TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-41760-1

Job Description: Harley Davidson

For:
Groundwater Sciences Corporation
2601 Market Place Street, Suite 310
Harrisburg, PA 17110-9307

Attention: Allan Miller

Approved for release.
Carrie L Gamber
Senior Project Manager
3/9/2015 8:49 AM

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03/09/2015

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Groundwater Sciences Corporation

Project: Harley Davidson

Report Number: 180-41760-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 03/05/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.1 C.

VOLATILES

The laboratory control sample (LCS) for batch 134916 recovered outside control limits for the following analytes:
Trans-1,3-dichloropropene. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

trans-1,3-Dichloropropene failed the recovery criteria low for the MSD of sample HD-MW-168-0/1-0 (180-41760-1) in batch 180-134916.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Client Sample ID: HD-MW-168-0/1-0 — Lab Sample ID: 180-41760-1

No Detections.

Client Sample ID: HD-MW-170-0/1-0 — Lab Sample ID: 180-41760-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.62	J	1.0	0.17	ug/L	1		8260C	Total/NA
Bromodichloromethane	0.17	J	1.0	0.13	ug/L	1		8260C	Total/NA

Client Sample ID: HD-QC1-0/1-2 — Lab Sample ID: 180-41760-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-168-0/1-0
Date Collected: 03/04/15 09:23
Date Received: 03/05/15 12:15

Lab Sample ID: 180-41760-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/06/15 13:54	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/06/15 13:54	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/06/15 13:54	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 13:54	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/06/15 13:54	1
Acetone	5.0	U	5.0	2.5	ug/L			03/06/15 13:54	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/06/15 13:54	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/06/15 13:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/06/15 13:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/06/15 13:54	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/06/15 13:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/06/15 13:54	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/06/15 13:54	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/06/15 13:54	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/06/15 13:54	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/06/15 13:54	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/06/15 13:54	1
Benzene	1.0	U	1.0	0.11	ug/L			03/06/15 13:54	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 13:54	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/06/15 13:54	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/06/15 13:54	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/06/15 13:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/06/15 13:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/06/15 13:54	1
Toluene	1.0	U	1.0	0.15	ug/L			03/06/15 13:54	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.15	ug/L			03/06/15 13:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 13:54	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/06/15 13:54	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/06/15 13:54	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/06/15 13:54	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/06/15 13:54	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/06/15 13:54	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/06/15 13:54	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/06/15 13:54	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/06/15 13:54	1
Styrene	1.0	U	1.0	0.097	ug/L			03/06/15 13:54	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/06/15 13:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 13:54	1
Acrylonitrile	20	U	20	0.55	ug/L			03/06/15 13:54	1
1,4-Dioxane	200	U	200	34	ug/L			03/06/15 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 135*		*03/06/15 13:54*	*1*
Toluene-d8 (Surr)	*102*		*71 - 118*		*03/06/15 13:54*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 118*		*03/06/15 13:54*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 128*		*03/06/15 13:54*	*1*

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-170-0/1-0
Date Collected: 03/04/15 09:50
Date Received: 03/05/15 12:15

Lab Sample ID: 180-41760-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/06/15 16:18	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/06/15 16:18	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/06/15 16:18	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 16:18	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/06/15 16:18	1
Acetone	5.0	U	5.0	2.5	ug/L			03/06/15 16:18	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/06/15 16:18	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/06/15 16:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/06/15 16:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/06/15 16:18	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/06/15 16:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/06/15 16:18	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/06/15 16:18	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/06/15 16:18	1
Chloroform	**0.62**	**J**	1.0	0.17	ug/L			03/06/15 16:18	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/06/15 16:18	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/06/15 16:18	1
Benzene	1.0	U	1.0	0.11	ug/L			03/06/15 16:18	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 16:18	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/06/15 16:18	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/06/15 16:18	1
Bromodichloromethane	**0.17**	**J**	1.0	0.13	ug/L			03/06/15 16:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/06/15 16:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/06/15 16:18	1
Toluene	1.0	U	1.0	0.15	ug/L			03/06/15 16:18	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.15	ug/L			03/06/15 16:18	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 16:18	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/06/15 16:18	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/06/15 16:18	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/06/15 16:18	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/06/15 16:18	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/06/15 16:18	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/06/15 16:18	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/06/15 16:18	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/06/15 16:18	1
Styrene	1.0	U	1.0	0.097	ug/L			03/06/15 16:18	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/06/15 16:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 16:18	1
Acrylonitrile	20	U	20	0.55	ug/L			03/06/15 16:18	1
1,4-Dioxane	200	U	200	34	ug/L			03/06/15 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*64 - 135*		*03/06/15 16:18*	*1*
Toluene-d8 (Surr)	*101*		*71 - 118*		*03/06/15 16:18*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 118*		*03/06/15 16:18*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 128*		*03/06/15 16:18*	*1*

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-QC1-0/1-2
Date Collected: 03/04/15 12:00
Date Received: 03/05/15 12:15

Lab Sample ID: 180-41760-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/06/15 14:18	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/06/15 14:18	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/06/15 14:18	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 14:18	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/06/15 14:18	1
Acetone	5.0	U	5.0	2.5	ug/L			03/06/15 14:18	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/06/15 14:18	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/06/15 14:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/06/15 14:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/06/15 14:18	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/06/15 14:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/06/15 14:18	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/06/15 14:18	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/06/15 14:18	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/06/15 14:18	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/06/15 14:18	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/06/15 14:18	1
Benzene	1.0	U	1.0	0.11	ug/L			03/06/15 14:18	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 14:18	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/06/15 14:18	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/06/15 14:18	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/06/15 14:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/06/15 14:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/06/15 14:18	1
Toluene	1.0	U	1.0	0.15	ug/L			03/06/15 14:18	1
trans-1,3-Dichloropropene	1.0	U *	1.0	0.15	ug/L			03/06/15 14:18	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 14:18	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/06/15 14:18	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/06/15 14:18	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/06/15 14:18	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/06/15 14:18	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/06/15 14:18	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/06/15 14:18	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/06/15 14:18	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/06/15 14:18	1
Styrene	1.0	U	1.0	0.097	ug/L			03/06/15 14:18	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/06/15 14:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 14:18	1
Acrylonitrile	20	U	20	0.55	ug/L			03/06/15 14:18	1
1,4-Dioxane	200	U	200	34	ug/L			03/06/15 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 135*		*03/06/15 14:18*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*03/06/15 14:18*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*		*03/06/15 14:18*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 128*		*03/06/15 14:18*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.28	ug/L	8260C
1,1,1-Trichloroethane	1.0	0.29	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.20	ug/L	8260C
1,1,2-Trichloroethane	1.0	0.20	ug/L	8260C
1,1-Dichloroethane	1.0	0.12	ug/L	8260C
1,1-Dichloroethene	1.0	0.30	ug/L	8260C
1,2-Dibromoethane (EDB)	1.0	0.18	ug/L	8260C
1,2-Dichloroethane	1.0	0.21	ug/L	8260C
1,2-Dichloropropane	1.0	0.095	ug/L	8260C
1,4-Dioxane	200	34	ug/L	8260C
2-Butanone (MEK)	5.0	0.55	ug/L	8260C
2-Hexanone	5.0	0.16	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	5.0	0.53	ug/L	8260C
Acetone	5.0	2.5	ug/L	8260C
Acrylonitrile	20	0.55	ug/L	8260C
Benzene	1.0	0.11	ug/L	8260C
Bromochloromethane	1.0	0.18	ug/L	8260C
Bromodichloromethane	1.0	0.13	ug/L	8260C
Bromoform	1.0	0.19	ug/L	8260C
Bromomethane	1.0	0.31	ug/L	8260C
Carbon disulfide	1.0	0.21	ug/L	8260C
Carbon tetrachloride	1.0	0.14	ug/L	8260C
Chlorobenzene	1.0	0.14	ug/L	8260C
Chloroethane	1.0	0.21	ug/L	8260C
Chloroform	1.0	0.17	ug/L	8260C
Chloromethane	1.0	0.28	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.24	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.19	ug/L	8260C
Dibromochloromethane	1.0	0.14	ug/L	8260C
Ethylbenzene	1.0	0.23	ug/L	8260C
Methyl tert-butyl ether	1.0	0.18	ug/L	8260C
Methylene Chloride	1.0	0.13	ug/L	8260C
Styrene	1.0	0.097	ug/L	8260C
Tetrachloroethene	1.0	0.15	ug/L	8260C
Toluene	1.0	0.15	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.17	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.15	ug/L	8260C
Trichloroethene	1.0	0.14	ug/L	8260C
Vinyl chloride	1.0	0.23	ug/L	8260C
Xylenes, Total	3.0	0.49	ug/L	8260C

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(64-135)	(71-118)	(70-118)	(70-128)
180-41760-1	HD-MW-168-0/1-0	96	102	100	98
180-41760-1 MS	HD-MW-168-0/1-0	96	103	96	100
180-41760-1 MSD	HD-MW-168-0/1-0	91	100	92	95
180-41760-2	HD-MW-170-0/1-0	95	101	99	97
180-41760-3	HD-QC1-0/1-2	97	105	103	103
LCS 180-134916/9	Lab Control Sample	95	98	92	94
MB 180-134916/6	Method Blank	99	104	101	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-134916/6
Matrix: Water
Analysis Batch: 134916

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			03/06/15 13:13	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/06/15 13:13	1
Bromomethane	1.0	U	1.0	0.31	ug/L			03/06/15 13:13	1
Chloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 13:13	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			03/06/15 13:13	1
Acetone	5.0	U	5.0	2.5	ug/L			03/06/15 13:13	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			03/06/15 13:13	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			03/06/15 13:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			03/06/15 13:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			03/06/15 13:13	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			03/06/15 13:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/06/15 13:13	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			03/06/15 13:13	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			03/06/15 13:13	1
Chloroform	1.0	U	1.0	0.17	ug/L			03/06/15 13:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/06/15 13:13	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			03/06/15 13:13	1
Benzene	1.0	U	1.0	0.11	ug/L			03/06/15 13:13	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/06/15 13:13	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/06/15 13:13	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			03/06/15 13:13	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			03/06/15 13:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			03/06/15 13:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			03/06/15 13:13	1
Toluene	1.0	U	1.0	0.15	ug/L			03/06/15 13:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			03/06/15 13:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 13:13	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/06/15 13:13	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			03/06/15 13:13	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			03/06/15 13:13	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			03/06/15 13:13	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			03/06/15 13:13	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			03/06/15 13:13	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			03/06/15 13:13	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			03/06/15 13:13	1
Styrene	1.0	U	1.0	0.097	ug/L			03/06/15 13:13	1
Bromoform	1.0	U	1.0	0.19	ug/L			03/06/15 13:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			03/06/15 13:13	1
Acrylonitrile	20	U	20	0.55	ug/L			03/06/15 13:13	1
1,4-Dioxane	200	U	200	34	ug/L			03/06/15 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 135*		*03/06/15 13:13*	*1*
Toluene-d8 (Surr)	*104*		*71 - 118*		*03/06/15 13:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 118*		*03/06/15 13:13*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 128*		*03/06/15 13:13*	*1*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-134916/9
Matrix: Water
Analysis Batch: 134916

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	9.70		ug/L		97	50 - 139
Vinyl chloride	10.0	10.1		ug/L		101	53 - 138
Bromomethane	10.0	12.6		ug/L		126	33 - 150
Chloroethane	10.0	12.5		ug/L		125	36 - 142
1,1-Dichloroethene	10.0	9.63		ug/L		96	65 - 136
Acetone	20.0	18.7		ug/L		94	22 - 150
Carbon disulfide	10.0	8.40		ug/L		84	54 - 132
Methylene Chloride	10.0	10.3		ug/L		103	63 - 129
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	73 - 126
Methyl tert-butyl ether	10.0	7.22		ug/L		72	64 - 123
1,1-Dichloroethane	10.0	9.74		ug/L		97	73 - 126
cis-1,2-Dichloroethene	10.0	9.88		ug/L		99	70 - 120
Bromochloromethane	10.0	9.90		ug/L		99	70 - 127
2-Butanone (MEK)	20.0	15.9		ug/L		80	39 - 138
Chloroform	10.0	9.78		ug/L		98	72 - 127
1,1,1-Trichloroethane	10.0	8.21		ug/L		82	63 - 133
Carbon tetrachloride	10.0	9.04		ug/L		90	55 - 150
Benzene	10.0	9.85		ug/L		98	80 - 120
1,2-Dichloroethane	10.0	9.90		ug/L		99	68 - 132
Trichloroethene	10.0	10.2		ug/L		102	73 - 120
1,2-Dichloropropane	10.0	9.03		ug/L		90	76 - 124
Bromodichloromethane	10.0	9.34		ug/L		93	66 - 130
cis-1,3-Dichloropropene	10.0	6.59		ug/L		66	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	16.3		ug/L		82	45 - 145
Toluene	10.0	11.1		ug/L		111	80 - 123
trans-1,3-Dichloropropene	10.0	5.81	*	ug/L		58	65 - 125
1,1,2-Trichloroethane	10.0	9.94		ug/L		99	77 - 127
Tetrachloroethene	10.0	11.1		ug/L		111	70 - 135
2-Hexanone	20.0	14.6		ug/L		73	25 - 132
Dibromochloromethane	10.0	9.97		ug/L		100	60 - 140
1,2-Dibromoethane (EDB)	10.0	9.16		ug/L		92	74 - 123
Chlorobenzene	10.0	10.7		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.28		ug/L		93	63 - 140
Ethylbenzene	10.0	10.5		ug/L		105	72 - 126
Xylenes, Total	20.0	21.4		ug/L		107	76 - 128
Styrene	10.0	10.4		ug/L		104	71 - 127
Bromoform	10.0	9.88		ug/L		99	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	62 - 125
1,4-Dioxane	200	173	J	ug/L		86	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*64 - 135*
Toluene-d8 (Surr)	*98*		*71 - 118*
4-Bromofluorobenzene (Surr)	*92*		*70 - 118*
Dibromofluoromethane (Surr)	*94*		*70 - 128*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-41760-1 MS
Matrix: Water
Analysis Batch: 134916

Client Sample ID: HD-MW-168-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	1.0	U	10.0	10.6		ug/L		106	50 - 139
Vinyl chloride	1.0	U	10.0	10.9		ug/L		109	53 - 138
Bromomethane	1.0	U	10.0	12.9		ug/L		129	33 - 150
Chloroethane	1.0	U	10.0	13.2		ug/L		132	36 - 142
1,1-Dichloroethene	1.0	U	10.0	11.0		ug/L		110	65 - 136
Acetone	5.0	U	20.0	19.8		ug/L		99	22 - 150
Carbon disulfide	1.0	U	10.0	9.50		ug/L		95	54 - 132
Methylene Chloride	1.0	U	10.0	10.8		ug/L		108	63 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	11.1		ug/L		111	73 - 126
Methyl tert-butyl ether	1.0	U	10.0	7.97		ug/L		80	64 - 123
1,1-Dichloroethane	1.0	U	10.0	10.4		ug/L		104	73 - 126
cis-1,2-Dichloroethene	1.0	U	10.0	10.5		ug/L		105	70 - 120
Bromochloromethane	1.0	U	10.0	11.0		ug/L		110	70 - 127
2-Butanone (MEK)	5.0	U	20.0	19.3		ug/L		96	39 - 138
Chloroform	1.0	U	10.0	10.8		ug/L		108	72 - 127
1,1,1-Trichloroethane	1.0	U	10.0	8.94		ug/L		89	63 - 133
Carbon tetrachloride	1.0	U	10.0	10.1		ug/L		101	55 - 150
Benzene	1.0	U	10.0	10.6		ug/L		106	80 - 120
1,2-Dichloroethane	1.0	U	10.0	10.5		ug/L		105	68 - 132
Trichloroethene	1.0	U	10.0	11.1		ug/L		111	73 - 120
1,2-Dichloropropane	1.0	U	10.0	9.92		ug/L		99	76 - 124
Bromodichloromethane	1.0	U	10.0	10.1		ug/L		101	66 - 130
cis-1,3-Dichloropropene	1.0	U	10.0	7.45		ug/L		75	66 - 120
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	17.0		ug/L		85	45 - 145
Toluene	1.0	U	10.0	11.4		ug/L		114	80 - 123
trans-1,3-Dichloropropene	1.0	U *	10.0	6.46		ug/L		65	65 - 125
1,1,2-Trichloroethane	1.0	U	10.0	10.5		ug/L		105	77 - 127
Tetrachloroethene	1.0	U	10.0	11.7		ug/L		117	70 - 135
2-Hexanone	5.0	U	20.0	15.2		ug/L		76	25 - 132
Dibromochloromethane	1.0	U	10.0	10.1		ug/L		101	60 - 140
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.61		ug/L		96	74 - 123
Chlorobenzene	1.0	U	10.0	11.0		ug/L		110	80 - 120
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.58		ug/L		96	63 - 140
Ethylbenzene	1.0	U	10.0	11.1		ug/L		111	72 - 126
Xylenes, Total	3.0	U	20.0	22.2		ug/L		111	76 - 128
Styrene	1.0	U	10.0	10.9		ug/L		109	71 - 127
Bromoform	1.0	U	10.0	9.62		ug/L		96	46 - 150
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.7		ug/L		107	62 - 125
1,4-Dioxane	200	U	200	198	J	ug/L		99	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 135*
Toluene-d8 (Surr)	*103*		*71 - 118*
4-Bromofluorobenzene (Surr)	*96*		*70 - 118*
Dibromofluoromethane (Surr)	*100*		*70 - 128*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-41760-1 MSD
Matrix: Water
Analysis Batch: 134916

Client Sample ID: HD-MW-168-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	1.0	U	10.0	10.2		ug/L		102	50 - 139	4	35
Vinyl chloride	1.0	U	10.0	9.80		ug/L		98	53 - 138	11	35
Bromomethane	1.0	U	10.0	12.3		ug/L		123	33 - 150	4	35
Chloroethane	1.0	U	10.0	12.2		ug/L		122	36 - 142	8	35
1,1-Dichloroethene	1.0	U	10.0	9.76		ug/L		98	65 - 136	12	35
Acetone	5.0	U	20.0	20.9		ug/L		104	22 - 150	5	35
Carbon disulfide	1.0	U	10.0	8.87		ug/L		89	54 - 132	7	35
Methylene Chloride	1.0	U	10.0	10.5		ug/L		105	63 - 129	3	35
trans-1,2-Dichloroethene	1.0	U	10.0	10.2		ug/L		102	73 - 126	8	35
Methyl tert-butyl ether	1.0	U	10.0	7.83		ug/L		78	64 - 123	2	35
1,1-Dichloroethane	1.0	U	10.0	9.88		ug/L		99	73 - 126	6	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.74		ug/L		97	70 - 120	8	35
Bromochloromethane	1.0	U	10.0	10.0		ug/L		100	70 - 127	9	35
2-Butanone (MEK)	5.0	U	20.0	18.1		ug/L		90	39 - 138	6	35
Chloroform	1.0	U	10.0	10.1		ug/L		101	72 - 127	6	35
1,1,1-Trichloroethane	1.0	U	10.0	8.38		ug/L		84	63 - 133	6	35
Carbon tetrachloride	1.0	U	10.0	9.51		ug/L		95	55 - 150	6	35
Benzene	1.0	U	10.0	9.99		ug/L		100	80 - 120	6	32
1,2-Dichloroethane	1.0	U	10.0	10.1		ug/L		101	68 - 132	4	32
Trichloroethene	1.0	U	10.0	10.3		ug/L		103	73 - 120	7	35
1,2-Dichloropropane	1.0	U	10.0	9.20		ug/L		92	76 - 124	8	34
Bromodichloromethane	1.0	U	10.0	9.45		ug/L		94	66 - 130	7	35
cis-1,3-Dichloropropene	1.0	U	10.0	7.18		ug/L		72	66 - 120	4	35
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	16.4		ug/L		82	45 - 145	4	35
Toluene	1.0	U	10.0	10.9		ug/L		109	80 - 123	5	35
trans-1,3-Dichloropropene	1.0	U *	10.0	6.38	F1	ug/L		64	65 - 125	1	35
1,1,2-Trichloroethane	1.0	U	10.0	10.2		ug/L		102	77 - 127	3	35
Tetrachloroethene	1.0	U	10.0	11.4		ug/L		114	70 - 135	3	35
2-Hexanone	5.0	U	20.0	15.1		ug/L		76	25 - 132	0	35
Dibromochloromethane	1.0	U	10.0	10.4		ug/L		104	60 - 140	3	35
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.51		ug/L		95	74 - 123	1	35
Chlorobenzene	1.0	U	10.0	10.7		ug/L		107	80 - 120	3	29
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.76		ug/L		98	63 - 140	2	34
Ethylbenzene	1.0	U	10.0	10.7		ug/L		107	72 - 126	4	33
Xylenes, Total	3.0	U	20.0	21.3		ug/L		107	76 - 128	4	32
Styrene	1.0	U	10.0	10.2		ug/L		102	71 - 127	6	34
Bromoform	1.0	U	10.0	9.24		ug/L		92	46 - 150	4	35
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.0		ug/L		100	62 - 125	6	35
1,4-Dioxane	200	U	200	166	J	ug/L		83	10 - 160	18	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*64 - 135*
Toluene-d8 (Surr)	*100*		*71 - 118*
4-Bromofluorobenzene (Surr)	*92*		*70 - 118*
Dibromofluoromethane (Surr)	*95*		*70 - 128*

GC/MS VOA

Analysis Batch: 134916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-41760-1	HD-MW-168-0/1-0	Total/NA	Water	8260C	
180-41760-1 MS	HD-MW-168-0/1-0	Total/NA	Water	8260C	
180-41760-1 MSD	HD-MW-168-0/1-0	Total/NA	Water	8260C	
180-41760-2	HD-MW-170-0/1-0	Total/NA	Water	8260C	
180-41760-3	HD-QC1-0/1-2	Total/NA	Water	8260C	
LCS 180-134916/9	Lab Control Sample	Total/NA	Water	8260C	
MB 180-134916/6	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Client Sample ID: HD-MW-168-0/1-0

Lab Sample ID: 180-41760-1

Date Collected: 03/04/15 09:23

Matrix: Water

Date Received: 03/05/15 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	134916	03/06/15 13:54	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-170-0/1-0

Lab Sample ID: 180-41760-2

Date Collected: 03/04/15 09:50

Matrix: Water

Date Received: 03/05/15 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	134916	03/06/15 16:18	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-QC1-0/1-2

Lab Sample ID: 180-41760-3

Date Collected: 03/04/15 12:00

Matrix: Water

Date Received: 03/05/15 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	134916	03/06/15 14:18	DLF	TAL PIT
	Instrument ID: CHHP5									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

DLF = Donald Ferguson

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-15

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-41760-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-41760-1	HD-MW-168-0/1-0	Water	03/04/15 09:23	03/05/15 12:15
180-41760-2	HD-MW-170-0/1-0	Water	03/04/15 09:50	03/05/15 12:15
180-41760-3	HD-QC1-0/1-2	Water	03/04/15 12:00	03/05/15 12:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 134613

Lab Sample ID: IC 180-134613/8 Client Sample ID:

Date Analyzed: 03/03/15 14:28 Lab File ID: 50303008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.31	Peak Tail	fergusond	03/04/15 09:28
1,4-Dioxane	8.07	Peak Tail	fergusond	03/04/15 09:20

Lab Sample ID: ICIS 180-134613/9 Client Sample ID:

Date Analyzed: 03/03/15 14:52 Lab File ID: 50303009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.32	Peak Tail	fergusond	03/04/15 09:28
1,4-Dioxane	8.06	Peak Tail	fergusond	03/04/15 09:25

Lab Sample ID: IC 180-134613/10 Client Sample ID:

Date Analyzed: 03/03/15 15:16 Lab File ID: 50303010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.32	Peak Tail	fergusond	03/04/15 09:31

Lab Sample ID: IC 180-134613/11 Client Sample ID:

Date Analyzed: 03/03/15 15:40 Lab File ID: 50303011.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.32	Peak Tail	fergusond	03/04/15 09:33
tert-Butyl alcohol	4.45	Peak Tail	fergusond	03/04/15 09:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 134613

Lab Sample ID: IC 180-134613/12 Client Sample ID:

Date Analyzed: 03/03/15 16:04 Lab File ID: 50303012.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	4.45	Peak Tail	fergusond	03/04/15 09:37

Lab Sample ID: IC 180-134613/13 Client Sample ID:

Date Analyzed: 03/03/15 16:28 Lab File ID: 50303013.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol	4.45	Peak Tail	fergusond	03/04/15 09:39

Lab Sample ID: IC 180-134613/18 Client Sample ID:

Date Analyzed: 03/03/15 18:29 Lab File ID: 50303018.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.52	Peak Tail	fergusond	03/04/15 09:45
Cyclohexane	6.59	Split Peak	fergusond	03/04/15 09:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 134916

Lab Sample ID: 180-41760-1 MS Client Sample ID: HD-MW-168-0/1-0 MS

Date Analyzed: 03/06/15 15:06 Lab File ID: 50306010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.07	Peak Tail	fergusond	03/06/15 17:06

Lab Sample ID: 180-41760-1 MSD Client Sample ID: HD-MW-168-0/1-0 MSD

Date Analyzed: 03/06/15 15:30 Lab File ID: 50306011.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/06/15 17:08

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00029	03/13/15	02/13/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00090	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00090	07/31/19		Restek, Lot A0104742		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00031	03/13/15	02/13/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00062	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00062	01/31/19		Restek, Lot A0100424		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260VOA2ND_00105	03/12/15	03/05/15	Methanol, Lot 85233	8 mL	VOA8260GAS2ND_00086	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00103	1 mL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS2ND_00086	11/30/15		Restek, Lot A099261		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOA2ND_00103	03/24/15	02/24/15	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00027	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Ethylbenzene	200 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylene Chloride	200 ug/mL
							Styrene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
							Xylenes, Total	400 ug/mL
..VOA8260MEGA2_00027	02/28/16		Restek, Lot A093733		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
VOA8260VOAPRI_00102	03/04/15	02/25/15	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00086	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00101	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00086	09/30/16		Restek, Lot A0105755		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOAPRI_00101	03/24/15	02/24/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00036	0.2 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VOA8260MEGA1_00027	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Cyclohexane	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Dibromomethane	200 ug/mL
							Ethyl ether	200 ug/mL
							Ethyl methacrylate	200 ug/mL
							Ethylbenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00036	02/28/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00027	02/28/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00104	03/12/15	03/05/15	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00088	0.08 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00101	1 mL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS1ST_00088	09/30/16		Restek, Lot A0108198		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00101	03/24/15	02/24/15	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00027	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Ethylbenzene	200 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylene Chloride	200 ug/mL
							Styrene	200 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	200 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
							Xylenes, Total	400 ug/mL
..VOA8260MEGA1_00027	02/28/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
VOAACRPRI_00003	03/31/15	03/03/15	Methanol, Lot 85233	100 mL	VOAACRORES_00064	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00064	03/31/15		Restek, Lot A0107338		(Purchased Reagent)		Acrolein	20000 ug/mL
VOAVAPRI_00003	03/12/15	02/12/15	Methanol, Lot 85233	20 mL	VOA8260VARES_00047	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00047	04/30/15		Restek, Lot A0106957		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
voaWEEpri Res_00003	03/30/15	03/02/15	Methanol, Lot 85233	25 mL	VOARESEE1ST_00008	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichloro-1-(triflouromethyl)-benzene	25 ug/mL
							2,5-Dichlorobenzotrifluoride	25 ug/mL
							2-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorotoluene	25 ug/mL
							4-Chlorobenzotrifluoride	25 ug/mL
.VOARESEE1ST_00008	02/28/15	Restek, Lot A097285			(Purchased Reagent)		1,2-dichloro-4-(trifluoromethyl)benzene	5000 ug/mL
							2,3,6-Trichlorotoluene	5000 ug/mL
							2,4,5-Trichlorotoluene	5000 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	5000 ug/mL
							2,5-Dichlorobenzotrifluoride	5000 ug/mL
							2-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorotoluene	5000 ug/mL
							4-Chlorobenzotrifluoride	5000 ug/mL
voaWket2 Rest_00001	03/08/15	02/06/15	Methanol, Lot 85233	50 mL	VOA8260KET2ND_00040	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET2ND_00040	01/31/18	Restek, Lot A0108157			(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWKetpri Re_00003	03/26/15	02/24/15	Methanol, Lot 85233	50 mL	VOA8260KET1ST_00037	0.125 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00037	02/28/16	Restek, Lot A093365			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL

Reagent

VOA8260GAS1ST_00086

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567645 **Lot No.:** A0105755

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q16A-86) **Purity** 99%	1,996.9 µg/mL	+/- 16.4920 µg/mL +/- 25.3820 µg/mL +/- 28.4359 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBC8470V) **Purity** 99%	2,003.6 µg/mL	+/- 13.5945 µg/mL +/- 23.6556 µg/mL +/- 26.9268 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 17542) **Purity** 99%	2,001.1 µg/mL	+/- 27.3546 µg/mL +/- 33.4976 µg/mL +/- 35.8765 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBD5808V) **Purity** 99%	1,999.9 µg/mL	+/- 23.4547 µg/mL +/- 30.3891 µg/mL +/- 32.9901 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	1,998.7 µg/mL	+/- 30.0266 µg/mL +/- 35.7004 µg/mL +/- 37.9363 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	2,000.1 µg/mL	+/- 18.0935 µg/mL +/- 26.4730 µg/mL +/- 29.4228 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot Q9B-58) **Purity** 99%	1,999.1 µg/mL	+/- 17.9677 µg/mL +/- 26.3801 µg/mL +/- 29.3364 µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 (Lot SHBD5121V) **Purity** 99%	2,001.1 µg/mL	+/- 24.2299 µg/mL +/- 30.9989 µg/mL +/- 33.5557 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260GAS1ST_00088

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0108198

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,504.8 µg/mL	+/- 21.9788 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/- 32.6918 µg/mL	Unstressed
	Purity 99%		+/- 36.4326 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,509.8 µg/mL	+/- 19.6377 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBC8470V)		+/- 31.2039 µg/mL	Unstressed
	Purity 99%		+/- 35.1185 µg/mL	Stressed
3	Vinyl chloride	2,515.3 µg/mL	+/- 22.1368 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 17542)		+/- 32.8734 µg/mL	Unstressed
	Purity 99%		+/- 36.6254 µg/mL	Stressed
4	1,3-Butadiene	2,498.0 µg/mL	+/- 23.6713 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBD5808V)		+/- 33.8065 µg/mL	Unstressed
	Purity 99%		+/- 37.4176 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,503.7 µg/mL	+/- 30.8470 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 39.2011 µg/mL	Unstressed
	Purity 99%		+/- 42.3685 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,507.7 µg/mL	+/- 21.9404 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot SHBD1717V)		+/- 32.6873 µg/mL	Unstressed
	Purity 99%		+/- 36.4370 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.7 µg/mL	+/- 26.0039 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot Q9B-58)		+/- 35.4965 µg/mL	Unstressed
	Purity 99%		+/- 38.9583 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.9	µg/mL	+/-	21.5914	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBD5121V)			+/-	32.4119	µg/mL	Unstressed
	Purity 99%				+/-	36.1734	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

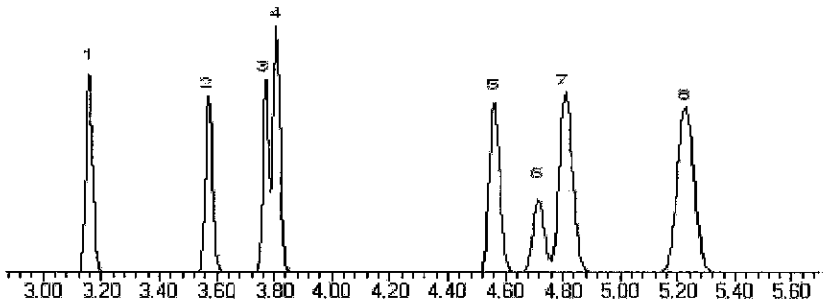
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 08-Jan-2015 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VOA8260GAS2ND_00086

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567645.sec **Lot No.:** A099261

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,002.2 µg/mL	+/- 16.7616 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 18348)		+/- 21.2987 µg/mL	Unstressed
	Purity 99%		+/- 24.7536 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,000.6 µg/mL	+/- 15.8216 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 21.2729 µg/mL	Unstressed
	Purity 99%		+/- 24.7262 µg/mL	Stressed
3	Vinyl chloride	2,001.9 µg/mL	+/- 14.6785 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 21.2759 µg/mL	Unstressed
	Purity 99%		+/- 24.7329 µg/mL	Stressed
4	1,3-Butadiene	2,002.8 µg/mL	+/- 16.7307 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 18349)		+/- 21.3051 µg/mL	Unstressed
	Purity 99%		+/- 24.7611 µg/mL	Stressed
5	Bromomethane (methyl bromide)	1,999.6 µg/mL	+/- 16.2313 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 21.2671 µg/mL	Unstressed
	Purity 99%		+/- 24.7183 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,001.0 µg/mL	+/- 14.6721 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot Q18B-13)		+/- 21.2666 µg/mL	Unstressed
	Purity 99%		+/- 24.7221 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,004.4 µg/mL	+/- 15.1665 µg/mL	Gravimetric
	CAS # 75-43-4.SEC (Lot SHBC0858V)		+/- 21.3071 µg/mL	Unstressed
	Purity 99%		+/- 24.7678 µg/mL	Stressed
8	Trichlorofluoromethane (CFC-11)	2,001.8 µg/mL	+/- 16.2157 µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot Q139-99)		+/- 21.2894 µg/mL	Unstressed
	Purity 99%		+/- 24.7442 µg/mL	Stressed

Reagent

VOA8260INTRES_00090

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567649 **Lot No.:** A0104742

Description : 8260 Internal Standard

8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot I201P5) **Purity** 99%	5,003.0 µg/mL	+/- 29.0879 µg/mL +/- 106.1005 µg/mL +/- 106.5713 µg/mL	Gravimetric Unstressed Stressed
2	Fluorobenzene **CAS #** 462-06-6 (Lot 1380033) **Purity** 99%	250.8 µg/mL	+/- 1.4795 µg/mL +/- 5.3247 µg/mL +/- 5.3483 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot 11C-596) **Purity** 99%	5,009.6 µg/mL	+/- 29.1262 µg/mL +/- 106.2405 µg/mL +/- 106.7119 µg/mL	Gravimetric Unstressed Stressed
4	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-22736) **Purity** 99%	250.8 µg/mL	+/- 1.4795 µg/mL +/- 5.3247 µg/mL +/- 5.3483 µg/mL	Gravimetric Unstressed Stressed
5	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	250.8 µg/mL	+/- 1.4795 µg/mL +/- 5.3247 µg/mL +/- 5.3483 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VOA8260KET1ST_00036

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567642 **Lot No.:** A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VOA8260KET1ST_00037

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567642 **Lot No.:** A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VOA8260KET2ND_00040

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.SEC **Lot No.:** A0108157

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone		12,504.0	µg/mL	+/- 73.2137	µg/mL	Gravimetric
	CAS # 67-64-1.SEC	(Lot 0902033)			+/- 665.4917	µg/mL	Unstressed
	Purity 99%				+/- 666.2255	µg/mL	Stressed
2	2-Butanone (MEK)		12,506.0	µg/mL	+/- 73.2254	µg/mL	Gravimetric
	CAS # 78-93-3.SEC	(Lot VEGGI)			+/- 665.5981	µg/mL	Unstressed
	Purity 99%				+/- 666.3320	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,537.3	µg/mL	+/- 73.4088	µg/mL	Gravimetric
	CAS # 108-10-1.SEC	(Lot E29T040)			+/- 667.2658	µg/mL	Unstressed
	Purity 99%				+/- 668.0015	µg/mL	Stressed
4	2-Hexanone		12,508.7	µg/mL	+/- 73.2410	µg/mL	Gravimetric
	CAS # 591-78-6.SEC	(Lot ZSVCD-FF)			+/- 665.7401	µg/mL	Unstressed
	Purity 99%				+/- 666.4741	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VOA8260MEGA1_00027

RESTEK

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567641 **Lot No.:** A093581

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 **Purity** 97%	1,999.9 µg/mL	+/- 11.6279 +/- 44.2519 +/- 44.4323	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 -/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9 **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 +/- 221.2646 +/- 222.1666	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0 **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	bromodichloromethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-27-4			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 10061-02-6			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	dibromochloromethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 124-48-1			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-57-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 95-63-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-Cymene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 99-87-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-12-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

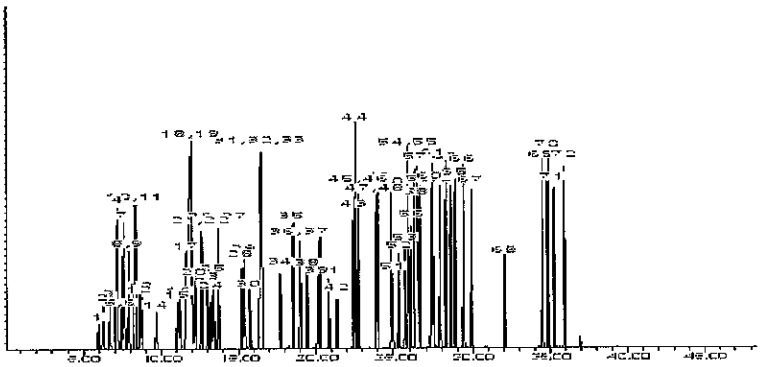
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

VOA8260MEGA2_00027

RESTEK

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567641.sec **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1,000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 +/- 221.2646 +/- 222.1666	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1.SEC			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 110-54-3.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-34-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 594-20-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 156-60-5.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
17	Chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1.SEC			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9.SEC			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-82-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
23	1,1-Dichloropropene	2,010.5	µg/mL	+/-	11.6890	µg/mL	Gravimetric
	CAS # 563-58-6.SEC			+/-	44.4847	µg/mL	Unstressed
	Purity 98%			+/-	44.6661	µg/mL	Stressed
24	Carbon tetrachloride	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 56-23-5.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
25	n-Heptane (C7)	2,000.1	µg/mL	+/-	11.6288	µg/mL	Gravimetric
	CAS # 142-82-5.SEC			+/-	44.2553	µg/mL	Unstressed
	Purity 99%			+/-	44.4357	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 79-01-6.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed

29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	40,000.0	µg/mL	+/- 232.5513 +/- 885.0582 +/- 888.6665	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 97%	2,000.1	µg/mL	+/- 11.6290 +/- 44.2562 +/- 44.4366	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
40	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	2,000.1	µg/mL	+/- 11.6290 +/- 44.2562 +/- 44.4366	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	Bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 96-18-4.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 110-57-6.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-63-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)	2,000.1	µg/mL	+/-	11.6285	µg/mL	Gravimetric
	CAS # 99-87-6.SEC			+/-	44.2545	µg/mL	Unstressed
	Purity 96%			+/-	44.4349	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 96-12-8.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

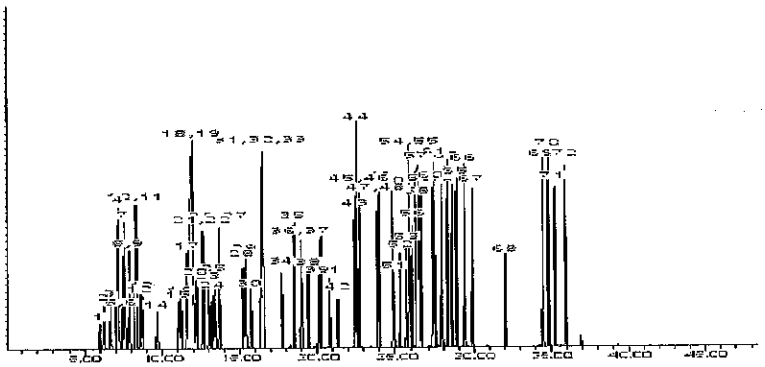
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

VOA8260SURRES_00062

RESTEK® CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0100424

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 022012) **Purity** 99%	2,502.2 µg/mL	+/- 14.5480 µg/mL +/- 28.2159 µg/mL +/- 32.4683 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot 12K-027) **Purity** 99%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 28.2046 µg/mL +/- 32.4554 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot 13I-050) **Purity** 99%	2,500.8 µg/mL	+/- 14.5399 µg/mL +/- 28.2001 µg/mL +/- 32.4502 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 01127COV) **Purity** 99%	2,501.4 µg/mL	+/- 14.5434 µg/mL +/- 28.2069 µg/mL +/- 32.4580 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VOA8260VARES_00047

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Certificate of Analysis

ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567646 **Lot No.:** A0106957

Description : 8260 List 1 / Std #6 Vinyl Acetate

8260 List 1 / Std #6 Vinyl Acetate 4000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate **CAS #** 108-05-4 (Lot STBC8935V) **Purity** 99%	4,027.0 µg/mL	+/- 23.6327 µg/mL +/- 214.3321 µg/mL +/- 214.5684 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VOAACRORES_00064

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110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

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Reference Material Producer
Certificate #3222.01

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0107338

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750 µg/ml, Water, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2015 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,759.0 µg/mL	+/- 115.6933	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 140429JLM)		+/- 633.5357	µg/mL	Unstressed
	Purity 99%		+/- 736.4159	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VOARESEE1ST_00008

RESTEK CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568363-FL **Lot No.:** A097285

Description : Custom EE Standard

Custom EE Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3-Chlorobenzotrifluoride		5,001.0 µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 98-15-7	(Lot 21324DO)		+/- 53.0822	µg/mL	Unstressed
	Purity 99%			+/- 61.7282	µg/mL	Stressed
2	4-Chlorobenzotrifluoride		5,003.0 µg/mL	+/- 29.3604	µg/mL	Gravimetric
	CAS # 98-56-6	(Lot 08507BO)		+/- 53.1034	µg/mL	Unstressed
	Purity 99%			+/- 61.7529	µg/mL	Stressed
3	2-Chlorobenzotrifluoride		5,005.0 µg/mL	+/- 29.3721	µg/mL	Gravimetric
	CAS # 88-16-4	(Lot I0316DQ)		+/- 53.1247	µg/mL	Unstressed
	Purity 99%			+/- 61.7775	µg/mL	Stressed
4	3-Chlorotoluene		5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 108-41-8	(Lot 13528LX)		+/- 53.0716	µg/mL	Unstressed
	Purity 99%			+/- 61.7158	µg/mL	Stressed
5	2,4-Dichlorobenzotrifluoride		5,002.0 µg/mL	+/- 29.3545	µg/mL	Gravimetric
	CAS # 320-60-5	(Lot MKBL3552V)		+/- 53.0928	µg/mL	Unstressed
	Purity 99%			+/- 61.7405	µg/mL	Stressed
6	3,4-Dichlorobenzotrifluoride		5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 328-84-7	(Lot 11105EJV)		+/- 53.0716	µg/mL	Unstressed
	Purity 99%			+/- 61.7158	µg/mL	Stressed
7	2,5-Dichlorobenzotrifluoride		5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 320-50-3	(Lot 04415DSV)		+/- 53.0716	µg/mL	Unstressed
	Purity 99%			+/- 61.7158	µg/mL	Stressed
8	2,4-Dichlorotoluene		5,002.0 µg/mL	+/- 29.3545	µg/mL	Gravimetric
	CAS # 95-73-8	(Lot 07715JS)		+/- 53.0928	µg/mL	Unstressed
	Purity 99%			+/- 61.7405	µg/mL	Stressed

9	2,5-Dichlorotoluene		5,000.0	µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 19398-61-9	(Lot 10119CU)			+/- 53.0716	µg/mL	Unstressed
	Purity 99%				+/- 61.7158	µg/mL	Stressed
10	2,6-Dichlorotoluene		5,001.0	µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 118-69-4	(Lot 16921JS)			+/- 53.0822	µg/mL	Unstressed
	Purity 99%				+/- 61.7282	µg/mL	Stressed
11	3,4-Dichlorotoluene		5,003.0	µg/mL	+/- 29.3604	µg/mL	Gravimetric
	CAS # 95-75-0	(Lot 09419AS)			+/- 53.1034	µg/mL	Unstressed
	Purity 99%				+/- 61.7529	µg/mL	Stressed
12	2,3-Dichlorotoluene		5,008.0	µg/mL	+/- 29.3897	µg/mL	Gravimetric
	CAS # 32768-54-0	(Lot 00317)			+/- 53.1565	µg/mL	Unstressed
	Purity 99%				+/- 61.8146	µg/mL	Stressed
13	2,4,5-Trichlorotoluene		5,001.0	µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 6639-30-1	(Lot 1767300)			+/- 53.0822	µg/mL	Unstressed
	Purity 99%				+/- 61.7282	µg/mL	Stressed
14	2,3,6-Trichlorotoluene		5,001.0	µg/mL	+/- 29.3487	µg/mL	Gravimetric
	CAS # 2077-46-5	(Lot RM01250)			+/- 53.0822	µg/mL	Unstressed
	Purity 99%				+/- 61.7282	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Method 8260C Low Level

Volatile Organic Compounds (GC/MS) by Method 8260C Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-MW-168-0/1-0	180-41760-1	98	96	102	100
HD-MW-170-0/1-0	180-41760-2	97	95	101	99
HD-QC1-0/1-2	180-41760-3	103	97	105	103
	MB 180-134916/6	100	99	104	101
	LCS 180-134916/9	94	95	98	92
HD-MW-168-0/1-0 MS	180-41760-1 MS	100	96	103	96
HD-MW-168-0/1-0 MSD	180-41760-1 MSD	95	91	100	92

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	70-128
DCA = 1,2-Dichloroethane-d4 (Surr)	64-135
TOL = Toluene-d8 (Surr)	71-118
BFB = 4-Bromofluorobenzene (Surr)	70-118

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50306009.D

Lab ID: LCS 180-134916/9 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.70	97	50-139	
Vinyl chloride	10.0	10.1	101	53-138	
Bromomethane	10.0	12.6	126	33-150	
Chloroethane	10.0	12.5	125	36-142	
1,1-Dichloroethene	10.0	9.63	96	65-136	
Acetone	20.0	18.7	94	22-150	
Carbon disulfide	10.0	8.40	84	54-132	
Methylene Chloride	10.0	10.3	103	63-129	
trans-1,2-Dichloroethene	10.0	10.1	101	73-126	
Methyl tert-butyl ether	10.0	7.22	72	64-123	
1,1-Dichloroethane	10.0	9.74	97	73-126	
cis-1,2-Dichloroethene	10.0	9.88	99	70-120	
Bromochloromethane	10.0	9.90	99	70-127	
2-Butanone (MEK)	20.0	15.9	80	39-138	
Chloroform	10.0	9.78	98	72-127	
1,1,1-Trichloroethane	10.0	8.21	82	63-133	
Carbon tetrachloride	10.0	9.04	90	55-150	
Benzene	10.0	9.85	98	80-120	
1,2-Dichloroethane	10.0	9.90	99	68-132	
Trichloroethene	10.0	10.2	102	73-120	
1,2-Dichloropropane	10.0	9.03	90	76-124	
Bromodichloromethane	10.0	9.34	93	66-130	
cis-1,3-Dichloropropene	10.0	6.59	66	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	16.3	82	45-145	
Toluene	10.0	11.1	111	80-123	
trans-1,3-Dichloropropene	10.0	5.81	58	65-125	*
1,1,2-Trichloroethane	10.0	9.94	99	77-127	
Tetrachloroethene	10.0	11.1	111	70-135	
2-Hexanone	20.0	14.6	73	25-132	
Dibromochloromethane	10.0	9.97	100	60-140	
1,2-Dibromoethane (EDB)	10.0	9.16	92	74-123	
Chlorobenzene	10.0	10.7	107	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.28	93	63-140	
Ethylbenzene	10.0	10.5	105	72-126	
Xylenes, Total	20.0	21.4	107	76-128	
Styrene	10.0	10.4	104	71-127	
Bromoform	10.0	9.88	99	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	62-125	
1,4-Dioxane	200	173 J	86	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50306010.D

Lab ID: 180-41760-1 MS Client ID: HD-MW-168-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	1.0 U	10.6	106	50-139	
Vinyl chloride	10.0	1.0 U	10.9	109	53-138	
Bromomethane	10.0	1.0 U	12.9	129	33-150	
Chloroethane	10.0	1.0 U	13.2	132	36-142	
1,1-Dichloroethene	10.0	1.0 U	11.0	110	65-136	
Acetone	20.0	5.0 U	19.8	99	22-150	
Carbon disulfide	10.0	1.0 U	9.50	95	54-132	
Methylene Chloride	10.0	1.0 U	10.8	108	63-129	
trans-1,2-Dichloroethene	10.0	1.0 U	11.1	111	73-126	
Methyl tert-butyl ether	10.0	1.0 U	7.97	80	64-123	
1,1-Dichloroethane	10.0	1.0 U	10.4	104	73-126	
cis-1,2-Dichloroethene	10.0	1.0 U	10.5	105	70-120	
Bromochloromethane	10.0	1.0 U	11.0	110	70-127	
2-Butanone (MEK)	20.0	5.0 U	19.3	96	39-138	
Chloroform	10.0	1.0 U	10.8	108	72-127	
1,1,1-Trichloroethane	10.0	1.0 U	8.94	89	63-133	
Carbon tetrachloride	10.0	1.0 U	10.1	101	55-150	
Benzene	10.0	1.0 U	10.6	106	80-120	
1,2-Dichloroethane	10.0	1.0 U	10.5	105	68-132	
Trichloroethene	10.0	1.0 U	11.1	111	73-120	
1,2-Dichloropropane	10.0	1.0 U	9.92	99	76-124	
Bromodichloromethane	10.0	1.0 U	10.1	101	66-130	
cis-1,3-Dichloropropene	10.0	1.0 U	7.45	75	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	17.0	85	45-145	
Toluene	10.0	1.0 U	11.4	114	80-123	
trans-1,3-Dichloropropene	10.0	1.0 U	6.46	65	65-125	
1,1,2-Trichloroethane	10.0	1.0 U	10.5	105	77-127	
Tetrachloroethene	10.0	1.0 U	11.7	117	70-135	
2-Hexanone	20.0	5.0 U	15.2	76	25-132	
Dibromochloromethane	10.0	1.0 U	10.1	101	60-140	
1,2-Dibromoethane (EDB)	10.0	1.0 U	9.61	96	74-123	
Chlorobenzene	10.0	1.0 U	11.0	110	80-120	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.58	96	63-140	
Ethylbenzene	10.0	1.0 U	11.1	111	72-126	
Xylenes, Total	20.0	3.0 U	22.2	111	76-128	
Styrene	10.0	1.0 U	10.9	109	71-127	
Bromoform	10.0	1.0 U	9.62	96	46-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	10.7	107	62-125	
1,4-Dioxane	200	200 U	198 J	99	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50306011.D

Lab ID: 180-41760-1 MSD Client ID: HD-MW-168-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	10.2	102	4	35	50-139	
Vinyl chloride	10.0	9.80	98	11	35	53-138	
Bromomethane	10.0	12.3	123	4	35	33-150	
Chloroethane	10.0	12.2	122	8	35	36-142	
1,1-Dichloroethene	10.0	9.76	98	12	35	65-136	
Acetone	20.0	20.9	104	5	35	22-150	
Carbon disulfide	10.0	8.87	89	7	35	54-132	
Methylene Chloride	10.0	10.5	105	3	35	63-129	
trans-1,2-Dichloroethene	10.0	10.2	102	8	35	73-126	
Methyl tert-butyl ether	10.0	7.83	78	2	35	64-123	
1,1-Dichloroethane	10.0	9.88	99	6	35	73-126	
cis-1,2-Dichloroethene	10.0	9.74	97	8	35	70-120	
Bromochloromethane	10.0	10.0	100	9	35	70-127	
2-Butanone (MEK)	20.0	18.1	90	6	35	39-138	
Chloroform	10.0	10.1	101	6	35	72-127	
1,1,1-Trichloroethane	10.0	8.38	84	6	35	63-133	
Carbon tetrachloride	10.0	9.51	95	6	35	55-150	
Benzene	10.0	9.99	100	6	32	80-120	
1,2-Dichloroethane	10.0	10.1	101	4	32	68-132	
Trichloroethene	10.0	10.3	103	7	35	73-120	
1,2-Dichloropropane	10.0	9.20	92	8	34	76-124	
Bromodichloromethane	10.0	9.45	94	7	35	66-130	
cis-1,3-Dichloropropene	10.0	7.18	72	4	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	16.4	82	4	35	45-145	
Toluene	10.0	10.9	109	5	35	80-123	
trans-1,3-Dichloropropene	10.0	6.38	64	1	35	65-125	F1
1,1,2-Trichloroethane	10.0	10.2	102	3	35	77-127	
Tetrachloroethene	10.0	11.4	114	3	35	70-135	
2-Hexanone	20.0	15.1	76	0	35	25-132	
Dibromochloromethane	10.0	10.4	104	3	35	60-140	
1,2-Dibromoethane (EDB)	10.0	9.51	95	1	35	74-123	
Chlorobenzene	10.0	10.7	107	3	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.76	98	2	34	63-140	
Ethylbenzene	10.0	10.7	107	4	33	72-126	
Xylenes, Total	20.0	21.3	107	4	32	76-128	
Styrene	10.0	10.2	102	6	34	71-127	
Bromoform	10.0	9.24	92	4	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.0	100	6	35	62-125	
1,4-Dioxane	200	166 J	83	18	35	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Lab File ID: 50306006.D Lab Sample ID: MB 180-134916/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP5 Date Analyzed: 03/06/2015 13:13

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-MW-168-0/1-0	180-41760-1	50306007.D	03/06/2015 13:54
HD-QC1-0/1-2	180-41760-3	50306008.D	03/06/2015 14:18
	LCS 180-134916/9	50306009.D	03/06/2015 14:42
HD-MW-168-0/1-0 MS	180-41760-1 MS	50306010.D	03/06/2015 15:06
HD-MW-168-0/1-0 MSD	180-41760-1 MSD	50306011.D	03/06/2015 15:30
HD-MW-170-0/1-0	180-41760-2	50306013.D	03/06/2015 16:18

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Lab File ID: 50303006.D BFB Injection Date: 03/03/2015

Instrument ID: CHHP5 BFB Injection Time: 12:21

Analysis Batch No.: 134613

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.6	
75	30.0 - 60.0 % of mass 95	46.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.7	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	73.0	
175	5.0 - 9.0 % of mass 174	5.5	(7.5)1
176	95.0 - 101.0 % of mass 174	72.9	(99.8)1
177	5.0 - 9.0 % of mass 176	4.6	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-134613/8	50303008.D	03/03/2015	14:28
	ICIS 180-134613/9	50303009.D	03/03/2015	14:52
	IC 180-134613/10	50303010.D	03/03/2015	15:16
	IC 180-134613/11	50303011.D	03/03/2015	15:40
	IC 180-134613/12	50303012.D	03/03/2015	16:04
	IC 180-134613/13	50303013.D	03/03/2015	16:28
	IC 180-134613/14	50303014.D	03/03/2015	16:52
	IC 180-134613/18	50303018.D	03/03/2015	18:29

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Lab File ID: 50306003.D BFB Injection Date: 03/06/2015

Instrument ID: CHHP5 BFB Injection Time: 10:53

Analysis Batch No.: 134916

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.3	
75	30.0 - 60.0 % of mass 95	50.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.8	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	78.6	
175	5.0 - 9.0 % of mass 174	6.8	(8.6)1
176	95.0 - 101.0 % of mass 174	79.1	(100.6)1
177	5.0 - 9.0 % of mass 176	5.1	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-134916/4	50306004.D	03/06/2015	12:23
	MB 180-134916/6	50306006.D	03/06/2015	13:13
HD-MW-168-0/1-0	180-41760-1	50306007.D	03/06/2015	13:54
HD-QC1-0/1-2	180-41760-3	50306008.D	03/06/2015	14:18
	LCS 180-134916/9	50306009.D	03/06/2015	14:42
HD-MW-168-0/1-0 MS	180-41760-1 MS	50306010.D	03/06/2015	15:06
HD-MW-168-0/1-0 MSD	180-41760-1 MSD	50306011.D	03/06/2015	15:30
HD-MW-170-0/1-0	180-41760-2	50306013.D	03/06/2015	16:18

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Sample No.: CCVIS 180-134916/4 Date Analyzed: 03/06/2015 12:23

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50306004.D Heated Purge: (Y/N) N

Calibration ID: 22321

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		91937	4.31	441962	7.27	101049	10.36
UPPER LIMIT		183874	4.81	883924	7.77	202098	10.86
LOWER LIMIT		45969	3.81	220981	6.77	50525	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-134916/6		87938	4.30	465134	7.28	107771	10.36
180-41760-1	HD-MW-168-0/1-0	82056	4.28	446530	7.27	102770	10.36
180-41760-3	HD-QC1-0/1-2	68360	4.30	397958	7.28	89750	10.36
LCS 180-134916/9		69432	4.31	417924	7.27	95027	10.36
180-41760-1 MS	HD-MW-168-0/1-0 MS	79996	4.30	390976	7.27	93368	10.36
180-41760-1 MSD	HD-MW-168-0/1-0 MSD	81746	4.31	430369	7.27	99092	10.36
180-41760-2	HD-MW-170-0/1-0	85793	4.29	426385	7.27	101255	10.36

TBA = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Sample No.: CCVIS 180-134916/4 Date Analyzed: 03/06/2015 12:23

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 50306004.D Heated Purge: (Y/N) N

Calibration ID: 22321

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		135554	12.68				
UPPER LIMIT		271108	13.18				
LOWER LIMIT		67777	12.18				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-134916/6		167302	12.69				
180-41760-1	HD-MW-168-0/1-0	156543	12.68				
180-41760-3	HD-QC1-0/1-2	149369	12.69				
LCS 180-134916/9		137726	12.68				
180-41760-1 MS	HD-MW-168-0/1-0 MS	131026	12.69				
180-41760-1 MSD	HD-MW-168-0/1-0 MSD	139626	12.69				
180-41760-2	HD-MW-170-0/1-0	148013	12.68				

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-168-0/1-0 Lab Sample ID: 180-41760-1

Matrix: Water Lab File ID: 50306007.D

Analysis Method: 8260C Date Collected: 03/04/2015 09:23

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 13:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	1.0	U	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-168-0/1-0 Lab Sample ID: 180-41760-1

Matrix: Water Lab File ID: 50306007.D

Analysis Method: 8260C Date Collected: 03/04/2015 09:23

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 13:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	98		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306007.D
Lims ID: 180-41760-A-1 Lab Sample ID: 180-41760-1
Client ID: HD-MW-168-0/1-0
Sample Type: Client
Inject. Date: 06-Mar-2015 13:54:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-41760-A-1
Misc. Info.: 180-0005922-007
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 15:14:25 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 15:14:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.281	4.308	-0.027	88	82056	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.271	0.003	99	446530	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.361	0.003	99	102770	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.679	0.003	99	156543	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.526	6.522	0.004	52	93301	48.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.897	6.900	-0.003	98	113409	48.0	
$ 7 Toluene-d8 (Surr)	98	8.923	8.925	-0.002	100	406665	50.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.529	0.003	97	148424	49.8	
11 Dichlorodifluoromethane	85		1.613				ND	
12 Chloromethane	50		1.777				ND	
13 Vinyl chloride	62		1.905				ND	
14 Butadiene	39		1.948				ND	
15 Bromomethane	94		2.258				ND	
16 Chloroethane	64		2.380				ND	
17 Dichlorofluoromethane	67		2.659				ND	
18 Trichlorofluoromethane	101		2.708				ND	
19 Ethanol	45		3.012				ND	
20 Ethyl ether	59		3.091				ND	
21 Acrolein	56		3.262				ND	
22 1,1-Dichloroethene	96		3.371				ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.426				ND	
24 Acetone	43	3.496	3.499	-0.003	58	3716	3.96	
25 Iodomethane	142		3.572				ND	
26 Carbon disulfide	76		3.651				ND	
27 Isopropyl alcohol	45		3.736				ND	
29 Acetonitrile	40		3.943				ND	
28 3-Chloro-1-propene	76		3.949				ND	
30 Methyl acetate	43		4.016				ND	
31 Methylene Chloride	84		4.144				ND	
32 2-Methyl-2-propanol	59		4.436				ND	
33 Acrylonitrile	53		4.545				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.564				ND	
35 Methyl tert-butyl ether	73		4.594				ND	
36 Hexane	57		4.983				ND	
37 1,1-Dichloroethane	63		5.172				ND	
38 Vinyl acetate	43		5.300				ND	
41 Isopropyl ether	45		5.300				ND	
39 2-Chloro-1,3-butadiene	53		5.300				ND	
40 Isopropyl ether TIC	45		5.409				ND	
42 Tert-butyl ethyl ether	59		5.799				ND	
44 2,2-Dichloropropane	77		5.932				ND	
45 cis-1,2-Dichloroethene	96		5.932				ND	
43 Tert-butyl ethyl ether (TI	59		5.961				ND	
46 2-Butanone (MEK)	43		5.987				ND	
48 Ethyl acetate	43		5.993				ND	
47 Propionitrile	54		6.024				ND	
49 Chlorobromomethane	128		6.224				ND	
51 Tetrahydrofuran	42		6.285				ND	
52 Chloroform	83		6.346				ND	
50 Methacrylonitrile	41		6.389				ND	
53 1,1,1-Trichloroethane	97		6.529				ND	
54 Cyclohexane	56		6.583				ND	
56 Carbon tetrachloride	117		6.717				ND	
55 1,1-Dichloropropene	75		6.723				ND	
57 Isobutyl alcohol	41		6.942				ND	
58 Benzene	78		6.954				ND	
59 1,2-Dichloroethane	62		6.985				ND	
61 Tert-amyl methyl ether	73		7.143				ND	
60 Tert-amyl methyl ether (TI	73		7.262				ND	
62 n-Heptane	43		7.277				ND	
63 n-Butanol	56		7.654				ND	
64 Trichloroethene	130		7.666				ND	
66 Methylcyclohexane	83		7.861				ND	
65 Ethyl acrylate	55		7.867				ND	
69 Methyl methacrylate	69		7.867				ND	
67 1,2-Dichloropropane	63		7.897				ND	
68 Dibromomethane	93		8.019				ND	
70 1,4-Dioxane	88		8.056				ND	
71 Dichlorobromomethane	83		8.195				ND	
72 2-Nitropropane	41		8.427				ND	
73 2-Chloroethyl vinyl ether	63		8.506				ND	
74 cis-1,3-Dichloropropene	75		8.658				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
76 Toluene	91		8.986				ND	
77 trans-1,3-Dichloropropene	75		9.224				ND	
78 Ethyl methacrylate	69		9.315				ND	
79 1,1,2-Trichloroethane	97		9.400				ND	
80 Tetrachloroethene	164		9.534				ND	
81 1,3-Dichloropropane	76		9.564				ND	
82 2-Hexanone	43		9.662				ND	
83 n-Butyl acetate	43		9.662				ND	
84 Chlorodibromomethane	129		9.789				ND	
85 Ethylene Dibromide	107		9.899				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.373				ND	
87 Chlorobenzene	112		10.392				ND	
88 4-Chlorobenzotrifluoride	180		10.428				ND	
89 1,1,1,2-Tetrachloroethane	131		10.471				ND	
90 Ethylbenzene	106		10.501				ND	
91 m-Xylene & p-Xylene	106		10.617				ND	
92 o-Xylene	106		11.012				ND	
93 Styrene	104		11.024				ND	
94 Bromoform	173		11.213				ND	
96 2-Chlorobenzotrifluoride	180		11.274				ND	
95 Cyclohexanol	57		11.280				ND	
97 Isopropylbenzene	105		11.377				ND	
98 Cyclohexanone	55		11.450				ND	
99 1,1,2,2-Tetrachloroethane	83		11.675				ND	
100 Bromobenzene	156		11.681				ND	
101 1,2,3-Trichloropropane	110		11.718				ND	
102 trans-1,4-Dichloro-2-buten	53		11.724				ND	
103 N-Propylbenzene	120		11.785				ND	
104 2-Chlorotoluene	126		11.876				ND	
105 3-Chlorotoluene	126		11.937				ND	
106 1,3,5-Trimethylbenzene	105		11.961				ND	
107 4-Chlorotoluene	126		11.979				ND	
108 tert-Butylbenzene	119		12.290				ND	
109 Pentachloroethane	167		12.314				ND	
110 1,2,4-Trimethylbenzene	105		12.338				ND	
111 1,2-dichloro-4-(trifluorom	214		12.399				ND	
112 sec-Butylbenzene	105		12.509				ND	
113 1,3-Dichlorobenzene	146		12.618				ND	
114 4-Isopropyltoluene	119		12.655				ND	
119 Benzyl chloride	91		12.655				ND	
115 1,4-Dichlorobenzene	146		12.709				ND	
116 2,4-Dichloro-1-(triflourom	214		12.758				ND	
117 1,2,3-Trimethylbenzene	105		12.758				ND	
118 2,5-Dichlorobenzotrifluori	214		12.813				ND	
120 n-Butylbenzene	91		13.062				ND	
121 1,2-Dichlorobenzene	146		13.080				ND	
122 1,2-Dibromo-3-Chloropropan	75		13.859				ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.005				ND	
124 1,3,5-Trichlorobenzene	180		14.078				ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.425				ND	
126 1,2,4-Trichlorobenzene	180		14.686				ND	
127 Hexachlorobutadiene	225		14.863				ND	
128 Naphthalene	128		14.942				ND	
129 1,2,3-Trichlorobenzene	180		15.191				ND	
131 2,4,5-Trichlorotoluene	159		15.964				ND	
130 2,3,6-Trichlorotoluene	159		16.061				ND	
132 2-Methylnaphthalene	142		16.080				ND	
148 2,3-Dichlorotoluene	1		0.000				ND	
147 2,4-Dichlorotoluene	1		0.000				ND	
146 2,5-Dichlorotoluene	1		0.000				ND	
150 2,6-Dichlorotoluene	1		0.000				ND	
152 Formaldehyde TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
151 Isooctane	57		0.000				ND	
149 3,4-Dichlorotoluene	1		0.000				ND	
S 133 Xylenes, Total	106		1.000				ND	
S 134 1,2-Dichloroethene, Total	96		1.000				ND	
S 135 1,3-Dichloropropene, Total	1		0.000				ND	
T 153 1,2 Epoxybutane TIC	42		0.000				ND	
T 136 Mesityl oxide TIC	83		0.000				ND	
T 137 Tetrahydrofuran TIC	42		0.000				ND	
T 138 Methyl n-amyl ketone TIC	43		0.000				ND	

Reagents:

VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

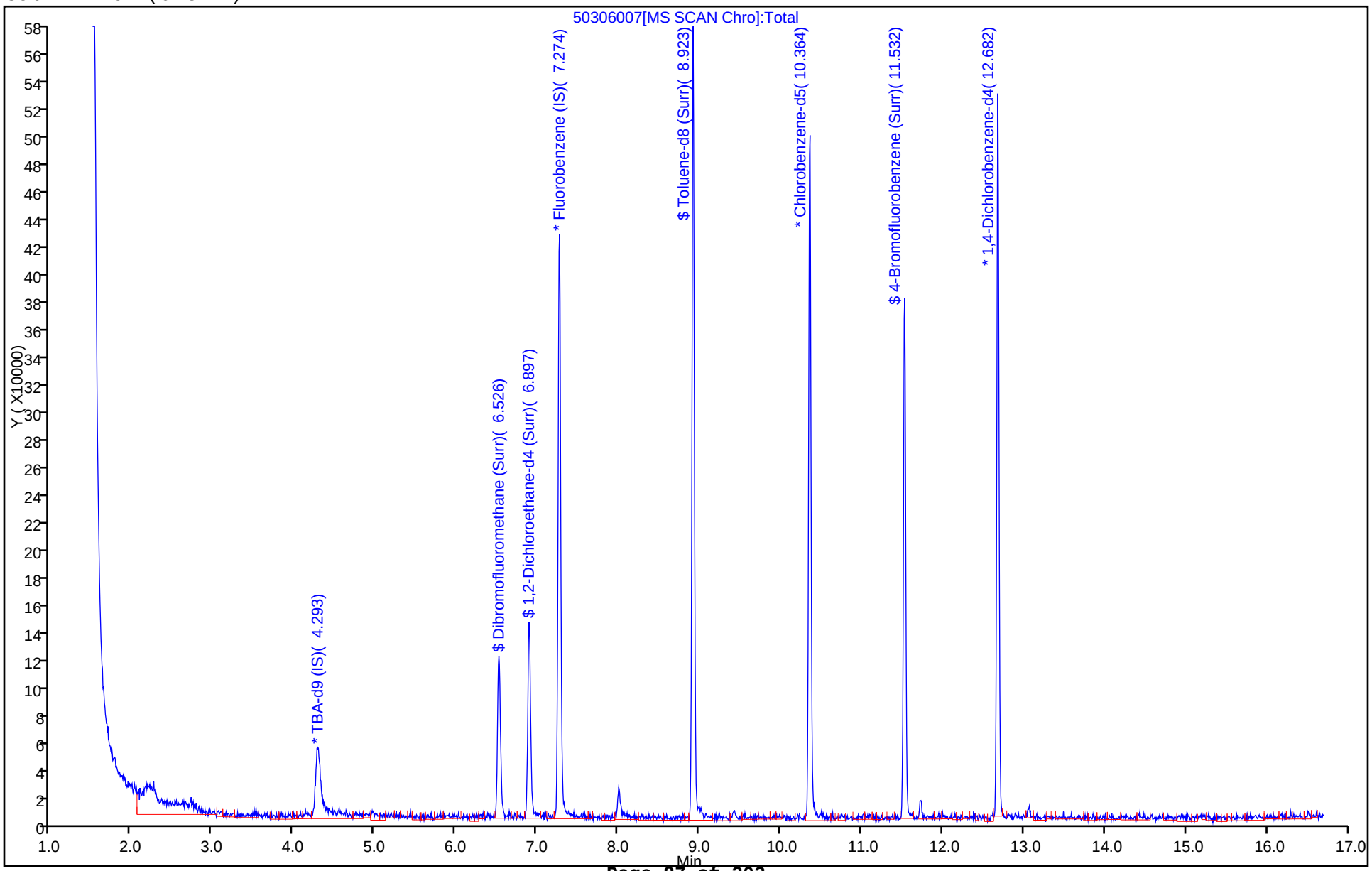
Report Date: 06-Mar-2015 15:14:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306007.D

Injection Date:	06-Mar-2015 13:54:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-41760-A-1	Lab Sample ID:	180-41760-1	Worklist Smp#:	7
Client ID:	HD-MW-168-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-170-0/1-0 Lab Sample ID: 180-41760-2

Matrix: Water Lab File ID: 50306013.D

Analysis Method: 8260C Date Collected: 03/04/2015 09:50

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 16:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.62	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	1.0	U	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	0.17	J	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-170-0/1-0 Lab Sample ID: 180-41760-2

Matrix: Water Lab File ID: 50306013.D

Analysis Method: 8260C Date Collected: 03/04/2015 09:50

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 16:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		64-135
2037-26-5	Toluene-d8 (Surr)	101		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	97		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306013.D
Lims ID: 180-41760-A-2 Lab Sample ID: 180-41760-2
Client ID: HD-MW-170-0/1-0
Sample Type: Client
Inject. Date: 06-Mar-2015 16:18:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-41760-A-2
Misc. Info.: 180-0005922-013
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 17:09:51 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 17:09:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.287	4.308	-0.021	90	85793	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.271	0.003	99	426385	50.0	
* 3 Chlorobenzene-d5	119	10.358	10.361	-0.003	99	101255	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.679	0.003	99	148013	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.522	0.010	53	88436	48.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.900	0.003	99	107370	47.6	
$ 7 Toluene-d8 (Surr)	98	8.923	8.925	-0.002	100	397158	50.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.533	11.529	0.004	97	144833	49.3	
12 Chloromethane	50		1.777				ND	
13 Vinyl chloride	62		1.905				ND	
15 Bromomethane	94		2.258				ND	
16 Chloroethane	64		2.380				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.502	3.499	0.003	86	8261	9.23	
26 Carbon disulfide	76	3.642	3.651	-0.009	51	3795	0.6210	
31 Methylene Chloride	84		4.144				ND	
33 Acrylonitrile	53		4.545				ND	
34 trans-1,2-Dichloroethene	96		4.564				ND	
35 Methyl tert-butyl ether	73		4.594				ND	
37 1,1-Dichloroethane	63		5.172				ND	
45 cis-1,2-Dichloroethene	96		5.932				ND	
46 2-Butanone (MEK)	43		5.987				ND	
49 Chlorobromomethane	128		6.224				ND	
52 Chloroform	83	6.343	6.346	-0.003	88	12171	3.09	
53 1,1,1-Trichloroethane	97		6.529				ND	
56 Carbon tetrachloride	117		6.717				ND	
58 Benzene	78		6.954				ND	
59 1,2-Dichloroethane	62		6.985				ND	
64 Trichloroethene	130		7.666				ND	
67 1,2-Dichloropropane	63		7.897				ND	
70 1,4-Dioxane	88		8.056				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83	8.199	8.195	0.004	25	1988	0.8349	
74 cis-1,3-Dichloropropene	75		8.658				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
76 Toluene	91	8.996	8.986	0.010	19	2842	0.2719	
77 trans-1,3-Dichloropropene	75		9.224				ND	
79 1,1,2-Trichloroethane	97		9.400				ND	
80 Tetrachloroethene	164		9.534				ND	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129	9.799	9.789	0.010	1	450	0.3584	
85 Ethylene Dibromide	107		9.899				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.471				ND	
90 Ethylbenzene	106		10.501				ND	
91 m-Xylene & p-Xylene	106		10.617				ND	
92 o-Xylene	106		11.012				ND	
93 Styrene	104		11.024				ND	
94 Bromoform	173		11.213				ND	
99 1,1,2,2-Tetrachloroethane	83		11.675				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

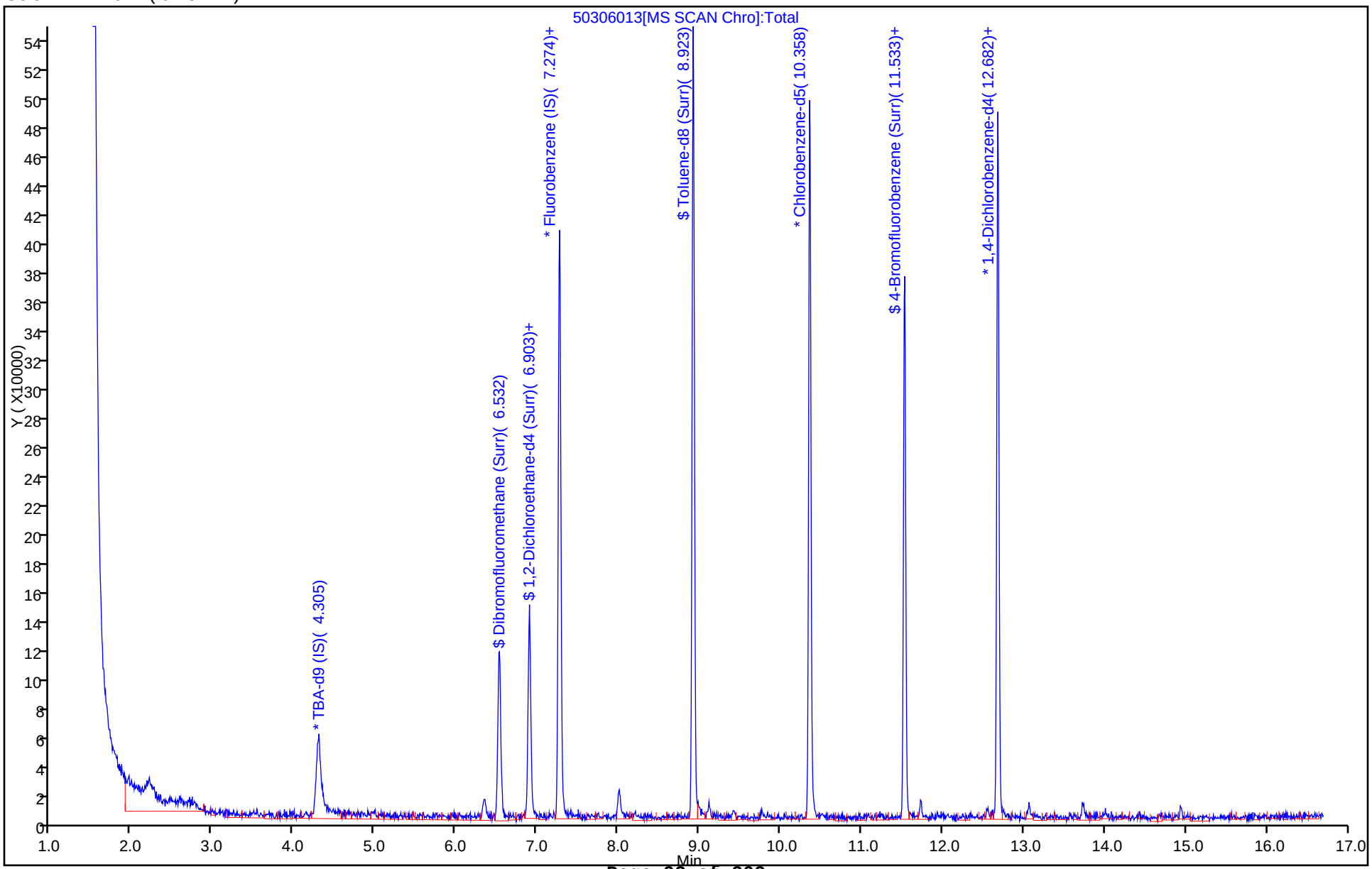
Report Date: 06-Mar-2015 17:09:51 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306013.D

Injection Date:	06-Mar-2015 16:18:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-41760-A-2	Lab Sample ID:	180-41760-2	Worklist Smp#:	13
Client ID:	HD-MW-170-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



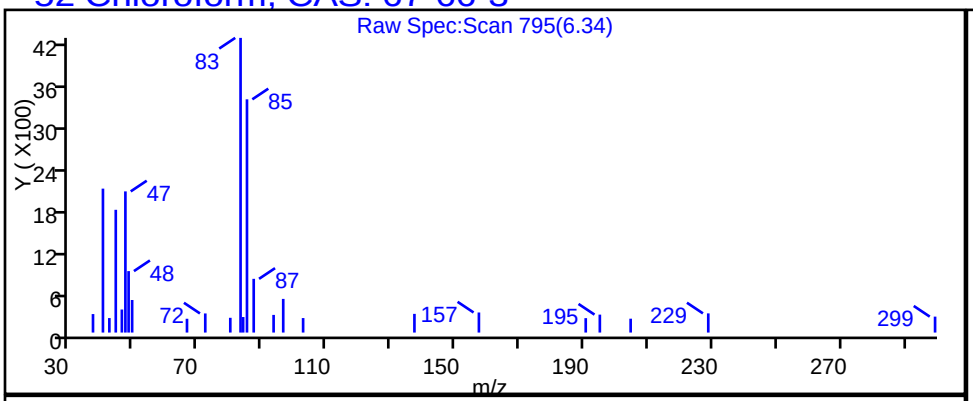
Report Date: 06-Mar-2015 17:09:52 Chrom Revision: 2.2 15-Jan-2015 13:05:58

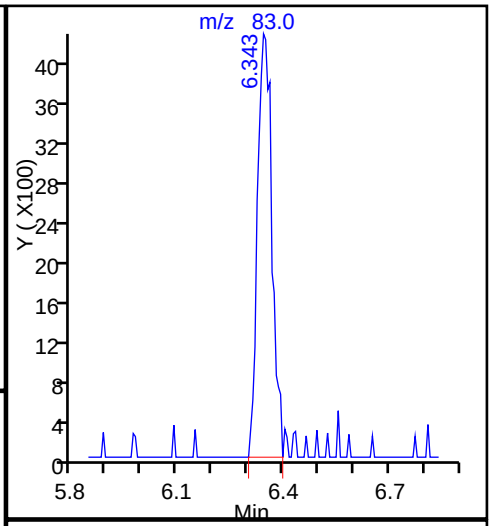
TestAmerica Pittsburgh

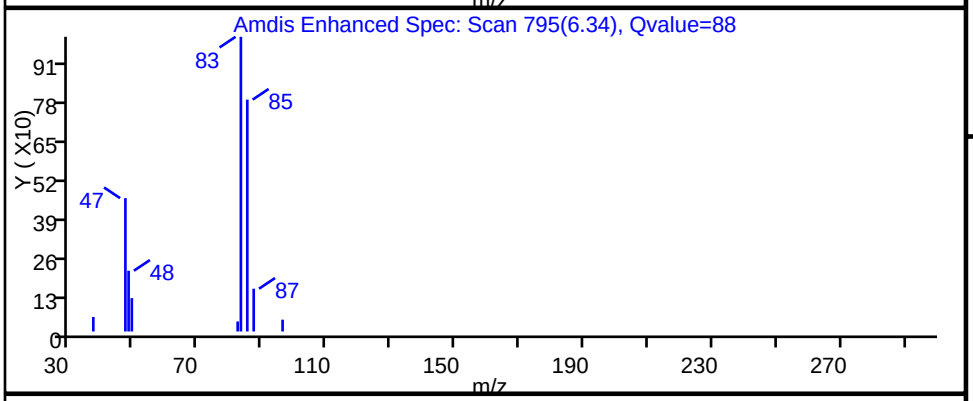
Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306013.D

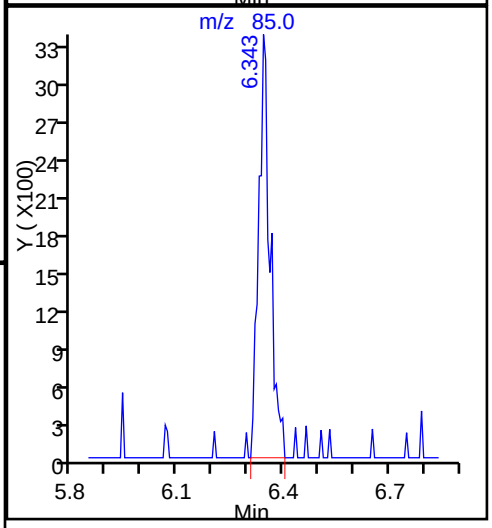
Injection Date:	06-Mar-2015 16:18:30	Instrument ID:	CHHP5		
Lims ID:	180-41760-A-2	Lab Sample ID:	180-41760-2		
Client ID:	HD-MW-170-0/1-0				
Operator ID:	001562	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

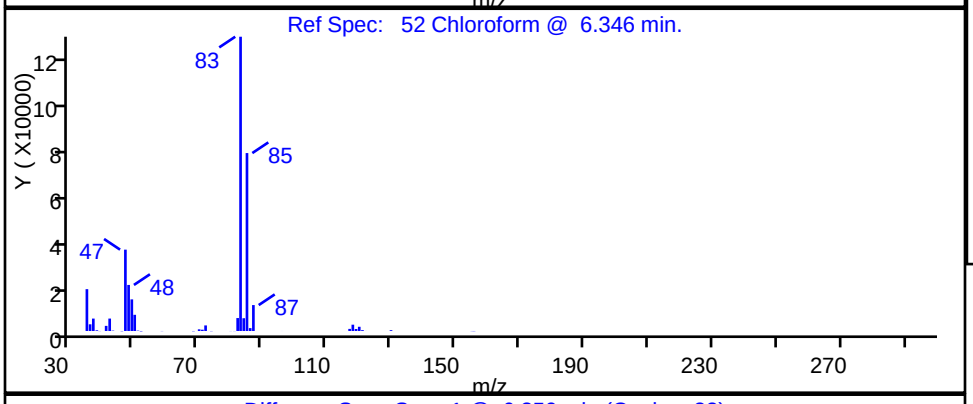
52 Chloroform, CAS: 67-66-3

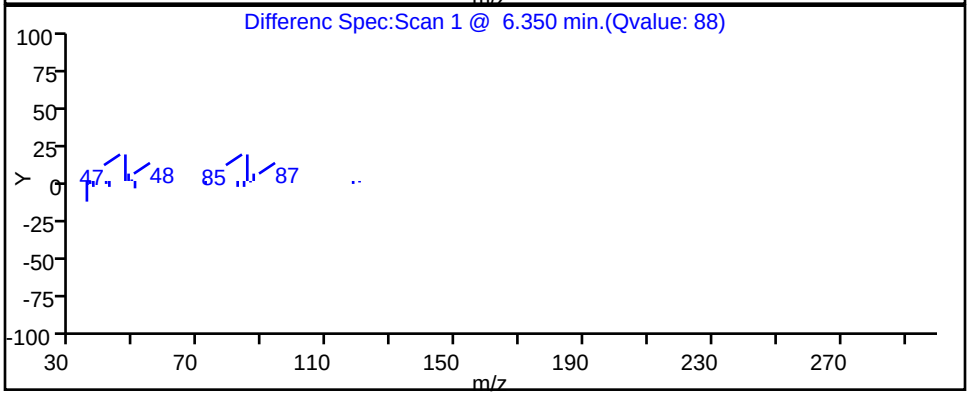










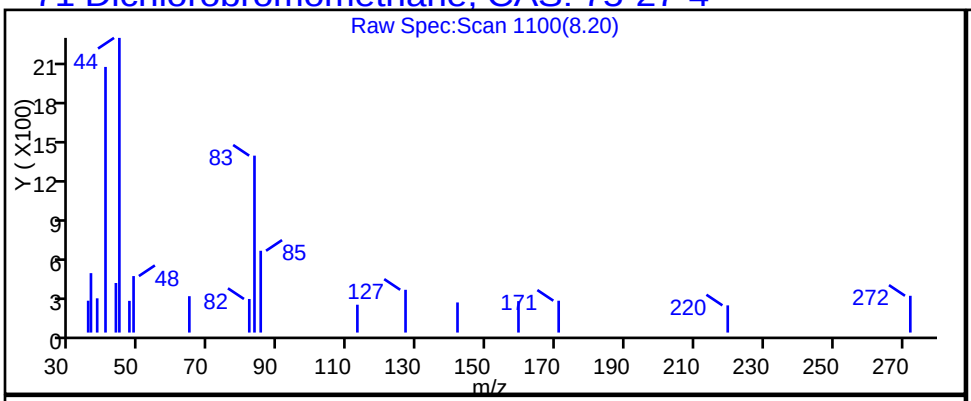


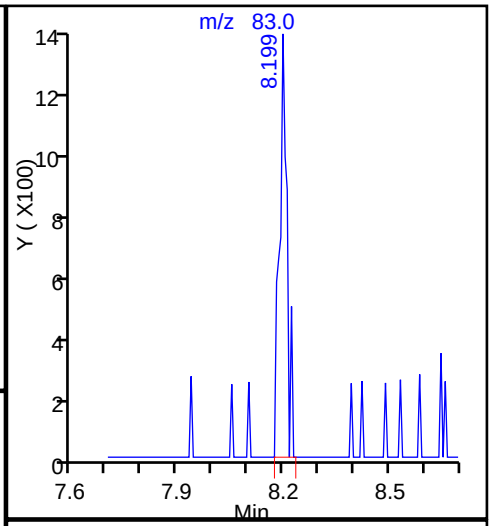
Report Date: 06-Mar-2015 17:09:52 Chrom Revision: 2.2 15-Jan-2015 13:05:58

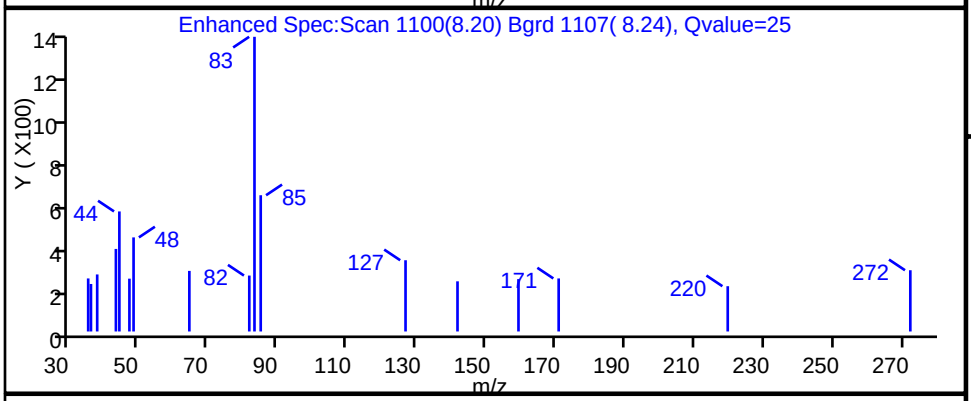
TestAmerica Pittsburgh

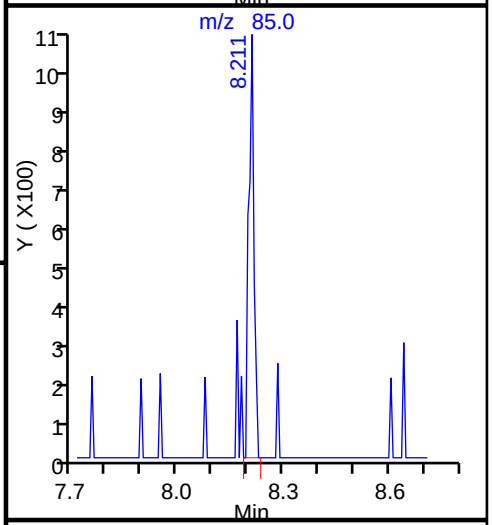
Data File:	\\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306013.D				
Injection Date:	06-Mar-2015 16:18:30	Instrument ID:	CHHP5		
Lims ID:	180-41760-A-2	Lab Sample ID:	180-41760-2		
Client ID:	HD-MW-170-0/1-0				
Operator ID:	001562	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

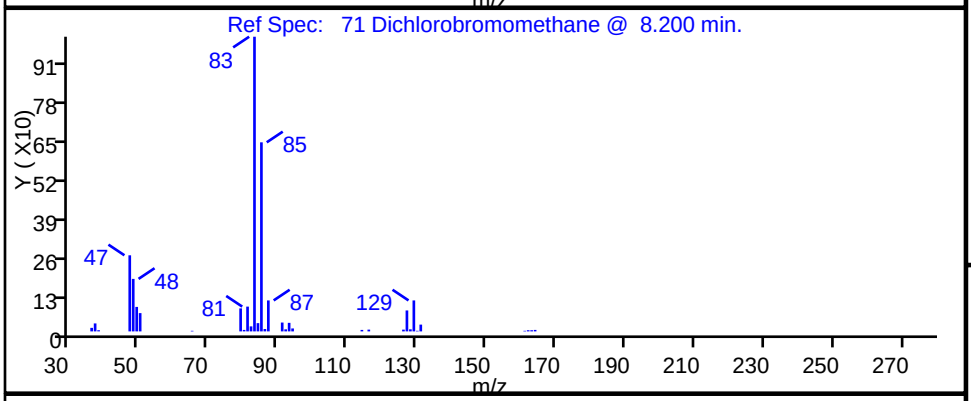
71 Dichlorobromomethane, CAS: 75-27-4

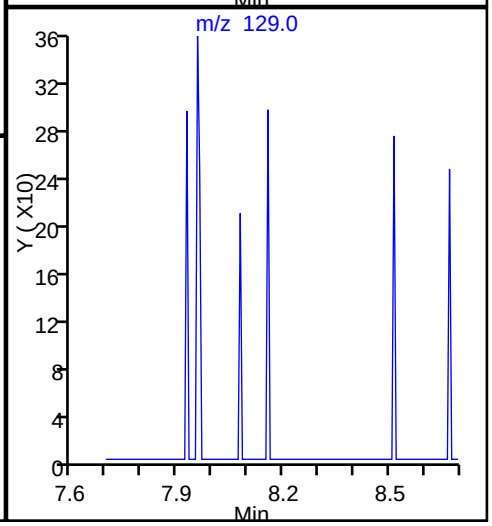


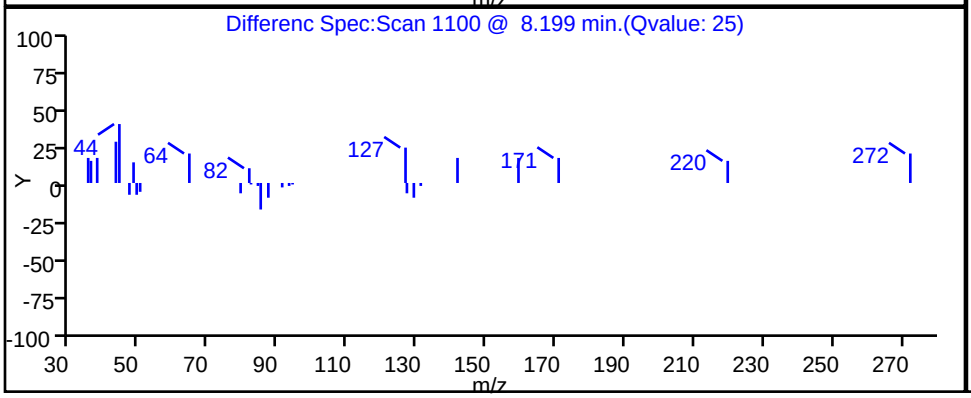












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-41760-3

Matrix: Water Lab File ID: 50306008.D

Analysis Method: 8260C Date Collected: 03/04/2015 12:00

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 14:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	1.0	U	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-41760-3

Matrix: Water Lab File ID: 50306008.D

Analysis Method: 8260C Date Collected: 03/04/2015 12:00

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 14:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	103		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306008.D
Lims ID: 180-41760-A-3 Lab Sample ID: 180-41760-3
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 06-Mar-2015 14:18:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-41760-A-3
Misc. Info.: 180-0005922-008
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 15:15:28 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 15:15:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.297	4.308	-0.011	87	68360	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.271	0.007	99	397958	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.361	0.001	100	89750	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.679	0.007	99	149369	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.530	6.522	0.008	52	87677	51.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.900	0.001	99	102154	48.5	
$ 7 Toluene-d8 (Surr)	98	8.927	8.925	0.002	100	368697	52.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.529	0.001	96	133965	51.5	
12 Chloromethane	50		1.777				ND	
13 Vinyl chloride	62		1.905				ND	
15 Bromomethane	94		2.258				ND	
16 Chloroethane	64		2.380				ND	
22 1,1-Dichloroethene	96		3.371				ND	
24 Acetone	43	3.561	3.499	0.062	77	2381	2.85	
26 Carbon disulfide	76		3.651				ND	
31 Methylene Chloride	84		4.144				ND	
33 Acrylonitrile	53		4.545				ND	
34 trans-1,2-Dichloroethene	96		4.564				ND	
35 Methyl tert-butyl ether	73		4.594				ND	
37 1,1-Dichloroethane	63		5.172				ND	
45 cis-1,2-Dichloroethene	96		5.932				ND	
46 2-Butanone (MEK)	43		5.987				ND	
49 Chlorobromomethane	128		6.224				ND	
52 Chloroform	83		6.346				ND	
53 1,1,1-Trichloroethane	97		6.529				ND	
56 Carbon tetrachloride	117		6.717				ND	
58 Benzene	78		6.954				ND	
59 1,2-Dichloroethane	62		6.985				ND	
64 Trichloroethene	130		7.666				ND	
67 1,2-Dichloropropane	63		7.897				ND	
70 1,4-Dioxane	88		8.056				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.195				ND	
74 cis-1,3-Dichloropropene	75		8.658				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
76 Toluene	91		8.986				ND	
77 trans-1,3-Dichloropropene	75		9.224				ND	
79 1,1,2-Trichloroethane	97		9.400				ND	
80 Tetrachloroethene	164		9.534				ND	
82 2-Hexanone	43		9.662				ND	
84 Chlorodibromomethane	129		9.789				ND	
85 Ethylene Dibromide	107		9.899				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.471				ND	
90 Ethylbenzene	106		10.501				ND	
91 m-Xylene & p-Xylene	106		10.617				ND	
92 o-Xylene	106		11.012				ND	
93 Styrene	104		11.024				ND	
94 Bromoform	173		11.213				ND	
99 1,1,2,2-Tetrachloroethane	83		11.675				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

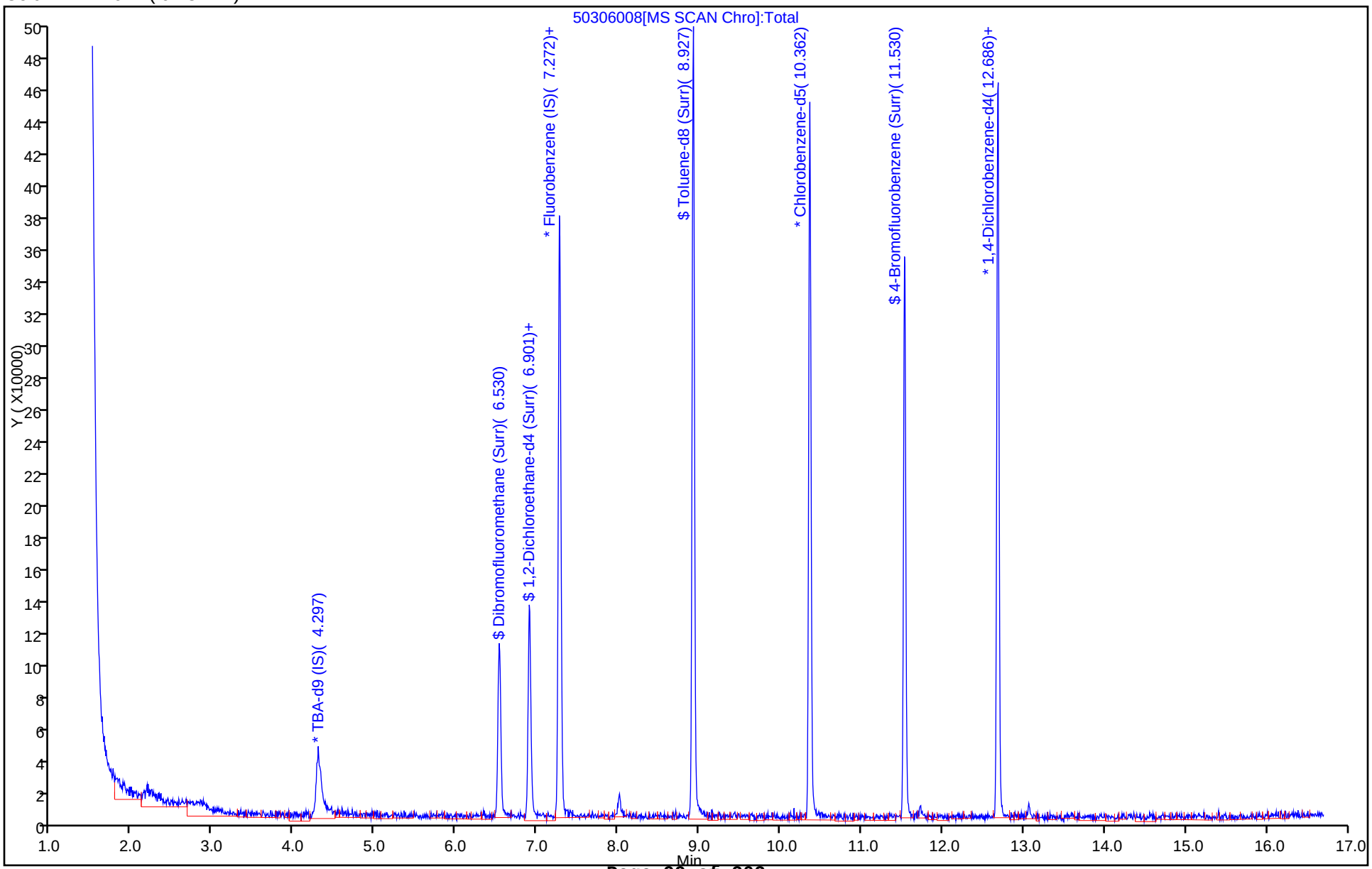
Report Date: 06-Mar-2015 15:20:34 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306008.D

Injection Date:	06-Mar-2015 14:18:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-41760-A-3	Lab Sample ID:	180-41760-3	Worklist Smp#:	8
Client ID:	HD-QC1-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-134613/18	50303018.D
Level 2	IC 180-134613/8	50303008.D
Level 3	ICIS 180-134613/9	50303009.D
Level 4	IC 180-134613/10	50303010.D
Level 5	IC 180-134613/11	50303011.D
Level 6	IC 180-134613/12	50303012.D
Level 7	IC 180-134613/13	50303013.D
Level 8	IC 180-134613/14	50303014.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2690 0.2315	0.2475 0.2504	0.2293 0.2519	0.2623	0.2680	Ave		0.2512			0.1000	6.0		20.0			
Chloromethane	0.4680 0.3696	0.3882 0.4086	0.3655 0.4050	0.4008	0.4067	Ave		0.4015			0.1000	7.9		20.0			
Vinyl chloride	0.4208 0.3539	0.3727 0.3911	0.3674 0.3929	0.3892	0.3994	Ave		0.3859			0.1000	5.4		20.0			
1,3-Butadiene	0.5877 0.3874	0.4356 0.4336	0.4089 0.4363	0.4396	0.4507	Ave		0.4475			0.0100	13.0		20.0			
Bromomethane	0.2102 0.0967	0.1328 0.1105	0.1305 0.0997	0.1176	0.1084	Lin2	0.5322	0.1060			0.0500				0.9930		0.9900
Chloroethane	0.2042 0.1423	0.1531 0.1639	0.1454 0.1403	0.1542	0.1526	Ave		0.1570			0.0500	13.0		20.0			
Dichlorofluoromethane	0.4250 0.3125	0.3499 0.3829	0.3794 0.3280	0.3555	0.3456	Ave		0.3598			0.0100	9.8		20.0			
Trichlorofluoromethane	0.3357 0.2560	0.2761 0.3432	0.3149 0.2839	0.2982	0.2961	Ave		0.3005			0.1000	9.9		20.0			
Ethyl ether	0.3462 0.2756	0.2799 0.2862	0.2559 0.3022	0.2863	0.2877	Ave		0.2900			0.0100	9.0		20.0			
Acrolein	0.0381 0.0352	0.0397 0.0387	0.0353 0.0396	0.0401	0.0397	Ave		0.0383			0.0100	5.1		20.0			
1,1-Dichloroethene	0.3310 0.2752	0.2698 0.2934	0.2608 0.2973	0.2971	0.3045	Ave		0.2911			0.1000	7.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3119 0.2752	0.2867 0.3077	0.2648 0.2991	0.3034	0.3054	Ave		0.2943			0.1000	5.8		20.0			
Acetone	0.1272 0.0999	0.1070 0.0981	0.0956 0.1093	0.1023	0.1006	Ave		0.1050			0.0500	9.5		20.0			
Iodomethane	0.4701 0.3888	0.3781 0.4191	0.3659 0.4254	0.4071	0.4219	Ave		0.4096			0.0100	8.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7278 0.6896	0.6311 0.7798	0.6350 0.7889	0.7235	0.7569	Ave		0.7166			0.1000	8.5		20.0			
Allyl chloride	0.1767 0.1804	0.1687 0.1929	0.1597 0.2039	0.1828	0.1896	Ave		0.1818			0.0100	7.7		20.0			
Methyl acetate	0.3135 0.2835	0.2688 0.2970	0.2547 0.3078	0.2918	0.2933	Ave		0.2888			0.1000	6.7		20.0			
Methylene Chloride	0.5303 0.3048	0.3340 0.3171	0.3002 0.3296	0.3199	0.3150	Lin2	1.1200	0.3021			0.1000				0.9970		0.9900
tert-Butyl alcohol	1.0728 1.1874	1.1850 1.2108	1.0775 1.3423	1.2805	1.2306	Ave		1.1984			0.0100	7.7		20.0			
Acrylonitrile	0.1522 0.1402	0.1370 0.1445	0.1317 0.1514	0.1426	0.1458	Ave		0.1432			0.0100	4.8		20.0			
trans-1,2-Dichloroethene	0.3284 0.2932	0.2930 0.3077	0.2772 0.3241	0.3005	0.3112	Ave		0.3044			0.1000	5.6		20.0			
Methyl tert-butyl ether	0.8077 0.7491	0.7066 0.7930	0.6816 0.8220	0.7507	0.7733	Ave		0.7605			0.1000	6.4		20.0			
Hexane	0.6242 0.5039	0.5149 0.5384	0.5008 0.5460	0.5396	0.5552	Ave		0.5404			0.0100	7.3		20.0			
1,1-Dichloroethane	0.6587 0.5578	0.5463 0.5868	0.5240 0.6027	0.5806	0.5849	Ave		0.5802			0.2000	7.0		20.0			
Vinyl acetate	0.1554 0.2042	0.1712 0.2248	0.1846 0.2374	0.1922	0.2159	Ave		0.1982			0.0100	14.0		20.0			
2,2-Dichloropropane	0.2089 0.2094	0.1923 0.2380	0.1918 0.2406	0.2153	0.2221	Ave		0.2148			0.0100	8.5		20.0			
cis-1,2-Dichloroethene	0.3752 0.3124	0.3118 0.3268	0.2893 0.3375	0.3247	0.3263	Ave		0.3255			0.1000	7.6		20.0			
2-Butanone (MEK)	0.1805 0.1692	0.1656 0.1804	0.1533 0.1823	0.1632	0.1743	Ave		0.1711			0.0500	5.9		20.0			
Bromochloromethane	0.1602 0.1300	0.1227 0.1367	0.1187 0.1453	0.1320	0.1397	Ave		0.1357			0.0100	9.7		20.0			
Tetrahydrofuran	0.1465 0.1140	0.1197 0.1221	0.1051 0.1283	0.1156	0.1227	Ave		0.1218			0.0100	10.0		20.0			
Chloroform	0.5305 0.4435	0.4372 0.4691	0.4040 0.4864	0.4580	0.4705	Ave		0.4624			0.2000	8.1		20.0			
1,1,1-Trichloroethane	0.3408 0.3041	0.2781 0.3311	0.2786 0.3337	0.3135	0.3326	Ave		0.3141			0.1000	8.0		20.0			
Cyclohexane	0.7553 0.6547	0.7067 0.7163	0.6518 0.7113	0.7195	0.7234	Ave		0.7049			0.1000	5.0		20.0			
Carbon tetrachloride	0.2188 0.2137	0.1783 0.2421	0.1756 0.2456	0.2093	0.2208	Ave		0.2130			0.1000	12.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.4190 0.3837	0.3836 0.4120	0.3653 0.4171	0.4094	0.4159	Ave		0.4007			0.0100	5.1		20.0			
Isobutyl alcohol	0.0062 0.0076	0.0051 0.0082	0.0049 0.0094	0.0062	0.0072	Ave		0.0069		*	0.0100	23.0	*	20.0			
Benzene	1.4277 1.1958	1.2285 1.2459	1.1487 1.2779	1.2764	1.3023	Ave		1.2629			0.5000	6.6		20.0			
1,2-Dichloroethane	0.3936 0.3555	0.3377 0.3701	0.3255 0.4002	0.3674	0.3684	Ave		0.3648			0.1000	6.9		20.0			
n-Heptane	0.5428 0.4760	0.4383 0.5130	0.4485 0.5151	0.4948	0.4996	Ave		0.4910			0.0100	7.2		20.0			
Trichloroethene	0.2973 0.2860	0.2875 0.3057	0.2716 0.3157	0.3042	0.3116	Ave		0.2974			0.2000	5.0		20.0			
Methylcyclohexane	0.5952 0.5306	0.5402 0.5732	0.5146 0.5770	0.5673	0.5970	Ave		0.5619			0.1000	5.4		20.0			
1,2-Dichloropropane	0.3666 0.3252	0.3035 0.3418	0.2998 0.3537	0.3291	0.3338	Ave		0.3317			0.1000	6.9		20.0			
Dibromomethane	0.1544 0.1493	0.1379 0.1557	0.1316 0.1667	0.1493	0.1534	Ave		0.1498			0.0100	7.3		20.0			
1,4-Dioxane	0.0032 0.0032	0.0026 0.0030	0.0024 0.0034	0.0029	0.0030	Ave		0.0030		*	0.0100	11.0		20.0			
Bromodichloromethane	0.2516 0.2918	0.2511 0.3052	0.2361 0.3279	0.2772	0.2930	Ave		0.2792			0.2000	11.0		20.0			
cis-1,3-Dichloropropene	0.3080 0.3953	0.3071 0.4172	0.3282 0.4415	0.3733	0.3881	Ave		0.3698			0.2000	14.0		20.0			
4-Methyl-2-pentanone (MIBK)	1.5509 1.4938	1.5302 1.5109	1.3735 1.4677	1.5874	1.5632	Ave		1.5097			0.1000	4.4		20.0			
Toluene	6.2344 4.6779	5.4647 4.8614	4.8117 4.5935	5.3452	5.2977	Ave		5.1608			0.4000	11.0		20.0			
trans-1,3-Dichloropropene	0.9390 1.1640	0.9614 1.2251	0.9301 1.2704	1.0789	1.1369	Ave		1.0882			0.1000	12.0		20.0			
Ethyl methacrylate	1.1441 1.2928	0.9998 1.3638	1.0308 1.3853	1.2627	1.3088	Ave		1.2235			0.0100	12.0		20.0			
1,1,2-Trichloroethane	1.0940 0.8884	0.9633 0.9132	0.8597 0.9115	0.9757	0.9363	Ave		0.9428			0.1000	7.6		20.0			
Tetrachloroethene	1.1157 0.8701	0.9938 0.9281	0.8738 0.8743	0.9857	0.9770	Ave		0.9523			0.2000	8.9		20.0			
1,3-Dichloropropane	1.9802 1.6858	1.8629 1.7187	1.6343 1.6897	1.8293	1.7741	Ave		1.7719			0.0100	6.4		20.0			
2-Hexanone	1.0477 1.0339	1.0431 1.0684	0.9679 1.0449	1.1247	1.1004	Ave		1.0539			0.1000	4.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.5658 0.6599	0.5280 0.7119	0.5067 0.7217	0.6199	0.6460	Ave		0.6200			0.1000	13.0		20.0			
1,2-Dibromoethane (EDB)	0.9524 0.9044	0.8836 0.9137	0.8153 0.9237	0.9263	0.9441	Ave		0.9079			0.1000	4.8		20.0			
3-Chlorobenzotrifluoride	1.9226 1.4974	1.6501 1.5076	1.5454 1.3370	1.6222	1.5811	Ave		1.5829			0.0100	11.0		20.0			
Chlorobenzene	4.0215 3.0327	3.4837 3.1544	3.0203 3.0023	3.3643	3.3626	Ave		3.3052			0.5000	10.0		20.0			
4-Chlorobenzotrifluoride	1.7532 1.4334	1.5607 1.4283	1.5227 1.2996	1.5809	1.5247	Ave		1.5129			0.0100	8.8		20.0			
1,1,1,2-Tetrachloroethane	0.8054 0.7937	0.6270 0.8576	0.6290 0.8548	0.7520	0.7784	Ave		0.7622			0.0100	12.0		20.0			
Ethylbenzene	2.1162 1.8003	1.9583 1.8639	1.7671 1.7871	1.9934	2.0020	Ave		1.9111			0.1000	6.6		20.0			
m-Xylene & p-Xylene	2.6982 2.2243	2.3435 2.3081	2.1594 2.2145	2.4436	2.4413	Ave		2.3541			0.1000	7.4		20.0			
o-Xylene	2.6404 2.1191	2.3559 2.2160	2.1315 2.1144	2.3759	2.3231	Ave		2.2845			0.3000	7.9		20.0			
Styrene	4.3797 3.4898	3.7333 3.6111	3.4486 3.4638	3.9065	3.8442	Ave		3.7346			0.3000	8.4		20.0			
Bromoform	0.2653 0.3657	0.2684 0.4014	0.2412 0.4171	0.3168	0.3442	Ave		0.3275			0.1000	20.0		20.0			
2-Chlorobenzotrifluoride	1.8187 1.4793	1.6992 1.5053	1.5228 1.3486	1.6018	1.5787	Ave		1.5693			0.0100	9.1		20.0			
Isopropylbenzene	6.6841 5.0501	5.9488 5.3239	5.2815 4.8448	5.9350	5.7977	Ave		5.6082			0.1000	11.0		20.0			
1,1,2,2-Tetrachloroethane	1.2994 1.2807	1.3075 1.3493	1.2094 1.3104	1.3458	1.3524	Ave		1.3069			0.3000	3.6		20.0			
Bromobenzene	1.0162 0.8475	0.8667 0.8518	0.8177 0.8692	0.8652	0.8533	Ave		0.8735			0.0100	6.9		20.0			
1,2,3-Trichloropropane	0.3627 0.2773	0.2931 0.2821	0.2728 0.2922	0.2800	0.2812	Ave		0.2927			0.0100	10.0		20.0			
trans-1,4-Dichloro-2-butene	0.2945 0.2859	0.2754 0.3162	0.2472 0.3267	0.2688	0.2602	Ave		0.2844			0.0100	9.6		20.0			
N-Propylbenzene	1.2166 1.1118	1.1732 1.1670	1.1362 1.1460	1.1729	1.1590	Ave		1.1604			0.0100	2.7		20.0			
2-Chlorotoluene	1.1065 0.9256	0.9581 0.9475	0.8975 0.9360	0.9513	0.9430	Ave		0.9582			0.0100	6.6		20.0			
3-Chlorotoluene	1.1820 0.9566	0.9980 0.9593	0.9643 0.9127	0.9261	0.9364	Ave		0.9794			0.0100	8.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	3.6478 3.0305	3.2397 3.1239	3.1299 3.0311	3.2594	3.2246	Ave		3.2109			0.0100	6.2		20.0			
4-Chlorotoluene	1.1560 0.9823	0.9826 1.0361	0.9918 1.0330	1.0376	1.0526	Ave		1.0340			0.0100	5.5		20.0			
tert-Butylbenzene	3.1191 2.5612	2.8481 2.6780	2.7134 2.6395	2.8302	2.7808	Ave		2.7713			0.0100	6.2		20.0			
1,2,4-Trimethylbenzene	3.6951 3.1036	3.3863 3.2221	3.2100 3.1692	3.3631	3.3623	Ave		3.3140			0.0100	5.6		20.0			
3,4-Dichlorobenzotrifluoride	0.7760 0.7222	0.8131 0.7485	0.7548 0.6963	0.7399	0.7344	Ave		0.7482			0.0100	4.7		20.0			
sec-Butylbenzene	4.7250 3.6615	4.1212 3.7973	3.8832 3.6388	4.0747	4.0112	Ave		3.9891			0.0100	8.7		20.0			
1,3-Dichlorobenzene	2.0686 1.6213	1.7447 1.6705	1.6238 1.6741	1.6987	1.7072	Ave		1.7261			0.6000	8.4		20.0			
4-Isopropyltoluene	3.7034 3.0652	3.3375 3.2100	3.1450 3.0900	3.3337	3.2665	Ave		3.2689			0.0100	6.2		20.0			
1,4-Dichlorobenzene	2.0020 1.6465	1.7449 1.6908	1.6438 1.7119	1.7346	1.7242	Ave		1.7373			0.5000	6.5		20.0			
2,4-Dichlorobenzotrifluoride	0.7973 0.6761	0.7429 0.6931	0.7301 0.6448	0.6927	0.7117	Ave		0.7111			0.0100	6.5		20.0			
2,5-Dichlorobenzotrifluoride	0.8019 0.7607	0.8189 0.7865	0.7792 0.7420	0.7522	0.7608	Ave		0.7753			0.0100	3.4		20.0			
n-Butylbenzene	3.2542 2.7311	2.9123 2.8828	2.7781 2.8096	2.9485	2.9341	Ave		2.9063			0.0100	5.5		20.0			
1,2-Dichlorobenzene	1.8289 1.5040	1.5633 1.5462	1.4970 1.5487	1.5655	1.5779	Ave		1.5789			0.4000	6.7		20.0			
1,2-Dibromo-3-Chloropropane	0.0849 0.1157	0.0814 0.1305	0.0843 0.1353	0.0954	0.1047	Ave		0.1040			0.0500	20.0		20.0			
1,2,4-Trichlorobenzene	0.8675 0.7733	0.7499 0.7923	0.7387 0.7989	0.8082	0.7890	Ave		0.7897			0.2000	5.0		20.0			
Hexachlorobutadiene	0.3817 0.3102	0.3469 0.3430	0.3138 0.3383	0.3301	0.3340	Ave		0.3373			0.0100	6.6		20.0			
Naphthalene	2.5167 2.2552	2.2494 2.2646	2.0797 2.3040	2.3468	2.3135	Ave		2.2912			0.0100	5.3		20.0			
1,2,3-Trichlorobenzene	0.7593 0.6559	0.6685 0.6729	0.5998 0.6937	0.6946	0.6725	Ave		0.6771			0.0100	6.6		20.0			
2,4,5-Trichlorotoluene	0.4218 0.3329	0.3284 0.3441	0.3044 0.3502	0.3314	0.3274	Ave		0.3426			0.0100	10.0		20.0			
2,3,6-Trichlorotoluene	0.3897 0.3029	0.3072 0.3055	0.2791 0.3183	0.3175	0.3065	Ave		0.3158			0.0100	10.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2143 0.2131	0.2130 0.2223	0.2086 0.2061	0.2196	0.2156	Ave		0.2141				2.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2838 0.2624	0.2484 0.2700	0.2554 0.2655	0.2610	0.2699	Ave		0.2646				4.0		20.0			
Toluene-d8 (Surr)	4.5146 3.6171	4.2502 3.7635	3.8828 3.1038	4.0750	3.9724	Ave		3.8974				11.0		20.0			
4-Bromofluorobenzene (Surr)	1.7106 1.3934	1.4785 1.4322	1.3831 1.2832	1.4890	1.4299	Ave		1.4500				8.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-134613/18	50303018.D
Level 2	IC 180-134613/8	50303008.D
Level 3	ICIS 180-134613/9	50303009.D
Level 4	IC 180-134613/10	50303010.D
Level 5	IC 180-134613/11	50303011.D
Level 6	IC 180-134613/12	50303012.D
Level 7	IC 180-134613/13	50303013.D
Level 8	IC 180-134613/14	50303014.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	11738 392329	61161 459101	120251 555245	186155	248600	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	20422 626420	95934 749194	191737 892689	284435	377346	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	18364 599809	92094 717244	192697 866068	276203	370529	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	25646 656586	107650 795057	214505 961606	311986	418091	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Lin2	9174 163842	32814 202557	68450 219710	83485	100603	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	8910 241114	37829 300539	76259 309302	109418	141570	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	18545 529735	86469 702217	199002 722968	252307	320590	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	14651 433936	68228 629405	165171 625870	211640	274680	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	15110 467174	69164 524790	134232 666037	203184	266877	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	33215 76799	49025 88701	55616 95898	66477	73636	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	14445 466370	66672 537938	136777 655372	210842	282447	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	13613 466462	70857 564199	138904 659263	215323	283308	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	27756 338711	52872 359769	100332 482030	145165	186722	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	20517 658969	93450 768602	191906 937612	288929	391404	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	31759 1168823	155959 1429882	333091 1738988	513502	702207	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	7709 305734	41688 353770	83771 449430	129734	175910	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	68405 2402270	332118 2723193	667992 3392163	1035670	1360573	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Lin2	23143 516693	82531 581573	157472 726477	227072	292219	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	8526 407341	47518 473360	88451 611565	166475	219266	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	66409 2376546	338546 2649598	691056 3337128	1012388	1352445	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	14331 496919	72412 564166	145422 714392	213264	288749	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	35247 1269630	174611 1454209	357516 1811989	532783	717429	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	27239 854071	127250 987257	262665 1203451	382955	515034	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	28747 945361	134994 1076133	274871 1328543	412070	542610	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	6783 346138	42316 412211	96814 523307	136421	200290	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	9115 354872	47512 436442	100580 530241	152789	206033	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	16372 529478	77048 599342	151771 743970	230462	302735	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	39378 573542	81869 661664	160864 803658	231681	323375	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	6992 220291	30321 250607	62252 320382	93661	129587	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	12789 386544	59174 447707	110296 565784	164028	227621	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	23149 751712	108043 860226	211933 1072109	325101	436474	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	14873 515456	68728 607230	146155 735465	222478	308574	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	32962 1109737	174651 1313560	341881 1567791	510634	671150	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	9550 362211	44069 443952	92122 541326	148555	204809	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	18284 650285	94793 755478	191632 919340	290552	385796	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	6766 324042	31713 374911	64264 519953	110778	166120	125 4375	625 5000	1250 6250	1875	2500

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	62303 2026853	303591 2284771	602514 2816860	905954	1208197	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	17175 602602	83451 678619	170712 882169	260776	341780	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	23686 806729	108328 940701	235230 1135342	351211	463470	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	12976 484743	71046 560499	142439 695890	215876	289114	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	25976 899256	133492 1051065	269904 1271791	402645	553839	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	15999 551216	75001 626785	157237 779651	233558	309721	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	6736 252976	34073 285467	69033 367478	105949	142348	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	2785 107243	12787 108953	25299 148650	41693	56031	100 3500	500 4000	1000 5000	1500	2000
Bromodichloromethane	FB	Ave	10980 494496	62048 559625	123848 722661	196712	271870	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	13441 670035	75900 764955	172126 973151	264977	360087	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	75647 1293845	171096 1424348	349805 1780762	535170	716953	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	60820 2025808	305509 2291440	612731 2786685	901036	1214867	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	9160 504089	53750 577469	118446 770673	181868	260722	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	11161 559868	55893 642835	131269 840399	212852	300128	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	10673 384751	53855 430453	109481 552961	164474	214719	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	10884 376799	55560 437446	111273 530396	166159	224037	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	19318 730064	104148 810109	208110 1025068	308357	406834	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	51105 895448	116636 1007219	246507 1267784	379170	504684	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	5520 285792	29519 335537	64530 437822	104491	148140	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	9291 391652	49397 430697	103819 560401	156151	216491	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	18756 648455	92250 710605	196791 811123	273444	362586	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	39232 1313352	194761 1486822	384609 1821377	567114	771107	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	17103 620760	87255 673239	193901 788386	266494	349632	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	7857 343717	35053 404254	80096 518562	126760	178500	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	20645 779624	109479 878562	225030 1084192	336025	459104	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	26322 963277	131016 1087938	274985 1343425	411920	559842	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	25758 917689	131707 1044535	271432 1282744	400497	532728	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	42726 1511299	208713 1702135	439152 2101328	658511	881546	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	2588 158386	15007 189179	30710 253039	53409	78926	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	17742 640624	94998 709528	193920 818132	270017	362034	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	65207 2186986	332572 2509471	672554 2939157	1000450	1329527	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	12676 554635	73095 635984	154009 794942	226865	310127	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	14051 509283	68608 564181	141042 712137	214072	285408	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	5015 166640	23201 186872	47052 239368	69273	94067	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	4072 171777	21797 209408	42637 267698	66494	87031	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	16822 668080	92868 772940	195976 938881	290195	387657	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	15299 556210	75841 627560	154797 766804	235369	315400	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	16343 574840	78996 635360	166326 747748	229133	313196	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	50437 1821042	256444 2069067	539843 2483271	806423	1078510	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	15984 590273	77780 686264	171070 846300	256729	352063	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	43127 1538995	225443 1773732	468002 2162487	700240	930079	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	51091 1864947	268049 2134132	553643 2596483	832074	1124585	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3,4-Dichlorobenzotrifluoride	DCB	Ave	10729 433987	64362 495775	130185 570450	183065	245627	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	65330 2200188	326221 2515133	669756 2981190	1008135	1341600	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	28602 974213	138101 1106407	280066 1371526	420272	570988	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	51205 1841892	264184 2126114	542443 2531591	824816	1092513	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	27681 989384	138120 1119886	283523 1402521	429154	576692	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	11024 406260	58806 459072	125921 528265	171372	238033	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	11088 457073	64824 520914	134395 607921	186097	254456	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	44994 1641091	230526 1909418	479164 2301855	729499	981363	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	25288 903766	123743 1024132	258190 1268840	387327	527759	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	1174 69537	6441 86409	14541 110818	23597	35031	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCB	Ave	11994 464683	59357 524775	127415 654550	199956	263899	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	5277 186416	27458 227215	54129 277147	81675	111717	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	34798 1355121	178051 1499909	358706 1887643	580632	773789	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	10498 394157	52915 445662	103456 568326	171850	224922	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	5832 200009	25992 227883	52505 286878	81997	109488	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	5388 182005	24319 202347	48130 260759	78544	102526	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	9351 361120	52645 407623	109435 454279	155860	199995	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	12383 444667	61392 495199	133978 585333	185233	250369	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	44042 1566428	237614 1773929	494434 1882951	686909	910944	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBZ	Ave	16688 603450	82659 675059	176122 778464	251005	327893	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1 Analy Batch No.: 134613

SDG No.:

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 14:28 Calibration End Date: 03/03/2015 18:29 Calibration ID: 22321

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303008.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Mar-2015 14:28:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD5
Misc. Info.: 180-0005873-008
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:04 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 03-Mar-2015 15:51:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.314	4.321	-0.007	94	160393	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.277	7.278	-0.001	98	494254	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.368	-0.001	96	111812	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.691	12.686	0.005	96	158312	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.528	6.535	-0.007	84	52645	25.0	24.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.899	6.907	-0.007	95	61392	25.0	23.5	
$ 7 Toluene-d8 (Surr)	98	8.931	8.926	0.005	94	237614	25.0	27.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.535	11.536	-0.001	88	82659	25.0	25.5	
11 Dichlorodifluoromethane	85	1.625	1.626	-0.001	98	61161	25.0	24.6	
12 Chloromethane	50	1.777	1.772	0.005	99	95934	25.0	24.2	
13 Vinyl chloride	62	1.899	1.906	-0.007	98	92094	25.0	24.1	
14 Butadiene	39	1.941	1.948	-0.007	97	107650	25.0	24.3	
15 Bromomethane	94	2.252	2.253	-0.001	92	32814	25.0	26.3	
16 Chloroethane	64	2.379	2.386	-0.007	97	37829	25.0	24.4	
17 Dichlorofluoromethane	67	2.653	2.654	-0.001	97	86469	25.0	24.3	
18 Trichlorofluoromethane	101	2.720	2.709	0.011	95	68228	25.0	23.0	
20 Ethyl ether	59	3.085	3.098	-0.013	94	69164	25.0	24.1	
21 Acrolein	56	3.261	3.263	-0.001	98	49025	125.0	129.5	
22 1,1-Dichloroethene	96	3.371	3.384	-0.013	96	66672	25.0	23.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.420	3.427	-0.007	94	70857	25.0	24.4	
24 Acetone	43	3.493	3.500	-0.007	98	52872	50.0	50.9	
25 Iodomethane	142	3.584	3.585	-0.001	98	93450	25.0	23.1	
26 Carbon disulfide	76	3.663	3.664	-0.001	99	155959	25.0	22.0	
28 3-Chloro-1-propene	76	3.943	3.950	-0.007	90	41688	25.0	23.2	
30 Methyl acetate	43	4.022	4.023	-0.001	99	332118	125.0	116.3	
31 Methylene Chloride	84	4.150	4.151	-0.001	99	82531	25.0	23.9	
32 2-Methyl-2-propanol	59	4.454	4.437	0.017	96	47518	250.0	247.2	
33 Acrylonitrile	53	4.557	4.558	-0.001	98	338546	250.0	239.2	
34 trans-1,2-Dichloroethene	96	4.569	4.577	-0.008	56	72412	25.0	24.1	
35 Methyl tert-butyl ether	73	4.600	4.601	-0.001	98	174611	25.0	23.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.989	4.990	-0.001	96	127250	25.0	23.8	
37 1,1-Dichloroethane	63	5.178	5.179	-0.001	96	134994	25.0	23.5	
38 Vinyl acetate	43	5.299	5.307	-0.008	96	42316	25.0	21.6	
44 2,2-Dichloropropane	77	5.926	5.933	-0.007	77	47512	25.0	22.4	
45 cis-1,2-Dichloroethene	96	5.938	5.939	-0.001	83	77048	25.0	23.9	
46 2-Butanone (MEK)	43	5.993	5.994	-0.001	99	81869	50.0	48.4	
49 Chlorobromomethane	128	6.230	6.231	-0.001	92	30321	25.0	22.6	
51 Tetrahydrofuran	42	6.297	6.298	-0.001	95	59174	50.0	49.2	
52 Chloroform	83	6.340	6.347	-0.007	97	108043	25.0	23.6	
53 1,1,1-Trichloroethane	97	6.534	6.541	-0.007	96	68728	25.0	22.1	
54 Cyclohexane	56	6.589	6.596	-0.007	92	174651	25.0	25.1	
56 Carbon tetrachloride	117	6.723	6.724	-0.001	58	44069	25.0	20.9	
55 1,1-Dichloropropene	75	6.729	6.730	-0.001	92	94793	25.0	23.9	
57 Isobutyl alcohol	41	6.954	6.955	-0.001	36	31713	625.0	467.5	
58 Benzene	78	6.960	6.961	-0.001	98	303591	25.0	24.3	
59 1,2-Dichloroethane	62	6.991	6.992	-0.001	95	83451	25.0	23.1	
62 n-Heptane	43	7.283	7.284	-0.001	96	108328	25.0	22.3	
64 Trichloroethene	130	7.672	7.673	-0.001	97	71046	25.0	24.2	
66 Methylcyclohexane	83	7.867	7.868	-0.001	94	133492	25.0	24.0	
67 1,2-Dichloropropane	63	7.909	7.910	-0.001	91	75001	25.0	22.9	
68 Dibromomethane	93	8.025	8.026	-0.001	95	34073	25.0	23.0	
70 1,4-Dioxane	88	8.067	8.056	0.011	89	12787	500.0	437.5	M
71 Dichlorobromomethane	83	8.201	8.202	-0.001	97	62048	25.0	22.5	
74 cis-1,3-Dichloropropene	75	8.664	8.665	-0.001	91	75900	25.0	20.8	
75 4-Methyl-2-pentanone (MIBK	43	8.828	8.829	-0.001	98	171096	50.0	50.7	
76 Toluene	91	8.992	8.993	-0.001	97	305509	25.0	26.5	
77 trans-1,3-Dichloropropene	75	9.223	9.224	-0.001	99	53750	25.0	22.1	
78 Ethyl methacrylate	69	9.321	9.322	-0.001	93	55893	25.0	20.4	
79 1,1,2-Trichloroethane	97	9.400	9.407	-0.007	91	53855	25.0	25.5	
80 Tetrachloroethene	164	9.540	9.541	-0.001	96	55560	25.0	26.1	
81 1,3-Dichloropropane	76	9.570	9.571	-0.001	98	104148	25.0	26.3	
82 2-Hexanone	43	9.661	9.662	-0.001	99	116636	50.0	49.5	
84 Chlorodibromomethane	129	9.795	9.796	-0.001	89	29519	25.0	21.3	
85 Ethylene Dibromide	107	9.905	9.906	-0.001	96	49397	25.0	24.3	
86 3-Chlorobenzotrifluoride	180	10.379	10.374	0.005	94	92250	25.0	26.1	
87 Chlorobenzene	112	10.397	10.398	-0.001	95	194761	25.0	26.4	
88 4-Chlorobenzotrifluoride	180	10.434	10.435	-0.001	94	87255	25.0	25.8	
89 1,1,1,2-Tetrachloroethane	131	10.483	10.477	0.006	86	35053	25.0	20.6	
90 Ethylbenzene	106	10.507	10.508	-0.001	98	109479	25.0	25.6	
91 m-Xylene & p-Xylene	106	10.622	10.624	-0.002	99	131016	25.0	24.9	
92 o-Xylene	106	11.018	11.013	0.005	96	131707	25.0	25.8	
93 Styrene	104	11.030	11.031	-0.001	95	208713	25.0	25.0	
94 Bromoform	173	11.219	11.214	0.005	96	15007	25.0	20.5	
96 2-Chlorobenzotrifluoride	180	11.279	11.274	0.005	97	94998	25.0	27.1	
97 Isopropylbenzene	105	11.383	11.384	-0.001	96	332572	25.0	26.5	
99 1,1,2,2-Tetrachloroethane	83	11.681	11.676	0.005	95	73095	25.0	25.0	
100 Bromobenzene	156	11.693	11.682	0.011	97	68608	25.0	24.8	
101 1,2,3-Trichloropropane	110	11.730	11.725	0.005	87	23201	25.0	25.0	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.737	-0.007	68	21797	25.0	24.2	
103 N-Propylbenzene	120	11.790	11.792	-0.002	99	92868	25.0	25.3	
104 2-Chlorotoluene	126	11.876	11.883	-0.007	96	75841	25.0	25.0	
105 3-Chlorotoluene	126	11.936	11.938	-0.002	95	78996	25.0	25.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.967	11.968	-0.001	95	256444	25.0	25.2	
107 4-Chlorotoluene	126	11.991	11.986	0.005	97	77780	25.0	23.8	
108 tert-Butylbenzene	119	12.289	12.290	-0.001	93	225443	25.0	25.7	
110 1,2,4-Trimethylbenzene	105	12.344	12.339	0.005	95	268049	25.0	25.5	
111 1,2-dichloro-4-(trifluorom	214	12.405	12.406	-0.001	97	64362	25.0	27.2	
112 sec-Butylbenzene	105	12.514	12.509	0.005	94	326221	25.0	25.8	
113 1,3-Dichlorobenzene	146	12.624	12.625	-0.001	97	138101	25.0	25.3	
114 4-Isopropyltoluene	119	12.654	12.655	-0.001	97	264184	25.0	25.5	
115 1,4-Dichlorobenzene	146	12.715	12.710	0.005	95	138120	25.0	25.1	
116 2,4-Dichloro-1-(triflourom	214	12.764	12.765	-0.001	96	58806	25.0	26.1	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.807	0.005	97	64824	25.0	26.4	
120 n-Butylbenzene	91	13.068	13.069	-0.001	98	230526	25.0	25.1	
121 1,2-Dichlorobenzene	146	13.086	13.087	-0.001	95	123743	25.0	24.8	
122 1,2-Dibromo-3-Chloropropan	75	13.865	13.866	-0.001	63	6441	25.0	19.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.006	-0.001	98	259963	75.0	76.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.431	14.432	-0.001	99	168108	50.0	49.8	
126 1,2,4-Trichlorobenzene	180	14.698	14.693	0.005	94	59357	25.0	23.7	
127 Hexachlorobutadiene	225	14.869	14.870	-0.001	96	27458	25.0	25.7	
128 Naphthalene	128	14.948	14.943	0.005	97	178051	25.0	24.5	
129 1,2,3-Trichlorobenzene	180	15.191	15.186	0.005	95	52915	25.0	24.7	
131 2,4,5-Trichlorotoluene	159	15.970	15.971	-0.001	97	25992	25.0	24.0	
130 2,3,6-Trichlorotoluene	159	16.067	16.068	-0.001	97	24319	25.0	24.3	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		50.0	50.7	
S 134 1,2-Dichloroethene, Total	96				0		50.0	48.0	
S 135 1,3-Dichloropropene, Total	1				0		50.0	42.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	5.00	Units: uL	
VOA8260SURR_00031	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	1.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	1.00	Units: uL	
VOAVAPRI_00003	Amount Added:	1.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	1.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

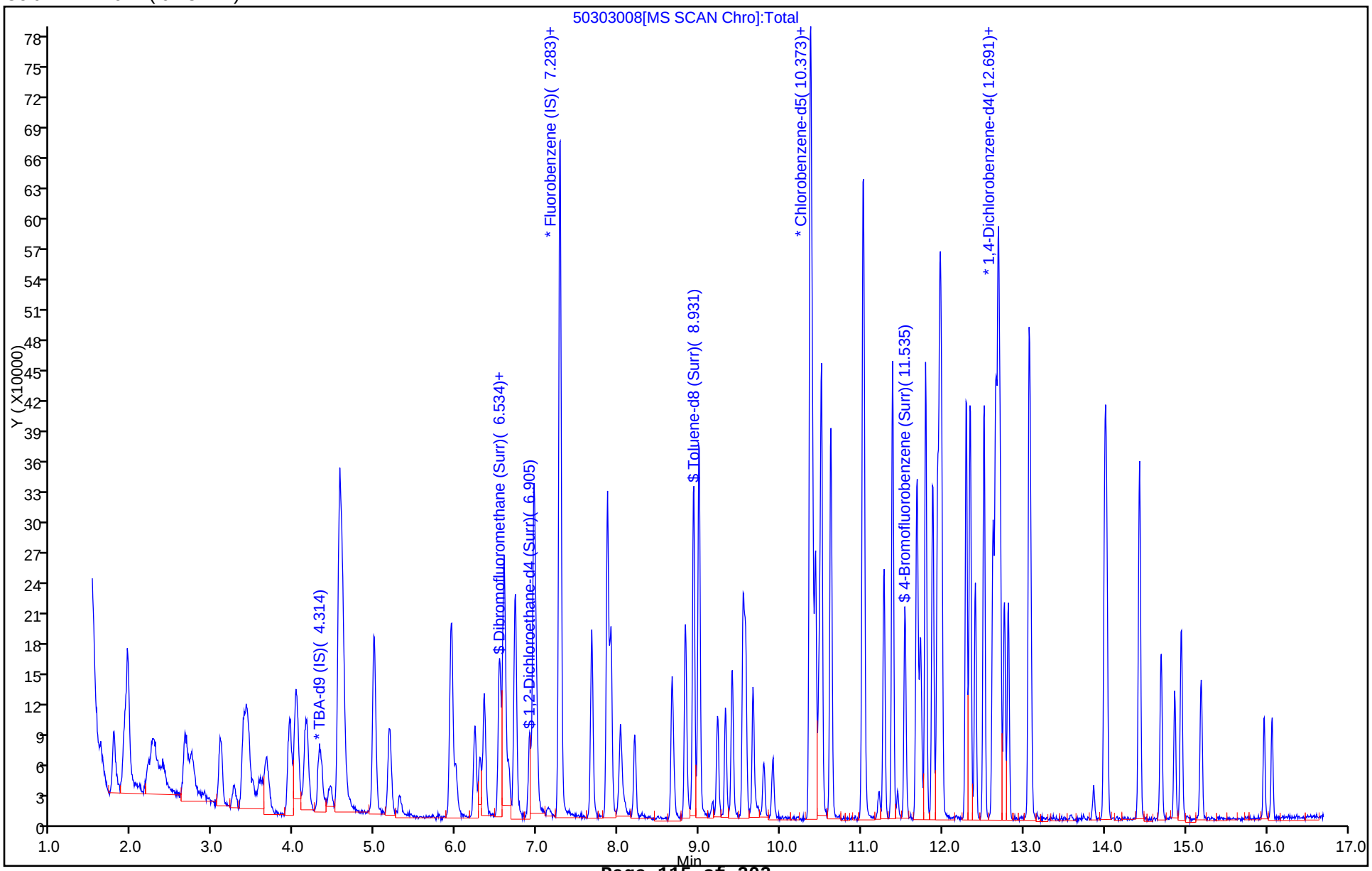
Report Date: 04-Mar-2015 10:13:04 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303008.D

Injection Date:	03-Mar-2015 14:28:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

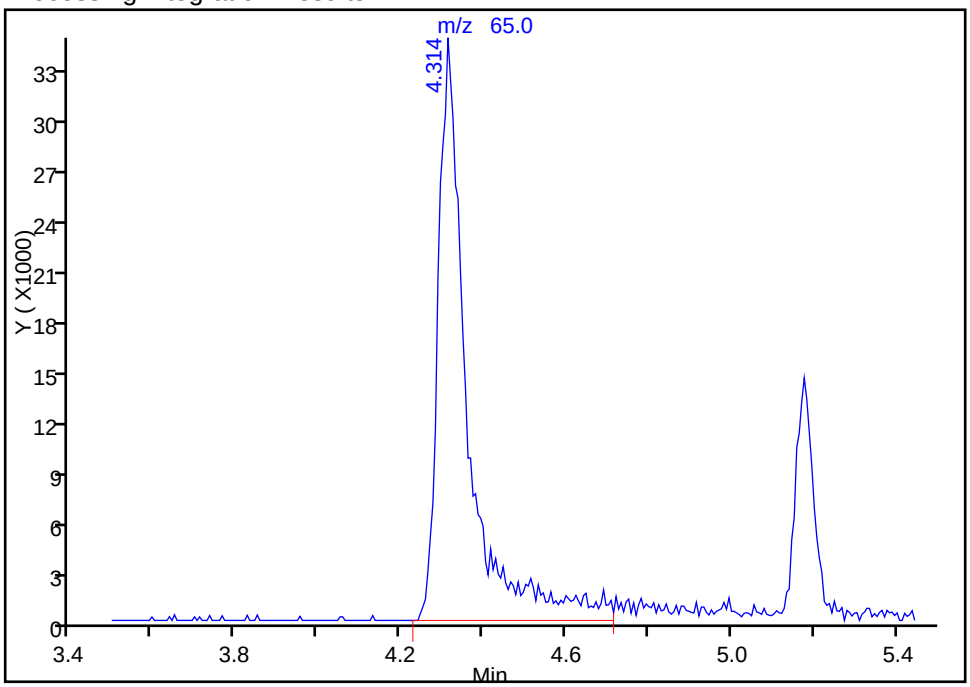
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303008.D				
Injection Date:	03-Mar-2015 14:28:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 1 TBA-d9 (IS), CAS: 25725-11-5

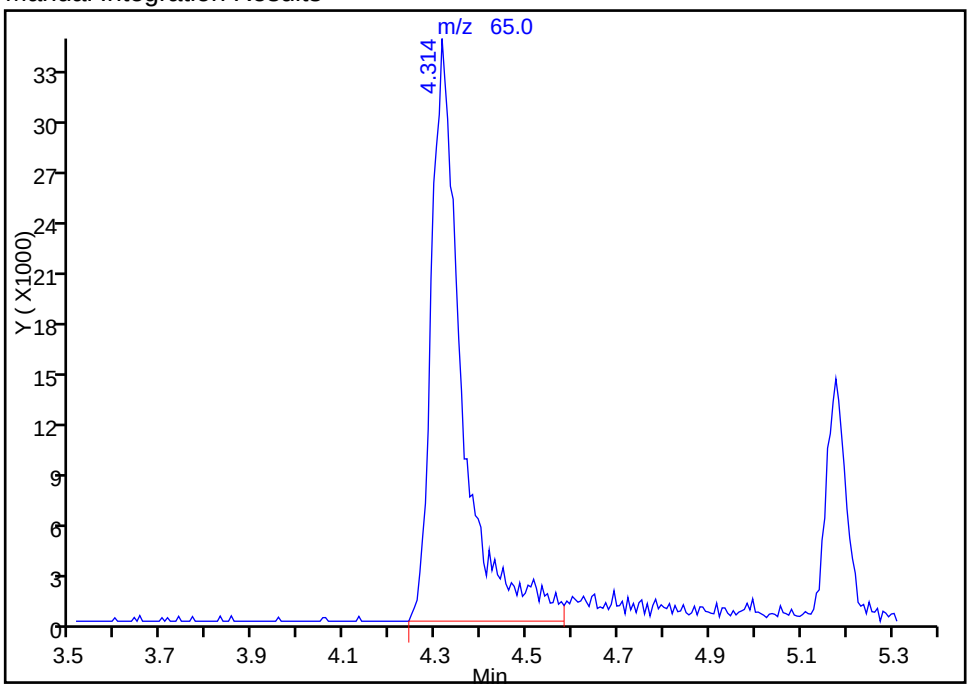
Processing Integration Results

RT: 4.31
Area: 169293
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.31
Area: 160393
Amount: 1000.0000
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:28:28
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

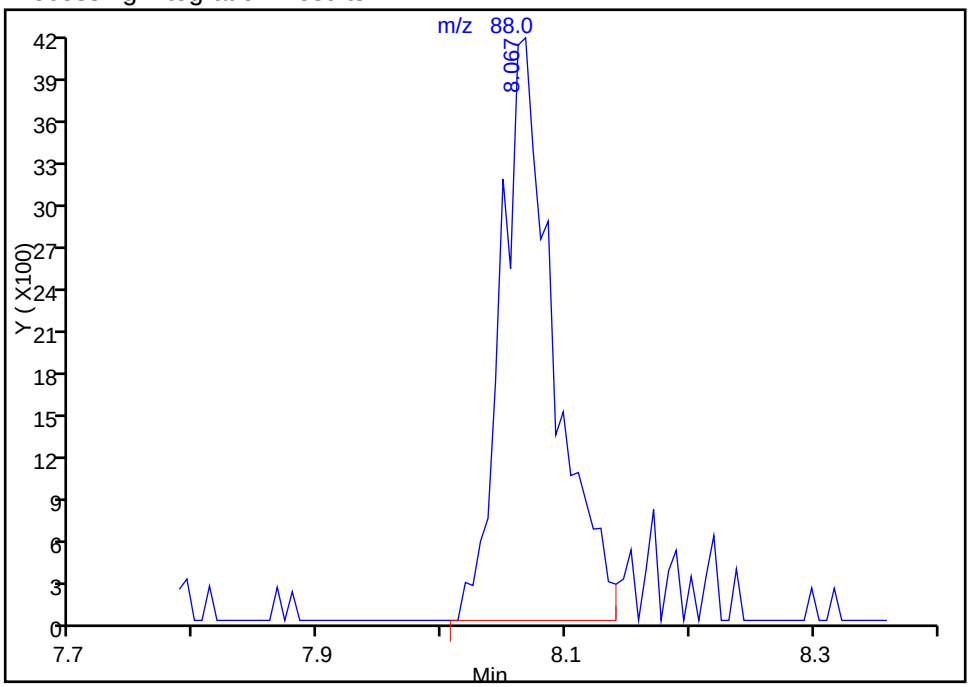
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303008.D
Injection Date: 03-Mar-2015 14:28:30 Instrument ID: CHHP5
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

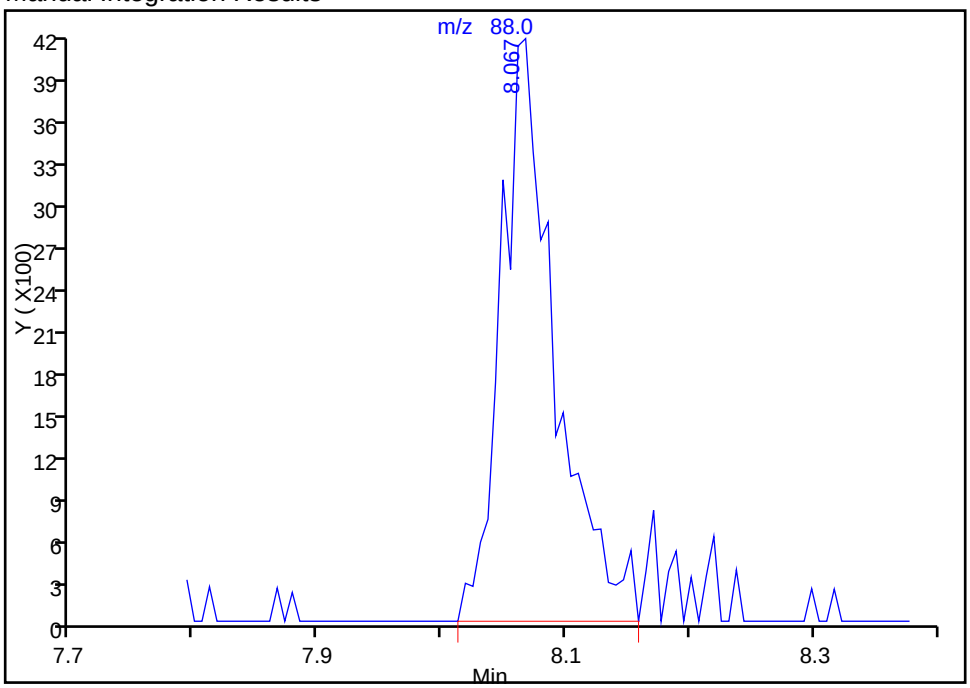
Processing Integration Results

RT: 8.07
Area: 12493
Amount: 432.4578
Amount Units: ng



Manual Integration Results

RT: 8.07
Area: 12787
Amount: 437.5160
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:20:09
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303009.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 03-Mar-2015 14:52:30 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS VSTD10
Misc. Info.: 180-0005873-009
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:28:23 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 04-Mar-2015 10:28:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.321	4.321	0.000	75	164184	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.278	7.278	0.000	95	524529	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.368	0.000	94	127341	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.686	0.000	92	172477	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.535	0.000	49	109435	50.0	48.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.907	0.000	67	133978	50.0	48.3	
$ 7 Toluene-d8 (Surr)	98	8.926	8.926	0.000	80	494434	50.0	49.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	89	176122	50.0	47.7	
11 Dichlorodifluoromethane	85	1.626	1.626	0.000	97	120251	50.0	45.6	
12 Chloromethane	50	1.772	1.772	0.000	87	191737	50.0	45.5	
13 Vinyl chloride	62	1.906	1.906	0.000	83	192697	50.0	47.6	
14 Butadiene	39	1.948	1.948	0.000	97	214505	50.0	45.7	
15 Bromomethane	94	2.253	2.253	0.000	89	68450	50.0	56.6	
16 Chloroethane	64	2.386	2.386	0.000	93	76259	50.0	46.3	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	199002	50.0	52.7	
18 Trichlorofluoromethane	101	2.709	2.709	0.000	81	165171	50.0	52.4	
20 Ethyl ether	59	3.098	3.098	0.000	86	134232	50.0	44.1	
21 Acrolein	56	3.263	3.263	0.000	88	55616	150.0	138.4	
22 1,1-Dichloroethene	96	3.384	3.384	0.000	98	136777	50.0	44.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.427	0.000	93	138904	50.0	45.0	
24 Acetone	43	3.500	3.500	0.000	96	100332	100.0	91.1	
25 Iodomethane	142	3.585	3.585	0.000	94	191906	50.0	44.7	
26 Carbon disulfide	76	3.664	3.664	0.000	99	333091	50.0	44.3	
28 3-Chloro-1-propene	76	3.950	3.950	0.000	88	83771	50.0	43.9	
30 Methyl acetate	43	4.023	4.023	0.000	99	667992	250.0	220.5	
31 Methylene Chloride	84	4.151	4.151	0.000	92	157472	50.0	46.0	
32 2-Methyl-2-propanol	59	4.437	4.437	0.000	71	88451	500.0	449.6	
33 Acrylonitrile	53	4.558	4.558	0.000	100	691056	500.0	460.1	
34 trans-1,2-Dichloroethene	96	4.577	4.577	0.000	59	145422	50.0	45.5	
35 Methyl tert-butyl ether	73	4.601	4.601	0.000	92	357516	50.0	44.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	94	262665	50.0	46.3	
37 1,1-Dichloroethane	63	5.179	5.179	0.000	85	274871	50.0	45.2	
38 Vinyl acetate	43	5.307	5.307	0.000	96	96814	50.0	46.6	
44 2,2-Dichloropropane	77	5.933	5.933	0.000	63	100580	50.0	44.6	
45 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	71	151771	50.0	44.4	
46 2-Butanone (MEK)	43	5.994	5.994	0.000	93	160864	100.0	89.6	
49 Chlorobromomethane	128	6.231	6.231	0.000	87	62252	50.0	43.7	
51 Tetrahydrofuran	42	6.298	6.298	0.000	92	110296	100.0	86.4	
52 Chloroform	83	6.347	6.347	0.000	84	211933	50.0	43.7	
53 1,1,1-Trichloroethane	97	6.541	6.541	0.000	89	146155	50.0	44.4	
54 Cyclohexane	56	6.596	6.596	0.000	94	341881	50.0	46.2	
56 Carbon tetrachloride	117	6.724	6.724	0.000	61	92122	50.0	41.2	
55 1,1-Dichloropropene	75	6.730	6.730	0.000	90	191632	50.0	45.6	
57 Isobutyl alcohol	41	6.955	6.955	0.000	39	64264	1250.0	892.6	
58 Benzene	78	6.961	6.961	0.000	97	602514	50.0	45.5	
59 1,2-Dichloroethane	62	6.992	6.992	0.000	87	170712	50.0	44.6	
62 n-Heptane	43	7.284	7.284	0.000	71	235230	50.0	45.7	
64 Trichloroethene	130	7.673	7.673	0.000	93	142439	50.0	45.6	
66 Methylcyclohexane	83	7.868	7.868	0.000	92	269904	50.0	45.8	
67 1,2-Dichloropropane	63	7.910	7.910	0.000	90	157237	50.0	45.2	
68 Dibromomethane	93	8.026	8.026	0.000	91	69033	50.0	43.9	
70 1,4-Dioxane	88	8.056	8.056	0.000	94	25299	1000.0	815.7	M
71 Dichlorobromomethane	83	8.202	8.202	0.000	90	123848	50.0	42.3	
74 cis-1,3-Dichloropropene	75	8.665	8.665	0.000	90	172126	50.0	44.4	
75 4-Methyl-2-pentanone (MIBK	43	8.829	8.829	0.000	96	349805	100.0	91.0	
76 Toluene	91	8.993	8.993	0.000	91	612731	50.0	46.6	
77 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	82	118446	50.0	42.7	
78 Ethyl methacrylate	69	9.322	9.322	0.000	94	131269	50.0	42.1	
79 1,1,2-Trichloroethane	97	9.407	9.407	0.000	85	109481	50.0	45.6	
80 Tetrachloroethene	164	9.541	9.541	0.000	97	111273	50.0	45.9	
81 1,3-Dichloropropane	76	9.571	9.571	0.000	95	208110	50.0	46.1	
82 2-Hexanone	43	9.662	9.662	0.000	98	246507	100.0	91.8	
84 Chlorodibromomethane	129	9.796	9.796	0.000	88	64530	50.0	40.9	
85 Ethylene Dibromide	107	9.906	9.906	0.000	99	103819	50.0	44.9	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	74	196791	50.0	48.8	
87 Chlorobenzene	112	10.398	10.398	0.000	90	384609	50.0	45.7	
88 4-Chlorobenzotrifluoride	180	10.435	10.435	0.000	78	193901	50.0	50.3	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.477	0.000	79	80096	50.0	41.3	
90 Ethylbenzene	106	10.508	10.508	0.000	98	225030	50.0	46.2	
91 m-Xylene & p-Xylene	106	10.624	10.624	0.000	99	274985	50.0	45.9	
92 o-Xylene	106	11.013	11.013	0.000	92	271432	50.0	46.7	
93 Styrene	104	11.031	11.031	0.000	91	439152	50.0	46.2	
94 Bromoform	173	11.214	11.214	0.000	69	30710	50.0	36.8	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	95	193920	50.0	48.5	
97 Isopropylbenzene	105	11.384	11.384	0.000	96	672554	50.0	47.1	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.676	0.000	76	154009	50.0	46.3	
100 Bromobenzene	156	11.682	11.682	0.000	94	141042	50.0	46.8	
101 1,2,3-Trichloropropane	110	11.725	11.725	0.000	57	47052	50.0	46.6	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.737	0.000	60	42637	50.0	43.5	
103 N-Propylbenzene	120	11.792	11.792	0.000	93	195976	50.0	49.0	
104 2-Chlorotoluene	126	11.883	11.883	0.000	96	154797	50.0	46.8	
105 3-Chlorotoluene	126	11.938	11.938	0.000	55	166326	50.0	49.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.968	11.968	0.000	94	539843	50.0	48.7	
107 4-Chlorotoluene	126	11.986	11.986	0.000	98	171070	50.0	48.0	
108 tert-Butylbenzene	119	12.290	12.290	0.000	63	468002	50.0	49.0	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	98	553643	50.0	48.4	
111 1,2-dichloro-4-(trifluorom	214	12.406	12.406	0.000	96	130185	50.0	50.4	
112 sec-Butylbenzene	105	12.509	12.509	0.000	94	669756	50.0	48.7	
113 1,3-Dichlorobenzene	146	12.625	12.625	0.000	82	280066	50.0	47.0	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	91	542443	50.0	48.1	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	92	283523	50.0	47.3	
116 2,4-Dichloro-1-(triflourom	214	12.765	12.765	0.000	89	125921	50.0	51.3	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.807	0.000	97	134395	50.0	50.3	
120 n-Butylbenzene	91	13.069	13.069	0.000	95	479164	50.0	47.8	
121 1,2-Dichlorobenzene	146	13.087	13.087	0.000	94	258190	50.0	47.4	
122 1,2-Dibromo-3-Chloropropan	75	13.866	13.866	0.000	51	14541	50.0	40.5	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.006	0.000	96	553886	150.0	148.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.432	14.432	0.000	98	360944	100.0	98.1	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	91	127415	50.0	46.8	
127 Hexachlorobutadiene	225	14.870	14.870	0.000	90	54129	50.0	46.5	
128 Naphthalene	128	14.943	14.943	0.000	97	358706	50.0	45.4	
129 1,2,3-Trichlorobenzene	180	15.186	15.186	0.000	95	103456	50.0	44.3	
131 2,4,5-Trichlorotoluene	159	15.971	15.971	0.000	93	52505	50.0	44.4	
130 2,3,6-Trichlorotoluene	159	16.068	16.068	0.000	94	48130	50.0	44.2	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	92.5	
S 134 1,2-Dichloroethene, Total	96				0		100.0	90.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	87.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
VOAVAPRI_00003	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	2.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

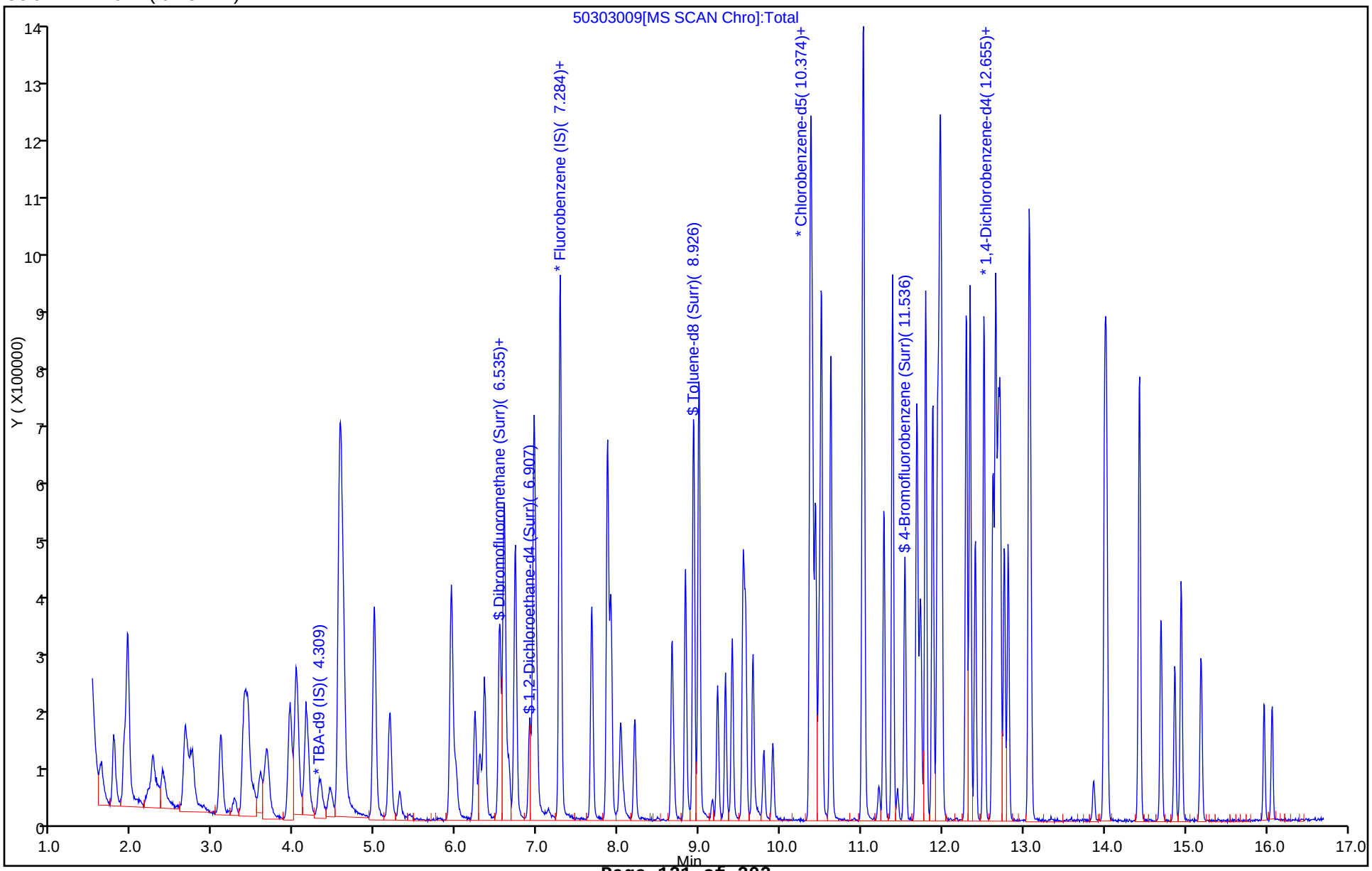
Report Date: 04-Mar-2015 10:28:24 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303009.D

Injection Date:	03-Mar-2015 14:52:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

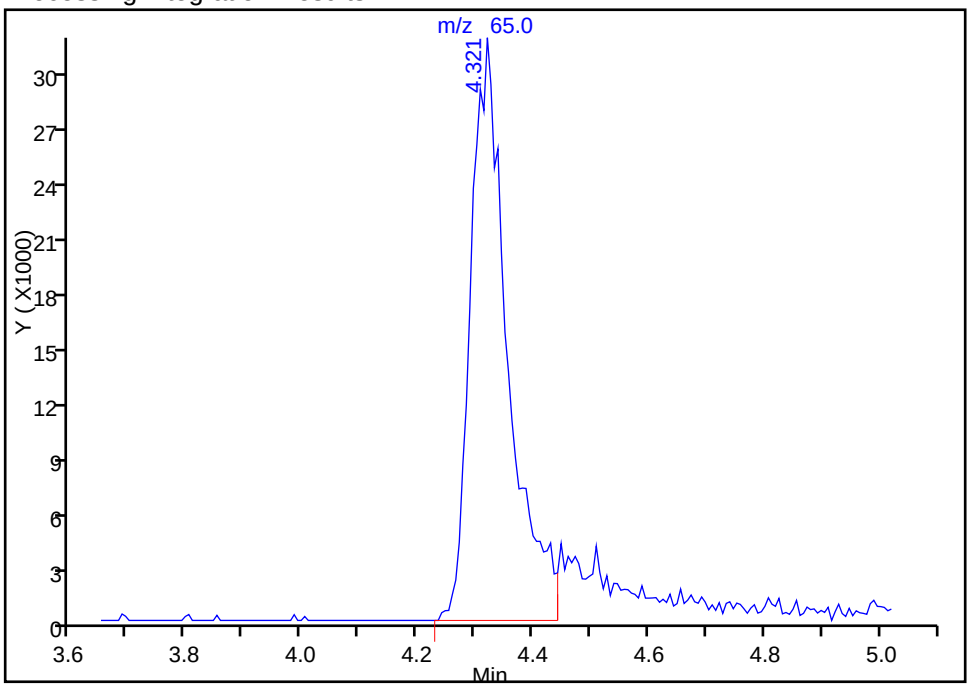
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303009.D
Injection Date: 03-Mar-2015 14:52:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

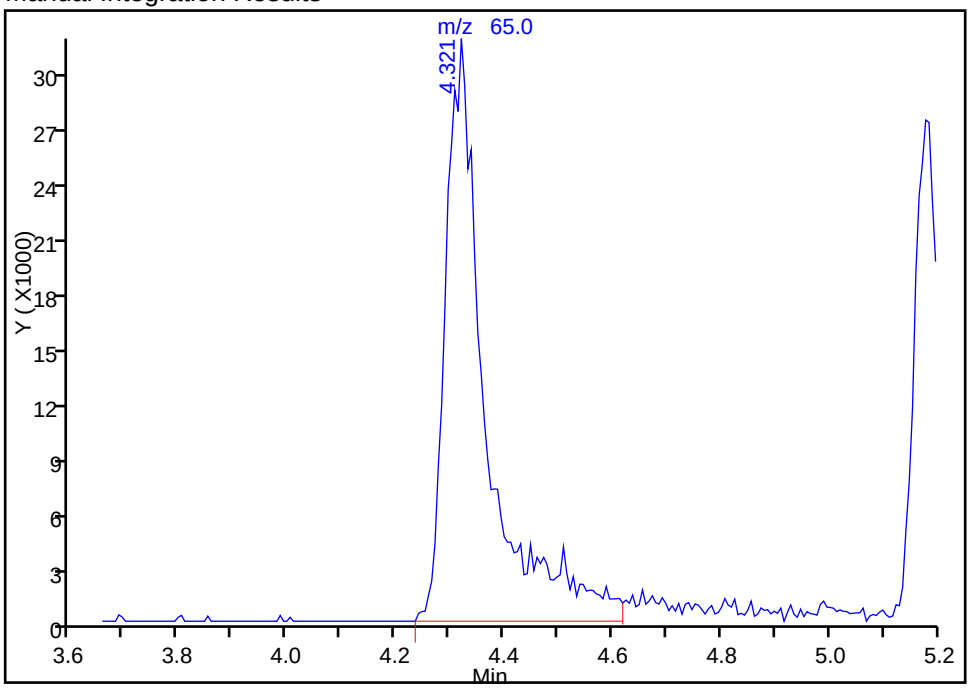
Processing Integration Results

RT: 4.32
Area: 141522
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.32
Area: 164184
Amount: 1000.0000
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:28:59
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

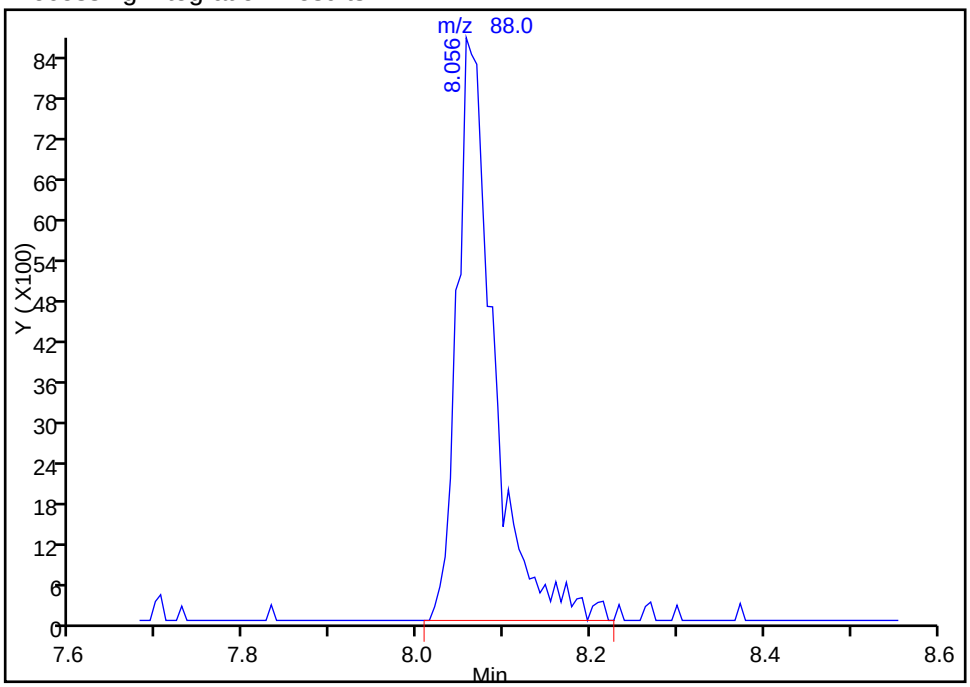
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303009.D
Injection Date: 03-Mar-2015 14:52:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

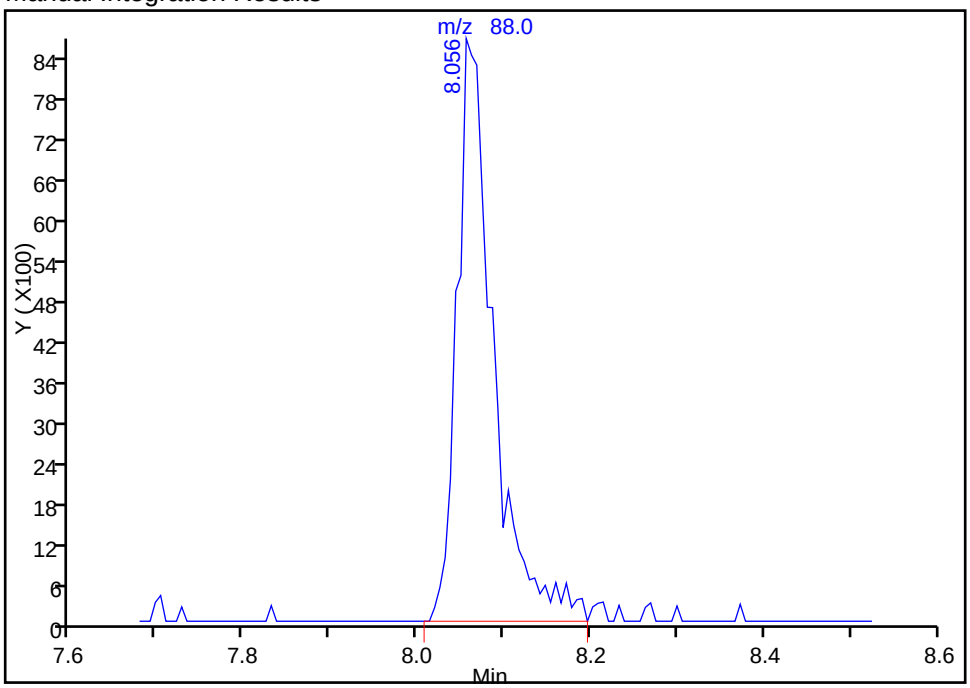
Processing Integration Results

RT: 8.06
Area: 25579
Amount: 832.2190
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 25299
Amount: 815.6604
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:25:43
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303010.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2015 15:16:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD15
Misc. Info.: 180-0005873-010
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:08 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 04-Mar-2015 09:26:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.321	4.321	0.000	94	173343	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.277	7.277	0.000	96	473168	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.368	0.000	95	112379	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.685	0.000	95	164943	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.535	0.000	79	155860	75.0	76.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.912	6.912	0.000	96	185233	75.0	74.0	
$ 7 Toluene-d8 (Surr)	98	8.932	8.932	0.000	94	686909	75.0	78.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	86	251005	75.0	77.0	
11 Dichlorodifluoromethane	85	1.620	1.620	0.000	98	186155	75.0	78.3	
12 Chloromethane	50	1.778	1.778	0.000	99	284435	75.0	74.9	
13 Vinyl chloride	62	1.912	1.912	0.000	98	276203	75.0	75.6	
14 Butadiene	39	1.948	1.948	0.000	98	311986	75.0	73.7	
15 Bromomethane	94	2.258	2.258	0.000	89	83485	75.0	78.2	
16 Chloroethane	64	2.380	2.380	0.000	97	109418	75.0	73.7	
17 Dichlorofluoromethane	67	2.648	2.648	0.000	97	252307	75.0	74.1	
18 Trichlorofluoromethane	101	2.708	2.708	0.000	97	211640	75.0	74.4	
20 Ethyl ether	59	3.092	3.092	0.000	100	203184	75.0	74.0	
21 Acrolein	56	3.274	3.274	0.000	100	66477	175.0	183.4	
22 1,1-Dichloroethene	96	3.384	3.384	0.000	100	210842	75.0	76.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.420	3.420	0.000	100	215323	75.0	77.3	
24 Acetone	43	3.505	3.505	0.000	100	145165	150.0	146.1	
25 Iodomethane	142	3.585	3.585	0.000	100	288929	75.0	74.5	
26 Carbon disulfide	76	3.664	3.664	0.000	100	513502	75.0	75.7	
28 3-Chloro-1-propene	76	3.956	3.956	0.000	100	129734	75.0	75.4	
30 Methyl acetate	43	4.029	4.029	0.000	100	1035670	375.0	378.9	
31 Methylene Chloride	84	4.150	4.150	0.000	100	227072	75.0	75.7	
32 2-Methyl-2-propanol	59	4.454	4.454	0.000	100	166475	750.0	801.4	
33 Acrylonitrile	53	4.564	4.564	0.000	100	1012388	750.0	747.2	
34 trans-1,2-Dichloroethene	96	4.576	4.576	0.000	100	213264	75.0	74.0	
35 Methyl tert-butyl ether	73	4.607	4.607	0.000	100	532783	75.0	74.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	100	382955	75.0	74.9	
37 1,1-Dichloroethane	63	5.178	5.178	0.000	100	412070	75.0	75.0	
38 Vinyl acetate	43	5.306	5.306	0.000	100	136421	75.0	72.7	
44 2,2-Dichloropropane	77	5.933	5.933	0.000	100	152789	75.0	75.2	
45 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	100	230462	75.0	74.8	
46 2-Butanone (MEK)	43	6.000	6.000	0.000	100	231681	150.0	143.1	
49 Chlorobromomethane	128	6.237	6.237	0.000	100	93661	75.0	73.0	
51 Tetrahydrofuran	42	6.292	6.292	0.000	100	164028	150.0	142.4	
52 Chloroform	83	6.346	6.346	0.000	100	325101	75.0	74.3	
53 1,1,1-Trichloroethane	97	6.535	6.535	0.000	100	222478	75.0	74.9	
54 Cyclohexane	56	6.590	6.590	0.000	100	510634	75.0	76.6	
56 Carbon tetrachloride	117	6.724	6.724	0.000	100	148555	75.0	73.7	
55 1,1-Dichloropropene	75	6.730	6.730	0.000	100	290552	75.0	76.6	
57 Isobutyl alcohol	41	6.949	6.949	0.000	100	110778	1875.0	1705.7	
58 Benzene	78	6.967	6.967	0.000	100	905954	75.0	75.8	
59 1,2-Dichloroethane	62	6.991	6.991	0.000	100	260776	75.0	75.5	
62 n-Heptane	43	7.283	7.283	0.000	100	351211	75.0	75.6	
64 Trichloroethene	130	7.673	7.673	0.000	100	215876	75.0	76.7	
66 Methylcyclohexane	83	7.867	7.867	0.000	100	402645	75.0	75.7	
67 1,2-Dichloropropane	63	7.910	7.910	0.000	100	233558	75.0	74.4	
68 Dibromomethane	93	8.025	8.025	0.000	100	105949	75.0	74.8	
70 1,4-Dioxane	88	8.068	8.068	0.000	100	41693	1500.0	1490.1	
71 Dichlorobromomethane	83	8.202	8.202	0.000	100	196712	75.0	74.4	
74 cis-1,3-Dichloropropene	75	8.664	8.664	0.000	100	264977	75.0	75.7	
75 4-Methyl-2-pentanone (MIBK	43	8.828	8.828	0.000	100	535170	150.0	157.7	
76 Toluene	91	8.999	8.999	0.000	100	901036	75.0	77.7	
77 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	100	181868	75.0	74.4	
78 Ethyl methacrylate	69	9.321	9.321	0.000	100	212852	75.0	77.4	
79 1,1,2-Trichloroethane	97	9.406	9.406	0.000	100	164474	75.0	77.6	
80 Tetrachloroethene	164	9.540	9.540	0.000	100	166159	75.0	77.6	
81 1,3-Dichloropropane	76	9.571	9.571	0.000	100	308357	75.0	77.4	
82 2-Hexanone	43	9.662	9.662	0.000	100	379170	150.0	160.1	
84 Chlorodibromomethane	129	9.796	9.796	0.000	100	104491	75.0	75.0	
85 Ethylene Dibromide	107	9.905	9.905	0.000	100	156151	75.0	76.5	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	100	273444	75.0	76.9	
87 Chlorobenzene	112	10.398	10.398	0.000	100	567114	75.0	76.3	
88 4-Chlorobenzotrifluoride	180	10.428	10.428	0.000	100	266494	75.0	78.4	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.477	0.000	100	126760	75.0	74.0	
90 Ethylbenzene	106	10.508	10.508	0.000	100	336025	75.0	78.2	
91 m-Xylene & p-Xylene	106	10.623	10.623	0.000	100	411920	75.0	77.9	
92 o-Xylene	106	11.019	11.019	0.000	100	400497	75.0	78.0	
93 Styrene	104	11.031	11.031	0.000	100	658511	75.0	78.5	
94 Bromoform	173	11.213	11.213	0.000	100	53409	75.0	72.6	
96 2-Chlorobenzotrifluoride	180	11.280	11.280	0.000	100	270017	75.0	76.6	
97 Isopropylbenzene	105	11.384	11.384	0.000	100	1000450	75.0	79.4	
99 1,1,2,2-Tetrachloroethane	83	11.682	11.682	0.000	100	226865	75.0	77.2	
100 Bromobenzene	156	11.688	11.688	0.000	100	214072	75.0	74.3	
101 1,2,3-Trichloropropane	110	11.724	11.724	0.000	100	69273	75.0	71.7	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.736	0.000	100	66494	75.0	70.9	
103 N-Propylbenzene	120	11.791	11.791	0.000	100	290195	75.0	75.8	
104 2-Chlorotoluene	126	11.882	11.882	0.000	100	235369	75.0	74.5	
105 3-Chlorotoluene	126	11.937	11.937	0.000	100	229133	75.0	70.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.968	11.968	0.000	100	806423	75.0	76.1	
107 4-Chlorotoluene	126	11.986	11.986	0.000	100	256729	75.0	75.3	
108 tert-Butylbenzene	119	12.296	12.296	0.000	100	700240	75.0	76.6	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	100	832074	75.0	76.1	
111 1,2-dichloro-4-(trifluorom	214	12.406	12.406	0.000	100	183065	75.0	74.2	
112 sec-Butylbenzene	105	12.515	12.515	0.000	100	1008135	75.0	76.6	
113 1,3-Dichlorobenzene	146	12.625	12.625	0.000	100	420272	75.0	73.8	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	100	824816	75.0	76.5	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	100	429154	75.0	74.9	
116 2,4-Dichloro-1-(triflourom	214	12.764	12.764	0.000	100	171372	75.0	73.1	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	100	186097	75.0	72.8	
120 n-Butylbenzene	91	13.069	13.069	0.000	100	729499	75.0	76.1	
121 1,2-Dichlorobenzene	146	13.087	13.087	0.000	100	387327	75.0	74.4	
122 1,2-Dibromo-3-Chloropropan	75	13.866	13.866	0.000	100	23597	75.0	68.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.012	14.012	0.000	100	813805	225.0	228.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.431	14.431	0.000	100	529936	150.0	150.7	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	100	199956	75.0	76.8	
127 Hexachlorobutadiene	225	14.869	14.869	0.000	100	81675	75.0	73.4	
128 Naphthalene	128	14.942	14.942	0.000	100	580632	75.0	76.8	
129 1,2,3-Trichlorobenzene	180	15.192	15.192	0.000	100	171850	75.0	76.9	
131 2,4,5-Trichlorotoluene	159	15.970	15.970	0.000	100	81997	75.0	72.6	
130 2,3,6-Trichlorotoluene	159	16.068	16.068	0.000	100	78544	75.0	75.4	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		150.0	155.9	
S 134 1,2-Dichloroethene, Total	96				0		150.0	148.8	
S 135 1,3-Dichloropropene, Total	1				0		150.0	150.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWKetpri Re_00003	Amount Added:	3.00	Units: uL	
VOA8260SURR_00031	Amount Added:	3.00	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	3.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	3.00	Units: uL	
VOAVAPRI_00003	Amount Added:	3.00	Units: uL	
VOAACRPRI_00003	Amount Added:	7.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

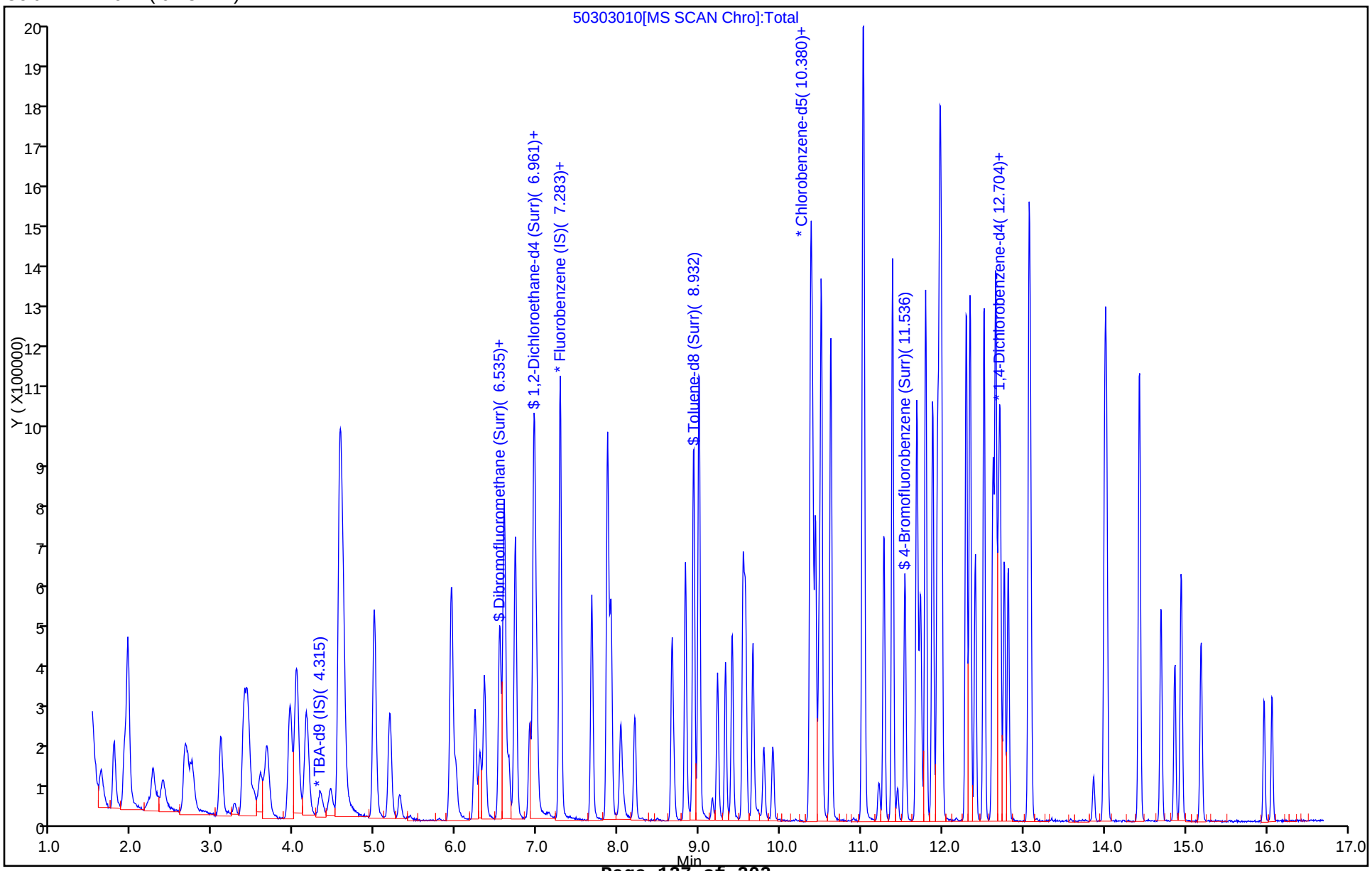
Report Date: 04-Mar-2015 10:13:08 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303010.D

Injection Date:	03-Mar-2015 15:16:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

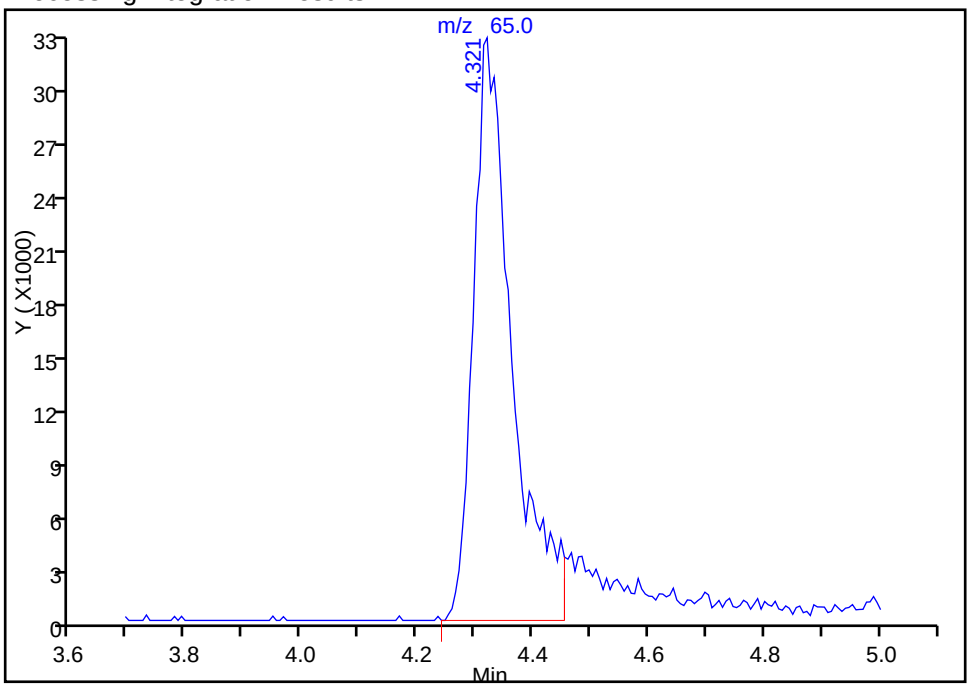
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303010.D				
Injection Date:	03-Mar-2015 15:16:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD15				
Client ID:					
Operator ID:	001562	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 1 TBA-d9 (IS), CAS: 25725-11-5

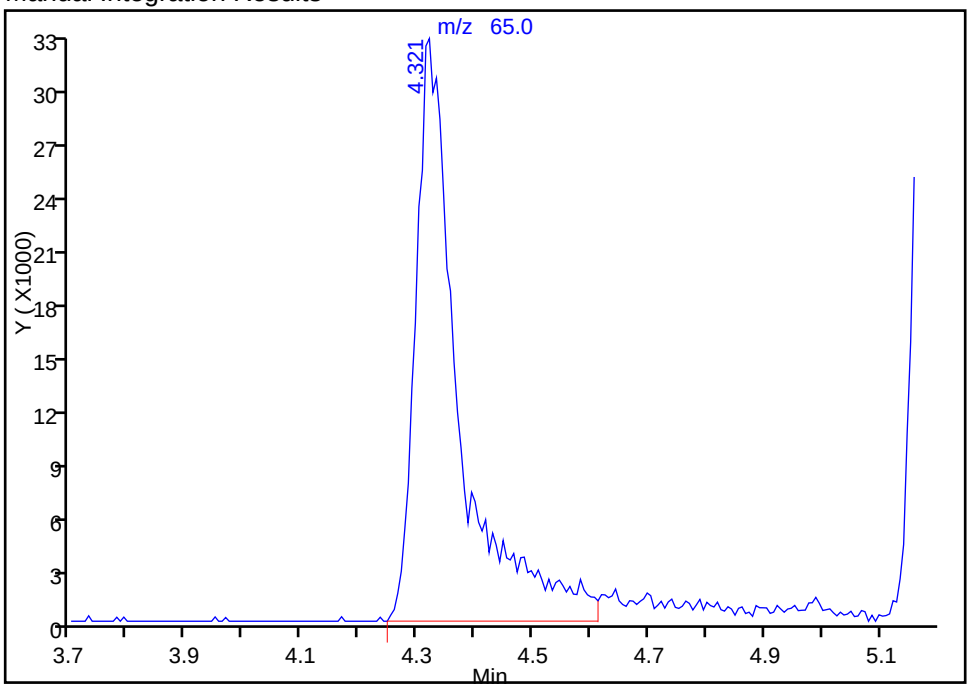
Processing Integration Results

RT: 4.32
Area: 152021
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.32
Area: 173343
Amount: 1000.0000
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:31:26
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303011.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Mar-2015 15:40:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD20
Misc. Info.: 180-0005873-011
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:10 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 04-Mar-2015 09:33:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.321	4.321	0.000	95	178184	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.277	7.277	0.000	90	463863	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.368	0.000	97	114659	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.685	0.001	96	167232	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.535	0.000	98	199995	100.0	100.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.912	-0.006	99	250369	100.0	102.0	
$ 7 Toluene-d8 (Surr)	98	8.926	8.932	-0.006	100	910944	100.0	101.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	99	327893	100.0	98.6	
11 Dichlorodifluoromethane	85	1.626	1.620	0.006	71	248600	100.0	106.7	
12 Chloromethane	50	1.778	1.778	0.000	94	377346	100.0	101.3	
13 Vinyl chloride	62	1.906	1.912	-0.006	100	370529	100.0	103.5	
14 Butadiene	39	1.948	1.948	0.000	98	418091	100.0	100.7	
15 Bromomethane	94	2.252	2.258	-0.006	70	100603	100.0	97.3	
16 Chloroethane	64	2.386	2.380	0.006	78	141570	100.0	97.2	
17 Dichlorofluoromethane	67	2.654	2.648	0.006	99	320590	100.0	96.0	
18 Trichlorofluoromethane	101	2.703	2.708	-0.005	97	274680	100.0	98.5	
20 Ethyl ether	59	3.092	3.092	0.000	99	266877	100.0	99.2	
21 Acrolein	56	3.262	3.274	-0.012	84	73636	200.0	207.2	
22 1,1-Dichloroethene	96	3.378	3.384	-0.006	99	282447	100.0	104.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.420	0.007	98	283308	100.0	103.8	
24 Acetone	43	3.506	3.505	0.001	99	186722	200.0	191.7	
25 Iodomethane	142	3.573	3.585	-0.012	96	391404	100.0	103.0	
26 Carbon disulfide	76	3.658	3.664	-0.006	100	702207	100.0	105.6	
28 3-Chloro-1-propene	76	3.944	3.956	-0.012	91	175910	100.0	104.3	
30 Methyl acetate	43	4.023	4.029	-0.006	100	1360573	500.0	507.8	
31 Methylene Chloride	84	4.144	4.150	-0.006	99	292219	100.0	100.5	
32 2-Methyl-2-propanol	59	4.449	4.454	-0.005	74	219266	1000.0	1026.9	M
33 Acrylonitrile	53	4.558	4.564	-0.006	99	1352445	1000.0	1018.2	
34 trans-1,2-Dichloroethene	96	4.564	4.576	-0.012	56	288749	100.0	102.2	
35 Methyl tert-butyl ether	73	4.607	4.607	0.000	100	717429	100.0	101.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.990	-0.006	99	515034	100.0	102.7	
37 1,1-Dichloroethane	63	5.173	5.178	-0.005	100	542610	100.0	100.8	
38 Vinyl acetate	43	5.300	5.306	-0.006	95	200290	100.0	108.9	
44 2,2-Dichloropropane	77	5.933	5.933	0.000	65	206033	100.0	103.4	
45 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	92	302735	100.0	100.2	
46 2-Butanone (MEK)	43	5.994	6.000	-0.006	100	323375	200.0	203.7	
49 Chlorobromomethane	128	6.225	6.237	-0.012	79	129587	100.0	103.0	
51 Tetrahydrofuran	42	6.286	6.292	-0.006	98	227621	200.0	201.5	
52 Chloroform	83	6.347	6.346	0.001	98	436474	100.0	101.7	
53 1,1,1-Trichloroethane	97	6.535	6.535	0.000	75	308574	100.0	105.9	
54 Cyclohexane	56	6.590	6.590	0.000	83	671150	100.0	102.6	
56 Carbon tetrachloride	117	6.724	6.724	0.000	68	204809	100.0	103.6	
55 1,1-Dichloropropene	75	6.730	6.730	0.000	96	385796	100.0	103.8	
57 Isobutyl alcohol	41	6.949	6.949	0.000	41	166120	2500.0	2609.2	
58 Benzene	78	6.961	6.967	-0.006	99	1208197	100.0	103.1	
59 1,2-Dichloroethane	62	6.985	6.991	-0.006	93	341780	100.0	101.0	
62 n-Heptane	43	7.284	7.283	0.001	96	463470	100.0	101.7	
64 Trichloroethene	130	7.673	7.673	0.000	98	289114	100.0	104.8	
66 Methylcyclohexane	83	7.868	7.867	0.001	95	553839	100.0	106.2	
67 1,2-Dichloropropane	63	7.910	7.910	0.000	99	309721	100.0	100.7	
68 Dibromomethane	93	8.026	8.025	0.001	98	142348	100.0	102.4	
70 1,4-Dioxane	88	8.062	8.068	-0.006	93	56031	2000.0	2042.7	
71 Dichlorobromomethane	83	8.202	8.202	0.000	99	271870	100.0	105.0	
74 cis-1,3-Dichloropropene	75	8.658	8.664	-0.006	99	360087	100.0	104.9	
75 4-Methyl-2-pentanone (MIBK	43	8.829	8.828	0.001	72	716953	200.0	207.1	
76 Toluene	91	8.993	8.999	-0.006	98	1214867	100.0	102.7	
77 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	80	260722	100.0	104.5	
78 Ethyl methacrylate	69	9.321	9.321	0.000	93	300128	100.0	107.0	
79 1,1,2-Trichloroethane	97	9.407	9.406	0.001	93	214719	100.0	99.3	
80 Tetrachloroethene	164	9.540	9.540	0.000	98	224037	100.0	102.6	
81 1,3-Dichloropropane	76	9.571	9.571	0.000	94	406834	100.0	100.1	
82 2-Hexanone	43	9.662	9.662	0.000	99	504684	200.0	208.8	
84 Chlorodibromomethane	129	9.796	9.796	0.000	93	148140	100.0	104.2	
85 Ethylene Dibromide	107	9.905	9.905	0.000	98	216491	100.0	104.0	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	99	362586	100.0	99.9	
87 Chlorobenzene	112	10.392	10.398	-0.006	89	771107	100.0	101.7	
88 4-Chlorobenzotrifluoride	180	10.435	10.428	0.007	97	349632	100.0	100.8	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.477	0.000	96	178500	100.0	102.1	
90 Ethylbenzene	106	10.508	10.508	0.000	100	459104	100.0	104.8	
91 m-Xylene & p-Xylene	106	10.623	10.623	0.000	100	559842	100.0	103.7	
92 o-Xylene	106	11.013	11.019	-0.005	93	532728	100.0	101.7	
93 Styrene	104	11.031	11.031	0.000	96	881546	100.0	102.9	
94 Bromoform	173	11.213	11.213	0.000	90	78926	100.0	105.1	
96 2-Chlorobenzotrifluoride	180	11.280	11.280	0.000	96	362034	100.0	100.6	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	1329527	100.0	103.4	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.682	-0.006	76	310127	100.0	103.5	
100 Bromobenzene	156	11.688	11.688	0.000	95	285408	100.0	97.7	
101 1,2,3-Trichloropropane	110	11.724	11.724	0.000	70	94067	100.0	96.1	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.736	0.001	79	87031	100.0	91.5	
103 N-Propylbenzene	120	11.791	11.791	0.000	98	387657	100.0	99.9	
104 2-Chlorotoluene	126	11.877	11.882	-0.005	99	315400	100.0	98.4	
105 3-Chlorotoluene	126	11.937	11.937	0.000	75	313196	100.0	95.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.968	11.968	0.000	99	1078510	100.0	100.4	
107 4-Chlorotoluene	126	11.986	11.986	0.000	99	352063	100.0	101.8	
108 tert-Butylbenzene	119	12.290	12.296	-0.006	66	930079	100.0	100.3	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	100	1124585	100.0	101.5	
111 1,2-dichloro-4-(trifluorom	214	12.406	12.406	0.000	98	245627	100.0	98.2	
112 sec-Butylbenzene	105	12.509	12.515	-0.006	92	1341600	100.0	100.6	
113 1,3-Dichlorobenzene	146	12.625	12.625	0.000	88	570988	100.0	98.9	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	99	1092513	100.0	99.9	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	97	576692	100.0	99.2	
116 2,4-Dichloro-1-(triflourom	214	12.765	12.764	0.001	94	238033	100.0	100.1	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	97	254456	100.0	98.1	
120 n-Butylbenzene	91	13.069	13.069	0.000	100	981363	100.0	101.0	
121 1,2-Dichlorobenzene	146	13.087	13.087	0.000	99	527759	100.0	99.9	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.866	-0.006	94	35031	100.0	100.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.012	14.012	0.000	99	1079107	300.0	299.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.431	-0.005	99	704089	200.0	197.4	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	98	263899	100.0	99.9	
127 Hexachlorobutadiene	225	14.864	14.869	-0.005	94	111717	100.0	99.0	
128 Naphthalene	128	14.943	14.942	0.001	100	773789	100.0	101.0	
129 1,2,3-Trichlorobenzene	180	15.192	15.192	0.000	98	224922	100.0	99.3	
131 2,4,5-Trichlorotoluene	159	15.971	15.970	0.001	96	109488	100.0	95.6	
130 2,3,6-Trichlorotoluene	159	16.062	16.068	-0.006	97	102526	100.0	97.1	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		200.0	205.4	
S 134 1,2-Dichloroethene, Total	96				0		200.0	202.5	
S 135 1,3-Dichloropropene, Total	1				0		200.0	209.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	4.00	Units: uL	
VOAVAPRI_00003	Amount Added:	4.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	4.00	Units: uL	
VOA8260SURR_00031	Amount Added:	4.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

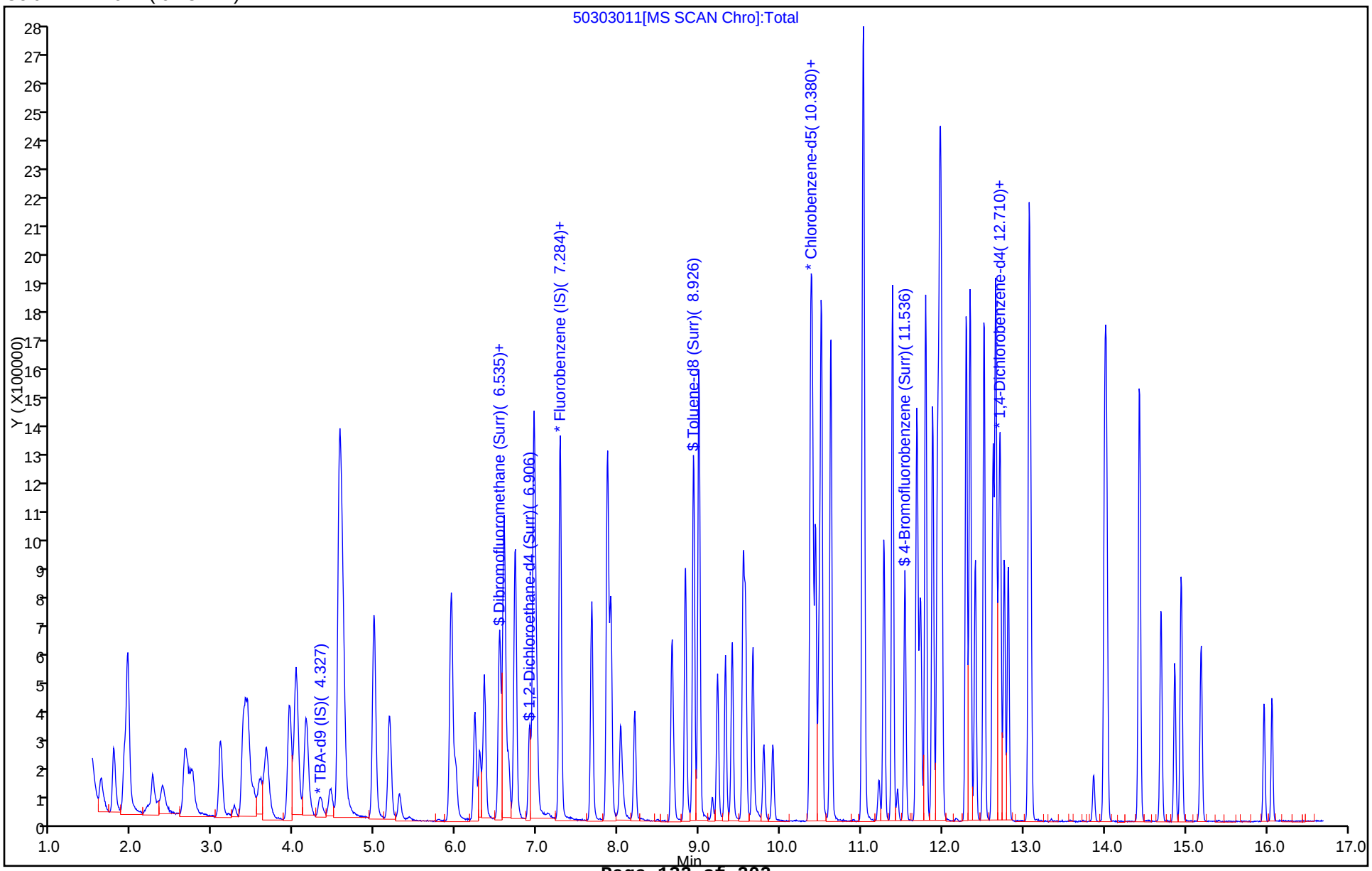
Report Date: 04-Mar-2015 10:13:10 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303011.D

Injection Date:	03-Mar-2015 15:40:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

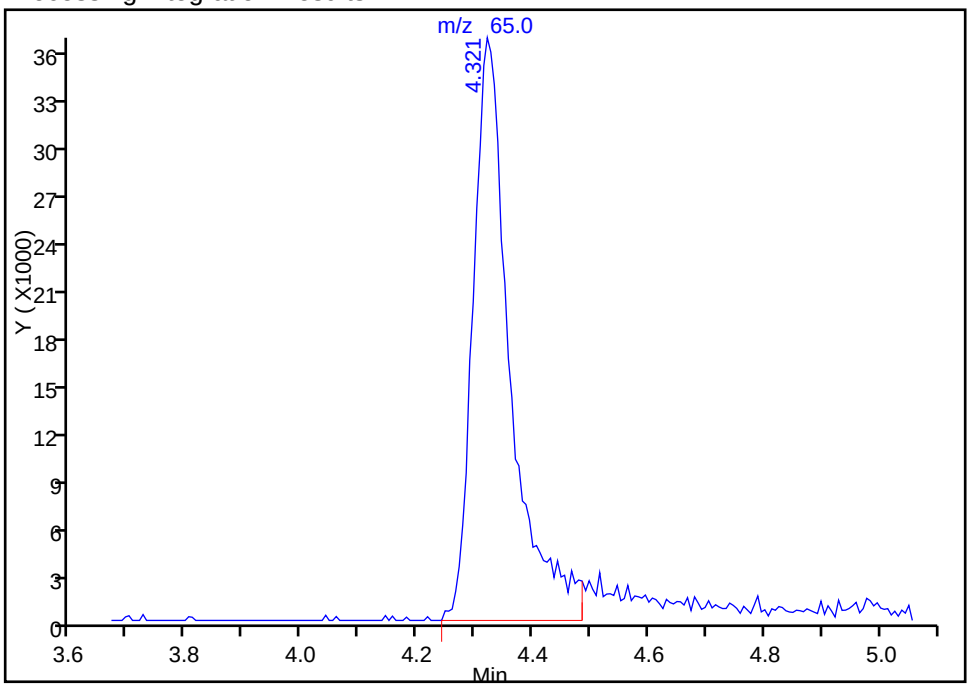
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303011.D
Injection Date: 03-Mar-2015 15:40:30 Instrument ID: CHHP5
Lims ID: IC VSTD20
Client ID:
Operator ID: 001562 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

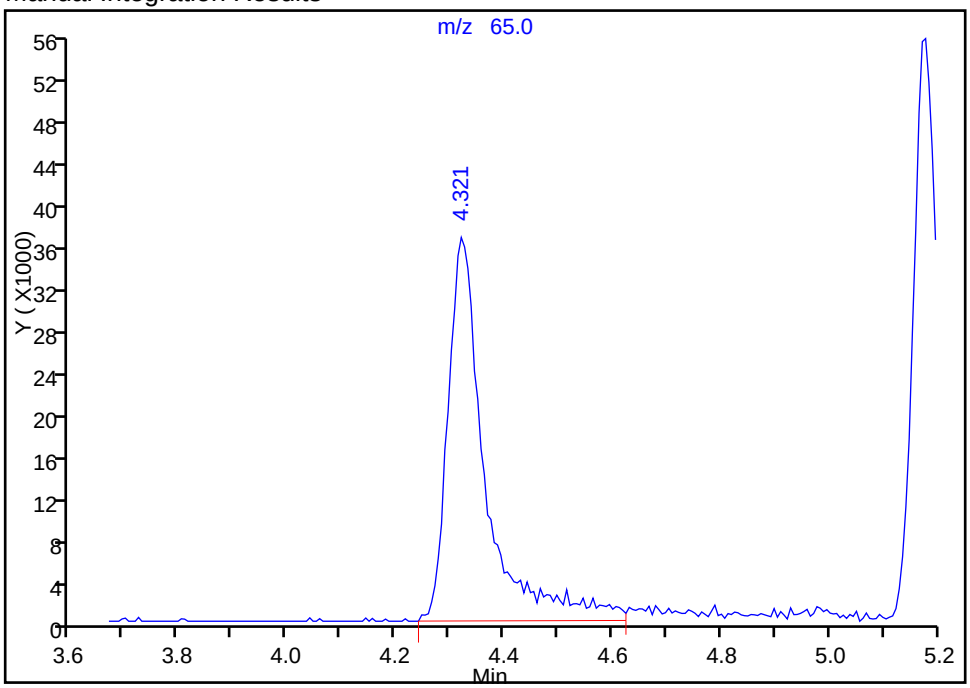
Processing Integration Results

RT: 4.32
Area: 165569
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.32
Area: 178184
Amount: 1000.0000
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:33:10
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

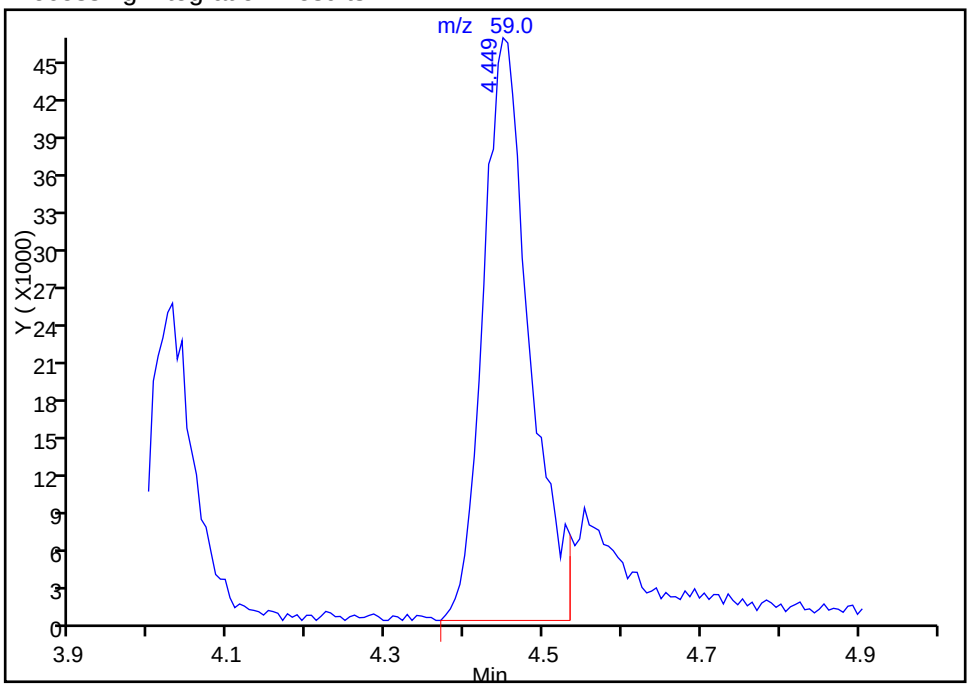
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303011.D
Injection Date: 03-Mar-2015 15:40:30 Instrument ID: CHHP5
Lims ID: IC VSTD20
Client ID:
Operator ID: 001562 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

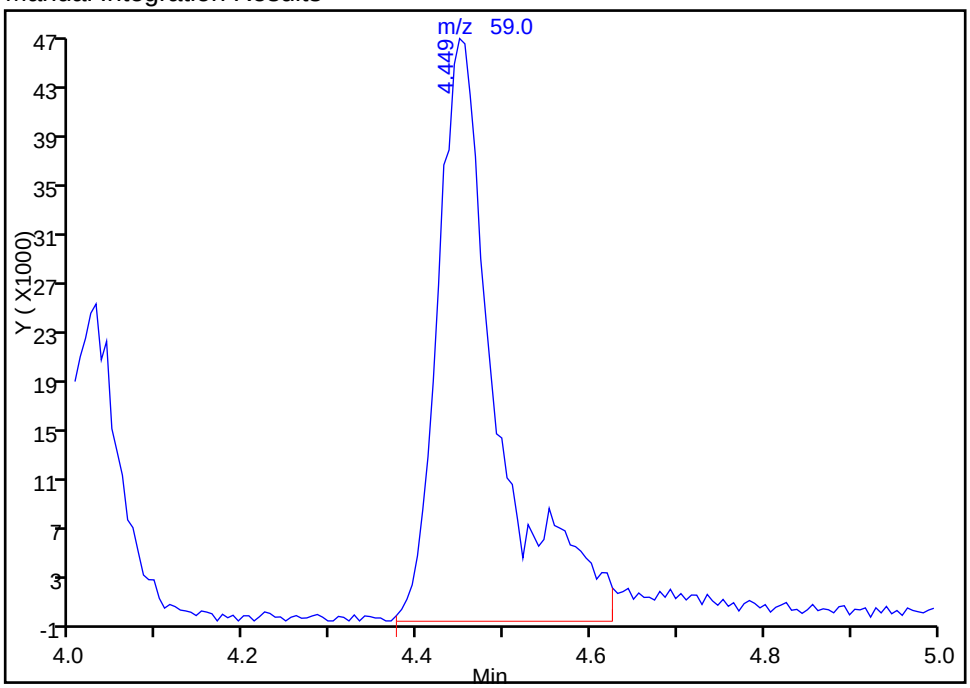
Processing Integration Results

RT: 4.45
Area: 188329
Amount: 911.3747
Amount Units: ng



Manual Integration Results

RT: 4.45
Area: 219266
Amount: 1026.8689
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:35:16
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303012.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Mar-2015 16:04:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD35
Misc. Info.: 180-0005873-012
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:11 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 04-Mar-2015 09:37:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.323	4.321	0.002	87	196024	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.280	7.277	0.003	72	484263	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.368	0.002	80	123732	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.688	12.685	0.003	94	171685	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.535	-0.004	98	361120	175.0	174.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.908	6.912	-0.004	99	444667	175.0	173.5	
$ 7 Toluene-d8 (Surr)	98	8.928	8.932	-0.004	100	1566428	175.0	162.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.538	11.536	0.002	99	603450	175.0	168.2	
11 Dichlorodifluoromethane	85	1.622	1.620	0.002	98	392329	175.0	161.2	
12 Chloromethane	50	1.780	1.778	0.002	94	626420	175.0	161.1	
13 Vinyl chloride	62	1.908	1.912	-0.004	99	599809	175.0	160.5	
14 Butadiene	39	1.950	1.948	0.002	98	656586	175.0	151.5	
15 Bromomethane	94	2.255	2.258	-0.003	75	163842	175.0	154.6	
16 Chloroethane	64	2.376	2.380	-0.004	83	241114	175.0	158.6	
17 Dichlorofluoromethane	67	2.650	2.648	0.002	99	529735	175.0	152.0	
18 Trichlorofluoromethane	101	2.717	2.708	0.009	98	433936	175.0	149.1	
20 Ethyl ether	59	3.094	3.092	0.002	100	467174	175.0	166.3	
21 Acrolein	56	3.258	3.274	-0.016	81	76799	225.0	207.0	
22 1,1-Dichloroethene	96	3.374	3.384	-0.010	99	466370	175.0	165.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.429	3.420	0.009	98	466462	175.0	163.7	
24 Acetone	43	3.508	3.505	0.003	98	338711	350.0	333.0	
25 Iodomethane	142	3.581	3.585	-0.004	96	658969	175.0	166.1	
26 Carbon disulfide	76	3.654	3.664	-0.010	100	1168823	175.0	168.4	
28 3-Chloro-1-propene	76	3.946	3.956	-0.010	92	305734	175.0	173.6	
30 Methyl acetate	43	4.025	4.029	-0.004	100	2402270	875.0	858.8	
31 Methylene Chloride	84	4.147	4.150	-0.003	99	516693	175.0	172.9	
32 2-Methyl-2-propanol	59	4.451	4.454	-0.003	90	407341	1750.0	1734.0	M
33 Acrylonitrile	53	4.554	4.564	-0.010	98	2376546	1750.0	1713.8	
34 trans-1,2-Dichloroethene	96	4.566	4.576	-0.010	57	496919	175.0	168.5	
35 Methyl tert-butyl ether	73	4.609	4.607	0.002	100	1269630	175.0	172.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.986	4.990	-0.004	98	854071	175.0	163.2	
37 1,1-Dichloroethane	63	5.175	5.178	-0.003	100	945361	175.0	168.2	
38 Vinyl acetate	43	5.296	5.306	-0.010	98	346138	175.0	180.3	
44 2,2-Dichloropropane	77	5.929	5.933	-0.004	65	354872	175.0	170.6	
45 cis-1,2-Dichloroethene	96	5.941	5.945	-0.004	87	529478	175.0	167.9	
46 2-Butanone (MEK)	43	5.990	6.000	-0.010	100	573542	350.0	346.1	
49 Chlorobromomethane	128	6.227	6.237	-0.010	75	220291	175.0	167.7	
51 Tetrahydrofuran	42	6.288	6.292	-0.004	99	386544	350.0	327.8	
52 Chloroform	83	6.349	6.346	0.003	85	751712	175.0	167.8	
53 1,1,1-Trichloroethane	97	6.531	6.535	-0.004	98	515456	175.0	169.5	
54 Cyclohexane	56	6.592	6.590	0.002	94	1109737	175.0	162.6	
56 Carbon tetrachloride	117	6.720	6.724	-0.004	66	362211	175.0	175.6	
55 1,1-Dichloropropene	75	6.726	6.730	-0.004	96	650285	175.0	167.5	
57 Isobutyl alcohol	41	6.951	6.949	0.002	45	324042	4375.0	4875.2	
58 Benzene	78	6.963	6.967	-0.004	98	2026853	175.0	165.7	
59 1,2-Dichloroethane	62	6.994	6.991	0.003	98	602602	175.0	170.6	
62 n-Heptane	43	7.286	7.283	0.003	89	806729	175.0	169.6	
64 Trichloroethene	130	7.669	7.673	-0.004	99	484743	175.0	168.3	
66 Methylcyclohexane	83	7.864	7.867	-0.003	95	899256	175.0	165.2	
67 1,2-Dichloropropane	63	7.906	7.910	-0.004	95	551216	175.0	171.6	
68 Dibromomethane	93	8.028	8.025	0.003	98	252976	175.0	174.4	
70 1,4-Dioxane	88	8.064	8.068	-0.004	96	107243	3500.0	3745.1	
71 Dichlorobromomethane	83	8.204	8.202	0.002	100	494496	175.0	182.9	
74 cis-1,3-Dichloropropene	75	8.660	8.664	-0.004	100	670035	175.0	187.1	
75 4-Methyl-2-pentanone (MIBK	43	8.825	8.828	-0.003	98	1293845	350.0	346.3	
76 Toluene	91	8.995	8.999	-0.004	98	2025808	175.0	158.6	
77 trans-1,3-Dichloropropene	75	9.226	9.224	0.002	93	504089	175.0	187.2	
78 Ethyl methacrylate	69	9.324	9.321	0.003	99	559868	175.0	184.9	
79 1,1,2-Trichloroethane	97	9.403	9.406	-0.003	98	384751	175.0	164.9	
80 Tetrachloroethene	164	9.543	9.540	0.003	99	376799	175.0	159.9	
81 1,3-Dichloropropane	76	9.567	9.571	-0.004	98	730064	175.0	166.5	
82 2-Hexanone	43	9.658	9.662	-0.004	99	895448	350.0	343.4	
84 Chlorodibromomethane	129	9.792	9.796	-0.004	96	285792	175.0	186.3	
85 Ethylene Dibromide	107	9.901	9.905	-0.004	99	391652	175.0	174.3	
86 3-Chlorobenzotrifluoride	180	10.376	10.374	0.002	90	648455	175.0	165.5	
87 Chlorobenzene	112	10.394	10.398	-0.004	98	1313352	175.0	160.6	
88 4-Chlorobenzotrifluoride	180	10.431	10.428	0.003	97	620760	175.0	165.8	
89 1,1,1,2-Tetrachloroethane	131	10.479	10.477	0.002	93	343717	175.0	182.2	
90 Ethylbenzene	106	10.504	10.508	-0.004	99	779624	175.0	164.9	
91 m-Xylene & p-Xylene	106	10.625	10.623	0.002	99	963277	175.0	165.4	
92 o-Xylene	106	11.015	11.019	-0.003	90	917689	175.0	162.3	
93 Styrene	104	11.027	11.031	-0.004	91	1511299	175.0	163.5	
94 Bromoform	173	11.216	11.213	0.003	91	158386	175.0	195.4	
96 2-Chlorobenzotrifluoride	180	11.276	11.280	-0.004	91	640624	175.0	165.0	
97 Isopropylbenzene	105	11.380	11.384	-0.004	99	2186986	175.0	157.6	
99 1,1,2,2-Tetrachloroethane	83	11.678	11.682	-0.004	69	554635	175.0	171.5	
100 Bromobenzene	156	11.684	11.688	-0.004	89	509283	175.0	169.8	
101 1,2,3-Trichloropropane	110	11.727	11.724	0.003	69	166640	175.0	165.8	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.736	-0.003	84	171777	175.0	175.9	
103 N-Propylbenzene	120	11.793	11.791	0.002	98	668080	175.0	167.7	
104 2-Chlorotoluene	126	11.879	11.882	-0.003	98	556210	175.0	169.1	
105 3-Chlorotoluene	126	11.939	11.937	0.002	73	574840	175.0	170.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.968	-0.004	99	1821042	175.0	165.2	
107 4-Chlorotoluene	126	11.988	11.986	0.002	97	590273	175.0	166.2	
108 tert-Butylbenzene	119	12.292	12.296	-0.004	89	1538995	175.0	161.7	
110 1,2,4-Trimethylbenzene	105	12.341	12.339	0.002	98	1864947	175.0	163.9	
111 1,2-dichloro-4-(trifluorom	214	12.408	12.406	0.002	99	433987	175.0	168.9	
112 sec-Butylbenzene	105	12.511	12.515	-0.004	93	2200188	175.0	160.6	
113 1,3-Dichlorobenzene	146	12.621	12.625	-0.004	91	974213	175.0	164.4	
114 4-Isopropyltoluene	119	12.657	12.655	0.002	98	1841892	175.0	164.1	
115 1,4-Dichlorobenzene	146	12.712	12.710	0.002	97	989384	175.0	165.9	
116 2,4-Dichloro-1-(triflourom	214	12.761	12.764	-0.003	93	406260	175.0	166.4	
118 2,5-Dichlorobenzotrifluori	214	12.809	12.813	-0.004	95	457073	175.0	171.7	
120 n-Butylbenzene	91	13.065	13.069	-0.004	99	1641091	175.0	164.4	
121 1,2-Dichlorobenzene	146	13.083	13.087	-0.004	98	903766	175.0	166.7	
122 1,2-Dibromo-3-Chloropropan	75	13.862	13.866	-0.004	92	69537	175.0	194.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.012	-0.004	99	1903055	525.0	514.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.431	-0.003	99	1260859	350.0	344.4	
126 1,2,4-Trichlorobenzene	180	14.695	14.693	0.002	98	464683	175.0	171.4	
127 Hexachlorobutadiene	225	14.866	14.869	-0.003	94	186416	175.0	161.0	
128 Naphthalene	128	14.945	14.942	0.003	100	1355121	175.0	172.2	
129 1,2,3-Trichlorobenzene	180	15.188	15.192	-0.004	99	394157	175.0	169.5	
131 2,4,5-Trichlorotoluene	159	15.967	15.970	-0.003	98	200009	175.0	170.0	
130 2,3,6-Trichlorotoluene	159	16.064	16.068	-0.004	97	182005	175.0	167.8	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		350.0	327.7	
S 134 1,2-Dichloroethene, Total	96				0		350.0	336.5	
S 135 1,3-Dichloropropene, Total	1				0		350.0	374.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00031	Amount Added:	7.00	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	7.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	7.00	Units: uL	
VOAVAPRI_00003	Amount Added:	7.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	7.00	Units: uL	
VOAACRPRI_00003	Amount Added:	9.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

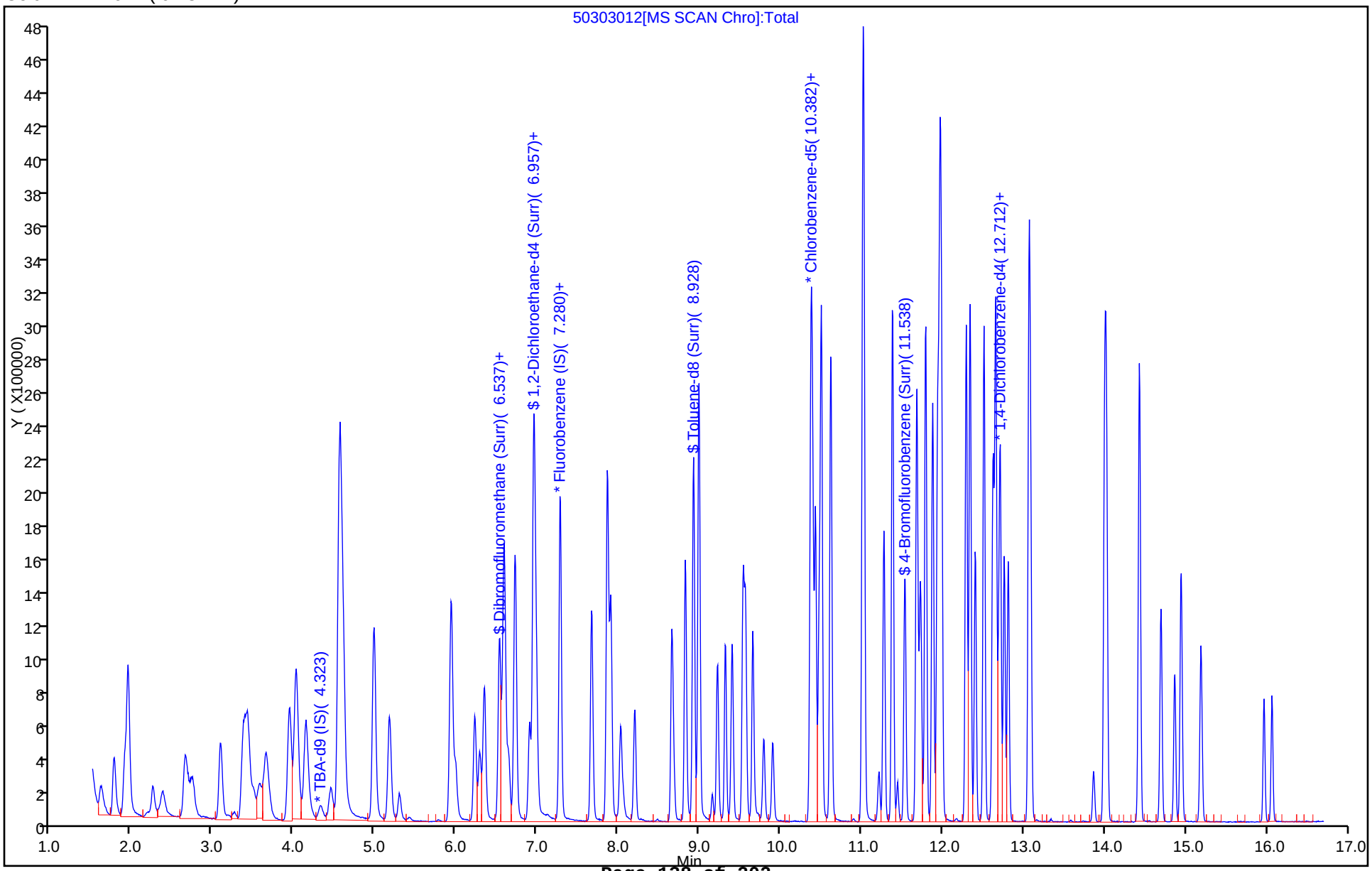
Report Date: 04-Mar-2015 10:13:12 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303012.D

Injection Date:	03-Mar-2015 16:04:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

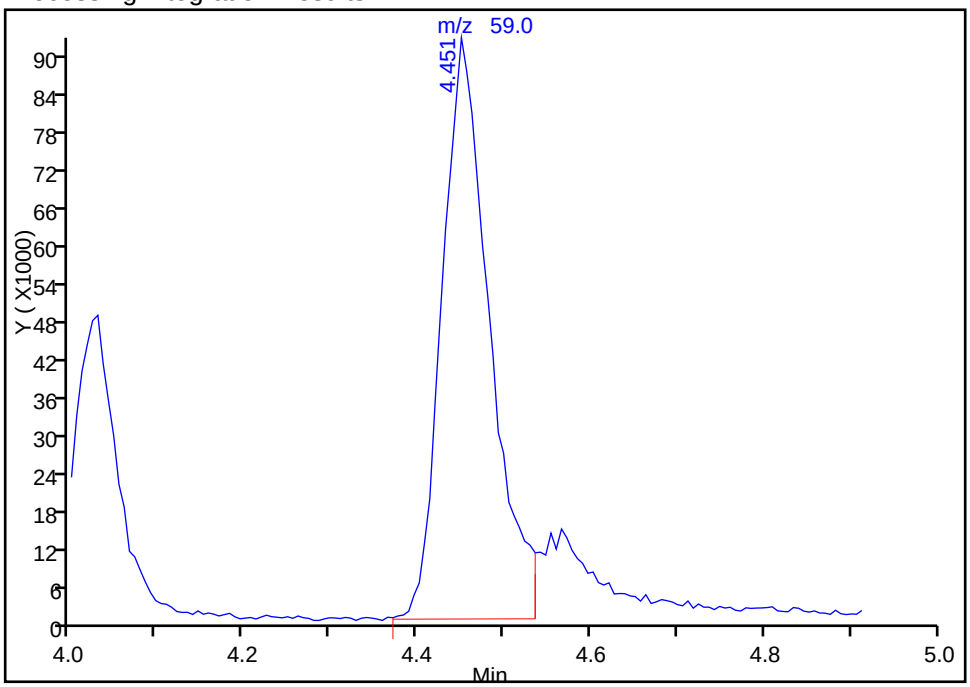
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303012.D
Injection Date: 03-Mar-2015 16:04:30 Instrument ID: CHHP5
Lims ID: IC VSTD35
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

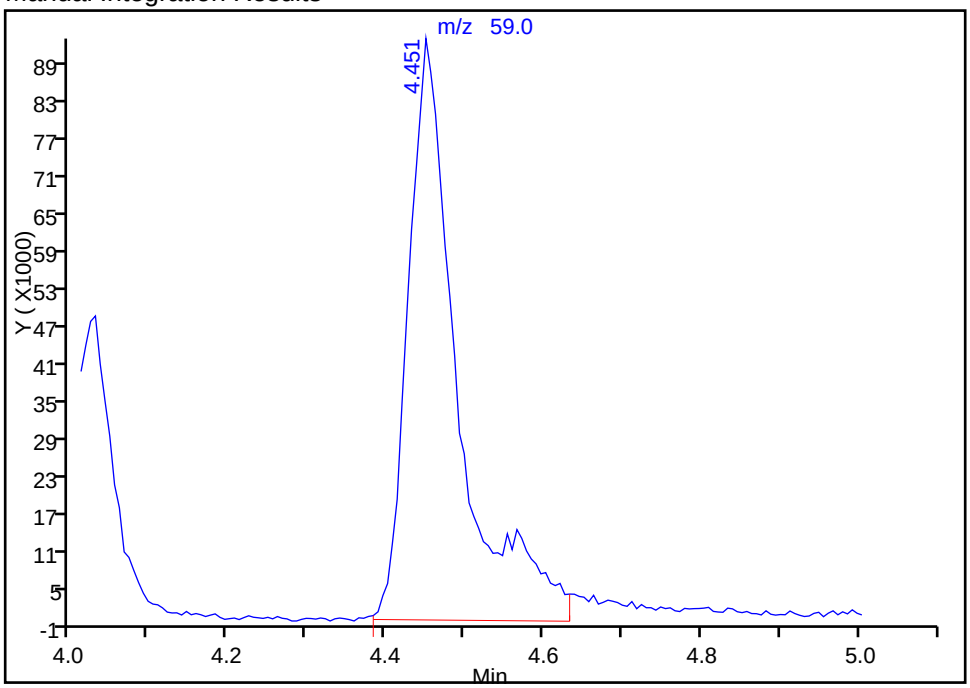
Processing Integration Results

RT: 4.45
Area: 353645
Amount: 1527.0542
Amount Units: ng



Manual Integration Results

RT: 4.45
Area: 407341
Amount: 1734.0487
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:37:20
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303013.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Mar-2015 16:28:30 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD40
Misc. Info.: 180-0005873-013
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:13 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 04-Mar-2015 09:39:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.329	4.321	0.007	99	195478	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.277	-0.004	99	458440	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.369	10.368	0.001	99	117839	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.687	12.685	0.002	94	165585	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.535	-0.004	99	407623	200.0	207.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.912	-0.010	99	495199	200.0	204.2	
$ 7 Toluene-d8 (Surr)	98	8.928	8.932	-0.004	100	1773929	200.0	193.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.537	11.536	0.001	99	675059	200.0	197.5	
11 Dichlorodifluoromethane	85	1.621	1.620	0.001	100	459101	200.0	199.3	
12 Chloromethane	50	1.773	1.778	-0.005	100	749194	200.0	203.5	
13 Vinyl chloride	62	1.907	1.912	-0.005	100	717244	200.0	202.7	
14 Butadiene	39	1.944	1.948	-0.004	99	795057	200.0	193.8	
15 Bromomethane	94	2.254	2.258	-0.004	92	202557	200.0	203.5	
16 Chloroethane	64	2.370	2.380	-0.010	98	300539	200.0	208.8	
17 Dichlorofluoromethane	67	2.649	2.648	0.001	99	702217	200.0	212.8	
18 Trichlorofluoromethane	101	2.698	2.708	-0.010	99	629405	200.0	228.4	
20 Ethyl ether	59	3.094	3.092	0.002	99	524790	200.0	197.4	
21 Acrolein	56	3.264	3.274	-0.010	98	88701	250.0	252.6	
22 1,1-Dichloroethene	96	3.373	3.384	-0.011	99	537938	200.0	201.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.420	0.008	100	564199	200.0	209.1	
24 Acetone	43	3.495	3.505	-0.010	100	359769	400.0	373.7	
25 Iodomethane	142	3.574	3.585	-0.011	98	768602	200.0	204.7	
26 Carbon disulfide	76	3.659	3.664	-0.005	100	1429882	200.0	217.6	
28 3-Chloro-1-propene	76	3.939	3.956	-0.017	100	353770	200.0	212.2	
30 Methyl acetate	43	4.024	4.029	-0.005	100	2723193	1000.0	1028.4	
31 Methylene Chloride	84	4.146	4.150	-0.004	99	581573	200.0	206.2	
32 2-Methyl-2-propanol	59	4.450	4.454	-0.004	99	473360	2000.0	2020.7	M
33 Acrylonitrile	53	4.554	4.564	-0.010	100	2649598	2000.0	2018.3	
34 trans-1,2-Dichloroethene	96	4.566	4.576	-0.010	94	564166	200.0	202.1	
35 Methyl tert-butyl ether	73	4.602	4.607	-0.005	100	1454209	200.0	208.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.986	4.990	-0.004	99	987257	200.0	199.3	
37 1,1-Dichloroethane	63	5.174	5.178	-0.004	100	1076133	200.0	202.3	
38 Vinyl acetate	43	5.296	5.306	-0.010	100	412211	200.0	226.8	
44 2,2-Dichloropropane	77	5.935	5.933	0.002	95	436442	200.0	221.6	
45 cis-1,2-Dichloroethene	96	5.941	5.945	-0.004	98	599342	200.0	200.8	
46 2-Butanone (MEK)	43	5.989	6.000	-0.011	100	661664	400.0	421.8	
49 Chlorobromomethane	128	6.233	6.237	-0.004	99	250607	200.0	201.5	
51 Tetrahydrofuran	42	6.287	6.292	-0.005	99	447707	400.0	401.0	
52 Chloroform	83	6.348	6.346	0.002	96	860226	200.0	202.9	
53 1,1,1-Trichloroethane	97	6.537	6.535	0.002	99	607230	200.0	210.9	
54 Cyclohexane	56	6.592	6.590	0.002	98	1313560	200.0	203.2	
56 Carbon tetrachloride	117	6.725	6.724	0.001	94	443952	200.0	227.3	
55 1,1-Dichloropropene	75	6.725	6.730	-0.005	98	755478	200.0	205.6	
57 Isobutyl alcohol	41	6.950	6.949	0.001	98	374911	5000.0	5958.2	
58 Benzene	78	6.957	6.967	-0.010	98	2284771	200.0	197.3	
59 1,2-Dichloroethane	62	6.987	6.991	-0.004	98	678619	200.0	202.9	
62 n-Heptane	43	7.285	7.283	0.002	89	940701	200.0	209.0	
64 Trichloroethene	130	7.668	7.673	-0.005	99	560499	200.0	205.5	
66 Methylcyclohexane	83	7.869	7.867	0.002	99	1051065	200.0	204.0	
67 1,2-Dichloropropane	63	7.906	7.910	-0.004	97	626785	200.0	206.1	
68 Dibromomethane	93	8.027	8.025	0.002	99	285467	200.0	207.9	
70 1,4-Dioxane	88	8.064	8.068	-0.004	96	108953	4000.0	4019.1	
71 Dichlorobromomethane	83	8.204	8.202	0.002	100	559625	200.0	218.6	
74 cis-1,3-Dichloropropene	75	8.660	8.664	-0.004	100	764955	200.0	225.6	
75 4-Methyl-2-pentanone (MIBK	43	8.824	8.828	-0.004	99	1424348	400.0	400.3	
76 Toluene	91	8.995	8.999	-0.004	99	2291440	200.0	188.4	
77 trans-1,3-Dichloropropene	75	9.220	9.224	-0.004	99	577469	200.0	225.2	
78 Ethyl methacrylate	69	9.317	9.321	-0.004	100	642835	200.0	222.9	
79 1,1,2-Trichloroethane	97	9.402	9.406	-0.004	99	430453	200.0	193.7	
80 Tetrachloroethene	164	9.536	9.540	-0.004	99	437446	200.0	194.9	
81 1,3-Dichloropropane	76	9.566	9.571	-0.005	100	810109	200.0	194.0	
82 2-Hexanone	43	9.658	9.662	-0.004	100	1007219	400.0	405.5	
84 Chlorodibromomethane	129	9.791	9.796	-0.005	99	335537	200.0	229.6	
85 Ethylene Dibromide	107	9.907	9.905	0.002	100	430697	200.0	201.3	
86 3-Chlorobenzotrifluoride	180	10.375	10.374	0.001	92	710605	200.0	190.5	
87 Chlorobenzene	112	10.394	10.398	-0.004	99	1486822	200.0	190.9	
88 4-Chlorobenzotrifluoride	180	10.430	10.428	0.002	99	673239	200.0	188.8	
89 1,1,1,2-Tetrachloroethane	131	10.479	10.477	0.002	94	404254	200.0	225.0	
90 Ethylbenzene	106	10.503	10.508	-0.005	99	878562	200.0	195.1	
91 m-Xylene & p-Xylene	106	10.619	10.623	-0.004	99	1087938	200.0	196.1	
92 o-Xylene	106	11.014	11.019	-0.004	95	1044535	200.0	194.0	
93 Styrene	104	11.026	11.031	-0.005	100	1702135	200.0	193.4	
94 Bromoform	173	11.215	11.213	0.002	99	189179	200.0	245.1	
96 2-Chlorobenzotrifluoride	180	11.276	11.280	-0.004	99	709528	200.0	191.8	
97 Isopropylbenzene	105	11.385	11.384	0.001	99	2509471	200.0	189.9	
99 1,1,2,2-Tetrachloroethane	83	11.677	11.682	-0.005	99	635984	200.0	206.5	
100 Bromobenzene	156	11.690	11.688	0.002	99	564181	200.0	195.0	
101 1,2,3-Trichloropropane	110	11.726	11.724	0.002	96	186872	200.0	192.8	
102 trans-1,4-Dichloro-2-buten	53	11.738	11.736	0.002	91	209408	200.0	222.4	
103 N-Propylbenzene	120	11.793	11.791	0.002	99	772940	200.0	201.1	
104 2-Chlorotoluene	126	11.878	11.882	-0.004	99	627560	200.0	197.8	
105 3-Chlorotoluene	126	11.939	11.937	0.002	99	635360	200.0	195.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.969	11.968	0.001	99	2069067	200.0	194.6	
107 4-Chlorotoluene	126	11.988	11.986	0.002	98	686264	200.0	200.4	
108 tert-Butylbenzene	119	12.292	12.296	-0.004	98	1773732	200.0	193.3	
110 1,2,4-Trimethylbenzene	105	12.340	12.339	0.001	98	2134132	200.0	194.5	
111 1,2-dichloro-4-(trifluorom	214	12.407	12.406	0.001	99	495775	200.0	200.1	
112 sec-Butylbenzene	105	12.511	12.515	-0.004	99	2515133	200.0	190.4	
113 1,3-Dichlorobenzene	146	12.620	12.625	-0.005	98	1106407	200.0	193.6	
114 4-Isopropyltoluene	119	12.657	12.655	0.002	98	2126114	200.0	196.4	
115 1,4-Dichlorobenzene	146	12.712	12.710	0.002	96	1119886	200.0	194.6	
116 2,4-Dichloro-1-(triflourom	214	12.760	12.764	-0.004	95	459072	200.0	194.9	
118 2,5-Dichlorobenzotrifluori	214	12.815	12.813	0.002	98	520914	200.0	202.9	
120 n-Butylbenzene	91	13.064	13.069	-0.005	99	1909418	200.0	198.4	
121 1,2-Dichlorobenzene	146	13.083	13.087	-0.004	99	1024132	200.0	195.9	
122 1,2-Dibromo-3-Chloropropan	75	13.861	13.866	-0.005	89	86409	200.0	250.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.007	14.012	-0.005	99	2106510	600.0	589.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.427	14.431	-0.004	99	1383564	400.0	391.9	
126 1,2,4-Trichlorobenzene	180	14.695	14.693	0.002	99	524775	200.0	200.7	
127 Hexachlorobutadiene	225	14.865	14.869	-0.004	98	227215	200.0	203.4	
128 Naphthalene	128	14.944	14.942	0.002	100	1499909	200.0	197.7	
129 1,2,3-Trichlorobenzene	180	15.194	15.192	0.002	99	445662	200.0	198.7	
131 2,4,5-Trichlorotoluene	159	15.966	15.970	-0.004	98	227883	200.0	200.9	
130 2,3,6-Trichlorotoluene	159	16.064	16.068	-0.004	97	202347	200.0	193.5	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		400.0	390.1	
S 134 1,2-Dichloroethene, Total	96				0		400.0	402.9	
S 135 1,3-Dichloropropene, Total	1				0		400.0	450.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	10.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	8.00	Units: uL	
VOAVAPRI_00003	Amount Added:	8.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	8.00	Units: uL	
VOA8260SURR_00031	Amount Added:	8.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

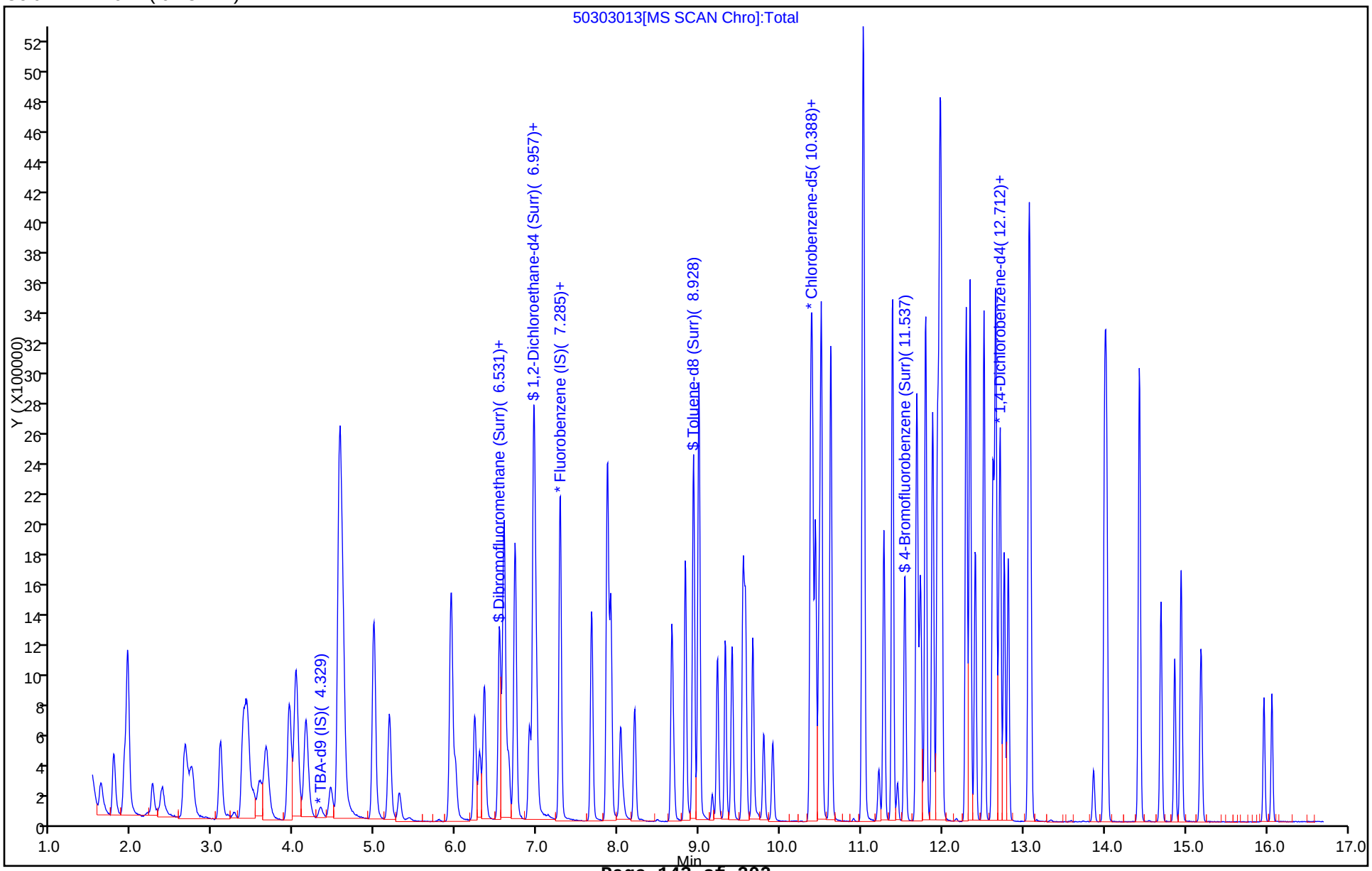
Report Date: 04-Mar-2015 10:13:13 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303013.D

Injection Date:	03-Mar-2015 16:28:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

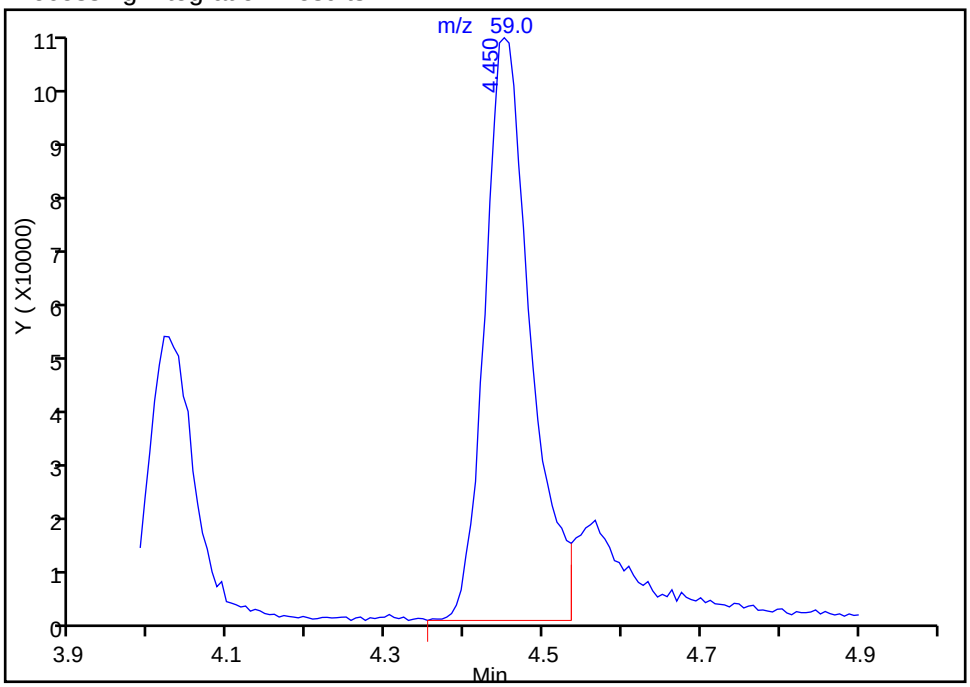
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303013.D
Injection Date: 03-Mar-2015 16:28:30 Instrument ID: CHHP5
Lims ID: IC VSTD40
Client ID:
Operator ID: 001562 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

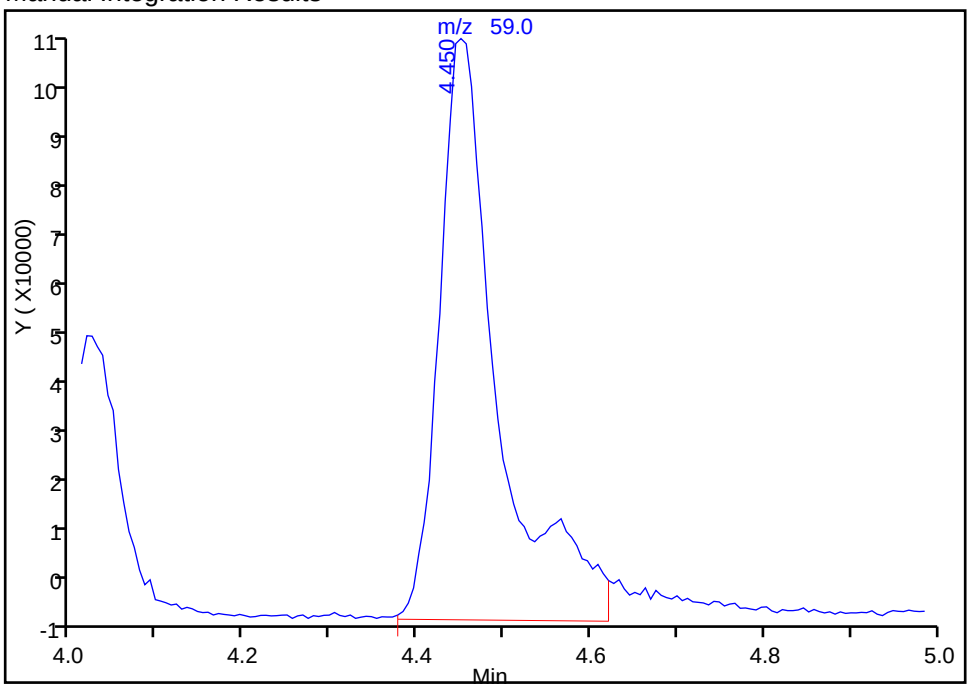
Processing Integration Results

RT: 4.45
Area: 405922
Amount: 1729.0486
Amount Units: ng



Manual Integration Results

RT: 4.45
Area: 473360
Amount: 2020.7198
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:39:19
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303014.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 03-Mar-2015 16:52:30 ALS Bottle#: 12 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD50
Misc. Info.: 180-0005873-014
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:14 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 04-Mar-2015 09:40:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.327	4.321	0.006	97	182249	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.277	0.001	99	440848	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.368	0.000	97	121332	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.685	0.001	91	163855	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.535	0.000	98	454279	250.0	240.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.912	-0.006	100	585333	250.0	250.9	
$ 7 Toluene-d8 (Surr)	98	8.926	8.932	-0.006	99	1882951	250.0	199.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	99	778464	250.0	221.2	
11 Dichlorodifluoromethane	85	1.620	1.620	0.000	100	555245	250.0	250.7	
12 Chloromethane	50	1.778	1.778	0.000	100	892689	250.0	252.1	
13 Vinyl chloride	62	1.912	1.912	0.000	100	866068	250.0	254.5	
14 Butadiene	39	1.948	1.948	0.000	99	961606	250.0	243.7	
15 Bromomethane	94	2.253	2.258	-0.005	92	219710	250.0	230.1	
16 Chloroethane	64	2.374	2.380	-0.006	98	309302	250.0	223.5	
17 Dichlorofluoromethane	67	2.648	2.648	0.000	100	722968	250.0	227.9	
18 Trichlorofluoromethane	101	2.697	2.708	-0.011	99	625870	250.0	236.2	
20 Ethyl ether	59	3.092	3.092	0.000	100	666037	250.0	260.5	
21 Acrolein	56	3.262	3.274	-0.012	99	95898	275.0	284.0	
22 1,1-Dichloroethene	96	3.372	3.384	-0.012	99	655372	250.0	255.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.420	0.007	97	659263	250.0	254.1	
24 Acetone	43	3.500	3.505	-0.005	100	482030	500.0	520.6	
25 Iodomethane	142	3.573	3.585	-0.012	98	937612	250.0	259.7	
26 Carbon disulfide	76	3.658	3.664	-0.006	100	1738988	250.0	275.2	
28 3-Chloro-1-propene	76	3.944	3.956	-0.012	100	449430	250.0	280.3	
30 Methyl acetate	43	4.023	4.029	-0.006	100	3392163	1250.0	1332.2	
31 Methylene Chloride	84	4.145	4.150	-0.005	100	726477	250.0	269.0	
32 2-Methyl-2-propanol	59	4.461	4.454	0.007	99	611565	2500.0	2800.2	
33 Acrylonitrile	53	4.558	4.564	-0.006	99	3337128	2500.0	2643.5	
34 trans-1,2-Dichloroethene	96	4.570	4.576	-0.006	93	714392	250.0	266.2	
35 Methyl tert-butyl ether	73	4.601	4.607	-0.006	100	1811989	250.0	270.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.990	-0.006	100	1203451	250.0	252.6	
37 1,1-Dichloroethane	63	5.179	5.178	0.001	100	1328543	250.0	259.7	
38 Vinyl acetate	43	5.300	5.306	-0.006	100	523307	250.0	299.4	
44 2,2-Dichloropropane	77	5.927	5.933	-0.006	97	530241	250.0	280.0	
45 cis-1,2-Dichloroethene	96	5.939	5.945	-0.006	98	743970	250.0	259.2	
46 2-Butanone (MEK)	43	5.988	6.000	-0.012	100	803658	500.0	532.7	
49 Chlorobromomethane	128	6.231	6.237	-0.006	98	320382	250.0	267.9	
51 Tetrahydrofuran	42	6.286	6.292	-0.006	99	565784	500.0	527.0	
52 Chloroform	83	6.347	6.346	0.001	96	1072109	250.0	263.0	
53 1,1,1-Trichloroethane	97	6.535	6.535	0.000	98	735465	250.0	265.6	
54 Cyclohexane	56	6.590	6.590	0.000	97	1567791	250.0	252.3	
56 Carbon tetrachloride	117	6.724	6.724	0.000	96	541326	250.0	288.2	
55 1,1-Dichloropropene	75	6.724	6.730	-0.006	98	919340	250.0	260.2	
57 Isobutyl alcohol	41	6.955	6.949	0.006	98	519953	6250.0	8593.0	
58 Benzene	78	6.961	6.967	-0.006	98	2816860	250.0	253.0	
59 1,2-Dichloroethane	62	6.986	6.991	-0.005	99	882169	250.0	274.3	
62 n-Heptane	43	7.284	7.283	0.001	87	1135342	250.0	262.3	
64 Trichloroethene	130	7.673	7.673	0.000	99	695890	250.0	265.3	
66 Methylcyclohexane	83	7.868	7.867	0.001	99	1271791	250.0	256.7	
67 1,2-Dichloropropane	63	7.904	7.910	-0.006	97	779651	250.0	266.6	
68 Dibromomethane	93	8.026	8.025	0.001	99	367478	250.0	278.3	
70 1,4-Dioxane	88	8.062	8.068	-0.006	96	148650	5000.0	5702.3	
71 Dichlorobromomethane	83	8.202	8.202	0.000	100	722661	250.0	293.5	
74 cis-1,3-Dichloropropene	75	8.659	8.664	-0.005	99	973151	250.0	298.4	
75 4-Methyl-2-pentanone (MIBK	43	8.829	8.828	0.001	99	1780762	500.0	486.1	
76 Toluene	91	8.993	8.999	-0.006	99	2786685	250.0	222.5	
77 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	100	770673	250.0	291.8	
78 Ethyl methacrylate	69	9.322	9.321	0.001	100	840399	250.0	283.1	
79 1,1,2-Trichloroethane	97	9.407	9.406	0.001	99	552961	250.0	241.7	
80 Tetrachloroethene	164	9.541	9.540	0.001	99	530396	250.0	229.5	
81 1,3-Dichloropropane	76	9.571	9.571	0.000	99	1025068	250.0	238.4	
82 2-Hexanone	43	9.656	9.662	-0.006	100	1267784	500.0	495.7	
84 Chlorodibromomethane	129	9.796	9.796	0.000	99	437822	250.0	291.0	
85 Ethylene Dibromide	107	9.906	9.905	0.001	100	560401	250.0	254.4	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	92	811123	250.0	211.2	
87 Chlorobenzene	112	10.392	10.398	-0.006	98	1821377	250.0	227.1	
88 4-Chlorobenzotrifluoride	180	10.435	10.428	0.007	98	788386	250.0	214.7	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.477	0.000	94	518562	250.0	280.4	
90 Ethylbenzene	106	10.502	10.508	-0.006	98	1084192	250.0	233.8	
91 m-Xylene & p-Xylene	106	10.623	10.623	0.000	98	1343425	250.0	235.2	
92 o-Xylene	106	11.013	11.019	-0.005	96	1282744	250.0	231.4	
93 Styrene	104	11.031	11.031	0.000	96	2101328	250.0	231.9	
94 Bromoform	173	11.214	11.213	0.001	98	253039	250.0	318.4	
96 2-Chlorobenzotrifluoride	180	11.274	11.280	-0.006	99	818132	250.0	214.8	
97 Isopropylbenzene	105	11.384	11.384	0.000	98	2939157	250.0	216.0	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.682	-0.006	98	794942	250.0	250.7	
100 Bromobenzene	156	11.688	11.688	0.000	99	712137	250.0	248.8	
101 1,2,3-Trichloropropane	110	11.725	11.724	0.001	97	239368	250.0	249.6	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.736	0.001	92	267698	250.0	287.3	
103 N-Propylbenzene	120	11.792	11.791	0.001	98	938881	250.0	246.9	
104 2-Chlorotoluene	126	11.877	11.882	-0.005	98	766804	250.0	244.2	
105 3-Chlorotoluene	126	11.938	11.937	0.001	99	747748	250.0	233.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.968	11.968	0.000	98	2483271	250.0	236.0	
107 4-Chlorotoluene	126	11.986	11.986	0.000	98	846300	250.0	249.7	
108 tert-Butylbenzene	119	12.290	12.296	-0.006	98	2162487	250.0	238.1	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	98	2596483	250.0	239.1	
111 1,2-dichloro-4-(trifluorom	214	12.406	12.406	0.000	99	570450	250.0	232.7	
112 sec-Butylbenzene	105	12.509	12.515	-0.006	98	2981190	250.0	228.0	
113 1,3-Dichlorobenzene	146	12.619	12.625	-0.006	97	1371526	250.0	242.5	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	98	2531591	250.0	236.3	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	97	1402521	250.0	246.3	
116 2,4-Dichloro-1-(triflourom	214	12.765	12.764	0.001	95	528265	250.0	226.7	
118 2,5-Dichlorobenzotrifluori	214	12.814	12.813	0.001	98	607921	250.0	239.3	
120 n-Butylbenzene	91	13.063	13.069	-0.006	98	2301855	250.0	241.7	
121 1,2-Dichlorobenzene	146	13.087	13.087	0.000	98	1268840	250.0	245.2	
122 1,2-Dibromo-3-Chloropropan	75	13.866	13.866	0.000	88	110818	250.0	325.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.012	-0.006	99	2522600	750.0	713.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.432	14.431	0.001	99	1703909	500.0	487.7	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	98	654550	250.0	252.9	
127 Hexachlorobutadiene	225	14.864	14.869	-0.005	98	277147	250.0	250.8	
128 Naphthalene	128	14.943	14.942	0.001	99	1887643	250.0	251.4	
129 1,2,3-Trichlorobenzene	180	15.186	15.192	-0.006	100	568326	250.0	256.1	
131 2,4,5-Trichlorotoluene	159	15.965	15.970	-0.005	98	286878	250.0	255.6	
130 2,3,6-Trichlorotoluene	159	16.062	16.068	-0.006	98	260759	250.0	251.9	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		500.0	466.6	
S 134 1,2-Dichloroethene, Total	96				0		500.0	525.4	
S 135 1,3-Dichloropropene, Total	1				0		500.0	590.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00031	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	10.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	10.00	Units: uL	
VOAVAPRI_00003	Amount Added:	10.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	10.00	Units: uL	
VOAACRPRI_00003	Amount Added:	11.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

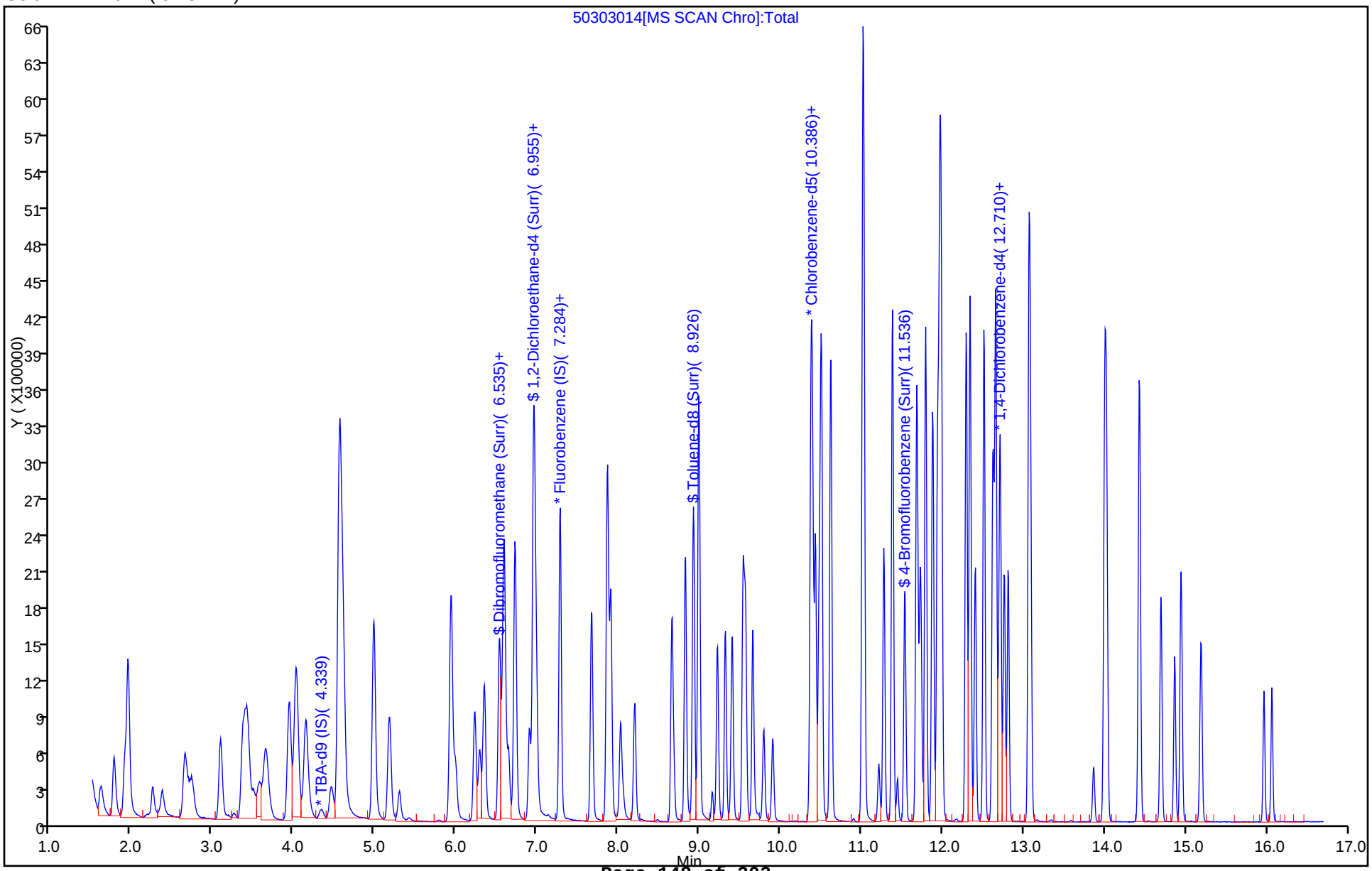
Report Date: 04-Mar-2015 10:13:14 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303014.D

Injection Date:	03-Mar-2015 16:52:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Mar-2015 18:29:30 ALS Bottle#: 16 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD1
Misc. Info.: 180-0005873-018
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:25 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 04-Mar-2015 09:08:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.327	4.321	0.006	97	158942	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.277	0.001	99	436397	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.368	-0.006	99	97555	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.685	0.001	98	138266	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.536	6.535	0.001	97	9351	5.00	5.00	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.912	-0.011	98	12383	5.00	5.36	
$ 7 Toluene-d8 (Surr)	98	8.926	8.932	-0.006	99	44042	5.00	5.79	
$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	98	16688	5.00	5.90	
11 Dichlorodifluoromethane	85	1.620	1.620	0.000	1	11738	5.00	5.35	
12 Chloromethane	50	1.778	1.778	0.000	99	20422	5.00	5.83	
13 Vinyl chloride	62	1.906	1.912	-0.006	98	18364	5.00	5.45	
14 Butadiene	39	1.949	1.948	0.001	99	25646	5.00	6.57	
15 Bromomethane	94	2.253	2.258	-0.005	49	9174	5.00	4.90	
16 Chloroethane	64	2.393	2.380	0.013	46	8910	5.00	6.50	
17 Dichlorofluoromethane	67	2.654	2.648	0.006	97	18545	5.00	5.90	
18 Trichlorofluoromethane	101	2.703	2.708	-0.005	78	14651	5.00	5.59	
20 Ethyl ether	59	3.098	3.092	0.006	92	15110	5.00	5.97	
21 Acrolein	56	3.263	3.274	-0.011	95	33215	100.0	99.4	
22 1,1-Dichloroethene	96	3.390	3.384	0.006	99	14445	5.00	5.69	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.420	0.007	95	13613	5.00	5.30	
24 Acetone	43	3.518	3.505	0.013	85	27756	25.0	30.3	M
25 Iodomethane	142	3.591	3.585	0.006	94	20517	5.00	5.74	
26 Carbon disulfide	76	3.658	3.664	-0.006	96	31759	5.00	5.08	
28 3-Chloro-1-propene	76	3.944	3.956	-0.012	96	7709	5.00	4.86	
30 Methyl acetate	43	4.029	4.029	0.000	99	68405	25.0	27.1	
31 Methylene Chloride	84	4.145	4.150	-0.005	97	23143	5.00	5.07	
32 2-Methyl-2-propanol	59	4.449	4.454	-0.005	57	8526	50.0	44.8	
33 Acrylonitrile	53	4.564	4.564	0.000	98	66409	50.0	53.1	
34 trans-1,2-Dichloroethene	96	4.571	4.576	-0.005	51	14331	5.00	5.39	
35 Methyl tert-butyl ether	73	4.607	4.607	0.000	99	35247	5.00	5.31	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.990	-0.006	94	27239	5.00	5.78	
37 1,1-Dichloroethane	63	5.179	5.178	0.001	98	28747	5.00	5.68	
38 Vinyl acetate	43	5.307	5.306	0.001	58	6783	5.00	3.92	
44 2,2-Dichloropropane	77	5.939	5.933	0.006	64	9115	5.00	4.86	
45 cis-1,2-Dichloroethene	96	5.952	5.945	0.007	96	16372	5.00	5.76	
46 2-Butanone (MEK)	43	6.000	6.000	0.000	99	39378	25.0	26.4	
49 Chlorobromomethane	128	6.237	6.237	0.000	91	6992	5.00	5.91	
51 Tetrahydrofuran	42	6.298	6.292	0.006	94	12789	10.0	12.0	
52 Chloroform	83	6.341	6.346	-0.005	96	23149	5.00	5.74	
53 1,1,1-Trichloroethane	97	6.536	6.535	0.001	97	14873	5.00	5.43	
54 Cyclohexane	56	6.590	6.590	0.000	94	32962	5.00	5.36	M
56 Carbon tetrachloride	117	6.724	6.724	0.000	67	9550	5.00	5.14	
55 1,1-Dichloropropene	75	6.736	6.730	0.006	97	18284	5.00	5.23	
57 Isobutyl alcohol	41	6.955	6.949	0.006	34	6766	125.0	113.0	
58 Benzene	78	6.955	6.967	-0.012	98	62303	5.00	5.65	
59 1,2-Dichloroethane	62	6.998	6.991	0.007	97	17175	5.00	5.39	
62 n-Heptane	43	7.278	7.283	-0.005	57	23686	5.00	5.53	
64 Trichloroethene	130	7.679	7.673	0.006	96	12976	5.00	5.00	
66 Methylcyclohexane	83	7.862	7.867	-0.005	98	25976	5.00	5.30	
67 1,2-Dichloropropane	63	7.910	7.910	0.000	93	15999	5.00	5.53	
68 Dibromomethane	93	8.026	8.025	0.001	97	6736	5.00	5.15	
70 1,4-Dioxane	88	8.081	8.068	0.013	40	2785	100.0	107.9	
71 Dichlorobromomethane	83	8.202	8.202	0.000	98	10980	5.00	4.51	
74 cis-1,3-Dichloropropene	75	8.659	8.664	-0.005	97	13441	5.00	4.16	
75 4-Methyl-2-pentanone (MIBK	43	8.829	8.828	0.001	99	75647	25.0	25.7	
76 Toluene	91	8.993	8.999	-0.006	99	60820	5.00	6.04	
77 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	94	9160	5.00	4.31	
78 Ethyl methacrylate	69	9.328	9.321	0.007	95	11161	5.00	4.68	
79 1,1,2-Trichloroethane	97	9.407	9.406	0.001	93	10673	5.00	5.80	
80 Tetrachloroethene	164	9.541	9.540	0.001	96	10884	5.00	5.86	
81 1,3-Dichloropropane	76	9.571	9.571	0.000	96	19318	5.00	5.59	
82 2-Hexanone	43	9.669	9.662	0.006	99	51105	25.0	24.9	
84 Chlorodibromomethane	129	9.796	9.796	0.000	96	5520	5.00	4.56	
85 Ethylene Dibromide	107	9.912	9.905	0.007	98	9291	5.00	5.24	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	64	18756	5.00	6.07	
87 Chlorobenzene	112	10.399	10.398	0.000	98	39232	5.00	6.08	
88 4-Chlorobenzotrifluoride	180	10.435	10.428	0.007	97	17103	5.00	5.79	
89 1,1,1,2-Tetrachloroethane	131	10.484	10.477	0.007	94	7857	5.00	5.28	
90 Ethylbenzene	106	10.502	10.508	-0.006	99	20645	5.00	5.54	
91 m-Xylene & p-Xylene	106	10.624	10.623	0.001	99	26322	5.00	5.73	
92 o-Xylene	106	11.019	11.019	0.001	96	25758	5.00	5.78	
93 Styrene	104	11.031	11.031	0.000	96	42726	5.00	5.86	
94 Bromoform	173	11.220	11.213	0.007	52	2588	5.00	4.05	
96 2-Chlorobenzotrifluoride	180	11.275	11.280	-0.005	97	17742	5.00	5.79	
97 Isopropylbenzene	105	11.384	11.384	0.000	99	65207	5.00	5.96	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.682	-0.006	91	12676	5.00	4.97	
100 Bromobenzene	156	11.688	11.688	0.000	97	14051	5.00	5.82	
101 1,2,3-Trichloropropane	110	11.725	11.724	0.001	95	5015	5.00	6.20	
102 trans-1,4-Dichloro-2-buten	53	11.743	11.736	0.007	90	4072	5.00	5.18	
103 N-Propylbenzene	120	11.792	11.791	0.001	100	16822	5.00	5.24	
104 2-Chlorotoluene	126	11.877	11.882	-0.005	99	15299	5.00	5.77	
105 3-Chlorotoluene	126	11.944	11.937	0.007	98	16343	5.00	6.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.962	11.968	-0.006	100	50437	5.00	5.68	
107 4-Chlorotoluene	126	11.986	11.986	0.000	95	15984	5.00	5.59	
108 tert-Butylbenzene	119	12.290	12.296	-0.006	98	43127	5.00	5.63	
110 1,2,4-Trimethylbenzene	105	12.339	12.339	0.000	96	51091	5.00	5.58	
111 1,2-dichloro-4-(trifluorom	214	12.406	12.406	0.000	97	10729	5.00	5.19	
112 sec-Butylbenzene	105	12.509	12.515	-0.006	99	65330	5.00	5.92	
113 1,3-Dichlorobenzene	146	12.619	12.625	-0.006	97	28602	5.00	5.99	
114 4-Isopropyltoluene	119	12.662	12.655	0.007	98	51205	5.00	5.66	
115 1,4-Dichlorobenzene	146	12.716	12.710	0.006	98	27681	5.00	5.76	
116 2,4-Dichloro-1-(triflourom	214	12.765	12.764	0.001	93	11024	5.00	5.61	
118 2,5-Dichlorobenzotrifluori	214	12.814	12.813	0.001	95	11088	5.00	5.17	
120 n-Butylbenzene	91	13.063	13.069	-0.006	99	44994	5.00	5.60	
121 1,2-Dichlorobenzene	146	13.087	13.087	0.000	97	25288	5.00	5.79	
122 1,2-Dibromo-3-Chloropropan	75	13.854	13.866	-0.012	89	1174	5.00	4.08	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.012	-0.006	99	47582	15.0	16.0	M
125 2,3- & 3,4- Dichlorotoluen	125	14.432	14.431	0.001	98	32193	10.0	10.9	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	96	11994	5.00	5.49	
127 Hexachlorobutadiene	225	14.864	14.869	-0.005	93	5277	5.00	5.66	
128 Naphthalene	128	14.943	14.942	0.001	99	34798	5.00	5.49	
129 1,2,3-Trichlorobenzene	180	15.192	15.192	0.000	95	10498	5.00	5.61	
131 2,4,5-Trichlorotoluene	159	15.965	15.970	-0.005	93	5832	5.00	6.16	
130 2,3,6-Trichlorotoluene	159	16.068	16.068	0.000	93	5388	5.00	6.17	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		10.0	11.5	
S 134 1,2-Dichloroethene, Total	96				0		10.0	11.2	
S 135 1,3-Dichloropropene, Total	1				0		10.0	8.48	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00031	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00102	Amount Added:	0.20	Units: uL	
voaWEEpri Res_00003	Amount Added:	0.20	Units: uL	
voaWKetpri Re_00003	Amount Added:	0.80	Units: uL	
VOAVAPRI_00003	Amount Added:	0.20	Units: uL	
VOAACRPRI_00003	Amount Added:	4.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent

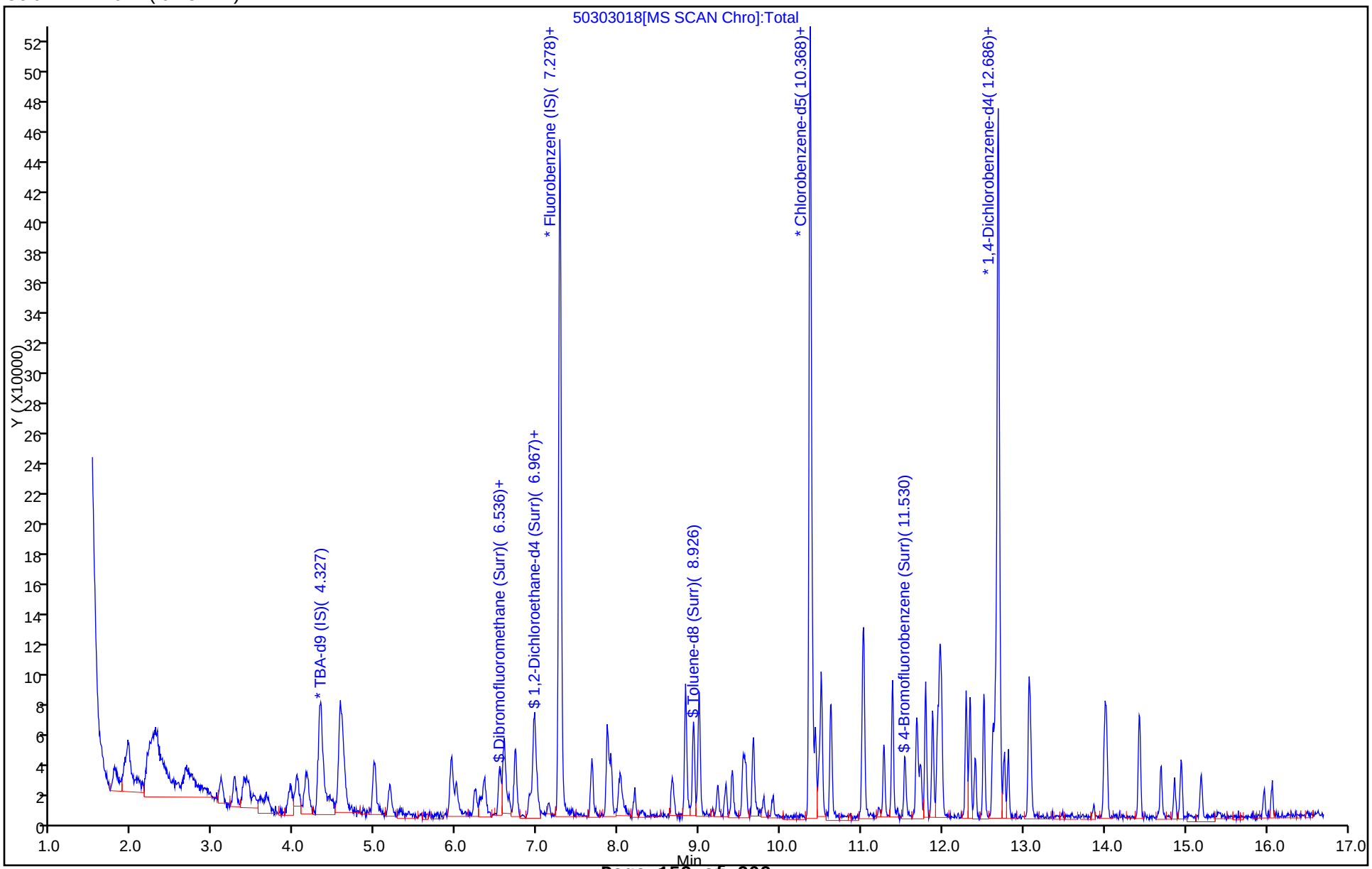
Report Date: 04-Mar-2015 10:13:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Injection Date:	03-Mar-2015 18:29:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

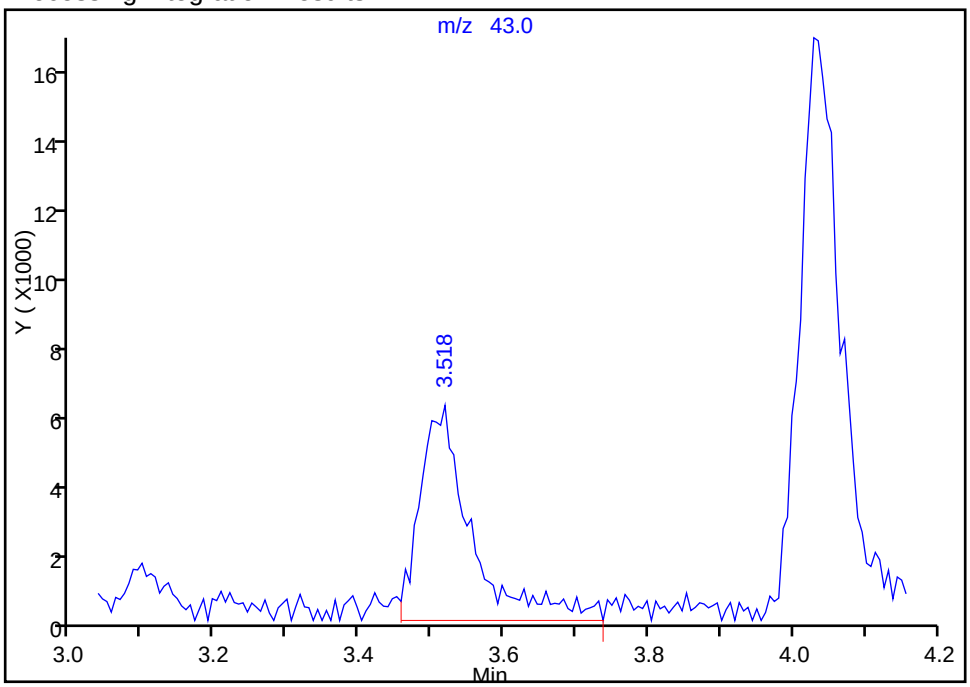
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D
Injection Date: 03-Mar-2015 18:29:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 16 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

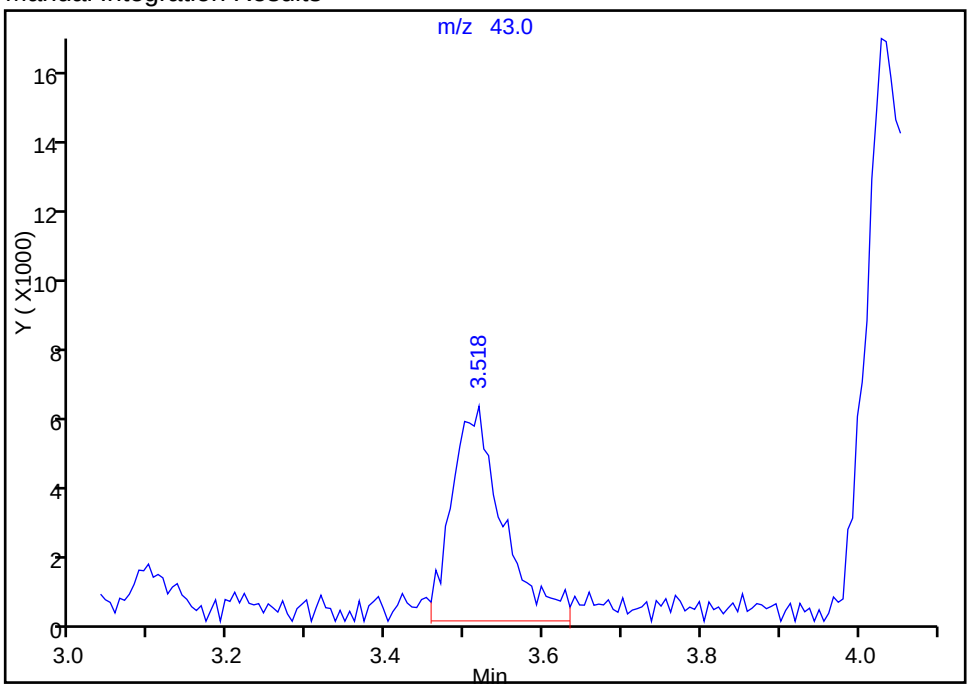
Processing Integration Results

RT: 3.52
Area: 30678
Amount: 34.064759
Amount Units: ng



Manual Integration Results

RT: 3.52
Area: 27756
Amount: 30.284284
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:45:02
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

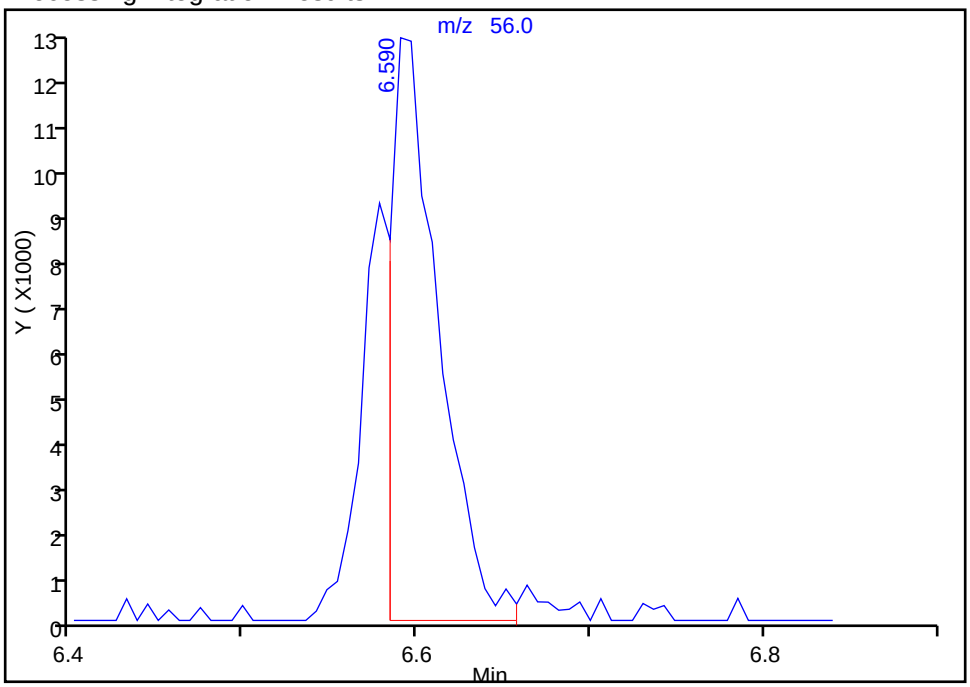
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D
Injection Date: 03-Mar-2015 18:29:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 16 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

54 Cyclohexane, CAS: 110-82-7

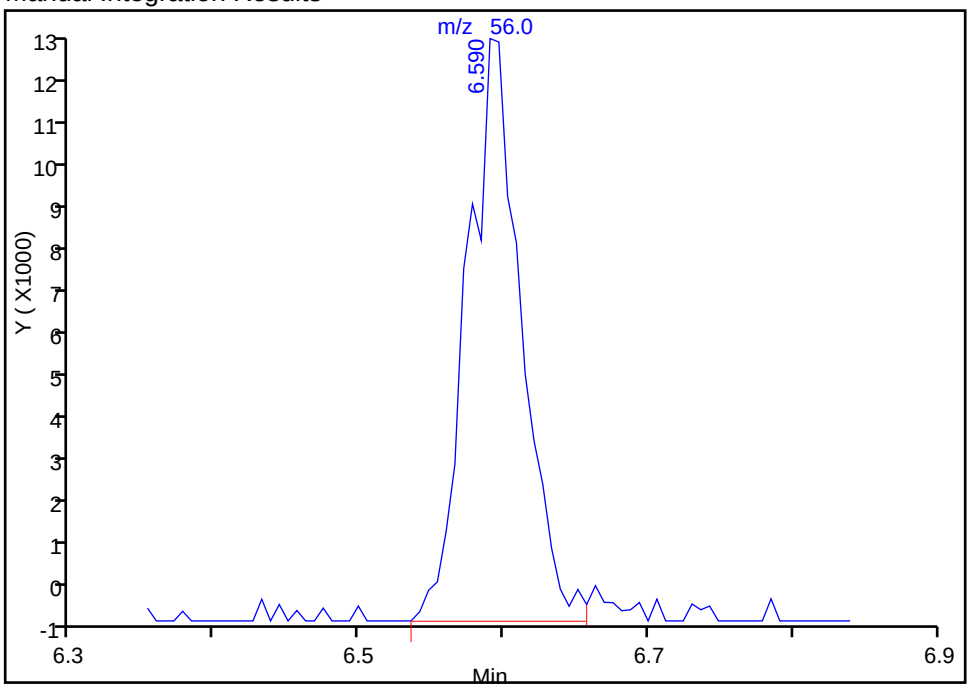
Processing Integration Results

RT: 6.59
Area: 24266
Amount: 3.949469
Amount Units: ng



Manual Integration Results

RT: 6.59
Area: 32962
Amount: 5.357794
Amount Units: ng



Reviewer: fergusond, 04-Mar-2015 09:45:02
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Lab Sample ID: CCVIS 180-134916/4 Calibration Date: 03/06/2015 12:23

Instrument ID: CHHP5 Calib Start Date: 03/03/2015 14:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 18:29

Lab File ID: 50306004.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2512	0.2843	0.1000	11.3	10.0	13.2	20.0
Chloromethane	Ave	0.4015	0.4612	0.1000	11.5	10.0	14.9	20.0
Vinyl chloride	Ave	0.3859	0.4419	0.1000	11.5	10.0	14.5	20.0
Bromomethane	Lin2		0.1659	0.0500	14.6	10.0	46.5*	20.0
Chloroethane	Ave	0.1570	0.2134	0.0500	13.6	10.0	35.9*	20.0
Dichlorofluoromethane	Ave	0.3598	0.5315	0.0100	14.8	10.0	47.7*	20.0
Trichlorofluoromethane	Ave	0.3005	0.4770	0.1000	15.9	10.0	58.7*	20.0
Ethyl ether	Ave	0.2900	0.2756	0.0100	9.50	10.0	-5.0	20.0
Acrolein	Ave	0.0383	0.0337	0.0100	26.4	30.0	-11.9	20.0
1,1-Dichloroethene	Ave	0.2911	0.3027	0.1000	10.4	10.0	4.0	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2943	0.3188	0.1000	10.8	10.0	8.3	20.0
Acetone	Ave	0.1050	0.1372	0.0500	26.1	20.0	30.6*	20.0
Iodomethane	Ave	0.4096	0.4417	0.0100	10.8	10.0	7.9	20.0
Carbon disulfide	Ave	0.7166	0.6525	0.1000	9.11	10.0	-8.9	20.0
Allyl chloride	Ave	0.1818	0.1546	0.0100	8.50	10.0	-15.0	20.0
Methyl acetate	Ave	0.2888	0.2529	0.1000	43.8	50.0	-12.4	20.0
Methylene Chloride	Lin2		0.3209	0.1000	9.88	10.0	-1.2	20.0
tert-Butyl alcohol	Ave	1.198	1.027	0.0100	85.7	100	-14.3	20.0
Acrylonitrile	Ave	0.1432	0.1377	0.0100	96.2	100	-3.8	20.0
trans-1,2-Dichloroethene	Ave	0.3044	0.3222	0.1000	10.6	10.0	5.8	20.0
Methyl tert-butyl ether	Ave	0.7605	0.5960	0.1000	7.84	10.0	-21.6*	20.0
Hexane	Ave	0.5404	0.5217	0.0100	9.65	10.0	-3.5	20.0
1,1-Dichloroethane	Ave	0.5802	0.5761	0.2000	9.93	10.0	-0.7	20.0
Vinyl acetate	Ave	0.1982	0.1690	0.0100	8.53	10.0	-14.7	20.0
2,2-Dichloropropane	Ave	0.2148	0.1205	0.0100	5.61	10.0	-43.9*	20.0
cis-1,2-Dichloroethene	Ave	0.3255	0.3452	0.1000	10.6	10.0	6.0	20.0
2-Butanone (MEK)	Ave	0.1711	0.1752	0.0500	20.5	20.0	2.4	20.0
Bromochloromethane	Ave	0.1357	0.1374	0.0100	10.1	10.0	1.3	20.0
Tetrahydrofuran	Ave	0.1218	0.1033	0.0100	17.0	20.0	-15.2	20.0
Chloroform	Ave	0.4624	0.4805	0.2000	10.4	10.0	3.9	20.0
1,1,1-Trichloroethane	Ave	0.3141	0.2807	0.1000	8.94	10.0	-10.6	20.0
Cyclohexane	Ave	0.7049	0.7092	0.1000	10.1	10.0	0.6	20.0
Carbon tetrachloride	Ave	0.2130	0.2017	0.1000	9.47	10.0	-5.3	20.0
1,1-Dichloropropene	Ave	0.4007	0.4154	0.0100	10.4	10.0	3.6	20.0
Isobutyl alcohol	Ave	0.0069	0.0043*	0.0100	155	250	-38.0*	20.0
Benzene	Ave	1.263	1.286	0.5000	10.2	10.0	1.8	20.0
1,2-Dichloroethane	Ave	0.3648	0.3572	0.1000	9.79	10.0	-2.1	20.0
n-Heptane	Ave	0.4910	0.4849	0.0100	9.87	10.0	-1.3	20.0
Trichloroethene	Ave	0.2974	0.3116	0.2000	10.5	10.0	4.8	20.0
Methylcyclohexane	Ave	0.5619	0.5736	0.1000	10.2	10.0	2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Lab Sample ID: CCVIS 180-134916/4 Calibration Date: 03/06/2015 12:23

Instrument ID: CHHP5 Calib Start Date: 03/03/2015 14:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 18:29

Lab File ID: 50306004.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3317	0.3050	0.1000	9.20	10.0	-8.0	20.0
Dibromomethane	Ave	0.1498	0.1504	0.0100	10.0	10.0	0.4	20.0
1,4-Dioxane	Ave	0.0030	0.0024*	0.0100	161	200	-19.7	20.0
Bromodichloromethane	Ave	0.2792	0.2605	0.2000	9.33	10.0	-6.7	20.0
cis-1,3-Dichloropropene	Ave	0.3698	0.2511	0.2000	6.79	10.0	-32.1*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.510	1.283	0.1000	17.0	20.0	-15.0	20.0
Toluene	Ave	5.161	5.552	0.4000	10.8	10.0	7.6	20.0
trans-1,3-Dichloropropene	Ave	1.088	0.6299	0.1000	5.79	10.0	-42.1*	20.0
Ethyl methacrylate	Ave	1.224	0.7688	0.0100	6.28	10.0	-37.2*	20.0
1,1,2-Trichloroethane	Ave	0.9428	0.9775	0.1000	10.4	10.0	3.7	20.0
Tetrachloroethene	Ave	0.9523	1.080	0.2000	11.3	10.0	13.4	20.0
1,3-Dichloropropane	Ave	1.772	1.734	0.0100	9.79	10.0	-2.1	20.0
2-Hexanone	Ave	1.054	0.9836	0.1000	18.7	20.0	-6.7	20.0
Dibromochloromethane	Ave	0.6200	0.6363	0.1000	10.3	10.0	2.6	20.0
1,2-Dibromoethane (EDB)	Ave	0.9079	0.8307	0.1000	9.15	10.0	-8.5	20.0
3-Chlorobenzotrifluoride	Ave	1.583	1.627	0.0100	10.3	10.0	2.8	20.0
Chlorobenzene	Ave	3.305	3.538	0.5000	10.7	10.0	7.0	20.0
4-Chlorobenzotrifluoride	Ave	1.513	1.530	0.0100	10.1	10.0	1.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7622	0.6877	0.0100	9.02	10.0	-9.8	20.0
Ethylbenzene	Ave	1.911	2.044	0.1000	10.7	10.0	7.0	20.0
m-Xylene & p-Xylene	Ave	2.354	2.530	0.1000	10.7	10.0	7.5	20.0
o-Xylene	Ave	2.285	2.400	0.3000	10.5	10.0	5.0	20.0
Styrene	Ave	3.735	3.937	0.3000	10.5	10.0	5.4	20.0
Bromoform	Ave	0.3275	0.3102	0.1000	9.47	10.0	-5.3	20.0
2-Chlorobenzotrifluoride	Ave	1.569	1.606	0.0100	10.2	10.0	2.3	20.0
Isopropylbenzene	Ave	5.608	6.241	0.1000	11.1	10.0	11.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.307	1.269	0.3000	9.71	10.0	-2.9	20.0
Bromobenzene	Ave	0.8735	0.9703	0.0100	11.1	10.0	11.1	20.0
1,2,3-Trichloropropane	Ave	0.2927	0.3024	0.0100	10.3	10.0	3.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2844	0.2433	0.0100	8.56	10.0	-14.4	20.0
N-Propylbenzene	Ave	1.160	1.286	0.0100	11.1	10.0	10.8	20.0
2-Chlorotoluene	Ave	0.9582	1.049	0.0100	10.9	10.0	9.5	20.0
3-Chlorotoluene	Ave	0.9794	0.9391	0.0100	9.59	10.0	-4.1	20.0
1,3,5-Trimethylbenzene	Ave	3.211	3.641	0.0100	11.3	10.0	13.4	20.0
4-Chlorotoluene	Ave	1.034	1.157	0.0100	11.2	10.0	11.9	20.0
tert-Butylbenzene	Ave	2.771	3.088	0.0100	11.1	10.0	11.4	20.0
1,2,4-Trimethylbenzene	Ave	3.314	3.677	0.0100	11.1	10.0	11.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7482	0.8253	0.0100	11.0	10.0	10.3	20.0
sec-Butylbenzene	Ave	3.989	4.548	0.0100	11.4	10.0	14.0	20.0
1,3-Dichlorobenzene	Ave	1.726	1.884	0.6000	10.9	10.0	9.1	20.0
4-Isopropyltoluene	Ave	3.269	3.636	0.0100	11.1	10.0	11.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Lab Sample ID: CCVIS 180-134916/4 Calibration Date: 03/06/2015 12:23

Instrument ID: CHHP5 Calib Start Date: 03/03/2015 14:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 18:29

Lab File ID: 50306004.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.737	1.975	0.5000	11.4	10.0	13.7	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7111	0.7645	0.0100	10.8	10.0	7.5	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.7753	0.8499	0.0100	11.0	10.0	9.6	20.0
n-Butylbenzene	Ave	2.906	3.278	0.0100	11.3	10.0	12.8	20.0
1,2-Dichlorobenzene	Ave	1.579	1.703	0.4000	10.8	10.0	7.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1040	0.0730	0.0500	7.01	10.0	-29.9*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.078	1.023	0.0100	28.5	30.0	-5.1	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.066	0.9568	0.0100	17.9	20.0	-10.3	20.0
1,2,4-Trichlorobenzene	Ave	0.7897	0.7861	0.2000	9.95	10.0	-0.5	20.0
Hexachlorobutadiene	Ave	0.3373	0.3742	0.0100	11.1	10.0	11.0	20.0
Naphthalene	Ave	2.291	2.054	0.0100	8.97	10.0	-10.3	20.0
1,2,3-Trichlorobenzene	Ave	0.6771	0.6157	0.0100	9.09	10.0	-9.1	20.0
2,4,5-Trichlorotoluene	Ave	0.3426	0.2621	0.0100	7.65	10.0	-23.5*	20.0
2,3,6-Trichlorotoluene	Ave	0.3158	0.2470	0.0100	7.82	10.0	-21.8*	20.0
Dibromofluoromethane (Surr)	Ave	0.2141	0.2079		9.71	10.0	-2.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2646	0.2437		9.21	10.0	-7.9	20.0
Toluene-d8 (Surr)	Ave	3.897	3.815		9.79	10.0	-2.1	20.0
4-Bromofluorobenzene (Surr)	Ave	1.450	1.314		9.06	10.0	-9.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306004.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Mar-2015 12:23:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0005922-004
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 15:11:36 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 12:51:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.308	4.308	0.000	88	91937	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	99	441962	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.361	0.000	99	101049	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.679	12.679	0.000	97	135554	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.522	6.522	0.000	97	91885	50.0	48.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	99	107685	50.0	46.1	
$ 7 Toluene-d8 (Surr)	98	8.925	8.925	0.000	100	385493	50.0	48.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.529	0.000	96	132815	50.0	45.3	
11 Dichlorodifluoromethane	85	1.613	1.613	0.000	100	125656	50.0	56.6	
12 Chloromethane	50	1.777	1.777	0.000	100	203832	50.0	57.4	
13 Vinyl chloride	62	1.905	1.905	0.000	100	195309	50.0	57.3	
14 Butadiene	39	1.948	1.948	0.000	99	227001	50.0	57.4	
15 Bromomethane	94	2.258	2.258	0.000	92	73309	50.0	73.2	
16 Chloroethane	64	2.380	2.380	0.000	99	94301	50.0	68.0	
17 Dichlorofluoromethane	67	2.659	2.659	0.000	100	234915	50.0	73.9	
18 Trichlorofluoromethane	101	2.708	2.708	0.000	99	210814	50.0	79.4	
20 Ethyl ether	59	3.091	3.091	0.000	98	121790	50.0	47.5	
21 Acrolein	56	3.262	3.262	0.000	99	44720	150.0	132.1	
22 1,1-Dichloroethene	96	3.371	3.371	0.000	99	133782	50.0	52.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.426	3.426	0.000	98	140902	50.0	54.2	
24 Acetone	43	3.499	3.499	0.000	99	121260	100.0	130.6	
25 Iodomethane	142	3.572	3.572	0.000	96	195229	50.0	53.9	
26 Carbon disulfide	76	3.651	3.651	0.000	100	288377	50.0	45.5	
28 3-Chloro-1-propene	76	3.949	3.949	0.000	99	68338	50.0	42.5	
30 Methyl acetate	43	4.016	4.016	0.000	100	558868	250.0	218.9	
31 Methylene Chloride	84	4.144	4.144	0.000	99	141833	50.0	49.4	
32 2-Methyl-2-propanol	59	4.436	4.436	0.000	89	47215	500.0	428.6	
33 Acrylonitrile	53	4.545	4.545	0.000	99	608478	500.0	480.8	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	91	142408	50.0	52.9	
35 Methyl tert-butyl ether	73	4.594	4.594	0.000	94	263418	50.0	39.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.983	4.983	0.000	99	230571	50.0	48.3	
37 1,1-Dichloroethane	63	5.172	5.172	0.000	99	254622	50.0	49.6	
38 Vinyl acetate	43	5.300	5.300	0.000	100	74702	50.0	42.6	
44 2,2-Dichloropropane	77	5.932	5.932	0.000	62	53253	50.0	28.1	
45 cis-1,2-Dichloroethene	96	5.932	5.932	0.000	93	152543	50.0	53.0	
46 2-Butanone (MEK)	43	5.987	5.987	0.000	100	154867	100.0	102.4	
49 Chlorobromomethane	128	6.224	6.224	0.000	98	60745	50.0	50.7	
51 Tetrahydrofuran	42	6.285	6.285	0.000	97	91279	100.0	84.8	
52 Chloroform	83	6.346	6.346	0.000	97	212378	50.0	52.0	
53 1,1,1-Trichloroethane	97	6.529	6.529	0.000	98	124070	50.0	44.7	
54 Cyclohexane	56	6.583	6.583	0.000	98	313432	50.0	50.3	
56 Carbon tetrachloride	117	6.717	6.717	0.000	96	89121	50.0	47.3	
55 1,1-Dichloropropene	75	6.723	6.723	0.000	97	183569	50.0	51.8	
57 Isobutyl alcohol	41	6.942	6.942	0.000	34	47046	1250.0	775.6	
58 Benzene	78	6.954	6.954	0.000	99	568392	50.0	50.9	
59 1,2-Dichloroethane	62	6.985	6.985	0.000	98	157863	50.0	49.0	
62 n-Heptane	43	7.277	7.277	0.000	82	214289	50.0	49.4	
64 Trichloroethene	130	7.666	7.666	0.000	98	137734	50.0	52.4	
66 Methylcyclohexane	83	7.861	7.861	0.000	99	253529	50.0	51.0	
67 1,2-Dichloropropane	63	7.897	7.897	0.000	94	134818	50.0	46.0	
68 Dibromomethane	93	8.019	8.019	0.000	99	66448	50.0	50.2	
70 1,4-Dioxane	88	8.056	8.056	0.000	94	20976	1000.0	802.6	
71 Dichlorobromomethane	83	8.195	8.195	0.000	100	115107	50.0	46.6	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	98	110985	50.0	33.9	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	99	259302	100.0	85.0	
76 Toluene	91	8.986	8.986	0.000	99	561063	50.0	53.8	
77 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	98	63647	50.0	28.9	
78 Ethyl methacrylate	69	9.315	9.315	0.000	99	77686	50.0	31.4	
79 1,1,2-Trichloroethane	97	9.400	9.400	0.000	99	98770	50.0	51.8	
80 Tetrachloroethene	164	9.534	9.534	0.000	97	109090	50.0	56.7	
81 1,3-Dichloropropane	76	9.564	9.564	0.000	100	175260	50.0	48.9	
82 2-Hexanone	43	9.662	9.662	0.000	98	198774	100.0	93.3	
84 Chlorodibromomethane	129	9.789	9.789	0.000	97	64301	50.0	51.3	
85 Ethylene Dibromide	107	9.899	9.899	0.000	99	83939	50.0	45.7	
86 3-Chlorobenzotrifluoride	180	10.373	10.373	0.000	98	164406	50.0	51.4	
87 Chlorobenzene	112	10.392	10.392	0.000	99	357496	50.0	53.5	
88 4-Chlorobenzotrifluoride	180	10.428	10.428	0.000	99	154600	50.0	50.6	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.471	0.000	93	69492	50.0	45.1	
90 Ethylbenzene	106	10.501	10.501	0.000	100	206578	50.0	53.5	
91 m-Xylene & p-Xylene	106	10.617	10.617	0.000	100	255611	50.0	53.7	
92 o-Xylene	106	11.012	11.012	0.000	95	242483	50.0	52.5	
93 Styrene	104	11.024	11.024	0.000	96	397809	50.0	52.7	
94 Bromoform	173	11.213	11.213	0.000	97	31348	50.0	47.4	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	99	162275	50.0	51.2	
97 Isopropylbenzene	105	11.377	11.377	0.000	100	630623	50.0	55.6	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.675	0.000	98	128247	50.0	48.6	
100 Bromobenzene	156	11.681	11.681	0.000	97	131532	50.0	55.5	
101 1,2,3-Trichloropropane	110	11.718	11.718	0.000	94	40995	50.0	51.7	
102 trans-1,4-Dichloro-2-buten	53	11.724	11.724	0.000	86	32977	50.0	42.8	
103 N-Propylbenzene	120	11.785	11.785	0.000	100	174327	50.0	55.4	
104 2-Chlorotoluene	126	11.876	11.876	0.000	100	142191	50.0	54.7	
105 3-Chlorotoluene	126	11.937	11.937	0.000	99	127297	50.0	47.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.961	0.000	100	493559	50.0	56.7	
107 4-Chlorotoluene	126	11.979	11.979	0.000	98	156836	50.0	55.9	
108 tert-Butylbenzene	119	12.290	12.290	0.000	99	418579	50.0	55.7	
110 1,2,4-Trimethylbenzene	105	12.338	12.338	0.000	100	498499	50.0	55.5	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.399	0.000	98	111873	50.0	55.2	
112 sec-Butylbenzene	105	12.509	12.509	0.000	100	616514	50.0	57.0	
113 1,3-Dichlorobenzene	146	12.618	12.618	0.000	100	255316	50.0	54.6	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	100	492832	50.0	55.6	
115 1,4-Dichlorobenzene	146	12.709	12.709	0.000	98	267653	50.0	56.8	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.758	0.000	94	103630	50.0	53.8	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	97	115203	50.0	54.8	
120 n-Butylbenzene	91	13.062	13.062	0.000	100	444336	50.0	56.4	
121 1,2-Dichlorobenzene	146	13.080	13.080	0.000	99	230811	50.0	53.9	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.859	0.000	93	9888	50.0	35.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.005	0.000	100	416169	150.0	142.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.425	0.000	99	259401	100.0	89.7	
126 1,2,4-Trichlorobenzene	180	14.686	14.686	0.000	99	106564	50.0	49.8	
127 Hexachlorobutadiene	225	14.863	14.863	0.000	98	50723	50.0	55.5	
128 Naphthalene	128	14.942	14.942	0.000	100	278446	50.0	44.8	
129 1,2,3-Trichlorobenzene	180	15.191	15.191	0.000	98	83457	50.0	45.5	
131 2,4,5-Trichlorotoluene	159	15.964	15.964	0.000	97	35526	50.0	38.3	
130 2,3,6-Trichlorotoluene	159	16.061	16.061	0.000	96	33483	50.0	39.1	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	106.2	
S 134 1,2-Dichloroethene, Total	96				0		100.0	105.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	62.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00104	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
VOAVAPRI_00003	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

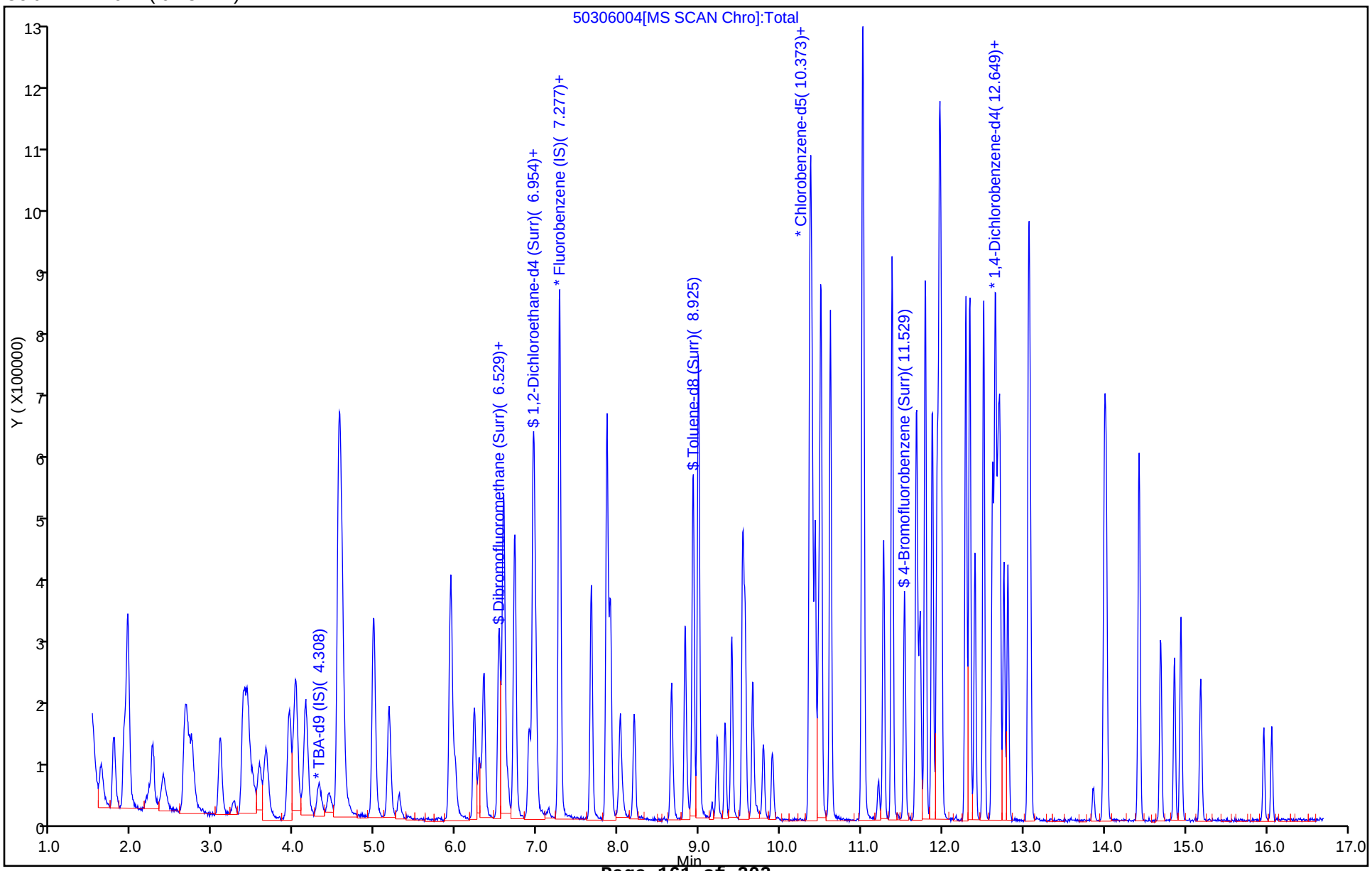
Report Date: 06-Mar-2015 15:11:36 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306004.D

Injection Date:	06-Mar-2015 12:23:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303006.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Mar-2015 12:21:30 ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0005873-006
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2015 10:13:03 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: fergusond Date: 03-Mar-2015 12:34:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.342	8.342	0.000	0	147446	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

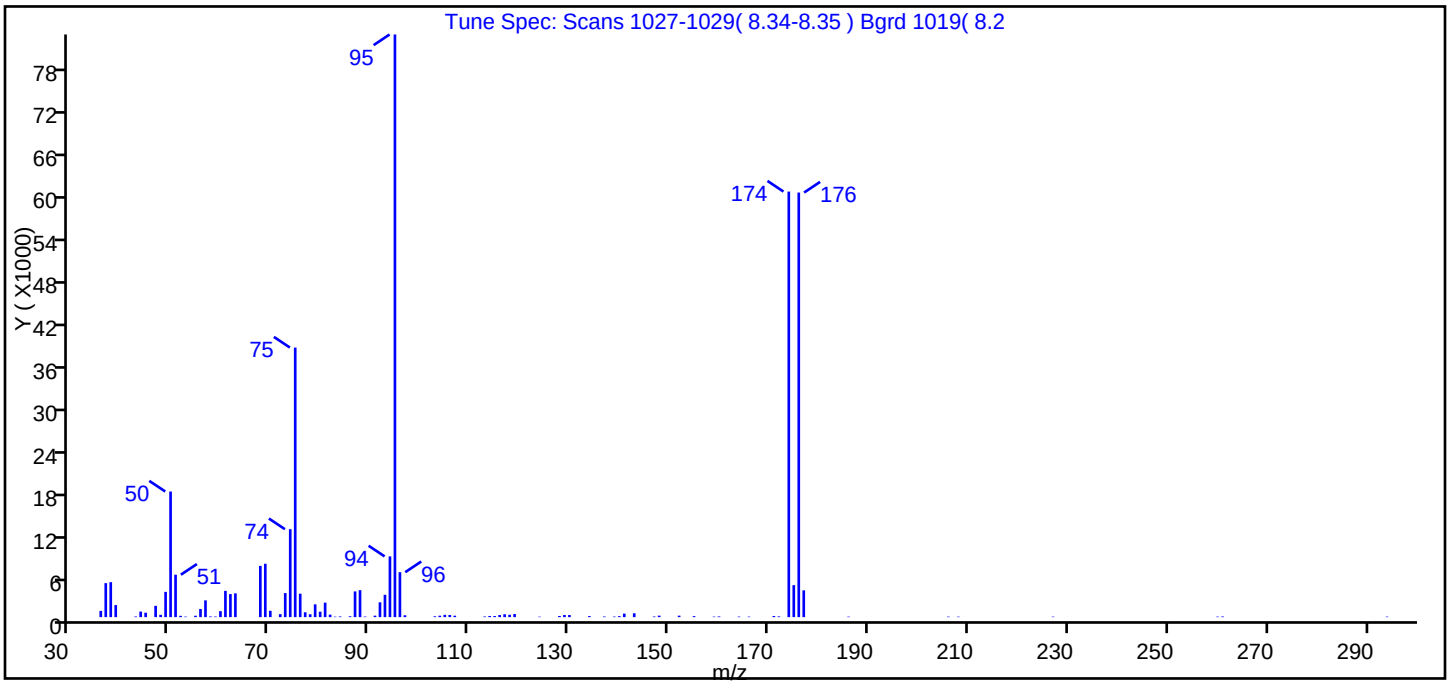
VOA BFB 25_00001 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303006.D				
Injection Date:	03-Mar-2015 12:21:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.6
75	30 to 60% of m/z 95	46.3
96	5 to 9% of m/z 95	7.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	73.0
175	5 to 9% of m/z 174	5.5 (7.5)
176	Greater than 95% but less than 101% of m/z 174	72.9 (99.8)
177	5 to 9% of m/z 176	4.6 (6.3)

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303006.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 03-Mar-2015 12:21:30
Spectrum: Tune Spec: Scans 1027-1029(8.34-8.35) Bgrd 1019(8.2
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	884	69.00	7531	96.00	6342	147.00	90
37.00	4798	70.00	895	97.00	267	148.00	212
38.00	4937	72.00	420	103.00	118	152.00	208
39.00	1701	73.00	3394	104.00	203	155.00	140
43.00	90	74.00	12405	105.00	323	159.00	71
44.00	787	75.00	38024	106.00	305	160.00	100
45.00	628	76.00	3310	107.00	205	164.00	78
47.00	1594	77.00	688	113.00	90	166.00	74
48.00	327	78.00	405	114.00	165	171.00	160
49.00	3565	79.00	1805	115.00	156	172.00	105
50.00	17720	80.00	768	116.00	297	174.00	60024
51.00	5986	81.00	2046	117.00	405	175.00	4514
52.00	186	82.00	354	118.00	334	176.00	59888
53.00	74	83.00	67	119.00	437	177.00	3780
55.00	198	84.00	93	124.00	67	186.00	69
56.00	1152	86.00	120	128.00	166	206.00	73
57.00	2364	87.00	3629	129.00	302	208.00	68
58.00	96	88.00	3807	130.00	296	227.00	70
59.00	84	89.00	81	134.00	146	260.00	73
60.00	846	91.00	210	137.00	89	261.00	93
61.00	3705	92.00	2094	139.00	81	294.00	74
62.00	3255	93.00	3151	140.00	139		
63.00	3358	94.00	8567	141.00	495		
68.00	7231	95.00	82184	143.00	545		

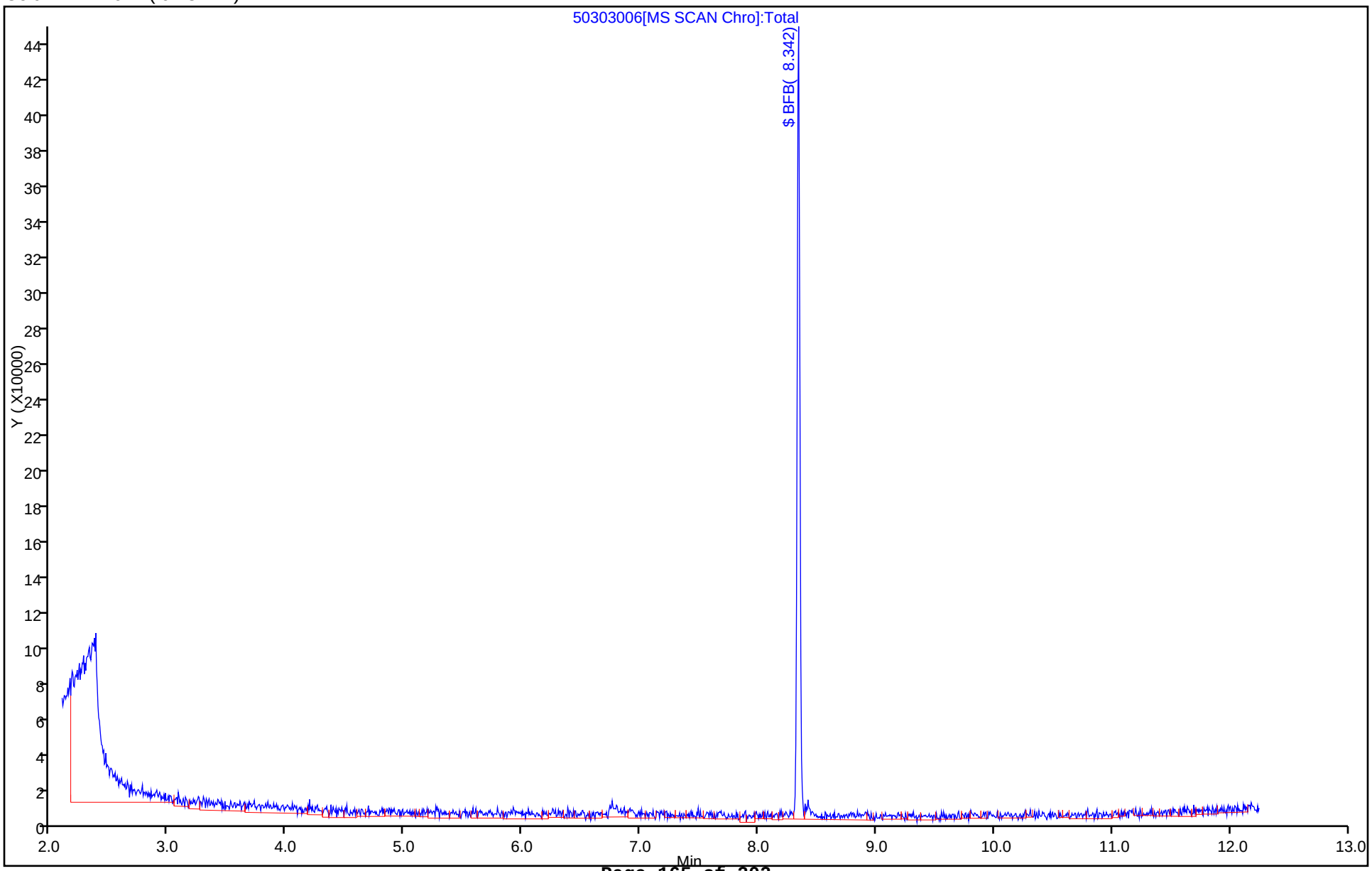
Report Date: 04-Mar-2015 10:13:03 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303006.D

Injection Date:	03-Mar-2015 12:21:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306003.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Mar-2015 10:53:30 ALS Bottle#: 1 Worklist Smp#: 3
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0005922-003
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 15:11:35 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 11:07:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.335	8.335	0.000	0	142859	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

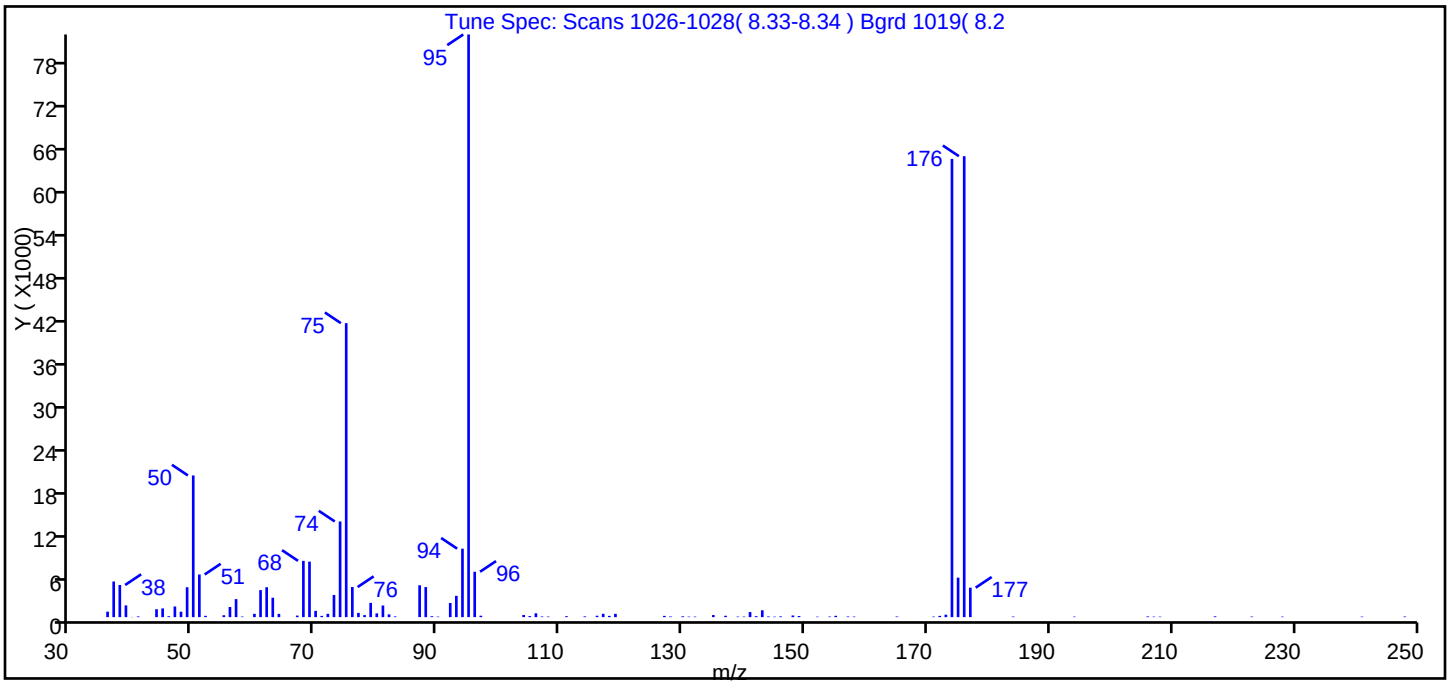
VOA BFB 25_00001 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306003.D				
Injection Date:	06-Mar-2015 10:53:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	3
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.3
75	30 to 60% of m/z 95	50.5
96	5 to 9% of m/z 95	7.8
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	78.6
175	5 to 9% of m/z 174	6.8 (8.6)
176	Greater than 95% but less than 101% of m/z 174	79.1 (100.6)
177	5 to 9% of m/z 176	5.1 (6.4)

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306003.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 06-Mar-2015 10:53:30
Spectrum: Tune Spec: Scans 1026-1028(8.33-8.34) Bgrd 1019(8.2
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	762	69.00	7738	105.00	150	149.00	157
37.00	4967	70.00	875	106.00	538	152.00	67
38.00	4484	71.00	177	107.00	90	154.00	82
39.00	1641	72.00	466	108.00	79	155.00	187
40.00	26	73.00	3093	111.00	133	157.00	90
41.00	99	74.00	13338	114.00	108	158.00	79
44.00	1104	75.00	40984	116.00	197	165.00	89
45.00	1215	76.00	4199	117.00	469	171.00	77
46.00	125	77.00	592	118.00	176	172.00	179
47.00	1486	78.00	284	119.00	463	173.00	339
48.00	760	79.00	1991	127.00	177	174.00	63880
49.00	4169	80.00	523	128.00	88	175.00	5506
50.00	19752	81.00	1622	130.00	118	176.00	64256
51.00	5948	82.00	387	131.00	72	177.00	4109
52.00	187	83.00	98	132.00	74	184.00	83
55.00	265	87.00	4447	135.00	290	194.00	73
56.00	1415	88.00	4194	137.00	194	206.00	99
57.00	2515	89.00	129	139.00	77	207.00	71
58.00	78	90.00	73	140.00	74	208.00	67
60.00	465	92.00	1978	141.00	709	217.00	112
61.00	3769	93.00	2971	142.00	139	223.00	80
62.00	4170	94.00	9547	143.00	957	228.00	72
63.00	2704	95.00	81224	144.00	96	241.00	73
64.00	459	96.00	6325	145.00	68	248.00	88
67.00	218	97.00	200	146.00	104		
68.00	7848	104.00	301	148.00	230		

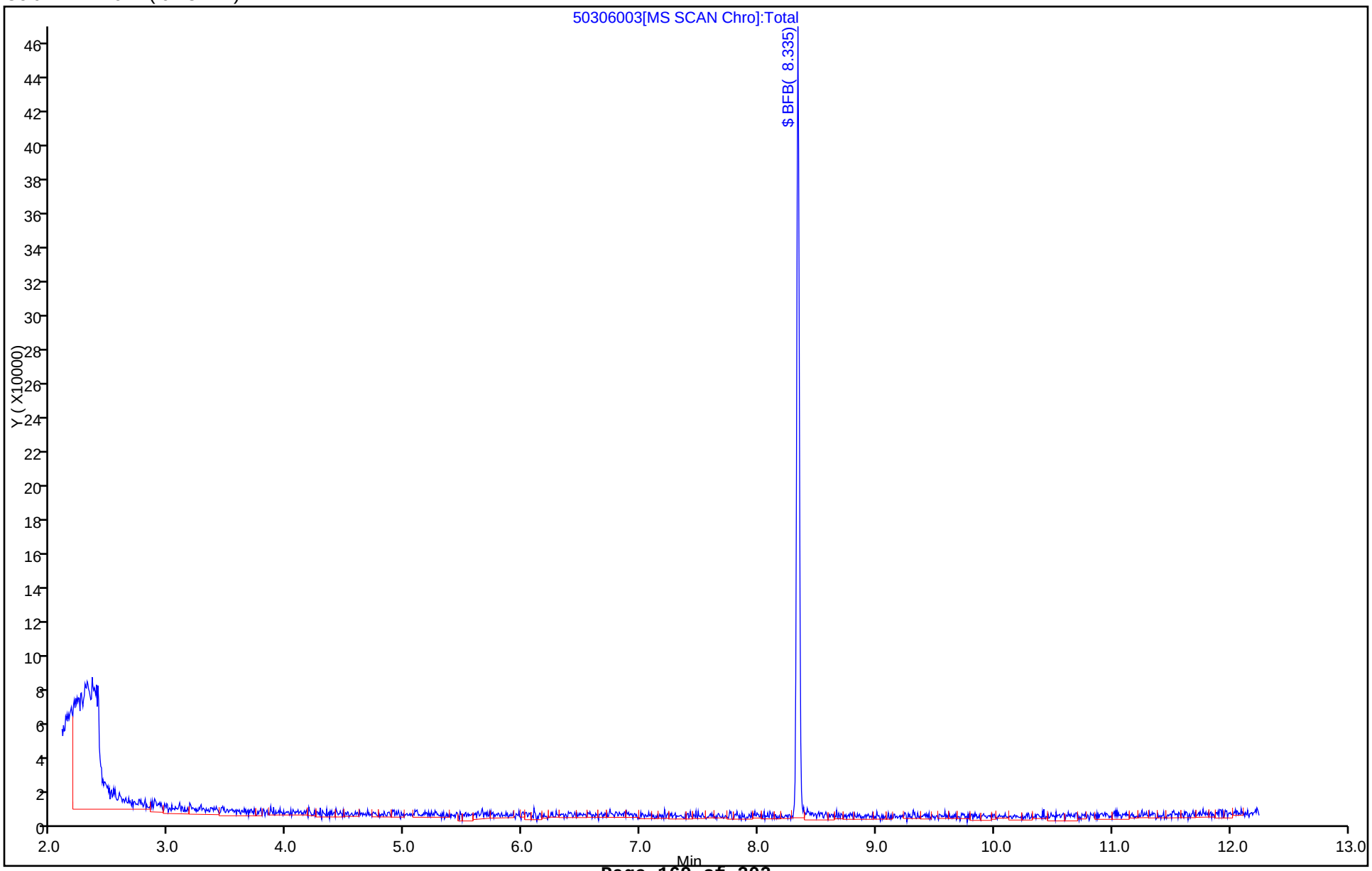
Report Date: 06-Mar-2015 15:11:35 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306003.D

Injection Date:	06-Mar-2015 10:53:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-41760-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-134916/6

Matrix: Water | Lab File ID: 50306006.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/06/2015 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134916 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	1.0	U	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-134916/6

Matrix: Water Lab File ID: 50306006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 13:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306006.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Mar-2015 13:13:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0005922-006
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 15:11:43 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 15:11:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.296	4.308	-0.012	89	87938	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.271	0.006	99	465134	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.361	0.001	99	107771	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.679	0.006	98	167302	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.522	0.007	52	99146	50.0	49.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	98	122297	50.0	49.7	
$ 7 Toluene-d8 (Surr)	98	8.926	8.925	0.001	100	435166	50.0	51.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.529	0.001	97	157917	50.0	50.5	
11 Dichlorodifluoromethane	85		1.613					ND	
12 Chloromethane	50		1.777					ND	
13 Vinyl chloride	62		1.905					ND	
14 Butadiene	39	1.985	1.948	0.037	1	260		0.0625	
15 Bromomethane	94		2.258					ND	
16 Chloroethane	64		2.380					ND	
17 Dichlorofluoromethane	67		2.659					ND	
18 Trichlorofluoromethane	101		2.708					ND	
19 Ethanol	45		3.012					ND	
20 Ethyl ether	59		3.091					ND	
21 Acrolein	56		3.262					ND	
22 1,1-Dichloroethene	96		3.371					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.426					ND	
24 Acetone	43		3.499					ND	
25 Iodomethane	142		3.572					ND	
26 Carbon disulfide	76		3.651					ND	
27 Isopropyl alcohol	45		3.736					ND	
29 Acetonitrile	40		3.943					ND	
28 3-Chloro-1-propene	76		3.949					ND	
30 Methyl acetate	43		4.016					ND	
31 Methylene Chloride	84		4.144					ND	
32 2-Methyl-2-propanol	59		4.436					ND	
33 Acrylonitrile	53		4.545					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.564					ND	
35 Methyl tert-butyl ether	73		4.594					ND	
36 Hexane	57		4.983					ND	
37 1,1-Dichloroethane	63		5.172					ND	
38 Vinyl acetate	43		5.300					ND	
41 Isopropyl ether	45		5.300					ND	
39 2-Chloro-1,3-butadiene	53		5.300					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.799					ND	
44 2,2-Dichloropropane	77		5.932					ND	
45 cis-1,2-Dichloroethene	96		5.932					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
46 2-Butanone (MEK)	43		5.987					ND	
48 Ethyl acetate	43		5.993					ND	
47 Propionitrile	54		6.024					ND	
49 Chlorobromomethane	128		6.224					ND	
51 Tetrahydrofuran	42		6.285					ND	
52 Chloroform	83		6.346					ND	
50 Methacrylonitrile	41		6.389					ND	
53 1,1,1-Trichloroethane	97		6.529					ND	
54 Cyclohexane	56		6.583					ND	
56 Carbon tetrachloride	117		6.717					ND	
55 1,1-Dichloropropene	75		6.723					ND	
57 Isobutyl alcohol	41		6.942					ND	
58 Benzene	78		6.954					ND	
59 1,2-Dichloroethane	62		6.985					ND	
61 Tert-amyl methyl ether	73		7.143					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.277					ND	
63 n-Butanol	56		7.654					ND	
64 Trichloroethene	130		7.666					ND	
66 Methylcyclohexane	83		7.861					ND	
65 Ethyl acrylate	55		7.867					ND	
69 Methyl methacrylate	69		7.867					ND	
67 1,2-Dichloropropane	63		7.897					ND	
68 Dibromomethane	93		8.019					ND	
70 1,4-Dioxane	88		8.056					ND	
71 Dichlorobromomethane	83		8.195					ND	
72 2-Nitropropane	41		8.427					ND	
73 2-Chloroethyl vinyl ether	63		8.506					ND	
74 cis-1,3-Dichloropropene	75		8.658					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.822					ND	
76 Toluene	91		8.986					ND	
77 trans-1,3-Dichloropropene	75		9.224					ND	
78 Ethyl methacrylate	69		9.315					ND	
79 1,1,2-Trichloroethane	97		9.400					ND	
80 Tetrachloroethene	164		9.534					ND	
81 1,3-Dichloropropane	76		9.564					ND	
82 2-Hexanone	43		9.662					ND	
83 n-Butyl acetate	43		9.662					ND	
84 Chlorodibromomethane	129		9.789					ND	
85 Ethylene Dibromide	107		9.899					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.373					ND	
87 Chlorobenzene	112		10.392					ND	
88 4-Chlorobenzotrifluoride	180		10.428					ND	
89 1,1,1,2-Tetrachloroethane	131		10.471					ND	
90 Ethylbenzene	106		10.501					ND	
91 m-Xylene & p-Xylene	106		10.617					ND	
92 o-Xylene	106		11.012					ND	
93 Styrene	104		11.024					ND	
94 Bromoform	173		11.213					ND	
96 2-Chlorobenzotrifluoride	180		11.274					ND	
95 Cyclohexanol	57		11.280					ND	
97 Isopropylbenzene	105		11.377					ND	
98 Cyclohexanone	55		11.450					ND	
99 1,1,2,2-Tetrachloroethane	83		11.675					ND	
100 Bromobenzene	156		11.681					ND	
101 1,2,3-Trichloropropane	110		11.718					ND	
102 trans-1,4-Dichloro-2-buten	53		11.724					ND	
103 N-Propylbenzene	120		11.785					ND	
104 2-Chlorotoluene	126		11.876					ND	
105 3-Chlorotoluene	126		11.937					ND	
106 1,3,5-Trimethylbenzene	105		11.961					ND	
107 4-Chlorotoluene	126		11.979					ND	
108 tert-Butylbenzene	119		12.290					ND	
109 Pentachloroethane	167		12.314					ND	
110 1,2,4-Trimethylbenzene	105		12.338					ND	
111 1,2-dichloro-4-(trifluorom	214		12.399					ND	
112 sec-Butylbenzene	105		12.509					ND	
113 1,3-Dichlorobenzene	146		12.618					ND	
114 4-Isopropyltoluene	119		12.655					ND	
119 Benzyl chloride	91		12.655					ND	
115 1,4-Dichlorobenzene	146		12.709					ND	
116 2,4-Dichloro-1-(triflourom	214		12.758					ND	
117 1,2,3-Trimethylbenzene	105		12.758					ND	
118 2,5-Dichlorobenzotrifluori	214		12.813					ND	
120 n-Butylbenzene	91		13.062					ND	
121 1,2-Dichlorobenzene	146		13.080					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.859					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.005					ND	
124 1,3,5-Trichlorobenzene	180		14.078					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.425					ND	
126 1,2,4-Trichlorobenzene	180		14.686					ND	
127 Hexachlorobutadiene	225		14.863					ND	
128 Naphthalene	128	14.930	14.942	-0.012	1	2033		0.2652	
129 1,2,3-Trichlorobenzene	180		15.191					ND	
131 2,4,5-Trichlorotoluene	159		15.964					ND	
130 2,3,6-Trichlorotoluene	159		16.061					ND	
132 2-Methylnaphthalene	142		16.080					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
151 Isooctane	57		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

Reagents:

VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

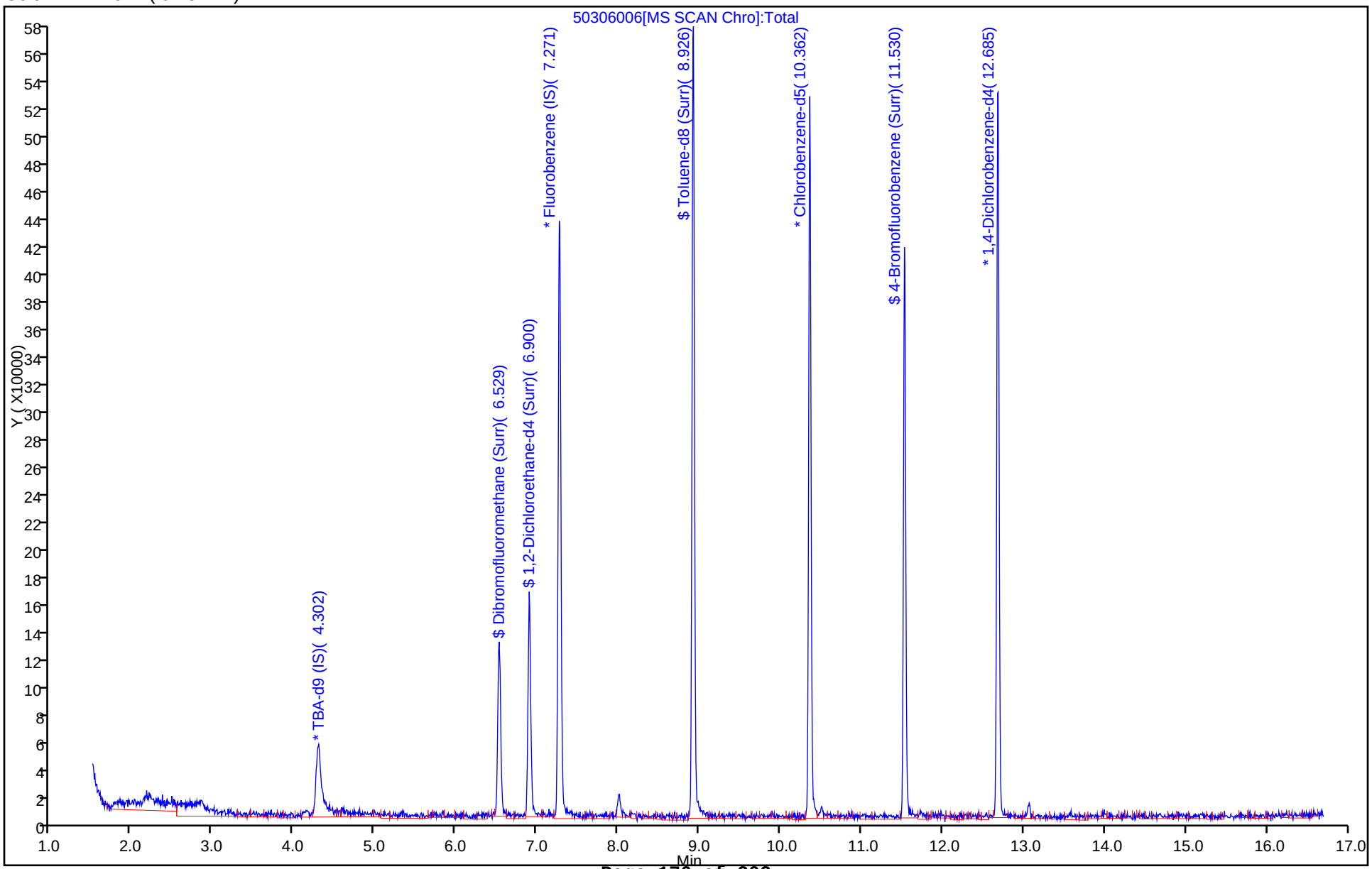
Report Date: 06-Mar-2015 15:12:00 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306006.D

Injection Date:	06-Mar-2015 13:13:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-134916/9

Matrix: Water Lab File ID: 50306009.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 14:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.70		1.0	0.28
75-01-4	Vinyl chloride	10.1		1.0	0.23
74-83-9	Bromomethane	12.6		1.0	0.31
75-00-3	Chloroethane	12.5		1.0	0.21
75-35-4	1,1-Dichloroethene	9.63		1.0	0.30
67-64-1	Acetone	18.7		5.0	2.5
75-15-0	Carbon disulfide	8.40		1.0	0.21
75-09-2	Methylene Chloride	10.3		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	10.1		1.0	0.17
1634-04-4	Methyl tert-butyl ether	7.22		1.0	0.18
75-34-3	1,1-Dichloroethane	9.74		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.88		1.0	0.24
74-97-5	Bromochloromethane	9.90		1.0	0.18
78-93-3	2-Butanone (MEK)	15.9		5.0	0.55
67-66-3	Chloroform	9.78		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.21		1.0	0.29
56-23-5	Carbon tetrachloride	9.04		1.0	0.14
71-43-2	Benzene	9.85		1.0	0.11
107-06-2	1,2-Dichloroethane	9.90		1.0	0.21
79-01-6	Trichloroethene	10.2		1.0	0.14
78-87-5	1,2-Dichloropropane	9.03		1.0	0.095
75-27-4	Bromodichloromethane	9.34		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	6.59		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	16.3		5.0	0.53
108-88-3	Toluene	11.1		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	5.81		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.94		1.0	0.20
127-18-4	Tetrachloroethene	11.1		1.0	0.15
591-78-6	2-Hexanone	14.6		5.0	0.16
124-48-1	Dibromochloromethane	9.97		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.16		1.0	0.18
108-90-7	Chlorobenzene	10.7		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.28		1.0	0.28
100-41-4	Ethylbenzene	10.5		1.0	0.23
1330-20-7	Xylenes, Total	21.4		3.0	0.49
100-42-5	Styrene	10.4		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-134916/9

Matrix: Water Lab File ID: 50306009.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 14:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.88		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.4		1.0	0.20
107-13-1	Acrylonitrile	92.0		20	0.55
123-91-1	1,4-Dioxane	173	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		64-135
2037-26-5	Toluene-d8 (Surr)	98		71-118
460-00-4	4-Bromofluorobenzene (Surr)	92		70-118
1868-53-7	Dibromofluoromethane (Surr)	94		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306009.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Mar-2015 14:42:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0005922-009
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 15:15:28 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 15:15:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.314	4.308	0.006	82	69432	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	99	417924	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.361	0.000	99	95027	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.679	12.679	0.000	98	137726	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.522	0.006	94	84371	50.0	47.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	100	105055	50.0	47.5	
$ 7 Toluene-d8 (Surr)	98	8.919	8.925	-0.006	100	362038	50.0	48.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.529	0.000	98	126968	50.0	46.1	
11 Dichlorodifluoromethane	85	1.619	1.613	0.006	99	107929	50.0	51.4	
12 Chloromethane	50	1.777	1.777	0.000	99	162831	50.0	48.5	
13 Vinyl chloride	62	1.905	1.905	0.000	100	163634	50.0	50.7	
14 Butadiene	39	1.942	1.948	-0.006	98	180877	50.0	48.4	
15 Bromomethane	94	2.252	2.258	-0.006	93	60298	50.0	63.1	
16 Chloroethane	64	2.386	2.380	0.006	98	81722	50.0	62.3	
17 Dichlorofluoromethane	67	2.653	2.659	-0.006	99	196924	50.0	65.5	
18 Trichlorofluoromethane	101	2.708	2.708	0.000	97	175895	50.0	70.0	
20 Ethyl ether	59	3.085	3.091	-0.006	100	115517	50.0	47.7	
21 Acrolein	56	3.262	3.262	0.000	96	41992	150.0	131.2	
22 1,1-Dichloroethene	96	3.383	3.371	0.012	98	117105	50.0	48.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.432	3.426	0.006	99	122300	50.0	49.7	
24 Acetone	43	3.493	3.499	-0.006	100	82200	100.0	93.7	
25 Iodomethane	142	3.572	3.572	0.000	98	178601	50.0	52.2	
26 Carbon disulfide	76	3.663	3.651	0.012	100	251641	50.0	42.0	
28 3-Chloro-1-propene	76	3.937	3.949	-0.012	98	50784	50.0	33.4	
30 Methyl acetate	43	4.016	4.016	0.000	100	486912	250.0	201.7	
31 Methylene Chloride	84	4.144	4.144	0.000	100	139090	50.0	51.4	
32 2-Methyl-2-propanol	59	4.436	4.436	0.000	82	40614	500.0	488.1	
33 Acrylonitrile	53	4.551	4.545	0.006	99	550722	500.0	460.2	
34 trans-1,2-Dichloroethene	96	4.570	4.564	0.006	95	128562	50.0	50.5	
35 Methyl tert-butyl ether	73	4.594	4.594	0.000	93	229359	50.0	36.1	
36 Hexane	57	4.983	4.983	0.000	99	217406	50.0	48.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.178	5.172	0.006	100	236296	50.0	48.7	
38 Vinyl acetate	43	5.287	5.300	-0.013	98	56161	50.0	33.9	
44 2,2-Dichloropropane	77	5.926	5.932	-0.006	62	42831	50.0	23.9	
45 cis-1,2-Dichloroethene	96	5.938	5.932	0.006	93	134338	50.0	49.4	
46 2-Butanone (MEK)	43	5.993	5.987	0.006	100	113925	100.0	79.7	
49 Chlorobromomethane	128	6.230	6.224	0.006	99	56143	50.0	49.5	
51 Tetrahydrofuran	42	6.285	6.285	0.000	99	89432	100.0	87.9	
52 Chloroform	83	6.340	6.346	-0.006	96	189008	50.0	48.9	
53 1,1,1-Trichloroethane	97	6.535	6.529	0.006	95	107791	50.0	41.1	
54 Cyclohexane	56	6.583	6.583	0.000	99	284331	50.0	48.3	
56 Carbon tetrachloride	117	6.717	6.717	0.000	63	80501	50.0	45.2	
55 1,1-Dichloropropene	75	6.723	6.723	0.000	96	180420	50.0	53.9	
57 Isobutyl alcohol	41	6.936	6.942	-0.006	36	35914	1250.0	626.1	
58 Benzene	78	6.954	6.954	0.000	99	519722	50.0	49.2	
59 1,2-Dichloroethane	62	6.985	6.985	0.000	100	150967	50.0	49.5	
62 n-Heptane	43	7.283	7.277	0.006	85	192872	50.0	47.0	
64 Trichloroethene	130	7.666	7.666	0.000	98	127224	50.0	51.2	
66 Methylcyclohexane	83	7.861	7.861	0.000	99	226517	50.0	48.2	
67 1,2-Dichloropropane	63	7.903	7.897	0.006	98	125118	50.0	45.1	
68 Dibromomethane	93	8.025	8.019	0.006	98	62660	50.0	50.1	
70 1,4-Dioxane	88	8.068	8.056	0.012	95	21315	1000.0	862.5	
71 Dichlorobromomethane	83	8.195	8.195	0.000	98	109031	50.0	46.7	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	98	101917	50.0	33.0	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	99	234470	100.0	81.7	
76 Toluene	91	8.992	8.986	0.006	99	542340	50.0	55.3	
77 trans-1,3-Dichloropropene	75	9.217	9.224	-0.007	97	60128	50.0	29.1	
78 Ethyl methacrylate	69	9.321	9.315	0.006	97	72917	50.0	31.4	
79 1,1,2-Trichloroethane	97	9.400	9.400	0.000	95	89084	50.0	49.7	
80 Tetrachloroethene	164	9.534	9.534	0.000	98	100147	50.0	55.3	
81 1,3-Dichloropropane	76	9.564	9.564	0.000	100	167620	50.0	49.8	
82 2-Hexanone	43	9.661	9.662	-0.001	99	146122	100.0	73.0	
84 Chlorodibromomethane	129	9.789	9.789	0.000	98	58749	50.0	49.9	
85 Ethylene Dibromide	107	9.899	9.899	0.000	99	79074	50.0	45.8	
86 3-Chlorobenzotrifluoride	180	10.373	10.373	0.000	95	192587	50.0	64.0	
87 Chlorobenzene	112	10.392	10.392	0.000	98	337402	50.0	53.7	
88 4-Chlorobenzotrifluoride	180	10.428	10.428	0.000	99	176251	50.0	61.3	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.471	0.006	92	67222	50.0	46.4	
90 Ethylbenzene	106	10.501	10.501	0.000	100	189939	50.0	52.3	
91 m-Xylene & p-Xylene	106	10.617	10.617	0.000	100	239616	50.0	53.6	
92 o-Xylene	106	11.012	11.012	0.000	95	233354	50.0	53.7	
93 Styrene	104	11.024	11.024	0.000	96	369638	50.0	52.1	
94 Bromoform	173	11.207	11.213	-0.006	95	30762	50.0	49.4	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	99	192498	50.0	64.5	
97 Isopropylbenzene	105	11.377	11.377	0.000	100	599780	50.0	56.3	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.675	0.000	97	128765	50.0	51.8	
100 Bromobenzene	156	11.681	11.681	0.000	99	128808	50.0	53.5	
101 1,2,3-Trichloropropane	110	11.718	11.718	0.000	97	38503	50.0	47.8	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.724	0.006	87	32361	50.0	41.3	
103 N-Propylbenzene	120	11.791	11.785	0.006	100	173170	50.0	54.2	
104 2-Chlorotoluene	126	11.876	11.876	0.000	100	135907	50.0	51.5	
105 3-Chlorotoluene	126	11.937	11.937	0.000	99	155901	50.0	57.8	
106 1,3,5-Trimethylbenzene	105	11.961	11.961	0.000	100	468113	50.0	52.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	11.985	11.979	0.006	96	144600	50.0	50.8	
108 tert-Butylbenzene	119	12.290	12.290	0.000	99	406046	50.0	53.2	
110 1,2,4-Trimethylbenzene	105	12.332	12.338	-0.006	99	465572	50.0	51.0	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.399	0.000	98	132997	50.0	64.5	
112 sec-Butylbenzene	105	12.509	12.509	0.000	100	587005	50.0	53.4	
113 1,3-Dichlorobenzene	146	12.618	12.618	0.000	99	248614	50.0	52.3	
114 4-Isopropyltoluene	119	12.655	12.655	0.000	100	469360	50.0	52.1	
115 1,4-Dichlorobenzene	146	12.703	12.709	-0.006	98	254540	50.0	53.2	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.758	0.000	94	120146	50.0	61.3	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.813	-0.006	98	133041	50.0	62.3	
120 n-Butylbenzene	91	13.062	13.062	0.000	100	415854	50.0	51.9	
121 1,2-Dichlorobenzene	146	13.080	13.080	0.000	99	233901	50.0	53.8	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.859	0.000	93	9437	50.0	32.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	13.999	14.005	-0.006	1	487452	150.0	164.1	M
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.425	0.000	100	315576	100.0	107.5	
126 1,2,4-Trichlorobenzene	180	14.693	14.686	0.007	98	102584	50.0	47.2	
127 Hexachlorobutadiene	225	14.863	14.863	0.000	96	47856	50.0	51.5	
128 Naphthalene	128	14.942	14.942	0.000	100	276856	50.0	43.9	
129 1,2,3-Trichlorobenzene	180	15.185	15.191	-0.006	99	82238	50.0	44.1	
131 2,4,5-Trichlorotoluene	159	15.964	15.964	0.000	98	40593	50.0	43.0	
130 2,3,6-Trichlorotoluene	159	16.061	16.061	0.000	97	37156	50.0	42.7	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.9	
S 133 Xylenes, Total	106				0		100.0	107.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	62.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00105	Amount Added:	2.00	Units: uL	
voaWket2 Rest_00001	Amount Added:	2.00	Units: uL	
VOAEE2ND_00001	Amount Added:	2.00	Units: uL	
VOAVA2ND_00002	Amount Added:	2.00	Units: uL	
VOAACRO2ND_00005	Amount Added:	6.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

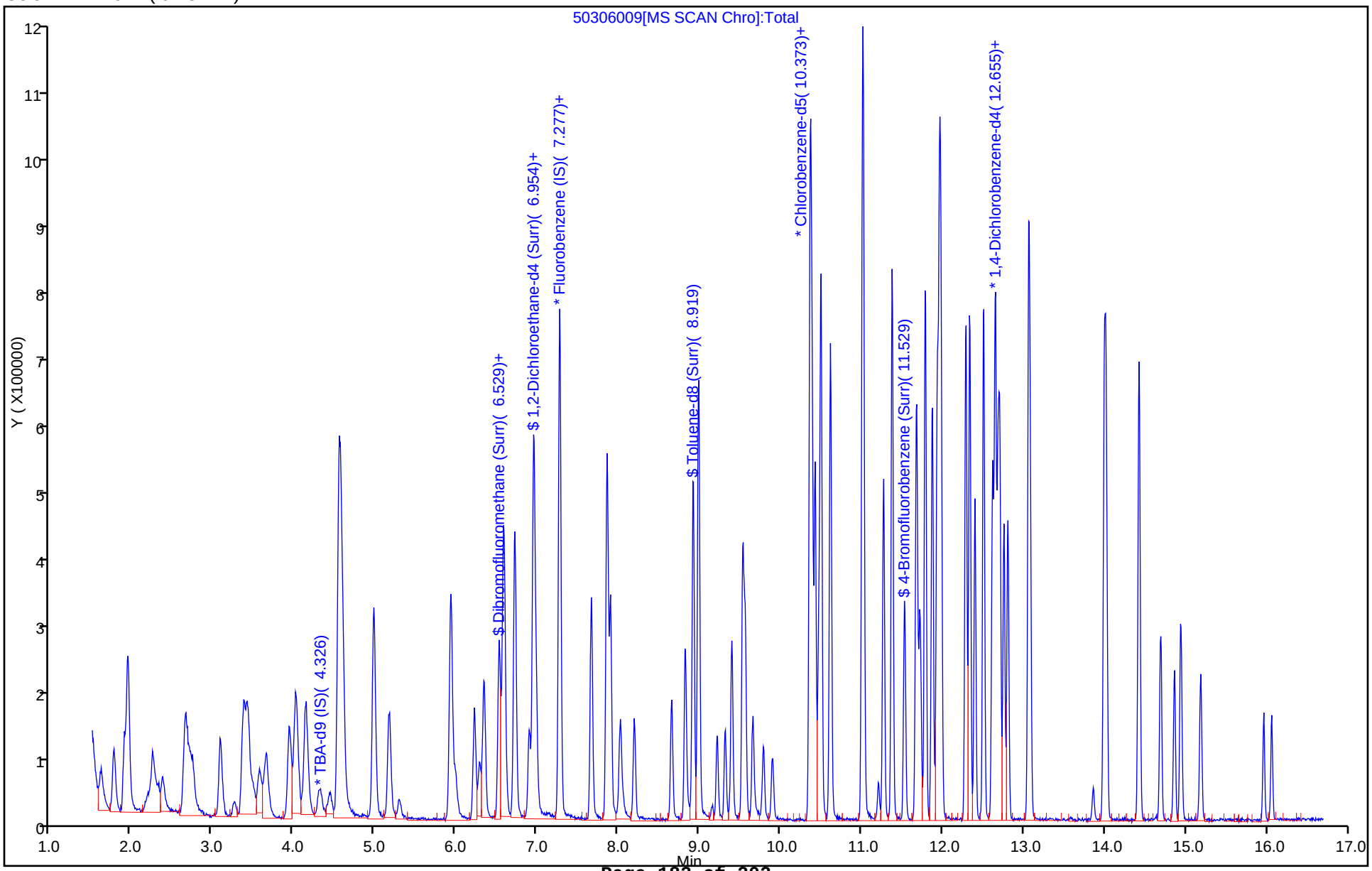
Report Date: 06-Mar-2015 15:15:37 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306009.D

Injection Date:	06-Mar-2015 14:42:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-168-0/1-0 MS Lab Sample ID: 180-41760-1 MS

Matrix: Water Lab File ID: 50306010.D

Analysis Method: 8260C Date Collected: 03/04/2015 09:23

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 15:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.6		1.0	0.28
75-01-4	Vinyl chloride	10.9		1.0	0.23
74-83-9	Bromomethane	12.9		1.0	0.31
75-00-3	Chloroethane	13.2		1.0	0.21
75-35-4	1,1-Dichloroethene	11.0		1.0	0.30
67-64-1	Acetone	19.8		5.0	2.5
75-15-0	Carbon disulfide	9.50		1.0	0.21
75-09-2	Methylene Chloride	10.8		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	11.1		1.0	0.17
1634-04-4	Methyl tert-butyl ether	7.97		1.0	0.18
75-34-3	1,1-Dichloroethane	10.4		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.24
74-97-5	Bromochloromethane	11.0		1.0	0.18
78-93-3	2-Butanone (MEK)	19.3		5.0	0.55
67-66-3	Chloroform	10.8		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.94		1.0	0.29
56-23-5	Carbon tetrachloride	10.1		1.0	0.14
71-43-2	Benzene	10.6		1.0	0.11
107-06-2	1,2-Dichloroethane	10.5		1.0	0.21
79-01-6	Trichloroethene	11.1		1.0	0.14
78-87-5	1,2-Dichloropropane	9.92		1.0	0.095
75-27-4	Bromodichloromethane	10.1		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	7.45		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.0		5.0	0.53
108-88-3	Toluene	11.4		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	6.46		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.5		1.0	0.20
127-18-4	Tetrachloroethene	11.7		1.0	0.15
591-78-6	2-Hexanone	15.2		5.0	0.16
124-48-1	Dibromochloromethane	10.1		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.61		1.0	0.18
108-90-7	Chlorobenzene	11.0		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.58		1.0	0.28
100-41-4	Ethylbenzene	11.1		1.0	0.23
1330-20-7	Xylenes, Total	22.2		3.0	0.49
100-42-5	Styrene	10.9		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-168-0/1-0 MS Lab Sample ID: 180-41760-1 MS

Matrix: Water Lab File ID: 50306010.D

Analysis Method: 8260C Date Collected: 03/04/2015 09:23

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 15:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.62		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.7		1.0	0.20
107-13-1	Acrylonitrile	101		20	0.55
123-91-1	1,4-Dioxane	198	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	96		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306010.D
Lims ID: 180-41760-C-1 MS
Client ID:
Sample Type: MS
Inject. Date: 06-Mar-2015 15:06:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-41760-C-1 MS
Misc. Info.: 180-0005922-010
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 17:06:52 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 17:06:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.303	4.308	-0.005	86	79996	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.271	0.001	99	390976	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.361	0.001	99	93368	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.679	0.007	97	131026	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.530	6.522	0.008	95	83668	50.0	50.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.895	6.900	-0.005	99	98972	50.0	47.8	
$ 7 Toluene-d8 (Surr)	98	8.920	8.925	-0.005	99	375886	50.0	51.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.529	0.001	97	130427	50.0	48.2	
11 Dichlorodifluoromethane	85	1.620	1.613	0.007	100	109463	50.0	55.7	
12 Chloromethane	50	1.772	1.777	-0.005	99	165997	50.0	52.9	
13 Vinyl chloride	62	1.900	1.905	-0.005	100	164821	50.0	54.6	
14 Butadiene	39	1.949	1.948	0.001	100	186330	50.0	53.3	
15 Bromomethane	94	2.253	2.258	-0.005	90	57446	50.0	64.3	
16 Chloroethane	64	2.375	2.380	-0.005	97	80826	50.0	65.8	
17 Dichlorofluoromethane	67	2.654	2.659	-0.005	99	190867	50.0	67.8	
18 Trichlorofluoromethane	101	2.703	2.708	-0.005	97	166447	50.0	70.8	
20 Ethyl ether	59	3.086	3.091	-0.005	98	117291	50.0	51.7	
21 Acrolein	56	3.257	3.262	-0.005	98	47376	150.0	158.2	
22 1,1-Dichloroethene	96	3.372	3.371	0.001	99	125632	50.0	55.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.415	3.426	-0.011	97	126268	50.0	54.9	
24 Acetone	43	3.494	3.499	-0.005	100	81153	100.0	98.8	
25 Iodomethane	142	3.573	3.572	0.001	98	181962	50.0	56.8	
26 Carbon disulfide	76	3.652	3.651	0.001	100	266263	50.0	47.5	
28 3-Chloro-1-propene	76	3.938	3.949	-0.011	100	55270	50.0	38.9	
30 Methyl acetate	43	4.011	4.016	-0.005	100	518490	250.0	229.6	
31 Methylene Chloride	84	4.139	4.144	-0.005	99	136686	50.0	54.1	
32 2-Methyl-2-propanol	59	4.425	4.436	-0.011	88	47857	500.0	499.2	
33 Acrylonitrile	53	4.552	4.545	0.007	100	563899	500.0	503.7	
34 trans-1,2-Dichloroethene	96	4.565	4.564	0.001	95	132622	50.0	55.7	
35 Methyl tert-butyl ether	73	4.595	4.594	0.001	93	236902	50.0	39.8	
36 Hexane	57	4.978	4.983	-0.005	99	226839	50.0	53.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.167	5.172	-0.005	99	236932	50.0	52.2	
38 Vinyl acetate	43	5.289	5.300	-0.012	99	68123	50.0	44.0	
44 2,2-Dichloropropane	77	5.921	5.932	-0.011	68	42734	50.0	25.4	
45 cis-1,2-Dichloroethene	96	5.939	5.932	0.007	92	134254	50.0	52.7	
46 2-Butanone (MEK)	43	5.988	5.987	0.001	99	128882	100.0	96.3	
49 Chlorobromomethane	128	6.219	6.224	-0.005	98	58335	50.0	55.0	
51 Tetrahydrofuran	42	6.286	6.285	0.001	99	81689	100.0	85.8	
52 Chloroform	83	6.341	6.346	-0.005	96	194925	50.0	53.9	
53 1,1,1-Trichloroethane	97	6.536	6.529	0.007	95	109736	50.0	44.7	
54 Cyclohexane	56	6.584	6.583	0.001	99	288350	50.0	52.3	
56 Carbon tetrachloride	117	6.718	6.717	0.001	63	84488	50.0	50.7	
55 1,1-Dichloropropene	75	6.718	6.723	-0.005	96	181270	50.0	57.8	
57 Isobutyl alcohol	41	6.949	6.942	0.007	32	42786	1250.0	797.3	
58 Benzene	78	6.955	6.954	0.001	99	522375	50.0	52.9	
59 1,2-Dichloroethane	62	6.986	6.985	0.001	100	149567	50.0	52.4	
62 n-Heptane	43	7.278	7.277	0.001	86	203162	50.0	52.9	
64 Trichloroethene	130	7.667	7.666	0.001	98	128870	50.0	55.4	
66 Methylcyclohexane	83	7.862	7.861	0.001	99	241130	50.0	54.9	
67 1,2-Dichloropropane	63	7.904	7.897	0.007	96	128655	50.0	49.6	
68 Dibromomethane	93	8.020	8.019	0.001	98	61587	50.0	52.6	
70 1,4-Dioxane	88	8.069	8.056	0.013	67	22930	1000.0	991.8	M
71 Dichlorobromomethane	83	8.196	8.195	0.001	99	110070	50.0	50.4	
74 cis-1,3-Dichloropropene	75	8.653	8.658	-0.005	99	107787	50.0	37.3	
75 4-Methyl-2-pentanone (MIBK	43	8.823	8.822	0.001	99	240248	100.0	85.2	
76 Toluene	91	8.987	8.986	0.001	100	551626	50.0	57.2	
77 trans-1,3-Dichloropropene	75	9.218	9.224	-0.006	97	65661	50.0	32.3	
78 Ethyl methacrylate	69	9.316	9.315	0.001	99	78575	50.0	34.4	
79 1,1,2-Trichloroethane	97	9.401	9.400	0.001	97	92372	50.0	52.5	
80 Tetrachloroethene	164	9.535	9.534	0.001	98	104463	50.0	58.7	
81 1,3-Dichloropropane	76	9.565	9.564	0.001	98	172411	50.0	52.1	
82 2-Hexanone	43	9.656	9.662	-0.006	99	149128	100.0	75.8	
84 Chlorodibromomethane	129	9.790	9.789	0.001	98	58377	50.0	50.4	
85 Ethylene Dibromide	107	9.900	9.899	0.001	98	81428	50.0	48.0	
86 3-Chlorobenzotrifluoride	180	10.374	10.373	0.001	96	190884	50.0	64.6	
87 Chlorobenzene	112	10.393	10.392	0.001	99	339369	50.0	55.0	
88 4-Chlorobenzotrifluoride	180	10.429	10.428	0.001	99	180347	50.0	63.8	
89 1,1,1,2-Tetrachloroethane	131	10.478	10.471	0.007	94	68181	50.0	47.9	
90 Ethylbenzene	106	10.502	10.501	0.001	100	198475	50.0	55.6	
91 m-Xylene & p-Xylene	106	10.618	10.617	0.001	100	240400	50.0	54.7	
92 o-Xylene	106	11.013	11.012	0.001	96	240993	50.0	56.5	
93 Styrene	104	11.025	11.024	0.001	97	378352	50.0	54.3	
94 Bromoform	173	11.208	11.213	-0.005	97	29407	50.0	48.1	
96 2-Chlorobenzotrifluoride	180	11.269	11.274	-0.005	99	188189	50.0	64.2	
97 Isopropylbenzene	105	11.378	11.377	0.001	100	604531	50.0	57.7	
99 1,1,2,2-Tetrachloroethane	83	11.670	11.675	-0.005	97	129985	50.0	53.3	
100 Bromobenzene	156	11.682	11.681	0.001	98	128177	50.0	56.0	
101 1,2,3-Trichloropropane	110	11.719	11.718	0.001	93	40775	50.0	53.2	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.724	0.007	89	31973	50.0	42.9	
103 N-Propylbenzene	120	11.792	11.785	0.007	100	168743	50.0	55.5	
104 2-Chlorotoluene	126	11.877	11.876	0.001	98	136905	50.0	54.5	
105 3-Chlorotoluene	126	11.932	11.937	-0.005	99	146317	50.0	57.0	
106 1,3,5-Trimethylbenzene	105	11.962	11.961	0.001	100	471679	50.0	56.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	11.980	11.979	0.001	99	151411	50.0	55.9	
108 tert-Butylbenzene	119	12.285	12.290	-0.006	100	393102	50.0	54.1	
110 1,2,4-Trimethylbenzene	105	12.333	12.338	-0.005	99	464645	50.0	53.5	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.399	0.001	99	125713	50.0	64.1	
112 sec-Butylbenzene	105	12.504	12.509	-0.005	100	585998	50.0	56.1	
113 1,3-Dichlorobenzene	146	12.619	12.618	0.001	99	245819	50.0	54.3	
114 4-Isopropyltoluene	119	12.650	12.655	-0.005	100	465785	50.0	54.4	
115 1,4-Dichlorobenzene	146	12.704	12.709	-0.005	98	247027	50.0	54.3	
116 2,4-Dichloro-1-(triflourom	214	12.759	12.758	0.001	93	119375	50.0	64.1	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.813	-0.005	98	131292	50.0	64.6	
120 n-Butylbenzene	91	13.063	13.062	0.001	100	414155	50.0	54.4	
121 1,2-Dichlorobenzene	146	13.081	13.080	0.001	98	224087	50.0	54.2	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.859	0.001	95	9176	50.0	33.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.005	0.001	100	468817	150.0	165.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.425	0.001	99	298651	100.0	106.9	
126 1,2,4-Trichlorobenzene	180	14.694	14.686	0.008	99	100931	50.0	48.8	
127 Hexachlorobutadiene	225	14.864	14.863	0.001	97	47249	50.0	53.5	
128 Naphthalene	128	14.937	14.942	-0.005	100	260574	50.0	43.4	
129 1,2,3-Trichlorobenzene	180	15.186	15.191	-0.005	99	75137	50.0	42.3	
131 2,4,5-Trichlorotoluene	159	15.965	15.964	0.001	96	40107	50.0	44.7	
130 2,3,6-Trichlorotoluene	159	16.062	16.061	0.001	97	35162	50.0	42.5	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	108.5	
S 133 Xylenes, Total	106				0		100.0	111.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	69.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00105	Amount Added:	2.00	Units: uL	
voaWket2 Rest_00001	Amount Added:	2.00	Units: uL	
VOAEE2ND_00001	Amount Added:	2.00	Units: uL	
VOAVA2ND_00002	Amount Added:	2.00	Units: uL	
VOAACRO2ND_00005	Amount Added:	6.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

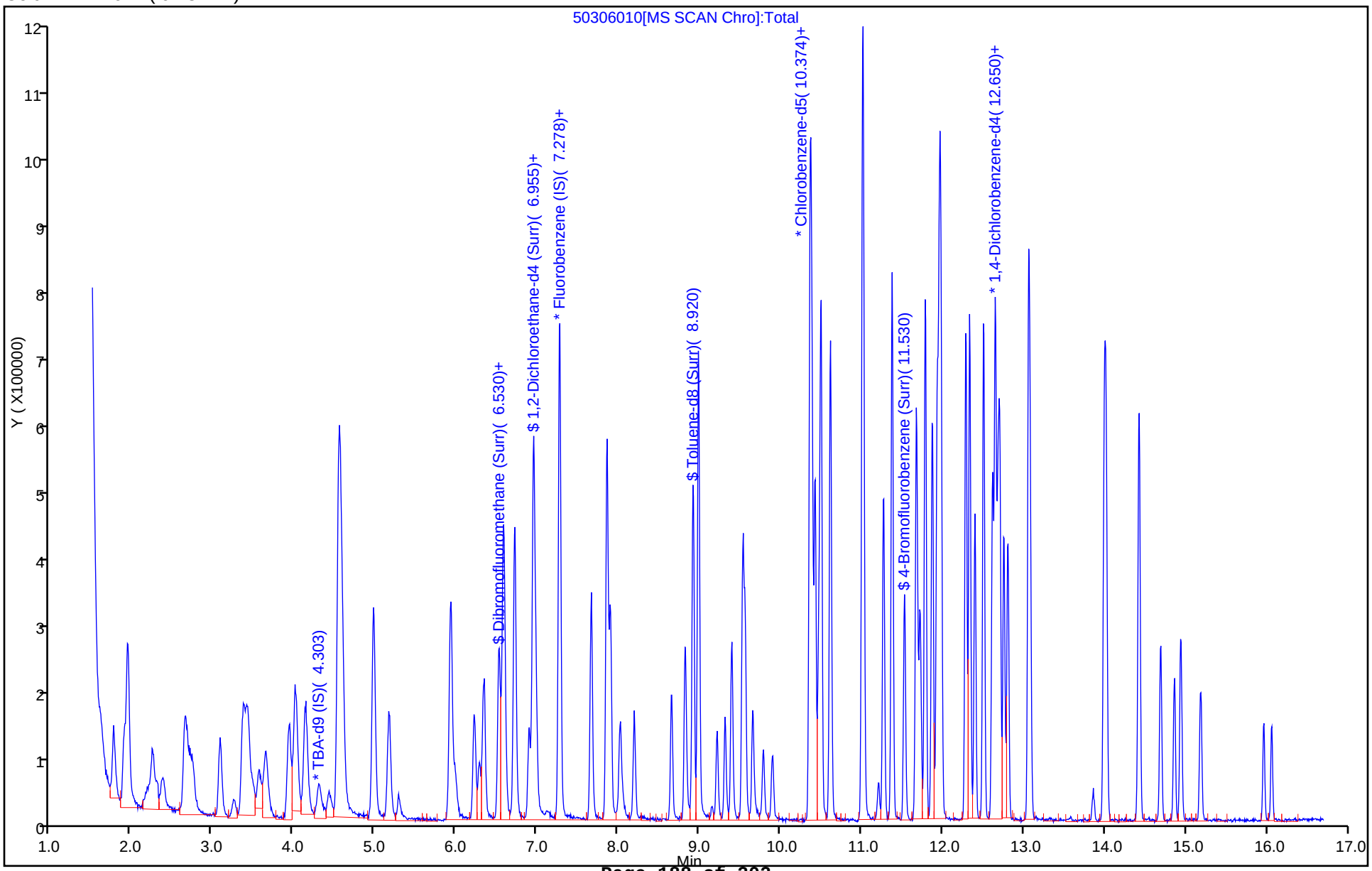
Report Date: 06-Mar-2015 17:06:52 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306010.D

Injection Date:	06-Mar-2015 15:06:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-41760-C-1 MS			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

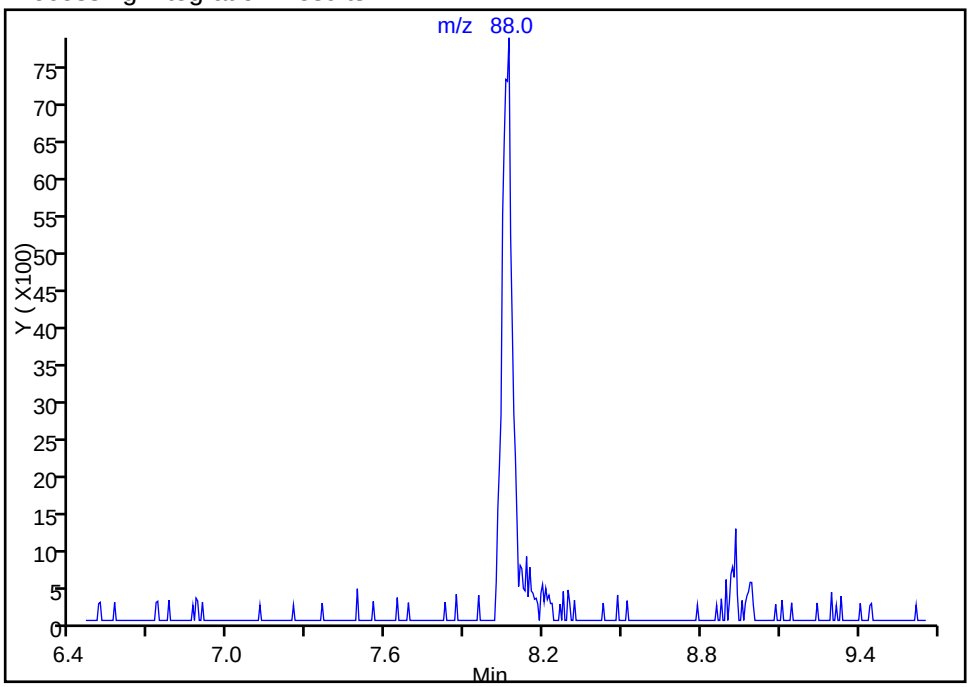
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306010.D				
Injection Date:	06-Mar-2015 15:06:30	Instrument ID:	CHHP5		
Lims ID:	180-41760-C-1 MS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

70 1,4-Dioxane, CAS: 123-91-1

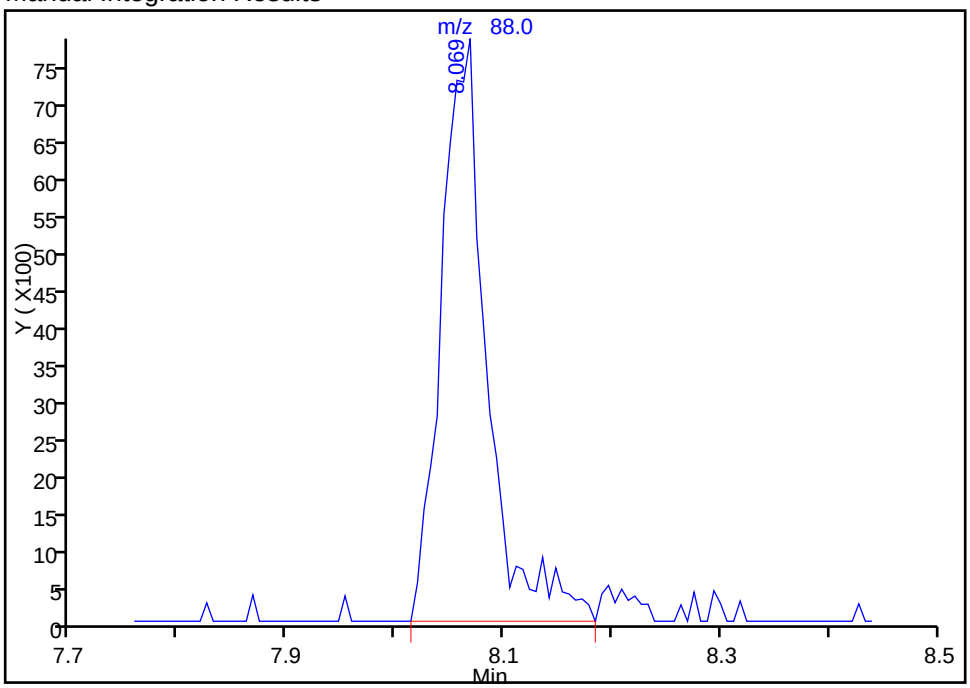
Not Detected
Expected RT: 8.06

Processing Integration Results



Manual Integration Results

RT: 8.07
Area: 22930
Amount: 991.8123
Amount Units: ng



Reviewer: fergusond, 06-Mar-2015 17:06:52
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-168-0/1-0 MSD | Lab Sample ID: 180-41760-1 MSD

Matrix: Water | Lab File ID: 50306011.D

Analysis Method: 8260C | Date Collected: 03/04/2015 09:23

Sample wt/vol: 5(mL) | Date Analyzed: 03/06/2015 15:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134916 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.2		1.0	0.28
75-01-4	Vinyl chloride	9.80		1.0	0.23
74-83-9	Bromomethane	12.3		1.0	0.31
75-00-3	Chloroethane	12.2		1.0	0.21
75-35-4	1,1-Dichloroethene	9.76		1.0	0.30
67-64-1	Acetone	20.9		5.0	2.5
75-15-0	Carbon disulfide	8.87		1.0	0.21
75-09-2	Methylene Chloride	10.5		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.17
1634-04-4	Methyl tert-butyl ether	7.83		1.0	0.18
75-34-3	1,1-Dichloroethane	9.88		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.74		1.0	0.24
74-97-5	Bromochloromethane	10.0		1.0	0.18
78-93-3	2-Butanone (MEK)	18.1		5.0	0.55
67-66-3	Chloroform	10.1		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.38		1.0	0.29
56-23-5	Carbon tetrachloride	9.51		1.0	0.14
71-43-2	Benzene	9.99		1.0	0.11
107-06-2	1,2-Dichloroethane	10.1		1.0	0.21
79-01-6	Trichloroethene	10.3		1.0	0.14
78-87-5	1,2-Dichloropropane	9.20		1.0	0.095
75-27-4	Bromodichloromethane	9.45		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	7.18		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	16.4		5.0	0.53
108-88-3	Toluene	10.9		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	6.38		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.2		1.0	0.20
127-18-4	Tetrachloroethene	11.4		1.0	0.15
591-78-6	2-Hexanone	15.1		5.0	0.16
124-48-1	Dibromochloromethane	10.4		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.51		1.0	0.18
108-90-7	Chlorobenzene	10.7		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.76		1.0	0.28
100-41-4	Ethylbenzene	10.7		1.0	0.23
1330-20-7	Xylenes, Total	21.3		3.0	0.49
100-42-5	Styrene	10.2		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Client Sample ID: HD-MW-168-0/1-0 MSD Lab Sample ID: 180-41760-1 MSD

Matrix: Water Lab File ID: 50306011.D

Analysis Method: 8260C Date Collected: 03/04/2015 09:23

Sample wt/vol: 5(mL) Date Analyzed: 03/06/2015 15:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134916 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.24		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.0		1.0	0.20
107-13-1	Acrylonitrile	95.8		20	0.55
123-91-1	1,4-Dioxane	166	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		64-135
2037-26-5	Toluene-d8 (Surr)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	92		70-118
1868-53-7	Dibromofluoromethane (Surr)	95		70-128

Report Date: 06-Mar-2015 17:08:05 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306011.D
Lims ID: 180-41760-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 06-Mar-2015 15:30:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-41760-B-1 MSD
Misc. Info.: 180-0005922-011
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Mar-2015 17:08:05 Calib Date: 03-Mar-2015 18:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150303-5873.b\50303018.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: fergusond Date: 06-Mar-2015 17:08:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.308	4.308	0.000	90	81746	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	100	430369	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.361	0.000	99	99092	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.679	0.006	98	139626	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.522	0.013	97	87927	50.0	47.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	99	104073	50.0	45.7	
$ 7 Toluene-d8 (Surr)	98	8.926	8.925	0.001	100	386191	50.0	50.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.529	0.000	96	132594	50.0	46.1	
11 Dichlorodifluoromethane	85	1.619	1.613	0.006	99	119833	50.0	55.4	
12 Chloromethane	50	1.771	1.777	-0.006	100	175658	50.0	50.8	
13 Vinyl chloride	62	1.905	1.905	0.000	100	162737	50.0	49.0	
14 Butadiene	39	1.942	1.948	-0.006	99	191470	50.0	49.7	
15 Bromomethane	94	2.246	2.258	-0.012	92	60886	50.0	61.7	
16 Chloroethane	64	2.380	2.380	0.000	99	82522	50.0	61.1	
17 Dichlorofluoromethane	67	2.647	2.659	-0.012	100	203739	50.0	65.8	
18 Trichlorofluoromethane	101	2.708	2.708	0.000	100	179595	50.0	69.4	
20 Ethyl ether	59	3.092	3.091	0.001	97	120955	50.0	48.5	
21 Acrolein	56	3.268	3.262	0.006	100	48746	150.0	147.9	
22 1,1-Dichloroethene	96	3.371	3.371	0.000	98	122223	50.0	48.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.414	3.426	-0.012	98	127255	50.0	50.2	
24 Acetone	43	3.493	3.499	-0.006	99	94337	100.0	104.4	
25 Iodomethane	142	3.566	3.572	-0.006	97	189588	50.0	53.8	
26 Carbon disulfide	76	3.651	3.651	0.000	100	273463	50.0	44.3	
28 3-Chloro-1-propene	76	3.943	3.949	-0.006	99	57734	50.0	36.9	
30 Methyl acetate	43	4.016	4.016	0.000	100	544174	250.0	218.9	
31 Methylene Chloride	84	4.144	4.144	0.000	99	145828	50.0	52.4	
32 2-Methyl-2-propanol	59	4.442	4.436	0.006	87	50334	500.0	513.8	
33 Acrylonitrile	53	4.552	4.545	0.007	99	590298	500.0	479.0	
34 trans-1,2-Dichloroethene	96	4.558	4.564	-0.006	93	134281	50.0	51.2	
35 Methyl tert-butyl ether	73	4.606	4.594	0.012	94	256222	50.0	39.1	
36 Hexane	57	4.984	4.983	0.001	99	228300	50.0	49.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.178	5.172	0.006	99	246745	50.0	49.4	
38 Vinyl acetate	43	5.300	5.300	0.000	99	77163	50.0	45.2	
44 2,2-Dichloropropane	77	5.933	5.932	0.001	59	45783	50.0	24.8	
45 cis-1,2-Dichloroethene	96	5.939	5.932	0.007	92	136402	50.0	48.7	
46 2-Butanone (MEK)	43	5.993	5.987	0.006	100	133083	100.0	90.4	
49 Chlorobromomethane	128	6.231	6.224	0.007	99	58658	50.0	50.2	
51 Tetrahydrofuran	42	6.285	6.285	0.000	98	87177	100.0	83.2	
52 Chloroform	83	6.340	6.346	-0.006	96	201608	50.0	50.7	
53 1,1,1-Trichloroethane	97	6.535	6.529	0.006	97	113265	50.0	41.9	
54 Cyclohexane	56	6.590	6.583	0.007	99	297224	50.0	49.0	
56 Carbon tetrachloride	117	6.723	6.717	0.006	63	87162	50.0	47.5	
55 1,1-Dichloropropene	75	6.729	6.723	0.006	97	184017	50.0	53.3	
57 Isobutyl alcohol	41	6.942	6.942	0.000	34	37695	1250.0	638.1	
58 Benzene	78	6.955	6.954	0.001	99	542961	50.0	49.9	
59 1,2-Dichloroethane	62	6.991	6.985	0.006	100	157879	50.0	50.3	
62 n-Heptane	43	7.277	7.277	0.000	84	202060	50.0	47.8	
64 Trichloroethene	130	7.666	7.666	0.000	99	131736	50.0	51.5	
66 Methylcyclohexane	83	7.861	7.861	0.000	98	241768	50.0	50.0	
67 1,2-Dichloropropane	63	7.897	7.897	0.000	95	131271	50.0	46.0	
68 Dibromomethane	93	8.025	8.019	0.006	99	64091	50.0	49.7	
70 1,4-Dioxane	88	8.062	8.056	0.006	96	21104	1000.0	829.3	M
71 Dichlorobromomethane	83	8.196	8.195	0.001	99	113526	50.0	47.2	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	98	114241	50.0	35.9	
75 4-Methyl-2-pentanone (MIBK	43	8.828	8.822	0.006	99	245642	100.0	82.1	
76 Toluene	91	8.993	8.986	0.007	100	557346	50.0	54.5	
77 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	97	68805	50.0	31.9	
78 Ethyl methacrylate	69	9.321	9.315	0.006	99	87420	50.0	36.1	
79 1,1,2-Trichloroethane	97	9.400	9.400	0.000	98	95558	50.0	51.1	
80 Tetrachloroethene	164	9.534	9.534	0.000	99	107179	50.0	56.8	
81 1,3-Dichloropropane	76	9.564	9.564	0.000	98	175939	50.0	50.1	
82 2-Hexanone	43	9.662	9.662	0.000	98	157742	100.0	75.5	
84 Chlorodibromomethane	129	9.789	9.789	0.000	98	64131	50.0	52.2	
85 Ethylene Dibromide	107	9.899	9.899	0.000	100	85538	50.0	47.5	
86 3-Chlorobenzotrifluoride	180	10.373	10.373	0.000	97	189742	50.0	60.5	
87 Chlorobenzene	112	10.392	10.392	0.000	99	350202	50.0	53.5	
88 4-Chlorobenzotrifluoride	180	10.428	10.428	0.000	99	180943	50.0	60.3	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.471	0.000	93	73753	50.0	48.8	
90 Ethylbenzene	106	10.501	10.501	0.000	100	202753	50.0	53.5	
91 m-Xylene & p-Xylene	106	10.617	10.617	0.000	99	244514	50.0	52.4	
92 o-Xylene	106	11.012	11.012	0.000	96	244401	50.0	54.0	
93 Styrene	104	11.024	11.024	0.000	97	379011	50.0	51.2	
94 Bromoform	173	11.207	11.213	-0.006	96	29991	50.0	46.2	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	99	188024	50.0	60.5	
97 Isopropylbenzene	105	11.377	11.377	0.000	100	618545	50.0	55.7	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.675	0.000	98	130130	50.0	50.2	
100 Bromobenzene	156	11.681	11.681	0.000	98	130334	50.0	53.4	
101 1,2,3-Trichloropropane	110	11.724	11.718	0.006	95	40911	50.0	50.1	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.724	0.006	94	35040	50.0	44.1	
103 N-Propylbenzene	120	11.791	11.785	0.006	100	163303	50.0	50.4	
104 2-Chlorotoluene	126	11.876	11.876	0.000	100	142505	50.0	53.3	
105 3-Chlorotoluene	126	11.937	11.937	0.000	99	159270	50.0	58.2	
106 1,3,5-Trimethylbenzene	105	11.961	11.961	0.000	100	478152	50.0	53.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	11.980	11.979	0.001	98	148404	50.0	51.4	
108 tert-Butylbenzene	119	12.290	12.290	0.000	99	413373	50.0	53.4	
110 1,2,4-Trimethylbenzene	105	12.338	12.338	0.000	100	481600	50.0	52.0	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.399	0.000	98	132097	50.0	63.2	
112 sec-Butylbenzene	105	12.509	12.509	0.000	100	603253	50.0	54.2	
113 1,3-Dichlorobenzene	146	12.618	12.618	0.000	99	249609	50.0	51.8	
114 4-Isopropyltoluene	119	12.649	12.655	-0.006	100	483382	50.0	53.0	
115 1,4-Dichlorobenzene	146	12.710	12.709	0.001	98	251513	50.0	51.8	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.758	0.000	95	117441	50.0	59.1	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.813	-0.006	98	135262	50.0	62.5	
120 n-Butylbenzene	91	13.062	13.062	0.000	99	426198	50.0	52.5	
121 1,2-Dichlorobenzene	146	13.081	13.080	0.001	99	231669	50.0	52.5	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.859	0.000	91	9492	50.0	32.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	13.999	14.005	-0.006	100	477078	150.0	158.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.425	0.000	99	299903	100.0	100.7	
126 1,2,4-Trichlorobenzene	180	14.693	14.686	0.007	98	96534	50.0	43.8	
127 Hexachlorobutadiene	225	14.857	14.863	-0.006	96	45942	50.0	48.8	
128 Naphthalene	128	14.942	14.942	0.000	100	274639	50.0	42.9	
129 1,2,3-Trichlorobenzene	180	15.185	15.191	-0.006	98	77143	50.0	40.8	
131 2,4,5-Trichlorotoluene	159	15.964	15.964	0.000	96	40725	50.0	42.6	
130 2,3,6-Trichlorotoluene	159	16.055	16.061	-0.006	98	37069	50.0	42.0	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.9	
S 133 Xylenes, Total	106				0		100.0	106.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	67.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00105	Amount Added:	2.00	Units: uL	
voaWket2 Rest_00001	Amount Added:	2.00	Units: uL	
VOAEE2ND_00001	Amount Added:	2.00	Units: uL	
VOAVA2ND_00002	Amount Added:	2.00	Units: uL	
VOAACRO2ND_00005	Amount Added:	6.00	Units: uL	
VOA8260INT_00029	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00031	Amount Added:	2.00	Units: uL	Run Reagent

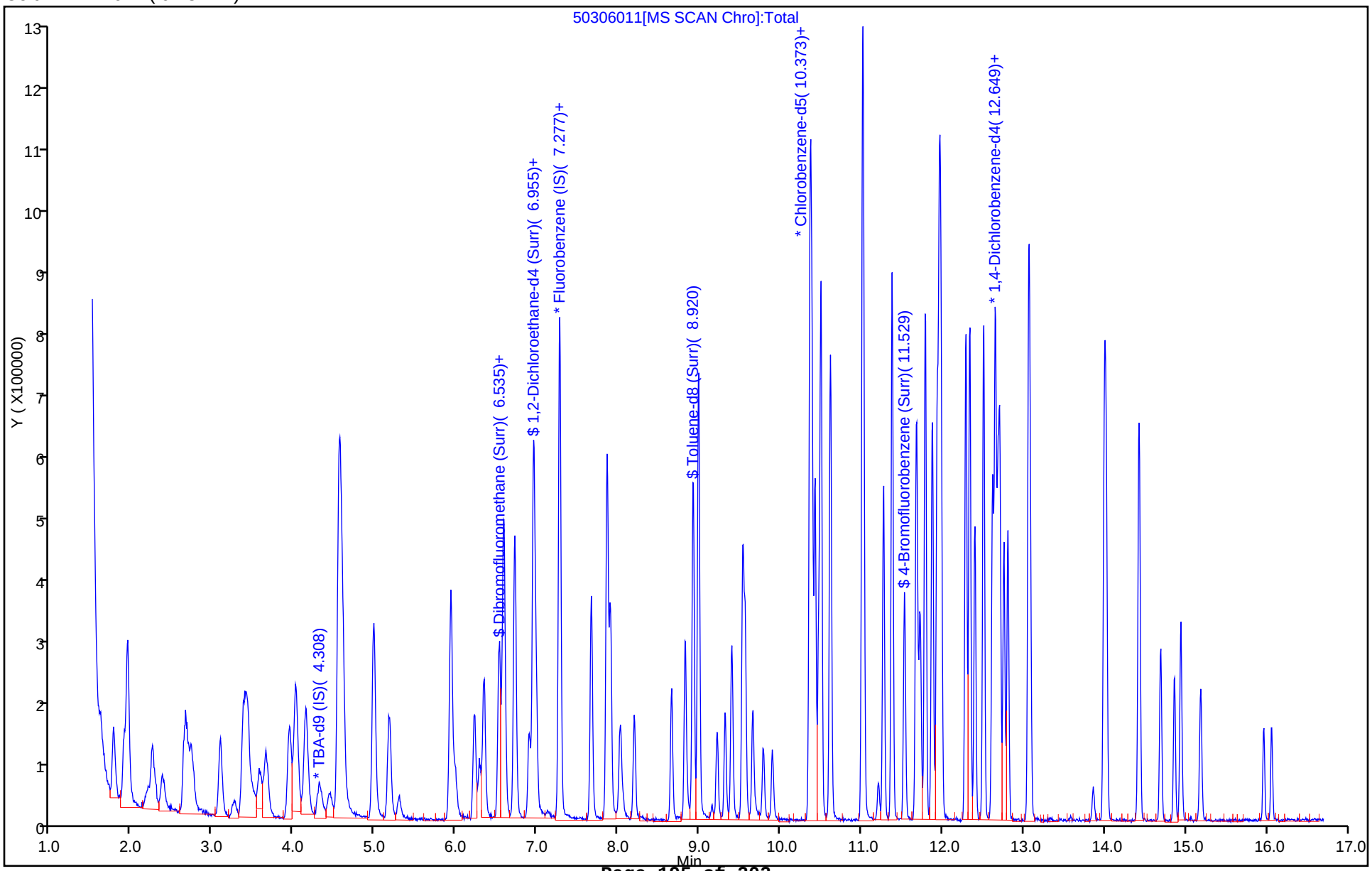
Report Date: 06-Mar-2015 17:08:05 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306011.D

Injection Date:	06-Mar-2015 15:30:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-41760-B-1 MSD			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

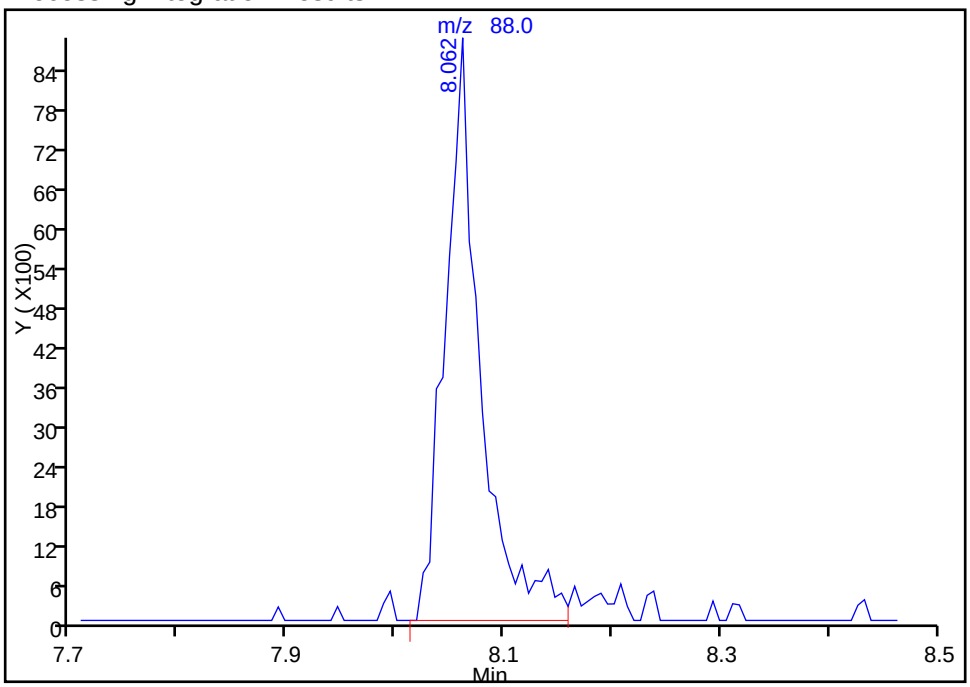
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150306-5922.b\50306011.D
Injection Date: 06-Mar-2015 15:30:30 Instrument ID: CHHP5
Lims ID: 180-41760-B-1 MSD
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

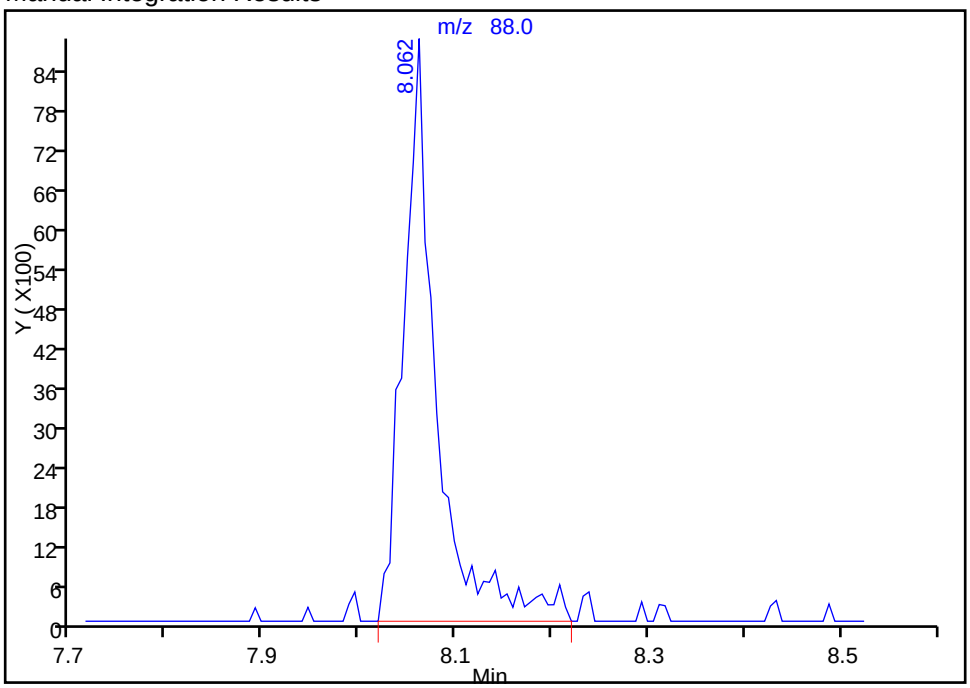
Processing Integration Results

RT: 8.06
Area: 19982
Amount: 785.1877
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 21104
Amount: 829.2764
Amount Units: ng



Reviewer: fergusond, 06-Mar-2015 17:08:05
Audit Action: Manually Integrated
Audit Reason: Peak Tail

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Instrument ID: CHHP5 Start Date: 03/03/2015 12:21

Analysis Batch Number: 134613 End Date: 03/03/2015 19:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-134613/6		03/03/2015 12:21	1	50303006.D	DB-624 0.18(mm)
IC 180-134613/8		03/03/2015 14:28	1	50303008.D	DB-624 0.18(mm)
ICIS 180-134613/9		03/03/2015 14:52	1	50303009.D	DB-624 0.18(mm)
IC 180-134613/10		03/03/2015 15:16	1	50303010.D	DB-624 0.18(mm)
IC 180-134613/11		03/03/2015 15:40	1	50303011.D	DB-624 0.18(mm)
IC 180-134613/12		03/03/2015 16:04	1	50303012.D	DB-624 0.18(mm)
IC 180-134613/13		03/03/2015 16:28	1	50303013.D	DB-624 0.18(mm)
IC 180-134613/14		03/03/2015 16:52	1	50303014.D	DB-624 0.18(mm)
IC 180-134613/18		03/03/2015 18:29	1	50303018.D	DB-624 0.18(mm)
ICV 180-134613/20		03/03/2015 19:17	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-41760-1

SDG No.:

Instrument ID: CHHP5 Start Date: 03/06/2015 10:53

Analysis Batch Number: 134916 End Date: 03/06/2015 16:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-134916/3		03/06/2015 10:53	1	50306003.D	DB-624 0.18(mm)
CCVIS 180-134916/4		03/06/2015 12:23	1	50306004.D	DB-624 0.18(mm)
MB 180-134916/6		03/06/2015 13:13	1	50306006.D	DB-624 0.18(mm)
180-41760-1	HD-MW-168-0/1-0	03/06/2015 13:54	1	50306007.D	DB-624 0.18(mm)
180-41760-3	HD-QC1-0/1-2	03/06/2015 14:18	1	50306008.D	DB-624 0.18(mm)
LCS 180-134916/9		03/06/2015 14:42	1	50306009.D	DB-624 0.18(mm)
180-41760-1 MS	HD-MW-168-0/1-0 MS	03/06/2015 15:06	1	50306010.D	DB-624 0.18(mm)
180-41760-1 MSD	HD-MW-168-0/1-0 MSD	03/06/2015 15:30	1	50306011.D	DB-624 0.18(mm)
180-41760-2	HD-MW-170-0/1-0	03/06/2015 16:18	1	50306013.D	DB-624 0.18(mm)
ZZZZZ		03/06/2015 16:42	1		DB-624 0.18(mm)

Shipping and Receiving Documents

TestAmerica Pittsburgh
301 Alpha Drive
Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2470

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jennifer S. Reese	Site Contact: Jennifer S. Reese	DateSubmitted: 3/4/2015	COC No: TAP2015030401
Groundwater Sciences Corporation	Tel/Fax: 717-901-8181 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 1 COCs
2601 Market Place St. Suite 310	Analysis Turnaround Time			Job No. 10012.26
Harrisburg, PA 17110	Calendar (C) or Work Days (W) _____			
(717) 901-8180 Phone	TAT if different from Below: Standard			Container No. 1
(717) 657-1611 FAX	☐ 2 weeks			SDG No.
Project Name: SPBA Initial Sampling Event	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	■ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)
HD-MW-168-0/1-0	3/4/15	9:23	Groundwater	Water	3	X
HD-MW-170-0/1-0	3/4/15	9:50	Groundwater	Water	3	X
HD-QC1-0/1-2	3/4/15	12:00	Trip Blank	Water	2	X
Number of Containers						3
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Na2S2O3						2 1 4
Field Filter						N N N

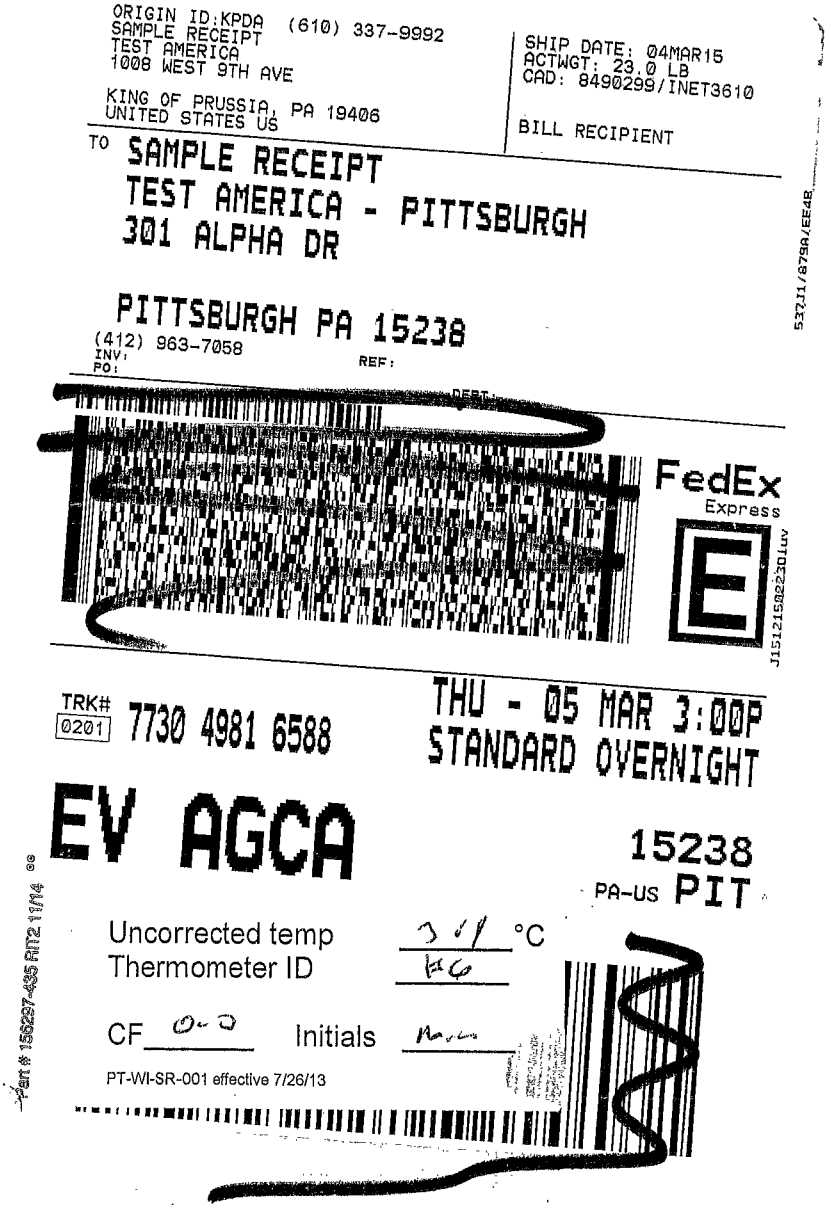

180-41760 Chain of Custody

Possible Hazard Identification
■ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **CLP Like Deliverables**

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 3/4/15	Received by:	Company:	Date/Time: 3/4/15 1300
Relinquished by:	Company: TAPGP	Date/Time: 3/4/15 1525	Received by:	Company: TAPGP	Date/Time: 3/5/15 1215
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:



ORIGIN ID:KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1008 WEST 9TH AVE

KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 04MAR15
ACTWGT: 23.0 LB
CAD: 8490299/INET3610

BILL RECIPIENT

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058
INV:
PO: REF:

DEPT:

FedEx Express

TRK# 0201 7730 4981 6588

THU - 05 MAR 3:00P
STANDARD OVERNIGHT

EV AGCA

15238
PA-US PIT

Uncorrected temp 3.1 °C
Thermometer ID EG

CF 0.0 Initials MM

PT-WI-SR-001 effective 7/26/13

Part # 156237-435 REV 2 11/14

537J1/879A/EE48

J151215082230Uuv

180-41760 Waybill

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-41760-1

Login Number: 41760

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	