MACTEC

engineering and constructing a better tomorrow

July 30, 2007

Mr. Jerry Deakle
Statesville Partnership, LLC
4108 Darlington Place
Raleigh, North Carolina 27612

Subject: **Report of Indoor Air Quality Testing Services**
224 Wilson Park Road
Statesville, North Carolina
MACTEC Project No. 6228-07-4282

Dear Mr. Deakle:

MACTEC Engineering and Consulting, Inc. (MACTEC) is pleased to present this report that summarizes results of the Indoor Air Quality (IAQ) Testing Services performed at the facility located at 224 Wilson Park Road in Statesville, North Carolina. This report includes a summary of the project information, air sampling results, and recommendations/conclusions.

Project Information

The subject property contains an approximate 67,000 square-foot, one-story facility. The site was formerly used as a manufacturing/industrial property; however, we understand that there is potential for the facility to be developed into office spaces. Reportedly, former dry-cleaning operations conducted in the on-site building have contaminated groundwater at the site.

Due to known groundwater contamination at the site, Statesville Partnership, LLC requested MACTEC to conduct indoor air quality testing at the site to evaluate if elevated levels of contaminants related to the former dry-cleaning operations are present in the indoor air of the facility.

On July 19, 2007, Ms. Kelly Lumsden of MACTEC performed the IAQ testing in accordance with MACTEC's Proposal No. Prop07chlt375, dated July 12, 2007, and amended on July 18, 2007 to increase the sampling from three to four air samples, to include an ambient air sample, which would be analyzed with a 5-day turn around schedule.

Air Sampling and Analysis Results

In order to assess the presence of the volatile organic compounds (VOCs) of concern, MACTEC personnel collected three air samples from random locations inside the facility on July 19, 2007. Approximate sample locations are depicted on the field notes included in Appendix A. MACTEC also collected one sample from outside the facility to obtain an outdoor comparison sample of the ambient air. The samples were collected in clean, evacuated 6-litre canisters, and air was drawn into the canisters using flow control restrictor devices that allowed a regulated flow of air into each canister over an approximate 8-hour time period.

Following sample collection, the samples were shipped to Test America Analytical for analysis of the groundwater contaminants related to the former drycleaning operations at the site and their daughter products including: tetrachloroethene; trichloroethene; cis-1,2-dichloroethene; trans-1,2-dichloroethene; and vinyl chloride, using a gas chromatography/mass spectrometry method (EPA Method TO-15).

Table 1 contains a summary of the detected constituents from the laboratory results of the four air samples. A copy of the laboratory report for the air sampling is included in Appendix B.

Table 1: VOC Constituents

Volatile Organic Compound	Sample 1 New Building (ppbv)	Sample 2 Laundry Area (ppbv)	Sample 3 Original Building (ppbv)	Sample 4 Outdoor (ppbv)	OSHA PEL (ppbv)	TIAC* $R=10^{-4}$ (ppbv)	TIAC* $R=10^{-5}$ (ppbv)	TIAC* $R=10^{-6}$ (ppbv)
Trans-1,2-Dichloroethene (DCE)	0.18 J	< 0.20	< 0.20	< 0.20	200,000 (1,2-DCE)	18	18	18
Tetrachloroethene	5.2	4.4	4.1	< 0.40	100,000	12	1.2	0.12

Notes: PEL = Permissible Exposure Limit
ppbv = parts per billion by volume
* TIAC represents the target indoor air concentration to satisfy the risk level and target hazard index identified in the OSWER Draft Guidance for evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils, November 2002
J indicates an estimated results which is greater than the method detection limit but lower than the report limit

Prepared By/Date: KPL 7-30-07
Checked By/Date: AMC 7-30-07

The detected concentrations of VOCs identified in Table 1 are orders of magnitude less than the Occupational Safety and Health Administration (OSHA) permissible exposure limits for these compounds.

MACTEC also compared the detected VOC concentrations to the target indoor air concentrations (TIAC) to satisfy both the prescribed risk level and the target hazard index from the Office of Solid Waste and Emergency Response (OSWER) Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance) dated November 2002. This document is primarily designed to ensure protection of the public in residential settings based on an adult residential exposure scenario and assume exposure of an individual for 350 days per year over a period of 30 years. The North Carolina Department of Environment and Natural Resources (NCDENR) typically defaults to these target concentrations when evaluating Brownfield projects in the State. Tetrachloroethene was detected at concentrations between the 10^{-4} and 10^{-5} risk levels identified in the OSWER Guidance document in the three indoor air samples collected.

Because the future use for the building will be either industrial or commercial, the potential receptors would be site workers rather than residents. As a result, the exposure frequency, exposure duration, and event duration would be less than assumed in the TIAC values. For example, current risk assessment guidance documents (Region 4 Risk Assessment Bulletins for Human Health, USEPA, 2001; Risk Assessment Guidance for Superfund, Part E, USEPA, 2004) recommend conservative default values of 250 days per year for 25 years for 10 hours each day for occupational exposure scenarios, as compared to 350 days per year for 30 years for 24 hours each day for a default residential scenario. The occupational exposure assumptions would increase the TIACs by a factor of 4 for potential carcinogens. For tetrachloroethene, the indoor air screening values would range

from 0.48 ppbv to 48 ppbv for a default occupational scenario for target risks ranging from 10^{-6} to 10^{-4}. When compared to the average indoor air concentrations of 4.57 ppbv for PCE, the estimated excess cancer risk would be 1 x 10^{-5} for a site worker receptor. Since the air samples were collected during a quiescent period when the HVAC system was not active in the building, the actual exposure point concentrations in indoor air are expected to be lower when the building is actually occupied and the HVAC system is active. Therefore, a risk estimate of 1 x 10^{-5} is probably an overestimate.

In accordance with the National Contingency Plan (NCP), acceptable exposure levels for noncarcinogens should not exceed a cumulative hazard index of one and acceptable exposure levels for carcinogens may range from 10^{-4} to 10^{-6}, with cumulative risk not exceeding 10^{-4}. The hazards associated with indoor concentrations for trans-1,2-dichloroethene are well below a hazard index of one. Estimated cancer risk associated with indoor air concentrations of tetrachloroethene detected at the site are within the NCP range, with cumulative risks at or below 10^{-5} based on the occupational scenario discussed above. Therefore, current and future indoor air exposures to volatile compounds are not expected to be unacceptable at this site.

Conclusions

Based on the air sample results and MACTEC's risk assessment, current and future indoor air exposures to volatile compounds related to the former dry-cleaning operations at the site are not expected to be unacceptable.

Closing

MACTEC appreciates the opportunity to provide our professional consulting to Statesville Partnership, LLC. If you should have any questions concerning this report or need additional services, please contact either of the undersigned at (704) 357-8600.

Sincerely,

MACTEC ENGINEERING AND CONSULTING, INC.

Kelly R. Lumsden

Kelly R. Lumsden, E.I.
Project Scientist

Andrew M. Clark, P.G.
Principal Geologist

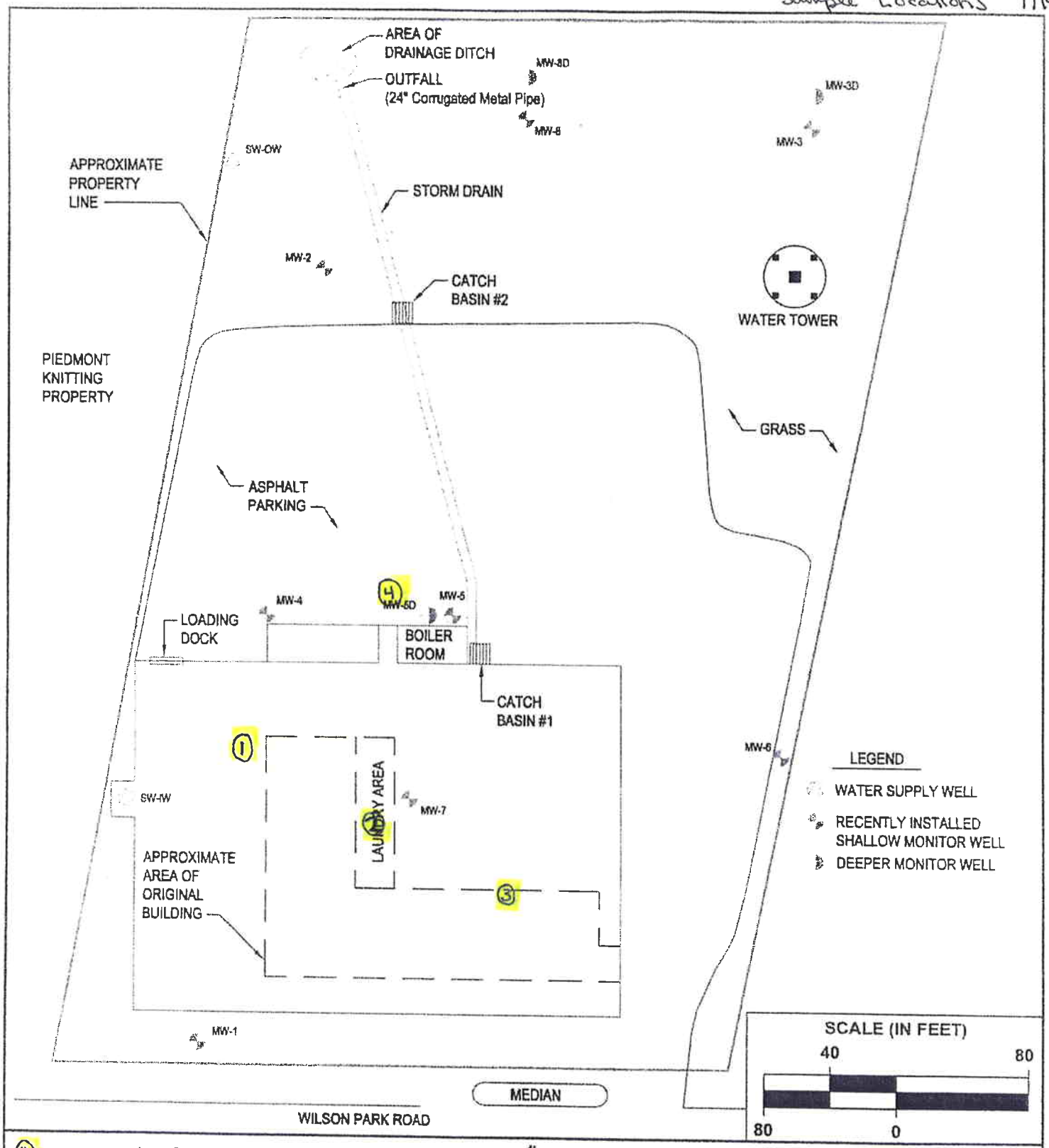
Appendices

Appendix A – Field Notes
Appendix B - Laboratory Report of Analysis

APPENDIX A

FIELD NOTES

6228-07.4282
Sample Locations 7/19/07



④ Approximate Sample Locations

Source:

Jerry Deakle & Associates, Inc.

ECS LLP
CAROLINAS
SETTING THE STANDARD FOR SERVICE

FIGURE 2

MONITORING WELL LOCATION MAP
224 Wilson Park Road
Statesville, North Carolina

ENGINEER BML	SCALE As Shown
DRAFTSMAN DWG	PROJECT NO. 08-4257
REVISIONS	FIGURE 2
	DATE 12-20-06

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: MACTEC

CANISTER SERIAL #: 3146

DATE CLEANED: 7-5-07A

CLIENT SAMPLE #: 1 - New Building

SITE LOCATION: 224 Wilson Park Road

MACTEC Project No: 6228-07-4282

VFR ID: 08013

Duration of comp. : 8 (hrs) / mins.

Flow setting: 9.9 - 10.4 ml/min

Initials: (KH)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	7/18/07	(KH)
INITIAL FIELD VACUUM	0926 hrs	28"	7/19/07	KRL
FINAL FIELD READING	1732 hrs	5"	7/19/07	KRL
GAUGE READING UPON RECEIPT				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (inches Hg and PSIA)			
FINAL PRESSURE (PSIA)			

Pressurization Gas: _____

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 MIN.	316-333
0.5 Hours	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: MACTEC

CANISTER SERIAL #: 1284

DATE CLEANED: 7-5-07A

CLIENT SAMPLE #: 2- Laundry Area

SITE LOCATION: 224 Wilson Park Road

MACTEC PROJECT No: 6228-07-4282

VFR ID: 08076

Duration of comp. : 8 (hrs) / mins.

Flow setting: 9.9 - 10.4 ml/min

Initials: (KL)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	7/18/07	(KL)
INITIAL FIELD VACUUM	0935 hrs	28"	7/19/07	KRL
FINAL FIELD READING	1737 hrs	4"	7/19/07	KRL
GAUGE READING UPON RECEIPT				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (inches Hg and PSIA)			
FINAL PRESSURE (PSIA)			

Pressurization Gas: _____

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 MIN.	316-333
0.5 Hours	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: MACTEC

CANISTER SERIAL #: 1166C

DATE CLEANED: 7-5-07A

CLIENT SAMPLE #: 3 - Original Building

SITE LOCATION: 224 Wilson Park Road

MACTEC PROJECT NO: 6228-07-4282

VFR ID: 08019

Duration of comp. : 8 (hrs) / mins.

Flow setting: 9.9 - 10.4 ml/min

Initials: (K)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	7/18/07	(K)
INITIAL FIELD VACUUM	0942 hrs	29"	7/19/07	KRL
FINAL FIELD READING	1744 hrs	4"	7/19/07	KRL
GAUGE READING UPON RECEIPT				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (inches Hg and PSIA)			
FINAL PRESSURE (PSIA)			

Pressurization Gas: _____

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 MIN.	316-333
0.5 Hours	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: MACTEC

CANISTER SERIAL #: 1100C

DATE CLEANED: 7-5-07A

CLIENT SAMPLE #: 4-Outdoor

SITE LOCATION: 224 Wilson Park Road

MACTEC PROJECT NO: 6228-07-4282

VFR ID: 08015

Duration of comp.: 8 (hrs) / mins.

Flow setting: 9.9 - 10.4 ml/min

Initials: (KRL)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	7/18/07	(KRL)
INITIAL FIELD VACUUM	0950 hrs	28.5"	7/19/07	KRL
FINAL FIELD READING	1711 hrs	0"	7/19/07	KRL
GAUGE READING UPON RECEIPT				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (inches Hg and PSIA)			
FINAL PRESSURE (PSIA)			

Pressurization Gas: _____

COMMENTS:

It had rained outside at some point during the air sampling.

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 MIN.	316-333
0.5 Hours	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

APPENDIX B

LABORATORY REPORT OF ANALYSIS

SEVERN TRENT STL

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

July 26, 2007

LOT NUMBER: E7G230122
NELAP Certification Number: 01118CA/E87652

Rec'd checked in 7/30/07

MARCELA HODGE
Aerotech PK
1501 West Knudsen Drive
Phoenix, AZ 85027

Dear Ms. Marcela Hodeg,

This report contains the analytical results for the four samples received under chain of custody by TestAmerica, formerly STL Los Angeles, on July 20, 2007. These samples are associated with your MACTEC project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. Any matrix related anomaly is footnoted within the report.

TestAmerica, formerly STL Los Angeles, certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610, extension 323.

Sincerely,

Terry Swart
Project Management Assistant

CC: Project File

000020
There are _____ pages in this report.

Leaders in Environmental Testing

Severn Trent Laboratories, Inc.

LOT NUMBER E7G230122

Nonconformance 05-0020122

Affected Samples:
E7G230122 (1): 1-NEW BUILDING
E7G230122 (2): 2-LAUNDRY AREA
E7G230122 (3): 3-ORIGINAL BUILDING
E7G230122 (4): 4-OUTDOOR

Affected Methods:
TO-15

Case Narrative:
The RPD of benzene is 26%, which is outside the criteria (25%), but is within ME (31%).

E7G230122

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705
phone 714-258-8610 fax 714-258-0921

Canister Samples Chain of Custody Record

STL

Severn Trent Laboratories, Inc. (STL) assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: Andy Clark	AMCLARK@mactec.com
Company: MACTEC	Phone: 704-357-5630	E7G230122
Address: 2801 Yorkmont Rd, Ste 100	Site Contact:	1 of 1 COCs
City/State/Zip Charlotte / NC / 28208	STL Contact:	
Phone: 704-357-8600		
FAX: 704-357-8638		
Project Name: IAQ - Statesville	Analysis Turnaround Time	
Site: 224 Wilson Park Road	Standard (Specify)	
PO # 85621	Rush (Specify) 5-day	

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15 (via SIM)	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
1- New Building	7/19/07	0926	1732	28	5	08013	3146	X						X				
2- Laundry Area	7/19/07	0935	1737	28	4	08076	1284	X						X				
3- Original Building	7/19/07	0942	1744	29	4	08019	1166C	X						X				
4- Outdoor	7/19/07	0950	1711	28.5	0	08015	1100C	X							X			

Temperature (Fahrenheit)	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	
Start			
Stop			

Sampler Name (printed): Kelly Lumsden

Sampler Signature: Kelly Lumsden

Special Instructions/QC Requirements & Comments:
Please conduct TO-15 for low level detections via SIM.
Note: Sample ID 4-Outdoor was impacted by rain at some point during the air sample.

Canisters Shipped by:	Date/Time: 7-18-07 1600	Canisters Received by: Kelly Lumsden
Samples Relinquished by: Kelly Lumsden	Date/Time: 7/19/07 1850	Received by: FedEx
Relinquished by: FedEx	Date/Time: 7-20-07 1000	Received by:

Lab Use Only Shipper Name: Opened by: Condition:

CANISTER QC CERTIFICATION

STL

Certification Type: TO-15 SCAN

Date Cleaned/Batch: 070507A

Date of QC: 7/9/07

Data File Number: MB070907 (Scan-MSE)

Canister ID Numbers

* 2733	3146 ✓
3443	2231
3413	3226
1106C	2333
1100C ✓	1166C ✓
3428	1284 ✓

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

LR
Reviewed By:

7/9/07
Date:

N:\CO\DOCS\Can QC Cert (012103).doc

Data File: \\LAPC062\MSE_D\chem\gcmse.i\070709.b\MB07092.D
Report Date: 09-Jul-2007 14:46

STL - Los Angeles

AIR LOW LEVEL TO-14A / TO-15

Data file : \\LAPC062\MSE_D\chem\gcmse.i\070709.b\MB07092.D
Lab Smp Id: BLANK
Client Smp ID: 2733
Inj Date : 09-JUL-2007 13:56
Inst ID: gcmse.i
Operator : LR
Smp Info : BLANK,2733,,METHOD BLANK,
Misc Info : 1,1,250,250,3,,BLANK,TO15.SUB,1,
Comment :
Method : \\LAPC062\MSE_D\chem\gcmse.i\070709.b\TO15.m
Meth Date : 09-Jul-2007 13:15 rongl
Quant Type: ISTD
Cal Date : 22-MAY-2007 18:58
Cal File: IC05228.D
Als bottle: 2
QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: TO15.SUB
Target Version: 4.12
Processing Host: LAPC062

Concentration Formula:
Amt * DF * (FinalPres / InitPres)*(CalVol / SmpVol) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
FinalPres	1.000	Final Pressure
InitPres	1.000	Initial Pressure
CalVol	250.000	Calibration Volume
SmpVol	250.000	Sample Volume
Cpnd Variable		Local Compound Variable

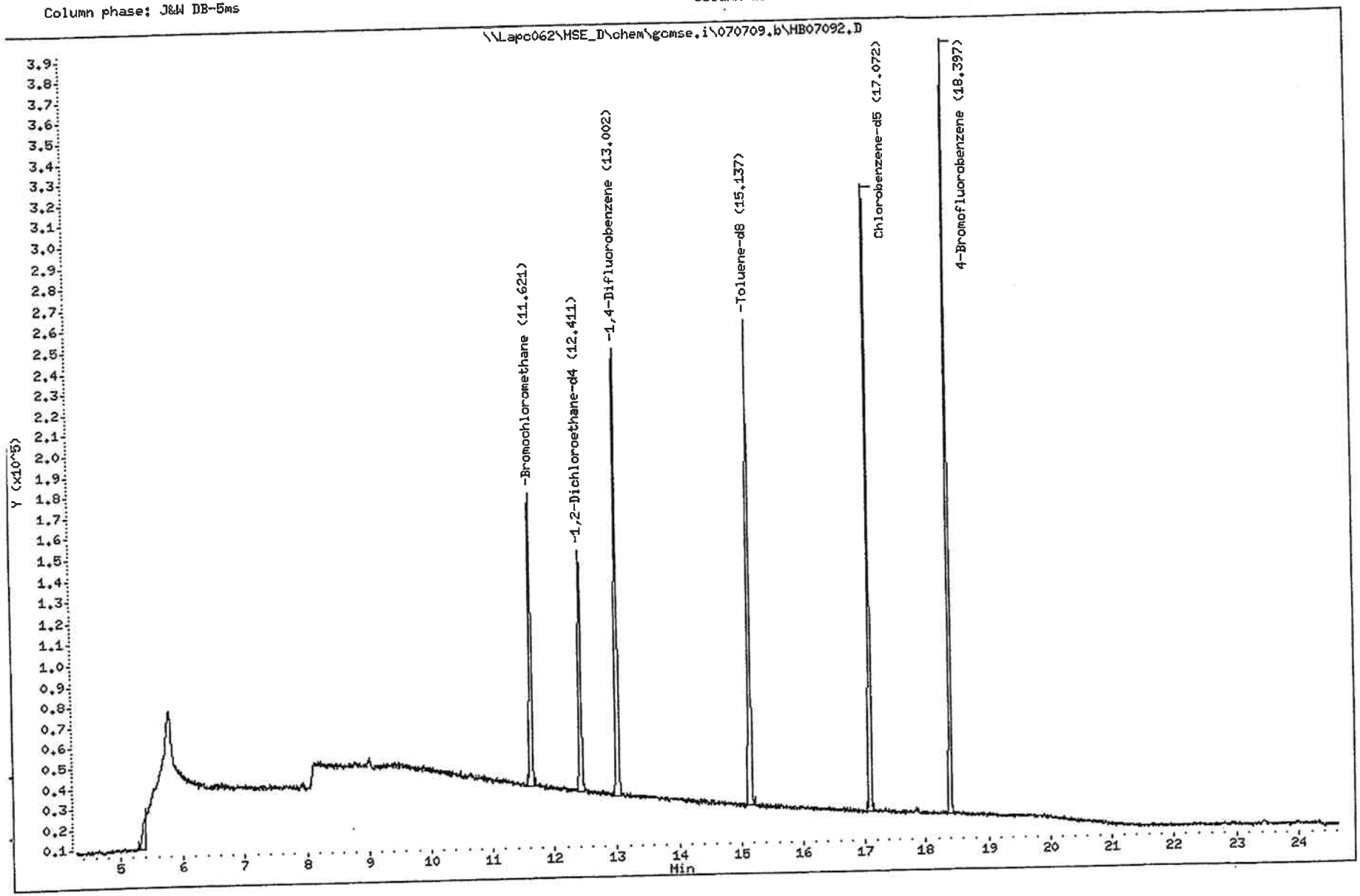
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 48 Bromochloromethane	49	11.620	11.621	(1.000)	79705	4.00000	
$ 54 1,2-Dichloroethane-d4	65	12.411	12.411	(0.955)	92718	4.04587	4.046
* 60 1,4-Difluorobenzene	114	13.002	13.002	(1.000)	223462	4.00000	
$ 72 Toluene-d8	98	15.130	15.136	(0.886)	201625	4.03173	4.032
* 82 Chlorobenzene-d5	117	17.071	17.071	(1.000)	195333	4.00000	
$ 93 4-Bromofluorobenzene	95	18.397	18.397	(1.078)	134375	3.74220	3.742

Data File: \\Lapc062\MSE_D\chem\gcmse.i\070709.b\MB07092.D
Date : 09-JUL-2007 13:56
Client ID: 2733
Sample Info: BLANK,2733,,METHOD BLANK,

Instrument: gcmse.i

Operator: LR
Column diameter: 0.32

Column phase: J&W DB-5ms



E7G230122

STL

Analytical Report

ANALYTICAL REPORT

PROJECT NO. 917010

MACTEC NC

Lot #: E7G230122

MARCELA HODGE

Aerotech PK

TESTAMERICA LABORATORIES, INC. (FKA STL)

Terry Swart
Project Manager

July 25, 2007

EXECUTIVE SUMMARY - Detection Highlights

E7G230122

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-NEW BUILDING 07/19/07 09:26 001				
trans-1,2-Dichloroethene	0.18 J	0.20	ppb(v/v)	EPA-2 TO-15
Tetrachloroethene	5.2	0.40	ppb(v/v)	EPA-2 TO-15
2-LAUNDRY AREA 07/19/07 09:35 002				
Tetrachloroethene	4.4	0.40	ppb(v/v)	EPA-2 TO-15
3-ORIGINAL BUILDING 07/19/07 09:42 003				
Tetrachloroethene	4.1	0.40	ppb(v/v)	EPA-2 TO-15

ANALYTICAL METHODS SUMMARY

E7G230122

PARAMETER	ANALYTICAL METHOD
Volatile Organics by TO15	EPA-2 TO-15

References:

EPA-2 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA-625/R-96/010b, January 1999.

SAMPLE SUMMARY

E7G230122

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
J3DRM	001	1-NEW BUILDING	07/19/07	09:26
J3DRP	002	2-LAUNDRY AREA	07/19/07	09:35
J3DRQ	003	3-ORIGINAL BUILDING	07/19/07	09:42
J3DRR	004	4-OUTDOOR	07/19/07	09:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Aerotech P & K - Arizona

Client Sample ID: 1-NEW BUILDING

GC/MS Volatiles

Lot-Sample #...: E7G230122-001	**Work Order #...:** J3DRM1AA	**Matrix.....:** AA	
Date Sampled...: 07/19/07	**Date Received..:** 07/20/07		
Prep Date.....: 07/24/07	**Analysis Date..:** 07/24/07		
Prep Batch #...: 7206562			
Dilution Factor: 1			
Analyst ID.....: 341569	**Instrument ID..:** MSE		
	Method.....: EPA-2 TO-15		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Vinyl chloride	ND	0.20	ppb(v/v)	0.10
trans-1,2-Dichloroethene	**0.18 J**	**0.20**	**ppb(v/v)**	**0.10**
cis-1,2-Dichloroethene	ND	0.20	ppb(v/v)	0.10
Trichloroethene	ND	0.40	ppb(v/v)	0.20
Tetrachloroethene	**5.2**	**0.40**	**ppb(v/v)**	**0.20**

NOTE(S):

J Estimated result. Result is less than RL.

Aerotech P & K - Arizona

Client Sample ID: 2-LAUNDRY AREA

GC/MS Volatiles

Lot-Sample #...: E7G230122-002 **Work Order #...:** J3DRP1AA **Matrix.....:** AA
Date Sampled...: 07/19/07 **Date Received..:** 07/20/07
Prep Date.....: 07/24/07 **Analysis Date..:** 07/24/07
Prep Batch #...: 7206562
Dilution Factor: 1
Analyst ID.....: 341569 **Instrument ID..:** MSE
Method.....: EPA-2 TO-15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Vinyl chloride	ND	0.20	ppb(v/v)	0.10
trans-1,2-Dichloroethene	ND	0.20	ppb(v/v)	0.10
cis-1,2-Dichloroethene	ND	0.20	ppb(v/v)	0.10
Trichloroethene	ND	0.40	ppb(v/v)	0.20
Tetrachloroethene	**4.4**	**0.40**	**ppb(v/v)**	**0.20**

Aerotech P & K - Arizona

Client Sample ID: 3-ORIGINAL BUILDING

GC/MS Volatiles

Lot-Sample #...: E7G230122-003	**Work Order #...:** J3DRQ1AA	**Matrix.....:** AA	
Date Sampled...: 07/19/07	**Date Received..:** 07/20/07		
Prep Date.....: 07/24/07	**Analysis Date..:** 07/24/07		
Prep Batch #...: 7206562			
Dilution Factor: 1			
Analyst ID.....: 341569	**Instrument ID..:** MSE		
	Method.....: EPA-2 TO-15		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Vinyl chloride	ND	0.20	ppb(v/v)	0.10
trans-1,2-Dichloroethene	ND	0.20	ppb(v/v)	0.10
cis-1,2-Dichloroethene	ND	0.20	ppb(v/v)	0.10
Trichloroethene	ND	0.40	ppb(v/v)	0.20
Tetrachloroethene	**4.1**	**0.40**	**ppb(v/v)**	**0.20**

Aerotech P & K - Arizona

Client Sample ID: 4-OUTDOOR

GC/MS Volatiles

Lot-Sample #...: E7G230122-004 **Work Order #...:** J3DRR1AA **Matrix.....:** AA
Date Sampled...: 07/19/07 **Date Received..:** 07/20/07
Prep Date.....: 07/25/07 **Analysis Date..:** 07/25/07
Prep Batch #...: 7206562
Dilution Factor: 1
Analyst ID.....: 341569 **Instrument ID..:** MSE
Method.....: EPA-2 TO-15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Vinyl chloride	ND	0.20	ppb(v/v)	0.10
trans-1,2-Dichloroethene	ND	0.20	ppb(v/v)	0.10
cis-1,2-Dichloroethene	ND	0.20	ppb(v/v)	0.10
Trichloroethene	ND	0.40	ppb(v/v)	0.20
Tetrachloroethene	ND	0.40	ppb(v/v)	0.20

STL

QA/QC

QC DATA ASSOCIATION SUMMARY

E7G230122

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AA	EPA-2 TO-15		7206562	
002	AA	EPA-2 TO-15		7206562	
003	AA	EPA-2 TO-15		7206562	
004	AA	EPA-2 TO-15		7206562	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E7G230122 **Work Order #...:** J3J5K1AA **Matrix.....:** AIR
MB Lot-Sample #: M7G250000-562
Prep Date.....: 07/24/07 **Instrument ID..:** MSE
Analysis Date..: 07/24/07 **Prep Batch #...:** 7206562
Dilution Factor: 1
Analyst ID.....: 341569

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Vinyl chloride	ND	0.20	ppb(v/v)	EPA-2 TO-15
trans-1,2-Dichloroethene	ND	0.20	ppb(v/v)	EPA-2 TO-15
cis-1,2-Dichloroethene	ND	0.20	ppb(v/v)	EPA-2 TO-15
Trichloroethene	ND	0.40	ppb(v/v)	EPA-2 TO-15
Tetrachloroethene	ND	0.40	ppb(v/v)	EPA-2 TO-15

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E7G230122 Work Order #...: J3J5K1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M7G250000-562 J3J5K1AD-LCSD
Prep Date.....: 07/24/07 Analysis Date..: 07/24/07
Prep Batch #...: 7206562
Dilution Factor: 1 Instrument ID..: MSE
Analyst ID.....: 341569

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**127**	**(70 - 130)**			**EPA-2 TO-15**
	111	**(70 - 130)**	**14**	**(0-25)**	**EPA-2 TO-15**
Trichloroethene	**128**	**(65 - 135)**			**EPA-2 TO-15**
	107	**(65 - 135)**	**18**	**(0-25)**	**EPA-2 TO-15**
Tetrachloroethene	**118**	**(70 - 130)**			**EPA-2 TO-15**
	101	**(70 - 130)**	**16**	**(0-25)**	**EPA-2 TO-15**
Methylene chloride	**121**	**(65 - 125)**			**EPA-2 TO-15**
	105	**(65 - 125)**	**14**	**(0-25)**	**EPA-2 TO-15**
1,1-Dichloroethane	**118**	**(70 - 130)**			**EPA-2 TO-15**
	103	**(70 - 130)**	**14**	**(0-25)**	**EPA-2 TO-15**
Chloroform	**117**	**(70 - 130)**			**EPA-2 TO-15**
	103	**(70 - 130)**	**13**	**(0-25)**	**EPA-2 TO-15**
1,1,1-Trichloroethane	**115**	**(70 - 130)**			**EPA-2 TO-15**
	100	**(70 - 130)**	**13**	**(0-25)**	**EPA-2 TO-15**
Benzene	**129**	**(70 - 130)**			**EPA-2 TO-15**
	100 p	**(70 - 130)**	**26**	**(0-25)**	**EPA-2 TO-15**
1,2-Dichloropropane	**118**	**(70 - 130)**			**EPA-2 TO-15**
	92	**(70 - 130)**	**24**	**(0-25)**	**EPA-2 TO-15**
Toluene	**111**	**(65 - 135)**			**EPA-2 TO-15**
	87	**(65 - 135)**	**25**	**(0-25)**	**EPA-2 TO-15**
Chlorobenzene	**114**	**(70 - 130)**			**EPA-2 TO-15**
	91	**(70 - 130)**	**22**	**(0-25)**	**EPA-2 TO-15**
1,1,2,2-Tetrachloroethane	**104**	**(55 - 135)**			**EPA-2 TO-15**
	88	**(55 - 135)**	**17**	**(0-25)**	**EPA-2 TO-15**
1,2,4-Trimethylbenzene	**109**	**(70 - 130)**			**EPA-2 TO-15**
	95	**(70 - 130)**	**14**	**(0-25)**	**EPA-2 TO-15**
1,2-Dichlorobenzene	**116**	**(70 - 130)**			**EPA-2 TO-15**
	100	**(70 - 130)**	**14**	**(0-25)**	**EPA-2 TO-15**
m-Xylene & p-Xylene	**103**	**(70 - 130)**			**EPA-2 TO-15**
	87	**(70 - 130)**	**17**	**(0-25)**	**EPA-2 TO-15**
o-Xylene	**100**	**(70 - 130)**			**EPA-2 TO-15**
	85	**(70 - 130)**	**16**	**(0-25)**	**EPA-2 TO-15**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E7G230122 **Work Order #...:** J3J5K1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M7G250000-562 J3J5K1AD-LCSD
Prep Date.....: 07/24/07 **Analysis Date..:** 07/24/07
Prep Batch #...: 7206562
Dilution Factor: 1 **Instrument ID..:** MSE
Analyst ID.....: 341569

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	12.7	ppb(v/v)	127		EPA-2 TO-15
	10.0	11.1	ppb(v/v)	111	14	EPA-2 TO-15
Trichloroethene	10.0	12.8	ppb(v/v)	128		EPA-2 TO-15
	10.0	10.7	ppb(v/v)	107	18	EPA-2 TO-15
Tetrachloroethene	10.0	11.8	ppb(v/v)	118		EPA-2 TO-15
	10.0	10.1	ppb(v/v)	101	16	EPA-2 TO-15
Methylene chloride	10.0	12.1	ppb(v/v)	121		EPA-2 TO-15
	10.0	10.5	ppb(v/v)	105	14	EPA-2 TO-15
1,1-Dichloroethane	10.0	11.8	ppb(v/v)	118		EPA-2 TO-15
	10.0	10.3	ppb(v/v)	103	14	EPA-2 TO-15
Chloroform	10.0	11.7	ppb(v/v)	117		EPA-2 TO-15
	10.0	10.3	ppb(v/v)	103	13	EPA-2 TO-15
1,1,1-Trichloroethane	10.0	11.5	ppb(v/v)	115		EPA-2 TO-15
	10.0	10.0	ppb(v/v)	100	13	EPA-2 TO-15
Benzene	10.0	12.9	ppb(v/v)	129		EPA-2 TO-15
	10.0	9.96 p	ppb(v/v)	100	26	EPA-2 TO-15
1,2-Dichloropropane	10.0	11.8	ppb(v/v)	118		EPA-2 TO-15
	10.0	9.20	ppb(v/v)	92	24	EPA-2 TO-15
Toluene	10.0	11.1	ppb(v/v)	111		EPA-2 TO-15
	10.0	8.66	ppb(v/v)	87	25	EPA-2 TO-15
Chlorobenzene	10.0	11.4	ppb(v/v)	114		EPA-2 TO-15
	10.0	9.12	ppb(v/v)	91	22	EPA-2 TO-15
1,1,2,2-Tetrachloroethane	10.0	10.4	ppb(v/v)	104		EPA-2 TO-15
	10.0	8.78	ppb(v/v)	88	17	EPA-2 TO-15
1,2,4-Trimethylbenzene	10.0	10.9	ppb(v/v)	109		EPA-2 TO-15
	10.0	9.50	ppb(v/v)	95	14	EPA-2 TO-15
1,2-Dichlorobenzene	10.0	11.6	ppb(v/v)	116		EPA-2 TO-15
	10.0	10.0	ppb(v/v)	100	14	EPA-2 TO-15
m-Xylene & p-Xylene	20.0	20.5	ppb(v/v)	103		EPA-2 TO-15
	20.0	17.3	ppb(v/v)	87	17	EPA-2 TO-15
o-Xylene	10.0	10.0	ppb(v/v)	100		EPA-2 TO-15
	10.0	8.54	ppb(v/v)	85	16	EPA-2 TO-15

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.