4	112569	61370 - 245480
Acenaphthene-d10	230968	121827 - 487308
Chrysene-d12	413104	233714 - 934858
Naphthalene-d8	417767	223871 - 895484
Perylene-d12	380874	208094 - 832374
Phenanthrene-d10	381988	204419 - 817676

Comments:			

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-10101

Initial Calibration ID:

<u> 1648</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

N1617.D

ation onles (mg/E of mg/kg).	<u>mga q</u>			111011.0	
Analyte	Expected	Found	%R	Control Limits	Q
1,2,4-Trichlorobenzene	1.667	1.4	84	44 - 125	
1,2-Dichlorobenzene	1.667	1.4	84	45 - 125	
1,3-Dichlorobenzene	1.667	1.3	80	39 - 125	
1,4-Dichlorobenzene	1.667	1.4	82	35 - 125	
2,4,5-Trichlorophenol	1.667	1.6	96	49 - 125	
2,4,6-Trichlorophenol	1.667	1.5	90	43 - 125	
2,4-Dichlorophenol	1.667	1.5	93	45 - 125	
2,4-Dimethylphenol	1.667	1.5	92	32 - 125	
2,4-Dinitrophenol	1.667	0.76	46	25 - 132	
2,4-Dinitrotoluene	1.667	1.6	94	48 - 125	
2,6-Dinitrotoluene	1.667	1.6	94	48 - 125	
2-Chloronaphthalene	1.667	1.4	87	45 - 125	
2-Chlorophenol	1.667	1.5	90	44 - 125	
2-Methylnaphthalene	1.667	1.5	92	47 - 125	
2-Methylphenol	1.667	1.5	92	40 - 125	
2-Nitroaniline	1.667	1.6	94	44 - 125	
2-Nitrophenol	1.667	1.5	89	42 - 125	
3,3'-Dichlorobenzidine	1.667	0.94	56	25 - 128	
3-Nitroaniline	1.667	1.1	66	27 - 125	
4,6-Dinitro-2-methylphenol	1.667	0.93	56	29 - 137	i
4-Bromophenyl phenyl ether	1.667	1.5	88	46 - 125	Ī
4-Chloro-3-methylphenol	1.667	1.6	98	46 - 125	j
4-Chloroaniline	1.667	0.83	50	25 - 125	
4-Chlorophenyl phenyl ether	1.667	1.5	92	47 - 125	
4-Methylphenol	1.667	1.5	93	41 - 125	
4-Nitroaniline	1.667	1.5	92	34 - 125	
4-Nitrophenol	1.667	1.7	102	25 - 138	
Acenaphthene	1.667	1.5	93	46 - 125	
Acenaphthylene	1.667	1.5	91	44 - 125	
Anthracene	1.667	1.6	96	53 - 125	<u> </u>
Benzo[a]anthracene	1.667	1.7	102	52 - 125	
Benzo[a]pyrene	1.667	1.6	98	50 - 125	
Benzo[b]fluoranthene	1.667	1.6	97	45 - 125	\vdash
Benzo[g,h,i]perylene	1.667	1.7	102	38 - 126	:
Benzo[k]fluoranthene	1.667	1.7	104	45 - 125	
Benzoic acid	1.667	0.75	45	25 - 125	
Benzyl alcohol	1.667	1.5	90	25 - 125	
bis(2-Chloroethoxy)methane	1.667	1.4	86	43 - 125	
bis(2-chloroethyl)ether	1.667	1.4	85	38 - 125	
bis(2-chloroisopropyl)ether	1.667	1.4	86	25 - 125	
bis(2-Ethylhexyl)phthalate	1.667		106	47 - 127	
Butyl benzyl phthalate	1.667		105		

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7	^	m	m	0	nı	œ	-

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-10101

Initial Calibration ID:

<u>1648</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

N1617.D

Analyte	Expected	Found	%R	Control Limits	Q
Chrysene	1.667	1.6	99	53 - 125	
Di-n-butyl phthalate	1.667	1.6	98	56 - 125	
Di-n-octyl phthalate	1.667	1.8	106	41 - 132	
Dibenz[a,h]anthracene	1.667	1.7	102	41 - 125	
Dibenzofuran	1.667	1.5	92	51 - 125	
Diethyl phthalate	1.667	1.6	98	50 - 125	
Dimethyl phthalate	1.667	1.6	94	49 - 125	
Fluoranthene	1.667	1.6	98	54 - 125	
Fluorene	1.667	1.6	95	49 - 125	
Hexachlorobenzene	1.667	1.5	89	47 - 125	
Hexachlorobutadiene	1.667	1.4	83	40 - 125	
Hexachloroethane	1.667	1.4	82	34 - 125	
Indeno[1,2,3-cd]pyrene	1.667	1.7	104	38 - 125	
Isophorone	1.667	1.4	83	43 - 125	
N-Nitroso-di-n-propylamine	1.667	1.4	86	40 - 125	
N-Nitrosodiphenylamine	1.667	1.6	95	49 - 125	
Naphthalene	1.667	1.5	88	40 - 125	
Nitrobenzene	1.667	1.4	83	41 - 125	
Pentachlorophenol	1.667	1.4	85	25 - 125	
Phenanthrene	1.667	1.6	95	50 - 125	
Phenol	1.667	1.5	89	39 - 125	
Pyrene	1.667	1.7	105	46 - 125	

Surrogate	Recovery	Control Limits Qu	alifier
2,4,6-Tribromophenol	95	36 - 126	
2-Fluorobiphenyl	87	43 - 120	
2-Fluorophenol	85	37 - 120	
Nitrobenzene-d5	85	37 - 120	
Phenol-d5	88	40 - 120	
Terphenyl-d14	102	32 - 120	

Internal Std	Area Counts	Area Count Limits Qualifie	er e
1,4-Dichlorobenzene-d4	120444	61370 - 245480	
Acenaphthene-d10	243925	121827 - 487308	
Chrysene-d12	428834	233714 - 934858	
Naphthalene-d8	441936	223871 - 895484	
Perylene-d12	394253	208094 - 832374	
Phenanthrene-d10	407405	204419 - 817676	

Comments:		
	 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	

AFCEE ORGANIC ANALYSES DATA SHEET 9 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

<u>0</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

mg/Kg

% Solids:

Parent Field Sample ID:

LCSD-10101

MS ID: <u>LCS-10101</u>

MSD ID: LCSD-10101

Calibration ID: 1648

Analyte	Parent		Spiked		Duplicate			Control	Control	
	Sample Result	Spike Added	Sample Result	%R	Spiked Sample	%R	%RPD	Limits %R	Limits %RPD	Q
					Result					
1,2,4-Trichlorobenzene		1.7	1.4	87	1.4	84	3	44 - 125	30	
1,2-Dichlorobenzene		1.7	1.4	86	1.4	84	3	45 - 125	30	
1,3-Dichlorobenzene	_	1.7	1.4	83	1.3	80	3	39 - 125	30	
1,4-Dichlorobenzene		1.7	1.4	84	1.4	82	3	35 - 125	30	
2,4,5-Trichlorophenol		1.7	1.5	92	1.6	96	4	49 - 125	30	
2,4,6-Trichlorophenol		1.7	1.5	89	1.5	90	1	43 - 125	30	
2,4-Dichlorophenol		1.7	1.6	93	1.5	93	1	45 - 125	30	
2,4-Dimethylphenol		1.7	1.5	91	1.5	92	1	32 - 125	30	
2,4-Dinitrophenol		1.7	0.95	57.	0.76	46	22	25 - 132	30	
2,4-Dinitrotoluene		1.7	1.6	94	1.6	94	0	48 - 125	30	
2,6-Dinitrotoluene		1.7	1.5	93	1.6	94	2	48 - 125	30	
2-Chloronaphthalene		1.7	1.5	88	1.4	87	1	45 - 125	30	
2-Chlorophenol		1.7	1.5	93	1.5	90	3	44 - 125	30	
2-Methylnaphthalene		1.7	1.6	93	1,5	92	2.	47 - 125	30	
2-Methylphenol		1.7	1.6	93	1.5	92	1	40 - 125	30	
2-Nitroaniline		1.7	1.5	93	1.6	94	2	44 - 125	30	
2-Nitrophenol		1.7	1.5	89	1.5	89	0	42 - 125	30	
3,3'-Dichlorobenzidine		1.7	0.96	58	0.94	56	3	25 - 128	30	
3-Nitroaniline		1.7	1.1	67	1.1	66	1	27 - 125	30	
4,6-Dinitro-2-methylphenol		1.7	1.2	72	0.93	56	26	29 - 137	30	
4-Bromophenyl phenyl ether		1.7	1.4	87	1.5	88	1	46 - 125	30	
4-Chloro-3-methylphenol		1.7	1.6	95	1.6	98	3	46 - 125	30	
4-Chloroaniline		1.7	0.90	54	0.83	50	8	25 - 125	30	
4-Chlorophenyl phenyl ether		1.7	1.5	92	1.5	92	0	47 - 125	30	
4-Methylphenol		1.7	1.6	95	1.5	93	3	41 - 125	30	
4-Nitroaniline		1.7	1.5	92	1.5	92	1	34 - 125	30	
4-Nitrophenol		1.7	1.7	99	1.7	102	3	25 - 138	30	
Acenaphthene		1.7	1.5	92	1.5	93	1	46 - 125	30	
Acenaphthylene		1.7	1.5	91	1.5	91	1	44 - 125	30	_
Anthracene	<u> </u>	1.7	1.6	97	1.6	96	1	53 - 125	30	
Benzo[a]anthracene		1.7	1.6	98	1.7	102	4	52 - 125	30	
Benzo[a]pyrene	-	1.7	1.6	97	1.6	98	1	50 - 125	30	_
Benzo[b]fluoranthene	-	1.7	1.6	95	1.6	97	2	45 - 125	30	
Comments:	l		1.0	55	1.0	31			30	—

AFCEE ORGANIC ANALYSES DATA SHEET 9 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method:

SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

mg/Kg

% Solids: <u>0</u>

Parent Field Sample ID:

LCSD-10101

MS ID: <u>LCS-10101</u>

MSD ID: <u>LCSD-10101</u>

Calibration ID: 1648

Analyte	Parent Sample	Spike	Spiked Sample	%R	Duplicate Spiked	%R	%RPD	Control	Control	Q.
	Result	Added	Result		Sample			%R	%RPD	
			W 1		Result					
Benzo[g,h,i]perylene		1.7	1.7	103	1.7	102	1	38 - 126	30	
Benzo[k]fluoranthene		1.7	1.7	100	1.7	104	3	45 - 125	30	
Benzoic acid		1.7	0.96	58	0.75	45	25	25 - 125	30	
Benzyl alcohol		1.7	1.5	92	1.5	90	2	25 - 125	30	
bis(2-Chloroethoxy)methane		1.7	1.5	88	1.4	86	2	43 - 125	30	
bis(2-chloroethyl)ether		1.7	1.4	87	1.4	85	3	38 - 125	30	
bis(2-chloroisopropyl)ether		1.7	1.5	88	1.4	86	2	25 - 125	30	
bis(2-Ethylhexyl)phthalate		1.7	1.8	105	1.8	106	1	47 - 127	30	
Butyl benzyl phthalate		1.7	1.7	102	1.7	105	3	49 - 125	30	
Chrysene		1.7	1.6	97	1.6	99	2	53 - 125	30	
Di-n-butyl phthalate		1.7	1.6	98	1.6	98	1	56 - 125	30	
Di-n-octyl phthalate		1.7	1.7	104	1.8	106	2	41 - 132	30	
Dibenz[a,h]anthracene		1.7	1.7	102	1.7	102	0	41 - 125	30	
Dibenzofuran		1.7	1.5	93	1.5	92	. 2	51 - 125	30	
Diethyl phthalate		1.7	1.6	95	1.6	98	3	50 - 125	30	
Dimethyl phthalate	·	1.7	1.5	92	1.6	94	3	49 - 125	30	
Fluoranthene		1.7	1.6	96	1.6	98	2	54 - 125	30	
Fluorene	-	1.7	1.6	96	1.6	95	1	49 - 125	30	
Hexachlorobenzene		1.7	1.5	87	1.5	89	2	47 - 125	30	
Hexachlorobutadiene		1.7	1.4	82	1.4	83	2	40 - 125	30	
Hexachloroethane	-	1.7	1.4	85	1.4	82	4	34 - 125	30	
Indeno[1,2,3-cd]pyrene	• •-	1.7	1.7	105	1.7	104	1	38 - 125	30	
Isophorone		1.7	1.4	85	1.4	83	2	43 - 125	30	
N-Nitroso-di-n-propylamine		1.7	1.5	88	1.4	86	2	40 - 125	30	
N-Nitrosodiphenylamine		1.7	1.6	94	1.6	95	1	49 - 125	30	
Naphthalene		1.7	1.5	89	1.5	88	1	40 - 125	30	
Nitrobenzene		1.7	1.4	86	1.4	83	3	41 - 125	30	
Pentachlorophenol		1.7	1.4	86	1.4	85	1	25 - 125	30	
Phenanthrene	,	1.7	1.6	96	1.6	95	1	50 - 125	30	
Phenol		1.7	1.5	92	1.5	89	2	39 - 125	30	
Pyrene		1.7	1.7	103	1.7	105	1	46 - 125	30	

Comments:	•		

AFCEE ORGANIC ANALYSES DATA SHEET 10 HOLDING TIMES

Analytical Method: SW8270C

AAB#:

<u>10101</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

	Property.				Max.	Time		Max.	Time
Field Sample ID	Lab Sample ID	Date	Date	Date	Holding	Held	Date	Holding	Held Q
		Collected	Received	Extracted	Time E	Ext	Analyzed	Time A	Anal.
SMCSD0101FA	0910009-001A	01-Oct-09	02-Oct-09	06-Oct-09	14	4.8	13-Oct-09	40	7
SMCSD0401FA	0910009-002A	01-Oct-09	02-Oct-09	06-Oct-09	14	4.8	12-Oct-09	40	6.3
SMCSD0401FC	0910009-003A	01-Oct-09	02-Oct-09	06-Oct-09	14	4.8	13-Oct-09	40	7
SMCSD0501FA	0910009-004A	01-Oct-09	02-Oct-09	06-Oct-09	14	4.8	13-Oct-09	40	6.9

Co	mm	ents	:
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AFCEE ORGANIC ANALYSES DATA SHEET 11 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method:

SW8270C

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

MS05_26

Calibration ID: 1648

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Lab Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
TD100909A5	TD100909A5	09-Oct-09	6:48	09-Oct-09	7:09
SSTD160PPM	SSTD160PPM	09-Oct-09	7:09	09-Oct-09	7:47
SSTD120PPM	SSTD120PPM	09-Oct-09	7:47	09-Oct-09	8:26
SSTD080PPM	SSTD080PPM	09-Oct-09	8:26	09-Oct-09	9:05
SSTD060PPM	SSTD060PPM	09-Oct-09	9:05	09-Oct-09	9:44
SSTD050PPM	SSTD050PPM	09-Oct-09	9:44	09-Oct-09	10:22
SSTD040PPM	SSTD040PPM	09-Oct-09	10:22	09-Oct-09	11:01
SSTD020PPM	SSTD020PPM	09-Oct-09	11:01	09-Oct-09	11:40
SSTD010PPM	SSTD010PPM	09-Oct-09	11:40	09-Oct-09	12:19
SSTD005PPM	SSTD005PPM	09-Oct-09	12:19	09-Oct-09	13:36
ICV-100909	ICV-100909	09-Oct-09	13:36	09-Oct-09	13:36
TD101209A5	TD101209A5	12-Oct-09	7:07	12-Oct-09	7:28
CC101209A5	CC101209A5	12-Oct-09	7:28	12-Oct-09	8:07
MB-10101	MB-10101	12-Oct-09	10:03	12-Oct-09	10:42
LCS-10101	LCS-10101	12-Oct-09	10:42	12-Oct-09	11:20
LCSD-10101	LCSD-10101	12-Oct-09	11:20	12-Oct-09	17:35
SMCSD0401FA	0910009-002A	12-Oct-09	17:35	12-Oct-09	17:35
TD101309A5	TD101309A5	13-Oct-09	7:42	13-Oct-09	8:03
CC101309A5	CC101309A5	13-Oct-09	8:03	13-Oct-09	8:42
SMCSD0501FA	0910009-004A	13-Oct-09	8:42	13-Oct-09	9:20
SMCSD0101FA	0910009-001A	13-Oct-09	9:20	13-Oct-09	11:16
SMCSD0401FC	0910009-003A	13-Oct-09	11:16	13-Oct-09	11:16

Comments:			
	 	 	

AFCEE ORGANIC ANALYSES DATA SHEET 12 INSTRUMENT PERFORMANCE CHECK (BFB or DFTPP)

Analytical Method:

SW8270C

AAB#:

MS05 26 091009A

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

MS05_26

10/9/2009 6:48:00 AM

Initial Calibration ID:

<u>1648</u>

Injection Date/Time: File ID:

C:\HPCHEM\1\DATA\N1590.D

Compound:

SW8270C

Sample ID:

TD100909A5

Mass	Ion Abundance Criteria	% Relative Abundance C
51	30 - 60% of mass 198	43.5
68	Less than 2% of mass 69	0
69	Mass 69 relative abundance	57.4
70	Less than 2% of mass 69	0.3
127	40 - 60% of mass 198	47.8
197	Less than 1% of mass 198	0
198	Base peak, 100% relative abundance	100
199	5 - 9% of mass 198	6.5
275	10 - 30% of mass 198	21.2
365	Greater than 1 % of mass 198	2.0
441	Present, but less than mass 443	6.7
442	Greater than 40% of mass 198	41.8
443	17 - 23% of mass 442	19.2

AFCEE ORGANIC ANALYSES DATA SHEET 12 INSTRUMENT PERFORMANCE CHECK (BFB or DFTPP)

Analytical Method:

SW8270C

AAB #:

MS05 26 091012A

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

MS05 26

Injection Date/Time:

10/12/2009 7:07:00 AM

Initial Calibration ID:

<u>1648</u>

File ID:

C:\HPCHEM\1\DATA\N1610.D

Compound:

SW8270C

Sample ID:

TD101209A5

Mass	Ion Abundance Criteria	% Relative Abundance Q
51	30 - 60% of mass 198	44.4
68	Less than 2% of mass 69	0.
69	Mass 69 relative abundance	57.0
70	Less than 2% of mass 69	0
127	40 - 60% of mass 198	49.0
197	Less than 1% of mass 198	0
198	Base peak, 100% relative abundance	100
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	21.1
365	Greater than 1 % of mass 198	2.1
441	Present, but less than mass 443	6.8
442	Greater than 40% of mass 198	42.4
443	17 - 23% of mass 442	. 19.1

AFCEE ORGANIC ANALYSES DATA SHEET 12 INSTRUMENT PERFORMANCE CHECK (BFB or DFTPP)

Analytical Method:

SW8270C

AAB #:

MS05_26_091013A

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

MS05_26

Injection Date/Time:

10/13/2009 7:42:00 AM

Initial Calibration ID:

<u>1648</u>

File ID:

C:\HPCHEM\1\DATA\N1629.D

Compound:

SW8270C

Sample ID:

TD101309A5

Mass	ion Abundance Criteria	% Relative Abundance Q
51	30 - 60% of mass 198	40.0
68	Less than 2% of mass 69	0
69	Mass 69 relative abundance	53.5
70	Less than 2% of mass 69	0.2
127	40 - 60% of mass 198	47.8
197	Less than 1% of mass 198	0
198	Base peak, 100% relative abundance	100
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	21.5
365	Greater than 1 % of mass 198	2.1
441	Present, but less than mass 443	6.5
442	Greater than 40% of mass 198	40.1
443	17 - 23% of mass 442	18.4

Pesticide Data

AFCEE ORGANIC ANALYSES DATA SHEET 3 INITIAL MULTIPOINT CALIBRATION

Analytical Method:

SW8081A

AAB #:

<u>18547</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

GCGT 57G

Date of Initial Calibration:

15-Oct-09

Initial Calibration ID:

<u>1651</u>

Concentration Units:

ug/mL

SEE ATTACHED INITIAL CALIBRATION

Comments:					
.	 		 	 	
	T				

AFCEE FORM O-3

INITIAL CALIBRATION

INSTRUMENT: HP5890-GT (GCGT-57G)

COLUMN: RTX-CLP

SEQUENCE: GT101509

Pesticides

Turbochrom Method File E:\Methods\GAB101509.mth

: manager on: 10/16/09 10:04:43 Printed by Created by manager on: 10/16/09 09:50:01 Edited by manager on: 10/16/09 10:04:39

Number of Times Edited Number of Times Calibrated : 112

Description: PESTICIDE IND. "AB" CALIBRATION

Global Sample Information

Default Sample Volume 1.000 uL Quantitation Units ng 0.000 min Vaid Time Correct amounts during calibration No Convert unknowns to concentration units : No Reject outliers during calibration No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

2,4,5,6-TCMX

Component Type Single Peak Component

Retention Time 4.701 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 1.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	19577.11	5020.43			1
5	0.0050	38974.63	9786.32			1
4	0.0100	77760.08	19175.12	************		1
3	0.0200	154254.82	36847,32			1
2	0.0400	290293.90	68489,30			1
1	0.0800	555177.15	126796.13	***************************************		1

Average Calibration Factor = 7.606311e+06 (%RSD = 5.72)

ALPHA-BHC

Component Type : Single Peak Component

Retention Time : 5.696 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	18753.95	5362.53			1
5	0.0050	40681.11	11678.43			1
4	0.0100	75030.07	21161.28			1
3	0.0200	166293,45	47140.78			1
2	0.0400	351286:26	98488.58			i
1	0.0800	732301.96	195357.51			1

Average Calibration Factor = 8.283997e+06 (%RSD = 7.36)

LINDANE

Component Type Single Peak Component

Retention Time 6.305 min Search Window 1.04 s, 0.00 % Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000% User Values

Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	18910.77	5521.96			1
5	0.0050	40803.99	11936.13			1
4	0.0100	73325.12	21320.09			1
3	0.0200	160158.94	46623.12			1
2	0.0400	330648.21	94702.21			1
1	0.0800	672315.26	185380.90			1

Average Calibration Factor = 8.008482e+06 (%RSD = 4.74)

в-внс

Component Type : Single Peak Component

Retention Time : 6.482 min Search Window : 1.35 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	12657.80	3612.36			1
5	0.0050	26750.03	7578.11			1
4	0.0100	46583.26	13043.25	***********		1
3	0.0200	97382.61	26445.44			1
2	0.0400	182832.97	49728.01			1
1	0.0800	354510.48	92638.78			1

Average Calibration Factor = 4.858958e+06 (%RSD = 7.81)

D-BHC

Component Type : Single Peak Component

Retention Time : 6.834 min Search Window : 1.35 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	17042.34	5012.80			1
5	0.0050	38355.08	11001.58			1
4	0.0100	67147 34	19766,38			1
3	0.0200	153906.37	44441.77			1
2	0.0400	323869.24	91839.84			1
1	0.0800	671473:29	184051.34			1

Average Calibration Factor = 7.612032e+06 (%RSD = 8.15)

HEPTACHLOR

Component Type : Single Peak Component

Retention Time : 7.245 min
Search Window : 1.44 s, 0.00 %
Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values Label :

> Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	18260.93	5298.79			1
5	0.0050	38138.14	10910.02			1
4	0.0100	65864.27	18758.78		*******	1
3	0.0200	133508.87	37491.05	******		1
2	0.0400	253841.03	70615.29	***********	•	1
1	0.0800	480094.33	130734.81			1

Average Calibration Factor = 6.807571e+06 (%RSD = 9.84)

ALDRIN

Component Type : Single Peak Component

Retention Time : 7.860 min Search Window : 1.44 s, 0.00 %

Reference Component : Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%
User Values

Label : Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000

Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
6	0.0024	18166.09	5351.11			1
5	0.0050	38621.72	11283,16			1
4	0.0100	68866,74	20077.08			1
3	0.0200	144591.58	42117.12			1
2	0.0400	294182.68	84400.99			1
1	0.0800	592281.02	164635.80			1

Average Calibration Factor = 7.361314e+06 (%RSD = 3.93)

HEPTACHLOR EPOXIDE

Component Type : Single Peak Component

Retention Time : 9.140 min Search Window : 1.44 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
-						
6	0.0024	19377.54	5703.99			1
5	0.0050	40982.71	11937.79			1
4	0.0100	71721.29	20886.35			1
3	0.0200	148615.98	42839.33		***************************************	1
2	0.0400	288630.04	82020.87		••••	1
1	0.0800	562963.10	155556.89	************		1

Average Calibration Factor = 7.521039e+06 (%RSD = 6.57)

G-CHLORDANE

Component Type : Single Peak Component

Retention Time : 9.401 min Search Window : 1.36 s, 0.00 %

Reference Component : Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000% User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000

Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	20345.26	5964.19			1
5	0.0050	43013.11	12456.62			1
4	0.0100	75198.80	21689.12			1
3	0.0200	156775.39	45283.24			1
2	0.0400	308697.46	87623,58			1
1	0.0800	615048.47	169764,07			1

Average Calibration Factor = 7.974001e+06 (%RSD = 5.67)

A-CHLORDANE

: Single Peak Component : 9.683 min Component Type

Retention Time Search Window : 1.36 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
6	0.0024	20474.94	6062.39			1
5	0.0050	43353.33	12697.80			1
4	0.0100	76027.52	22125.87			1
3	0.0200	159197.34	45671.57			1
2	0.0400	312382.10	88124.21		************	1
1	0.0800	618005.33	169244.43	***********		1

Average Calibration Factor = 8.049855e+06 (%RSD = 5.52)

4-4-DDE

Component Type : Single Peak Component

Retention Time 9.877 min Search Window : 1.36 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label Value 1: 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt,	ISTD Resp.	# Replicates
6	0.0048	30431.65	9132.92			1
5	0.0100	65248.16	19601.03			1
4	0.0200	117419.95	35111.61		***************************************	1
3	0.0400	256311.15	76056.06			1
2	0.0800	520743.32	151052.97		***********	1
1	0.1600	1043402.68	291559.55			1

Average Calibration Factor = 6.362346e+06 (%RSD = 3.96)

ENDOSULFAN I

Single Peak Component Component Type

Retention Time : 9.970 min : 1.36 s, 0.00 % Search Window

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000% User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	40400.00	E448.46			
_						1
5	0.0050	40294.50	11422.98			1
4	0.0100	70767.82	19917.71			1
3	0.0200	146213.14	40849.01			1
2	0.0400	282765.46	79079.74			1
1	0.0800	554624.29	148889,29			1

Average Calibration Factor = 7.403436e+06 (%RSD = 6.62)

DIELDRIN

Component Type

: Single Peak Component

Retention Time Search Window

: 10.483 min : 1.28 5, 0.00 %

Reference Component :

Find peak closest to expected RT in window

Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	⇒ Amount	Area	Height	ISTD Amt.	ISTD Resp.	#Replicates
6	0.0048	33478.12	9711.55			1
5	0.0100	71365,45	20694.98			1
4	0.0200	126887.69	36703.98			1
3	0.0400	270165.71	77608.41	***************************************		1
2	0.0800	536088.44	149660.65			1
1	0.1600	1044598.13	281697.60			1

Average Calibration Factor = 6.739921e+06 (%RSD = 4.28)

ENDRIN

: Single Peak Component : 10.974 min Component Type

Retention Time

: 1.28 s, 0.00 % Search Window

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000

Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	26469,02	7702.57			1
5	0.0100	56844,50	16403.89		***************************************	1
4	0.0200	101557.44	29215.87			1
3	0.0400	214696.69	61240.91		*****	1
2	0.0800	428062.59	119249,81			1
1	0.1600	845025.00	227116.47			1

Average Catibration Factor = 5.379385e+06 (%RSD = 3.83)

4-4-DDD

Component Type : Single Peak Component

Retention Time : 11.161 min Search Window 1.28 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100,0000% User Values

Label Value 1 : 0.000000

Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	23094.77	6465.89			. 1
5	0.0100	49544.50	13979.68			1
4	0.0200	89080.50	25058.52			1
3	0.0400	188192.04	53294.11		***************************************	1
2	0.0800	371265.52	105204.06			1
1	0.1600	728979.00	203141.27	************		1

Average Calibration Factor = 4.686937e+06 (%RSD = 3.83)

ENDOSULFAN II

Component Type : Single Peak Component

: 11.463 min Retention Time Search Window : 1.18 s, 0.00 %

Reference Component : Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

ı	evel Name	Amount	Area	Height	iSTD Amt,	ISTD Resp.	# Replicates
(6	0.0048	33868.54	9498.86			
	5	0.0100	69879.00	19817.97			1
4	4	0.0200	125938.35	34857.25			1
	3	0,0400	258351.61	71600.51	***************************************		i
- 2	2	0.0800	499861.75	135308.29	***********		1
•	1	0.1600	960368.86	251837.19			1

Average Calibration Factor = 6.508355e+06 (%RSD = 6.52)

4-4-DDT

Component Type : Single Peak Component

Retention Time : 11.758 min Search Window : 1.28 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	22390.59	6469.49			1
5	0.0100	48839.16	14166.58			1
4	0.0200	88739.54	25598.73			1
3	0.0400	188701.91	54219.84			1
2	0.0800	375165.72	107170.30			1
1	0.1600	745188.91	206988.48			1
						•

Average Calibration Factor = 4.675025e+06 (%RSD = 3.07)

ENDRIN ALDEHYDE

Component Type Single Peak Component

Retention Time 12.379 min Search Window : 1.20 s, 0.00 % Reference Component :

Find peak closest to expected RT in window Calibrating Area versus Amount using a 2nd Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

10/16/09 10:04:43 Method: E:\Methods\GAB101509.mth

Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	30642.16	8164.52			1
5	0.0100	63010.95	16878.43			1
4	0.0200	108679.16	28545.03			1
3	0.0400	222370:26	57864.23			1
2	0.0800	407167.95	104529.59			1
1	0.1600	752982.11	188305.13			1

Calibration Curve : $y = (6439.175818) + (5434197.001346)x + (-4819842.186549)x^2 + (0.000000)x^3$

: 0.999788 R-squared

METHOXYCHLOR

Component Type : Single Peak Component

Retention Time : 12.838 min Search Window : 1.20 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 2nd Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0240	61176.24	16911.15			1
5	0.0500	128928.82	35123.00			1
4	0.1000	219938,79	59151.51			1
3	0.2000	430567.10	113727.66			1
2	0.4000	772575.72	201084.81			1
1	0.8000	1388057.68	364556.58			i

Calibration Curve: $y = (18921.673351) + (2096673.863834)x + (-483486.061944)x^2 + (0.000000)x^3$

R-squared : 0.999756

ENDOSULFAN SULFATE

Component Type : Single Peak Component

Retention Time : 13.327 min Search Window : 1.20 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)
Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	#Replicates
6	0.0048	31225.19	8713.16			1
5	0.0100	65979.10	18134.57			1
4	0.0200	115408.20	31650.12			1
3	0.0400	240844.88	64503.10			1
2	0.0800	463680.56	122588.52			1
1	0.1600	888546.70	227783 20			· i

Average Calibration Factor = 6.040686e+06 (%RSD = 7.01)

```
ENDRIN KETONE
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: Single Peak Component : 13,922 min Component Type

Retention Time : 1.20 s, 0.00 % Search Window

Reference Component:

Find peak closest to expected RT in window Calibrating Area versus Amount using a 2nd Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values

Label

Value 1: 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	44998.22	11772.09			1
5	0.0100	84173.47	22521.58			1
4	0.0200	152705.33	40380.81			1
3	0.0400	297557.64	79287.40			1
2	0.0800	568658.36	147388.99			1
1	0.1600	1084914.19	272066,35			1

Calibration Curve : $y = (10780.075703) + (7256323.675152)x + (-3398405.727898)x^2 + (0.000000)x^3$

R-squared : 0.999988

DECACHLOROBIPHENYL

: Single Peak Component : 16.143 min Component Type

Retention Time Search Window : 1.04 s, 0.00 % Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1: 1.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	21210.65	5800.66			1
5	0.0050	41356.30	11193.91			1
4	0.0100	82063.11	21758.16			1
3	0.0200	159046.06	40709,67			1
2	0.0400	295466.94	73702.81			1
1	0.0800	564508.25	138312.87			1

Average Calibration Factor = 7.951778e+06 (%RSD = 8.10)

Calibration Replicate Lists

Component: 2,4,5,6-TCMX --

Level : 6

Area	Height	voi Auj Amt	15 ID Response	IS LO Amount	Date	Time	File
19577.11	5020.43	0.0024			10/16/09	10:02:32	E:\Gtoct09\G101509.rst

Level: 5

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
							-
38974.63	9786.32	0.0050			10/16/09	10:02:31	E:\Gtoct09\G101508.rst

Level: 4

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
							
77760.08	19175.12	0.0100			10/16/09	10:02:31	E:\Gtoct09\G101507.rst

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
							
154254.82	36847.32	0.0200			10/16/09	10:02:30	E:\Gtoct09\G101506.rst

10/10/09 10:04:43 Method: C.Wiethods(GAD 10/1309;Hit)			
Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount	t Date	Time	File
290293.90 68489.30 0.0400	10/16/09	10:02:30	E:\Gtoct09\G101505.rst
Level : 1 Area Height Vol Adj Amt !STD Response ISTD Amou	nt Date	Time	File
555177.15 126796.13 0.0800	10/16/0	9 10:02:2	9 E:\Gtoct09\G101504.rst
Component : ALPHA-BHC Level : 6 Area Height Vol Adj Amt ISTD Response ISTD Amount	Date	Time _	File
18753.95 5362.53 0.0024 1	10/16/09 1	0:02:32 E	:\Gtoct09\G101509.rst
Level : 5 Area Height Vol Adj Amt ISTD Response ISTD Amount	Date	Time	File
40681.11 11678.43 0.0050	10/16/09	10:02:31	E:\Gtact09\G101508.rst
Level : 4 Area Height Vol Adj Amt ISTD Response ISTD Amount	Date	Time	File
75030.07 21161.28 0.0100	10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3 Area Height Vol Adj Amt ISTD Response ISTD Amoun	t Date	Time	File
166293.45 47140.78 0.0200	10/16/09	10:02:30	E:\Gtoct09\G101506.rst
Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amoun	t Date	Time	File
351286.26 98488.58 0.0400	10/16/09	10:02:30	E:\Gtoct09\G101505.rst
251286.26 98488.58			E:\Gtoct09\G101505.rst
Level: 1	nt Date	Time	
Level : 1	nt Date 10/16/0	Time 9 10:02:2	File 9 E:\Gtoct09\G101504.rst
Level: 1 Area Height Vol Adj Amt ISTD Response ISTD Amou 732301.96 195357.51 0.0800 Component: LINDANE Level: 6 Area Height Vol Adj Amt ISTD Response ISTD Amount	nt Date 10/16/0 Date	Time 9 10:02:2	File 9 E:\Gtoct09\G101504.rst File
Level: 1 Area Height Vol Adj Amt ISTD Response ISTD Amou 732301.96 195357.51 0.0800 Component: LINDANE Level: 6 Area Height Vol Adj Amt ISTD Response ISTD Amount	nt Date 10/16/0 Date	Time 9 10:02:2	File 9 E:\Gtoct09\G101504.rst
Level : 1	nt Date 10/16/0 Date 10/16/09 1 Date	Time 9 10:02:2 Time 0:02:32 E	File 9 E:\Gtoct09\G101504.rst File E:\Gtoct09\G101509.rst
Level : 1	nt Date 10/16/0 Date 10/16/09 1 Date	Time 9 10:02:2 Time 0:02:32 E	File File File File
Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount 732301.96 195357.51 0.0800	Date 10/16/09 1 Date 10/16/09 1	Time 9 10:02:2 Time 0:02:32 E	File 9 E:\Gtoct09\G101504.rst File E:\Gtoct09\G101509.rst
Level : 1	nt Date 10/16/0 Date 10/16/09 1 Date 10/16/09 Date	Time 9 10:02:32 E Time 10:02:31 Time	File 9 E:\Gtoct09\G101504.rst File E:\Gtoct09\G101509.rst File E:\Gtoct09\G101508.rst
Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount 732301.96 195357.51 0.0800	Date 10/16/09 Date 10/16/09 Date 10/16/09	Time 9 10:02:32 E Time 10:02:31 Time	File File File File File File File File E:\Glocd09\G101508.rst File
Level: 1 Area	Date 10/16/09 Date 10/16/09 Date 10/16/09 Date 10/16/09	Time 9 10:02:32 E Time 10:02:31 Time 10:02:31 Time	File File File E:\Gtoct09\G101504.rst File E:\Gtoct09\G101509.rst File E:\Gtoct09\G101508.rst File E:\Gtoct09\G101507.rst
Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount 732301.96 195357.51 0.0800	Date 10/16/09 Date 10/16/09 Date 10/16/09 Date 10/16/09	Time 9 10:02:32 E Time 10:02:31 Time 10:02:31 Time	File File File E:\Gtoct09\G101504.rst File E:\Gtoct09\G101509.rst File E:\Gtoct09\G101508.rst File File E:\Gtoct09\G101507.rst
Level: 1 Area Height Vol Adj Amt ISTD Response ISTD Amount 732301.96 195357.51 0.0800	Date 10/16/09 1 Date 10/16/09 1 Date 10/16/09 Date 10/16/09	Time 9 10:02:32 E Time 10:02:31 Time 10:02:31 Time 10:02:30 Time	File File File E:\Gtoct09\G101504.rst File E:\Gtoct09\G101509.rst File E:\Gtoct09\G101507.rst File E:\Gtoct09\G101507.rst
Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount 732301.96 195357.51 0.0800	Date 10/16/09 Date 10/16/09 Date 10/16/09 Date 10/16/09 t Date 10/16/09	Time 9 10:02:32 E Time 10:02:31 Time 10:02:31 Time 10:02:30 Time	File File File E:\Gtoct09\G101504.rst File E:\Gtoct09\G101509.rst File E:\Gtoct09\G101508.rst File E:\Gtoct09\G101507.rst File E:\Gtoct09\G101506.rst File

Component Level Area I	: 6		ISTD Response	ISTD Amount	Date	Time	File
12657.80 3	612.36	0.0024			10/16/09	10:02:32	E:\Gtoct09\G101509.rst
Level : 5 Area i		Val Adi Amt	ISTD Response	ISTD Amount	Date	Time	File
26750.03 7		0.0050		************			E:\Gtoct09\G101508.rst
					10/10/00		2.10.00.00.10.10.10.10.10.10.10.10.10.10.
Level : 4 Area		Vol Adj Ami	ISTD Response	STD Amoun	t Date	Time	File
46583.26 1	3043.25	0.0100	######################################	*********	10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3 Area		Vol Adj Aml	: ISTD Response	e ISTD Amoun	t Date	Time	File
97382.61 2	6445.44	0.0200			10/16/09	10:02:30	E:\Gtoct09\G101506.rst
Level : 2 Area		Vol Adi An	nt ISTD Respons	se ISTD Amou	nt Date	Time	File
		0.040					0 E:\Gtoct09\G101505.rst
102002.51	45720.0	0.040	•		10/10/0	10.02.0	D E.IGIOCIOS/O 10 1000.131
Level : 1 Area		Vol Adj An	nt ISTD Respons	se ISTD Amou	nt Date	Time	File
354510.48	92638.7	78 0.080	0	**********	10/16/0	9 10:02:2	9 E:\Gtoct09\G101504.rst
Component Level Area I	: 6		ISTD Response	ISTD Amount	Date	Time	File
17042.34 5	012.80	0.0024			10/16/09	10:02:32	E:\Gtoct09\G101509.rst
Level: 5 Area		Vol Adi Ami	ISTD Response	s ISTD Amoun	t Date	Tìme	File
38355.08 1			·				E:\Gtoct09\G101508.rst
Level : 4 Area		Vol Adj Am	ISTD Response	STD Amoun	t Date	Time	File
67147.34 1	9766.38	0.0100		********	10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3 Area		Vol Adj An	nt ISTD Respons	se ISTD Amou	nt Date	Time	File
153906.37	44441.7	7 0.020	10	*********	10/16/0	9 10:02:3	0 E:\Gtoct09\G101506.rst
Level : 2 Area		: Vol Adi An	nt ISTD Respons	se ISTD Amou	nt Date	Time	File
323869.24		_ _ `	10				0 E;\Gtoct09\G101505.rst
					7-11475		2,1010010010010101
Level : 1 Area	Heigh	t Vol Adj A	mt ISTO Respoi	nse ISTD Amo	unt Date	e Tim	e File
671473.29	184051.	.34 0.08	100		10/16/	/09 10:02 ⁻	:29 E:\Gtoct09\G101504.rs
Component Level	: HEP	TACHLOR -					
Area I	Height	Vol Adj Amt	ISTD Response	STD Amount	Date	Time	File
18260.93 5	298.79	0.0024	***************************************		10/16/09	10:02:32	E:\Gtoct09\G101509.rst
Level : 5 Area		Vol Adj Am	t ISTD Response	e ISTD Amoun	t Date	Time	File
38138.14 1	0910.02	0.0050		********	10/16/09	10:02:31	E:\Gtoct09\G101508.rst

		Voi Auj Aint	ISTD Response		Date	Time	File
65864.27	18758.78	0.0100	*******		10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3 Area		Vol Adj Amt	ISTD Response	e ISTD Amount	Date	Time	File
133508.87	37491.05	0.0200			10/16/09	10:02:30	E:\Gtoct09\G101506.rs
Level : 2 Area		Vol Adj Amt	ISTD Response	e ISTD Amount	Date	Time	File
253841.03	70615.29	0.0400		***********	10/16/09	10:02:30	E:\Gtoct09\G101505.rs
Level : 1		Vol Adj Am	nt ISTD Respon	se ISTD Amour	nt Date	Time	File
480094.33	130734.8	0.080	0		10/16/0	9 10:02:2	9 E:\Gtoct09\G101504.
Componen Level	: 6		270.0				
Area .			STD Response			Time	File
18166.09	5351.11	0.0024		 1:	0/16/09 1	0:02:32 E	:\Gtoct09\G101509.rst
Level : ! Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
38621,72	11283.16	0.0050		######################################	10/16/09	10:02:31	E:\Gtoct09\G101508.rst
Level : 4 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
68866.74	20077.08	0.0100		*****	10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3 Area		Vol Adj Aml	ISTD Response	e ISTD Amount	Date	Time	File
144591.58	42117.12	0.0200			10/16/09	10:02:30	E:\Gtoct09\G101506.rs
Level : 3		Vol Adj Amt	ISTD Response	e ISTD Amount	Date	Time	File
		- 				10:02:30	E:\Gtoct09\G101505.n
294182.68	84400.99	0.0400	***********				
294182.68 Level : *			nt ISTD Respon	se ISTD Amour	nt Date	Time	File
Level : Area	1 Height	Vol Adj An		se ISTD Amour			
Area 592281.02	1 Height 164635.8	Vol Adj An	nt ISTD Respon	se ISTD Amour			
Level : Area 592281.02	Height 164635.8 at : HEPT : 6	Vol Adj Am 30 0.080	nt ISTD Respon				File 9 E:\Gtoct09\G101504. File
Level : Area 592281.02	Height 164635.8 It: HEPT : 6 Height \	Vol Adj Am 30 0.080	OXIDE	ISTD Amount	10/16/0 Date	9 10:02:2 Time	9 E:\Gtoct09\G101504.
Level : Area 592281.02 Componen Level Area	Height 164635.8 it: HEPT : 6 Height \ 5703.99	Vol Adj An 0.080 ACHLOR EPI /ol Adj Amt 18 0.0024	OXIDE	ISTD Amount	10/16/0 Date 0/16/09 1	9 10:02:2 Time	9 E:\Gtoct09\G101504.
Level : Area 592281.02 Componen Level Area 19377.54	Height 164635.8 t: HEPT : 6 Height \ 5703.99 Height	Vol Adj An 0.080 ACHLOR EPI /ol Adj Amt 18 0.0024	OXIDE STD Response	ISTD Amount ISTD Amount	10/16/0 Date 0/16/09 1	9 10:02:2 Time 0:02:32 E	9 E:\Gtoct09\G101504. File :\Gtoct09\G101509.rst File
Level : Area 592281.02 Component Level Area 19377.54 Level : 4 Area	Height 164635.8 it: HEPT : 6 Height \ 5703.99 Height 11937.79	Vol Adj Am 30 0.080 ACHLOR EPI /ol Adj Amt 18 0.0024 Vol Adj Amt 0.0050	OXIDE STD Response	ISTD Amount ISTD Amount	10/16/0 Date 0/16/09 1 Date 10/16/09	7 10:02:2 Time 0:02:32 E	File File File File File File File File File File
Level : Area 592281.02 Componen Level Area 19377.54 Level : Area 40982.71	Height 164635.8 It: HEPT : 6 Height \ 5703.99 Height 11937.79 Height	Vol Adj Am 30 0.080 ACHLOR EPI /ol Adj Amt 18 0.0024 Vol Adj Amt 0.0050	OXIDE STD Response	ISTD Amount ISTD Amount ISTD Amount	10/16/0 Date 0/16/09 1 Date 10/16/09 Date	7 10:02:2 Time 0:02:32 E Time 10:02:31	9 E:\Gtoct09\G101504. File :\Gtoct09\G101509.rst
Level : Area 592281.02 Component Level Area 19377.54 : Area 40982.71 Level : Area	Height 164635.8 It: HEPT : 6 Height \ 5703.99 Height 11937.79 Height 20886.35	Vol Adj Am O.080 ACHLOR EPI O.0024 Vol Adj Amt O.0050 Vol Adj Amt O.0050 O.0100	OXIDE STD Response	ISTD Amount ISTD Amount ISTD Amount	10/16/0 Date 0/16/09 1 Date 10/16/09 Date 10/16/09	7 10:02:2 Time 0:02:32 E Time 10:02:31	File :\Gtoct09\G101504 File :\Gtoct09\G101509.rst File E:\Gtoct09\G101508.rs File

Area			nods\GAB101509 ISTD Response		. Date	Time	File
288630.04			******				E:\Gtoct09\G101505.rst
Level : * Area		Val Adj Am	nt ISTD Respons	se ISTD Amour	nt Date	Time	File
562963.10	155556,8	9 0.080	0	***********	10/16/0	9 10:02:2	9 E:\Gtoct09\G101504.rs
Componen	t : G-CHL	ORDANE	•				
Level Area	: 6 Height V	ol Adj Amt IS	STD Response I	STD Amount	Date	Time	File
20345.26	5964,19	0.0024		 1	0/16/09 10	D:02:32 E	:\Gtoct09\G101509.rst
Level : 5 Area		Vol Adj Amt	ISTD Response		Date	Time	File
43013.11	12456.62	0.0050	***************************************		10/16/09	10:02:31	E:\Gtoct09\G101508.rst
Level : 4		Vol Adi Amt	ISTD Response	ISTD Amount	Date	Time	File
75198.80	<u> </u>	0.0100			 -		E:\Gtoct09\G101507.rst
70100.00 2	1005.12	0.0100		***************************************	10/10/09	10.02.31	E.//GIOCIO9/G101507.151
Level : 3 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
156775.39	45283.24	0.0200			10/16/09	10:02:30	E:\Gtoct09\G101506.rst
Level : 2 Area		Vol Adj Amt	ISTD Response	s ISTD Amount	Date	Time	File
308697.46	87623.58	0.0400			10/16/09	10:02:30	E:\Gtoct09\G101505.rst
Level : 1 Area		Val Adi Arr	it ISTD Respons	ie ISTD Amour	nt Date	Time	File
615048.47			0			-	= ====================================
•							
Componen ⁱ Level Area	: 6		STD Response 3	STD Amount	Date	Time	File
20474.94 6		0.0024					:\Gtoct09\G101509.rst
				•		J.02.02	
Level : 5		/al Adj Amt	STD Response	ISTO Amount	Date	Time	File
43353.33 1	2697.80	0.0050			10/16/09	0:02:31	E:\Gtoct09\G101508.rst
Level: 4		fal Adi A—t i	ISTO December	1070 4			-
Area 		0.0100	STD Response			Time -	File E:\Gloct09\G101507.rst
		*******			10110/05	.0.02.31	2.1010010310101001.130
Level: 3 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
159197.34	45671.57	0.0200			10/16/09	10:02:30	E:\Gtoct09\G101506.rst
Level : 2 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
312382.10	88124.21	0.0400	***************************************		10/16/09	10:02:30	E:\Gtoct09\G101505.rst
Level : 1 Area	Height	Vot Adi Am	t ISTD Respons	≙ ISTD λ	nt Data	Time	Eile
518005.33						Time	File File
· · · · · · · · · · · · ·	100274.40	, 0.0000		******	10/16/08	10:02:25	9 E:\Gtoct09\G101504.rs

Component : 4-4-DDE Level : 6

Area	Height	Vol Adj Ami	ISTD Response	509.mth s ISTD Amount	Date	Time	File
0431.65	9132.92	0.0048	4-21-34		10/16/09	0:02:32 E	::\Gtoct09\G101509.rst
Level : Area		Vol Adj An	nt ISTD Respons	se ISTD Amount	t Date	Time	File
5248.16	19601.03	3 0.010	0	**********	10/16/09	10:02:31	E:\Gtoct09\G101508.rst
Level : Area		t Vol Adj A	mt ISTD Respon	nse ISTD Amou	nt Date	Time	File
17419.9	5 35111.6	51 0.02	00		10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : Area		t Vol Adj A	.mt ISTD Respo	nse ISTD Amou	nt Date	Time	File
256311.1	5 76056.0	0.04	-00		10/16/09	10:02:30	E;\Gtoct09\G101506.rst
Level : Area	2 Heigl	nt Vol Adj	Amt ISTD Resp	onse ISTD Amo	unt Date	Time	File
520743.3	2 151052	2.97 0.0	9800	*********	10/16/0	09 10:02:3	80 E:\Gtoct09\G101505.rsi
Level : Area		ght Vol Ad	j Amt ISTD Res	ponse ISTD Am	ount Dat	e Tim	e File
1043402.	68 29155	9.55 0	1600		10/16	/09 10:02	:29 E:\Gtoct09\G101504.r
Compone Level Area	: 6	OSULFAN (I ISTD Respons	e ISTD Amount	Date	Time	File
19133.60	5442.10	0.0024			10/16/09	10:02:32 E	E:\Gtoct09\G101509.rst
Level : Area		Vol Adj Ar	nt ISTD Respon	se ISTD Amoun	t Date	Time	File
10294.50	11422.9	8 0.005	50		10/16/09	10:02:31	E:\Gtoct09\G101508.rst
Level : Area		Vol Adj Ar	nt ISTD Respon	se ISTD Amoun	t Date	Time	File
70767.82	19917.7	1 0.010	00		10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : Area		t Vol Adj A	umt ISTD Respo	nse ISTD Amou	nt Date	Time	File
146213.1	4 40849.	01 0.02	200		10/16/0	9 10:02:30	E:\Gtoct09\G101506.rst
Level : Area		it Vol Adj A	omt ISTD Respo	nse ISTD Amou	nt Date	Time	File
282765.4	6 79079.	74 0.04			10/16/0	9 10:02:30	E:\Gtoct09\G101505.rst
Level : Area	1 Heig	ht Val Adj	Amt ISTD Resp	onse ISTO Amo	unt Date	Time	File
554624.2	9 148889	0.29 0.0	0800	***************************************	10/16/	09 10:02:2	29 E:\Gtoct09\G101504.rs
Compone Level Area	ent : DIE		ISTO Passass	e ISTD Amount	Date	Time	File
	9711.55			- ISTO AMOUNT		Time 	E:\Gtoct09\G101509.rst
Level :		Vol Adi A	nt ISTO Resoon	ise ISTD Amoun	it Date	Time	File
	20694.9		00 ——				E:\Gtact09\G101508.rst
	_5557.5		-		. 4. 14.44		

Level; 4

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
126887.69	36703.98	0.0200			10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
270165.71	77608.41	0.0400			10/16/09	10:02:30	E:\Gtoct09\G101506.rst
Level : 2 Area	2 Height	Vol Adj Am	t ISTD Respons	e ISTD Amoun	t Date	Time	File
536088.44	149660.68	5 0.0800)		10/16/09	9 10:02:30	D E:\Gtoct09\G101505.rst
Level : 1 Area		Vol Adj Ai	nt ISTD Respon	se ISTD Amou	nt Date	Time	File
1044598.13	3 281697.	60 0,16	30		10/16/9	09 10:02::	29 E:\Gtoct09\G101504.rs
Componen Level Area	: 6		STD Response IS	STD Amount	Date	Tíme	File
26469.02	 -					D:02:32 E	:\Gtoct09\G101509.rst
Level : 5	5						
Area		 -	ISTD Response			Time	File
56844.50	16403.89	0.0100		***********	10/16/09	10:02:31	E:\Gtoct09\G101508.rst
Level : 4 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
101557.44	29215.87	0.0200		*********	10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
214696.69	61240.91	0.0400			10/16/09	10:02:30	E:\Gtoct09\G101506.rst
Level : : Area		Vol Adj An	nt ISTD Respons	se ISTD Amour	nt Date	Time	File
428062.59	119249.8	1 0.080	0		10/16/0	9 10:02:3	0 E:\Gtact09\G101505.rs
Level : Area	1 Height	Vol Adj An	nt ISTD Respons	se ISTD Amour	nt Date	Time	File
845025.00	227116.4	7 0.160	0		10/16/0	9 10:02:2	9 E:\Gtoct09\G101504.rs
Componer Level Area	: 6		STD Response I	STD Amount	Date	Time	File
23094.77	6465,89	0.0048	· · · · · · · · · · · · · · · · · · ·		0/16/09 1	0:02:32 E	::\Gtoct09\G101509.rst
Level :		Vol Adi Amt	ISTD Response	ISTD Amount	Date	Time	File
49544.50		0.0100	 				E:\Gtoct09\G101508.rst
Level :	4						
Area	<u> </u>		ISTD Response	ISTD Amount		Time	File
89080.50	25058.52	0.0200			10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : Area		Vol Adj Am	ISTD Response	s ISTD Amount	t Date	Time	File
188192.04	53294,11	0.0400	l 		10/16/09	10:02:30	E:\Gtoct09\G101506.rst

	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
371265.52	105204.06	0.0800	*********		10/16/09	10:02:30	E:\Gtoct09\G101505.rs
Level: 1 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
728979.00	203141.27	0.1600	*********	******	10/16/09	10:02:29	E:\Gtoct09\G101504.rs
Level	t : ENDOS : 6 Height Vo		TD Response IS	TD Amount	Date 1	Time	File
33868.54	9498.86	0.0048		10	/16/09 10	:02:32 E:\	Gtoct09\G101509.rst
Level : 5 Area		ol Adj Amt IS	STD Response IS	STD Amount	Date	Time	File
69879.00	19817.97	0.0100 —			0/16/09 1	0:02:31 E	:\Gtoct09\G101508.rst
Level : 4 Area		Vol Adj Amt 1	STD Response	ISTD Amount	Date	Time	File
125938.35	34857.25	0.0200		·····	10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level: 3 Area		Vol Adi Amt i	STD Response	ISTD Amount.	Date	Time	File
258351.61		0.0400	·-···				E:\Gtoct09\G101506.rst
Level : 2 Area		Vol Adi Amt	ISTD Response	ISTD Amount	· Nate	Time	File
	135308.29						E:\Gtocl09\G101505.rs
Level : 1 Area	l j		ISTD Response	ISTD Amount		Time	File
	251837.19						E:\Gtoct09\G101504.rs
		-					
Level	t: 4-4-DD7 : 6 Height: Vo		'n Resnanse IS'	TD Amount 1	Data 1	Time.	File
Level	: 6 Height Vo		D Response IS			Fime :02:32 E:\	File Gtoct09\G101509.rst
Level Area 22390.59 6	: 6 Height Vo 3469.49	I Adj Amt IST	D Response IS				
Level Area	: 6 Height Vo 5469.49	1 Adj Amt 1S1 0.0048 —	TD Response IS	 10			
Level Area 22390.59 6	: 6 Height Vo 3469.49 Height V	1 Adj Amt 1S1 0.0048 —	TD Response IS	3TD Amount	/16/09 10 Date	:02:32 E:\	Gtoct09\G101509.rst
Level 22390.59 6 Level : 5 Area	: 6 Height Vo 3469.49 Height V 14166.58	0.0048 — 0.0048 — 0l Adj Amt IS 0.0100 —	TD Response IS	3TD Amount 1	/16/09 10 Date	:02:32 E:\	Gtoct09\G101509.rst
Level : 5 Area	: 6 Height Vo 3469.49 Height V 14166.58 Height V	0.0048 — 0.0048 — 0l Adj Amt IS 0.0100 —	TD Response IS	STD Amount 10 STD Amount	Date 0/16/09 1	Time 0:02:31 E	Gtoct09\G101509.rst File :\Gtoct09\G101508.rst
Level : 5 Area 48839.16 1 Level : 4 Area	: 6 Height Vo 3469.49 Height V 14166.58 Height V 25598.73	0.0048 — Ol Adj Amt IS 0.0100 — Ol Adj Amt IS 0.0100 —	TD Response IS	10 Amount 1	Date 0/16/09 1	Time 0:02:31 E	Gtoct09\G101509.rst File :\Gtoct09\G101508.rst
Level : 5 Area	: 6 Height Vo 3469.49 Height V 14166.58 Height V 25598.73	0.0048 — Ol Adj Amt IS 0.0100 — Ol Adj Amt IS 0.0100 —	STD Response IS	10 Amount 1	Date 0/16/09 1 Date 0/16/09 1 Date 0/16/09 1	Time 0:02:31 E	File :\Gtoct09\G101509.rst File :\Gtoct09\G101508.rst File :\Gtoct09\G101507.rst
Level : 5 Area - 48839.16 1 Level : 4 Area - 88739.54 2 Level : 3 Area - 3	: 6 Height Vo 6469.49 Height V 14166.58 Height V 25598.73 Height V 54219.84	O Adj Amt IST O .0048 — OI Adj Amt IS O .0100 — OI Adj Amt IS O .0200 Vol Adj Amt I	STD Response IS	10 STD Amount STD Amount 1 STD Amount	Date 0/16/09 1 Date 0/16/09 1 Date 10/16/09 1	Time 0:02:31 E	File :\Gtoct09\G101509.rst File :\Gtoct09\G101508.rst File :\Gtoct09\G101507.rst
Level : 5 Area	: 6 Height Vo 3469.49 Height V 14166.58 Height V 25598.73 Height V 54219.84	O Adj Amt IST O .0048 — OI Adj Amt IST O .0100 — OI Adj Amt IST O .0200 — Vol Adj Amt IST O .0400 —	STD Response IS	10 STD Amount STD Amount 1 STD Amount	Date 0/16/09 1 Date 0/16/09 1 Date 10/16/09 1 Date 10/16/09	Time 0:02:31 E Time 0:02:31 E Time 10:02:30	File :\Gtoct09\G101509.rst File :\Gtoct09\G101508.rst File :\Gtoct09\G101507.rst File E:\Gtoct09\G101506.rst
Level : 5 Area	: 6 Height Vo 3469.49 Height V 14166.58 Height V 25598.73 Height V 54219.84 Height 107170.30	Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST Ol Adj Amt IST	STD Response ISTD Response	STD Amount STD Amount 1 STD Amount ISTD Amount	Date 0/16/09 1 Date 0/16/09 1 Date 10/16/09 1 Date 10/16/09 1	Time 0:02:31 E Time 0:02:31 E Time 10:02:30	File :\Gtoct09\G101509.rst File :\Gtoct09\G101508.rst File :\Gtoct09\G101507.rst File E:\Gtoct09\G101506.rst

Component : ENDRIN ALDEHYDE Level : 6

30642.16	r leight i	√ol Adj Amt IS	TD Response I	STD Amount	Date	Time	File
	8164,52	0.0048		1	0/16/09 1	0:02:32 E	::\Gtoct09\G101509.rst
Level : 5 Area	=	Vol Adj Amt I	STO Response	ISTD Amount	Date	Time	File
63010.95	16878.43	0.0100 -	********		10/16/09	10:02:31	E:\Gtoct09\G101508.rst
Level : 4 Area		Vol Adj Amt	ISTD Response	s ISTD Amount	t Date	Time	File
108679.16	28545.03	3 0.0200			10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3 Area		Vol Adj Amt	ISTD Response	STD Amount	t Date	Time	File
222370.26	57864.23	3 0.0400		****	10/16/09	10:02:30	E:\Gtoct09\G101506.rst
Level : 2	Height	_ 	t ISTD Respons			Time	
407167.95	104529.5	59 0.0800)	**********	10/16/0	9 10:02:3	80 E:\Gtoct09\G101505.rst
Level : ' Area	Height	<u>-</u>	t ISTD Respons	se ISTD Amoui	nt Date	Time	File
752982.11	188305.1	13 0.1600	· ———	~~~~~~	10/16/0	9 10:02:2	9 E:\Gtoct09\G101504.rst
Componen Level Area	: 6	HOXYCHLOR Vol Adj Amt I	STD Response	ISTD Amount	Oate	Time	File
61176.24	16911.15	0.0240 -		***************************************	10/16/09	10:02:32	E:\Gtoct09\G101509.rst
Level : 5		Vol Adj Amt	ISTD Response	∍ ISTD Amount	t Date	Time	File
128928.82	35123.00	0.0500			10/16/09	10:02:31	E:\Gtoct09\G101508.rst
Level : 4 Area		Vol Adj Amt	ISTD Response	∍ ISTD Amount	t Date	Time	File
219938.79	59151.51	1 0.1000			10/16/09	10:02:31	E:\Gtoct09\G101507.rst
Level : 3	3						
Area	Height	Vol Adj Am	t ISTD Respons	se ISTD Amour	nt Date	Time	File
Area				se ISTD Amour			
Area	113727.6	0,2000			10/16/0		
Area 430567.10 Level : 2 Area	113727.6 2 Height	0.2000 Vol Adj Am)		10/16/0	9 10:02:3	0 E:\Gtoct09\G101506.rst
Area 430567.10 Level : 2 Area	113727.6 2 Height 201084.8	0.2000 Vol Adj Am 0.4000	t ISTD Respons	se ISTD Amour	10/16/0	9 10:02:3 Time 9 10:02:3	E:\Gloct09\G101506.rs File E:\Gloct09\G101505.rs
Area 430567.10 Level: 2 Area 772575.72 Level: 3 Area	113727.62 Height 201084.8	Vol Adj Am 0.4000 1. Vol Adj Am Vol Adj Ar	t ISTD Respons	se ISTD Amour	10/16/0	7 Time 10:02:3	E:\Gtoct09\G101506.rst File E:\Gtoct09\G101505.rst
Area 430567.10 Level: 2 Area 772575.72 Level: 1 Area 1388057.68	113727.6 2 Height 201084.8 4 Height 8 364556 tt: ENDC	Vol Adj Am 31 0.4000 Tot Vol Adj Ar 58 0.800 DSULFAN SUL	t ISTD Respons	se ISTD Amour	10/16/0	7 Time 10:02:3	E:\Gtoct09\G101506.rs File E:\Gtoct09\G101505.rs
Area 430567.10 Level : 2 Area 772575.72 Level : 1 Area 1388057.68 Componen Level	113727.6 2 Height 201084.8 364556 tt: ENDO: : 6 Height \	Vol Adj Am 31 0.4000 Tot Vol Adj Ar 58 0.800 DSULFAN SUL	t ISTD Respons int ISTD Respons int ISTD Response FATE TD Response	se ISTD Amour	10/16/0: 10/16/0: unt Date 10/16/0: 10/16/	Time 9 10:02:3 Time 9 10:02:3 Time 10:02:	File E:\Gtoct09\G101506.rsf File E:\Gtoct09\G101505.rsf File E:\Gtoct09\G101504.rsf
Area 430567.10 Level : 2 Area 772575.72 Level : 1 Area 1388057.66 Componen Level Area	113727.6 Height 201084.8 Height 8 364556 t: ENDO : 6 Height \ 8713.16	Vol Adj Am 81 0.4000 nt Vol Adj Ar .58 0.800 DSULFAN SUL Vol Adj Amt IS 0.0048	t ISTD Respons int ISTD Respons int ISTD Response FATE TD Response	se ISTD Amount	10/16/0: 10/16/0: unt Date 10/16/0: 10/16/	Time 9 10:02:3 Time 9 10:02:3 Time 10:02:	File E:\Gtoct09\G101506.rsi File E:\Gtoct09\G101505.rsi E:\Gtoct09\G101504.rsi

	Height	Vol Adj Amt	ISTD Response	ISTO Amount	Date	Time	File
115408.20	31650.12	0.0200			10/16/09	10:02:31	E:\Gtoct09\G101507.rs
Level : 3 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
240844.88	64503.10	0.0400			10/16/09	10:02:30	E:\Gtoct09\G101506.rs
Level : 2 Area	Height	Vol Adj Am	t ISTD Respons	e ISTD Amoun	t Date	Time	File
463680.56	122588.52	2 0.0800)	4	10/16/09	10:02:30	E:\Gtoct09\G101505.
Level : 1 Area		Vol Adj Am	t ISTD Respons	e ISTD Amoun	t Date	Time	File
888546.70	227783.20	0.1600)		10/16/09	10:02:29	E:\Gtoct09\G101504.
Level	; 6	N KETONE					
	<u> </u>		STD Response			Time -	File
14998.22 1	1772.09	0.0048 -		 1	.0/16/09 1	0:02:32 E	E:\Gtoct09\G101509.rst
Level : 5 Area		√ol Adj Amt I	STD Response	ISTD Amount	Date	Time	File
34173.47 2	2521.58	0.0100 -		1	0/16/09 1	0:02:31 E	:\Gtoct09\G101508.rsf
Level : 4 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
52705.33	40380.81	0.0200			10/16/09	10:02:31	E;\Gtoct09\G101507.r
Level: 3 Area		Vol Adj Amt	ISTD Response	iSTD Amount	Date	Time	File
297557.64	79287.40	0.0400	***************************************		10/16/09	10:02:30	E:\Gtoct09\G101506.rs
Level : 2 Area		Val Adj Am	t ISTD Respons	e ISTD Amoun	t Date	Time	File
			·		10/16/09	10:02:30	E:\Gtoct09\G101505
68658.36	147388.99	9 0.0800					
Level : 1				an ISTO Ameri	nt Data	T:	File
Level : 1 Area	Height	Vol Adj Ar	nt ISTD Respon	ise ISTD Amou		Time	File
Level : 1 Area 1084914.19 Component	Height 272066.3	Vol Adj Ar	nt ISTD Respon	ise ISTD Amou			<u> </u>
Level : 1 Area 1084914.19 Component Level	Height 272066.3	Vol Adj Ar 35 0.160 CHLOROBIPI	nt ISTD Respon	***************************************	10/16/0		<u> </u>
Level : 1 Area 084914.19 Component Level Area	Height 272066.3 : DECAC	Vol Adj Ar 35 0.160 CHLOROBIPI	nt ISTD Respon OO ——— HENYL TD Response IS	STD Amount	10/16/0 Date	9 10:02:2	9 E:\Gtoct09\G10150
Level : 1 Area 1084914.19 Component Level Area 21210.65 5	Height 272066.3 DECA6 : 6 Height Vo	Vol Adj Ar 35 0.160 CHLOROBIPH ol Adj Amt IS 0,0024	nt ISTD Respon OO ——— HENYL TD Response IS	STD Amount	10/16/0 Date	9 10:02:2	9 E:\Gtact09\G101504
Level : 1 Area 1084914.19 Component Level Area 11210.65 5 Level : 5 Area	Height 272066.3 :: DECAC :: 6 Height Vo	Vol Adj Ar 35 0.160 CHLOROBIPH ol Adj Amt IS 0,0024	mt ISTD Respon OO ——— HENYL STD Response IS	STD Amount 10	10/16/0 Date	10:02:2 Time 1:02:32 E:	Pile Gtoct09\G101509.rst
Level: 1 Area 1084914.19 Component Level Area 121210.65 Level: 5 Area 11356.30 1 Level: 4	Height 272066.3 :: DECAC :: 6 Height Vo	Vol Adj Ar 35 0.160 CHLOROBIPH ol Adj Amt IS 0.0024	mt ISTD Respon OO ——— HENYL STD Response IS	STD Amount 10 ISTD Amount	10/16/0 Date	10:02:2 Time 1:02:32 E:	File
Level : 1 Area 084914.19 Component Level Area 121210.65 5 Level : 5 Area 1356.30 1 Level : 4 Area	Height 272066.3 : DECAG : 6 Height Volume : 6 Height Volume : 6 Height \ 1193.91 Height \	Vol Adj Ar 35 0.160 CHLOROBIPH ol Adj Amt IS 0.0024	nt ISTD Respon	ISTD Amount ISTD Amount ISTD Amount	Date Date Date Date Date Date Date Date	9 10:02:2 Time :02:32 E: Time 0:02:31 E	File \Gtoct09\G101509.rst File E:\Gtoct09\G101509.rst File E:\Gtoct09\G101508.rst
Area 1084914.19 Component Level Area 121210.65 5 Level : 5 Area 1356.30 1 Level : 4	Height 272066.3 :: DECAG:: 6 Height Vol. 1193.91 Height \(\)	Vol Adj Ar 35 0.160 CHLOROBIPH ol Adj Amt IS 0.0024 Vol Adj Amt I 0.0050	nt ISTD Respon	ISTD Amount ISTD Amount ISTD Amount	Date Date Date Date 0/16/09 10 Date 0/16/09 1	9 10:02:2 Time :02:32 E: Time 0:02:31 E	File \Gtoct09\G101509.rst File \Gtoct09\G101509.rst File E:\Gtoct09\G101508.rst

10/16/09 10:04:43 Method: E:\Methods\GAB101509,mth

Area	Height	Vol Adj Amt I	STD Response	ISTD Amount	Date	Time	File
295466.94	73702.81	0.0400 -			10/16/09	10:02:30	E:\Gtoct09\G101505.rst
Level : 1 Area	Height	Vol Adj Amt	ISTD Response	: ISTD Amount	t Date	Time	File
564508.25	138312.87	0.0800			10/16/09	10:02:29	E:\Gtoct09\G101504.rst

Fit Analysis Output For Method File: E:\METHODS\GAB101509,MTH

Component Name: ENDRIN ALDEHYDE : 10/16/09 10:06:11

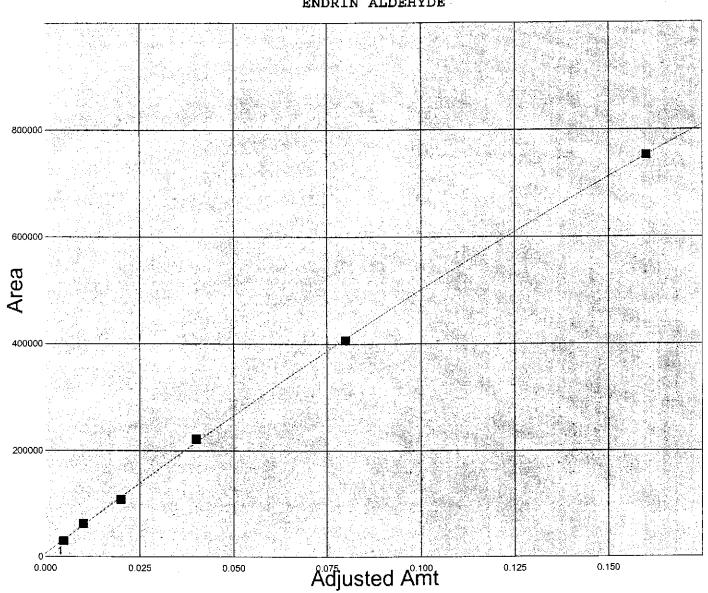
Curve Parameters:

Curve #1: 2nd Order

Weighting Factor = 1 (No Weighting) R-Squared = 0.999788
Calibration Curve: Y = (6439.175818) + (5434197.001346) X + (-4819842.186549) X^2

Curve #1: Level Observed Calculated Observed Calculated Name X-Value X-Value Delta %Diff. Y-Value Y-Value Delta %Diff. 0.004800 0.004472 0.000328 7.345 30642.160482 32412.272 -1770.112 -5.461 0.010000 0.010508 -5.083e-04 -4.837 63010.952858 60299,162 2711.791 4.497 0,020000 0.019139 0.000861 4.498 108679.162868 113195.179 -4516.016 -3.990 4 3 2 1 0.040000 0.041244 -0.001244 -3.017 222370.260993 216095.308 6274,953 2.904 0.080000 0.079323 0.000677 0.854 407167.953451 410327.946 -3159.992 -0.770 0.160000 0.160118 -1.181e-04 -0.074 752982.112557 752522.736 459,376 0.061

ENDRIN ALDEHYDE



Fit Analysis Output For Method File: E:\METHODS\GAB(101509.MTH Component Name : METHOXYCHLOR
Date : 10/16/09 10:06:22

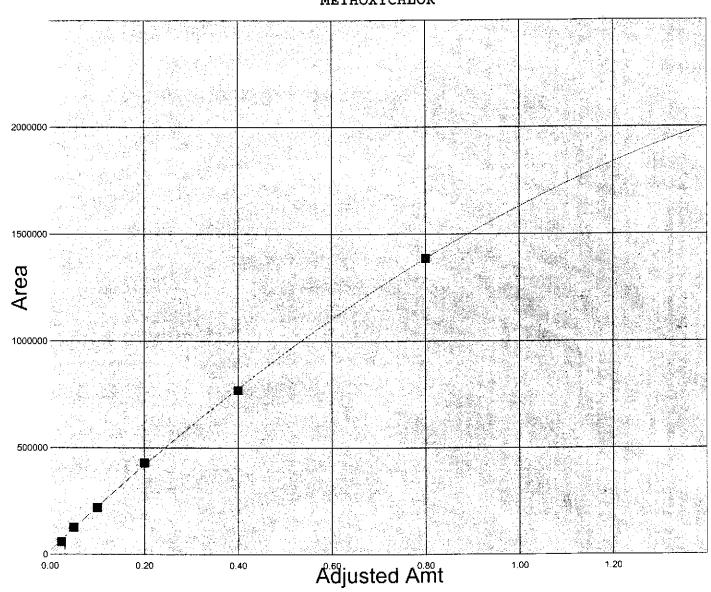
Curve Parameters:

Curve #1: 2nd Order

Weighting Factor = 1 (No Weighting) R-Squared = 0.999756
Calibration Curve: Y = (18921.673351) + (2096673.863834) X + (-483486.061944) X^2

Curve #1 : Level Name		Calculated X-Value	Delta	%Diff.	Observed Y-Value	Calculated Y-Value	Delta	%Diff.
								
6	0.024000	0.020248	0.003752	18.532	61176.237091	68963.358	-7787.121	-11.292
5	0.050000	0.053118	-0.003118	-5.870	128928.819875	122546.651	6382.168	5.208
4	0.100000	0.098093	0.001907	1.944	219938.788341	223754.199	-3815.411	-1.705
3	0.200000	0.206131	-0.006131	-2.974	430567,104119	418917.004	11650.100	2.781
2	0.400000	0.395527	0.004473	1.131	772575.715976	780233,449	-7657,733	-0.981
1	0.800000	0.800928	-9.284e-04	-0.116	1388057.680601	1386829.685	1227.996	0.089

METHOXYCHLOR



Fit Analysis Output For Method File: E:\METHODS\GAB101509.MTH
Component Name : ENDRIN KETONE
Date : 10/16/09 10:06:32

Curve Parameters:

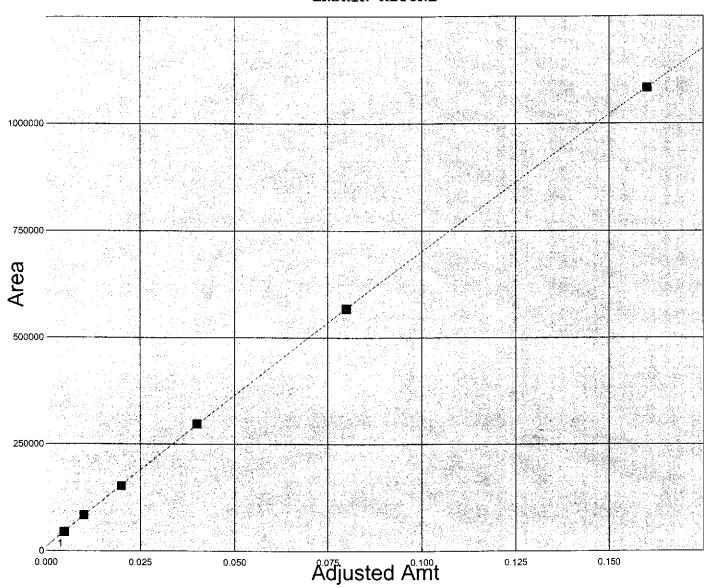
Curve #1: 2nd Order

Weighting Factor = 1 (No Weighting) R-Squared = 0.999988
Calibration Curve: Y = (10780.075703) + (7256323.675152) X + (-3398405.727898) X^2

Curve #1:

Level Name	Observed X-Value	Calculated X-Value	Delta	%Diff.	Observed Y-Value	Calculated Y-Value	Delta	%Diff.
6	0.004800	0.004726	7.3909e-05	1.564	44998.217533	45532.130	-533.913	-1.173
5	0.010000	0.010163	-1.628e-04	-1.602	84173.472224	83003.472	1170.000	1.410
4	0.020000	0.019741	0.000259	1.310	152705.326977	154547.187	-1841.860	-1.192
3	0.040000	0.040281	-2.810e-04	-0.697	297557.643238	295595.574	1962.070	0.664
2	0.080000	0.079869	0.000131	0.164	568658.363099	569536,173	-877.810	-0.154
1	0.160000	0.160020	-1.970e-05	-0.012	1084914.189495	1084792.677	121.512	0.011

ENDRIN KETONE



Turbochrom Method File E:\Methods\GTOX101509.mth

Printed by manager on: 10/16/09 10:11:28 Created by manager on: 10/16/09 09:50:39 Edited by manager on: 10/16/09 10:11:26

Number of Times Edited

Number of Times Calibrated: 118 Description: TOXAPHENE CALIBRATION

Global Sample Information

Default Sample Volume 1.000 uL Quantitation Units ng 0.000 min Void Time Correct amounts during calibration No Convert unknowns to concentration units : Reject outliers during calibration No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

TOX-1

Single Peak Component Сотропелt Туре

Retention Time 9.979 min Search Window

1.04 s, 0.00 %

Reference Component Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3: 0.000000

Value 4: 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
4	0.1000	11792.44	1479.49			1
2	1.0000	146558,98	16148.13			1
1	2.0000	269724.22	29949,64			1
3	0.5000	58644.07	8720.23			1
5	0.0500	6851.97	953.78		**********	1

Average Calibration Factor = 130734.597822 (%RSD = 9.77)

Single Peak Component Component Type

Retention Time 11.035 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level I	Vame Amo	unt Are	a Heigh	t ISTD Am	t. ISTD Resp.	# Replicates
4	0.10	000 2221	7.74 2800.	79		1
2	1.00	000 24656	1.06 30114.	35		1
1 .	2.00	000 47942	3.15 58350.3	22		1
3	0.50	000 12488	3.89 15214.0	55 ———		1
5	0.05	500 1259	2.73 1561.8	84		1

Average Calibration Factor = 242015.078548 (%RSD = 4.96)

TOX-3

Component Type : Single Peak Component

Retention Time 11.435 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100,0000% User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
4	0.1000	31198.14	4903.89			
2	1.0000	340022.32	48512.69			1
1	2.0000	657957.59	92155.63			1
3	0.5000	175200.94	25693.84			1
5	0.0500	17161.86	2692.45			1

Average Calibration Factor = 334924.341390 (%RSD = 4.47)

TOX-4

Component Type : Single Peak Component

Retention Time : 12.177 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	#Replicates
	0.+000	24104.84	2072.60			
4						1
2	1.0000	242796.69	41235.53			1
1	2.0000	482982.36	80427.10			1
3	0.5000	120290.98	20865.84			1
5	0.0500	11091.10	2048.95			1

Average Calibration Factor = 231547.979231 (%RSD = 6.19)

TOX-5

Component Type : Single Peak Component

Retention Time : 13.082 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label : Value 1 : 0,000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
4	0.1000	18911.06	3889.51			1
2						i
1	2.0000	447095.67	81004.81			i
3	0.5000	112204.55	21245.16			1
5	0.0500	9797.63	2046.02		***********	1

Average Calibration Factor = 211768.670936 (%RSD = 8.38)

Calibration Replicate Lists Component: TOX-1 Level: 4

Area Height Vol Adj Amt ISTD Response ISTD Amount Date 11792.44 1479,49 0.1000 10/16/09 10:11:20 E:\Gtoct09\G101513.rst

Area	Height	Val Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
146558.98	16148.13	1.0000		**********	10/16/09	10:11:19	E:\Gtoct09\G101511.rs
Level : 1 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
269724.22	29949.64	2.0000		***********	10/16/09	10:11:19	E:\Gtoct09\G101510.rs
Level : 3 Area		ol Adj Amt IS	TD Response IS	STD Amount	Date	Time	File
58644.07 8	720.23	0.5000		10	0/16/09 10	0:11:19 E:	:\Gtoct09\G101512.rst
Level : 5 Area He		Adj Amt !ST0	Response ISTI	D Amount Da	ate Tir	пе	File
	53.78	0.0500		10/1	6/09 10:1	1:20 E:\G	itoct09\G101514.rst
Component Level	: 4						
Area -	Height V	ol Adj Amt IS	TD Response IS	STD Amount	Date	Time ————	File
22217.74 2	2800.79	0.1000 —		10	0/16/09 10	D:11:20 E:	:\Gtocl09\G101513.rst
Level : 2 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
246564.06	30114.35	1.0000			10/16/09	10:11:19	E:\Gtoct09\G101511.rs
Level : 1 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
179423.15	58350.22	2.0000			10/16/09	10:11:19	E:\Gtoct09\G101510.rd
Level : 3 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
124883.89	15214.65	0.5000			10/16/09	10:11:19	E:\Gtoct09\G101512.rs
Level : 5 Area		ol Adj Amt IS	TD Response IS	STD Amount	Date	Time	File
12592.73 1	561.84	0.0500		10	0/16/09 10	D:11:20 E:	:\Gtoct09\G101514.rst
Component Level	t : TOX-3 : 4						
		ol Adj Amt IS	TD Response IS	STD Amount	Date	Time	File
31198.14 4	903.89	0.1000 —		 16	0/16/09 10	0:11:20 E:	:\Gtact09\G101513.rst
Level : 2 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
340022.32	48512.69	1.0000			10/16/09	10:11:19	E:\Gtoct09\G101511.rs
Level : 1 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
657957.59	92155.63	2.0000			10/16/09	10:11:19	E:\Gtoct09\G101510.rs
Level: 3			ICTO D	IOTO A		_	
Area			ISTD Response			Time 10:11:19	File E:\Gtoct09\G101512.rs
175200.94							= .= = = =
175200.94 Level : 5	.						
		ol Adj Amt IS	TD Response IS	STD Amount	Date	Time	Fíle

Component : TOX-4 Level : 4

10/16/09 10:11:28 Method: E:\Methods\GTOX101509.mth

Area	Height	VOI AUJ AINT IS	TD Response	ISTU Amount	Date	Time	File
21104.81	3872.60	0.1000 —		1	0/16/09 1	0:11:20 E	:\Gtoct09\G101513.rst
Level : Area		Vol Adj Amt	ISTD Respons	e ISTD Amount	Date	Time	File
242796.69	41235.5	3 1.0000		*******	10/16/09	10:11:19	E:\Gtoct09\G101511.rs
Level : Area		Vol Adj Amt	ISTD Respons	e ISTD Amount	Date	Time	File
182982.36	80427.1	0 2.0000			10/16/09	10:11:19	E;\Gtoct09\G101510.rs
Level : Area		Vol Adj Amt	ISTD Respons	e ISTD Amount	Date	Time	File
120290.98	20865.8	4 0.5000		***************************************	10/16/09	10:11:19	E:\Gtoct09\G101512.rs
Level : Area		Vol Adj Amt IS	TD Response	ISTD Amount	Date	Time	File
11091.10	2048.95	0.0500		 1	0/16/09 1	0:11:20 E	:\Gtoct09\G101514.rst
	nt : TOX- : 4	5		1		0:11:20 E	:\Gtoct09\G101514.rst
Componer Level Area	nt : TOX- : 4 Height	5	TD Response	ISTD Amount	Date	Time	
Level	nt : TOX- : 4 Height 3889.51	5 Vol Adj Amt IS 0.1000	TD Response	ISTD Amount	Date	Time	File
Componer Level Area 18911.06 Level : Area	nt : TOX- : 4 Height 3889.51	5 Vol Adj Amt IS 0.1000 Vol Adj Amt	ISTD Response	ISTD Amount 1	Date 0/16/09 1 Date	Time	File :\Gtoct09\G101513.rst File
Componer Level Area 18911.06 Level : Area	nt : TOX- : 4 Height 3889.51 2 Height 7 41605.5	5 Vol Adj Amt IS 0.1000 Vol Adj Amt 9 1.0000	ISTD Response	ISTD Amount 1	Date Date 10/16/09	Time	File :\Gtoct09\G101513.rst
Componer Level Area 18911.06 Level: Area 225823.17 Level: Area	nt : TOX- : 4 Height 3889.51 2 Height 7 41605.5	5 Vol Adj Amt IS 0.1000 Vol Adj Amt 9 1.0000 Vol Adj Amt	ISTD Response	e ISTD Amount	Date Date D	Time 0:11:20 E Time 10:11:19 Time	File ::\Gtoct09\G101513.rst File E:\Gtoct09\G101511.rs
Componer Level Area 18911.06 Level: Area 225823.17 Level: Area	nt : TOX- : 4 Height 3889.51 2 Height 7 41605.5 1 Height 7 81004.8	5 Vol Adj Amt IS 0.1000 Vol Adj Amt 9 1.0000 Vol Adj Amt 1 2.0000	ISTD Response	e ISTD Amount	Date 0/16/09 1 Date 10/16/09 Date 10/16/09	Time 0:11:20 E Time 10:11:19 Time	File :\Gtoct09\G101513.rst File E:\Gtoct09\G101511.rs
Componed Level : Area : 18911.06 Level : Area : 147095.67 Level : Area :	nt : TOX- : 4 Height 3889.51 2 Height 7 41605.5 1 Height 7 81004.8	5 Vol Adj Amt IS 0.1000 Vol Adj Amt 9 1.0000 Vol Adj Amt 1 2.0000 Vol Adj Amt	ISTD Response	e ISTD Amount	Date Date 10/16/09 1 1 1 1 1 1 1 1 1	Time 0:11:20 E Time 10:11:19 Time 10:11:19	File File E:\Gtoct09\G101513.rst File E:\Gtoct09\G101511.r. File E:\Gtoct09\G101510.rst

Turbochrom Method File E:\Methods\GCL101509.mth

Printed by : manager on: 10/16/09 10:12:44 Created by manager on: 10/16/09 09:50:21 Edited by manager on: 10/16/09 10:12:42

Number of Times Edited Number of Times Calibrated: 56 Description: CHLORDANE CALIBRATION

Global Sample Information

Default Sample Volume 1.000 uL Quantitation Units ng 0.000 min Void Time Correct amounts during calibration Yes Convert unknowns to concentration units Yes Reject outliers during calibration No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

CHLOR-TECH-1

Component Type Single Peak Component

Retention Time ; 7.080 min Search Window 1.04 s, 0.00 % Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

L	evel Name	Amount	Area	Height	ISTO Amt.	ISTD Resp.	# Replicates
_							
1		0.5000	137052.01	40285.02			1
2		0.2000	57066.75	16897.03			1
3		0.0500	15004.19	4470.15			1

Average Calibration Factor = 286507.220371 (%RSD = 4.55)

CHLOR-TECH-2

Component Type : Single Peak Component

Retention Time 8.150 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 ; 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	182919.79	46231.26			1
2	0.2000	80213.76	20713.63			1
3	0.0500	20583.64	5703.26			1

Average Calibration Factor = 392860.427919 (%RSD = 6.11)

CHLOR-TECH-3

Component Type Single Peak Component

Retention Time 9,395 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

```
Calibration Level
 Level Name Amount
                                 Height
                                          ISTD Amt. ISTD Resp. # Replicates
              0.5000 461936.47 115976.73
              0.2000 190348.99
                                48922.50 -----
              0.0500 49584.91
                                12763.15 ----
 Average Calibration Factor = 955771,998700 (%RSD = 3.57)
CHLOR-TECH-4
                      : Single Peak Component
 Component Type
 Retention Time
                        9.662 min
                        1.04 $, 0.00 %
 Search Window
 Reference Component :
 Find peak closest to expected RT in window
 Use Average Calibration Factor (Area / Amount)
 Component standard purity percentage: 100.0000%
 User Values
   Label
   Value 1 : 0.000000
   Value 2:
            0.000000
   Value 3 : 0.000000
   Value 4 : 0.000000
   Value 5 : 0.000000
 Calibration Level
                                          ISTD Amt. ISTD Resp. # Replicates
 Level Name Amount
                        Area
                                 Height
              0.5000 754066.84 150259.80
 2
              0.2000 313796.97
                                 63596.45
 3
              0.0500 81044.16
                                 16640.69
 Average Calibration Factor = 1.566001e+06 (%RSD = 3.60)
CHLOR-TECH-5
 Component Type
                      : Single Peak Component
                      : 11.299 min
  Retention Time
 Search Window
                        1.04 s, 0.00 %
 Reference Component:
 Find peak closest to expected RT in window
 Use Average Calibration Factor (Area / Amount)
 Component standard purity percentage: 100.0000%
 User Values
   Label
   Value 1 : 0.000000
   Value 2 : 0.000000
   Value 3 : 0.000000
   Value 4 : 0.000000
   Value 5 : 0.000000
 Calibration Level
 Level Name Amount
                        Area
                                 Height
                                         ISTD Amt. ISTD Resp. # Replicates
              0.5000 125789.24 32951,08
                      52060.22 13779.60
 3
              0.0500
                      13228.27 3529.88 -
 Average Calibration Factor = 258815.020271 (%RSD = 2.56)
Calibration Replicate Lists
  Component : CHLOR-TECH-1
   Level
            Height Vol Adj Amt ISTD Response ISTD Amount
                                                                                      File
  Area
                                                              Date
                                                                      Time
137052.01 40285.02
                        0.5000 ---
                                                            10/16/09 10:12:37 E:\Gtoct09\G101515.rst
 Level
           Height Vol Adj Amt ISTD Response ISTD Amount
  Area
                                                             Date
                                                                     Time
                                                                                     File
57066.75 16897.03
                       0.2000
                                                           10/16/09 10:12:37 E:\Gtoct09\G101516.rst
 Level: 3
          Height Vol Adj Amt ISTD Response ISTD Amount
                                                           Date
                                                                                    File
  Area
                                                                    Time
                      0.0500 -----
15004.19 4470.15
                                                          10/16/09 10:12:38 E:\Gtoct09\G101517.rst
Component: CHLOR-TECH-2
  Level
            Height Vol Adj Amt ISTD Response ISTD Amount
                                                                                       File
   Area
182919.79 46231.26
                         0.5000 -----
                                                            10/16/09 10:12:37 E:\Gtoct09\G101515.rst
```

10/10/09	10.12.44 19	ieruoo. c./wier	HOUS/GCE TO 150	ามสา.เยเ			
Level :		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
80213.76	20713.63	0.2000	**-**		10/16/09	10;12;37	E:\Gtoct09\G101516.rst
Level : Area		Vol Adj Amt 1	STD Response	ISTD Amount	Date	Time	File
20583.64	5703.26	0.0500 -			10/16/09	10:12:38	E:\Gtoct09\G101517.rst
Compone Level Area	int : CHLC : 1 Height	OR-TECH-3 Vol Adj An	nt ISTD Respon	ise ISTD Amou	unt Date	Time	File
461936.4	7 115976,	73 0.500	0		10/16/0	09 10:12:3	37 E:\Gtoct09\G101515.rst
Level :		Vol Adj Am	ISTD Respons	e ISTD Amour	nt Date	Time	File
190348.99	9 48922.50	0.2000	*******		10/16/09	10:12:37	7 E:\Gtoct09\G101516.rst
Level : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
49584,91	12763.15	0.0500		Allenhersone	10/16/09	10:12:38	E:\Gtoct09\G101517.rst
Compone Level Area	: 1	PR-TECH-4 Vol Adj An	nt ISTD Respon	se ISTD Amou	ınt Date	Time	File
754066.84	4 150259,8	30 0.500	0 ——	***************************************	10/16/0	9 10:12:3	37 E:\Gtoct09\G101515.rst
Level :	Height		ISTD Respons	e ISTD Amour	nt Date	Time	File
313796.97	7 63596.45	0.2000	***************************************		10/16/09	10:12:37	E:\Gtoct09\G101516.rst
Level : Area			ISTD Response	ISTD Amount	Date	Time .	File
81044.16	16640.69	0.0500	**********		10/16/09	10:12:38	E:\Gtoct09\G101517.rst
Compone Levei Area	: 1	R-TECH-5	ISTO Deserve	- ICTD 4			
		· ———	ISTD Respons	e ISTU Amoun		Time	File
123709.22	1 32951.08	0.5000		~~~~~~ ~	10/16/09	10:12:37	' E:\Gtoct09\G101515.rst
Level : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
52060.22	13779.60	0.2000			10/16/09	10:12:37	E:\Gtoct09\G101516.rst
Level : Area		/ol Adj Amt IS	STD Response	ISTD Amount	Date	Time	File
13228.27	3529.88	0.0500			10/16/09 1	0:12:38 É	:\Gtoct09\G101517.rst

AFCEE ORGANIC ANALYSES DATA SHEET 3 INITIAL MULTIPOINT CALIBRATION

Analytical Method:

SW8081A

AAB#:

<u>18548</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

GCGT 57H

Date of Initial Calibration:

15-Oct-09

Initial Calibration ID:

<u>1652</u>

Concentration Units:

ug/mL

SEE ATTACHED INITIAL CALIBRATION

Comments:		

AFCEE FORM 0-3

QAPP 4.0 Page 1 of 1

INITIAL CALIBRATION

INSTRUMENT: HP5890-GT (GCGT-57H)

COLUMN: RTX-CLP2

SEQUENCE: GT101509

<u>Pesticides</u>

Turbochrom Method File E:\Methods\HAB101509.mth

Printed by : manager on: 10/16/09 10:17:58 Created by : manager on: 10/16/09 09:49:07 Edited by : manager on: 10/16/09 10:17:55

Number of Times Edited Number of Times Calibrated: 94

Description: INDIV.AB PEST CALIBRATION

Global Sample Information

Default Sample Volume 1.000 uL Quantitation Units ng 0.000 min Vaid Time Correct amounts during calibration Yes Convert unknowns to concentration units: Yes Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

2,4,5,6-TCMX

Component Type Single Peak Component

Retention Time 5.419 min : 1.04 s, 0.00 %

Search Window Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 1.000000 Value 2: 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	7445.00	4000.40			
_						1
5	0.0050	14389.76	3824.62		**********	1
4	0.0100	30386.62	7881.12			1
3	0.0200	61496.47	16057.82	*************		1
2	0.0400	125209.97	32725.83	**********		1
1	0.0800	266196.84	67207.41			1

Average Calibration Factor = 3.071064e+06 (%RSD = 4.97)

ALPHA-BHC

Component Type : Single Peak Component

Retention Time : 6.724 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 2nd Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression; 1

Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt,	ISTD Resp.	#Replicates
_						
6						1
5	0.0050	13480.58	3990.78			1
4	0.0100	24541.19	7329.31		***************************************	1
3	0.0200	55789.05	17172.42		********	1
2	0.0400	128145.45	40221.15			1
1	0.0800	307507.98	93816.38			1

Calibration Curve : $y = (-696.380029) + (2534699.367313)x + (16502733.724006)x^2 + (0.000000)x^3$

: 0.999904 R-squared

LINDANE

Component Type : Single Peak Component : 7.518 min

Retention Time Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 2nd Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000

Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
6	0.0024	6265.80	1853.13			1
5						1
4	0.0100	24689.54	7520.08			i
3	0.0200	55578.61	17346.18			1
2	0.0400	123870.91	38919.55		***************************************	i
1	0.0800	285288.50	87458.76			1

Calibration Curve : $y = (-727.691945) + (2604034.000593)x + (12167429.943378)x^2 + (0.000000)x^3$

: 0.999891

B-BHC

: Single Peak Component Component Type

Retention Time : 7.703 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt,	ISTD Resp.	# Replicates
6	0.0024	4658.77	1359.83			1
5	0.0050	10069.40	2947.50			<u> </u>
4	0.0100	17989,21	5250.73	***************************************		ì
3	0.0200	38476.58	11280.86	****		1
2	0.0400	78888.39	22944.98			1
1	0.0800	164531.58	46713.28			í

Average Calibration Factor = 1.951106e+06 (%RSD = 4.56)

D-BHC

Component Type : Single Peak Component

Retention Time : 8.365 min Search Window 1.04 s, 0.00 %

Reference Component : Find peak closest to expected RT in window

Calibrating Area versus Amount using a 2nd Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100,0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
6	0.0024	5646.41	1689.57			1
5	0.0050	12364.10	3724.12			1
4	0.0100	22335.49	6889.32			1
3	0.0200	50486.71	16060.93			1
2	0.0400	114118.85	36895.88			1
1	0.0800	269208.01	84711.28			1

Calibration Curve: $y = (-518.412202) + (2315220.763318)x + (13229102.124131)x^2 + (0.000000)x^3$

R-squared : 0.999903

HEPTACHLOR

Component Type

: Single Peak Component

Retention Time

8.439 min

Search Window

: 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	6685.39	1936.06			1
5	0.0050	14638.15	4138.86			1
4	0.0100	25909.33	7314.00			1
3	0.0200	53922.76	15304,23			1
2	0.0400	108079.91	30968.08			1
1	0.0800	221633 52	63471.98			1

Average Calibration Factor = 2.745449e+06 (%RSD = 4.11)

ALDRIN

Component Type

: Single Peak Component

Retention Time

9.218 min

Search Window Reference Component:

1.04 s, 0.00 %

Find peak closest to expected RT in window

Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Labe!

Value 1 : 0,000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	#Replicates
6	0.0024	6422.38	1889.66			
5	0.0050	13857.77	4043.72			1
4	0.0100	24972.49	7316.99			1
3	0.0200	53734.61	15977.08			1
2	0.0400	115861,22	34948.28			1
1	0.0800	260926.74	78080.69			1

Average Calibration Factor = 2.798274e+06 (%RSD = 9.36)

HEPTACHLOR EPOXIDE

Component Type

Single Peak Component 10,514 min

Retention Time Search Window

1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	6948.85	2011.92			1
5	0.0050	14877.79	4300.70			1
4	0.0100	26433.71	7570.42	************************	***************************************	1
3	0.0200	55710.35	16275.20			1
2	0.0400	114280.35	33653,75			1
1	0.0800	244793.97	71587.56			1

Average Calibration Factor = 2.869456e+06 (%RSD = 5.09)

G-CHLORDANE

: Single Peak Component

Component Type Retention Time

: 10.928 min

Search Window

: 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Агеа	Height	ISTD Amt,	ISTD Resp.	# Replicates
6	0.0024	7536,00	2157.12		************	1
5	0.0050	16081.08	4643.96		***************************************	1
4	0.0100	28588.79	8242.02	***************************************	***********	1
3	0.0200	61123.18	17807.14			1
2	0.0400	127381.88	37521.85			1
1	0.0800	279872.99	81015.00			1

Average Calibration Factor = 3.159035e+06 (%RSD = 6.64)

A-CHLORDANE

: Single Peak Component Component Type

Retention Time : 11.257 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100,0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	7504.29	2176.17			1
5						1
4						1
3	-					1
2						1
1	0.0800	282399.06	81954.26			1

Average Calibration Factor = 3.178023e+06 (%RSD = 6.79)

ENDOSULFAN I

Component Type : Single Peak Component

Retention Time : 11.394 min

Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0,000000

10/16/09 10:17:58 Method: E:\Methods\HAB101509.mth

Calibration Level Level Name Amount Height ISTD Amt. ISTD Resp. # Replicates Area 6 0.0024 6696.91 1899.93 --0.0050 14373.32 4086 48 ------5 4 0.0100 25446.15 7216.16 -0.0200 54267.46 15603.40 3 0.0400 112131.30 32550.11 --2

Average Calibration Factor = 2.794718e+06 (%RSD = 5.92)

4-4-DDE

Component Type : Single Peak Component

Retention Time 11.629 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 2nd Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values

Labei

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	13031.76	3702.54		*************	1
5	0.0100	28208.70	8087.26			1
4	0.0200	51512.01	14901.75			1
3	0.0400	117626.95	34851.01			1
2	0.0800	260779.79	76852.26			1
1	0.1600	585134.65	164835.57			1

Calibration Curve : $y = (-2915.182039) + (2849594.523883)x + (5179274.389108)x^2 + (0.000000)x^3$ R-squared : 0.999833

R-squared

DIELDRIN

Component Type : Single Peak Component

Retention Time : 12.009 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.900000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	12162.31	3476.26			
5	0.0100	26396.73	7560.80			1
4	0.0200	47367.93	13636.39			1
3	0.0400	105449.02	30839.55			1
2	0.0800	226016.83	66425.65			1
1	0.1600	491219.53	140268.24			1

Average Calibration Factor = 2.678907e+06 (%RSD = 9.07)

ENDRIN

Component Type : Single Peak Component

Retention Time : 12.697 min

Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000% User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTO Amt.	ISTD Resp.	# Replicates
		0570.00				
6	0.0048	9573.03	2680.33			1
5	0.0100	20513.41	5784.06			1
4	0.0200	37529.98	10606.87		***************************************	1
3	0.0400	81775.68	23479.14			1
2	0.0800	175653.75	50159.06			1
1	0.1600	383411.45	106344.26			1

Average Calibration Factor = 2.093101e+06 (%RSD = 8.63)

4-4-DDD

Component Type

: Single Peak Component

Retention Time

: 12.928 min

Search Window

: 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window

Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000

Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	10135.94	2701.22			
5	0.0100	21173.15	5862.17			1
4	0.0200	39039.26	10758.69			1
3	0.0400	83143.49	23938.84	***************************************		1
2	0.0800	174539.80	51255.23			1
1	0.1600	372876.83	107449.02			1

Average Calibration Factor = 2.128624e+06 (%RSD = 5.86)

ENDOSULFAN II

Сотролепt Туре

: Single Peak Component

Retention Time : 13,174 min

Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	#Replicates
6	0.0048	12689.26	3496.38			1
5	0.0100	26513.56	7442.83			1
4	0.0200	48519.12	13482.24			1
3	0.0400	103833.28	29649.06			1
2	0.0800	216453,20	61146,99			1
1	0.1600	462082.10	125769.07			1

Average Calibration Factor = 2.651736e+06 (%RSD = 5.67)

4-4-DDT

Component Type : Single Peak Component

Retention Time : 13.623 min

Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	8979.98	2539.98			1
5	0.0100	20254.38	5758.37			1
4	0.0200	37323.11	10714.33	***************************************		1
3	0.0400	84863.34	24209.37		************	1
2	0.0800	179544.78	51388.93			1
1	0.1600	386284.62	108689.78			1

Average Calibration Factor = 2.090433e+06 (%RSD = 10.31)

ENDRIN ALDEHYDE

Component Type

: Single Peak Component

Retention Time : 13.939 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6						1
5	0.0100	24834.45	6772.52			1
4	0.0200	43308.30	11871.42			1
3	0.0400	93911.22	25368.59			1
2	0.0800	181230.61	48948,09			1
1	0.1600	359108.71	94872.26			1

Average Calibration Factor = 2.327221e+06 (%RSD = 5.38)

ENDOSULFAN SULFATE

Component Type : Single Peak Component

Retention Time : 14.555 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100,0000%

User Values Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
6	0.0048	11533.41	3255.04	***************************************		1
5	0.0100	24568.34	6972.94	*****		1
4	0.0200	43672.36	12317.74			1
3	0.0400	95052.90	27167.91			1
2	0.0800	202371.43	55339.71			1
1	0.1600	428401.26	114110.27			1

Average Calibration Factor = 2.437786e+06 (%R\$D = 6.76)

METHOXYCHLOR

Component Type : Single Peak Component

Retention Time : 15.168 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000% User Values Label :

> Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0240	27134.19	7553.54			1
5	0.0500	57940.68	16342.46			1
4	0.1000	103376.62	29061.78			1
3	0.2000	212513.83	59541.57			1
2	0.4000	410873.18	112332.72			1
1	0.8000	788336.31	212393.73			1

Average Calibration Factor = 1.066391e+06 (%RSD = 6.20)

ENDRIN KETONE

Component Type : Single Peak Component

Retention Time : 15.767 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0048	13905.17	3819.90			1
5	0.0100	30623.03	8399.29			1
4	0.0200	55165.82	15318.98			1
3	0.0400	124691.84	34241.86			1
2	0.0800	258888.47	70368.98		*************	1
1	0.1600	532467.80	139151.36			1

Average Calibration Factor = 3.066471e+06 (%RSD = 6.89)

DECACHLOROBIPHENYL

Component Type : Single Peak Component

Retention Time : 18.816 min Search Window : 1.20 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window
Use Average Calibration Factor (Area / Amount)
Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 1.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
6	0.0024	10153.51	2125.50			1
5	0.0050	20009.32	4146.47			1
4	0.0100	41203.77	8315.50			1
3	0.0200	81550.33	16287.50			1
2	0.0400	156951.08	30826.48			1
1	0.0800	322975.51	61956.61			1

Average Calibration Factor = 4.065226e+06 (%RSD = 2.59)

Calibration Replicate Lists Component: 2,4,5,6-TCMX

Level 6

Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File

7145.36 1903.12 0.0024 ——— 10/16/09 10:16:06 E:\Gtoctlog\H101509.rst

Area			ethods\HAB1015 ISTD Response		Date	Time	File
14389.76	3824.62	0.0050	******		10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level :		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
30386.62	7881.12	0.0100			10/16/09	10:16:05	E:\Gtoct09\H101507.rst
Level : Area		Vol Adj Am	at ISTD Respons	e ISTD Amoun	t Date	Time	File
31496.47	16057.8	2 0.020	0	*****	10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level : Area		nt Vol Adj A	mt ISTD Respon	se ISTD Amou	int Date	Time	File
125209.97	32725.	83 0.04	00		10/16/0	09 10:16:0	4 E:\Gtoct09\H101505.rs
Level : Area		nt Vol Adj A	rnt ISTD Respon	se ISTD Amou	int Date	Time	File
266196.84	67207.	41 0.08	00		10/16/0	09 10:16:0	3 E:\Gtoct09\H101504.rs
Compone Level	: 6		10 73 B	1075			E-1
Area 			ISTD Response			Time	File :\Gtoct09\H101509.rst
0700.01	1802.04	0.0024			10,10,00	10.10.00	
Level : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
13480.58	3990.78	0.0 05 0			10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
 24541.19	7329.31	0.0100		***************************************	10/16/09	10:16:05	E:\Gtoct09\H101507.rst
	_						
Level : Area		Vol Adj An	nt ISTD Respons	e ISTD Amour	nt Date	Time	File
55789.05	17172.4	2 0.020	0 ——		10/16/0	9 10:16:04	E:\Gtoct09\H101506.rst
Level : Area		nt VolAdjA	mt ISTD Respon	ise ISTD Amou	unt Date	. Time	File
128145.4	5 40221	.15 0.04	00		10/16/	09 10:16:0	94 E:\Gtoct09\H101505.rs
Level : Area	1 Heigt	nt Vol Adi A	mt ISTD Respon	ıse ISTD Amoı	unt Date	. Time	File
307507.9	- 		.00				23 E:\Gtoct09\H101504.rs
Compone	ont : IINI	DANE					
Level Area	: 6		ISTD Response	ISTD Amount	Date	Time	File
6265.80	1853.13	0,0024			10/16/09	10:16:06 E	E:\Gtoct09\H101509.rst
Level :		Vol Adi Ami	ISTO Bossons	ISTD Amount	Date	Time	File
Area 13612.86			ISTD Response			Time 10:16:05	E:\Gtoct09\H101508.rst
Level :	4						
Area		Vol Adj Am	ISTD Response	STD Amount	Date	Time	File
24689.54	7520.08	0.0100)		10/16/09	10:16:05	E:\Gtoct09\H101507.rst

Area Hei		Amt ISTD Re			Date	Time	File
55578.61 1734	6.18 0.0	0200			10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level : 2 Area He	eight Vol Ar	dj Amt ISTD F	Response	ISTD Amour	t Date	Tîme	File
123870.91 389	19.55 0	0.0400	=		10/16/09	10:16:04	E:\Gtoct09\H101505.rs
Level : 1 Area He	eight Vol A	dj Amt ISTD F	Response	ISTD Amour	it Date	Time	File
285288.50 874	58.76 0	.0800	-		10/16/09	10:16:03	E:\Gtoct09\H101504.rs
Component : E Level : 6 Area Heigh	3	mt ISTD Resp	oonse IS	TD Amount	Date	Time	File
4658.77 1359.8	3 0.00	24		1	0/16/09 10):16:06 E:	\Gtoct09\H101509.rst
Level : 5 Area Heig	jht Vol Adj	Amt ISTD Re	sponse IS	STD Amount	Date	Time	File
10069,40 2947	.50 0.0	050		**************************************	10/16/09	10:16:05 E	E:\Gtoct09\H101508.rst
Level : 4 Area Hei	jht Vol Adj	Amt ISTD Re	sponse IS	STD Amount	Date	Time	File
17989.21 5250	.73 0,0	100			10/16/09	10:16:05 E	E:\Gtoct09\H101507.rst
Level : 3 Area Hei	ght Vol Ad	Amt ISTD R	esponse	ISTD Amount	Date	Time	File
38476.58 1128	0.86 0.	0200			10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level : 2 Area Hei	ght Vol Adj	j Amt ISTD R	esponse	ISTD Amount	Date	Time	File
78888.39 2294	4.98 0.	0400			10/16/09	10:16:04	E:\Gtoct09\H101505.rst
Level : 1 Area Hi	aight Vol A	dj Amt ISTD i	Response	ISTD Amour	nt Date	Time	File
164531.58 467	13.28	0.0800	_		10/16/0	9 10:16:03	3 E:\Gtoct09\H101504.rs
Component : I	5						
		mt ISTD Res	ponse IS			Time	File
5646.41 1689.	37 0.00	24		,	OVIDADA H	J:16:06 E:	\Gtoct09\H101509.rst
Level : 5 Area Heig	ht Vol Adj	Amt ISTO Re	sponse 18	STD Amount	Date	Time	File
12364.10 3724	.12 0.0	050			10/16/09	10:16:05 E	E:\Gtoct09\H101508.rst
Level : 4 Area Hei	ght Vol Adj.	Amt ISTD Re	sponse (S	STD Amount	Date	Time	File
22335.49 6889	.32 0.0	100			10/16/09	10:16:05 E	E:\Gtoct09\H101507.rst
Level : 3 Area Hei	ght Vol Ad	j Amt ISTD R	esponse	ISTD Amount	Date	Time	File
50486.71 1606		0200 ——				10:16:04	E:\Gtoct09\H101506.rst
Level : 2 Area H	eight Vol A	dj Amt ISTD I	Response	ı ISTO Amou	nt Date	Time	File
114118.85 368	95.88 (0.0400	**		10/16/0	9 10:16:04	E:\Gtoct09\H101505.n

Area			ol Adj Amt						
269208.0	1 84711.	.28	0.0800				10/16/0	9 10:16:0	3 E:\Gtoct09\H101504.
Compone	ent : HEF	PTAC	HLOR						
Level Area	: 6 Height	Vol A	dj Amt IS	TD Respor	nse IS	TD Amount	Date	Time	File
6685.39	1936.06	(0.0024				10/16/09	10:16:06 E	E:\Gtoct09\H101509.rst
Level : Area		Vol	Adj Amt II	STD Respo	onse l	STD Amount	Date	Time	File
14638.15	4138.86	3	0.0050 -				10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level : Area		Vol.	AdjAmt I	STD Respo	onse l	STD Amount	Date	Time	File
25909.33	7314.00)	0.0100 -				10/16/09	10:16:05	E:\Gtoct09\H101507.rst
Level : Area		: Vo	Adj Amt	ISTD Res	ponse	ISTD Amour	it Date	Time	File
53922.76	15304.2	23	0.0200				10/16/09	10:16:04	E:\Gtoct09\H101506.rs
Level :									
Area	_ 				sponse	STD Amou			
108079.9	1 30968	.08	0.0400				10/16/0	09 10:16:0	04 E:\Gtoct09\H101505.
Level :	1								
Area		nt V	ol Adj Ami	ISTD Re	sponse	e ISTD Amou	int Date	Time	File
			•	ISTD Re	sponse			-	File 03 E:\Gtoct09\H101504.
221633.5	Heigl 52 63471 ent : ALC : 6	.98 .98 DRIN	0.0800		<u>·····</u>	STD Amount		-	
221633.5 Compone Level Area	Heigl 62 63471 ent : ALC : 6 Height	.98 ORIN Vol A	0.0800	TD Respon	<u>·····</u>	TD Amount	10/16/0	709 10:16:0	E:\Gtoct09\H101504.
221633.5 Compone Level Area	Height: ALC : 6 Height 1889.66	ORIN Vol A	0.0800 dj Amt IS 0.0024 —	TD Respon	nse IS	TD Amount	10/16/0 Date 10/16/09	709 10:16:0	3 E:\Gtoct09\H101504.
Compone Level Area 6422.38 Level :	Height: ALC : 6 Height 1889.66	.98 ORIN Vol A	0.0800 dj Amt IS 0.0024 —	TD Respon	nse IS	STD Amount	10/16/0 Date 10/16/09	7ime Time Time	File E:\Gtoct09\H101504.
Compone Level Area 6422.38 Level :	Height : ALC : 6 Height : 1889.66 Height : 4043.72	ORIN Vol A	0.0800 dj Amt IS 0.0024 — Adj Amt I	TD Respon	onse I	STD Amount	10/16/09 Date 10/16/09 Date 10/16/09	7ime Time Time	File E:\Gtoct09\H101504. File File
Component Level Area S422.38 Level: Area 13857.77 Level: Area	Height : ALC : 6 Height : 1889.66 Height : 4043.72	98 DRIN Vol A Vol.	0.0800 dj Amt IS 0.0024 — Adj Amt I	TD Respons	onse I	STD Amount	Date Date 10/16/09 Date 10/16/09	Time 10:16:06 E Time 10:16:05 Time	File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst
221633.5 Compone Level Area 6422.38 Level : Area 13857.77 Level : Area 24972.49	Height : ALC : 6 Height : 1889.66 Height : 4043.72 Height : 7316.99	98 DRIN Vol A Vol. Vol.	0.0800 dj Amt IS 0.0024 — Adj Amt II 0.0050 -	TD Respons	onse I	STD Amount STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09	Time 10:16:05 Time 10:16:05 Time 10:16:05	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst
221633.5 Compone Level Area 6422.38 Level: Area 13857.77 Level: Area 24972.49 Level: Area	Height 1889.66 5 Height 4043.72 4 Height 7316.99	ORIN Vol A Vol.	0.0800 dj Amt IS 0.0024 — Adj Amt II 0.0050 - Adj Amt II 0.0100 -	TD Respons	onse I	STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09	Time 10:16:05 Time 10:16:05 Time 10:16:05	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst
221633.5 Compone Level Area 6422.38 Level: Area 13857.77 Level: Area 24972.49 Level: Area	Height : ALC : 6 Height : 1889.66 Height : 4043.72 Height : 7316.99	ORIN Vol A Vol.	0.0800 dj Amt IS 0.0024 — Adj Amt II 0.0050 -	TD Respons	onse I	STD Amount STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09	Time 10:16:05 Time 10:16:05 Time 10:16:05	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst
221633.5 Compone Level Area 6422.38 Level: Area 13857.77 Level: Area 24972.49 Level: Area	Height 1889.66 5 Height 4043.72 4 Height 7316.99 3 Height 15977.0	ORIN Vol A Vol. Vol. Vol.	0.0800 dj Amt IS 0.0024 — Adj Amt II 0.0050 - Adj Amt II 0.0100 -	STD Responsive STD Re	onse I	STD Amount STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09 10/16/09	Time 10:16:05 Time 10:16:05 Time 10:16:05	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File
221633.5 Compone Level Area 3422.38 Level: Area 13857.77 Level: Area 24972.49 Level: Area 53734.61 Level: Area	Height 1889.66 5 Height 4043.72 4 Height 7316.99 3 Height 15977.0	Vol. Vol. Vol. Vol. Vol. Vol. Vol. Vol.	0.0800 dj Amt IS 0.0024 — Adj Amt II 0.0050 - Adj Amt II 0.0100 -	STD Responsive STD Re	onse I	STD Amount STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09 tt Date 10/16/09	Time 10:16:05 Time 10:16:05 Time 10:16:05 Time 10:16:05	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File
221633.5 Compone Level Area 3422.38 Level: Area 13857.77 Level: Area 24972.49 Level: Area 53734.61 Level: Area	Height : ALC : 6 Height : 1889.66	Vol. Vol. Vol. Vol. Vol. Vol. Vol. Vol.	0.08000 dj Amt IS 0.0024 — Adj Amt II 0.0050 - Adj Amt II 0.0100 - I Adj Amt 0.0200	STD Responsive STD Re	onse I	STD Amount STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09 at Date 10/16/09	Time 10:16:05 Time 10:16:05 Time 10:16:05 Time 10:16:04 Time 09 10:16:04	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File E:\Gtoct09\H101506.rst
221633.5 Compone Level Area 6422.38 Level: Area 13857.77 Level: Area 24972.49 Level: Area 115861.2 Level: Area	Height : ALC : 6 Height : 1889.66	Vol Vol	0.0800 dj Amt IS 0.0024 — Adj Amt II 0.0050 - Adj Amt II 0.0100 - I Adj Amt 0.0200	STD Responsions of the second state of the sec	onse I	STD Amount STD Amount STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09 At Date 10/16/09 At Date 10/16/09 Date 10/16/09	Time 10:16:06 E Time 10:16:05 Time 10:16:05 Time 10:16:04 Time 09 10:16:04	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File 6::\Gtoct09\H101506.rst File 4: E:\Gtoct09\H101506.rst
221633.5 Compone Level Area 3422.38 Level: Area 13857.77 Level: Area 24972.49 Level: Area 115861.2 Level: Area 260926.7	Height : ALC : 6 Height : 1889.66	Vol. 2 Vol. 3 Vo	0.0800 dj Amt IS 0.0024 — Adj Amt II 0.0050 - Adj Amt II 0.0100 - I Adj Amt 0.0200 ol Adj Amt 0.0400	STD Responsive STD Re	onse I	STD Amount STD Amount STD Amount	Date 10/16/09 Date 10/16/09 Date 10/16/09 At Date 10/16/09 At Date 10/16/09 Date 10/16/09	Time 10:16:06 E Time 10:16:05 Time 10:16:05 Time 10:16:04 Time 09 10:16:04	File E:\Gtoct09\H101504. File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File 4 E:\Gtoct09\H101506.rs File File File File File File File File File File File

1/1877 70		Vol Adj Am	t ISTD Response	ISTD Amount	Date	Time	File
.+u/1.(8	4300.70	0.0050)		10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level : Area		Vol Adj Am	t ISTD Response	ISTD Amount	Date	Time	File
26433.71	7570.42	0.0109)		10/16/09	10:16:05	E:\Gtoct09\H101507.rst
Level : Area		Vol Adj Ar	nt ISTD Respons	e ISTD Amoun	t Date	Time	File
55710.35	16275.2	0.020	00		10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level : Area		nt Vol Adj A	Amt ISTD Respon	ise ISTD Amou	nt Date	Time	File
114280.3	5 33653.	75 0.0	400		10/16/0	09 10:16:0	4 E:\Gtoct09\H101505.rs
Level : Area		nt Vol Adj /	Amt ISTD Respon	ise ISTD Amou	nt Date	Time	File
244793.9	7 71587.	56 0.0	800		10/16/0	09 10:16:0	3 E:\Gtoct09\H101504.rs
Compone Level Area	: 6	:HLORDANE	STD Response	ISTD Amount	Date	Time	File
7536.00							::\Gtoct09\H101509.rst
Level :	5						
Area		Vol Adj Am	t ISTD Response	ISTD Amount	Date	Time	File
16081.08	4643.96	0.005	0		10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level : Area		Vol Adj Am	nt ISTD Response	ISTD Amount	Date	Time	File
28588.79	8242.02	0.010	0		10/16/09	10:16:05	E:\Gtoct09\H101507.rst
Level : Area		: Vol Adj A	mt ISTD Respons	se ISTD Amoun	t Oate	Time	File
Area	Height		mt ISTD Respons	SE ISTD Amoun			
Area	Height 17807.1	4 0.02	<u> </u>		10/16/09	9 10:16:04	
Area 61123.18 Level :	Height 17807.1 2 Heigh	4 0.02	00		10/16/09	9 10:16:04 Time	E.\Gtoct09\H101506.rst
Area 61123.18 Level : Area 127381.8 Level :	Height 17807.1 2 Height 8 37521.	4 0.02	Amt ISTD Respon	nse ISTD Amou	10/16/09 int Date 10/16/9	9 10:16:04 Time 99 10:16:0	E.\Gtoct09\H101506.rst
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Area 61123.18 Level: Area 127381.8 Level: Area 279872.9 Compone	Height 17807.1 2 Height 8 37521. 1 Height 9 81015. ent : A-C : 6 Height	4 0.02 nt Vol Adj . 85 0.0 nt Vol Adj . 00 0.0 CHLORDANE	Amt ISTD Respon 400 Amt ISTD Respon 800	nse ISTD Amou	10/16/04 Int Date 10/16/4 Int Date 10/16/4 Oate	9 10:16:04 Time 09 10:16:0 Time 09 10:16:0 Time	File ### E:\Gtoct09\H101506.rst File ### E:\Gtoct09\H101505.rs File #### E:\Gtoct09\H101504.rs
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Area 61123.18 Level: Area 127381.8 Level: Area 279872.9 Compone Level Area 7504.29 Level:	Height 17807.1 2 Height 8 37521. 1 Height 9 81015. ent: A-C: 6 Height 2176.17	4 0.02 nt Vol Adj . 85 0.0 nt Vol Adj . 00 0.0 CHLORDANE Vol Adj Amt 0.0024	Amt ISTD Respor	nse ISTD Amount	10/16/04 10/16// int Date 10/16// Date 10/16/09 Date	7 Time 7 Time 7 Time 7 Time 7 Time 7 Time 7 Time 7 Time 7 Time 7 Time	File # E:\Gtoct09\H101506.rst File # E:\Gtoct09\H101505.rs File # E:\Gtoct09\H101504.rs File # E:\Gtoct09\H101504.rs
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		VOI AUJ AIIIL	ISTD Response	ISTD Amount	Date	Time	File
31775.18	18126.12	0.0200		*	10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level : Area		Vol Adj Am	I ISTO Response	e ISTD Amount	Date	Time	File
128818.80	38082.43	3 0.0400			10/16/09	10:16:04	E:\Gtoct09\H101505.rst
Level : Area		Vol Adj Am	t ISTD Respons	e ISTD Amount	Date	Time	File
282399.06	81954.26	0.0800)		10/16/09	10:16:03	E:\Gtoct09\H101504.rst
Level	: 6	OSULFAN I	TD Response IS	STD Amount	Date 1	Γime ————————————————————————————————————	File
696.91	1899.93	0.0024 —		10	/16/09 10	:16:06 E:	\Gtoct09\H101509.rst
Level : Area		√olAdjAmtl	STD Response	ISTD Amount	Date	Time	File
14373.32	4086.48	0.0050		1	0/16/09 1	0:16:05 E	:\Gtoct09\H101508,rst
Level : Area 25446.15	Height	Vol Adj Amt - 0.0100 -	STD Response			Time 0:16:05	File E:\Gtoct09\H101507.rst
Level : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
54267.46	15603.40	0.0200			10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level :							
Area		Vol Adi Am	t ISTD Respons	e ISTD Amoun	t Date	Time	File
Area 112131.3			t ISTD Respons	e ISTD Amoun			
	Height0 32550.1	1 0.040	- <u> </u>	Print Reservation on Audient	10/16/09		
112131.30 Level : Area	Height0 32550.1	1 0.040		Print Reservation on Audient	10/16/09	Tirne	E:\Gtact09\H101505.rs
112131.30 Level : Area 243359.6	Height 0 32550.1 1 Height	1 0.040 Vol Adj Arr 1 0.080	it ISTD Respons	Print Reservation on Audient	10/16/09	Tirne	E:\Gtact09\H101505.rs
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Level: Area 243359.6 Compone Level Area 13031.76 Level: Area	Height 0 32550.1 Height 3 69810.7 ent : 4-4-C : 6 Height 3702.54	Vol Adj Am 1 0.080 DE Vol Adj Amt 0.0048	ISTD Response	ISTD Amount	10/16/09 t Date 10/16/09 Date	Time 10:16:06 Time 10:16:06 Time	File File E:\Gtoct09\H101505.rs File E:\Gtoct09\H101504.rs
Level: Area 243359.6 Compone Level Area 13031.76 Level: Area	Height 32550.1 Height 69810.7 ent: 4-4-C Height 3702.54 5 Height 8087.26	Vol Adj Amt 0.0048 Vol Adj Amt 0.0048 Vol Adj Amt 0.00100	ISTD Response	ISTD Amount	10/16/09 t Date 10/16/09 Date 10/16/09 1	Time 10:16:06 Time 10:16:06 Time	File E:\Gtoct09\H101505.rs File E:\Gtoct09\H101504.rs File E:\Gtoct09\H101509.rst File
Level: Area 243359.6 Compone Level Area 13031.76 Level: Area 28208.70 Level: Area	Height 32550.1 Height 69810.7 ent: 4-4-C Height 3702.54 5 Height 8087.26	Vol Adj Amt 0.0048 Vol Adj Amt 0.0048 Vol Adj Amt 0.0100	ISTD Response	ISTD Amount	10/16/09 t Date 10/16/09 Date 10/16/09 1	Time 10:16:06 Time 10:16:06 Time 10:16:05 Time	File E:\Gtoct09\H101505.rs File E:\Gtoct09\H101504.rs File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst
Level: Area 243359.6 Compone Level Area 13031.76 Level: Area 28208.70 Level: Area	Height 0 32550.1 Height 3 69810.7 ent : 4-4-C : 6 Height 3702.54 5 Height 0 8087.26 4 Height 14901.75	Vol Adj Amt 0.0048 Vol Adj Amt 0.0048 Vol Adj Amt 0.0100 Vol Adj Amt 0.0200	ISTD Response	ISTD Amount	10/16/09 t Date 10/16/09 Date 10/16/09 Date 10/16/09	Time 10:16:06 Time 10:16:06 Time 10:16:05 Time	File E:\Gtoct09\H101505.rs File E:\Gtoct09\H101504.rs File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst
Level: Area 243359.6 Compone Level Area 13031.76 Level: Area 51512.01 Level: Area	Height 0 32550.1 Height 3 69810.7 ent : 4-4-C : 6 Height 3702.54 5 Height 0 8087.26 4 Height 14901.75	Vol Adj Amt 0.0100 Vol Adj Amt 0.0100 Vol Adj Amt 0.0200 Vol Adj Amt 0.0200	ISTD Response	ISTD Amount	10/16/09 t Date 10/16/09 Date 10/16/09 Date 10/16/09 Date	Time 10:16:05 Time 10:16:05 Time 10:16:05 Time 10:16:05	File E:\Gtoct09\H101505.rst File E:\Gtoct09\H101504.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101508.rst File
Level: Area 243359.6 Compone Level Area 13031.76 Level: Area 51512.01 Level: Area	Height 32550.1 Height 369810.7 ent: 4-4-D : 6 Height 3702.54 Height 4 Height 14901.75 Height 14901.75	Vol Adj Amt 0.0100 Vol Adj Amt 0.0100 Vol Adj Amt 0.0200 Vol Adj Amt 0.0200	ISTD Response	ISTD Amount ISTD Amount ISTD Amount ISTD Amount	10/16/09 t Date 10/16/09 Date 10/16/09 Date 10/16/09 10/16/09 10/16/09	Time 10:16:05 Time 10:16:05 Time 10:16:05 Time 10:16:05	File E:\Gtoct09\H101505.rst File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File

Area	Height ———	t Vo	I Adj Amt			— Dan	e Time	File
585134.65	164835.	57	0.1600	*********	***********	10/16	/09 10:16:0	03 E:\Gtact09\H101504.r
Componen Level Area	: 6		lj Amt IST	'D Response	e ISTD Amount	Date	Time	File
12162.31	3476.26	0	.0048			10/16/09	10:16:06 E	E:\Gtoct09\H101509.rst
Level : 5		Vol Ad	li Amt IST	D Response	e ISTD Amount	Date	Time	File
26396.73			.0100					E:\Gtoct09\H101508.rst
Level : 4		Vol A	dj Amt IS	STD Respons	se ISTD Amoun	t Date	Time	File
47367.93	13636.39		0,0200			10/16/09	10:16:05	E:\Gtoct09\H101507.rst
Level : 3 Area		Vol	Adj Amt I	STD Respar	nse ISTD Amou	ınt Date	Time	File
105449.02	30839.5	is	0.0400 -			10/16/0	09 10:16:04	4 E:\Gtoct09\H101506.rs
Level : :		Vol	Adj Amt I	STD Respor	nse ISTD Amou	int Date	Time	File
226016,83	66425.6	 i5	0.0800			10/16/0	9 10:16:04	E:\Gtoct09\H101505.rs
Level : ' Area	Heigh	t Vo	ıl Adj Amt	ISTD Respo	onse ISTD Amo	ount Dat	e Time	File
401210 F2								
491219.00	140268.	.24	0.1600			10/16	/09 10:16:0	03 E:\Gtoct09\H101504.i
Componer Level	nt : END : 6	RIN						
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Componer Level	nt : END : 6 Height \	RIN /ol Adj		O Response	ISTD Amount	Date	Time	
Componen Level Area I	nt : END : 6 Height \ 680.33	RIN /ol Adj 0.0	Amt ISTI	O Response	ISTD Amount	Date 10/16/09	Time	File
Componen Level Area H 9573.03 2	nt : END : 6 Height \ 680.33 5 Height	RIN /ol Adj 0.0	Amt ISTI	D Response	ISTD Amount	Date 10/16/09	Time	:\Gtoct09\H101509.rst
Component Level Area H 9573.03 2 Level : :	nt : END : 6 Height \(\sum_{680.33} \) 5 Height \(\sum_{784.06} \)	RIN /ol Adj 0.0 Vol Ad	Amt IST0	D Response	ISTD Amount	Date Date 10/16/09	Time	File \Gtoct09\H101509.rst
Component Level Area H 9573.03 2 Level : : Area 20513.41 Level : : Area	nt : END : 680.33 5 Height V Height 5784.06 4 Height Height	RIN O.C Vol Ac Vol Ac	Amt IST0	D Response TD Response	ISTD Amount ISTD Amount	Date 10/16/09 Date 10/16/09	Time	File File File E:\Gtoct09\H101508.rst
Component Level Area H 9573.03 2 Level : : Area 20513.41 Level : : Area	nt : END : 6 Height \(\frac{1}{2}\) 680.33 5 Height \(\frac{1}{2}\) 5784.06 4 Height \(\frac{1}{2}\)	Vol Adj	Amt ISTO 0048 dj Amt IST .0100 adj Amt IS 0.0200	D Response	ISTD Amount ISTD Amount	Date Date 10/16/09 10/16/09 10/16/09	Time	File File E:\Gloct09\H101509.rst File E:\Gloct09\H101508.rst File
Component Level	nt : END : 6 Height V :680.33 5 Height 5784.06 4 Height 10606.87 3	RIN O.0 Vol Ac Vol A	Amt ISTO 0048 dj Amt IST .0100 adj Amt IS 0.0200	D Response TD Response	e ISTD Amount	Date 10/16/09 Date 10/16/09 nt Date 10/16/09	Time 10:16:06 E Time 10:16:05 I Time 9 10:16:05 Time	File File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst
Component Level 1: Area 20513.41 Level 1: Area 37529.98 Level 1: Area 37529.98	11 : END : 6 Height V 680.33 5 Height 10606.87 3 Height 23479.14	Vol Ac	Amt ISTE 0048	D Response TD Response	e ISTD Amount	Date 10/16/09 The Date 10/16/09 The Date 10/16/09	Time 10:16:06 E Time 10:16:05 (Time 9 10:16:05 Time 9 10:16:04	File File E:\Gloct09\H101509.rst File E:\Gloct09\H101508.rst File E:\Gtoct09\H101507.rst
Component Level Area 9573.03 2 Level : Area 37529.98 Level : Area 81775.68 Level : Area Area	nt : END : 6 Height V 680.33 5 Height 5784.06 4 Height 10606.87 3 Height 23479.14 2 Height	RIN O.0 Adj O.0 Vol Ac Vol A	Amt ISTE 0048	D Response TD Response STD Response	e ISTD Amount se ISTD Amount se ISTD Amount	Date 10/16/09 10/16/09 10/16/09 10/16/09 10/16/09	Time 10:16:06 E Time 10:16:05 I Time 10:16:05 Time 10:16:05 Time 10:16:04	File File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File E:\Gtoct09\H101506.rst
Component Level Area 9573.03 2 Level : Area 37529.98 Level : Area 81775.68 Level : Area Area	11 : END 16 : 6 Height V 680.33 5 Height 5784.06 4 Height 10606.87 3 Height 23479.14 2 Height 5 50159.0	RIN O.C Vol Ac Vol A Vol A Vol A	Amt ISTE 20048	D Response TD Response STD Response	e ISTD Amount se ISTD Amount se ISTD Amount se ISTD Amoun	Date 10/16/09 10/16/09 10/16/09 10/16/09 10/16/09	Time 10:16:06 E Time 10:16:05 I Time 9 10:16:05 Time 9 10:16:04 Time	File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File E:\Gtoct09\H101506.rst File
Component Level : : : : : : : : : : : : : : : : : : :	11 : END : 6 Height V 680.33 5 Height 5784.06 4 Height 10606.87 3 Height 23479.14 2 Height 50159.0	Vol Adj	Amt ISTI 0048 dij Amt IST 0100 ddj Amt IS 0.0200 Adj Amt IS 0.0400 Adj Amt IS 0.0800	D Response TD Response STD Response	e ISTD Amount se ISTD Amount se ISTD Amount se ISTD Amount	Date 10/16/09 Date 10/16/09 It Date 10/16/09 It Date 10/16/09 It Date 10/16/09 It Date 10/16/09	Time 10:16:06 E Time 10:16:05 (Time 9 10:16:05 Time 9 10:16:04 Time 10:16:04 Time 10:16:04	File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File E:\Gtoct09\H101506.rst File
Component Level Area 9573.03 2 Level :	11 : END : 6 Height V 680.33 5 Height 5784.06 4 Height 10606.87 3 Height 23479.14 2 Height 50159.0	RIN O.0 Vol Ac Vol A Vol A Vol A L Vol A C Vol A C Vol A	Amt ISTI 0048 dij Amt IST 0100 ddj Amt IS 0.0200 Adj Amt IS 0.0400 Adj Amt IS 0.0800	D Response TD Response STD Response STD Response ISTD Response	ISTD Amount ISTD	Date 10/16/09 Date 10/16/09 It Date 10/16/09 It Date 10/16/09 It Date 10/16/09 It Date 10/16/09	Time 10:16:06 E Time 10:16:05 (Time 9 10:16:05 Time 9 10:16:04 Time 10:16:04 Time 10:16:04	File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File E:\Gtoct09\H101506.rst File E:\Gtoct09\H101506.rst
Component Level Area 9573.03 2 Level : Area 37529.98 Level : Area 37529.98 Level : Area 175653.75 Level : Area 383411.45	nt : END : 6 Height \	Vol Ac Vo	Amt ISTI 0048 dij Amt IST .0100 ddj Amt IS 0.0200 Adj Amt IS 0.0800 0.1600	D Response TD Response STD Response STD Response ISTD Response	ISTD Amount ISTD	Date 10/16/09 Tate 10/16/09 It Date 10/16/09 It Date 10/16/09 It Date 10/16/09 It Date 10/16/09	Time 10:16:06 E Time 10:16:05 (Time 9 10:16:05 Time 9 10:16:04 Time 10:16:04 Time 10:16:04	File E:\Gtoct09\H101509.rst File E:\Gtoct09\H101508.rst File E:\Gtoct09\H101507.rst File E:\Gtoct09\H101506.rst File E:\Gtoct09\H101506.rst

Area		lethod: E:\Met Vol Adj Amt 1	STD Response		Date	Time	File
21173.15	5862.17	0.0100 -			10/16/09	10:16:05 E	:\Gtoct09\H101508.rst
Level : Area		Vol Adi Amt	ISTD Response	∍ ISTD Amoun	t Date	Time	File
	10758.69	· 					E:\Gtoct09\H101507.rst
Level :	3						
Area	Height		ISTD Response				File
83143.49	23938.84	0.0400	******	*********	10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level :		: Vol Adj Am	it ISTD Respons	se ISTD Amou	nt Date	Time	File
174539.8	0 51255.2	.3 0.080	0		10/16/0	9 10:16:04	E:\Gtoct09\H101505.rst
Level : Area		it Vol Adj A	mt ISTD Respon	nse ISTD Amo	unt Date	e Time	File
372876.8	3 107449	.02 0.16	00		10/16/	09 10:16:0	3 E:\Gtoct09\H101504.rs
Level	: 6	OSULFAN II	ISTD Response	ISTO Amount	Date	Time	File
Area 12689.26	3496.38						::\Gtoct09\H101509.rst
Level :		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
26513.56	7442.83	0.0100			10/16/09	10:16:05 E	E:\Gtoct09\H101508.rst
Level :	; 4 Height	Vol Adj Amt	: ISTD Respons	e ISTD Amour	nt Date	Time	File
48519.12	2 13482.24	1 0,0200			10/16/09	10:16:05	E:\Gtoct09\H101507.rst
Level : Area		t Vol Adj An	nt ISTD Respon	ise ISTD Amou	ınt Date	Tìme	File
103833.2	28 2 9649.0	0.040	00		10/16/0	09 10:16:04	E:\Gtoct09\H101506.rst
Levei Area		ıt Vol Adj An	nt ISTD Respon	ise ISTD Amou	ınt Date	Time	File
216453.2	20 61146.	99 0.080	00		10/16/0	9 10:16:04	£:\Gtoct09\H101505.rst
Level Area	: 1 Heigl	ht VolAdjA	umt ISTD Respo	onse ISTD Amo	ount Dat	e Time	File
462082.	10 125769	0.07 0.16	300		10/16	/09 10:16:0	03 E:\Gtoct09\H101504.rs
Compon	ent : 4-4-	DDT					
Level Area	: 6 Height	Vol Adj Amt I	STD Response	ISTD Amount	Date	Time	File
8979.98	2539.98	0.0048			10/16/09	10:16:06 E	:\Gtoct09\H101509.rst
		Vol Adi Amt	ISTD Response	: ISTD Amount	t Date	Time	File
Level Area						-	
Area	8 5758.37	· — -			10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Area	8 5758.37	0.0100	t ISTD Respons	se ISTD Amou		10:16:05 Time	E:\Gtoct09\H101508.rst File

Area	Height	Voi Adj Amt	ISTD Response	STD Amount	Date	Time	File
84863.34	24209.37	0.0400	*********		10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level : Area		t Vol Adj Am	t ISTD Respon	se ISTD Amoun	t Date	Time	File
179544.78	51388.9	0.0800)		10/16/09	10:16:04	E:\Gtoct09\H101505.n
Level : Area		t Vol Adj Ar	mt ISTD Respo	nse ISTD Amou	nt Date	Time	File
386284.62	2 108689	.78 0.160	00		10/16/0	9 10:16:0	03 E:\Gtoct09\H101504
Compone Level Area	: 6	RIN ALDEHYI Voi Adj Amt I		ISTD Amount	Date	Time	File
11793.00	3195.74	0.0048			10/16/09	10:16:06	E:\Gtoct09\H101509.rst
Level : Area		Vol Adj Amt I	STD Response	ISTD Amount	Date	Time	File
24834.45	6772.52	0.0100	*********	<u> </u>	10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level : Area		Vol Adj Amt	ISTD Respons	e ISTD Amount	Date	Time	File
43308.30	11871.42	0.0200			10/16/09	10:16:05	E:\Gtoct09\H101507.rs
Level : Area		Vol Adj Amt	ISTD Respons	e ISTD Amount	Date	Time	File
93911.22	25368.59	0.0400			10/16/09	10:16:04	E:\Gtoct09\H101506.rs
Level : Area		t Vol Adj Am	ıt ISTD Respon	se ISTD Amoun	t Date	Time	File
181230.6	1 48948.0	0.080.0	D		10/16/09	10:16:04	£:\Gtoct09\H101505.
Level : Area		t Vol Adj Am	it ISTD Respon	se ISTD Amoun	it Date	Time	File
359108.7	1 94872.2	26 0.160	0	*******	10/16/09	9 10:16:0	3 E:\Gtoct09\H101504.
Level	: 6	OSULFAN SU		IOTE			
Area 11533.41	3255.04	0,0048		ISTD Amount		Time	File E:\Gtoct09\H101509.rst
		-10-70			, (0. 0 0		
Level : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
24568.34	6972.94	0.0100			10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level : Area		Voi Adj Amt	ISTD Respons	e ISTD Amount	Date	Time	File
43672.36	12317.74	0.0200		******	10/16/09	10:16:05	E:\Gtoct09\H101507.rs
Level : Area		Vol Adj Amt	ISTD Respons	e ISTD Amount	Date	Time	File
95052.90	27167.9	1 0.0400	**********		10/16/09	10:16:04	E:\Gtoct09\H101506.rs
Level : Area		t Vol Adj Am	it ISTD Respon	se ISTD Amour	nt Date	Time	File
202371.4	3 55339.	71 0.080	0		10/16/0	9 10:16:0	4 E:\Gtoct09\H101505.

	Height	Vol Adj Amt	ISTD Respon	se ISTD Amou	ınt Date	Time	File
428401.26	114110.27	0.1600		77000000	10/16/0	9 10:16:03	E:\Gtoct09\H101504.rs
Componen Level Area	at : METHC : 6 Height Vo		TD Response	ISTD Amount	Date	Time	File
27134.19	7553. 5 4	0.0240		***************************************	10/16/09 1	0:16:06 E:	\Gtoct09\H101509.rst
Level : { Area		ol Adj Amt 18	STD Response	ISTD Amount	Date	Time	File
57940.68	16342.46	0.0500 -			10/16/09	10:16:05 E	:\Gtoct09\H101508.rst
Level : 4 Area		Vol Adj Amt	ISTD Respons	e ISTD Amour	nt Date	Time	File
103376.62	29061.78	0.1000			10/16/09	10:16:05	E:\Gtoct09\H101507.rst
Level : 3 Area		Vol Adj Amt	ISTD Respons	e ISTO Amour	nt Date	Time	File
212513.83	59541.57	0.2000			10/16/09	10:16:04	E:\Gtoct09\H101506.rst
Level : :	2 Height	Vol Adj Ami	ISTD Respon	se ISTD Amou	ınt Date	Time	File
410873.18	112332.72	0.4000			10/16/0	9 10:16:04	E:\Gtoct09\H101505.rs
Level : ·		Vol Adj Amf	t ISTD Respon	se ISTD Amou	ınt Date	Time	File
788336.31	212393.73	0.8000		**********	10/16/0	9 10:16:03	E:\Gtoct09\H101504.rs
Componen Level Area	nt : ENDRIN : 6		TD Response	ISTA Amount	Date	Time	Fìle
13905.17	<u> </u>	0,0048	· · · · · · · · · · · · · · · · · · ·				\Gtoct09\H101509.rst
Level:		2,52,0			10,10,00	0.10.00 L.	10100100117101001.01
Area 30623.03			TD Response		Date	Time	File
30023.03	0.388.28	0.0100			10/16/09 1	0:16:05 E:	\Gtoct09\H101508.rst
Level : 4		'ol Adj Amt I	STD Response	ISTD Amount	Date	Time	File
55165.82	15318.98	0.0200	********		10/16/09	10:16:05 E	E:\Gtoct09\H101507.rst
Level : : Area		Vol Adj Amt	ISTD Respons	e ISTD Amour	nt Date	Time	File
124691.84	34241.86	0.0400			10/16/09	10:16:04	E:\Gtoct09\H101506.rs
	2					Time	File
Level : : Area		Voi Adj Amt	ISTD Respons	e ISTD Amour	nt Date		
Area		Voi Adj Amt 0.0800		e ISTD Amour	_		
Area	Height 70368,98	0.0800		***************************************	10/16/09	10:16:04	
Area 258888.47 Level : Area	Height 70368.98	0.0800 Vol Adj Ami		***************************************	10/16/09 unt Date	10:16:04 Time	E:\Gtoct09\H101505.rs
Area 258888.47 Level : Area 532467.80 Componen	Height 70368.98 1 Height 139151.36	0.0800 Vol Adj Ami	ISTD Respon	***************************************	10/16/09 unt Date	10:16:04 Time	E:\Gtoct09\H101505.rs
Area 258888.47 Level : Area 532467.80	Height 70368.98 1 Height 139151.36 at: DECAC	0.0800 Vol Adj Amt 0.1600 CHLOROBIPH	ISTD Respon	se ISTD Amou	10/16/09 unt Date	10:16:04 Time	E:\Gtoct09\H101505.rs

10/16/09 10:17:58 Method: E:\Methods\HAB101509.mth

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
20009.32	4146.47	0.0050	***************************************		10/16/09	10:16:05	E:\Gtoct09\H101508.rst
Level : Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
41203.77	8315.50	0.0100			10/16/09	10:16:05	E:\Gtoct09\H101507,rst
Level : Area 81550.33	Height	- <u> </u>	t ISTD Response	ISTD Amount	-	Time	File E:\Gtoct09\H101506.rst
Level : Area			nt ISTD Respons	e ISTD Amour			
156951.08	30826.4	18 0.040	00		10/16/0	09 10:16:0	04 E:\Gtoct09\H101505.rs
Level : Area	1 Heigh	t Vol Adj Ar	πt ISTD Respons	e ISTD Amour	nt Date	Time	File
322975.51	61956.6	61 0.080	00		10/16/0	9 10:16:0	3 E:\Gtoct09\H101504.rs

Turbochrom Method File E:\Methods\HTQX101509.mth

: manager on: 10/16/09 10:21:15 Printed by Created by manager on: 10/16/09 09:49:27 Edited by Number of Times Edited manager on: 10/16/09 10:21:13

Number of Times Calibrated: 91

Description: INDIV.AB PEST CALIBRATION

Global Sample Information

Default Sample Volume : 1.000 uL Quantitation Units ng 0.000 min Void Time Correct amounts during calibration Yes Convert unknowns to concentration units: Yes Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

TOX-1

Single Peak Component

Component Type Retention Time 11.093 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 1st Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	356.87	77.84			1
4	0.1000	1653.74	239.07			1
2	1.0000	22487.29	3601.26			1
1	2.0000	49269.49	7648,87			1
3	0.5000	10526.78	1681.73			1

Calibration Curve : $y = (-1387.832478) + (24995.431956)x + (0.000000)x^2 + (0.000000)x^3$

R-squared : 0.998414

TQX-2

Component Type : Single Peak Component

Retention Time : 11.959 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 1st Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100,0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	#Replicates
5	0.0500	2203.41	441.51			1
4	0.1000	4371.92	846.58	***********		1
2	1.0000	66621.59	10845.08		****************	1
1	2.0000	140682.19	22669.79			1
3	0.5000	32782.76	5323.90			1

Calibration Curve : $y = (-2611.019183) + (71155.332589)x + (0.000000)x^2 + (0.000000)x^3$

: 0.999522 R-squared

```
TOX-3
```

: Single Peak Component Component Type

; 13.351 min Retention Time Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 1st Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	5568.91	1282.86			1
4	0.1000	10840.87	2418.71			1
2	1,0000	158919.09	29511.23			1
1	2.0000	339422.23	61281.06			1
3	0.5000	77206.43	14320.03			1

Calibration Curve: $y = (-68 \% 5.659653) + (171516.664670)x + (0.000000)x^2 + (0.000000)x^3$

: 0.999196 R-squared

TQX-4

Component Type : Single Peak Component

Retention Time : 13.927 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 1st Order Fit

Curve will ignore the origin

Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	3189.89	694.18			1
4	0.1000	6114.61	1317.10			1
2	1.0000	91170.79	17344.92	***********		1
1	2.0000	193883.46	37279.37			1
3	0.5000	43278.46	8471.97			1

Calibration Curve : $y = (-4088.066479) + (98103.437817)x + (0.000000)x^2 + (0.000000)x^3$

R-squared : 0.999208

TOX-5

: Single Peak Component Сотролен Туре

Retention Time : 15.077 min Search Window : 1.08 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window

Calibrating Area versus Amount using a 1st Order Fit

Curve will ignore the origin Amounts will not be scaled prior to the regression

Weighting factor for the regression: 1

Component standard purity percentage: 100.0000%

User Values

Label

Value 1: 0,000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level Calibration Calibrat	TOTALDS TO.21. TO MICCIOC. C. WICKIOSSII II OATO TOOGANAT
4 0.1000 10218.55 1686.07	
1	5 0.0500 6201.02 873.02 1
1 2,0000 173993 41 34029 54	2 1,000 80587 22 16102 37
Calibration Curve : y = (967,999974) + (84914.424422)x + (0.000000)x*2 + (0.000000)x*3 R-squared : 0.997551	1 2.0000 173593.41 34029.54 1
Component TOX-1 Level 3 Area Height Vol Adj Amt STD Response STD Amount Date Time File File	Calibration Curve : y = (967.999974) + (84914.424422)x + (0.000000)x^2 + (0.000000)x^3
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File	
Level : 4	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 1653.74 239.07 0.1000	356.87 77.84 0.0500 10/16/09 10:20:25 E:\Gtoct09\H101514.rst
Level 2	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File	1653.74 239.07 0.1000 10/16/09 10:20:25 E:\Gtoct09\H101513.rst
Level 1	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File	22487.29 3601.26 1.0000 10/16/09 10:20:24 E:\Gtoct09\H101511.re
Level : 3	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File	49269.49 7648.87 2.0000 10/16/09 10:20:24 E:\Gtoct09\H101510.n
10526.78 1681.73 0.5000 10/16/09 10:20:25 E\Gtoct09\H101512.rst	
Component: TOX-2 Level: 5 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 2203.41 441.51 0.0500	Area Height Vol Adj Amt ISTD Response ISTD Amount Date File
Level 4 Area Height Vol Adj Amt iSTD Response ISTD Amount Date Time File 4371.92 846.58 0.1000 10/16/09 10:20:25 E:\Gtoct09\H101513.rst Level 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 66621.59 10845.08 1.0000 10/16/09 10:20:24 E:\Gtoct09\H101511.rst Level 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 140682.19 22669.79 2.0000 10/16/09 10:20:24 E:\Gtoct09\H101510.rst Level 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File Component : TOX-3 Level : 5 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 5568.91 1282.86 0.0500 10/16/09 10:20:25 E:\Gtoct	Level : 5
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 4371.92 846.58 0.1000 ————————————————————————————————————	2203.41 441.51 0.0500 10/16/09 10:20:25 E:\Gtact09\H101514.rst
Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 66621.59 10845.08 1.0000	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 66621.59 10845.08 1.0000	4371.92 846.58 0.1000 10/18/09 10:20:25 E:\Gtoct09\H101513.rst
Level : 1	
Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 140682.19 22669.79 2.0000	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 140682.19 22669.79 2.0000	66621.59 10845.08 1.0000 10/16/09 10:20:24 E:\Gtoct09\H101511
Level : 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 32782.76 5323.90 0.5000 10/16/09 10:20:25 E:\Gloct09\H101512.rst Component : TOX-3 Level : 5 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File File 5568.91 1282.86 0.0500 10/16/09 10:20:25 E:\Gloct09\H101514.rst Level : 4 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File File	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 32782.76 5323.90 0.5000	140682.19 22669.79 2.0000 10/16/09 10:20:24 E:\Gtoct09\H10151
Component : TOX-3 Level : 5 5 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 5568.91 1282.86 0.0500 10/16/09 10:20:25 E:\Gtoct09\H101514.rst Level : 4 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File	
Level : 5 Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 5568.91 1282.86 0.0500	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 5568.91 1282.86 0.0500	
5568.91 1282.86	
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File	
10840.87 2418.71 0.1000	
	10840.87 2418.71 0.1000

10,10,00,10	, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	alou. E. wear	OGS (TI OX TO 150	J.17111			
Level : 2 Area		Vol Adj Amt	ISTD Response	iSTD Amount	Date	Time	File
158919.09	29511.23	1.0000			10/16/09	10:20:24	E:\Gtoct09\H101511.rst
Level : 1 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
339422.23	61281.06	2.0000	******	**********	10/16/09	10:20:24	E:\Gtoct09\H101510.rst
Level : 3 Area		Vol Adj A mt I	STD Response	ISTD Amount	Date	Time	File
77206.43 1	14320.03	0.5000 -			10/16/09	10:20:25	E:\Gtoct09\H101512.rst
Component Level Area H	: 5		O Response IST	D Amount D	ate Ti	me	File
3189.89 69	94.18	0.0500		 10 /1	6/09 10:2	0:25 E:\G	Stoct09\H101514.rst
Level : 4 Area H 6114.61 13	leight Vo	0.1000	TD Response IS			ime 20:25 E:\	File Gtoct09\H101513.rst
Level : 2 Area		Vol Adj Amt i	STD Response	ISTD Amount	Date	Time	File
91170.79	17344.92	1.0000 -			10/16/09	10:20:24	E:\Gtact09\H101511.rst
Level : 1 Area 193883.46	Height		ISTD Response	ISTD Amount			File E:\Gloct09\H101510.rst
Level : 3 Area		ol Adj Amt IS	TD Response IS	STD Amount	Date	Time	File
43278.46 8	3471.97	0.5000 —		1	0/16/09 1	0;20;25 E	:\Gtoct09\H101512.rst
Componen Level Area H	: 5		D Response IST	D Amount D	ate Ti	me	File
6201.02 87	73.02	0.0500		10/1	16/09 10:2	20:25 E:\C	Stoct09\H101514.rst
Level : 4		ol Adj Amt IS	TD Response	STD Amount	Date	Time	File
12216.85	1666.07	0.1000		1	0/16/09 1	0:20:25 E	::\Gtoct09\H101513.rst
Level : 2 Area		Vol Adj Amt I	STD Response	ISTD Amount	Date	Time	File
80587.22	16102.37	1.0000			10/16/09	10:20:24	E:\Gtoct09\H101511.rst
Level : 1 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
173593.41	34029.54	2.0000			10/16/09	10:20:24	E:\Gtoct09\H101510.rst
Level : 3 Area		fol Adj Amt IS	STD Response I	STD Amount	Date	Time	File
42179,15	7987,21	0.5000	-	1	0/16/09 1	0:20:25 E	:\Gtoct09\H101512.rst

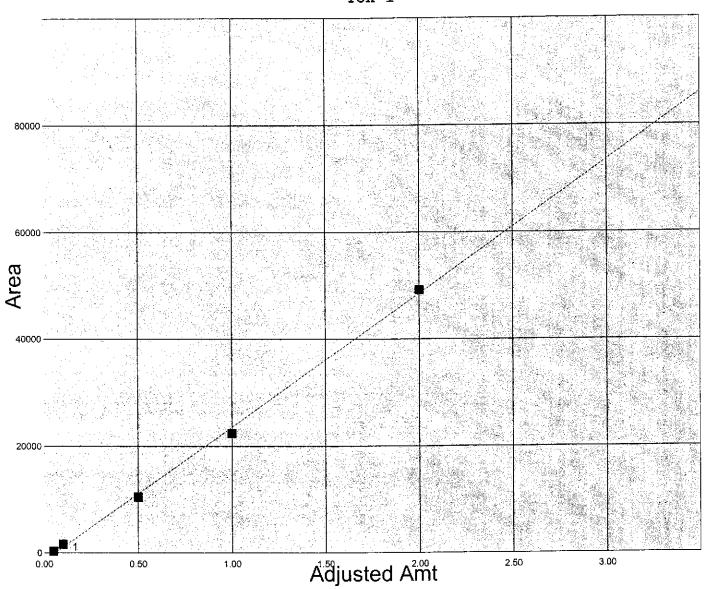
Fit Analysis Output For Method File: E:\METHODS\HTOX101509.MTH Component Name : TOX-1
Date : 10/16/09 10:21:39

Curve Parameters:

Curve #1:

Level Name	Observed X-Value	Calculated X-Value	Delta	%Diff.	Observed Y-Value	Calculated Y-Value	Delta	%Diff.
5	0.050000	0.069801	-0.019801	-28,368	356.868078	-138.061	494.929	-358.486
4	0.100000	0.121685	-0.021685	-17.821	1653.739036	1111.711	542.028	48.756
3	0.500000	0.476672	0.023328	4.894	10526.778533	11109,883	-583.105	-5.249
2	1.000000	0.955179	0.044821	4.692	22487.291654	23607,599	-1120.308	-4.746
1	2.000000	2.026663	-0.026663	-1.316	49269.486948	48603.031	666.456	1.371

TOX-1



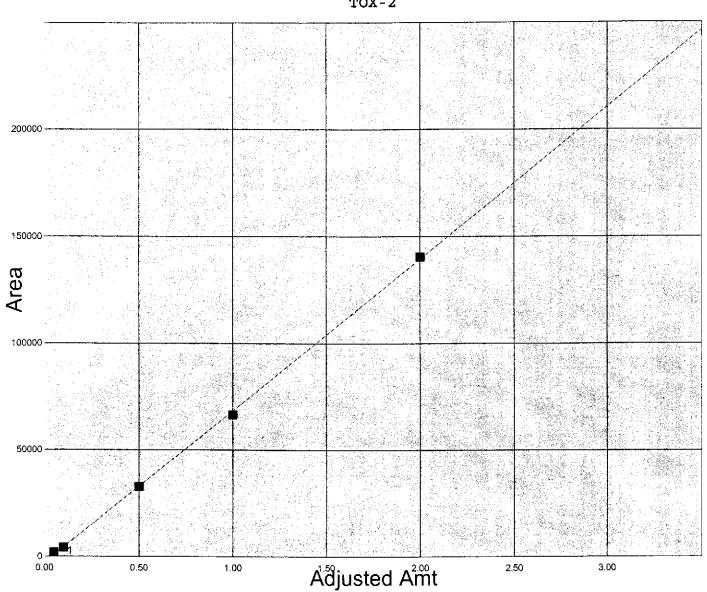
Fit Analysis Output For Method File: E:\METHODS\HTOX101509.MTH Component Name: TOX-2
Date: 10/16/09 10:21:44

Curve Parameters:

Curve #1:

Level Name	Observed X-Value	Calculated X-Value	Delta	%Diff.	Observed Y-Value	Calculated Y-Value	Delta	%Diff.
5	0.050000	0.067661	-0.017661	-26.102	2203.405406	946.747	1256.658	132.734
4	0.100000	0.098137	0.001863	1.899	4371.917559	4504.514	-132.597	-2.944
3	0.500000	0.497416	0.002584	0.520	32782.764361	32966.647	-183.883	-0.558
2	1.000000	0.972978	0.027022	2.777	66621.587893	68544.313	-1922.726	-2.805
1	2.000000	2.013808	-0.013808	-0.686	140682.192816	139699.646	982.547	0.703

TOX-2



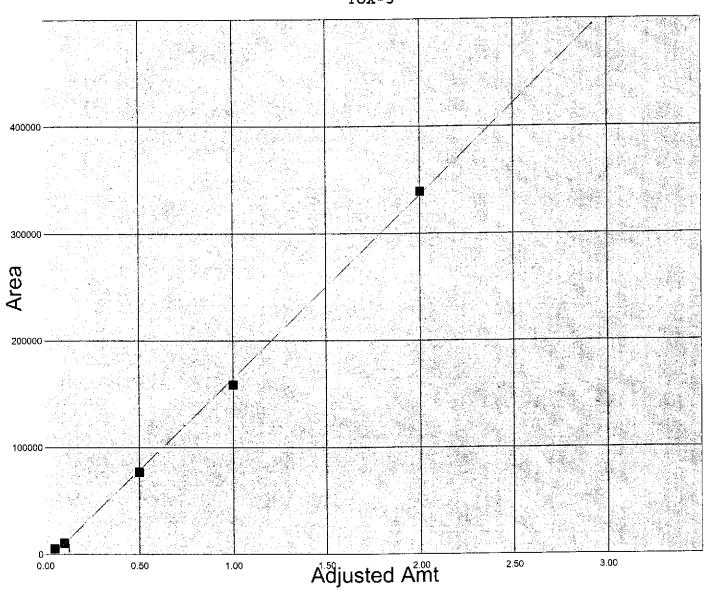
Fit Analysis Output For Method File: E:\METHODS\HTOX101509.MTH Component Name : TOX-3
Date : 10/16/09 10:21:49

Curve Parameters:

Curve #1:

Level Name	Observed X-Value	Calculated X-Value	Delta	%Diff.	Observed Y-Value	Calculated Y-Value	Delta	%Diff.
5	0.050000	0.072206	-0.022206	-30,754	5568,912317	1760.174	3808.739	216.384
4	0.100000	0.102944	-0.002944	-2.859	10840.866986	10336,007	504,860	4.884
3	0.500000	0.489877	0.010123	2.066	77206.431933	78942.673	-1736.241	-2.199
2	1.000000	0.966289	0.033711	3.489	158919.091277	164701.005	-5781.914	-3.511
	2.000000	2.018684	-0.018684	-0.926	339422.225268	336217.670	3204.556	0.953

TOX-3



Fit Analysis Output For Method File: E:\METHODS\HTOX101509.MTH Component Name : TOX-4 Date : 10/16/09 10:21:54

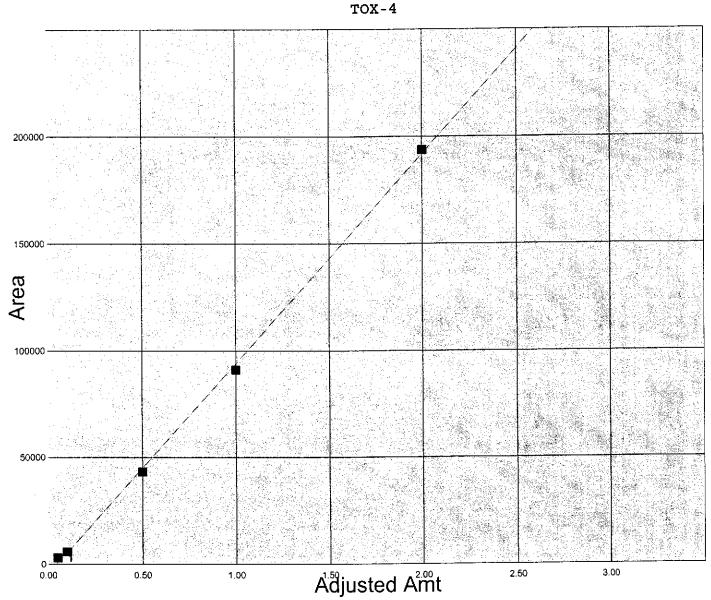
Curve Parameters:

Curve #1: 1st Order

Weighting Factor = 1 (No Weighting) R-Squared = 0.999208 Calibration Curve : Y = (-4088.066479) +(98103.437817) X

Curve #1 :

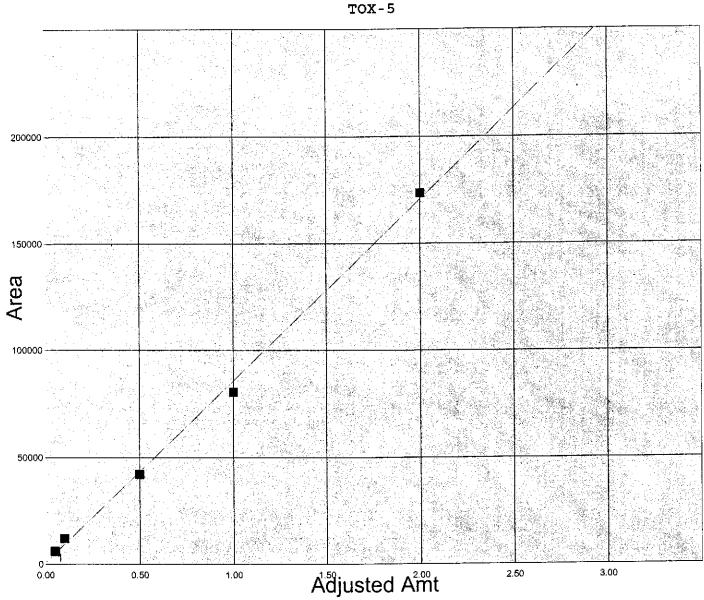
Level Name	Observed X-Value	Calculated X-Value	Delta	%Diff.	Observed Y-Value	Calculated Y-Value	Delta	%Diff.
5	0.050000	0.074187	-0.024187	-32.602	3189.891124	817.105	2372.786	290.389
4	0.100000	0.103999	-0.003999	-3,845	6114.610625	5722.277	392.333	6.856
3	0.500000	0.482822	0.017178	3,558	43278.460857	44963.652	-1685.192	-3.748
2	1.000000	0.971004	0.028996	2.986	91170.793247	94015.371	-2844.578	-3.026
1	2.000000	2.017988	-0.017988	-0.891	193883.459785	192118.809	1764.651	0.919



Fit Analysis Output For Method File: E:\METHODS\HTOX101509.MTH Component Name: TOX-5
Date: 10/16/09 10:22:00

Curve Parameters:

Level Name	Observed X-Value	Calculated X-Value	Delta	%Diff.	Observed Y-Value	Calculated Y-Value	Delta	%Diff.
5 4 3 2	0.050000 0.100000 0.500000 1.000000 2.000000	0.132473 0.485326 0.937641	-0.011627 -0.032473 0.014674 0.062359 -0.032934	-24.513 3.024 6.651		9459.442 43425.212 85882.424	-5295.207	29.150 -2.869



Turbochrom Method File E:\Methods\HCL101509.mth

Printed by : manager on: 10/16/09 10:23:05
Created by : manager on: 10/16/09 09:49:44
Edited by : manager on: 10/16/09 10:23:04

Number of Times Edited : 2 Number of Times Calibrated : 44 Description: CHLORDANE CALIBRATION

Global Sample Information

Default Sample Volume : 1.000 uL
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration
Convert unknowns to concentration units : Yes
Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

CHLOR-TECH-1

Component Type : Single Peak Component

Retention Time : 8.161 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
						
1	0.5000	57790.11	15868.73			1
2	0.2000	22643.91	6259.95			1
3	0.0500	5694.21	1590.34			1

Average Calibration Factor = 114228.000965 (%RSD = 1.07)

CHLOR-TECH-2

Component Type : Single Peak Component

Retention Time : 9.558 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label : Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Агеа	Height	IS IU AMT,	15 TO Resp.	# Replicates
1	0.5000	78405.72	19741.93	***************************************	*****	1
2	0.2000	31658.04	8152.98			1
3	0.0500	8175.33	2132.70	***************************************		1

Average Calibration Factor = 159536.092391 (%RSD = 2.20)

CHLOR-TECH-3

Component Type : Single Peak Component

Retention Time : 10.921 min Search Window : 1.04 s, 0.00 % Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values Label :

Value 1 : 0.000000

Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

10/16/09 10:23:05 Method	d: E:\Metho	ods\HCL10	1509.mth			
Calibration Level Level Name Amount	Area	Height		ISTD Resp.	# Replicates	
2 0.2000	76643.75	20520.42				
Average Calibration Fac	otor = 3897	782.62931	5 (%RSD = 4	1.61)		
CHLOR-TECH-4 Component Type Retention Time Search Window Reference Component Find peak closest to exi Use Average Calibration Component standard pu	: Single F : 11.252 i : 1.04 s, (: : : : Dected RT n Factor (A	Peak Comp min 0.00 % in window Area / Amo	conent	,		
User Values Label : Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000						
Calibration Level Level Name Amount					# Replicates	
2 0.2000	65563.64	17800.25			1 1 1	
Average Calibration Fac	ctor = 332	105,52375	3 (%RSD = 4	4.64)		
CHLOR-TECH-5 Component Type Retention Time Search Window Reference Component Find peak closest to ex Use Average Calibratio Component standard po User Values Label : Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000	: 13.264 : 1.04 s, (: pected RT n Factor (/	min 0.00 % in window Area / Amo	unt)			
Calibration Level Level Name Amount	Area .	Height	ISTD Amt.	ISTD Resp.	# Replicates	
2 0.2000 2		5276.04 -			1 1 1	
Average Calibration Fa	ctor = 100	130.70676	6 (%RSD = !	5.65)		
Calibration Replicate List Component : CHLOR- Level : 1 Area Height Vol	TECH-1	STD Resox	onse ISTD/	Amount Da	ite Time	File
57790.11 15868.73	0.5000 -	*********		- 10/1		E:\Gtoct09\H101515.rst
Level : 2 Area Height Vol A	dj Amt IS	TD Respor	nse ISTD Ai	mount Date	e Time	File
22643.91 6259.95	0.2000			10/16	/09 10:22:59	E:\Gtoct09\H101516.rst
Level: 3 Area Height Vol Ad	ij Amt IST	D Respons	se ISTD Am	ount Date	Time	File
5694.21 1590.34 0	.0500		************	10/16/0	09 10:22:59 E	:\Gtoct09\H101517.rst
Component : CHLOR-T Level : 1 Area Height Vol		STD Respo	onse ISTD /	Amount Da	ote Time	File
78405.72 19741.93	0.5000 -			- 10/1	6/09 10:22:58	E:\Gtoct09\H101515.rst

Section	Level : . Area		Vol Adj Amt	ISTD Response	e ISTD Amount	Date	Time	File
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File	31658.04	8152.98	0.2000			10/16/09	10:22:59	E:\Gtoct09\H101516.rst
Component : CHLOR-TECH-3 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 10/16/09 10:22:58 E\\Gtoct09\H101515.55 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 18800.40 4962.98 0.0500			ol Adj Amt	STD Response	ISTD Amount	Date	Time	File
Level : 1 Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 205060.55 54960.78 0.5000 10/16/09 10/16/09 10:22:58 E:\Gloct09\H101515 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 18600.40 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 18800.40 4962.98 0.0500 10/16/09 10:22:59 E:\Gloct09\H101517.rs Component : CHLOR-TECH-4 Level 1 Time File 174605.41 47104.31 0.5000 10/16/09 10:22:58 E:\Gloct09\H101515 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 15964.33 4320.31 0.0500 10/16/09 10:22:58 E:\Gloct09\H101516.rs Level : 1 Area	8175.33 2	2132.70	0.0500 -		1	10/16/09 1	0:22:59 E	\Gtoct09\H101517.rst
Level : 2	Level	: 1		nt ISTD Respor	nse ISTD Amou	nt Date	Time	File
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 76643.75 20520.42 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.fd Level 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File Component : CHLOR-TECH-4 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 174605.41 47104.31 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File Level : 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 15984.38 4320.31 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rs Component : CHLOR-TECH-5 Level 1 Area Height	205060.55	54960.7	8 0.500	00		10/16/0	9 10:22:58	E:\Gtoct09\H101515.rst
Level : 3 Area Height Height Vol Adj Amt ISTD Response ISTD Amount Date Date Time File 18800.40 4962.98 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rs Component : CHLOR-TECH-4 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 174605.41 47104.31 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 65563.64 17800.25 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rs Level : 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 15964.38 4320.31 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rs Component : CHLOR-TECH-5 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 52614.25 13441.12 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515.rd Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File File 20222.85 5276.04 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rs Level : 3			Vol Adj Ami	t ISTD Respons	se ISTD Amoun	t Date	Time	File
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 18800.40 4962.98 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rs Component : CHLOR-TECH-4 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 174605.41 47104.31 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 65563.84 17800.25 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rs Level : 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 15964.38 4320.31 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rs Component : CHLOR-TECH-5 Evel : 1 Area Height Vol Adj Amt ISTD Response ISTD	76643.75	20520.42	0.2000)		10/16/09	10:22:59	E:\Gtoct09\H101516.rst
Component : CHLOR-TECH-4 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 174605.41 47104.31 0.5000			Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
Level Area : 1 Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 174605.41 47104.31 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 65563.64 17800.25 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.r Level : 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 15964.38 4320.31 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rs Component : CHLOR-TECH-5 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 52614.25 13441.12 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515.rd Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 20222.85 5276.04 0.2000 <td< td=""><td>18800.40</td><td>4962.98</td><td>0.0500</td><td></td><td></td><td>10/16/09</td><td>10:22:59</td><td>E:\Gtoct09\H101517.rst</td></td<>	18800.40	4962.98	0.0500			10/16/09	10:22:59	E:\Gtoct09\H101517.rst
Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 65563.64 17800.25 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rd Level: 3 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 15964.38 4320.31 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rs Component: CHLOR-TECH-5 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 52614.25 13441.12 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515.rd Level: 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 20222.85 5276.04 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rs Level: 3	Level Area	: 1 Height	Vol Adj An	- 	nse ISTD Amou			
65563.64 17800.25 0.2000			\{-1	LICTO Dances	an ICTB Assess		-	eu.
Level : 3 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 15964.38 4320.31 0.0500				· · · · · · · · · · · · · · · · · · ·				
Component : CHLOR-TECH-5 Level : 1 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 52614.25 13441.12 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515.4 Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File File 20222.85 5276.04 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rs Level : 3	Level :	3			STD Amount			
Level : 1 Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 52614.25 13441.12 0.5000	15964.38	4320.31	0.0500			10/16/09	10:22:59	E:\Gtoct09\H101517.rst
52614.25 13441.12 0.5000 10/16/09 10:22:58 E:\Gtoct09\H101515.i Level : 2 Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 20222.85 5276.04 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rs Level : 3	Level	: 1		t ISTO Respon	se ISTO Amoun	t Oate	Timo	Sile.
Level : 2 Area Height Period Vol Adj Amt Vol Adj Amt Price ISTD Response ISTD Amount Price Date Time File 20222.85 5276.04 0.2000				- 				
20222.85 5276.04 0.2000 10/16/09 10:22:59 E:\Gtoct09\H101516.rs	Level :	2			e ISTD Amount			
Level: 3								
			/ol Adj Amt I	STD Response	ISTD Amount			
4702.47 1272.64 0.0500 10/16/09 10:22:59 E:\Gtoct09\H101517.rst	4702.47 1	1272.64	0.0500 -	*********		10/16/09 1	0:22:59 E	:\Gtoct09\H101517.rst

Analytical Method:

SW8081A

AAB#:

R18547

Lab Name:

Life Science Laboratories, Inc

Contract Number:

Instrument ID:

GCGT 57G

initial Calibration ID:

<u>1651</u>

Second Source ID:

PEST S.S.

Concentration Units (mg/L or mg/kg):

μg/L

Analyte 4	Expected:	Found	- %D	Q,
4,4'-DDD	50	51	2.0	
4,4'-DDE	50	51	2.0	
4,4'-DDT	50	49	-2.0	
Aldrin	50	52	4.0	
alpha-BHC	50	56	12.0	·
alpha-Chlordane	50	50	0	
beta-BHC	50	48	-4.0	
delta-BHC	50	55	10	
Dieldrin	50	52	4.0	
Endosulfan I	50	50	0	
Endosulfan II	50	50	0	
Endosulfan sulfate	50	51	2.0	
Endrin	50	49	-2.0	
Endrin aldehyde	50	49	-2.0	
gamma-BHC	50	53	6.0	
gamma-Chlordane	50	51	2.0	
Heptachlor	50	47	-6.0	
Heptachlor epoxide	50	49	-2.0	
Methoxychlor	50	52	4.0	

Comments:			
	· · · · · · · · · · · · · · · · · · ·	 	

Analytical Method:

SW8081A

AAB#:

R18547

Lab Name:

<u>Life Science Laboratories, Inc</u> Contract Number:

Instrument ID:

GCGT 57G

Initial Calibration ID:

<u>1651</u>

Second Source ID:

TOX S.S.

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D =⊨ . Ω [†]
Toxaphene	500	420	-15.4

Comments:			
	· · · · · · · · · · · · · · · · · · ·	 	

Analytical Method:

SW8081A

AAB#:

R18548

Lab Name:

<u>Life Science Laboratories, Inc</u> Contract Number:

Instrument ID:

GCGT_57H

Initial Calibration ID:

<u>1652</u>

Second Source ID:

PEST S.S.

Concentration Units (mg/L or mg/kg):

<u>μα/L</u>

Analyte	Expected	Found	%D	Q i
4,4'-DDD	50	50	0.2	
4,4'-DDE	50	50	0.8	
4,4´-DDT	50	50	-0.2	
Aldrin	. 50	54	8.4	
alpha-BHC	50	51	2.8	
alpha-Chlordane	50	54	7.2	
beta-BHC	50	52	4.6	
delta-BHC	50	51	2.8	
Dieldrin	50	52	3.8	
Endosulfan I	50	53	5.2	
Endosulfan II	50	50	0.4	
Endosulfan sulfate	50	51	2.8	
Endrin	50	49	-1.2	
Endrin aldehyde	50	47	-5.2	
gamma-BHC	50	51	2.6	
gamma-Chlordane	50	53	6.4	
Heptachlor	50	51	2.0	
Heptachlor epoxide	50	52	3.8	
Methoxychlor	50	53	6.8	

Comments:				

Analytical Method:

SW8081A

AAB#:

R18548

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Instrument ID:

GCGT 57H

Initial Calibration ID:

<u> 1652</u>

Second Source ID:

TOX S.S.

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D	Q
Toxaphene	500	57	13.2	

Comments:			•		
	 	•	 	 	

AFCEE ORGANIC ANALYSES DATA SHEET 5 CALIBRATION VERIFICATION

Analytical Method:

SW8081A

AAB #:

<u>18547</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

GCGT_57G

Initial Calibration ID:

<u>1651</u>

SEE ATTACHED CALIBRATION VERIFICATION

Comments:			
-		 	

PESTICIDE/PCB **CONTINUING CALIBRATION SUMMARY**

INSTRUMENT: <u>HP5890-GT</u>

SEQUENCE: GT101509.SEQ

COLUMN: RTXCLP

		Name: File:	INDAB-3 G101524	Name: File:	INDAB-3 G101546	Name: File:	INDAB-3 G101563
		Date:	<u>10/16/09</u>	Date:	<u>10/16/09</u>	Date:	10/16/09
		Time	<u>01:01</u>	Time	<u>10:33</u>	Time	<u>17:19</u>
	Nominal	Calculated		Calculated		Calculated	
Parameter	Amount(ng)	Amount(ng)	%D	Amount(ng)	%D	Amount(ng)	%D
ALPHA-BHC	0.02	.0207	4	.0224	12	.0199	0
LINDANE	0.02	.0206	3	.0220	10	.0199	0
HEPTACHLOR	0.02	.0202	1	.0208	4	.0202	1
ENDOSULFAN I	0.02	.0205	3	.0217	9	.0191	5
DIELDRIN	0.04	.0416	4	.0433	8	.0399	0
ENDRIN	0.04	.0399	0	.0413	3	.0405	1
4-4-DDD	0.04	.0404	1	.0431	8	.0441	10
4-4-DDT	0.04	.0415	4	.0439	10	.0401	0
METHOXYCHLOR	0.20	.207	3	.200	0	.211	5
B-BHC	0.02	.0206	3	.0217	9	.0196	2
D-BHC	0.02	.0208	4	.0221	11	.0202	1
ALDRIN	0.02	.0202	1	.0214	7	.0194	3
HEPTACHLOR EPOXIDE	0.02	.0204	2	.0215	7	.0194	3
G-CHLORDANE	0.02	.0203	1	.0214	7	.0194	3
A-CHLORDANE	0.02	.0204	2	.0208	4	.0188	6
4-4-DDE	0.04	.0407	2	.0434	9	.0407	2
ENDOSULFAN II	0.04	.0410	3	.0451	13	.0410	3
ENDRIN ALDEHYDE	0.04	.0436	9	.0456	14	.0401	0
ENDOSULFAN SULFATE	0.04	.0409	2	.0423	6	.0378	6
ENDRIN KETONE	0.04	.0436	9	.0448	12	.0405	1
TECH. CHLORDANE	0.20						
TOXAPHENE	0.50						
AR1016	0.40					<u> </u>	
AR1221	0.40						
AR1232	0.40						
AR1242	0.40						
AR1248	0.40					<u> </u>	
AR1254	0.40						
AR1260	0.40						
HEXACHLOROBENZENE	0.10						
AVERAGE % D			3		8		3

Page 1 Page 3 Page 1

PESTICIDE/PCB CONTINUING CALIBRATION SUMMARY

INSTRUMENT: <u>HP5890-GT</u>

SEQUENCE: GT101509.SEQ

COLUMN: RTXCLP

		Name: File: Date: Time	TOX-3 G101564 10/16/09 17:43	Name: File: Date: Time	INDAB-3 G101570 10/16/09 20:08	Name: File: Date: Time	
	Nominal	Caiculated		Calculated		Calculated	0/5
Parameter	Amount(ng)	Amount(ng)	%D	Amount(ng)	%D	Amount(ng)	%D
ALPHA-BHC	0.02			.0201	0	1	
LINDANE	0.02			.0201	0	 	·
HEPTACHLOR	0.02			.0201	0		
ENDOSULFAN I	0.02			.0195	3	-	
DIELDRIN	0.04			.0404	11	 	
ENDRIN	0.04			.0405	1	<u> </u>	
4-4-DDD	0.04			.0439	10		
4-4-DDT	0.04			.0403	1		
METHOXYCHLOR	0.20			.203	2		
В-ВНС	0.02			.0197	2		
D-BHC	0.02			.0203	1		
ALDRIN	0.02			.0197	2		
HEPTACHLOR EPOXIDE	0.02			.0196	2		
G-CHLORDANE	0.02			.0197	2		
A-CHLORDANE	0.02			.0191	5		
4-4-DDE	0.04			.0408	2		
ENDOSULFAN II	0.04			.0420	5		
ENDRIN ALDEHYDE	0.04			.0408	2		
ENDOSULFAN SULFATE	0.04		<u> </u>	.0391	2		
ENDRIN KETONE	0.04			.0413	3		
TECH. CHLORDANE	0.20						
TOXAPHENE	0.50	.501	0	<u> </u>			
AR1016	0.40		-	1			
AR1221	0.40			- 			
AR1232	0.40			 		†	
AR1242	0.40			 			
AR1248	0.40			 		1	
AR1254	0.40			 		 	
AR1260	0.40			 	· · · · · · · · · · · · · · · · · · ·	+	
HEXACHLOROBENZENE	0.10					1	
AVERAGE % D	1 0.10	ŀ	0	1	2	<u> </u>	#DIV/0!

Page 1 Page 3 Page 2

AFCEE ORGANIC ANALYSES DATA SHEET 5 CALIBRATION VERIFICATION

Analytical Method:

SW8081A

AAB #:

18548

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

GCGT 57H

Initial Calibration ID:

<u>1652</u>

SEE ATTACHED CALIBRATION VERIFICATION

Comments:				
		 		
		 	 	 -

PESTICIDE/PCB CONTINUING CALIBRATION SUMMARY

INSTRUMENT:

HP5890-GT

SEQUENCE: GT101509.SEQ

COLUMN: RTXCLP2

		Name: File: Date: Time	NDAB-3 H101524 10/16/09 01:01	Name: File: Date: Time	INDAB-3 H101546 10/16/09 10:33	Name: File: Date: Time	INDAB-3 H101563 10/16/09 17:19
	Nominal	Calculated		Calculated	-	Calculated	
Parameter	Amount(ng)	Amount(ng)	%D	Amount(ng)	%D	Amount(ng)	%D
ALPHA-BHC	0.02	.0200	0	.0200	0	.0196	2
LINDANE	0.02	.0200	0	.0199	0	.0195	3
HEPTACHLOR	0.02	.0198	1	.0191	5	.0197	2
ENDOSULFAN I	0.02	.0197	2	.0199	0	.0193	4
DIELDRIN	0.04	.0399	0	.0398	0	.0395	1
ENDRIN	0.04	.0384	4	.0404	11	.0398	0
4-4-DDD	0.04	.0390	3	.0421	5	.0411	3
4-4-DDT	0.04	.0410	3	.0404	1	.0367	8
METHOXYCHLOR	0.20	.204	2	.186	7	.209	4
B-BHC	0.02	.0199	0	.0202	1	.0194	3
D-BHC	0.02	.0199	0	.0200	0	.0198	1
ALDRIN	0.02	.0194	3	.0194	3	.0191	5
HEPTACHLOR EPOXIDE	0.02	.0197	2	.0206	3	.0198	1
G-CHLORDANE	0.02	.0196	2	.0197	2	.0193	4
A-CHLORDANE	0.02	.0197	2	.0197	2	.0193	4
4-4-DDE	0.04	.0396	1	.0401	0	.0392	2
ENDOSULFAN II	0.04	.0398	0	.0429	7	.0388	3
ENDRIN ALDEHYDE	0.04	.0420	5	.0420	5	.0401	0
ENDOSULFAN SULFATE	0.04	.0394	2	.0398	0	.0389	3
ENDRIN KETONE	0.04	.0417	4	.0422	6	.0410	3
TECH. CHLORDANE	0.20						
TOXAPHENE	0.50						
AR1016	0.40		·				
AR1221	0.40		-				
AR1232	0.40						
AR1242	0.40						
AR1248	0.40						
AR1254	0.40						
AR1260	0.40						
HEXACHLOROBENZENE	0.10						
AVERAGE % D	<u> </u>	•	2		2		3

Page 1 Page 3 Page 1

PESTICIDE/PCB CONTINUING CALIBRATION SUMMARY

INSTRUMENT:

HP5890-GT

SEQUENCE: GT101509.SEQ

COLUMN: RTXCLP2

		Name: File: Date: Time	TOX-3 H101564 10/16/09 17:43	Name: File: Date: Time	INDAB-3 H101570 10/16/09 20:08	Name: File: Date: Time	
Parameter	Nominal Amount(ng)	Calculated Amount(ng)	%D	Calculated Amount(ng)	%D	Calculated Amount(ng)	%D
ALPHA-BHC	0.02	Amounting)	760	.0196	2	/anoant(rig)	700
LINDANE	0.02			.0196	2		
HEPTACHLOR	0.02	<u> </u>		.0195	3		
ENDOSULFAN I	0.02			.0194	3		
DIELDRIN	0.04			.0395	1		
ENDRIN	0.04			.0395	1		
4-4-DDD	0.04			.0410	3		
4-4-DDT	0.04			.0366	9		·
METHOXYCHLOR	0.20			.202	1		
B-BHC	0.02			.0196	2		· · · · · · · · · · · · · · · · · · ·
D-BHC	0.02			.0198	1		
ALDRIN	0.02			.0190	5		
HEPTACHLOR EPOXIDE	0.02			.0200	0		
G-CHLORDANE	0.02			.0192	4		
A-CHLORDANE	0.02			.0192	4		
4-4-DDE	0.04			.0392	2		
ENDOSULFAN II	0.04			.0391	2		
ENDRIN ALDEHYDE	0.04			.0403	1		
ENDOSULFAN SULFATE	0.04			.0393	2		
ENDRIN KETONE	0.04			.0412	3		
TECH. CHLORDANE	0.20						<u> </u>
TOXAPHENE	0.50	.448	10				
AR1016	0.40						
AR1221	0.40						
AR1232	0.40						
AR1242	0.40						
AR1248	0.40					1	
AR1254	0.40						
AR1260	0.40						
HEXACHLOROBENZENE AVERAGE % D	0.10		10	<u> </u>	3		#DIV/0!

Page 1

Page 3

Page 2

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

mg/Kg

Method Blank ID:

MB-10117

Initial Calibration ID:

<u>1651</u>

File ID:

E:\Gtoct09\G101530.rst

Analyte	Method Blank	RL	Q
alpha-BHC	0.00033	0.0017	U
beta-BHC	0.00084	0.0017	U
delta-BHC	0.00046	0.0017	U
gamma-BHC	0.00037	0.0017	U
alpha-Chlordane	0.00035	0.0017	U
gamma-Chlordane	0.00042	0.0017	U
4,4'-DDD	0.00035	0.0033	Ü
4,4'-DDE	0.00037	0.0033	U
4,4'-DDT	0.00043	0.0033	U
Aldrin	0.00040	0.0017	U
Dieldrin	0.00042	0.0033	U
Endosulfan I	0.00031	0.0017	U
Endosulfan II	0.00037	0.0033	U
Endosulfan sulfate	0.00062	0.0033	U
Endrin	0.00065	0.0033	U
Endrin aldehyde	0.00047	0.0033	U
Heptachlor	0.00051	0.0017	U
Heptachlor epoxide	0.00045	0.0017	U
Methoxychlor	0.00044	0.017	U
Toxaphene	0.0067	0.10	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	86	56 - 132	
Tetrachloro-m-xylene	86	69 - 124	

Comments:	4

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

mg/Kg

Method Blank ID:

MB-10117

Initial Calibration ID:

<u>1652</u>

File ID:

E:\Gtoct09\H101530.rst

Analyte	Method Blank	RL	Q
alpha-BHC	0.00033	0.0017	U
beta-BHC	0.00084	0.0017	U
delta-BHC	0.00046	0.0017	U
gamma-BHC	0.00037	0.0017	U
alpha-Chlordane	0.00035	0.0017	U
gamma-Chlordane	0.00042	0.0017	U
4,4´-DDD	0.00035	0.0033	U
4,4´-DDE	0.00037	0.0033	U
4,4´-DDT	0.00043	0.0033	U
Aldrin	0.00040	0.0017	U
Diektrin	0.00042	0.0033	U
Endosulfan I	0.00031	0.0017	Ü
Endosulfan II	0.00037	0.0033	U
Endosulfan sulfate	0.00062	0.0033	U
Endrin	0.00065	0.0033	U
Endrin aldehyde	0.00047	0.0033	U
Heptachlor	0.00051	0.0017	U
Heptachlor epoxide	0.00045	0.0017	U
Methoxychlor	0.00044	0.017	U
Toxaphene	0.0067	0.10	U

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	90	56 - 132	
Tetrachioro-m-xylene	94	69 - 124	

Comments:	

AFCEE ORGANIC ANALYSES DATA SHEET 8 LABORATORY CONTROL SAMPLE

Analytical Method:

SW8081A

AAB #:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCS-10117

Initial Calibration ID:

<u>1651</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\G101531.rst

Analyte	Expected	Found	%R	Control Limits	Q
alpha-BHC	0.0167	0.017	99	62 - 125	
beta-BHC	0.0167	0.015	88	62 - 127	
delta-BHC	0.0167	0.016	98	57 - 130	
gamma-BHC	0.0167	0.016	95	59 - 123	
alpha-Chlordane	0.0167	0.015	90	63 - 121	
gamma-Chlordane	0.0167	0.015	91	48 - 124	
4,4'-DDD	0.0167	0.016	93	50 - 139	
4,4'-DDE	0.0167	0.015	92	68 - 126	
4,4'-DDT	0.0167	0.015	89	46 - 135	
Aldrin	0.0167	0.015	92	47 - 120	
Dieldrin	0.0167	0.016	94	67 - 125	
Endosulfan I	0.0167	0.015	89	41 - 147	
Endosulfan II	0.0167	0.015	91	37 - 141	
Endosulfan sulfate	0.0167	0.015	92	62 - 135	
Endrin	0.0167	0.016	96	61 - 133	
Endrin aldehyde	0.0167	0.0074	45	37 - 147	
Heptachlor	0.0167	0.015	87	51 - 140	
Heptachlor epoxide	0.0167	0.015	89	66 - 130	
Methoxychlor	0.0167	0.020	118	57 - 143	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	94	56 - 132	
Tetrachloro-m-xylene	93	69 - 124	

Con	nments:			
		 	· ·	

AFCEE ORGANIC ANALYSES DATA SHEET 8 LABORATORY CONTROL SAMPLE

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-10117

Initial Calibration ID:

<u>1651</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\G101532.rst

Analyte	Expected	Found	%R	Control Limits	Q
alpha-BHC	0.0167	0.017	104	62 - 125	
beta-BHC	0.0167	0.015	92	62 - 127	
delta-BHC	0.0167	0.017	103	57 - 130	
gamma-BHC	0.0167	0.017	100	59 - 123	
alpha-Chlordane	0.0167	0.016	93	63 - 121	
gamma-Chlordane	0.0167	0.016	95	48 - 124	
4,4´-DDD	0.0167	0.016	98	50 - 139	
4,4'-DDE	0.0167	0.016	96	68 - 126	
4,4'-DDT	0.0167	0.016	96	46 - 135	
Aldrin	0.0167	0.016	96	47 - 120	
Dieldrin	0.0167	0.016	98	67 - 125	
Endosulfan I	0.0167	0.016	93	41 - 147	
Endosulfan II	0.0167	0.016	96	37 - 141	
Endosulfan sulfate	0.0167	0.016	96	62 - 135	
Endrin	0.0167	0.017	100	61 - 133	
Endrin aldehyde	0.0167	0.0075	45	37 - 147	
Heptachlor	0.0167	0.015	91	51 - 140	
Heptachlor epoxide	0.0167	0.015	92	66 - 130	T
Methoxychlor	0.0167	0.021	123	57 - 143	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	90	56 - 132	
Tetrachloro-m-xyleпе	89	69 - 124	

Comments:			
	 ·		

AFCEE ORGANIC ANALYSES DATA SHEET 8 LABORATORY CONTROL SAMPLE

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

TLCS-10117

Initial Calibration ID:

<u>1651</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\G101533.rst

Analyte	Expected	Found	%R		Limits	Q
Toxaphene	0.167	0.16	99	31 -	136	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	0	0 - 0	
Tetrachloro-m-xylene	0	0 - 0	

Co	m	me	ents	s:														
	-	_				 			 		 		 	 				
		-						 		 		 	 			 	 	

Analytical Method:

SW8081A

AAB #:

Contract #:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

LCS ID:

TLCSD-10117

Initial Calibration ID:

<u>1651</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\G101534.rst

Analyte	Expected	Found	%R	Control Limit	s Q
Toxaphene	0.167	0.17	104	31 - 136	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	0	0 - 0	
Tetrachloro-m-xylene	0	0 - 0	

Comments:		

Analytical Method:

SW8081A

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCS-10117

Initial Calibration ID:

<u>1652</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\H101531.rst

Analyte	Expected	Found	%R	Control Limits	Q
alpha-BHC	0.0167	0.015	90	62 - 125	
beta-BHC	0.0167	0.015	91	62 - 127	
delta-BHC	0.0167	0.015	92	57 - 130	
gamma-BHC	0.0167	0.015	90	59 - 123	
alpha-Chlordane	0.0167	0.016	94	63 - 121	:
gamma-Chlordane	0.0167	0.016	93	48 - 124	!
4,4´-DDD	0.0167	0.016	93	50 - 139	:
4,4'-DDE	0.0167	0.015	89	68 - 126	
4,4'-DDT	0.0167	0.017	101	46 - 135	
Aldrin	0.0167	0.016	95	47 - 120	
Dieldrin	0.0167	0.015	92	67 - 125	
Endosulfan I	0.0167	0.015	93	41 - 147	
Endosulfan II	0.0167	0.017	101	37 - 141	
Endosulfan sulfate	0.0167	0.016	94	62 - 135	
Endrin	0.0167	0.016	95	61 - 133	
Endrin aldehyde	0.0167	0.0084	50	37 - 147	
Heptachlor	0.0167	0.015	88	51 - 140	
Heptachlor epoxide	0.0167	0.015	92	66 - 130	
Methoxychlor	0.0167	0.016	98	57 - 143	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	98	56 - 132	
Tetrachloro-m-xylene	104	69 - 124	

Comments:						
	 	 -				
	 		<u></u>	 		

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-10117

Initial Calibration ID:

<u>1652</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\H101532.rst

Analyte	Expected	Found	%R	Control Limits	Q
alpha-BHC	0.0167	0.016	94	62 - 125	
beta-BHC	0.0167	0.016	95	62 - 127	
delta-BHC	0.0167	0.016	96	57 - 130	
gamma-BHC	0.0167	0.016	94	59 - 123	
alpha-Chlordane	0.0167	0.016	98	63 - 121	
gamma-Chlordane	0.0167	0.016	97	48 - 124	
4,4'-DDD	0.0167	0.016	98	50 - 139	
4,4'-DDE	0.0167	0.016	93	68 - 126	
4,4'-DDT	0.0167	0.018	105	46 - 135	
Aldrin	0.0167	0.017	100	47 - 120	1
Dieldrin	0.0167	0.016	96	67 - 125	
Endosulfan I	0.0167	0.016	97	41 - 147	
Endosulfan II	0.0167	0.018	105	37 - 141	
Endosulfan sulfate	0.0167	0.016	98	62 - 135	
Endrin	0.0167	0.017	99	61 - 133	
Endrin aldehyde	0.0167	0.0085	51	37 - 147	
Heptachlor	0.0167	0.015	92	51 - 140	
Heptachlor epoxide	0.0167	0.016	97	66 - 130	
Methoxychlor	0.0167	0.017	102	57 - 143	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	92	56 - 132	
Tetrachloro-m-xylene	99	69 - 124	**

Comments:			
	 	 	
	 	 	

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

TLCS-10117

Initial Calibration ID:

<u>1652</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\H101533.rst

Analyte	Expected	Found	%R	Control Lim	its Q
Toxaphene	0.167	0.15	92	31 - 136	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	0	0 - 0	
Tetrachloro-m-xylene	0	0 - 0	

Comments:				
 -	-	 		

Analytical Method:

SW8081A

AAB #:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

TLCSD-10117

Initial Calibration ID:

<u>1652</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\Gtoct09\H101534.rst

Analyte	Expected	Found	%R	Control Limi	ts Q
Toxaphene	0.167	0.16	94	31 - 136	

Surrogate	Recovery	Control Limits	Qualifier
Decachlorobiphenyl	0	0 - 0	
Tetrachloro-m-xylene	0	0 - 0	

Comments:				

Analytical Method:

SW8081A

LCSD-10117

AAB#:

<u>10117</u>

Lab Name:

Life Science Laboratories, Inc.

0

Concentration Units (mg/L or mg/kg):

mg/Kg

% Solids:

Contract #:

Parent Field Sample ID:

MS ID: <u>LCS-10117</u>

MSD ID: LCSD-10117

	Parent		Spiked		Duplicate			Control	Control	
Analyte	Sample Result	Spike Added	Sample Result	%R	Spiked Sample Result	%R	%RPD	Limits %R	Limits %RPD	Q
alpha-BHC		0.017	0.017	99	0.017	104	5	62 - 125	50	
beta-BHC		0.017	0.015	88	0.015	92	4	62 - 127	50	
delta-BHC		0.017	0.016	98	0.017	103	5	57 - 130	50	
gamma-BHC		0.017	0.016	95	0.017	100	5	59 - 123	50	
alpha-Chlordane		0.017	0.015	90	0.016	93	3	63 - 121	50	
gamma-Chlordane		0.017	0.015	91	0.016	95	4	48 - 124	50	
4,4'-DDD		0.017	0.016	93	0.016	98	5	50 - 139	50	
4,4'-DDE	-	0.017	0.015	92	0.016	96	5	68 - 126	50	
4,4'-DDT		0.017	0.015	89	0.016	96	7	46 - 135	50	
Aldrin		0.017	0.015	92	0.016	96	4	47 - 120	50	
Dieldrin		0.017	0.016	94	0.016	98	4	67 - 125	50	
Endosulfan I		0.017	0.015	89	0.016	93	4	41 - 147	50	
Endosulfan II		0.017	0.015	91	0.016	96	6	37 - 141	50	
Endosulfan sulfate		0.017	0.015	92	0.016	96	4	62 - 135	50	
Endrin		0.017	0.016	96	0.017	100	4	61 - 133	50	
Endrin aldehyde		0.017	0.0074	45	0.0075	45	1	37 - 147	50	
Heptachlor		0.017	0.015	87	0.015	91	4	51 - 140	50	
Heptachlor epoxide		0.017	0.015	89	0.015	92	4	66 - 130	50	
Methoxychlor		0.017	0.020	118	0.021	123	4	57 - 143	50	

Comments:			

Analytical Method:

SW8081A

AAB#:

<u>10117</u>

<u>0</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

mg/Kg

% Solids:

Parent Field Sample ID:

LCSD-10117

MS ID: LCS-10117

MSD ID: <u>LCSD-10117</u>

Analyte	Parent Sample	Spike	Spiked Sample	%R	Duplicate Spiked	%R	%RPD	Control Limits	Control Limits Q
	Result	Added	Result		Sample Result			%R	%RPD
alpha-BHC		0.017	0.015	90	0.016	94	4	62 - 125	50
beta-BHC		0.017	0.015	91	0.016	95	5	62 - 127	50
delta-BHC		0.017	0.015	92	0.016	96	4	57 - 130	50
gamma-BHC		0.017	0.015	90	0.016	94	4	59 - 123	50
alpha-Chlordane		0.017	0.016	94	0.016	98	5	63 - 121	50
gamma-Chlordane		0.017	0.016	93	0.016	97	5	48 - 124	50
4,4'-DDD		0.017	0.016	93	0.016	98	5	50 - 139	50
4,4'-DDE		0.017	0.015	89	0.016	93	4	68 - 126	50
4,4'-DDT	,	0.017	0.017	101	0.018	105	4	46 - 135	50
Aldrin		0.017	0.016	95	0.017	100	5	47 - 120	50
Dieldrin		0.017	0.015	92	0.016	96	5	67 - 125	50
Endosulfan I		0.017	0.015	93	0.016	97	5	41 - 147	50
Endosulfan II		0.017	0.017	101	0.018	105	4	37 - 141	50
Endosulfan sulfate		0.017	0.016	94	0.016	98	4	62 - 135	50
Endrin		0.017	0.016	95	0.017	99	5	61 - 133	50
Endrin aldehyde		0.017	0.0084	50	0.0085	51	2	37 - 147	50
Heptachlor	-	0.017	0.015	88	0.015	92	4	51 - 140	50
Heptachlor epoxide		0.017	0.015	92	0.016	97	5	66 - 130	50
Methoxychlor		0.017	0.016	98	0.017	102	4	57 - 143	50

Comments:		
	 	

Analytical Method:

SW8081A

AAB #:

<u>10117</u>

<u>0</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

mg/Kg

% Solids:

Parent Field Sample ID:

TLCSD-10117

MS ID: TLCS-10117

MSD ID: TLCSD-10117

Analyte	Sample Result	Spike Added	Spiked Sample Result	%R	Spiked Sample	%R	%RPD	0.0000000000000000000000000000000000000	imits %R	Limits C %RPD
					Result					
Toxaphene		0.17	0.16	99	0.17	104	6	31	- 136	l 50

Comments:			
	<u> </u>	 	

Analytical Method:

SW8081A

AAB #:

10117

<u>0</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

mg/Kg

% Solids:

Parent Field Sample ID:

TLCSD-10117

MS ID: TLCS-10117

MSD ID: TLCSD-10117

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicate Spiked Sample Result	%R	%RPD		Control Limits (%RPD	ב
Toxaphene		0.17	0.15	92	0.16	94	3	31 - 136	50	

AFCEE ORGANIC ANALYSES DATA SHEET 10 HOLDING TIMES

Analytical Method: SW8081A

AAB #:

10117

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Max. Holding Time E	Time Held Ext.	Date Analyzed	Max. Holding Time A	Time Held Anal	Q
SMCSD0101FA	0910009-001A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.1	16-Oct-09	40	6.6	
SMCSD0101FA	0910009-001A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.1	16-Oct-09	40	6.6	Ī
SMCSD0401FA	0910009-002A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	16-Oct-09	40	6.7	
SMCSD0401FA	0910009-002A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	16-Oct-09	40	6.7	
SMCSD0401FC	0910009-003A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	16-Oct-09	40	6.7	
SMCSD0401FC	0910009-003A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	16-Oct-09	40	6.7	
SMCSD0501FA	0910009-004A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	16-Oct-09	40	6.7	
SMCSD0501FA	0910009-004A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	16-Oct-09	40	6.7	

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Analytical Method:

SW8081A

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

GCGT 57G

Calibration ID: 1651

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Lab Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
PIBLK				•	
PEM	PIBLK	15-Oct-09	15:49	15-Oct-09	16:13
	PEM	15-Oct-09	16:13	15-Oct-09	16:37
RESC	RESC	15-Oct-09	16:37	15-Oct-09	17:01
INDAB-1	INDAB-1	15-Oct-09	17:01	15-Oct-09	17:25
INDAB-2	INDAB-2	15-Oct-09	17:25	15-Oct-09	17:49
INDAB-3	INDAB-3	15-Oct-09	17:49	15-Oct-09	18:13
INDAB-4	INDAB-4	15-Oct-09	18:13	15-Oct-09	18:37
INDAB-5	INDAB-5	15-Oct-09	18:37	15-Oct-09	19:01
INDAB-6	INDAB-6	15-Oct-09	19:01	15-Oct-09	19:25
TOX-1	TOX-1	15-Oct-09	19:25	15-Oct-09	19:49
TOX-2	TOX-2	15-Oct-09	19:49	15-Oct-09	20:13
TOX-3	TOX-3	15-Oct-09	20:13	15-Oct-09	20:37
TOX-4	TOX-4	15-Oct-09	20:37	15-Oct-09	21:01
TOX-5	TOX-5	15-Oct-09	21:01	15-Oct-09	21:25
CHLOR-1	CHLOR-1	15-Oct-09	21:25	15-Oct-09	21:49
CHLOR-2	CHLOR-2	15-Oct-09	21:49	15-Oct-09	22:13
CHLOR-3	CHLOR-3	15-Oct-09	22:13	15-Oct-09	22:37
PEST S.S.	PEST S.S.	15-Oct-09	22:37	15-Oct-09	23:01
TOX S.S.	TOX S.S.	15-Oct-09	23:01	16-Oct-09	0:13
PIBLK	PIBLK	16-Oct-09	0:13	16-Oct-09	0:37
PEM	PEM	16-Oct-09	0:37	16-Oct-09	1:01
INDAB-3	INDAB-3	16-Oct-09	1:01	16-Oct-09	1:25
MB-10117	MB-10117	16-Oct-09	3:25	16-Oct-09	3:49
LCS-10117	LCS-10117	16-Oct-09	3:49	16-Oct-09	4:13
LCSD-10117	LCSD-10117	16-Oct-09	4:13	16-Oct-09	4:37
TLCS-10117	TLCS-10117	16-Oct-09	4:37	16-Oct-09	5:01
TLCSD-10117	TLCSD-10117	16-Oct-09	5:01	16-Oct-09	9:25
PIBLK	PIBLK	16-Oct-09	9:25	16-Oct-09	10:33
INDAB-3	INDAB-3	16-Oct-09	10:33	16-Oct-09	10:57
SMCSD0101FA	0910009-001A	16-Oct-09	10:57	16-Oct-09	11:21
SMCSD0401FA	0910009-002A	16-Oct-09	11:21	16-Oct-09	11:45
SMCSD0401FC	0910009-003A	16-Oct-09	11:45	16-Oct-09	12:09
SMCSD0501FA	0910009-004A	16-Oct-09	12:09	16-Oct-09	16:55
PIBLK	PIBLK	16-Oct-09	16:55	16-Oct-09	17:19
INDAB-3	INDAB-3	16-Oct-09	17:19	16-Oct-09	17:43

Comments:

Analytical Method:

SW8081A

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

GCGT 57G

Field Sample ID/Std ID/	Lab	Date Analysis	Time Analysis		Time Analysis
Blank ID/QC Sample ID	Sample ID	Started	Started		Completed
TOX-3	TOX-3	16-Oct-09	17:43	16-Oct-09	18:31

Analytical Method:

SW8081A

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

GCGT 57H

Calibration ID: 1652

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Lab Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
PIBLK			100000000000000000000000000000000000000		
PEM	PIBLK	15-Oct-09	15:49	15-Oct-09	16:13
	PEM	15-Oct-09	16:13	15-Oct-09	16:37
RESC	RESC	15-Oct-09	16:37	15-Oct-09	17:01
INDAB-1	INDAB-1	15-Oct-09	17:01	15-Oct-09	17:25
INDAB-2	INDAB-2	15-Oct-09	17:25	15-Oct-09	17:49
NDAB-3	INDAB-3	15-Oct-09	17:49	15-Oct-09	18:13
NDAB-4	INDAB-4	15-Oct-09	18:13	15-Oct-09	18:37
NDAB-5	INDAB-5	15-Oct-09	18:37	15-Oct-09	19:01
NDAB-6	INDAB-6	15-Oct-09	19:01	15-Oct-09	19:25
TOX-1	TOX-1	15-Oct-09	19:25	15-Oct-09	19:49
TOX-2	TOX-2	15-Oct-09	19:49	15-Oct-09	20:13
ГОХ-3	TOX-3	15-Oct-09	20:13	15-Oct-09	20:37
ГОХ-4	TOX-4	15-Oct-09	20:37	15-Oct-09	21:01
TOX-5	TOX-5	15-Oct-09	21:01	15-Oct-09	21:25
CHLOR-1	CHLOR-1	15-Oct-09	21:25	15-Oct-09	21:49
CHLOR-2	CHLOR-2	15-Oct-09	21:49	15-Oct-09	22:13
CHLOR-3	CHLOR-3	15-Oct-09	22:13	15-Oct-09	22:37
PEST S.S.	PEST S.S.	15-Oct-09	22:37	15-Oct-09	23:01
TOX S.S.	TOX S.S.	15-Oct-09	23:01	16-Oct-09	0:13
PIBLK	PIBLK	16-Oct-09	0:13	16-Oct-09	0:37
PEM	PEM	16-Oct-09	0:37	16-Oct-09	1:01
NDAB-3	INDAB-3	16-Oct-09	1:01	16-Oct-09	1:25
MB-10117	MB-10117	16-Oct-09	3:25	16-Oct-09	3:49
_CS-10117	LCS-10117	16-Oct-09	3:49	16-Oct-09	4:13
LCSD-10117	LCSD-10117	16-Oct-09	4:13	16-Oct-09	4:37
TLCS-10117	TLCS-10117	16-Oct-09	4:37	16-Oct-09	5:01
TLCSD-10117	TLCSD-10117	16-Oct-09	5:01	16-Oct-09	9:25
PIBLK	PIBLK	16-Oct-09	9:25	16-Oct-09	10:33
NDAB-3	INDAB-3	16-Oct-09	10:33	16-Oct-09	10:57
SMCSD0101FA	0910009-001A	16-Oct-09	10:57	16-Oct-09	11:21
SMCSD0401FA	0910009-002A	16-Oct-09	11:21	16-Oct-09	11:45
SMCSD0401FC	0910009-003A	16-Oct-09	11:45	16-Oct-09	12:09
SMCSD0501FA	0910009-004A	16-Oct-09	12:09	16-Oct-09	16:55
PIBLK	PIBLK	16-Oct-09	16:55	16-Oct-09	17:19
NDAB-3	INDAB-3	16-Oct-09	17:19	16-Oct-09	17:19

Comments:

Analytical Method:

SW8081A

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

GCGT 57H

PCB Data

AFCEE ORGANIC ANALYSES DATA SHEET 3 INITIAL MULTIPOINT CALIBRATION

Analytical Method:

SW8082

AAB #:

<u> 18534</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

GC90_20C

Date of Initial Calibration:

22-Sep-09

Initial Calibration ID:

<u>1650</u>

Concentration Units:

ug/mL

SEE ATTACHED INITIAL CALIBRATION

Comments:				

AFCEE FORM O-3

QAPP 4.0 Page 1 of 1

INITIAL CALIBRATION

<u>INSTRUMENT:</u> HP5890-90 (GC90-20C)

COLUMN: DB-608

SEQUENCE: 90092209

<u>PCBs</u>

ICAL 1650

Turbochrom Method File E:\Methods\cSURR092209.mth

 Printed by
 : manager on: 09/24/09
 11:45:39

 Created by
 : manager on: 09/24/09
 11:45:28

 Edited by
 : manager on: 09/24/09
 11:45:37

Number of Times Edited : 1 Number of Times Calibrated : 60

Description: AR1016/AR1260 - CHANNEL C

ICAL 1650

Global Sample Information

Default Sample Volume : 1.000 uL
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration : Yes
Convert unknowns to concentration units : Yes
Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

2,4,5,6-TCMX

Component Type : Single Peak Component

Retention Time Search Window

: 4.941 min : 1.04 s, 0.00 %

Reference Component ;

1.04 s, 0.00 %

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 1.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Агеа	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0800	677809.25	161575.09			
2	0.0400	337578.70	82008.07			i
3						1
4	-	75457.40				1
5	0.0050	34504.33	8093.13			1

Average Calibration Factor = 7.868798e+06 (%RSD = 8.39)

DECACHLOROBIPHENYL

Component Type : Single Peak Component

Retention Time : 23.030 min Search Window : 1.08 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label

Value 1 : 1.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0800	844212.68	95480.73			
2	0.0400	455247.10	51661.88			1
3	0.0200	225282.56	25985.65			1
4	0.0100	113149.44	13103.57			1
5	0.0050	53589.90	6231.07			i

Average Calibration Factor = 1.104618e+07 (%RSD = 3.46)

Calibration Replicate Lists Component : 2,4,5,6-TCMX

Level : 1

Alea	meigrii	voi Aaj Amt	ISTD Response	ISTD Amount	Date	Time	File
677809.25	161575.09	0.0800		~~~~~	09/24/09	11:45:11	E:\90sep09\C092203.rst

09/24/09 11:45:39 Method: E:\Methods\cSURR092209.mth

Area	Height	Vol Adj Amt	ISTD Response	STD Amount	Date	Time	File
337578.70	82008.07	0.0400			09/24/09	11:45:11	E:\90sep09\C092204.rs
Level ; 3		Vol Adj Amt	ISTD Response	: ISTD Amount	Date	Time	File
159706.07	38466.81	0.0200		*	09/24/09	11:45:12	E:\90sep09\C092205.rs
Level : 4 Area		Vol Adj Amt	STD Response	ISTD Amount	Date	Time	File
75457.40	17994.33	0.0100			09/24/09	11:45:12	E:\90sep09\C092206.rst
Level : 5		ol Adj Amt IS	STD Response IS	STD Amount	Date	Time	File
34504.33	3093.13	0.0050			9/24/09 1	1:45:12 E	:\90sep09\C092207.rst
Componen Level Area	: 1	CHLOROBIP		1070 4			
844212.68			ISTD Response	ISTD Amount		Time	File
OTTE 12.00	55460.75	0.0000	<u> </u>	***************************************	09/24/09	11:45:11	E:\90sep09\C092203.rs
Level : 2 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
455247.10	51661,88	0.0400	********		09/24/09	11:45:11	E:\90sep09\C092204.rs
Level : 3 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
225282.56	25985.65	0.0200			09/24/09	11:45:12	E:\90sep09\C092205.rs
Level: 4 Area		Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
113149,44	13103,57	0.0100			09/24/09	11:45:12	E:\90sep09\C092206.rsf
Level : 5 Area		ol Adj Amt IS	TD Response IS	STD Amount	Date	Time	File
53589.90 6	231.07	0.0050			9/24/09 1	1:45:12 E:	\90sep09\C092207.rst

Turbochrom Method File E:\Methods\c60092209.mth

 Printed by
 : manager on: 09/24/09 11:43:13

 Created by
 : manager on: 09/24/09 10:02:20

 Edited by
 : manager on: 09/24/09 11:43:11

 Number of Times Edited
 : 2

Number of Times Edited : 2 Number of Times Calibrated : 59

Description: AR1016/AR1260 - CHANNEL C

Global Sample Information

Default Sample Volume : 1.000 uL
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration : Yes
Convert unknowns to concentration units : Yes
Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1016-1

Component Type : Single Peak Component

Retention Time : 6.763 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	11567.17	2398.56			1
4	0.1000	22487.51	4693.72		***************************************	1
3	0.2000	43892.50	9001.04			1
2	0.3000	60255.34	12461.89			1
1	0.5000	100532.70	20644.14			1

Average Calibration Factor = 215519.508212 (%RSD = 6.47)

AR1016-2

Component Type : Single Peak Component

Retention Time : 7.980 min Search Window : 1.04 s, 0.00 % Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard punty percentage: 100.0000%

User Values Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000

Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	27911.21	5462.41			1
4	0.1000	54688.38	10410.53		***************************************	1
3	0.2000	103808.46	19590.75		***********	1
2	0.3000	144027.44	27028.16			1
1	0.5000	233839.65	43543.85			1

Average Calibration Factor = 514384.202856 (%RSD = 7.75)

AR1016-3

Component Type : Single Peak Component

Retention Time : 9.055 min Search Window : 1.04 s, 0.00 %

Reference Component :

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000

Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	38797.97	6154.05			1
4	0.1000	78522.40	12328.36			1
3	0.2000	160335.00	24385.60			1
2	0.3000	226676.14	35148.54			1
1	0.5000	385330.93	59616.63			1

Average Calibration Factor = 777821.494682 (%RSD = 2.20)

AR1016-4

Component Type

: Single Peak Component

9.544 min Retention Time

1.04 s, 0.00 % Search Window

Reference Component:

Find peak closest to expected RT in window
Use Average Calibration Factor (Area / Amount)
Component standard purity percentage : 100.0000%

User Values

Label

Value 1: 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	15816.31	2861.93			1
4	0.1000	30702.55	5608.89			1
3	0.2000	66618.08	11328.31			1
2	0.3000	89382.28	15794.69			1
1	0.5000	151979.95	26468.59	•		1

Average Calibration Factor = 311668.558020 (%RSD = 4.39)

AR1016-5

Component Type : Single Peak Component

: 10.985 min Retention Time Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	16381.35	2814.51			1
4	0,1000	33447,63	5561.05			1
3	0.2000	68715.72	11152.65			1
2	0.3000	90238.23	15237.36			1
1	0.5000	152270.47	25385.20			1

Average Calibration Factor = 322203.388477 (%RSD = 5.82)

AR1260-1

: Single Peak Component Component Type

Retention Time : 13.923 min Search Window : 1.04 s, 0.00 %

Reference Component :

User Values

Label

Value 1: 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	16056.94	3095.91			1
4	0.1000	34521.00	6495.07	***************************************		1
3	0.2000	66320.05	12789.95			1
2	0.3000	99733.94	18573.80			1
1	0.5000	155241.08	29249.57			1

Average Calibration Factor = 328175,536682 (%RSD = 3.98)

AR1260-2

Component Type Single Peak Component

Retention Time 14.465 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	33614.12	5982.72			1
4	0.1000	71579.97	12600.47			1
3	0.2000	136004.61	23679.42			1
2	0.3000	200797.93	34460.08			ì
1	0.5000	307195.08	51907.07		***********	1
						-

Average Calibration Factor = 670364.362112 (%RSD = 5.43)

AR1260-3

Component Type

: Single Peak Component : 14.727 min : 1.04 s, 0.00 % Retention Time Search Window

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2: 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	34660.21	6733.28			1
4						i
3	0.2000	141112.07	27156.73			i
2	0.3000	208002.69	39779.00			1
1	0.5000	319774.31	60230.45			1

Average Calibration Factor = 694078.754146 (%RSD = 5.15)

AR1260-4

Component Type : Single Peak Component

Retention Time : 17.588 min Search Window 1.04 s, 0.00 %

Reference Component:

```
09/24/09 11:43:13 Method: E:\Methods\c60092209.mth
  User Values
   Label
    Value 1 : 0.000000
    Value 2 : 0.000000
    Value 3 ; 0.000000
   Value 4 : 0.000000
   Value 5 : 0.000000
  Calibration Level
  Level Name Amount
                        Area
                                  Height
                                           ISTD Amt. ISTD Resp. # Replicates
  5
                       55052.95
                                 10254.82
  4
              0.1000 119578.80
                                 22469.85
  3
              0.2000 235581.98
                                 43797.70
              0.3000 354550.96
                                 65562.12
              0.5000 559127.01 102955.79
  Average Calibration Factor = 1.154969e+06 (%RSD = 3.67)
AR1260-5
  Component Type
                        Single Peak Component
  Retention Time
                        18.935 min
  Search Window
                         1.35 s, 0.00 %
  Reference Component:
  Find peak closest to expected RT in window
  Use Average Calibration Factor (Area / Amount)
  Component standard purity percentage: 100.0000%
  User Values
   Label
   Value 1: 0.000000
   Value 2 : 0.000000
   Value 3 : 0.000000
   Value 4: 0.000000
   Value 5 : 0.000000
  Calibration Level
  Level Name Amount
                                 Height ISTD Amt. ISTD Resp. #Replicates
                        Area
              0.0500
                      24711.17 4591.77 -
              0.1000
                      57520.23 10232.61
              0.2000 109098.00 19705.81
              0.3000 167385.14 29922.65
              0.5000 268397.30 48077.59
 Average Calibration Factor = 541932.163260 (%RSD = 5.60)
Calibration Replicate Lists
 Component: AR1016-1
   Level
             : 5
  Area
          Height Vol Adj Amt ISTD Response ISTD Amount
                                                           Date
                                                                                    File
                                                                    Time
11567.17 2398.56
                      0.0500
                                                          09/24/09 11:43:05 E:\90sep09\C092207.rst
 Level: 4
  Area
          Height Vol Adj Amt ISTD Response ISTD Amount
                                                                                    File
                                                           Date
                                                                    Time
22487.51 4693.72
                      0.1000 ----
                                                          09/24/09 11:43:05 E:\90sep09\C092206.rst
 Level: 3
  Area
          Height Vol Adj Amt ISTD Response ISTD Amount
                                                           Date
                                                                    Time
                                                                                    File
43892.50 9001.04
                      0.2000 --
                                                          09/24/09 11:43:04 E:\90sep09\C092205.rst
 Level: 2
          Height Vol Adj Amt ISTD Response ISTD Amount
 Area
                                                            Date
                                                                     Time
60255.34 12461,89
                       0.3000 ---
                                                           09/24/09 11:43:04 E:\90sep09\C092204.rst
 Level: 1
  Area
           Height Vol Adj Amt ISTD Response ISTO Amount
                                                             Date
                                                                      Time
                                                                                      File
100532.70 20644.14
                        0.5000
                                                            09/24/09 11:43:04 E:\90sep09\C092203.rst
Component : AR1016-2
 Level
```

Level: 4

27911.21 5462.41

Area

Height Vol Adj Amt ISTD Response ISTD Amount

0.0500 ----

Date

Time

09/24/09 11:43:05 E:\90sep09\C092207.rst

Turbochrom Method File E:\Methods\c21092209.mth

Printed by : manager on: 09/24/09 12:12:11
Created by : manager on: 09/24/09 10:01:18
Edited by : manager on: 09/24/09 12:12:09

Number of Times Edited : 2 Number of Times Calibrated : 48 Description: AR1221 - CHANNEL C

Global Sample Information

Default Sample Volume : 1.000 uL
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration : Yes
Convert unknowns to concentration units : Yes
Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1221-1

Component Type : Single Peak Component

Retention Time : 4.273 min

Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000

Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	52318.49	10863.35			1
2	0.3000	32660.11	6759.58			1
3	0.2000	21847.23	4707.37		***************************************	1
4	0.1000	11500.25	2550.28			1
5	0.0500	5844 44	1324.26			1

Average Calibration Factor = 110926.276530 (%RSD = 4.48)

AR1221-2

Component Type : Single Peak Component

Retention Time : 6.148 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	53382.94	10793.18			1
2	0.3000	30911.79	6299.63			1
3	0.2000	20731.47	4218.88			1
4	0.1000	11032.62	2238.29			1
5	0.0500	5619.02	1128.92			1

Average Calibration Factor = 107233.834587 (%RSD = 3.81)

AR1221-3

Component Type : Single Peak Component

Retention Time : 6.578 min Search Window : 1.04 s, 0.00 % Reference Component :

```
User Values
 Label
```

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

_	evel Name		Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
1		0.5000	39965,17	8541.09			1
2		0.3000	23590.15	5018.28			1
3		0.2000	15859.52	3385.24			1
4		0.1000	8630.57	1818,89			1
5		0.0500	4546.62	940.11			1

Average Calibration Factor = 83019.981011 (%RSD = 6.49)

AR1221-4

Component Type

Single Peak Component

Retention Time 6.763 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 ; 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	128925.99	26422.27	*************		1
2	0.3000	77533.92	15877.59			1
3	0.2000	52405.26	10806.34		***************************************	1
4	0.1000	28415.86	5819.60			1
5	0.0500	14077.96	2973.62			1

Average Calibration Factor = 268808.494672 (%RSD = 4.82)

Calibration Replicate Lists Component: AR1221-1

Levei

Area Height Vol Adj Amt ISTD Response ISTD Amount Time File 52318.49 10863.35 0.5000 -09/24/09 12:12:04 E:\90sep09\C092208.rst

Level: 2

Height Vol Adj Amt ISTD Response ISTD Amount Area Date File Time 32660.11 6759.58 0.3000 --09/24/09 12:12:05 E:\90sep09\C092209.rst

Level: 3

Height Vol Adj Amt ISTD Response ISTD Amount Area 21847.23 4707.37 0.2000 -----09/24/09 12:12:05 E:\90sep09\C092210.rst

Level: 4

Height Vol Adj Amt ISTD Response ISTD Amount Area Date Time File 11500.25 2550.28 0.1000 -09/24/09 12:12:05 E:\90sep09\C092211.rst

Level: 5

Area Height Vol Adj Amt ISTD Response ISTD Amount Time File 5844.44 1324.26 0.0500 --09/24/09 12:12:05 E:\90sep09\C092212.rst

Component: AR1221-2

Level

Area Height Vol Adj Amt ISTD Response ISTD Amount Date Time File 53382.94 10793.18 0.5000 ---09/24/09 12:12:04 E:\90sep09\C092208.rst

Level: 2

Turbochrom Method File E:\Methods\c32092209.mth

 Printed by
 : manager on: 09/24/09 12:44:29

 Created by
 : manager on: 09/24/09 10:01:30

 Edited by
 : manager on: 09/24/09 12:44:26

Number of Times Edited : 3 Number of Times Calibrated : 55 Description: AR1232 - CHANNEL C

Global Sample Information

Default Sample Volume : 1.000 uL
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration : Yes
Convert unknowns to concentration units : Yes
Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1232-1

Component Type : Single Peak Component

Retention Time : 6.763 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	104518.33	21447.96			1
2	0.3000	64822.19	13327.02			i
3	0.2000	45452.92	9323.08			1
4	0.1000	23409.53	4824.27			1
5	0.0500	11938.54	2469.70			1

Average Calibration Factor = 225048.232443 (%RSD = 5.50)

AR1232-2

Component Type :

Single Peak Component

Retention Time Search Window

: 7.979 min : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	118372.50	21371.53		***************************************	1
2	0.3000	74200.30	13456,40		·	i i
3						1
4	0.1000	26777.10	4938.40			1
5	0.0500	13261.16	2561,76			1

Average Calibration Factor = 255566.184658 (%RSD = 5.14)

AR1232-3

Component Type : Single Peak Component

Retention Time : 9.056 min Search Window : 1.04 s, 0.00 %

Reference Component :

```
User Values
```

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	164999.62	25959.36			1
2	0.3000	101826.76	15542.03			1
3	0.2000	70826.48	10714.82			1
4	0.1000	33762.78	5334.35	************		1
5	0.0500	17121.17	2708,41	************	***************************************	1

Average Calibration Factor = 340721.064135 (%RSD = 2.58)

AR1232-4

Component Type : Single Peak Component

Retention Time : 10.985 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000

Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	70790.06	11424.75			1
2	0.3000	43011.40	6957.95			1
3	0.2000	29849.00	4845.93			1
4	0.1000	15405.15	2483.10		***************************************	1
5	0.0500	7851.09	1266.15	***************************************		1

Average Calibration Factor = 149053.953449 (%RSD = 4.46)

AR1232-5

Component Type : Single Peak Component

Retention Time : 11.948 min Search Window : 1.04 s, 0.00 % Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1: 0.000000 Value 2 : 0.000000 Value 3: 0.000000 Value 4: 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	63516.66	11882.37			1
2	0.3000	38622.46	7118.94	*		1
3	0.2000	27193.83	4965,25			1
4	0.1000	13003.68	2452.64			1
5	0.0500	6603.56	1235.69			1

Average Calibration Factor = 130770.389458 (%RSD = 2.63)

Calibration Replicate Lists Component: AR1232-1

Level

Height Vol Adj Amt ISTD Response ISTD Amount Time File Date 104518.33 21447.96 0.5000 ----09/24/09 12:44:22 E:\90sep09\C092213.rst

Level: 2

Turbochrom Method File E:\Methods\c42092209.mth

Printed by manager on: 09/24/09 12:45:42 Created by manager on: 09/24/09 10:01:45 Edited by manager on: 09/24/09 12:45:39

Number of Times Edited Number of Times Calibrated : 62 Description: AR1242 - CHANNEL C

Global Sample Information

Default Sample Volume 1.000 uL Quantitation Units ng 0.000 min Vaid Time Correct amounts during calibration Yes Convert unknowns to concentration units: Yes Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1242-1

Component Type Single Peak Component

Retention Time 6.763 min Search Window

1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Label

Value 1: 0.000000 Value 2 : 0.000000

Value 3 : 0.000000 Value 4 : 0.000000

Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt,	ISTD Resp.	# Replicates
1	0.5000	78925.84	16197.88			1
2						1
3	0.2000	31871.98	6592.34			1
4	0.1000	17229.29	3610,28			1
5	0.0500	8106.21	1717 01	*************		1

Average Calibration Factor = 162139.755100 (%RSD = 3.63)

AR1242-2

Component Type : Single Peak Component

Retention Time : 7.980 min

Search Window : 1.04 s, 0.00 %

Reference Component: Find peak closest to expected RT in window

Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Label

: 0.000000 Value 1 Value 2 : 0.000000 Value 3 : 0.000000

Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1 2 3	0.3000 0.2000	115117.86 78250.13	21850.42 14835.15			1 1 1
5						i

Average Calibration Factor = 401026.978259 (%RSD = 6.50)

AR1242-3

Component Type : Single Peak Component

Retention Time 9.055 min Search Window 1.04 s, 0.00 % Reference Component:

```
User Values
```

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3: 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	298055.12	46345.33			1
2	0.3000	174395.91	27215.99			1
3	0.2000	117928.23	17821.45			1
4	0.1000	63952.26	9495.84			1
5	0.0500	28798.71	4472.21			1

Average Calibration Factor = 596513.573752 (%RSD = 4.23)

AR1242-4

: Single Peak Component : 11.766 min Component Type

Retention Time

Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	#Replicates
1	0.5000	99774 62	19298 84			
2						i
3	0.2000	39605.60	7701.95			1
4	0.1000	21853.28	4161.06		**********	1
5	0.0500	10534.32	2013.09			1

Average Calibration Factor = 205237.149317 (%RSD = 4.39)

AR1242-5

Component Type : Single Peak Component

Retention Time : 12.785 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
1	0.5000	95000.59	10002.20			
						1
2	0.3000	51043.38	9906.16			1
3	0.2000	33468.59	6478.49		***************************************	1
4	0.1000	18399.61	3490.65			1
5	0.0500	8856.05	1682.70			1

Average Calibration Factor = 174120.764979 (%RSD = 3.77)

Calibration Replicate Lists

Component : AR1242-1 Level : 1 Area Height Vol Adi Amt ISTD Response

Alea	neigni	voi Auj Ami	1910 Kesponse	15 I D Amount	Date	i ime	Filė
78925.84	16197.88	0.5000	*********		09/24/09	12:45:35	F:\90sen09\C092218 rst

Level: 2

Turbochrom Method File E:\Methods\c48092209.mth

: manager on: 09/24/09 12:46:48 Printed by Created by : manager on; 09/24/09 10:01:56 Edited by : manager on: 09/24/09 12:46:47

Number of Times Edited Number of Times Calibrated: 64 Description: AR1248 - CHANNEL C

Global Sample Information

Default Sample Volume Quantitation Units ng 0.000 min Void Time Correct amounts during calibration Yes Convert unknowns to concentration units: Yes Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1248-1

: Single Peak Component : 7,979 min Component Type

Retention Time

: 1.04 s, 0.00 % Search Window

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0.000000

Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	99854.75	19193.72			1
2	0.3000	60466.13	11751.69			1
3	0.2000	41020.99	7981.16			1
4	0.1000	22076.69	4393.98		***********	1
5	0.0500	11416.85	2281,24			1

Average Calibration Factor = 211094.411690 (%RSD = 6.03)

AR1248-2

Component Type : Single Peak Component

Retention Time : 9,050 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	196414.08	30030.59			1
2	0.3000	116121.19	17461.61			1
3	0.2000	78293.16	11687.74		*************	1
4	0.1000	39771.69	6178.03			1
5	0.0500	20153,72	3111.96			1

Average Calibration Factor = 394431,179623 (%RSD = 1.56)

AR1248-3

: Single Peak Component Component Type

Retention Time : 10.020 min Search Window : 1.04 s, 0.00 %

Reference Component:

User Values

Label

Value 1 : 0,000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0,5000	191228.89	30334.44			1
2	0.3000	115859.39	18526.24			1
3	0.2000	80125.10	12732.10			1
4	0.1000	42361.08	6977.52			1
5	0.0500	21556.04	3602.00	***************************************		1

Average Calibration Factor = 404802.570428 (%RSD = 5.40)

AR1248-4

Component Type : Single Peak Component

Retention Time 11.947 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values Label

Value 1 : 0,000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	198752.38	36428.45			1
2	0.3000	116977.18	21484.33			1
3	0.2000	78650.38	14350.51			1
4	0.1000	42044.45	7634.45			1
5	0.0500	20966.23	3828.72			1

Average Calibration Factor = 404089.932029 (%RSD = 3.63)

AR1248-5

: Single Peak Component

Component Type Retention Time : 13.937 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	106908.34	20605.16			1
2	0.3000	62741.85	11934.33			1
3	0.2000	40936.15	8011.44			1
4	0.1000	21923.51	4304.32			1
5	0.0500	11013.84	2156.37			1

Average Calibration Factor = 213429.757883 (%RSD = 3.11)

Calibration Replicate Lists

Component : AR1248-1

Level

Height Vol Adj Amt ISTD Response ISTD Amount Date Time File Area 99854.75 19193.72 0.5000 -----09/24/09 12:46:43 E:\90sep09\C092223.rst

Level: 2

Turbochrom Method File E:\Methods\c54092209.mth

Printed by manager on: 09/24/09 12:48:01 Created by manager on: 09/24/09 10:02:08 Edited by manager on: 09/24/09 12:48:00

Number of Times Edited Number of Times Calibrated: 50

Description: AR1254/60 - CHANNEL C

Global Sample Information

Default Sample Volume Quantitation Units ng 0.000 min Void Time Correct amounts during calibration Yes Convert unknowns to concentration units : Yes Reject outliers during calibration No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1254-1

Component Type Single Peak Component

Retention Time 10.021 min

Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label Value 1 : 0.000000

Value 2 : 0.000000 Value 3 : 0,000000

Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

	Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1		0.5000	114394.44	22429.31			1
2		0.3000	70374.93	13808.49			1
3		0.2000	48605.99	9379.45		***************************************	1
4		0.1000	25888.12	5075.58		**	1
5		0.0500	11788.92	2496.36			1

Average Calibration Factor = 240212,307495 (%RSD = 4.83)

AR1254-2

Component Type : Single Peak Component

Retention Time 12.192 min Search Window 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100,0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

L	evel Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1		0.5000	230066.52	42687.80			
2		0.3000	139994.48	26380.42		***************************************	1
3		0.2000	95201.90	17962.50			1
4			-				1
5		0.0500	25891,50	5001,33			1

Average Calibration Factor = 486986.137167 (%RSD = 5.58)

AR1254-3

Component Type Single Peak Component

Retention Time 12.388 min Search Window 1.04 s, 0.00 %

```
User Values
Label :
```

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	277955.68	48024.69			1
2	0.3000	169572.15	29463.27			1
3	0,2000	115602.02	20168.99			1
4	0.1000	62709.40	11020.67			1
5	0.0500	32150.07	5688.09			1

Average Calibration Factor = 593851.465389 (%RSD = 6.54)

AR1254-4

Component Type : Single Peak Component

Retention Time : 13.936 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.5000	354028.66	66553.70			1
2	0,3000	210136.15	40010.28			1
3	0.2000	140486.40	26946.90			1
4	0.1000	74804.17	14166.08			1
5	0.0500	37292.51	7165,48			1

Average Calibration Factor = 720967.009532 (%RSD = 3.31)

AR1254-5

Component Type : Single Peak Component

Retention Time : 16.011 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

L	evel Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1		0.5000	303219.41	50458.28			1
2							1
3		0.2000	120496.23	20081.44			1
4		0.1000	64043.43	10600.66			1
5		0.0500	32438.37	5333.53		••••	1

Average Calibration Factor = 619007.950148 (%RSD = 3.84)

Calibration Replicate Lists

Component : AR1254-1

Level Area	; 1 Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
114394.44	22429.31	0.5000		********	09/24/09	12:47:56	E:\90sep09\C092228.rst

Level: 2

Turbochrom Method File E:\Methods\c62092209.mth

Printed by : manager on: 09/24/09 12:49:09
Created by : manager on: 09/24/09 10:02:46
Edited by : manager on: 09/24/09 12:49:08

Number of Times Edited : 2 Number of Times Calibrated : 53 Description: AR1262 - CHANNEL C

Global Sample Information

Default Sample Volume : 1.000 uL
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration Convert unknowns to concentration units : No
Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1262-1

Component Type : Single Peak Component

Retention Time : 13.920 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
-	0.0500	40000 44	2455.45			
5						1
4	0.1000	30241.13	5894.77			1
3	0.2000	59377.40	11183.58			1
2	0.3000	87293.90	16371.68			1
1	0.5000	144060.85	26970.88			1

Average Calibration Factor = 300585.592895 (%RSD = 4.81)

AR1262-2

Component Type : Single Peak Component

Retention Time : 14.726 min Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label : Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

- 1	_evel Name	Amount	Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
	 5	0.0600	20965.07	5702.20			
ľ	4					***************************************	1
:	3						1
	2						i
	1	0.5000	259171.22	48585.16			1

Average Calibration Factor = 552577.275823 (%RSD = 5.86)

AR1262-3

Component Type : Single Peak Component

Retention Time : 16.117 min Search Window : 1.04 s, 0.00 % Reference Component :

```
User Values
```

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	42058.26	7672.22			1
4	0.1000	83045,87	15122.66			1
3	0.2000	154169.31	27788.25			1
2	0.3000	224282.79	39922.18			1
1	0.5000	364049.16	65120.84			1

Average Calibration Factor = 783635.593540 (%RSD = 6.40)

AR1262-4

Component Type

: Single Peak Component

Retention Time

: 17.586 min

Search Window

: 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	66625.49	12277.93			1
4	0.1000	133576.87	24096.85			1
3	0.2000	255594.59	46653.12		***************************************	1
2	0.3000	378949.99	68495.45			1
1	0.5000	633036.34	114747.67			1

Average Calibration Factor = 1.295098e+06 (%RSD = 2.79)

AR1262-5

Component Type

: Single Peak Component

Retention Time Search Window : 18.695 min

: 1.35 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount)

Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
5	0.0500	29809.77	5302.83			1
4	0.1000	59098.31	10428.41			1
3	0.2000	112233.06	19660.98	************		1
2	0.3000	165757.16	28949.18			1
1	0.5000	275762.51	47750.65			1

Average Calibration Factor = 570478.555914 (%RSD = 3.77)

Calibration Replicate Lists

Component : AR1262-1

Level

Height Vol Adj Amt ISTD Response ISTD Amount Date Area Time File 16226.41 3105.40 0.0500 -----09/24/09 12:49:05 E:\90sep09\C092237.rst

Level: 4

Turbochrom Method File E:\Methods\c68092209.mth

Printed by : manager on: 09/24/09 12:50:11
Created by : manager on: 09/24/09 10:03:01
Edited by : manager on: 09/24/09 12:50:10

Number of Times Edited : 2 Number of Times Calibrated : 66 Description: AR1268 CALIBRATION

Global Sample Information

Default Sample Volume : 1.000 uL Quantitation Units : ng Void Time : 0.000 min Correct amounts during calibration : Yes Convert unknowns to concentration units : Yes Reject outliers during calibration : No

An External Standard calibration will be used

Unknown peaks will use the response factor of the nearest component

First peak will be relative retention reference

Component Information

AR1268-1

Component Type : Single Peak Component

Retention Time : 16.118 min Search Window : 1.04 s, 0.00 %

Reference Component

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values Label :

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name		Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
3	0.2000	75581.20	14044.16			1
1	0.5000	184133.13	33918.32			1
2	0.3000	108329.63	20072.03		~~~~~	1
4	0.1000	39275.42	7405.45			1
5	0.0500	19288.41	3632.75			1

Average Calibration Factor = 377158.692879 (%RSD = 3.39)

AR1268-2

Component Type : Single Peak Component

Retention Time : 17.097 min Search Window : 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage : 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTO Resp.	# Replicates
3	0.2000	92768.52	15988.91			1
1						1
2	0.3000	132762.47	22480.42			1
4	0.1000	48674.65	8464.97			1
5	0.0500	23879,25	4222.89			1

Average Calibration Factor = 463069.748965 (%RSD = 4.23)

AR1268-3

Component Type : Single Peak Component

Retention Time : 18.692 min Search Window : 1.04 s, 0.00 %

Reference Component:

```
User Values
```

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
3	0.2000	293252.22	54438.12			1
1	0.5000	714598.64	132679.40			1
2	0.3000	422135.35	78803.66			1
4	0.1000	152367,04	28708.65			1
5	0.0500	75175.39	14093.80			1

Average Calibration Factor = 1.465951e+06 (%RSD = 3.33)

AR1268-4

: Single Peak Component Component Type

Retention Time : 19.693 min Search Window 1.04 s, 0.00 %

Reference Component:

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
3	0.2000	216970.72	35437.26			1
1	0.5000	512844.62	87325.33			1
2	0.3000	301300.09	50830.05			1
4	0.1000	120932.85	18701.53			1
5	0.0500	57033.82	9347.37			1

Average Calibration Factor = 1.092976e+06 (%RSD = 7.69)

AR1268-5

: Single Peak Component : 21.669 min Component Type

Retention Time Search Window : 1.04 s, 0.00 %

Reference Component :

Find peak closest to expected RT in window Use Average Calibration Factor (Area / Amount) Component standard purity percentage: 100.0000%

User Values

Label

Value 1 : 0.000000 Value 2 : 0.000000 Value 3 : 0.000000 Value 4 : 0.000000 Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
3	0.2000	644659.95	87456.04			1
1	0.5000	1596474.84	212236.66			1
2	0.3000	933848.38	125266.16			1
4	0.1000	328036.31	44785.72			1
5	0.0500	156795.59	21248.64			1

Average Calibration Factor = 3.189070e+06 (%RSD = 2.11)

Calibration Replicate Lists Component: AR1268-1

Level : 3

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
75581.20	14044.16	0.2000			09/24/09	12:50:06	E:\90sep09\C092240.rst

Level: 1

Analytical Method:

SW8082

AAB #:

R18534

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Instrument ID:

GC90_20C

Initial Calibration ID:

<u>1650</u>

Second Source ID:

AR1221S.S.

Concentration Units (mg/L or mg/kg):

<u>μg/L</u>

Analyte	Expected	Found	%D	Q
Aroclor 1221	200	183	-8.6	

Comments:	

Analytical Method:

SW8082

AAB#:

R18534

Lab Name:

<u>Life Science Laboratories, Inc.</u> Contract Number:

Instrument ID:

GC90 20C

Initial Calibration ID:

<u>1650</u>

Second Source ID:

AR1232 S.S.

Concentration Units (mg/L or mg/kg):

<u>μg/L</u>

Aroclor 1232	200	186	-7.2
Analyte	Expected	Found	%D Q

Comments:			

Analytical Method:

SW8082

AAB#:

R18534

Lab Name:

<u>Life Science Laboratories, Inc</u> Contract Number:

Instrument ID:

GC90 20C

Initial Calibration ID:

<u>1650</u>

Second Source ID:

AR1242 S.S.

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D Q	Ĭ
Aroclor 1242	200	192	-3.9	_

Comments:		
	·	

Analytical Method:

SW8082

AAB #:

R18534

Lab Name:

Life Science Laboratories, Inc.

Instrument ID:

GC90 20C

Initial Calibration ID:

Contract Number:

<u>1650</u>

Second Source ID:

AR1248 S.S.

Concentration Units (mg/L or mg/kg):

μg/L

Analyte	Expected	Found	%D	Q
Aroclor 1248	200	200	-0.2	

Comments	
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Analytical Method:

SW8082

AAB #:

R18534

Lab Name:

Life Science Laboratories, Inc

Contract Number:

Instrument ID:

GC90 20C

Initial Calibration ID:

<u>1650</u>

Second Source ID:

AR1254 S.S.

Concentration Units (mg/L or mg/kg):

<u>µg/L</u>

Analyte	Expected	Found	%D	Q
Aroclor 1254	200	166	-16.9	

Comments:	
· · · · · · · · · · · · · · · · · · ·	

Analytical Method:

SW8082

AAB #:

R18534

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Instrument ID:

GC90 20C

Initial Calibration ID:

<u> 1650</u>

Second Source ID:

AR1660 S.S.

Concentration Units (mg/L or mg/kg):

<u>ug/L</u>

Analyte	Expected	Found	%D Q
Aroclor 1016	200	176	-11.9
Aroclor 1260	200	188	-6.0

Comments

AFCEE ORGANIC ANALYSES DATA SHEET 5 CALIBRATION VERIFICATION

Analytical Method:

SW8082

AAB#:

<u> 18533</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID:

GC90_20C

Initial Calibration ID:

<u>1650</u>

Page 1 of 1

SEE ATTACHED CALIBRATION VERIFICATION

Comments:

AFCEE FORM O-5

QAPP 4.0

PCB CONTINUING CALIBRATION SUMMARY

COLUMN: <u>DB-608</u>

90101409.SEQ

SEQUENCE:

HP5890-90

INSTRUMENT:

			-	-	_	_		_		_	· · · · · · · · · · · · · · · · · · ·			,		_		_	1	т	1	т	1
AR1254-3 C101442 10/15/09 10:52	۵%				i		7				:		۵%										
Name: File: Date: Time	Calculated Amount(ng)						0.187				Name: File: Date: Time	Calculated	Amount(ng)	,									
AR1660-3 C101439 10/15/09 09:15	Q%	6						2			:		Q%										
Name; File: Date: Time	Calculated Amount(ng)	0.183						0.195			Name: File: Date: Time	Calculated	Amount(ng)										
AR1660-3 C101425 10/15/09 01:43	Q%	9						2					Q%										Page 1
Name: File: Date: Time	Calculated Amount(ng)	0.187						0.196			Name: File: Date: Time	Calculated	Amount(ng)										
AR1660-3 C101403 10/14/09 13:52	Q%	9						2					%D										
· ¥	Calculated Amount(ng)	0.189						0.197			Name: File: Date: Time	Calculated	Amount(ng)										
	Nominal Amount(ng)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20		Nominal	Amount(ng)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
:	Parameter	AR1016	AR1221	R1232	AR1242	AR1248	AR1254	AR1260	AR1262	AR1268			Parameter	AR1016	AR1221	AR1232	AR1242	AR1248	AR1254	AR1260	AR1262	AR1268	
	Pa	¥	A	¥	A	∢	¥	A	٧	A			Ŗ,	4	4	7	1	#	f	1	†	1	

AFCEE ORGANIC ANALYSES DATA SHEET 7 BLANKS

Analytical Method:

SW8082

AAB#:

<u>10119</u>

Lab Name:

Life Science Laboratories, Inc.

Contract Number:

Units:

mg/Kg

Method Blank ID:

MB-10119

Initial Calibration ID:

<u>1650</u>

File ID:

E:\90oct09\C101407.rst

Analyte	Method Blank	RL	Q
Aroclor 1016	0.00219	0.0170	U
Aroclor 1221	0.00222	0.0170	U
Aroclor 1232	0.00135	0.0170	ป
Aroclor 1242	0.00183	0.0170	U
Aroclor 1248	0.00357	0.0170	U
Aroclor 1254	0.00474	0.0170	U
Aroclor 1260	0.00200	0.0170	U

Decachlorobiphenyl	100	58 - 125	
Surrogate	Recovery	Control Limits Qualifier	

Comments:		

AFCEE ORGANIC ANALYSES DATA SHEET 8 LABORATORY CONTROL SAMPLE

Analytical Method:

SW8082

AAB #:

<u>10119</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCS-10119

Initial Calibration ID:

<u>1650</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\90oct09\C101408.rst

Analyte	Expected	Found	%R	Control Limits	Q
Aroclor 1016	0.2	0.191	95	40 - 130	
Aroclor 1260	0.2	0.206	103	40 - 130	

Decachlorobiohenyl 1	06 58 - 125	
Decachlorobiphenyl 10	06 58 - 125	

Comments.				
	 			_

AFCEE ORGANIC ANALYSES DATA SHEET 8 LABORATORY CONTROL SAMPLE

Analytical Method:

SW8082

AAB#:

<u>10119</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-10119

Initial Calibration ID:

<u>1650</u>

Concentration Units (mg/L or mg/kg):

mg/Kg

File ID:

E:\90oct09\C101409.rst

Analyte	Expected	Found	%R	Control Limits	Q
Aroclor 1016	0.2	0.203	102	40 - 130	
Aroclor 1260	0.2	0.222	111	40 - 130	

Decachlorobiphenyl	106	58 - 125	
Surrogate	Recovery	Control Limits	Qualifier

Comments:			
	 		
-	 		

AFCEE **ORGANIC ANALYSES DATA SHEET 9** MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method:

SW8082

AAB#:

10119

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Concentration Units (mg/L or mg/kg):

mg/Kg

% Solids:

<u>0</u>

Parent Field Sample ID:

LCSD-10119

MS ID: LCS-10119

MSD ID: LCSD-10119

Calibration ID: 1650

Analyte Parent Sample Result	Spike	Sample Result	%R		%R	%RPD		Limits	Q
Aroclor 1016	0.200	0.191	95	0.203	102	6	40 - 130	50	
Aroclor 1260	0.200	0.206	103	0.222	111	7	40 - 130	50	

Comments:			

AFCEE ORGANIC ANALYSES DATA SHEET 10 HOLDING TIMES

Analytical Method: SW8082

AAB#:

<u>10119</u>

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Field Sample ID	Lab Sample ID	Date	Date Received	Date Extracted	Max. Holding	Time Held Ext.		Max. Holding		Q
SMCSD0101FA	0910009-001A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	Analyzed 14-Oct-09	40	4.9	
SMCSD0401FA	0910009-002A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	14-Oct-09	40	4.9	
SMCSD0401FC	0910009-003A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	14-Oct-09	40	5	
SMCSD0501FA	0910009-004A	01-Oct-09	02-Oct-09	09-Oct-09	14	8.2	14-Oct-09	40	5	

AFCEE ORGANIC ANALYSES DATA SHEET 11 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method:

SW8082

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

GC90_20C

Calibration ID: 1650

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Lab Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
PIBLK	PIBLK	22-Sep-09	17:04	22-Sep-09	17:37
AR1660-1	AR1660-1	22-Sep-09	17:37	22-Sep-09	18:09
AR1660-2	AR1660-2	22-Sep-09	18:09	23-Sep-09	9:52
AR1660-3	AR1660-3	23-Sep-09	9:52	23-Sep-09	10:25
AR1660-4	AR1660-4	23-Sep-09	10:25	23-Sep-09	10:57
AR1660-5	AR1660-5	23-Sep-09	10:57	23-Sep-09	11:29
AR1221-1	AR1221-1	23-Sep-09	11:29	23-Sep-09	12:01
AR1221-2	AR1221-2	23-Sep-09	12:01	23-Sep-09	12:34
AR1221-3	AR1221-3	23-Sep-09	12:34	23-Sep-09	13:06
AR1221-4	AR1221-4	23-Sep-09	13:06	23-Sep-09	13:38
AR1221-5	AR1221-5	23-Sep-09	13:38	23-Sep-09	14:11
AR1232-1	AR1232-1	23-Sep-09	14:11	23-Sep-09	14:43
AR1232-2	AR1232-2	23-Sep-09	14:43	23-Sep-09	15:15
AR1232-3	AR1232-3	23-Sep-09	15:15	23-Sep-09	15:48
AR1232-4	AR1232-4	23-Sep-09	15:48	23-Sep-09	16:20
AR1232-5	AR1232-5	23-Sep-09	16:20	23-Sep-09	16:52
AR1242-1	AR1242-1	23-Sep-09	16:52	23-Sep-09	17:25
AR1242-2	AR1242-2	23-Sep-09	17:25	23-Sep-09	17:57
AR1242-3	AR1242-3	23-Sep-09	17:57	23-Sep-09	18:29
AR1242-4	AR1242-4	23-Sep-09	18:29	23-Sep-09	19:02
AR1242-5	AR1242-5	23-Sep-09	19:02	23-Sep-09	19:34
AR1248-1	AR1248-1	23-Sep-09	19:34	23-Sep-09	20:06
AR1248-2	AR1248-2	23-Sep-09	20:06	23-Sep-09	20:39
AR1248-3	AR1248-3	23-Sep-09	20:39	23-Sep-09	21:11
AR1248-4	AR1248-4	23-Sep-09	21:11	23-Sep-09	21:43
AR1248-5	AR1248-5	23-Sep-09	21:43	23-Sep-09	22:15
AR1254-1	AR1254-1	23-Sep-09	22:15	23-Sep-09	22:48
AR1254-2	AR1254-2	23-Sep-09	22:48	23-Sep-09	23:20
AR1254-3	AR1254-3	23-Sep-09	23:20	23-Sep-09	23:52
\R1254-4	AR1254-4	23-Sep-09	23:52	24-Sep-09	0:25
AR1254-5	AR1254-5	24-Sep-09	0:25	24-Sep-09	6:52
AR1221S.S.	AR1221S.S.	24-Sep-09	6:52	24-Sep-09	7:25
AR1232 S.S.	AR1232 S.S.	24-Sep-09	7:25	24-Sep-09	7:57
AR1242 S.S.	AR1242 S.S.	24-Sep-09	7:57	24-Sep-09	8:29
AR1248 S.S.	AR1248 S.S.	24-Sep-09	8:29	24-Sep-09	9:01

Comments:

AFCEE ORGANIC ANALYSES DATA SHEET 11 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method:

SW8082

AAB#:

Lab Name:

Life Science Laboratories, Inc.

Contract #:

Instrument ID #:

GC90 20C

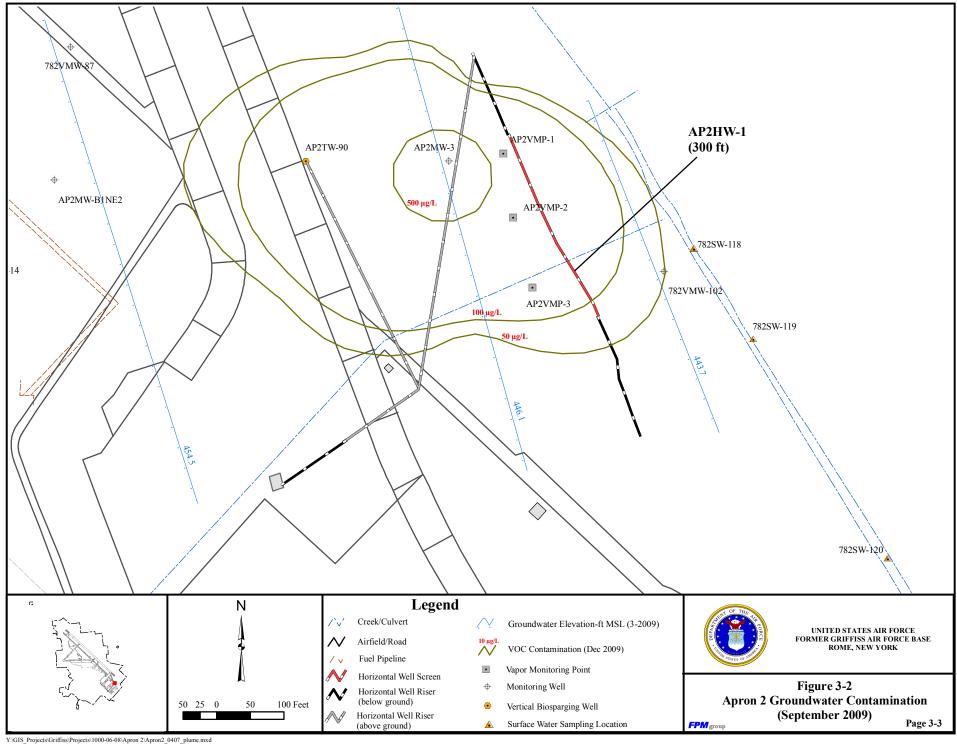
Calibration ID: 1650

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Lab Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
AR1254 S.S.	AR1254 S.S.	24-Sep-09	9:01	24-Sep-09	12:33
AR1660 S.S.	AR1660 S.S.	24-Sep-09	12:33	24-Sep-09	12:33
PIBLK	PIBLK	14-Oct-09	13:20	14-Oct-09	13:52
AR1660-3	AR1660-3	14-Oct-09	13:52	14-Oct-09	14:24
LCSD-10103	LCSD-10103	14-Oct-09	15:29	14-Oct-09	16:01
MB-10119	MB-10119	14-Oct-09	16:01	14-Oct-09	16:34
LCS-10119	LCS-10119	14-Oct-09	16:34	14-Oct-09	17:06
LCSD-10119	LCSD-10119	14-Oct-09	17:06	14-Oct-09	17:38
SMCSD0101FA	0910009-001A	14-Oct-09	17:38	14-Oct-09	18:11
SMCSD0401FA	0910009-002A	14-Oct-09	18:11	14-Oct-09	18:43
SMCSD0401FC	0910009-003A	14-Oct-09	18:43	14-Oct-09	19:15
SMCSD0501FA	0910009-004A	14-Oct-09	19:15	15-Oct-09	1:11
PIBLK	PIBLK	15-Oct-09	1:11	15-Oct-09	1:43
AR1660-3	AR1660-3	15-Oct-09	1:43	15-Oct-09	8:43
PIBLK	PIBLK	15-Oct-09	8:43	15-Oct-09	9:15
AR1660-3	AR1660-3	15-Oct-09	9:15	15-Oct-09	10:52
AR1254-3	AR1254-3	15-Oct-09	10:52	15-Oct-09	10:52

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Appendix D
Potentially Impacting Site Results and Maps





Apron 2 Groundwater Sampling Results

Sample Location				AP2N	AW-3				
Sample ID	GW Standards		AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-
			27BA	27CA	27DA	27EA	27FA	27GA	27HA
Date of Collection	(μg/L)		2/7/2003	6/27/2003	9/19/2003	12/9/2003	3/31/2004	7/2/2004	9/21/2004
Sample Depth (ft)			27	27	27	27	27	27	27
VOCs (µg/L)									
1,2,4-trimethylbenzene	5*		U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*		U	U	U	U	U	U	U
benzene	1		1100	2200 J	2400	2200	2100	1900	1200
ethylbenzene	5*		U	U	U	U	U	50 F	60
isopropylbenzene	5*		U	U	U	U	U	U	U
n-butylbenzene	5*		U	U	U	U	U	U	U
n-propylbenzene	5*		U	U	U	U	U	U	U
o-xylene	5*	AP2MW-3 added to Chlorinated LTM Network	U	U	U	U	U	U	U
naphthalene	10	February 2002	U	U	U	U	U	75 F	42 F
m,p,-xylene	5*		U	U	U	U	U	U	U
methyl tert-butyl ether	10		270	310	370	210	190 F	270 F	190 F
p-isopropyltoluene	5*		U	U	U	U	U	U	U
sec-butylbenzene	5*		U	U	U	U	U	U	U
t-butylbenzene	5*		U	U	U	U	U	U	U
toluene	5*		U	U	U	U	U	18 F	14 F
Total VOCs			1,370	2,510	2,770	2,410	2,290	2,313	1,506

Apron 2 Groundwater Sampling Results

Sample Location						AP2N	AW-3				
Sample ID	GW Standards	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-
		20KA	19LA	20MA	21NA	20OA	19PA	20QA	20RA	19SA	20SB
Date of Collection	(μg/L)	1/3/2005	4/8/2005	6/23/2005	9/28/2005	12/30/2005	3/22/2006	6/20/2006	9/20/2006	12/18/2006	2/28/2007
Sample Depth (ft)		20	19	20	21	20	19	20	20	19	20
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	6.9 J	38	110 J	53	180	210	152	176	206
1,3,5-trimethylbenzene	5*	U	U	U	21 F	10	37	33	37	37 F	54.5
benzene	1	1200	920	1200	980 J	720	1400	1300	1120	1140	1120
ethylbenzene	5*	160	130	220	150 J	84	180	190	141	173	140
isopropylbenzene	5*	3 F	4.9 J	12	14 J	8.2	17	17	12.4 F	14.5 F	18 F
n-butylbenzene	5*	U	U	U	UJ	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	0.83 J	2.2 F	9.4	10	8.40 F	16.5 F	25 F
o-xylene	5*	U	5.4 J	8.7 F	3.2 J	2.2 F	5.1	4.5	3.20 F	U	U
naphthalene	10	14	1.9 J	7.2 F	27 J	U	62	61	57.4	59.5	143
m,p,-xylene	5*	450	420	780	550 J	240	690	780	658	850	693
methyl tert-butyl ether	10	U	180	U	UJ	U	U	U	141	116 F	117 F
p-isopropyltoluene	5*	U	U	U	UJ	U	U	6.8	U	U	U
sec-butylbenzene	5*	U	U	U	UJ	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	UJ	U	0.4 F	0.33 F	U	U	U
toluene	5*	11	8.6 F	14	10 J	8.8	20	16	12.2 F	16 F	11 F
Total VOCs		1,828	1,678.91	2,279.9	1,866.03	1,208.4	2,600.9	2,628.63	2,342.6	2,598.5	2,545.5

Apron 2 Groundwater Sampling Results

Sample Location						AP2N	AW-3				
Sample ID	GW Standards	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-	AP2M03-
		20TA	20UA	21VA	20WA	19XA	20YA	22ZA	20A1A	20A2A	20A3A
Date of Collection	(μg/L)	4/10/2007	6/28/2007	9/17/2007	12/5/2007	3/24/2008	6/11/2008	9/9/2008	12/17/2008	3/16/2009	6/23/2009
Sample Depth (ft)		20	20	21	20	19	20	22	20	20	20
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	129	44 F	89.20	78.20	46.5 F	44.6	43.5	26.4	33.4	20.0
1,3,5-trimethylbenzene	5*	41 F	44 F	6.9 F	20.5 F	14.5 F	8.4 F	10.5 F	6.4 F	7.4 F	9.2 F
benzene	1	1000	997	892	696	774	767	820.0	644	568	581.0
ethylbenzene	5*	65	27 F	28.3	28.5	38 F	9.4 F	9 F	4.8 F	5.2 F	2.4 F
isopropylbenzene	5*	10.5 F	U	6 F	8 F	30.5 F	U	U	U	2.4 F	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	12.5 F	U	9.5 F	11.2 F	27.5	6.4 F	5.5 F	3.2 F	4.2 F	2.6 F
o-xylene	5*	U	U	1.1 F	U	U	U	U	U	U	U
naphthalene	10	84.5	15.5 F	10.1	12.8 F	31.5 F	16.6 F	16.5 F	5.4 F	12.2 F	18.8 F
m,p,-xylene	5*	328	146	201	196	208	94.2	71.0	45.4	55.4	41.8
methyl tert-butyl ether	10	108 F	U	114 F	81.5 F	84 F	U	65 F	52.6 F	51.8 F	43.6 F
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	5 F	U	3.5 F	4.75 F	U	U	U	U	U	U
Total VOCs		1,783.5	1,273.5	1,361.6	1,137.5	1,254.5	946.6	1041	788.2	740	719.4

Apron 2 Groundwater Sampling Results

Sample Location				AP2N	MW-3		
Sample ID	CW 6411-	AP2M03-					
	GW Standards	20A4A					
Date of Collection	(μg/L)	9/10/2009					
Sample Depth (ft)		20					
VOCs (µg/L)							
1,2,4-trimethylbenzene	5*	25.6					
1,3,5-trimethylbenzene	5*	5.6 F					
benzene	1	647					
ethylbenzene	5*	2.2 F					
isopropylbenzene	5*	2.2 F					
n-butylbenzene	5*	U					
n-propylbenzene	5*	3 F					
o-xylene	5*	U					
naphthalene	10	7.8 F					
m,p,-xylene	5*	39 F					
methyl tert-butyl ether	10	55 F					
p-isopropyltoluene	5*	U					
sec-butylbenzene	5*	U					
t-butylbenzene	5*	U					
toluene	5*	U					
Total VOCs		787.4					

Apron 2 Groundwater Sampling Results

Sample Location						782VM	IW-102				
Sample ID	CW Standard	NA	782VM102-	782VM102-	782VM102-	782VM102-	782VM102-	782VM102-	782VM102-	782M102-	782M102-
	GW Standards		19BA	19CA	19DA	19EA	19FA	19GA	19HA	09KA	08LA
Date of Collection	(μg/L)	2/20/2002	1/30/2003	6/25/2003	9/19/2003	12/9/2003	3/31/2004	7/2/2004	9/21/2004	1/3/2005	4/8/2005
Sample Depth (ft)	1		19	19	19	19	19	19	19	9	8
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
benzene	1	U	U	U	U	U	2000	3200	2900	1900	2200
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	25 J	U	U
m,p,-xylene	5*	U	U	U	U	U	U	U		U	U
methyl tert-butyl ether	10	86	120	480	630	200	310	340	230 F	170	300
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		86	120	480	630	200	2,310	3,540	3,155	2,070	2,500

Apron 2 Groundwater Sampling Results

Sample Location						782VN	IW-102				
Sample ID	GW Standards	782M102- 09MA	782M102- 09NA	782M102- 08OA	782M102- 09PA	782M102- 08QA	782M102- 09RA	782M102 08SA	782M102- 09SB	782M102- 09TA	782M102- 09UA
Date of Collection	(μg/L)	6/23/2005	9/28/2005	12/30/2005	3/22/2006	6/20/2006	9/20/2006	12/18/2006	2/28/2007	4/10/2007	6/19/2007
Sample Depth (ft)	1	9	9	8	9	8	9	8	9	9	9
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U		U	U
benzene	1	32	1400	720	1700 M	1600	1460	1820 ♦	1450	1030	606
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	UM	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	U	U	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	2.8	110F	87	280 M	60	88	93 F	134 F	69 F	1.19
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		34.8	1,510	807	1,980	1,660	1,548	1,913	1,584	1,099	607.19

Apron 2 Groundwater Sampling Results

Sample Location						782VN	IW-102				
Sample ID	GW Standards	782M102-	782M102-	782M102-	782M102-	782M102-	782M102-	782M102-	782M102-	782M102-	
	G W Standards (μg/L)	09VA	08WA	08XA	09YA	10ZA	08A1A	08A2A	09A3A	09A4A	
Date of Collection	(μg/L)	9/17/2007	12/5/2007	3/24/2008	6/11/2008	3/17/2009	12/16/2008	3/16/2009	6/23/2009	9/10/2009	
Sample Depth (ft)		9	8	8	9	10	8	8	9	9	
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	
benzene	1	726	435 ♦	251 ♦	236	58.9	34.7 M	17 M ◆	46.6	52.2	
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	
o-xylene	5*	U	U	U	U	U	U	U	U	U	
naphthalene	10	U	U	U	U	U	U	0.73 F ◆	U	U	
m,p,-xylene	5*	U	U	U	U	U	U	U	U	U	
methyl tert-butyl ether	10	53 F	37 F	28.7 F	U	15.9	0.58 F	0.72 F ◆	0.58 F	1.84 F	
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	
toluene	5*	U	U	U	U	U	U	U	U	U	
Total VOCs		779	472	280	236	74.8	35.28	18.45	47.18	54.04	

Apron 2 Surface Water Sampling Results

Sample Location	NYS	1							782SW-118							
Sample ID	Groundwater	782S11801	782S11801	782S11801	782S11801	782S11801	782S11801	782S11801	782S11801	782S11801	782S11801	782SW11801		782SW11801	782SW11801	782SW11801
•	standards	AA	BA	CA	DA	EA	FA	GA	HA	IA	JA	MA	NA	OA	PA	QA
Date of Collection	(μg/L)	5/7/2002	2/10/2003	2/27/2003	9/19/2003	12/9/2003	3/31/2004	7/2/2004	9/21/2004	12/29/2004	4/6/2005	6/24/2005	9/28/2005	12/30/2005	3/22/2006	6/20/2006
Sample Depth (ft TOIC) VOCs (µg/L)		0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
1,1,1,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-trichloroethane	5*	U	U	U	Ü	Ü	U	U	U	Ü	Ü	U	Ü	Ü	Ü	Ü
1,1,2,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloroethane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloropropene 1,2,3-trichlorobenzene	5* 5*	U	U	U U	U U	U U	U U	U U	U U	U	U	U	U	U U	U U	U U
1,2,3-trichloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	Ü	Ü
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	Ü	Ü
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromoethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene 1,3-dichlorobenzene	5* 3	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U
1,3-dichloropropane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,4-dichlorobenzene	3	Ü	U	U	U	U	U	Ü	U	U	Ü	U	U	U	Ü	Ü
1-chlorohexane		U	U	U	Ü	Ü	U	U	U	Ü	Ü	U	Ü	Ü	Ü	Ü
2,2-dichloropropane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-methyl-2-pentanone		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	50 1	U U	U U	U U	U 3.8	U 3.8	U 1.5	U 13	U 6.2	U 9.1	7.1	U 25	U 5.2	U U	3.3 B	U 5.2
benzene bromomethane	5*	U	U	U	3.8 U	3.8 U	U 1.5	U U	U U	9.1 U	7.1 U	U 25	0.2 U	U	3.3 B U	U 5.2
bromochloromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromodichloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	Ü
bromoform	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloromethane cis-1,2-dichloroethylene	5*	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U	U	U U	U U	U U
cis-1,3-dichloropropene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromochloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dichlorofluoromethane	5*	Ü	U	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü
dibromomethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methylene chloride	5* 5*	U	U	U	U	U U	U	U	U	U U	U U	U	U	U	U	U
n-butylbenzene n-propylbenzene	5* 5*	U U	U U	U U	U	U	U U	U U	U U	U	U	U	U U	U U	U U	U U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U	U	U	U	U	Ü
m,p,-xylene	5*	U	U	U	U	Ü	Ü	U	U	U	Ü	U	U	Ü	U	Ü
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
styrene	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
toluene tetrachloroethene	5* 5*	U U	U U	U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U
trans-1,2-dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-dichloropropene	3* 	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	Ü
methyl tert butyl ether (MTBE)		1.59 F	1.1	0.86 F	4.2 F	0.71 F	0.24 F	2.5	1 F	0.86 F	0.51 F	2.5	U	U	U	0.6 F
2-butanone		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs **		1.59	1.1	0.86	8	4.51	1.74	15.5	7.2	9.96	7.61	27.5	5.2	0	3.3	5.8

Total VUCs ***

For notes, please refer to the beginning of Appendix A.

Apron 2 Surface Water Sampling Results

Sample Location	NYS								782SW-118							
•	Groundwater	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	782SW11801	
Sample ID	standards	RA	SA	SB	SB	UA	VA	WA	XA	YA	ZA	BB	A2A	DA	EB	
Date of Collection	(µg/L)	9/20/2006	12/18/2006	2/28/2007	4/10/2007	7/2/2007	9/11/2007	12/10/2007	3/17/2008	6/12/2008	9/30/2008	12/30/2008	4/16/2009	6/16/2009	9/28/2009	
Sample Depth (ft TOIC) VOCs (µg/L)		0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	
1,1,1,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,1-trichloroethane	5*	U	U	U	U	U	U	Ü	U	U	U	U	U	U	U	
1,1,2,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,2-trichloroethane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloropropene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
,2,3-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
,2,3-trichloropropane ,2-dichloroethane	0.04	U U	U U	U U	U	U	U U	U U	U U	U U	U	U U	U U	U U	U U	
,2,4-trichlorobenzene	0.6 5*	U	U	U	U	U U	U	U	U	U	U	U	U	U	U	
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
,2-dibromoethane	0.04	U	U	U	U	U	U	Ü	U	U	U	U	U	U	U	
.2-dichlorobenzene	3	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	Ü	t
,2-dichloropropane	1	U	Ü	Ü	U	U	U	Ü	U	Ü	Ü	Ü	Ü	Ü	U	
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
,3-dichloropropane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
-chlorohexane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	<u> </u>
2,2-dichloropropane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
-chlorotoluene	5	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U	U U	U U	U U	
-methyl-2-pentanone cetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
enzene	1	3.75	6.84	0.7	5.17	22.8	10.2	3.41	2.82	2.67	3.78	1.11	0.64	0.62	0.74	
romomethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
romochloromethane	5*	Ü	Ü	Ü	U	U	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	1
oromodichloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	
oromoform	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloromethane	5*	U U	U U	U U	U	U	U U	U U	U U	U U	U	U	U	U U	0.390 F U	
cis-1,2-dichloroethylene cis-1,3-dichloropropene	5*	U	U	U	U U	U U	U	U	U	U	U U	U U	U U	U	U	
dibromochloromethane	3**	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
lichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
libromomethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
ethylbenzene	5*	0.14 F	0.34 F	Ü	0.13 F	0.2 F	U	Ü	U	Ü	U	U	Ü	Ü	U	
nexachlorobutadiene	0.5	U	U	Ü	U	U	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	
sopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
nethylene chloride	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
-xylene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
naphthalene	10 5*	0.17 F	U 0.63 F	U	0.22 F	0.32 F	U	U U	U U	U U	U U	U	U	U	U U	-
n,p,-xylene o-isopropyltoluene	5* 5*	0.17 F U	0.63 F U	U	0.22 F U	0.32 F U	U	U	U	U	U	U	U	U	U	
ec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
tyrene	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
oluene	5*	0.12 F	U	Ü	U	U	U	Ü	U	Ü	U	U	Ü	Ü	U	
etrachloroethene	5*	U	Ü	Ü	U	U	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	0.110 F	
ans-1,2-dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
rans-1,3-dichloropropene		U	U	U	U	U	U	U	U	U	U	U	U	U	U	
richloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
richlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
nethyl tert butyl ether (MTBE)	10	0.45 F	0.79 F	0.15	0.62 F	3.27 F	1.52 F	0.95 F	U	0.55 F	1.05 F	0.22 F	U	0.22 F	0.300 F	
2-butanone		U	U	U	U	U	U	U	U	U	U	U	U	U	U	
vinyl chloride	2	U	U	U	U	U 26.50	U	U	U	U 2.22	U 4.02	U	U	U	U	-
Total VOCs **		4.63	8.6	0.85	6.14	26.59	11.72	4.36	2.82	3.22	4.83	1.33	0.64	0.84	1.54	

Apron 2 Surface Water Sampling Results

Sample Location	NYS								782SW-119							
Sample ID	Groundwater standards	782S11901 AA	782S11901 BA	782S11901 CA	782S11901 DA	782S11901 EA	782S11901 FA	782S11901 GA	782S11901 HA	782S11901 IA	782S11901 JA	782SW11901 MA	782SW11901 NA	782SW11901 OA	782SW11901 PA	782SW11901 OA
Date of Collection	(μg/L)	5/7/2002	2/10/2003	2/27/2003	9/19/2003	12/9/2003	3/31/2004	7/2/2004	9/21/2004	12/29/2004	4/6/2005	6/24/2005	9/28/2005	12/30/2005	3/22/2006	6/20/2006
Sample Depth (ft TOIC)		0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
VOCs (µg/L)																
1,1,1,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-trichloroethane 1,1,2,2-tetrachloroethane	5* 5*	U U	U U	U U	U	U	U	U	U	U U	U	U	U	U U	U	U U
1,1,2,2-tetracnioroetnane 1,1,2-trichloroethane	3° 1	U	U	U	U	U	U U	U U	U U	U	U	U U	U U	U	U	U
1,1-dichloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethene	5*	U	U	U	Ü	U	Ü	Ü	U	Ü	Ü	U	Ü	Ü	Ü	Ü
1,1-dichloropropene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5* 0.04	U U	U	U U	U U	U U	U U	U U								
1,2-dibromo-3-chloropropane 1,2-dibromoethane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	U	U	U	U	U	Ü	U	U	U	U	U	U	U	Ü
1,3,5-trimethylbenzene	5*	U	U	U	Ü	U	Ü	Ü	U	Ü	Ü	U	Ü	Ü	Ü	Ü
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3-dichloropropane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1-chlorohexane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2,2-dichloropropane 2-chlorotoluene	5* 5	U U	U	U U	U U	U U	U U	U U								
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-methyl-2-pentanone		U	U	U	U	U	U	U	U	U	U	U	U	U	Ü	U
acetone	50	U	U	U	Ü	U	Ü	Ü	U	Ü	Ü	U	Ü	Ü	Ü	Ü
benzene	1	U	U	U	3.1	3.6	1.8	6.6	5.1	8.3	6.4	18	15	3.5	7.1	23
bromomethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromochloromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromodichloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromoform	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon tetrachloride chlorobenzene	5 5	U U	U U	U U	U U	U U										
chloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloromethane		U	U	U	U	U	U	U	U	U	Ü	U	U	U	U	U
cis-1,2-dichloroethylene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,3-dichloropropene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromochloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromomethane ethylbenzene	5* 5*	U U	U	U	U U	U U	U 0.27 F									
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U.27 F
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methylene chloride	5*	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5* 5*	U U	U U	U U	U	U	U U	U U	U U	U U	U	U U	U U	U U	U U	U U
p-isopropyltoluene sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
styrene	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	Ü	Ü	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü
tetrachloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-dichloropropene		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl tert butyl ether (MTBE) 2-butanone		1.59 F U	1 U	2.5 F U	5.2 U	1.3 F U	0.52 F U	1.8 F U	1 F U	1 F U	1.2 F U	6.5 U	2.1 U	U U	U U	U U
z-butanone vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs **	-	1.59	1	2.5	8.3	4.9	2.32	8.4	6.1	9.3	7.6	24.5	17.1	3.5	7.1	23.27
For notes, please refer to the beginning	6 A A	1.37			0.5		2.32	U.T	U.1		, .0	27.3	. / . 1	2.2		20.21

Apron 2 Surface Water Sampling Results

Sample Location	NYS								782SW-119							
	NYS Groundwater	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	782SW11901	
Sample ID	standards	RA	SA	SB	SB	UA	VA	WA	XA	YA	ZA	BB	A2A	DA	EB	
Date of Collection	(μg/L)	9/20/2006	12/18/2006	2/28/2007	4/10/2007	7/2/2007	9/11/2007	12/10/2007	3/17/2008	6/12/2008	9/30/2008	12/30/2008	4/16/2009	6/16/2009	9/28/2009	
Sample Depth (ft TOIC) VOCs (µg/L)		0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	
1,1,1,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	11.6 ♦	U	U	U	
1,1,1-trichloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,2,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,2-trichloroethane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloroethene 1,1-dichloropropene	5* 5*	U U	U U	U U	U U	U	U	U U	U U	U	U	U	U	U U	U U	
1,2,3-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,3-trichloropropane	0.04	Ü	Ü	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	Ü	Ü	
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dibromo-3-chloropropane 1,2-dibromoethane	0.04	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,3,5-trimethylbenzene	5*	U	Ü	U	Ü	U	U	Ü	U	U	U	U	Ü	Ü	U	
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,3-dichloropropane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1-chlorohexane 2,2-dichloropropane	5*	U	U	U U	U	U U	U U	U	U U	U	U	U	U U	U U	U	
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-chlorotoluene	5	Ü	Ü	Ü	Ü	Ü	Ü	Ü	U	U	U	Ü	Ü	Ü	Ü	
4-methyl-2-pentanone		U	U	U	U	U	U	U	U	U	U	U	U	U	U	
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
benzene	1 5*	6.81	7	5.89	4.37	11.2	5.79	3.87	2.36	4.39	3.21	1.25	0.62	0.59	0.71	
bromomethane bromochloromethane	5*	U	U	U	U	U U	U	U	U	U	U U	U	U	U	U	-
bromodichloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	
bromoform	50	Ü	Ü	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	Ü	Ü	
carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloroform chloromethane	7	U	U	U U	U	U U	U	U	U	U	U	U	U	U U	U	+
cis-1,2-dichloroethylene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
cis-1,3-dichloropropene	5*	Ü	Ü	Ü	Ü	Ü	Ü	Ü	U	Ü	U	Ü	Ü	Ü	Ü	
dibromochloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U	
dichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
dibromomethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
ethylbenzene hexachlorobutadiene	5* 0.5	0.15 F U	0.29 F U	0.24 F U	0.12 F U	0.11 F U	U	U	U	U	U	U	U	U	U	
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
methylene chloride	5*	Ü	Ü	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	Ü	Ü	
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
o-xylene	5* 10	U U	U U	U U	U U	U U	U U	U U	U U	U	U	U	U U	U U	U U	
naphthalene m,p,-xylene	10 5*	0.18 F	0.48 F	0.46 F	0.2 F	0.23 F	U	U	U	U	U	U	U	U	U	
p-isopropyltoluene	5*	U.18 F	U.48 F	U.46 F	U.2 F	U.23 F	U	U	U	U	U	U	U	U	U	
sec-butylbenzene	5*	U	Ü	U	Ü	U	U	Ü	U	U	U	U	Ü	Ü	U	
styrene	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
toluene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
tetrachloroethene trans-1,2-dichloroethene	5* 5*	U U	U	U U	U U	U U	U U	U	U U	U	U	U U	U U	U U	U U	
trans-1,2-dichloropropene	5"	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
trichlorofluoromethane	5*	Ü	U	U	U	Ü	Ü	Ü	U	U	U	Ü	U	Ü	Ü	
methyl tert butyl ether (MTBE)	10	0.99 F	0.76 F	0.68 F	0.57 F	1.98 F	1.37 F	0.87 F	U	0.79 F	0.99 F	0.26 F	U	0.19 F	0.370 F	
2-butanone		U	U	U	U	U	U	U	U	U	U	U	U	U	U	
vinyl chloride	2	U	U 0.52	U	U	U 12.52	U	U	U	U	U	U	U	U	U	-
Total VOCs **	l	8.13	8.53	7.27	5.26	13.52	7.16	4.74	2.36	5.18	4.2	1.51	0.62	0.78	1.08	1

Apron 2 Surface Water Sampling Results

Sample Location	NYS								782SW-120							
Sample ID	Groundwater	782S12001	782S12001	782S12001	782S12001	782S12001	782S12001	782S12001	782S12001	782S12001	782S12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001
-	standards	AA	BA	CA	DA	EA	FA	GA	HA	IA	JA	MA	NA	OA	PA	QA
Date of Collection Sample Depth (ft TOIC)	(µg/L)	5/7/2002 0-1	2/10/2003 0-1	2/27/2003 0-1	9/19/2003 0-1	12/9/2003 0-1	3/31/2004 0-1	7/2/2004 0-1	9/21/2004 0-1	12/29/2004 0-1	4/6/2005 0-1	6/24/2005 0-1	9/28/2005 0-1	12/30/2005 0-1	3/22/2006 0-1	6/20/2006 0-1
VOCs (µg/L)		0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
1,1,1,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-trichloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloroethane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethane 1,1-dichloroethene	5* 5*	U U	U U	U U	U U	U U	U U	U U	U U	U U	U	U U	U U	U U	U U	U U
1,1-dichloropropene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichloropropane	0.04	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	0.26 F	U	U	U	0.37 F
1,2-dibromo-3-chloropropane 1,2-dibromoethane	0.04	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	Ü	U	U	U
1,3,5-trimethylbenzene	5*	U	U	Ü	U	U	U	U	U	U	U	U	Ü	U	U	U
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3-dichloropropane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1-chlorohexane	5*	U U	U	U	U U	U U	U U	U U	U U	U	U	U U	U	U U	U	U U
2,2-dichloropropane 2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-chlorotoluene	5	U	Ü	U	U	U	U	U	U	U	U	U	U	U	U	U
4-methyl-2-pentanone		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
benzene	1	2.86	1	0.24 F	2.8	3.7	1.8	6.7	5	9	5.2	14	10	3.5	9.2	16
bromomethane	5* 5*	U	U	U	U	U U	U	U	U	U	U	U	U	U	U	U U
bromochloromethane bromodichloromethane	J*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromoform	50	Ü	U	Ü	U	U	Ü	U	U	U	U	U	Ü	U	Ü	Ü
carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroform chloromethane	7	U	U	U	U	U	U	U	U U	U	U	U	U	U	U	U
cis-1,2-dichloroethylene	5*	U	U	U	U	U U	U U	U U	U	U	U	U U	U U	U U	U U	U U
cis-1,3-dichloropropene	5*	U	U	U	U	U	Ü	U	U	U	U	U	Ü	U	U	Ü
dibromochloromethane		U	Ü	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	Ü	Ü	Ü
dichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromomethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5*	0.37 F	0.23 F	U	0.31 F	U	U	0.22 F	0.22 F	0.36 F	U	0.58	U	U	U	0.53
hexachlorobutadiene isopropylbenzene	0.5 5*	U U	U U	U U	U	U	U U	U U	U U	U U	U	U U	U U	U U	U U	U U
methylene chloride	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	Ü	Ü	Ü	U	Ü	Ü	U	U	Ü	U	Ü	U	Ü	Ü
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
naphthalene	10 5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
m,p,-xylene p-isopropyltoluene	5* 5*	0.87 F U	0.58 F U	U U	0.64 F U	U U	U	0.58 F U	0.50 F U	0.91 F U	U	2.2 U	0.92 F U	U U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
styrene	50	U	Ü	Ü	Ü	U	U	U	U	U	U	U	Ü	U	Ü	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
tetrachloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-dichloroethene trans-1,3-dichloropropene	5*	U	U	U U	U	U	U	U U	U U	U	U	U	U	U U	U	U
trichloroethylene	5	U U	U U	U	U U	U U	U U	U	U	U U	U U	U U	U U	U	U U	U U
trichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl tert butyl ether (MTBE)		1.74 F	1.1	1.7 F	4.6 F	1.3 F	0.68 F	1.8 F	1.3 F	U	0.89 F	U	2	0.5 F	U	U
2-butanone		U	U	U	U	U	U	U	U	Ü	U	U	U	U	U	U
vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs **		5.84	2.91	1.94	8.35	5	2.48	9.3	7.02	10.27	6.09	17.04	12.92	4	9.2	16.9

Apron 2 Surface Water Sampling Results

Sample Location	NYS	1							782SW-120						
•	Groundwater	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	782SW12001	AP2SW12001	
Sample ID	standards	RA	SA	SB	SB	UA	VA	WA	XA	YA	ZA	A2A	DA	A4A	
Date of Collection	(μg/L)	9/20/2006	12/18/2006	2/28/2007	4/10/2007	7/2/2007	9/11/2007	12/10/2007	3/17/2008	6/12/2008	9/30/2008	4/16/2009	6/16/2009	9/24/2009	
Sample Depth (ft TOIC)		0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	
VOCs (µg/L) 1,1,1,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,1-trichloroethane	5*	U	U	U	U	U	U	U	U	U	II	U	U	U	
1,1,2,2-tetrachloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,2-trichloroethane	1	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	
1,1-dichloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloropropene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,3-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,3-trichloropropane 1,2-dichloroethane	0.04 0.6	U U	U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,4-trimethylbenzene	5*	0.57 F	U	U	U	0.23 F	U	0.16 F	0.24 F	0.59 F	U	0.33 F	U	0.18 F	
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dibromoethane		U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	i
1,3,5-trimethylbenzene	5*	U	U	U	U	0.33 F	U	U	U	U	U	U	U	U	i
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	i
1,3-dichloropropane 1,4-dichlorobenzene	5* 3	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	i,
1-chlorohexane		U	U	U	U	U	U	U	U	U	U	U	U	U	
2,2-dichloropropane	5*	Ü	U	Ü	U	U	U	U	U	U	U	Ü	U	U	
2-chlorotoluene	5	Ü	Ü	Ü	U	Ü	Ü	Ü	Ü	Ü	U	Ü	Ü	Ü	
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-methyl-2-pentanone		U	U	U	U	U	U	U	U	U	U	U	U	U	
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	
benzene	1	4.35	5.95	5.13	2.72	6.57	4.1	3.65	2.3	3.87	2.64	1.16	0.59	0.87	
bromomethane	5* 5*	U	U	U	U	U	U	U	U U	U U	U	U	U	U	
bromochloromethane bromodichloromethane	J*	U	U	U	U	U	U	U	U	U	U	U	U	U	
bromoform	50	U	U	U	U	U	U	U	U	U	U	U	U	U	
carbon tetrachloride	5	U	U	Ü	U	Ü	U	U	U	Ü	U	Ü	Ü	U	
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloroethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloromethane		U	U	U	U	U	U	U	U	U	U	U	U	U	
cis-1,2-dichloroethylene	5* 5*	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	
cis-1,3-dichloropropene dibromochloromethane	5**	U	U	U	U	U	U	U	U	U	U	U	U	U	
dichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	i,
dibromomethane	5*	U	U	Ü	U	U	U	U	U	U	U	Ü	U	U	
ethylbenzene	5*	0.24 F	0.25	0.23 F	0.18 F	0.35 F	U	0.15 F	0.18 F	0.21 F	0.15 F	0.12 F	Ü	0.13 F	
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	i
methylene chloride	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	i
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
n-propylbenzene	5* 5*	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U	U U	U U	
o-xylene naphthalene	10	U	U	U	U	0.14 F	U	U	U	U	U	0.15 F	U	0.23 F	i
m,p,-xylene	5*	0.64 F	0.44 F	0.43 F	0.43 F	0.14 F 0.97 F	U	0.38 F	1.08 F	0.57 F	0.27 F	0.15 F	U	U.23 F	
p-isopropyltoluene	5*	U	U	U	U.431	U	U	U	U	U	U	U	U	U	i
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	Ü	U	Ü	U	Ü	i
styrene	50	U	U	U	U	U	U	U	U	U	U	U	U	U	i
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	i
toluene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	i
tetrachloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	
trans-1,2-dichloroethene trans-1,3-dichloropropene	5*	U U	U U	U U	U U	U U	U U	U U	U U	U	U U	U U	U U	U U	i
trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	
trichlorofluoromethane	5*	U	U	U	U	U	U	U	U	U	U	U	U	U	i
methyl tert butyl ether (MTBE)		1 F	0.84 F	0.71 F	0.42 F	1.61 F	1.19 F	0.76 F	U	0.86 F	0.82 F	Ü	0.26 F	0.48 F	i
2-butanone		U	U	U	U	U	U	U	Ü	U	U	Ü	U	U	i
vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U	U	
Total VOCs **		6.8	7.48	6.5	3.75	10.2	5.29	5.1	3.8	6.1	3.88	2.2	0.85	1.89	.

Total VUCs ***

For notes, please refer to the beginning of Appendix A.

Apron 2 Groundwater Sampling Results

Sample Location						AP2V	MP-1				
Sample ID	GW	AP2VM01M	AP2VM01D	AP2VM01D	AP2VM01D	AP2VM01D	AP2VM01D	AP2VM01M	AP2VM01M	AP2VM01D	AP2VM01M
	Standards	14SA	15SA	16SB	16UA	16VA	16WA	15WA	15XA	15XA	15YA
Date of Collection	(µg/L)	12/18/2006	12/18/2006	3/1/2007	6/28/2007	9/18/2007	12/5/2007	12/5/2007	3/24/2008	3/24/2008	6/11/2008
Sample Depth (ft)		14	15	16	16	16	16	15	15	15	15
VOCs (µg/L)											
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	16 F	U	U
1,2,4-trimethylbenzene	5*	358	2.03	1.3	U	U	U	200	U	U	15.1
1,3,5-trimethylbenzene	5*	71.5	0.32 F	0.730 F	U	U	U	43	U	U	5.04
benzene	1	1260	1.81	5.5 F	U	U	U	368	633	U	425
ethylbenzene	5*	212	0.85 F	U	U	U	U	71.4	U	U	3.14
isopropylbenzene	5*	24 F	U	U	U	U	U	15.8	U	U	1.68
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	13.5 F	U	U	U	U	U	17.5	U	U	1.92
o-xylene	5*	U	U	U	U	U	U	1.4 F	U	U	U
naphthalene	10	97	1.29	2.19	U	U	U	41.4	25.5	U	10.1
m,p,-xylene	5*	970	4.29	5 F	U	U	U	105	U	U	7.64
methyl tert-butyl ether	10	114 F	3.04 F	4.1 F	U	6.5	3.74 F	93.8	101.0	6.58	91.4 F
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	18 F	U	0.11 F	U	U	U	1.6 F	U	U	U
trichloroethylene (TCE)	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		3138	13.63	18.93	0	6.5	3.74	958.9	775.5	6.58	561.02

Apron 2 Groundwater Sampling Results

Sample Location						AP2V	MP-1				
Sample ID	GW	AP2VM01D	AP2VM01M	AP2VM01D	AP2VM01M	AP2VM01D	AP2VM01M	AP2VM01D	AP2VM01M	AP2VM01D	AP2VM01M
	Standards	16YA	16ZA	17ZA	15A1A	16A1A	15A2A	15A2A	15A3A	16A3A	15A4A
Date of Collection	(μg/L)	6/11/2008	9/9/2008	9/9/2008	12/17/2008	12/17/2008	3/16/2009	3/16/2009	6/24/2009	6/24/2009	9/10/2009
Sample Depth (ft)		16	16	17	15	16	15	15	15	16	15
VOCs (µg/L)											
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5*	U	7.2 F	U	U	U	U	U	2.4 F	U	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
benzene	1	U	886	U	626	U	550	U	313	U	309
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	U	2.8 F	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	6.99 J	69 F	6.75	73.5 F	7.75	76.8 F	8.79	66.1	10.2	69.4 F
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	U	U	U	U	U	U	U
trichloroethylene (TCE)	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		6.99	965.00	6.75	699.5	7.75	626.8	8.79	381.5	10.2	378.4

Apron 2 Groundwater Sampling Results

Sample Location		AP2VMP-1									
Sample ID	GW	AP2VM01D									
	Standards	16A4A									
Date of Collection	(µg/L)	9/10/2009									
Sample Depth (ft)		16									
VOCs (µg/L)											
1,2,4-trichlorobenzene	5*	U									
1,2,4-trimethylbenzene	5*	U									
1,3,5-trimethylbenzene	5*	U									
benzene	1	U									
ethylbenzene	5*	U									
isopropylbenzene	5*	U									
n-butylbenzene	5*	U									
n-propylbenzene	5*	U									
o-xylene	5*	U									
naphthalene	10	U									
m,p,-xylene	5*	U									
methyl tert-butyl ether	10	11.2									
p-isopropyltoluene	5*	U									
sec-butylbenzene	5*	U									
t-butylbenzene	5*	U									
toluene	5*	U									
trichloroethylene (TCE)	5*	U									
Total VOCs		11.2									·

Apron 2 Groundwater Sampling Results

Sample Location		AP2VMP-2									
Sample ID	GW	AP2VM02M	AP2VM02D	AP2VM02D	AP2VM02D	AP2VM02D	AP2VM02D	AP2VM02D	AP2VM02D	AP2VM02D	AP2VM02D
	Standards	17SA	17SA	18SB	17UA	18VA	17WA	17XA	17YA	18ZA	17A1A
Date of Collection	(μg/L)	12/18/2006	12/18/2006	3/1/2007	6/28/2007	9/18/2007	12/5/2007	3/24/2008	6/11/2008	9/9/2008	12/17/2008
Sample Depth (ft)		17	17	18	17	18	17	17	17	18	17
VOCs (µg/L)											
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5*	U	0.1 F	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
benzene	1	1150	20.2	22.6	2.33	U	1.39	0.63	0.70	0.56 F	0.44 F
ethylbenzene	5*	U	0.28 F	0.11 F	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	0.17 F	U	U	U	U	U	U	U	U
o-xylene	5*	U	0.1 F	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	U	0.25 F	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	85 F	5.8	2.42 F	U	U	U	U	U	U	U
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	15.5 F	0.17 F	0.3 F	U	U	U	U	U	U	U
trichloroethylene (TCE)	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs	_	1250.50	27.07	25.43	2.33	0	1.39	0.63	0.7	0.56	0.44

Apron 2 Groundwater Sampling Results

Sample Location						AP2V	MP-2		
Sample ID	GW	AP2VM02D	AP2VM02M	AP2VM02D	AP2VM02M	AP2VM02D			
_	Standards	17A2A	17A3A	17A3A	18A4A	18A4A			
Date of Collection	(µg/L)	3/16/2009	6/24/2009	6/24/2009	9/10/2009	9/10/2009			
Sample Depth (ft)		17	17	17	18	18			
VOCs (µg/L)									
1,2,4-trichlorobenzene	5*	U	U	U	U	U			
1,2,4-trimethylbenzene	5*	U	U	U	U	U			
1,3,5-trimethylbenzene	5*	U	U	U	U	U			
benzene	1	0.29 F	0.27 F	0.16 F	U	0.43 F			
ethylbenzene	5*	U	U	U	U	U			
isopropylbenzene	5*	U	U	U	U	U			
n-butylbenzene	5*	U	U	U	U	U			
n-propylbenzene	5*	U	U	U	U	U			
o-xylene	5*	U	U	U	U	U			
naphthalene	10	U	U	U	U	U			
m,p,-xylene	5*	U	U	U	U	U			
methyl tert-butyl ether	10	U	U	U	U	U			
p-isopropyltoluene	5*	U	U	U	U	U			
sec-butylbenzene	5*	U	U	U	U	U			
t-butylbenzene	5*	U	U	U	U	U			
toluene	5*	U	U	U	U	U			
trichloroethylene (TCE)	5*	U	U	U	U	U			
Total VOCs		0.29	0.27	0.16	0	0.43			

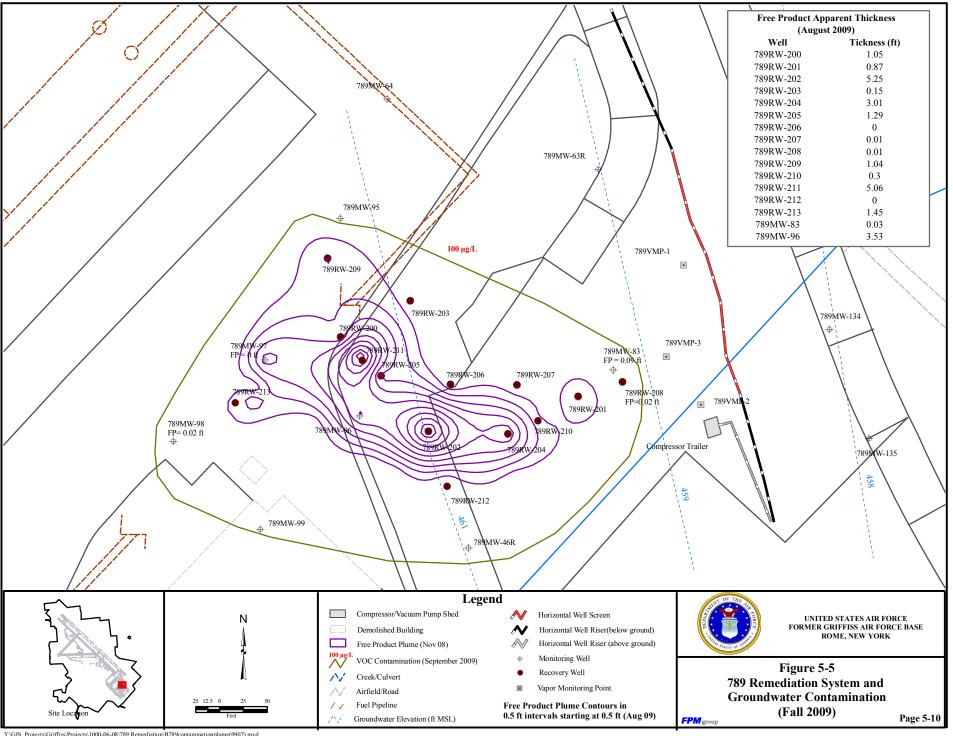
Apron 2 Groundwater Sampling Results

Sample Location						AP2V	MP-3				
Sample ID	GW	AP2VM03M	AP2VM03D	AP2VM03D	AP2VM03D	AP2VM03D	AP2VM03D	AP2VM03D	AP2VM03D	AP2VM03D	AP2VM03D
	Standards	19SA	17SA	18SB	17UA	18VA	18WA	17XA	18YA	19ZA	18A1A
Date of Collection	(µg/L)	12/18/2006	12/18/2006	3/1/2007	6/28/2007	9/18/2007	12/5/2007	3/24/2008	6/11/2008	9/9/2008	12/17/2008
Sample Depth (ft)		19	17	18	17	18	18	17	18	19	18
VOCs (µg/L)											
1,2,4-trichlorobenzene	5*	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
benzene	1	0.13 F	U	U	U	U	U	U	U	U	U
ethylbenzene	5*	0.16 F	0.15 F	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	0.12 F	0.12 F	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	0.32 F	0.44 F	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	0.19 F	U	U	U	U	U	U	U	U	U
trichloroethylene (TCE)	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		0.92	0.71	0	0	0	0	0	0	0	0

Apron 2 Groundwater Sampling Results

Sample Location						AP2V	MP-3		
Sample ID	GW	AP2VM03D	AP2VM03M	AP2VM03D	AP2VM03M	AP2VM03D			
	Standards	17A2A	19A3A	18A3A	20A4A	18A4A			
Date of Collection	(µg/L)	3/16/2009	6/24/2009	6/24/2009	9/10/2009	9/10/2009			
Sample Depth (ft)		17	19	18	20	18			
VOCs (µg/L)									
1,2,4-trichlorobenzene	5*	U	U	U	U	U			
1,2,4-trimethylbenzene	5*	U	U	U	U	U			
1,3,5-trimethylbenzene	5*	U	U	U	U	U			
benzene	1	U	U	U	U	U			
ethylbenzene	5*	U	U	U	U	U			
isopropylbenzene	5*	U	U	U	U	U			
n-butylbenzene	5*	U	U	U	U	U			
n-propylbenzene	5*	U	U	U	U	U			
o-xylene	5*	U	U	U	U	U			
naphthalene	10	U	U	U	U	U			
m,p,-xylene	5*	U	U	U	U	U			
methyl tert-butyl ether	10	U	U	U	U	U			
p-isopropyltoluene	5*	U	U	U	U	U			
sec-butylbenzene	5*	U	U	U	U	U			
t-butylbenzene	5*	U	U	U	U	U			
toluene	5*	U	U	U	U	U			
trichloroethylene (TCE)	5*	U	U	U	U	U			
Total VOCs		0	0	0	0	0			





Building 789 Groundwater Sampling Results

Sample Location						789M	W-63R				
Sample ID	GW Standards	789M63R-	789M63R-	789M63R-	789M63R-	789M63R-	789M63R-	789M63R-	789M63R-	789M63R-	789M63R-
	(μg/L)	24AA	24BA	23EA	22FA	22EA	23FA	22GA	22HA	22SA	22TA
Date of Collection	(μg/L)	7/10/2002	10/3/2002	12/11/2002	4/8/2003	7/2/2003	9/23/2003	12/22/2003	4/8/2004	12/20/2006	4/12/2007
Sample Depth (ft)		24	24	23	22	22	23	22	22	22	22
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	0.2 F	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
benzene	1	5.7	1.4	1.5	2.8	0.26	0.28 F	U	U	U	U
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	0.15 F	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	U	U	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	0.092 F	U	U	U	U	U	U
Total VOCs		6.7	1.7	1.8	2.9	0.26	0.28	0	0	0.35	0

Building 789 Groundwater Sampling Results

Sample Location						789M	W-63R		
Sample ID	GW Standards	789M63R-	789M63R-	789M63R-		789M63R-	789M63R-		
	(μg/L)	22UA	23VA	21XA		22ZA	21A2A		
Date of Collection	(μg/L)	6/18/2007	9/18/2007	3/25/2008		9/9/2008	3/23/2009		
Sample Depth (ft)		22	23	21		22	21		
VOCs (µg/L)									
1,2,4-trimethylbenzene	5*	U	U	U		0.45 F	U		
1,3,5-trimethylbenzene	5*	U	U	U		0.27 F	U		
benzene	1	U	U	U		U	U		
ethylbenzene	5*	U	U	U		U	U		
isopropylbenzene	5*	U	U	U		U	U		
n-butylbenzene	5*	U	U	U		U	U		
n-propylbenzene	5*	U	U	U	Semi-Annual	U	U		
o-xylene	5*	U	U	U	Sampling	U	U		
naphthalene	10	U	U	U		U	U		
m,p,-xylene	5*	U	U	U		U	U		
methyl tert-butyl ether	10	U	U	U		U	U		
p-isopropyltoluene	5*	U	U	U		U	U		
sec-butylbenzene	5*	U	U	U		U	U		
t-butylbenzene	5*	U	U	U		U	U		
toluene	5*	U	U	U		U	U		
Total VOCs		0	0	0		0.72	0		

Sample Location						789M	IW-83				
Sample ID	GW Standards										
Date of Collection	(μg/L)	7/10/2002	10/3/2002	12/11/2002	4/8/2003	7/2/2003	9/23/2003	12/22/2003	4/8/2004	7/7/2004	9/24/2004
Sample Depth (ft)	1										
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*										
1,3,5-trimethylbenzene	5*										
benzene	1										
ethylbenzene	5*										
isopropylbenzene	5*										
n-butylbenzene	5*										
n-propylbenzene	5*	No Sample	Free Product	No Sample	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product
o-xylene	5*		5.39 ft		6.57 ft	5.71 ft	5.25 ft		4.85 ft	2.91 ft	Recovery
naphthalene	10										Ongoing
m,p,-xylene	5*										
methyl tert-butyl ether	10										
p-isopropyltoluene	5*										
sec-butylbenzene	5*										
t-butylbenzene	5*										
toluene	5*										
Total VOCs		•									

Sample Location						789M	IW-83				
Sample ID	GW Standards										789M83- 23TA
Date of Collection	(μg/L)	1/3/2005	4/7/2005	6/23/2005	9/27/2005	1/3/2006	3/22/2006	6/21/2006	9/20/2006	12/19/2006	4/11/2007
Sample Depth (ft)											23
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*										382
1,3,5-trimethylbenzene	5*										89.8
benzene	1										U
ethylbenzene	5*										111
isopropylbenzene	5*										37.4
n-butylbenzene	5*										38.2
n-propylbenzene	5*	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	67.4
o-xylene	5*	Recovery	Recovery	0.03 ft	0.14 ft	0.01 ft	0.03 ft	0.25 ft	0.10 ft	0.06 ft	76.6
naphthalene	10	Ongoing	Ongoing								109
m,p,-xylene	5*										331
methyl tert-butyl ether	10										U
p-isopropyltoluene	5*										20.2
sec-butylbenzene	5*										23.7
t-butylbenzene	5*										U
toluene	5*										4.6
Total VOCs											1,290.9

Sample Location						789M	[W-83				
Sample ID	GW Standards					70211					
Date of Collection	(μg/L)	6/18/2007	9/18/2007	12/5/2007	3/24/2008	6/10/2008	9/9/2008	12/16/2008	3/23/2009	6/23/2009	9/9/2009
Sample Depth (ft)											
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*										
1,3,5-trimethylbenzene	5*										
benzene	1										
ethylbenzene	5*										
isopropylbenzene	5*										
n-butylbenzene	5*										
n-propylbenzene	5*	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product	Free Product
o-xylene	5*	0.04 ft	0.10 ft	0.02 ft	0.06 ft	0.01 ft	0.5 ft	0.32 ft	0.06 ft	0.01 ft	0.03 ft
naphthalene	10										
m,p,-xylene	5*										
methyl tert-butyl ether	10										
p-isopropyltoluene	5*										
sec-butylbenzene	5*										
t-butylbenzene	5*										
toluene	5*										
Total VOCs											

Building 789 Groundwater Sampling Results

Sample Location						789M	W-134				
Sample ID	GW Standards					789M134-	789M134-	789M134-	789M134-	789M134-	789M134-
						23EA	24FA	24GA	23HA	24IA	24JA
Date of Collection	(μg/L)	7/10/2002	10/3/2002	12/11/2002	4/8/2003	7/2/2003	9/23/2003	12/22/2003	4/8/2004	7/7/2004	9/24/2004
Sample Depth (ft)						23	24	24	23	24	24
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*					U	U	U	U	U	U
1,3,5-trimethylbenzene	5*					U	U	U	U	U	U
benzene	1					U	U	U	U	U	U
ethylbenzene	5*					U	U	U	U	U	U
isopropylbenzene	5*					U	U	U	U	U	U
n-butylbenzene	5*					U	U	U	U	U	U
n-propylbenzene	5*					U	U	U	U	U	U
o-xylene	5*		789MW-134 was	installed June 2003	3	U	U	U	U	U	U
naphthalene	10					U	U	U	U	U	U
m,p,-xylene	5*					U	U	U	U	U	U
methyl tert-butyl ether	10					U	U	U	U	U	27
p-isopropyltoluene	5*					U	U	U	U	U	U
sec-butylbenzene	5*					U	U	U	U	U	U
t-butylbenzene	5*					U	U	U	U	U	U
toluene	5*					U	U	U	U	U	U
Total VOCs						0	0	0	0	0	27

Building 789 Groundwater Sampling Results

Sample Location						789M	W-134				
Sample ID	GW Standards		789M134-	789M134-	789M134-	789M134-	789M134-	789M134-	789M134-	789M134-	789M134-
_			25LA	25NA	24PA	24RA	23SA	22TA	23UA	24VA	22XA
Date of Collection	- (μg/L)	1/3/2005	4/7/2005	9/26/2005	3/22/2006	9/20/2006	12/19/2006	4/12/2007	6/18/2007	9/18/2007	3/24/2008
Sample Depth (ft)			25	25	24	24	23	22	23	24	22
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*		U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*		U	U	U	U	U	U	U	U	U
benzene	1		U	U	U	U	U	U	U	U	U
ethylbenzene	5*		U	U	U	U	U	U	U	U	U
isopropylbenzene	5*		U	U	U	U	U	U	U	U	U
n-butylbenzene	5*		U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	Semi-Annual	U	U	U	U	U	U	U	U	U
o-xylene	5*	Sampling	U	U	U	U	U	U	U	U	U
naphthalene	10		U	U	U	U	U	U	U	U	U
m,p,-xylene	5*		U	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10		U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5*		U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*		U	U	U	U	U	U	U	U	U
t-butylbenzene	5*		U	U	U	U	U	U	U	U	U
toluene	5*		U	U	U	U	U	U	U	U	U
Total VOCs			0	0	0	0	0	0	0	0	0

Sample Location					789M	W-134		
Sample ID	-	789M134-	789M134-					
Sumple 12	GW Standards	23ZA	23A2A					
Date of Collection	(μg/L)	9/9/2008	3/23/2009					
Sample Depth (ft)	1	23	23					
VOCs (μg/L)								
1,2,4-trimethylbenzene	5*	U	U					
1,3,5-trimethylbenzene	5*	U	U					
benzene	1	U	U					
ethylbenzene	5*	U	U					
isopropylbenzene	5*	U	U					
n-butylbenzene	5*	U	U					
n-propylbenzene	5*	U	U					
o-xylene	5*	U	U					
naphthalene	10	U	U					
m,p,-xylene	5*	U	U					
methyl tert-butyl ether	10	U	U					
p-isopropyltoluene	5*	U	U					
sec-butylbenzene	5*	U	U					
t-butylbenzene	5*	U	U					
toluene	5*	U	U					
Total VOCs		0	0					

Building 789 Groundwater Sampling Results

Sample Location						789V	MP-1				
Sample ID	CW Ct. 1. 1.	789VM01D	789VM01D	789VM01D	789VM01D	789VM01D	789VM01D	789VM01D	789VM01D	789VM01D	789VM01D
	GW Standards	01SA	21TA	30UA	23VA	23WA	21XA	21YA	21ZA	22A1A	22A2A
Date of Collection	- (μg/L)	1/11/2007	4/12/2007	7/9/2007	9/18/2007	12/5/2007	3/24/2008	6/10/2008	9/9/2008	12/16/2008	3/23/2009
Sample Depth (ft)		1	21	30	23	23	21	21	21	22	22
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
benzene	1	U	U	U	U	0.14 F	U	U	U	U	U
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	U	U	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		0	0	0	0	0.14	0	0	0	0	0

Sample Location				789V	MP-1		
Sample ID	GW Standards (μg/L)	789VM01D		705 (
Батрк 15		22A4A					
Date of Collection		9/10/2009					
Sample Depth (ft)		22					
		22					
VOCs (µg/L)							
1,2,4-trimethylbenzene	5*	U					
1,3,5-trimethylbenzene	5*	U					
benzene	1	U					
ethylbenzene	5*	U					
isopropylbenzene	5*	U					
n-butylbenzene	5*	U					
n-propylbenzene	5*	U					
o-xylene	5*	U					
naphthalene	10	U					
m,p,-xylene	5*	U					
methyl tert-butyl ether	10	U					•
p-isopropyltoluene	5*	U					
sec-butylbenzene	5*	U					
t-butylbenzene	5*	U					
toluene	5*	U					
Total VOCs		0					

Building 789 Groundwater Sampling Results

Sample Location						789V	MP-2				
Sample ID	GW Standards (µg/L)	789VM02D	789VM02D	789VM02D	789VM02D	789VM02D	789VM02D	789VM02D	789VM02D	789VM02D	789VM02D
		02SA	23TA	30UA	24VA	22WA	22XA	22YA	22ZA	23A1A	23A2A
Date of Collection		1/11/2007	4/12/2007	7/9/2007	9/18/2007	12/5/2007	3/24/2008	6/10/2008	9/9/2008	12/16/2008	3/23/2009
Sample Depth (ft)		2	23	30	24	22	22	22	22	23	23
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
benzene	1	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	U	U	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5*	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		0	0	0	0	0	0	0	0	0	0

Sample Location				789V	MP-2		
Sample ID	GW Standards (µg/L)	789VM02D		705 1			
Sample 1D		23A4A					ı l
Date of Collection		9/10/2009					
Sample Depth (ft)		23					ı
VOCs (µg/L)							
1,2,4-trimethylbenzene	5*	U					i I
1,3,5-trimethylbenzene	5*	U					ı l
benzene	1	U					ı l
ethylbenzene	5*	U					ı
isopropylbenzene	5*	U					
n-butylbenzene	5*	U					ı l
n-propylbenzene	5*	U					ı
o-xylene	5*	U					i
naphthalene	10	U					ı
m,p,-xylene	5*	U					
methyl tert-butyl ether	10	U					i
p-isopropyltoluene	5*	U					i
sec-butylbenzene	5*	U					ı
t-butylbenzene	5*	U					ı
toluene	5*	U					
Total VOCs		0					

Building 789 Groundwater Sampling Results

Sample Location						789V	MP-3				
Sample ID	CW Ct 1	789VM03D	789VM03D	789VM03D	789VM03D	789VM03D	789VM03D	789VM03D	789VM03D	789VM03D	789VM03D
-	GW Standards	03SA	22TA	22UA	23VA	23WA	21XA	21YA	26ZA	22A1A	11A 22A2A
Date of Collection	(μg/L)	1/11/2007	4/12/2007	6/18/2007	9/18/2007	12/5/2007	3/25/2008	6/10/2008	9/9/2008	12/16/2008	3/23/2009
Sample Depth (ft)		3	22	22	23	23	21	21	26	22	23
VOCs (µg/L)											
1,2,4-trimethylbenzene	5*	U	0.75 F	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5*	U	0.35 F	U	U	U	U	U	U	U	U
benzene	1	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5*	U	U	U	U	U	U	U	U	U	U
o-xylene	5*	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U
m,p,-xylene	5*	U	U	U	U	U	U	U	U	U	U
methyl tert-butyl ether	10	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5*	U	0.32 F	U	U	U	U	U	U	U	U
sec-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5*	U	U	U	U	U	U	U	U	U	U
toluene	5*	U	U	U	U	U	U	U	U	U	U
Total VOCs		0	1.42	0	0	0	0	0	0	0	0

Sample Location				789V	MP-3		
Sample ID	GW Standards (µg/L)	789VM03D					
		22A4A					
Date of Collection		9/10/2009					
Sample Depth (ft)		22					
VOCs (µg/L)							
1,2,4-trimethylbenzene	5*	U					
1,3,5-trimethylbenzene	5*	U					l l
benzene	1	U					ı İ
ethylbenzene	5*	U					
isopropylbenzene	5*	U					
n-butylbenzene	5*	U					
n-propylbenzene	5*	U					l l
o-xylene	5*	U					
naphthalene	10	U					l l
m,p,-xylene	5*	U					
methyl tert-butyl ether	10	U					
p-isopropyltoluene	5*	U					
sec-butylbenzene	5*	U					
t-butylbenzene	5*	U					
toluene	5*	U					1
Total VOCs		0					