LIMITED SITE INVESTIGATION

Office Building
1016 West Abram Street
Arlington, Texas

Terracon Project No. 94087317.3R1
May 4, 2010

Prepared for:

City of Arlington
101 West Abram Street, 1st Floor
MC 01-0260
Arlington, TX 76010

Prepared by:

TERRACON CONSULTANTS, INC.
Dallas, Texas

9878650

Terracon

May 4, 2010

City of Arlington
101 West Abram Street, 1st Floor
MC 01-0260
Arlington, Texas 76010
Attn: Ms. Lexin Murphy

Telephone: (817) 459-6657
Fax: (817) 459-6671

Re: Limited Site Investigation
UTA Office Building
1016 West Abram Street
Arlington, Texas
Terracon Project No. 94087317.3R1

Dear Ms. Murphy:

Terracon Consultants, Inc. (Terracon) is pleased to submit three copies of the Limited Site Investigation (LSI) report for the above referenced site. This investigation was performed in accordance with Terracon's Proposal Number P94087317.3RP dated April 5, 2010.

The investigation-derived waste materials are currently staged on the site pending characterization and on-site dispersal and/or off-site disposal, as applicable, which is included in Terracon's scope of services.

We appreciate the opportunity to perform these services for the City of Arlington. Please contact either of the undersigned at (214) 630-1010 if you have questions regarding the information provided in the report.

Sincerely,
Terracon

Prepared by:

Chris Sandwell
Environmental Scientist

Reviewed by:

John B. Sallman, P.G.
Principal

N:\Projects\2008\94087317\Task 3R1 -1000 & 1016 W Abram\Office Building (1016 Abram) LSI\94087371.3R1.Office Building.doc

TABLE OF CONTENTS

Terracon

Page No.

1.0 INTRODUCTION **1**

2.0 FIELD ACTIVITIES **3**

3.0 LABORATORY ANALYTICAL METHODS **5**

4.0 DATA EVALUATION **6**

5.0 FINDINGS AND RECOMMENDATIONS **7**

LIST OF APPENDICES

Appendix A: Figure 1- Topographic Map, Figure 2 – Site Plan, Figure 3 – Groundwater Gradient
Appendix B: Boring Logs
Appendix C: Tables
Appendix D: Laboratory Data Sheets

LIMITED SITE INVESTIGATION

UTA Office Building
1016 West Abram Street
Arlington, Texas

Terracon Project No. 94087317.3R1
May 4, 2010

1.0 INTRODUCTION

1.1 Site Description

Site Name	UTA Office Building
Site Location/Address	1016 West Abram Street
General Site Description	The site consists of a 1.0698-acre tract of land developed with a single-story 10,642 s.f. office building and two-story storage building that were constructed in 1948 and is currently occupied by the University of Texas at Arlington Engineering Department. The on-site office building was converted from an apartment building.

A topographic map is included as Figure 1, and a site plan is included as Figure 2 of Appendix A.

1.2 Scope of Work

Terracon Consultants, Inc. (Terracon) conducted a Limited Site Investigation (LSI) at the UTA Office Building located at 1016 West Abram Street in Arlington, Texas. At your request, Terracon's LSI was undertaken in response to the results of Terracon's Environmental Site Assessment (ESA Report No. 94087317.3R) dated November 29, 2009, which identified the following recognized environmental condition (REC):

- Stop N Go Market, formerly located 50 feet north of the site, was identified in the 1983 historical city directory. Based on the historical aerial review, an apparent dispenser island was noted approximately 100 feet north of the site; however, this facility was not identified during the regulatory review. Based on its proximity to the site, topographic gradient relative to the site (up-gradient), and absence of regulatory information, the former Stop N Go Market constitutes an REC to the site.

The objective of the LSI was to evaluate the presence of volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH) and semi-volatile organic compounds (SVOCs) in the on-site soils

and groundwater (above relevant laboratory reporting limits) as a result of a potential release from the former up-gradient Stop N Go Market. Terracon's LSI was conducted in accordance with Terracon's proposal date April 5, 2010, as authorized by Ms. Lexin Murphy, City of Arlington on April 5, 2010.

1.3 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, our client, as set forth in our proposal and were not intended to be in strict conformance with ASTM E1903-97.

1.4 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this LSI. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.5 Reliance

This report has been prepared for the exclusive use of the City of Arlington and American Campus Communities, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of the City of Arlington and Terracon. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, LSI report, and Terracon's Terms and Conditions. The

limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

2.0 FIELD ACTIVITIES

2.1 Borings and Monitoring Wells

Terracon's field activities were conducted on April 16 and April 19, 2010, by Mr. Chris Sandwell, a Terracon environmental scientist. As part of the approved scope of work, two permanent groundwater monitoring wells (MW-1 and MW-2) were advanced on site. Monitoring wells MW-1 and MW-2 were installed proximate to the northeast and north-central boundaries of the property, respectively.

Figure 1 presents the general boundaries and topography of the site on portions of the USGS topographic quadrangle map of Arlington, Texas (Appendix A). Figure 2 is a site plan that indicates the approximate locations of the soil borings and monitoring wells in relation to the pertinent structures and general site boundaries (Appendix A).

Drilling services, with the exception of borings accomplished via hand-auger, were performed by a State of Texas licensed Monitoring Well Driller using a truck-mounted hollow stem auger drilling rig under the supervision of a Terracon environmental scientist. Soil samples were collected using five-foot core barrel samplers or Shelby tubes. Drilling equipment was cleaned using a high pressure washer prior to beginning the project and before beginning each soil boring. Sampling equipment was cleaned using an Alconox® wash and potable water prior to the beginning of the project and before collecting each soil sample.

Soil samples were collected continuously and observed to document soil lithology, color, moisture content and sensory evidence of impairment. The soil samples were field-screened using a photoionization detector (PID – Thermo Environmental Instruments Model 580B OVM or equivalent) to indicate the presence of VOCs.

The general soil lithology encountered during sample collection consisted of the following:

- Sandy Clay – from beneath grass and concrete surface to a depth of 10 feet below grade surface (bgs).
- Clay – from 10 feet bgs to 15 feet bgs.

- Sandy Clay – from 15 feet bgs to the terminus of the soil borings at a depth of 25 feet bgs.

Detailed lithologic descriptions are presented on the soil boring logs included in Appendix B.

Groundwater was encountered during the advancement of soil borings MW-1 and MW-2 at depths of 15.0 feet bgs and 16.0 feet bgs, respectively.

No odors were detected in the soil samples collected from soil borings MW-1 or MW-2. PID readings ranging up to 8.8 parts per million (ppm) were detected in the soil samples collected from the soil borings MW-1 and MW-2. The highest PID reading was observed in the soil sample collected from a depth of 9.0 to 10.0 feet bgs in soil boring MW-1. The soil boring logs are included in Appendix B.

Subsequent to advancement, soil borings MW-1 and MW-2 were converted to flush-mounted groundwater monitoring wells. The monitoring wells were completed using the following methodology:

- Installation of 20 feet of 2-inch diameter, 0.010-inch machine slotted PVC well screen with a threaded bottom cap;
- Installation of 5 feet of 2-inch diameter, threaded, flush joint PVC riser pipe to the surface;
- Addition of a pre-sieved 20/40-grade annular silica sand pack from the bottom of the boring to approximately 2 feet above the top of the well screen;
- Addition of at least 2 feet of hydrated bentonite seal from above the sand pack filter zone to the near surface; and,
- Installation of an 8-inch diameter, circular, bolt-down, steel, monitoring well cover with locking well cap inset in a flush-mount, concrete well pad.

The monitoring well construction details are presented on the soil boring logs for these monitoring wells and are included in Appendix B.

The monitoring wells were developed by surging and removing groundwater with a new, disposable, polypropylene bailer until the groundwater was relatively free of fine-grained sediment. Approximately 18 gallons of groundwater were removed from each monitoring well MW-1 and MW-2 during development activities.

Soil cuttings, groundwater and equipment cleaning water generated during the field activities were placed in Department of Transportation (DOT) approved, 55-gallon steel drums, closed and

appropriately labeled with project-specific information and initial accumulation date. A total of four 55-gallon drums containing soil cuttings, one 55-gallon drum containing groundwater and one 55-gallon drum containing equipment cleaning water were generated during these field services and were left on site for subsequent characterization and disposal, which is included in the Scope of Services.

2.2 Soil and Groundwater Sampling

Terracon's soil sampling program involved submitting two soil samples from each soil boring for laboratory analysis. Soil samples were collected from the zone exhibiting the highest PID reading. If no elevated PID readings were detected, soil samples were collected from the capillary fringe zone, from the interval exhibiting a change in lithology, from the bottom of the boring, or from the interval of most likely environmental impact based on the field professional's judgement. Soil sample intervals for each boring are presented with the soil sample analytical results (Table 1) and are provided on the lithologic boring logs included in Appendix B.

One groundwater sample was collected from each monitoring well for laboratory analysis. Prior to sample collection, each monitoring well was purged until consistent values (i.e., less than 10% variance between consecutive readings) were obtained for pH, temperature and conductivity. Subsequent to sufficient recharge, one groundwater sample was collected from each monitoring well utilizing low-flow sampling equipment.

Soil and groundwater samples were collected and placed in laboratory prepared glassware, sealed with custody tape and placed on ice in coolers which were secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to Trace Analysis analytical laboratory in Lubbock, Texas for analysis on a standard turnaround.

3.0 LABORATORY ANALYTICAL METHODS

The soil and groundwater samples collected from monitoring wells MW-1 and MW-2 were analyzed for VOCs using EPA SW-846 method #8260B, TPH using method TX1005, and SVOCs using EPA SW-846 method #8270C. In addition, one equipment cleaning rinse blank (Rinsate) and one field blank was prepared and analyzed for VOCs using EPA SW-846 method #8260B for quality control (QC) purposes.

Laboratory results are summarized in the tables included in Appendix C. The executed chain-of-custody form and laboratory data sheets are provided in Appendix D.

4.0 DATA EVALUATION

4.1 Soil Samples

The soil samples collected from monitoring wells MW-1 and MW-2 exhibited elevated PID readings ranging up to 8.8 ppm.

The soil samples collected from monitoring wells MW-1 (14.0 to 15.0 feet bgs), MW-2 (11.0 to 12.0 feet bgs) and MW-2 (16.0 to 17.0 feet bgs) did not exhibit VOC concentrations above the laboratory sample detection limits (SDLs). The laboratory analysis of the soil sample collected from monitoring well MW-1 (9.0 to 10.0) indicated a chloromethane "j" value concentration of 0.00966 mg/kg, a methylene chloride "j" value concentration of 0.109 mg/Kg and a naphthalene "j" value concentration of 0.00462 mg/Kg. The laboratory analysis of the soil samples collected from monitoring wells MW-1 (9.0 to 10.0), MW-1 (14.0 to 15.0 feet bgs), MW-2 (11.0 to 12.0 feet bgs) and MW-2 (16.0 to 17.0 feet bgs) indicated TPH C6-C12 concentrations above the laboratory SDLs, as summarized in Table 1. It should be noted that a "j" value is a concentration detected between the laboratory method detection limit and the sample detection limit and may or may not be reproducible in laboratory analysis.

Terracon compared the chloromethane, methylene chloride, and naphthalene "j" value concentrations detected in the soil samples to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) (30TAC Chapter 350) Tier 1 Residential Protective Concentration Levels (PCLs) for a 0.5-acre source area. The Critical PCL for the VOCs identified in the on-site soil was the lower of the applicable PCLs for a 0.5-acre source area (i.e., ${}^{Total}Soil_{Comb}$, ${}^{GW}Soil_{Ing}$, ${}^{Air}Soil_{Inh\text{-}V}$ and ${}^{Air}GW\text{-}Soil_{Inh}$). The Critical PCL was the ${}^{GW}Soil_{Ing}$ value for each of the VOCs reviewed. The VOC concentrations detected in the on-site soil samples were below the applicable TRRP Tier 1 Critical PCLs for chloromethane, methylene chloride, and naphthalene identified, as summarized in Table 1.

Based on the highest TPH concentration, the soil sample collected from monitoring well MW-1 (9.0 to 10.0 feet bgs) was additionally analyzed for SVOCs. The laboratory analysis of the soil sample collected from monitoring well MW-1 (9.0 to 10.0) did not exhibit SVOC concentrations above the laboratory SDLs, as summarized in Table 1.

4.2 Groundwater Samples

The groundwater sample collected from monitoring wells MW-1 and MW-2 did not exhibit VOC concentrations above the laboratory SDLs. The groundwater sample collected from monitoring

wells MW-1 and MW-2 exhibited TPH (C6-C12) concentrations of 0.887 mg/L and 1.45 mg/L, respectively; however, the groundwater collected from the monitoring wells did not exhibit TPH (C12-C28) concentrations above the laboratory SDLs, as summarized in Table 2.

Based on the highest TPH concentration, the groundwater sample collected from monitoring well MW-2 was additionally analyzed for SVOCs. The laboratory analysis of the groundwater sample collected from monitoring well MW-2 did not exhibit SVOC concentrations above the laboratory SDLs, as summarized in Table 2.

5.0 FINDINGS AND RECOMMENDATIONS

The findings and recommendations of this investigation are as follows:

- Based on the analytical results, the on-site soils in the vicinity of monitoring wells MW-1 and MW-2 exhibited chloromethane, methylene chloride, naphthalene "j" value concentrations, and TPH concentrations above the laboratory SDLs; however, the chloromethane, methylene chloride, naphthalene and TPH concentrations are below the applicable TRRP Tier 1 Critical PCLs and TPH Screening Levels, respectively.

- Based on the highest TPH concentration, the soil sample collected from monitoring well MW-1 (9.0 to 10.0 feet bgs) was additionally analyzed for SVOCs. The laboratory analysis of the soil sample collected from monitoring well MW-1 (9.0 to 10.0) did not exhibit SVOC concentrations above the laboratory SDLs.

- Based on the analytical results, the groundwater in the vicinity of monitoring wells MW-1 and MW-2 did not exhibit VOC concentrations above the laboratory SDLs. The groundwater in the vicinity of monitoring wells MW-1 and MW-2 exhibited TPH (C6-C12) concentrations of 0.887 mg/L and 1.45 mg/L, respectively; however, the groundwater collected from the monitoring wells did not exhibit TPH (C12-C28) concentrations above the laboratory SDLs.

- Based on the highest TPH concentration, the groundwater sample collected from monitoring well MW-2 was additionally analyzed for SVOCs. The laboratory analysis of the groundwater sample collected from monitoring well MW-2 did not exhibit SVOC concentrations above the laboratory SDLs.

- Based on the analytical results, groundwater generated during the development/purging of monitoring well MW-2 should be characterized as non-hazardous waste and should be treated

and/or disposed in accordance with applicable local, state and federal regulations. Based on the analytical results, the soil cuttings generated during the advancement of monitoring wells MW-1 and MW-2 and the groundwater generated during the development/purging of monitoring well MW-1 may be dispersed on-site as unaffected material.

- The objective of the LSI was to evaluate the presence of VOCs, TPH, and SVOCs in the on-site soils and groundwater above relevant laboratory reporting limits.

- If the monitoring wells installed during this investigation are not expected to be used in the future, they should by plugged and abandoned in accordance with state regulations and guidance.

- Based on the analytical results and groundwater flow direction data, the groundwater in the vicinity of monitoring well MW-2 appears to be affected by a release from the former Stop N Go Market located to the north and upgradient of the site. Based on the preliminary results of Terracon's Phase I ESA subsequent LSI, the site may qualify for an Innocent Owner/Operator Program certificate. The Texas Innocent Owner/Operator Program (IOP) was established to provide release of liability and to provide a certificate to the owner or operator of a property affected by a release or migration of contaminants from off-site sources.

  To become eligible for immunity, the innocent owner or operator must grant reasonable access to the property for future investigation or remediation, agree on necessary restrictions to protect human health and the environment, if appropriate, and demonstrate that:

  - the property has become contaminated because of a release or migration of contaminants from a source or sources not located on or at the property;
  - he or she has not caused or contributed to the source or sources of the contamination;
  - he or she does not currently or formerly own, operate, or was involved in any activity which may have caused or contributed to on-site contamination at a property within ¼ mile of the subject property, or is otherwise a responsible party;
  - he or she did not acquire the property from the person that caused the release; or if the property was purchased from the owner of the source property after September 1, 1997, the effective date of the IOP law, the applicant must demonstrate he did not know or have reason to know of the contamination at the time the property was acquired.

  As per the IOP law, it will be necessary for IOP parties to submit:

  - an application;

- a fee of $1,000 to cover the TCEQ's review cost. (Any portion of the application fee not incurred or obligated in the review of the application shall be refunded.); and
- a Site Investigation Report (SIR) that describes the contaminated area of concern.

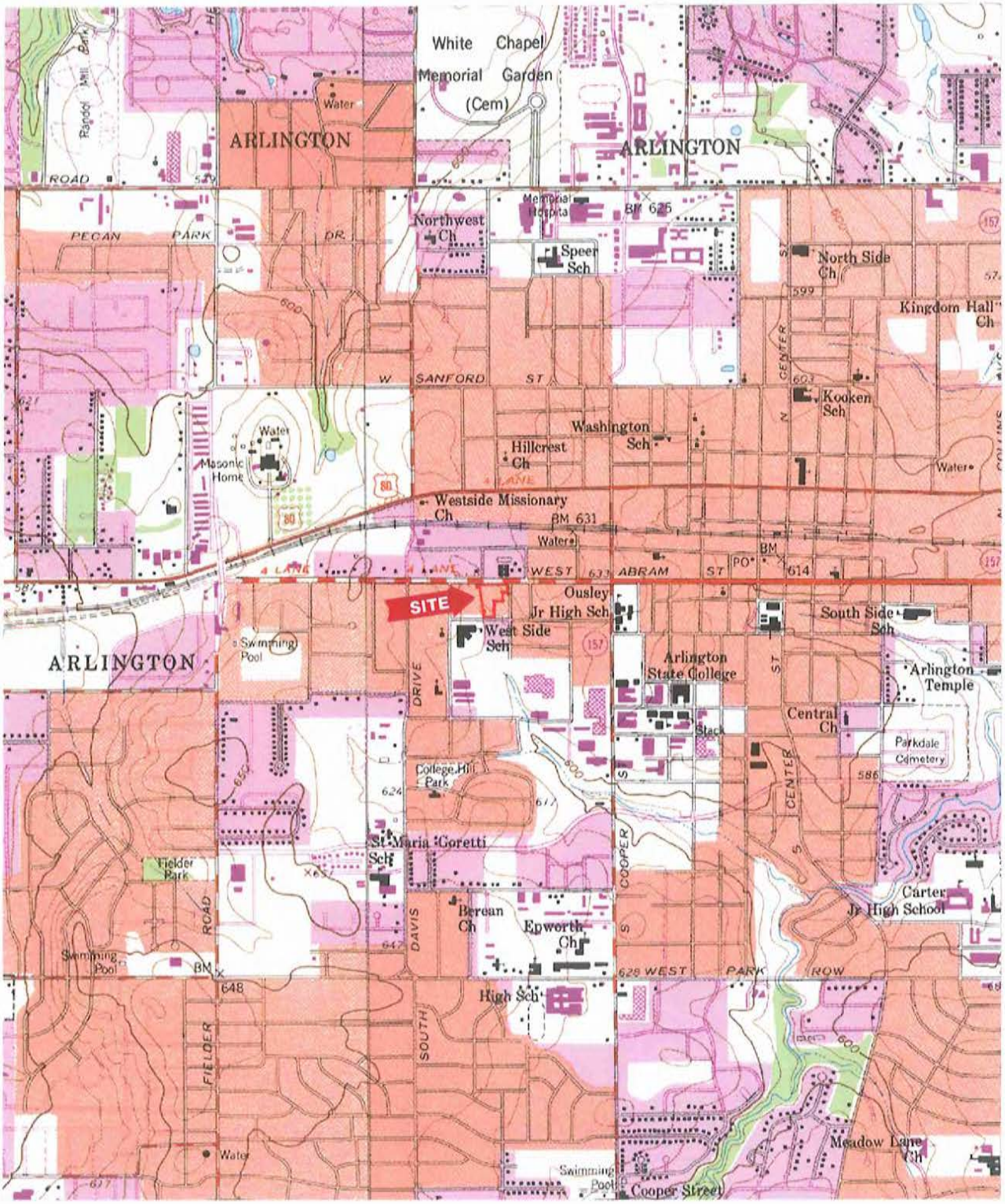
Upon completion of a SIR that demonstrates that the above criteria have been met, then the owner/operator is eligible to receive an IOC from the TCEQ. Parties may terminate their participation in the IOP at any time by written notice to the program.

The site appears eligible for an IOP certificate based on:

- Analytical data for monitoring well MW-2 and groundwater flow direction data indicating COC concentrations detected in monitoring well MW-2 likely originated from an off-site source; and,
- Review of past on-site property uses did not identify conditions that would have caused or contributed to the elevated COC concentrations detected in monitoring well MW-2.

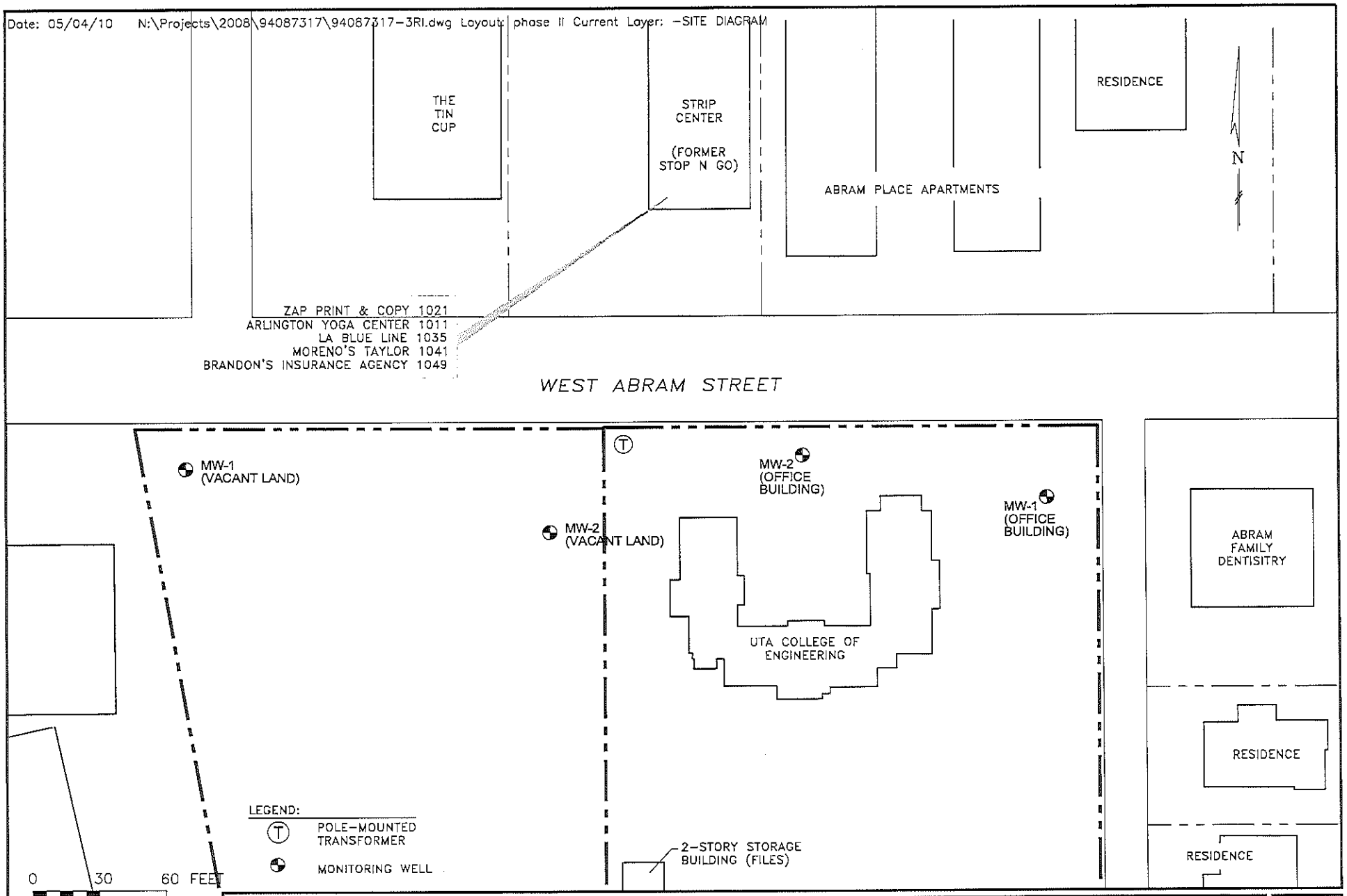
APPENDIX A

Figure 1 – Topographic Map
Figure 2 – Site Plan
Figure 3 – Groundwater Gradient



USGS TOPOGRAPHIC QUADRANGLE MAP Arlington, Texas		Office Building 1016 West Abram Street Arlington, Tarrant County, Texas
Dated: 1959 Photorevised: 1981 SCALE: 1" = 2,000'	↑	
PROJECT NO. 94087317.3R1	N	FIGURE 1: TOPOGRAPHIC MAP

Terracon



THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.

NOTE: ALL BORING LOCATIONS ARE APPROXIMATE.

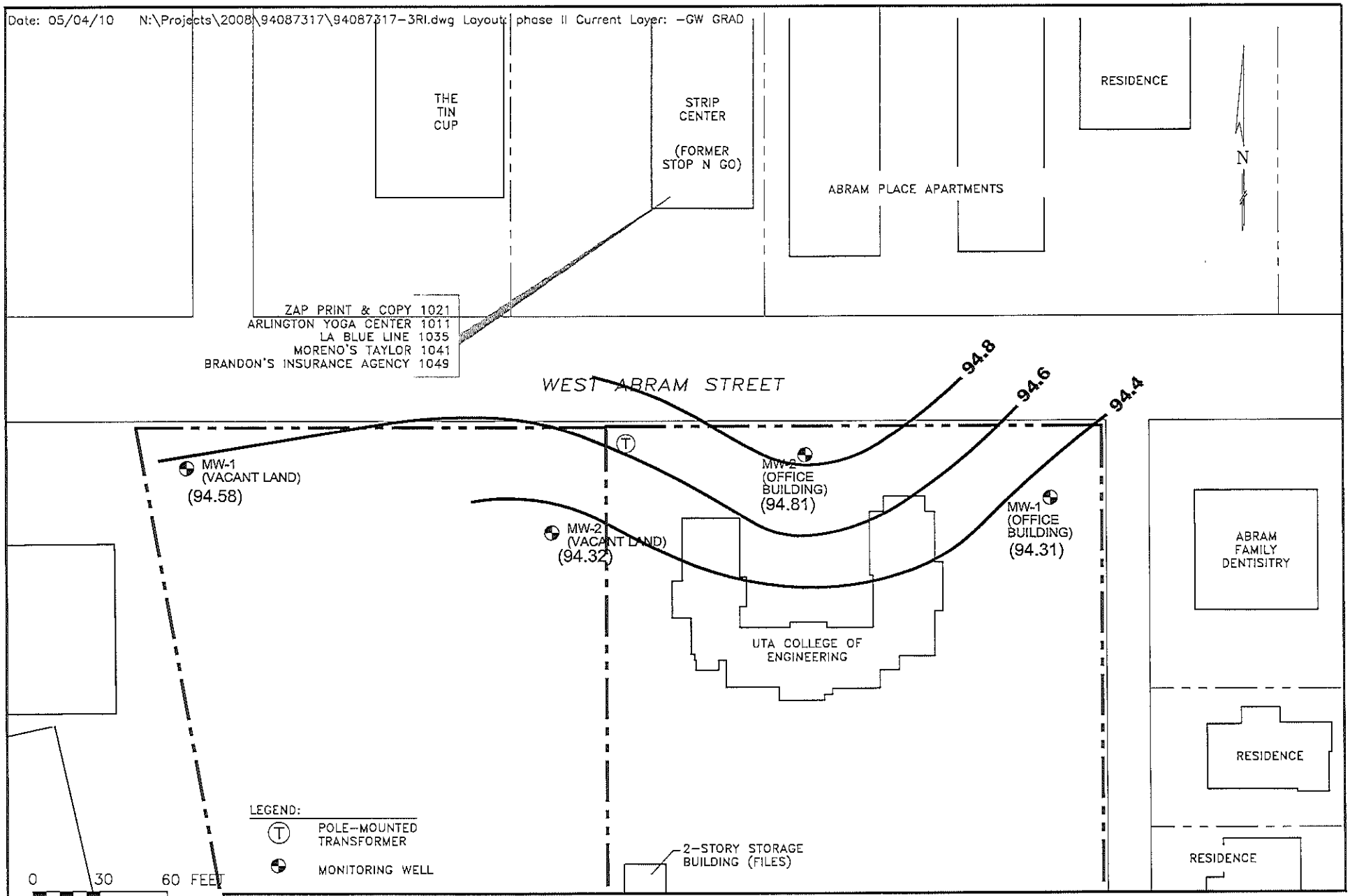
Project Mngr:	CS
Drawn By:	JJD
Checked By:	CS
Approved By:	CS
Project No.	94087317.3RI
Scale:	AS SHOWN
Date:	04/28/10

Terracon
Consulting Engineers and Scientists
(Registration No.: F-3272)
6301 CARPENTER FREEWAY DALLAS, TEXAS 75247
PH. (214) 630-1010 FAX. (214) 630-7070

SITE DIAGRAM

OFFICE BUILDING & VACANT LAND
1016 WEST ABRAM STREET
ARLINGTON, TEXAS

FIGURE 2



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NOTE: ALL BORING LOCATIONS ARE APPROXIMATE.

Project Mngr:	CS
Drawn By:	JJD
Checked By:	CS
Approved By:	CS
Project No.	94087317.3RI
Scale:	AS SHOWN
Date:	04/28/10

Terracon
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GROUNDWATER GRADIENT

OFFICE BUILDING & VACANT LAND
1016 WEST ABRAM STREET
ARLINGTON, TEXAS

FIGURE 3

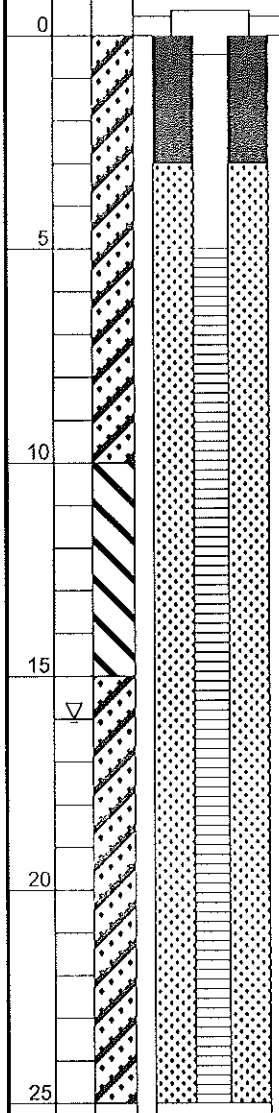
APPENDIX B

Boring Logs

SOIL BORING / MONITORING WELL LOG

PROJECT: OFFICE BUILDING
PROJECT NUMBER: 94087319.3RI
CLIENT: City of Arlington
BORING / WELL NUMBER: MW-1
TOTAL DEPTH: 25.0'
TOP OF CASING:
FIELD PERSONNEL: C. Sandwell

DRILLING COMPANY: Sunbelt
DRILLER: M. Kickox
DRILLING METHOD: Hollow Stem Auger
BORE HOLE DIAMETER: 8.75"
SCREEN: Diam. 2" Length 20' Slot Size 0.01"
CASING: Diam. 2" Length 5' Type PVC
DATE DRILLED: 4-16-10



DEPTH (FT)	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM
0	1.3				GRASS SURFACE SANDY CLAY (CL), moderate yellowish brown, slightly moist, no odor
	NR				
	2.0				
	4.8				
	5.5		4.0		
5	8.3		5.0		
	7.6				
	8.8				
	8.1				- dark yellowish brown, with moderate yellowish brown mottling
	8.8		9.0		
10	7.9		10.0	10.0	CLAY (CH), very pale orange, with moderate yellowish brown mottling, moist, no odor
	5.5				
	5.5				
	4.5				
	5.9		14.0		- 6" sand, moist
15	4.5		15.0	15.0	SANDY CLAY (CL), light yellowish brown, with moderate yellowish brown mottling, wet, no odor
	5.9				
	5.5				
	5.6				- very moist
	5.9				
20	6.1				- increased sand
	6.6				
	3.8				
	4.5				
	3.8		24.0		- light gray
25			25.0	25.0	Bottom of boring at 25.0'
30					

REMARKS:

THIS LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT.

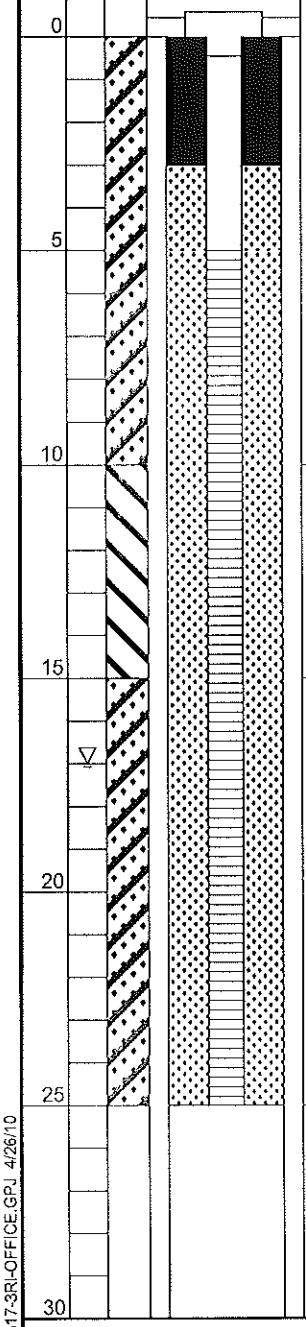
Terracon

MWL30 94087317-3RI-OFFICE.GPJ 4/26/10

SOIL BORING / MONITORING WELL LOG

PROJECT: OFFICE BUILDING
PROJECT NUMBER: 94087319.3RI
CLIENT: City of Arlington
BORING / WELL NUMBER: MW-2
TOTAL DEPTH: 25.0'
TOP OF CASING:
FIELD PERSONNEL: C. Sandwell

DRILLING COMPANY: Sunbelt
DRILLER: M. Kickox
DRILLING METHOD: Hollow Stem Auger
BORE HOLE DIAMETER: 8.75"
SCREEN: Diam. 2" Length 20' Slot Size 0.01"
CASING: Diam. 2" Length 5' Type PVC
DATE DRILLED: 4-16-10



DEPTH (FT)	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM
0	4.7				SANDY CLAY (CL) moderate yellowish brown, slightly moist, no odor
	NR				
	5.2				
	4.7		4.0		
5	5.4		5.0		
	3.8				
	NR				
	NR				
	4.0				- light brown, with moderate brown mottling
10	2.9			10.0	
	4.5		11.0		CLAY (CH), pale yellowish brown, slightly moist, no odor
	4.7		12.0		
	3.8				
	2.2				
15	5.4			15.0	
	3.1		16.0		SANDY CLAY, pale yellowish brown, moist, no odor
	5.6		17.0		- wet, 6" red ironstone
	5.2				
	3.6				
20	5.2				
	3.1				- moderate yellowish brown, very moist
	3.3				
	2.6				- light gray, moist
	3.6		24.0		
25	1.9		25.0	25.0	
					B.H. at 25.0'
30					

REMARKS:

THIS LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT.

Terracon

MWL30 94087317-3RI-OFFICE.GPJ 4/26/10

APPENDIX C

Tables

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - VOCs[1] (8260B), TPH[2] (TX1005) and SVOCs[3] (8270C)
UTA Office Building
1016 West Abram Street
Arlington, Texas
Terracon Project No. 94087317.3R1

Sample I.D.	Sample Depth (in bgs)	Sample Date	VOCs[4] (mg/Kg)	SVOCs[4] (mg/Kg)	TPH (TX1005 Rev. 3) (mg/Kg)	
					C6-C12	>C12-C28
MW-1	9.0-10.0	04/16/10	Chloromethane - 0.00966(j) Methylene chloride - 0.109(j) Naphthalene - 0.00462(j)	ND	36.9	<7.26
MW-1	14.0-15.0	04/16/10	ND	N/A	22.2(j)	<7.33
MW-2	11.0-12.0	04/16/10	ND	N/A	22.3(j)	<7.52
MW-2	16.0-17.0	04/16/10	ND	N/A	11.6	<7.77
Texas Risk Reduction Program Tier 1 Critical Residential Soil PCLs (0.5-Acre Source Area)			Chloromethane - 0.41 Methylene chloride - 0.013 Napthalene - 31	N/A	*65*	Carbon-Range Specific

ND = Constituents were not detected above laboratory SQLs.
N/A = Not applicable
j = The value is above the method detection limit but below the reporting limit.
1. VOCs = Volatile Organic Compounds
2. TPH = Total Petroleum Hydrocarbons
3. SVOCs = Semi-Volatile Organic Compounds
4. Only those constituents detected above the sample quantitation limit are reported.

TABLE 2

GROUNDWATER SAMPLE ANALYTICAL RESULTS - VOCs[1] (8260B), TPH[2] (TX1005) and SVOCs[3] (8270C)

UTA Office Building
1016 West Abram Street
Arlington, Texas
Terracon Project No. 94087317.3R1

Sample I.D.	Sample Date	VOCs[4] (mg/L)	SVOCs[4] (mg/L)	TPH (TX 1005 Rev. 3) (mg/L)	
				C6-C12	C12-C35
MW-1	04/19/10	ND	N/A	0.887	<0.889
MW-2	04/19/10	ND	ND	**1.45**	<0.889
FB-1	04/19/10	ND	N/A	N/A	
Trip Blank	04/16/10	ND	N/A	N/A	
Trip Blank	04/19/10	ND	N/A	N/A	
Texas Risk Reduction Program Tier 1 Critical Residential Groundwater PCLs - Class 2 Groundwater		ND	ND	*0.98*	*Carbon-Range Specific*

ND = Constituents were not detected above laboratory SQLs.

N/A = Not applicable

j = The value is above the method detection limit but below the reporting limit.

1. VOCs = Volatile Organic Compounds
2. TPH = Total Petroleum Hydrocarbons
3. SVOCs = Semi-Volatile Organic Compounds.
4. Only those constituents detected above the sample quantitation limit are reported.

Bold denotes concentrations that exceed the applicable TRRP Tier 1 Critical PCL.

TABLE 3

GROUNDWATER SAMPLE ANALYTICAL RESULTS - VOCs[1] (8260B) and TPH[2] (TX1005)

UTA Office Building
1016 West Abram Street
Arlington, Texas
Terracon Project No. 94087317.3R1

Sample I.D.	Sample Date	VOCs[3] (mg/L)	TPH (TX 1005 Rev. 3) (mg/L)	
			C6-C12	C12-C35
Equipment Rinsate	04/16/10	Bromodichloromethane - 0.00135 Bromoform - 0.00092(j) Chloroform - 0.0144 Dibromochloromethane - 0.00089(j)	<0.817	<0.889
Texas Risk Reduction Program Tier 1 Critical Residential Groundwater PCLs - Class 2 Groundwater		Bromodichloromethane - 0.015 Bromoform - 0.12 Chloroform - 0.24 Dibromochloromethane - 0.011	*Carbon-Range Specific*	

j = The value is above the method detection limit but below the reporting limit.

1. VOCs = Volatile Organic Compounds
2. TPH = Total Petroleum Hydrocarbons
3. Only those constituents detected above the sample quantitation limit are reported.

APPENDIX D

Laboratory Data Sheets

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317
El Paso: T104704221-08-TX LELAP-02002
Midland: T104704392-08-TX

Analytical and Quality Control Report

Mary Helen Niemann
Terracon - Dallas
8901 Carpenter Frwy.
Suite 100
Dallas, TX, 75247

Report Date: May 3, 2010

Work Order: 10042115

Project Name: Office Building
Project Number: 94087317.3RI

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
229178	MW-1	water	2010-04-19	12:23	2010-04-20
229179	MW-2	water	2010-04-19	13:20	2010-04-20
229180	FB-1	water	2010-04-19	13:45	2010-04-20
229181	Trip Blank	water	2010-04-09	00:00	2010-04-20

Comment(s)

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 38 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Notes:
For inorganic analyses, the term MQL should actually read PQL.

Standard Flags

U - Not detected. The analyte is not detected above the SDL.
J - Estimated. The analyte is positively identified and the value is approximated between the SDL and MQL.
B - The sample contains less than ten times the concentration found in the method blank.
JB - The analyte is positively identified and the value is approximated between the SDL and MQL.
The sample contains less than ten times the concentration found in the method blank.
The result should be considered non-detect to the SDL.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Case Narrative

Samples for project Office Building were received by TraceAnalysis, Inc. on 2010-04-20 and assigned to work order 10042115. Samples for work order 10042115 were received intact without headspace and at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Semivolatiles TRRP	S 8270C	59454	2010-04-26 at 15:00	69467	2010-04-28 at 09:33
TX1005 Extended - NEW	TX1005	59325	2010-04-21 at 15:00	69316	2010-04-21 at 16:00
Volatiles	S 8260B	59371	2010-04-22 at 12:00	69365	2010-04-22 at 12:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10042115 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 229178 - MW-1

Laboratory:	Lubbock				
Analysis:	TX1005 Extended - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	69316	Date Analyzed:	2010-04-21	Analyzed By:	AW
Prep Batch:	59325	Sample Preparation:	2010-04-21	Prepared By:	AW

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
C6-C12	JB	**0.878**	<5.00	0.926	mg/L	1	0.817	5	0.817
>C12-C35	U	<0.889	<5.00	1.25	mg/L	1	0.889	5	0.889

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.6	mg/L	1	10.0	126	58.6 - 181
n-Octane		7.27	mg/L	1	10.0	73	70 - 130
n-Tricosane		11.0	mg/L	1	10.0	110	70 - 130

Sample: 229178 - MW-1

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69365	Date Analyzed:	2010-04-22	Analyzed By:	KB
Prep Batch:	59371	Sample Preparation:	2010-04-22	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.210	<1.00	<0.210	µg/L	1	0.210	1	0.21
Dichlorodifluoromethane	[1] U	<0.480	<1.00	<0.480	µg/L	1	0.480	1	0.48
Chloromethane (methyl chloride)	U	<0.350	<1.00	<0.350	µg/L	1	0.350	1	0.35
Vinyl Chloride	U	<0.360	<1.00	<0.360	µg/L	1	0.360	1	0.36
Bromomethane (methyl bromide)	U	<0.620	<5.00	<0.620	µg/L	1	0.620	5	0.62
Chloroethane	U	<0.560	<1.00	<0.560	µg/L	1	0.560	1	0.56
Trichlorofluoromethane	U	<0.310	<1.00	<0.310	µg/L	1	0.310	1	0.31
Acetone	U	<1.63	<10.0	<1.63	µg/L	1	1.63	10	1.63
Iodomethane (methyl iodide)	U	<0.210	<5.00	<0.210	µg/L	1	0.210	5	0.21
Carbon Disulfide	U	<0.280	<1.00	<0.280	µg/L	1	0.280	1	0.28
Acrylonitrile	U	<0.290	<1.00	<0.290	µg/L	1	0.290	1	0.29
2-Butanone (MEK)	U	<0.750	<5.00	<0.750	µg/L	1	0.750	5	0.75
4-Methyl-2-pentanone (MIBK)	U	<0.680	<5.00	<0.680	µg/L	1	0.680	5	0.68
2-Hexanone	U	<0.480	<5.00	<0.480	µg/L	1	0.480	5	0.48
trans 1,4-Dichloro-2-butene	U	<0.230	<10.0	<0.230	µg/L	1	0.230	10	0.23
1,1-Dichloroethene	U	<0.240	<1.00	<0.240	µg/L	1	0.240	1	0.24
Methylene chloride	U	<0.520	<5.00	<0.520	µg/L	1	0.520	5	0.52

continued ...

[1] Concentration biased low.

sample 229178 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
MTBE	U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
trans-1,2-Dichloroethene	U	<0.240	<1.00	<0.240	μg/L	1	0.240	1	0.24
1,1-Dichloroethane	U	<0.180	<1.00	<0.180	μg/L	1	0.180	1	0.18
cis-1,2-Dichloroethene	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
2,2-Dichloropropane	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
1,2-Dichloroethane (EDC)	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Chloroform	U	<0.160	<1.00	<0.160	μg/L	1	0.160	1	0.16
1,1,1-Trichloroethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
1,1-Dichloropropene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
Benzene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Carbon Tetrachloride	U	<0.540	<1.00	<0.540	μg/L	1	0.540	1	0.54
1,2-Dichloropropane	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Trichloroethene (TCE)	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Dibromomethane (methylene bromide)	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Bromodichloromethane	U	<0.180	<1.00	<0.180	μg/L	1	0.180	1	0.18
2-Chloroethyl vinyl ether	U	<0.130	<5.00	<0.130	μg/L	1	0.130	5	0.13
cis-1,3-Dichloropropene	U	<0.230	<1.00	<0.230	μg/L	1	0.230	1	0.23
trans-1,3-Dichloropropene	U	<0.220	<1.00	<0.220	μg/L	1	0.220	1	0.22
Toluene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
1,1,2-Trichloroethane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
1,3-Dichloropropane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
Dibromochloromethane	U	<0.150	<1.00	<0.150	μg/L	1	0.150	1	0.15
1,2-Dibromoethane (EDB)	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
Tetrachloroethene (PCE)	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
Chlorobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
1,1,1,2-Tetrachloroethane	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Ethylbenzene	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
m,p-Xylene	U	<0.270	<1.00	<0.270	μg/L	1	0.270	1	0.27
Bromoform	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Styrene	U	<0.0900	<1.00	<0.0900	μg/L	1	0.0900	1	0.09
o-Xylene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,1,2,2-Tetrachloroethane	U	<0.320	<1.00	<0.320	μg/L	1	0.320	1	0.32
2-Chlorotoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,2,3-Trichloropropane	U	<0.620	<1.00	<0.620	μg/L	1	0.620	1	0.62
Isopropylbenzene	U	<0.530	<1.00	<0.530	μg/L	1	0.530	1	0.53
Bromobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Propylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11
1,3,5-Trimethylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11
tert-Butylbenzene	U	<0.450	<1.00	<0.450	μg/L	1	0.450	1	0.45
1,2,4-Trimethylbenzene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,4-Dichlorobenzene (para)	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
sec-Butylbenzene	U	<0.460	<1.00	<0.460	μg/L	1	0.460	1	0.46
1,3-Dichlorobenzene (meta)	U	<0.520	<1.00	<0.520	μg/L	1	0.520	1	0.52
p-Isopropyltoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
4-Chlorotoluene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12

continued ...

sample 229178 continued . . .

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichlorobenzene (ortho)	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Butylbenzene	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
1,2-Dibromo-3-chloropropane	[2] U	<0.650	<5.00	<0.650	μg/L	1	0.650	5	0.65
1,2,3-Trichlorobenzene	U	<0.240	<5.00	<0.240	μg/L	1	0.240	5	0.24
1,2,4-Trichlorobenzene	U	<0.190	<5.00	<0.190	μg/L	1	0.190	5	0.19
Naphthalene	[3] U	<0.330	<5.00	<0.330	μg/L	1	0.330	5	0.33
Hexachlorobutadiene	U	<0.260	<5.00	<0.260	μg/L	1	0.260	5	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	μg/L	1	50.0	102	88.3 - 117
Toluene-d8		50.8	μg/L	1	50.0	102	87.7 - 112
4-Bromofluorobenzene (4-BFB)		49.2	μg/L	1	50.0	98	84.6 - 114

Sample: 229179 - MW-2

Laboratory:	Lubbock				
Analysis:	Semivolatiles TRRP	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	69467	Date Analyzed:	2010-04-28	Analyzed By:	MN
Prep Batch:	59454	Sample Preparation:	2010-04-26	Prepared By:	MN

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	[4] U	<0.000602	<0.00495	<0.000602	mg/L	0.99	0.000602	0.005	0.000608
N-Nitrosodimethylamine	U	<0.000546	<0.00495	<0.000546	mg/L	0.99	0.000546	0.005	0.000552
2-Picoline	U	<0.000404	<0.00495	<0.000404	mg/L	0.99	0.000404	0.005	0.000408
Methyl methanesulfonate	U	<0.000346	<0.00495	<0.000346	mg/L	0.99	0.000346	0.005	0.00035
Ethyl methanesulfonate	U	<0.000444	<0.00495	<0.000444	mg/L	0.99	0.000444	0.005	0.000448
Phenol	U	<0.000504	<0.00495	<0.000504	mg/L	0.99	0.000504	0.005	0.000509
Aniline	[5] U	<0.000684	<0.00495	<0.000684	mg/L	0.99	0.000684	0.005	0.000691
bis(2-chloroethyl)ether	U	<0.000436	<0.00495	<0.000436	mg/L	0.99	0.000436	0.005	0.00044
2-Chlorophenol	U	<0.000532	<0.00495	<0.000532	mg/L	0.99	0.000532	0.005	0.000537
1,3-Dichlorobenzene (meta)	U	<0.000436	<0.00495	<0.000436	mg/L	0.99	0.000436	0.005	0.000441
1,4-Dichlorobenzene (para)	U	<0.000436	<0.00495	<0.000436	mg/L	0.99	0.000436	0.005	0.00044
Benzyl alcohol	U	<0.000533	<0.00495	<0.000533	mg/L	0.99	0.000533	0.005	0.000538
1,2-Dichlorobenzene (ortho)	U	<0.000438	<0.00495	<0.000438	mg/L	0.99	0.000438	0.005	0.000443
2-Methylphenol	U	<0.000719	<0.00495	<0.000719	mg/L	0.99	0.000719	0.005	0.000726
bis(2-chloroisopropyl)ether	U	<0.000498	<0.00495	<0.000498	mg/L	0.99	0.000498	0.005	0.000503

continued . . .

[2] Concentration biased low.
[3] Concentration biased low.
[4] Concentration biased low.
[5] Concentration biased low.

sample 229179 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
4-Methylphenol / 3-Methylphenol	[6] U	<0.000507	<0.00495	<0.000507	mg/L	0.99	0.000507	0.005	0.000512
Acetophenone	U	<0.000420	<0.00495	<0.000420	mg/L	0.99	0.000420	0.005	0.000424
N-Nitrosodi-n-propylamine	U	<0.000725	<0.00495	<0.000725	mg/L	0.99	0.000725	0.005	0.000732
Hexachloroethane	U	<0.000502	<0.00495	<0.000502	mg/L	0.99	0.000502	0.005	0.000507
Nitrobenzene	U	<0.000460	<0.00495	<0.000460	mg/L	0.99	0.000460	0.005	0.000465
N-Nitrosopiperidine	U	<0.000438	<0.00495	<0.000438	mg/L	0.99	0.000438	0.005	0.000443
Isophorone	U	<0.000613	<0.00495	<0.000613	mg/L	0.99	0.000613	0.005	0.000619
2-Nitrophenol	U	<0.000402	<0.00495	<0.000402	mg/L	0.99	0.000402	0.005	0.000406
2,4-Dimethylphenol	U	<0.000472	<0.00495	<0.000472	mg/L	0.99	0.000472	0.005	0.000477
bis(2-chloroethoxy)methane	U	<0.000428	<0.00495	<0.000428	mg/L	0.99	0.000428	0.005	0.000432
Benzoic acid	[7] U	<0.00161	<0.00495	<0.00161	mg/L	0.99	0.00161	0.005	0.00163
2,4-Dichlorophenol	U	<0.000396	<0.00495	<0.000396	mg/L	0.99	0.000396	0.005	0.0004
1,2,4-Trichlorobenzene	U	<0.000400	<0.00495	<0.000400	mg/L	0.99	0.000400	0.005	0.000404
a,a-Dimethylphenethylamine	[8] U	<0.00128	<0.00495	<0.00128	mg/L	0.99	0.00128	0.005	0.00129
Naphthalene	U	<0.000484	<0.00495	<0.000484	mg/L	0.99	0.000484	0.005	0.000489
4-Chloroaniline	U	<0.000374	<0.00495	<0.000374	mg/L	0.99	0.000374	0.005	0.000378
2,6-Dichlorophenol	U	<0.000479	<0.00990	<0.000479	mg/L	0.99	0.000479	0.01	0.000484
Hexachlorobutadiene	U	<0.000512	<0.00495	<0.000512	mg/L	0.99	0.000512	0.005	0.000517
N-Nitroso-di-n-butylamine	U	<0.000649	<0.00495	<0.000649	mg/L	0.99	0.000649	0.005	0.000656
4-Chloro-3-methylphenol	[9] U	<0.000517	<0.00495	<0.000517	mg/L	0.99	0.000517	0.005	0.000522
1-Methylnaphthalene	U	<0.000490	<0.00495	<0.000490	mg/L	0.99	0.000490	0.005	0.000495
2-Methylnaphthalene	U	<0.000419	<0.00495	<0.000419	mg/L	0.99	0.000419	0.005	0.000423
1,2,4,5-Tetrachlorobenzene	U	<0.000606	<0.00495	<0.000606	mg/L	0.99	0.000606	0.005	0.000612
Hexachlorocyclopentadiene	U	<0.000552	<0.00495	<0.000552	mg/L	0.99	0.000552	0.005	0.000558
2,4,6-Trichlorophenol	U	<0.000786	<0.00990	<0.000786	mg/L	0.99	0.000786	0.01	0.000794
2,4,5-Trichlorophenol	U	<0.000826	<0.00495	<0.000826	mg/L	0.99	0.000826	0.005	0.000834
2-Chloronaphthalene	U	<0.000412	<0.00495	<0.000412	mg/L	0.99	0.000412	0.005	0.000416
1-Chloronaphthalene	U	<0.000471	<0.00495	<0.000471	mg/L	0.99	0.000471	0.005	0.000476
2-Nitroaniline	U	<0.000752	<0.00495	<0.000752	mg/L	0.99	0.000752	0.005	0.00076
Dimethylphthalate	U	<0.000636	<0.00495	<0.000636	mg/L	0.99	0.000636	0.005	0.000643
Acenaphthylene	U	<0.000580	<0.00495	<0.000580	mg/L	0.99	0.000580	0.005	0.000586
2,6-Dinitrotoluene	U	<0.000634	<0.00495	<0.000634	mg/L	0.99	0.000634	0.005	0.00064
3-Nitroaniline	U	<0.000714	<0.00495	<0.000714	mg/L	0.99	0.000714	0.005	0.000721
Acenaphthene	U	<0.000419	<0.00495	<0.000419	mg/L	0.99	0.000419	0.005	0.000423
2,4-Dinitrophenol	U	<0.000218	<0.00495	<0.000218	mg/L	0.99	0.000218	0.005	0.00022
Dibenzofuran	U	<0.000404	<0.00495	<0.000404	mg/L	0.99	0.000404	0.005	0.000408
Pentachlorobenzene	U	<0.000565	<0.00495	<0.000565	mg/L	0.99	0.000565	0.005	0.000571
4-Nitrophenol	U	<0.00183	<0.0248	<0.00183	mg/L	0.99	0.00183	0.025	0.00185
1-Naphthylamine	U	<0.000681	<0.00495	<0.000681	mg/L	0.99	0.000681	0.005	0.000688
2,4-Dinitrotoluene	U	<0.000902	<0.00495	<0.000902	mg/L	0.99	0.000902	0.005	0.000911
2-Naphthylamine	U	<0.000692	<0.00495	<0.000692	mg/L	0.99	0.000692	0.005	0.000699

continued ...

[6] Concentration biased low.
[7] Concentration biased low.
[8] Concentration biased low.
[9] Concentration biased low.

sample 229179 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
2,3,4,6-Tetrachlorophenol	U	<0.000559	<0.00990	<0.000559	mg/L	0.99	0.000559	0.01	0.000565
Fluorene	U	<0.000642	<0.00495	<0.000642	mg/L	0.99	0.000642	0.005	0.000648
Diethylphthalate	U	<0.000820	<0.00495	<0.000820	mg/L	0.99	0.000820	0.005	0.000828
4-Chlorophenyl-phenylether	U	<0.000613	<0.00495	<0.000613	mg/L	0.99	0.000613	0.005	0.000619
4-Nitroaniline	U	<0.000695	<0.00495	<0.000695	mg/L	0.99	0.000695	0.005	0.000702
4,6-Dinitro-2-methylphenol	U	<0.00196	<0.00495	<0.00196	mg/L	0.99	0.00196	0.005	0.00198
Diphenylamine	U	<0.000436	<0.00495	<0.000436	mg/L	0.99	0.000436	0.005	0.00044
Diphenylhydrazine	U	<0.000650	<0.00495	<0.000650	mg/L	0.99	0.000650	0.005	0.000657
4-Bromophenyl-phenylether	U	<0.000544	<0.00495	<0.000544	mg/L	0.99	0.000544	0.005	0.00055
Phenacetin	U	<0.000599	<0.00495	<0.000599	mg/L	0.99	0.000599	0.005	0.000605
Hexachlorobenzene	U	<0.000501	<0.00495	<0.000501	mg/L	0.99	0.000501	0.005	0.000506
4-Aminobiphenyl	U	<0.000522	<0.00495	<0.000522	mg/L	0.99	0.000522	0.005	0.000527
Pentachlorophenol	U	<0.000431	<0.00990	<0.000431	mg/L	0.99	0.000431	0.01	0.000435
Pentachloronitrobenzene	U	<0.000404	<0.00495	<0.000404	mg/L	0.99	0.000404	0.005	0.000408
Pronamide	U	<0.000471	<0.00495	<0.000471	mg/L	0.99	0.000471	0.005	0.000476
Phenanthrene	U	<0.000542	<0.00495	<0.000542	mg/L	0.99	0.000542	0.005	0.000548
Anthracene	U	<0.000424	<0.00495	<0.000424	mg/L	0.99	0.000424	0.005	0.000428
Di-n-butylphthalate	U	<0.000478	<0.00495	<0.000478	mg/L	0.99	0.000478	0.005	0.000483
Fluoranthene	U	<0.000626	<0.00495	<0.000626	mg/L	0.99	0.000626	0.005	0.000632
Benzidine	U	<0.00236	<0.0248	<0.00236	mg/L	0.99	0.00236	0.025	0.00238
Pyrene	U	<0.000716	<0.00495	<0.000716	mg/L	0.99	0.000716	0.005	0.000723
p-Dimethylaminoazobenzene	U	<0.000893	<0.00495	<0.000893	mg/L	0.99	0.000893	0.005	0.000902
Butylbenzylphthalate	U	<0.000440	<0.00495	<0.000440	mg/L	0.99	0.000440	0.005	0.000445
Benzo(a)anthracene	U	<0.000522	<0.00495	<0.000522	mg/L	0.99	0.000522	0.005	0.000527
3,3-Dichlorobenzidine	U	<0.00117	<0.00495	0.00149	mg/L	0.99	0.00117	0.005	0.00118
Chrysene	U	<0.000632	<0.00495	<0.000632	mg/L	0.99	0.000632	0.005	0.000638
bis(2-ethylhexyl)phthalate	U	<0.000555	<0.00495	<0.000555	mg/L	0.99	0.000555	0.005	0.000561
Di-n-octylphthalate	U	<0.00115	<0.00495	<0.00115	mg/L	0.99	0.00115	0.005	0.00116
Benzo(b)fluoranthene	U	<0.000870	<0.00495	<0.000870	mg/L	0.99	0.000870	0.005	0.000879
7,12-Dimethylbenz(a)anthracene	U	<0.00101	<0.00495	<0.00101	mg/L	0.99	0.00101	0.005	0.00102
Benzo(k)fluoranthene	U	<0.000836	<0.00495	<0.000836	mg/L	0.99	0.000836	0.005	0.000845
Benzo(a)pyrene	U	<0.00165	<0.00495	<0.00165	mg/L	0.99	0.00165	0.005	0.00167
3-Methylcholanthrene	U	<0.000899	<0.00495	<0.000899	mg/L	0.99	0.000899	0.005	0.000908
Dibenzo(a,j)acridine	U	<0.00128	<0.00495	<0.00128	mg/L	0.99	0.00128	0.005	0.00129
Indeno(1,2,3-cd)pyrene	U	<0.000853	<0.00495	<0.000853	mg/L	0.99	0.000853	0.005	0.000862
Dibenzo(a,h)anthracene	U	<0.000801	<0.00495	<0.000801	mg/L	0.99	0.000801	0.005	0.000809
Benzo(g,h,i)perylene	U	<0.000940	<0.00495	<0.000940	mg/L	0.99	0.000940	0.005	0.000949

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0251	mg/L	0.99	0.0800	31	10 - 52.4
Phenol-d5		0.0169	mg/L	0.99	0.0800	21	10 - 36.4
Nitrobenzene-d5		0.0403	mg/L	0.99	0.0800	50	21.6 - 108
2-Fluorobiphenyl		0.0487	mg/L	0.99	0.0800	61	13.7 - 126
2,4,6-Tribromophenol		0.0456	mg/L	0.99	0.0800	57	10 - 121

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Terphenyl-d14		0.0552	mg/L	0.99	0.0800	69	15.1 - 159

Sample: 229179 - MW-2

Laboratory:	Lubbock				
Analysis:	TX1005 Extended - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	69316	Date Analyzed:	2010-04-21	Analyzed By:	AW
Prep Batch:	59325	Sample Preparation:	2010-04-21	Prepared By:	AW

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
C6-C12	JB	**1.45**	<5.00	0.926	mg/L	1	0.817	5	0.817
>C12-C35	U	<0.889	<5.00	1.25	mg/L	1	0.889	5	0.889

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.1	mg/L	1	10.0	131	58.6 - 181
n-Octane		8.20	mg/L	1	10.0	82	70 - 130
n-Tricosane		11.6	mg/L	1	10.0	116	70 - 130

Sample: 229179 - MW-2

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69365	Date Analyzed:	2010-04-22	Analyzed By:	KB
Prep Batch:	59371	Sample Preparation:	2010-04-22	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
Dichlorodifluoromethane	[10] U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
Chloromethane (methyl chloride)	U	<0.350	<1.00	<0.350	μg/L	1	0.350	1	0.35
Vinyl Chloride	U	<0.360	<1.00	<0.360	μg/L	1	0.360	1	0.36
Bromomethane (methyl bromide)	U	<0.620	<5.00	<0.620	μg/L	1	0.620	5	0.62
Chloroethane	U	<0.560	<1.00	<0.560	μg/L	1	0.560	1	0.56
Trichlorofluoromethane	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Acetone	U	<1.63	<10.0	<1.63	μg/L	1	1.63	10	1.63
Iodomethane (methyl iodide)	U	<0.210	<5.00	<0.210	μg/L	1	0.210	5	0.21
Carbon Disulfide	U	<0.280	<1.00	<0.280	μg/L	1	0.280	1	0.28
Acrylonitrile	U	<0.290	<1.00	<0.290	μg/L	1	0.290	1	0.29
2-Butanone (MEK)	U	<0.750	<5.00	<0.750	μg/L	1	0.750	5	0.75

continued ...

[10] Concentration biased low.

sample 229179 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
4-Methyl-2-pentanone (MIBK)	U	<0.680	<5.00	<0.680	µg/L	1	0.680	5	0.68
2-Hexanone	U	<0.480	<5.00	<0.480	µg/L	1	0.480	5	0.48
trans 1,4-Dichloro-2-butene	U	<0.230	<10.0	<0.230	µg/L	1	0.230	10	0.23
1,1-Dichloroethene	U	<0.240	<1.00	<0.240	µg/L	1	0.240	1	0.24
Methylene chloride	U	<0.520	<5.00	<0.520	µg/L	1	0.520	5	0.52
MTBE	U	<0.480	<1.00	<0.480	µg/L	1	0.480	1	0.48
trans-1,2-Dichloroethene	U	<0.240	<1.00	<0.240	µg/L	1	0.240	1	0.24
1,1-Dichloroethane	U	<0.180	<1.00	<0.180	µg/L	1	0.180	1	0.18
cis-1,2-Dichloroethene	U	<0.210	<1.00	<0.210	µg/L	1	0.210	1	0.21
2,2-Dichloropropane	U	<0.140	<1.00	<0.140	µg/L	1	0.140	1	0.14
1,2-Dichloroethane (EDC)	U	<0.260	<1.00	<0.260	µg/L	1	0.260	1	0.26
Chloroform	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
1,1,1-Trichloroethane	U	<0.210	<1.00	<0.210	µg/L	1	0.210	1	0.21
1,1-Dichloropropene	U	<0.130	<1.00	<0.130	µg/L	1	0.130	1	0.13
Benzene	U	<0.200	<1.00	<0.200	µg/L	1	0.200	1	0.2
Carbon Tetrachloride	U	<0.540	<1.00	<0.540	µg/L	1	0.540	1	0.54
1,2-Dichloropropane	U	<0.260	<1.00	<0.260	µg/L	1	0.260	1	0.26
Trichloroethene (TCE)	U	<0.190	<1.00	<0.190	µg/L	1	0.190	1	0.19
Dibromomethane (methylene bromide)	U	<0.310	<1.00	<0.310	µg/L	1	0.310	1	0.31
Bromodichloromethane	U	<0.180	<1.00	<0.180	µg/L	1	0.180	1	0.18
2-Chloroethyl vinyl ether	U	<0.130	<5.00	<0.130	µg/L	1	0.130	5	0.13
cis-1,3-Dichloropropene	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.23
trans-1,3-Dichloropropene	U	<0.220	<1.00	<0.220	µg/L	1	0.220	1	0.22
Toluene	U	<0.200	<1.00	<0.200	µg/L	1	0.200	1	0.2
1,1,2-Trichloroethane	U	<0.300	<1.00	<0.300	µg/L	1	0.300	1	0.3
1,3-Dichloropropane	U	<0.300	<1.00	<0.300	µg/L	1	0.300	1	0.3
Dibromochloromethane	U	<0.150	<1.00	<0.150	µg/L	1	0.150	1	0.15
1,2-Dibromoethane (EDB)	U	<0.140	<1.00	<0.140	µg/L	1	0.140	1	0.14
Tetrachloroethene (PCE)	U	<0.400	<1.00	<0.400	µg/L	1	0.400	1	0.4
Chlorobenzene	U	<0.130	<1.00	<0.130	µg/L	1	0.130	1	0.13
1,1,1,2-Tetrachloroethane	U	<0.200	<1.00	<0.200	µg/L	1	0.200	1	0.2
Ethylbenzene	U	<0.140	<1.00	<0.140	µg/L	1	0.140	1	0.14
m,p-Xylene	U	<0.270	<1.00	<0.270	µg/L	1	0.270	1	0.27
Bromoform	U	<0.190	<1.00	<0.190	µg/L	1	0.190	1	0.19
Styrene	U	<0.0900	<1.00	<0.0900	µg/L	1	0.0900	1	0.09
o-Xylene	U	<0.120	<1.00	<0.120	µg/L	1	0.120	1	0.12
1,1,2,2-Tetrachloroethane	U	<0.320	<1.00	<0.320	µg/L	1	0.320	1	0.32
2-Chlorotoluene	U	<0.100	<1.00	<0.100	µg/L	1	0.100	1	0.1
1,2,3-Trichloropropane	U	<0.620	<1.00	<0.620	µg/L	1	0.620	1	0.62
Isopropylbenzene	U	<0.530	<1.00	<0.530	µg/L	1	0.530	1	0.53
Bromobenzene	U	<0.130	<1.00	<0.130	µg/L	1	0.130	1	0.13
n-Propylbenzene	U	<0.110	<1.00	<0.110	µg/L	1	0.110	1	0.11
1,3,5-Trimethylbenzene	U	<0.110	<1.00	<0.110	µg/L	1	0.110	1	0.11
tert-Butylbenzene	U	<0.450	<1.00	<0.450	µg/L	1	0.450	1	0.45
1,2,4-Trimethylbenzene	U	<0.100	<1.00	<0.100	µg/L	1	0.100	1	0.1

continued ...

sample 229179 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
1,4-Dichlorobenzene (para)	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
sec-Butylbenzene	U	<0.460	<1.00	<0.460	μg/L	1	0.460	1	0.46
1,3-Dichlorobenzene (meta)	U	<0.520	<1.00	<0.520	μg/L	1	0.520	1	0.52
p-Isopropyltoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
4-Chlorotoluene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,2-Dichlorobenzene (ortho)	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Butylbenzene	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
1,2-Dibromo-3-chloropropane	[11] U	<0.650	<5.00	<0.650	μg/L	1	0.650	5	0.65
1,2,3-Trichlorobenzene	U	<0.240	<5.00	<0.240	μg/L	1	0.240	5	0.24
1,2,4-Trichlorobenzene	U	<0.190	<5.00	<0.190	μg/L	1	0.190	5	0.19
Naphthalene	[12] U	<0.330	<5.00	<0.330	μg/L	1	0.330	5	0.33
Hexachlorobutadiene	U	<0.260	<5.00	<0.260	μg/L	1	0.260	5	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	μg/L	1	50.0	102	88.3 - 117
Toluene-d8		50.7	μg/L	1	50.0	101	87.7 - 112
4-Bromofluorobenzene (4-BFB)		49.6	μg/L	1	50.0	99	84.6 - 114

Sample: 229180 - FB-1

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69365	Date Analyzed:	2010-04-22	Analyzed By:	KB
Prep Batch:	59371	Sample Preparation:	2010-04-22	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
Dichlorodifluoromethane	U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
Chloromethane (methyl chloride)	U	<0.350	<1.00	<0.350	μg/L	1	0.350	1	0.35
Vinyl Chloride	U	<0.360	<1.00	<0.360	μg/L	1	0.360	1	0.36
Bromomethane (methyl bromide)	U	<0.620	<5.00	<0.620	μg/L	1	0.620	5	0.62
Chloroethane	U	<0.560	<1.00	<0.560	μg/L	1	0.560	1	0.56
Trichlorofluoromethane	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Acetone	U	<1.63	<10.0	<1.63	μg/L	1	1.63	10	1.63
Iodomethane (methyl iodide)	U	<0.210	<5.00	<0.210	μg/L	1	0.210	5	0.21
Carbon Disulfide	U	<0.280	<1.00	<0.280	μg/L	1	0.280	1	0.28
Acrylonitrile	U	<0.290	<1.00	<0.290	μg/L	1	0.290	1	0.29
2-Butanone (MEK)	U	<0.750	<5.00	<0.750	μg/L	1	0.750	5	0.75

continued ...

[11] Concentration biased low.
[12] Concentration biased low.

sample 229180 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
4-Methyl-2-pentanone (MIBK)	U	<0.680	<5.00	<0.680	µg/L	1	0.680	5	0.68
2-Hexanone	U	<0.480	<5.00	<0.480	µg/L	1	0.480	5	0.48
trans 1,4-Dichloro-2-butene	U	<0.230	<10.0	<0.230	µg/L	1	0.230	10	0.23
1,1-Dichloroethene	U	<0.240	<1.00	<0.240	µg/L	1	0.240	1	0.24
Methylene chloride	U	<0.520	<5.00	<0.520	µg/L	1	0.520	5	0.52
MTBE	U	<0.480	<1.00	<0.480	µg/L	1	0.480	1	0.48
trans-1,2-Dichloroethene	U	<0.240	<1.00	<0.240	µg/L	1	0.240	1	0.24
1,1-Dichloroethane	U	<0.180	<1.00	<0.180	µg/L	1	0.180	1	0.18
cis-1,2-Dichloroethene	U	<0.210	<1.00	<0.210	µg/L	1	0.210	1	0.21
2,2-Dichloropropane	U	<0.140	<1.00	<0.140	µg/L	1	0.140	1	0.14
1,2-Dichloroethane (EDC)	U	<0.260	<1.00	<0.260	µg/L	1	0.260	1	0.26
Chloroform	U	<0.160	<1.00	<0.160	µg/L	1	0.160	1	0.16
1,1,1-Trichloroethane	U	<0.210	<1.00	<0.210	µg/L	1	0.210	1	0.21
1,1-Dichloropropene	U	<0.130	<1.00	<0.130	µg/L	1	0.130	1	0.13
Benzene	U	<0.200	<1.00	<0.200	µg/L	1	0.200	1	0.2
Carbon Tetrachloride	U	<0.540	<1.00	<0.540	µg/L	1	0.540	1	0.54
1,2-Dichloropropane	U	<0.260	<1.00	<0.260	µg/L	1	0.260	1	0.26
Trichloroethene (TCE)	U	<0.190	<1.00	<0.190	µg/L	1	0.190	1	0.19
Dibromomethane (methylene bromide)	U	<0.310	<1.00	<0.310	µg/L	1	0.310	1	0.31
Bromodichloromethane	U	<0.180	<1.00	<0.180	µg/L	1	0.180	1	0.18
2-Chloroethyl vinyl ether	U	<0.130	<5.00	<0.130	µg/L	1	0.130	5	0.13
cis-1,3-Dichloropropene	U	<0.230	<1.00	<0.230	µg/L	1	0.230	1	0.23
trans-1,3-Dichloropropene	U	<0.220	<1.00	<0.220	µg/L	1	0.220	1	0.22
Toluene	U	<0.200	<1.00	<0.200	µg/L	1	0.200	1	0.2
1,1,2-Trichloroethane	U	<0.300	<1.00	<0.300	µg/L	1	0.300	1	0.3
1,3-Dichloropropane	U	<0.300	<1.00	<0.300	µg/L	1	0.300	1	0.3
Dibromochloromethane	U	<0.150	<1.00	<0.150	µg/L	1	0.150	1	0.15
1,2-Dibromoethane (EDB)	U	<0.140	<1.00	<0.140	µg/L	1	0.140	1	0.14
Tetrachloroethene (PCE)	U	<0.400	<1.00	<0.400	µg/L	1	0.400	1	0.4
Chlorobenzene	U	<0.130	<1.00	<0.130	µg/L	1	0.130	1	0.13
1,1,1,2-Tetrachloroethane	U	<0.200	<1.00	<0.200	µg/L	1	0.200	1	0.2
Ethylbenzene	U	<0.140	<1.00	<0.140	µg/L	1	0.140	1	0.14
m,p-Xylene	U	<0.270	<1.00	<0.270	µg/L	1	0.270	1	0.27
Bromoform	U	<0.190	<1.00	<0.190	µg/L	1	0.190	1	0.19
Styrene	U	<0.0900	<1.00	<0.0900	µg/L	1	0.0900	1	0.09
o-Xylene	U	<0.120	<1.00	<0.120	µg/L	1	0.120	1	0.12
1,1,2,2-Tetrachloroethane	U	<0.320	<1.00	<0.320	µg/L	1	0.320	1	0.32
2-Chlorotoluene	U	<0.100	<1.00	<0.100	µg/L	1	0.100	1	0.1
1,2,3-Trichloropropane	U	<0.620	<1.00	<0.620	µg/L	1	0.620	1	0.62
Isopropylbenzene	U	<0.530	<1.00	<0.530	µg/L	1	0.530	1	0.53
Bromobenzene	U	<0.130	<1.00	<0.130	µg/L	1	0.130	1	0.13
n-Propylbenzene	U	<0.110	<1.00	<0.110	µg/L	1	0.110	1	0.11
1,3,5-Trimethylbenzene	U	<0.110	<1.00	<0.110	µg/L	1	0.110	1	0.11
tert-Butylbenzene	U	<0.450	<1.00	<0.450	µg/L	1	0.450	1	0.45
1,2,4-Trimethylbenzene	U	<0.100	<1.00	<0.100	µg/L	1	0.100	1	0.1

continued ...

sample 229180 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
1,4-Dichlorobenzene (para)	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
sec-Butylbenzene	U	<0.460	<1.00	<0.460	μg/L	1	0.460	1	0.46
1,3-Dichlorobenzene (meta)	U	<0.520	<1.00	<0.520	μg/L	1	0.520	1	0.52
p-Isopropyltoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
4-Chlorotoluene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,2-Dichlorobenzene (ortho)	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Butylbenzene	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
1,2-Dibromo-3-chloropropane	U	<0.650	<5.00	<0.650	μg/L	1	0.650	5	0.65
1,2,3-Trichlorobenzene	U	<0.240	<5.00	<0.240	μg/L	1	0.240	5	0.24
1,2,4-Trichlorobenzene	U	<0.190	<5.00	<0.190	μg/L	1	0.190	5	0.19
Naphthalene	U	<0.330	<5.00	<0.330	μg/L	1	0.330	5	0.33
Hexachlorobutadiene	U	<0.260	<5.00	<0.260	μg/L	1	0.260	5	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.1	μg/L	1	50.0	102	88.3 - 117
Toluene-d8		50.3	μg/L	1	50.0	101	87.7 - 112
4-Bromofluorobenzene (4-BFB)		48.7	μg/L	1	50.0	97	84.6 - 114

Sample: 229181 - Trip Blank

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69365	Date Analyzed:	2010-04-22	Analyzed By:	KB
Prep Batch:	59371	Sample Preparation:	2010-04-22	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
Dichlorodifluoromethane	[13] U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
Chloromethane (methyl chloride)	U	<0.350	<1.00	<0.350	μg/L	1	0.350	1	0.35
Vinyl Chloride	U	<0.360	<1.00	<0.360	μg/L	1	0.360	1	0.36
Bromomethane (methyl bromide)	U	<0.620	<5.00	<0.620	μg/L	1	0.620	5	0.62
Chloroethane	U	<0.560	<1.00	<0.560	μg/L	1	0.560	1	0.56
Trichlorofluoromethane	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Acetone	U	<1.63	<10.0	<1.63	μg/L	1	1.63	10	1.63
Iodomethane (methyl iodide)	U	<0.210	<5.00	<0.210	μg/L	1	0.210	5	0.21
Carbon Disulfide	U	<0.280	<1.00	<0.280	μg/L	1	0.280	1	0.28
Acrylonitrile	U	<0.290	<1.00	<0.290	μg/L	1	0.290	1	0.29
2-Butanone (MEK)	U	<0.750	<5.00	<0.750	μg/L	1	0.750	5	0.75
4-Methyl-2-pentanone (MIBK)	U	<0.680	<5.00	<0.680	μg/L	1	0.680	5	0.68

continued ...

[13] Concentration biased low.

sample 229181 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
2-Hexanone	U	<0.480	<5.00	<0.480	μg/L	1	0.480	5	0.48
trans 1,4-Dichloro-2-butene	U	<0.230	<10.0	<0.230	μg/L	1	0.230	10	0.23
1,1-Dichloroethene	U	<0.240	<1.00	<0.240	μg/L	1	0.240	1	0.24
Methylene chloride	U	<0.520	<5.00	<0.520	μg/L	1	0.520	5	0.52
MTBE	U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
trans-1,2-Dichloroethene	U	<0.240	<1.00	<0.240	μg/L	1	0.240	1	0.24
1,1-Dichloroethane	U	<0.180	<1.00	<0.180	μg/L	1	0.180	1	0.18
cis-1,2-Dichloroethene	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
2,2-Dichloropropane	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
1,2-Dichloroethane (EDC)	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Chloroform	U	<0.160	<1.00	<0.160	μg/L	1	0.160	1	0.16
1,1,1-Trichloroethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
1,1-Dichloropropene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
Benzene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Carbon Tetrachloride	U	<0.540	<1.00	<0.540	μg/L	1	0.540	1	0.54
1,2-Dichloropropane	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Trichloroethene (TCE)	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Dibromomethane (methylene bromide)	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Bromodichloromethane	U	<0.180	<1.00	<0.180	μg/L	1	0.180	1	0.18
2-Chloroethyl vinyl ether	U	<0.130	<5.00	<0.130	μg/L	1	0.130	5	0.13
cis-1,3-Dichloropropene	U	<0.230	<1.00	<0.230	μg/L	1	0.230	1	0.23
trans-1,3-Dichloropropene	U	<0.220	<1.00	<0.220	μg/L	1	0.220	1	0.22
Toluene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
1,1,2-Trichloroethane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
1,3-Dichloropropane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
Dibromochloromethane	U	<0.150	<1.00	<0.150	μg/L	1	0.150	1	0.15
1,2-Dibromoethane (EDB)	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
Tetrachloroethene (PCE)	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
Chlorobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
1,1,1,2-Tetrachloroethane	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Ethylbenzene	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
m,p-Xylene	U	<0.270	<1.00	<0.270	μg/L	1	0.270	1	0.27
Bromoform	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Styrene	U	<0.0900	<1.00	<0.0900	μg/L	1	0.0900	1	0.09
o-Xylene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,1,2,2-Tetrachloroethane	U	<0.320	<1.00	<0.320	μg/L	1	0.320	1	0.32
2-Chlorotoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,2,3-Trichloropropane	U	<0.620	<1.00	<0.620	μg/L	1	0.620	1	0.62
Isopropylbenzene	U	<0.530	<1.00	<0.530	μg/L	1	0.530	1	0.53
Bromobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Propylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11
1,3,5-Trimethylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11
tert-Butylbenzene	U	<0.450	<1.00	<0.450	μg/L	1	0.450	1	0.45
1,2,4-Trimethylbenzene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,4-Dichlorobenzene (para)	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12

continued ...

sample 229181 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
sec-Butylbenzene	U	<0.460	<1.00	<0.460	μg/L	1	0.460	1	0.46
1,3-Dichlorobenzene (meta)	U	<0.520	<1.00	<0.520	μg/L	1	0.520	1	0.52
p-Isopropyltoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
4-Chlorotoluene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,2-Dichlorobenzene (ortho)	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Butylbenzene	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
1,2-Dibromo-3-chloropropane	[14] U	<0.650	<5.00	<0.650	μg/L	1	0.650	5	0.65
1,2,3-Trichlorobenzene	U	<0.240	<5.00	<0.240	μg/L	1	0.240	5	0.24
1,2,4-Trichlorobenzene	U	<0.190	<5.00	<0.190	μg/L	1	0.190	5	0.19
Naphthalene	[15] U	<0.330	<5.00	<0.330	μg/L	1	0.330	5	0.33
Hexachlorobutadiene	U	<0.260	<5.00	<0.260	μg/L	1	0.260	5	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.4	μg/L	1	50.0	101	88.3 - 117
Toluene-d8		50.4	μg/L	1	50.0	101	87.7 - 112
4-Bromofluorobenzene (4-BFB)		49.5	μg/L	1	50.0	99	84.6 - 114

Method Blank (1)

QC Batch: 69316 Date Analyzed: 2010-04-21 Analyzed By: AW
Prep Batch: 59325 QC Preparation: 2010-04-21 Prepared By: AW

Parameter	Flag	Result	Units	Reporting Limits
C6-C12		0.926	mg/L	0.817
>C12-C35		1.25	mg/L	0.889

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.6	mg/L	1	10.0	116	58.6 - 181
n-Octane		8.03	mg/L	1	10.0	80	70 - 130
n-Tricosane		10.2	mg/L	1	10.0	102	70 - 130

Method Blank (1)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB
Prep Batch: 59371 QC Preparation: 2010-04-22 Prepared By: KB

[14] Concentration biased low.
[15] Concentration biased low.

Parameter	Flag	Result	Units	Reporting Limits
Bromochloromethane		<0.210	μg/L	0.21
Dichlorodifluoromethane		<0.480	μg/L	0.48
Chloromethane (methyl chloride)		<0.350	μg/L	0.35
Vinyl Chloride		<0.360	μg/L	0.36
Bromomethane (methyl bromide)		<0.620	μg/L	0.62
Chloroethane		<0.560	μg/L	0.56
Trichlorofluoromethane		<0.310	μg/L	0.31
Acetone		<1.63	μg/L	1.63
Iodomethane (methyl iodide)		<0.210	μg/L	0.21
Carbon Disulfide		<0.280	μg/L	0.28
Acrylonitrile		<0.290	μg/L	0.29
2-Butanone (MEK)		<0.750	μg/L	0.75
4-Methyl-2-pentanone (MIBK)		<0.680	μg/L	0.68
2-Hexanone		<0.480	μg/L	0.48
trans 1,4-Dichloro-2-butene		<0.230	μg/L	0.23
1,1-Dichloroethene		<0.240	μg/L	0.24
Methylene chloride		<0.520	μg/L	0.52
MTBE		<0.480	μg/L	0.48
trans-1,2-Dichloroethene		<0.240	μg/L	0.24
1,1-Dichloroethane		<0.180	μg/L	0.18
cis-1,2-Dichloroethene		<0.210	μg/L	0.21
2,2-Dichloropropane		<0.140	μg/L	0.14
1,2-Dichloroethane (EDC)		<0.260	μg/L	0.26
Chloroform		<0.160	μg/L	0.16
1,1,1-Trichloroethane		<0.210	μg/L	0.21
1,1-Dichloropropene		<0.130	μg/L	0.13
Benzene		<0.200	μg/L	0.2
Carbon Tetrachloride		<0.540	μg/L	0.54
1,2-Dichloropropane		<0.260	μg/L	0.26
Trichloroethene (TCE)		<0.190	μg/L	0.19
Dibromomethane (methylene bromide)		<0.310	μg/L	0.31
Bromodichloromethane		<0.180	μg/L	0.18
2-Chloroethyl vinyl ether		<0.130	μg/L	0.13
cis-1,3-Dichloropropene		<0.230	μg/L	0.23
trans-1,3-Dichloropropene		<0.220	μg/L	0.22
Toluene		<0.200	μg/L	0.2
1,1,2-Trichloroethane		<0.300	μg/L	0.3
1,3-Dichloropropane		<0.300	μg/L	0.3
Dibromochloromethane		<0.150	μg/L	0.15
1,2-Dibromoethane (EDB)		<0.140	μg/L	0.14
Tetrachloroethene (PCE)		<0.400	μg/L	0.4
Chlorobenzene		<0.130	μg/L	0.13
1,1,1,2-Tetrachloroethane		<0.200	μg/L	0.2
Ethylbenzene		<0.140	μg/L	0.14
m,p-Xylene		<0.270	μg/L	0.27
Bromoform		<0.190	μg/L	0.19
Styrene		<0.0900	μg/L	0.09
o-Xylene		<0.120	μg/L	0.12

continued ...

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
1,1,2,2-Tetrachloroethane		<0.320	μg/L	0.32
2-Chlorotoluene		<0.100	μg/L	0.1
1,2,3-Trichloropropane		<0.620	μg/L	0.62
Isopropylbenzene		<0.530	μg/L	0.53
Bromobenzene		<0.130	μg/L	0.13
n-Propylbenzene		<0.110	μg/L	0.11
1,3,5-Trimethylbenzene		<0.110	μg/L	0.11
tert-Butylbenzene		<0.450	μg/L	0.45
1,2,4-Trimethylbenzene		<0.100	μg/L	0.1
1,4-Dichlorobenzene (para)		<0.120	μg/L	0.12
sec-Butylbenzene		<0.460	μg/L	0.46
1,3-Dichlorobenzene (meta)		<0.520	μg/L	0.52
p-Isopropyltoluene		<0.100	μg/L	0.1
4-Chlorotoluene		<0.120	μg/L	0.12
1,2-Dichlorobenzene (ortho)		<0.130	μg/L	0.13
n-Butylbenzene		<0.400	μg/L	0.4
1,2-Dibromo-3-chloropropane		<0.650	μg/L	0.65
1,2,3-Trichlorobenzene		<0.240	μg/L	0.24
1,2,4-Trichlorobenzene		<0.190	μg/L	0.19
Naphthalene		<0.330	μg/L	0.33
Hexachlorobutadiene		<0.260	μg/L	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.3	μg/L	1	50.0	101	88.3 - 117
Toluene-d8		49.9	μg/L	1	50.0	100	87.7 - 112
4-Bromofluorobenzene (4-BFB)		49.3	μg/L	1	50.0	99	84.6 - 114

Method Blank (1)

QC Batch: 69467 Date Analyzed: 2010-04-28 Analyzed By: MN
Prep Batch: 59454 QC Preparation: 2010-04-26 Prepared By: MN

Parameter	Flag	Result	Units	Reporting Limits
Pyridine		<0.000608	mg/L	0.000608
N-Nitrosodimethylamine		<0.000552	mg/L	0.000552
2-Picoline		<0.000408	mg/L	0.000408
Methyl methanesulfonate		<0.000350	mg/L	0.00035
Ethyl methanesulfonate		<0.000448	mg/L	0.000448
Phenol		<0.000509	mg/L	0.000509
Aniline		<0.000691	mg/L	0.000691
bis(2-chloroethyl)ether		<0.000440	mg/L	0.00044
2-Chlorophenol		<0.000537	mg/L	0.000537
1,3-Dichlorobenzene (meta)		<0.000441	mg/L	0.000441
1,4-Dichlorobenzene (para)		<0.000440	mg/L	0.00044

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
Benzyl alcohol		<0.000538	mg/L	0.000538
1,2-Dichlorobenzene (ortho)		<0.000443	mg/L	0.000443
2-Methylphenol		<0.000726	mg/L	0.000726
bis(2-chloroisopropyl)ether		<0.000503	mg/L	0.000503
4-Methylphenol / 3-Methylphenol		<0.000512	mg/L	0.000512
Acetophenone		<0.000424	mg/L	0.000424
N-Nitrosodi-n-propylamine		<0.000732	mg/L	0.000732
Hexachloroethane		<0.000507	mg/L	0.000507
Nitrobenzene		<0.000465	mg/L	0.000465
N-Nitrosopiperidine		<0.000443	mg/L	0.000443
Isophorone		<0.000619	mg/L	0.000619
2-Nitrophenol		<0.000406	mg/L	0.000406
2,4-Dimethylphenol		<0.000477	mg/L	0.000477
bis(2-chloroethoxy)methane		<0.000432	mg/L	0.000432
Benzoic acid		<0.00163	mg/L	0.00163
2,4-Dichlorophenol		<0.000400	mg/L	0.0004
1,2,4-Trichlorobenzene		<0.000404	mg/L	0.000404
a,a-Dimethylphenethylamine		<0.00129	mg/L	0.00129
Naphthalene		<0.000489	mg/L	0.000489
4-Chloroaniline		<0.000378	mg/L	0.000378
2,6-Dichlorophenol		<0.000484	mg/L	0.000484
Hexachlorobutadiene		<0.000517	mg/L	0.000517
N-Nitroso-di-n-butylamine		<0.000656	mg/L	0.000656
4-Chloro-3-methylphenol		<0.000522	mg/L	0.000522
1-Methylnaphthalene		<0.000495	mg/L	0.000495
2-Methylnaphthalene		<0.000423	mg/L	0.000423
1,2,4,5-Tetrachlorobenzene		<0.000612	mg/L	0.000612
Hexachlorocyclopentadiene		<0.000558	mg/L	0.000558
2,4,6-Trichlorophenol		<0.000794	mg/L	0.000794
2,4,5-Trichlorophenol		<0.000834	mg/L	0.000834
2-Chloronaphthalene		<0.000416	mg/L	0.000416
1-Chloronaphthalene		<0.000476	mg/L	0.000476
2-Nitroaniline		<0.000760	mg/L	0.00076
Dimethylphthalate		<0.000643	mg/L	0.000643
Acenaphthylene		<0.000586	mg/L	0.000586
2,6-Dinitrotoluene		<0.000640	mg/L	0.00064
3-Nitroaniline		<0.000721	mg/L	0.000721
Acenaphthene		<0.000423	mg/L	0.000423
2,4-Dinitrophenol		<0.000220	mg/L	0.00022
Dibenzofuran		<0.000408	mg/L	0.000408
Pentachlorobenzene		<0.000571	mg/L	0.000571
4-Nitrophenol		<0.00185	mg/L	0.00185
1-Naphthylamine		<0.000688	mg/L	0.000688
2,4-Dinitrotoluene		<0.000911	mg/L	0.000911
2-Naphthylamine		<0.000699	mg/L	0.000699
2,3,4,6-Tetrachlorophenol		<0.000565	mg/L	0.000565
Fluorene		<0.000648	mg/L	0.000648

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Parameter	Flag	Result	Units	Reporting Limits
Diethylphthalate		<0.000828	mg/L	0.000828
4-Chlorophenyl-phenylether		<0.000619	mg/L	0.000619
4-Nitroaniline		<0.000702	mg/L	0.000702
4,6-Dinitro-2-methylphenol		<0.00198	mg/L	0.00198
Diphenylamine		<0.000440	mg/L	0.00044
Diphenylhydrazine		<0.000657	mg/L	0.000657
4-Bromophenyl-phenylether		<0.000550	mg/L	0.00055
Phenacetin		<0.000605	mg/L	0.000605
Hexachlorobenzene		<0.000506	mg/L	0.000506
4-Aminobiphenyl		<0.000527	mg/L	0.000527
Pentachlorophenol		<0.000435	mg/L	0.000435
Pentachloronitrobenzene		<0.000408	mg/L	0.000408
Pronamide		<0.000476	mg/L	0.000476
Phenanthrene		<0.000548	mg/L	0.000548
Anthracene		<0.000428	mg/L	0.000428
Di-n-butylphthalate		<0.000483	mg/L	0.000483
Fluoranthene		<0.000632	mg/L	0.000632
Benzidine		<0.00238	mg/L	0.00238
Pyrene		<0.000723	mg/L	0.000723
p-Dimethylaminoazobenzene		<0.000902	mg/L	0.000902
Butylbenzylphthalate		<0.000445	mg/L	0.000445
Benzo(a)anthracene		<0.000527	mg/L	0.000527
3,3-Dichlorobenzidine		0.00151	mg/L	0.00118
Chrysene		<0.000638	mg/L	0.000638
bis(2-ethylhexyl)phthalate		<0.000561	mg/L	0.000561
Di-n-octylphthalate		<0.00116	mg/L	0.00116
Benzo(b)fluoranthene		<0.000879	mg/L	0.000879
7,12-Dimethylbenz(a)anthracene		<0.00102	mg/L	0.00102
Benzo(k)fluoranthene		<0.000845	mg/L	0.000845
Benzo(a)pyrene		<0.00167	mg/L	0.00167
3-Methylcholanthrene		<0.000908	mg/L	0.000908
Dibenzo(a,j)acridine		<0.00129	mg/L	0.00129
Indeno(1,2,3-cd)pyrene		<0.000862	mg/L	0.000862
Dibenzo(a,h)anthracene		<0.000809	mg/L	0.000809
Benzo(g,h,i)perylene		<0.000949	mg/L	0.000949

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0248	mg/L	1	0.0800	31	10 - 52.4
Phenol-d5		0.0162	mg/L	1	0.0800	20	10 - 36.4
Nitrobenzene-d5		0.0394	mg/L	1	0.0800	49	21.6 - 108
2-Fluorobiphenyl		0.0450	mg/L	1	0.0800	56	13.7 - 126
2,4,6-Tribromophenol		0.0421	mg/L	1	0.0800	53	10 - 121
Terphenyl-d14		0.0561	mg/L	1	0.0800	70	15.1 - 159

Laboratory Control Spike (LCS-1)

QC Batch: 69316 Date Analyzed: 2010-04-21 Analyzed By: AW
Prep Batch: 59325 QC Preparation: 2010-04-21 Prepared By: AW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	26.1	mg/L	1	25.0	0.926	101	75 - 125
>C12-C35	25.5	mg/L	1	25.0	1.25	97	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	25.6	mg/L	1	25.0	0.926	99	75 - 125	2	20
>C12-C35	25.1	mg/L	1	25.0	1.25	95	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	11.9	12.2	mg/L	1	10.0	119	122	58.6 - 181
n-Octane	8.83	8.77	mg/L	1	10.0	88	88	70 - 130
n-Tricosane	10.8	10.7	mg/L	1	10.0	108	107	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB
Prep Batch: 59371 QC Preparation: 2010-04-22 Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	52.9	µg/L	1	50.0	<0.210	106	72.8 - 128
Dichlorodifluoromethane	46.4	µg/L	1	50.0	<0.480	93	50.7 - 144
Chloromethane (methyl chloride)	55.2	µg/L	1	50.0	<0.350	110	55.1 - 143
Vinyl Chloride	54.7	µg/L	1	50.0	<0.360	109	52 - 144
Bromomethane (methyl bromide)	51.2	µg/L	1	50.0	<0.620	102	57.9 - 150
Chloroethane	53.4	µg/L	1	50.0	<0.560	107	55 - 149
Trichlorofluoromethane	57.6	µg/L	1	50.0	<0.310	115	48.5 - 162
Acetone	65.0	µg/L	1	50.0	<1.63	130	32.3 - 196
Iodomethane (methyl iodide)	51.9	µg/L	1	50.0	<0.210	104	72.6 - 134
Carbon Disulfide	52.4	µg/L	1	50.0	<0.280	105	65.6 - 135
Acrylonitrile	54.2	µg/L	1	50.0	<0.290	108	68.4 - 134
2-Butanone (MEK)	56.5	µg/L	1	50.0	<0.750	113	61.8 - 133
4-Methyl-2-pentanone (MIBK)	59.6	µg/L	1	50.0	<0.680	119	68.4 - 132
2-Hexanone	58.8	µg/L	1	50.0	<0.480	118	47.4 - 154
trans 1,4-Dichloro-2-butene	44.2	µg/L	1	50.0	<0.230	88	52.9 - 152
1,1-Dichloroethene	57.6	µg/L	1	50.0	<0.240	115	70.3 - 130
Methylene chloride	53.4	µg/L	1	50.0	<0.520	107	72.4 - 132
MTBE	54.9	µg/L	1	50.0	<0.480	110	77.3 - 124

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
trans-1,2-Dichloroethene	52.6	μg/L	1	50.0	<0.240	105	71 - 128
1,1-Dichloroethane	53.6	μg/L	1	50.0	<0.180	107	73.2 - 128
cis-1,2-Dichloroethene	53.1	μg/L	1	50.0	<0.210	106	71.6 - 129
2,2-Dichloropropane	58.9	μg/L	1	50.0	<0.140	118	65.4 - 134
1,2-Dichloroethane (EDC)	52.3	μg/L	1	50.0	<0.260	105	70 - 134
Chloroform	51.7	μg/L	1	50.0	<0.160	103	75.8 - 126
1,1,1-Trichloroethane	51.7	μg/L	1	50.0	<0.210	103	74.4 - 133
1,1-Dichloropropene	53.8	μg/L	1	50.0	<0.130	108	78.4 - 123
Benzene	52.8	μg/L	1	50.0	<0.200	106	77.3 - 121
Carbon Tetrachloride	50.4	μg/L	1	50.0	<0.540	101	56.8 - 168
1,2-Dichloropropane	54.0	μg/L	1	50.0	<0.260	108	75 - 126
Trichloroethene (TCE)	53.3	μg/L	1	50.0	<0.190	107	72.5 - 130
Dibromomethane (methylene bromide)	52.4	μg/L	1	50.0	<0.310	105	80.2 - 120
Bromodichloromethane	51.2	μg/L	1	50.0	<0.180	102	76.5 - 131
2-Chloroethyl vinyl ether	48.7	μg/L	1	50.0	<0.130	97	60 - 130
cis-1,3-Dichloropropene	55.1	μg/L	1	50.0	<0.230	110	81.2 - 124
trans-1,3-Dichloropropene	56.5	μg/L	1	50.0	<0.220	113	75.9 - 129
Toluene	53.1	μg/L	1	50.0	<0.200	106	79.1 - 122
1,1,2-Trichloroethane	52.0	μg/L	1	50.0	<0.300	104	82.2 - 115
1,3-Dichloropropane	52.7	μg/L	1	50.0	<0.300	105	82.1 - 116
Dibromochloromethane	51.3	μg/L	1	50.0	<0.150	103	80.6 - 131
1,2-Dibromoethane (EDB)	52.4	μg/L	1	50.0	<0.140	105	82.8 - 117
Tetrachloroethene (PCE)	47.4	μg/L	1	50.0	<0.400	95	20.1 - 178
Chlorobenzene	52.5	μg/L	1	50.0	<0.130	105	79.8 - 120
1,1,1,2-Tetrachloroethane	52.5	μg/L	1	50.0	<0.200	105	81.5 - 125
Ethylbenzene	52.1	μg/L	1	50.0	<0.140	104	82.4 - 121
m,p-Xylene	104	μg/L	1	100	<0.270	104	80.9 - 123
Bromoform	50.6	μg/L	1	50.0	<0.190	101	73.7 - 135
Styrene	54.2	μg/L	1	50.0	<0.0900	108	82.6 - 122
o-Xylene	52.2	μg/L	1	50.0	<0.120	104	82.2 - 123
1,1,2,2-Tetrachloroethane	53.2	μg/L	1	50.0	<0.320	106	63.8 - 132
2-Chlorotoluene	51.0	μg/L	1	50.0	<0.100	102	83.2 - 116
1,2,3-Trichloropropane	53.6	μg/L	1	50.0	<0.620	107	81 - 113
Isopropylbenzene	52.3	μg/L	1	50.0	<0.530	105	82.3 - 120
Bromobenzene	49.8	μg/L	1	50.0	<0.130	100	80.6 - 116
n-Propylbenzene	51.3	μg/L	1	50.0	<0.110	103	82.4 - 117
1,3,5-Trimethylbenzene	51.4	μg/L	1	50.0	<0.110	103	83.3 - 118
tert-Butylbenzene	51.8	μg/L	1	50.0	<0.450	104	81.8 - 120
1,2,4-Trimethylbenzene	52.4	μg/L	1	50.0	<0.100	105	83.7 - 118
1,4-Dichlorobenzene (para)	50.8	μg/L	1	50.0	<0.120	102	76.8 - 117
sec-Butylbenzene	51.8	μg/L	1	50.0	<0.460	104	81.2 - 120
1,3-Dichlorobenzene (meta)	51.4	μg/L	1	50.0	<0.520	103	77.7 - 117
p-Isopropyltoluene	53.2	μg/L	1	50.0	<0.100	106	83 - 120
4-Chlorotoluene	51.2	μg/L	1	50.0	<0.120	102	83.8 - 116
1,2-Dichlorobenzene (ortho)	51.4	μg/L	1	50.0	<0.130	103	77.9 - 119
n-Butylbenzene	53.6	μg/L	1	50.0	<0.400	107	81.2 - 118
1,2-Dibromo-3-chloropropane	42.5	μg/L	1	50.0	<0.650	85	70.4 - 125

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,2,3-Trichlorobenzene	54.7	µg/L	1	50.0	<0.240	109	64.8 - 132
1,2,4-Trichlorobenzene	55.1	µg/L	1	50.0	<0.190	110	73.8 - 121
Naphthalene	45.5	µg/L	1	50.0	<0.330	91	67.2 - 128
Hexachlorobutadiene	56.2	µg/L	1	50.0	<0.260	112	71.7 - 133

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	53.7	µg/L	1	50.0	<0.210	107	72.8 - 128	2	20
Dichlorodifluoromethane	45.8	µg/L	1	50.0	<0.480	92	50.7 - 144	1	20
Chloromethane (methyl chloride)	54.1	µg/L	1	50.0	<0.350	108	55.1 - 143	2	20
Vinyl Chloride	54.0	µg/L	1	50.0	<0.360	108	52 - 144	1	20
Bromomethane (methyl bromide)	51.6	µg/L	1	50.0	<0.620	103	57.9 - 150	1	20
Chloroethane	53.5	µg/L	1	50.0	<0.560	107	55 - 149	0	20
Trichlorofluoromethane	56.6	µg/L	1	50.0	<0.310	113	48.5 - 162	2	20
Acetone	63.9	µg/L	1	50.0	<1.63	128	32.3 - 196	2	20
Iodomethane (methyl iodide)	52.4	µg/L	1	50.0	<0.210	105	72.6 - 134	1	20
Carbon Disulfide	50.3	µg/L	1	50.0	<0.280	101	65.6 - 135	4	20
Acrylonitrile	53.0	µg/L	1	50.0	<0.290	106	68.4 - 134	2	20
2-Butanone (MEK)	54.7	µg/L	1	50.0	<0.750	109	61.8 - 133	3	20
4-Methyl-2-pentanone (MIBK)	57.5	µg/L	1	50.0	<0.680	115	68.4 - 132	4	20
2-Hexanone	57.5	µg/L	1	50.0	<0.480	115	47.4 - 154	2	20
trans 1,4-Dichloro-2-butene	42.4	µg/L	1	50.0	<0.230	85	52.9 - 152	4	20
1,1-Dichloroethene	57.2	µg/L	1	50.0	<0.240	114	70.3 - 130	1	20
Methylene chloride	53.7	µg/L	1	50.0	<0.520	107	72.4 - 132	1	20
MTBE	54.2	µg/L	1	50.0	<0.480	108	77.3 - 124	1	20
trans-1,2-Dichloroethene	52.4	µg/L	1	50.0	<0.240	105	71 - 128	0	20
1,1-Dichloroethane	53.8	µg/L	1	50.0	<0.180	108	73.2 - 128	0	20
cis-1,2-Dichloroethene	53.7	µg/L	1	50.0	<0.210	107	71.6 - 129	1	20
2,2-Dichloropropane	58.3	µg/L	1	50.0	<0.140	117	65.4 - 134	1	20
1,2-Dichloroethane (EDC)	51.7	µg/L	1	50.0	<0.260	103	70 - 134	1	20
Chloroform	51.7	µg/L	1	50.0	<0.160	103	75.8 - 126	0	20
1,1,1-Trichloroethane	51.8	µg/L	1	50.0	<0.210	104	74.4 - 133	0	20
1,1-Dichloropropene	54.0	µg/L	1	50.0	<0.130	108	78.4 - 123	0	20
Benzene	53.2	µg/L	1	50.0	<0.200	106	77.3 - 121	1	20
Carbon Tetrachloride	50.5	µg/L	1	50.0	<0.540	101	56.8 - 168	0	20
1,2-Dichloropropane	53.7	µg/L	1	50.0	<0.260	107	75 - 126	1	20
Trichloroethene (TCE)	53.8	µg/L	1	50.0	<0.190	108	72.5 - 130	1	20
Dibromomethane (methylene bromide)	52.7	µg/L	1	50.0	<0.310	105	80.2 - 120	1	20
Bromodichloromethane	50.9	µg/L	1	50.0	<0.180	102	76.5 - 131	1	20
2-Chloroethyl vinyl ether	46.2	µg/L	1	50.0	<0.130	92	60 - 130	5	20
cis-1,3-Dichloropropene	55.2	µg/L	1	50.0	<0.230	110	81.2 - 124	0	20
trans-1,3-Dichloropropene	56.2	µg/L	1	50.0	<0.220	112	75.9 - 129	0	20
Toluene	53.0	µg/L	1	50.0	<0.200	106	79.1 - 122	0	20
1,1,2-Trichloroethane	51.6	µg/L	1	50.0	<0.300	103	82.2 - 115	1	20
1,3-Dichloropropane	52.6	µg/L	1	50.0	<0.300	105	82.1 - 116	0	20
Dibromochloromethane	51.0	µg/L	1	50.0	<0.150	102	80.6 - 131	1	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,2-Dibromoethane (EDB)	52.2	μg/L	1	50.0	<0.140	104	82.8 - 117	0	20
Tetrachloroethene (PCE)	47.7	μg/L	1	50.0	<0.400	95	20.1 - 178	1	20
Chlorobenzene	52.7	μg/L	1	50.0	<0.130	105	79.8 - 120	0	20
1,1,1,2-Tetrachloroethane	53.0	μg/L	1	50.0	<0.200	106	81.5 - 125	1	20
Ethylbenzene	52.7	μg/L	1	50.0	<0.140	105	82.4 - 121	1	20
m,p-Xylene	105	μg/L	1	100	<0.270	105	80.9 - 123	1	20
Bromoform	49.5	μg/L	1	50.0	<0.190	99	73.7 - 135	2	20
Styrene	54.2	μg/L	1	50.0	<0.0900	108	82.6 - 122	0	20
o-Xylene	52.7	μg/L	1	50.0	<0.120	105	82.2 - 123	1	20
1,1,2,2-Tetrachloroethane	52.5	μg/L	1	50.0	<0.320	105	63.8 - 132	1	20
2-Chlorotoluene	51.6	μg/L	1	50.0	<0.100	103	83.2 - 116	1	20
1,2,3-Trichloropropane	54.1	μg/L	1	50.0	<0.620	108	81 - 113	1	20
Isopropylbenzene	52.7	μg/L	1	50.0	<0.530	105	82.3 - 120	1	20
Bromobenzene	49.9	μg/L	1	50.0	<0.130	100	80.6 - 116	0	20
n-Propylbenzene	51.6	μg/L	1	50.0	<0.110	103	82.4 - 117	1	20
1,3,5-Trimethylbenzene	51.6	μg/L	1	50.0	<0.110	103	83.3 - 118	0	20
tert-Butylbenzene	52.1	μg/L	1	50.0	<0.450	104	81.8 - 120	1	20
1,2,4-Trimethylbenzene	52.4	μg/L	1	50.0	<0.100	105	83.7 - 118	0	20
1,4-Dichlorobenzene (para)	51.3	μg/L	1	50.0	<0.120	103	76.8 - 117	1	20
sec-Butylbenzene	52.2	μg/L	1	50.0	<0.460	104	81.2 - 120	1	20
1,3-Dichlorobenzene (meta)	51.9	μg/L	1	50.0	<0.520	104	77.7 - 117	1	20
p-Isopropyltoluene	53.6	μg/L	1	50.0	<0.100	107	83 - 120	1	20
4-Chlorotoluene	51.6	μg/L	1	50.0	<0.120	103	83.8 - 116	1	20
1,2-Dichlorobenzene (ortho)	51.8	μg/L	1	50.0	<0.130	104	77.9 - 119	1	20
n-Butylbenzene	53.7	μg/L	1	50.0	<0.400	107	81.2 - 118	0	20
1,2-Dibromo-3-chloropropane	41.3	μg/L	1	50.0	<0.650	83	70.4 - 125	3	20
1,2,3-Trichlorobenzene	54.3	μg/L	1	50.0	<0.240	109	64.8 - 132	1	20
1,2,4-Trichlorobenzene	55.0	μg/L	1	50.0	<0.190	110	73.8 - 121	0	20
Naphthalene	45.8	μg/L	1	50.0	<0.330	92	67.2 - 128	1	20
Hexachlorobutadiene	55.4	μg/L	1	50.0	<0.260	111	71.7 - 133	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	49.8	49.8	μg/L	1	50.0	100	100	87.7 - 114
Toluene-d8	50.3	50.5	μg/L	1	50.0	101	101	89.7 - 112
4-Bromofluorobenzene (4-BFB)	50.2	50.3	μg/L	1	50.0	100	101	86.7 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 69467 Date Analyzed: 2010-04-28 Analyzed By: MN
Prep Batch: 59454 QC Preparation: 2010-04-26 Prepared By: MN

continued ...

control spikes continued ...

Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyridine	[16]	0.0193	mg/L	1	0.0800	<0.00608	24	10 - 64.4
N-Nitrosodimethylamine		0.0176	mg/L	1	0.0800	<0.000552	22	11.6 - 40.2
2-Picoline		0.0339	mg/L	1	0.0800	<0.000408	42	10 - 88.3
Methyl methanesulfonate		0.0212	mg/L	1	0.0800	<0.000350	26	10 - 97.3
Ethyl methanesulfonate		0.0365	mg/L	1	0.0800	<0.000448	46	10 - 106
Phenol		0.0168	mg/L	1	0.0800	<0.000509	21	10 - 64.9
Aniline		0.0247	mg/L	1	0.0800	<0.000691	31	10 - 73.7
bis(2-chloroethyl)ether		0.0393	mg/L	1	0.0800	<0.000440	49	16.7 - 100
2-Chlorophenol		0.0412	mg/L	1	0.0800	<0.000537	52	10 - 108
1,3-Dichlorobenzene (meta)		0.0375	mg/L	1	0.0800	<0.000441	47	15.6 - 92.4
1,4-Dichlorobenzene (para)		0.0366	mg/L	1	0.0800	<0.000440	46	11.3 - 102
Benzyl alcohol		0.0536	mg/L	1	0.0800	<0.000538	67	17 - 71.7
1,2-Dichlorobenzene (ortho)		0.0394	mg/L	1	0.0800	<0.000443	49	15.3 - 96.4
2-Methylphenol		0.0345	mg/L	1	0.0800	<0.000726	43	26.1 - 70.8
bis(2-chloroisopropyl)ether		0.0389	mg/L	1	0.0800	<0.000503	49	10.9 - 105
4-Methylphenol / 3-Methylphenol		0.0267	mg/L	1	0.0800	<0.000512	33	20 - 67.2
Acetophenone		0.0412	mg/L	1	0.0800	<0.000424	52	16.6 - 118
N-Nitrosodi-n-propylamine		0.0383	mg/L	1	0.0800	<0.000732	48	10 - 142
Hexachloroethane		0.0335	mg/L	1	0.0800	<0.000507	42	14.1 - 93.8
Nitrobenzene		0.0384	mg/L	1	0.0800	<0.000465	48	10 - 124
N-Nitrosopiperidine		0.0478	mg/L	1	0.0800	<0.000443	60	35.8 - 99.6
Isophorone		0.0399	mg/L	1	0.0800	<0.000619	50	19.2 - 121
2-Nitrophenol		0.0517	mg/L	1	0.0800	<0.000406	65	10 - 123
2,4-Dimethylphenol		0.0359	mg/L	1	0.0800	<0.000477	45	18 - 113
bis(2-chloroethoxy)methane		0.0432	mg/L	1	0.0800	<0.000432	54	16 - 124
Benzoic acid		0.0121	mg/L	1	0.0800	<0.00163	15	10 - 219
2,4-Dichlorophenol		0.0432	mg/L	1	0.0800	<0.000400	54	21.7 - 105
1,2,4-Trichlorobenzene		0.0423	mg/L	1	0.0800	<0.000404	53	13.9 - 119
a,a-Dimethylphenethylamine	[17]	<0.00129	mg/L	1	0.0800	<0.00129	0	10 - 133
Naphthalene		0.0418	mg/L	1	0.0800	<0.000489	52	16.1 - 115
4-Chloroaniline		0.0183	mg/L	1	0.0800	<0.000378	23	10 - 121
2,6-Dichlorophenol		0.0458	mg/L	1	0.0800	<0.000484	57	21.8 - 107
Hexachlorobutadiene		0.0376	mg/L	1	0.0800	<0.000517	47	10 - 116
N-Nitroso-di-n-butylamine		0.0381	mg/L	1	0.0800	<0.000656	48	23.4 - 117
4-Chloro-3-methylphenol		0.0155	mg/L	1	0.0800	<0.000522	19	18.3 - 125
1-Methylnaphthalene		0.0427	mg/L	1	0.0800	<0.000495	53	10 - 149
2-Methylnaphthalene		0.0429	mg/L	1	0.0800	<0.000423	54	27.6 - 100
1,2,4,5-Tetrachlorobenzene		0.0545	mg/L	1	0.0800	<0.000612	68	22.1 - 111
Hexachlorocyclopentadiene		0.0684	mg/L	1	0.0800	<0.000558	86	10 - 148
2,4,6-Trichlorophenol		0.0568	mg/L	1	0.0800	<0.000794	71	37.2 - 105
2,4,5-Trichlorophenol		0.0540	mg/L	1	0.0800	<0.000834	68	37.8 - 100
2-Chloronaphthalene		0.0516	mg/L	1	0.0800	<0.000416	64	28.5 - 108

continued ...

[16] MS/MSD not ran due to lack of sample. •
[17] Spike analyte out of control limits. Results biased low. •

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1-Chloronaphthalene	0.0508	mg/L	1	0.0800	<0.000476	64	27.8 - 108
2-Nitroaniline	0.0402	mg/L	1	0.0800	<0.000760	50	29 - 132
Dimethylphthalate	0.0496	mg/L	1	0.0800	<0.000643	62	37.6 - 126
Acenaphthylene	0.0506	mg/L	1	0.0800	<0.000586	63	22.8 - 120
2,6-Dinitrotoluene	0.0513	mg/L	1	0.0800	<0.000640	64	43 - 121
3-Nitroaniline	0.0325	mg/L	1	0.0800	<0.000721	41	10 - 133
Acenaphthene	0.0486	mg/L	1	0.0800	<0.000423	61	29.3 - 123
2,4-Dinitrophenol	0.0232	mg/L	1	0.0800	<0.000220	29	10 - 152
Dibenzofuran	0.0497	mg/L	1	0.0800	<0.000408	62	38.5 - 110
Pentachlorobenzene	0.0484	mg/L	1	0.0800	<0.000571	60	38.6 - 110
4-Nitrophenol	0.0717	mg/L	1	0.0800	<0.00185	90	10 - 122
1-Naphthylamine	0.0300	mg/L	1	0.0800	<0.000688	38	10 - 140
2,4-Dinitrotoluene	0.0535	mg/L	1	0.0800	<0.000911	67	46.6 - 132
2-Naphthylamine	0.0279	mg/L	1	0.0800	<0.000699	35	10 - 155
2,3,4,6-Tetrachlorophenol	0.0469	mg/L	1	0.0800	<0.000565	59	10 - 160
Fluorene	0.0497	mg/L	1	0.0800	<0.000648	62	41 - 118
Diethylphthalate	0.0511	mg/L	1	0.0800	<0.000828	64	32.4 - 137
4-Chlorophenyl-phenylether	0.0472	mg/L	1	0.0800	<0.000619	59	42.1 - 116
4-Nitroaniline	0.0563	mg/L	1	0.0800	<0.000702	70	41.2 - 126
4,6-Dinitro-2-methylphenol	0.0464	mg/L	1	0.0800	<0.00198	58	10 - 143
Diphenylamine	0.0544	mg/L	1	0.0800	<0.000440	68	45.4 - 113
Diphenylhydrazine	0.0377	mg/L	1	0.0800	<0.000657	47	38.1 - 119
4-Bromophenyl-phenylether	0.0552	mg/L	1	0.0800	<0.000550	69	47.4 - 114
Phenacetin	0.0536	mg/L	1	0.0800	<0.000605	67	56 - 116
Hexachlorobenzene	0.0580	mg/L	1	0.0800	<0.000506	72	52.3 - 112
4-Aminobiphenyl	0.0200	mg/L	1	0.0800	<0.000527	25	10 - 144
Pentachlorophenol	0.0202	mg/L	1	0.0800	<0.000435	25	10 - 137
Pentachloronitrobenzene	0.0536	mg/L	1	0.0800	<0.000408	67	44.3 - 129
Pronamide	0.0496	mg/L	1	0.0800	<0.000476	62	49.7 - 126
Phenanthrene	0.0568	mg/L	1	0.0800	<0.000548	71	50 - 120
Anthracene	0.0583	mg/L	1	0.0800	<0.000428	73	51.7 - 117
Di-n-butylphthalate	0.0592	mg/L	1	0.0800	<0.000483	74	57.4 - 121
Fluoranthene	0.0583	mg/L	1	0.0800	<0.000632	73	50.5 - 125
Benzidine [18]	<0.00238	mg/L	1	0.0800	<0.00238	0	10 - 144
Pyrene	0.0584	mg/L	1	0.0800	<0.000723	73	47.7 - 136
p-Dimethylaminoazobenzene	0.0452	mg/L	1	0.0800	<0.000902	56	55.3 - 126
Butylbenzylphthalate	0.0602	mg/L	1	0.0800	<0.000445	75	50.2 - 122
Benzo(a)anthracene	0.0571	mg/L	1	0.0800	<0.000527	71	56.5 - 113
3,3-Dichlorobenzidine	0.0368	mg/L	1	0.0800	0.00151	44	14.3 - 135
Chrysene	0.0576	mg/L	1	0.0800	<0.000638	72	50.1 - 116
bis(2-ethylhexyl)phthalate	0.0603	mg/L	1	0.0800	<0.000561	75	24.3 - 159
Di-n-octylphthalate	0.0532	mg/L	1	0.0800	<0.00116	66	45.9 - 138
Benzo(b)fluoranthene	0.0476	mg/L	1	0.0800	<0.000879	60	48.4 - 131
7,12-Dimethylbenz(a)anthracene	0.0466	mg/L	1	0.0800	<0.00102	58	10 - 153
Benzo(k)fluoranthene	0.0465	mg/L	1	0.0800	<0.000845	58	50 - 128
Benzo(a)pyrene	0.0496	mg/L	1	0.0800	<0.00167	62	48.2 - 130

continued ...

[18] Spike analyte out of control limits. Results biased low. •

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
3-Methylcholanthrene	0.0523	mg/L	1	0.0800	<0.000908	65	21.3 - 144
Dibenzo(a,j)acridine	0.0465	mg/L	1	0.0800	<0.00129	58	19.4 - 142
Indeno(1,2,3-cd)pyrene	0.0496	mg/L	1	0.0800	<0.000862	62	48.4 - 131
Dibenzo(a,h)anthracene	0.0486	mg/L	1	0.0800	<0.000809	61	50.3 - 130
Benzo(g,h,i)perylene	0.0510	mg/L	1	0.0800	<0.000949	64	43.6 - 134

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Pyridine	0.0171	mg/L	1	0.0800	<0.00608	21	10 - 64.4	12	20
N-Nitrosodimethylamine	0.0156	mg/L	1	0.0800	<0.000552	20	11.6 - 40.2	12	20
2-Picoline	0.0324	mg/L	1	0.0800	<0.000408	40	10 - 88.3	4	20
Methyl methanesulfonate	0.0194	mg/L	1	0.0800	<0.000350	24	10 - 97.3	9	20
Ethyl methanesulfonate	0.0322	mg/L	1	0.0800	<0.000448	40	10 - 106	12	20
Phenol	0.0153	mg/L	1	0.0800	<0.000509	19	10 - 64.9	9	20
Aniline	0.0236	mg/L	1	0.0800	<0.000691	30	10 - 73.7	5	20
bis(2-chloroethyl)ether	0.0375	mg/L	1	0.0800	<0.000440	47	16.7 - 100	5	20
2-Chlorophenol	0.0370	mg/L	1	0.0800	<0.000537	46	10 - 108	11	20
1,3-Dichlorobenzene (meta)	0.0338	mg/L	1	0.0800	<0.000441	42	15.6 - 92.4	10	20
1,4-Dichlorobenzene (para)	0.0328	mg/L	1	0.0800	<0.000440	41	11.3 - 102	11	20
Benzyl alcohol	0.0484	mg/L	1	0.0800	<0.000538	60	17 - 71.7	10	20
1,2-Dichlorobenzene (ortho)	0.0356	mg/L	1	0.0800	<0.000443	44	15.3 - 96.4	10	20
2-Methylphenol	0.0311	mg/L	1	0.0800	<0.000726	39	26.1 - 70.8	10	20
bis(2-chloroisopropyl)ether	0.0351	mg/L	1	0.0800	<0.000503	44	10.9 - 105	10	20
4-Methylphenol / 3-Methylphenol	0.0246	mg/L	1	0.0800	<0.000512	31	20 - 67.2	8	20
Acetophenone	0.0364	mg/L	1	0.0800	<0.000424	46	16.6 - 118	12	20
N-Nitrosodi-n-propylamine	0.0346	mg/L	1	0.0800	<0.000732	43	10 - 142	10	20
Hexachloroethane	0.0301	mg/L	1	0.0800	<0.000507	38	14.1 - 93.8	11	20
Nitrobenzene	0.0340	mg/L	1	0.0800	<0.000465	42	10 - 124	12	20
N-Nitrosopiperidine	0.0427	mg/L	1	0.0800	<0.000443	53	35.8 - 99.6	11	20
Isophorone	0.0360	mg/L	1	0.0800	<0.000619	45	19.2 - 121	10	20
2-Nitrophenol	0.0468	mg/L	1	0.0800	<0.000406	58	10 - 123	10	20
2,4-Dimethylphenol	0.0325	mg/L	1	0.0800	<0.000477	41	18 - 113	10	20
bis(2-chloroethoxy)methane	0.0386	mg/L	1	0.0800	<0.000432	48	16 - 124	11	20
Benzoic acid	0.0112	mg/L	1	0.0800	<0.00163	14	10 - 219	8	20
2,4-Dichlorophenol	0.0386	mg/L	1	0.0800	<0.000400	48	21.7 - 105	11	20
1,2,4-Trichlorobenzene	0.0376	mg/L	1	0.0800	<0.000404	47	13.9 - 119	12	20
a,a-Dimethylphenethylamine [19]	<0.00129	mg/L	1	0.0800	<0.00129	0	10 - 133	0	20
Naphthalene	0.0372	mg/L	1	0.0800	<0.000489	46	16.1 - 115	12	20
4-Chloroaniline	0.0175	mg/L	1	0.0800	<0.000378	22	10 - 121	4	20
2,6-Dichlorophenol	0.0411	mg/L	1	0.0800	<0.000484	51	21.8 - 107	11	20
Hexachlorobutadiene	0.0335	mg/L	1	0.0800	<0.000517	42	10 - 116	12	20
N-Nitroso-di-n-butylamine	0.0351	mg/L	1	0.0800	<0.000656	44	23.4 - 117	8	20
4-Chloro-3-methylphenol	0.0173	mg/L	1	0.0800	<0.000522	22	18.3 - 125	11	20
1-Methylnaphthalene	0.0383	mg/L	1	0.0800	<0.000495	48	10 - 149	11	20
2-Methylnaphthalene	0.0384	mg/L	1	0.0800	<0.000423	48	27.6 - 100	11	20

continued ...

[19] Spike recovery out of control limits. Results biased low. •

control spikes continued ...

Param		LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene		0.0468	mg/L	1	0.0800	<0.000612	58	22.1 - 111	15	20
Hexachlorocyclopentadiene		0.0629	mg/L	1	0.0800	<0.000558	79	10 - 148	8	20
2,4,6-Trichlorophenol		0.0501	mg/L	1	0.0800	<0.000794	63	37.2 - 105	12	20
2,4,5-Trichlorophenol		0.0478	mg/L	1	0.0800	<0.000834	60	37.8 - 100	12	20
2-Chloronaphthalene		0.0450	mg/L	1	0.0800	<0.000416	56	28.5 - 108	14	20
1-Chloronaphthalene		0.0448	mg/L	1	0.0800	<0.000476	56	27.8 - 108	13	20
2-Nitroaniline		0.0367	mg/L	1	0.0800	<0.000760	46	29 - 132	9	20
Dimethylphthalate		0.0440	mg/L	1	0.0800	<0.000643	55	37.6 - 126	12	20
Acenaphthylene		0.0439	mg/L	1	0.0800	<0.000586	55	22.8 - 120	14	20
2,6-Dinitrotoluene		0.0463	mg/L	1	0.0800	<0.000640	58	43 - 121	10	20
3-Nitroaniline		0.0276	mg/L	1	0.0800	<0.000721	34	10 - 133	16	20
Acenaphthene		0.0429	mg/L	1	0.0800	<0.000423	54	29.3 - 123	12	20
2,4-Dinitrophenol	[20]	0.0174	mg/L	1	0.0800	<0.000220	22	10 - 152	29	20
Dibenzofuran		0.0445	mg/L	1	0.0800	<0.000408	56	38.5 - 110	11	20
Pentachlorobenzene		0.0435	mg/L	1	0.0800	<0.000571	54	38.6 - 110	11	20
4-Nitrophenol		0.0672	mg/L	1	0.0800	<0.00185	84	10 - 122	6	20
1-Naphthylamine		0.0269	mg/L	1	0.0800	<0.000688	34	10 - 140	11	20
2,4-Dinitrotoluene		0.0487	mg/L	1	0.0800	<0.000911	61	46.6 - 132	9	20
2-Naphthylamine		0.0253	mg/L	1	0.0800	<0.000699	32	10 - 155	10	20
2,3,4,6-Tetrachlorophenol		0.0424	mg/L	1	0.0800	<0.000565	53	10 - 160	10	20
Fluorene		0.0443	mg/L	1	0.0800	<0.000648	55	41 - 118	12	20
Diethylphthalate		0.0451	mg/L	1	0.0800	<0.000828	56	32.4 - 137	12	20
4-Chlorophenyl-phenylether		0.0424	mg/L	1	0.0800	<0.000619	53	42.1 - 116	11	20
4-Nitroaniline		0.0516	mg/L	1	0.0800	<0.000702	64	41.2 - 126	9	20
4,6-Dinitro-2-methylphenol		0.0412	mg/L	1	0.0800	<0.00198	52	10 - 143	12	20
Diphenylamine		0.0486	mg/L	1	0.0800	<0.000440	61	45.4 - 113	11	20
Diphenylhydrazine		0.0341	mg/L	1	0.0800	<0.000657	43	38.1 - 119	10	20
4-Bromophenyl-phenylether		0.0494	mg/L	1	0.0800	<0.000550	62	47.4 - 114	11	20
Phenacetin		0.0474	mg/L	1	0.0800	<0.000605	59	56 - 116	12	20
Hexachlorobenzene		0.0520	mg/L	1	0.0800	<0.000506	65	52.3 - 112	11	20
4-Aminobiphenyl		0.0182	mg/L	1	0.0800	<0.000527	23	10 - 144	9	20
Pentachlorophenol		0.0206	mg/L	1	0.0800	<0.000435	26	10 - 137	2	20
Pentachloronitrobenzene		0.0477	mg/L	1	0.0800	<0.000408	60	44.3 - 129	12	20
Pronamide		0.0436	mg/L	1	0.0800	<0.000476	54	49.7 - 126	13	20
Phenanthrene		0.0506	mg/L	1	0.0800	<0.000548	63	50 - 120	12	20
Anthracene		0.0517	mg/L	1	0.0800	<0.000428	65	51.7 - 117	12	20
Di-n-butylphthalate		0.0526	mg/L	1	0.0800	<0.000483	66	57.4 - 121	12	20
Fluoranthene		0.0518	mg/L	1	0.0800	<0.000632	65	50.5 - 125	12	20
Benzidine	[21]	0.00573	mg/L	1	0.0800	<0.00238	7	10 - 144	200	20
Pyrene		0.0522	mg/L	1	0.0800	<0.000723	65	47.7 - 136	11	20
p-Dimethylaminoazobenzene	[22]	0.0428	mg/L	1	0.0800	<0.000902	54	55.3 - 126	5	20
Butylbenzylphthalate		0.0544	mg/L	1	0.0800	<0.000445	68	50.2 - 122	10	20
Benzo(a)anthracene		0.0511	mg/L	1	0.0800	<0.000527	64	56.5 - 113	11	20
3,3-Dichlorobenzidine		0.0346	mg/L	1	0.0800	0.00151	41	14.3 - 135	6	20

continued ...

[20] RPD outside RPD control limits. Results for analyte considered estimated values. •
[21] Spike recovery and RPD out of control limits. Results biased low. •
[22] Spike recovery out of control limits. Results biased low. •

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chrysene	0.0514	mg/L	1	0.0800	<0.000638	64	50.1 - 116	11	20
bis(2-ethylhexyl)phthalate	0.0538	mg/L	1	0.0800	<0.000561	67	24.3 - 159	11	20
Di-n-octylphthalate	0.0476	mg/L	1	0.0800	<0.00116	60	45.9 - 138	11	20
Benzo(b)fluoranthene	0.0425	mg/L	1	0.0800	<0.000879	53	48.4 - 131	11	20
7,12-Dimethylbenz(a)anthracene	0.0415	mg/L	1	0.0800	<0.00102	52	10 - 153	12	20
Benzo(k)fluoranthene	0.0423	mg/L	1	0.0800	<0.000845	53	50 - 128	9	20
Benzo(a)pyrene	0.0450	mg/L	1	0.0800	<0.00167	56	48.2 - 130	10	20
3-Methylcholanthrene	0.0462	mg/L	1	0.0800	<0.000908	58	21.3 - 144	12	20
Dibenzo(a,j)acridine	0.0418	mg/L	1	0.0800	<0.00129	52	19.4 - 142	11	20
Indeno(1,2,3-cd)pyrene	0.0445	mg/L	1	0.0800	<0.000862	56	48.4 - 131	11	20
Dibenzo(a,h)anthracene	0.0434	mg/L	1	0.0800	<0.000809	54	50.3 - 130	11	20
Benzo(g,h,i)perylene	0.0461	mg/L	1	0.0800	<0.000949	58	43.6 - 134	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	0.0265	0.0236	mg/L	1	0.0800	33	30	10 - 52.4
Phenol-d5	0.0174	0.0156	mg/L	1	0.0800	22	20	10 - 36.4
Nitrobenzene-d5	0.0428	0.0380	mg/L	1	0.0800	54	48	21.6 - 108
2-Fluorobiphenyl	0.0534	0.0465	mg/L	1	0.0800	67	58	13.7 - 126
2,4,6-Tribromophenol	0.0628	0.0565	mg/L	1	0.0800	78	71	10 - 121
Terphenyl-d14	0.0568	0.0509	mg/L	1	0.0800	71	64	15.1 - 159

Matrix Spike (MS-1) Spiked Sample: 229175

QC Batch: 69316 Date Analyzed: 2010-04-21 Analyzed By: AW
Prep Batch: 59325 QC Preparation: 2010-04-21 Prepared By: AW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	20.3	mg/L	1	25.0	0.974	77	21.4 - 138
>C12-C35	20.8	mg/L	1	25.0	<0.889	83	41 - 149

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	20.1	mg/L	1	25.0	0.974	76	21.4 - 138	1	20
>C12-C35	20.9	mg/L	1	25.0	<0.889	84	41 - 149	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	10.9	10.8	mg/L	1	10	109	108	58.6 - 181
n-Octane	7.16	7.17	mg/L	1	10	72	72	70 - 130
n-Tricosane	9.53	9.48	mg/L	1	10	95	95	70 - 130

Matrix Spike (MS-1) Spiked Sample: 229175

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB
Prep Batch: 59371 QC Preparation: 2010-04-22 Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	56.0	µg/L	1	50.0	<0.210	112	64 - 140
Dichlorodifluoromethane	46.4	µg/L	1	50.0	<0.480	93	13.9 - 166
Chloromethane (methyl chloride)	59.7	µg/L	1	50.0	<0.350	119	40.4 - 153
Vinyl Chloride	57.7	µg/L	1	50.0	<0.360	115	51.8 - 130
Bromomethane (methyl bromide)	57.0	µg/L	1	50.0	<0.620	114	52.6 - 138
Chloroethane	59.1	µg/L	1	50.0	<0.560	118	52.2 - 138
Trichlorofluoromethane	62.6	µg/L	1	50.0	<0.310	125	34.2 - 137
Acetone	36.3	µg/L	1	50.0	<1.63	73	17.1 - 143
Iodomethane (methyl iodide)	52.2	µg/L	1	50.0	<0.210	104	66.8 - 136
Carbon Disulfide	52.0	µg/L	1	50.0	<0.280	104	62 - 144
Acrylonitrile	51.7	µg/L	1	50.0	<0.290	103	55.7 - 150
2-Butanone (MEK)	40.9	µg/L	1	50.0	<0.750	82	46.8 - 128
4-Methyl-2-pentanone (MIBK)	53.3	µg/L	1	50.0	<0.680	107	52.3 - 149
2-Hexanone	45.9	µg/L	1	50.0	<0.480	92	44.3 - 157
trans 1,4-Dichloro-2-butene	38.6	µg/L	1	50.0	<0.230	77	24.8 - 159
1,1-Dichloroethene	58.9	µg/L	1	50.0	<0.240	118	64.5 - 133
Methylene chloride	55.9	µg/L	1	50.0	<0.520	112	65.4 - 138
MTBE	72.4	µg/L	1	50.0	18.2	108	62.9 - 135
trans-1,2-Dichloroethene	54.7	µg/L	1	50.0	<0.240	109	63.6 - 137
1,1-Dichloroethane	56.1	µg/L	1	50.0	<0.180	112	65.5 - 138
cis-1,2-Dichloroethene	56.2	µg/L	1	50.0	<0.210	112	63.1 - 139
2,2-Dichloropropane	48.6	µg/L	1	50.0	<0.140	97	31.5 - 132
1,2-Dichloroethane (EDC)	56.9	µg/L	1	50.0	<0.260	114	64 - 146
Chloroform	56.1	µg/L	1	50.0	<0.160	112	66.9 - 135
1,1,1-Trichloroethane	56.0	µg/L	1	50.0	<0.210	112	62.5 - 144
1,1-Dichloropropene	57.0	µg/L	1	50.0	<0.130	114	69.3 - 131
Benzene	56.1	µg/L	1	50.0	<0.200	112	68.2 - 129
Carbon Tetrachloride	56.4	µg/L	1	50.0	<0.540	113	55.4 - 155
1,2-Dichloropropane	57.2	µg/L	1	50.0	<0.260	114	65.8 - 134
Trichloroethene (TCE)	55.6	µg/L	1	50.0	<0.190	111	65.7 - 128
Dibromomethane (methylene bromide)	54.4	µg/L	1	50.0	<0.310	109	70.3 - 132
Bromodichloromethane	55.8	µg/L	1	50.0	<0.180	112	67 - 139
2-Chloroethyl vinyl ether	<0.130	µg/L	1	50.0	<0.130	0	0 - 24.7
cis-1,3-Dichloropropene	55.6	µg/L	1	50.0	<0.230	111	63.6 - 130
trans-1,3-Dichloropropene	56.9	µg/L	1	50.0	<0.220	114	63.4 - 133
Toluene	56.2	µg/L	1	50.0	<0.200	112	77.4 - 122
1,1,2-Trichloroethane	53.1	µg/L	1	50.0	<0.300	106	69.2 - 128
1,3-Dichloropropane	54.6	µg/L	1	50.0	<0.300	109	70.5 - 129
Dibromochloromethane	54.0	µg/L	1	50.0	<0.150	108	65.6 - 142
1,2-Dibromoethane (EDB)	52.2	µg/L	1	50.0	<0.140	104	69.1 - 128
Tetrachloroethene (PCE)	40.8	µg/L	1	50.0	<0.400	82	23.4 - 117
Chlorobenzene	55.3	µg/L	1	50.0	<0.130	111	68.4 - 128
1,1,1,2-Tetrachloroethane	56.1	µg/L	1	50.0	<0.200	112	77.4 - 129

continued ...

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ethylbenzene	55.4	µg/L	1	50.0	<0.140	111	80.8 - 118
m,p-Xylene	111	µg/L	1	100	<0.270	111	80.5 - 118
Bromoform	50.8	µg/L	1	50.0	<0.190	102	57.3 - 141
Styrene	56.2	µg/L	1	50.0	<0.0900	112	10 - 191
o-Xylene	56.0	µg/L	1	50.0	<0.120	112	81.8 - 120
1,1,2,2-Tetrachloroethane	52.2	µg/L	1	50.0	<0.320	104	65.7 - 140
2-Chlorotoluene	54.0	µg/L	1	50.0	<0.100	108	70 - 123
1,2,3-Trichloropropane	55.1	µg/L	1	50.0	<0.620	110	72.3 - 126
Isopropylbenzene	54.1	µg/L	1	50.0	<0.530	108	68 - 125
Bromobenzene	54.2	µg/L	1	50.0	<0.130	108	69.1 - 126
n-Propylbenzene	53.7	µg/L	1	50.0	<0.110	107	67.6 - 123
1,3,5-Trimethylbenzene	53.7	µg/L	1	50.0	<0.110	107	67.1 - 124
tert-Butylbenzene	54.8	µg/L	1	50.0	<0.450	110	66.6 - 126
1,2,4-Trimethylbenzene	54.8	µg/L	1	50.0	<0.100	110	68.1 - 126
1,4-Dichlorobenzene (para)	52.6	µg/L	1	50.0	<0.120	105	66.7 - 121
sec-Butylbenzene	53.9	µg/L	1	50.0	<0.460	108	64.9 - 126
1,3-Dichlorobenzene (meta)	53.2	µg/L	1	50.0	<0.520	106	67.4 - 123
p-Isopropyltoluene	54.6	µg/L	1	50.0	<0.100	109	65.1 - 126
4-Chlorotoluene	53.8	µg/L	1	50.0	<0.120	108	70.7 - 123
1,2-Dichlorobenzene (ortho)	52.8	µg/L	1	50.0	<0.130	106	66.6 - 125
n-Butylbenzene	54.3	µg/L	1	50.0	<0.400	109	63.4 - 124
1,2-Dibromo-3-chloropropane	39.2	µg/L	1	50.0	<0.650	78	59.8 - 136
1,2,3-Trichlorobenzene	50.8	µg/L	1	50.0	<0.240	102	51.8 - 133
1,2,4-Trichlorobenzene	52.6	µg/L	1	50.0	<0.190	105	59.8 - 125
Naphthalene	38.2	µg/L	1	50.0	<0.330	76	53.1 - 139
Hexachlorobutadiene	52.2	µg/L	1	50.0	<0.260	104	58.1 - 119

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	56.6	µg/L	1	50.0	<0.210	113	64 - 140	1	20
Dichlorodifluoromethane	49.8	µg/L	1	50.0	<0.480	100	13.9 - 166	7	20
Chloromethane (methyl chloride)	58.9	µg/L	1	50.0	<0.350	118	40.4 - 153	1	20
Vinyl Chloride	58.2	µg/L	1	50.0	<0.360	116	51.8 - 130	1	20
Bromomethane (methyl bromide)	57.3	µg/L	1	50.0	<0.620	115	52.6 - 138	0	20
Chloroethane	58.4	µg/L	1	50.0	<0.560	117	52.2 - 138	1	20
Trichlorofluoromethane	62.0	µg/L	1	50.0	<0.310	124	34.2 - 137	1	20
Acetone	37.1	µg/L	1	50.0	<1.63	74	17.1 - 143	2	20
Iodomethane (methyl iodide)	56.5	µg/L	1	50.0	<0.210	113	66.8 - 136	8	20
Carbon Disulfide	56.1	µg/L	1	50.0	<0.280	112	62 - 144	8	20
Acrylonitrile	54.0	µg/L	1	50.0	<0.290	108	55.7 - 150	4	20
2-Butanone (MEK)	43.5	µg/L	1	50.0	<0.750	87	46.8 - 128	6	20
4-Methyl-2-pentanone (MIBK)	56.5	µg/L	1	50.0	<0.680	113	52.3 - 149	6	20
2-Hexanone	48.9	µg/L	1	50.0	<0.480	98	44.3 - 157	6	20
trans 1,4-Dichloro-2-butene	40.4	µg/L	1	50.0	<0.230	81	24.8 - 159	5	20
1,1-Dichloroethene	60.9	µg/L	1	50.0	<0.240	122	64.5 - 133	3	20
Methylene chloride	57.2	µg/L	1	50.0	<0.520	114	65.4 - 138	2	20

continued ...

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE	74.6	µg/L	1	50.0	18.2	113	62.9 - 135	3	20
trans-1,2-Dichloroethene	55.6	µg/L	1	50.0	<0.240	111	63.6 - 137	2	20
1,1-Dichloroethane	57.1	µg/L	1	50.0	<0.180	114	65.5 - 138	2	20
cis-1,2-Dichloroethene	57.2	µg/L	1	50.0	<0.210	114	63.1 - 139	2	20
2,2-Dichloropropane	48.8	µg/L	1	50.0	<0.140	98	31.5 - 132	0	20
1,2-Dichloroethane (EDC)	57.7	µg/L	1	50.0	<0.260	115	64 - 146	1	20
Chloroform	56.4	µg/L	1	50.0	<0.160	113	66.9 - 135	0	20
1,1,1-Trichloroethane	57.1	µg/L	1	50.0	<0.210	114	62.5 - 144	2	20
1,1-Dichloropropene	57.8	µg/L	1	50.0	<0.130	116	69.3 - 131	1	20
Benzene	56.8	µg/L	1	50.0	<0.200	114	68.2 - 129	1	20
Carbon Tetrachloride	57.0	µg/L	1	50.0	<0.540	114	55.4 - 155	1	20
1,2-Dichloropropane	58.0	µg/L	1	50.0	<0.260	116	65.8 - 134	1	20
Trichloroethene (TCE)	56.5	µg/L	1	50.0	<0.190	113	65.7 - 128	2	20
Dibromomethane (methylene bromide)	55.4	µg/L	1	50.0	<0.310	111	70.3 - 132	2	20
Bromodichloromethane	56.7	µg/L	1	50.0	<0.180	113	67 - 139	2	20
2-Chloroethyl vinyl ether	<0.130	µg/L	1	50.0	<0.130	0	0 - 24.7	0	20
cis-1,3-Dichloropropene	56.2	µg/L	1	50.0	<0.230	112	63.6 - 130	1	20
trans-1,3-Dichloropropene	57.6	µg/L	1	50.0	<0.220	115	63.4 - 133	1	20
Toluene	56.7	µg/L	1	50.0	<0.200	113	77.4 - 122	1	20
1,1,2-Trichloroethane	53.8	µg/L	1	50.0	<0.300	108	69.2 - 128	1	20
1,3-Dichloropropane	55.4	µg/L	1	50.0	<0.300	111	70.5 - 129	1	20
Dibromochloromethane	55.4	µg/L	1	50.0	<0.150	111	65.6 - 142	3	20
1,2-Dibromoethane (EDB)	53.6	µg/L	1	50.0	<0.140	107	69.1 - 128	3	20
Tetrachloroethene (PCE)	40.8	µg/L	1	50.0	<0.400	82	23.4 - 117	0	20
Chlorobenzene	55.8	µg/L	1	50.0	<0.130	112	68.4 - 128	1	20
1,1,1,2-Tetrachloroethane	57.0	µg/L	1	50.0	<0.200	114	77.4 - 129	2	20
Ethylbenzene	56.2	µg/L	1	50.0	<0.140	112	80.8 - 118	1	20
m,p-Xylene	112	µg/L	1	100	<0.270	112	80.5 - 118	1	20
Bromoform	53.0	µg/L	1	50.0	<0.190	106	57.3 - 141	4	20
Styrene	56.7	µg/L	1	50.0	<0.0900	113	10 - 191	1	20
o-Xylene	56.4	µg/L	1	50.0	<0.120	113	81.8 - 120	1	20
1,1,2,2-Tetrachloroethane	53.9	µg/L	1	50.0	<0.320	108	65.7 - 140	3	20
2-Chlorotoluene	55.1	µg/L	1	50.0	<0.100	110	70 - 123	2	20
1,2,3-Trichloropropane	58.0	µg/L	1	50.0	<0.620	116	72.3 - 126	5	20
Isopropylbenzene	55.2	µg/L	1	50.0	<0.530	110	68 - 125	2	20
Bromobenzene	55.3	µg/L	1	50.0	<0.130	111	69.1 - 126	2	20
n-Propylbenzene	54.6	µg/L	1	50.0	<0.110	109	67.6 - 123	2	20
1,3,5-Trimethylbenzene	55.1	µg/L	1	50.0	<0.110	110	67.1 - 124	3	20
tert-Butylbenzene	55.6	µg/L	1	50.0	<0.450	111	66.6 - 126	1	20
1,2,4-Trimethylbenzene	55.8	µg/L	1	50.0	<0.100	112	68.1 - 126	2	20
1,4-Dichlorobenzene (para)	53.5	µg/L	1	50.0	<0.120	107	66.7 - 121	2	20
sec-Butylbenzene	55.1	µg/L	1	50.0	<0.460	110	64.9 - 126	2	20
1,3-Dichlorobenzene (meta)	54.4	µg/L	1	50.0	<0.520	109	67.4 - 123	2	20
p-Isopropyltoluene	55.8	µg/L	1	50.0	<0.100	112	65.1 - 126	2	20
4-Chlorotoluene	54.5	µg/L	1	50.0	<0.120	109	70.7 - 123	1	20
1,2-Dichlorobenzene (ortho)	54.2	µg/L	1	50.0	<0.130	108	66.6 - 125	3	20
n-Butylbenzene	55.8	µg/L	1	50.0	<0.400	112	63.4 - 124	3	20

continued ...

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,2-Dibromo-3-chloropropane	41.0	μg/L	1	50.0	<0.650	82	59.8 - 136	4	20
1,2,3-Trichlorobenzene	54.0	μg/L	1	50.0	<0.240	108	51.8 - 133	6	20
1,2,4-Trichlorobenzene	54.2	μg/L	1	50.0	<0.190	108	59.8 - 125	3	20
Naphthalene	44.0	μg/L	1	50.0	<0.330	88	53.1 - 139	14	20
Hexachlorobutadiene	56.1	μg/L	1	50.0	<0.260	112	58.1 - 119	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	50.9	51.2	μg/L	1	50	102	102	89.8 - 118
Toluene-d8	50.5	50.1	μg/L	1	50	101	100	89.9 - 110
4-Bromofluorobenzene (4-BFB)	50.8	50.7	μg/L	1	50	102	101	86.4 - 117

Standard (CCV-1)

QC Batch: 69316 Date Analyzed: 2010-04-21 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	253	101	75 - 125	2010-04-21
>C12-C35		mg/L	250	248	99	75 - 125	2010-04-21

Standard (CCV-2)

QC Batch: 69316 Date Analyzed: 2010-04-21 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	250	100	75 - 125	2010-04-21
>C12-C35		mg/L	250	240	96	75 - 125	2010-04-21

Standard (CCV-1)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		μg/L	50.0	48.1	96	80 - 120	2010-04-22
Dichlorodifluoromethane	[23]	μg/L	50.0	39.0	78	80 - 120	2010-04-22
Chloromethane (methyl chloride)		μg/L	50.0	48.4	97	80 - 120	2010-04-22
Vinyl Chloride		μg/L	50.0	47.4	95	80 - 120	2010-04-22

continued ...

[23] Analyte recovery outside CCV limits. Concentration biased low. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromomethane (methyl bromide)		µg/L	50.0	43.6	87	80 - 120	2010-04-22
Chloroethane		µg/L	50.0	46.0	92	80 - 120	2010-04-22
Trichlorofluoromethane		µg/L	50.0	48.8	98	80 - 120	2010-04-22
Acetone		µg/L	50.0	60.1	120	80 - 120	2010-04-22
Iodomethane (methyl iodide)		µg/L	50.0	44.0	88	80 - 120	2010-04-22
Carbon Disulfide		µg/L	50.0	45.4	91	80 - 120	2010-04-22
Acrylonitrile		µg/L	50.0	49.7	99	80 - 120	2010-04-22
2-Butanone (MEK)		µg/L	50.0	50.4	101	80 - 120	2010-04-22
4-Methyl-2-pentanone (MIBK)		µg/L	50.0	54.2	108	80 - 120	2010-04-22
2-Hexanone		µg/L	50.0	53.8	108	80 - 120	2010-04-22
trans 1,4-Dichloro-2-butene		µg/L	50.0	40.0	80	80 - 120	2010-04-22
1,1-Dichloroethene		µg/L	50.0	51.1	102	80 - 120	2010-04-22
Methylene chloride		µg/L	50.0	47.8	96	80 - 120	2010-04-22
MTBE		µg/L	50.0	49.3	99	80 - 120	2010-04-22
trans-1,2-Dichloroethene		µg/L	50.0	46.9	94	80 - 120	2010-04-22
1,1-Dichloroethane		µg/L	50.0	48.0	96	80 - 120	2010-04-22
cis-1,2-Dichloroethene		µg/L	50.0	48.0	96	80 - 120	2010-04-22
2,2-Dichloropropane		µg/L	50.0	53.4	107	80 - 120	2010-04-22
1,2-Dichloroethane (EDC)		µg/L	50.0	47.3	95	80 - 120	2010-04-22
Chloroform		µg/L	50.0	46.8	94	80 - 120	2010-04-22
1,1,1-Trichloroethane		µg/L	50.0	46.4	93	80 - 120	2010-04-22
1,1-Dichloropropene		µg/L	50.0	48.9	98	80 - 120	2010-04-22
Benzene		µg/L	50.0	47.7	95	80 - 120	2010-04-22
Carbon Tetrachloride		µg/L	50.0	44.7	89	80 - 120	2010-04-22
1,2-Dichloropropane		µg/L	50.0	48.5	97	80 - 120	2010-04-22
Trichloroethene (TCE)		µg/L	50.0	47.9	96	80 - 120	2010-04-22
Dibromomethane (methylene bromide)		µg/L	50.0	47.3	95	80 - 120	2010-04-22
Bromodichloromethane		µg/L	50.0	45.8	92	80 - 120	2010-04-22
2-Chloroethyl vinyl ether		µg/L	50.0	43.3	87	80 - 120	2010-04-22
cis-1,3-Dichloropropene		µg/L	50.0	49.3	99	80 - 120	2010-04-22
trans-1,3-Dichloropropene		µg/L	50.0	50.8	102	80 - 120	2010-04-22
Toluene		µg/L	50.0	47.9	96	80 - 120	2010-04-22
1,1,2-Trichloroethane		µg/L	50.0	47.0	94	80 - 120	2010-04-22
1,3-Dichloropropane		µg/L	50.0	48.2	96	80 - 120	2010-04-22
Dibromochloromethane		µg/L	50.0	45.9	92	80 - 120	2010-04-22
1,2-Dibromoethane (EDB)		µg/L	50.0	47.8	96	80 - 120	2010-04-22
Tetrachloroethene (PCE)		µg/L	50.0	41.4	83	80 - 120	2010-04-22
Chlorobenzene		µg/L	50.0	47.1	94	80 - 120	2010-04-22
1,1,1,2-Tetrachloroethane		µg/L	50.0	47.1	94	80 - 120	2010-04-22
Ethylbenzene		µg/L	50.0	47.1	94	80 - 120	2010-04-22
m,p-Xylene		µg/L	100	94.2	94	80 - 120	2010-04-22
Bromoform		µg/L	50.0	46.0	92	80 - 120	2010-04-22
Styrene		µg/L	50.0	48.7	97	80 - 120	2010-04-22
o-Xylene		µg/L	50.0	47.2	94	80 - 120	2010-04-22
1,1,2,2-Tetrachloroethane		µg/L	50.0	48.6	97	80 - 120	2010-04-22
2-Chlorotoluene		µg/L	50.0	46.1	92	80 - 120	2010-04-22

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,2,3-Trichloropropane		µg/L	50.0	50.3	101	80 - 120	2010-04-22
Isopropylbenzene		µg/L	50.0	46.9	94	80 - 120	2010-04-22
Bromobenzene		µg/L	50.0	45.0	90	80 - 120	2010-04-22
n-Propylbenzene		µg/L	50.0	46.2	92	80 - 120	2010-04-22
1,3,5-Trimethylbenzene		µg/L	50.0	46.2	92	80 - 120	2010-04-22
tert-Butylbenzene		µg/L	50.0	46.7	93	80 - 120	2010-04-22
1,2,4-Trimethylbenzene		µg/L	50.0	46.9	94	80 - 120	2010-04-22
1,4-Dichlorobenzene (para)		µg/L	50.0	45.8	92	80 - 120	2010-04-22
sec-Butylbenzene		µg/L	50.0	46.5	93	80 - 120	2010-04-22
1,3-Dichlorobenzene (meta)		µg/L	50.0	46.3	93	80 - 120	2010-04-22
p-Isopropyltoluene		µg/L	50.0	47.8	96	80 - 120	2010-04-22
4-Chlorotoluene		µg/L	50.0	46.0	92	80 - 120	2010-04-22
1,2-Dichlorobenzene (ortho)		µg/L	50.0	46.2	92	80 - 120	2010-04-22
n-Butylbenzene		µg/L	50.0	47.9	96	80 - 120	2010-04-22
1,2-Dibromo-3-chloropropane	[24]	µg/L	50.0	38.1	76	80 - 120	2010-04-22
1,2,3-Trichlorobenzene		µg/L	50.0	47.6	95	80 - 120	2010-04-22
1,2,4-Trichlorobenzene		µg/L	50.0	48.8	98	80 - 120	2010-04-22
Naphthalene	[25]	µg/L	50.0	37.8	76	80 - 120	2010-04-22
Hexachlorobutadiene		µg/L	50.0	49.0	98	80 - 120	2010-04-22

Standard (CCV-2)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/L	50.0	56.8	114	80 - 120	2010-04-22
Dichlorodifluoromethane		µg/L	50.0	50.2	100	80 - 120	2010-04-22
Chloromethane (methyl chloride)		µg/L	50.0	60.0	120	80 - 120	2010-04-22
Vinyl Chloride		µg/L	50.0	59.3	119	80 - 120	2010-04-22
Bromomethane (methyl bromide)		µg/L	50.0	54.9	110	80 - 120	2010-04-22
Chloroethane		µg/L	50.0	57.7	115	80 - 120	2010-04-22
Trichlorofluoromethane	[26]	µg/L	50.0	61.1	122	80 - 120	2010-04-22
Acetone	[27]	µg/L	50.0	64.8	130	80 - 120	2010-04-22
Iodomethane (methyl iodide)		µg/L	50.0	56.1	112	80 - 120	2010-04-22
Carbon Disulfide		µg/L	50.0	55.3	111	80 - 120	2010-04-22
Acrylonitrile		µg/L	50.0	56.1	112	80 - 120	2010-04-22
2-Butanone (MEK)		µg/L	50.0	55.4	111	80 - 120	2010-04-22
4-Methyl-2-pentanone (MIBK)		µg/L	50.0	56.9	114	80 - 120	2010-04-22
2-Hexanone		µg/L	50.0	57.8	116	80 - 120	2010-04-22
trans 1,4-Dichloro-2-butene		µg/L	50.0	40.4	81	80 - 120	2010-04-22

continued ...

[24] Analyte recovery outside CCV limits. Concentration biased low. •
[25] Analyte recovery outside CCV limits. Concentration biased low. •
[26] Analyte recovery outside CCV limits. Concentration biased high.
[27] Analyte recovery outside CCV limits. Concentration biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,1-Dichloroethene		µg/L	50.0	59.3	119	80 - 120	2010-04-22
Methylene chloride		µg/L	50.0	56.9	114	80 - 120	2010-04-22
MTBE		µg/L	50.0	57.1	114	80 - 120	2010-04-22
trans-1,2-Dichloroethene		µg/L	50.0	55.5	111	80 - 120	2010-04-22
1,1-Dichloroethane		µg/L	50.0	57.6	115	80 - 120	2010-04-22
cis-1,2-Dichloroethene		µg/L	50.0	56.6	113	80 - 120	2010-04-22
2,2-Dichloropropane		µg/L	50.0	47.1	94	80 - 120	2010-04-22
1,2-Dichloroethane (EDC)		µg/L	50.0	58.2	116	80 - 120	2010-04-22
Chloroform		µg/L	50.0	57.0	114	80 - 120	2010-04-22
1,1,1-Trichloroethane		µg/L	50.0	56.7	113	80 - 120	2010-04-22
1,1-Dichloropropene		µg/L	50.0	57.5	115	80 - 120	2010-04-22
Benzene		µg/L	50.0	56.6	113	80 - 120	2010-04-22
Carbon Tetrachloride		µg/L	50.0	56.7	113	80 - 120	2010-04-22
1,2-Dichloropropane		µg/L	50.0	57.4	115	80 - 120	2010-04-22
Trichloroethene (TCE)	[28]	µg/L	50.0	63.8	128	80 - 120	2010-04-22
Dibromomethane (methylene bromide)		µg/L	50.0	55.9	112	80 - 120	2010-04-22
Bromodichloromethane		µg/L	50.0	56.8	114	80 - 120	2010-04-22
2-Chloroethyl vinyl ether		µg/L	50.0	46.2	92	80 - 120	2010-04-22
cis-1,3-Dichloropropene		µg/L	50.0	56.0	112	80 - 120	2010-04-22
trans-1,3-Dichloropropene		µg/L	50.0	58.0	116	80 - 120	2010-04-22
Toluene		µg/L	50.0	56.8	114	80 - 120	2010-04-22
1,1,2-Trichloroethane		µg/L	50.0	54.9	110	80 - 120	2010-04-22
1,3-Dichloropropane		µg/L	50.0	55.7	111	80 - 120	2010-04-22
Dibromochloromethane		µg/L	50.0	56.0	112	80 - 120	2010-04-22
1,2-Dibromoethane (EDB)		µg/L	50.0	54.4	109	80 - 120	2010-04-22
Tetrachloroethene (PCE)	[29]	µg/L	50.0	66.2	132	80 - 120	2010-04-22
Chlorobenzene		µg/L	50.0	55.8	112	80 - 120	2010-04-22
1,1,1,2-Tetrachloroethane		µg/L	50.0	56.5	113	80 - 120	2010-04-22
Ethylbenzene		µg/L	50.0	55.7	111	80 - 120	2010-04-22
m,p-Xylene		µg/L	100	111	111	80 - 120	2010-04-22
Bromoform		µg/L	50.0	54.4	109	80 - 120	2010-04-22
Styrene		µg/L	50.0	56.4	113	80 - 120	2010-04-22
o-Xylene		µg/L	50.0	56.1	112	80 - 120	2010-04-22
1,1,2,2-Tetrachloroethane		µg/L	50.0	45.2	90	80 - 120	2010-04-22
2-Chlorotoluene		µg/L	50.0	54.3	109	80 - 120	2010-04-22
1,2,3-Trichloropropane		µg/L	50.0	56.8	114	80 - 120	2010-04-22
Isopropylbenzene		µg/L	50.0	54.8	110	80 - 120	2010-04-22
Bromobenzene		µg/L	50.0	55.1	110	80 - 120	2010-04-22
n-Propylbenzene		µg/L	50.0	54.4	109	80 - 120	2010-04-22
1,3,5-Trimethylbenzene		µg/L	50.0	54.1	108	80 - 120	2010-04-22
tert-Butylbenzene		µg/L	50.0	54.7	109	80 - 120	2010-04-22
1,2,4-Trimethylbenzene		µg/L	50.0	55.5	111	80 - 120	2010-04-22
1,4-Dichlorobenzene (para)		µg/L	50.0	52.9	106	80 - 120	2010-04-22
sec-Butylbenzene		µg/L	50.0	54.3	109	80 - 120	2010-04-22

continued ...

[28] Analyte recovery outside CCV limits. Concentration biased high. •
[29] Analyte recovery outside CCV limits. Concentration biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,3-Dichlorobenzene (meta)		µg/L	50.0	53.8	108	80 - 120	2010-04-22
p-Isopropyltoluene		µg/L	50.0	54.9	110	80 - 120	2010-04-22
4-Chlorotoluene		µg/L	50.0	54.2	108	80 - 120	2010-04-22
1,2-Dichlorobenzene (ortho)		µg/L	50.0	53.7	107	80 - 120	2010-04-22
n-Butylbenzene		µg/L	50.0	54.8	110	80 - 120	2010-04-22
1,2-Dibromo-3-chloropropane		µg/L	50.0	41.3	83	80 - 120	2010-04-22
1,2,3-Trichlorobenzene		µg/L	50.0	53.2	106	80 - 120	2010-04-22
1,2,4-Trichlorobenzene		µg/L	50.0	54.3	109	80 - 120	2010-04-22
Naphthalene		µg/L	50.0	41.2	82	80 - 120	2010-04-22
Hexachlorobutadiene		µg/L	50.0	53.3	107	80 - 120	2010-04-22

Standard (CCV-1)

QC Batch: 69467 Date Analyzed: 2010-04-28 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Pyridine	[30]	mg/L	60.0	0.716	1	80 - 120	2010-04-28
N-Nitrosodimethylamine		mg/L	60.0	61.4	102	80 - 120	2010-04-28
2-Picoline		mg/L	60.0	61.1	102	80 - 120	2010-04-28
Methyl methanesulfonate		mg/L	60.0	49.2	82	80 - 120	2010-04-28
Ethyl methanesulfonate		mg/L	60.0	61.3	102	80 - 120	2010-04-28
Phenol		mg/L	60.0	48.5	81	80 - 120	2010-04-28
Aniline	[31]	mg/L	60.0	34.3	57	80 - 120	2010-04-28
bis(2-chloroethyl)ether		mg/L	60.0	54.6	91	80 - 120	2010-04-28
2-Chlorophenol		mg/L	60.0	58.8	98	80 - 120	2010-04-28
1,3-Dichlorobenzene (meta)		mg/L	60.0	59.1	98	80 - 120	2010-04-28
1,4-Dichlorobenzene (para)		mg/L	60.0	58.1	97	80 - 120	2010-04-28
Benzyl alcohol		mg/L	60.0	60.4	101	80 - 120	2010-04-28
1,2-Dichlorobenzene (ortho)		mg/L	60.0	60.4	101	80 - 120	2010-04-28
2-Methylphenol		mg/L	60.0	48.4	81	80 - 120	2010-04-28
bis(2-chloroisopropyl)ether		mg/L	60.0	57.4	96	80 - 120	2010-04-28
4-Methylphenol / 3-Methylphenol	[32]	mg/L	60.0	42.3	70	80 - 120	2010-04-28
Acetophenone		mg/L	60.0	57.8	96	80 - 120	2010-04-28
N-Nitrosodi-n-propylamine		mg/L	60.0	50.0	83	80 - 120	2010-04-28
Hexachloroethane		mg/L	60.0	53.4	89	80 - 120	2010-04-28
Nitrobenzene		mg/L	60.0	55.4	92	80 - 120	2010-04-28
N-Nitrosopiperidine		mg/L	60.0	63.6	106	80 - 120	2010-04-28
Isophorone		mg/L	60.0	52.6	88	80 - 120	2010-04-28
2-Nitrophenol	[33]	mg/L	60.0	76.4	127	80 - 120	2010-04-28
2,4-Dimethylphenol		mg/L	60.0	49.0	82	80 - 120	2010-04-28

continued ...

[30] Control analyte out of CCV control limits. Results biased low.
[31] Control analyte out of CCV control limits. Results biased low.
[32] Control analyte out of CCV control limits. Results biased low.
[33] Control analyte out of CCV control limits. Results biased high.

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
bis(2-chloroethoxy)methane		mg/L	60.0	59.6	99	80 - 120	2010-04-28
Benzoic acid	[34]	mg/L	60.0	18.2	30	80 - 120	2010-04-28
2,4-Dichlorophenol		mg/L	60.0	57.8	96	80 - 120	2010-04-28
1,2,4-Trichlorobenzene		mg/L	60.0	60.7	101	80 - 120	2010-04-28
a,a-Dimethylphenethylamine	[35]	mg/L	60.0	1.46	2	80 - 120	2010-04-28
Naphthalene		mg/L	60.0	59.1	98	80 - 120	2010-04-28
4-Chloroaniline		mg/L	60.0	47.7	80	80 - 120	2010-04-28
2,6-Dichlorophenol		mg/L	60.0	61.1	102	80 - 120	2010-04-28
Hexachlorobutadiene		mg/L	60.0	58.3	97	80 - 120	2010-04-28
N-Nitroso-di-n-butylamine		mg/L	60.0	49.9	83	80 - 120	2010-04-28
4-Chloro-3-methylphenol	[36]	mg/L	60.0	32.6	54	80 - 120	2010-04-28
1-Methylnaphthalene		mg/L	60.0	57.5	96	80 - 120	2010-04-28
2-Methylnaphthalene		mg/L	60.0	57.2	95	80 - 120	2010-04-28
1,2,4,5-Tetrachlorobenzene		mg/L	60.0	67.0	112	80 - 120	2010-04-28
Hexachlorocyclopentadiene	[37]	mg/L	60.0	99.1	165	80 - 120	2010-04-28
2,4,6-Trichlorophenol		mg/L	60.0	71.5	119	80 - 120	2010-04-28
2,4,5-Trichlorophenol		mg/L	60.0	69.9	116	80 - 120	2010-04-28
2-Chloronaphthalene		mg/L	60.0	63.4	106	80 - 120	2010-04-28
1-Chloronaphthalene		mg/L	60.0	62.9	105	80 - 120	2010-04-28
2-Nitroaniline		mg/L	60.0	52.8	88	80 - 120	2010-04-28
Dimethylphthalate		mg/L	60.0	61.1	102	80 - 120	2010-04-28
Acenaphthylene		mg/L	60.0	60.5	101	80 - 120	2010-04-28
2,6-Dinitrotoluene		mg/L	60.0	66.0	110	80 - 120	2010-04-28
3-Nitroaniline		mg/L	60.0	52.3	87	80 - 120	2010-04-28
Acenaphthene		mg/L	60.0	60.7	101	80 - 120	2010-04-28
2,4-Dinitrophenol		mg/L	60.0	50.3	84	80 - 120	2010-04-28
Dibenzofuran		mg/L	60.0	60.9	102	80 - 120	2010-04-28
Pentachlorobenzene		mg/L	60.0	58.7	98	80 - 120	2010-04-28
4-Nitrophenol		mg/L	60.0	49.5	82	80 - 120	2010-04-28
1-Naphthylamine		mg/L	60.0	48.2	80	80 - 120	2010-04-28
2,4-Dinitrotoluene		mg/L	60.0	65.4	109	80 - 120	2010-04-28
2-Naphthylamine		mg/L	60.0	51.6	86	80 - 120	2010-04-28
2,3,4,6-Tetrachlorophenol		mg/L	60.0	59.1	98	80 - 120	2010-04-28
Fluorene		mg/L	60.0	60.5	101	80 - 120	2010-04-28
Diethylphthalate		mg/L	60.0	58.8	98	80 - 120	2010-04-28
4-Chlorophenyl-phenylether		mg/L	60.0	57.5	96	80 - 120	2010-04-28
4-Nitroaniline		mg/L	60.0	69.3	116	80 - 120	2010-04-28
4,6-Dinitro-2-methylphenol		mg/L	60.0	55.4	92	80 - 120	2010-04-28
Diphenylamine		mg/L	60.0	59.1	98	80 - 120	2010-04-28
Diphenylhydrazine		mg/L	60.0	47.9	80	80 - 120	2010-04-28
4-Bromophenyl-phenylether		mg/L	60.0	62.2	104	80 - 120	2010-04-28
Phenacetin		mg/L	60.0	59.0	98	80 - 120	2010-04-28

continued ...

[34] Control analyte out of CCV control limits. Results biased low.
[35] Control analyte out of CCV control limits. Results biased low.
[36] Control analyte out of CCV control limits. Results biased low.
[37] Control analyte out of CCV control limits. Results biased high.

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexachlorobenzene		mg/L	60.0	63.5	106	80 - 120	2010-04-28
4-Aminobiphenyl		mg/L	60.0	50.2	84	80 - 120	2010-04-28
Pentachlorophenol		mg/L	60.0	49.6	83	80 - 120	2010-04-28
Pentachloronitrobenzene		mg/L	60.0	55.1	92	80 - 120	2010-04-28
Pronamide		mg/L	60.0	53.1	88	80 - 120	2010-04-28
Phenanthrene		mg/L	60.0	60.4	101	80 - 120	2010-04-28
Anthracene		mg/L	60.0	61.4	102	80 - 120	2010-04-28
Di-n-butylphthalate		mg/L	60.0	59.8	100	80 - 120	2010-04-28
Fluoranthene		mg/L	60.0	58.8	98	80 - 120	2010-04-28
Benzidine		mg/L	60.0	53.4	89	80 - 120	2010-04-28
Pyrene		mg/L	60.0	64.1	107	80 - 120	2010-04-28
p-Dimethylaminoazobenzene		mg/L	60.0	51.0	85	80 - 120	2010-04-28
Butylbenzylphthalate		mg/L	60.0	67.3	112	80 - 120	2010-04-28
Benzo(a)anthracene		mg/L	60.0	62.9	105	80 - 120	2010-04-28
3,3-Dichlorobenzidine		mg/L	60.0	55.3	92	80 - 120	2010-04-28
Chrysene		mg/L	60.0	63.2	105	80 - 120	2010-04-28
bis(2-ethylhexyl)phthalate		mg/L	60.0	65.9	110	80 - 120	2010-04-28
Di-n-octylphthalate		mg/L	60.0	71.1	118	80 - 120	2010-04-28
Benzo(b)fluoranthene		mg/L	60.0	60.8	101	80 - 120	2010-04-28
7,12-Dimethylbenz(a)anthracene		mg/L	60.0	61.4	102	80 - 120	2010-04-28
Benzo(k)fluoranthene		mg/L	60.0	60.0	100	80 - 120	2010-04-28
Benzo(a)pyrene		mg/L	60.0	63.7	106	80 - 120	2010-04-28
3-Methylcholanthrene		mg/L	60.0	68.5	114	80 - 120	2010-04-28
Dibenzo(a,j)acridine		mg/L	60.0	67.6	113	80 - 120	2010-04-28
Indeno(1,2,3-cd)pyrene		mg/L	60.0	64.2	107	80 - 120	2010-04-28
Dibenzo(a,h)anthracene		mg/L	60.0	63.0	105	80 - 120	2010-04-28
Benzo(g,h,i)perylene		mg/L	60.0	66.0	110	80 - 120	2010-04-28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		63.4	mg/L	1	60.0	106	80 - 120
Phenol-d5		49.3	mg/L	1	60.0	82	80 - 120
Nitrobenzene-d5		61.1	mg/L	1	60.0	102	80 - 120
2-Fluorobiphenyl		64.6	mg/L	1	60.0	108	80 - 120
2,4,6-Tribromophenol		70.4	mg/L	1	60.0	117	80 - 120
Terphenyl-d14		62.1	mg/L	1	60.0	104	80 - 120

ENVIRONMENTAL, GEOTECHNICAL AND CONSTRUCTION MATERIALS SERVICES

CHAIN OF CUSTODY RECORD

10042115

Terracon
Consulting Engineers & Scientists

Office Location: DALLAS

Project Manager: M.H. NIEMAN

Laboratory: TRACE ANALYSES
Address:
Contact:
Phone:
PO/SO #:

Sampler's Name: CHRIS SANDWELL
Sampler's Signature: Chris Sandwell

Proj. No.: 94087317.321
Project Name: OFFICE BUILDING

ANALYSIS REQUESTED

Lab use only
Due Date: 10042115
Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Page ____ of ____

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	P/O	VOCs (8260B)	TPH (TX 1005)	SVOC Halo	Lab Sample ID (Lab Use Only)
W	4/19/10	12:23		X	MW-1			12	1			X	X	X	229178
↓	↓	13:20		X	MW-2			6	1			X	X	X	179
↓	↓	13:45		X	FB-1			6				X			180
	4/19/10	~~4/19/10~~ 0000		X	Trip Blank			2							181
					NFE										

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	4/20/10	9:05	[signature]	4/20/10	0905
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature) Carol Fox	Date: 4-21-10	Time: 9:05 AM

NOTES:
RESULTS BY APRIL 26, 2010 (MORNING)
TRRP REPORTING
-6 VOAs MW-1 FOR MSD

4°C 4.4/4.6 P LS, Z J5527020

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

Houston Office
11555 Clay Road, Suite 100
Houston, Texas 77043
(713) 690-8989 Fax (713) 690-8787

Dallas Office
8901 Carpenter Freeway, Suite 100
Dallas, Texas 75247
(214) 630-1010 Fax (214) 630-7070

Fort Worth Office
2601 Gravel Drive
Fort Worth, Texas 76118
(817) 268-8600 Fax (817) 268-8602

Austin Office
5307 Industrial Oaks Blvd. # 160
Austin, Texas 78735
(512) 442-1122 Fax (512) 442-1181

Midland Office
24 Smith Rd., # 261
Midland, Texas 79705
(432) 684-9600 Fax (432) 684-9608

Appendix A Laboratory Data Package Cover Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ❑ R1 Field chain-of-custody documentation;
- ❑ R2 Sample identification cross-reference;
- ❑ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ❑ R4 Surrogate recovery data including:
  - a) calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ❑ R5 Test reports/summary forms for blank samples;
- ❑ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ❑ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ❑ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ❑ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ❑ R10 Other problems or anomalies

The Exception Report for every "No" or "Not Reviewed (NR)" item in the laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to the rule. The official signing of the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Michael Abel	Michael Abel	Production Manager	05/03/2010
Name (Printed)	Signature	Official Title (Print)	Date

Project Name: Office Building Laboratory Job Number: 10042115

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TraceAnalysis, Inc.	LRC Date: 5/03/10
Project Name: Office Building	Laboratory Job Number: 10042115
Reviewer Name: Michael Abel	Prep Batch Number(s): All Inclusive for Order I.D.

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✔				
		Were all departures from standard conditions described in an exception report?	✔				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✔				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✔				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✔				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✔				
		Were calculations checked by a peer or supervisor?	✔				
		Were all analyte identifications checked by a peer or supervisor?	✔				
		Were sample quantitation limits reported for all analytes not detected?	✔				
		Were all results for soil and sediment samples reported on a dry weight basis?	✔				
		Were % moisture (or solids) reported for all soil and sediment samples?	✔				
		If required for the project, TICs reported?			✔		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✔				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✔				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✔				
		Were blanks analyzed at the appropriate frequency?	✔				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✔				
		Were blank concentrations < MQL?	✔				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✔				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✔				
		Were LCSs analyzed at required frequency?	✔				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✔			
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✔				
		Was the LCSD RPD within QC limits?		✔			
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✔				
		Were MS/MSD analyzed a the appropriate frequency?	✔				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✔				
		Were MS/MSD RPDs within laboratory QC limits?	✔				

1 Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3 NA = Not applicable;

4 NR = Not reviewed;

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TraceAnalysis, Inc.	LRC Date: 5/03/10
Project Name: Office Building	Laboratory Job Number: 10042115
Reviewer Name: Michael Abel	Prep Batch Number(s): All Inclusive for Order I.D.

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✔				
		Were analytical duplicates analyzed at the appropriate frequency?	✔				
		Were RPDs relative standard deviations within the laboratory QC limits?	✔				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✔				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✔				
		Are unadjusted MQLs included in the laboratory data package?	✔				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✔				
		Were all necessary corrective actions performed for the reported data?	✔				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✔				
S1	OI	**Initial Calibration (ICAL)**					
		Were response factors and /or relative response factors for each analyte within QC limits?	✔				
		Were percent RSDs or correlation coefficient criteria met?	✔				
		Was the number of standards recommended in the method used for all analytes?	✔				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✔				
		Are ICAL data available for all instruments used?	✔				
		Has the initial calibration curve been verified using an appropriate second source standard?	✔				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required QC limits?	✔				
		Was the ICAL curve verified for each analyte?		✔			
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	✔				
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	✔				
		Were ion abundance data within the method-required QC limits?	✔				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	✔				
S5	O	**Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✔				
		Were data associated with manual integrations flagged on the raw data?	✔				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✔		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✔		
S8	I	**Interference Check Sample (ICS) results:**					

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Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TraceAnalysis, Inc.	LRC Date: 5/03/10
Project Name: Office Building	Laboratory Job Number: 10042115
Reviewer Name: Michael Abel	Prep Batch Number(s): All Inclusive for Order I.D.

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Were percent recovery within method QC limits?			✓		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✓				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✓				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
		Is documentation of the analyst's competency up-to-date and on file?	✓				
S15	OI	**Verification/validation documentation for methods** (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the date documented, verified, and validated, where applicable?	✓				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	✓				

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5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Work Order: 10042115

Sample: 229178 **Volatiles:**

Dichlorodifluoromethane	Concentration biased low.
1,2-Dibromo-3-chloropropane	Concentration biased low.
Naphthalene	Concentration biased low.

Sample: 229179 **Semivolatiles TRRP:**

Pyridine	Concentration biased low.
Aniline	Concentration biased low.
4-Methylphenol / 3-Methylphenol	Concentration biased low.
Benzoic acid	Concentration biased low.
a,a-Dimethylphenethylamine	Concentration biased low.
4-Chloro-3-methylphenol	Concentration biased low.

Volatiles:

Dichlorodifluoromethane	Concentration biased low.
1,2-Dibromo-3-chloropropane	Concentration biased low.
Naphthalene	Concentration biased low.

Sample: 229181 **Volatiles:**

Dichlorodifluoromethane	Concentration biased low.
1,2-Dibromo-3-chloropropane	Concentration biased low.
Naphthalene	Concentration biased low.

QC Batch: 69365

CCV(1)	Dichlorodifluoromethane	Analyte recovery outside CCV limits.	Concentration biased low. •
CCV(1)	1,2-Dibromo-3-chloropropane	Analyte recovery outside CCV limits.	Concentration biased low. •
CCV(1)	Naphthalene	Analyte recovery outside CCV limits.	Concentration biased low. •
CCV(2)	Trichloroethene (TCE)	Analyte recovery outside CCV limits.	Concentration biased high. •
CCV(2)	Trichlorofluoromethane	Analyte recovery outside CCV limits.	Concentration biased high.
CCV(2)	Tetrachloroethene (PCE)	Analyte recovery outside CCV limits.	Concentration biased high. •
CCV(2)	Acetone	Analyte recovery outside CCV limits.	Concentration biased high. •

QC Batch: 69467

LCS(1)	a,a-Dimethylphenethylamine	Spike analyte out of control limits. Results biased low. •
LCS(1)	Benzidine	Spike analyte out of control limits. Results biased low. •
LCS(1)	Pyridine	MS/MSD not ran due to lack of sample. •
LCSD(1)	2,4-Dinitrophenol	RPD outside RPD control limits. Results for analyte considered estimated values. •
LCSD(1)	Benzidine	Spike recovery and RPD out of control limits. Results biased low. •
LCSD(1)	a,a-Dimethylphenethylamine	Spike recovery out of control limits. Results biased low. •
LCSD(1)	p-Dimethylaminoazobenzene	Spike recovery out of control limits. Results biased low. •
CCV(1)	Benzoic acid	Control analyte out of CCV control limits. Results biased low.
CCV(1)	4-Chloro-3-methylphenol	Control analyte out of CCV control limits. Results biased low.
CCV(1)	Aniline	Control analyte out of CCV control limits. Results biased low.
CCV(1)	2-Nitrophenol	Control analyte out of CCV control limits. Results biased high.
CCV(1)	4-Methylphenol / 3-Methylphenol	Control analyte out of CCV control limits. Results biased low.
CCV(1)	Pyridine	Control analyte out of CCV control limits. Results biased low.
CCV(1)	a,a-Dimethylphenethylamine	Control analyte out of CCV control limits. Results biased low.
CCV(1)	Hexachlorocyclopentadiene	Control analyte out of CCV control limits. Results biased high.

TRACEANALYSIS, INC.

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Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317
El Paso: T104704221-08-TX LELAP-02002
Midland: T104704392-08-TX

Analytical and Quality Control Report

Mary Helen Niemann
Terracon - Dallas
8901 Carpenter Frwy.
Suite 100
Dallas, TX, 75247

Report Date: May 3, 2010

Work Order: 10041907

Project Name: Office Building
Project Number: 94087317.3RI

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
228927	MW-1 (9-10)	soil	2010-04-16	10:20	2010-04-16
228928	MW-1 (14-15)	soil	2010-04-16	10:40	2010-04-16
228931	MW-2 (11-12)	soil	2010-04-16	12:55	2010-04-16
228932	MW-2 (16-17)	soil	2010-04-16	13:00	2010-04-16
228934	Rinsate	water	2010-04-16	12:40	2010-04-16
228945	Trip Blank	water	2010-04-15	00:00	2010-04-16

Comment(s)

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 91 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Notes:
All sample results are reported on a dry weight basis.

For inorganic analyses, the term MQL should actually read PQL.

Standard Flags

U - Not detected. The analyte is not detected above the SDL.
J - Estimated. The analyte is positively identified and the value is approximated between the SDL and MQL.
B - The sample contains less than ten times the concentration found in the method blank.
JB - The analyte is positively identified and the value is approximated between the SDL and MQL.
The sample contains less than ten times the concentration found in the method blank.
The result should be considered non-detect to the SDL.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Case Narrative

Samples for project Office Building were received by TraceAnalysis, Inc. on 2010-04-16 and assigned to work order 10041907. Samples for work order 10041907 were received intact without headspace and at a temperature of 5.4 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Moisture Content	ASTM D 2216-05	59311	2010-04-20 at 14:31	69299	2010-04-21 at 11:32
Moisture Content	ASTM D 2216-05	59423	2010-04-23 at 17:11	69422	2010-04-26 at 14:12
Moisture Content	ASTM D 2216-05	59452	2010-04-26 at 14:26	69462	2010-04-27 at 15:00
Semivolatiles TRRP	S 8270D	59505	2010-04-28 at 15:00	69520	2010-04-29 at 12:35
TX1005 - NEW	TX1005	59252	2010-04-19 at 15:00	69217	2010-04-19 at 16:00
TX1005 - NEW	TX1005	59293	2010-04-20 at 15:00	69276	2010-04-20 at 17:00
TX1005 - NEW	TX1005	59405	2010-04-23 at 15:00	69406	2010-04-23 at 18:00
TX1005 - NEW	TX1005	59465	2010-04-26 at 15:00	69469	2010-04-28 at 11:00
Volatiles	S 8260B	59345	2010-04-21 at 12:00	69336	2010-04-21 at 12:00
Volatiles	S 8260B	59371	2010-04-22 at 12:00	69365	2010-04-22 at 12:00
Volatiles	S 8260B	59412	2010-04-23 at 15:00	69410	2010-04-23 at 15:00
Volatiles	S 8260B	59443	2010-04-26 at 12:00	69447	2010-04-26 at 12:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10041907 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Note: *All sample results are reported on a dry weight basis.*

Sample: 228927 - MW-1 (9-10)

Laboratory:	Lubbock				
Analysis:	Moisture Content	Analytical Method:	ASTM D 2216-05	Prep Method:	N/A
QC Batch:	69422	Date Analyzed:	2010-04-26	Analyzed By:	SS
Prep Batch:	59423	Sample Preparation:	2010-04-23	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Moisture		18.7	%	1	

Sample: 228927 - MW-1 (9-10)

Laboratory:	Lubbock				
Analysis:	Semivolatiles TRRP	Analytical Method:	S 8270D	Prep Method:	S 3550
QC Batch:	69520	Date Analyzed:	2010-04-29	Analyzed By:	MN
Prep Batch:	59505	Sample Preparation:	2010-04-28	Prepared By:	MN

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.0663	<0.308	<0.0663	mg/Kg	1	0.0663	0.25	0.0539
N-Nitrosodimethylamine	U	<0.0576	<0.308	<0.0576	mg/Kg	1	0.0576	0.25	0.0468
2-Picoline	U	<0.0630	<0.308	<0.0630	mg/Kg	1	0.0630	0.25	0.0512
Methyl methanesulfonate	U	<0.0589	<0.308	<0.0589	mg/Kg	1	0.0589	0.25	0.0479
Ethyl methanesulfonate	U	<0.0584	<0.308	<0.0584	mg/Kg	1	0.0584	0.25	0.0475
Phenol	U	<0.0604	<0.308	<0.0604	mg/Kg	1	0.0604	0.25	0.0491
Aniline	U	<0.0726	<0.308	<0.0726	mg/Kg	1	0.0726	0.25	0.059
bis(2-chloroethyl)ether	U	<0.0648	<0.308	<0.0648	mg/Kg	1	0.0648	0.25	0.0527
2-Chlorophenol	U	<0.0546	<0.308	<0.0546	mg/Kg	1	0.0546	0.25	0.0444
1,3-Dichlorobenzene (meta)	U	<0.0610	<0.308	<0.0610	mg/Kg	1	0.0610	0.25	0.0496
1,4-Dichlorobenzene (para)	U	<0.0594	<0.308	<0.0594	mg/Kg	1	0.0594	0.25	0.0483
Benzyl alcohol	U	<0.0712	<0.308	<0.0712	mg/Kg	1	0.0712	0.25	0.0579
1,2-Dichlorobenzene (ortho)	U	<0.0551	<0.308	<0.0551	mg/Kg	1	0.0551	0.25	0.0448
2-Methylphenol	U	<0.0642	<0.308	<0.0642	mg/Kg	1	0.0642	0.25	0.0522
bis(2-chloroisopropyl)ether	U	<0.0653	<0.308	<0.0653	mg/Kg	1	0.0653	0.25	0.0531
4-Methylphenol / 3-Methylphenol	U	<0.0731	<0.308	<0.0731	mg/Kg	1	0.0731	0.25	0.0594
Acetophenone	U	<0.0524	<0.308	<0.0524	mg/Kg	1	0.0524	0.25	0.0426
N-Nitrosodi-n-propylamine	U	<0.0697	<0.308	<0.0697	mg/Kg	1	0.0697	0.25	0.0567
Hexachloroethane	U	<0.0525	<0.308	<0.0525	mg/Kg	1	0.0525	0.25	0.0427
Nitrobenzene	U	<0.0535	<0.308	<0.0535	mg/Kg	1	0.0535	0.25	0.0435
N-Nitrosopiperidine	U	<0.0627	<0.308	<0.0627	mg/Kg	1	0.0627	0.25	0.051
Isophorone	U	<0.0626	<0.308	<0.0626	mg/Kg	1	0.0626	0.25	0.0509
2-Nitrophenol	U	<0.0595	<0.308	<0.0595	mg/Kg	1	0.0595	0.25	0.0484
2,4-Dimethylphenol	U	<0.0453	<0.308	<0.0453	mg/Kg	1	0.0453	0.25	0.0368

continued . . .

sample 228927 continued . . .

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-chloroethoxy)methane	U	<0.0576	<0.308	<0.0576	mg/Kg	1	0.0576	0.25	0.0468
Benzoic acid	U	<0.106	<0.308	<0.106	mg/Kg	1	0.106	0.25	0.0865
2,4-Dichlorophenol	U	<0.0456	<0.308	<0.0456	mg/Kg	1	0.0456	0.25	0.0371
1,2,4-Trichlorobenzene	U	<0.0541	<0.308	<0.0541	mg/Kg	1	0.0541	0.25	0.044
a,a-Dimethylphenethylamine	U	<0.0341	<0.308	<0.0341	mg/Kg	1	0.0341	0.25	0.0277
Naphthalene	U	<0.0625	<0.308	<0.0625	mg/Kg	1	0.0625	0.25	0.0508
4-Chloroaniline	U	<0.0539	<0.308	<0.0539	mg/Kg	1	0.0539	0.25	0.0438
2,6-Dichlorophenol	U	<0.0519	<0.308	<0.0519	mg/Kg	1	0.0519	0.25	0.0422
Hexachlorobutadiene	U	<0.0628	<0.308	<0.0628	mg/Kg	1	0.0628	0.25	0.0511
N-Nitroso-di-n-butylamine	U	<0.0528	<0.308	<0.0528	mg/Kg	1	0.0528	0.25	0.0429
4-Chloro-3-methylphenol	U	<0.0398	<0.308	<0.0398	mg/Kg	1	0.0398	0.25	0.0324
1-Methylnaphthalene	U	<0.0599	<0.308	<0.0599	mg/Kg	1	0.0599	0.25	0.0487
2-Methylnaphthalene	U	<0.0529	<0.308	<0.0529	mg/Kg	1	0.0529	0.25	0.043
1,2,4,5-Tetrachlorobenzene	U	<0.0652	<0.308	<0.0652	mg/Kg	1	0.0652	0.25	0.053
Hexachlorocyclopentadiene	U	<0.0504	<0.308	<0.0504	mg/Kg	1	0.0504	0.25	0.041
2,4,6-Trichlorophenol	U	<0.0499	<0.308	<0.0499	mg/Kg	1	0.0499	0.25	0.0406
2,4,5-Trichlorophenol	U	<0.0403	<0.308	<0.0403	mg/Kg	1	0.0403	0.25	0.0328
2-Chloronaphthalene	U	<0.0554	<0.308	<0.0554	mg/Kg	1	0.0554	0.25	0.045
1-Chloronaphthalene	U	<0.0635	<0.308	<0.0635	mg/Kg	1	0.0635	0.25	0.0516
2-Nitroaniline	U	<0.0318	<0.308	<0.0318	mg/Kg	1	0.0318	0.25	0.0259
Dimethylphthalate	U	<0.0389	<0.308	<0.0389	mg/Kg	1	0.0389	0.25	0.0316
Acenaphthylene	U	<0.0534	<0.308	<0.0534	mg/Kg	1	0.0534	0.25	0.0434
2,6-Dinitrotoluene	U	<0.0336	<0.308	<0.0336	mg/Kg	1	0.0336	0.25	0.0273
3-Nitroaniline	U	<0.0263	<0.308	<0.0263	mg/Kg	1	0.0263	0.25	0.0214
Acenaphthene	U	<0.0526	<0.308	<0.0526	mg/Kg	1	0.0526	0.25	0.0428
2,4-Dinitrophenol	U	<0.0371	<0.308	<0.0371	mg/Kg	1	0.0371	0.25	0.0302
Dibenzofuran	U	<0.0492	<0.308	<0.0492	mg/Kg	1	0.0492	0.25	0.04
Pentachlorobenzene	U	<0.0526	<0.308	<0.0526	mg/Kg	1	0.0526	0.25	0.0428
4-Nitrophenol	U	<0.0376	<0.308	<0.0376	mg/Kg	1	0.0376	0.25	0.0306
1-Naphthylamine	U	<0.0334	<0.308	<0.0334	mg/Kg	1	0.0334	0.25	0.0272
2,4-Dinitrotoluene	U	<0.0474	<0.308	<0.0474	mg/Kg	1	0.0474	0.25	0.0385
2-Naphthylamine	U	<0.0352	<0.308	<0.0352	mg/Kg	1	0.0352	0.25	0.0286
2,3,4,6-Tetrachlorophenol	U	<0.0320	<0.308	<0.0320	mg/Kg	1	0.0320	0.25	0.026
Fluorene	U	<0.0453	<0.308	<0.0453	mg/Kg	1	0.0453	0.25	0.0368
Diethylphthalate	U	<0.0490	<0.308	<0.0490	mg/Kg	1	0.0490	0.25	0.0398
4-Chlorophenyl-phenylether	U	<0.0539	<0.308	<0.0539	mg/Kg	1	0.0539	0.25	0.0438
4-Nitroaniline	U	<0.0421	<0.308	<0.0421	mg/Kg	1	0.0421	0.25	0.0342
4,6-Dinitro-2-methylphenol	U	<0.0391	<0.308	<0.0391	mg/Kg	1	0.0391	0.25	0.0318
Diphenylamine	U	<0.0654	<0.308	<0.0654	mg/Kg	1	0.0654	0.25	0.0532
Diphenylhydrazine	U	<0.0454	<0.308	<0.0454	mg/Kg	1	0.0454	0.25	0.0369
4-Bromophenyl-phenylether	U	<0.0569	<0.308	<0.0569	mg/Kg	1	0.0569	0.25	0.0463
Phenacetin	U	<0.0557	<0.308	<0.0557	mg/Kg	1	0.0557	0.25	0.0453
Hexachlorobenzene	U	<0.0616	<0.308	<0.0616	mg/Kg	1	0.0616	0.25	0.0501
4-Aminobiphenyl	U	<0.0733	<0.308	<0.0733	mg/Kg	1	0.0733	0.25	0.0596
Pentachlorophenol	U	<0.0555	<0.308	<0.0555	mg/Kg	1	0.0555	0.25	0.0451

continued . . .

sample 228927 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Pentachloronitrobenzene	U	<0.0530	<0.308	<0.0530	mg/Kg	1	0.0530	0.25	0.0431
Pronamide	U	<0.0604	<0.308	<0.0604	mg/Kg	1	0.0604	0.25	0.0491
Phenanthrene	U	<0.0664	<0.308	<0.0664	mg/Kg	1	0.0664	0.25	0.054
Anthracene	U	<0.0711	<0.308	<0.0711	mg/Kg	1	0.0711	0.25	0.0578
Di-n-butylphthalate	U	<0.0668	<0.308	<0.0668	mg/Kg	1	0.0668	0.25	0.0543
Fluoranthene	U	<0.0834	<0.308	<0.0834	mg/Kg	1	0.0834	0.25	0.0678
Benzidine	U	<0.115	<0.308	<0.115	mg/Kg	1	0.115	0.25	0.0938
Pyrene	U	<0.0836	<0.308	<0.0836	mg/Kg	1	0.0836	0.25	0.068
p-Dimethylaminoazobenzene	U	<0.0739	<0.308	<0.0739	mg/Kg	1	0.0739	0.25	0.0601
Butylbenzylphthalate	U	<0.0523	<0.308	<0.0523	mg/Kg	1	0.0523	0.25	0.0425
Benzo(a)anthracene	U	<0.0599	<0.308	<0.0599	mg/Kg	1	0.0599	0.25	0.0487
3,3-Dichlorobenzidine	U	<0.0648	<0.308	<0.0648	mg/Kg	1	0.0648	0.25	0.0527
Chrysene	U	<0.0699	<0.308	<0.0699	mg/Kg	1	0.0699	0.25	0.0568
bis(2-ethylhexyl)phthalate	U	<0.0518	<0.308	<0.0518	mg/Kg	1	0.0518	0.25	0.0421
Di-n-octylphthalate	U	<0.0749	<0.308	<0.0749	mg/Kg	1	0.0749	0.25	0.0609
Benzo(b)fluoranthene	U	<0.0978	<0.308	<0.0978	mg/Kg	1	0.0978	0.25	0.0795
7,12-Dimethylbenz(a)anthracene	U	<0.0637	<0.308	<0.0637	mg/Kg	1	0.0637	0.25	0.0518
Benzo(k)fluoranthene	U	<0.0935	<0.308	<0.0935	mg/Kg	1	0.0935	0.25	0.076
Benzo(a)pyrene	U	<0.0675	<0.308	<0.0675	mg/Kg	1	0.0675	0.25	0.0549
3-Methylcholanthrene	U	<0.0562	<0.308	<0.0562	mg/Kg	1	0.0562	0.25	0.0457
Dibenzo(a,j)acridine	U	<0.0652	<0.308	<0.0652	mg/Kg	1	0.0652	0.25	0.053
Indeno(1,2,3-cd)pyrene	U	<0.0647	<0.308	<0.0647	mg/Kg	1	0.0647	0.25	0.0526
Dibenzo(a,h)anthracene	U	<0.0782	<0.308	<0.0782	mg/Kg	1	0.0782	0.25	0.0636
Benzo(g,h,i)perylene	U	<0.0593	<0.308	<0.0593	mg/Kg	1	0.0593	0.25	0.0482

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		1.25	mg/Kg	1	2.67	47	12.8 - 71.1
Phenol-d5		1.35	mg/Kg	1	2.67	50	10.2 - 82.2
Nitrobenzene-d5		1.35	mg/Kg	1	2.67	50	17.4 - 83.8
2-Fluorobiphenyl		1.65	mg/Kg	1	2.67	62	21.4 - 92.8
2,4,6-Tribromophenol		1.23	mg/Kg	1	2.67	46	18.6 - 98.6
Terphenyl-d14		1.64	mg/Kg	1	2.67	61	24.3 - 133

Sample: 228927 - MW-1 (9-10)

Laboratory:	Lubbock				
Analysis:	TX1005 - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	69406	Date Analyzed:	2010-04-23	Analyzed By:	AW
Prep Batch:	59405	Sample Preparation:	2010-04-23	Prepared By:	AW

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
C6-C12	JB	**36.9**	<61.5	38.6	mg/Kg	1	9.80	50	7.97
>C12-C28	U	<7.26	<61.5	<7.26	mg/Kg	1	7.26	50	5.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		74.6	mg/Kg	1	100	75	70 - 130
n-Tricosane		106	mg/Kg	1	100	106	70 - 130
n-Triacontane		116	mg/Kg	1	100	116	60.7 - 146

Sample: 228927 - MW-1 (9-10)

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69410	Date Analyzed:	2010-04-23	Analyzed By:	KB
Prep Batch:	59412	Sample Preparation:	2010-04-23	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<4.48	<24.6	<4.48	µg/Kg	1	4.48	20	3.64
Dichlorodifluoromethane	[1] U	<6.33	<24.6	<6.33	µg/Kg	1	6.33	20	5.15
Chloromethane (methyl chloride)	JB	**9.66**	<24.6	7.43	µg/Kg	1	5.12	20	4.16
Vinyl Chloride	U	<5.48	<24.6	<5.48	µg/Kg	1	5.48	20	4.46
Bromomethane (methyl bromide)	U	<8.62	<123	<8.62	µg/Kg	1	8.62	100	7.01
Chloroethane	U	<3.31	<24.6	<3.31	µg/Kg	1	3.31	20	2.69
Trichlorofluoromethane	U	<4.97	<24.6	<4.97	µg/Kg	1	4.97	20	4.04
Acetone	[2] U	<53.1	<246	<53.1	µg/Kg	1	53.1	200	43.2
Iodomethane (methyl iodide)	U	<7.86	<123	<7.86	µg/Kg	1	7.86	100	6.39
Carbon Disulfide	U	<8.58	<24.6	<8.58	µg/Kg	1	8.58	20	6.98
Acrylonitrile	U	<3.43	<24.6	<3.43	µg/Kg	1	3.43	20	2.79
2-Butanone (MEK)	[3] U	<8.45	<123	<8.45	µg/Kg	1	8.45	100	6.87
4-Methyl-2-pentanone (MIBK)	U	<5.18	<123	<5.18	µg/Kg	1	5.18	100	4.21
2-Hexanone	[4] U	<3.62	<123	<3.62	µg/Kg	1	3.62	100	2.94
trans 1,4-Dichloro-2-butene	[5] U	<2.96	<246	<2.96	µg/Kg	1	2.96	200	2.41
1,1-Dichloroethene	U	<8.03	<24.6	<8.03	µg/Kg	1	8.03	20	6.53
Methylene chloride	JB	**109**	<123	120	µg/Kg	1	20.7	100	16.8
MTBE	U	<2.63	<24.6	<2.63	µg/Kg	1	2.63	20	2.14
trans-1,2-Dichloroethene	U	<8.00	<24.6	<8.00	µg/Kg	1	8.00	20	6.5
1,1-Dichloroethane	U	<7.31	<24.6	<7.31	µg/Kg	1	7.31	20	5.94
cis-1,2-Dichloroethene	U	<7.37	<24.6	<7.37	µg/Kg	1	7.37	20	5.99
2,2-Dichloropropane	U	<9.99	<24.6	<9.99	µg/Kg	1	9.99	20	8.12

continued . . .

[1] Concentration biased low.
[2] Concentration biased low.
[3] Concentration biased low.
[4] Concentration biased low.
[5] Concentration biased low.

sample 228927 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dichloroethane (EDC)	U	<4.51	<24.6	<4.51	μg/Kg	1	4.51	20	3.67
Chloroform	U	<6.53	<24.6	<6.53	μg/Kg	1	6.53	20	5.31
1,1,1-Trichloroethane	U	<9.54	<24.6	<9.54	μg/Kg	1	9.54	20	7.76
1,1-Dichloropropene	U	<9.14	<24.6	<9.14	μg/Kg	1	9.14	20	7.43
Benzene	U	<7.66	<24.6	<7.66	μg/Kg	1	7.66	20	6.23
Carbon Tetrachloride	U	<7.77	<24.6	<7.77	μg/Kg	1	7.77	20	6.32
1,2-Dichloropropane	U	<6.43	<24.6	<6.43	μg/Kg	1	6.43	20	5.23
Trichloroethene (TCE)	U	<9.78	<24.6	<9.78	μg/Kg	1	9.78	20	7.95
Dibromomethane (methylene bromide)	U	<4.19	<24.6	<4.19	μg/Kg	1	4.19	20	3.41
Bromodichloromethane	U	<4.96	<24.6	<4.96	μg/Kg	1	4.96	20	4.03
2-Chloroethyl vinyl ether	[6] U	<2.73	<24.6	<2.73	μg/Kg	1	2.73	20	2.22
cis-1,3-Dichloropropene	U	<4.60	<24.6	<4.60	μg/Kg	1	4.60	20	3.74
trans-1,3-Dichloropropene	U	<4.87	<24.6	<4.87	μg/Kg	1	4.87	20	3.96
Toluene	U	<7.50	<24.6	<7.50	μg/Kg	1	7.50	20	6.1
1,1,2-Trichloroethane	U	<2.53	<24.6	<2.53	μg/Kg	1	2.53	20	2.06
1,3-Dichloropropane	U	<4.60	<24.6	<4.60	μg/Kg	1	4.60	20	3.74
Dibromochloromethane	U	<4.65	<24.6	<4.65	μg/Kg	1	4.65	20	3.78
1,2-Dibromoethane (EDB)	U	<2.51	<24.6	<2.51	μg/Kg	1	2.51	20	2.04
Tetrachloroethene (PCE)	[7] U	<8.90	<24.6	<8.90	μg/Kg	1	8.90	20	7.24
Chlorobenzene	U	<7.56	<24.6	<7.56	μg/Kg	1	7.56	20	6.15
1,1,1,2-Tetrachloroethane	U	<5.06	<24.6	<5.06	μg/Kg	1	5.06	20	4.11
Ethylbenzene	U	<6.74	<24.6	<6.74	μg/Kg	1	6.74	20	5.48
m,p-Xylene	U	<14.1	<24.6	<14.1	μg/Kg	1	14.1	20	11.5
Bromoform	U	<2.76	<24.6	<2.76	μg/Kg	1	2.76	20	2.24
Styrene	U	<5.19	<24.6	<5.19	μg/Kg	1	5.19	20	4.22
o-Xylene	U	<7.24	<24.6	<7.24	μg/Kg	1	7.24	20	5.89
1,1,2,2-Tetrachloroethane	U	<2.83	<24.6	<2.83	μg/Kg	1	2.83	20	2.3
2-Chlorotoluene	U	<7.20	<24.6	<7.20	μg/Kg	1	7.20	20	5.85
1,2,3-Trichloropropane	U	<5.44	<24.6	<5.44	μg/Kg	1	5.44	20	4.42
Isopropylbenzene	U	<7.29	<24.6	<7.29	μg/Kg	1	7.29	20	5.93
Bromobenzene	U	<10.1	<24.6	<10.1	μg/Kg	1	10.1	20	8.21
n-Propylbenzene	U	<7.40	<24.6	<7.40	μg/Kg	1	7.40	20	6.02
1,3,5-Trimethylbenzene	U	<6.58	<24.6	<6.58	μg/Kg	1	6.58	20	5.35
tert-Butylbenzene	U	<7.55	<24.6	<7.55	μg/Kg	1	7.55	20	6.14
1,2,4-Trimethylbenzene	U	<6.75	<24.6	<6.75	μg/Kg	1	6.75	20	5.49
1,4-Dichlorobenzene (para)	U	<5.83	<24.6	<5.83	μg/Kg	1	5.83	20	4.74
sec-Butylbenzene	U	<7.58	<24.6	<7.58	μg/Kg	1	7.58	20	6.16
1,3-Dichlorobenzene (meta)	U	<7.59	<24.6	<7.59	μg/Kg	1	7.59	20	6.17
p-Isopropyltoluene	U	<7.85	<24.6	<7.85	μg/Kg	1	7.85	20	6.38
4-Chlorotoluene	U	<7.42	<24.6	<7.42	μg/Kg	1	7.42	20	6.03
1,2-Dichlorobenzene (ortho)	U	<6.10	<24.6	<6.10	μg/Kg	1	6.10	20	4.96
n-Butylbenzene	U	<7.40	<24.6	<7.40	μg/Kg	1	7.40	20	6.02

continued ...

[6] Concentration biased low.
[7] Concentration biased low.

sample 228927 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
1,2-Dibromo-3-chloropropane	[8] U	<8.35	<123	<8.35	µg/Kg	1	8.35	100	6.79
1,2,3-Trichlorobenzene	U	<6.04	<123	<6.04	µg/Kg	1	6.04	100	4.91
1,2,4-Trichlorobenzene	U	<5.67	<123	<5.67	µg/Kg	1	5.67	100	4.61
Naphthalene	[9] JB	**4.62**	<123	7.81	µg/Kg	1	2.89	100	2.35
Hexachlorobutadiene	U	<17.1	<123	<17.1	µg/Kg	1	17.1	100	13.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		974	µg/Kg	1	1000	97	78.3 - 111
Toluene-d8		1000	µg/Kg	1	1000	100	91.4 - 107
4-Bromofluorobenzene (4-BFB)		965	µg/Kg	1	1000	96	68.1 - 120

Sample: 228928 - MW-1 (14-15)

Laboratory:	Lubbock				
Analysis:	Moisture Content	Analytical Method:	ASTM D 2216-05	Prep Method:	N/A
QC Batch:	69462	Date Analyzed:	2010-04-27	Analyzed By:	SS
Prep Batch:	59452	Sample Preparation:	2010-04-26	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Moisture		19.5	%	1	

Sample: 228928 - MW-1 (14-15)

Laboratory:	Lubbock				
Analysis:	TX1005 - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	69469	Date Analyzed:	2010-04-28	Analyzed By:	AW
Prep Batch:	59465	Sample Preparation:	2010-04-26	Prepared By:	AW

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
C6-C12	JB	**22.2**	<62.1	18.9	mg/Kg	1	9.90	50	7.97
>C12-C28	U	<7.33	<62.1	<7.33	mg/Kg	1	7.33	50	5.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		88.7	mg/Kg	1	100	89	70 - 130
n-Tricosane		104	mg/Kg	1	100	104	70 - 130

continued ...

[8] Concentration biased low.
[9] Concentration biased low.

sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	100	122	60.7 - 146

Sample: 228928 - MW-1 (14-15)

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69447	Date Analyzed:	2010-04-26	Analyzed By:	KB
Prep Batch:	59443	Sample Preparation:	2010-04-26	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<4.52	<24.8	<4.52	µg/Kg	1	4.52	20	3.64
Dichlorodifluoromethane	[10] U	<6.40	<24.8	<6.40	µg/Kg	1	6.40	20	5.15
Chloromethane (methyl chloride)	U	<5.17	<24.8	<5.17	µg/Kg	1	5.17	20	4.16
Vinyl Chloride	U	<5.54	<24.8	<5.54	µg/Kg	1	5.54	20	4.46
Bromomethane (methyl bromide)	U	<8.71	<124	<8.71	µg/Kg	1	8.71	100	7.01
Chloroethane	U	<3.34	<24.8	<3.34	µg/Kg	1	3.34	20	2.69
Trichlorofluoromethane	U	<5.02	<24.8	<5.02	µg/Kg	1	5.02	20	4.04
Acetone	U	<53.7	<248	<53.7	µg/Kg	1	53.7	200	43.2
Iodomethane (methyl iodide)	U	<7.94	<124	<7.94	µg/Kg	1	7.94	100	6.39
Carbon Disulfide	U	<8.67	<24.8	<8.67	µg/Kg	1	8.67	20	6.98
Acrylonitrile	U	<3.46	<24.8	<3.46	µg/Kg	1	3.46	20	2.79
2-Butanone (MEK)	U	<8.53	<124	<8.53	µg/Kg	1	8.53	100	6.87
4-Methyl-2-pentanone (MIBK)	U	<5.23	<124	<5.23	µg/Kg	1	5.23	100	4.21
2-Hexanone	U	<3.65	<124	<3.65	µg/Kg	1	3.65	100	2.94
trans 1,4-Dichloro-2-butene	U	<2.99	<248	<2.99	µg/Kg	1	2.99	200	2.41
1,1-Dichloroethene	U	<8.11	<24.8	<8.11	µg/Kg	1	8.11	20	6.53
Methylene chloride	U	<20.9	<124	<20.9	µg/Kg	1	20.9	100	16.8
MTBE	U	<2.66	<24.8	<2.66	µg/Kg	1	2.66	20	2.14
trans-1,2-Dichloroethene	U	<8.07	<24.8	<8.07	µg/Kg	1	8.07	20	6.5
1,1-Dichloroethane	U	<7.38	<24.8	<7.38	µg/Kg	1	7.38	20	5.94
cis-1,2-Dichloroethene	U	<7.44	<24.8	<7.44	µg/Kg	1	7.44	20	5.99
2,2-Dichloropropane	U	<10.1	<24.8	<10.1	µg/Kg	1	10.1	20	8.12
1,2-Dichloroethane (EDC)	U	<4.56	<24.8	<4.56	µg/Kg	1	4.56	20	3.67
Chloroform	U	<6.60	<24.8	<6.60	µg/Kg	1	6.60	20	5.31
1,1,1-Trichloroethane	U	<9.64	<24.8	<9.64	µg/Kg	1	9.64	20	7.76
1,1-Dichloropropene	U	<9.23	<24.8	<9.23	µg/Kg	1	9.23	20	7.43
Benzene	U	<7.74	<24.8	<7.74	µg/Kg	1	7.74	20	6.23
Carbon Tetrachloride	U	<7.85	<24.8	<7.85	µg/Kg	1	7.85	20	6.32
1,2-Dichloropropane	U	<6.50	<24.8	<6.50	µg/Kg	1	6.50	20	5.23
Trichloroethene (TCE)	U	<9.88	<24.8	<9.88	µg/Kg	1	9.88	20	7.95
Dibromomethane (methylene bromide)	U	<4.24	<24.8	<4.24	µg/Kg	1	4.24	20	3.41
Bromodichloromethane	U	<5.01	<24.8	<5.01	µg/Kg	1	5.01	20	4.03

continued . . .

[10] Concentration biased low.

sample 228928 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
2-Chloroethyl vinyl ether	U	<2.76	<24.8	<2.76	µg/Kg	1	2.76	20	2.22
cis-1,3-Dichloropropene	U	<4.64	<24.8	<4.64	µg/Kg	1	4.64	20	3.74
trans-1,3-Dichloropropene	U	<4.92	<24.8	<4.92	µg/Kg	1	4.92	20	3.96
Toluene	U	<7.58	<24.8	<7.58	µg/Kg	1	7.58	20	6.1
1,1,2-Trichloroethane	U	<2.56	<24.8	<2.56	µg/Kg	1	2.56	20	2.06
1,3-Dichloropropane	U	<4.64	<24.8	<4.64	µg/Kg	1	4.64	20	3.74
Dibromochloromethane	U	<4.70	<24.8	<4.70	µg/Kg	1	4.70	20	3.78
1,2-Dibromoethane (EDB)	U	<2.53	<24.8	<2.53	µg/Kg	1	2.53	20	2.04
Tetrachloroethene (PCE)	U	<8.99	<24.8	<8.99	µg/Kg	1	8.99	20	7.24
Chlorobenzene	U	<7.64	<24.8	<7.64	µg/Kg	1	7.64	20	6.15
1,1,1,2-Tetrachloroethane	U	<5.10	<24.8	<5.10	µg/Kg	1	5.10	20	4.11
Ethylbenzene	U	<6.81	<24.8	<6.81	µg/Kg	1	6.81	20	5.48
m,p-Xylene	U	<14.3	<24.8	<14.3	µg/Kg	1	14.3	20	11.5
Bromoform	U	<2.78	<24.8	<2.78	µg/Kg	1	2.78	20	2.24
Styrene	U	<5.24	<24.8	<5.24	µg/Kg	1	5.24	20	4.22
o-Xylene	U	<7.32	<24.8	<7.32	µg/Kg	1	7.32	20	5.89
1,1,2,2-Tetrachloroethane	U	<2.86	<24.8	<2.86	µg/Kg	1	2.86	20	2.3
2-Chlorotoluene	U	<7.27	<24.8	<7.27	µg/Kg	1	7.27	20	5.85
1,2,3-Trichloropropane	U	<5.49	<24.8	<5.49	µg/Kg	1	5.49	20	4.42
Isopropylbenzene	U	<7.37	<24.8	<7.37	µg/Kg	1	7.37	20	5.93
Bromobenzene	U	<10.2	<24.8	<10.2	µg/Kg	1	10.2	20	8.21
n-Propylbenzene	U	<7.48	<24.8	<7.48	µg/Kg	1	7.48	20	6.02
1,3,5-Trimethylbenzene	U	<6.64	<24.8	<6.64	µg/Kg	1	6.64	20	5.35
tert-Butylbenzene	U	<7.63	<24.8	<7.63	µg/Kg	1	7.63	20	6.14
1,2,4-Trimethylbenzene	U	<6.82	<24.8	<6.82	µg/Kg	1	6.82	20	5.49
1,4-Dichlorobenzene (para)	U	<5.89	<24.8	<5.89	µg/Kg	1	5.89	20	4.74
sec-Butylbenzene	U	<7.65	<24.8	<7.65	µg/Kg	1	7.65	20	6.16
1,3-Dichlorobenzene (meta)	U	<7.66	<24.8	<7.66	µg/Kg	1	7.66	20	6.17
p-Isopropyltoluene	U	<7.92	<24.8	<7.92	µg/Kg	1	7.92	20	6.38
4-Chlorotoluene	U	<7.49	<24.8	<7.49	µg/Kg	1	7.49	20	6.03
1,2-Dichlorobenzene (ortho)	U	<6.16	<24.8	<6.16	µg/Kg	1	6.16	20	4.96
n-Butylbenzene	U	<7.48	<24.8	<7.48	µg/Kg	1	7.48	20	6.02
1,2-Dibromo-3-chloropropane	U	<8.43	<124	<8.43	µg/Kg	1	8.43	100	6.79
1,2,3-Trichlorobenzene	U	<6.10	<124	<6.10	µg/Kg	1	6.10	100	4.91
1,2,4-Trichlorobenzene	U	<5.73	<124	<5.73	µg/Kg	1	5.73	100	4.61
Naphthalene	U	<2.92	<124	<2.92	µg/Kg	1	2.92	100	2.35
Hexachlorobutadiene	U	<17.3	<124	<17.3	µg/Kg	1	17.3	100	13.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		990	µg/Kg	1	1000	99	78.3 - 111
Toluene-d8		1000	µg/Kg	1	1000	100	91.4 - 107
4-Bromofluorobenzene (4-BFB)		976	µg/Kg	1	1000	98	68.1 - 120

Sample: 228931 - MW-2 (11-12)

Laboratory:	Lubbock				
Analysis:	Moisture Content	Analytical Method:	ASTM D 2216-05	Prep Method:	N/A
QC Batch:	69462	Date Analyzed:	2010-04-27	Analyzed By:	SS
Prep Batch:	59452	Sample Preparation:	2010-04-26	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Moisture		21.6	%	1	

Sample: 228931 - MW-2 (11-12)

Laboratory:	Lubbock				
Analysis:	TX1005 - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	69469	Date Analyzed:	2010-04-28	Analyzed By:	AW
Prep Batch:	59465	Sample Preparation:	2010-04-26	Prepared By:	AW

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
C6-C12	JB	**22.3**	<63.8	19.4	mg/Kg	1	10.2	50	7.97
>C12-C28	U	<7.52	<63.8	<7.52	mg/Kg	1	7.52	50	5.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		88.8	mg/Kg	1	100	89	70 - 130
n-Tricosane		105	mg/Kg	1	100	105	70 - 130
n-Triacontane		124	mg/Kg	1	100	124	60.7 - 146

Sample: 228931 - MW-2 (11-12)

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69447	Date Analyzed:	2010-04-26	Analyzed By:	KB
Prep Batch:	59443	Sample Preparation:	2010-04-26	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<4.64	<25.5	<4.64	μg/Kg	1	4.64	20	3.64
Dichlorodifluoromethane	[11] U	<6.57	<25.5	<6.57	μg/Kg	1	6.57	20	5.15
Chloromethane (methyl chloride)	U	<5.31	<25.5	<5.31	μg/Kg	1	5.31	20	4.16
Vinyl Chloride	U	<5.69	<25.5	<5.69	μg/Kg	1	5.69	20	4.46
Bromomethane (methyl bromide)	U	<8.94	<128	<8.94	μg/Kg	1	8.94	100	7.01
Chloroethane	U	<3.43	<25.5	<3.43	μg/Kg	1	3.43	20	2.69

continued . . .

[11] Concentration biased low.

sample 228931 continued . . .

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Trichlorofluoromethane	U	<5.15	<25.5	<5.15	µg/Kg	1	5.15	20	4.04
Acetone	U	<55.1	<255	<55.1	µg/Kg	1	55.1	200	43.2
Iodomethane (methyl iodide)	U	<8.15	<128	<8.15	µg/Kg	1	8.15	100	6.39
Carbon Disulfide	U	<8.90	<25.5	<8.90	µg/Kg	1	8.90	20	6.98
Acrylonitrile	U	<3.56	<25.5	<3.56	µg/Kg	1	3.56	20	2.79
2-Butanone (MEK)	U	<8.76	<128	<8.76	µg/Kg	1	8.76	100	6.87
4-Methyl-2-pentanone (MIBK)	U	<5.37	<128	<5.37	µg/Kg	1	5.37	100	4.21
2-Hexanone	U	<3.75	<128	<3.75	µg/Kg	1	3.75	100	2.94
trans 1,4-Dichloro-2-butene	U	<3.07	<255	<3.07	µg/Kg	1	3.07	200	2.41
1,1-Dichloroethene	U	<8.33	<25.5	<8.33	µg/Kg	1	8.33	20	6.53
Methylene chloride	U	<21.4	<128	<21.4	µg/Kg	1	21.4	100	16.8
MTBE	U	<2.73	<25.5	<2.73	µg/Kg	1	2.73	20	2.14
trans-1,2-Dichloroethene	U	<8.29	<25.5	<8.29	µg/Kg	1	8.29	20	6.5
1,1-Dichloroethane	U	<7.58	<25.5	<7.58	µg/Kg	1	7.58	20	5.94
cis-1,2-Dichloroethene	U	<7.64	<25.5	<7.64	µg/Kg	1	7.64	20	5.99
2,2-Dichloropropane	U	<10.4	<25.5	<10.4	µg/Kg	1	10.4	20	8.12
1,2-Dichloroethane (EDC)	U	<4.68	<25.5	<4.68	µg/Kg	1	4.68	20	3.67
Chloroform	U	<6.77	<25.5	<6.77	µg/Kg	1	6.77	20	5.31
1,1,1-Trichloroethane	U	<9.90	<25.5	<9.90	µg/Kg	1	9.90	20	7.76
1,1-Dichloropropene	U	<9.48	<25.5	<9.48	µg/Kg	1	9.48	20	7.43
Benzene	U	<7.95	<25.5	<7.95	µg/Kg	1	7.95	20	6.23
Carbon Tetrachloride	U	<8.06	<25.5	<8.06	µg/Kg	1	8.06	20	6.32
1,2-Dichloropropane	U	<6.67	<25.5	<6.67	µg/Kg	1	6.67	20	5.23
Trichloroethene (TCE)	U	<10.1	<25.5	<10.1	µg/Kg	1	10.1	20	7.95
Dibromomethane (methylene bromide)	U	<4.35	<25.5	<4.35	µg/Kg	1	4.35	20	3.41
Bromodichloromethane	U	<5.14	<25.5	<5.14	µg/Kg	1	5.14	20	4.03
2-Chloroethyl vinyl ether	U	<2.83	<25.5	<2.83	µg/Kg	1	2.83	20	2.22
cis-1,3-Dichloropropene	U	<4.77	<25.5	<4.77	µg/Kg	1	4.77	20	3.74
trans-1,3-Dichloropropene	U	<5.05	<25.5	<5.05	µg/Kg	1	5.05	20	3.96
Toluene	U	<7.78	<25.5	<7.78	µg/Kg	1	7.78	20	6.1
1,1,2-Trichloroethane	U	<2.63	<25.5	<2.63	µg/Kg	1	2.63	20	2.06
1,3-Dichloropropane	U	<4.77	<25.5	<4.77	µg/Kg	1	4.77	20	3.74
Dibromochloromethane	U	<4.82	<25.5	<4.82	µg/Kg	1	4.82	20	3.78
1,2-Dibromoethane (EDB)	U	<2.60	<25.5	<2.60	µg/Kg	1	2.60	20	2.04
Tetrachloroethene (PCE)	U	<9.23	<25.5	<9.23	µg/Kg	1	9.23	20	7.24
Chlorobenzene	U	<7.84	<25.5	<7.84	µg/Kg	1	7.84	20	6.15
1,1,1,2-Tetrachloroethane	U	<5.24	<25.5	<5.24	µg/Kg	1	5.24	20	4.11
Ethylbenzene	U	<6.99	<25.5	<6.99	µg/Kg	1	6.99	20	5.48
m,p-Xylene	U	<14.7	<25.5	<14.7	µg/Kg	1	14.7	20	11.5
Bromoform	U	<2.86	<25.5	<2.86	µg/Kg	1	2.86	20	2.24
Styrene	U	<5.38	<25.5	<5.38	µg/Kg	1	5.38	20	4.22
o-Xylene	U	<7.51	<25.5	<7.51	µg/Kg	1	7.51	20	5.89
1,1,2,2-Tetrachloroethane	U	<2.93	<25.5	<2.93	µg/Kg	1	2.93	20	2.3
2-Chlorotoluene	U	<7.46	<25.5	<7.46	µg/Kg	1	7.46	20	5.85
1,2,3-Trichloropropane	U	<5.64	<25.5	<5.64	µg/Kg	1	5.64	20	4.42

continued . . .

sample 228931 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Isopropylbenzene	U	<7.56	<25.5	<7.56	µg/Kg	1	7.56	20	5.93
Bromobenzene	U	<10.5	<25.5	<10.5	µg/Kg	1	10.5	20	8.21
n-Propylbenzene	U	<7.68	<25.5	<7.68	µg/Kg	1	7.68	20	6.02
1,3,5-Trimethylbenzene	U	<6.82	<25.5	<6.82	µg/Kg	1	6.82	20	5.35
tert-Butylbenzene	U	<7.83	<25.5	<7.83	µg/Kg	1	7.83	20	6.14
1,2,4-Trimethylbenzene	U	<7.00	<25.5	<7.00	µg/Kg	1	7.00	20	5.49
1,4-Dichlorobenzene (para)	U	<6.04	<25.5	<6.04	µg/Kg	1	6.04	20	4.74
sec-Butylbenzene	U	<7.86	<25.5	<7.86	µg/Kg	1	7.86	20	6.16
1,3-Dichlorobenzene (meta)	U	<7.87	<25.5	<7.87	µg/Kg	1	7.87	20	6.17
p-Isopropyltoluene	U	<8.14	<25.5	<8.14	µg/Kg	1	8.14	20	6.38
4-Chlorotoluene	U	<7.69	<25.5	<7.69	µg/Kg	1	7.69	20	6.03
1,2-Dichlorobenzene (ortho)	U	<6.33	<25.5	<6.33	µg/Kg	1	6.33	20	4.96
n-Butylbenzene	U	<7.68	<25.5	<7.68	µg/Kg	1	7.68	20	6.02
1,2-Dibromo-3-chloropropane	U	<8.66	<128	<8.66	µg/Kg	1	8.66	100	6.79
1,2,3-Trichlorobenzene	U	<6.26	<128	<6.26	µg/Kg	1	6.26	100	4.91
1,2,4-Trichlorobenzene	U	<5.88	<128	<5.88	µg/Kg	1	5.88	100	4.61
Naphthalene	U	<3.00	<128	<3.00	µg/Kg	1	3.00	100	2.35
Hexachlorobutadiene	U	<17.7	<128	<17.7	µg/Kg	1	17.7	100	13.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		980	µg/Kg	1	1000	98	78.3 - 111
Toluene-d8		989	µg/Kg	1	1000	99	91.4 - 107
4-Bromofluorobenzene (4-BFB)		988	µg/Kg	1	1000	99	68.1 - 120

Sample: 228932 - MW-2 (16-17)

Laboratory:	Lubbock				
Analysis:	Moisture Content	Analytical Method:	ASTM D 2216-05	Prep Method:	N/A
QC Batch:	69299	Date Analyzed:	2010-04-21	Analyzed By:	SS
Prep Batch:	59311	Sample Preparation:	2010-04-20	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
Moisture		24.1	%	1	

Sample: 228932 - MW-2 (16-17)

Laboratory:	Lubbock				
Analysis:	TX1005 - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	69276	Date Analyzed:	2010-04-20	Analyzed By:	AW
Prep Batch:	59293	Sample Preparation:	2010-04-20	Prepared By:	AW

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
C6-C12	JB	**11.6**	<65.9	10.9	mg/Kg	1	10.5	50	7.97
>C12-C28	U	<7.77	<65.9	<7.77	mg/Kg	1	7.77	50	5.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		80.8	mg/Kg	1	100	81	70 - 130
n-Tricosane		102	mg/Kg	1	100	102	70 - 130
n-Triacontane		112	mg/Kg	1	100	112	60.7 - 146

Sample: 228932 - MW-2 (16-17)

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69336	Date Analyzed:	2010-04-21	Analyzed By:	KB
Prep Batch:	59345	Sample Preparation:	2010-04-21	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<4.80	<26.4	<4.80	µg/Kg	1	4.80	20	3.64
Dichlorodifluoromethane	U	<6.78	<26.4	<6.78	µg/Kg	1	6.78	20	5.15
Chloromethane (methyl chloride)	U	<5.48	<26.4	<5.48	µg/Kg	1	5.48	20	4.16
Vinyl Chloride	U	<5.88	<26.4	<5.88	µg/Kg	1	5.88	20	4.46
Bromomethane (methyl bromide)	U	<9.24	<132	<9.24	µg/Kg	1	9.24	100	7.01
Chloroethane	U	<3.54	<26.4	<3.54	µg/Kg	1	3.54	20	2.69
Trichlorofluoromethane	U	<5.32	<26.4	<5.32	µg/Kg	1	5.32	20	4.04
Acetone	U	<56.9	<264	<56.9	µg/Kg	1	56.9	200	43.2
Iodomethane (methyl iodide)	U	<8.42	<132	<8.42	µg/Kg	1	8.42	100	6.39
Carbon Disulfide	U	<9.20	<26.4	<9.20	µg/Kg	1	9.20	20	6.98
Acrylonitrile	U	<3.68	<26.4	<3.68	µg/Kg	1	3.68	20	2.79
2-Butanone (MEK)	U	<9.05	<132	<9.05	µg/Kg	1	9.05	100	6.87
4-Methyl-2-pentanone (MIBK)	U	<5.55	<132	<5.55	µg/Kg	1	5.55	100	4.21
2-Hexanone	U	<3.87	<132	<3.87	µg/Kg	1	3.87	100	2.94
trans 1,4-Dichloro-2-butene	U	<3.18	<264	<3.18	µg/Kg	1	3.18	200	2.41
1,1-Dichloroethene	U	<8.60	<26.4	<8.60	µg/Kg	1	8.60	20	6.53
Methylene chloride	U	<22.1	<132	<22.1	µg/Kg	1	22.1	100	16.8
MTBE	U	<2.82	<26.4	<2.82	µg/Kg	1	2.82	20	2.14
trans-1,2-Dichloroethene	U	<8.56	<26.4	<8.56	µg/Kg	1	8.56	20	6.5
1,1-Dichloroethane	U	<7.83	<26.4	<7.83	µg/Kg	1	7.83	20	5.94
cis-1,2-Dichloroethene	U	<7.89	<26.4	<7.89	µg/Kg	1	7.89	20	5.99
2,2-Dichloropropane	U	<10.7	<26.4	<10.7	µg/Kg	1	10.7	20	8.12
1,2-Dichloroethane (EDC)	U	<4.84	<26.4	<4.84	µg/Kg	1	4.84	20	3.67
Chloroform	U	<7.00	<26.4	<7.00	µg/Kg	1	7.00	20	5.31
1,1,1-Trichloroethane	U	<10.2	<26.4	<10.2	µg/Kg	1	10.2	20	7.76
1,1-Dichloropropene	U	<9.79	<26.4	<9.79	µg/Kg	1	9.79	20	7.43
Benzene	U	<8.21	<26.4	<8.21	µg/Kg	1	8.21	20	6.23

continued . . .

sample 228932 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Carbon Tetrachloride	U	<8.33	<26.4	<8.33	µg/Kg	1	8.33	20	6.32
1,2-Dichloropropane	U	<6.89	<26.4	<6.89	µg/Kg	1	6.89	20	5.23
Trichloroethene (TCE)	U	<10.5	<26.4	<10.5	µg/Kg	1	10.5	20	7.95
Dibromomethane (methylene bromide)	U	<4.49	<26.4	<4.49	µg/Kg	1	4.49	20	3.41
Bromodichloromethane	U	<5.31	<26.4	<5.31	µg/Kg	1	5.31	20	4.03
2-Chloroethyl vinyl ether	U	<2.92	<26.4	<2.92	µg/Kg	1	2.92	20	2.22
cis-1,3-Dichloropropene	U	<4.93	<26.4	<4.93	µg/Kg	1	4.93	20	3.74
trans-1,3-Dichloropropene	U	<5.22	<26.4	<5.22	µg/Kg	1	5.22	20	3.96
Toluene	U	<8.04	<26.4	<8.04	µg/Kg	1	8.04	20	6.1
1,1,2-Trichloroethane	U	<2.71	<26.4	<2.71	µg/Kg	1	2.71	20	2.06
1,3-Dichloropropane	U	<4.93	<26.4	<4.93	µg/Kg	1	4.93	20	3.74
Dibromochloromethane	U	<4.98	<26.4	<4.98	µg/Kg	1	4.98	20	3.78
1,2-Dibromoethane (EDB)	U	<2.69	<26.4	<2.69	µg/Kg	1	2.69	20	2.04
Tetrachloroethene (PCE)	U	<9.54	<26.4	<9.54	µg/Kg	1	9.54	20	7.24
Chlorobenzene	U	<8.10	<26.4	<8.10	µg/Kg	1	8.10	20	6.15
1,1,1,2-Tetrachloroethane	U	<5.42	<26.4	<5.42	µg/Kg	1	5.42	20	4.11
Ethylbenzene	U	<7.22	<26.4	<7.22	µg/Kg	1	7.22	20	5.48
m,p-Xylene	U	<15.2	<26.4	<15.2	µg/Kg	1	15.2	20	11.5
Bromoform	U	<2.95	<26.4	<2.95	µg/Kg	1	2.95	20	2.24
Styrene	U	<5.56	<26.4	<5.56	µg/Kg	1	5.56	20	4.22
o-Xylene	U	<7.76	<26.4	<7.76	µg/Kg	1	7.76	20	5.89
1,1,2,2-Tetrachloroethane	U	<3.03	<26.4	<3.03	µg/Kg	1	3.03	20	2.3
2-Chlorotoluene	U	<7.71	<26.4	<7.71	µg/Kg	1	7.71	20	5.85
1,2,3-Trichloropropane	U	<5.82	<26.4	<5.82	µg/Kg	1	5.82	20	4.42
Isopropylbenzene	U	<7.81	<26.4	<7.81	µg/Kg	1	7.81	20	5.93
Bromobenzene	U	<10.8	<26.4	<10.8	µg/Kg	1	10.8	20	8.21
n-Propylbenzene	U	<7.93	<26.4	<7.93	µg/Kg	1	7.93	20	6.02
1,3,5-Trimethylbenzene	U	<7.05	<26.4	<7.05	µg/Kg	1	7.05	20	5.35
tert-Butylbenzene	U	<8.09	<26.4	<8.09	µg/Kg	1	8.09	20	6.14
1,2,4-Trimethylbenzene	U	<7.23	<26.4	<7.23	µg/Kg	1	7.23	20	5.49
1,4-Dichlorobenzene (para)	U	<6.24	<26.4	<6.24	µg/Kg	1	6.24	20	4.74
sec-Butylbenzene	U	<8.12	<26.4	<8.12	µg/Kg	1	8.12	20	6.16
1,3-Dichlorobenzene (meta)	U	<8.13	<26.4	<8.13	µg/Kg	1	8.13	20	6.17
p-Isopropyltoluene	U	<8.40	<26.4	<8.40	µg/Kg	1	8.40	20	6.38
4-Chlorotoluene	U	<7.94	<26.4	<7.94	µg/Kg	1	7.94	20	6.03
1,2-Dichlorobenzene (ortho)	U	<6.53	<26.4	<6.53	µg/Kg	1	6.53	20	4.96
n-Butylbenzene	U	<7.93	<26.4	<7.93	µg/Kg	1	7.93	20	6.02
1,2-Dibromo-3-chloropropane	U	<8.94	<132	<8.94	µg/Kg	1	8.94	100	6.79
1,2,3-Trichlorobenzene	U	<6.47	<132	<6.47	µg/Kg	1	6.47	100	4.91
1,2,4-Trichlorobenzene	U	<6.07	<132	<6.07	µg/Kg	1	6.07	100	4.61
Naphthalene	U	<3.10	<132	<3.10	µg/Kg	1	3.10	100	2.35
Hexachlorobutadiene	U	<18.3	<132	<18.3	µg/Kg	1	18.3	100	13.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		966	μg/Kg	1	1000	97	78.3 - 111
Toluene-d8		1000	μg/Kg	1	1000	100	91.4 - 107
4-Bromofluorobenzene (4-BFB)		983	μg/Kg	1	1000	98	68.1 - 120

Sample: 228934 - Rinsate

Laboratory:	Lubbock				
Analysis:	TX1005 - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	69217	Date Analyzed:	2010-04-19	Analyzed By:	AW
Prep Batch:	59252	Sample Preparation:	2010-04-19	Prepared By:	AW

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
C6-C12	U	<0.817	<5.00	<0.817	mg/L	1	0.817	5	0.817
>C12-C28	U	<0.889	<5.00	<0.889	mg/L	1	0.889	5	0.889

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		9.34	mg/L	1	10.0	93	70 - 130
n-Tricosane	[12]	13.3	mg/L	1	10.0	133	70 - 130
n-Triacontane		14.3	mg/L	1	10.0	143	59.6 - 155

Sample: 228934 - Rinsate

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69365	Date Analyzed:	2010-04-22	Analyzed By:	KB
Prep Batch:	59371	Sample Preparation:	2010-04-22	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
Dichlorodifluoromethane	[13] U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
Chloromethane (methyl chloride)	U	<0.350	<1.00	<0.350	μg/L	1	0.350	1	0.35
Vinyl Chloride	U	<0.360	<1.00	<0.360	μg/L	1	0.360	1	0.36
Bromomethane (methyl bromide)	U	<0.620	<5.00	<0.620	μg/L	1	0.620	5	0.62
Chloroethane	U	<0.560	<1.00	<0.560	μg/L	1	0.560	1	0.56
Trichlorofluoromethane	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Acetone	U	<1.63	<10.0	<1.63	μg/L	1	1.63	10	1.63
Iodomethane (methyl iodide)	U	<0.210	<5.00	<0.210	μg/L	1	0.210	5	0.21
Carbon Disulfide	U	<0.280	<1.00	<0.280	μg/L	1	0.280	1	0.28

continued ...

[12] High surrogate recovery, result bias high.
[13] Concentration biased low.

sample 228934 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Acrylonitrile	U	<0.290	<1.00	<0.290	μg/L	1	0.290	1	0.29
2-Butanone (MEK)	U	<0.750	<5.00	<0.750	μg/L	1	0.750	5	0.75
4-Methyl-2-pentanone (MIBK)	U	<0.680	<5.00	<0.680	μg/L	1	0.680	5	0.68
2-Hexanone	U	<0.480	<5.00	<0.480	μg/L	1	0.480	5	0.48
trans 1,4-Dichloro-2-butene	U	<0.230	<10.0	<0.230	μg/L	1	0.230	10	0.23
1,1-Dichloroethene	U	<0.240	<1.00	<0.240	μg/L	1	0.240	1	0.24
Methylene chloride	U	<0.520	<5.00	<0.520	μg/L	1	0.520	5	0.52
MTBE	U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
trans-1,2-Dichloroethene	U	<0.240	<1.00	<0.240	μg/L	1	0.240	1	0.24
1,1-Dichloroethane	U	<0.180	<1.00	<0.180	μg/L	1	0.180	1	0.18
cis-1,2-Dichloroethene	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
2,2-Dichloropropane	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
1,2-Dichloroethane (EDC)	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Chloroform		**1.18**	**1.18**	<0.160	μg/L	1	0.160	1	0.16
1,1,1-Trichloroethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
1,1-Dichloropropene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
Benzene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Carbon Tetrachloride	U	<0.540	<1.00	<0.540	μg/L	1	0.540	1	0.54
1,2-Dichloropropane	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Trichloroethene (TCE)	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Dibromomethane (methylene bromide)	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Bromodichloromethane		**1.35**	**1.35**	<0.180	μg/L	1	0.180	1	0.18
2-Chloroethyl vinyl ether	U	<0.130	<5.00	<0.130	μg/L	1	0.130	5	0.13
cis-1,3-Dichloropropene	U	<0.230	<1.00	<0.230	μg/L	1	0.230	1	0.23
trans-1,3-Dichloropropene	U	<0.220	<1.00	<0.220	μg/L	1	0.220	1	0.22
Toluene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
1,1,2-Trichloroethane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
1,3-Dichloropropane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
Dibromochloromethane	J	**0.890**	<1.00	<0.150	μg/L	1	0.150	1	0.15
1,2-Dibromoethane (EDB)	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
Tetrachloroethene (PCE)	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
Chlorobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
1,1,1,2-Tetrachloroethane	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Ethylbenzene	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
m,p-Xylene	U	<0.270	<1.00	<0.270	μg/L	1	0.270	1	0.27
Bromoform	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Styrene	U	<0.0900	<1.00	<0.0900	μg/L	1	0.0900	1	0.09
o-Xylene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,1,2,2-Tetrachloroethane	U	<0.320	<1.00	<0.320	μg/L	1	0.320	1	0.32
2-Chlorotoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,2,3-Trichloropropane	U	<0.620	<1.00	<0.620	μg/L	1	0.620	1	0.62
Isopropylbenzene	U	<0.530	<1.00	<0.530	μg/L	1	0.530	1	0.53
Bromobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Propylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11
1,3,5-Trimethylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11

continued ...

sample 228934 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
tert-Butylbenzene	U	<0.450	<1.00	<0.450	μg/L	1	0.450	1	0.45
1,2,4-Trimethylbenzene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,4-Dichlorobenzene (para)	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
sec-Butylbenzene	U	<0.460	<1.00	<0.460	μg/L	1	0.460	1	0.46
1,3-Dichlorobenzene (meta)	U	<0.520	<1.00	<0.520	μg/L	1	0.520	1	0.52
p-Isopropyltoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
4-Chlorotoluene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,2-Dichlorobenzene (ortho)	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Butylbenzene	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
1,2-Dibromo-3-chloropropane	[14] U	<0.650	<5.00	<0.650	μg/L	1	0.650	5	0.65
1,2,3-Trichlorobenzene	U	<0.240	<5.00	<0.240	μg/L	1	0.240	5	0.24
1,2,4-Trichlorobenzene	U	<0.190	<5.00	<0.190	μg/L	1	0.190	5	0.19
Naphthalene	[15] U	<0.330	<5.00	<0.330	μg/L	1	0.330	5	0.33
Hexachlorobutadiene	U	<0.260	<5.00	<0.260	μg/L	1	0.260	5	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	μg/L	1	50.0	102	88.3 - 117
Toluene-d8		50.7	μg/L	1	50.0	101	87.7 - 112
4-Bromofluorobenzene (4-BFB)		49.9	μg/L	1	50.0	100	84.6 - 114

Sample: 228945 - Trip Blank

Laboratory:	Lubbock				
Analysis:	Volatiles	Analytical Method:	S 8260B	Prep Method:	S 5030B
QC Batch:	69365	Date Analyzed:	2010-04-22	Analyzed By:	KB
Prep Batch:	59371	Sample Preparation:	2010-04-22	Prepared By:	KB

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromochloromethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
Dichlorodifluoromethane	[16] U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
Chloromethane (methyl chloride)	U	<0.350	<1.00	<0.350	μg/L	1	0.350	1	0.35
Vinyl Chloride	U	<0.360	<1.00	<0.360	μg/L	1	0.360	1	0.36
Bromomethane (methyl bromide)	U	<0.620	<5.00	<0.620	μg/L	1	0.620	5	0.62
Chloroethane	U	<0.560	<1.00	<0.560	μg/L	1	0.560	1	0.56
Trichlorofluoromethane	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Acetone	U	<1.63	<10.0	<1.63	μg/L	1	1.63	10	1.63
Iodomethane (methyl iodide)	U	<0.210	<5.00	<0.210	μg/L	1	0.210	5	0.21
Carbon Disulfide	U	<0.280	<1.00	<0.280	μg/L	1	0.280	1	0.28

continued ...

[14] Concentration biased low.
[15] Concentration biased low.
[16] Concentration biased low.

sample 228945 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Acrylonitrile	U	<0.290	<1.00	<0.290	μg/L	1	0.290	1	0.29
2-Butanone (MEK)	U	<0.750	<5.00	<0.750	μg/L	1	0.750	5	0.75
4-Methyl-2-pentanone (MIBK)	U	<0.680	<5.00	<0.680	μg/L	1	0.680	5	0.68
2-Hexanone	U	<0.480	<5.00	<0.480	μg/L	1	0.480	5	0.48
trans 1,4-Dichloro-2-butene	U	<0.230	<10.0	<0.230	μg/L	1	0.230	10	0.23
1,1-Dichloroethene	U	<0.240	<1.00	<0.240	μg/L	1	0.240	1	0.24
Methylene chloride	U	<0.520	<5.00	<0.520	μg/L	1	0.520	5	0.52
MTBE	U	<0.480	<1.00	<0.480	μg/L	1	0.480	1	0.48
trans-1,2-Dichloroethene	U	<0.240	<1.00	<0.240	μg/L	1	0.240	1	0.24
1,1-Dichloroethane	U	<0.180	<1.00	<0.180	μg/L	1	0.180	1	0.18
cis-1,2-Dichloroethene	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
2,2-Dichloropropane	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
1,2-Dichloroethane (EDC)	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Chloroform	U	<0.160	<1.00	<0.160	μg/L	1	0.160	1	0.16
1,1,1-Trichloroethane	U	<0.210	<1.00	<0.210	μg/L	1	0.210	1	0.21
1,1-Dichloropropene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
Benzene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Carbon Tetrachloride	U	<0.540	<1.00	<0.540	μg/L	1	0.540	1	0.54
1,2-Dichloropropane	U	<0.260	<1.00	<0.260	μg/L	1	0.260	1	0.26
Trichloroethene (TCE)	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Dibromomethane (methylene bromide)	U	<0.310	<1.00	<0.310	μg/L	1	0.310	1	0.31
Bromodichloromethane	U	<0.180	<1.00	<0.180	μg/L	1	0.180	1	0.18
2-Chloroethyl vinyl ether	U	<0.130	<5.00	<0.130	μg/L	1	0.130	5	0.13
cis-1,3-Dichloropropene	U	<0.230	<1.00	<0.230	μg/L	1	0.230	1	0.23
trans-1,3-Dichloropropene	U	<0.220	<1.00	<0.220	μg/L	1	0.220	1	0.22
Toluene	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
1,1,2-Trichloroethane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
1,3-Dichloropropane	U	<0.300	<1.00	<0.300	μg/L	1	0.300	1	0.3
Dibromochloromethane	U	<0.150	<1.00	<0.150	μg/L	1	0.150	1	0.15
1,2-Dibromoethane (EDB)	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
Tetrachloroethene (PCE)	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
Chlorobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
1,1,1,2-Tetrachloroethane	U	<0.200	<1.00	<0.200	μg/L	1	0.200	1	0.2
Ethylbenzene	U	<0.140	<1.00	<0.140	μg/L	1	0.140	1	0.14
m,p-Xylene	U	<0.270	<1.00	<0.270	μg/L	1	0.270	1	0.27
Bromoform	U	<0.190	<1.00	<0.190	μg/L	1	0.190	1	0.19
Styrene	U	<0.0900	<1.00	<0.0900	μg/L	1	0.0900	1	0.09
o-Xylene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,1,2,2-Tetrachloroethane	U	<0.320	<1.00	<0.320	μg/L	1	0.320	1	0.32
2-Chlorotoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,2,3-Trichloropropane	U	<0.620	<1.00	<0.620	μg/L	1	0.620	1	0.62
Isopropylbenzene	U	<0.530	<1.00	<0.530	μg/L	1	0.530	1	0.53
Bromobenzene	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Propylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11
1,3,5-Trimethylbenzene	U	<0.110	<1.00	<0.110	μg/L	1	0.110	1	0.11

continued ...

sample 228945 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
tert-Butylbenzene	U	<0.450	<1.00	<0.450	μg/L	1	0.450	1	0.45
1,2,4-Trimethylbenzene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
1,4-Dichlorobenzene (para)	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
sec-Butylbenzene	U	<0.460	<1.00	<0.460	μg/L	1	0.460	1	0.46
1,3-Dichlorobenzene (meta)	U	<0.520	<1.00	<0.520	μg/L	1	0.520	1	0.52
p-Isopropyltoluene	U	<0.100	<1.00	<0.100	μg/L	1	0.100	1	0.1
4-Chlorotoluene	U	<0.120	<1.00	<0.120	μg/L	1	0.120	1	0.12
1,2-Dichlorobenzene (ortho)	U	<0.130	<1.00	<0.130	μg/L	1	0.130	1	0.13
n-Butylbenzene	U	<0.400	<1.00	<0.400	μg/L	1	0.400	1	0.4
1,2-Dibromo-3-chloropropane	[17] U	<0.650	<5.00	<0.650	μg/L	1	0.650	5	0.65
1,2,3-Trichlorobenzene	U	<0.240	<5.00	<0.240	μg/L	1	0.240	5	0.24
1,2,4-Trichlorobenzene	U	<0.190	<5.00	<0.190	μg/L	1	0.190	5	0.19
Naphthalene	[18] U	<0.330	<5.00	<0.330	μg/L	1	0.330	5	0.33
Hexachlorobutadiene	U	<0.260	<5.00	<0.260	μg/L	1	0.260	5	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.4	μg/L	1	50.0	101	88.3 - 117
Toluene-d8		50.7	μg/L	1	50.0	101	87.7 - 112
4-Bromofluorobenzene (4-BFB)		49.6	μg/L	1	50.0	99	84.6 - 114

Method Blank (1)

QC Batch: 69217 Date Analyzed: 2010-04-19 Analyzed By: AW
Prep Batch: 59252 QC Preparation: 2010-04-19 Prepared By: AW

Parameter	Flag	Result	Units	Reporting Limits
C6-C12		<0.817	mg/L	0.817
>C12-C28		<0.889	mg/L	0.889

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		8.55	mg/L	1	10.0	86	70 - 130
n-Tricosane		9.84	mg/L	1	10.0	98	70 - 130
n-Triacontane		10.1	mg/L	1	10.0	101	59.6 - 155

Method Blank (1)

QC Batch: 69276 Date Analyzed: 2010-04-20 Analyzed By: AW
Prep Batch: 59293 QC Preparation: 2010-04-20 Prepared By: AW

[17] Concentration biased low.
[18] Concentration biased low.

Parameter	Flag	Result	Units	Reporting Limits
C6-C12		8.30	mg/Kg	7.97
>C12-C28		<5.90	mg/Kg	5.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		82.3	mg/Kg	1	100	82	70 - 130
n-Tricosane		101	mg/Kg	1	100	101	70 - 130
n-Triacontane		110	mg/Kg	1	100	110	60.7 - 146

Method Blank (1)

QC Batch: 69336 Date Analyzed: 2010-04-21 Analyzed By: KB
Prep Batch: 59345 QC Preparation: 2010-04-21 Prepared By: KB

Parameter	Flag	Result	Units	Reporting Limits
Bromochloromethane		<3.64	µg/Kg	3.64
Dichlorodifluoromethane		<5.15	µg/Kg	5.15
Chloromethane (methyl chloride)		<4.16	µg/Kg	4.16
Vinyl Chloride		<4.46	µg/Kg	4.46
Bromomethane (methyl bromide)		<7.01	µg/Kg	7.01
Chloroethane		<2.69	µg/Kg	2.69
Trichlorofluoromethane		<4.04	µg/Kg	4.04
Acetone		<43.2	µg/Kg	43.2
Iodomethane (methyl iodide)		<6.39	µg/Kg	6.39
Carbon Disulfide		<6.98	µg/Kg	6.98
Acrylonitrile		<2.79	µg/Kg	2.79
2-Butanone (MEK)		<6.87	µg/Kg	6.87
4-Methyl-2-pentanone (MIBK)		<4.21	µg/Kg	4.21
2-Hexanone		<2.94	µg/Kg	2.94
trans 1,4-Dichloro-2-butene		<2.41	µg/Kg	2.41
1,1-Dichloroethene		<6.53	µg/Kg	6.53
Methylene chloride		<16.8	µg/Kg	16.8
MTBE		<2.14	µg/Kg	2.14
trans-1,2-Dichloroethene		<6.50	µg/Kg	6.5
1,1-Dichloroethane		<5.94	µg/Kg	5.94
cis-1,2-Dichloroethene		<5.99	µg/Kg	5.99
2,2-Dichloropropane		<8.12	µg/Kg	8.12
1,2-Dichloroethane (EDC)		<3.67	µg/Kg	3.67
Chloroform		<5.31	µg/Kg	5.31
1,1,1-Trichloroethane		<7.76	µg/Kg	7.76
1,1-Dichloropropene		<7.43	µg/Kg	7.43
Benzene		<6.23	µg/Kg	6.23
Carbon Tetrachloride		<6.32	µg/Kg	6.32
1,2-Dichloropropane		<5.23	µg/Kg	5.23
Trichloroethene (TCE)		<7.95	µg/Kg	7.95
Dibromomethane (methylene bromide)		<3.41	µg/Kg	3.41

continued ...

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
Bromodichloromethane		<4.03	μg/Kg	4.03
2-Chloroethyl vinyl ether		<2.22	μg/Kg	2.22
cis-1,3-Dichloropropene		<3.74	μg/Kg	3.74
trans-1,3-Dichloropropene		<3.96	μg/Kg	3.96
Toluene		<6.10	μg/Kg	6.1
1,1,2-Trichloroethane		<2.06	μg/Kg	2.06
1,3-Dichloropropane		<3.74	μg/Kg	3.74
Dibromochloromethane		<3.78	μg/Kg	3.78
1,2-Dibromoethane (EDB)		<2.04	μg/Kg	2.04
Tetrachloroethene (PCE)		<7.24	μg/Kg	7.24
Chlorobenzene		<6.15	μg/Kg	6.15
1,1,1,2-Tetrachloroethane		<4.11	μg/Kg	4.11
Ethylbenzene		<5.48	μg/Kg	5.48
m,p-Xylene		<11.5	μg/Kg	11.5
Bromoform		<2.24	μg/Kg	2.24
Styrene		<4.22	μg/Kg	4.22
o-Xylene		<5.89	μg/Kg	5.89
1,1,2,2-Tetrachloroethane		<2.30	μg/Kg	2.3
2-Chlorotoluene		<5.85	μg/Kg	5.85
1,2,3-Trichloropropane		<4.42	μg/Kg	4.42
Isopropylbenzene		<5.93	μg/Kg	5.93
Bromobenzene		<8.21	μg/Kg	8.21
n-Propylbenzene		<6.02	μg/Kg	6.02
1,3,5-Trimethylbenzene		<5.35	μg/Kg	5.35
tert-Butylbenzene		<6.14	μg/Kg	6.14
1,2,4-Trimethylbenzene		<5.49	μg/Kg	5.49
1,4-Dichlorobenzene (para)		<4.74	μg/Kg	4.74
sec-Butylbenzene		<6.16	μg/Kg	6.16
1,3-Dichlorobenzene (meta)		<6.17	μg/Kg	6.17
p-Isopropyltoluene		<6.38	μg/Kg	6.38
4-Chlorotoluene		<6.03	μg/Kg	6.03
1,2-Dichlorobenzene (ortho)		<4.96	μg/Kg	4.96
n-Butylbenzene		<6.02	μg/Kg	6.02
1,2-Dibromo-3-chloropropane		<6.79	μg/Kg	6.79
1,2,3-Trichlorobenzene		<4.91	μg/Kg	4.91
1,2,4-Trichlorobenzene		<4.61	μg/Kg	4.61
Naphthalene		<2.35	μg/Kg	2.35
Hexachlorobutadiene		<13.9	μg/Kg	13.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		979	μg/Kg	1	1000	98	78.3 - 111
Toluene-d8		1020	μg/Kg	1	1000	102	91.4 - 107
4-Bromofluorobenzene (4-BFB)		947	μg/Kg	1	1000	95	68.1 - 120

Method Blank (1)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB
Prep Batch: 59371 QC Preparation: 2010-04-22 Prepared By: KB

Parameter	Flag	Result	Units	Reporting Limits
Bromochloromethane		<0.210	μg/L	0.21
Dichlorodifluoromethane		<0.480	μg/L	0.48
Chloromethane (methyl chloride)		<0.350	μg/L	0.35
Vinyl Chloride		<0.360	μg/L	0.36
Bromomethane (methyl bromide)		<0.620	μg/L	0.62
Chloroethane		<0.560	μg/L	0.56
Trichlorofluoromethane		<0.310	μg/L	0.31
Acetone		<1.63	μg/L	1.63
Iodomethane (methyl iodide)		<0.210	μg/L	0.21
Carbon Disulfide		<0.280	μg/L	0.28
Acrylonitrile		<0.290	μg/L	0.29
2-Butanone (MEK)		<0.750	μg/L	0.75
4-Methyl-2-pentanone (MIBK)		<0.680	μg/L	0.68
2-Hexanone		<0.480	μg/L	0.48
trans 1,4-Dichloro-2-butene		<0.230	μg/L	0.23
1,1-Dichloroethene		<0.240	μg/L	0.24
Methylene chloride		<0.520	μg/L	0.52
MTBE		<0.480	μg/L	0.48
trans-1,2-Dichloroethene		<0.240	μg/L	0.24
1,1-Dichloroethane		<0.180	μg/L	0.18
cis-1,2-Dichloroethene		<0.210	μg/L	0.21
2,2-Dichloropropane		<0.140	μg/L	0.14
1,2-Dichloroethane (EDC)		<0.260	μg/L	0.26
Chloroform		<0.160	μg/L	0.16
1,1,1-Trichloroethane		<0.210	μg/L	0.21
1,1-Dichloropropene		<0.130	μg/L	0.13
Benzene		<0.200	μg/L	0.2
Carbon Tetrachloride		<0.540	μg/L	0.54
1,2-Dichloropropane		<0.260	μg/L	0.26
Trichloroethene (TCE)		<0.190	μg/L	0.19
Dibromomethane (methylene bromide)		<0.310	μg/L	0.31
Bromodichloromethane		<0.180	μg/L	0.18
2-Chloroethyl vinyl ether		<0.130	μg/L	0.13
cis-1,3-Dichloropropene		<0.230	μg/L	0.23
trans-1,3-Dichloropropene		<0.220	μg/L	0.22
Toluene		<0.200	μg/L	0.2
1,1,2-Trichloroethane		<0.300	μg/L	0.3
1,3-Dichloropropane		<0.300	μg/L	0.3
Dibromochloromethane		<0.150	μg/L	0.15
1,2-Dibromoethane (EDB)		<0.140	μg/L	0.14
Tetrachloroethene (PCE)		<0.400	μg/L	0.4
Chlorobenzene		<0.130	μg/L	0.13
1,1,1,2-Tetrachloroethane		<0.200	μg/L	0.2
Ethylbenzene		<0.140	μg/L	0.14

continued ...

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
m,p-Xylene		<0.270	μg/L	0.27
Bromoform		<0.190	μg/L	0.19
Styrene		<0.0900	μg/L	0.09
o-Xylene		<0.120	μg/L	0.12
1,1,2,2-Tetrachloroethane		<0.320	μg/L	0.32
2-Chlorotoluene		<0.100	μg/L	0.1
1,2,3-Trichloropropane		<0.620	μg/L	0.62
Isopropylbenzene		<0.530	μg/L	0.53
Bromobenzene		<0.130	μg/L	0.13
n-Propylbenzene		<0.110	μg/L	0.11
1,3,5-Trimethylbenzene		<0.110	μg/L	0.11
tert-Butylbenzene		<0.450	μg/L	0.45
1,2,4-Trimethylbenzene		<0.100	μg/L	0.1
1,4-Dichlorobenzene (para)		<0.120	μg/L	0.12
sec-Butylbenzene		<0.460	μg/L	0.46
1,3-Dichlorobenzene (meta)		<0.520	μg/L	0.52
p-Isopropyltoluene		<0.100	μg/L	0.1
4-Chlorotoluene		<0.120	μg/L	0.12
1,2-Dichlorobenzene (ortho)		<0.130	μg/L	0.13
n-Butylbenzene		<0.400	μg/L	0.4
1,2-Dibromo-3-chloropropane		<0.650	μg/L	0.65
1,2,3-Trichlorobenzene		<0.240	μg/L	0.24
1,2,4-Trichlorobenzene		<0.190	μg/L	0.19
Naphthalene		<0.330	μg/L	0.33
Hexachlorobutadiene		<0.260	μg/L	0.26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.3	μg/L	1	50.0	101	88.3 - 117
Toluene-d8		49.9	μg/L	1	50.0	100	87.7 - 112
4-Bromofluorobenzene (4-BFB)		49.3	μg/L	1	50.0	99	84.6 - 114

Method Blank (1)

QC Batch: 69406 Date Analyzed: 2010-04-23 Analyzed By: AW
Prep Batch: 59405 QC Preparation: 2010-04-23 Prepared By: AW

Parameter	Flag	Result	Units	Reporting Limits
C6-C12		31.4	mg/Kg	7.97
>C12-C28		<5.90	mg/Kg	5.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		77.7	mg/Kg	1	100	78	70 - 130
n-Tricosane		103	mg/Kg	1	100	103	70 - 130

continued . . .

method blank continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		113	mg/Kg	1	100	113	60.7 - 146

Method Blank (1)

QC Batch: 69410 Date Analyzed: 2010-04-23 Analyzed By: KB
Prep Batch: 59412 QC Preparation: 2010-04-23 Prepared By: KB

Parameter	Flag	Result	Units	Reporting Limits
Bromochloromethane		<3.64	µg/Kg	3.64
Dichlorodifluoromethane		<5.15	µg/Kg	5.15
Chloromethane (methyl chloride)		6.04	µg/Kg	4.16
Vinyl Chloride		<4.46	µg/Kg	4.46
Bromomethane (methyl bromide)		<7.01	µg/Kg	7.01
Chloroethane		<2.69	µg/Kg	2.69
Trichlorofluoromethane		<4.04	µg/Kg	4.04
Acetone		<43.2	µg/Kg	43.2
Iodomethane (methyl iodide)		<6.39	µg/Kg	6.39
Carbon Disulfide		<6.98	µg/Kg	6.98
Acrylonitrile		<2.79	µg/Kg	2.79
2-Butanone (MEK)		<6.87	µg/Kg	6.87
4-Methyl-2-pentanone (MIBK)		<4.21	µg/Kg	4.21
2-Hexanone		<2.94	µg/Kg	2.94
trans 1,4-Dichloro-2-butene		<2.41	µg/Kg	2.41
1,1-Dichloroethene		<6.53	µg/Kg	6.53
Methylene chloride		97.6	µg/Kg	16.8
MTBE		<2.14	µg/Kg	2.14
trans-1,2-Dichloroethene		<6.50	µg/Kg	6.5
1,1-Dichloroethane		<5.94	µg/Kg	5.94
cis-1,2-Dichloroethene		<5.99	µg/Kg	5.99
2,2-Dichloropropane		<8.12	µg/Kg	8.12
1,2-Dichloroethane (EDC)		<3.67	µg/Kg	3.67
Chloroform		<5.31	µg/Kg	5.31
1,1,1-Trichloroethane		<7.76	µg/Kg	7.76
1,1-Dichloropropene		<7.43	µg/Kg	7.43
Benzene		<6.23	µg/Kg	6.23
Carbon Tetrachloride		<6.32	µg/Kg	6.32
1,2-Dichloropropane		<5.23	µg/Kg	5.23
Trichloroethene (TCE)		<7.95	µg/Kg	7.95
Dibromomethane (methylene bromide)		<3.41	µg/Kg	3.41
Bromodichloromethane		<4.03	µg/Kg	4.03
2-Chloroethyl vinyl ether		<2.22	µg/Kg	2.22
cis-1,3-Dichloropropene		<3.74	µg/Kg	3.74
trans-1,3-Dichloropropene		<3.96	µg/Kg	3.96
Toluene		<6.10	µg/Kg	6.1
1,1,2-Trichloroethane		<2.06	µg/Kg	2.06

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
1,3-Dichloropropane		<3.74	μg/Kg	3.74
Dibromochloromethane		<3.78	μg/Kg	3.78
1,2-Dibromoethane (EDB)		<2.04	μg/Kg	2.04
Tetrachloroethene (PCE)		<7.24	μg/Kg	7.24
Chlorobenzene		<6.15	μg/Kg	6.15
1,1,1,2-Tetrachloroethane		<4.11	μg/Kg	4.11
Ethylbenzene		<5.48	μg/Kg	5.48
m,p-Xylene		<11.5	μg/Kg	11.5
Bromoform		<2.24	μg/Kg	2.24
Styrene		<4.22	μg/Kg	4.22
o-Xylene		<5.89	μg/Kg	5.89
1,1,2,2-Tetrachloroethane		<2.30	μg/Kg	2.3
2-Chlorotoluene		<5.85	μg/Kg	5.85
1,2,3-Trichloropropane		<4.42	μg/Kg	4.42
Isopropylbenzene		<5.93	μg/Kg	5.93
Bromobenzene		<8.21	μg/Kg	8.21
n-Propylbenzene		<6.02	μg/Kg	6.02
1,3,5-Trimethylbenzene		<5.35	μg/Kg	5.35
tert-Butylbenzene		<6.14	μg/Kg	6.14
1,2,4-Trimethylbenzene		<5.49	μg/Kg	5.49
1,4-Dichlorobenzene (para)		<4.74	μg/Kg	4.74
sec-Butylbenzene		<6.16	μg/Kg	6.16
1,3-Dichlorobenzene (meta)		<6.17	μg/Kg	6.17
p-Isopropyltoluene		<6.38	μg/Kg	6.38
4-Chlorotoluene		<6.03	μg/Kg	6.03
1,2-Dichlorobenzene (ortho)		<4.96	μg/Kg	4.96
n-Butylbenzene		<6.02	μg/Kg	6.02
1,2-Dibromo-3-chloropropane		<6.79	μg/Kg	6.79
1,2,3-Trichlorobenzene		<4.91	μg/Kg	4.91
1,2,4-Trichlorobenzene		<4.61	μg/Kg	4.61
Naphthalene		6.35	μg/Kg	2.35
Hexachlorobutadiene		<13.9	μg/Kg	13.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		982	μg/Kg	1	1000	98	78.3 - 111
Toluene-d8		1010	μg/Kg	1	1000	101	91.4 - 107
4-Bromofluorobenzene (4-BFB)		966	μg/Kg	1	1000	97	68.1 - 120

Method Blank (1)

QC Batch:	69447	Date Analyzed:	2010-04-26	Analyzed By:	KB
Prep Batch:	59443	QC Preparation:	2010-04-26	Prepared By:	KB

Parameter	Flag	Result	Units	Reporting Limits
Bromochloromethane		<3.64	μg/Kg	3.64
Dichlorodifluoromethane		<5.15	μg/Kg	5.15
Chloromethane (methyl chloride)		<4.16	μg/Kg	4.16
Vinyl Chloride		<4.46	μg/Kg	4.46
Bromomethane (methyl bromide)		<7.01	μg/Kg	7.01
Chloroethane		<2.69	μg/Kg	2.69
Trichlorofluoromethane		<4.04	μg/Kg	4.04
Acetone		<43.2	μg/Kg	43.2
Iodomethane (methyl iodide)		<6.39	μg/Kg	6.39
Carbon Disulfide		<6.98	μg/Kg	6.98
Acrylonitrile		<2.79	μg/Kg	2.79
2-Butanone (MEK)		<6.87	μg/Kg	6.87
4-Methyl-2-pentanone (MIBK)		<4.21	μg/Kg	4.21
2-Hexanone		<2.94	μg/Kg	2.94
trans 1,4-Dichloro-2-butene		<2.41	μg/Kg	2.41
1,1-Dichloroethene		<6.53	μg/Kg	6.53
Methylene chloride		<16.8	μg/Kg	16.8
MTBE		<2.14	μg/Kg	2.14
trans-1,2-Dichloroethene		<6.50	μg/Kg	6.5
1,1-Dichloroethane		<5.94	μg/Kg	5.94
cis-1,2-Dichloroethene		<5.99	μg/Kg	5.99
2,2-Dichloropropane		<8.12	μg/Kg	8.12
1,2-Dichloroethane (EDC)		<3.67	μg/Kg	3.67
Chloroform		<5.31	μg/Kg	5.31
1,1,1-Trichloroethane		<7.76	μg/Kg	7.76
1,1-Dichloropropene		<7.43	μg/Kg	7.43
Benzene		<6.23	μg/Kg	6.23
Carbon Tetrachloride		<6.32	μg/Kg	6.32
1,2-Dichloropropane		<5.23	μg/Kg	5.23
Trichloroethene (TCE)		<7.95	μg/Kg	7.95
Dibromomethane (methylene bromide)		<3.41	μg/Kg	3.41
Bromodichloromethane		<4.03	μg/Kg	4.03
2-Chloroethyl vinyl ether		<2.22	μg/Kg	2.22
cis-1,3-Dichloropropene		<3.74	μg/Kg	3.74
trans-1,3-Dichloropropene		<3.96	μg/Kg	3.96
Toluene		<6.10	μg/Kg	6.1
1,1,2-Trichloroethane		<2.06	μg/Kg	2.06
1,3-Dichloropropane		<3.74	μg/Kg	3.74
Dibromochloromethane		<3.78	μg/Kg	3.78
1,2-Dibromoethane (EDB)		<2.04	μg/Kg	2.04
Tetrachloroethene (PCE)		<7.24	μg/Kg	7.24
Chlorobenzene		<6.15	μg/Kg	6.15
1,1,1,2-Tetrachloroethane		<4.11	μg/Kg	4.11
Ethylbenzene		<5.48	μg/Kg	5.48
m,p-Xylene		<11.5	μg/Kg	11.5
Bromoform		<2.24	μg/Kg	2.24
Styrene		<4.22	μg/Kg	4.22
o-Xylene		<5.89	μg/Kg	5.89

continued ...

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
1,1,2,2-Tetrachloroethane		<2.30	μg/Kg	2.3
2-Chlorotoluene		<5.85	μg/Kg	5.85
1,2,3-Trichloropropane		<4.42	μg/Kg	4.42
Isopropylbenzene		<5.93	μg/Kg	5.93
Bromobenzene		<8.21	μg/Kg	8.21
n-Propylbenzene		<6.02	μg/Kg	6.02
1,3,5-Trimethylbenzene		<5.35	μg/Kg	5.35
tert-Butylbenzene		<6.14	μg/Kg	6.14
1,2,4-Trimethylbenzene		<5.49	μg/Kg	5.49
1,4-Dichlorobenzene (para)		<4.74	μg/Kg	4.74
sec-Butylbenzene		<6.16	μg/Kg	6.16
1,3-Dichlorobenzene (meta)		<6.17	μg/Kg	6.17
p-Isopropyltoluene		<6.38	μg/Kg	6.38
4-Chlorotoluene		<6.03	μg/Kg	6.03
1,2-Dichlorobenzene (ortho)		<4.96	μg/Kg	4.96
n-Butylbenzene		<6.02	μg/Kg	6.02
1,2-Dibromo-3-chloropropane		<6.79	μg/Kg	6.79
1,2,3-Trichlorobenzene		<4.91	μg/Kg	4.91
1,2,4-Trichlorobenzene		<4.61	μg/Kg	4.61
Naphthalene		<2.35	μg/Kg	2.35
Hexachlorobutadiene		<13.9	μg/Kg	13.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		1000	μg/Kg	1	1000	100	78.3 - 111
Toluene-d8		992	μg/Kg	1	1000	99	91.4 - 107
4-Bromofluorobenzene (4-BFB)		1010	μg/Kg	1	1000	101	68.1 - 120

Method Blank (1)

QC Batch: 69469 Date Analyzed: 2010-04-28 Analyzed By: AW
Prep Batch: 59465 QC Preparation: 2010-04-26 Prepared By: AW

Parameter	Flag	Result	Units	Reporting Limits
C6-C12		15.2	mg/Kg	7.97
>C12-C28		<5.90	mg/Kg	5.9

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		90.3	mg/Kg	1	100	90	70 - 130
n-Tricosane		95.8	mg/Kg	1	100	96	70 - 130
n-Triacontane		112	mg/Kg	1	100	112	60.7 - 146

Method Blank (1)

QC Batch: 69520 Date Analyzed: 2010-04-29 Analyzed By: MN
Prep Batch: 59505 QC Preparation: 2010-04-28 Prepared By: MN

Parameter	Flag	Result	Units	Reporting Limits
Pyridine		<0.0539	mg/Kg	0.0539
N-Nitrosodimethylamine		<0.0468	mg/Kg	0.0468
2-Picoline		<0.0512	mg/Kg	0.0512
Methyl methanesulfonate		<0.0479	mg/Kg	0.0479
Ethyl methanesulfonate		<0.0475	mg/Kg	0.0475
Phenol		<0.0491	mg/Kg	0.0491
Aniline		<0.0590	mg/Kg	0.059
bis(2-chloroethyl)ether		<0.0527	mg/Kg	0.0527
2-Chlorophenol		<0.0444	mg/Kg	0.0444
1,3-Dichlorobenzene (meta)		<0.0496	mg/Kg	0.0496
1,4-Dichlorobenzene (para)		<0.0483	mg/Kg	0.0483
Benzyl alcohol		<0.0579	mg/Kg	0.0579
1,2-Dichlorobenzene (ortho)		<0.0448	mg/Kg	0.0448
2-Methylphenol		<0.0522	mg/Kg	0.0522
bis(2-chloroisopropyl)ether		<0.0531	mg/Kg	0.0531
4-Methylphenol / 3-Methylphenol		<0.0594	mg/Kg	0.0594
Acetophenone		<0.0426	mg/Kg	0.0426
N-Nitrosodi-n-propylamine		<0.0567	mg/Kg	0.0567
Hexachloroethane		<0.0427	mg/Kg	0.0427
Nitrobenzene		<0.0435	mg/Kg	0.0435
N-Nitrosopiperidine		<0.0510	mg/Kg	0.051
Isophorone		<0.0509	mg/Kg	0.0509
2-Nitrophenol		<0.0484	mg/Kg	0.0484
2,4-Dimethylphenol		<0.0368	mg/Kg	0.0368
bis(2-chloroethoxy)methane		<0.0468	mg/Kg	0.0468
Benzoic acid		<0.0865	mg/Kg	0.0865
2,4-Dichlorophenol		<0.0371	mg/Kg	0.0371
1,2,4-Trichlorobenzene		<0.0440	mg/Kg	0.044
a,a-Dimethylphenethylamine		<0.0277	mg/Kg	0.0277
Naphthalene		<0.0508	mg/Kg	0.0508
4-Chloroaniline		<0.0438	mg/Kg	0.0438
2,6-Dichlorophenol		<0.0422	mg/Kg	0.0422
Hexachlorobutadiene		<0.0511	mg/Kg	0.0511
N-Nitroso-di-n-butylamine		<0.0429	mg/Kg	0.0429
4-Chloro-3-methylphenol		<0.0324	mg/Kg	0.0324
1-Methylnaphthalene		<0.0487	mg/Kg	0.0487
2-Methylnaphthalene		<0.0430	mg/Kg	0.043
1,2,4,5-Tetrachlorobenzene		<0.0530	mg/Kg	0.053
Hexachlorocyclopentadiene		<0.0410	mg/Kg	0.041
2,4,6-Trichlorophenol		<0.0406	mg/Kg	0.0406
2,4,5-Trichlorophenol		<0.0328	mg/Kg	0.0328
2-Chloronaphthalene		<0.0450	mg/Kg	0.045
1-Chloronaphthalene		<0.0516	mg/Kg	0.0516
2-Nitroaniline		<0.0259	mg/Kg	0.0259

continued ...

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
Dimethylphthalate		<0.0316	mg/Kg	0.0316
Acenaphthylene		<0.0434	mg/Kg	0.0434
2,6-Dinitrotoluene		<0.0273	mg/Kg	0.0273
3-Nitroaniline		<0.0214	mg/Kg	0.0214
Acenaphthene		<0.0428	mg/Kg	0.0428
2,4-Dinitrophenol		<0.0302	mg/Kg	0.0302
Dibenzofuran		<0.0400	mg/Kg	0.04
Pentachlorobenzene		<0.0428	mg/Kg	0.0428
4-Nitrophenol		<0.0306	mg/Kg	0.0306
1-Naphthylamine		<0.0272	mg/Kg	0.0272
2,4-Dinitrotoluene		<0.0385	mg/Kg	0.0385
2-Naphthylamine		<0.0286	mg/Kg	0.0286
2,3,4,6-Tetrachlorophenol		<0.0260	mg/Kg	0.026
Fluorene		<0.0368	mg/Kg	0.0368
Diethylphthalate		<0.0398	mg/Kg	0.0398
4-Chlorophenyl-phenylether		<0.0438	mg/Kg	0.0438
4-Nitroaniline		<0.0342	mg/Kg	0.0342
4,6-Dinitro-2-methylphenol		<0.0318	mg/Kg	0.0318
Diphenylamine		<0.0532	mg/Kg	0.0532
Diphenylhydrazine		<0.0369	mg/Kg	0.0369
4-Bromophenyl-phenylether		<0.0463	mg/Kg	0.0463
Phenacetin		<0.0453	mg/Kg	0.0453
Hexachlorobenzene		<0.0501	mg/Kg	0.0501
4-Aminobiphenyl		<0.0596	mg/Kg	0.0596
Pentachlorophenol		<0.0451	mg/Kg	0.0451
Pentachloronitrobenzene		<0.0431	mg/Kg	0.0431
Pronamide		<0.0491	mg/Kg	0.0491
Phenanthrene		<0.0540	mg/Kg	0.054
Anthracene		<0.0578	mg/Kg	0.0578
Di-n-butylphthalate		<0.0543	mg/Kg	0.0543
Fluoranthene		<0.0678	mg/Kg	0.0678
Benzidine		<0.0938	mg/Kg	0.0938
Pyrene		<0.0680	mg/Kg	0.068
p-Dimethylaminoazobenzene		<0.0601	mg/Kg	0.0601
Butylbenzylphthalate		<0.0425	mg/Kg	0.0425
Benzo(a)anthracene		<0.0487	mg/Kg	0.0487
3,3-Dichlorobenzidine		<0.0527	mg/Kg	0.0527
Chrysene		<0.0568	mg/Kg	0.0568
bis(2-ethylhexyl)phthalate		<0.0421	mg/Kg	0.0421
Di-n-octylphthalate		<0.0609	mg/Kg	0.0609
Benzo(b)fluoranthene		<0.0795	mg/Kg	0.0795
7,12-Dimethylbenz(a)anthracene		<0.0518	mg/Kg	0.0518
Benzo(k)fluoranthene		<0.0760	mg/Kg	0.076
Benzo(a)pyrene		<0.0549	mg/Kg	0.0549
3-Methylcholanthrene		<0.0457	mg/Kg	0.0457
Dibenzo(a,j)acridine		<0.0530	mg/Kg	0.053
Indeno(1,2,3-cd)pyrene		<0.0526	mg/Kg	0.0526

continued . . .

method blank continued . . .

Parameter	Flag	Result	Units	Reporting Limits
Dibenzo(a,h)anthracene		<0.0636	mg/Kg	0.0636
Benzo(g,h,i)perylene		<0.0482	mg/Kg	0.0482

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.830	mg/Kg	1	2.67	31	12.8 - 71.1
Phenol-d5		0.550	mg/Kg	1	2.67	20	10.2 - 82.2
Nitrobenzene-d5		1.32	mg/Kg	1	2.67	49	17.4 - 83.8
2-Fluorobiphenyl		1.55	mg/Kg	1	2.67	58	21.4 - 92.8
2,4,6-Tribromophenol		1.25	mg/Kg	1	2.67	47	18.6 - 98.6
Terphenyl-d14		1.85	mg/Kg	1	2.67	69	24.3 - 133

Duplicate (1) Duplicated Sample: 229049

QC Batch: 69299 Date Analyzed: 2010-04-21 Analyzed By: SS
Prep Batch: 59311 QC Preparation: 2010-04-20 Prepared By: SS

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Moisture	17.8	18.0	%	1	1	20

Duplicate (1) Duplicated Sample: 228927

QC Batch: 69422 Date Analyzed: 2010-04-26 Analyzed By: SS
Prep Batch: 59423 QC Preparation: 2010-04-23 Prepared By: SS

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Moisture	18.0	18.7	%	1	4	20

Duplicate (1) Duplicated Sample: 229517

QC Batch: 69462 Date Analyzed: 2010-04-27 Analyzed By: SS
Prep Batch: 59452 QC Preparation: 2010-04-26 Prepared By: SS

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Moisture	9.55	9.74	%	1	2	20

Laboratory Control Spike (LCS-1)

QC Batch: 69217 Date Analyzed: 2010-04-19 Analyzed By: AW
Prep Batch: 59252 QC Preparation: 2010-04-19 Prepared By: AW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	25.8	mg/L	1	25.0	<0.817	103	75 - 125
>C12-C28	24.5	mg/L	1	25.0	<0.889	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	25.9	mg/L	1	25.0	<0.817	104	75 - 125	0	20
>C12-C28	24.7	mg/L	1	25.0	<0.889	99	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Octane	9.10	9.02	mg/L	1	10.0	91	90	70 - 130
n-Tricosane	10.8	10.8	mg/L	1	10.0	108	108	70 - 130
n-Triacontane	11.5	11.6	mg/L	1	10.0	115	116	59.6 - 155

Laboratory Control Spike (LCS-1)

QC Batch: 69276 Date Analyzed: 2010-04-20 Analyzed By: AW
Prep Batch: 59293 QC Preparation: 2010-04-20 Prepared By: AW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	280	mg/Kg	1	250	8.3	109	75 - 125
>C12-C28	267	mg/Kg	1	250	<5.90	107	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	256	mg/Kg	1	250	8.3	99	75 - 125	9	20
>C12-C28	257	mg/Kg	1	250	<5.90	103	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Octane	92.0	88.6	mg/Kg	1	100	92	89	70 - 130
n-Tricosane	119	111	mg/Kg	1	100	119	111	70 - 130
n-Triacontane	130	120	mg/Kg	1	100	130	120	60.7 - 146

Laboratory Control Spike (LCS-1)

QC Batch: 69336 Date Analyzed: 2010-04-21 Analyzed By: KB
Prep Batch: 59345 QC Preparation: 2010-04-21 Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	1090	µg/Kg	1	1000	<3.64	109	79 - 125
Dichlorodifluoromethane	1020	µg/Kg	1	1000	<5.15	102	30.3 - 142
Chloromethane (methyl chloride)	1120	µg/Kg	1	1000	<4.16	112	41.6 - 148
Vinyl Chloride	1140	µg/Kg	1	1000	<4.46	114	62 - 130
Bromomethane (methyl bromide)	1230	µg/Kg	1	1000	<7.01	123	44.5 - 148
Chloroethane	1230	µg/Kg	1	1000	<2.69	123	55.7 - 139
Trichlorofluoromethane	1260	µg/Kg	1	1000	<4.04	126	16.1 - 178
Acetone	1040	µg/Kg	1	1000	<43.2	104	16.9 - 210
Iodomethane (methyl iodide)	1140	µg/Kg	1	1000	<6.39	114	74.9 - 133
Carbon Disulfide	1110	µg/Kg	1	1000	<6.98	111	75.9 - 136
Acrylonitrile	1050	µg/Kg	1	1000	<2.79	105	71.1 - 133
2-Butanone (MEK)	984	µg/Kg	1	1000	<6.87	98	55.5 - 146
4-Methyl-2-pentanone (MIBK)	1090	µg/Kg	1	1000	<4.21	109	61.5 - 139
2-Hexanone	1060	µg/Kg	1	1000	<2.94	106	53.2 - 150
trans 1,4-Dichloro-2-butene	870	µg/Kg	1	1000	<2.41	87	39.7 - 157
1,1-Dichloroethene	1190	µg/Kg	1	1000	<6.53	119	67.8 - 131
Methylene chloride	1130	µg/Kg	1	1000	<16.8	113	74.6 - 137
MTBE	1100	µg/Kg	1	1000	<2.14	110	76.5 - 125
trans-1,2-Dichloroethene	1100	µg/Kg	1	1000	<6.50	110	79.9 - 122
1,1-Dichloroethane	1110	µg/Kg	1	1000	<5.94	111	80.7 - 123
cis-1,2-Dichloroethene	1130	µg/Kg	1	1000	<5.99	113	78.8 - 126
2,2-Dichloropropane	1250	µg/Kg	1	1000	<8.12	125	52.4 - 146
1,2-Dichloroethane (EDC)	1110	µg/Kg	1	1000	<3.67	111	59.5 - 136
Chloroform	1110	µg/Kg	1	1000	<5.31	111	74.8 - 124
1,1,1-Trichloroethane	1110	µg/Kg	1	1000	<7.76	111	63.2 - 137
1,1-Dichloropropene	1130	µg/Kg	1	1000	<7.43	113	79.6 - 121
Benzene	1110	µg/Kg	1	1000	<6.23	111	79.5 - 117
Carbon Tetrachloride	1110	µg/Kg	1	1000	<6.32	111	37.2 - 170
1,2-Dichloropropane	1110	µg/Kg	1	1000	<5.23	111	82.6 - 122
Trichloroethene (TCE)	1100	µg/Kg	1	1000	<7.95	110	78 - 124
Dibromomethane (methylene bromide)	1080	µg/Kg	1	1000	<3.41	108	78.4 - 121
Bromodichloromethane	1110	µg/Kg	1	1000	<4.03	111	70.3 - 134
2-Chloroethyl vinyl ether	920	µg/Kg	1	1000	<2.22	92	51.3 - 127
cis-1,3-Dichloropropene	1140	µg/Kg	1	1000	<3.74	114	78.6 - 130
trans-1,3-Dichloropropene	1170	µg/Kg	1	1000	<3.96	117	74.6 - 133
Toluene	1120	µg/Kg	1	1000	<6.10	112	81.5 - 116
1,1,2-Trichloroethane	1090	µg/Kg	1	1000	<2.06	109	81.1 - 118
1,3-Dichloropropane	1100	µg/Kg	1	1000	<3.74	110	82.5 - 117
Dibromochloromethane	1100	µg/Kg	1	1000	<3.78	110	77.6 - 133
1,2-Dibromoethane (EDB)	1080	µg/Kg	1	1000	<2.04	108	80.5 - 120
Tetrachloroethene (PCE)	1040	µg/Kg	1	1000	<7.24	104	33.2 - 172
Chlorobenzene	1110	µg/Kg	1	1000	<6.15	111	83.4 - 117
1,1,1,2-Tetrachloroethane	1120	µg/Kg	1	1000	<4.11	112	79 - 126

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ethylbenzene	1130	μg/Kg	1	1000	<5.48	113	79.8 - 117
m,p-Xylene	2260	μg/Kg	1	2000	<11.5	113	74.8 - 120
Bromoform	1050	μg/Kg	1	1000	<2.24	105	64.1 - 134
Styrene	1140	μg/Kg	1	1000	<4.22	114	85.6 - 121
o-Xylene	1120	μg/Kg	1	1000	<5.89	112	74.6 - 120
1,1,2,2-Tetrachloroethane	1100	μg/Kg	1	1000	<2.30	110	64.5 - 133
2-Chlorotoluene	1120	μg/Kg	1	1000	<5.85	112	80.9 - 117
1,2,3-Trichloropropane	1110	μg/Kg	1	1000	<4.42	111	70.2 - 129
Isopropylbenzene	1120	μg/Kg	1	1000	<5.93	112	79.6 - 122
Bromobenzene	1070	μg/Kg	1	1000	<8.21	107	79.9 - 116
n-Propylbenzene	1140	μg/Kg	1	1000	<6.02	114	81 - 118
1,3,5-Trimethylbenzene	1130	μg/Kg	1	1000	<5.35	113	79.3 - 121
tert-Butylbenzene	1140	μg/Kg	1	1000	<6.14	114	77 - 126
1,2,4-Trimethylbenzene	1140	μg/Kg	1	1000	<5.49	114	81.1 - 120
1,4-Dichlorobenzene (para)	1090	μg/Kg	1	1000	<4.74	109	73.1 - 120
sec-Butylbenzene	1150	μg/Kg	1	1000	<6.16	115	79.9 - 121
1,3-Dichlorobenzene (meta)	1100	μg/Kg	1	1000	<6.17	110	73.5 - 124
p-Isopropyltoluene	1170	μg/Kg	1	1000	<6.38	117	79.2 - 123
4-Chlorotoluene	1120	μg/Kg	1	1000	<6.03	112	80.1 - 117
1,2-Dichlorobenzene (ortho)	1090	μg/Kg	1	1000	<4.96	109	74.6 - 122
n-Butylbenzene	1220	μg/Kg	1	1000	<6.02	122	77.8 - 122
1,2-Dibromo-3-chloropropane	843	μg/Kg	1	1000	<6.79	84	57.3 - 133
1,2,3-Trichlorobenzene	1170	μg/Kg	1	1000	<4.91	117	59.7 - 135
1,2,4-Trichlorobenzene	1150	μg/Kg	1	1000	<4.61	115	72.2 - 125
Naphthalene	931	μg/Kg	1	1000	<2.35	93	59.1 - 135
Hexachlorobutadiene	1150	μg/Kg	1	1000	<13.9	115	71 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	1140	μg/Kg	1	1000	<3.64	114	79 - 125	4	20
Dichlorodifluoromethane	974	μg/Kg	1	1000	<5.15	97	30.3 - 142	5	20
Chloromethane (methyl chloride)	1100	μg/Kg	1	1000	<4.16	110	41.6 - 148	2	20
Vinyl Chloride	1110	μg/Kg	1	1000	<4.46	111	62 - 130	3	20
Bromomethane (methyl bromide)	1180	μg/Kg	1	1000	<7.01	118	44.5 - 148	4	20
Chloroethane	1200	μg/Kg	1	1000	<2.69	120	55.7 - 139	2	20
Trichlorofluoromethane	1230	μg/Kg	1	1000	<4.04	123	16.1 - 178	2	20
Acetone	1220	μg/Kg	1	1000	<43.2	122	16.9 - 210	16	20
Iodomethane (methyl iodide)	1160	μg/Kg	1	1000	<6.39	116	74.9 - 133	2	20
Carbon Disulfide	1060	μg/Kg	1	1000	<6.98	106	75.9 - 136	5	20
Acrylonitrile	1250	μg/Kg	1	1000	<2.79	125	71.1 - 133	17	20
2-Butanone (MEK)	1180	μg/Kg	1	1000	<6.87	118	55.5 - 146	18	20
4-Methyl-2-pentanone (MIBK)	1300	μg/Kg	1	1000	<4.21	130	61.5 - 139	18	20
2-Hexanone	1260	μg/Kg	1	1000	<2.94	126	53.2 - 150	17	20
trans 1,4-Dichloro-2-butene	1020	μg/Kg	1	1000	<2.41	102	39.7 - 157	16	20
1,1-Dichloroethene	1200	μg/Kg	1	1000	<6.53	120	67.8 - 131	1	20
Methylene chloride	1140	μg/Kg	1	1000	<16.8	114	74.6 - 137	1	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
MTBE	1190	µg/Kg	1	1000	<2.14	119	76.5 - 125	8	20
trans-1,2-Dichloroethene	1120	µg/Kg	1	1000	<6.50	112	79.9 - 122	2	20
1,1-Dichloroethane	1140	µg/Kg	1	1000	<5.94	114	80.7 - 123	3	20
cis-1,2-Dichloroethene	1130	µg/Kg	1	1000	<5.99	113	78.8 - 126	0	20
2,2-Dichloropropane	1260	µg/Kg	1	1000	<8.12	126	52.4 - 146	1	20
1,2-Dichloroethane (EDC)	1150	µg/Kg	1	1000	<3.67	115	59.5 - 136	4	20
Chloroform	1140	µg/Kg	1	1000	<5.31	114	74.8 - 124	3	20
1,1,1-Trichloroethane	1120	µg/Kg	1	1000	<7.76	112	63.2 - 137	1	20
1,1-Dichloropropene	1150	µg/Kg	1	1000	<7.43	115	79.6 - 121	2	20
Benzene	1130	µg/Kg	1	1000	<6.23	113	79.5 - 117	2	20
Carbon Tetrachloride	1120	µg/Kg	1	1000	<6.32	112	37.2 - 170	1	20
1,2-Dichloropropane	1150	µg/Kg	1	1000	<5.23	115	82.6 - 122	4	20
Trichloroethene (TCE)	1130	µg/Kg	1	1000	<7.95	113	78 - 124	3	20
Dibromomethane (methylene bromide)	1150	µg/Kg	1	1000	<3.41	115	78.4 - 121	6	20
Bromodichloromethane	1130	µg/Kg	1	1000	<4.03	113	70.3 - 134	2	20
2-Chloroethyl vinyl ether	1060	µg/Kg	1	1000	<2.22	106	51.3 - 127	14	20
cis-1,3-Dichloropropene	1170	µg/Kg	1	1000	<3.74	117	78.6 - 130	3	20
trans-1,3-Dichloropropene	1230	µg/Kg	1	1000	<3.96	123	74.6 - 133	5	20
Toluene	1140	µg/Kg	1	1000	<6.10	114	81.5 - 116	2	20
1,1,2-Trichloroethane	1160	µg/Kg	1	1000	<2.06	116	81.1 - 118	6	20
1,3-Dichloropropane	1160	µg/Kg	1	1000	<3.74	116	82.5 - 117	5	20
Dibromochloromethane	1160	µg/Kg	1	1000	<3.78	116	77.6 - 133	5	20
1,2-Dibromoethane (EDB)	1160	µg/Kg	1	1000	<2.04	116	80.5 - 120	7	20
Tetrachloroethene (PCE)	1150	µg/Kg	1	1000	<7.24	115	33.2 - 172	10	20
Chlorobenzene	1130	µg/Kg	1	1000	<6.15	113	83.4 - 117	2	20
1,1,1,2-Tetrachloroethane	1150	µg/Kg	1	1000	<4.11	115	79 - 126	3	20
Ethylbenzene	1150	µg/Kg	1	1000	<5.48	115	79.8 - 117	2	20
m,p-Xylene	2290	µg/Kg	1	2000	<11.5	114	74.8 - 120	1	20
Bromoform	1160	µg/Kg	1	1000	<2.24	116	64.1 - 134	10	20
Styrene	1150	µg/Kg	1	1000	<4.22	115	85.6 - 121	1	20
o-Xylene	1140	µg/Kg	1	1000	<5.89	114	74.6 - 120	2	20
1,1,2,2-Tetrachloroethane	1230	µg/Kg	1	1000	<2.30	123	64.5 - 133	11	20
2-Chlorotoluene	1130	µg/Kg	1	1000	<5.85	113	80.9 - 117	1	20
1,2,3-Trichloropropane	1200	µg/Kg	1	1000	<4.42	120	70.2 - 129	8	20
Isopropylbenzene	1150	µg/Kg	1	1000	<5.93	115	79.6 - 122	3	20
Bromobenzene	1100	µg/Kg	1	1000	<8.21	110	79.9 - 116	3	20
n-Propylbenzene	1150	µg/Kg	1	1000	<6.02	115	81 - 118	1	20
1,3,5-Trimethylbenzene	1140	µg/Kg	1	1000	<5.35	114	79.3 - 121	1	20
tert-Butylbenzene	1160	µg/Kg	1	1000	<6.14	116	77 - 126	2	20
1,2,4-Trimethylbenzene	1160	µg/Kg	1	1000	<5.49	116	81.1 - 120	2	20
1,4-Dichlorobenzene (para)	1110	µg/Kg	1	1000	<4.74	111	73.1 - 120	2	20
sec-Butylbenzene	1160	µg/Kg	1	1000	<6.16	116	79.9 - 121	1	20
1,3-Dichlorobenzene (meta)	1110	µg/Kg	1	1000	<6.17	111	73.5 - 124	1	20
p-Isopropyltoluene	1190	µg/Kg	1	1000	<6.38	119	79.2 - 123	2	20
4-Chlorotoluene	1130	µg/Kg	1	1000	<6.03	113	80.1 - 117	1	20
1,2-Dichlorobenzene (ortho)	1120	µg/Kg	1	1000	<4.96	112	74.6 - 122	3	20
n-Butylbenzene	1220	µg/Kg	1	1000	<6.02	122	77.8 - 122	0	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,2-Dibromo-3-chloropropane	1010	µg/Kg	1	1000	<6.79	101	57.3 - 133	18	20
1,2,3-Trichlorobenzene	1250	µg/Kg	1	1000	<4.91	125	59.7 - 135	7	20
1,2,4-Trichlorobenzene	1200	µg/Kg	1	1000	<4.61	120	72.2 - 125	4	20
Naphthalene	1050	µg/Kg	1	1000	<2.35	105	59.1 - 135	12	20
Hexachlorobutadiene	1170	µg/Kg	1	1000	<13.9	117	71 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	1020	1010	µg/Kg	1	1000	102	101	79.2 - 119
Toluene-d8	1010	1020	µg/Kg	1	1000	101	102	91.6 - 107
4-Bromofluorobenzene (4-BFB)	1010	1020	µg/Kg	1	1000	101	102	70.7 - 122

Laboratory Control Spike (LCS-1)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB
Prep Batch: 59371 QC Preparation: 2010-04-22 Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	52.9	µg/L	1	50.0	<0.210	106	72.8 - 128
Dichlorodifluoromethane	46.4	µg/L	1	50.0	<0.480	93	50.7 - 144
Chloromethane (methyl chloride)	55.2	µg/L	1	50.0	<0.350	110	55.1 - 143
Vinyl Chloride	54.7	µg/L	1	50.0	<0.360	109	52 - 144
Bromomethane (methyl bromide)	51.2	µg/L	1	50.0	<0.620	102	57.9 - 150
Chloroethane	53.4	µg/L	1	50.0	<0.560	107	55 - 149
Trichlorofluoromethane	57.6	µg/L	1	50.0	<0.310	115	48.5 - 162
Acetone	65.0	µg/L	1	50.0	<1.63	130	32.3 - 196
Iodomethane (methyl iodide)	51.9	µg/L	1	50.0	<0.210	104	72.6 - 134
Carbon Disulfide	52.4	µg/L	1	50.0	<0.280	105	65.6 - 135
Acrylonitrile	54.2	µg/L	1	50.0	<0.290	108	68.4 - 134
2-Butanone (MEK)	56.5	µg/L	1	50.0	<0.750	113	61.8 - 133
4-Methyl-2-pentanone (MIBK)	59.6	µg/L	1	50.0	<0.680	119	68.4 - 132
2-Hexanone	58.8	µg/L	1	50.0	<0.480	118	47.4 - 154
trans 1,4-Dichloro-2-butene	44.2	µg/L	1	50.0	<0.230	88	52.9 - 152
1,1-Dichloroethene	57.6	µg/L	1	50.0	<0.240	115	70.3 - 130
Methylene chloride	53.4	µg/L	1	50.0	<0.520	107	72.4 - 132
MTBE	54.9	µg/L	1	50.0	<0.480	110	77.3 - 124
trans-1,2-Dichloroethene	52.6	µg/L	1	50.0	<0.240	105	71 - 128
1,1-Dichloroethane	53.6	µg/L	1	50.0	<0.180	107	73.2 - 128
cis-1,2-Dichloroethene	53.1	µg/L	1	50.0	<0.210	106	71.6 - 129
2,2-Dichloropropane	58.9	µg/L	1	50.0	<0.140	118	65.4 - 134
1,2-Dichloroethane (EDC)	52.3	µg/L	1	50.0	<0.260	105	70 - 134
Chloroform	51.7	µg/L	1	50.0	<0.160	103	75.8 - 126
1,1,1-Trichloroethane	51.7	µg/L	1	50.0	<0.210	103	74.4 - 133
1,1-Dichloropropene	53.8	µg/L	1	50.0	<0.130	108	78.4 - 123

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	52.8	µg/L	1	50.0	<0.200	106	77.3 - 121
Carbon Tetrachloride	50.4	µg/L	1	50.0	<0.540	101	56.8 - 168
1,2-Dichloropropane	54.0	µg/L	1	50.0	<0.260	108	75 - 126
Trichloroethene (TCE)	53.3	µg/L	1	50.0	<0.190	107	72.5 - 130
Dibromomethane (methylene bromide)	52.4	µg/L	1	50.0	<0.310	105	80.2 - 120
Bromodichloromethane	51.2	µg/L	1	50.0	<0.180	102	76.5 - 131
2-Chloroethyl vinyl ether	48.7	µg/L	1	50.0	<0.130	97	60 - 130
cis-1,3-Dichloropropene	55.1	µg/L	1	50.0	<0.230	110	81.2 - 124
trans-1,3-Dichloropropene	56.5	µg/L	1	50.0	<0.220	113	75.9 - 129
Toluene	53.1	µg/L	1	50.0	<0.200	106	79.1 - 122
1,1,2-Trichloroethane	52.0	µg/L	1	50.0	<0.300	104	82.2 - 115
1,3-Dichloropropane	52.7	µg/L	1	50.0	<0.300	105	82.1 - 116
Dibromochloromethane	51.3	µg/L	1	50.0	<0.150	103	80.6 - 131
1,2-Dibromoethane (EDB)	52.4	µg/L	1	50.0	<0.140	105	82.8 - 117
Tetrachloroethene (PCE)	47.4	µg/L	1	50.0	<0.400	95	20.1 - 178
Chlorobenzene	52.5	µg/L	1	50.0	<0.130	105	79.8 - 120
1,1,1,2-Tetrachloroethane	52.5	µg/L	1	50.0	<0.200	105	81.5 - 125
Ethylbenzene	52.1	µg/L	1	50.0	<0.140	104	82.4 - 121
m,p-Xylene	104	µg/L	1	100	<0.270	104	80.9 - 123
Bromoform	50.6	µg/L	1	50.0	<0.190	101	73.7 - 135
Styrene	54.2	µg/L	1	50.0	<0.0900	108	82.6 - 122
o-Xylene	52.2	µg/L	1	50.0	<0.120	104	82.2 - 123
1,1,2,2-Tetrachloroethane	53.2	µg/L	1	50.0	<0.320	106	63.8 - 132
2-Chlorotoluene	51.0	µg/L	1	50.0	<0.100	102	83.2 - 116
1,2,3-Trichloropropane	53.6	µg/L	1	50.0	<0.620	107	81 - 113
Isopropylbenzene	52.3	µg/L	1	50.0	<0.530	105	82.3 - 120
Bromobenzene	49.8	µg/L	1	50.0	<0.130	100	80.6 - 116
n-Propylbenzene	51.3	µg/L	1	50.0	<0.110	103	82.4 - 117
1,3,5-Trimethylbenzene	51.4	µg/L	1	50.0	<0.110	103	83.3 - 118
tert-Butylbenzene	51.8	µg/L	1	50.0	<0.450	104	81.8 - 120
1,2,4-Trimethylbenzene	52.4	µg/L	1	50.0	<0.100	105	83.7 - 118
1,4-Dichlorobenzene (para)	50.8	µg/L	1	50.0	<0.120	102	76.8 - 117
sec-Butylbenzene	51.8	µg/L	1	50.0	<0.460	104	81.2 - 120
1,3-Dichlorobenzene (meta)	51.4	µg/L	1	50.0	<0.520	103	77.7 - 117
p-Isopropyltoluene	53.2	µg/L	1	50.0	<0.100	106	83 - 120
4-Chlorotoluene	51.2	µg/L	1	50.0	<0.120	102	83.8 - 116
1,2-Dichlorobenzene (ortho)	51.4	µg/L	1	50.0	<0.130	103	77.9 - 119
n-Butylbenzene	53.6	µg/L	1	50.0	<0.400	107	81.2 - 118
1,2-Dibromo-3-chloropropane	42.5	µg/L	1	50.0	<0.650	85	70.4 - 125
1,2,3-Trichlorobenzene	54.7	µg/L	1	50.0	<0.240	109	64.8 - 132
1,2,4-Trichlorobenzene	55.1	µg/L	1	50.0	<0.190	110	73.8 - 121
Naphthalene	45.5	µg/L	1	50.0	<0.330	91	67.2 - 128
Hexachlorobutadiene	56.2	µg/L	1	50.0	<0.260	112	71.7 - 133

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	53.7	μg/L	1	50.0	<0.210	107	72.8 - 128	2	20
Dichlorodifluoromethane	45.8	μg/L	1	50.0	<0.480	92	50.7 - 144	1	20
Chloromethane (methyl chloride)	54.1	μg/L	1	50.0	<0.350	108	55.1 - 143	2	20
Vinyl Chloride	54.0	μg/L	1	50.0	<0.360	108	52 - 144	1	20
Bromomethane (methyl bromide)	51.6	μg/L	1	50.0	<0.620	103	57.9 - 150	1	20
Chloroethane	53.5	μg/L	1	50.0	<0.560	107	55 - 149	0	20
Trichlorofluoromethane	56.6	μg/L	1	50.0	<0.310	113	48.5 - 162	2	20
Acetone	63.9	μg/L	1	50.0	<1.63	128	32.3 - 196	2	20
Iodomethane (methyl iodide)	52.4	μg/L	1	50.0	<0.210	105	72.6 - 134	1	20
Carbon Disulfide	50.3	μg/L	1	50.0	<0.280	101	65.6 - 135	4	20
Acrylonitrile	53.0	μg/L	1	50.0	<0.290	106	68.4 - 134	2	20
2-Butanone (MEK)	54.7	μg/L	1	50.0	<0.750	109	61.8 - 133	3	20
4-Methyl-2-pentanone (MIBK)	57.5	μg/L	1	50.0	<0.680	115	68.4 - 132	4	20
2-Hexanone	57.5	μg/L	1	50.0	<0.480	115	47.4 - 154	2	20
trans 1,4-Dichloro-2-butene	42.4	μg/L	1	50.0	<0.230	85	52.9 - 152	4	20
1,1-Dichloroethene	57.2	μg/L	1	50.0	<0.240	114	70.3 - 130	1	20
Methylene chloride	53.7	μg/L	1	50.0	<0.520	107	72.4 - 132	1	20
MTBE	54.2	μg/L	1	50.0	<0.480	108	77.3 - 124	1	20
trans-1,2-Dichloroethene	52.4	μg/L	1	50.0	<0.240	105	71 - 128	0	20
1,1-Dichloroethane	53.8	μg/L	1	50.0	<0.180	108	73.2 - 128	0	20
cis-1,2-Dichloroethene	53.7	μg/L	1	50.0	<0.210	107	71.6 - 129	1	20
2,2-Dichloropropane	58.3	μg/L	1	50.0	<0.140	117	65.4 - 134	1	20
1,2-Dichloroethane (EDC)	51.7	μg/L	1	50.0	<0.260	103	70 - 134	1	20
Chloroform	51.7	μg/L	1	50.0	<0.160	103	75.8 - 126	0	20
1,1,1-Trichloroethane	51.8	μg/L	1	50.0	<0.210	104	74.4 - 133	0	20
1,1-Dichloropropene	54.0	μg/L	1	50.0	<0.130	108	78.4 - 123	0	20
Benzene	53.2	μg/L	1	50.0	<0.200	106	77.3 - 121	1	20
Carbon Tetrachloride	50.5	μg/L	1	50.0	<0.540	101	56.8 - 168	0	20
1,2-Dichloropropane	53.7	μg/L	1	50.0	<0.260	107	75 - 126	1	20
Trichloroethene (TCE)	53.8	μg/L	1	50.0	<0.190	108	72.5 - 130	1	20
Dibromomethane (methylene bromide)	52.7	μg/L	1	50.0	<0.310	105	80.2 - 120	1	20
Bromodichloromethane	50.9	μg/L	1	50.0	<0.180	102	76.5 - 131	1	20
2-Chloroethyl vinyl ether	46.2	μg/L	1	50.0	<0.130	92	60 - 130	5	20
cis-1,3-Dichloropropene	55.2	μg/L	1	50.0	<0.230	110	81.2 - 124	0	20
trans-1,3-Dichloropropene	56.2	μg/L	1	50.0	<0.220	112	75.9 - 129	0	20
Toluene	53.0	μg/L	1	50.0	<0.200	106	79.1 - 122	0	20
1,1,2-Trichloroethane	51.6	μg/L	1	50.0	<0.300	103	82.2 - 115	1	20
1,3-Dichloropropane	52.6	μg/L	1	50.0	<0.300	105	82.1 - 116	0	20
Dibromochloromethane	51.0	μg/L	1	50.0	<0.150	102	80.6 - 131	1	20
1,2-Dibromoethane (EDB)	52.2	μg/L	1	50.0	<0.140	104	82.8 - 117	0	20
Tetrachloroethene (PCE)	47.7	μg/L	1	50.0	<0.400	95	20.1 - 178	1	20
Chlorobenzene	52.7	μg/L	1	50.0	<0.130	105	79.8 - 120	0	20
1,1,1,2-Tetrachloroethane	53.0	μg/L	1	50.0	<0.200	106	81.5 - 125	1	20
Ethylbenzene	52.7	μg/L	1	50.0	<0.140	105	82.4 - 121	1	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
m,p-Xylene	105	μg/L	1	100	<0.270	105	80.9 - 123	1	20
Bromoform	49.5	μg/L	1	50.0	<0.190	99	73.7 - 135	2	20
Styrene	54.2	μg/L	1	50.0	<0.0900	108	82.6 - 122	0	20
o-Xylene	52.7	μg/L	1	50.0	<0.120	105	82.2 - 123	1	20
1,1,2,2-Tetrachloroethane	52.5	μg/L	1	50.0	<0.320	105	63.8 - 132	1	20
2-Chlorotoluene	51.6	μg/L	1	50.0	<0.100	103	83.2 - 116	1	20
1,2,3-Trichloropropane	54.1	μg/L	1	50.0	<0.620	108	81 - 113	1	20
Isopropylbenzene	52.7	μg/L	1	50.0	<0.530	105	82.3 - 120	1	20
Bromobenzene	49.9	μg/L	1	50.0	<0.130	100	80.6 - 116	0	20
n-Propylbenzene	51.6	μg/L	1	50.0	<0.110	103	82.4 - 117	1	20
1,3,5-Trimethylbenzene	51.6	μg/L	1	50.0	<0.110	103	83.3 - 118	0	20
tert-Butylbenzene	52.1	μg/L	1	50.0	<0.450	104	81.8 - 120	1	20
1,2,4-Trimethylbenzene	52.4	μg/L	1	50.0	<0.100	105	83.7 - 118	0	20
1,4-Dichlorobenzene (para)	51.3	μg/L	1	50.0	<0.120	103	76.8 - 117	1	20
sec-Butylbenzene	52.2	μg/L	1	50.0	<0.460	104	81.2 - 120	1	20
1,3-Dichlorobenzene (meta)	51.9	μg/L	1	50.0	<0.520	104	77.7 - 117	1	20
p-Isopropyltoluene	53.6	μg/L	1	50.0	<0.100	107	83 - 120	1	20
4-Chlorotoluene	51.6	μg/L	1	50.0	<0.120	103	83.8 - 116	1	20
1,2-Dichlorobenzene (ortho)	51.8	μg/L	1	50.0	<0.130	104	77.9 - 119	1	20
n-Butylbenzene	53.7	μg/L	1	50.0	<0.400	107	81.2 - 118	0	20
1,2-Dibromo-3-chloropropane	41.3	μg/L	1	50.0	<0.650	83	70.4 - 125	3	20
1,2,3-Trichlorobenzene	54.3	μg/L	1	50.0	<0.240	109	64.8 - 132	1	20
1,2,4-Trichlorobenzene	55.0	μg/L	1	50.0	<0.190	110	73.8 - 121	0	20
Naphthalene	45.8	μg/L	1	50.0	<0.330	92	67.2 - 128	1	20
Hexachlorobutadiene	55.4	μg/L	1	50.0	<0.260	111	71.7 - 133	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	49.8	49.8	μg/L	1	50.0	100	100	87.7 - 114
Toluene-d8	50.3	50.5	μg/L	1	50.0	101	101	89.7 - 112
4-Bromofluorobenzene (4-BFB)	50.2	50.3	μg/L	1	50.0	100	101	86.7 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 69406 Date Analyzed: 2010-04-23 Analyzed By: AW
Prep Batch: 59405 QC Preparation: 2010-04-23 Prepared By: AW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	253	mg/Kg	1	250	31.4	89	75 - 125
>C12-C28	239	mg/Kg	1	250	<5.90	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	254	mg/Kg	1	250	31.4	89	75 - 125	0	20
>C12-C28	239	mg/Kg	1	250	<5.90	96	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Octane	80.8	80.3	mg/Kg	1	100	81	80	70 - 130
n-Tricosane	110	111	mg/Kg	1	100	110	111	70 - 130
n-Triacontane	120	122	mg/Kg	1	100	120	122	60.7 - 146

Laboratory Control Spike (LCS-1)

QC Batch: 69410 Date Analyzed: 2010-04-23 Analyzed By: KB
Prep Batch: 59412 QC Preparation: 2010-04-23 Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	1090	µg/Kg	1	1000	<3.64	109	79 - 125
Dichlorodifluoromethane	766	µg/Kg	1	1000	<5.15	77	30.3 - 142
Chloromethane (methyl chloride)	1080	µg/Kg	1	1000	6.04	108	41.6 - 148
Vinyl Chloride	1060	µg/Kg	1	1000	<4.46	106	62 - 130
Bromomethane (methyl bromide)	1130	µg/Kg	1	1000	<7.01	113	44.5 - 148
Chloroethane	1170	µg/Kg	1	1000	<2.69	117	55.7 - 139
Trichlorofluoromethane	1100	µg/Kg	1	1000	<4.04	110	16.1 - 178
Acetone	1080	µg/Kg	1	1000	<43.2	108	16.9 - 210
Iodomethane (methyl iodide)	1090	µg/Kg	1	1000	<6.39	109	74.9 - 133
Carbon Disulfide	1030	µg/Kg	1	1000	<6.98	103	75.9 - 136
Acrylonitrile	1150	µg/Kg	1	1000	<2.79	115	71.1 - 133
2-Butanone (MEK)	1110	µg/Kg	1	1000	<6.87	111	55.5 - 146
4-Methyl-2-pentanone (MIBK)	1210	µg/Kg	1	1000	<4.21	121	61.5 - 139
2-Hexanone	1130	µg/Kg	1	1000	<2.94	113	53.2 - 150
trans 1,4-Dichloro-2-butene	942	µg/Kg	1	1000	<2.41	94	39.7 - 157
1,1-Dichloroethene	1150	µg/Kg	1	1000	<6.53	115	67.8 - 131
Methylene chloride	1180	µg/Kg	1	1000	97.6	118	74.6 - 137
MTBE	1120	µg/Kg	1	1000	<2.14	112	76.5 - 125
trans-1,2-Dichloroethene	1060	µg/Kg	1	1000	<6.50	106	79.9 - 122
1,1-Dichloroethane	1090	µg/Kg	1	1000	<5.94	109	80.7 - 123
cis-1,2-Dichloroethene	1080	µg/Kg	1	1000	<5.99	108	78.8 - 126
2,2-Dichloropropane	1210	µg/Kg	1	1000	<8.12	121	52.4 - 146
1,2-Dichloroethane (EDC)	1100	µg/Kg	1	1000	<3.67	110	59.5 - 136
Chloroform	1070	µg/Kg	1	1000	<5.31	107	74.8 - 124
1,1,1-Trichloroethane	1070	µg/Kg	1	1000	<7.76	107	63.2 - 137
1,1-Dichloropropene	1100	µg/Kg	1	1000	<7.43	110	79.6 - 121
Benzene	1080	µg/Kg	1	1000	<6.23	108	79.5 - 117
Carbon Tetrachloride	1050	µg/Kg	1	1000	<6.32	105	37.2 - 170
1,2-Dichloropropane	1100	µg/Kg	1	1000	<5.23	110	82.6 - 122
Trichloroethene (TCE)	1080	µg/Kg	1	1000	<7.95	108	78 - 124

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dibromomethane (methylene bromide)	1100	µg/Kg	1	1000	<3.41	110	78.4 - 121
Bromodichloromethane	1070	µg/Kg	1	1000	<4.03	107	70.3 - 134
2-Chloroethyl vinyl ether	940	µg/Kg	1	1000	<2.22	94	51.3 - 127
cis-1,3-Dichloropropene	1130	µg/Kg	1	1000	<3.74	113	78.6 - 130
trans-1,3-Dichloropropene	1180	µg/Kg	1	1000	<3.96	118	74.6 - 133
Toluene	1090	µg/Kg	1	1000	<6.10	109	81.5 - 116
1,1,2-Trichloroethane	1060	µg/Kg	1	1000	<2.06	106	81.1 - 118
1,3-Dichloropropane	1090	µg/Kg	1	1000	<3.74	109	82.5 - 117
Dibromochloromethane	1070	µg/Kg	1	1000	<3.78	107	77.6 - 133
1,2-Dibromoethane (EDB)	1080	µg/Kg	1	1000	<2.04	108	80.5 - 120
Tetrachloroethene (PCE)	766	µg/Kg	1	1000	<7.24	77	33.2 - 172
Chlorobenzene	1050	µg/Kg	1	1000	<6.15	105	83.4 - 117
1,1,1,2-Tetrachloroethane	1060	µg/Kg	1	1000	<4.11	106	79 - 126
Ethylbenzene	1070	µg/Kg	1	1000	<5.48	107	79.8 - 117
m,p-Xylene	2130	µg/Kg	1	2000	<11.5	106	74.8 - 120
Bromoform	1060	µg/Kg	1	1000	<2.24	106	64.1 - 134
Styrene	1080	µg/Kg	1	1000	<4.22	108	85.6 - 121
o-Xylene	1070	µg/Kg	1	1000	<5.89	107	74.6 - 120
1,1,2,2-Tetrachloroethane	1130	µg/Kg	1	1000	<2.30	113	64.5 - 133
2-Chlorotoluene	1050	µg/Kg	1	1000	<5.85	105	80.9 - 117
1,2,3-Trichloropropane	1100	µg/Kg	1	1000	<4.42	110	70.2 - 129
Isopropylbenzene	1060	µg/Kg	1	1000	<5.93	106	79.6 - 122
Bromobenzene	1080	µg/Kg	1	1000	<8.21	108	79.9 - 116
n-Propylbenzene	1060	µg/Kg	1	1000	<6.02	106	81 - 118
1,3,5-Trimethylbenzene	1040	µg/Kg	1	1000	<5.35	104	79.3 - 121
tert-Butylbenzene	1050	µg/Kg	1	1000	<6.14	105	77 - 126
1,2,4-Trimethylbenzene	1070	µg/Kg	1	1000	<5.49	107	81.1 - 120
1,4-Dichlorobenzene (para)	1020	µg/Kg	1	1000	<4.74	102	73.1 - 120
sec-Butylbenzene	1050	µg/Kg	1	1000	<6.16	105	79.9 - 121
1,3-Dichlorobenzene (meta)	1020	µg/Kg	1	1000	<6.17	102	73.5 - 124
p-Isopropyltoluene	1070	µg/Kg	1	1000	<6.38	107	79.2 - 123
4-Chlorotoluene	1040	µg/Kg	1	1000	<6.03	104	80.1 - 117
1,2-Dichlorobenzene (ortho)	1030	µg/Kg	1	1000	<4.96	103	74.6 - 122
n-Butylbenzene	1090	µg/Kg	1	1000	<6.02	109	77.8 - 122
1,2-Dibromo-3-chloropropane	900	µg/Kg	1	1000	<6.79	90	57.3 - 133
1,2,3-Trichlorobenzene	1080	µg/Kg	1	1000	<4.91	108	59.7 - 135
1,2,4-Trichlorobenzene	1070	µg/Kg	1	1000	<4.61	107	72.2 - 125
Naphthalene	896	µg/Kg	1	1000	6.35	90	59.1 - 135
Hexachlorobutadiene	1060	µg/Kg	1	1000	<13.9	106	71 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	1100	µg/Kg	1	1000	<3.64	110	79 - 125	1	20
Dichlorodifluoromethane	866	µg/Kg	1	1000	<5.15	87	30.3 - 142	12	20
Chloromethane (methyl chloride)	1110	µg/Kg	1	1000	6.04	111	41.6 - 148	3	20
Vinyl Chloride	1110	µg/Kg	1	1000	<4.46	111	62 - 130	5	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromomethane (methyl bromide)	1160	µg/Kg	1	1000	<7.01	116	44.5 - 148	3	20
Chloroethane	1220	µg/Kg	1	1000	<2.69	122	55.7 - 139	4	20
Trichlorofluoromethane	1100	µg/Kg	1	1000	<4.04	110	16.1 - 178	0	20
Acetone	956	µg/Kg	1	1000	<43.2	96	16.9 - 210	12	20
Iodomethane (methyl iodide)	1150	µg/Kg	1	1000	<6.39	115	74.9 - 133	5	20
Carbon Disulfide	1080	µg/Kg	1	1000	<6.98	108	75.9 - 136	5	20
Acrylonitrile	1090	µg/Kg	1	1000	<2.79	109	71.1 - 133	5	20
2-Butanone (MEK)	1020	µg/Kg	1	1000	<6.87	102	55.5 - 146	8	20
4-Methyl-2-pentanone (MIBK)	1110	µg/Kg	1	1000	<4.21	111	61.5 - 139	9	20
2-Hexanone	994	µg/Kg	1	1000	<2.94	99	53.2 - 150	13	20
trans 1,4-Dichloro-2-butene	858	µg/Kg	1	1000	<2.41	86	39.7 - 157	9	20
1,1-Dichloroethene	1180	µg/Kg	1	1000	<6.53	118	67.8 - 131	3	20
Methylene chloride	1200	µg/Kg	1	1000	97.6	120	74.6 - 137	2	20
MTBE	1120	µg/Kg	1	1000	<2.14	112	76.5 - 125	0	20
trans-1,2-Dichloroethene	1090	µg/Kg	1	1000	<6.50	109	79.9 - 122	3	20
1,1-Dichloroethane	1130	µg/Kg	1	1000	<5.94	113	80.7 - 123	4	20
cis-1,2-Dichloroethene	1120	µg/Kg	1	1000	<5.99	112	78.8 - 126	4	20
2,2-Dichloropropane	1240	µg/Kg	1	1000	<8.12	124	52.4 - 146	2	20
1,2-Dichloroethane (EDC)	1120	µg/Kg	1	1000	<3.67	112	59.5 - 136	2	20
Chloroform	1100	µg/Kg	1	1000	<5.31	110	74.8 - 124	3	20
1,1,1-Trichloroethane	1100	µg/Kg	1	1000	<7.76	110	63.2 - 137	3	20
1,1-Dichloropropene	1130	µg/Kg	1	1000	<7.43	113	79.6 - 121	3	20
Benzene	1120	µg/Kg	1	1000	<6.23	112	79.5 - 117	4	20
Carbon Tetrachloride	1100	µg/Kg	1	1000	<6.32	110	37.2 - 170	5	20
1,2-Dichloropropane	1130	µg/Kg	1	1000	<5.23	113	82.6 - 122	3	20
Trichloroethene (TCE)	1100	µg/Kg	1	1000	<7.95	110	78 - 124	2	20
Dibromomethane (methylene bromide)	1090	µg/Kg	1	1000	<3.41	109	78.4 - 121	1	20
Bromodichloromethane	1100	µg/Kg	1	1000	<4.03	110	70.3 - 134	3	20
2-Chloroethyl vinyl ether	863	µg/Kg	1	1000	<2.22	86	51.3 - 127	8	20
cis-1,3-Dichloropropene	1150	µg/Kg	1	1000	<3.74	115	78.6 - 130	2	20
trans-1,3-Dichloropropene	1180	µg/Kg	1	1000	<3.96	118	74.6 - 133	0	20
Toluene	1120	µg/Kg	1	1000	<6.10	112	81.5 - 116	3	20
1,1,2-Trichloroethane	1070	µg/Kg	1	1000	<2.06	107	81.1 - 118	1	20
1,3-Dichloropropane	1100	µg/Kg	1	1000	<3.74	110	82.5 - 117	1	20
Dibromochloromethane	1080	µg/Kg	1	1000	<3.78	108	77.6 - 133	1	20
1,2-Dibromoethane (EDB)	1070	µg/Kg	1	1000	<2.04	107	80.5 - 120	1	20
Tetrachloroethene (PCE)	797	µg/Kg	1	1000	<7.24	80	33.2 - 172	4	20
Chlorobenzene	1090	µg/Kg	1	1000	<6.15	109	83.4 - 117	4	20
1,1,1,2-Tetrachloroethane	1100	µg/Kg	1	1000	<4.11	110	79 - 126	4	20
Ethylbenzene	1100	µg/Kg	1	1000	<5.48	110	79.8 - 117	3	20
m,p-Xylene	2200	µg/Kg	1	2000	<11.5	110	74.8 - 120	3	20
Bromoform	1040	µg/Kg	1	1000	<2.24	104	64.1 - 134	2	20
Styrene	1120	µg/Kg	1	1000	<4.22	112	85.6 - 121	4	20
o-Xylene	1110	µg/Kg	1	1000	<5.89	111	74.6 - 120	4	20
1,1,2,2-Tetrachloroethane	1080	µg/Kg	1	1000	<2.30	108	64.5 - 133	4	20
2-Chlorotoluene	1080	µg/Kg	1	1000	<5.85	108	80.9 - 117	3	20
1,2,3-Trichloropropane	1120	µg/Kg	1	1000	<4.42	112	70.2 - 129	2	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Isopropylbenzene	1100	μg/Kg	1	1000	<5.93	110	79.6 - 122	4	20
Bromobenzene	1100	μg/Kg	1	1000	<8.21	110	79.9 - 116	2	20
n-Propylbenzene	1100	μg/Kg	1	1000	<6.02	110	81 - 118	4	20
1,3,5-Trimethylbenzene	1080	μg/Kg	1	1000	<5.35	108	79.3 - 121	4	20
tert-Butylbenzene	1100	μg/Kg	1	1000	<6.14	110	77 - 126	5	20
1,2,4-Trimethylbenzene	1100	μg/Kg	1	1000	<5.49	110	81.1 - 120	3	20
1,4-Dichlorobenzene (para)	1060	μg/Kg	1	1000	<4.74	106	73.1 - 120	4	20
sec-Butylbenzene	1110	μg/Kg	1	1000	<6.16	111	79.9 - 121	6	20
1,3-Dichlorobenzene (meta)	1080	μg/Kg	1	1000	<6.17	108	73.5 - 124	6	20
p-Isopropyltoluene	1110	μg/Kg	1	1000	<6.38	111	79.2 - 123	4	20
4-Chlorotoluene	1080	μg/Kg	1	1000	<6.03	108	80.1 - 117	4	20
1,2-Dichlorobenzene (ortho)	1060	μg/Kg	1	1000	<4.96	106	74.6 - 122	3	20
n-Butylbenzene	1140	μg/Kg	1	1000	<6.02	114	77.8 - 122	4	20
1,2-Dibromo-3-chloropropane	836	μg/Kg	1	1000	<6.79	84	57.3 - 133	7	20
1,2,3-Trichlorobenzene	1080	μg/Kg	1	1000	<4.91	108	59.7 - 135	0	20
1,2,4-Trichlorobenzene	1100	μg/Kg	1	1000	<4.61	110	72.2 - 125	3	20
Naphthalene	888	μg/Kg	1	1000	6.35	89	59.1 - 135	1	20
Hexachlorobutadiene	1110	μg/Kg	1	1000	<13.9	111	71 - 130	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	1020	1000	μg/Kg	1	1000	102	100	79.2 - 119
Toluene-d8	1010	1000	μg/Kg	1	1000	101	100	91.6 - 107
4-Bromofluorobenzene (4-BFB)	1010	1010	μg/Kg	1	1000	101	101	70.7 - 122

Laboratory Control Spike (LCS-1)

QC Batch: 69447 Date Analyzed: 2010-04-26 Analyzed By: KB
Prep Batch: 59443 QC Preparation: 2010-04-26 Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	1160	μg/Kg	1	1000	<3.64	116	79 - 125
Dichlorodifluoromethane	813	μg/Kg	1	1000	<5.15	81	30.3 - 142
Chloromethane (methyl chloride)	1080	μg/Kg	1	1000	<4.16	108	41.6 - 148
Vinyl Chloride	1140	μg/Kg	1	1000	<4.46	114	62 - 130
Bromomethane (methyl bromide)	1300	μg/Kg	1	1000	<7.01	130	44.5 - 148
Chloroethane	1330	μg/Kg	1	1000	<2.69	133	55.7 - 139
Trichlorofluoromethane	1170	μg/Kg	1	1000	<4.04	117	16.1 - 178
Acetone	1220	μg/Kg	1	1000	<43.2	122	16.9 - 210
Iodomethane (methyl iodide)	1220	μg/Kg	1	1000	<6.39	122	74.9 - 133
Carbon Disulfide	1130	μg/Kg	1	1000	<6.98	113	75.9 - 136
Acrylonitrile	1230	μg/Kg	1	1000	<2.79	123	71.1 - 133
2-Butanone (MEK)	1100	μg/Kg	1	1000	<6.87	110	55.5 - 146
4-Methyl-2-pentanone (MIBK)	1300	μg/Kg	1	1000	<4.21	130	61.5 - 139

continued ...

control spikes continued ...

Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
2-Hexanone		1220	μg/Kg	1	1000	<2.94	122	53.2 - 150
trans 1,4-Dichloro-2-butene		855	μg/Kg	1	1000	<2.41	86	39.7 - 157
1,1-Dichloroethene		1220	μg/Kg	1	1000	<6.53	122	67.8 - 131
Methylene chloride		1190	μg/Kg	1	1000	<16.8	119	74.6 - 137
MTBE		1230	μg/Kg	1	1000	<2.14	123	76.5 - 125
trans-1,2-Dichloroethene		1150	μg/Kg	1	1000	<6.50	115	79.9 - 122
1,1-Dichloroethane		1190	μg/Kg	1	1000	<5.94	119	80.7 - 123
cis-1,2-Dichloroethene		1190	μg/Kg	1	1000	<5.99	119	78.8 - 126
2,2-Dichloropropane		1040	μg/Kg	1	1000	<8.12	104	52.4 - 146
1,2-Dichloroethane (EDC)		1210	μg/Kg	1	1000	<3.67	121	59.5 - 136
Chloroform		1180	μg/Kg	1	1000	<5.31	118	74.8 - 124
1,1,1-Trichloroethane		1170	μg/Kg	1	1000	<7.76	117	63.2 - 137
1,1-Dichloropropene		1190	μg/Kg	1	1000	<7.43	119	79.6 - 121
Benzene	[19]	1180	μg/Kg	1	1000	<6.23	118	79.5 - 117
Carbon Tetrachloride		1140	μg/Kg	1	1000	<6.32	114	37.2 - 170
1,2-Dichloropropane		1210	μg/Kg	1	1000	<5.23	121	82.6 - 122
Trichloroethene (TCE)	[20]	1260	μg/Kg	1	1000	<7.95	126	78 - 124
Dibromomethane (methylene bromide)		1190	μg/Kg	1	1000	<3.41	119	78.4 - 121
Bromodichloromethane		1180	μg/Kg	1	1000	<4.03	118	70.3 - 134
2-Chloroethyl vinyl ether		921	μg/Kg	1	1000	<2.22	92	51.3 - 127
cis-1,3-Dichloropropene		1190	μg/Kg	1	1000	<3.74	119	78.6 - 130
trans-1,3-Dichloropropene		1240	μg/Kg	1	1000	<3.96	124	74.6 - 133
Toluene	[21]	1190	μg/Kg	1	1000	<6.10	119	81.5 - 116
1,1,2-Trichloroethane		1130	μg/Kg	1	1000	<2.06	113	81.1 - 118
1,3-Dichloropropane		1160	μg/Kg	1	1000	<3.74	116	82.5 - 117
Dibromochloromethane		1140	μg/Kg	1	1000	<3.78	114	77.6 - 133
1,2-Dibromoethane (EDB)		1150	μg/Kg	1	1000	<2.04	115	80.5 - 120
Tetrachloroethene (PCE)		1330	μg/Kg	1	1000	<7.24	133	33.2 - 172
Chlorobenzene		1120	μg/Kg	1	1000	<6.15	112	83.4 - 117
1,1,1,2-Tetrachloroethane		1140	μg/Kg	1	1000	<4.11	114	79 - 126
Ethylbenzene		1140	μg/Kg	1	1000	<5.48	114	79.8 - 117
m,p-Xylene		2280	μg/Kg	1	2000	<11.5	114	74.8 - 120
Bromoform		1120	μg/Kg	1	1000	<2.24	112	64.1 - 134
Styrene		1150	μg/Kg	1	1000	<4.22	115	85.6 - 121
o-Xylene		1140	μg/Kg	1	1000	<5.89	114	74.6 - 120
1,1,2,2-Tetrachloroethane		1040	μg/Kg	1	1000	<2.30	104	64.5 - 133
2-Chlorotoluene		1110	μg/Kg	1	1000	<5.85	111	80.9 - 117
1,2,3-Trichloropropane		1280	μg/Kg	1	1000	<4.42	128	70.2 - 129
Isopropylbenzene		1120	μg/Kg	1	1000	<5.93	112	79.6 - 122
Bromobenzene		1140	μg/Kg	1	1000	<8.21	114	79.9 - 116
n-Propylbenzene		1110	μg/Kg	1	1000	<6.02	111	81 - 118
1,3,5-Trimethylbenzene		1100	μg/Kg	1	1000	<5.35	110	79.3 - 121
tert-Butylbenzene		1120	μg/Kg	1	1000	<6.14	112	77 - 126
1,2,4-Trimethylbenzene		1120	μg/Kg	1	1000	<5.49	112	81.1 - 120

continued ...

[19] Spike recovery outside control limits. Concentration biased high. Analyte not detected in samples.
[20] Spike recovery outside control limits. Concentration biased high. Analyte not detected in samples. •
[21] Spike recovery outside control limits. Concentration biased high. Analyte not detected in samples. •

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,4-Dichlorobenzene (para)	1060	µg/Kg	1	1000	<4.74	106	73.1 - 120
sec-Butylbenzene	1110	µg/Kg	1	1000	<6.16	111	79.9 - 121
1,3-Dichlorobenzene (meta)	1080	µg/Kg	1	1000	<6.17	108	73.5 - 124
p-Isopropyltoluene	1120	µg/Kg	1	1000	<6.38	112	79.2 - 123
4-Chlorotoluene	1100	µg/Kg	1	1000	<6.03	110	80.1 - 117
1,2-Dichlorobenzene (ortho)	1080	µg/Kg	1	1000	<4.96	108	74.6 - 122
n-Butylbenzene	1140	µg/Kg	1	1000	<6.02	114	77.8 - 122
1,2-Dibromo-3-chloropropane	955	µg/Kg	1	1000	<6.79	96	57.3 - 133
1,2,3-Trichlorobenzene	1160	µg/Kg	1	1000	<4.91	116	59.7 - 135
1,2,4-Trichlorobenzene	1100	µg/Kg	1	1000	<4.61	110	72.2 - 125
Naphthalene	997	µg/Kg	1	1000	<2.35	100	59.1 - 135
Hexachlorobutadiene	1070	µg/Kg	1	1000	<13.9	107	71 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	1140	µg/Kg	1	1000	<3.64	114	79 - 125	2	20
Dichlorodifluoromethane	846	µg/Kg	1	1000	<5.15	85	30.3 - 142	4	20
Chloromethane (methyl chloride)	1070	µg/Kg	1	1000	<4.16	107	41.6 - 148	1	20
Vinyl Chloride	1130	µg/Kg	1	1000	<4.46	113	62 - 130	1	20
Bromomethane (methyl bromide)	1250	µg/Kg	1	1000	<7.01	125	44.5 - 148	4	20
Chloroethane	1320	µg/Kg	1	1000	<2.69	132	55.7 - 139	1	20
Trichlorofluoromethane	1210	µg/Kg	1	1000	<4.04	121	16.1 - 178	3	20
Acetone	1230	µg/Kg	1	1000	<43.2	123	16.9 - 210	1	20
Iodomethane (methyl iodide)	1190	µg/Kg	1	1000	<6.39	119	74.9 - 133	2	20
Carbon Disulfide	1100	µg/Kg	1	1000	<6.98	110	75.9 - 136	3	20
Acrylonitrile	1210	µg/Kg	1	1000	<2.79	121	71.1 - 133	2	20
2-Butanone (MEK)	1090	µg/Kg	1	1000	<6.87	109	55.5 - 146	1	20
4-Methyl-2-pentanone (MIBK)	1270	µg/Kg	1	1000	<4.21	127	61.5 - 139	2	20
2-Hexanone	1200	µg/Kg	1	1000	<2.94	120	53.2 - 150	2	20
trans 1,4-Dichloro-2-butene	828	µg/Kg	1	1000	<2.41	83	39.7 - 157	3	20
1,1-Dichloroethene	1210	µg/Kg	1	1000	<6.53	121	67.8 - 131	1	20
Methylene chloride	1170	µg/Kg	1	1000	<16.8	117	74.6 - 137	2	20
MTBE	1200	µg/Kg	1	1000	<2.14	120	76.5 - 125	2	20
trans-1,2-Dichloroethene	1130	µg/Kg	1	1000	<6.50	113	79.9 - 122	2	20
1,1-Dichloroethane	1160	µg/Kg	1	1000	<5.94	116	80.7 - 123	3	20
cis-1,2-Dichloroethene	1160	µg/Kg	1	1000	<5.99	116	78.8 - 126	3	20
2,2-Dichloropropane	1010	µg/Kg	1	1000	<8.12	101	52.4 - 146	3	20
1,2-Dichloroethane (EDC)	1190	µg/Kg	1	1000	<3.67	119	59.5 - 136	2	20
Chloroform	1160	µg/Kg	1	1000	<5.31	116	74.8 - 124	2	20
1,1,1-Trichloroethane	1140	µg/Kg	1	1000	<7.76	114	63.2 - 137	3	20
1,1-Dichloropropene	1170	µg/Kg	1	1000	<7.43	117	79.6 - 121	2	20
Benzene	1160	µg/Kg	1	1000	<6.23	116	79.5 - 117	2	20
Carbon Tetrachloride	1120	µg/Kg	1	1000	<6.32	112	37.2 - 170	2	20
1,2-Dichloropropane	1170	µg/Kg	1	1000	<5.23	117	82.6 - 122	3	20
Trichloroethene (TCE)	1240	µg/Kg	1	1000	<7.95	124	78 - 124	2	20
Dibromomethane (methylene bromide)	1170	µg/Kg	1	1000	<3.41	117	78.4 - 121	2	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromodichloromethane	1160	μg/Kg	1	1000	<4.03	116	70.3 - 134	2	20
2-Chloroethyl vinyl ether	879	μg/Kg	1	1000	<2.22	88	51.3 - 127	5	20
cis-1,3-Dichloropropene	1170	μg/Kg	1	1000	<3.74	117	78.6 - 130	2	20
trans-1,3-Dichloropropene	1210	μg/Kg	1	1000	<3.96	121	74.6 - 133	2	20
Toluene	1160	μg/Kg	1	1000	<6.10	116	81.5 - 116	3	20
1,1,2-Trichloroethane	1120	μg/Kg	1	1000	<2.06	112	81.1 - 118	1	20
1,3-Dichloropropane	1130	μg/Kg	1	1000	<3.74	113	82.5 - 117	3	20
Dibromochloromethane	1120	μg/Kg	1	1000	<3.78	112	77.6 - 133	2	20
1,2-Dibromoethane (EDB)	1120	μg/Kg	1	1000	<2.04	112	80.5 - 120	3	20
Tetrachloroethene (PCE)	1300	μg/Kg	1	1000	<7.24	130	33.2 - 172	2	20
Chlorobenzene	1100	μg/Kg	1	1000	<6.15	110	83.4 - 117	2	20
1,1,1,2-Tetrachloroethane	1120	μg/Kg	1	1000	<4.11	112	79 - 126	2	20
Ethylbenzene	1120	μg/Kg	1	1000	<5.48	112	79.8 - 117	2	20
m,p-Xylene	2230	μg/Kg	1	2000	<11.5	112	74.8 - 120	2	20
Bromoform	1100	μg/Kg	1	1000	<2.24	110	64.1 - 134	2	20
Styrene	1120	μg/Kg	1	1000	<4.22	112	85.6 - 121	3	20
o-Xylene	1120	μg/Kg	1	1000	<5.89	112	74.6 - 120	2	20
1,1,2,2-Tetrachloroethane	1020	μg/Kg	1	1000	<2.30	102	64.5 - 133	2	20
2-Chlorotoluene	1090	μg/Kg	1	1000	<5.85	109	80.9 - 117	2	20
1,2,3-Trichloropropane	1230	μg/Kg	1	1000	<4.42	123	70.2 - 129	4	20
Isopropylbenzene	1100	μg/Kg	1	1000	<5.93	110	79.6 - 122	2	20
Bromobenzene	1120	μg/Kg	1	1000	<8.21	112	79.9 - 116	2	20
n-Propylbenzene	1090	μg/Kg	1	1000	<6.02	109	81 - 118	2	20
1,3,5-Trimethylbenzene	1080	μg/Kg	1	1000	<5.35	108	79.3 - 121	2	20
tert-Butylbenzene	1090	μg/Kg	1	1000	<6.14	109	77 - 126	3	20
1,2,4-Trimethylbenzene	1090	μg/Kg	1	1000	<5.49	109	81.1 - 120	3	20
1,4-Dichlorobenzene (para)	1040	μg/Kg	1	1000	<4.74	104	73.1 - 120	2	20
sec-Butylbenzene	1100	μg/Kg	1	1000	<6.16	110	79.9 - 121	1	20
1,3-Dichlorobenzene (meta)	1050	μg/Kg	1	1000	<6.17	105	73.5 - 124	3	20
p-Isopropyltoluene	1110	μg/Kg	1	1000	<6.38	111	79.2 - 123	1	20
4-Chlorotoluene	1080	μg/Kg	1	1000	<6.03	108	80.1 - 117	2	20
1,2-Dichlorobenzene (ortho)	1060	μg/Kg	1	1000	<4.96	106	74.6 - 122	2	20
n-Butylbenzene	1120	μg/Kg	1	1000	<6.02	112	77.8 - 122	2	20
1,2-Dibromo-3-chloropropane	939	μg/Kg	1	1000	<6.79	94	57.3 - 133	2	20
1,2,3-Trichlorobenzene	1150	μg/Kg	1	1000	<4.91	115	59.7 - 135	1	20
1,2,4-Trichlorobenzene	1090	μg/Kg	1	1000	<4.61	109	72.2 - 125	1	20
Naphthalene	999	μg/Kg	1	1000	<2.35	100	59.1 - 135	0	20
Hexachlorobutadiene	1060	μg/Kg	1	1000	<13.9	106	71 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	1020	1020	μg/Kg	1	1000	102	102	79.2 - 119
Toluene-d8	996	995	μg/Kg	1	1000	100	100	91.6 - 107
4-Bromofluorobenzene (4-BFB)	1030	1020	μg/Kg	1	1000	103	102	70.7 - 122

Laboratory Control Spike (LCS-1)

QC Batch: 69469 Date Analyzed: 2010-04-28 Analyzed By: AW
Prep Batch: 59465 QC Preparation: 2010-04-26 Prepared By: AW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	238	mg/Kg	1	250	15.2	89	75 - 125
>C12-C28	217	mg/Kg	1	250	<5.90	87	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	231	mg/Kg	1	250	15.2	86	75 - 125	3	20
>C12-C28	217	mg/Kg	1	250	<5.90	87	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Octane	90.0	94.8	mg/Kg	1	100	90	95	70 - 130
n-Tricosane	108	108	mg/Kg	1	100	108	108	70 - 130
n-Triacontane	125	125	mg/Kg	1	100	125	125	60.7 - 146

Laboratory Control Spike (LCS-1)

QC Batch: 69520 Date Analyzed: 2010-04-29 Analyzed By: MN
Prep Batch: 59505 QC Preparation: 2010-04-28 Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyridine	0.747	mg/Kg	1	2.67	<0.0539	28	11.1 - 76.5
N-Nitrosodimethylamine	0.881	mg/Kg	1	2.67	<0.0468	33	21 - 77.7
2-Picoline	1.36	mg/Kg	1	2.67	<0.0512	51	15.1 - 87.4
Methyl methanesulfonate	0.958	mg/Kg	1	2.67	<0.0479	36	14.9 - 91.4
Ethyl methanesulfonate	1.41	mg/Kg	1	2.67	<0.0475	53	21.3 - 88
Phenol	0.792	mg/Kg	1	2.67	<0.0491	30	27.8 - 76.6
Aniline	0.993	mg/Kg	1	2.67	<0.0590	37	28.1 - 80.9
bis(2-chloroethyl)ether	1.57	mg/Kg	1	2.67	<0.0527	59	28.4 - 80.4
2-Chlorophenol	1.59	mg/Kg	1	2.67	<0.0444	60	26.7 - 74.6
1,3-Dichlorobenzene (meta)	1.47	mg/Kg	1	2.67	<0.0496	55	31 - 70
1,4-Dichlorobenzene (para)	1.44	mg/Kg	1	2.67	<0.0483	54	30.1 - 71.1
Benzyl alcohol	2.07	mg/Kg	1	2.67	<0.0579	78	18 - 92.9
1,2-Dichlorobenzene (ortho)	1.54	mg/Kg	1	2.67	<0.0448	58	30.8 - 72.7
2-Methylphenol	1.33	mg/Kg	1	2.67	<0.0522	50	29 - 75.8
bis(2-chloroisopropyl)ether	1.54	mg/Kg	1	2.67	<0.0531	58	10.3 - 79.5
4-Methylphenol / 3-Methylphenol	1.07	mg/Kg	1	2.67	<0.0594	40	26.2 - 82.2
Acetophenone	1.56	mg/Kg	1	2.67	<0.0426	58	31 - 88.9
N-Nitrosodi-n-propylamine	1.46	mg/Kg	1	2.67	<0.0567	55	27.4 - 93.9

continued ...

control spikes continued ...

Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Hexachloroethane		1.33	mg/Kg	1	2.67	<0.0427	50	27.3 - 73
Nitrobenzene		1.51	mg/Kg	1	2.67	<0.0435	56	29.2 - 86.4
N-Nitrosopiperidine		1.80	mg/Kg	1	2.67	<0.0510	67	34.5 - 95
Isophorone		1.55	mg/Kg	1	2.67	<0.0509	58	37.9 - 99.1
2-Nitrophenol		1.98	mg/Kg	1	2.67	<0.0484	74	26.8 - 90.7
2,4-Dimethylphenol		1.33	mg/Kg	1	2.67	<0.0368	50	29.2 - 82.7
bis(2-chloroethoxy)methane		1.66	mg/Kg	1	2.67	<0.0468	62	34.2 - 87.4
Benzoic acid		1.82	mg/Kg	1	2.67	<0.0865	68	10 - 133
2,4-Dichlorophenol		1.67	mg/Kg	1	2.67	<0.0371	62	31 - 87.3
1,2,4-Trichlorobenzene		1.59	mg/Kg	1	2.67	<0.0440	60	26.6 - 89.2
a,a-Dimethylphenethylamine	[22]	0.0322	mg/Kg	1	2.67	<0.0277	1	10 - 100
Naphthalene		1.60	mg/Kg	1	2.67	<0.0508	60	33.3 - 80.8
4-Chloroaniline		0.850	mg/Kg	1	2.67	<0.0438	32	25.1 - 88.5
2,6-Dichlorophenol		1.76	mg/Kg	1	2.67	<0.0422	66	29.5 - 88.4
Hexachlorobutadiene		1.46	mg/Kg	1	2.67	<0.0511	55	30.1 - 80.6
N-Nitroso-di-n-butylamine		1.54	mg/Kg	1	2.67	<0.0429	58	32.3 - 104
4-Chloro-3-methylphenol	[23]	0.788	mg/Kg	1	2.67	<0.0324	30	37.2 - 107
1-Methylnaphthalene		1.65	mg/Kg	1	2.67	<0.0487	62	34.5 - 85
2-Methylnaphthalene		1.64	mg/Kg	1	2.67	<0.0430	61	35.9 - 81.6
1,2,4,5-Tetrachlorobenzene		1.90	mg/Kg	1	2.67	<0.0530	71	21.6 - 106
Hexachlorocyclopentadiene		2.58	mg/Kg	1	2.67	<0.0410	97	10 - 114
2,4,6-Trichlorophenol		2.15	mg/Kg	1	2.67	<0.0406	80	31 - 109
2,4,5-Trichlorophenol		2.01	mg/Kg	1	2.67	<0.0328	75	33.3 - 108
2-Chloronaphthalene		1.86	mg/Kg	1	2.67	<0.0450	70	32 - 91.4
1-Chloronaphthalene		1.83	mg/Kg	1	2.67	<0.0516	68	38.1 - 88.9
2-Nitroaniline		1.55	mg/Kg	1	2.67	<0.0259	58	39.8 - 122
Dimethylphthalate		1.86	mg/Kg	1	2.67	<0.0316	70	40.4 - 125
Acenaphthylene		1.85	mg/Kg	1	2.67	<0.0434	69	34.5 - 96.8
2,6-Dinitrotoluene		1.97	mg/Kg	1	2.67	<0.0273	74	51 - 115
3-Nitroaniline	[24]	1.25	mg/Kg	1	2.67	<0.0214	47	47.8 - 116
Acenaphthene		1.82	mg/Kg	1	2.67	<0.0428	68	42 - 93.3
2,4-Dinitrophenol		1.60	mg/Kg	1	2.67	<0.0302	60	10 - 108
Dibenzofuran		1.86	mg/Kg	1	2.67	<0.0400	70	41.9 - 101
Pentachlorobenzene		1.81	mg/Kg	1	2.67	<0.0428	68	31.8 - 122
4-Nitrophenol		1.40	mg/Kg	1	2.67	<0.0306	52	19 - 117
1-Naphthylamine		1.24	mg/Kg	1	2.67	<0.0272	46	17.6 - 136
2,4-Dinitrotoluene		2.02	mg/Kg	1	2.67	<0.0385	76	55.7 - 124
2-Naphthylamine		1.21	mg/Kg	1	2.67	<0.0286	45	22.8 - 140
2,3,4,6-Tetrachlorophenol		1.87	mg/Kg	1	2.67	<0.0260	70	41.6 - 117
Fluorene		1.88	mg/Kg	1	2.67	<0.0368	70	47.9 - 111
Diethylphthalate		1.86	mg/Kg	1	2.67	<0.0398	70	43.1 - 133
4-Chlorophenyl-phenylether		1.81	mg/Kg	1	2.67	<0.0438	68	40.9 - 117
4-Nitroaniline		2.15	mg/Kg	1	2.67	<0.0342	80	46.8 - 124
4,6-Dinitro-2-methylphenol		2.02	mg/Kg	1	2.67	<0.0318	76	17.6 - 122

continued ...

[22] Spike analyte out of control limits. Results biased low. •
[23] Spike analyte out of control limits. Results biased low. •
[24] Spike analyte out of control limits. Results biased low. •

control spikes continued ...

Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Diphenylamine		1.95	mg/Kg	1	2.67	<0.0532	73	48 - 112
Diphenylhydrazine		1.50	mg/Kg	1	2.67	<0.0369	56	40.7 - 117
4-Bromophenyl-phenylether		2.00	mg/Kg	1	2.67	<0.0463	75	38.9 - 115
Phenacetin		1.89	mg/Kg	1	2.67	<0.0453	71	56.1 - 120
Hexachlorobenzene		2.08	mg/Kg	1	2.67	<0.0501	78	36 - 131
4-Aminobiphenyl	[25]	0.794	mg/Kg	1	2.67	<0.0596	30	38 - 135
Pentachlorophenol		1.37	mg/Kg	1	2.67	<0.0451	51	10 - 120
Pentachloronitrobenzene		1.95	mg/Kg	1	2.67	<0.0431	73	27.2 - 160
Pronamide		1.81	mg/Kg	1	2.67	<0.0491	68	48.5 - 127
Phenanthrene		2.03	mg/Kg	1	2.67	<0.0540	76	49.9 - 112
Anthracene		2.07	mg/Kg	1	2.67	<0.0578	78	50.6 - 112
Di-n-butylphthalate		2.06	mg/Kg	1	2.67	<0.0543	77	52.9 - 113
Fluoranthene		2.03	mg/Kg	1	2.67	<0.0678	76	48.2 - 120
Benzidine	[26]	0.182	mg/Kg	1	2.67	<0.0938	7	10 - 199
Pyrene		2.10	mg/Kg	1	2.67	<0.0680	79	32.2 - 133
p-Dimethylaminoazobenzene		1.80	mg/Kg	1	2.67	<0.0601	67	18.6 - 155
Butylbenzylphthalate		2.16	mg/Kg	1	2.67	<0.0425	81	27.4 - 137
Benzo(a)anthracene		2.04	mg/Kg	1	2.67	<0.0487	76	38.8 - 127
3,3-Dichlorobenzidine		1.50	mg/Kg	1	2.67	<0.0527	56	36 - 133
Chrysene		2.04	mg/Kg	1	2.67	<0.0568	76	17.9 - 137
bis(2-ethylhexyl)phthalate		2.15	mg/Kg	1	2.67	<0.0421	80	31.2 - 142
Di-n-octylphthalate		1.91	mg/Kg	1	2.67	<0.0609	72	42.8 - 142
Benzo(b)fluoranthene		1.71	mg/Kg	1	2.67	<0.0795	64	44.6 - 126
7,12-Dimethylbenz(a)anthracene		1.61	mg/Kg	1	2.67	<0.0518	60	39 - 130
Benzo(k)fluoranthene		1.71	mg/Kg	1	2.67	<0.0760	64	41.3 - 137
Benzo(a)pyrene		1.79	mg/Kg	1	2.67	<0.0549	67	48.6 - 134
3-Methylcholanthrene		1.86	mg/Kg	1	2.67	<0.0457	70	41.8 - 142
Dibenzo(a,j)acridine		1.70	mg/Kg	1	2.67	<0.0530	64	43.6 - 147
Indeno(1,2,3-cd)pyrene		1.79	mg/Kg	1	2.67	<0.0526	67	41.1 - 145
Dibenzo(a,h)anthracene		1.75	mg/Kg	1	2.67	<0.0636	66	28.4 - 154
Benzo(g,h,i)perylene		1.85	mg/Kg	1	2.67	<0.0482	69	45 - 144

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Pyridine	0.778	mg/Kg	1	2.67	<0.0539	29	11.1 - 76.5	4	20
N-Nitrosodimethylamine	0.915	mg/Kg	1	2.67	<0.0468	34	21 - 77.7	4	20
2-Picoline	1.42	mg/Kg	1	2.67	<0.0512	53	15.1 - 87.4	4	20
Methyl methanesulfonate	0.980	mg/Kg	1	2.67	<0.0479	37	14.9 - 91.4	2	20
Ethyl methanesulfonate	1.47	mg/Kg	1	2.67	<0.0475	55	21.3 - 88	4	20
Phenol	0.787	mg/Kg	1	2.67	<0.0491	29	27.8 - 76.6	1	20
Aniline	1.03	mg/Kg	1	2.67	<0.0590	38	28.1 - 80.9	4	20
bis(2-chloroethyl)ether	1.64	mg/Kg	1	2.67	<0.0527	61	28.4 - 80.4	4	20
2-Chlorophenol	1.67	mg/Kg	1	2.67	<0.0444	62	26.7 - 74.6	5	20
1,3-Dichlorobenzene (meta)	1.58	mg/Kg	1	2.67	<0.0496	59	31 - 70	7	20

continued ...

[25] Spike analyte out of control limits. Results biased low. •
[26] Spike analyte out of control limits. Results biased low. •

control spikes continued ...

Param		LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,4-Dichlorobenzene (para)		1.55	mg/Kg	1	2.67	<0.0483	58	30.1 - 71.1	7	20
Benzyl alcohol		2.12	mg/Kg	1	2.67	<0.0579	79	18 - 92.9	2	20
1,2-Dichlorobenzene (ortho)		1.65	mg/Kg	1	2.67	<0.0448	62	30.8 - 72.7	7	20
2-Methylphenol		1.35	mg/Kg	1	2.67	<0.0522	50	29 - 75.8	2	20
bis(2-chloroisopropyl)ether		1.60	mg/Kg	1	2.67	<0.0531	60	10.3 - 79.5	4	20
4-Methylphenol / 3-Methylphenol		1.07	mg/Kg	1	2.67	<0.0594	40	26.2 - 82.2	0	20
Acetophenone		1.66	mg/Kg	1	2.67	<0.0426	62	31 - 88.9	6	20
N-Nitrosodi-n-propylamine		1.50	mg/Kg	1	2.67	<0.0567	56	27.4 - 93.9	3	20
Hexachloroethane		1.40	mg/Kg	1	2.67	<0.0427	52	27.3 - 73	5	20
Nitrobenzene		1.61	mg/Kg	1	2.67	<0.0435	60	29.2 - 86.4	6	20
N-Nitrosopiperidine		1.92	mg/Kg	1	2.67	<0.0510	72	34.5 - 95	6	20
Isophorone		1.62	mg/Kg	1	2.67	<0.0509	61	37.9 - 99.1	4	20
2-Nitrophenol		2.12	mg/Kg	1	2.67	<0.0484	79	26.8 - 90.7	7	20
2,4-Dimethylphenol		1.40	mg/Kg	1	2.67	<0.0368	52	29.2 - 82.7	5	20
bis(2-chloroethoxy)methane		1.73	mg/Kg	1	2.67	<0.0468	65	34.2 - 87.4	4	20
Benzoic acid		1.78	mg/Kg	1	2.67	<0.0865	67	10 - 133	2	20
2,4-Dichlorophenol		1.74	mg/Kg	1	2.67	<0.0371	65	31 - 87.3	4	20
1,2,4-Trichlorobenzene		1.69	mg/Kg	1	2.67	<0.0440	63	26.6 - 89.2	6	20
a,a-Dimethylphenethylamine	[27]	0.0388	mg/Kg	1	2.67	<0.0277	1	10 - 100	19	20
Naphthalene		1.68	mg/Kg	1	2.67	<0.0508	63	33.3 - 80.8	5	20
4-Chloroaniline		0.873	mg/Kg	1	2.67	<0.0438	33	25.1 - 88.5	3	20
2,6-Dichlorophenol		1.84	mg/Kg	1	2.67	<0.0422	69	29.5 - 88.4	4	20
Hexachlorobutadiene		1.54	mg/Kg	1	2.67	<0.0511	58	30.1 - 80.6	5	20
N-Nitroso-di-n-butylamine		1.59	mg/Kg	1	2.67	<0.0429	60	32.3 - 104	3	20
4-Chloro-3-methylphenol	[28]	0.850	mg/Kg	1	2.67	<0.0324	32	37.2 - 107	8	20
1-Methylnaphthalene		1.74	mg/Kg	1	2.67	<0.0487	65	34.5 - 85	5	20
2-Methylnaphthalene		1.72	mg/Kg	1	2.67	<0.0430	64	35.9 - 81.6	5	20
1,2,4,5-Tetrachlorobenzene		2.02	mg/Kg	1	2.67	<0.0530	76	21.6 - 106	6	20
Hexachlorocyclopentadiene		2.69	mg/Kg	1	2.67	<0.0410	101	10 - 114	4	20
2,4,6-Trichlorophenol		2.29	mg/Kg	1	2.67	<0.0406	86	31 - 109	6	20
2,4,5-Trichlorophenol		2.11	mg/Kg	1	2.67	<0.0328	79	33.3 - 108	5	20
2-Chloronaphthalene		1.97	mg/Kg	1	2.67	<0.0450	74	32 - 91.4	6	20
1-Chloronaphthalene		1.94	mg/Kg	1	2.67	<0.0516	73	38.1 - 88.9	6	20
2-Nitroaniline		1.72	mg/Kg	1	2.67	<0.0259	64	39.8 - 122	10	20
Dimethylphthalate		2.06	mg/Kg	1	2.67	<0.0316	77	40.4 - 125	10	20
Acenaphthylene		2.00	mg/Kg	1	2.67	<0.0434	75	34.5 - 96.8	8	20
2,6-Dinitrotoluene		2.16	mg/Kg	1	2.67	<0.0273	81	51 - 115	9	20
3-Nitroaniline		1.43	mg/Kg	1	2.67	<0.0214	54	47.8 - 116	13	20
Acenaphthene		1.97	mg/Kg	1	2.67	<0.0428	74	42 - 93.3	8	20
2,4-Dinitrophenol		1.75	mg/Kg	1	2.67	<0.0302	66	10 - 108	9	20
Dibenzofuran		2.02	mg/Kg	1	2.67	<0.0400	76	41.9 - 101	8	20
Pentachlorobenzene		1.96	mg/Kg	1	2.67	<0.0428	73	31.8 - 122	8	20
4-Nitrophenol		1.57	mg/Kg	1	2.67	<0.0306	59	19 - 117	11	20
1-Naphthylamine		1.32	mg/Kg	1	2.67	<0.0272	49	17.6 - 136	6	20
2,4-Dinitrotoluene		2.25	mg/Kg	1	2.67	<0.0385	84	55.7 - 124	11	20

continued ...

[27] Spike analyte out of control limits. Results biased low. •
[28] Spike analyte out of control limits. Results biased low. •

control spikes continued ...

Param		LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
2-Naphthylamine		1.26	mg/Kg	1	2.67	<0.0286	47	22.8 - 140	4	20
2,3,4,6-Tetrachlorophenol		2.09	mg/Kg	1	2.67	<0.0260	78	41.6 - 117	11	20
Fluorene		2.06	mg/Kg	1	2.67	<0.0368	77	47.9 - 111	9	20
Diethylphthalate		2.07	mg/Kg	1	2.67	<0.0398	78	43.1 - 133	11	20
4-Chlorophenyl-phenylether		1.96	mg/Kg	1	2.67	<0.0438	73	40.9 - 117	8	20
4-Nitroaniline		2.38	mg/Kg	1	2.67	<0.0342	89	46.8 - 124	10	20
4,6-Dinitro-2-methylphenol		2.18	mg/Kg	1	2.67	<0.0318	82	17.6 - 122	8	20
Diphenylamine		2.14	mg/Kg	1	2.67	<0.0532	80	48 - 112	9	20
Diphenylhydrazine		1.64	mg/Kg	1	2.67	<0.0369	61	40.7 - 117	9	20
4-Bromophenyl-phenylether		2.16	mg/Kg	1	2.67	<0.0463	81	38.9 - 115	8	20
Phenacetin		2.07	mg/Kg	1	2.67	<0.0453	78	56.1 - 120	9	20
Hexachlorobenzene		2.24	mg/Kg	1	2.67	<0.0501	84	36 - 131	7	20
4-Aminobiphenyl	[29]	0.859	mg/Kg	1	2.67	<0.0596	32	38 - 135	8	20
Pentachlorophenol		1.37	mg/Kg	1	2.67	<0.0451	51	10 - 120	0	20
Pentachloronitrobenzene		2.14	mg/Kg	1	2.67	<0.0431	80	27.2 - 160	9	20
Pronamide		1.99	mg/Kg	1	2.67	<0.0491	74	48.5 - 127	10	20
Phenanthrene		2.21	mg/Kg	1	2.67	<0.0540	83	49.9 - 112	8	20
Anthracene		2.26	mg/Kg	1	2.67	<0.0578	85	50.6 - 112	9	20
Di-n-butylphthalate		2.26	mg/Kg	1	2.67	<0.0543	85	52.9 - 113	9	20
Fluoranthene		2.20	mg/Kg	1	2.67	<0.0678	82	48.2 - 120	8	20
Benzidine	[30]	0.185	mg/Kg	1	2.67	<0.0938	7	10 - 199	2	20
Pyrene		2.26	mg/Kg	1	2.67	<0.0680	85	32.2 - 133	7	20
p-Dimethylaminoazobenzene		1.97	mg/Kg	1	2.67	<0.0601	74	18.6 - 155	9	20
Butylbenzylphthalate		2.34	mg/Kg	1	2.67	<0.0425	88	27.4 - 137	8	20
Benzo(a)anthracene		2.20	mg/Kg	1	2.67	<0.0487	82	38.8 - 127	8	20
3,3-Dichlorobenzidine		1.62	mg/Kg	1	2.67	<0.0527	61	36 - 133	8	20
Chrysene		2.23	mg/Kg	1	2.67	<0.0568	84	17.9 - 137	9	20
bis(2-ethylhexyl)phthalate		2.30	mg/Kg	1	2.67	<0.0421	86	31.2 - 142	7	20
Di-n-octylphthalate		2.01	mg/Kg	1	2.67	<0.0609	75	42.8 - 142	5	20
Benzo(b)fluoranthene		1.79	mg/Kg	1	2.67	<0.0795	67	44.6 - 126	5	20
7,12-Dimethylbenz(a)anthracene		1.71	mg/Kg	1	2.67	<0.0518	64	39 - 130	6	20
Benzo(k)fluoranthene		1.87	mg/Kg	1	2.67	<0.0760	70	41.3 - 137	9	20
Benzo(a)pyrene		1.92	mg/Kg	1	2.67	<0.0549	72	48.6 - 134	7	20
3-Methylcholanthrene		1.99	mg/Kg	1	2.67	<0.0457	74	41.8 - 142	7	20
Dibenzo(a,j)acridine		1.82	mg/Kg	1	2.67	<0.0530	68	43.6 - 147	7	20
Indeno(1,2,3-cd)pyrene		1.90	mg/Kg	1	2.67	<0.0526	71	41.1 - 145	6	20
Dibenzo(a,h)anthracene		1.85	mg/Kg	1	2.67	<0.0636	69	28.4 - 154	6	20
Benzo(g,h,i)perylene		1.98	mg/Kg	1	2.67	<0.0482	74	45 - 144	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	1.19	1.24	mg/Kg	1	2.67	44	46	12.8 - 71.1
Phenol-d5	0.870	0.860	mg/Kg	1	2.67	32	32	10.2 - 82.2
Nitrobenzene-d5	1.65	1.76	mg/Kg	1	2.67	62	66	17.4 - 83.8

continued ...

[29] Spike analyte out of control limits. Results biased low. •
[30] Spike analyte out of control limits. Results biased low. •

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorobiphenyl	1.90	2.04	mg/Kg	1	2.67	71	76	21.4 - 92.8
2,4,6-Tribromophenol [31]	2.45	2.70	mg/Kg	1	2.67	92	101	18.6 - 98.6
Terphenyl-d14	2.04	2.18	mg/Kg	1	2.67	76	82	24.3 - 133

Matrix Spike (MS-1) Spiked Sample: 228954

QC Batch: 69217 Date Analyzed: 2010-04-19 Analyzed By: AW
Prep Batch: 59252 QC Preparation: 2010-04-19 Prepared By: AW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	22.2	mg/L	1	25.0	<0.817	89	20.3 - 163
>C12-C28	22.6	mg/L	1	25.0	<0.889	90	49.6 - 138

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	22.4	mg/L	1	25.0	<0.817	90	20.3 - 163	1	20
>C12-C28	23.0	mg/L	1	25.0	<0.889	92	49.6 - 138	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Octane	8.34	8.43	mg/L	1	10	83	84	70 - 130
n-Tricosane	9.94	10.1	mg/L	1	10	99	101	70 - 130
n-Triacontane	10.8	10.9	mg/L	1	10	108	109	59.6 - 155

Matrix Spike (MS-1) Spiked Sample: 229026

QC Batch: 69276 Date Analyzed: 2010-04-20 Analyzed By: AW
Prep Batch: 59293 QC Preparation: 2010-04-20 Prepared By: AW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	256	mg/Kg	1	250	10.1	98	40.4 - 152
>C12-C28	211	mg/Kg	1	250	9.88	80	36.6 - 168

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	258	mg/Kg	1	250	10.1	99	40.4 - 152	1	20
>C12-C28	213	mg/Kg	1	250	9.88	81	36.6 - 168	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[31] 8270 Only - One acidic surrogate is out of control limits. The other two acidic surrogates show extraction was performed properly.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Octane	77.0	78.9	mg/Kg	1	100	77	79	70 - 130
n-Tricosane	98.5	99.9	mg/Kg	1	100	98	100	70 - 130
n-Triacontane	115	116	mg/Kg	1	100	115	116	60.7 - 146

Matrix Spike (MS-1) Spiked Sample: 228932

QC Batch: 69336 Date Analyzed: 2010-04-21 Analyzed By: KB
Prep Batch: 59345 QC Preparation: 2010-04-21 Prepared By: KB

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane		1440	µg/Kg	1	1000	<3.64	144	37.9 - 148
Dichlorodifluoromethane		1120	µg/Kg	1	1000	<5.15	112	10 - 144
Chloromethane (methyl chloride)		1590	µg/Kg	1	1000	<4.16	159	10 - 169
Vinyl Chloride		1490	µg/Kg	1	1000	<4.46	149	10 - 156
Bromomethane (methyl bromide)		302	µg/Kg	1	1000	<7.01	30	10 - 63.2
Chloroethane		266	µg/Kg	1	1000	<2.69	27	10 - 44.3
Trichlorofluoromethane	[32]	1440	µg/Kg	1	1000	<4.04	144	10 - 53.8
Acetone		958	µg/Kg	1	1000	<43.2	96	10 - 149
Iodomethane (methyl iodide)		1370	µg/Kg	1	1000	<6.39	137	24.1 - 148
Carbon Disulfide		1260	µg/Kg	1	1000	<6.98	126	20.7 - 142
Acrylonitrile		1200	µg/Kg	1	1000	<2.79	120	13.4 - 145
2-Butanone (MEK)		1060	µg/Kg	1	1000	<6.87	106	26.1 - 127
4-Methyl-2-pentanone (MIBK)		1140	µg/Kg	1	1000	<4.21	114	23.6 - 133
2-Hexanone		953	µg/Kg	1	1000	<2.94	95	26.6 - 101
trans 1,4-Dichloro-2-butene		889	µg/Kg	1	1000	<2.41	89	10 - 143
1,1-Dichloroethene	[33]	1790	µg/Kg	1	1000	<6.53	179	37.5 - 152
Methylene chloride	[34]	1560	µg/Kg	1	1000	<16.8	156	52.4 - 129
MTBE		1390	µg/Kg	1	1000	<2.14	139	23.5 - 151
trans-1,2-Dichloroethene		1470	µg/Kg	1	1000	<6.50	147	37.4 - 148
1,1-Dichloroethane		1500	µg/Kg	1	1000	<5.94	150	33.9 - 150
cis-1,2-Dichloroethene	[35]	1500	µg/Kg	1	1000	<5.99	150	42.6 - 146
2,2-Dichloropropane		1120	µg/Kg	1	1000	<8.12	112	10 - 122
1,2-Dichloroethane (EDC)		1360	µg/Kg	1	1000	<3.67	136	17.6 - 149
Chloroform		1440	µg/Kg	1	1000	<5.31	144	30.4 - 149
1,1,1-Trichloroethane		1240	µg/Kg	1	1000	<7.76	124	20 - 137
1,1-Dichloropropene		1510	µg/Kg	1	1000	<7.43	151	35.2 - 154
Benzene		1490	µg/Kg	1	1000	<6.23	149	26.3 - 149
Carbon Tetrachloride		1180	µg/Kg	1	1000	<6.32	118	10 - 152
1,2-Dichloropropane		1500	µg/Kg	1	1000	<5.23	150	42 - 150
Trichloroethene (TCE)		1560	µg/Kg	1	1000	<7.95	156	23.3 - 219
Dibromomethane (methylene bromide)		1320	µg/Kg	1	1000	<3.41	132	29.2 - 144
Bromodichloromethane		1310	µg/Kg	1	1000	<4.03	131	23.4 - 142

continued ...

[32] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[33] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[34] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[35] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
2-Chloroethyl vinyl ether	1290	µg/Kg	1	1000	<2.22	129	20.8 - 142
cis-1,3-Dichloropropene	1410	µg/Kg	1	1000	<3.74	141	31.3 - 151
trans-1,3-Dichloropropene	1370	µg/Kg	1	1000	<3.96	137	23.6 - 148
Toluene	1480	µg/Kg	1	1000	<6.10	148	14 - 160
1,1,2-Trichloroethane	1290	µg/Kg	1	1000	<2.06	129	37.2 - 139
1,3-Dichloropropane	1330	µg/Kg	1	1000	<3.74	133	37.1 - 142
Dibromochloromethane	1200	µg/Kg	1	1000	<3.78	120	20.3 - 135
1,2-Dibromoethane (EDB)	1290	µg/Kg	1	1000	<2.04	129	31.8 - 141
Tetrachloroethene (PCE)	1700	µg/Kg	1	1000	<7.24	170	10 - 253
Chlorobenzene	1490	µg/Kg	1	1000	<6.15	149	45.4 - 150
1,1,1,2-Tetrachloroethane	1390	µg/Kg	1	1000	<4.11	139	31 - 148
Ethylbenzene	1490	µg/Kg	1	1000	<5.48	149	15.6 - 161
m,p-Xylene	2960	µg/Kg	1	2000	<11.5	148	10 - 171
Bromoform	1000	µg/Kg	1	1000	<2.24	100	10 - 123
Styrene	1510	µg/Kg	1	1000	<4.22	151	43.3 - 159
o-Xylene	1480	µg/Kg	1	1000	<5.89	148	10 - 182
1,1,2,2-Tetrachloroethane	1110	µg/Kg	1	1000	<2.30	111	10 - 141
2-Chlorotoluene	1480	µg/Kg	1	1000	<5.85	148	41 - 157
1,2,3-Trichloropropane	1240	µg/Kg	1	1000	<4.42	124	29.6 - 133
Isopropylbenzene	1550	µg/Kg	1	1000	<5.93	155	42.6 - 165
Bromobenzene	1400	µg/Kg	1	1000	<8.21	140	38.1 - 145
n-Propylbenzene	1550	µg/Kg	1	1000	<6.02	155	44.2 - 166
1,3,5-Trimethylbenzene	1550	µg/Kg	1	1000	<5.35	155	41.8 - 167
tert-Butylbenzene	1620	µg/Kg	1	1000	<6.14	162	43.3 - 173
1,2,4-Trimethylbenzene	1600	µg/Kg	1	1000	<5.49	160	40.9 - 168
1,4-Dichlorobenzene (para)	1490	µg/Kg	1	1000	<4.74	149	41.9 - 152
sec-Butylbenzene	1660	µg/Kg	1	1000	<6.16	166	44.1 - 179
1,3-Dichlorobenzene (meta)	1520	µg/Kg	1	1000	<6.17	152	45.1 - 156
p-Isopropyltoluene	1710	µg/Kg	1	1000	<6.38	171	44 - 179
4-Chlorotoluene	1490	µg/Kg	1	1000	<6.03	149	39.2 - 158
1,2-Dichlorobenzene (ortho)	1440	µg/Kg	1	1000	<4.96	144	41.7 - 150
n-Butylbenzene	1770	µg/Kg	1	1000	<6.02	177	43.3 - 182
1,2-Dibromo-3-chloropropane	761	µg/Kg	1	1000	<6.79	76	10 - 116
1,2,3-Trichlorobenzene	1390	µg/Kg	1	1000	<4.91	139	24.6 - 153
1,2,4-Trichlorobenzene	1590	µg/Kg	1	1000	<4.61	159	26.6 - 178
Naphthalene	841	µg/Kg	1	1000	<2.35	84	23 - 133
Hexachlorobutadiene	1830	µg/Kg	1	1000	<13.9	183	38.1 - 185

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane [36]	1510	µg/Kg	1	1000	<3.64	151	37.9 - 148	5	20
Dichlorodifluoromethane	1220	µg/Kg	1	1000	<5.15	122	10 - 144	8	20
Chloromethane (methyl chloride)	1690	µg/Kg	1	1000	<4.16	169	10 - 169	6	20
Vinyl Chloride	1560	µg/Kg	1	1000	<4.46	156	10 - 156	5	20
Bromomethane (methyl bromide)	314	µg/Kg	1	1000	<7.01	31	10 - 63.2	4	20

continued ...

[36] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.

matrix spikes continued ...

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloroethane		280	µg/Kg	1	1000	<2.69	28	10 - 44.3	5	20
Trichlorofluoromethane	[37]	1250	µg/Kg	1	1000	<4.04	125	10 - 53.8	14	20
Acetone		1010	µg/Kg	1	1000	<43.2	101	10 - 149	5	20
Iodomethane (methyl iodide)		1480	µg/Kg	1	1000	<6.39	148	24.1 - 148	8	20
Carbon Disulfide		1320	µg/Kg	1	1000	<6.98	132	20.7 - 142	5	20
Acrylonitrile		1280	µg/Kg	1	1000	<2.79	128	13.4 - 145	6	20
2-Butanone (MEK)		1060	µg/Kg	1	1000	<6.87	106	26.1 - 127	0	20
4-Methyl-2-pentanone (MIBK)		1240	µg/Kg	1	1000	<4.21	124	23.6 - 133	8	20
2-Hexanone		1000	µg/Kg	1	1000	<2.94	100	26.6 - 101	5	20
trans 1,4-Dichloro-2-butene		949	µg/Kg	1	1000	<2.41	95	10 - 143	6	20
1,1-Dichloroethene	[38]	1830	µg/Kg	1	1000	<6.53	183	37.5 - 152	2	20
Methylene chloride	[39]	1600	µg/Kg	1	1000	<16.8	160	52.4 - 129	2	20
MTBE		1440	µg/Kg	1	1000	<2.14	144	23.5 - 151	4	20
trans-1,2-Dichloroethene	[40]	1520	µg/Kg	1	1000	<6.50	152	37.4 - 148	3	20
1,1-Dichloroethane	[41]	1540	µg/Kg	1	1000	<5.94	154	33.9 - 150	3	20
cis-1,2-Dichloroethene	[42]	1550	µg/Kg	1	1000	<5.99	155	42.6 - 146	3	20
2,2-Dichloropropane		1170	µg/Kg	1	1000	<8.12	117	10 - 122	4	20
1,2-Dichloroethane (EDC)		1410	µg/Kg	1	1000	<3.67	141	17.6 - 149	4	20
Chloroform		1490	µg/Kg	1	1000	<5.31	149	30.4 - 149	3	20
1,1,1-Trichloroethane		1300	µg/Kg	1	1000	<7.76	130	20 - 137	5	20
1,1-Dichloropropene	[43]	1550	µg/Kg	1	1000	<7.43	155	35.2 - 154	3	20
Benzene	[44]	1530	µg/Kg	1	1000	<6.23	153	26.3 - 149	3	20
Carbon Tetrachloride		1270	µg/Kg	1	1000	<6.32	127	10 - 152	7	20
1,2-Dichloropropane	[45]	1540	µg/Kg	1	1000	<5.23	154	42 - 150	3	20
Trichloroethene (TCE)		1600	µg/Kg	1	1000	<7.95	160	23.3 - 219	2	20
Dibromomethane (methylene bromide)		1390	µg/Kg	1	1000	<3.41	139	29.2 - 144	5	20
Bromodichloromethane		1370	µg/Kg	1	1000	<4.03	137	23.4 - 142	4	20
2-Chloroethyl vinyl ether	[46]	1510	µg/Kg	1	1000	<2.22	151	20.8 - 142	16	20
cis-1,3-Dichloropropene		1470	µg/Kg	1	1000	<3.74	147	31.3 - 151	4	20
trans-1,3-Dichloropropene		1440	µg/Kg	1	1000	<3.96	144	23.6 - 148	5	20
Toluene		1530	µg/Kg	1	1000	<6.10	153	14 - 160	3	20
1,1,2-Trichloroethane		1350	µg/Kg	1	1000	<2.06	135	37.2 - 139	4	20
1,3-Dichloropropane		1390	µg/Kg	1	1000	<3.74	139	37.1 - 142	4	20
Dibromochloromethane		1300	µg/Kg	1	1000	<3.78	130	20.3 - 135	8	20
1,2-Dibromoethane (EDB)		1360	µg/Kg	1	1000	<2.04	136	31.8 - 141	5	20
Tetrachloroethene (PCE)		1640	µg/Kg	1	1000	<7.24	164	10 - 253	4	20

continued ...

[37] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
[38] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
[39] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
[40] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[41] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[42] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
[43] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[44] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[45] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[46] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.

matrix spikes continued . . .

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chlorobenzene	[47]	1540	µg/Kg	1	1000	<6.15	154	45.4 - 150	3	20
1,1,1,2-Tetrachloroethane		1440	µg/Kg	1	1000	<4.11	144	31 - 148	4	20
Ethylbenzene		1530	µg/Kg	1	1000	<5.48	153	15.6 - 161	3	20
m,p-Xylene		3030	µg/Kg	1	2000	<11.5	152	10 - 171	2	20
Bromoform		1090	µg/Kg	1	1000	<2.24	109	10 - 123	9	20
Styrene		1550	µg/Kg	1	1000	<4.22	155	43.3 - 159	3	20
o-Xylene		1500	µg/Kg	1	1000	<5.89	150	10 - 182	1	20
1,1,2,2-Tetrachloroethane		1180	µg/Kg	1	1000	<2.30	118	10 - 141	6	20
2-Chlorotoluene		1530	µg/Kg	1	1000	<5.85	153	41 - 157	3	20
1,2,3-Trichloropropane	[48]	1380	µg/Kg	1	1000	<4.42	138	29.6 - 133	11	20
Isopropylbenzene		1590	µg/Kg	1	1000	<5.93	159	42.6 - 165	2	20
Bromobenzene	[49]	1470	µg/Kg	1	1000	<8.21	147	38.1 - 145	5	20
n-Propylbenzene		1590	µg/Kg	1	1000	<6.02	159	44.2 - 166	2	20
1,3,5-Trimethylbenzene		1580	µg/Kg	1	1000	<5.35	158	41.8 - 167	2	20
tert-Butylbenzene		1660	µg/Kg	1	1000	<6.14	166	43.3 - 173	2	20
1,2,4-Trimethylbenzene		1620	µg/Kg	1	1000	<5.49	162	40.9 - 168	1	20
1,4-Dichlorobenzene (para)	[50]	1540	µg/Kg	1	1000	<4.74	154	41.9 - 152	3	20
sec-Butylbenzene		1700	µg/Kg	1	1000	<6.16	170	44.1 - 179	2	20
1,3-Dichlorobenzene (meta)	[51]	1570	µg/Kg	1	1000	<6.17	157	45.1 - 156	3	20
p-Isopropyltoluene		1750	µg/Kg	1	1000	<6.38	175	44 - 179	2	20
4-Chlorotoluene		1540	µg/Kg	1	1000	<6.03	154	39.2 - 158	3	20
1,2-Dichlorobenzene (ortho)		1500	µg/Kg	1	1000	<4.96	150	41.7 - 150	4	20
n-Butylbenzene		1810	µg/Kg	1	1000	<6.02	181	43.3 - 182	2	20
1,2-Dibromo-3-chloropropane		825	µg/Kg	1	1000	<6.79	82	10 - 116	8	20
1,2,3-Trichlorobenzene		1500	µg/Kg	1	1000	<4.91	150	24.6 - 153	8	20
1,2,4-Trichlorobenzene		1680	µg/Kg	1	1000	<4.61	168	26.6 - 178	6	20
Naphthalene		979	µg/Kg	1	1000	<2.35	98	23 - 133	15	20
Hexachlorobutadiene	[52]	1950	µg/Kg	1	1000	<13.9	195	38.1 - 185	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	970	970	µg/Kg	1	1000	97	97	72.4 - 113
Toluene-d8	1000	1000	µg/Kg	1	1000	100	100	90.7 - 113
4-Bromofluorobenzene (4-BFB)	990	982	µg/Kg	1	1000	99	98	65.1 - 127

Matrix Spike (MS-1) Spiked Sample: 229175

QC Batch:	69365	Date Analyzed:	2010-04-22	Analyzed By:	KB
Prep Batch:	59371	QC Preparation:	2010-04-22	Prepared By:	KB

[47] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[48] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[49] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[50] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[51] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[52] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	56.0	µg/L	1	50.0	<0.210	112	64 - 140
Dichlorodifluoromethane	46.4	µg/L	1	50.0	<0.480	93	13.9 - 166
Chloromethane (methyl chloride)	59.7	µg/L	1	50.0	<0.350	119	40.4 - 153
Vinyl Chloride	57.7	µg/L	1	50.0	<0.360	115	51.8 - 130
Bromomethane (methyl bromide)	57.0	µg/L	1	50.0	<0.620	114	52.6 - 138
Chloroethane	59.1	µg/L	1	50.0	<0.560	118	52.2 - 138
Trichlorofluoromethane	62.6	µg/L	1	50.0	<0.310	125	34.2 - 137
Acetone	36.3	µg/L	1	50.0	<1.63	73	17.1 - 143
Iodomethane (methyl iodide)	52.2	µg/L	1	50.0	<0.210	104	66.8 - 136
Carbon Disulfide	52.0	µg/L	1	50.0	<0.280	104	62 - 144
Acrylonitrile	51.7	µg/L	1	50.0	<0.290	103	55.7 - 150
2-Butanone (MEK)	40.9	µg/L	1	50.0	<0.750	82	46.8 - 128
4-Methyl-2-pentanone (MIBK)	53.3	µg/L	1	50.0	<0.680	107	52.3 - 149
2-Hexanone	45.9	µg/L	1	50.0	<0.480	92	44.3 - 157
trans 1,4-Dichloro-2-butene	38.6	µg/L	1	50.0	<0.230	77	24.8 - 159
1,1-Dichloroethene	58.9	µg/L	1	50.0	<0.240	118	64.5 - 133
Methylene chloride	55.9	µg/L	1	50.0	<0.520	112	65.4 - 138
MTBE	72.4	µg/L	1	50.0	18.2	108	62.9 - 135
trans-1,2-Dichloroethene	54.7	µg/L	1	50.0	<0.240	109	63.6 - 137
1,1-Dichloroethane	56.1	µg/L	1	50.0	<0.180	112	65.5 - 138
cis-1,2-Dichloroethene	56.2	µg/L	1	50.0	<0.210	112	63.1 - 139
2,2-Dichloropropane	48.6	µg/L	1	50.0	<0.140	97	31.5 - 132
1,2-Dichloroethane (EDC)	56.9	µg/L	1	50.0	<0.260	114	64 - 146
Chloroform	56.1	µg/L	1	50.0	<0.160	112	66.9 - 135
1,1,1-Trichloroethane	56.0	µg/L	1	50.0	<0.210	112	62.5 - 144
1,1-Dichloropropene	57.0	µg/L	1	50.0	<0.130	114	69.3 - 131
Benzene	56.1	µg/L	1	50.0	<0.200	112	68.2 - 129
Carbon Tetrachloride	56.4	µg/L	1	50.0	<0.540	113	55.4 - 155
1,2-Dichloropropane	57.2	µg/L	1	50.0	<0.260	114	65.8 - 134
Trichloroethene (TCE)	55.6	µg/L	1	50.0	<0.190	111	65.7 - 128
Dibromomethane (methylene bromide)	54.4	µg/L	1	50.0	<0.310	109	70.3 - 132
Bromodichloromethane	55.8	µg/L	1	50.0	<0.180	112	67 - 139
2-Chloroethyl vinyl ether	<0.130	µg/L	1	50.0	<0.130	0	0 - 24.7
cis-1,3-Dichloropropene	55.6	µg/L	1	50.0	<0.230	111	63.6 - 130
trans-1,3-Dichloropropene	56.9	µg/L	1	50.0	<0.220	114	63.4 - 133
Toluene	56.2	µg/L	1	50.0	<0.200	112	77.4 - 122
1,1,2-Trichloroethane	53.1	µg/L	1	50.0	<0.300	106	69.2 - 128
1,3-Dichloropropane	54.6	µg/L	1	50.0	<0.300	109	70.5 - 129
Dibromochloromethane	54.0	µg/L	1	50.0	<0.150	108	65.6 - 142
1,2-Dibromoethane (EDB)	52.2	µg/L	1	50.0	<0.140	104	69.1 - 128
Tetrachloroethene (PCE)	40.8	µg/L	1	50.0	<0.400	82	23.4 - 117
Chlorobenzene	55.3	µg/L	1	50.0	<0.130	111	68.4 - 128
1,1,1,2-Tetrachloroethane	56.1	µg/L	1	50.0	<0.200	112	77.4 - 129
Ethylbenzene	55.4	µg/L	1	50.0	<0.140	111	80.8 - 118
m,p-Xylene	111	µg/L	1	100	<0.270	111	80.5 - 118
Bromoform	50.8	µg/L	1	50.0	<0.190	102	57.3 - 141
Styrene	56.2	µg/L	1	50.0	<0.0900	112	10 - 191
o-Xylene	56.0	µg/L	1	50.0	<0.120	112	81.8 - 120

continued ...

matrix spikes continued . . .

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1,2,2-Tetrachloroethane	52.2	µg/L	1	50.0	<0.320	104	65.7 - 140
2-Chlorotoluene	54.0	µg/L	1	50.0	<0.100	108	70 - 123
1,2,3-Trichloropropane	55.1	µg/L	1	50.0	<0.620	110	72.3 - 126
Isopropylbenzene	54.1	µg/L	1	50.0	<0.530	108	68 - 125
Bromobenzene	54.2	µg/L	1	50.0	<0.130	108	69.1 - 126
n-Propylbenzene	53.7	µg/L	1	50.0	<0.110	107	67.6 - 123
1,3,5-Trimethylbenzene	53.7	µg/L	1	50.0	<0.110	107	67.1 - 124
tert-Butylbenzene	54.8	µg/L	1	50.0	<0.450	110	66.6 - 126
1,2,4-Trimethylbenzene	54.8	µg/L	1	50.0	<0.100	110	68.1 - 126
1,4-Dichlorobenzene (para)	52.6	µg/L	1	50.0	<0.120	105	66.7 - 121
sec-Butylbenzene	53.9	µg/L	1	50.0	<0.460	108	64.9 - 126
1,3-Dichlorobenzene (meta)	53.2	µg/L	1	50.0	<0.520	106	67.4 - 123
p-Isopropyltoluene	54.6	µg/L	1	50.0	<0.100	109	65.1 - 126
4-Chlorotoluene	53.8	µg/L	1	50.0	<0.120	108	70.7 - 123
1,2-Dichlorobenzene (ortho)	52.8	µg/L	1	50.0	<0.130	106	66.6 - 125
n-Butylbenzene	54.3	µg/L	1	50.0	<0.400	109	63.4 - 124
1,2-Dibromo-3-chloropropane	39.2	µg/L	1	50.0	<0.650	78	59.8 - 136
1,2,3-Trichlorobenzene	50.8	µg/L	1	50.0	<0.240	102	51.8 - 133
1,2,4-Trichlorobenzene	52.6	µg/L	1	50.0	<0.190	105	59.8 - 125
Naphthalene	38.2	µg/L	1	50.0	<0.330	76	53.1 - 139
Hexachlorobutadiene	52.2	µg/L	1	50.0	<0.260	104	58.1 - 119

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	56.6	µg/L	1	50.0	<0.210	113	64 - 140	1	20
Dichlorodifluoromethane	49.8	µg/L	1	50.0	<0.480	100	13.9 - 166	7	20
Chloromethane (methyl chloride)	58.9	µg/L	1	50.0	<0.350	118	40.4 - 153	1	20
Vinyl Chloride	58.2	µg/L	1	50.0	<0.360	116	51.8 - 130	1	20
Bromomethane (methyl bromide)	57.3	µg/L	1	50.0	<0.620	115	52.6 - 138	0	20
Chloroethane	58.4	µg/L	1	50.0	<0.560	117	52.2 - 138	1	20
Trichlorofluoromethane	62.0	µg/L	1	50.0	<0.310	124	34.2 - 137	1	20
Acetone	37.1	µg/L	1	50.0	<1.63	74	17.1 - 143	2	20
Iodomethane (methyl iodide)	56.5	µg/L	1	50.0	<0.210	113	66.8 - 136	8	20
Carbon Disulfide	56.1	µg/L	1	50.0	<0.280	112	62 - 144	8	20
Acrylonitrile	54.0	µg/L	1	50.0	<0.290	108	55.7 - 150	4	20
2-Butanone (MEK)	43.5	µg/L	1	50.0	<0.750	87	46.8 - 128	6	20
4-Methyl-2-pentanone (MIBK)	56.5	µg/L	1	50.0	<0.680	113	52.3 - 149	6	20
2-Hexanone	48.9	µg/L	1	50.0	<0.480	98	44.3 - 157	6	20
trans 1,4-Dichloro-2-butene	40.4	µg/L	1	50.0	<0.230	81	24.8 - 159	5	20
1,1-Dichloroethene	60.9	µg/L	1	50.0	<0.240	122	64.5 - 133	3	20
Methylene chloride	57.2	µg/L	1	50.0	<0.520	114	65.4 - 138	2	20
MTBE	74.6	µg/L	1	50.0	18.2	113	62.9 - 135	3	20
trans-1,2-Dichloroethene	55.6	µg/L	1	50.0	<0.240	111	63.6 - 137	2	20
1,1-Dichloroethane	57.1	µg/L	1	50.0	<0.180	114	65.5 - 138	2	20
cis-1,2-Dichloroethene	57.2	µg/L	1	50.0	<0.210	114	63.1 - 139	2	20
2,2-Dichloropropane	48.8	µg/L	1	50.0	<0.140	98	31.5 - 132	0	20

continued . . .

matrix spikes continued . . .

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,2-Dichloroethane (EDC)	57.7	µg/L	1	50.0	<0.260	115	64 - 146	1	20
Chloroform	56.4	µg/L	1	50.0	<0.160	113	66.9 - 135	0	20
1,1,1-Trichloroethane	57.1	µg/L	1	50.0	<0.210	114	62.5 - 144	2	20
1,1-Dichloropropene	57.8	µg/L	1	50.0	<0.130	116	69.3 - 131	1	20
Benzene	56.8	µg/L	1	50.0	<0.200	114	68.2 - 129	1	20
Carbon Tetrachloride	57.0	µg/L	1	50.0	<0.540	114	55.4 - 155	1	20
1,2-Dichloropropane	58.0	µg/L	1	50.0	<0.260	116	65.8 - 134	1	20
Trichloroethene (TCE)	56.5	µg/L	1	50.0	<0.190	113	65.7 - 128	2	20
Dibromomethane (methylene bromide)	55.4	µg/L	1	50.0	<0.310	111	70.3 - 132	2	20
Bromodichloromethane	56.7	µg/L	1	50.0	<0.180	113	67 - 139	2	20
2-Chloroethyl vinyl ether	<0.130	µg/L	1	50.0	<0.130	0	0 - 24.7	0	20
cis-1,3-Dichloropropene	56.2	µg/L	1	50.0	<0.230	112	63.6 - 130	1	20
trans-1,3-Dichloropropene	57.6	µg/L	1	50.0	<0.220	115	63.4 - 133	1	20
Toluene	56.7	µg/L	1	50.0	<0.200	113	77.4 - 122	1	20
1,1,2-Trichloroethane	53.8	µg/L	1	50.0	<0.300	108	69.2 - 128	1	20
1,3-Dichloropropane	55.4	µg/L	1	50.0	<0.300	111	70.5 - 129	1	20
Dibromochloromethane	55.4	µg/L	1	50.0	<0.150	111	65.6 - 142	3	20
1,2-Dibromoethane (EDB)	53.6	µg/L	1	50.0	<0.140	107	69.1 - 128	3	20
Tetrachloroethene (PCE)	40.8	µg/L	1	50.0	<0.400	82	23.4 - 117	0	20
Chlorobenzene	55.8	µg/L	1	50.0	<0.130	112	68.4 - 128	1	20
1,1,1,2-Tetrachloroethane	57.0	µg/L	1	50.0	<0.200	114	77.4 - 129	2	20
Ethylbenzene	56.2	µg/L	1	50.0	<0.140	112	80.8 - 118	1	20
m,p-Xylene	112	µg/L	1	100	<0.270	112	80.5 - 118	1	20
Bromoform	53.0	µg/L	1	50.0	<0.190	106	57.3 - 141	4	20
Styrene	56.7	µg/L	1	50.0	<0.0900	113	10 - 191	1	20
o-Xylene	56.4	µg/L	1	50.0	<0.120	113	81.8 - 120	1	20
1,1,2,2-Tetrachloroethane	53.9	µg/L	1	50.0	<0.320	108	65.7 - 140	3	20
2-Chlorotoluene	55.1	µg/L	1	50.0	<0.100	110	70 - 123	2	20
1,2,3-Trichloropropane	58.0	µg/L	1	50.0	<0.620	116	72.3 - 126	5	20
Isopropylbenzene	55.2	µg/L	1	50.0	<0.530	110	68 - 125	2	20
Bromobenzene	55.3	µg/L	1	50.0	<0.130	111	69.1 - 126	2	20
n-Propylbenzene	54.6	µg/L	1	50.0	<0.110	109	67.6 - 123	2	20
1,3,5-Trimethylbenzene	55.1	µg/L	1	50.0	<0.110	110	67.1 - 124	3	20
tert-Butylbenzene	55.6	µg/L	1	50.0	<0.450	111	66.6 - 126	1	20
1,2,4-Trimethylbenzene	55.8	µg/L	1	50.0	<0.100	112	68.1 - 126	2	20
1,4-Dichlorobenzene (para)	53.5	µg/L	1	50.0	<0.120	107	66.7 - 121	2	20
sec-Butylbenzene	55.1	µg/L	1	50.0	<0.460	110	64.9 - 126	2	20
1,3-Dichlorobenzene (meta)	54.4	µg/L	1	50.0	<0.520	109	67.4 - 123	2	20
p-Isopropyltoluene	55.8	µg/L	1	50.0	<0.100	112	65.1 - 126	2	20
4-Chlorotoluene	54.5	µg/L	1	50.0	<0.120	109	70.7 - 123	1	20
1,2-Dichlorobenzene (ortho)	54.2	µg/L	1	50.0	<0.130	108	66.6 - 125	3	20
n-Butylbenzene	55.8	µg/L	1	50.0	<0.400	112	63.4 - 124	3	20
1,2-Dibromo-3-chloropropane	41.0	µg/L	1	50.0	<0.650	82	59.8 - 136	4	20
1,2,3-Trichlorobenzene	54.0	µg/L	1	50.0	<0.240	108	51.8 - 133	6	20
1,2,4-Trichlorobenzene	54.2	µg/L	1	50.0	<0.190	108	59.8 - 125	3	20
Naphthalene	44.0	µg/L	1	50.0	<0.330	88	53.1 - 139	14	20
Hexachlorobutadiene	56.1	µg/L	1	50.0	<0.260	112	58.1 - 119	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	50.9	51.2	μg/L	1	50	102	102	89.8 - 118
Toluene-d8	50.5	50.1	μg/L	1	50	101	100	89.9 - 110
4-Bromofluorobenzene (4-BFB)	50.8	50.7	μg/L	1	50	102	101	86.4 - 117

Matrix Spike (xMS-1) Spiked Sample:

QC Batch: 69406 Date Analyzed: 2010-04-23 Analyzed By: AW
Prep Batch: 59405 QC Preparation: 2010-04-23 Prepared By: AW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	250	mg/Kg	1	250	30.681	88	40.4 - 152
>C12-C28	243	mg/Kg	1	250	<5.90	97	36.6 - 168

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	251	mg/Kg	1	250	30.681	88	40.4 - 152	0	20
>C12-C28	242	mg/Kg	1	250	<5.90	97	36.6 - 168	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Octane	72.4	72.2	mg/Kg	1	100	72	72	70 - 130
n-Tricosane	102	103	mg/Kg	1	100	102	103	70 - 130
n-Triacontane	111	114	mg/Kg	1	100	111	114	60.7 - 146

Matrix Spike (MS-1) Spiked Sample: 228927

QC Batch: 69410 Date Analyzed: 2010-04-23 Analyzed By: KB
Prep Batch: 59412 QC Preparation: 2010-04-23 Prepared By: KB

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane		1330	μg/Kg	1	1000	<3.64	133	37.9 - 148
Dichlorodifluoromethane		1040	μg/Kg	1	1000	<5.15	104	10 - 144
Chloromethane (methyl chloride)		1520	μg/Kg	1	1000	7.85	151	10 - 169
Vinyl Chloride		1470	μg/Kg	1	1000	<4.46	147	10 - 156
Bromomethane (methyl bromide)		311	μg/Kg	1	1000	<7.01	31	10 - 63.2
Chloroethane		221	μg/Kg	1	1000	<2.69	22	10 - 44.3
Trichlorofluoromethane	[53]	1450	μg/Kg	1	1000	<4.04	145	10 - 53.8
Acetone		708	μg/Kg	1	1000	<43.2	71	10 - 149
Iodomethane (methyl iodide)		1300	μg/Kg	1	1000	<6.39	130	24.1 - 148
Carbon Disulfide		1210	μg/Kg	1	1000	<6.98	121	20.7 - 142

continued ...

[53] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued . . .

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Acrylonitrile		1140	µg/Kg	1	1000	<2.79	114	13.4 - 145
2-Butanone (MEK)		956	µg/Kg	1	1000	<6.87	96	26.1 - 127
4-Methyl-2-pentanone (MIBK)		1040	µg/Kg	1	1000	<4.21	104	23.6 - 133
2-Hexanone		804	µg/Kg	1	1000	<2.94	80	26.6 - 101
trans 1,4-Dichloro-2-butene		847	µg/Kg	1	1000	<2.41	85	10 - 143
1,1-Dichloroethene	[54]	1590	µg/Kg	1	1000	<6.53	159	37.5 - 152
Methylene chloride	[55]	1500	µg/Kg	1	1000	88.8	141	52.4 - 129
MTBE		1290	µg/Kg	1	1000	<2.14	129	23.5 - 151
trans-1,2-Dichloroethene		1350	µg/Kg	1	1000	<6.50	135	37.4 - 148
1,1-Dichloroethane		1370	µg/Kg	1	1000	<5.94	137	33.9 - 150
cis-1,2-Dichloroethene		1380	µg/Kg	1	1000	<5.99	138	42.6 - 146
2,2-Dichloropropane		1180	µg/Kg	1	1000	<8.12	118	10 - 122
1,2-Dichloroethane (EDC)		1260	µg/Kg	1	1000	<3.67	126	17.6 - 149
Chloroform		1310	µg/Kg	1	1000	<5.31	131	30.4 - 149
1,1,1-Trichloroethane		1140	µg/Kg	1	1000	<7.76	114	20 - 137
1,1-Dichloropropene		1380	µg/Kg	1	1000	<7.43	138	35.2 - 154
Benzene		1370	µg/Kg	1	1000	<6.23	137	26.3 - 149
Carbon Tetrachloride		1100	µg/Kg	1	1000	<6.32	110	10 - 152
1,2-Dichloropropane		1360	µg/Kg	1	1000	<5.23	136	42 - 150
Trichloroethene (TCE)		1360	µg/Kg	1	1000	<7.95	136	23.3 - 219
Dibromomethane (methylene bromide)		1220	µg/Kg	1	1000	<3.41	122	29.2 - 144
Bromodichloromethane		1210	µg/Kg	1	1000	<4.03	121	23.4 - 142
2-Chloroethyl vinyl ether		1240	µg/Kg	1	1000	<2.22	124	20.8 - 142
cis-1,3-Dichloropropene		1330	µg/Kg	1	1000	<3.74	133	31.3 - 151
trans-1,3-Dichloropropene		1300	µg/Kg	1	1000	<3.96	130	23.6 - 148
Toluene		1360	µg/Kg	1	1000	<6.10	136	14 - 160
1,1,2-Trichloroethane		1180	µg/Kg	1	1000	<2.06	118	37.2 - 139
1,3-Dichloropropane		1240	µg/Kg	1	1000	<3.74	124	37.1 - 142
Dibromochloromethane		1120	µg/Kg	1	1000	<3.78	112	20.3 - 135
1,2-Dibromoethane (EDB)		1190	µg/Kg	1	1000	<2.04	119	31.8 - 141
Tetrachloroethene (PCE)		962	µg/Kg	1	1000	<7.24	96	10 - 253
Chlorobenzene		1350	µg/Kg	1	1000	<6.15	135	45.4 - 150
1,1,1,2-Tetrachloroethane		1260	µg/Kg	1	1000	<4.11	126	31 - 148
Ethylbenzene		1360	µg/Kg	1	1000	<5.48	136	15.6 - 161
m,p-Xylene		2710	µg/Kg	1	2000	<11.5	136	10 - 171
Bromoform		926	µg/Kg	1	1000	<2.24	93	10 - 123
Styrene		1380	µg/Kg	1	1000	<4.22	138	43.3 - 159
o-Xylene		1350	µg/Kg	1	1000	<5.89	135	10 - 182
1,1,2,2-Tetrachloroethane		1010	µg/Kg	1	1000	<2.30	101	10 - 141
2-Chlorotoluene		1360	µg/Kg	1	1000	<5.85	136	41 - 157
1,2,3-Trichloropropane		1130	µg/Kg	1	1000	<4.42	113	29.6 - 133
Isopropylbenzene		1430	µg/Kg	1	1000	<5.93	143	42.6 - 165
Bromobenzene		1290	µg/Kg	1	1000	<8.21	129	38.1 - 145
n-Propylbenzene		1420	µg/Kg	1	1000	<6.02	142	44.2 - 166
1,3,5-Trimethylbenzene		1420	µg/Kg	1	1000	<5.35	142	41.8 - 167

continued . . .

[54] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[55] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued . . .

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
tert-Butylbenzene	1480	µg/Kg	1	1000	<6.14	148	43.3 - 173
1,2,4-Trimethylbenzene	1430	µg/Kg	1	1000	<5.49	143	40.9 - 168
1,4-Dichlorobenzene (para)	1340	µg/Kg	1	1000	<4.74	134	41.9 - 152
sec-Butylbenzene	1510	µg/Kg	1	1000	<6.16	151	44.1 - 179
1,3-Dichlorobenzene (meta)	1380	µg/Kg	1	1000	<6.17	138	45.1 - 156
p-Isopropyltoluene	1540	µg/Kg	1	1000	<6.38	154	44 - 179
4-Chlorotoluene	1370	µg/Kg	1	1000	<6.03	137	39.2 - 158
1,2-Dichlorobenzene (ortho)	1290	µg/Kg	1	1000	<4.96	129	41.7 - 150
n-Butylbenzene	1600	µg/Kg	1	1000	<6.02	160	43.3 - 182
1,2-Dibromo-3-chloropropane	654	µg/Kg	1	1000	<6.79	65	10 - 116
1,2,3-Trichlorobenzene	1140	µg/Kg	1	1000	<4.91	114	24.6 - 153
1,2,4-Trichlorobenzene	1370	µg/Kg	1	1000	<4.61	137	26.6 - 178
Naphthalene	692	µg/Kg	1	1000	3.76	69	23 - 133
Hexachlorobutadiene	1650	µg/Kg	1	1000	<13.9	165	38.1 - 185

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane	1130	µg/Kg	1	1000	<3.64	113	37.9 - 148	16	20
Dichlorodifluoromethane	986	µg/Kg	1	1000	<5.15	99	10 - 144	5	20
Chloromethane (methyl chloride)	1400	µg/Kg	1	1000	7.85	139	10 - 169	8	20
Vinyl Chloride	1380	µg/Kg	1	1000	<4.46	138	10 - 156	6	20
Bromomethane (methyl bromide)	285	µg/Kg	1	1000	<7.01	28	10 - 63.2	9	20
Chloroethane	194	µg/Kg	1	1000	<2.69	19	10 - 44.3	13	20
Trichlorofluoromethane [56]	1320	µg/Kg	1	1000	<4.04	132	10 - 53.8	9	20
Acetone	616	µg/Kg	1	1000	<43.2	62	10 - 149	14	20
Iodomethane (methyl iodide)	1180	µg/Kg	1	1000	<6.39	118	24.1 - 148	10	20
Carbon Disulfide	1060	µg/Kg	1	1000	<6.98	106	20.7 - 142	13	20
Acrylonitrile	984	µg/Kg	1	1000	<2.79	98	13.4 - 145	15	20
2-Butanone (MEK)	830	µg/Kg	1	1000	<6.87	83	26.1 - 127	14	20
4-Methyl-2-pentanone (MIBK)	876	µg/Kg	1	1000	<4.21	88	23.6 - 133	17	20
2-Hexanone	671	µg/Kg	1	1000	<2.94	67	26.6 - 101	18	20
trans 1,4-Dichloro-2-butene	713	µg/Kg	1	1000	<2.41	71	10 - 143	17	20
1,1-Dichloroethene	1380	µg/Kg	1	1000	<6.53	138	37.5 - 152	14	20
Methylene chloride	1310	µg/Kg	1	1000	88.8	122	52.4 - 129	14	20
MTBE	1110	µg/Kg	1	1000	<2.14	111	23.5 - 151	15	20
trans-1,2-Dichloroethene	1170	µg/Kg	1	1000	<6.50	117	37.4 - 148	14	20
1,1-Dichloroethane	1190	µg/Kg	1	1000	<5.94	119	33.9 - 150	14	20
cis-1,2-Dichloroethene	1200	µg/Kg	1	1000	<5.99	120	42.6 - 146	14	20
2,2-Dichloropropane	1030	µg/Kg	1	1000	<8.12	103	10 - 122	14	20
1,2-Dichloroethane (EDC)	1070	µg/Kg	1	1000	<3.67	107	17.6 - 149	16	20
Chloroform	1130	µg/Kg	1	1000	<5.31	113	30.4 - 149	15	20
1,1,1-Trichloroethane	994	µg/Kg	1	1000	<7.76	99	20 - 137	14	20
1,1-Dichloropropene	1190	µg/Kg	1	1000	<7.43	119	35.2 - 154	15	20
Benzene	1190	µg/Kg	1	1000	<6.23	119	26.3 - 149	14	20

continued . . .

[56] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.

matrix spikes continued . . .

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Carbon Tetrachloride	972	µg/Kg	1	1000	<6.32	97	10 - 152	12	20
1,2-Dichloropropane	1190	µg/Kg	1	1000	<5.23	119	42 - 150	13	20
Trichloroethene (TCE)	1180	µg/Kg	1	1000	<7.95	118	23.3 - 219	14	20
Dibromomethane (methylene bromide)	1060	µg/Kg	1	1000	<3.41	106	29.2 - 144	14	20
Bromodichloromethane	1040	µg/Kg	1	1000	<4.03	104	23.4 - 142	15	20
2-Chloroethyl vinyl ether [57]	990	µg/Kg	1	1000	<2.22	99	20.8 - 142	22	20
cis-1,3-Dichloropropene	1170	µg/Kg	1	1000	<3.74	117	31.3 - 151	13	20
trans-1,3-Dichloropropene	1130	µg/Kg	1	1000	<3.96	113	23.6 - 148	14	20
Toluene	1180	µg/Kg	1	1000	<6.10	118	14 - 160	14	20
1,1,2-Trichloroethane	1020	µg/Kg	1	1000	<2.06	102	37.2 - 139	14	20
1,3-Dichloropropane	1070	µg/Kg	1	1000	<3.74	107	37.1 - 142	15	20
Dibromochloromethane	960	µg/Kg	1	1000	<3.78	96	20.3 - 135	15	20
1,2-Dibromoethane (EDB)	1020	µg/Kg	1	1000	<2.04	102	31.8 - 141	15	20
Tetrachloroethene (PCE)	835	µg/Kg	1	1000	<7.24	84	10 - 253	14	20
Chlorobenzene	1180	µg/Kg	1	1000	<6.15	118	45.4 - 150	13	20
1,1,1,2-Tetrachloroethane	1110	µg/Kg	1	1000	<4.11	111	31 - 148	13	20
Ethylbenzene	1180	µg/Kg	1	1000	<5.48	118	15.6 - 161	14	20
m,p-Xylene	2360	µg/Kg	1	2000	<11.5	118	10 - 171	14	20
Bromoform	759	µg/Kg	1	1000	<2.24	76	10 - 123	20	20
Styrene	1200	µg/Kg	1	1000	<4.22	120	43.3 - 159	14	20
o-Xylene	1180	µg/Kg	1	1000	<5.89	118	10 - 182	13	20
1,1,2,2-Tetrachloroethane	850	µg/Kg	1	1000	<2.30	85	10 - 141	17	20
2-Chlorotoluene	1200	µg/Kg	1	1000	<5.85	120	41 - 157	12	20
1,2,3-Trichloropropane	966	µg/Kg	1	1000	<4.42	97	29.6 - 133	16	20
Isopropylbenzene	1250	µg/Kg	1	1000	<5.93	125	42.6 - 165	13	20
Bromobenzene	1120	µg/Kg	1	1000	<8.21	112	38.1 - 145	14	20
n-Propylbenzene	1250	µg/Kg	1	1000	<6.02	125	44.2 - 166	13	20
1,3,5-Trimethylbenzene	1250	µg/Kg	1	1000	<5.35	125	41.8 - 167	13	20
tert-Butylbenzene	1300	µg/Kg	1	1000	<6.14	130	43.3 - 173	13	20
1,2,4-Trimethylbenzene	1240	µg/Kg	1	1000	<5.49	124	40.9 - 168	14	20
1,4-Dichlorobenzene (para)	1160	µg/Kg	1	1000	<4.74	116	41.9 - 152	14	20
sec-Butylbenzene	1330	µg/Kg	1	1000	<6.16	133	44.1 - 179	13	20
1,3-Dichlorobenzene (meta)	1200	µg/Kg	1	1000	<6.17	120	45.1 - 156	14	20
p-Isopropyltoluene	1360	µg/Kg	1	1000	<6.38	136	44 - 179	12	20
4-Chlorotoluene	1200	µg/Kg	1	1000	<6.03	120	39.2 - 158	13	20
1,2-Dichlorobenzene (ortho)	1120	µg/Kg	1	1000	<4.96	112	41.7 - 150	14	20
n-Butylbenzene	1400	µg/Kg	1	1000	<6.02	140	43.3 - 182	13	20
1,2-Dibromo-3-chloropropane	548	µg/Kg	1	1000	<6.79	55	10 - 116	18	20
1,2,3-Trichlorobenzene	976	µg/Kg	1	1000	<4.91	98	24.6 - 153	16	20
1,2,4-Trichlorobenzene	1170	µg/Kg	1	1000	<4.61	117	26.6 - 178	16	20
Naphthalene	636	µg/Kg	1	1000	3.76	63	23 - 133	8	20
Hexachlorobutadiene	1490	µg/Kg	1	1000	<13.9	149	38.1 - 185	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[57] MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	972	967	μg/Kg	1	1000	97	97	72.4 - 113
Toluene-d8	1010	1010	μg/Kg	1	1000	101	101	90.7 - 113
4-Bromofluorobenzene (4-BFB)	981	976	μg/Kg	1	1000	98	98	65.1 - 127

Matrix Spike (MS-1) Spiked Sample: 229513

QC Batch: 69447 Date Analyzed: 2010-04-26 Analyzed By: KB
Prep Batch: 59443 QC Preparation: 2010-04-26 Prepared By: KB

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromochloromethane	[58]	1500	μg/Kg	1	1000	<3.64	150	37.9 - 148
Dichlorodifluoromethane		1030	μg/Kg	1	1000	<5.15	103	10 - 144
Chloromethane (methyl chloride)		1540	μg/Kg	1	1000	<4.16	154	10 - 169
Vinyl Chloride		1530	μg/Kg	1	1000	<4.46	153	10 - 156
Bromomethane (methyl bromide)		337	μg/Kg	1	1000	<7.01	34	10 - 63.2
Chloroethane		232	μg/Kg	1	1000	<2.69	23	10 - 44.3
Trichlorofluoromethane	[59]	1360	μg/Kg	1	1000	<4.04	136	10 - 53.8
Acetone		1240	μg/Kg	1	1000	<43.2	124	10 - 149
Iodomethane (methyl iodide)		1470	μg/Kg	1	1000	<6.39	147	24.1 - 148
Carbon Disulfide		1350	μg/Kg	1	1000	<6.98	135	20.7 - 142
Acrylonitrile		1430	μg/Kg	1	1000	<2.79	143	13.4 - 145
2-Butanone (MEK)		1220	μg/Kg	1	1000	<6.87	122	26.1 - 127
4-Methyl-2-pentanone (MIBK)		1290	μg/Kg	1	1000	<4.21	129	23.6 - 133
2-Hexanone	[60]	1040	μg/Kg	1	1000	<2.94	104	26.6 - 101
trans 1,4-Dichloro-2-butene		869	μg/Kg	1	1000	<2.41	87	10 - 143
1,1-Dichloroethene	[61]	1740	μg/Kg	1	1000	<6.53	174	37.5 - 152
Methylene chloride	[62]	1570	μg/Kg	1	1000	<16.8	157	52.4 - 129
MTBE	[63]	1530	μg/Kg	1	1000	<2.14	153	23.5 - 151
trans-1,2-Dichloroethene	[64]	1510	μg/Kg	1	1000	<6.50	151	37.4 - 148
1,1-Dichloroethane	[65]	1540	μg/Kg	1	1000	<5.94	154	33.9 - 150
cis-1,2-Dichloroethene	[66]	1550	μg/Kg	1	1000	<5.99	155	42.6 - 146
2,2-Dichloropropane		984	μg/Kg	1	1000	<8.12	98	10 - 122
1,2-Dichloroethane (EDC)		1430	μg/Kg	1	1000	<3.67	143	17.6 - 149
Chloroform	[67]	1500	μg/Kg	1	1000	<5.31	150	30.4 - 149
1,1,1-Trichloroethane		1320	μg/Kg	1	1000	<7.76	132	20 - 137
1,1-Dichloropropene	[68]	1560	μg/Kg	1	1000	<7.43	156	35.2 - 154

continued ...

[58] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
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[67] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[68] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued . . .

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	[69]	1540	µg/Kg	1	1000	<6.23	154	26.3 - 149
Carbon Tetrachloride		1300	µg/Kg	1	1000	<6.32	130	10 - 152
1,2-Dichloropropane	[70]	1550	µg/Kg	1	1000	<5.23	155	42 - 150
Trichloroethene (TCE)		1650	µg/Kg	1	1000	<7.95	165	23.3 - 219
Dibromomethane (methylene bromide)		1430	µg/Kg	1	1000	<3.41	143	29.2 - 144
Bromodichloromethane		1420	µg/Kg	1	1000	<4.03	142	23.4 - 142
2-Chloroethyl vinyl ether		1390	µg/Kg	1	1000	<2.22	139	20.8 - 142
cis-1,3-Dichloropropene		1470	µg/Kg	1	1000	<3.74	147	31.3 - 151
trans-1,3-Dichloropropene		1440	µg/Kg	1	1000	<3.96	144	23.6 - 148
Toluene		1540	µg/Kg	1	1000	<6.10	154	14 - 160
1,1,2-Trichloroethane		1370	µg/Kg	1	1000	<2.06	137	37.2 - 139
1,3-Dichloropropane		1400	µg/Kg	1	1000	<3.74	140	37.1 - 142
Dibromochloromethane		1290	µg/Kg	1	1000	<3.78	129	20.3 - 135
1,2-Dibromoethane (EDB)		1380	µg/Kg	1	1000	<2.04	138	31.8 - 141
Tetrachloroethene (PCE)		1800	µg/Kg	1	1000	<7.24	180	10 - 253
Chlorobenzene		1490	µg/Kg	1	1000	<6.15	149	45.4 - 150
1,1,1,2-Tetrachloroethane		1430	µg/Kg	1	1000	<4.11	143	31 - 148
Ethylbenzene		1510	µg/Kg	1	1000	<5.48	151	15.6 - 161
m,p-Xylene		2990	µg/Kg	1	2000	<11.5	150	10 - 171
Bromoform		1080	µg/Kg	1	1000	<2.24	108	10 - 123
Styrene		1520	µg/Kg	1	1000	<4.22	152	43.3 - 159
o-Xylene		1490	µg/Kg	1	1000	<5.89	149	10 - 182
1,1,2,2-Tetrachloroethane		1050	µg/Kg	1	1000	<2.30	105	10 - 141
2-Chlorotoluene		1530	µg/Kg	1	1000	<5.85	153	41 - 157
1,2,3-Trichloropropane		1320	µg/Kg	1	1000	<4.42	132	29.6 - 133
Isopropylbenzene		1600	µg/Kg	1	1000	<5.93	160	42.6 - 165
Bromobenzene		1440	µg/Kg	1	1000	<8.21	144	38.1 - 145
n-Propylbenzene		1600	µg/Kg	1	1000	<6.02	160	44.2 - 166
1,3,5-Trimethylbenzene		1590	µg/Kg	1	1000	<5.35	159	41.8 - 167
tert-Butylbenzene		1650	µg/Kg	1	1000	<6.14	165	43.3 - 173
1,2,4-Trimethylbenzene		1620	µg/Kg	1	1000	<5.49	162	40.9 - 168
1,4-Dichlorobenzene (para)		1470	µg/Kg	1	1000	<4.74	147	41.9 - 152
sec-Butylbenzene		1700	µg/Kg	1	1000	<6.16	170	44.1 - 179
1,3-Dichlorobenzene (meta)		1510	µg/Kg	1	1000	<6.17	151	45.1 - 156
p-Isopropyltoluene		1740	µg/Kg	1	1000	<6.38	174	44 - 179
4-Chlorotoluene		1530	µg/Kg	1	1000	<6.03	153	39.2 - 158
1,2-Dichlorobenzene (ortho)		1400	µg/Kg	1	1000	<4.96	140	41.7 - 150
n-Butylbenzene		1820	µg/Kg	1	1000	<6.02	182	43.3 - 182
1,2-Dibromo-3-chloropropane		786	µg/Kg	1	1000	<6.79	79	10 - 116
1,2,3-Trichlorobenzene		1330	µg/Kg	1	1000	<4.91	133	24.6 - 153
1,2,4-Trichlorobenzene		1510	µg/Kg	1	1000	<4.61	151	26.6 - 178
Naphthalene		877	µg/Kg	1	1000	<2.35	88	23 - 133
Hexachlorobutadiene		1820	µg/Kg	1	1000	<13.9	182	38.1 - 185

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[69] Matrix spike recovery out of control limits due to matrix interference. Concentration biased high.
[70] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromochloromethane		1480	µg/Kg	1	1000	<3.64	148	37.9 - 148	1	20
Dichlorodifluoromethane		1090	µg/Kg	1	1000	<5.15	109	10 - 144	6	20
Chloromethane (methyl chloride)		1610	µg/Kg	1	1000	<4.16	161	10 - 169	4	20
Vinyl Chloride	[71]	1600	µg/Kg	1	1000	<4.46	160	10 - 156	4	20
Bromomethane (methyl bromide)		334	µg/Kg	1	1000	<7.01	33	10 - 63.2	1	20
Chloroethane		256	µg/Kg	1	1000	<2.69	26	10 - 44.3	10	20
Trichlorofluoromethane	[72]	1320	µg/Kg	1	1000	<4.04	132	10 - 53.8	3	20
Acetone		1060	µg/Kg	1	1000	<43.2	106	10 - 149	16	20
Iodomethane (methyl iodide)	[73]	1530	µg/Kg	1	1000	<6.39	153	24.1 - 148	4	20
Carbon Disulfide		1340	µg/Kg	1	1000	<6.98	134	20.7 - 142	1	20
Acrylonitrile		1290	µg/Kg	1	1000	<2.79	129	13.4 - 145	10	20
2-Butanone (MEK)		1080	µg/Kg	1	1000	<6.87	108	26.1 - 127	12	20
4-Methyl-2-pentanone (MIBK)		1200	µg/Kg	1	1000	<4.21	120	23.6 - 133	7	20
2-Hexanone		946	µg/Kg	1	1000	<2.94	95	26.6 - 101	10	20
trans 1,4-Dichloro-2-butene		807	µg/Kg	1	1000	<2.41	81	10 - 143	7	20
1,1-Dichloroethene	[74]	1750	µg/Kg	1	1000	<6.53	175	37.5 - 152	1	20
Methylene chloride	[75]	1580	µg/Kg	1	1000	<16.8	158	52.4 - 129	1	20
MTBE		1470	µg/Kg	1	1000	<2.14	147	23.5 - 151	4	20
trans-1,2-Dichloroethene	[76]	1510	µg/Kg	1	1000	<6.50	151	37.4 - 148	0	20
1,1-Dichloroethane	[77]	1550	µg/Kg	1	1000	<5.94	155	33.9 - 150	1	20
cis-1,2-Dichloroethene	[78]	1550	µg/Kg	1	1000	<5.99	155	42.6 - 146	0	20
2,2-Dichloropropane		996	µg/Kg	1	1000	<8.12	100	10 - 122	1	20
1,2-Dichloroethane (EDC)		1400	µg/Kg	1	1000	<3.67	140	17.6 - 149	2	20
Chloroform	[79]	1500	µg/Kg	1	1000	<5.31	150	30.4 - 149	0	20
1,1,1-Trichloroethane		1330	µg/Kg	1	1000	<7.76	133	20 - 137	1	20
1,1-Dichloropropene	[80]	1570	µg/Kg	1	1000	<7.43	157	35.2 - 154	1	20
Benzene	[81]	1540	µg/Kg	1	1000	<6.23	154	26.3 - 149	0	20
Carbon Tetrachloride		1310	µg/Kg	1	1000	<6.32	131	10 - 152	1	20
1,2-Dichloropropane	[82]	1560	µg/Kg	1	1000	<5.23	156	42 - 150	1	20

continued ...

[71] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
[72] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[73] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[74] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[75] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[76] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[77] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[78] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[79] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[80] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
[81] Matrix spike recovery out of control limits due to matrix interference. Concentration biased high. RPD within RPD limits. •
[82] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •

matrix spikes continued . . .

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Trichloroethene (TCE)	1610	µg/Kg	1	1000	<7.95	161	23.3 - 219	2	20
Dibromomethane (methylene bromide)	1380	µg/Kg	1	1000	<3.41	138	29.2 - 144	4	20
Bromodichloromethane	1400	µg/Kg	1	1000	<4.03	140	23.4 - 142	1	20
2-Chloroethyl vinyl ether	1340	µg/Kg	1	1000	<2.22	134	20.8 - 142	4	20
cis-1,3-Dichloropropene	1450	µg/Kg	1	1000	<3.74	145	31.3 - 151	1	20
trans-1,3-Dichloropropene	1410	µg/Kg	1	1000	<3.96	141	23.6 - 148	2	20
Toluene	1550	µg/Kg	1	1000	<6.10	155	14 - 160	1	20
1,1,2-Trichloroethane	1300	µg/Kg	1	1000	<2.06	130	37.2 - 139	5	20
1,3-Dichloropropane	1340	µg/Kg	1	1000	<3.74	134	37.1 - 142	4	20
Dibromochloromethane	1250	µg/Kg	1	1000	<3.78	125	20.3 - 135	3	20
1,2-Dibromoethane (EDB)	1300	µg/Kg	1	1000	<2.04	130	31.8 - 141	6	20
Tetrachloroethene (PCE)	1660	µg/Kg	1	1000	<7.24	166	10 - 253	8	20
Chlorobenzene	1480	µg/Kg	1	1000	<6.15	148	45.4 - 150	1	20
1,1,1,2-Tetrachloroethane	1400	µg/Kg	1	1000	<4.11	140	31 - 148	2	20
Ethylbenzene	1480	µg/Kg	1	1000	<5.48	148	15.6 - 161	2	20
m,p-Xylene	2950	µg/Kg	1	2000	<11.5	148	10 - 171	1	20
Bromoform	1030	µg/Kg	1	1000	<2.24	103	10 - 123	5	20
Styrene	1490	µg/Kg	1	1000	<4.22	149	43.3 - 159	2	20
o-Xylene	1460	µg/Kg	1	1000	<5.89	146	10 - 182	2	20
1,1,2,2-Tetrachloroethane	1040	µg/Kg	1	1000	<2.30	104	10 - 141	1	20
2-Chlorotoluene	1500	µg/Kg	1	1000	<5.85	150	41 - 157	2	20
1,2,3-Trichloropropane	1230	µg/Kg	1	1000	<4.42	123	29.6 - 133	7	20
Isopropylbenzene	1570	µg/Kg	1	1000	<5.93	157	42.6 - 165	2	20
Bromobenzene	1420	µg/Kg	1	1000	<8.21	142	38.1 - 145	1	20
n-Propylbenzene	1580	µg/Kg	1	1000	<6.02	158	44.2 - 166	1	20
1,3,5-Trimethylbenzene	1560	µg/Kg	1	1000	<5.35	156	41.8 - 167	2	20
tert-Butylbenzene	1630	µg/Kg	1	1000	<6.14	163	43.3 - 173	1	20
1,2,4-Trimethylbenzene	1600	µg/Kg	1	1000	<5.49	160	40.9 - 168	1	20
1,4-Dichlorobenzene (para)	1450	µg/Kg	1	1000	<4.74	145	41.9 - 152	1	20
sec-Butylbenzene	1670	µg/Kg	1	1000	<6.16	167	44.1 - 179	2	20
1,3-Dichlorobenzene (meta)	1500	µg/Kg	1	1000	<6.17	150	45.1 - 156	1	20
p-Isopropyltoluene	1710	µg/Kg	1	1000	<6.38	171	44 - 179	2	20
4-Chlorotoluene	1500	µg/Kg	1	1000	<6.03	150	39.2 - 158	2	20
1,2-Dichlorobenzene (ortho)	1390	µg/Kg	1	1000	<4.96	139	41.7 - 150	1	20
n-Butylbenzene	1780	µg/Kg	1	1000	<6.02	178	43.3 - 182	2	20
1,2-Dibromo-3-chloropropane	734	µg/Kg	1	1000	<6.79	73	10 - 116	7	20
1,2,3-Trichlorobenzene	1320	µg/Kg	1	1000	<4.91	132	24.6 - 153	1	20
1,2,4-Trichlorobenzene	1510	µg/Kg	1	1000	<4.61	151	26.6 - 178	0	20
Naphthalene	868	µg/Kg	1	1000	<2.35	87	23 - 133	1	20
Hexachlorobutadiene	1850	µg/Kg	1	1000	<13.9	185	38.1 - 185	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	979	989	µg/Kg	1	1000	98	99	72.4 - 113
Toluene-d8	993	983	µg/Kg	1	1000	99	98	90.7 - 113
4-Bromofluorobenzene (4-BFB)	988	985	µg/Kg	1	1000	99	98	65.1 - 127

Matrix Spike (MS-1) Spiked Sample: 228928

QC Batch: 69469 Date Analyzed: 2010-04-28 Analyzed By: AW
Prep Batch: 59465 QC Preparation: 2010-04-26 Prepared By: AW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12	220	mg/Kg	1	250	17.9	81	40.4 - 152
>C12-C28	216	mg/Kg	1	250	<5.90	86	36.6 - 168

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	225	mg/Kg	1	250	17.9	83	40.4 - 152	2	20
>C12-C28	217	mg/Kg	1	250	<5.90	87	36.6 - 168	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Octane	92.6	87.7	mg/Kg	1	100	93	88	70 - 130
n-Tricosane	103	104	mg/Kg	1	100	103	104	70 - 130
n-Triacontane	120	121	mg/Kg	1	100	120	121	60.7 - 146

Matrix Spike (MS-1) Spiked Sample: 228927

QC Batch: 69520 Date Analyzed: 2010-04-29 Analyzed By: MN
Prep Batch: 59505 QC Preparation: 2010-04-28 Prepared By: MN

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyridine		0.647	mg/Kg	1	2.67	<0.0539	24	11.1 - 76.5
N-Nitrosodimethylamine		1.15	mg/Kg	1	2.67	<0.0468	43	21 - 77.7
2-Picoline		1.03	mg/Kg	1	2.67	<0.0512	38	15.1 - 87.4
Methyl methanesulfonate		1.06	mg/Kg	1	2.67	<0.0479	40	14.9 - 91.4
Ethyl methanesulfonate		1.22	mg/Kg	1	2.67	<0.0475	46	21.3 - 88
Phenol		1.12	mg/Kg	1	2.67	<0.0491	42	27.8 - 76.6
Aniline	[83]	0.754	mg/Kg	1	2.67	<0.0590	28	28.1 - 80.9
bis(2-chloroethyl)ether		1.20	mg/Kg	1	2.67	<0.0527	45	28.4 - 80.4
2-Chlorophenol		1.27	mg/Kg	1	2.67	<0.0444	48	26.7 - 74.6
1,3-Dichlorobenzene (meta)		1.12	mg/Kg	1	2.67	<0.0496	42	31 - 70
1,4-Dichlorobenzene (para)		1.10	mg/Kg	1	2.67	<0.0483	41	30.1 - 71.1
Benzyl alcohol		1.85	mg/Kg	1	2.67	<0.0579	69	18 - 92.9
1,2-Dichlorobenzene (ortho)		1.18	mg/Kg	1	2.67	<0.0448	44	30.8 - 72.7
2-Methylphenol		1.18	mg/Kg	1	2.67	<0.0522	44	29 - 75.8
bis(2-chloroisopropyl)ether		1.19	mg/Kg	1	2.67	<0.0531	44	10.3 - 79.5
4-Methylphenol / 3-Methylphenol		1.08	mg/Kg	1	2.67	<0.0594	40	26.2 - 82.2
Acetophenone		1.24	mg/Kg	1	2.67	<0.0426	46	31 - 88.9

continued ...

[83] Matrix spike recovery out of control limits due to matrix interference.

matrix spikes continued ...

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
N-Nitrosodi-n-propylamine		1.17	mg/Kg	1	2.67	<0.0567	44	27.4 - 93.9
Hexachloroethane		1.02	mg/Kg	1	2.67	<0.0427	38	27.3 - 73
Nitrobenzene		1.18	mg/Kg	1	2.67	<0.0435	44	29.2 - 86.4
N-Nitrosopiperidine		1.41	mg/Kg	1	2.67	<0.0510	53	34.5 - 95
Isophorone		1.20	mg/Kg	1	2.67	<0.0509	45	37.9 - 99.1
2-Nitrophenol		1.53	mg/Kg	1	2.67	<0.0484	57	26.8 - 90.7
2,4-Dimethylphenol		1.17	mg/Kg	1	2.67	<0.0368	44	29.2 - 82.7
bis(2-chloroethoxy)methane		1.31	mg/Kg	1	2.67	<0.0468	49	34.2 - 87.4
Benzoic acid		0.402	mg/Kg	1	2.67	<0.0865	15	10 - 133
2,4-Dichlorophenol		1.24	mg/Kg	1	2.67	<0.0371	46	31 - 87.3
1,2,4-Trichlorobenzene		1.27	mg/Kg	1	2.67	<0.0440	48	26.6 - 89.2
a,a-Dimethylphenethylamine	[84]	<0.0277	mg/Kg	1	2.67	<0.0277	0	10 - 100
Naphthalene		1.25	mg/Kg	1	2.67	<0.0508	47	33.3 - 80.8
4-Chloroaniline		1.12	mg/Kg	1	2.67	<0.0438	42	25.1 - 88.5
2,6-Dichlorophenol		1.30	mg/Kg	1	2.67	<0.0422	49	29.5 - 88.4
Hexachlorobutadiene		1.17	mg/Kg	1	2.67	<0.0511	44	30.1 - 80.6
N-Nitroso-di-n-butylamine		1.09	mg/Kg	1	2.67	<0.0429	41	32.3 - 104
4-Chloro-3-methylphenol	[85]	0.664	mg/Kg	1	2.67	<0.0324	25	37.2 - 107
1-Methylnaphthalene		1.26	mg/Kg	1	2.67	<0.0487	47	34.5 - 85
2-Methylnaphthalene		1.27	mg/Kg	1	2.67	<0.0430	48	35.9 - 81.6
1,2,4,5-Tetrachlorobenzene		1.61	mg/Kg	1	2.67	<0.0530	60	21.6 - 106
Hexachlorocyclopentadiene		2.17	mg/Kg	1	2.67	<0.0410	81	10 - 114
2,4,6-Trichlorophenol		1.52	mg/Kg	1	2.67	<0.0406	57	31 - 109
2,4,5-Trichlorophenol		1.41	mg/Kg	1	2.67	<0.0328	53	33.3 - 108
2-Chloronaphthalene		1.49	mg/Kg	1	2.67	<0.0450	56	32 - 91.4
1-Chloronaphthalene		1.49	mg/Kg	1	2.67	<0.0516	56	38.1 - 88.9
2-Nitroaniline		1.06	mg/Kg	1	2.67	<0.0259	40	39.8 - 122
Dimethylphthalate		1.31	mg/Kg	1	2.67	<0.0316	49	40.4 - 125
Acenaphthylene		1.41	mg/Kg	1	2.67	<0.0434	53	34.5 - 96.8
2,6-Dinitrotoluene	[86]	1.35	mg/Kg	1	2.67	<0.0273	50	51 - 115
3-Nitroaniline	[87]	1.22	mg/Kg	1	2.67	<0.0214	46	47.8 - 116
Acenaphthene		1.35	mg/Kg	1	2.67	<0.0428	50	42 - 93.3
2,4-Dinitrophenol		0.881	mg/Kg	1	2.67	<0.0302	33	10 - 108
Dibenzofuran		1.35	mg/Kg	1	2.67	<0.0400	50	41.9 - 101
Pentachlorobenzene		1.33	mg/Kg	1	2.67	<0.0428	50	31.8 - 122
4-Nitrophenol		1.41	mg/Kg	1	2.67	<0.0306	53	19 - 117
1-Naphthylamine		1.36	mg/Kg	1	2.67	<0.0272	51	17.6 - 136
2,4-Dinitrotoluene	[88]	1.47	mg/Kg	1	2.67	<0.0385	55	55.7 - 124
2-Naphthylamine		1.31	mg/Kg	1	2.67	<0.0286	49	22.8 - 140
2,3,4,6-Tetrachlorophenol		1.29	mg/Kg	1	2.67	<0.0260	48	41.6 - 117
Fluorene		1.32	mg/Kg	1	2.67	<0.0368	49	47.9 - 111
Diethylphthalate		1.37	mg/Kg	1	2.67	<0.0398	51	43.1 - 133
4-Chlorophenyl-phenylether		1.28	mg/Kg	1	2.67	<0.0438	48	40.9 - 117

continued ...

[84] Matrix spike recovery out of control limits due to matrix interference.
[85] Matrix spike recovery out of control limits due to matrix interference.
[86] Matrix spike recovery out of control limits due to matrix interference.
[87] Matrix spike recovery out of control limits due to matrix interference.
[88] Matrix spike recovery out of control limits due to matrix interference.

matrix spikes continued ...

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
4-Nitroaniline		1.78	mg/Kg	1	2.67	<0.0342	67	46.8 - 124
4,6-Dinitro-2-methylphenol		1.42	mg/Kg	1	2.67	<0.0318	53	17.6 - 122
Diphenylamine		1.46	mg/Kg	1	2.67	<0.0532	55	48 - 112
Diphenylhydrazine	[89]	1.03	mg/Kg	1	2.67	<0.0369	38	40.7 - 117
4-Bromophenyl-phenylether		1.42	mg/Kg	1	2.67	<0.0463	53	38.9 - 115
Phenacetin		1.59	mg/Kg	1	2.67	<0.0453	60	56.1 - 120
Hexachlorobenzene		1.54	mg/Kg	1	2.67	<0.0501	58	36 - 131
4-Aminobiphenyl		1.35	mg/Kg	1	2.67	<0.0596	50	38 - 135
Pentachlorophenol		0.920	mg/Kg	1	2.67	<0.0451	34	10 - 120
Pentachloronitrobenzene		1.51	mg/Kg	1	2.67	<0.0431	56	27.2 - 160
Pronamide		1.55	mg/Kg	1	2.67	<0.0491	58	48.5 - 127
Phenanthrene		1.52	mg/Kg	1	2.67	<0.0540	57	49.9 - 112
Anthracene		1.57	mg/Kg	1	2.67	<0.0578	59	50.6 - 112
Di-n-butylphthalate		1.68	mg/Kg	1	2.67	<0.0543	63	52.9 - 113
Fluoranthene		1.63	mg/Kg	1	2.67	<0.0678	61	48.2 - 120
Benzidine		1.39	mg/Kg	1	2.67	<0.0938	52	10 - 199
Pyrene		1.65	mg/Kg	1	2.67	<0.0680	62	32.2 - 133
p-Dimethylaminoazobenzene		1.58	mg/Kg	1	2.67	<0.0601	59	18.6 - 155
Butylbenzylphthalate		1.71	mg/Kg	1	2.67	<0.0425	64	27.4 - 137
Benzo(a)anthracene		1.62	mg/Kg	1	2.67	<0.0487	61	38.8 - 127
3,3-Dichlorobenzidine		1.62	mg/Kg	1	2.67	<0.0527	61	36 - 133
Chrysene		1.61	mg/Kg	1	2.67	<0.0568	60	17.9 - 137
bis(2-ethylhexyl)phthalate		1.69	mg/Kg	1	2.67	<0.0421	63	31.2 - 142
Di-n-octylphthalate		1.36	mg/Kg	1	2.67	<0.0609	51	42.8 - 142
Benzo(b)fluoranthene		1.22	mg/Kg	1	2.67	<0.0795	46	44.6 - 126
7,12-Dimethylbenz(a)anthracene		1.20	mg/Kg	1	2.67	<0.0518	45	39 - 130
Benzo(k)fluoranthene		1.22	mg/Kg	1	2.67	<0.0760	46	41.3 - 137
Benzo(a)pyrene	[90]	1.28	mg/Kg	1	2.67	<0.0549	48	48.6 - 134
3-Methylcholanthrene		1.32	mg/Kg	1	2.67	<0.0457	49	41.8 - 142
Dibenzo(a,j)acridine		1.35	mg/Kg	1	2.67	<0.0530	50	43.6 - 147
Indeno(1,2,3-cd)pyrene		1.28	mg/Kg	1	2.67	<0.0526	48	41.1 - 145
Dibenzo(a,h)anthracene		1.25	mg/Kg	1	2.67	<0.0636	47	28.4 - 154
Benzo(g,h,i)perylene		1.32	mg/Kg	1	2.67	<0.0482	49	45 - 144

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Pyridine		0.649	mg/Kg	1	2.67	<0.0539	24	11.1 - 76.5	0	20
N-Nitrosodimethylamine		1.18	mg/Kg	1	2.67	<0.0468	44	21 - 77.7	3	20
2-Picoline		1.04	mg/Kg	1	2.67	<0.0512	39	15.1 - 87.4	1	20
Methyl methanesulfonate		1.07	mg/Kg	1	2.67	<0.0479	40	14.9 - 91.4	1	20
Ethyl methanesulfonate		1.22	mg/Kg	1	2.67	<0.0475	46	21.3 - 88	0	20
Phenol		1.14	mg/Kg	1	2.67	<0.0491	43	27.8 - 76.6	2	20
Aniline	[91]	0.758	mg/Kg	1	2.67	<0.0590	28	28.1 - 80.9	0	20

continued ...

[89] Matrix spike recovery out of control limits due to matrix interference.
[90] Matrix spike recovery out of control limits due to matrix interference.
[91] Matrix spike recovery out of control limits due to matrix interference. •

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
bis(2-chloroethyl)ether	1.20	mg/Kg	1	2.67	<0.0527	45	28.4 - 80.4	0	20
2-Chlorophenol	1.29	mg/Kg	1	2.67	<0.0444	48	26.7 - 74.6	2	20
1,3-Dichlorobenzene (meta)	1.14	mg/Kg	1	2.67	<0.0496	43	31 - 70	2	20
1,4-Dichlorobenzene (para)	1.12	mg/Kg	1	2.67	<0.0483	42	30.1 - 71.1	2	20
Benzyl alcohol	1.89	mg/Kg	1	2.67	<0.0579	71	18 - 92.9	2	20
1,2-Dichlorobenzene (ortho)	1.20	mg/Kg	1	2.67	<0.0448	45	30.8 - 72.7	2	20
2-Methylphenol	1.20	mg/Kg	1	2.67	<0.0522	45	29 - 75.8	2	20
bis(2-chloroisopropyl)ether	1.20	mg/Kg	1	2.67	<0.0531	45	10.3 - 79.5	1	20
4-Methylphenol / 3-Methylphenol	1.10	mg/Kg	1	2.67	<0.0594	41	26.2 - 82.2	2	20
Acetophenone	1.26	mg/Kg	1	2.67	<0.0426	47	31 - 88.9	2	20
N-Nitrosodi-n-propylamine	1.18	mg/Kg	1	2.67	<0.0567	44	27.4 - 93.9	1	20
Hexachloroethane	1.05	mg/Kg	1	2.67	<0.0427	39	27.3 - 73	3	20
Nitrobenzene	1.17	mg/Kg	1	2.67	<0.0435	44	29.2 - 86.4	1	20
N-Nitrosopiperidine	1.46	mg/Kg	1	2.67	<0.0510	55	34.5 - 95	4	20
Isophorone	1.24	mg/Kg	1	2.67	<0.0509	46	37.9 - 99.1	3	20
2-Nitrophenol	1.59	mg/Kg	1	2.67	<0.0484	60	26.8 - 90.7	4	20
2,4-Dimethylphenol	1.20	mg/Kg	1	2.67	<0.0368	45	29.2 - 82.7	2	20
bis(2-chloroethoxy)methane	1.34	mg/Kg	1	2.67	<0.0468	50	34.2 - 87.4	2	20
Benzoic acid	0.405	mg/Kg	1	2.67	<0.0865	15	10 - 133	1	20
2,4-Dichlorophenol	1.28	mg/Kg	1	2.67	<0.0371	48	31 - 87.3	3	20
1,2,4-Trichlorobenzene	1.29	mg/Kg	1	2.67	<0.0440	48	26.6 - 89.2	2	20
a,a-Dimethylphenethylamine [92]	<0.0277	mg/Kg	1	2.67	<0.0277	0	10 - 100	0	20
Naphthalene	1.26	mg/Kg	1	2.67	<0.0508	47	33.3 - 80.8	1	20
4-Chloroaniline	1.16	mg/Kg	1	2.67	<0.0438	43	25.1 - 88.5	4	20
2,6-Dichlorophenol	1.31	mg/Kg	1	2.67	<0.0422	49	29.5 - 88.4	1	20
Hexachlorobutadiene	1.18	mg/Kg	1	2.67	<0.0511	44	30.1 - 80.6	1	20
N-Nitroso-di-n-butylamine	1.15	mg/Kg	1	2.67	<0.0429	43	32.3 - 104	5	20
4-Chloro-3-methylphenol [93]	0.721	mg/Kg	1	2.67	<0.0324	27	37.2 - 107	8	20
1-Methylnaphthalene	1.30	mg/Kg	1	2.67	<0.0487	49	34.5 - 85	3	20
2-Methylnaphthalene	1.30	mg/Kg	1	2.67	<0.0430	49	35.9 - 81.6	2	20
1,2,4,5-Tetrachlorobenzene	1.60	mg/Kg	1	2.67	<0.0530	60	21.6 - 106	1	20
Hexachlorocyclopentadiene	2.11	mg/Kg	1	2.67	<0.0410	79	10 - 114	3	20
2,4,6-Trichlorophenol	1.56	mg/Kg	1	2.67	<0.0406	58	31 - 109	3	20
2,4,5-Trichlorophenol	1.45	mg/Kg	1	2.67	<0.0328	54	33.3 - 108	3	20
2-Chloronaphthalene	1.51	mg/Kg	1	2.67	<0.0450	56	32 - 91.4	1	20
1-Chloronaphthalene	1.49	mg/Kg	1	2.67	<0.0516	56	38.1 - 88.9	0	20
2-Nitroaniline	1.11	mg/Kg	1	2.67	<0.0259	42	39.8 - 122	5	20
Dimethylphthalate	1.34	mg/Kg	1	2.67	<0.0316	50	40.4 - 125	2	20
Acenaphthylene	1.44	mg/Kg	1	2.67	<0.0434	54	34.5 - 96.8	2	20
2,6-Dinitrotoluene	1.38	mg/Kg	1	2.67	<0.0273	52	51 - 115	2	20
3-Nitroaniline	1.27	mg/Kg	1	2.67	<0.0214	48	47.8 - 116	4	20
Acenaphthene	1.38	mg/Kg	1	2.67	<0.0428	52	42 - 93.3	2	20
2,4-Dinitrophenol	0.674	mg/Kg	1	2.67	<0.0302	25	10 - 108	27	20
Dibenzofuran	1.40	mg/Kg	1	2.67	<0.0400	52	41.9 - 101	4	20
Pentachlorobenzene	1.36	mg/Kg	1	2.67	<0.0428	51	31.8 - 122	2	20

continued ...

[92] Matrix spike recovery out of control limits due to matrix interference. •
[93] Matrix spike recovery out of control limits due to matrix interference. •

matrix spikes continued ...

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
4-Nitrophenol		1.44	mg/Kg	1	2.67	<0.0306	54	19 - 117	2	20
1-Naphthylamine		1.16	mg/Kg	1	2.67	<0.0272	43	17.6 - 136	16	20
2,4-Dinitrotoluene	[94]	1.48	mg/Kg	1	2.67	<0.0385	55	55.7 - 124	1	20
2-Naphthylamine		1.28	mg/Kg	1	2.67	<0.0286	48	22.8 - 140	2	20
2,3,4,6-Tetrachlorophenol		1.30	mg/Kg	1	2.67	<0.0260	49	41.6 - 117	1	20
Fluorene		1.35	mg/Kg	1	2.67	<0.0368	50	47.9 - 111	2	20
Diethylphthalate		1.39	mg/Kg	1	2.67	<0.0398	52	43.1 - 133	1	20
4-Chlorophenyl-phenylether		1.32	mg/Kg	1	2.67	<0.0438	49	40.9 - 117	3	20
4-Nitroaniline		1.79	mg/Kg	1	2.67	<0.0342	67	46.8 - 124	1	20
4,6-Dinitro-2-methylphenol		1.36	mg/Kg	1	2.67	<0.0318	51	17.6 - 122	4	20
Diphenylamine		1.51	mg/Kg	1	2.67	<0.0532	56	48 - 112	3	20
Diphenylhydrazine	[95]	1.07	mg/Kg	1	2.67	<0.0369	40	40.7 - 117	4	20
4-Bromophenyl-phenylether		1.48	mg/Kg	1	2.67	<0.0463	55	38.9 - 115	4	20
Phenacetin		1.64	mg/Kg	1	2.67	<0.0453	61	56.1 - 120	3	20
Hexachlorobenzene		1.58	mg/Kg	1	2.67	<0.0501	59	36 - 131	3	20
4-Aminobiphenyl		1.41	mg/Kg	1	2.67	<0.0596	53	38 - 135	4	20
Pentachlorophenol		0.962	mg/Kg	1	2.67	<0.0451	36	10 - 120	4	20
Pentachloronitrobenzene		1.55	mg/Kg	1	2.67	<0.0431	58	27.2 - 160	3	20
Pronamide		1.60	mg/Kg	1	2.67	<0.0491	60	48.5 - 127	3	20
Phenanthrene		1.56	mg/Kg	1	2.67	<0.0540	58	49.9 - 112	3	20
Anthracene		1.60	mg/Kg	1	2.67	<0.0578	60	50.6 - 112	2	20
Di-n-butylphthalate		1.72	mg/Kg	1	2.67	<0.0543	64	52.9 - 113	2	20
Fluoranthene		1.65	mg/Kg	1	2.67	<0.0678	62	48.2 - 120	1	20
Benzidine		1.46	mg/Kg	1	2.67	<0.0938	55	10 - 199	5	20
Pyrene		1.69	mg/Kg	1	2.67	<0.0680	63	32.2 - 133	2	20
p-Dimethylaminoazobenzene		1.62	mg/Kg	1	2.67	<0.0601	61	18.6 - 155	2	20
Butylbenzylphthalate		1.75	mg/Kg	1	2.67	<0.0425	66	27.4 - 137	2	20
Benzo(a)anthracene		1.65	mg/Kg	1	2.67	<0.0487	62	38.8 - 127	2	20
3,3-Dichlorobenzidine		1.62	mg/Kg	1	2.67	<0.0527	61	36 - 133	0	20
Chrysene		1.66	mg/Kg	1	2.67	<0.0568	62	17.9 - 137	3	20
bis(2-ethylhexyl)phthalate		1.74	mg/Kg	1	2.67	<0.0421	65	31.2 - 142	3	20
Di-n-octylphthalate		1.40	mg/Kg	1	2.67	<0.0609	52	42.8 - 142	3	20
Benzo(b)fluoranthene		1.24	mg/Kg	1	2.67	<0.0795	46	44.6 - 126	2	20
7,12-Dimethylbenz(a)anthracene		1.23	mg/Kg	1	2.67	<0.0518	46	39 - 130	2	20
Benzo(k)fluoranthene		1.27	mg/Kg	1	2.67	<0.0760	48	41.3 - 137	4	20
Benzo(a)pyrene		1.32	mg/Kg	1	2.67	<0.0549	49	48.6 - 134	3	20
3-Methylcholanthrene		1.36	mg/Kg	1	2.67	<0.0457	51	41.8 - 142	3	20
Dibenzo(a,j)acridine		1.36	mg/Kg	1	2.67	<0.0530	51	43.6 - 147	1	20
Indeno(1,2,3-cd)pyrene		1.31	mg/Kg	1	2.67	<0.0526	49	41.1 - 145	2	20
Dibenzo(a,h)anthracene		1.27	mg/Kg	1	2.67	<0.0636	48	28.4 - 154	2	20
Benzo(g,h,i)perylene		1.36	mg/Kg	1	2.67	<0.0482	51	45 - 144	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

[94] Matrix spike recovery out of control limits due to matrix interference. •
[95] Matrix spike recovery out of control limits due to matrix interference. •

matrix spikes continued . . .

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	1.14	1.17	mg/Kg	1	2.67	43	44	12.8 - 71.1
Phenol-d5	1.25	1.27	mg/Kg	1	2.67	47	48	10.2 - 82.2
Nitrobenzene-d5	1.27	1.30	mg/Kg	1	2.67	48	49	17.4 - 83.8
2-Fluorobiphenyl	1.57	1.57	mg/Kg	1	2.67	59	59	21.4 - 92.8
2,4,6-Tribromophenol	1.74	1.77	mg/Kg	1	2.67	65	66	18.6 - 98.6
Terphenyl-d14	1.60	1.65	mg/Kg	1	2.67	60	62	24.3 - 133

Standard (CCV-1)

QC Batch: 69217 Date Analyzed: 2010-04-19 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	266	106	75 - 125	2010-04-19
>C12-C28		mg/L	250	243	97	75 - 125	2010-04-19

Standard (CCV-2)

QC Batch: 69217 Date Analyzed: 2010-04-19 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	251	100	75 - 125	2010-04-19
>C12-C28		mg/L	250	241	96	75 - 125	2010-04-19

Standard (CCV-1)

QC Batch: 69276 Date Analyzed: 2010-04-20 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	254	102	75 - 125	2010-04-20
>C12-C28		mg/Kg	250	249	100	75 - 125	2010-04-20

Standard (CCV-2)

QC Batch: 69276 Date Analyzed: 2010-04-20 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	259	104	75 - 125	2010-04-20
>C12-C28		mg/Kg	250	250	100	75 - 125	2010-04-20

Standard (CCV-1)

QC Batch: 69336 Date Analyzed: 2010-04-21 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/Kg	50.0	53.9	108	80 - 120	2010-04-21
Dichlorodifluoromethane		µg/Kg	50.0	47.4	95	80 - 120	2010-04-21
Chloromethane (methyl chloride)		µg/Kg	50.0	51.2	102	80 - 120	2010-04-21
Vinyl Chloride		µg/Kg	50.0	51.5	103	80 - 120	2010-04-21
Bromomethane (methyl bromide)		µg/Kg	50.0	56.1	112	80 - 120	2010-04-21
Chloroethane		µg/Kg	50.0	58.0	116	80 - 120	2010-04-21
Trichlorofluoromethane		µg/Kg	50.0	58.3	117	80 - 120	2010-04-21
Acetone		µg/Kg	50.0	56.4	113	80 - 120	2010-04-21
Iodomethane (methyl iodide)		µg/Kg	50.0	53.1	106	80 - 120	2010-04-21
Carbon Disulfide		µg/Kg	50.0	51.2	102	80 - 120	2010-04-21
Acrylonitrile		µg/Kg	50.0	57.6	115	80 - 120	2010-04-21
2-Butanone (MEK)		µg/Kg	50.0	54.1	108	80 - 120	2010-04-21
4-Methyl-2-pentanone (MIBK)		µg/Kg	50.0	58.1	116	80 - 120	2010-04-21
2-Hexanone		µg/Kg	50.0	57.0	114	80 - 120	2010-04-21
trans 1,4-Dichloro-2-butene		µg/Kg	50.0	47.0	94	80 - 120	2010-04-21
1,1-Dichloroethene		µg/Kg	50.0	57.4	115	80 - 120	2010-04-21
Methylene chloride		µg/Kg	50.0	55.2	110	80 - 120	2010-04-21
MTBE		µg/Kg	50.0	54.7	109	80 - 120	2010-04-21
trans-1,2-Dichloroethene		µg/Kg	50.0	53.5	107	80 - 120	2010-04-21
1,1-Dichloroethane		µg/Kg	50.0	53.8	108	80 - 120	2010-04-21
cis-1,2-Dichloroethene		µg/Kg	50.0	54.4	109	80 - 120	2010-04-21
2,2-Dichloropropane		µg/Kg	50.0	59.9	120	80 - 120	2010-04-21
1,2-Dichloroethane (EDC)		µg/Kg	50.0	55.6	111	80 - 120	2010-04-21
Chloroform		µg/Kg	50.0	54.0	108	80 - 120	2010-04-21
1,1,1-Trichloroethane		µg/Kg	50.0	53.4	107	80 - 120	2010-04-21
1,1-Dichloropropene		µg/Kg	50.0	55.2	110	80 - 120	2010-04-21
Benzene		µg/Kg	50.0	54.4	109	80 - 120	2010-04-21
Carbon Tetrachloride		µg/Kg	50.0	53.6	107	80 - 120	2010-04-21
1,2-Dichloropropane		µg/Kg	50.0	54.3	109	80 - 120	2010-04-21
Trichloroethene (TCE)		µg/Kg	50.0	53.0	106	80 - 120	2010-04-21
Dibromomethane (methylene bromide)		µg/Kg	50.0	54.6	109	80 - 120	2010-04-21
Bromodichloromethane		µg/Kg	50.0	54.5	109	80 - 120	2010-04-21
2-Chloroethyl vinyl ether		µg/Kg	50.0	44.7	89	80 - 120	2010-04-21
cis-1,3-Dichloropropene		µg/Kg	50.0	55.9	112	80 - 120	2010-04-21
trans-1,3-Dichloropropene		µg/Kg	50.0	58.3	117	80 - 120	2010-04-21
Toluene		µg/Kg	50.0	54.1	108	80 - 120	2010-04-21

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,1,2-Trichloroethane		µg/Kg	50.0	54.4	109	80 - 120	2010-04-21
1,3-Dichloropropane		µg/Kg	50.0	54.8	110	80 - 120	2010-04-21
Dibromochloromethane		µg/Kg	50.0	54.9	110	80 - 120	2010-04-21
1,2-Dibromoethane (EDB)		µg/Kg	50.0	54.6	109	80 - 120	2010-04-21
Tetrachloroethene (PCE)		µg/Kg	50.0	45.6	91	80 - 120	2010-04-21
Chlorobenzene		µg/Kg	50.0	53.7	107	80 - 120	2010-04-21
1,1,1,2-Tetrachloroethane		µg/Kg	50.0	54.7	109	80 - 120	2010-04-21
Ethylbenzene		µg/Kg	50.0	54.6	109	80 - 120	2010-04-21
m,p-Xylene		µg/Kg	100	110	110	80 - 120	2010-04-21
Bromoform		µg/Kg	50.0	54.0	108	80 - 120	2010-04-21
Styrene		µg/Kg	50.0	54.9	110	80 - 120	2010-04-21
o-Xylene		µg/Kg	50.0	54.7	109	80 - 120	2010-04-21
1,1,2,2-Tetrachloroethane		µg/Kg	50.0	58.1	116	80 - 120	2010-04-21
2-Chlorotoluene		µg/Kg	50.0	54.5	109	80 - 120	2010-04-21
1,2,3-Trichloropropane		µg/Kg	50.0	56.1	112	80 - 120	2010-04-21
Isopropylbenzene		µg/Kg	50.0	54.7	109	80 - 120	2010-04-21
Bromobenzene		µg/Kg	50.0	53.2	106	80 - 120	2010-04-21
n-Propylbenzene		µg/Kg	50.0	55.5	111	80 - 120	2010-04-21
1,3,5-Trimethylbenzene		µg/Kg	50.0	54.6	109	80 - 120	2010-04-21
tert-Butylbenzene		µg/Kg	50.0	54.8	110	80 - 120	2010-04-21
1,2,4-Trimethylbenzene		µg/Kg	50.0	55.1	110	80 - 120	2010-04-21
1,4-Dichlorobenzene (para)		µg/Kg	50.0	52.6	105	80 - 120	2010-04-21
sec-Butylbenzene		µg/Kg	50.0	55.7	111	80 - 120	2010-04-21
1,3-Dichlorobenzene (meta)		µg/Kg	50.0	53.6	107	80 - 120	2010-04-21
p-Isopropyltoluene		µg/Kg	50.0	56.8	114	80 - 120	2010-04-21
4-Chlorotoluene		µg/Kg	50.0	54.4	109	80 - 120	2010-04-21
1,2-Dichlorobenzene (ortho)		µg/Kg	50.0	53.1	106	80 - 120	2010-04-21
n-Butylbenzene		µg/Kg	50.0	58.2	116	80 - 120	2010-04-21
1,2-Dibromo-3-chloropropane		µg/Kg	50.0	46.8	94	80 - 120	2010-04-21
1,2,3-Trichlorobenzene		µg/Kg	50.0	56.0	112	80 - 120	2010-04-21
1,2,4-Trichlorobenzene		µg/Kg	50.0	55.7	111	80 - 120	2010-04-21
Naphthalene		µg/Kg	50.0	43.6	87	80 - 120	2010-04-21
Hexachlorobutadiene		µg/Kg	50.0	54.0	108	80 - 120	2010-04-21

Standard (CCV-2)

QC Batch: 69336 Date Analyzed: 2010-04-21 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/Kg	50.0	55.6	111	80 - 120	2010-04-21
Dichlorodifluoromethane		µg/Kg	50.0	46.8	94	80 - 120	2010-04-21
Chloromethane (methyl chloride)		µg/Kg	50.0	57.2	114	80 - 120	2010-04-21
Vinyl Chloride		µg/Kg	50.0	56.8	114	80 - 120	2010-04-21
Bromomethane (methyl bromide)		µg/Kg	50.0	48.5	97	80 - 120	2010-04-21

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloroethane		µg/Kg	50.0	55.2	110	80 - 120	2010-04-21
Trichlorofluoromethane	[96]	µg/Kg	50.0	60.4	121	80 - 120	2010-04-21
Acetone		µg/Kg	50.0	55.2	110	80 - 120	2010-04-21
Iodomethane (methyl iodide)		µg/Kg	50.0	56.8	114	80 - 120	2010-04-21
Carbon Disulfide		µg/Kg	50.0	53.6	107	80 - 120	2010-04-21
Acrylonitrile		µg/Kg	50.0	54.0	108	80 - 120	2010-04-21
2-Butanone (MEK)		µg/Kg	50.0	48.8	98	80 - 120	2010-04-21
4-Methyl-2-pentanone (MIBK)		µg/Kg	50.0	56.6	113	80 - 120	2010-04-21
2-Hexanone		µg/Kg	50.0	50.7	101	80 - 120	2010-04-21
trans 1,4-Dichloro-2-butene	[97]	µg/Kg	50.0	36.3	73	80 - 120	2010-04-21
1,1-Dichloroethene		µg/Kg	50.0	58.8	118	80 - 120	2010-04-21
Methylene chloride		µg/Kg	50.0	55.7	111	80 - 120	2010-04-21
MTBE		µg/Kg	50.0	55.4	111	80 - 120	2010-04-21
trans-1,2-Dichloroethene		µg/Kg	50.0	54.8	110	80 - 120	2010-04-21
1,1-Dichloroethane		µg/Kg	50.0	56.2	112	80 - 120	2010-04-21
cis-1,2-Dichloroethene		µg/Kg	50.0	55.5	111	80 - 120	2010-04-21
2,2-Dichloropropane		µg/Kg	50.0	45.6	91	80 - 120	2010-04-21
1,2-Dichloroethane (EDC)		µg/Kg	50.0	54.3	109	80 - 120	2010-04-21
Chloroform		µg/Kg	50.0	54.8	110	80 - 120	2010-04-21
1,1,1-Trichloroethane		µg/Kg	50.0	54.0	108	80 - 120	2010-04-21
1,1-Dichloropropene		µg/Kg	50.0	55.7	111	80 - 120	2010-04-21
Benzene		µg/Kg	50.0	55.5	111	80 - 120	2010-04-21
Carbon Tetrachloride		µg/Kg	50.0	52.0	104	80 - 120	2010-04-21
1,2-Dichloropropane		µg/Kg	50.0	56.2	112	80 - 120	2010-04-21
Trichloroethene (TCE)	[98]	µg/Kg	50.0	65.1	130	80 - 120	2010-04-21
Dibromomethane (methylene bromide)		µg/Kg	50.0	53.5	107	80 - 120	2010-04-21
Bromodichloromethane		µg/Kg	50.0	52.7	105	80 - 120	2010-04-21
2-Chloroethyl vinyl ether		µg/Kg	50.0	48.3	97	80 - 120	2010-04-21
cis-1,3-Dichloropropene		µg/Kg	50.0	53.9	108	80 - 120	2010-04-21
trans-1,3-Dichloropropene		µg/Kg	50.0	54.4	109	80 - 120	2010-04-21
Toluene		µg/Kg	50.0	55.2	110	80 - 120	2010-04-21
1,1,2-Trichloroethane		µg/Kg	50.0	53.4	107	80 - 120	2010-04-21
1,3-Dichloropropane		µg/Kg	50.0	54.2	108	80 - 120	2010-04-21
Dibromochloromethane		µg/Kg	50.0	52.0	104	80 - 120	2010-04-21
1,2-Dibromoethane (EDB)		µg/Kg	50.0	53.7	107	80 - 120	2010-04-21
Tetrachloroethene (PCE)	[99]	µg/Kg	50.0	65.9	132	80 - 120	2010-04-21
Chlorobenzene		µg/Kg	50.0	55.3	111	80 - 120	2010-04-21
1,1,1,2-Tetrachloroethane		µg/Kg	50.0	54.2	108	80 - 120	2010-04-21
Ethylbenzene		µg/Kg	50.0	54.7	109	80 - 120	2010-04-21
m,p-Xylene		µg/Kg	100	109	109	80 - 120	2010-04-21
Bromoform		µg/Kg	50.0	49.2	98	80 - 120	2010-04-21
Styrene		µg/Kg	50.0	56.0	112	80 - 120	2010-04-21

continued ...

[96] Analyte recovery outside CCV limits. Concentration biased high. •
[97] Analyte recovery outside CCV limits. Concentration biased low. •
[98] Analyte recovery outside CCV limits. Concentration biased high. •
[99] Analyte recovery outside CCV limits. Concentration biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
o-Xylene		µg/Kg	50.0	54.4	109	80 - 120	2010-04-21
1,1,2,2-Tetrachloroethane		µg/Kg	50.0	40.8	82	80 - 120	2010-04-21
2-Chlorotoluene		µg/Kg	50.0	54.1	108	80 - 120	2010-04-21
1,2,3-Trichloropropane		µg/Kg	50.0	57.8	116	80 - 120	2010-04-21
Isopropylbenzene		µg/Kg	50.0	55.2	110	80 - 120	2010-04-21
Bromobenzene		µg/Kg	50.0	54.8	110	80 - 120	2010-04-21
n-Propylbenzene		µg/Kg	50.0	54.3	109	80 - 120	2010-04-21
1,3,5-Trimethylbenzene		µg/Kg	50.0	54.5	109	80 - 120	2010-04-21
tert-Butylbenzene		µg/Kg	50.0	55.9	112	80 - 120	2010-04-21
1,2,4-Trimethylbenzene		µg/Kg	50.0	55.8	112	80 - 120	2010-04-21
1,4-Dichlorobenzene (para)		µg/Kg	50.0	53.1	106	80 - 120	2010-04-21
sec-Butylbenzene		µg/Kg	50.0	54.9	110	80 - 120	2010-04-21
1,3-Dichlorobenzene (meta)		µg/Kg	50.0	54.2	108	80 - 120	2010-04-21
p-Isopropyltoluene		µg/Kg	50.0	55.8	112	80 - 120	2010-04-21
4-Chlorotoluene		µg/Kg	50.0	53.7	107	80 - 120	2010-04-21
1,2-Dichlorobenzene (ortho)		µg/Kg	50.0	53.8	108	80 - 120	2010-04-21
n-Butylbenzene		µg/Kg	50.0	54.8	110	80 - 120	2010-04-21
1,2-Dibromo-3-chloropropane	[100]	µg/Kg	50.0	39.4	79	80 - 120	2010-04-21
1,2,3-Trichlorobenzene		µg/Kg	50.0	53.0	106	80 - 120	2010-04-21
1,2,4-Trichlorobenzene		µg/Kg	50.0	54.9	110	80 - 120	2010-04-21
Naphthalene		µg/Kg	50.0	41.0	82	80 - 120	2010-04-21
Hexachlorobutadiene		µg/Kg	50.0	53.8	108	80 - 120	2010-04-21

Standard (CCV-1)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/L	50.0	48.1	96	80 - 120	2010-04-22
Dichlorodifluoromethane	[101]	µg/L	50.0	39.0	78	80 - 120	2010-04-22
Chloromethane (methyl chloride)		µg/L	50.0	48.4	97	80 - 120	2010-04-22
Vinyl Chloride		µg/L	50.0	47.4	95	80 - 120	2010-04-22
Bromomethane (methyl bromide)		µg/L	50.0	43.6	87	80 - 120	2010-04-22
Chloroethane		µg/L	50.0	46.0	92	80 - 120	2010-04-22
Trichlorofluoromethane		µg/L	50.0	48.8	98	80 - 120	2010-04-22
Acetone		µg/L	50.0	60.1	120	80 - 120	2010-04-22
Iodomethane (methyl iodide)		µg/L	50.0	44.0	88	80 - 120	2010-04-22
Carbon Disulfide		µg/L	50.0	45.4	91	80 - 120	2010-04-22
Acrylonitrile		µg/L	50.0	49.7	99	80 - 120	2010-04-22
2-Butanone (MEK)		µg/L	50.0	50.4	101	80 - 120	2010-04-22
4-Methyl-2-pentanone (MIBK)		µg/L	50.0	54.2	108	80 - 120	2010-04-22
2-Hexanone		µg/L	50.0	53.8	108	80 - 120	2010-04-22

continued ...

[100] Analyte recovery outside CCV limits. Concentration biased low. •
[101] Analyte recovery outside CCV limits. Concentration biased low. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
trans 1,4-Dichloro-2-butene		µg/L	50.0	40.0	80	80 - 120	2010-04-22
1,1-Dichloroethene		µg/L	50.0	51.1	102	80 - 120	2010-04-22
Methylene chloride		µg/L	50.0	47.8	96	80 - 120	2010-04-22
MTBE		µg/L	50.0	49.3	99	80 - 120	2010-04-22
trans-1,2-Dichloroethene		µg/L	50.0	46.9	94	80 - 120	2010-04-22
1,1-Dichloroethane		µg/L	50.0	48.0	96	80 - 120	2010-04-22
cis-1,2-Dichloroethene		µg/L	50.0	48.0	96	80 - 120	2010-04-22
2,2-Dichloropropane		µg/L	50.0	53.4	107	80 - 120	2010-04-22
1,2-Dichloroethane (EDC)		µg/L	50.0	47.3	95	80 - 120	2010-04-22
Chloroform		µg/L	50.0	46.8	94	80 - 120	2010-04-22
1,1,1-Trichloroethane		µg/L	50.0	46.4	93	80 - 120	2010-04-22
1,1-Dichloropropene		µg/L	50.0	48.9	98	80 - 120	2010-04-22
Benzene		µg/L	50.0	47.7	95	80 - 120	2010-04-22
Carbon Tetrachloride		µg/L	50.0	44.7	89	80 - 120	2010-04-22
1,2-Dichloropropane		µg/L	50.0	48.5	97	80 - 120	2010-04-22
Trichloroethene (TCE)		µg/L	50.0	47.9	96	80 - 120	2010-04-22
Dibromomethane (methylene bromide)		µg/L	50.0	47.3	95	80 - 120	2010-04-22
Bromodichloromethane		µg/L	50.0	45.8	92	80 - 120	2010-04-22
2-Chloroethyl vinyl ether		µg/L	50.0	43.3	87	80 - 120	2010-04-22
cis-1,3-Dichloropropene		µg/L	50.0	49.3	99	80 - 120	2010-04-22
trans-1,3-Dichloropropene		µg/L	50.0	50.8	102	80 - 120	2010-04-22
Toluene		µg/L	50.0	47.9	96	80 - 120	2010-04-22
1,1,2-Trichloroethane		µg/L	50.0	47.0	94	80 - 120	2010-04-22
1,3-Dichloropropane		µg/L	50.0	48.2	96	80 - 120	2010-04-22
Dibromochloromethane		µg/L	50.0	45.9	92	80 - 120	2010-04-22
1,2-Dibromoethane (EDB)		µg/L	50.0	47.8	96	80 - 120	2010-04-22
Tetrachloroethene (PCE)		µg/L	50.0	41.4	83	80 - 120	2010-04-22
Chlorobenzene		µg/L	50.0	47.1	94	80 - 120	2010-04-22
1,1,1,2-Tetrachloroethane		µg/L	50.0	47.1	94	80 - 120	2010-04-22
Ethylbenzene		µg/L	50.0	47.1	94	80 - 120	2010-04-22
m,p-Xylene		µg/L	100	94.2	94	80 - 120	2010-04-22
Bromoform		µg/L	50.0	46.0	92	80 - 120	2010-04-22
Styrene		µg/L	50.0	48.7	97	80 - 120	2010-04-22
o-Xylene		µg/L	50.0	47.2	94	80 - 120	2010-04-22
1,1,2,2-Tetrachloroethane		µg/L	50.0	48.6	97	80 - 120	2010-04-22
2-Chlorotoluene		µg/L	50.0	46.1	92	80 - 120	2010-04-22
1,2,3-Trichloropropane		µg/L	50.0	50.3	101	80 - 120	2010-04-22
Isopropylbenzene		µg/L	50.0	46.9	94	80 - 120	2010-04-22
Bromobenzene		µg/L	50.0	45.0	90	80 - 120	2010-04-22
n-Propylbenzene		µg/L	50.0	46.2	92	80 - 120	2010-04-22
1,3,5-Trimethylbenzene		µg/L	50.0	46.2	92	80 - 120	2010-04-22
tert-Butylbenzene		µg/L	50.0	46.7	93	80 - 120	2010-04-22
1,2,4-Trimethylbenzene		µg/L	50.0	46.9	94	80 - 120	2010-04-22
1,4-Dichlorobenzene (para)		µg/L	50.0	45.8	92	80 - 120	2010-04-22
sec-Butylbenzene		µg/L	50.0	46.5	93	80 - 120	2010-04-22
1,3-Dichlorobenzene (meta)		µg/L	50.0	46.3	93	80 - 120	2010-04-22

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
p-Isopropyltoluene		µg/L	50.0	47.8	96	80 - 120	2010-04-22
4-Chlorotoluene		µg/L	50.0	46.0	92	80 - 120	2010-04-22
1,2-Dichlorobenzene (ortho)		µg/L	50.0	46.2	92	80 - 120	2010-04-22
n-Butylbenzene		µg/L	50.0	47.9	96	80 - 120	2010-04-22
1,2-Dibromo-3-chloropropane	[102]	µg/L	50.0	38.1	76	80 - 120	2010-04-22
1,2,3-Trichlorobenzene		µg/L	50.0	47.6	95	80 - 120	2010-04-22
1,2,4-Trichlorobenzene		µg/L	50.0	48.8	98	80 - 120	2010-04-22
Naphthalene	[103]	µg/L	50.0	37.8	76	80 - 120	2010-04-22
Hexachlorobutadiene		µg/L	50.0	49.0	98	80 - 120	2010-04-22

Standard (CCV-2)

QC Batch: 69365 Date Analyzed: 2010-04-22 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/L	50.0	56.8	114	80 - 120	2010-04-22
Dichlorodifluoromethane		µg/L	50.0	50.2	100	80 - 120	2010-04-22
Chloromethane (methyl chloride)		µg/L	50.0	60.0	120	80 - 120	2010-04-22
Vinyl Chloride		µg/L	50.0	59.3	119	80 - 120	2010-04-22
Bromomethane (methyl bromide)		µg/L	50.0	54.9	110	80 - 120	2010-04-22
Chloroethane		µg/L	50.0	57.7	115	80 - 120	2010-04-22
Trichlorofluoromethane	[104]	µg/L	50.0	61.1	122	80 - 120	2010-04-22
Acetone	[105]	µg/L	50.0	64.8	130	80 - 120	2010-04-22
Iodomethane (methyl iodide)		µg/L	50.0	56.1	112	80 - 120	2010-04-22
Carbon Disulfide		µg/L	50.0	55.3	111	80 - 120	2010-04-22
Acrylonitrile		µg/L	50.0	56.1	112	80 - 120	2010-04-22
2-Butanone (MEK)		µg/L	50.0	55.4	111	80 - 120	2010-04-22
4-Methyl-2-pentanone (MIBK)		µg/L	50.0	56.9	114	80 - 120	2010-04-22
2-Hexanone		µg/L	50.0	57.8	116	80 - 120	2010-04-22
trans 1,4-Dichloro-2-butene		µg/L	50.0	40.4	81	80 - 120	2010-04-22
1,1-Dichloroethene		µg/L	50.0	59.3	119	80 - 120	2010-04-22
Methylene chloride		µg/L	50.0	56.9	114	80 - 120	2010-04-22
MTBE		µg/L	50.0	57.1	114	80 - 120	2010-04-22
trans-1,2-Dichloroethene		µg/L	50.0	55.5	111	80 - 120	2010-04-22
1,1-Dichloroethane		µg/L	50.0	57.6	115	80 - 120	2010-04-22
cis-1,2-Dichloroethene		µg/L	50.0	56.6	113	80 - 120	2010-04-22
2,2-Dichloropropane		µg/L	50.0	47.1	94	80 - 120	2010-04-22
1,2-Dichloroethane (EDC)		µg/L	50.0	58.2	116	80 - 120	2010-04-22
Chloroform		µg/L	50.0	57.0	114	80 - 120	2010-04-22
1,1,1-Trichloroethane		µg/L	50.0	56.7	113	80 - 120	2010-04-22

continued ...

[102] Analyte recovery outside CCV limits. Concentration biased low. •
[103] Analyte recovery outside CCV limits. Concentration biased low. •
[104] Analyte recovery outside CCV limits. Concentration biased high.
[105] Analyte recovery outside CCV limits. Concentration biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,1-Dichloropropene		µg/L	50.0	57.5	115	80 - 120	2010-04-22
Benzene		µg/L	50.0	56.6	113	80 - 120	2010-04-22
Carbon Tetrachloride		µg/L	50.0	56.7	113	80 - 120	2010-04-22
1,2-Dichloropropane		µg/L	50.0	57.4	115	80 - 120	2010-04-22
Trichloroethene (TCE)	[106]	µg/L	50.0	63.8	128	80 - 120	2010-04-22
Dibromomethane (methylene bromide)		µg/L	50.0	55.9	112	80 - 120	2010-04-22
Bromodichloromethane		µg/L	50.0	56.8	114	80 - 120	2010-04-22
2-Chloroethyl vinyl ether		µg/L	50.0	46.2	92	80 - 120	2010-04-22
cis-1,3-Dichloropropene		µg/L	50.0	56.0	112	80 - 120	2010-04-22
trans-1,3-Dichloropropene		µg/L	50.0	58.0	116	80 - 120	2010-04-22
Toluene		µg/L	50.0	56.8	114	80 - 120	2010-04-22
1,1,2-Trichloroethane		µg/L	50.0	54.9	110	80 - 120	2010-04-22
1,3-Dichloropropane		µg/L	50.0	55.7	111	80 - 120	2010-04-22
Dibromochloromethane		µg/L	50.0	56.0	112	80 - 120	2010-04-22
1,2-Dibromoethane (EDB)		µg/L	50.0	54.4	109	80 - 120	2010-04-22
Tetrachloroethene (PCE)	[107]	µg/L	50.0	66.2	132	80 - 120	2010-04-22
Chlorobenzene		µg/L	50.0	55.8	112	80 - 120	2010-04-22
1,1,1,2-Tetrachloroethane		µg/L	50.0	56.5	113	80 - 120	2010-04-22
Ethylbenzene		µg/L	50.0	55.7	111	80 - 120	2010-04-22
m,p-Xylene		µg/L	100	111	111	80 - 120	2010-04-22
Bromoform		µg/L	50.0	54.4	109	80 - 120	2010-04-22
Styrene		µg/L	50.0	56.4	113	80 - 120	2010-04-22
o-Xylene		µg/L	50.0	56.1	112	80 - 120	2010-04-22
1,1,2,2-Tetrachloroethane		µg/L	50.0	45.2	90	80 - 120	2010-04-22
2-Chlorotoluene		µg/L	50.0	54.3	109	80 - 120	2010-04-22
1,2,3-Trichloropropane		µg/L	50.0	56.8	114	80 - 120	2010-04-22
Isopropylbenzene		µg/L	50.0	54.8	110	80 - 120	2010-04-22
Bromobenzene		µg/L	50.0	55.1	110	80 - 120	2010-04-22
n-Propylbenzene		µg/L	50.0	54.4	109	80 - 120	2010-04-22
1,3,5-Trimethylbenzene		µg/L	50.0	54.1	108	80 - 120	2010-04-22
tert-Butylbenzene		µg/L	50.0	54.7	109	80 - 120	2010-04-22
1,2,4-Trimethylbenzene		µg/L	50.0	55.5	111	80 - 120	2010-04-22
1,4-Dichlorobenzene (para)		µg/L	50.0	52.9	106	80 - 120	2010-04-22
sec-Butylbenzene		µg/L	50.0	54.3	109	80 - 120	2010-04-22
1,3-Dichlorobenzene (meta)		µg/L	50.0	53.8	108	80 - 120	2010-04-22
p-Isopropyltoluene		µg/L	50.0	54.9	110	80 - 120	2010-04-22
4-Chlorotoluene		µg/L	50.0	54.2	108	80 - 120	2010-04-22
1,2-Dichlorobenzene (ortho)		µg/L	50.0	53.7	107	80 - 120	2010-04-22
n-Butylbenzene		µg/L	50.0	54.8	110	80 - 120	2010-04-22
1,2-Dibromo-3-chloropropane		µg/L	50.0	41.3	83	80 - 120	2010-04-22
1,2,3-Trichlorobenzene		µg/L	50.0	53.2	106	80 - 120	2010-04-22
1,2,4-Trichlorobenzene		µg/L	50.0	54.3	109	80 - 120	2010-04-22
Naphthalene		µg/L	50.0	41.2	82	80 - 120	2010-04-22
Hexachlorobutadiene		µg/L	50.0	53.3	107	80 - 120	2010-04-22

[106] Analyte recovery outside CCV limits. Concentration biased high. •
[107] Analyte recovery outside CCV limits. Concentration biased high. •

Standard (CCV-1)

QC Batch: 69406 Date Analyzed: 2010-04-23 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	252	101	75 - 125	2010-04-23
>C12-C28		mg/Kg	250	236	94	75 - 125	2010-04-23

Standard (CCV-2)

QC Batch: 69406 Date Analyzed: 2010-04-23 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	252	101	75 - 125	2010-04-23
>C12-C28		mg/Kg	250	235	94	75 - 125	2010-04-23

Standard (CCV-1)

QC Batch: 69410 Date Analyzed: 2010-04-23 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/Kg	50.0	46.7	93	80 - 120	2010-04-23
Dichlorodifluoromethane	[108]	µg/Kg	50.0	36.9	74	80 - 120	2010-04-23
Chloromethane (methyl chloride)		µg/Kg	50.0	46.3	93	80 - 120	2010-04-23
Vinyl Chloride		µg/Kg	50.0	46.6	93	80 - 120	2010-04-23
Bromomethane (methyl bromide)		µg/Kg	50.0	48.2	96	80 - 120	2010-04-23
Chloroethane		µg/Kg	50.0	50.2	100	80 - 120	2010-04-23
Trichlorofluoromethane		µg/Kg	50.0	49.7	99	80 - 120	2010-04-23
Acetone	[109]	µg/Kg	50.0	33.9	68	80 - 120	2010-04-23
Iodomethane (methyl iodide)		µg/Kg	50.0	48.7	97	80 - 120	2010-04-23
Carbon Disulfide		µg/Kg	50.0	48.4	97	80 - 120	2010-04-23
Acrylonitrile		µg/Kg	50.0	43.1	86	80 - 120	2010-04-23
2-Butanone (MEK)	[110]	µg/Kg	50.0	37.1	74	80 - 120	2010-04-23
4-Methyl-2-pentanone (MIBK)		µg/Kg	50.0	43.1	86	80 - 120	2010-04-23
2-Hexanone	[111]	µg/Kg	50.0	37.6	75	80 - 120	2010-04-23
trans 1,4-Dichloro-2-butene	[112]	µg/Kg	50.0	34.6	69	80 - 120	2010-04-23
1,1-Dichloroethene		µg/Kg	50.0	49.6	99	80 - 120	2010-04-23
Methylene chloride		µg/Kg	50.0	51.5	103	80 - 120	2010-04-23
MTBE		µg/Kg	50.0	45.7	91	80 - 120	2010-04-23

continued ...

[108] Analyte recovery outside CCV limits. Concentration biased low. •
[109] Analyte recovery outside CCV limits. Concentration biased low. •
[110] Analyte recovery outside CCV limits. Concentration biased low. •
[111] Analyte recovery outside CCV limits. Concentration biased low. •
[112] Analyte recovery outside CCV limits. Concentration biased low. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
trans-1,2-Dichloroethene		µg/Kg	50.0	46.9	94	80 - 120	2010-04-23
1,1-Dichloroethane		µg/Kg	50.0	48.4	97	80 - 120	2010-04-23
cis-1,2-Dichloroethene		µg/Kg	50.0	47.6	95	80 - 120	2010-04-23
2,2-Dichloropropane		µg/Kg	50.0	54.2	108	80 - 120	2010-04-23
1,2-Dichloroethane (EDC)		µg/Kg	50.0	47.2	94	80 - 120	2010-04-23
Chloroform		µg/Kg	50.0	47.1	94	80 - 120	2010-04-23
1,1,1-Trichloroethane		µg/Kg	50.0	47.4	95	80 - 120	2010-04-23
1,1-Dichloropropene		µg/Kg	50.0	48.5	97	80 - 120	2010-04-23
Benzene		µg/Kg	50.0	47.9	96	80 - 120	2010-04-23
Carbon Tetrachloride		µg/Kg	50.0	47.0	94	80 - 120	2010-04-23
1,2-Dichloropropane		µg/Kg	50.0	48.3	97	80 - 120	2010-04-23
Trichloroethene (TCE)		µg/Kg	50.0	47.2	94	80 - 120	2010-04-23
Dibromomethane (methylene bromide)		µg/Kg	50.0	45.3	91	80 - 120	2010-04-23
Bromodichloromethane		µg/Kg	50.0	47.0	94	80 - 120	2010-04-23
2-Chloroethyl vinyl ether	[113]	µg/Kg	50.0	36.8	74	80 - 120	2010-04-23
cis-1,3-Dichloropropene		µg/Kg	50.0	49.4	99	80 - 120	2010-04-23
trans-1,3-Dichloropropene		µg/Kg	50.0	49.2	98	80 - 120	2010-04-23
Toluene		µg/Kg	50.0	47.8	96	80 - 120	2010-04-23
1,1,2-Trichloroethane		µg/Kg	50.0	44.3	89	80 - 120	2010-04-23
1,3-Dichloropropane		µg/Kg	50.0	45.8	92	80 - 120	2010-04-23
Dibromochloromethane		µg/Kg	50.0	44.8	90	80 - 120	2010-04-23
1,2-Dibromoethane (EDB)		µg/Kg	50.0	43.5	87	80 - 120	2010-04-23
Tetrachloroethene (PCE)	[114]	µg/Kg	50.0	33.7	67	80 - 120	2010-04-23
Chlorobenzene		µg/Kg	50.0	46.2	92	80 - 120	2010-04-23
1,1,1,2-Tetrachloroethane		µg/Kg	50.0	47.2	94	80 - 120	2010-04-23
Ethylbenzene		µg/Kg	50.0	47.2	94	80 - 120	2010-04-23
m,p-Xylene		µg/Kg	100	94.4	94	80 - 120	2010-04-23
Bromoform		µg/Kg	50.0	42.0	84	80 - 120	2010-04-23
Styrene		µg/Kg	50.0	47.6	95	80 - 120	2010-04-23
o-Xylene		µg/Kg	50.0	47.4	95	80 - 120	2010-04-23
1,1,2,2-Tetrachloroethane		µg/Kg	50.0	43.6	87	80 - 120	2010-04-23
2-Chlorotoluene		µg/Kg	50.0	46.3	93	80 - 120	2010-04-23
1,2,3-Trichloropropane		µg/Kg	50.0	44.8	90	80 - 120	2010-04-23
Isopropylbenzene		µg/Kg	50.0	46.9	94	80 - 120	2010-04-23
Bromobenzene		µg/Kg	50.0	44.4	89	80 - 120	2010-04-23
n-Propylbenzene		µg/Kg	50.0	47.0	94	80 - 120	2010-04-23
1,3,5-Trimethylbenzene		µg/Kg	50.0	46.2	92	80 - 120	2010-04-23
tert-Butylbenzene		µg/Kg	50.0	46.9	94	80 - 120	2010-04-23
1,2,4-Trimethylbenzene		µg/Kg	50.0	46.5	93	80 - 120	2010-04-23
1,4-Dichlorobenzene (para)		µg/Kg	50.0	44.8	90	80 - 120	2010-04-23
sec-Butylbenzene		µg/Kg	50.0	46.8	94	80 - 120	2010-04-23
1,3-Dichlorobenzene (meta)		µg/Kg	50.0	45.4	91	80 - 120	2010-04-23
p-Isopropyltoluene		µg/Kg	50.0	47.8	96	80 - 120	2010-04-23
4-Chlorotoluene		µg/Kg	50.0	46.5	93	80 - 120	2010-04-23

continued ...

[113] Analyte recovery outside CCV limits. Concentration biased low. •
[114] Analyte recovery outside CCV limits. Concentration biased low. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,2-Dichlorobenzene (ortho)		µg/Kg	50.0	44.8	90	80 - 120	2010-04-23
n-Butylbenzene		µg/Kg	50.0	48.2	96	80 - 120	2010-04-23
1,2-Dibromo-3-chloropropane	115	µg/Kg	50.0	32.8	66	80 - 120	2010-04-23
1,2,3-Trichlorobenzene		µg/Kg	50.0	41.8	84	80 - 120	2010-04-23
1,2,4-Trichlorobenzene		µg/Kg	50.0	44.4	89	80 - 120	2010-04-23
Naphthalene	116	µg/Kg	50.0	30.4	61	80 - 120	2010-04-23
Hexachlorobutadiene		µg/Kg	50.0	46.1	92	80 - 120	2010-04-23

Standard (CCV-1)

QC Batch: 69447 Date Analyzed: 2010-04-26 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/Kg	50.0	57.5	115	80 - 120	2010-04-26
Dichlorodifluoromethane	117	µg/Kg	50.0	38.1	76	80 - 120	2010-04-26
Chloromethane (methyl chloride)		µg/Kg	50.0	54.9	110	80 - 120	2010-04-26
Vinyl Chloride		µg/Kg	50.0	57.4	115	80 - 120	2010-04-26
Bromomethane (methyl bromide)	118	µg/Kg	50.0	65.4	131	80 - 120	2010-04-26
Chloroethane	119	µg/Kg	50.0	67.8	136	80 - 120	2010-04-26
Trichlorofluoromethane		µg/Kg	50.0	58.1	116	80 - 120	2010-04-26
Acetone		µg/Kg	50.0	58.6	117	80 - 120	2010-04-26
Iodomethane (methyl iodide)		µg/Kg	50.0	59.3	119	80 - 120	2010-04-26
Carbon Disulfide		µg/Kg	50.0	52.5	105	80 - 120	2010-04-26
Acrylonitrile	120	µg/Kg	50.0	62.1	124	80 - 120	2010-04-26
2-Butanone (MEK)		µg/Kg	50.0	55.0	110	80 - 120	2010-04-26
4-Methyl-2-pentanone (MIBK)	121	µg/Kg	50.0	65.5	131	80 - 120	2010-04-26
2-Hexanone	122	µg/Kg	50.0	60.3	121	80 - 120	2010-04-26
trans 1,4-Dichloro-2-butene		µg/Kg	50.0	43.4	87	80 - 120	2010-04-26
1,1-Dichloroethene	123	µg/Kg	50.0	60.7	121	80 - 120	2010-04-26
Methylene chloride		µg/Kg	50.0	59.0	118	80 - 120	2010-04-26
MTBE	124	µg/Kg	50.0	61.2	122	80 - 120	2010-04-26
trans-1,2-Dichloroethene		µg/Kg	50.0	57.0	114	80 - 120	2010-04-26
1,1-Dichloroethane		µg/Kg	50.0	58.8	118	80 - 120	2010-04-26
cis-1,2-Dichloroethene		µg/Kg	50.0	58.4	117	80 - 120	2010-04-26
2,2-Dichloropropane		µg/Kg	50.0	51.6	103	80 - 120	2010-04-26

continued ...

[115] Analyte recovery outside CCV limits. Concentration biased low. •
[116] Analyte recovery outside CCV limits. Concentration biased low. •
[117] Analyte recovery outside CCV limits. Concentration biased low. •
[118] Analyte recovery outside CCV limits. Concentration biased high. •
[119] Analyte recovery outside CCV limits. Concentration biased high. •
[120] Analyte recovery outside CCV limits. Concentration biased high. •
[121] Analyte recovery outside CCV limits. Concentration biased high. •
[122] Analyte recovery outside CCV limits. Concentration biased high. •
[123] Analyte recovery outside CCV limits. Concentration biased high. •
[124] Analyte recovery outside CCV limits. Concentration biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,2-Dichloroethane (EDC)	[125]	µg/Kg	50.0	60.6	121	80 - 120	2010-04-26
Chloroform		µg/Kg	50.0	59.2	118	80 - 120	2010-04-26
1,1,1-Trichloroethane		µg/Kg	50.0	57.7	115	80 - 120	2010-04-26
1,1-Dichloropropene		µg/Kg	50.0	58.8	118	80 - 120	2010-04-26
Benzene		µg/Kg	50.0	58.7	117	80 - 120	2010-04-26
Carbon Tetrachloride		µg/Kg	50.0	56.8	114	80 - 120	2010-04-26
1,2-Dichloropropane		µg/Kg	50.0	59.3	119	80 - 120	2010-04-26
Trichloroethene (TCE)	[126]	µg/Kg	50.0	61.3	123	80 - 120	2010-04-26
Dibromomethane (methylene bromide)		µg/Kg	50.0	59.3	119	80 - 120	2010-04-26
Bromodichloromethane		µg/Kg	50.0	59.0	118	80 - 120	2010-04-26
2-Chloroethyl vinyl ether		µg/Kg	50.0	46.8	94	80 - 120	2010-04-26
cis-1,3-Dichloropropene		µg/Kg	50.0	59.3	119	80 - 120	2010-04-26
trans-1,3-Dichloropropene	[127]	µg/Kg	50.0	61.6	123	80 - 120	2010-04-26
Toluene		µg/Kg	50.0	58.8	118	80 - 120	2010-04-26
1,1,2-Trichloroethane		µg/Kg	50.0	56.6	113	80 - 120	2010-04-26
1,3-Dichloropropane		µg/Kg	50.0	57.7	115	80 - 120	2010-04-26
Dibromochloromethane		µg/Kg	50.0	56.5	113	80 - 120	2010-04-26
1,2-Dibromoethane (EDB)		µg/Kg	50.0	57.1	114	80 - 120	2010-04-26
Tetrachloroethene (PCE)	[128]	µg/Kg	50.0	66.1	132	80 - 120	2010-04-26
Chlorobenzene		µg/Kg	50.0	55.3	111	80 - 120	2010-04-26
1,1,1,2-Tetrachloroethane		µg/Kg	50.0	56.0	112	80 - 120	2010-04-26
Ethylbenzene		µg/Kg	50.0	56.2	112	80 - 120	2010-04-26
m,p-Xylene		µg/Kg	100	112	112	80 - 120	2010-04-26
Bromoform		µg/Kg	50.0	56.1	112	80 - 120	2010-04-26
Styrene		µg/Kg	50.0	57.0	114	80 - 120	2010-04-26
o-Xylene		µg/Kg	50.0	56.9	114	80 - 120	2010-04-26
1,1,2,2-Tetrachloroethane		µg/Kg	50.0	53.7	107	80 - 120	2010-04-26
2-Chlorotoluene		µg/Kg	50.0	54.8	110	80 - 120	2010-04-26
1,2,3-Trichloropropane		µg/Kg	50.0	60.2	120	80 - 120	2010-04-26
Isopropylbenzene		µg/Kg	50.0	54.8	110	80 - 120	2010-04-26
Bromobenzene		µg/Kg	50.0	55.8	112	80 - 120	2010-04-26
n-Propylbenzene		µg/Kg	50.0	54.9	110	80 - 120	2010-04-26
1,3,5-Trimethylbenzene		µg/Kg	50.0	54.0	108	80 - 120	2010-04-26
tert-Butylbenzene		µg/Kg	50.0	55.2	110	80 - 120	2010-04-26
1,2,4-Trimethylbenzene		µg/Kg	50.0	55.5	111	80 - 120	2010-04-26
1,4-Dichlorobenzene (para)		µg/Kg	50.0	52.4	105	80 - 120	2010-04-26
sec-Butylbenzene		µg/Kg	50.0	54.3	109	80 - 120	2010-04-26
1,3-Dichlorobenzene (meta)		µg/Kg	50.0	52.9	106	80 - 120	2010-04-26
p-Isopropyltoluene		µg/Kg	50.0	54.9	110	80 - 120	2010-04-26
4-Chlorotoluene		µg/Kg	50.0	54.2	108	80 - 120	2010-04-26
1,2-Dichlorobenzene (ortho)		µg/Kg	50.0	53.4	107	80 - 120	2010-04-26
n-Butylbenzene		µg/Kg	50.0	55.7	111	80 - 120	2010-04-26

continued ...

[125] Analyte recovery outside CCV limits. Concentration biased high. •
[126] Analyte recovery outside CCV limits. Concentration biased high. •
[127] Analyte recovery outside CCV limits. Concentration biased high. •
[128] Analyte recovery outside CCV limits. Concentration biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,2-Dibromo-3-chloropropane		µg/Kg	50.0	48.1	96	80 - 120	2010-04-26
1,2,3-Trichlorobenzene		µg/Kg	50.0	56.7	113	80 - 120	2010-04-26
1,2,4-Trichlorobenzene		µg/Kg	50.0	54.1	108	80 - 120	2010-04-26
Naphthalene		µg/Kg	50.0	46.2	92	80 - 120	2010-04-26
Hexachlorobutadiene		µg/Kg	50.0	51.3	103	80 - 120	2010-04-26

Standard (CCV-2)

QC Batch: 69447 Date Analyzed: 2010-04-26 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromochloromethane		µg/Kg	50.0	49.4	99	80 - 120	2010-04-26
Dichlorodifluoromethane	[129]	µg/Kg	50.0	35.8	72	80 - 120	2010-04-26
Chloromethane (methyl chloride)		µg/Kg	50.0	49.4	99	80 - 120	2010-04-26
Vinyl Chloride		µg/Kg	50.0	49.7	99	80 - 120	2010-04-26
Bromomethane (methyl bromide)		µg/Kg	50.0	48.3	97	80 - 120	2010-04-26
Chloroethane		µg/Kg	50.0	51.6	103	80 - 120	2010-04-26
Trichlorofluoromethane		µg/Kg	50.0	51.2	102	80 - 120	2010-04-26
Acetone		µg/Kg	50.0	51.1	102	80 - 120	2010-04-26
Iodomethane (methyl iodide)		µg/Kg	50.0	49.4	99	80 - 120	2010-04-26
Carbon Disulfide		µg/Kg	50.0	50.4	101	80 - 120	2010-04-26
Acrylonitrile		µg/Kg	50.0	51.7	103	80 - 120	2010-04-26
2-Butanone (MEK)		µg/Kg	50.0	47.8	96	80 - 120	2010-04-26
4-Methyl-2-pentanone (MIBK)		µg/Kg	50.0	53.9	108	80 - 120	2010-04-26
2-Hexanone		µg/Kg	50.0	48.9	98	80 - 120	2010-04-26
trans 1,4-Dichloro-2-butene	[130]	µg/Kg	50.0	36.6	73	80 - 120	2010-04-26
1,1-Dichloroethene		µg/Kg	50.0	52.6	105	80 - 120	2010-04-26
Methylene chloride		µg/Kg	50.0	51.0	102	80 - 120	2010-04-26
MTBE		µg/Kg	50.0	51.6	103	80 - 120	2010-04-26
trans-1,2-Dichloroethene		µg/Kg	50.0	49.3	99	80 - 120	2010-04-26
1,1-Dichloroethane		µg/Kg	50.0	50.6	101	80 - 120	2010-04-26
cis-1,2-Dichloroethene		µg/Kg	50.0	49.5	99	80 - 120	2010-04-26
2,2-Dichloropropane		µg/Kg	50.0	55.1	110	80 - 120	2010-04-26
1,2-Dichloroethane (EDC)		µg/Kg	50.0	50.1	100	80 - 120	2010-04-26
Chloroform		µg/Kg	50.0	48.3	97	80 - 120	2010-04-26
1,1,1-Trichloroethane		µg/Kg	50.0	48.7	97	80 - 120	2010-04-26
1,1-Dichloropropene		µg/Kg	50.0	50.2	100	80 - 120	2010-04-26
Benzene		µg/Kg	50.0	50.0	100	80 - 120	2010-04-26
Carbon Tetrachloride		µg/Kg	50.0	45.8	92	80 - 120	2010-04-26
1,2-Dichloropropane		µg/Kg	50.0	50.8	102	80 - 120	2010-04-26
Trichloroethene (TCE)		µg/Kg	50.0	49.9	100	80 - 120	2010-04-26
Dibromomethane (methylene bromide)		µg/Kg	50.0	49.5	99	80 - 120	2010-04-26

continued ...

[129] Analyte recovery outside CCV limits. Concentration biased low.
[130] Analyte recovery outside CCV limits. Concentration biased low.

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromodichloromethane		µg/Kg	50.0	47.8	96	80 - 120	2010-04-26
2-Chloroethyl vinyl ether	[131]	µg/Kg	50.0	39.7	79	80 - 120	2010-04-26
cis-1,3-Dichloropropene		µg/Kg	50.0	50.9	102	80 - 120	2010-04-26
trans-1,3-Dichloropropene		µg/Kg	50.0	52.2	104	80 - 120	2010-04-26
Toluene		µg/Kg	50.0	50.0	100	80 - 120	2010-04-26
1,1,2-Trichloroethane		µg/Kg	50.0	47.0	94	80 - 120	2010-04-26
1,3-Dichloropropane		µg/Kg	50.0	48.7	97	80 - 120	2010-04-26
Dibromochloromethane		µg/Kg	50.0	45.0	90	80 - 120	2010-04-26
1,2-Dibromoethane (EDB)		µg/Kg	50.0	48.0	96	80 - 120	2010-04-26
Tetrachloroethene (PCE)	[132]	µg/Kg	50.0	35.2	70	80 - 120	2010-04-26
Chlorobenzene		µg/Kg	50.0	47.5	95	80 - 120	2010-04-26
1,1,1,2-Tetrachloroethane		µg/Kg	50.0	47.0	94	80 - 120	2010-04-26
Ethylbenzene		µg/Kg	50.0	47.8	96	80 - 120	2010-04-26
m,p-Xylene		µg/Kg	100	95.1	95	80 - 120	2010-04-26
Bromoform		µg/Kg	50.0	42.4	85	80 - 120	2010-04-26
Styrene		µg/Kg	50.0	47.7	95	80 - 120	2010-04-26
o-Xylene		µg/Kg	50.0	47.8	96	80 - 120	2010-04-26
1,1,2,2-Tetrachloroethane		µg/Kg	50.0	49.2	98	80 - 120	2010-04-26
2-Chlorotoluene		µg/Kg	50.0	47.1	94	80 - 120	2010-04-26
1,2,3-Trichloropropane		µg/Kg	50.0	51.9	104	80 - 120	2010-04-26
Isopropylbenzene		µg/Kg	50.0	47.8	96	80 - 120	2010-04-26
Bromobenzene		µg/Kg	50.0	47.8	96	80 - 120	2010-04-26
n-Propylbenzene		µg/Kg	50.0	47.5	95	80 - 120	2010-04-26
1,3,5-Trimethylbenzene		µg/Kg	50.0	47.1	94	80 - 120	2010-04-26
tert-Butylbenzene		µg/Kg	50.0	47.9	96	80 - 120	2010-04-26
1,2,4-Trimethylbenzene		µg/Kg	50.0	47.6	95	80 - 120	2010-04-26
1,4-Dichlorobenzene (para)		µg/Kg	50.0	45.6	91	80 - 120	2010-04-26
sec-Butylbenzene		µg/Kg	50.0	47.6	95	80 - 120	2010-04-26
1,3-Dichlorobenzene (meta)		µg/Kg	50.0	46.6	93	80 - 120	2010-04-26
p-Isopropyltoluene		µg/Kg	50.0	48.4	97	80 - 120	2010-04-26
4-Chlorotoluene		µg/Kg	50.0	46.9	94	80 - 120	2010-04-26
1,2-Dichlorobenzene (ortho)		µg/Kg	50.0	46.4	93	80 - 120	2010-04-26
n-Butylbenzene		µg/Kg	50.0	48.7	97	80 - 120	2010-04-26
1,2-Dibromo-3-chloropropane	[133]	µg/Kg	50.0	37.7	75	80 - 120	2010-04-26
1,2,3-Trichlorobenzene		µg/Kg	50.0	48.4	97	80 - 120	2010-04-26
1,2,4-Trichlorobenzene		µg/Kg	50.0	47.7	95	80 - 120	2010-04-26
Naphthalene	[134]	µg/Kg	50.0	37.1	74	80 - 120	2010-04-26
Hexachlorobutadiene		µg/Kg	50.0	46.0	92	80 - 120	2010-04-26

Standard (CCV-1)

QC Batch: 69469 Date Analyzed: 2010-04-28 Analyzed By: AW

[131] Analyte recovery outside CCV limits. Concentration biased low.
[132] Analyte recovery outside CCV limits. Concentration biased low.
[133] Analyte recovery outside CCV limits. Concentration biased low.
[134] Analyte recovery outside CCV limits. Concentration biased low.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	231	92	75 - 125	2010-04-28
>C12-C28		mg/Kg	250	221	88	75 - 125	2010-04-28

Standard (CCV-2)

QC Batch: 69469 Date Analyzed: 2010-04-28 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	233	93	75 - 125	2010-04-28
>C12-C28		mg/Kg	250	225	90	75 - 125	2010-04-28

Standard (CCV-1)

QC Batch: 69520 Date Analyzed: 2010-04-29 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Pyridine	[135]	mg/Kg	60.0	35.1	58	80 - 120	2010-04-29
N-Nitrosodimethylamine		mg/Kg	60.0	71.2	119	80 - 120	2010-04-29
2-Picoline		mg/Kg	60.0	56.9	95	80 - 120	2010-04-29
Methyl methanesulfonate		mg/Kg	60.0	55.3	92	80 - 120	2010-04-29
Ethyl methanesulfonate		mg/Kg	60.0	66.3	110	80 - 120	2010-04-29
Phenol		mg/Kg	60.0	56.6	94	80 - 120	2010-04-29
Aniline	[136]	mg/Kg	60.0	41.5	69	80 - 120	2010-04-29
bis(2-chloroethyl)ether		mg/Kg	60.0	66.0	110	80 - 120	2010-04-29
2-Chlorophenol		mg/Kg	60.0	68.7	114	80 - 120	2010-04-29
1,3-Dichlorobenzene (meta)		mg/Kg	60.0	70.2	117	80 - 120	2010-04-29
1,4-Dichlorobenzene (para)		mg/Kg	60.0	67.8	113	80 - 120	2010-04-29
Benzyl alcohol	[137]	mg/Kg	60.0	98.0	163	80 - 120	2010-04-29
1,2-Dichlorobenzene (ortho)		mg/Kg	60.0	71.4	119	80 - 120	2010-04-29
2-Methylphenol		mg/Kg	60.0	62.1	104	80 - 120	2010-04-29
bis(2-chloroisopropyl)ether		mg/Kg	60.0	67.4	112	80 - 120	2010-04-29
4-Methylphenol / 3-Methylphenol		mg/Kg	60.0	53.8	90	80 - 120	2010-04-29
Acetophenone		mg/Kg	60.0	68.6	114	80 - 120	2010-04-29
N-Nitrosodi-n-propylamine		mg/Kg	60.0	60.2	100	80 - 120	2010-04-29
Hexachloroethane		mg/Kg	60.0	61.5	102	80 - 120	2010-04-29
Nitrobenzene		mg/Kg	60.0	65.3	109	80 - 120	2010-04-29
N-Nitrosopiperidine	[138]	mg/Kg	60.0	81.3	136	80 - 120	2010-04-29
Isophorone		mg/Kg	60.0	66.4	111	80 - 120	2010-04-29

continued ...

[135] Control analyte out of CCV control limits. Results biased high. •
[136] Control analyte out of CCV control limits. Results biased low. •
[137] Control analyte out of CCV control limits. Results biased high. •
[138] Control analyte out of CCV control limits. Results biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
2-Nitrophenol	[139]	mg/Kg	60.0	89.9	150	80 - 120	2010-04-29
2,4-Dimethylphenol		mg/Kg	60.0	57.3	96	80 - 120	2010-04-29
bis(2-chloroethoxy)methane		mg/Kg	60.0	70.4	117	80 - 120	2010-04-29
Benzoic acid		mg/Kg	60.0	69.1	115	80 - 120	2010-04-29
2,4-Dichlorophenol		mg/Kg	60.0	71.5	119	80 - 120	2010-04-29
1,2,4-Trichlorobenzene		mg/Kg	60.0	69.7	116	80 - 120	2010-04-29
a,a-Dimethylphenethylamine	[140]	mg/Kg	60.0	0.203	0	80 - 120	2010-04-29
Naphthalene		mg/Kg	60.0	69.6	116	80 - 120	2010-04-29
4-Chloroaniline	[141]	mg/Kg	60.0	25.3	42	80 - 120	2010-04-29
2,6-Dichlorophenol	[142]	mg/Kg	60.0	75.6	126	80 - 120	2010-04-29
Hexachlorobutadiene		mg/Kg	60.0	65.7	110	80 - 120	2010-04-29
N-Nitroso-di-n-butylamine		mg/Kg	60.0	69.5	116	80 - 120	2010-04-29
4-Chloro-3-methylphenol	[143]	mg/Kg	60.0	36.9	62	80 - 120	2010-04-29
1-Methylnaphthalene		mg/Kg	60.0	70.0	117	80 - 120	2010-04-29
2-Methylnaphthalene		mg/Kg	60.0	72.2	120	80 - 120	2010-04-29
1,2,4,5-Tetrachlorobenzene		mg/Kg	60.0	71.7	120	80 - 120	2010-04-29
Hexachlorocyclopentadiene	[144]	mg/Kg	60.0	99.8	166	80 - 120	2010-04-29
2,4,6-Trichlorophenol	[145]	mg/Kg	60.0	81.6	136	80 - 120	2010-04-29
2,4,5-Trichlorophenol	[146]	mg/Kg	60.0	75.2	125	80 - 120	2010-04-29
2-Chloronaphthalene		mg/Kg	60.0	68.6	114	80 - 120	2010-04-29
1-Chloronaphthalene		mg/Kg	60.0	70.0	117	80 - 120	2010-04-29
2-Nitroaniline		mg/Kg	60.0	60.3	100	80 - 120	2010-04-29
Dimethylphthalate		mg/Kg	60.0	68.7	114	80 - 120	2010-04-29
Acenaphthylene		mg/Kg	60.0	69.6	116	80 - 120	2010-04-29
2,6-Dinitrotoluene		mg/Kg	60.0	72.3	120	80 - 120	2010-04-29
3-Nitroaniline		mg/Kg	60.0	55.8	93	80 - 120	2010-04-29
Acenaphthene		mg/Kg	60.0	69.1	115	80 - 120	2010-04-29
2,4-Dinitrophenol		mg/Kg	60.0	66.1	110	80 - 120	2010-04-29
Dibenzofuran		mg/Kg	60.0	70.4	117	80 - 120	2010-04-29
Pentachlorobenzene		mg/Kg	60.0	68.0	113	80 - 120	2010-04-29
4-Nitrophenol		mg/Kg	60.0	53.5	89	80 - 120	2010-04-29
1-Naphthylamine		mg/Kg	60.0	59.7	100	80 - 120	2010-04-29
2,4-Dinitrotoluene		mg/Kg	60.0	70.6	118	80 - 120	2010-04-29
2-Naphthylamine		mg/Kg	60.0	57.4	96	80 - 120	2010-04-29
2,3,4,6-Tetrachlorophenol		mg/Kg	60.0	67.6	113	80 - 120	2010-04-29
Fluorene		mg/Kg	60.0	69.4	116	80 - 120	2010-04-29
Diethylphthalate		mg/Kg	60.0	64.4	107	80 - 120	2010-04-29
4-Chlorophenyl-phenylether		mg/Kg	60.0	66.3	110	80 - 120	2010-04-29

continued ...

[139] Control analyte out of CCV control limits. Results biased high. •
[140] Control analyte out of CCV control limits. Results biased low. •
[141] Control analyte out of CCV control limits. Results biased low. •
[142] Control analyte out of CCV control limits. Results biased high. •
[143] Control analyte out of CCV control limits. Results biased low. •
[144] Control analyte out of CCV control limits. Results biased high. •
[145] Control analyte out of CCV control limits. Results biased high. •
[146] Control analyte out of CCV control limits. Results biased high. •

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
4-Nitroaniline	[147]	mg/Kg	60.0	75.7	126	80 - 120	2010-04-29
4,6-Dinitro-2-methylphenol		mg/Kg	60.0	69.4	116	80 - 120	2010-04-29
Diphenylamine		mg/Kg	60.0	70.5	118	80 - 120	2010-04-29
Diphenylhydrazine		mg/Kg	60.0	54.0	90	80 - 120	2010-04-29
4-Bromophenyl-phenylether	[148]	mg/Kg	60.0	73.2	122	80 - 120	2010-04-29
Phenacetin		mg/Kg	60.0	69.6	116	80 - 120	2010-04-29
Hexachlorobenzene	[149]	mg/Kg	60.0	74.0	123	80 - 120	2010-04-29
4-Aminobiphenyl		mg/Kg	60.0	55.2	92	80 - 120	2010-04-29
Pentachlorophenol		mg/Kg	60.0	52.6	88	80 - 120	2010-04-29
Pentachloronitrobenzene		mg/Kg	60.0	67.1	112	80 - 120	2010-04-29
Pronamide		mg/Kg	60.0	63.0	105	80 - 120	2010-04-29
Phenanthrene		mg/Kg	60.0	69.2	115	80 - 120	2010-04-29
Anthracene		mg/Kg	60.0	70.2	117	80 - 120	2010-04-29
Di-n-butylphthalate		mg/Kg	60.0	68.0	113	80 - 120	2010-04-29
Fluoranthene		mg/Kg	60.0	67.0	112	80 - 120	2010-04-29
Benzidine		mg/Kg	60.0	47.9	80	80 - 120	2010-04-29
Pyrene		mg/Kg	60.0	71.2	119	80 - 120	2010-04-29
p-Dimethylaminoazobenzene		mg/Kg	60.0	65.8	110	80 - 120	2010-04-29
Butylbenzylphthalate	[150]	mg/Kg	60.0	75.3	126	80 - 120	2010-04-29
Benzo(a)anthracene	[151]	mg/Kg	60.0	73.3	122	80 - 120	2010-04-29
3,3-Dichlorobenzidine		mg/Kg	60.0	68.4	114	80 - 120	2010-04-29
Chrysene		mg/Kg	60.0	61.4	102	80 - 120	2010-04-29
bis(2-ethylhexyl)phthalate	[152]	mg/Kg	60.0	73.9	123	80 - 120	2010-04-29
Di-n-octylphthalate		mg/Kg	60.0	68.5	114	80 - 120	2010-04-29
Benzo(b)fluoranthene		mg/Kg	60.0	62.0	103	80 - 120	2010-04-29
7,12-Dimethylbenz(a)anthracene		mg/Kg	60.0	61.3	102	80 - 120	2010-04-29
Benzo(k)fluoranthene		mg/Kg	60.0	57.8	96	80 - 120	2010-04-29
Benzo(a)pyrene		mg/Kg	60.0	62.5	104	80 - 120	2010-04-29
3-Methylcholanthrene		mg/Kg	60.0	68.2	114	80 - 120	2010-04-29
Dibenzo(a,j)acridine		mg/Kg	60.0	68.0	113	80 - 120	2010-04-29
Indeno(1,2,3-cd)pyrene		mg/Kg	60.0	62.1	104	80 - 120	2010-04-29
Dibenzo(a,h)anthracene		mg/Kg	60.0	61.0	102	80 - 120	2010-04-29
Benzo(g,h,i)perylene		mg/Kg	60.0	69.0	115	80 - 120	2010-04-29

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		71.4	mg/Kg	1	60.0	119	80 - 120
Phenol-d5		61.3	mg/Kg	1	60.0	102	80 - 120
Nitrobenzene-d5		70.1	mg/Kg	1	60.0	117	80 - 120
2-Fluorobiphenyl		69.5	mg/Kg	1	60.0	116	80 - 120

continued ...

[147] Control analyte out of CCV control limits. Results biased high. •
[148] Control analyte out of CCV control limits. Results biased high. •
[149] Control analyte out of CCV control limits. Results biased high. •
[150] Control analyte out of CCV control limits. Results biased high. •
[151] Control analyte out of CCV control limits. Results biased high. •
[152] Control analyte out of CCV control limits. Results biased high. •

standard continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,6-Tribromophenol	[153]	80.4	mg/Kg	1	60.0	134	80 - 120
Terphenyl-d14		68.2	mg/Kg	1	60.0	114	80 - 120

[153] 8270 Only - One acidic surrogate is out of control limits. The other two acidic surrogates show extraction was performed properly.

ENVIRONMENTAL, GEOTECHNICAL AND CONSTRUCTION MATERIALS SERVICES

CHAIN OF CUSTODY RECORD

10041907

Terracon
Consulting Engineers & Scientists

Office Location: DALLAS

Project Manager: M.H. NIEMAN

Laboratory: TRACE ANALYSIS
Address: 6701 ABERDEEN AVE. ST. 9 LUBBOCK, TX
Contact: D. DUNLAP
Phone: 806-794-1296
PO/SO #:

Lab use only
Due Date: 10041907
Temp. of coolers when received (C°): 1 2 3 4 5
Page 1 of 1

Sampler's Name: CHRIS SANDWELL
Sampler's Signature: [signature]

Proj. No.: 94087317.3R1
Project Name: OFFICE BUILDING

ANALYSIS REQUESTED

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	P/O	TPH (TX1005)	VOC (8260B)	SVOC	% Moisture	Sample Duplicate	MS/MSD	HOLD	Lab Sample ID (Lab Use Only)
S	4/16/10	10:10		X	MW-1 (4-5)	4	5				1							X	228926
		10:20		X	MW-1 (9-10)	9	10				2	X	X		X	X			927
		10:40		X	MW-1 (14-15)	14	15				1							X	928
		11:00		X	MW-1 (24-25)	24	25				1							X	929
		12:50		X	MW-2 (4-5)	4	5				1							X	930
		12:55		X	MW-2 (11-12)	11	12				1							X	931
		13:00		X	MW-2 (16-17)	16	17				2	X	X		X		X		932
		13:15		X	MW-2 (24-25)	24	25				1							X	933
W		12:40		X	RINSATE			6				X	X						934
W		00:00			Trip Blank			2											228945

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	4/16/10	1350	[signature]	4.16.10	1350
[signature]	4.16.10	1617	[signature]	4-16-10	1617
			[signature] 5.2°C 5.4°C	4/17/10	1135

NOTES:

Matrix: WW - Wastewater, W - Water, S - Soil, SD - Solid, L - Liquid, A - Air Bag, C - Charcoal tube, SL - sludge, O - Oil
Container: VOA - 40 ml vial, A/G - Amber / Or Glass 1 Liter, 250 ml - Glass wide mouth, P/O - Plastic or other

Houston Office
11555 Clay Road, Suite 100
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(713) 690-8989 Fax (713) 690-8787

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Appendix A Laboratory Data Package Cover Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- ❑ R1 Field chain-of-custody documentation;
- ❑ R2 Sample identification cross-reference;
- ❑ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ❑ R4 Surrogate recovery data including:
  - a) calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ❑ R5 Test reports/summary forms for blank samples;
- ❑ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ❑ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ❑ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ❑ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ❑ R10 Other problems or anomalies

The Exception Report for every "No" or "Not Reviewed (NR)" item in the laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to the rule. The official signing of the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Michael Abel	Michael Abel	Production Manager	05/03/2010
Name (Printed)	Signature	Official Title (Print)	Date

Project Name: Office Building Laboratory Job Number: 10041907

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TraceAnalysis, Inc.	LRC Date: 5/03/10
Project Name: Office Building	Laboratory Job Number: 10041907
Reviewer Name: Michael Abel	Prep Batch Number(s): All Inclusive for Order I.D.

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✔				
		Were all departures from standard conditions described in an exception report?	✔				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✔				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✔				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✔				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✔				
		Were calculations checked by a peer or supervisor?	✔				
		Were all analyte identifications checked by a peer or supervisor?	✔				
		Were sample quantitation limits reported for all analytes not detected?	✔				
		Were all results for soil and sediment samples reported on a dry weight basis?	✔				
		Were % moisture (or solids) reported for all soil and sediment samples?	✔				
		If required for the project, TICs reported?			✔		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✔				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		✔			
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✔				
		Were blanks analyzed at the appropriate frequency?	✔				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✔				
		Were blank concentrations < MQL?	✔				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✔				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✔				
		Were LCSs analyzed at required frequency?	✔				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✔			
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✔				
		Was the LCSD RPD within QC limits?	✔				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✔				
		Were MS/MSD analyzed a the appropriate frequency?	✔				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✔			
		Were MS/MSD RPDs within laboratory QC limits?		✔			

1 Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3 NA = Not applicable;

4 NR = Not reviewed;

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TraceAnalysis, Inc.	LRC Date: 5/03/10
Project Name: Office Building	Laboratory Job Number: 10041907
Reviewer Name: Michael Abel	Prep Batch Number(s): All Inclusive for Order I.D.

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✔				
		Were analytical duplicates analyzed at the appropriate frequency?	✔				
		Were RPDs relative standard deviations within the laboratory QC limits?	✔				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✔				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✔				
		Are unadjusted MQLs included in the laboratory data package?	✔				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✔				
		Were all necessary corrective actions performed for the reported data?	✔				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✔				
S1	OI	**Initial Calibration (ICAL)**					
		Were response factors and /or relative response factors for each analyte within QC limits?	✔				
		Were percent RSDs or correlation coefficient criteria met?	✔				
		Was the number of standards recommended in the method used for all analytes?	✔				
		Were all points generated between the lowest and highest standard used to calculate the curve?	✔				
		Are ICAL data available for all instruments used?	✔				
		Has the initial calibration curve been verified using an appropriate second source standard?	✔				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required QC limits?	✔				
		Was the ICAL curve verified for each analyte?		✔			
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	✔				
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	✔				
		Were ion abundance data within the method-required QC limits?	✔				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	✔				
S5	O	**Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✔				
		Were data associated with manual integrations flagged on the raw data?	✔				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			✔		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✔		
S8	I	**Interference Check Sample (ICS) results:**					

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Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TraceAnalysis, Inc.	LRC Date: 5/03/10
Project Name: Office Building	Laboratory Job Number: 10041907
Reviewer Name: Michael Abel	Prep Batch Number(s): All Inclusive for Order I.D.

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Were percent recovery within method QC limits?			✔		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✔		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	✔				
		Is the MDL either adjusted or supported by the analysis of DCSs?	✔				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✔				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✔				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	✔				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✔				
		Is documentation of the analyst's competency up-to-date and on file?	✔				
S15	OI	**Verification/validation documentation for methods** (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the date documented, verified, and validated, where applicable?	✔				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	✔				

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Work Order: 10041907

Sample: 228927 **Volatiles:**

Dichlorodifluoromethane	Concentration biased low.
Acetone	Concentration biased low.
2-Butanone (MEK)	Concentration biased low.
2-Hexanone	Concentration biased low.
trans 1,4-Dichloro-2-butene	Concentration biased low.
2-Chloroethyl vinyl ether	Concentration biased low.
Tetrachloroethene (PCE)	Concentration biased low.
1,2-Dibromo-3-chloropropane	Concentration biased low.
Naphthalene	Concentration biased low.

Sample: 228928 **Volatiles:**

Dichlorodifluoromethane	Concentration biased low.

Sample: 228931 **Volatiles:**

Dichlorodifluoromethane	Concentration biased low.

Sample: 228934 **TX1005 - NEW:**

n-Tricosane	High surrogate recovery, result bias high.

Volatiles:

Dichlorodifluoromethane	Concentration biased low.
1,2-Dibromo-3-chloropropane	Concentration biased low.
Naphthalene	Concentration biased low.

Sample: 228945 **Volatiles:**

Dichlorodifluoromethane	Concentration biased low.
1,2-Dibromo-3-chloropropane	Concentration biased low.
Naphthalene	Concentration biased low.

QC Batch: 69336

MS(1)	cis-1,2-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	Methylene chloride	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	Trichlorofluoromethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	1,1-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MSD(1)	Chlorobenzene	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	2-Chloroethyl vinyl ether	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	Trichlorofluoromethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
MSD(1)	Hexachlorobutadiene	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	Benzene	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	1,1-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
MSD(1)	cis-1,2-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
MSD(1)	Methylene chloride	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
MSD(1)	1,3-Dichlorobenzene (meta)	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	Bromobenzene	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	trans-1,2-Dichloroethene	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	1,2-Dichloropropane	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	Bromochloromethane	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	1,1-Dichloroethane	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	1,4-Dichlorobenzene (para)	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	1,1-Dichloropropene	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
MSD(1)	1,2,3-Trichloropropane	MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
CCV(2)	trans 1,4-Dichloro-2-butene	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(2)	Trichlorofluoromethane	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(2)	Tetrachloroethene (PCE)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(2)	Trichloroethene (TCE)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(2)	1,2-Dibromo-3-chloropropane	Analyte recovery outside CCV limits. Concentration biased low. •

QC Batch: 69365

CCV(1)	Dichlorodifluoromethane	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	1,2-Dibromo-3-chloropropane	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	Naphthalene	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(2)	Trichloroethene (TCE)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(2)	Trichlorofluoromethane	Analyte recovery outside CCV limits. Concentration biased high.
CCV(2)	Tetrachloroethene (PCE)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(2)	Acetone	Analyte recovery outside CCV limits. Concentration biased high. •

QC Batch: 69410

MS(1)	Trichlorofluoromethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	Methylene chloride	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	1,1-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MSD(1)	Trichlorofluoromethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
MSD(1)	2-Chloroethyl vinyl ether	MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
CCV(1)	Dichlorodifluoromethane	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	2-Butanone (MEK)	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	1,2-Dibromo-3-chloropropane	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	2-Chloroethyl vinyl ether	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	Tetrachloroethene (PCE)	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	trans 1,4-Dichloro-2-butene	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	Acetone	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	2-Hexanone	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	Naphthalene	Analyte recovery outside CCV limits. Concentration biased low. •

QC Batch: 69447

LCS(1)	Benzene	Spike recovery outside control limits. Concentration biased high. Analyte not detected in samples.
LCS(1)	Trichloroethene (TCE)	Spike recovery outside control limits. Concentration biased high. Analyte not detected in samples. •
LCS(1)	Toluene	Spike recovery outside control limits. Concentration biased high. Analyte not detected in samples. •
MS(1)	Methylene chloride	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	trans-1,2-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	MTBE	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	1,2-Dichloropropane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	Bromochloromethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	2-Hexanone	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	1,1-Dichloroethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	Chloroform	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	1,1-Dichloropropene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	Benzene	Matrix spike recovery out of control limits due to matrix interference. Concentration biased high.
MS(1)	Trichlorofluoromethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	1,1-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MS(1)	cis-1,2-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
MSD(1)	1,1-Dichloropropene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	Benzene	Matrix spike recovery out of control limits due to matrix interference. Concentration biased high. RPD within RPD limits. •
MSD(1)	Vinyl Chloride	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits.
MSD(1)	1,1-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	cis-1,2-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	Methylene chloride	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	trans-1,2-Dichloroethene	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	Iodomethane (methyl iodide)	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	1,2-Dichloropropane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	1,1-Dichloroethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	Chloroform	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
MSD(1)	Trichlorofluoromethane	Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control. RPD within RPD limits. •
CCV(1)	trans-1,3-Dichloropropene	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	Acrylonitrile	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	1,1-Dichloroethene	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	1,2-Dichloroethane (EDC)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	Bromomethane (methyl bromide)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	MTBE	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	4-Methyl-2-pentanone (MIBK)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	Chloroethane	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	2-Hexanone	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	Dichlorodifluoromethane	Analyte recovery outside CCV limits. Concentration biased low. •
CCV(1)	Tetrachloroethene (PCE)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(1)	Trichloroethene (TCE)	Analyte recovery outside CCV limits. Concentration biased high. •
CCV(2)	1,2-Dibromo-3-chloropropane	Analyte recovery outside CCV limits. Concentration biased low.
CCV(2)	trans 1,4-Dichloro-2-butene	Analyte recovery outside CCV limits. Concentration biased low.
CCV(2)	2-Chloroethyl vinyl ether	Analyte recovery outside CCV limits. Concentration biased low.
CCV(2)	Tetrachloroethene (PCE)	Analyte recovery outside CCV limits. Concentration biased low.
CCV(2)	Naphthalene	Analyte recovery outside CCV limits. Concentration biased low.
CCV(2)	Dichlorodifluoromethane	Analyte recovery outside CCV limits. Concentration biased low.

QC Batch: 69520

LCS(1)	a,a-Dimethylphenethylamine	Spike analyte out of control limits. Results biased low. •
LCS(1)	4-Aminobiphenyl	Spike analyte out of control limits. Results biased low. •
LCS(1)	3-Nitroaniline	Spike analyte out of control limits. Results biased low. •
LCS(1)	4-Chloro-3-methylphenol	Spike analyte out of control limits. Results biased low. •
LCS(1)	Benzidine	Spike analyte out of control limits. Results biased low. •
LCSD(1)	4-Chloro-3-methylphenol	Spike analyte out of control limits. Results biased low. •
LCSD(1)	4-Aminobiphenyl	Spike analyte out of control limits. Results biased low. •
LCSD(1)	2,4,6-Tribromophenol	8270 Only - One acidic surrogate is out of control limits. The other two acidic surrogates show extraction was performed properly.
LCSD(1)	a,a-Dimethylphenethylamine	Spike analyte out of control limits. Results biased low. •
LCSD(1)	Benzidine	Spike analyte out of control limits. Results biased low. •
MS(1)	2,6-Dinitrotoluene	Matrix spike recovery out of control limits due to matrix interference.
MS(1)	Benzo(a)pyrene	Matrix spike recovery out of control limits due to matrix interference.
MS(1)	2,4-Dinitrotoluene	Matrix spike recovery out of control limits due to matrix interference.
MS(1)	3-Nitroaniline	Matrix spike recovery out of control limits due to matrix interference.
MS(1)	a,a-Dimethylphenethylamine	Matrix spike recovery out of control limits due to matrix interference.
MS(1)	Aniline	Matrix spike recovery out of control limits due to matrix interference.
MS(1)	4-Chloro-3-methylphenol	Matrix spike recovery out of control limits due to matrix interference.
MS(1)	Diphenylhydrazine	Matrix spike recovery out of control limits due to matrix interference.
MSD(1)	2,4-Dinitrotoluene	Matrix spike recovery out of control limits due to matrix interference. •
MSD(1)	Diphenylhydrazine	Matrix spike recovery out of control limits due to matrix interference. •
MSD(1)	a,a-Dimethylphenethylamine	Matrix spike recovery out of control limits due to matrix interference. •
MSD(1)	4-Chloro-3-methylphenol	Matrix spike recovery out of control limits due to matrix interference. •
MSD(1)	Aniline	Matrix spike recovery out of control limits due to matrix interference. •
CCV(1)	Butylbenzylphthalate	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	4-Bromophenyl-phenylether	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	N-Nitrosopiperidine	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	2,4,6-Trichlorophenol	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	Hexachlorocyclopentadiene	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	2,4,6-Tribromophenol	8270 Only - One acidic surrogate is out of control limits. The other two acidic surrogates show extraction was performed properly.
CCV(1)	4-Chloroaniline	Control analyte out of CCV control limits. Results biased low. •
CCV(1)	bis(2-ethylhexyl)phthalate	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	a,a-Dimethylphenethylamine	Control analyte out of CCV control limits. Results biased low. •
CCV(1)	2,6-Dichlorophenol	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	Hexachlorobenzene	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	Benzyl alcohol	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	4-Nitroaniline	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	Pyridine	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	2-Nitrophenol	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	Aniline	Control analyte out of CCV control limits. Results biased low. •
CCV(1)	4-Chloro-3-methylphenol	Control analyte out of CCV control limits. Results biased low. •
CCV(1)	2,4,5-Trichlorophenol	Control analyte out of CCV control limits. Results biased high. •
CCV(1)	Benzo(a)anthracene	Control analyte out of CCV control limits. Results biased high. •