TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-42445-2

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
4/2/2015 4:13 PM

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04/02/2015

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 180-42445-2

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 03/27/2015; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.3º C, 1.8º C and 2.2º C.

Samples HD-QC1-0/1-3 and HD-QC1- /1-4 have only 3 voa vials for each sample; however the COC lists tests for metals, nitrates and alkalinity which no containers were received. The client was notified and confirmed the samples should only be logged in for volatiles.

VOLATILES

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42445-2

Client Sample ID: HD-QC6-0/1-2

Lab Sample ID: 180-42445-13

No Detections.

Client Sample ID: HD-MW-167-0/1-0

Lab Sample ID: 180-42445-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.5		1.0	0.17	ug/L	1		8260C	Total/NA
Trichloroethene	2.4		1.0	0.14	ug/L	1		8260C	Total/NA
Bromodichloromethane	0.31	J	1.0	0.13	ug/L	1		8260C	Total/NA
Tetrachloroethene	7.6		1.0	0.15	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-QC6-0/1-2
Date Collected: 03/26/15 12:01
Date Received: 03/27/15 09:30

Lab Sample ID: 180-42445-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/01/15 14:32	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/01/15 14:32	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/01/15 14:32	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 14:32	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/01/15 14:32	1
Acetone	5.0	U	5.0	2.5	ug/L			04/01/15 14:32	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/01/15 14:32	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/01/15 14:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/01/15 14:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/01/15 14:32	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/01/15 14:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/01/15 14:32	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/01/15 14:32	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/01/15 14:32	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/01/15 14:32	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/01/15 14:32	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/01/15 14:32	1
Benzene	1.0	U	1.0	0.11	ug/L			04/01/15 14:32	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 14:32	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/01/15 14:32	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/01/15 14:32	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/01/15 14:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/01/15 14:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/01/15 14:32	1
Toluene	1.0	U	1.0	0.15	ug/L			04/01/15 14:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/01/15 14:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 14:32	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/01/15 14:32	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/01/15 14:32	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/01/15 14:32	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/01/15 14:32	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/01/15 14:32	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/01/15 14:32	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/01/15 14:32	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/01/15 14:32	1
Styrene	1.0	U	1.0	0.097	ug/L			04/01/15 14:32	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/01/15 14:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 14:32	1
Acrylonitrile	20	U	20	0.55	ug/L			04/01/15 14:32	1
1,4-Dioxane	200	U	200	34	ug/L			04/01/15 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*64 - 135*		*04/01/15 14:32*	*1*
Toluene-d8 (Surr)	*113*		*71 - 118*		*04/01/15 14:32*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 118*		*04/01/15 14:32*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 128*		*04/01/15 14:32*	*1*

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

Client Sample ID: HD-MW-167-0/1-0
Date Collected: 03/26/15 10:10
Date Received: 03/27/15 09:30

Lab Sample ID: 180-42445-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/01/15 16:37	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/01/15 16:37	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/01/15 16:37	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 16:37	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/01/15 16:37	1
Acetone	5.0	U	5.0	2.5	ug/L			04/01/15 16:37	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/01/15 16:37	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/01/15 16:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/01/15 16:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/01/15 16:37	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/01/15 16:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/01/15 16:37	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/01/15 16:37	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/01/15 16:37	1
Chloroform	**1.5**		1.0	0.17	ug/L			04/01/15 16:37	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/01/15 16:37	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/01/15 16:37	1
Benzene	1.0	U	1.0	0.11	ug/L			04/01/15 16:37	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 16:37	1
Trichloroethene	**2.4**		1.0	0.14	ug/L			04/01/15 16:37	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/01/15 16:37	1
Bromodichloromethane	**0.31**	**J**	1.0	0.13	ug/L			04/01/15 16:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/01/15 16:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/01/15 16:37	1
Toluene	1.0	U	1.0	0.15	ug/L			04/01/15 16:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/01/15 16:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 16:37	1
Tetrachloroethene	**7.6**		1.0	0.15	ug/L			04/01/15 16:37	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/01/15 16:37	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/01/15 16:37	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/01/15 16:37	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/01/15 16:37	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/01/15 16:37	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/01/15 16:37	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/01/15 16:37	1
Styrene	1.0	U	1.0	0.097	ug/L			04/01/15 16:37	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/01/15 16:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 16:37	1
Acrylonitrile	20	U	20	0.55	ug/L			04/01/15 16:37	1
1,4-Dioxane	200	U	200	34	ug/L			04/01/15 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 135*		*04/01/15 16:37*	*1*
Toluene-d8 (Surr)	*106*		*71 - 118*		*04/01/15 16:37*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 118*		*04/01/15 16:37*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 128*		*04/01/15 16:37*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42445-2

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: 180-42445-2

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)
180-42445-13	HD-QC6-0/1-2	121	113	99	112
180-42445-14	HD-MW-167-0/1-0	102	106	90	101
LCS 180-137223/8	Lab Control Sample	96	94	84	94
MB 180-137223/5	Method Blank	117	112	97	105

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: 180-42445-2

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

Lab Sample ID: MB 180-137223/5
Matrix: Water
Analysis Batch: 137223

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			04/01/15 13:17	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/01/15 13:17	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/01/15 13:17	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 13:17	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/01/15 13:17	1
Acetone	5.0	U	5.0	2.5	ug/L			04/01/15 13:17	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/01/15 13:17	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/01/15 13:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/01/15 13:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/01/15 13:17	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/01/15 13:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/01/15 13:17	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/01/15 13:17	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/01/15 13:17	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/01/15 13:17	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/01/15 13:17	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/01/15 13:17	1
Benzene	1.0	U	1.0	0.11	ug/L			04/01/15 13:17	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/01/15 13:17	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/01/15 13:17	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/01/15 13:17	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/01/15 13:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/01/15 13:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/01/15 13:17	1
Toluene	1.0	U	1.0	0.15	ug/L			04/01/15 13:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/01/15 13:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 13:17	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/01/15 13:17	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/01/15 13:17	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/01/15 13:17	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/01/15 13:17	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/01/15 13:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/01/15 13:17	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/01/15 13:17	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/01/15 13:17	1
Styrene	1.0	U	1.0	0.097	ug/L			04/01/15 13:17	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/01/15 13:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/01/15 13:17	1
Acrylonitrile	20	U	20	0.55	ug/L			04/01/15 13:17	1
1,4-Dioxane	200	U	200	34	ug/L			04/01/15 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 135*		*04/01/15 13:17*	*1*
Toluene-d8 (Surr)	*112*		*71 - 118*		*04/01/15 13:17*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*04/01/15 13:17*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 128*		*04/01/15 13:17*	*1*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42445-2

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

Lab Sample ID: LCS 180-137223/8
Matrix: Water
Analysis Batch: 137223

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	8.16		ug/L		82	50 - 139
Vinyl chloride	10.0	9.52		ug/L		95	53 - 138
Bromomethane	10.0	11.4		ug/L		114	33 - 150
Chloroethane	10.0	9.30		ug/L		93	36 - 142
1,1-Dichloroethene	10.0	8.00		ug/L		80	65 - 136
Acetone	20.0	18.4		ug/L		92	22 - 150
Carbon disulfide	10.0	6.65		ug/L		67	54 - 132
Methylene Chloride	10.0	7.73		ug/L		77	63 - 129
trans-1,2-Dichloroethene	10.0	7.82		ug/L		78	73 - 126
Methyl tert-butyl ether	10.0	8.58		ug/L		86	64 - 123
1,1-Dichloroethane	10.0	8.21		ug/L		82	73 - 126
cis-1,2-Dichloroethene	10.0	8.34		ug/L		83	70 - 120
Bromochloromethane	10.0	8.58		ug/L		86	70 - 127
2-Butanone (MEK)	20.0	20.9		ug/L		104	39 - 138
Chloroform	10.0	8.36		ug/L		84	72 - 127
1,1,1-Trichloroethane	10.0	7.47		ug/L		75	63 - 133
Carbon tetrachloride	10.0	7.48		ug/L		75	55 - 150
Benzene	10.0	9.52		ug/L		95	80 - 120
1,2-Dichloroethane	10.0	9.99		ug/L		100	68 - 132
Trichloroethene	10.0	8.66		ug/L		87	73 - 120
1,2-Dichloropropane	10.0	8.85		ug/L		88	76 - 124
Bromodichloromethane	10.0	8.58		ug/L		86	66 - 130
cis-1,3-Dichloropropene	10.0	8.18		ug/L		82	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	17.6		ug/L		88	45 - 145
Toluene	10.0	10.2		ug/L		102	80 - 123
trans-1,3-Dichloropropene	10.0	9.11		ug/L		91	65 - 125
1,1,2-Trichloroethane	10.0	11.5		ug/L		115	77 - 127
Tetrachloroethene	10.0	9.21		ug/L		92	70 - 135
2-Hexanone	20.0	18.7		ug/L		93	25 - 132
Dibromochloromethane	10.0	9.55		ug/L		96	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.8		ug/L		108	74 - 123
Chlorobenzene	10.0	9.75		ug/L		97	80 - 120
1,1,1,2-Tetrachloroethane	10.0	8.69		ug/L		87	63 - 140
Ethylbenzene	10.0	9.79		ug/L		98	72 - 126
Xylenes, Total	20.0	18.8		ug/L		94	76 - 128
Styrene	10.0	10.2		ug/L		102	71 - 127
Bromoform	10.0	10.3		ug/L		103	46 - 150
1,1,2,2-Tetrachloroethane	10.0	12.3		ug/L		123	62 - 125
1,4-Dioxane	200	294		ug/L		147	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 135*
Toluene-d8 (Surr)	*94*		*71 - 118*
4-Bromofluorobenzene (Surr)	*84*		*70 - 118*
Dibromofluoromethane (Surr)	*94*		*70 - 128*

GC/MS VOA

Analysis Batch: 137223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42445-13	HD-QC6-0/1-2	Total/NA	Water	8260C	
180-42445-14	HD-MW-167-0/1-0	Total/NA	Water	8260C	
LCS 180-137223/8	Lab Control Sample	Total/NA	Water	8260C	
MB 180-137223/5	Method Blank	Total/NA	Water	8260C	

Client Sample ID: HD-QC6-0/1-2

Lab Sample ID: 180-42445-13

Date Collected: 03/26/15 12:01

Matrix: Water

Date Received: 03/27/15 09:30

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	137223	04/01/15 14:32	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-MW-167-0/1-0

Lab Sample ID: 180-42445-14

Date Collected: 03/26/15 10:10

Matrix: Water

Date Received: 03/27/15 09:30

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	137223	04/01/15 16:37	DLF	TAL PIT
	Instrument ID: CHHP6									

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: 180-42445-2

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 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42445-2

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: 180-42445-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-42445-13	HD-QC6-0/1-2	Water	03/26/15 12:01	03/27/15 09:30
180-42445-14	HD-MW-167-0/1-0	Water	03/26/15 10:10	03/27/15 09:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 131929

Lab Sample ID: IC 180-131929/6 Client Sample ID:

Date Analyzed: 01/28/15 13:58 Lab File ID: 60128006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.25	Poor chromatography	fergusond	01/29/15 10:25
Chloroethane	2.39	Poor chromatography	fergusond	01/29/15 10:25
Acrylonitrile	4.55	Poor chromatography	fergusond	01/29/15 10:25
Methyl tert-butyl ether	4.61	Split Peak	fergusond	01/29/15 10:25
1,1-Dichloroethane	5.25	Split Peak	fergusond	01/29/15 10:25
1,1,1,2-Tetrachloroethane	10.56	Poor chromatography	fergusond	01/29/15 10:25

Lab Sample ID: IC 180-131929/7 Client Sample ID:

Date Analyzed: 01/28/15 14:21 Lab File ID: 60128007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	2.68	Baseline	fergusond	01/29/15 10:28
1,4-Dioxane	8.08	Peak Tail	fergusond	01/29/15 10:31
2-Hexanone	9.70	Baseline	fergusond	01/29/15 10:31

Lab Sample ID: ICIS 180-131929/8 Client Sample ID:

Date Analyzed: 01/28/15 14:45 Lab File ID: 60128008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol	6.94	Peak Tail	fergusond	01/29/15 11:08

Lab Sample ID: IC 180-131929/9 Client Sample ID:

Date Analyzed: 01/28/15 15:09 Lab File ID: 60128009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.24	Peak Tail	fergusond	01/29/15 10:51
1,4-Dioxane	8.07	Poor chromatography	fergusond	01/29/15 10:54

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 131929

Lab Sample ID: IC 180-131929/10 Client Sample ID:

Date Analyzed: 01/28/15 15:33 Lab File ID: 60128010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.08	Peak Tail	fergusond	01/29/15 10:53

Lab Sample ID: IC 180-131929/11 Client Sample ID:

Date Analyzed: 01/28/15 15:57 Lab File ID: 60128011.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.08	Poor chromatography	fergusond	01/29/15 10:59

Lab Sample ID: IC 180-131929/12 Client Sample ID:

Date Analyzed: 01/28/15 16:21 Lab File ID: 60128012.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	01/29/15 11:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 137223

Lab Sample ID: CCVIS 180-137223/2 Client Sample ID:

Date Analyzed: 04/01/15 11:45 Lab File ID: 60401002.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	04/01/15 12:30

Lab Sample ID: MB 180-137223/5 Client Sample ID:

Date Analyzed: 04/01/15 13:17 Lab File ID: 60401005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.46	Split Peak	fergusond	04/01/15 14:57
Toluene	9.05	Split Peak	fergusond	04/01/15 14:57

Lab Sample ID: 180-42445-13 Client Sample ID: HD-QC6-0/1-2

Date Analyzed: 04/01/15 14:32 Lab File ID: 60401007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene	9.05	Split Peak	fergusond	04/01/15 15:00

Lab Sample ID: LCS 180-137223/8 Client Sample ID:

Date Analyzed: 04/01/15 14:58 Lab File ID: 60401008.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	04/01/15 15:20

Lab Sample ID: 180-42445-14 Client Sample ID: HD-MW-167-0/1-0

Date Analyzed: 04/01/15 16:37 Lab File ID: 60401012.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene	9.05	Split Peak	fergusond	04/02/15 09:33

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00027	01/30/15	12/30/14	Methanol, Lot 85233	10 mL	VOA8260INTRES_00051	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_00051	02/01/18		Restek, Lot A093504		(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_00029	01/30/15	12/30/14	Methanol, Lot 85233	100 mL	VOA8260SURRES_00075	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_00075	01/31/19		Restek, Lot A0101000		(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
VOA8260SURR_00032	04/10/15	03/10/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00063	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_00063	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_00109	04/06/15	03/30/15	Methanol, Lot 85233	10 mL	VOA8260GAS2ND_00090	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00107	1.25 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
.VOA8260GAS2ND_00090	11/30/15		Restek, Lot A0108226		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00107	04/19/15	03/19/15	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00011	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

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
							Xylenes, Total	400 ug/mL
..VOA8260MEGA2_00011	02/01/16		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
							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_00097	01/28/15	01/21/15	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00081	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_00094	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00081	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_00094	01/31/15	12/31/14	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00030	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_00025	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00030	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_00025	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00108	04/06/15	03/30/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00092	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00106	1.25 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00092	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_00106	04/19/15	03/19/15	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00014	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260MEGA1_00014	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOAKETONEPRI_00003	02/20/15	01/20/15	Methanol, Lot 85233	50 mL	VOA8260KET1ST_00034	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_00034	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
voaWAcropri R_00006	02/02/15	01/02/15	Methanol, Lot 85233	50 mL	VOAACRORES_00062	0.0625 mL	Acrolein	25 ug/mL
.VOAACRORES_00062	02/28/15		Restek, Lot A0106504		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWeemixpri_00001	01/29/15	12/29/14	Methanol, Lot 85233	25 mL	VOARESEE1ST_00017	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
							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_00017	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_00002	04/16/15	03/16/15	Methanol, Lot 85233	50 mL	VOA8260KET2ND_00042	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_00042	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_00004	04/30/15	03/30/15	Methanol, Lot 85233	50 mL	VOA8260KET1ST_00039	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
.VOA8260KET1ST_00039	01/31/18		Restek, Lot A0108151		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWVApri Res_00001	02/06/15	01/06/15	Methanol, Lot 85233	20 mL	VOA8260VARES_00049	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00049	04/30/15	Restek, Lot A0106957			(Purchased Reagent)		Vinyl acetate	4000 ug/mL

Reagent

VOA8260GAS1ST_00081

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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. : 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_00092

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

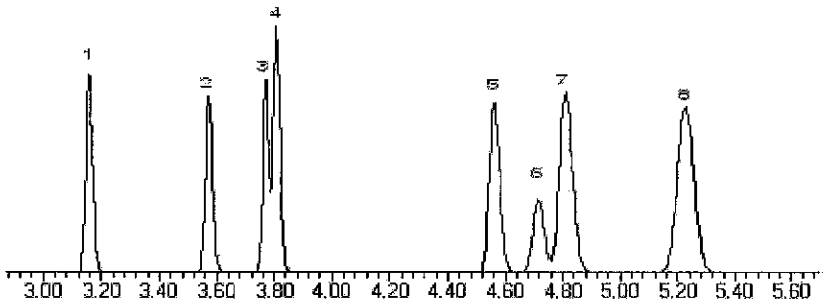
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00090

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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. : 569722.sec **Lot No.:** A0108226

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)	2,494.8 µg/mL	+/- 23.5521	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 19630)		+/- 33.7009	µg/mL	Unstressed
	Purity 99%		+/- 37.3133	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,505.6 µg/mL	+/- 26.4745	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 35.8743	µg/mL	Unstressed
	Purity 99%		+/- 39.3156	µg/mL	Stressed
3	Vinyl chloride	2,499.8 µg/mL	+/- 25.3054	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 34.9816	µg/mL	Unstressed
	Purity 99%		+/- 38.4872	µg/mL	Stressed
4	1,3-Butadiene	2,505.4 µg/mL	+/- 23.1450	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 18349)		+/- 33.4914	µg/mL	Unstressed
	Purity 99%		+/- 37.1536	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,495.4 µg/mL	+/- 25.3762	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 35.0038	µg/mL	Unstressed
	Purity 99%		+/- 38.4957	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,499.5 µg/mL	+/- 21.8687	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot Q18B-13)		+/- 32.5806	µg/mL	Unstressed
	Purity 99%		+/- 36.3180	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,511.0 µg/mL	+/- 21.9690	µg/mL	Gravimetric
	CAS # 75-43-4.SEC (Lot SHBC0858V)		+/- 32.7299	µg/mL	Unstressed
	Purity 99%		+/- 36.4846	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,504.4	µg/mL	+/-	25.2390	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q158-102)			+/-	34.9647	µg/mL	Unstressed
	Purity 99%				+/-	38.4843	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)

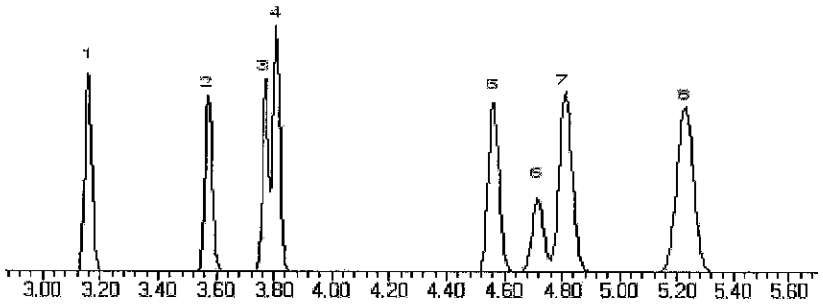
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Michael J Maye

Date Mixed: 12-Jan-2015 **Balance:** 1127510105

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

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Registered Quality System
Certificate #FM 80397

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VOA8260INTRES_00051

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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.:** A093504

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 : February 2018 **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	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed

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

Reagent

VOA8260KET1ST_00030

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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_00034

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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_00039

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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. : 569721 **Lot No.:** A0108151

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 **CAS #** 67-64-1 (Lot 07196AK) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot BCBH7802V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF5332V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBK8325V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET2ND_00042

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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. : 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

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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. : 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)

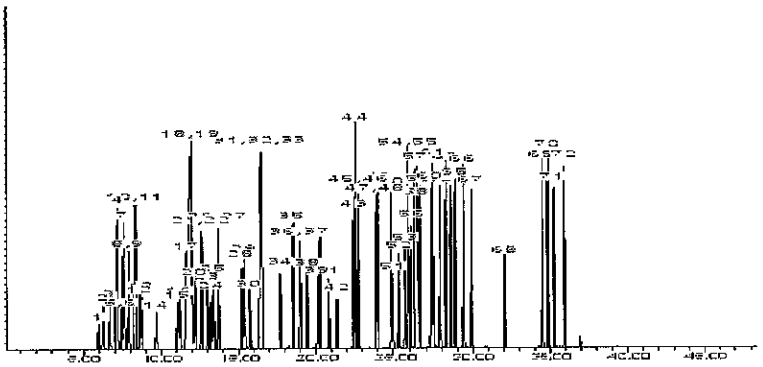
Carrier Gas:
helium-constant pressure 30 psi

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

VOA8260MEGA1_00025

RESTEK

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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)

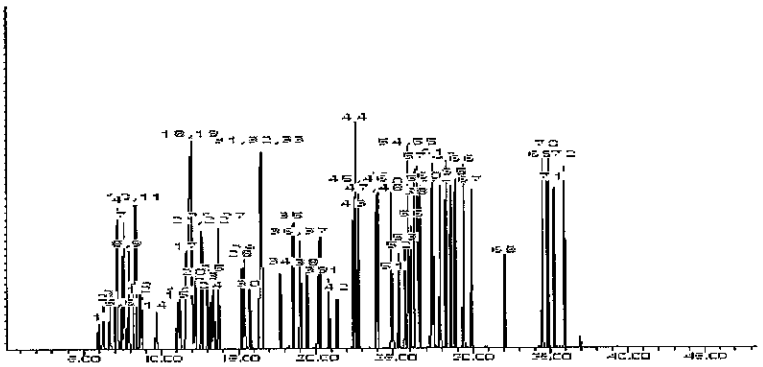
Carrier Gas:
helium-constant pressure 30 psi

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_00011

RESTEK

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Bellefonte, PA 16823-8812
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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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)

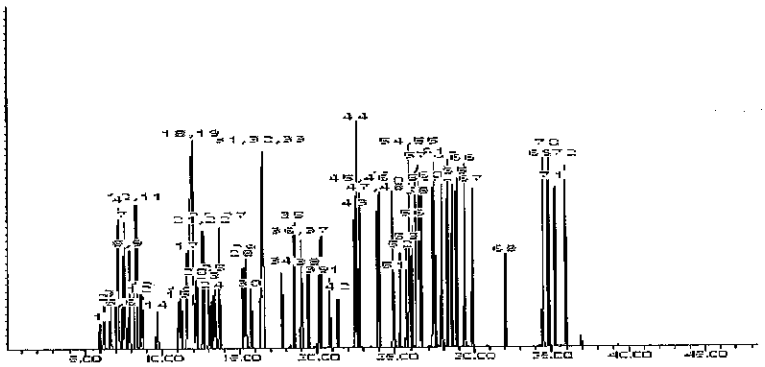
Carrier Gas:
helium-constant pressure 30 psi

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_00063

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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

VOA8260SURRES_00075

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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.:** A0101000

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		2,509.6 µg/mL	+/- 14.5910	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 022012)		+/- 28.2993	µg/mL	Unstressed
	Purity 99%			+/- 32.5644	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,508.2 µg/mL	+/- 14.5829	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot 12K-027)		+/- 28.2836	µg/mL	Unstressed
	Purity 99%			+/- 32.5462	µg/mL	Stressed
3	Toluene-d8		2,508.8 µg/mL	+/- 14.5864	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot 13I-050)		+/- 28.2903	µg/mL	Unstressed
	Purity 99%			+/- 32.5540	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,509.8 µg/mL	+/- 14.5922	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 01127COV)		+/- 28.3016	µg/mL	Unstressed
	Purity 99%			+/- 32.5670	µg/mL	Stressed

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

Reagent

VOA8260VARES_00049

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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. : 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	4,027.0 µg/mL	+/- 23.6327	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBC8935V)		+/- 214.3321	µg/mL	Unstressed
	Purity 99%		+/- 214.5684	µg/mL	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_00062

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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.:** A0106504

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 : February 28, 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		19,767.0 µg/mL	+/- 115.7401	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 140903JLM)		+/- 633.7922	µg/mL	Unstressed
	Purity 99%			+/- 736.7140	µg/mL	Stressed

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

Reagent

VOARESEE1ST_00017

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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 **CAS #** 98-15-7 **Purity** 99%	(Lot 21324DO)	5,001.0 µg/mL	+/- 29.3487 µg/mL +/- 53.0822 µg/mL +/- 61.7282 µg/mL	Gravimetric Unstressed Stressed
2	4-Chlorobenzotrifluoride **CAS #** 98-56-6 **Purity** 99%	(Lot 08507BO)	5,003.0 µg/mL	+/- 29.3604 µg/mL +/- 53.1034 µg/mL +/- 61.7529 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorobenzotrifluoride **CAS #** 88-16-4 **Purity** 99%	(Lot I0316DQ)	5,005.0 µg/mL	+/- 29.3721 µg/mL +/- 53.1247 µg/mL +/- 61.7775 µg/mL	Gravimetric Unstressed Stressed
4	3-Chlorotoluene **CAS #** 108-41-8 **Purity** 99%	(Lot 13528LX)	5,000.0 µg/mL	+/- 29.3428 µg/mL +/- 53.0716 µg/mL +/- 61.7158 µg/mL	Gravimetric Unstressed Stressed
5	2,4-Dichlorobenzotrifluoride **CAS #** 320-60-5 **Purity** 99%	(Lot MKBL3552V)	5,002.0 µg/mL	+/- 29.3545 µg/mL +/- 53.0928 µg/mL +/- 61.7405 µg/mL	Gravimetric Unstressed Stressed
6	3,4-Dichlorobenzotrifluoride **CAS #** 328-84-7 **Purity** 99%	(Lot 11105EJV)	5,000.0 µg/mL	+/- 29.3428 µg/mL +/- 53.0716 µg/mL +/- 61.7158 µg/mL	Gravimetric Unstressed Stressed
7	2,5-Dichlorobenzotrifluoride **CAS #** 320-50-3 **Purity** 99%	(Lot 04415DSV)	5,000.0 µg/mL	+/- 29.3428 µg/mL +/- 53.0716 µg/mL +/- 61.7158 µg/mL	Gravimetric Unstressed Stressed
8	2,4-Dichlorotoluene **CAS #** 95-73-8 **Purity** 99%	(Lot 07715JS)	5,002.0 µg/mL	+/- 29.3545 µg/mL +/- 53.0928 µg/mL +/- 61.7405 µg/mL	Gravimetric Unstressed 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.: 180-42445-2

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-QC6-0/1-2	180-42445-13	112	121	113	99
HD-MW-167-0/1-0	180-42445-14	101	102	106	90
	MB 180-137223/5	105	117	112	97
	LCS 180-137223/8	94	96	94	84

	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.: 180-42445-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 60401008.D

Lab ID: LCS 180-137223/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.16	82	50-139	
Vinyl chloride	10.0	9.52	95	53-138	
Bromomethane	10.0	11.4	114	33-150	
Chloroethane	10.0	9.30	93	36-142	
1,1-Dichloroethene	10.0	8.00	80	65-136	
Acetone	20.0	18.4	92	22-150	
Carbon disulfide	10.0	6.65	67	54-132	
Methylene Chloride	10.0	7.73	77	63-129	
trans-1,2-Dichloroethene	10.0	7.82	78	73-126	
Methyl tert-butyl ether	10.0	8.58	86	64-123	
1,1-Dichloroethane	10.0	8.21	82	73-126	
cis-1,2-Dichloroethene	10.0	8.34	83	70-120	
Bromochloromethane	10.0	8.58	86	70-127	
2-Butanone (MEK)	20.0	20.9	104	39-138	
Chloroform	10.0	8.36	84	72-127	
1,1,1-Trichloroethane	10.0	7.47	75	63-133	
Carbon tetrachloride	10.0	7.48	75	55-150	
Benzene	10.0	9.52	95	80-120	
1,2-Dichloroethane	10.0	9.99	100	68-132	
Trichloroethene	10.0	8.66	87	73-120	
1,2-Dichloropropane	10.0	8.85	88	76-124	
Bromodichloromethane	10.0	8.58	86	66-130	
cis-1,3-Dichloropropene	10.0	8.18	82	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	17.6	88	45-145	
Toluene	10.0	10.2	102	80-123	
trans-1,3-Dichloropropene	10.0	9.11	91	65-125	
1,1,2-Trichloroethane	10.0	11.5	115	77-127	
Tetrachloroethene	10.0	9.21	92	70-135	
2-Hexanone	20.0	18.7	93	25-132	
Dibromochloromethane	10.0	9.55	96	60-140	
1,2-Dibromoethane (EDB)	10.0	10.8	108	74-123	
Chlorobenzene	10.0	9.75	97	80-120	
1,1,1,2-Tetrachloroethane	10.0	8.69	87	63-140	
Ethylbenzene	10.0	9.79	98	72-126	
Xylenes, Total	20.0	18.8	94	76-128	
Styrene	10.0	10.2	102	71-127	
Bromoform	10.0	10.3	103	46-150	
1,1,2,2-Tetrachloroethane	10.0	12.3	123	62-125	
1,4-Dioxane	200	294	147	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.: 180-42445-2

SDG No.:

Lab File ID: 60401005.D Lab Sample ID: MB 180-137223/5

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

Instrument ID: CHHP6 Date Analyzed: 04/01/2015 13:17

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-QC6-0/1-2	180-42445-13	60401007.D	04/01/2015 14:32
	LCS 180-137223/8	60401008.D	04/01/2015 14:58
HD-MW-167-0/1-0	180-42445-14	60401012.D	04/01/2015 16:37

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Lab File ID: 60128004.D BFB Injection Date: 01/28/2015

Instrument ID: CHHP6 BFB Injection Time: 11:55

Analysis Batch No.: 131929

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.1	
75	30.0 - 60.0 % of mass 95	48.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.5	(0.7)1
174	50.0 - 120.00 % of mass 95	64.3	
175	5.0 - 9.0 % of mass 174	4.8	(7.4)1
176	95.0 - 101.0 % of mass 174	64.5	(100.3)1
177	5.0 - 9.0 % of mass 176	4.6	(7.1)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 180-131929/6	60128006.D	01/28/2015	13:58
	IC 180-131929/7	60128007.D	01/28/2015	14:21
	ICIS 180-131929/8	60128008.D	01/28/2015	14:45
	IC 180-131929/9	60128009.D	01/28/2015	15:09
	IC 180-131929/10	60128010.D	01/28/2015	15:33
	IC 180-131929/11	60128011.D	01/28/2015	15:57
	IC 180-131929/12	60128012.D	01/28/2015	16:21
	IC 180-131929/13	60128013.D	01/28/2015	16:44

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Lab File ID: 60401004.D BFB Injection Date: 04/01/2015

Instrument ID: CHHP6 BFB Injection Time: 11:02

Analysis Batch No.: 137223

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.5	
75	30.0 - 60.0 % of mass 95	53.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.1	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	68.8	
175	5.0 - 9.0 % of mass 174	3.9	(5.6)1
176	95.0 - 101.0 % of mass 174	68.2	(99.1)1
177	5.0 - 9.0 % of mass 176	5.5	(8.0)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 180-137223/2	60401002.D	04/01/2015	11:45
	MB 180-137223/5	60401005.D	04/01/2015	13:17
HD-QC6-0/1-2	180-42445-13	60401007.D	04/01/2015	14:32
	LCS 180-137223/8	60401008.D	04/01/2015	14:58
HD-MW-167-0/1-0	180-42445-14	60401012.D	04/01/2015	16:37

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Sample No.: CCVIS 180-137223/2 Date Analyzed: 04/01/2015 11:45

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 60401002.D Heated Purge: (Y/N) N

Calibration ID: 21588

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		178333	4.28	427770	7.33	88386	10.44
UPPER LIMIT		356666	4.78	855540	7.83	176772	10.94
LOWER LIMIT		89167	3.78	213885	6.83	44193	9.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137223/5		230971	4.27	480605	7.33	96601	10.44
180-42445-13	HD-QC6-0/1-2	200608	4.27	444315	7.33	88409	10.44
LCS 180-137223/8		235579	4.28	535628	7.33	114547	10.43
180-42445-14	HD-MW-167-0/1-0	272518	4.27	619138	7.33	126008	10.44

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.: 180-42445-2

SDG No.:

Sample No.: CCVIS 180-137223/2 Date Analyzed: 04/01/2015 11:45

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 60401002.D Heated Purge: (Y/N) N

Calibration ID: 21588

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		153253	12.79				
UPPER LIMIT		306506	13.29				
LOWER LIMIT		76627	12.29				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137223/5		153546	12.79				
180-42445-13	HD-QC6-0/1-2	151727	12.79				
LCS 180-137223/8		186919	12.79				
180-42445-14	HD-MW-167-0/1-0	194886	12.79				

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.: 180-42445-2

SDG No.:

Client Sample ID: HD-QC6-0/1-2 Lab Sample ID: 180-42445-13

Matrix: Water Lab File ID: 60401007.D

Analysis Method: 8260C Date Collected: 03/26/2015 12:01

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 14:32

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.: 137223 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.: 180-42445-2

SDG No.:

Client Sample ID: HD-QC6-0/1-2 Lab Sample ID: 180-42445-13

Matrix: Water Lab File ID: 60401007.D

Analysis Method: 8260C Date Collected: 03/26/2015 12:01

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 14:32

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.: 137223 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)	121		64-135
2037-26-5	Toluene-d8 (Surr)	113		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	112		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401007.D
Lims ID: 180-42445-A-13 Lab Sample ID: 180-42445-13
Client ID: HD-QC6-0/1-2
Sample Type: Client
Inject. Date: 01-Apr-2015 14:32:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42445-A-13
Misc. Info.: 180-0006281-007
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 15:00:15 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 15:00:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.267	4.280	-0.013	92	200608	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	97	444315	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.440	-0.001	89	88409	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.787	0.000	97	151727	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.597	-0.001	93	112635	56.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.979	6.974	0.005	71	174056	60.5	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	93	392192	56.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.631	11.626	0.005	85	146888	49.5	
12 Chloromethane	50		1.762				ND	
13 Vinyl chloride	62		1.896				ND	
15 Bromomethane	94		2.248				ND	
16 Chloroethane	64		2.388				ND	
22 1,1-Dichloroethene	96		3.379				ND	
24 Acetone	43		3.459				ND	
26 Carbon disulfide	76		3.677				ND	
31 Methylene Chloride	84		4.170				ND	
33 Acrylonitrile	53		4.535				ND	
35 Methyl tert-butyl ether	73		4.608				ND	
34 trans-1,2-Dichloroethene	96		4.614				ND	
37 1,1-Dichloroethane	63		5.240				ND	
44 2-Butanone (MEK)	43		5.982				ND	
43 cis-1,2-Dichloroethene	96		5.982				ND	
48 Chlorobromomethane	128		6.274				ND	
50 Chloroform	83		6.414				ND	
51 1,1,1-Trichloroethane	97		6.578				ND	
53 Carbon tetrachloride	117		6.761				ND	
56 Benzene	78		6.980				ND	
57 1,2-Dichloroethane	62		7.059				ND	
61 Trichloroethene	130		7.722				ND	
64 1,2-Dichloropropane	63		7.995				ND	
65 1,4-Dioxane	88		8.068				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.269				ND	
71 cis-1,3-Dichloropropene	75		8.713				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.053	9.047	0.006	10	4179	0.4624	M
74 trans-1,3-Dichloropropene	75		9.291				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164		9.564				ND	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129		9.868				ND	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.470				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.701				ND	
89 o-Xylene	106		11.078				ND	
90 Styrene	104		11.103				ND	
91 Bromoform	173		11.285				ND	
96 1,1,2,2-Tetrachloroethane	83		11.753				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

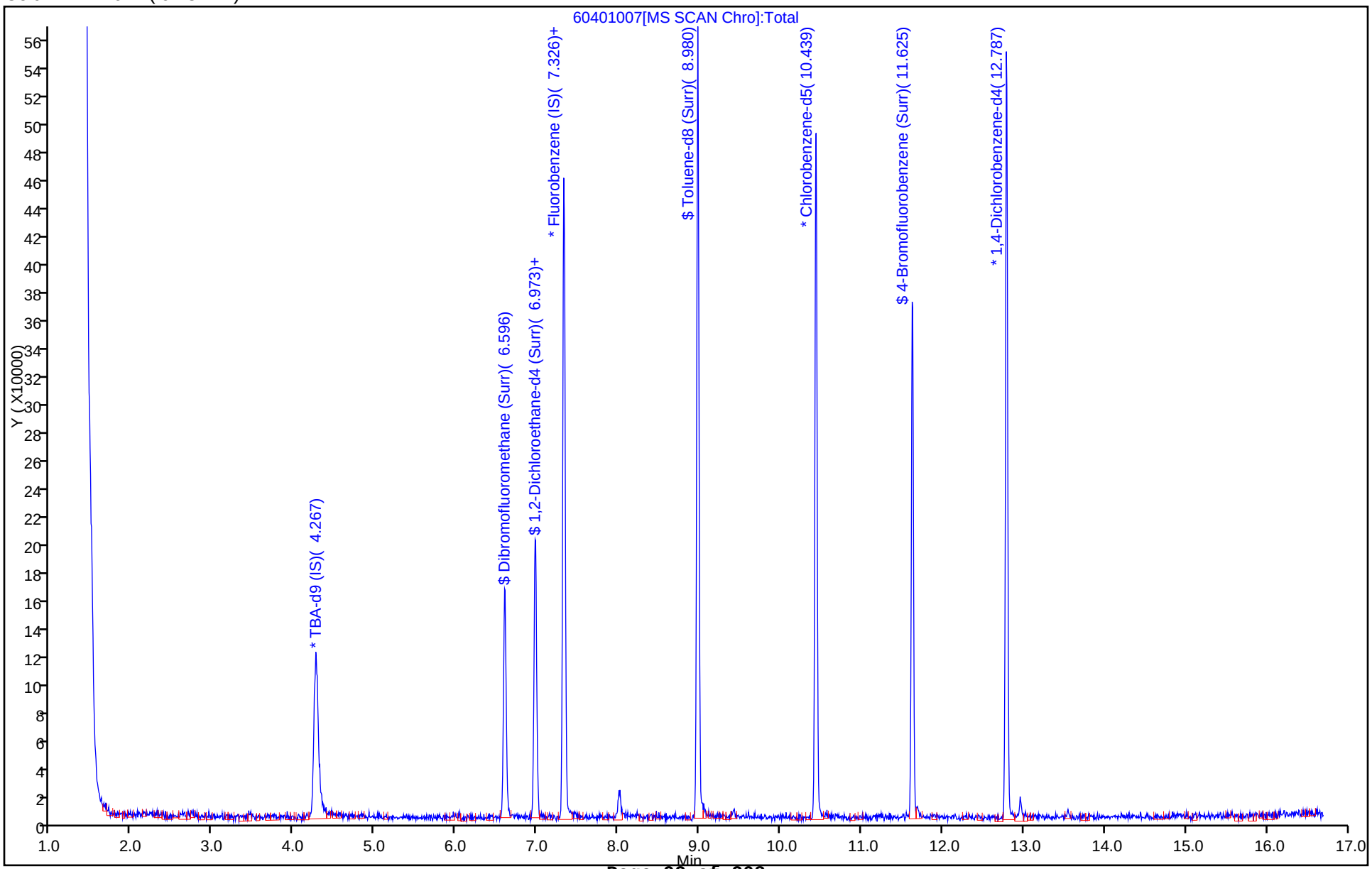
Report Date: 01-Apr-2015 15:00:16 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401007.D

Injection Date:	01-Apr-2015 14:32:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42445-A-13	Lab Sample ID:	180-42445-13	Worklist Smp#:	7
Client ID:	HD-QC6-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

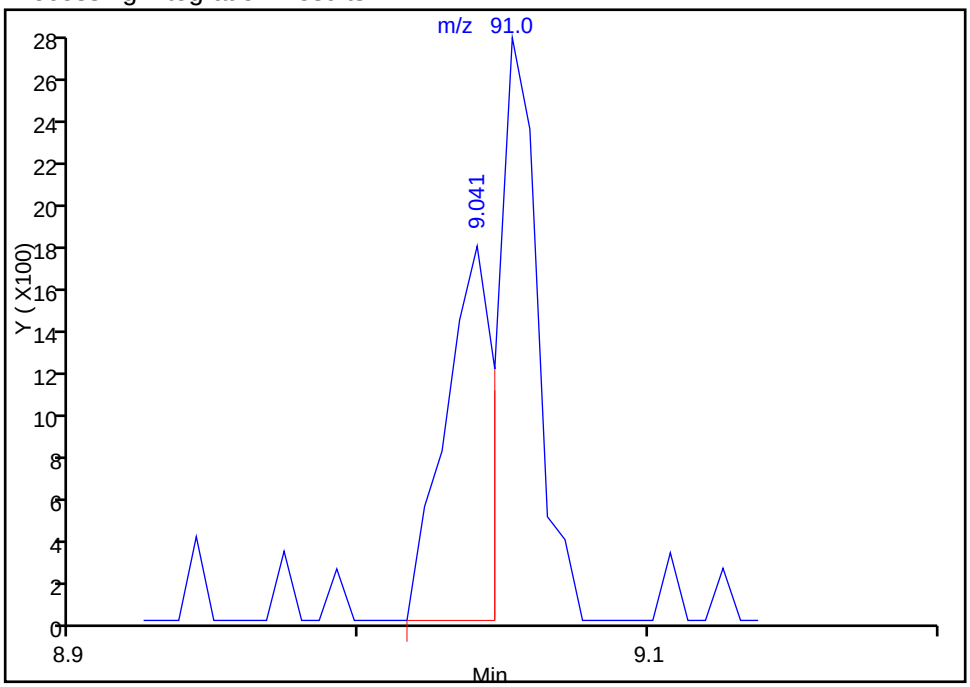
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401007.D				
Injection Date:	01-Apr-2015 14:32:30	Instrument ID:	CHHP6		
Lims ID:	180-42445-A-13	Lab Sample ID:	180-42445-13		
Client ID:	HD-QC6-0/1-2				
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

73 Toluene, CAS: 108-88-3

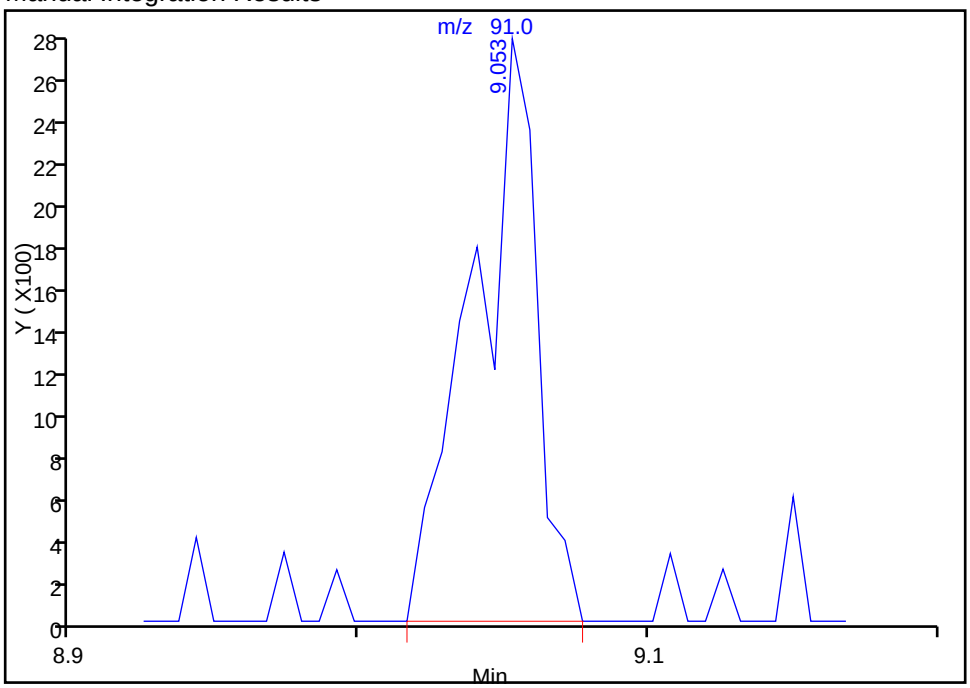
Processing Integration Results

RT: 9.04
Area: 2049
Amount: 0.226698
Amount Units: ng



Manual Integration Results

RT: 9.05
Area: 4179
Amount: 0.462357
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 15:00:15
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Client Sample ID: HD-MW-167-0/1-0 Lab Sample ID: 180-42445-14

Matrix: Water Lab File ID: 60401012.D

Analysis Method: 8260C Date Collected: 03/26/2015 10:10

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 16:37

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.: 137223 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	1.5		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	2.4		1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	0.31	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	7.6		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.: 180-42445-2

SDG No.:

Client Sample ID: HD-MW-167-0/1-0 Lab Sample ID: 180-42445-14

Matrix: Water Lab File ID: 60401012.D

Analysis Method: 8260C Date Collected: 03/26/2015 10:10

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 16:37

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.: 137223 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)	102		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	90		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401012.D
Lims ID: 180-42445-B-14 Lab Sample ID: 180-42445-14
Client ID: HD-MW-167-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2015 16:37:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-42445-B-14
Misc. Info.: 180-0006281-012
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Apr-2015 09:33:09 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: fergusond Date: 02-Apr-2015 09:33:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.268	4.280	-0.012	92	272518	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.326	0.001	99	619138	50.0	
* 3 Chlorobenzene-d5	119	10.441	10.440	0.001	89	126008	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.788	12.787	0.001	98	194886	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.598	6.597	0.001	93	141074	50.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.981	6.974	0.007	69	204902	51.1	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	93	524836	52.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.626	0.001	82	189468	44.8	
12 Chloromethane	50		1.762				ND	
13 Vinyl chloride	62		1.896				ND	
15 Bromomethane	94		2.248				ND	
16 Chloroethane	64		2.388				ND	
22 1,1-Dichloroethene	96		3.379				ND	
24 Acetone	43		3.459				ND	
26 Carbon disulfide	76		3.677				ND	
31 Methylene Chloride	84		4.170				ND	
33 Acrylonitrile	53		4.535				ND	
35 Methyl tert-butyl ether	73		4.608				ND	
34 trans-1,2-Dichloroethene	96		4.614				ND	
37 1,1-Dichloroethane	63		5.240				ND	
43 cis-1,2-Dichloroethene	96		5.982				ND	
44 2-Butanone (MEK)	43		5.982				ND	
48 Chlorobromomethane	128		6.274				ND	
50 Chloroform	83	6.421	6.414	0.007	93	52637	7.55	
51 1,1,1-Trichloroethane	97		6.578				ND	
53 Carbon tetrachloride	117		6.761				ND	
56 Benzene	78		6.980				ND	
57 1,2-Dichloroethane	62		7.059				ND	
61 Trichloroethene	130	7.723	7.722	0.001	96	41813	11.9	
64 1,2-Dichloropropane	63		7.995				ND	
65 1,4-Dioxane	88		8.068				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83	8.276	8.269	0.007	92	6661	1.56	
71 cis-1,3-Dichloropropene	75		8.713				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859				ND	
73 Toluene	91	9.054	9.047	0.007	75	8552	0.6639	M
74 trans-1,3-Dichloropropene	75		9.291				ND	
76 1,1,2-Trichloroethane	97		9.485				ND	
77 Tetrachloroethene	164	9.565	9.564	0.001	95	87864	38.2	
79 2-Hexanone	43		9.692				ND	
81 Chlorodibromomethane	129	9.863	9.868	-0.005	1	632	0.3183	
82 Ethylene Dibromide	107		9.984				ND	
84 Chlorobenzene	112		10.470				ND	
86 1,1,1,2-Tetrachloroethane	131		10.562				ND	
87 Ethylbenzene	106		10.568				ND	
88 m-Xylene & p-Xylene	106		10.701				ND	
89 o-Xylene	106		11.078				ND	
90 Styrene	104		11.103				ND	
91 Bromoform	173		11.285				ND	
96 1,1,2,2-Tetrachloroethane	83		11.753				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

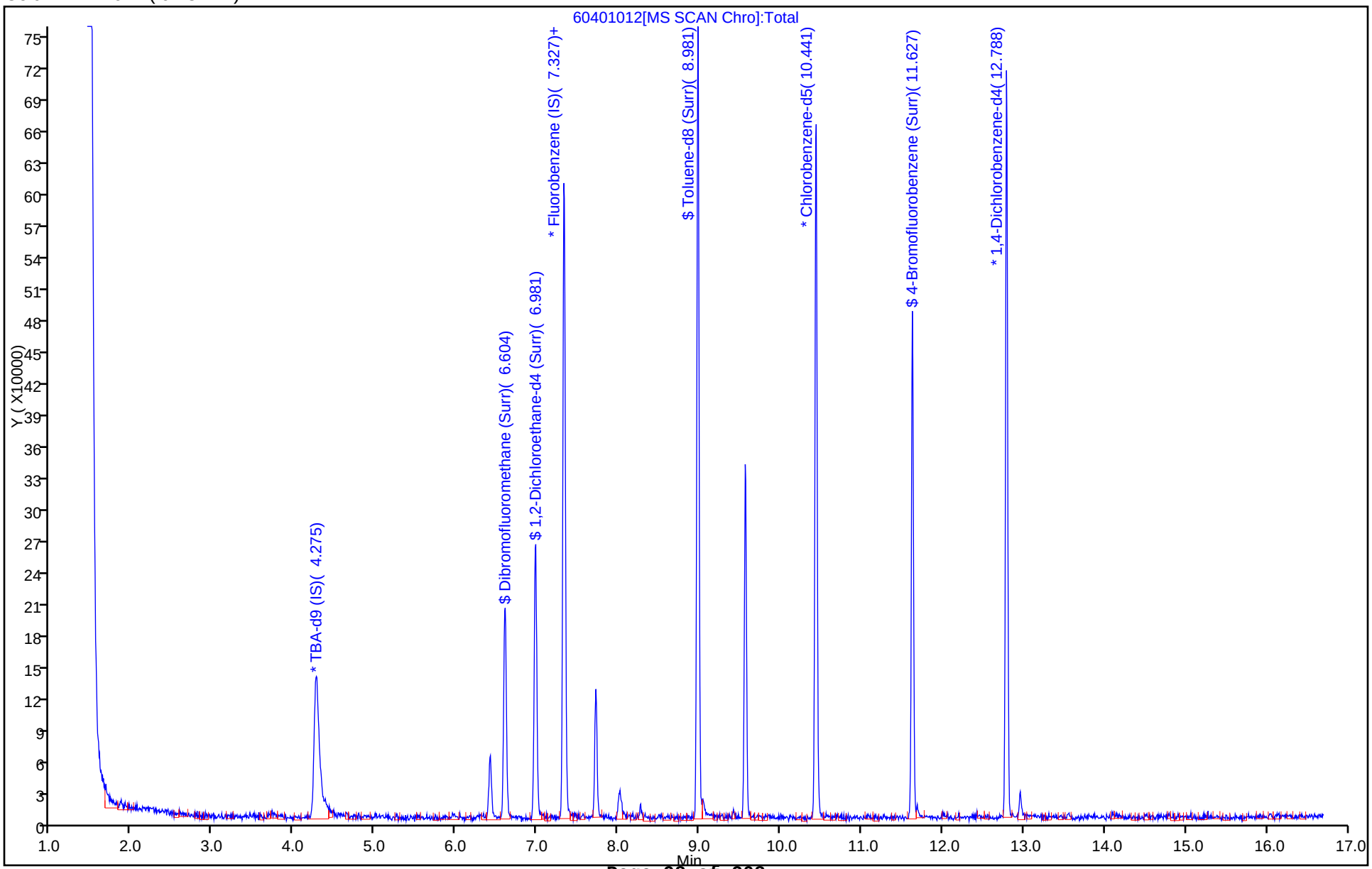
Report Date: 02-Apr-2015 09:33:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401012.D

Injection Date:	01-Apr-2015 16:37:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-42445-B-14	Lab Sample ID:	180-42445-14	Worklist Smp#:	12
Client ID:	HD-MW-167-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

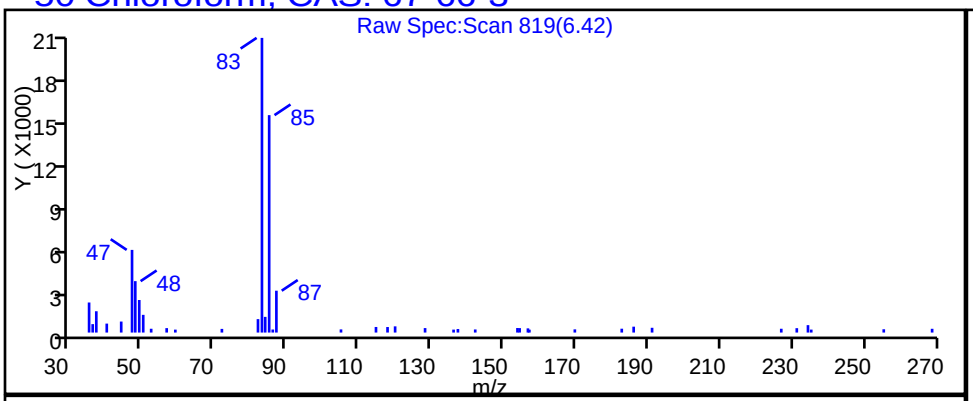


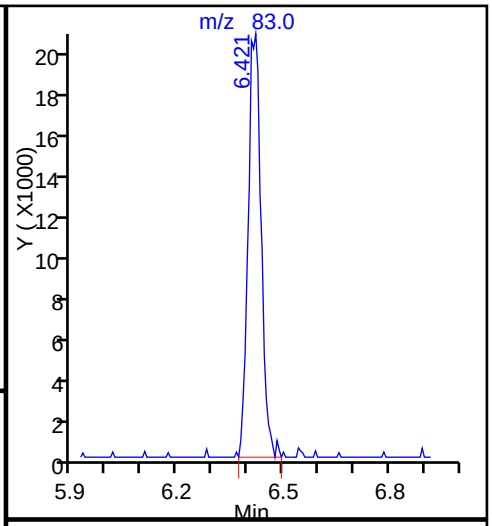
Report Date: 02-Apr-2015 09:33:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

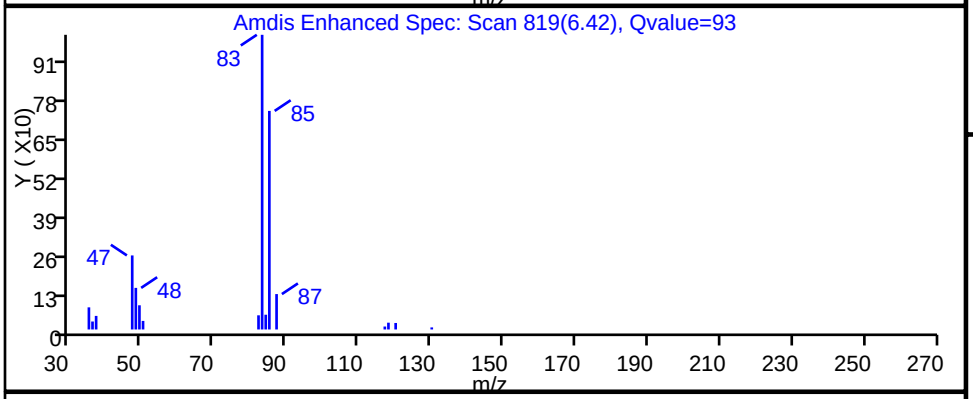
TestAmerica Pittsburgh

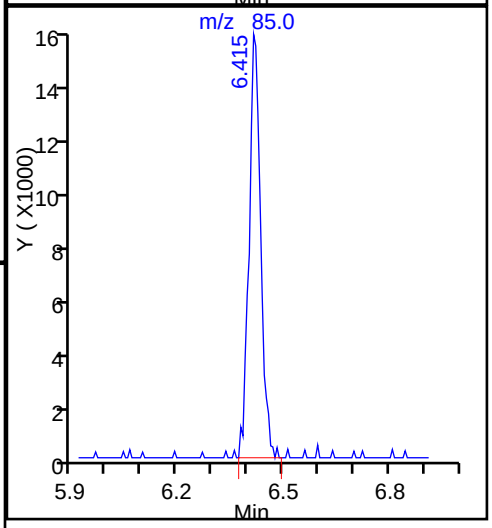
Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401012.D				
Injection Date:	01-Apr-2015 16:37:30	Instrument ID:	CHHP6		
Lims ID:	180-42445-B-14	Lab Sample ID:	180-42445-14		
Client ID:	HD-MW-167-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

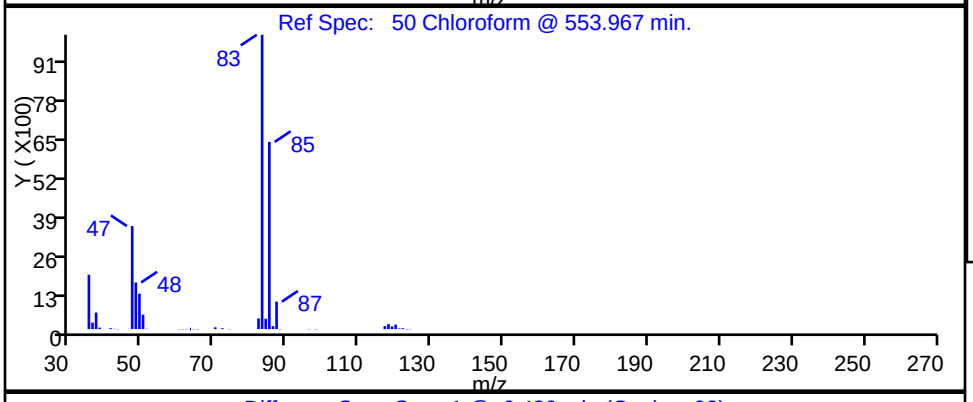
50 Chloroform, CAS: 67-66-3

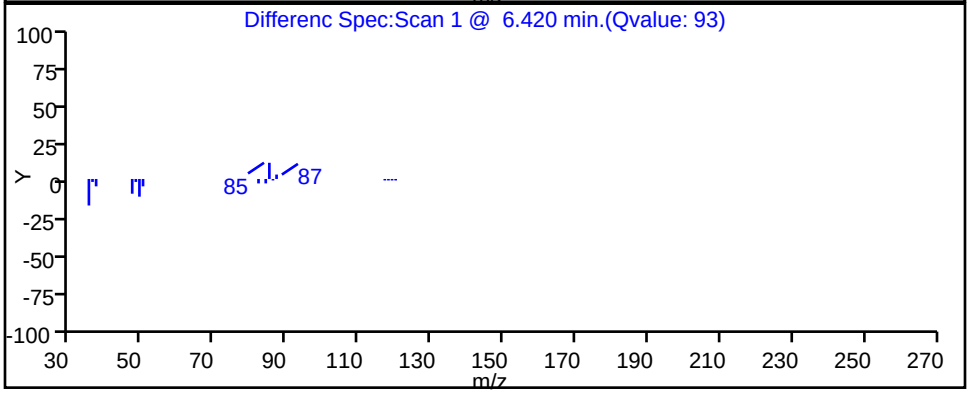










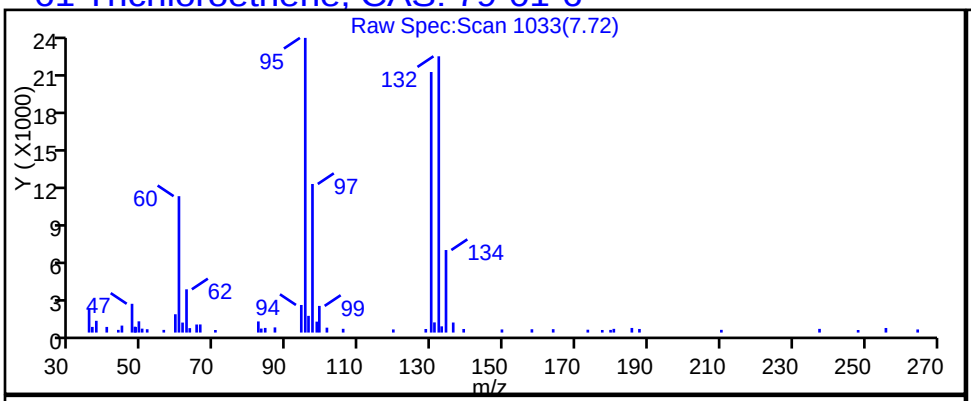


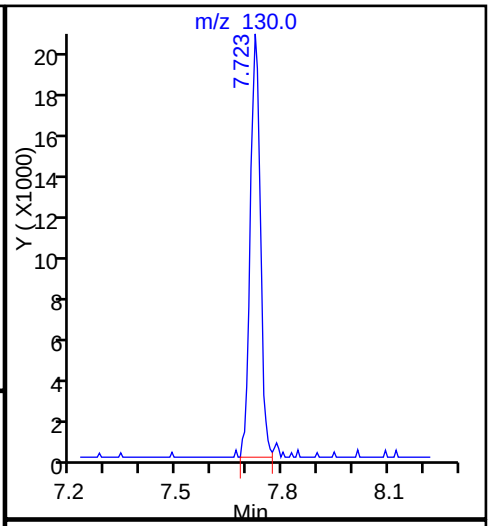
Report Date: 02-Apr-2015 09:33:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

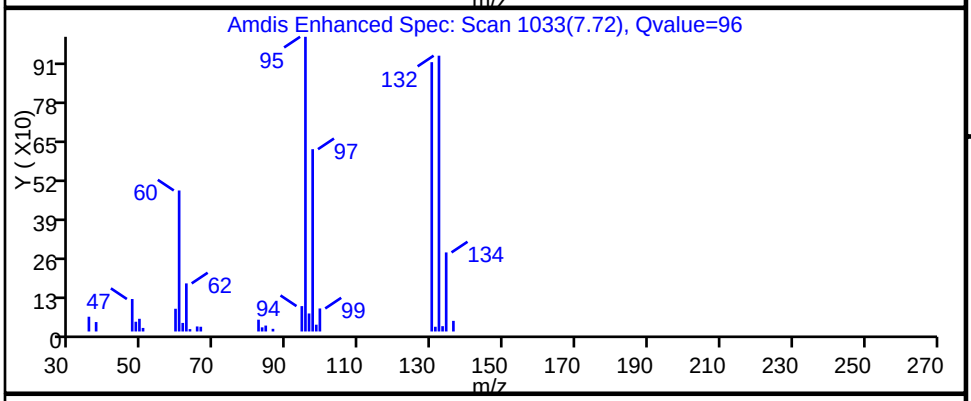
TestAmerica Pittsburgh

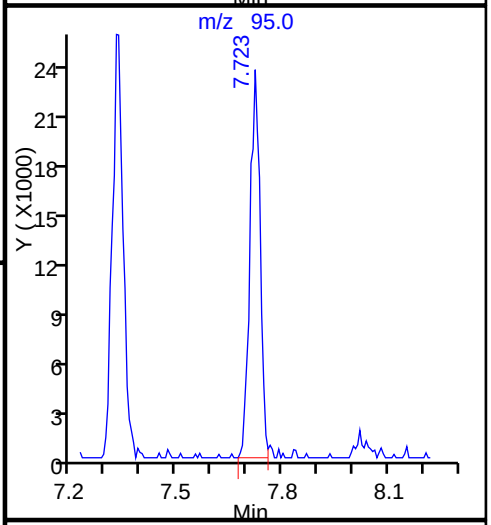
Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401012.D				
Injection Date:	01-Apr-2015 16:37:30	Instrument ID:	CHHP6		
Lims ID:	180-42445-B-14	Lab Sample ID:	180-42445-14		
Client ID:	HD-MW-167-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

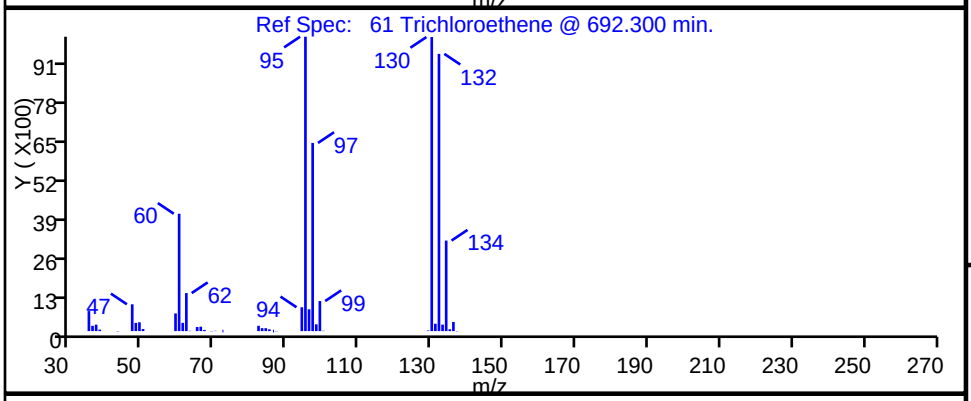
61 Trichloroethene, CAS: 79-01-6

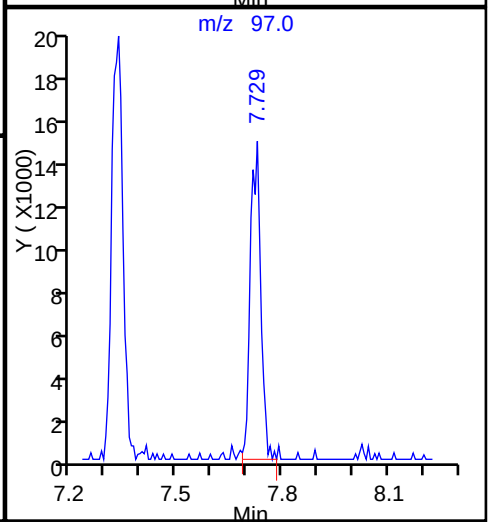


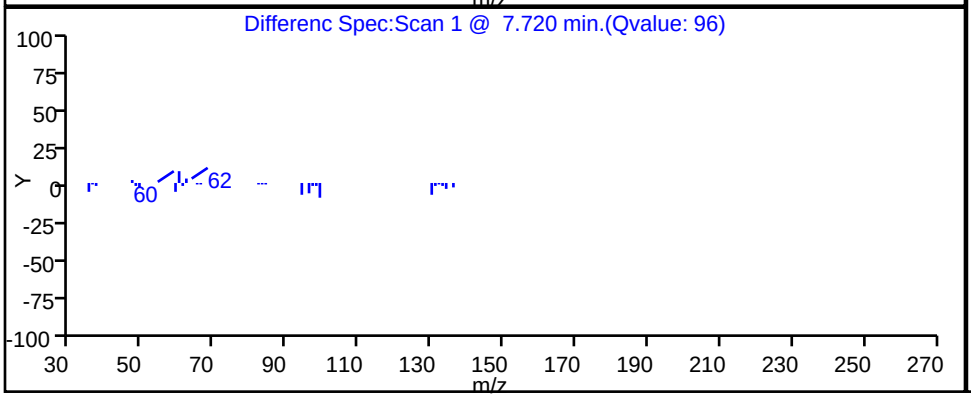










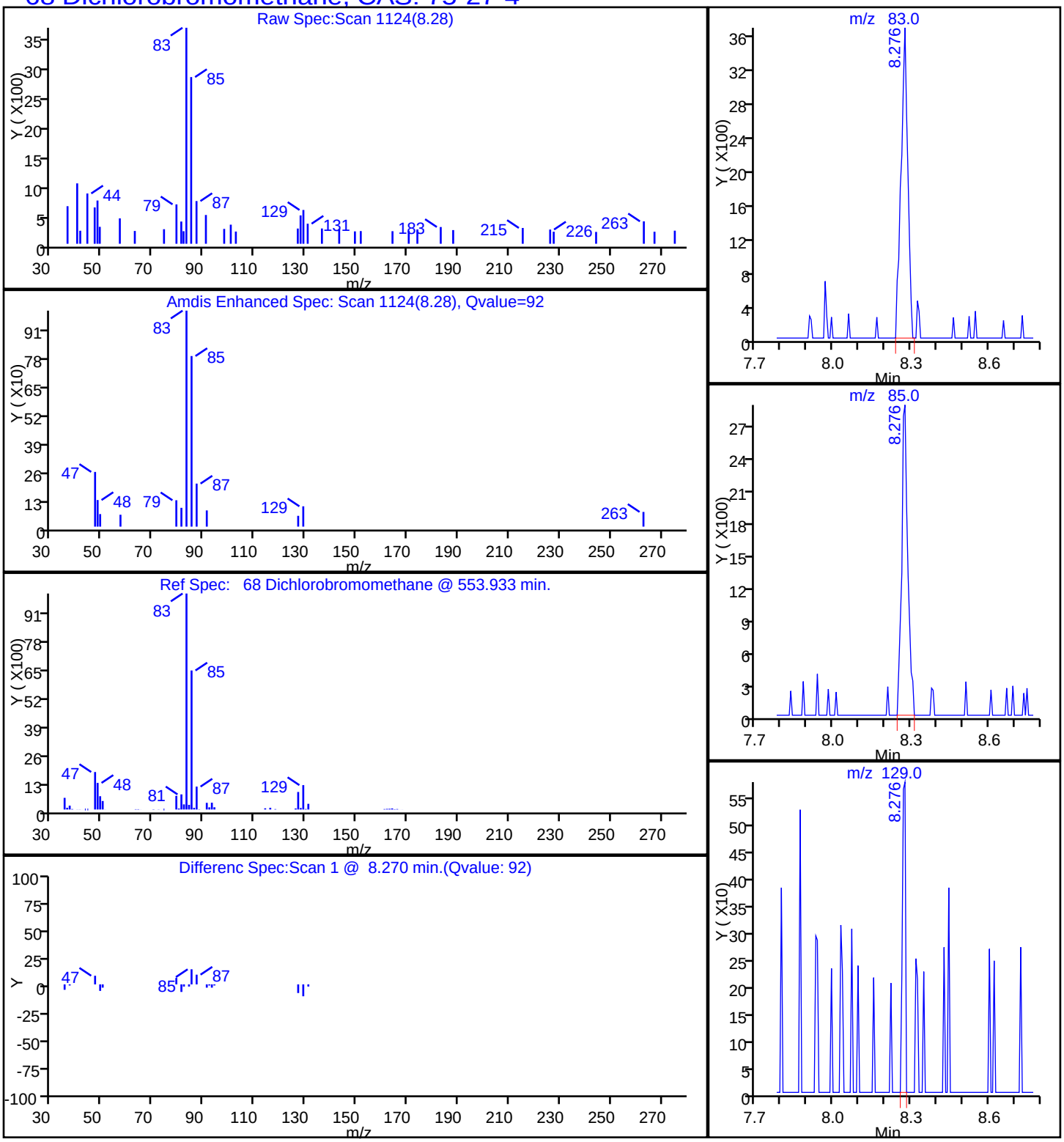


Report Date: 02-Apr-2015 09:33:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401012.D				
Injection Date:	01-Apr-2015 16:37:30	Instrument ID:	CHHP6		
Lims ID:	180-42445-B-14	Lab Sample ID:	180-42445-14		
Client ID:	HD-MW-167-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

68 Dichlorobromomethane, CAS: 75-27-4

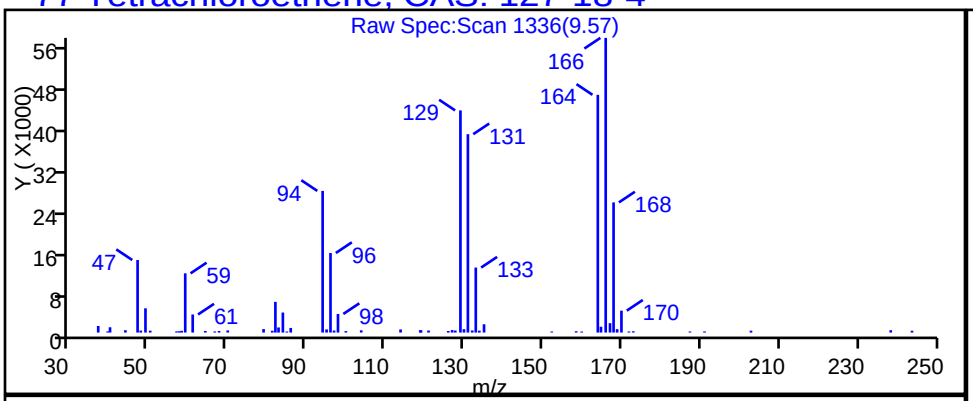


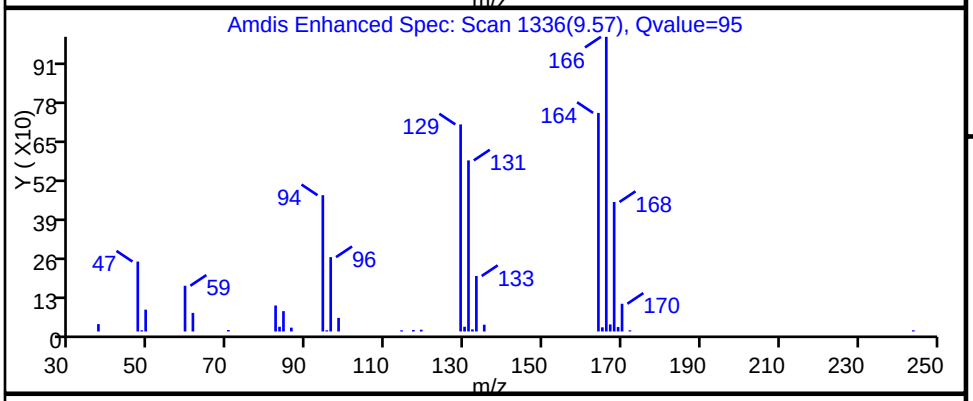
Report Date: 02-Apr-2015 09:33:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

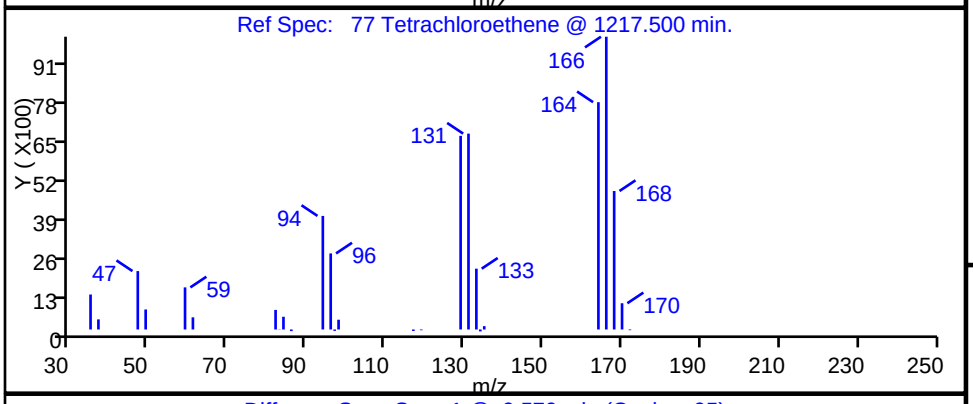
TestAmerica Pittsburgh

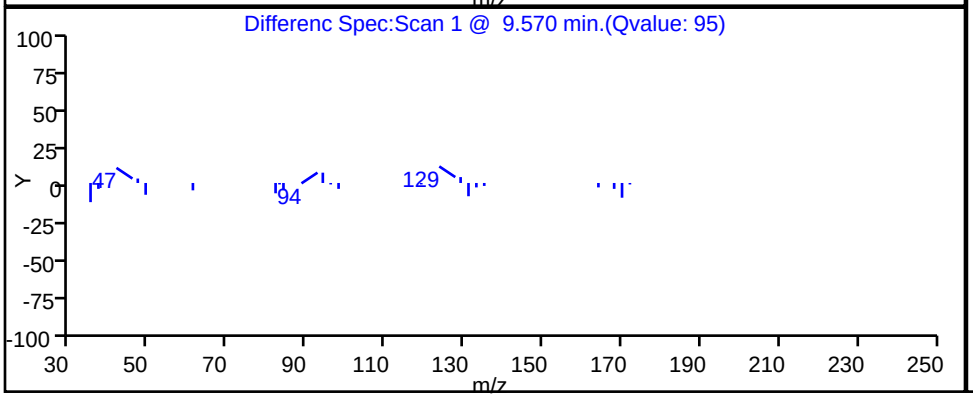
Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401012.D				
Injection Date:	01-Apr-2015 16:37:30	Instrument ID:	CHHP6		
Lims ID:	180-42445-B-14	Lab Sample ID:	180-42445-14		
Client ID:	HD-MW-167-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

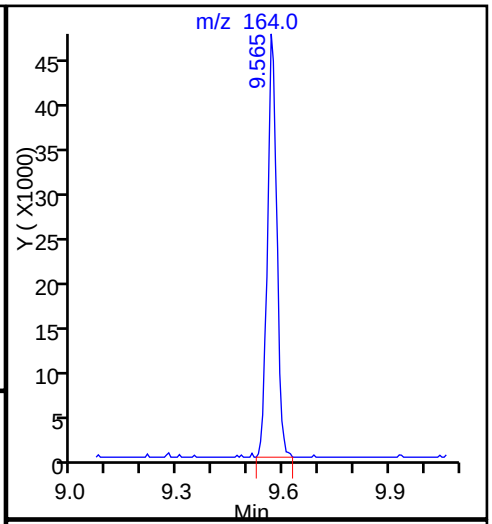
77 Tetrachloroethene, CAS: 127-18-4

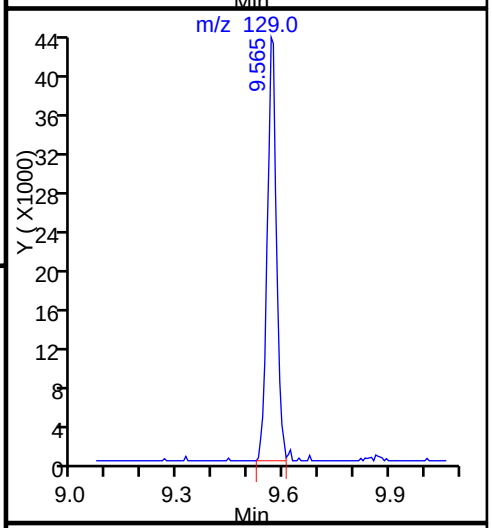


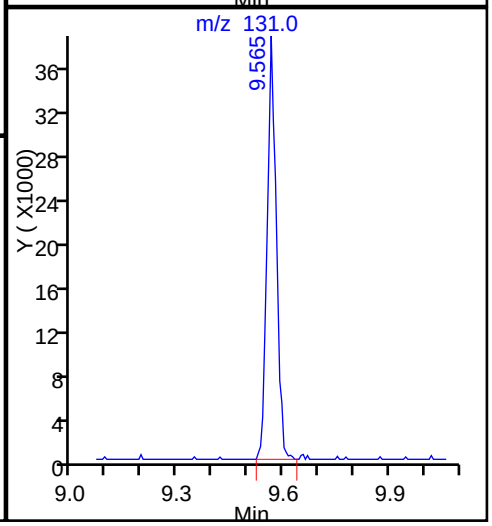












Manual Integration/User Assign Peak Report

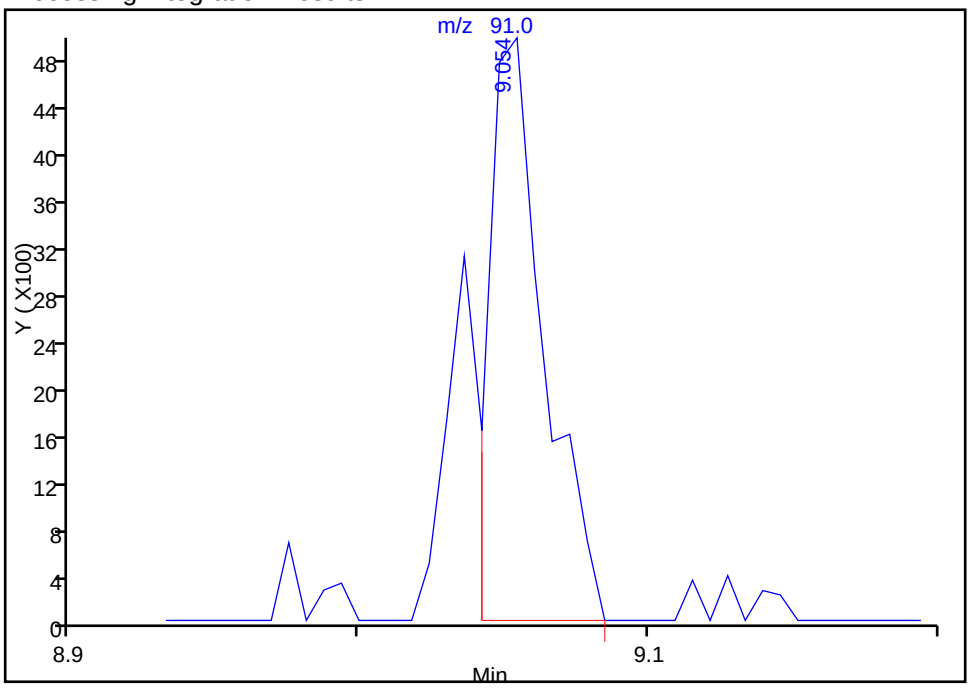
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401012.D				
Injection Date:	01-Apr-2015 16:37:30	Instrument ID:	CHHP6		
Lims ID:	180-42445-B-14	Lab Sample ID:	180-42445-14		
Client ID:	HD-MW-167-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

73 Toluene, CAS: 108-88-3

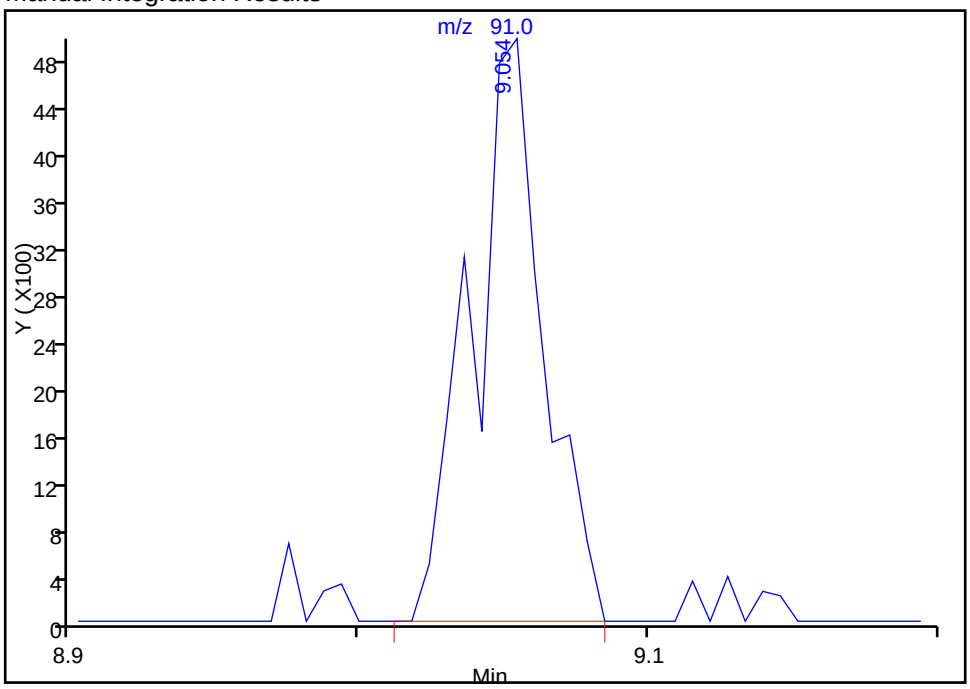
Processing Integration Results

RT: 9.05
Area: 6616
Amount: 0.513569
Amount Units: ng



Manual Integration Results

RT: 9.05
Area: 8552
Amount: 0.663851
Amount Units: ng



Reviewer: fergusond, 02-Apr-2015 09:33:09
Audit Action: Manually Integrated
Audit Reason: Split Peak

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-131929/6	60128006.D
Level 2	IC 180-131929/7	60128007.D
Level 3	ICIS 180-131929/8	60128008.D
Level 4	IC 180-131929/9	60128009.D
Level 5	IC 180-131929/10	60128010.D
Level 6	IC 180-131929/11	60128011.D
Level 7	IC 180-131929/12	60128012.D
Level 8	IC 180-131929/13	60128013.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	0.2515 0.2570	0.3026 0.2707	0.2756 0.2444	0.2408	0.2772	Ave		0.2650			0.1000	7.8		20.0			
Chloromethane	0.3999 0.4010	0.4495 0.4049	0.4034 0.3807	0.3828	0.4377	Ave		0.4075			0.1000	6.0		20.0			
Vinyl chloride	0.3422 0.3550	0.3985 0.3659	0.3669 0.3370	0.3364	0.3870	Ave		0.3611			0.1000	6.4		20.0			
1,3-Butadiene	0.3856 0.3575	0.4506 0.3848	0.3871 0.3581	0.3471	0.4135	Ave		0.3855			0.0100	8.8		20.0			
Bromomethane	0.1467 0.1381	0.1750 0.1385	0.1535 0.1204	0.1356	0.1518	Ave		0.1449			0.0500	11.0		20.0			
Chloroethane	0.2246 0.2156	0.2378 0.2212	0.2308 0.2039	0.2024	0.2350	Ave		0.2214			0.0500	6.0		20.0			
Dichlorofluoromethane	0.5042 0.5028	0.6157 0.5326	0.5347 0.4962	0.4839	0.5527	Ave		0.5279			0.0100	8.0		20.0			
Trichlorofluoromethane	0.3860 0.3913	0.5126 0.4251	0.4168 0.3840	0.3562	0.4323	Ave		0.4130			0.1000	11.0		20.0			
Ethyl ether	0.3086 0.3102	0.3235 0.3233	0.3137 0.3151	0.2963	0.3289	Ave		0.3150			0.0100	3.3		20.0			
Acrolein	0.0396 0.0517	0.0543 0.0531	0.0483 0.0514	0.0494	0.0523	Ave		0.0500			0.0100	9.2		20.0			
1,1-Dichloroethene	0.2617 0.2769	0.3126 0.2902	0.2929 0.2710	0.2438	0.2966	Ave		0.2807			0.1000	7.8		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2784 0.2816	0.3066 0.2868	0.2842 0.2700	0.2572	0.3066	Ave		0.2839			0.1000	5.9		20.0			
Acetone	0.0798 0.0903	0.1021 0.0898	0.0810 0.0901	0.0853	0.0894	Ave		0.0884			0.0500	7.8		20.0			
Iodomethane	0.3845 0.4194	0.4548 0.4293	0.4169 0.4189	0.3736	0.4299	Ave		0.4159			0.0100	6.2		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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	0.7487 0.8423	0.8906 0.8871	0.8183 0.8610	0.7260	0.8778	Ave		0.8315			0.1000	7.6		20.0			
Allyl chloride	0.1478 0.1884	0.2053 0.1953	0.1824 0.1875	0.1614	0.1907	Ave		0.1823			0.0100	10.0		20.0			
Methyl acetate	0.1939 0.2192	0.2296 0.2217	0.2129 0.2109	0.2145	0.2292	Ave		0.2165			0.1000	5.3		20.0			
Methylene Chloride	0.5663 0.3764	0.4406 0.3812	0.3942 0.3763	0.3452	0.4033	Ave		0.4104			0.1000	17.0		20.0			
tert-Butyl alcohol	0.9048 1.1531	1.2046 1.1953	1.1245 1.1486	1.1865	1.1233	Ave		1.1301			0.0100	8.5		20.0			
Acrylonitrile	0.0986 0.1135	0.1174 0.1174	0.1124 0.1105	0.1114	0.1219	Ave		0.1129			0.0100	6.1		20.0			
trans-1,2-Dichloroethene	0.3049 0.3368	0.3676 0.3502	0.3416 0.3352	0.3064	0.3612	Ave		0.3380			0.1000	6.8		20.0			
Methyl tert-butyl ether	0.7928 0.9305	0.9167 0.9185	0.8812 0.8985	0.8253	0.9438	Ave		0.8884			0.1000	6.0		20.0			
Hexane	0.4629 0.4758	0.5115 0.4938	0.4880 0.4752	0.4742	0.5094	Ave		0.4863			0.0100	3.6		20.0			
1,1-Dichloroethane	0.6073 0.6486	0.7152 0.6711	0.6594 0.6387	0.5982	0.6916	Ave		0.6538			0.2000	6.1		20.0			
Vinyl acetate	0.3314 0.3275	0.3270 0.3665	0.3192 0.3491	0.3563	0.3424	Ave		0.3399			0.0100	4.8		20.0			
2-Butanone (MEK)	0.0981 0.1170	0.1045 0.1174	0.1091 0.1130	0.1341	0.1140	Ave		0.1134			0.0500	9.4		20.0			
cis-1,2-Dichloroethene	0.3245 0.3584	0.3872 0.3703	0.3585 0.3605	0.3251	0.3832	Ave		0.3585			0.1000	6.5		20.0			
2,2-Dichloropropane	0.3199 0.3750	0.4095 0.3953	0.3658 0.3787	0.3260	0.3957	Ave		0.3707			0.0100	8.8		20.0			
Bromochloromethane	0.1350 0.1448	0.1446 0.1494	0.1365 0.1459	0.1362	0.1490	Ave		0.1427			0.0100	4.1		20.0			
Tetrahydrofuran	0.0903 0.0790	0.0922 0.0786	0.0695 0.0777	0.0808	0.0836	Ave		0.0815			0.0100	8.9		20.0			
Chloroform	0.5289 0.5736	0.5990 0.5775	0.5675 0.5500	0.5145	0.5923	Ave		0.5629			0.2000	5.3		20.0			
1,1,1-Trichloroethane	0.3563 0.4446	0.4657 0.4553	0.4238 0.4340	0.3968	0.4543	Ave		0.4288			0.1000	8.5		20.0			
Cyclohexane	0.6359 0.6708	0.7886 0.6979	0.7167 0.6628	0.6153	0.7383	Ave		0.6908			0.1000	8.2		20.0			
Carbon tetrachloride	0.3118 0.3436	0.3285 0.3563	0.3441 0.3446	0.2948	0.3616	Ave		0.3357			0.1000	6.8		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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	0.4003 0.4186	0.4561 0.4404	0.4219 0.4179	0.4152	0.4528	Ave		0.4279			0.0100	4.6		20.0			
Isobutyl alcohol	0.0043 0.0072	0.0064 0.0072	0.0064 0.0068	0.0074	0.0076	Ave		0.0067		*	0.0100	16.0		20.0			
Benzene	1.1307 1.1958	1.3767 1.2342	1.2896 1.1539	1.2476	1.3035	Ave		1.2415			0.5000	6.6		20.0			
1,2-Dichloroethane	0.4007 0.3996	0.4089 0.4174	0.3990 0.4021	0.4078	0.4253	Ave		0.4076			0.1000	2.3		20.0			
n-Heptane	0.3920 0.3756	0.4175 0.3951	0.4074 0.3772	0.3914	0.4078	Ave		0.3955			0.0100	3.8		20.0			
Trichloroethene	0.2891 0.2677	0.3005 0.2889	0.2760 0.2665	0.2817	0.2919	Ave		0.2828			0.2000	4.3		20.0			
Methylcyclohexane	0.5102 0.5411	0.6090 0.5779	0.5854 0.5414	0.5070	0.5852	Ave		0.5572			0.1000	6.8		20.0			
1,2-Dichloropropane	0.3166 0.3290	0.3285 0.3343	0.3184 0.3303	0.3331	0.3380	Ave		0.3285			0.1000	2.3		20.0			
1,4-Dioxane	0.0014 0.0021	0.0019 0.0021	0.0020 0.0019	0.0023	0.0026	Ave		0.0021		*	0.0100	16.0		20.0			
Dibromomethane	0.1216 0.1521	0.1431 0.1598	0.1502 0.1505	0.1442	0.1532	Ave		0.1468			0.0100	7.8		20.0			
Bromodichloromethane	0.2993 0.3553	0.3290 0.3756	0.3325 0.3612	0.3451	0.3571	Ave		0.3444			0.2000	6.9		20.0			
cis-1,3-Dichloropropene	0.3353 0.4110	0.3503 0.4405	0.3634 0.4227	0.4129	0.4256	Ave		0.3952			0.2000	10.0		20.0			
4-Methyl-2-pentanone (MIBK)	0.9540 1.1151	1.1043 1.1718	1.1815 1.0384	1.2050	1.2539	Ave		1.1280			0.1000	8.6		20.0			
Toluene	5.4914 4.5310	5.7208 4.7401	5.6426 4.1615	5.1921	5.4144	Ave		5.1117			0.4000	11.0		20.0			
trans-1,3-Dichloropropene	1.2695 1.3907	1.2955 1.4928	1.3784 1.3478	1.5487	1.4918	Ave		1.4019			0.1000	7.2		20.0			
Ethyl methacrylate	1.1291 1.2563	1.2172 1.3586	1.3093 1.2529	1.3664	1.4291	Ave		1.2899			0.0100	7.4		20.0			
1,1,2-Trichloroethane	1.0185 0.8514	1.0026 0.9021	0.9486 0.8143	0.9248	0.9635	Ave		0.9282			0.1000	7.6		20.0			
Tetrachloroethene	0.9955 0.7962	1.0058 0.8828	0.9677 0.7835	0.9124	0.9591	Ave		0.9129			0.2000	9.4		20.0			
1,3-Dichloropropane	1.7663 1.5809	1.8062 1.6986	1.7615 1.5218	1.8579	1.8132	Ave		1.7258			0.0100	6.8		20.0			
2-Hexanone	0.5452 0.6314	0.6409 0.6677	0.6587 0.6084	0.6924	0.7040	Ave		0.6436			0.1000	7.9		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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	0.6719 0.7933	0.7287 0.8651	0.8081 0.7828	0.8040	0.8498	Ave		0.7880			0.1000	7.9		20.0			
1,2-Dibromoethane (EDB)	0.7702 0.8091	0.8566 0.8695	0.8717 0.7825	0.8987	0.8965	Ave		0.8444			0.1000	6.0		20.0			
3-Chlorobenzotrifluoride	2.1092 1.5798	1.9444 1.6709	2.0206 1.4750	1.6511	1.7758	Ave		1.7784			0.0100	13.0		20.0			
Chlorobenzene	3.4601 2.8835	3.3914 3.0356	3.4154 2.7518	3.2008	3.3854	Ave		3.1905			0.5000	8.5		20.0			
4-Chlorobenzotrifluoride	1.8212 1.5037	1.8756 1.5784	1.8254 1.4071	1.5671	1.6615	Ave		1.6550			0.0100	10.0		20.0			
1,1,1,2-Tetrachloroethane	0.8739 1.1196	1.1217 1.1535	1.1594 1.0827	1.0702	1.2192	Ave		1.1000			0.0100	9.3		20.0			
Ethylbenzene	2.0615 1.7563	2.0184 1.8372	2.0638 1.6858	1.8579	2.0338	Ave		1.9143			0.1000	7.8		20.0			
m-Xylene & p-Xylene	2.2289 2.2454	2.6070 2.2936	2.5188 2.0897	2.3575	2.5596	Ave		2.3626			0.1000	7.7		20.0			
o-Xylene	2.3535 2.3021	2.6114 2.3512	2.6901 2.1211	2.3725	2.6243	Ave		2.4283			0.3000	8.0		20.0			
Styrene	3.4711 3.4069	3.6753 3.5670	3.8725 3.1901	3.5790	3.8420	Ave		3.5755			0.3000	6.3		20.0			
Bromoform	0.3456 0.4498	0.4023 0.4747	0.4231 0.4455	0.3941	0.4408	Ave		0.4220			0.1000	9.6		20.0			
2-Chlorobenzotrifluoride	2.0831 1.6651	2.0073 1.7788	2.0600 1.5739	1.7397	1.9308	Ave		1.8549			0.0100	10.0		20.0			
Isopropylbenzene	6.1322 5.3578	7.0417 5.5217	6.7733 4.8040	5.7294	6.5255	Ave		5.9857			0.1000	13.0		20.0			
1,1,2,2-Tetrachloroethane	1.2405 1.1782	1.3514 1.2324	1.3065 1.1416	1.2206	1.3137	Ave		1.2481			0.3000	5.7		20.0			
Bromobenzene	0.8075 0.8703	0.8805 0.8822	0.8751 0.8614	0.9099	0.9143	Ave		0.8752			0.0100	3.8		20.0			
trans-1,4-Dichloro-2-butene	0.2451 0.2511	0.2240 0.2674	0.2263 0.2510	0.2496	0.2545	Ave		0.2461			0.0100	5.9		20.0			
1,2,3-Trichloropropane	0.2160 0.2538	0.2689 0.2524	0.2612 0.2534	0.2761	0.2673	Ave		0.2561			0.0100	7.1		20.0			
N-Propylbenzene	0.9508 1.0270	1.1121 1.0371	1.0896 0.9935	1.0682	1.0870	Ave		1.0457			0.0100	5.2		20.0			
2-Chlorotoluene	0.9024 0.8995	0.9760 0.9205	0.9138 0.8970	0.9017	0.9611	Ave		0.9215			0.0100	3.3		20.0			
3-Chlorotoluene	1.0017 0.9586	0.9692 0.9307	1.0137 0.9112	0.9609	0.9611	Ave		0.9634			0.0100	3.5		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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	3.0768 3.2530	3.7359 3.2181	3.5555 3.0192	3.4050	3.6257	Ave		3.3612			0.0100	7.8		20.0			
4-Chlorotoluene	0.9577 0.8968	0.9866 0.9558	0.9331 0.9061	0.9440	0.9865	Ave		0.9458			0.0100	3.5		20.0			
tert-Butylbenzene	2.5600 2.5478	2.7508 2.5597	2.6532 2.3924	2.6993	2.7650	Ave		2.6160			0.0100	4.8		20.0			
1,2,4-Trimethylbenzene	3.3035 3.3532	3.8322 3.3235	3.7005 3.1044	3.4799	3.7246	Ave		3.4777			0.0100	7.3		20.0			
3,4-Dichlorobenzotrifluoride	0.9887 0.9504	1.0234 0.9539	1.0268 0.9051	0.9364	0.9894	Ave		0.9718			0.0100	4.4		20.0			
sec-Butylbenzene	3.9016 3.7982	4.5860 3.7545	4.3726 3.4441	4.1591	4.3402	Ave		4.0445			0.0100	9.5		20.0			
1,3-Dichlorobenzene	1.7518 1.6682	1.8502 1.6495	1.7633 1.5971	1.6478	1.7893	Ave		1.7146			0.6000	5.0		20.0			
4-Isopropyltoluene	3.1932 3.1803	3.5244 3.1617	3.4397 2.9124	3.3244	3.5095	Ave		3.2807			0.0100	6.4		20.0			
1,4-Dichlorobenzene	1.8921 1.7229	1.8544 1.7172	1.7634 1.6486	1.7582	1.8323	Ave		1.7736			0.5000	4.6		20.0			
2,4-Dichlorobenzotrifluoride	0.8418 0.9115	1.1643 0.9139	1.0936 0.9451	0.9618	0.9706	Ave		0.9753			0.0100	11.0		20.0			
2,5-Dichlorobenzotrifluoride	1.0277 1.1282	1.0948 1.1145	1.0804 0.9872	1.0256	1.1409	Ave		1.0749			0.0100	5.2		20.0			
n-Butylbenzene	2.8749 3.0408	3.5216 3.0472	3.3346 2.8083	3.1859	3.4281	Ave		3.1552			0.0100	8.2		20.0			
1,2-Dichlorobenzene	1.7178 1.6847	1.8218 1.6615	1.7626 1.6068	1.6829	1.7742	Ave		1.7140			0.4000	4.0		20.0			
1,2-Dibromo-3-Chloropropane	0.1196 0.1498	0.1418 0.1456	0.1302 0.1391	0.1296	0.1389	Ave		0.1368			0.0500	7.2		20.0			
1,2,4-Trichlorobenzene	1.2077 1.3259	1.4506 1.3099	1.3159 1.2520	1.3543	1.4062	Ave		1.3278			0.2000	5.9		20.0			
Hexachlorobutadiene	0.4827 0.5151	0.5622 0.5136	0.5273 0.4845	0.5177	0.5517	Ave		0.5193			0.0100	5.4		20.0			
Naphthalene	1.8023 2.3658	2.4053 2.3151	2.3140 2.1769	2.4289	2.4476	Ave		2.2820			0.0100	9.3		20.0			
1,2,3-Trichlorobenzene	0.9869 1.1121	1.2131 1.1031	1.0884 1.0649	1.1361	1.1802	Ave		1.1106			0.0100	6.3		20.0			
2,4,5-Trichlorotoluene	0.8654 0.8230	0.8306 0.8086	0.8131 0.7852	0.7828	0.8314	Ave		0.8175			0.0100	3.3		20.0			
2,3,6-Trichlorotoluene	0.7105 0.7303	0.7883 0.7307	0.7351 0.7070	0.6935	0.7334	Ave		0.7286			0.0100	3.9		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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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)	0.2174 0.2296	0.2406 0.2250	0.2312 0.2238	0.2125	0.2294	Ave		0.2262				3.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3069 0.3169	0.3462 0.3188	0.3353 0.3175	0.3254	0.3226	Ave		0.3237				3.8		20.0			
Toluene-d8 (Surr)	4.7309 3.4535	4.2834 3.3788	4.5099 3.1748	3.9656	4.0301	Ave		3.9409				14.0		20.0			
4-Bromofluorobenzene (Surr)	2.0381 1.5065	1.7519 1.5176	1.8406 1.4336	1.6178	1.7074	Ave		1.6767				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 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-131929/6	60128006.D
Level 2	IC 180-131929/7	60128007.D
Level 3	ICIS 180-131929/8	60128008.D
Level 4	IC 180-131929/9	60128009.D
Level 5	IC 180-131929/10	60128010.D
Level 6	IC 180-131929/11	60128011.D
Level 7	IC 180-131929/12	60128012.D
Level 8	IC 180-131929/13	60128013.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	12441 399376	61413 466774	123370 543864	178504	243452	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	19782 623186	91222 698118	180612 847288	283765	384421	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	16929 551705	80864 630878	164249 750079	249364	339939	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	19072 555574	91449 663356	173303 797079	257326	363197	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	7254 214591	35506 238802	68708 267917	100551	133368	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	11109 335043	48264 381411	103324 453830	150069	206434	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	24939 781500	124955 918274	239388 1104334	358712	485448	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	19093 608185	104021 732912	186613 854688	264073	379709	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	15266 482160	65645 557320	140456 701385	219655	288913	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	39186 103226	55086 114431	64846 125821	85368	91786	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	12943 430377	63440 500308	131155 603276	180761	260475	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	13773 437728	62215 494476	127227 600973	190645	269318	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	19736 280558	41421 309648	72525 400973	126400	156961	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	19019 651846	92291 740212	186664 932274	276926	377556	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	37034 1309070	180744 1529475	366360 1916453	538178	770934	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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	7309 292881	41661 336687	81645 417234	119671	167495	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	47953 1703104	232955 1911445	476543 2346689	795107	1006389	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	28011 585012	89407 657192	176505 837610	255870	354231	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	5769 335472	44315 373469	82385 475572	157863	196865	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	48759 1763284	238315 2023857	503259 2458471	825638	1070950	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	15080 523513	74610 603714	152947 746155	227148	317224	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	39215 1446119	186042 1583536	394527 1999816	611806	828973	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	22898 739493	103798 851374	218490 1057585	351514	447359	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	30038 1008065	145146 1157116	295240 1421566	443424	607468	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	16394 509076	66357 631938	142927 777050	264095	300763	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	24262 363723	42402 404756	97685 502816	198782	200186	25.0 350	50.0 400	100 500	150	200
cis-1,2-Dichloroethene	FB	Ave	16049 557043	78570 638509	160524 802357	240979	336595	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	15822 582789	83097 681588	163798 842775	241640	347540	5.00 175	25.0 200	50.0 250	75.0	100
Bromochloromethane	FB	Ave	6679 225087	29353 257539	61127 324697	100988	130848	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	8931 245422	37414 271171	62273 346093	119820	146874	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	26162 891515	121573 995734	254065 1224156	381367	520205	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	17622 690974	94502 785027	189759 966056	294109	399010	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	31454 1042561	160049 1203343	320878 1475197	456085	648441	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	15423 533960	66664 614377	154066 766964	218554	317552	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	19800 650661	92563 759338	188906 930038	307766	397719	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	5333 280190	32224 309707	71829 377064	137058	166021	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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	55932 1858516	279397 2127915	577373 2568317	924844	1144809	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	19819 620987	82990 719730	178647 895039	302310	373539	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	19391 583751	84739 681180	182403 839502	290134	358203	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	14298 416102	60983 498060	123549 593184	208800	256342	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	25239 840990	123591 996383	262105 1205068	375853	513997	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	15660 511401	66666 576307	142558 735181	246898	296893	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	1410 66654	7809 73473	18208 86605	33822	44901	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	6013 236358	29036 275521	67249 334892	106863	134511	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	14807 552260	66762 647525	148860 803958	255826	313642	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	16586 638776	71082 759439	162719 940779	306111	373776	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	48490 833434	94789 963310	221045 1165825	401820	485147	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	55826 1693226	245530 1948278	527825 2335981	865706	1047433	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	12906 519690	55603 613591	128942 756557	258221	288597	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	11478 469489	52242 558436	122480 703298	227823	276463	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	10354 318177	43032 370798	88732 457078	154194	186391	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	10120 297552	43168 362836	90521 439818	152121	185546	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	17956 590770	77521 698175	164779 854230	309767	350761	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	27710 471926	55014 548903	123231 682982	230885	272392	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	6831 296438	31276 355583	75589 439418	134047	164399	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	7830 302375	36764 357378	81540 439262	149846	173425	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	21442 590382	83450 686787	189015 827969	275294	343534	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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	35175 1077548	145556 1247688	319491 1544665	533675	654919	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	18514 561945	80499 648765	170754 789851	261287	321428	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	8884 418399	48143 474135	108450 607735	178444	235848	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	20957 656339	86627 755113	193055 946322	309783	393435	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	22659 839112	111891 942705	235617 1173036	393071	495166	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	23926 860280	112080 966416	251637 1190653	395578	507675	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	35287 1273143	157741 1466119	362245 1790733	596747	743239	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	3513 168078	17267 195103	39579 250089	65704	85273	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	21177 622262	86153 731138	192703 883499	290061	373509	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	62340 2002206	302221 2269536	633598 2696635	955292	1262379	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	12611 440302	58000 506563	122215 640819	203512	254135	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	13104 477179	60469 550534	135116 690860	223525	278729	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	3977 137653	15381 166844	34948 201266	61317	77586	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	3506 139161	18469 157512	40329 203260	67823	81476	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	15430 563113	76375 647166	168244 796757	262417	331379	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	14645 493158	67028 574430	141092 719388	221515	293005	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	16255 525597	66559 580756	156510 730727	236047	292985	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	49931 1783600	256568 2008176	548969 2421330	836492	1105314	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	15542 491693	67753 596461	144067 726677	231900	300726	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	41544 1396912	188912 1597317	409657 1918630	663124	842934	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	53610 1838518	263177 2073941	571367 2489630	854880	1135474	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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

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	16045 521070	70285 595281	158534 725838	230038	301633	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	63316 2082501	314946 2342860	675141 2762118	1021731	1323132	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	28428 914665	127066 1029314	272251 1280853	404796	545480	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	51820 1743713	242039 1972986	531099 2335695	816686	1069888	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	30705 944630	127353 1071549	272272 1322179	431926	558588	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	13661 499776	79958 570286	168861 757959	236290	295903	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	16677 618602	75184 695499	166815 791743	251951	347814	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	46654 1667227	241849 1901534	514864 2252239	782657	1045083	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	27877 923690	125111 1036802	272148 1288639	413439	540869	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	1941 82124	9741 90830	20104 111534	31840	42357	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCB	Ave	19598 726984	99622 817434	203185 1004110	332715	428696	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	7834 282422	38609 320466	81412 388561	127169	168186	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	29248 1297115	165187 1444669	357281 1745866	596683	746148	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	16016 609774	83313 688354	168045 854020	279103	359783	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	14043 451216	57044 504552	125544 629698	192318	253456	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	11530 400428	54138 455993	113503 566962	170378	223585	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	10756 356892	48823 387858	103502 498125	157502	201508	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	15181 492507	70258 549644	150111 706731	241234	283354	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	48094 1290581	183840 1388779	421866 1782119	661202	779639	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBZ	Ave	20719 562972	75189 623752	172172 804742	269743	330292	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.: 180-42445-2 Analy Batch No.: 131929

SDG No.:

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/28/2015 13:58 Calibration End Date: 01/28/2015 16:44 Calibration ID: 21588

Curve Type Legend:
Ave = Average ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Jan-2015 13:58:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD1
Misc. Info.: 180-0005450-006
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:05 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:25:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.261	4.279	-0.018	94	127519	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.327	0.000	98	494647	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.442	-0.006	91	101660	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.790	12.790	0.000	98	162281	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.597	0.000	51	10756	5.00	4.81	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	51	15181	5.00	4.74	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	48094	5.00	6.00	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.628	0.000	79	20719	5.00	6.08	
11 Dichlorodifluoromethane	85	1.608	1.608	0.000	94	12441	5.00	4.75	
12 Chloromethane	50	1.767	1.773	-0.006	97	19782	5.00	4.91	
13 Vinyl chloride	62	1.900	1.907	-0.006	94	16929	5.00	4.74	
14 Butadiene	39	1.931	1.943	-0.012	96	19072	5.00	5.00	
15 Bromomethane	94	2.247	2.253	-0.006	77	7254	5.00	5.06	M
16 Chloroethane	64	2.393	2.393	0.000	58	11109	5.00	5.07	M
17 Dichlorofluoromethane	67	2.673	2.673	0.000	92	24939	5.00	4.78	
18 Trichlorofluoromethane	101	2.697	2.685	0.012	77	19093	5.00	4.67	
20 Ethyl ether	59	3.062	3.075	-0.013	96	15266	5.00	4.90	
21 Acrolein	56	3.251	3.263	-0.012	96	39186	100.0	79.2	
22 1,1-Dichloroethene	96	3.385	3.373	0.012	78	12943	5.00	4.66	
23 1,1,2-Trichloro-1,2,2-trif	101	3.433	3.427	0.006	68	13773	5.00	4.90	
24 Acetone	43	3.452	3.464	-0.012	97	19736	25.0	22.6	
25 Iodomethane	142	3.567	3.579	-0.012	99	19019	5.00	4.62	
26 Carbon disulfide	76	3.677	3.689	-0.012	100	37034	5.00	4.50	
29 3-Chloro-1-propene	76	3.963	3.957	0.006	66	7309	5.00	4.05	
30 Methyl acetate	43	3.969	3.969	0.000	97	47953	25.0	22.4	
31 Methylene Chloride	84	4.182	4.176	0.006	91	28011	5.00	6.90	
32 2-Methyl-2-propanol	59	4.395	4.407	-0.012	54	5769	50.0	40.0	
33 Acrylonitrile	53	4.547	4.547	0.000	91	48759	50.0	43.7	M
34 trans-1,2-Dichloroethene	96	4.602	4.614	-0.012	73	15080	5.00	4.51	
35 Methyl tert-butyl ether	73	4.608	4.614	-0.006	98	39215	5.00	4.46	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.033	5.033	0.000	96	22898	5.00	4.76	
37 1,1-Dichloroethane	63	5.246	5.246	0.000	55	30038	5.00	4.64	M
38 Vinyl acetate	43	5.283	5.283	0.000	77	16394	5.00	4.87	
44 2-Butanone (MEK)	43	5.982	5.982	0.000	80	24262	25.0	21.6	
43 cis-1,2-Dichloroethene	96	5.989	5.982	0.007	85	16049	5.00	4.53	
42 2,2-Dichloropropane	77	5.982	5.989	-0.006	59	15822	5.00	4.31	
49 Tetrahydrofuran	42	6.287	6.281	0.007	89	8931	10.0	11.1	
48 Chlorobromomethane	128	6.274	6.281	-0.006	94	6679	5.00	4.73	
50 Chloroform	83	6.414	6.414	0.000	94	26162	5.00	4.70	
51 1,1,1-Trichloroethane	97	6.585	6.585	0.000	94	17622	5.00	4.15	
52 Cyclohexane	56	6.658	6.664	-0.006	96	31454	5.00	4.60	
53 Carbon tetrachloride	117	6.755	6.767	-0.012	77	15423	5.00	4.64	
54 1,1-Dichloropropene	75	6.767	6.773	-0.006	90	19800	5.00	4.68	
55 Isobutyl alcohol	41	6.925	6.938	-0.013	43	5333	125.0	81.0	
56 Benzene	78	6.974	6.986	-0.012	97	55932	5.00	4.55	
57 1,2-Dichloroethane	62	7.059	7.065	-0.006	97	19819	5.00	4.91	
59 n-Heptane	43	7.345	7.345	0.000	94	19391	5.00	4.96	
61 Trichloroethene	130	7.722	7.722	0.000	95	14298	5.00	5.11	
63 Methylcyclohexane	83	7.966	7.966	0.000	92	25239	5.00	4.58	
64 1,2-Dichloropropane	63	7.996	7.990	0.006	96	15660	5.00	4.82	
65 1,4-Dioxane	88	8.069	8.075	-0.006	31	1410	100.0	69.4	
67 Dibromomethane	93	8.075	8.081	-0.006	91	6013	5.00	4.14	
68 Dichlorobromomethane	83	8.270	8.270	0.000	93	14807	5.00	4.35	
71 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	92	16586	5.00	4.24	
72 4-Methyl-2-pentanone (MIBK	43	8.854	8.854	0.000	97	48490	25.0	21.1	
73 Toluene	91	9.049	9.048	0.001	97	55826	5.00	5.37	
74 trans-1,3-Dichloropropene	75	9.298	9.292	0.006	97	12906	5.00	4.53	
75 Ethyl methacrylate	69	9.347	9.347	0.000	88	11478	5.00	4.38	
76 1,1,2-Trichloroethane	97	9.487	9.493	-0.006	84	10354	5.00	5.49	
77 Tetrachloroethene	164	9.572	9.566	0.006	95	10120	5.00	5.45	
78 1,3-Dichloropropane	76	9.651	9.651	0.000	91	17956	5.00	5.12	
79 2-Hexanone	43	9.687	9.687	0.000	98	27710	25.0	21.2	
81 Chlorodibromomethane	129	9.870	9.864	0.006	88	6831	5.00	4.26	
82 Ethylene Dibromide	107	9.979	9.985	-0.006	69	7830	5.00	4.56	
83 3-Chlorobenzotrifluoride	180	10.429	10.429	0.000	91	21442	5.00	5.93	
84 Chlorobenzene	112	10.466	10.472	-0.006	92	35175	5.00	5.42	
85 4-Chlorobenzotrifluoride	180	10.521	10.521	0.000	95	18514	5.00	5.50	
87 Ethylbenzene	106	10.563	10.563	0.000	98	20957	5.00	5.38	
86 1,1,1,2-Tetrachloroethane	131	10.563	10.563	0.000	41	8884	5.00	3.97	M
88 m-Xylene & p-Xylene	106	10.697	10.697	0.000	97	22659	5.00	4.72	
89 o-Xylene	106	11.080	11.080	0.000	97	23926	5.00	4.85	
90 Styrene	104	11.099	11.099	0.000	93	35287	5.00	4.85	
91 Bromoform	173	11.281	11.287	-0.006	20	3513	5.00	4.09	
92 2-Chlorobenzotrifluoride	180	11.342	11.342	0.000	95	21177	5.00	5.62	
93 Isopropylbenzene	105	11.452	11.451	0.001	96	62340	5.00	5.12	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.756	0.000	90	12611	5.00	4.97	
95 Bromobenzene	156	11.768	11.768	0.000	93	13104	5.00	4.61	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	57	3977	5.00	4.98	
98 1,2,3-Trichloropropane	110	11.823	11.810	0.013	79	3506	5.00	4.22	
99 N-Propylbenzene	120	11.871	11.871	0.000	99	15430	5.00	4.55	
100 2-Chlorotoluene	126	11.963	11.956	0.006	94	14645	5.00	4.90	
101 3-Chlorotoluene	126	12.029	12.023	0.006	96	16255	5.00	5.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.048	0.000	92	49931	5.00	4.58	
103 4-Chlorotoluene	126	12.078	12.078	0.000	99	15542	5.00	5.06	
104 tert-Butylbenzene	119	12.364	12.364	0.000	93	41544	5.00	4.89	
106 1,2,4-Trimethylbenzene	105	12.425	12.425	0.000	96	53610	5.00	4.75	
107 1,2-dichloro-4-(trifluorom	214	12.455	12.455	0.000	95	16045	5.00	5.09	
108 sec-Butylbenzene	105	12.583	12.589	-0.006	95	63316	5.00	4.82	
109 1,3-Dichlorobenzene	146	12.711	12.711	0.000	93	28428	5.00	5.11	
110 4-Isopropyltoluene	119	12.747	12.741	0.006	95	51820	5.00	4.87	
111 1,4-Dichlorobenzene	146	12.814	12.814	0.000	89	30705	5.00	5.33	
113 2,4-Dichloro-1-(triflourom	214	12.826	12.826	0.000	55	13661	5.00	4.32	
114 2,5-Dichlorobenzotrifluori	214	12.869	12.869	0.000	94	16677	5.00	4.78	
116 n-Butylbenzene	91	13.155	13.155	0.000	96	46654	5.00	4.56	
117 1,2-Dichlorobenzene	146	13.167	13.173	-0.006	92	27877	5.00	5.01	
118 1,2-Dibromo-3-Chloropropan	75	13.958	13.964	-0.006	12	1941	5.00	4.37	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.104	14.104	0.000	98	75930	15.0	14.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.524	14.518	0.006	98	55126	10.0	9.66	
122 1,2,4-Trichlorobenzene	180	14.785	14.791	-0.006	91	19598	5.00	4.55	
123 Hexachlorobutadiene	225	14.931	14.931	0.000	93	7834	5.00	4.65	
124 Naphthalene	128	15.053	15.053	0.000	97	29248	5.00	3.95	
125 1,2,3-Trichlorobenzene	180	15.278	15.278	0.000	92	16016	5.00	4.44	
126 2,4,5-Trichlorotoluene	159	16.045	16.044	0.001	0	14043	5.00	5.29	
127 2,3,6-Trichlorotoluene	159	16.148	16.148	0.000	90	11530	5.00	4.88	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		10.0	9.04	
S 131 Xylenes, Total	106				0		10.0	9.56	
S 132 1,3-Dichloropropene, Total	1				0		10.0	8.77	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	0.20	Units: uL	
voaWeemixpri_00001	Amount Added:	0.20	Units: uL	
voaWVApri Res_00001	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	0.20	Units: uL	
VOAKETONEPRI_00003	Amount Added:	0.80	Units: uL	
voaWAcropri R_00006	Amount Added:	4.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

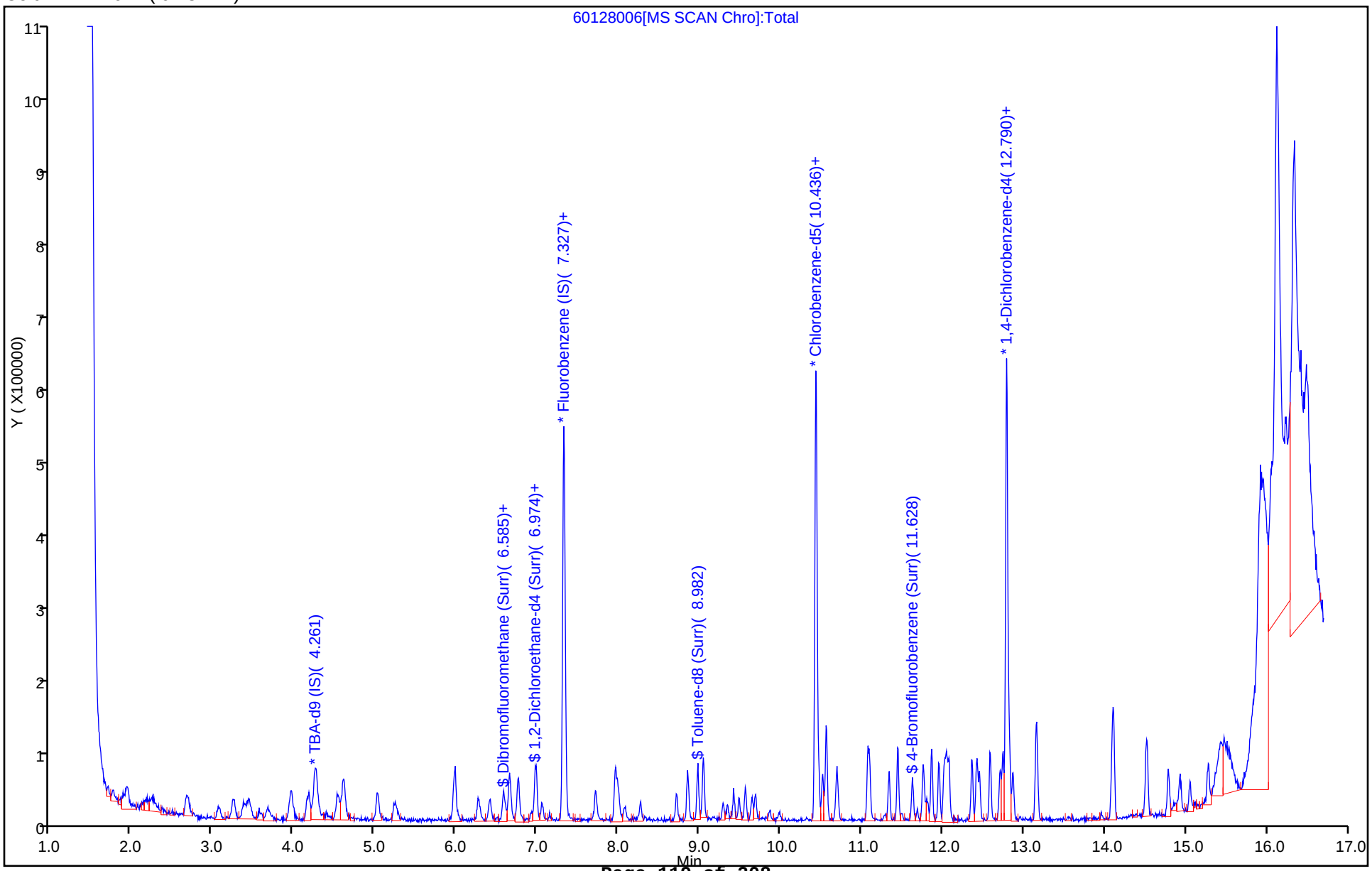
Report Date: 29-Jan-2015 12:59:06 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D

Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

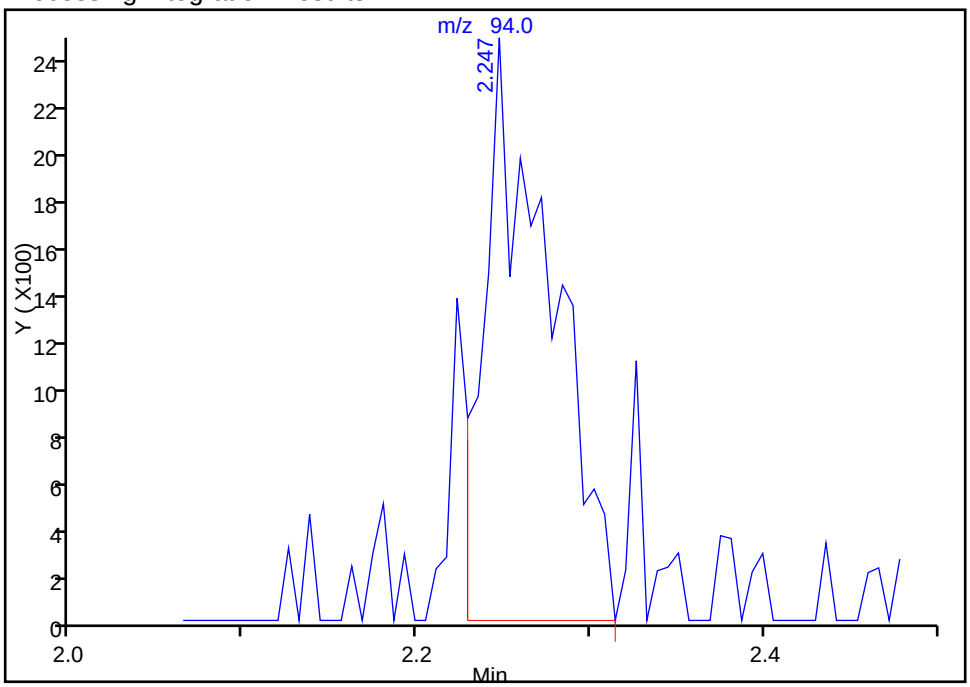
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

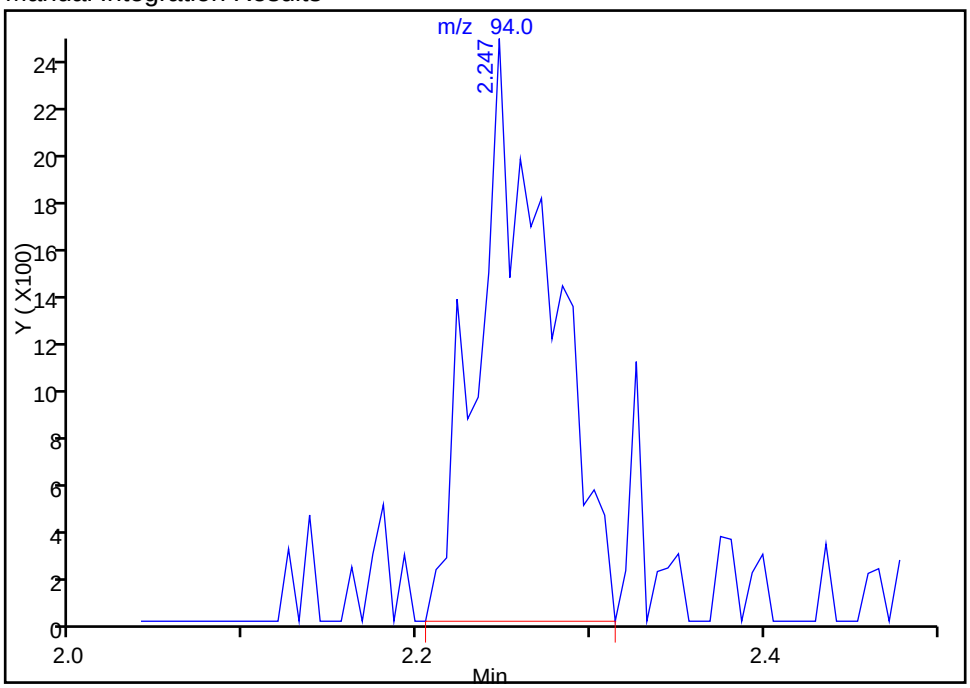
Processing Integration Results

RT: 2.25
Area: 6582
Amount: 4.663707
Amount Units: ng



Manual Integration Results

RT: 2.25
Area: 7254
Amount: 5.059028
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

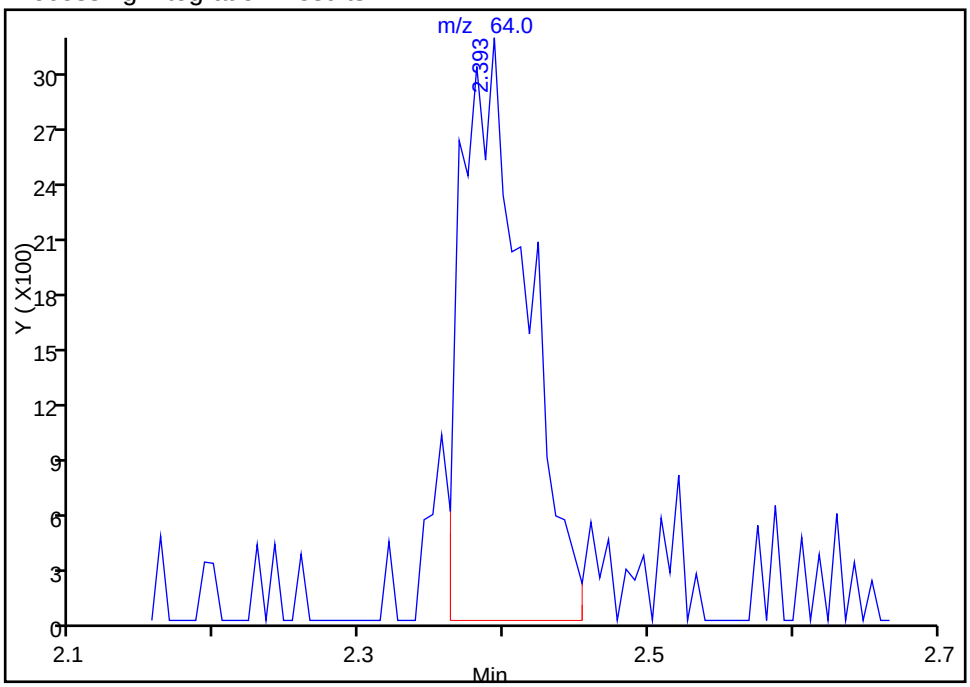
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

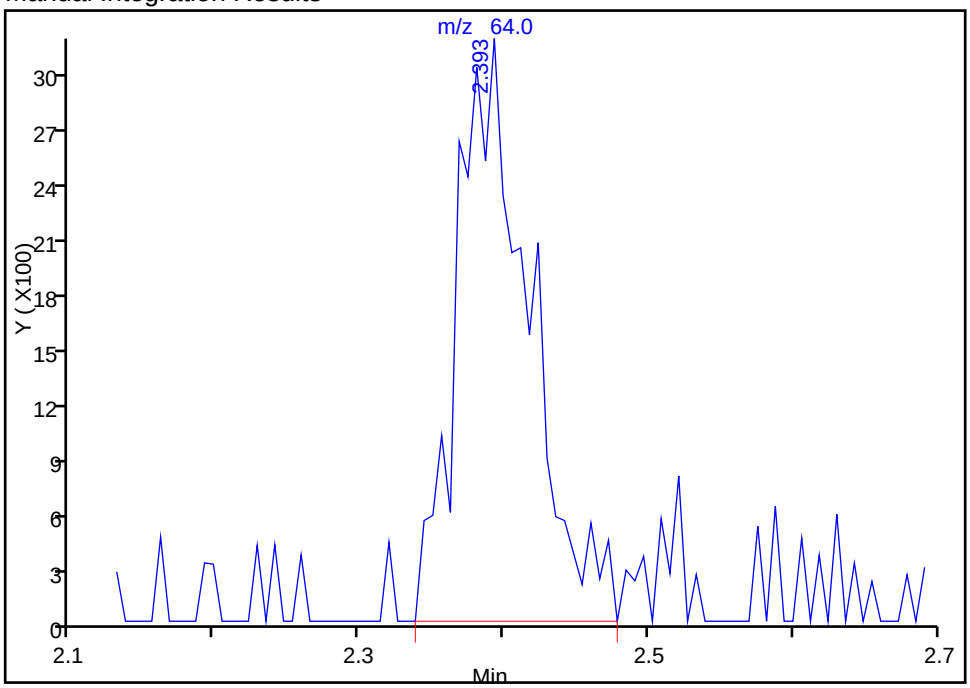
Processing Integration Results

RT: 2.39
Area: 9880
Amount: 4.574556
Amount Units: ng



Manual Integration Results

RT: 2.39
Area: 11109
Amount: 5.071451
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

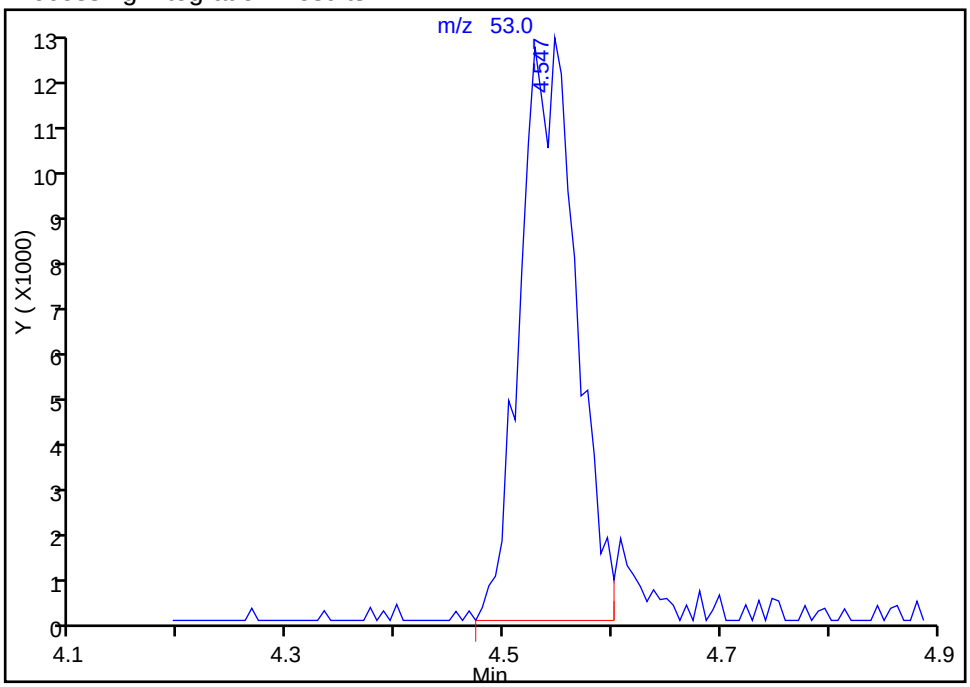
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

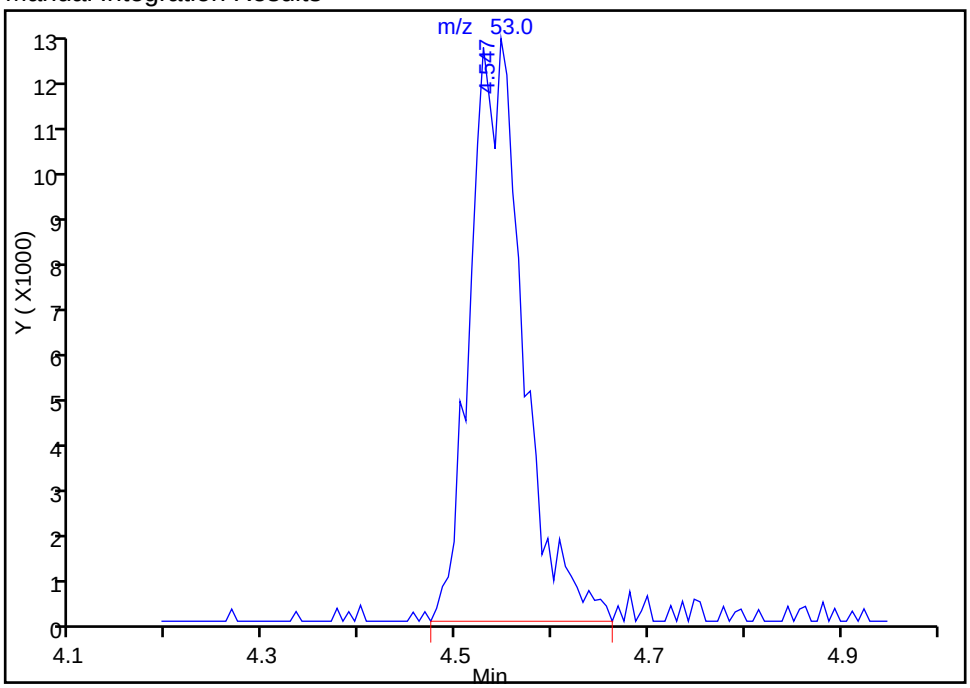
Processing Integration Results

RT: 4.55
Area: 46151
Amount: 41.571241
Amount Units: ng



Manual Integration Results

RT: 4.55
Area: 48759
Amount: 43.664000
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

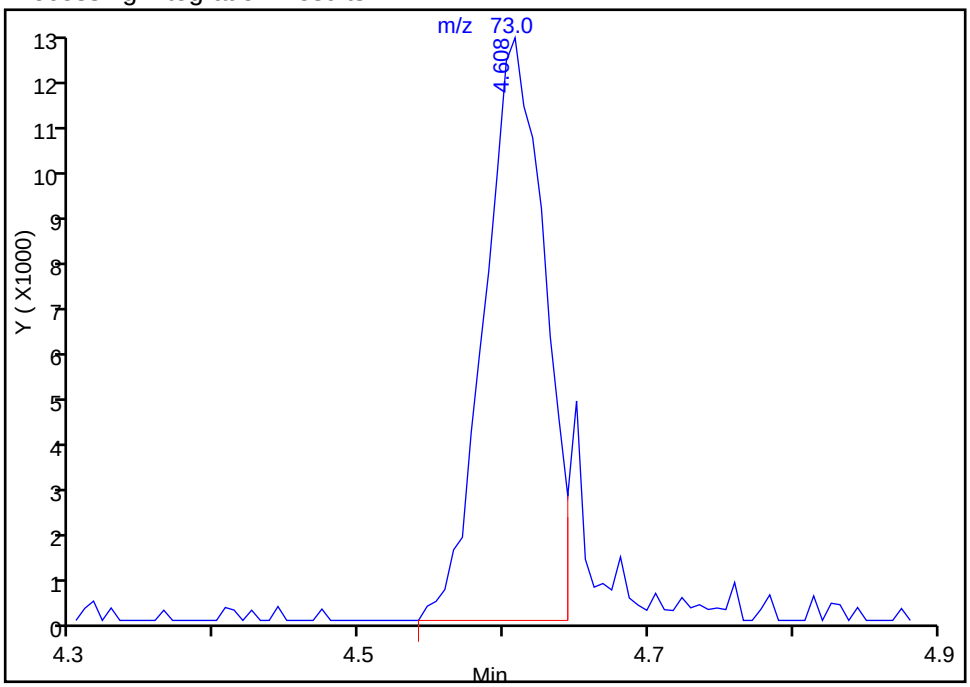
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

35 Methyl tert-butyl ether, CAS: 1634-04-4

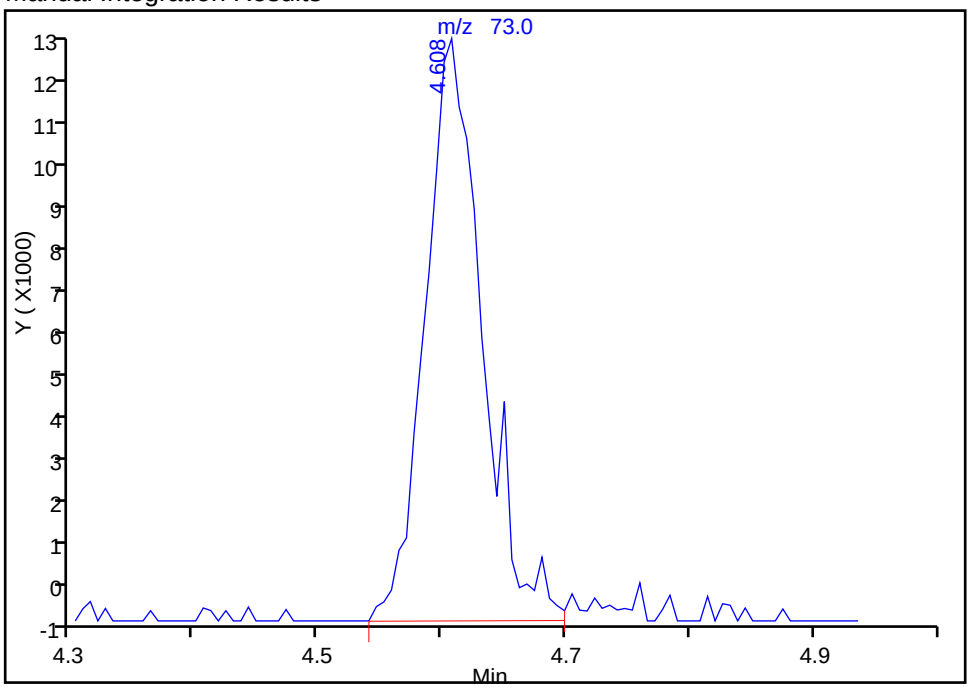
Processing Integration Results

RT: 4.61
Area: 35452
Amount: 4.077319
Amount Units: ng



Manual Integration Results

RT: 4.61
Area: 39215
Amount: 4.461825
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Split Peak

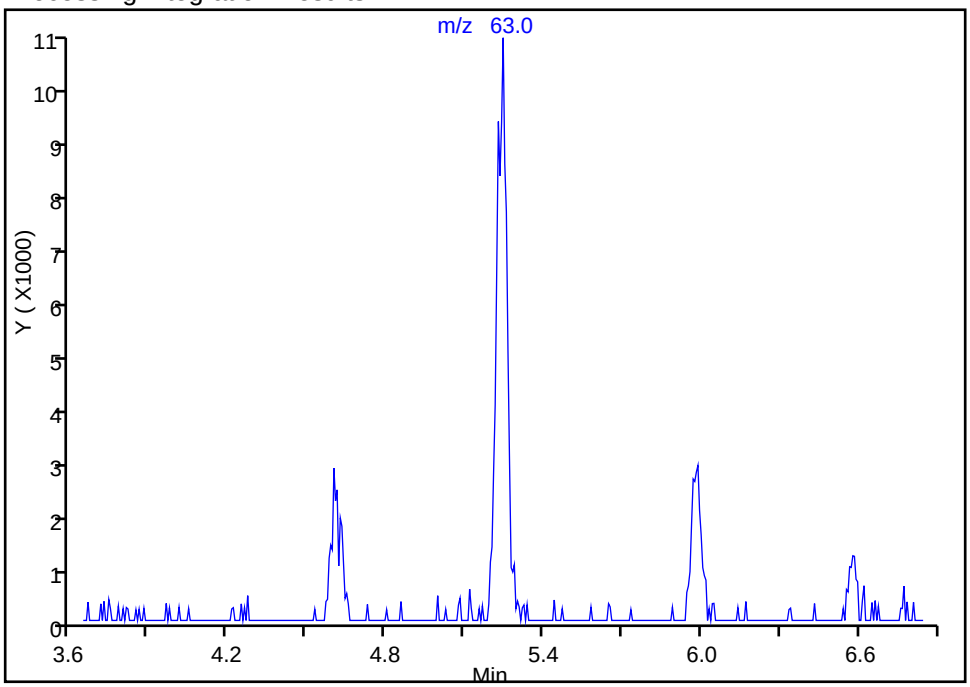
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D				
Injection Date:	28-Jan-2015 13:58:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

37 1,1-Dichloroethane, CAS: 75-34-3

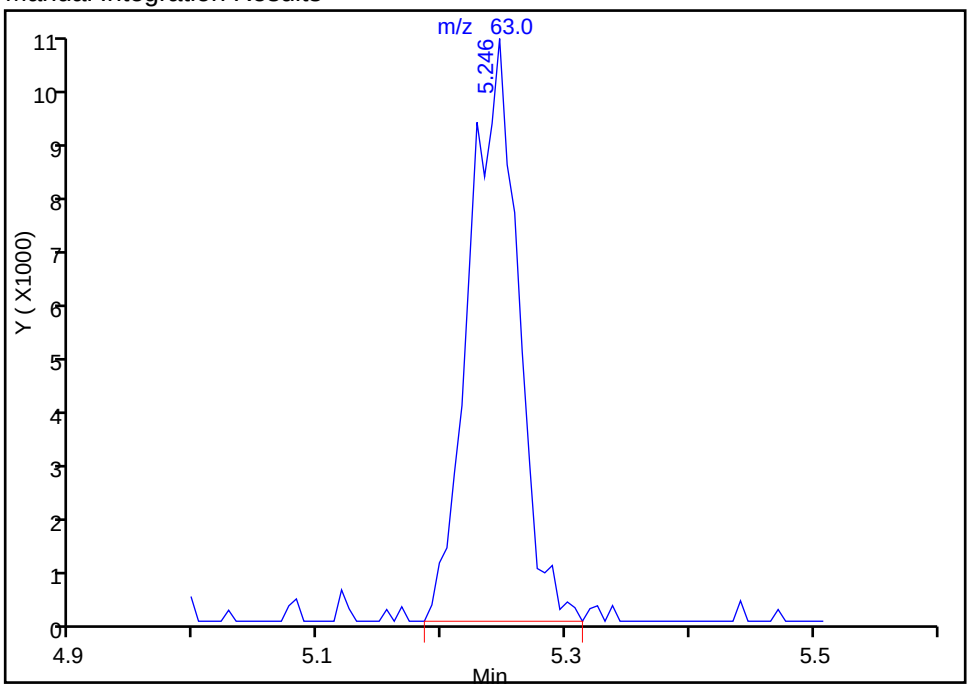
Not Detected
Expected RT: 5.25

Processing Integration Results



Manual Integration Results

RT: 5.25
Area: 30038
Amount: 4.644301
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Split Peak

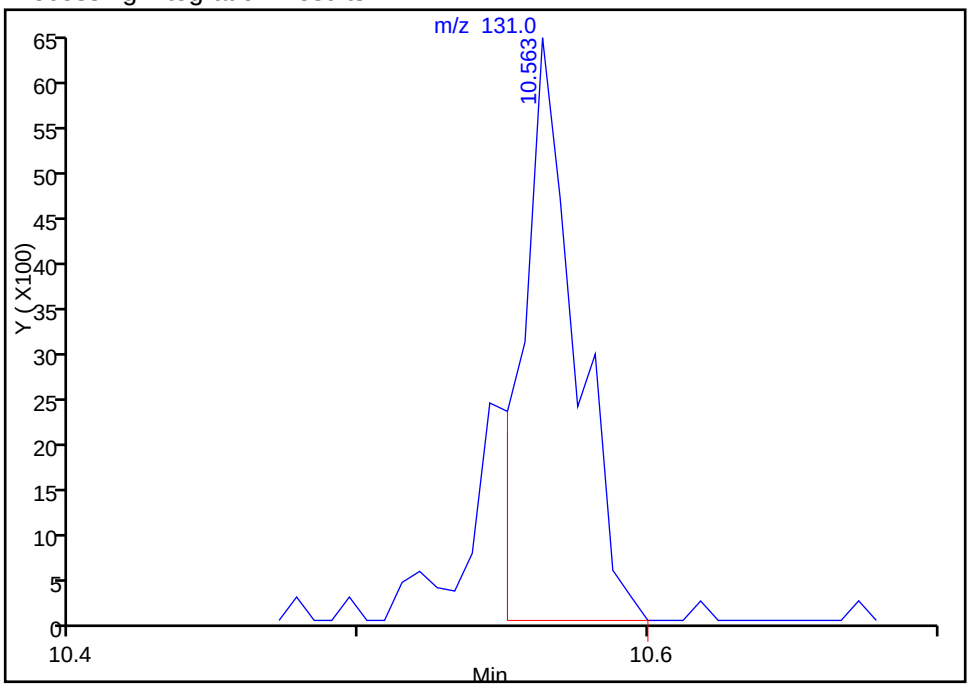
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128006.D
Injection Date: 28-Jan-2015 13:58:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

86 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

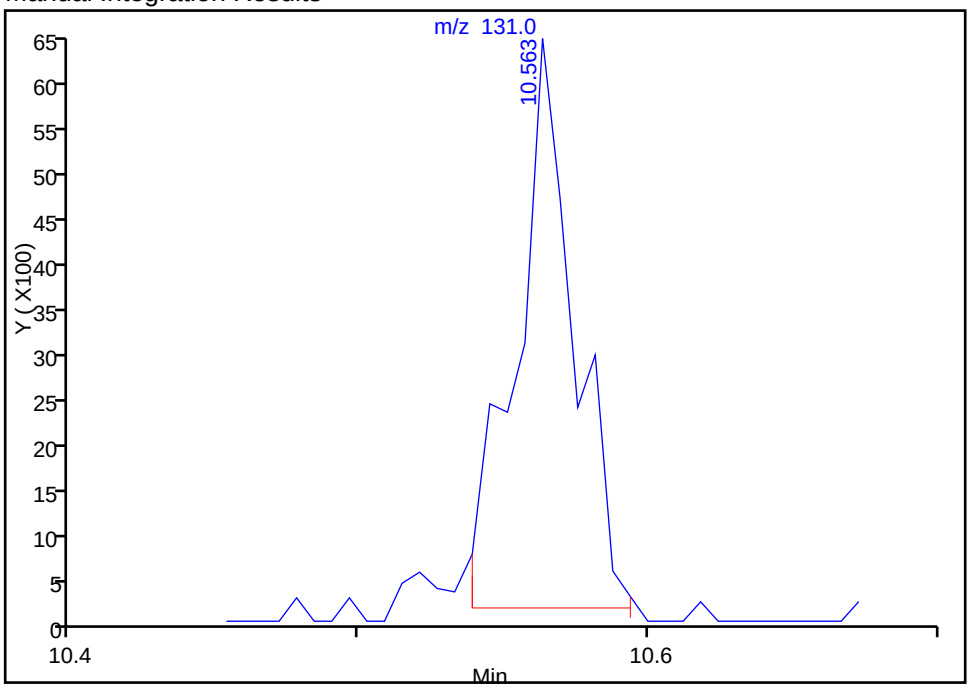
Processing Integration Results

RT: 10.56
Area: 8268
Amount: 3.722370
Amount Units: ng



Manual Integration Results

RT: 10.56
Area: 8884
Amount: 3.972161
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:25:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 29-Jan-2015 12:59:08 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Jan-2015 14:21:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD5
Misc. Info.: 180-0005450-007
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:07 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:28:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.279	-0.005	94	147158	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.328	7.327	0.001	97	405888	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.437	10.442	-0.005	92	85838	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.790	0.001	97	137352	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.604	6.597	0.007	90	48823	25.0	26.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.976	6.974	0.002	50	70258	25.0	26.7	
$ 7 Toluene-d8 (Surr)	98	8.983	8.982	0.001	94	183840	25.0	27.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.629	11.628	0.001	82	75189	25.0	26.1	
11 Dichlorodifluoromethane	85	1.610	1.608	0.002	99	61413	25.0	28.6	
12 Chloromethane	50	1.774	1.773	0.001	98	91222	25.0	27.6	
13 Vinyl chloride	62	1.902	1.907	-0.004	97	80864	25.0	27.6	
14 Butadiene	39	1.945	1.943	0.001	89	91449	25.0	29.2	
15 Bromomethane	94	2.261	2.253	0.008	92	35506	25.0	30.2	
16 Chloroethane	64	2.389	2.393	-0.004	97	48264	25.0	26.9	
17 Dichlorofluoromethane	67	2.675	2.673	0.002	94	124955	25.0	29.2	M
18 Trichlorofluoromethane	101	2.699	2.685	0.014	95	104021	25.0	31.0	
20 Ethyl ether	59	3.076	3.075	0.001	95	65645	25.0	25.7	
21 Acrolein	56	3.252	3.263	-0.011	97	55086	125.0	135.7	
22 1,1-Dichloroethene	96	3.368	3.373	-0.005	92	63440	25.0	27.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.441	3.427	0.014	94	62215	25.0	27.0	
24 Acetone	43	3.465	3.464	0.001	91	41421	50.0	57.7	
25 Iodomethane	142	3.581	3.579	0.002	99	92291	25.0	27.3	
26 Carbon disulfide	76	3.684	3.689	-0.005	99	180744	25.0	26.8	
29 3-Chloro-1-propene	76	3.958	3.957	0.001	76	41661	25.0	28.1	
30 Methyl acetate	43	3.964	3.969	-0.005	98	232955	125.0	132.6	
31 Methylene Chloride	84	4.183	4.176	0.007	99	89407	25.0	26.8	
32 2-Methyl-2-propanol	59	4.408	4.407	0.001	94	44315	250.0	266.5	
33 Acrylonitrile	53	4.542	4.547	-0.005	100	238315	250.0	260.1	
34 trans-1,2-Dichloroethene	96	4.621	4.614	0.007	77	74610	25.0	27.2	
35 Methyl tert-butyl ether	73	4.615	4.614	0.001	98	186042	25.0	25.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.029	5.033	-0.004	93	103798	25.0	26.3	
37 1,1-Dichloroethane	63	5.242	5.246	-0.004	96	145146	25.0	27.3	
38 Vinyl acetate	43	5.278	5.283	-0.005	94	66357	25.0	24.0	
44 2-Butanone (MEK)	43	5.972	5.982	-0.010	49	42402	50.0	46.1	
43 cis-1,2-Dichloroethene	96	5.990	5.982	0.008	85	78570	25.0	27.0	
42 2,2-Dichloropropane	77	5.990	5.989	0.002	66	83097	25.0	27.6	
49 Tetrahydrofuran	42	6.288	6.281	0.008	80	37414	50.0	56.6	
48 Chlorobromomethane	128	6.282	6.281	0.002	89	29353	25.0	25.3	
50 Chloroform	83	6.416	6.414	0.002	95	121573	25.0	26.6	
51 1,1,1-Trichloroethane	97	6.580	6.585	-0.005	97	94502	25.0	27.1	
52 Cyclohexane	56	6.665	6.664	0.001	96	160049	25.0	28.5	
53 Carbon tetrachloride	117	6.757	6.767	-0.010	95	66664	25.0	24.5	
54 1,1-Dichloropropene	75	6.775	6.773	0.002	94	92563	25.0	26.6	
55 Isobutyl alcohol	41	6.933	6.938	-0.005	88	32224	625.0	596.8	
56 Benzene	78	6.982	6.986	-0.004	97	279397	25.0	27.7	
57 1,2-Dichloroethane	62	7.061	7.065	-0.004	96	82990	25.0	25.1	
59 n-Heptane	43	7.353	7.345	0.008	95	84739	25.0	26.4	
61 Trichloroethene	130	7.718	7.722	-0.004	96	60983	25.0	26.6	
63 Methylcyclohexane	83	7.967	7.966	0.001	94	123591	25.0	27.3	
64 1,2-Dichloropropane	63	7.998	7.990	0.008	88	66666	25.0	25.0	
65 1,4-Dioxane	88	8.077	8.075	0.002	40	7809	500.0	468.1	M
67 Dibromomethane	93	8.083	8.081	0.002	93	29036	25.0	24.4	
68 Dichlorobromomethane	83	8.271	8.270	0.001	98	66762	25.0	23.9	
71 cis-1,3-Dichloropropene	75	8.721	8.720	0.001	91	71082	25.0	22.2	
72 4-Methyl-2-pentanone (MIBK	43	8.855	8.854	0.001	97	94789	50.0	48.9	
73 Toluene	91	9.050	9.048	0.002	99	245530	25.0	28.0	
74 trans-1,3-Dichloropropene	75	9.299	9.292	0.007	98	55603	25.0	23.1	
75 Ethyl methacrylate	69	9.354	9.347	0.007	91	52242	25.0	23.6	
76 1,1,2-Trichloroethane	97	9.488	9.493	-0.005	89	43032	25.0	27.0	
77 Tetrachloroethene	164	9.567	9.566	0.001	96	43168	25.0	27.5	
78 1,3-Dichloropropane	76	9.652	9.651	0.001	92	77521	25.0	26.2	
79 2-Hexanone	43	9.695	9.687	0.008	95	55014	50.0	49.8	M
81 Chlorodibromomethane	129	9.871	9.864	0.007	87	31276	25.0	23.1	
82 Ethylene Dibromide	107	9.981	9.985	-0.004	95	36764	25.0	25.4	
83 3-Chlorobenzotrifluoride	180	10.431	10.429	0.002	93	83450	25.0	27.3	
84 Chlorobenzene	112	10.467	10.472	-0.005	91	145556	25.0	26.6	
85 4-Chlorobenzotrifluoride	180	10.522	10.521	0.001	95	80499	25.0	28.3	
87 Ethylbenzene	106	10.571	10.563	0.008	99	86627	25.0	26.4	
86 1,1,1,2-Tetrachloroethane	131	10.559	10.563	-0.004	42	48143	25.0	25.5	
88 m-Xylene & p-Xylene	106	10.705	10.697	0.008	99	111891	25.0	27.6	
89 o-Xylene	106	11.076	11.080	-0.004	97	112080	25.0	26.9	
90 Styrene	104	11.106	11.099	0.007	95	157741	25.0	25.7	
91 Bromoform	173	11.283	11.287	-0.004	93	17267	25.0	23.8	
92 2-Chlorobenzotrifluoride	180	11.343	11.342	0.001	96	86153	25.0	27.1	
93 Isopropylbenzene	105	11.447	11.451	-0.004	97	302221	25.0	29.4	
96 1,1,2,2-Tetrachloroethane	83	11.757	11.756	0.001	96	58000	25.0	27.1	
95 Bromobenzene	156	11.769	11.768	0.001	97	60469	25.0	25.2	
97 trans-1,4-Dichloro-2-buten	53	11.794	11.792	0.002	60	15381	25.0	22.8	
98 1,2,3-Trichloropropane	110	11.812	11.810	0.002	83	18469	25.0	26.2	
99 N-Propylbenzene	120	11.867	11.871	-0.004	99	76375	25.0	26.6	
100 2-Chlorotoluene	126	11.958	11.956	0.002	95	67028	25.0	26.5	
101 3-Chlorotoluene	126	12.025	12.023	0.002	96	66559	25.0	25.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.049	12.048	0.001	93	256568	25.0	27.8	
103 4-Chlorotoluene	126	12.080	12.078	0.002	99	67753	25.0	26.1	
104 tert-Butylbenzene	119	12.365	12.364	0.001	92	188912	25.0	26.3	
106 1,2,4-Trimethylbenzene	105	12.426	12.425	0.001	97	263177	25.0	27.5	
107 1,2-dichloro-4-(trifluorom	214	12.457	12.455	0.002	97	70285	25.0	26.3	
108 sec-Butylbenzene	105	12.591	12.589	0.002	95	314946	25.0	28.3	
109 1,3-Dichlorobenzene	146	12.712	12.711	0.001	95	127066	25.0	27.0	
110 4-Isopropyltoluene	119	12.743	12.741	0.002	96	242039	25.0	26.9	
111 1,4-Dichlorobenzene	146	12.816	12.814	0.002	89	127353	25.0	26.1	
113 2,4-Dichloro-1-(triflourom	214	12.834	12.826	0.008	43	79958	25.0	29.8	
114 2,5-Dichlorobenzotrifluori	214	12.870	12.869	0.001	97	75184	25.0	25.5	
116 n-Butylbenzene	91	13.156	13.155	0.001	98	241849	25.0	27.9	
117 1,2-Dichlorobenzene	146	13.169	13.173	-0.005	92	125111	25.0	26.6	
118 1,2-Dibromo-3-Chloropropan	75	13.959	13.964	-0.005	70	9741	25.0	25.9	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.105	14.104	0.001	99	389895	75.0	88.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.519	14.518	0.001	99	285810	50.0	59.2	
122 1,2,4-Trichlorobenzene	180	14.781	14.791	-0.010	93	99622	25.0	27.3	
123 Hexachlorobutadiene	225	14.927	14.931	-0.004	95	38609	25.0	27.1	
124 Naphthalene	128	15.054	15.053	0.001	97	165187	25.0	26.4	
125 1,2,3-Trichlorobenzene	180	15.279	15.278	0.001	94	83313	25.0	27.3	
126 2,4,5-Trichlorotoluene	159	16.046	16.044	0.002	0	57044	25.0	25.4	
127 2,3,6-Trichlorotoluene	159	16.149	16.148	0.001	94	54138	25.0	27.0	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		50.0	54.2	
S 131 Xylenes, Total	106				0		50.0	54.5	
S 132 1,3-Dichloropropene, Total	1				0		50.0	45.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	1.00	Units: uL	
voaWAcropri R_00006	Amount Added:	5.00	Units: uL	
voaWeemixpri_00001	Amount Added:	1.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	1.00	Units: uL	
voaWVApri Res_00001	Amount Added:	1.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

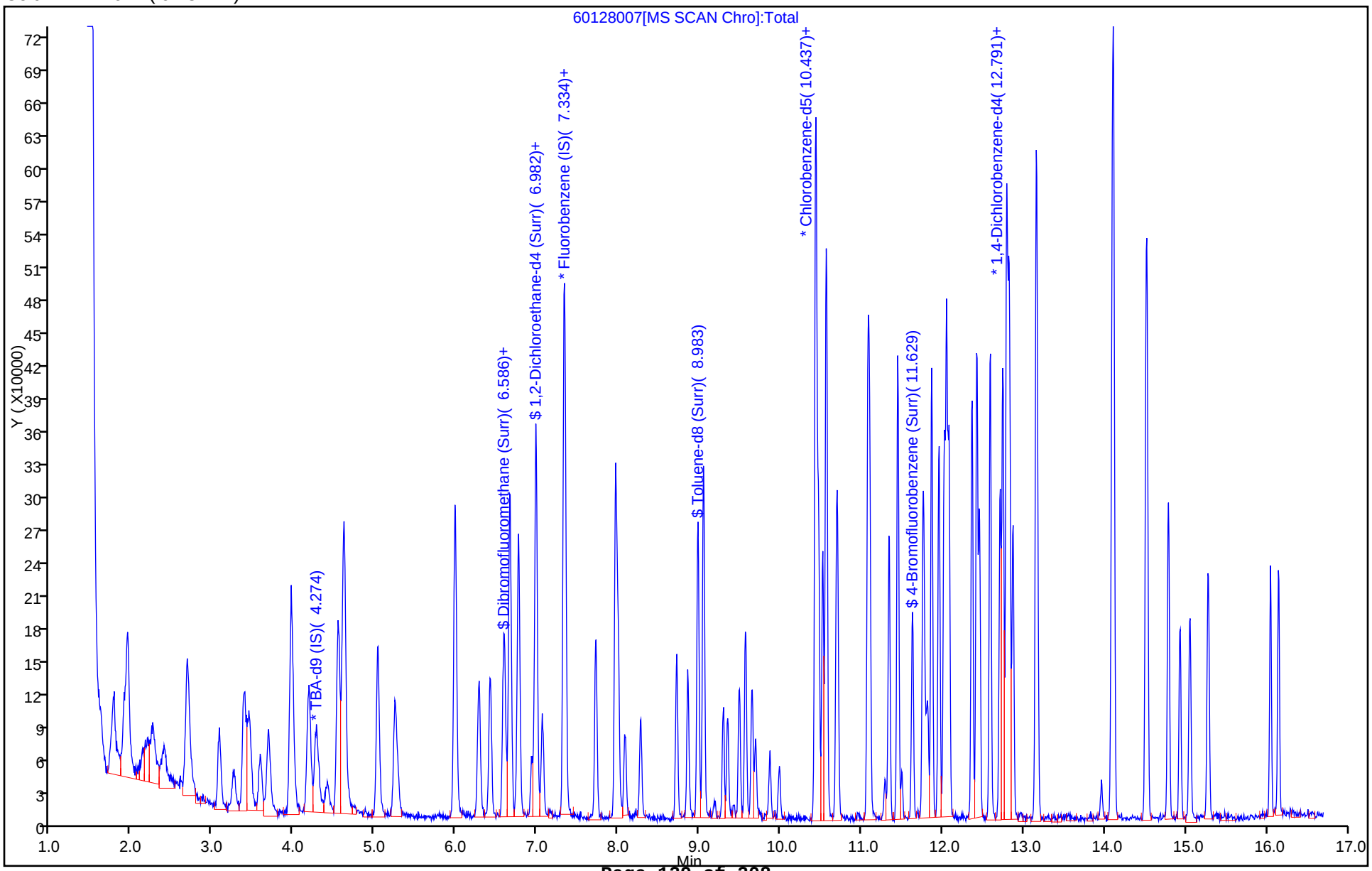
Report Date: 29-Jan-2015 12:59:08 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D

Injection Date:	28-Jan-2015 14:21:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

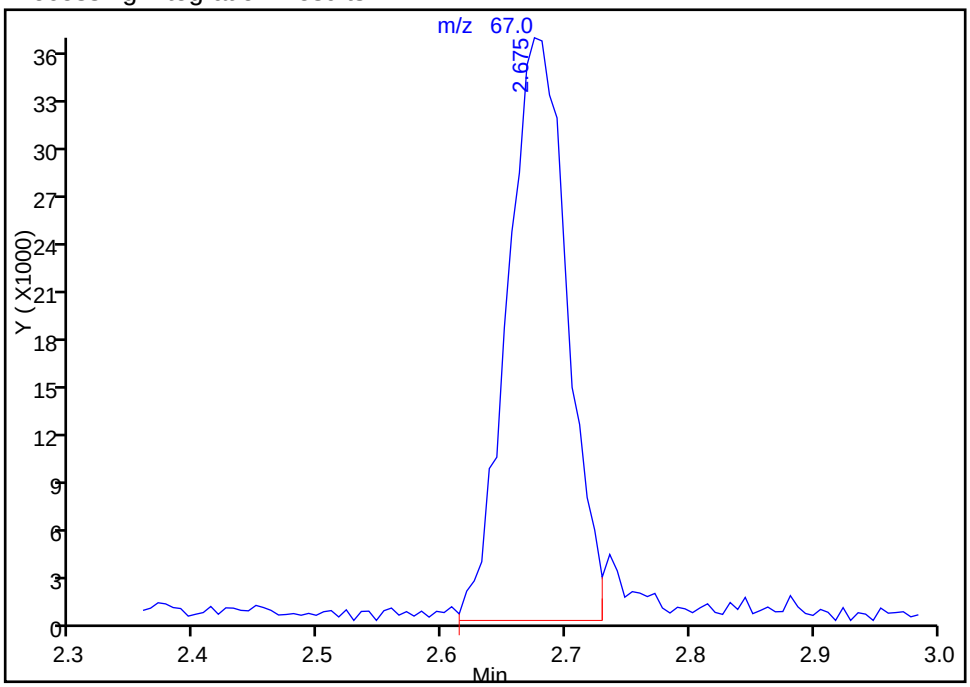
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D
Injection Date: 28-Jan-2015 14:21:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

17 Dichlorofluoromethane, CAS: 75-43-4

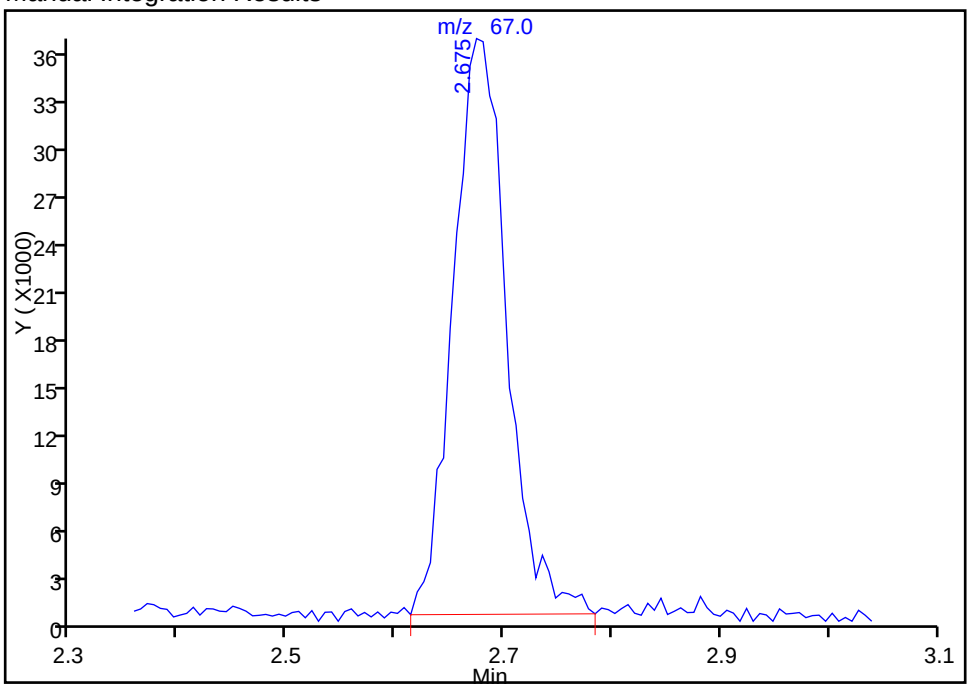
Processing Integration Results

RT: 2.67
Area: 123498
Amount: 28.870358
Amount Units: ng



Manual Integration Results

RT: 2.67
Area: 124955
Amount: 29.161301
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:28:06
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

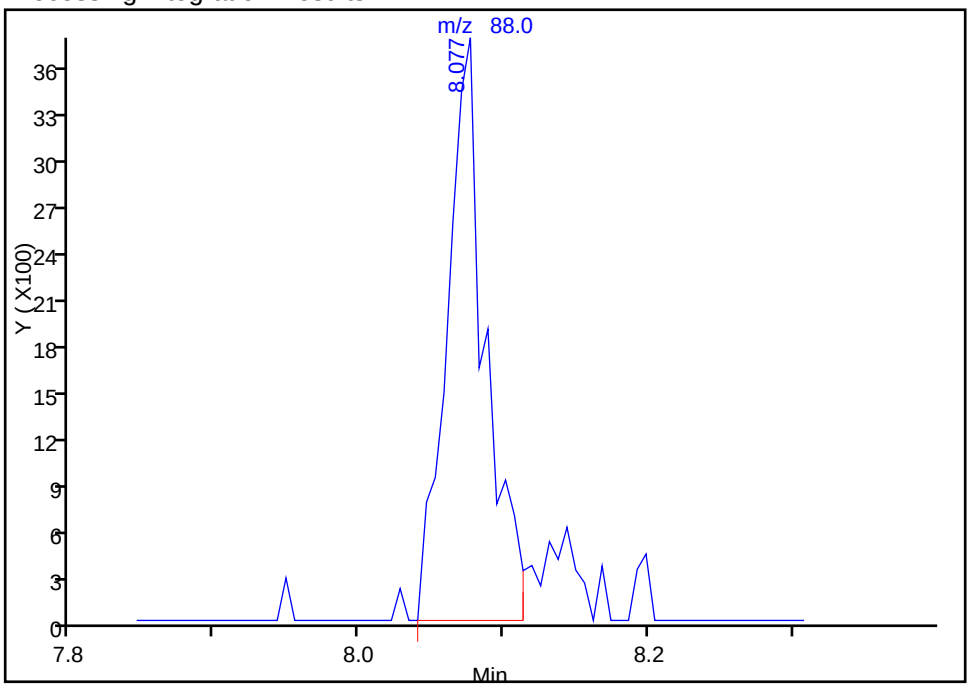
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D
Injection Date: 28-Jan-2015 14:21:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

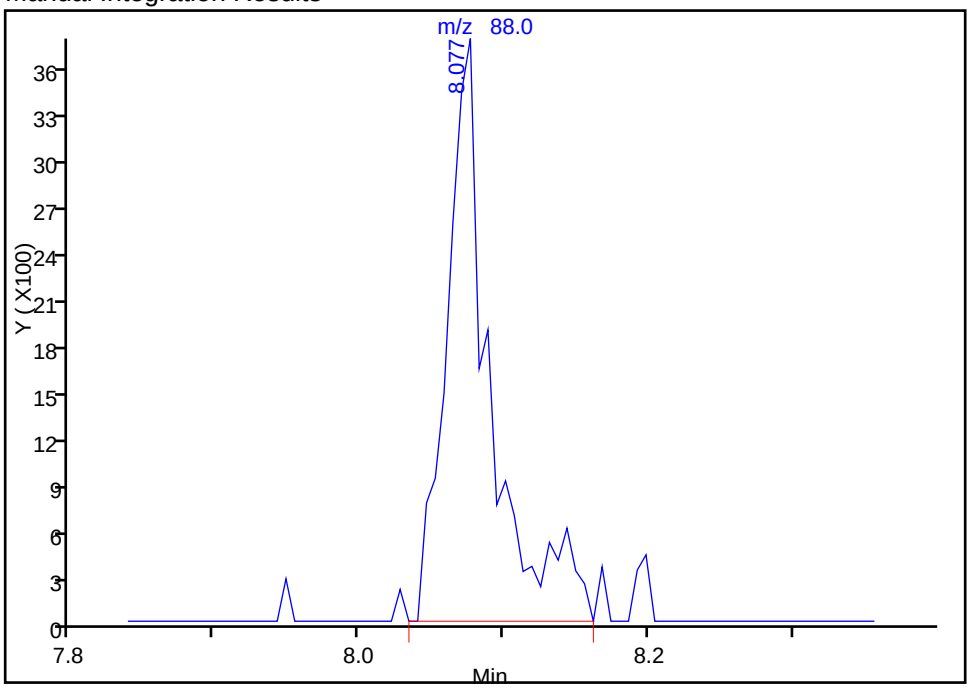
Processing Integration Results

RT: 8.08
Area: 6858
Amount: 429.4537
Amount Units: ng



Manual Integration Results

RT: 8.08
Area: 7809
Amount: 468.0903
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:31:00
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

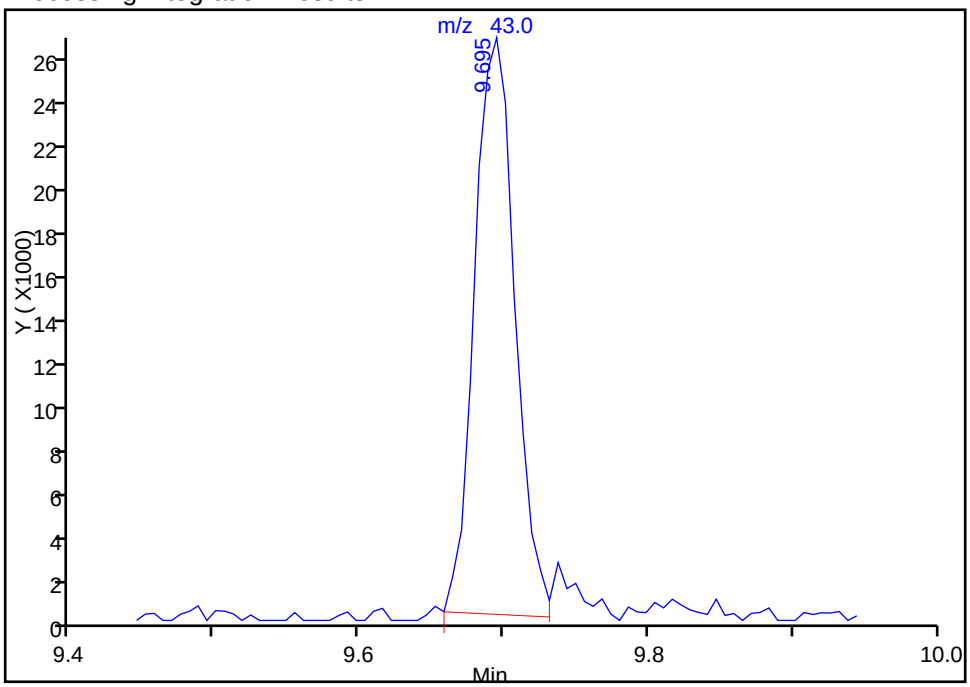
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128007.D				
Injection Date:	28-Jan-2015 14:21:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

79 2-Hexanone, CAS: 591-78-6

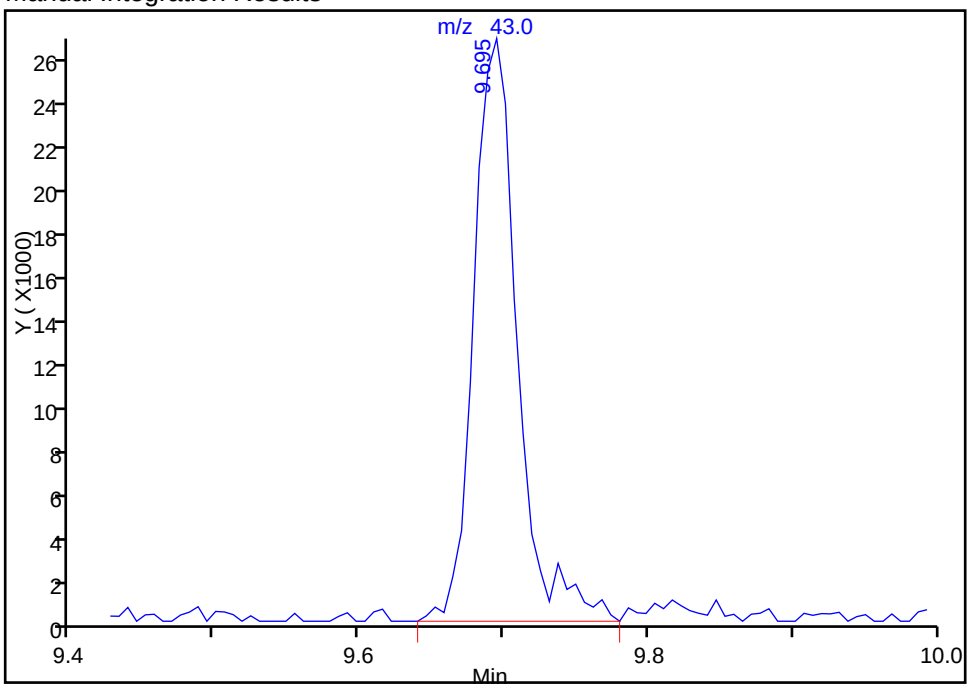
Processing Integration Results

RT: 9.69
Area: 50333
Amount: 46.043032
Amount Units: ng



Manual Integration Results

RT: 9.69
Area: 55014
Amount: 49.792035
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:31:00
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128008.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 28-Jan-2015 14:45:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS VSTD10
Misc. Info.: 180-0005450-008
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:09 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:09:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.279	4.279	0.000	95	146525	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.327	0.000	97	447720	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.442	10.442	0.000	93	93543	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.790	12.790	0.000	96	154402	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.597	0.000	92	103502	50.0	51.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	49	150111	50.0	51.8	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	421866	50.0	57.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.628	0.000	84	172172	50.0	54.9	
11 Dichlorodifluoromethane	85	1.608	1.608	0.000	100	123370	50.0	52.0	
12 Chloromethane	50	1.773	1.773	0.000	98	180612	50.0	49.5	
13 Vinyl chloride	62	1.907	1.907	0.000	98	164249	50.0	50.8	
14 Butadiene	39	1.943	1.943	0.000	91	173303	50.0	50.2	
15 Bromomethane	94	2.253	2.253	0.000	90	68708	50.0	52.9	
16 Chloroethane	64	2.393	2.393	0.000	98	103324	50.0	52.1	
17 Dichlorofluoromethane	67	2.673	2.673	0.000	96	239388	50.0	50.6	
18 Trichlorofluoromethane	101	2.685	2.685	0.000	74	186613	50.0	50.5	
20 Ethyl ether	59	3.075	3.075	0.000	95	140456	50.0	49.8	
21 Acrolein	56	3.263	3.263	0.000	93	64846	150.0	144.9	
22 1,1-Dichloroethene	96	3.373	3.373	0.000	94	131155	50.0	52.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.427	0.000	95	127227	50.0	50.0	
24 Acetone	43	3.464	3.464	0.000	100	72525	100.0	91.6	
25 Iodomethane	142	3.579	3.579	0.000	98	186664	50.0	50.1	
26 Carbon disulfide	76	3.689	3.689	0.000	100	366360	50.0	49.2	
29 3-Chloro-1-propene	76	3.957	3.957	0.000	78	81645	50.0	50.0	
30 Methyl acetate	43	3.969	3.969	0.000	97	476543	250.0	245.8	
31 Methylene Chloride	84	4.176	4.176	0.000	97	176505	50.0	48.0	
32 2-Methyl-2-propanol	59	4.407	4.407	0.000	96	82385	500.0	497.5	
33 Acrylonitrile	53	4.547	4.547	0.000	99	503259	500.0	497.9	
34 trans-1,2-Dichloroethene	96	4.614	4.614	0.000	74	152947	50.0	50.5	
35 Methyl tert-butyl ether	73	4.614	4.614	0.000	98	394527	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.033	5.033	0.000	93	218490	50.0	50.2	
37 1,1-Dichloroethane	63	5.246	5.246	0.000	96	295240	50.0	50.4	
38 Vinyl acetate	43	5.283	5.283	0.000	97	142927	50.0	47.0	
44 2-Butanone (MEK)	43	5.982	5.982	0.000	48	97685	100.0	96.2	
43 cis-1,2-Dichloroethene	96	5.982	5.982	0.000	85	160524	50.0	50.0	
42 2,2-Dichloropropane	77	5.989	5.989	0.000	64	163798	50.0	49.3	
49 Tetrahydrofuran	42	6.281	6.281	0.000	68	62273	100.0	85.4	
48 Chlorobromomethane	128	6.281	6.281	0.000	91	61127	50.0	47.8	
50 Chloroform	83	6.414	6.414	0.000	94	254065	50.0	50.4	
51 1,1,1-Trichloroethane	97	6.585	6.585	0.000	98	189759	50.0	49.4	
52 Cyclohexane	56	6.664	6.664	0.000	95	320878	50.0	51.9	
53 Carbon tetrachloride	117	6.767	6.767	0.000	94	154066	50.0	51.3	
54 1,1-Dichloropropene	75	6.773	6.773	0.000	93	188906	50.0	49.3	
55 Isobutyl alcohol	41	6.938	6.938	0.000	89	71829	1250.0	1206.0	M
56 Benzene	78	6.986	6.986	0.000	97	577373	50.0	51.9	
57 1,2-Dichloroethane	62	7.065	7.065	0.000	97	178647	50.0	48.9	
59 n-Heptane	43	7.345	7.345	0.000	95	182403	50.0	51.5	
61 Trichloroethene	130	7.722	7.722	0.000	96	123549	50.0	48.8	
63 Methylcyclohexane	83	7.966	7.966	0.000	94	262105	50.0	52.5	
64 1,2-Dichloropropane	63	7.990	7.990	0.000	86	142558	50.0	48.5	
65 1,4-Dioxane	88	8.075	8.075	0.000	38	18208	1000.0	989.5	
67 Dibromomethane	93	8.081	8.081	0.000	94	67249	50.0	51.2	
68 Dichlorobromomethane	83	8.270	8.270	0.000	98	148860	50.0	48.3	
71 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	92	162719	50.0	46.0	
72 4-Methyl-2-pentanone (MIBK	43	8.854	8.854	0.000	97	221045	100.0	104.7	
73 Toluene	91	9.048	9.048	0.000	98	527825	50.0	55.2	
74 trans-1,3-Dichloropropene	75	9.292	9.292	0.000	98	128942	50.0	49.2	
75 Ethyl methacrylate	69	9.347	9.347	0.000	92	122480	50.0	50.8	
76 1,1,2-Trichloroethane	97	9.493	9.493	0.000	94	88732	50.0	51.1	
77 Tetrachloroethene	164	9.566	9.566	0.000	94	90521	50.0	53.0	
78 1,3-Dichloropropane	76	9.651	9.651	0.000	94	164779	50.0	51.0	
79 2-Hexanone	43	9.687	9.687	0.000	97	123231	100.0	102.3	
81 Chlorodibromomethane	129	9.864	9.864	0.000	91	75589	50.0	51.3	
82 Ethylene Dibromide	107	9.985	9.985	0.000	98	81540	50.0	51.6	
83 3-Chlorobenzotrifluoride	180	10.429	10.429	0.000	93	189015	50.0	56.8	
84 Chlorobenzene	112	10.472	10.472	0.000	90	319491	50.0	53.5	
85 4-Chlorobenzotrifluoride	180	10.521	10.521	0.000	97	170754	50.0	55.1	
87 Ethylbenzene	106	10.563	10.563	0.000	99	193055	50.0	53.9	
86 1,1,1,2-Tetrachloroethane	131	10.563	10.563	0.000	80	108450	50.0	52.7	
88 m-Xylene & p-Xylene	106	10.697	10.697	0.000	99	235617	50.0	53.3	
89 o-Xylene	106	11.080	11.080	0.000	96	251637	50.0	55.4	
90 Styrene	104	11.099	11.099	0.000	94	362245	50.0	54.2	
91 Bromoform	173	11.287	11.287	0.000	96	39579	50.0	50.1	
92 2-Chlorobenzotrifluoride	180	11.342	11.342	0.000	95	192703	50.0	55.5	
93 Isopropylbenzene	105	11.451	11.451	0.000	97	633598	50.0	56.6	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.756	0.000	96	122215	50.0	52.3	
95 Bromobenzene	156	11.768	11.768	0.000	96	135116	50.0	50.0	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	70	34948	50.0	46.0	
98 1,2,3-Trichloropropane	110	11.810	11.810	0.000	85	40329	50.0	51.0	
99 N-Propylbenzene	120	11.871	11.871	0.000	99	168244	50.0	52.1	
100 2-Chlorotoluene	126	11.956	11.956	0.000	94	141092	50.0	49.6	
101 3-Chlorotoluene	126	12.023	12.023	0.000	96	156510	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.048	0.000	94	548969	50.0	52.9	
103 4-Chlorotoluene	126	12.078	12.078	0.000	99	144067	50.0	49.3	
104 tert-Butylbenzene	119	12.364	12.364	0.000	92	409657	50.0	50.7	
106 1,2,4-Trimethylbenzene	105	12.425	12.425	0.000	98	571367	50.0	53.2	
107 1,2-dichloro-4-(trifluorom	214	12.455	12.455	0.000	97	158534	50.0	52.8	
108 sec-Butylbenzene	105	12.589	12.589	0.000	95	675141	50.0	54.1	
109 1,3-Dichlorobenzene	146	12.711	12.711	0.000	95	272251	50.0	51.4	
110 4-Isopropyltoluene	119	12.741	12.741	0.000	96	531099	50.0	52.4	
111 1,4-Dichlorobenzene	146	12.814	12.814	0.000	92	272272	50.0	49.7	
113 2,4-Dichloro-1-(triflourom	214	12.826	12.826	0.000	57	168861	50.0	56.1	
114 2,5-Dichlorobenzotrifluori	214	12.869	12.869	0.000	97	166815	50.0	50.3	
116 n-Butylbenzene	91	13.155	13.155	0.000	98	514864	50.0	52.8	
117 1,2-Dichlorobenzene	146	13.173	13.173	0.000	95	272148	50.0	51.4	
118 1,2-Dibromo-3-Chloropropan	75	13.958	13.964	-0.006	76	20104	50.0	47.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.104	14.104	0.000	99	818401	150.0	164.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.518	14.518	0.000	99	576450	100.0	106.2	
122 1,2,4-Trichlorobenzene	180	14.791	14.791	0.000	94	203185	50.0	49.6	
123 Hexachlorobutadiene	225	14.931	14.931	0.000	96	81412	50.0	50.8	
124 Naphthalene	128	15.053	15.053	0.000	98	357281	50.0	50.7	
125 1,2,3-Trichlorobenzene	180	15.278	15.278	0.000	94	168045	50.0	49.0	
126 2,4,5-Trichlorotoluene	159	16.044	16.044	0.000	0	125544	50.0	49.7	
127 2,3,6-Trichlorotoluene	159	16.148	16.148	0.000	95	113503	50.0	50.4	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	100.5	
S 131 Xylenes, Total	106				0		100.0	108.7	
S 132 1,3-Dichloropropene, Total	1				0		100.0	95.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	2.00	Units: uL	
voaWeemixpri_00001	Amount Added:	2.00	Units: uL	
voaWVApri Res_00001	Amount Added:	2.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	2.00	Units: uL	
voaWAcropri R_00006	Amount Added:	6.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

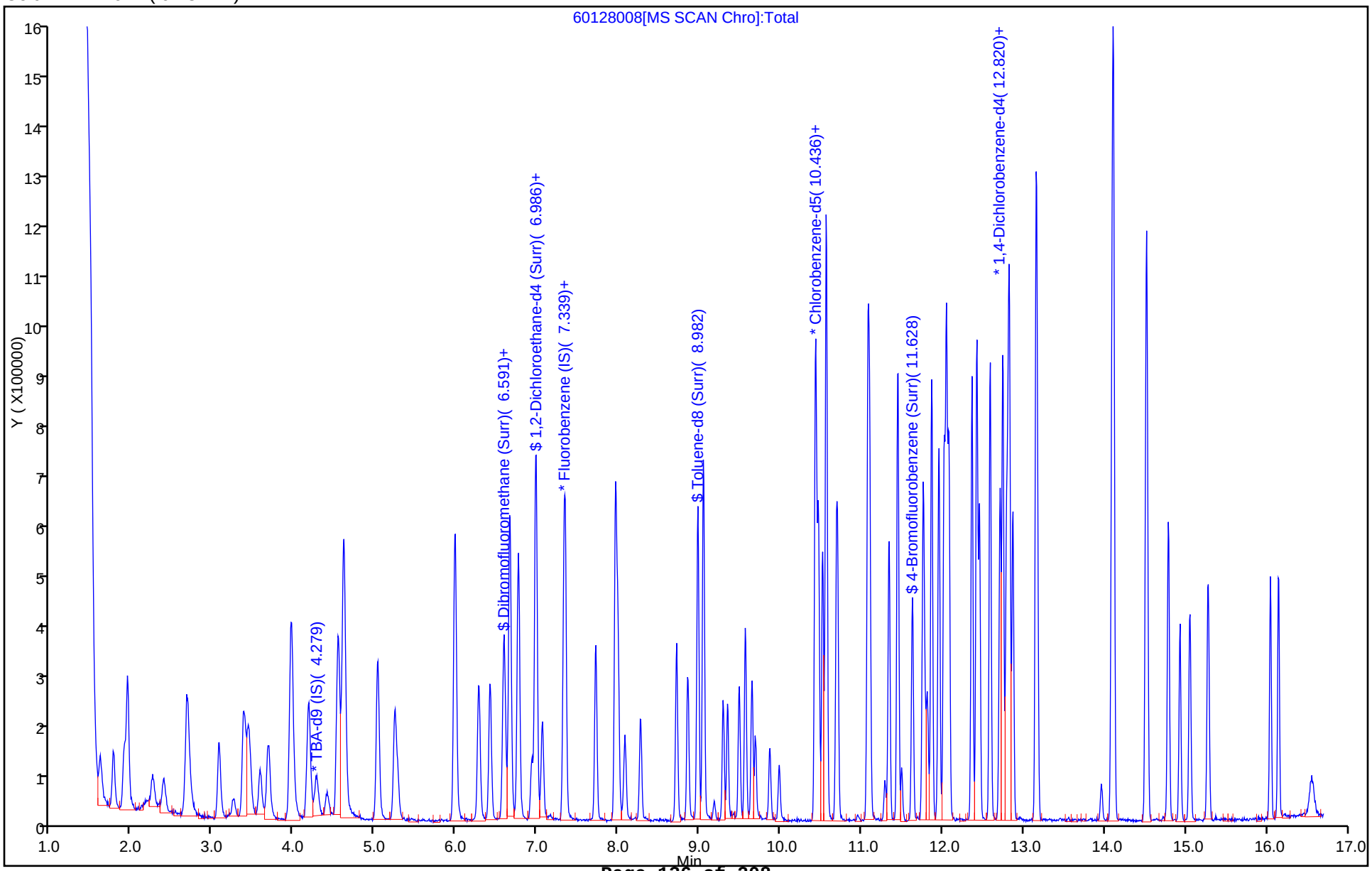
Report Date: 29-Jan-2015 12:59:09 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128008.D

Injection Date:	28-Jan-2015 14:45:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

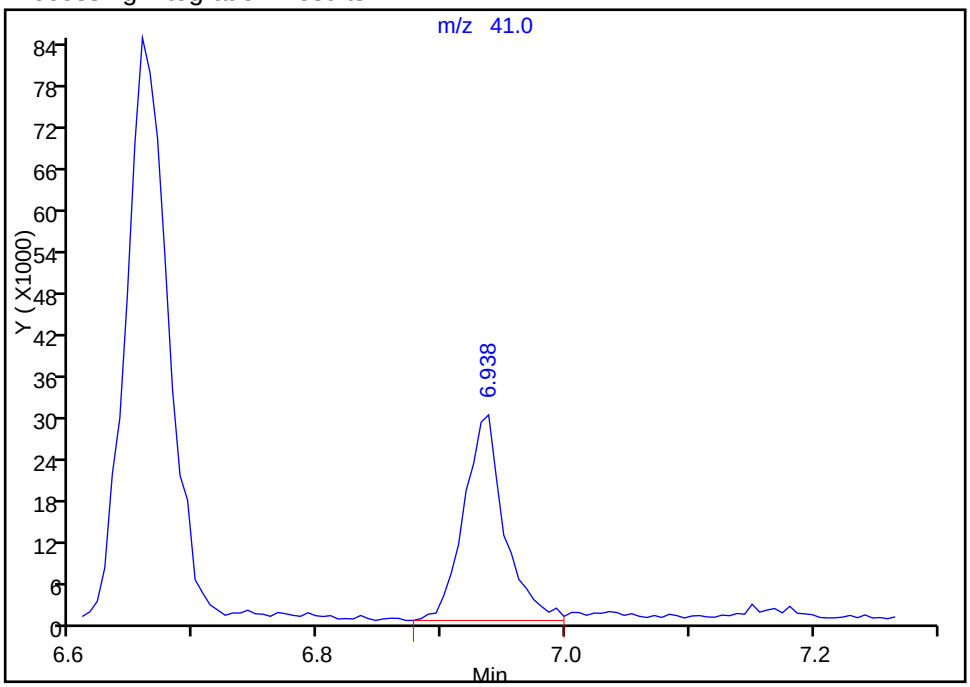
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128008.D				
Injection Date:	28-Jan-2015 14:45:30	Instrument ID:	CHHP6		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

55 Isobutyl alcohol, CAS: 78-83-1

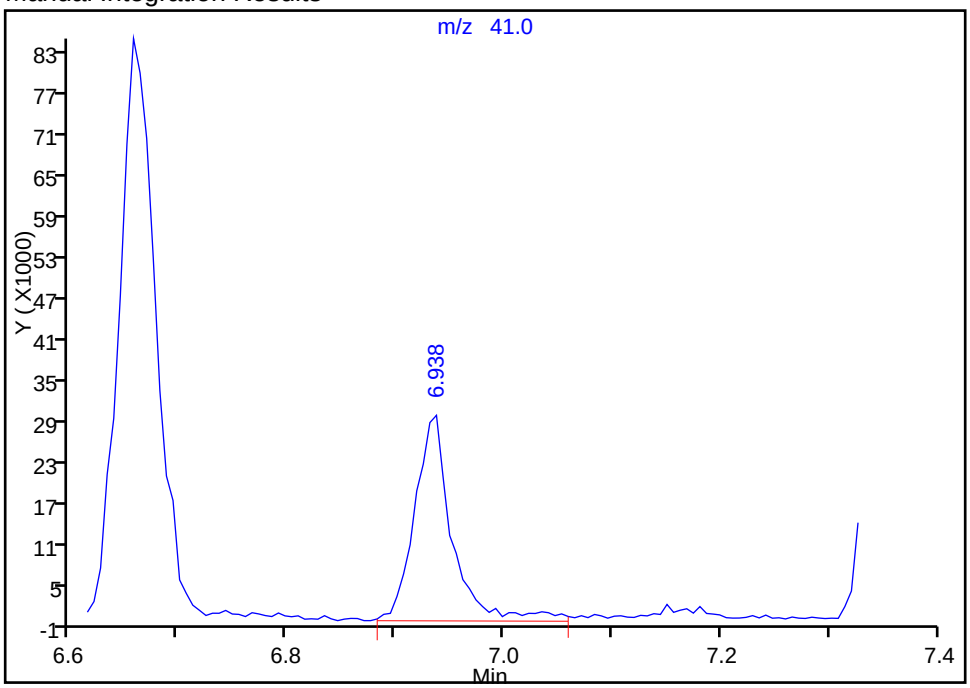
Processing Integration Results

RT: 6.94
Area: 67676
Amount: 1108.5181
Amount Units: ng



Manual Integration Results

RT: 6.94
Area: 71829
Amount: 1206.0150
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 11:08:50
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Jan-2015 15:09:30 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD15
Misc. Info.: 180-0005450-009
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:10 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:51:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	96	177406	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	98	494191	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	92	111156	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.789	0.000	95	163776	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.596	0.000	93	157502	75.0	70.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	69	241234	75.0	75.4	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	93	661202	75.0	75.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	83	269743	75.0	72.4	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	99	178504	75.0	68.2	
12 Chloromethane	50	1.759	1.759	0.000	99	283765	75.0	70.5	
13 Vinyl chloride	62	1.893	1.893	0.000	98	249364	75.0	69.9	
14 Butadiene	39	1.936	1.936	0.000	92	257326	75.0	67.5	
15 Bromomethane	94	2.240	2.240	0.000	92	100551	75.0	70.2	M
16 Chloroethane	64	2.380	2.380	0.000	99	150069	75.0	68.6	
17 Dichlorofluoromethane	67	2.666	2.666	0.000	96	358712	75.0	68.8	
18 Trichlorofluoromethane	101	2.684	2.684	0.000	68	264073	75.0	64.7	
20 Ethyl ether	59	3.067	3.067	0.000	95	219655	75.0	70.6	
21 Acrolein	56	3.244	3.244	0.000	99	85368	175.0	172.8	
22 1,1-Dichloroethene	96	3.365	3.365	0.000	92	180761	75.0	65.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.426	3.426	0.000	96	190645	75.0	67.9	
24 Acetone	43	3.451	3.451	0.000	99	126400	150.0	144.6	
25 Iodomethane	142	3.578	3.578	0.000	98	276926	75.0	67.4	
26 Carbon disulfide	76	3.676	3.676	0.000	100	538178	75.0	65.5	
29 3-Chloro-1-propene	76	3.956	3.956	0.000	70	119671	75.0	66.4	
30 Methyl acetate	43	3.962	3.962	0.000	97	795107	375.0	371.6	
31 Methylene Chloride	84	4.175	4.175	0.000	98	255870	75.0	63.1	
32 2-Methyl-2-propanol	59	4.412	4.412	0.000	94	157863	750.0	787.4	
33 Acrylonitrile	53	4.540	4.540	0.000	99	825638	750.0	740.0	
34 trans-1,2-Dichloroethene	96	4.613	4.613	0.000	72	227148	75.0	68.0	
35 Methyl tert-butyl ether	73	4.613	4.613	0.000	98	611806	75.0	69.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.026	5.026	0.000	95	351514	75.0	73.1	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	97	443424	75.0	68.6	
38 Vinyl acetate	43	5.276	5.276	0.000	97	264095	75.0	78.6	
44 2-Butanone (MEK)	43	5.975	5.975	0.000	77	198782	150.0	177.4	
43 cis-1,2-Dichloroethene	96	5.981	5.981	0.000	86	240979	75.0	68.0	
42 2,2-Dichloropropane	77	5.987	5.987	0.000	64	241640	75.0	65.9	
49 Tetrahydrofuran	42	6.279	6.279	0.000	83	119820	150.0	148.8	
48 Chlorobromomethane	128	6.279	6.279	0.000	91	100988	75.0	71.6	
50 Chloroform	83	6.419	6.419	0.000	94	381367	75.0	68.5	
51 1,1,1-Trichloroethane	97	6.584	6.584	0.000	97	294109	75.0	69.4	
52 Cyclohexane	56	6.657	6.657	0.000	96	456085	75.0	66.8	
53 Carbon tetrachloride	117	6.760	6.760	0.000	96	218554	75.0	65.9	
54 1,1-Dichloropropene	75	6.766	6.766	0.000	93	307766	75.0	72.8	
55 Isobutyl alcohol	41	6.936	6.936	0.000	95	137058	1875.0	2084.8	
56 Benzene	78	6.985	6.985	0.000	98	924844	75.0	75.4	
57 1,2-Dichloroethane	62	7.058	7.058	0.000	97	302310	75.0	75.0	
59 n-Heptane	43	7.350	7.350	0.000	94	290134	75.0	74.2	
61 Trichloroethene	130	7.721	7.721	0.000	96	208800	75.0	74.7	
63 Methylcyclohexane	83	7.965	7.965	0.000	94	375853	75.0	68.3	
64 1,2-Dichloropropane	63	7.995	7.995	0.000	88	246898	75.0	76.0	
65 1,4-Dioxane	88	8.074	8.074	0.000	48	33822	1500.0	1665.1	M
67 Dibromomethane	93	8.080	8.080	0.000	97	106863	75.0	73.6	
68 Dichlorobromomethane	83	8.275	8.275	0.000	98	255826	75.0	75.2	
71 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	92	306111	75.0	78.4	
72 4-Methyl-2-pentanone (MIBK	43	8.853	8.853	0.000	98	401820	150.0	160.2	
73 Toluene	91	9.047	9.047	0.000	98	865706	75.0	76.2	
74 trans-1,3-Dichloropropene	75	9.291	9.291	0.000	96	258221	75.0	82.9	
75 Ethyl methacrylate	69	9.345	9.345	0.000	91	227823	75.0	79.4	
76 1,1,2-Trichloroethane	97	9.491	9.491	0.000	92	154194	75.0	74.7	
77 Tetrachloroethene	164	9.564	9.564	0.000	95	152121	75.0	75.0	
78 1,3-Dichloropropane	76	9.650	9.650	0.000	92	309767	75.0	80.7	
79 2-Hexanone	43	9.692	9.692	0.000	98	230885	150.0	161.4	
81 Chlorodibromomethane	129	9.869	9.869	0.000	90	134047	75.0	76.5	
82 Ethylene Dibromide	107	9.984	9.984	0.000	100	149846	75.0	79.8	
83 3-Chlorobenzotrifluoride	180	10.428	10.428	0.000	93	275294	75.0	69.6	
84 Chlorobenzene	112	10.471	10.471	0.000	91	533675	75.0	75.2	
85 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	97	261287	75.0	71.0	
87 Ethylbenzene	106	10.568	10.568	0.000	98	309783	75.0	72.8	
86 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	91	178444	75.0	73.0	
88 m-Xylene & p-Xylene	106	10.702	10.702	0.000	99	393071	75.0	74.8	
89 o-Xylene	106	11.079	11.079	0.000	97	395578	75.0	73.3	
90 Styrene	104	11.098	11.098	0.000	94	596747	75.0	75.1	
91 Bromoform	173	11.292	11.292	0.000	95	65704	75.0	70.0	
92 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	96	290061	75.0	70.3	
93 Isopropylbenzene	105	11.444	11.444	0.000	98	955292	75.0	71.8	
96 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	95	203512	75.0	73.3	
95 Bromobenzene	156	11.767	11.767	0.000	97	223525	75.0	78.0	
97 trans-1,4-Dichloro-2-buten	53	11.791	11.791	0.000	74	61317	75.0	76.1	
98 1,2,3-Trichloropropane	110	11.815	11.815	0.000	84	67823	75.0	80.8	
99 N-Propylbenzene	120	11.864	11.864	0.000	98	262417	75.0	76.6	
100 2-Chlorotoluene	126	11.955	11.955	0.000	94	221515	75.0	73.4	
101 3-Chlorotoluene	126	12.022	12.022	0.000	96	236047	75.0	74.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.047	12.047	0.000	93	836492	75.0	76.0	
103 4-Chlorotoluene	126	12.083	12.083	0.000	98	231900	75.0	74.9	
104 tert-Butylbenzene	119	12.363	12.363	0.000	92	663124	75.0	77.4	
106 1,2,4-Trimethylbenzene	105	12.424	12.424	0.000	98	854880	75.0	75.0	
107 1,2-dichloro-4-(trifluorom	214	12.460	12.460	0.000	97	230038	75.0	72.3	
108 sec-Butylbenzene	105	12.588	12.588	0.000	96	1021731	75.0	77.1	
109 1,3-Dichlorobenzene	146	12.710	12.710	0.000	93	404796	75.0	72.1	
110 4-Isopropyltoluene	119	12.740	12.740	0.000	96	816686	75.0	76.0	
111 1,4-Dichlorobenzene	146	12.813	12.813	0.000	92	431926	75.0	74.3	
113 2,4-Dichloro-1-(triflourom	214	12.831	12.831	0.000	96	236290	75.0	74.0	
114 2,5-Dichlorobenzotrifluori	214	12.868	12.868	0.000	98	251951	75.0	71.6	
116 n-Butylbenzene	91	13.154	13.154	0.000	97	782657	75.0	75.7	
117 1,2-Dichlorobenzene	146	13.166	13.166	0.000	92	413439	75.0	73.6	
118 1,2-Dibromo-3-Chloropropan	75	13.957	13.963	-0.006	79	31840	75.0	71.0	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.103	14.103	0.000	98	1177478	225.0	223.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.516	14.516	0.000	99	856615	150.0	148.8	
122 1,2,4-Trichlorobenzene	180	14.784	14.784	0.000	93	332715	75.0	76.5	
123 Hexachlorobutadiene	225	14.930	14.930	0.000	95	127169	75.0	74.8	
124 Naphthalene	128	15.052	15.052	0.000	98	596683	75.0	79.8	
125 1,2,3-Trichlorobenzene	180	15.277	15.277	0.000	94	279103	75.0	76.7	
126 2,4,5-Trichlorotoluene	159	16.049	16.049	0.000	0	192318	75.0	71.8	
127 2,3,6-Trichlorotoluene	159	16.147	16.147	0.000	93	170378	75.0	71.4	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		150.0	136.0	
S 131 Xylenes, Total	106				0		150.0	148.1	
S 132 1,3-Dichloropropene, Total	1				0		150.0	161.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	3.00	Units: uL	
voaWeemixpri_00001	Amount Added:	3.00	Units: uL	
voaWVApri Res_00001	Amount Added:	3.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	3.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	3.00	Units: uL	
voaWAcropri R_00006	Amount Added:	7.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

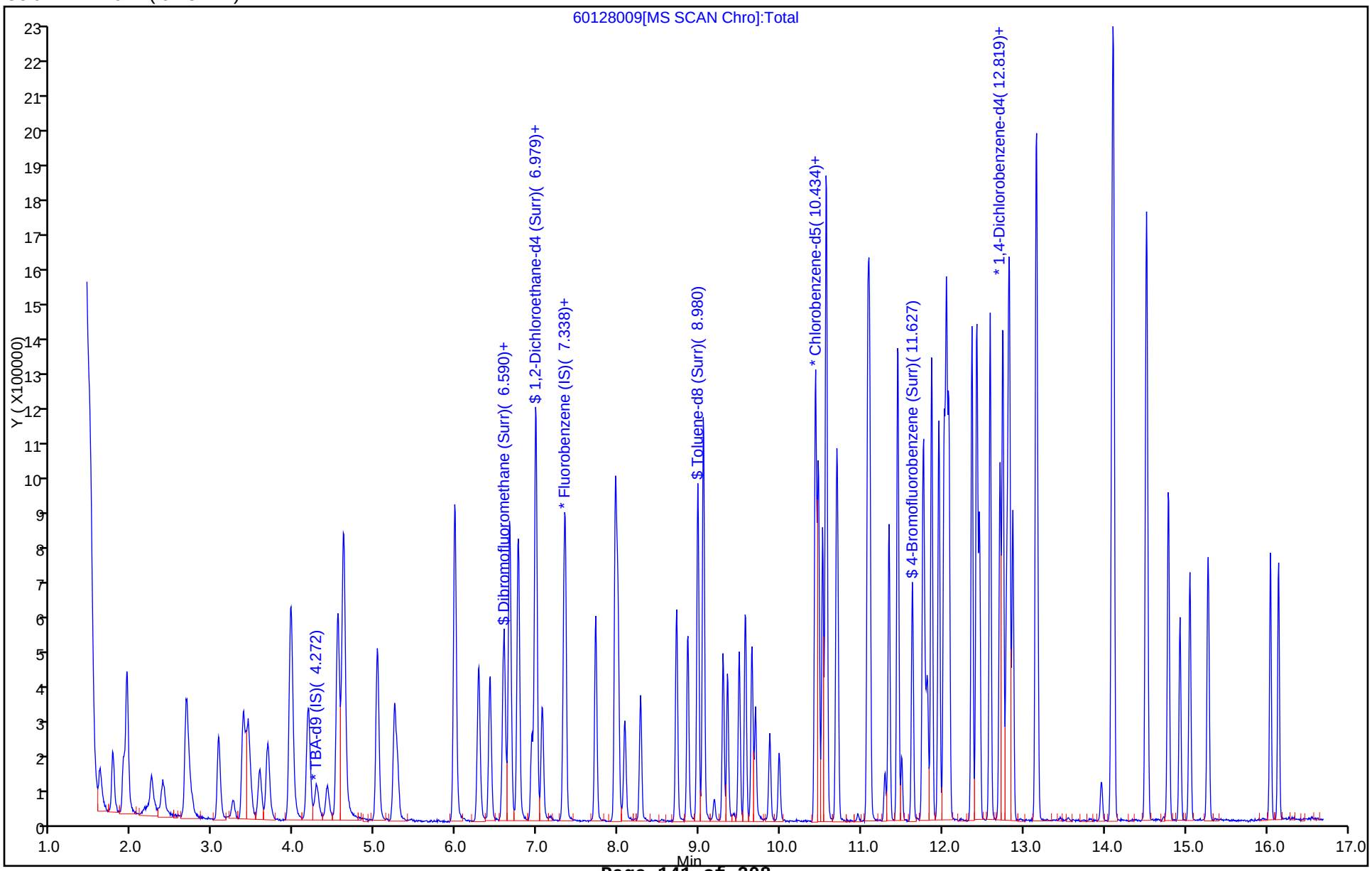
Report Date: 29-Jan-2015 12:59:11 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D

Injection Date:	28-Jan-2015 15:09:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

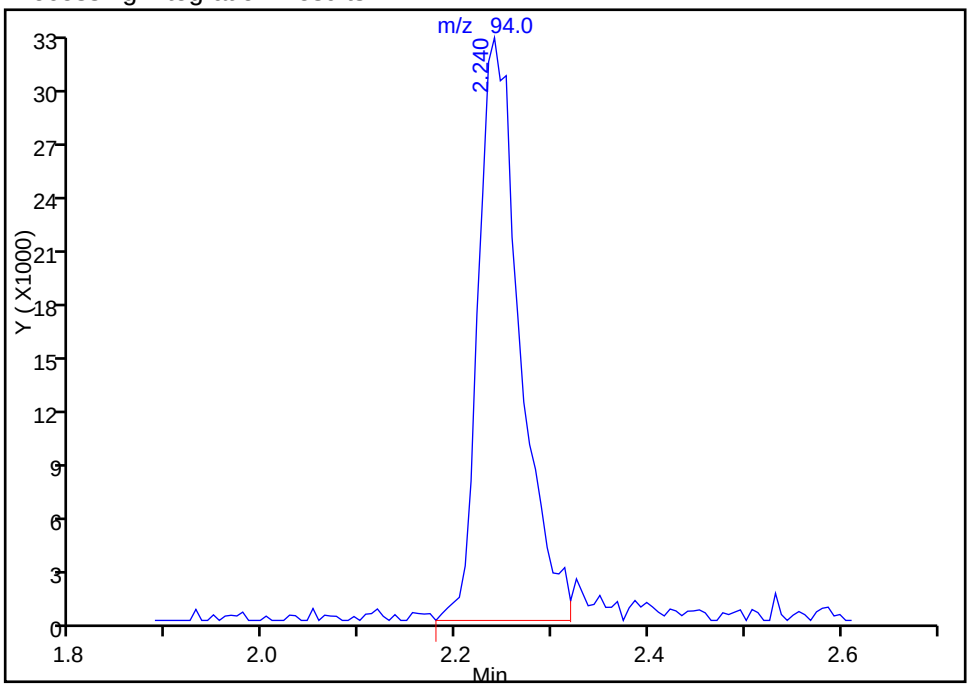
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D				
Injection Date:	28-Jan-2015 15:09:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD15				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

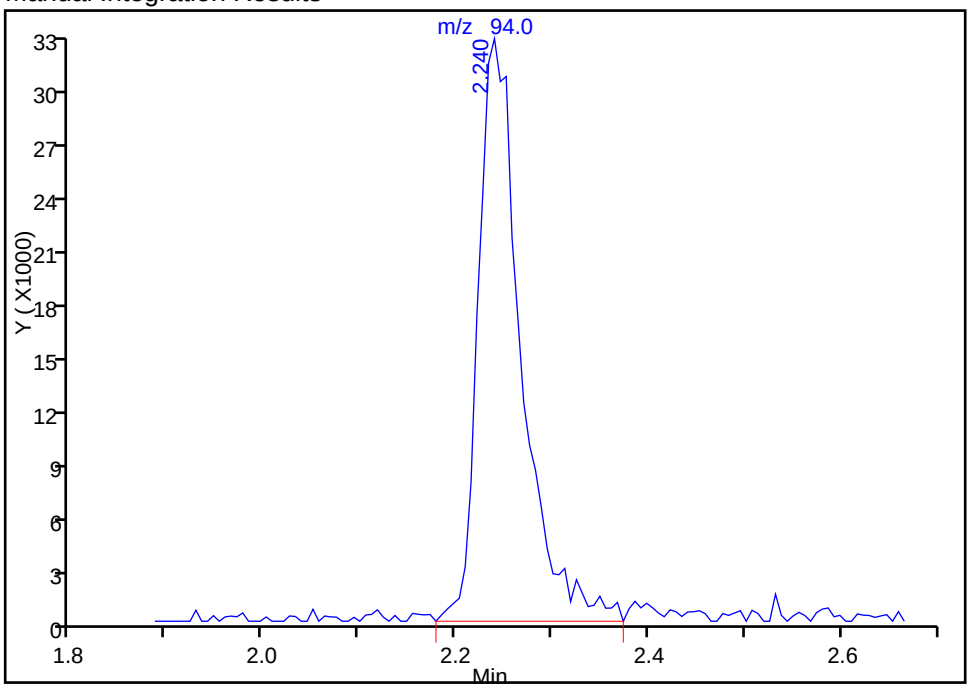
Processing Integration Results

RT: 2.24
Area: 97105
Amount: 68.057558
Amount Units: ng



Manual Integration Results

RT: 2.24
Area: 100551
Amount: 70.190204
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:51:24
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

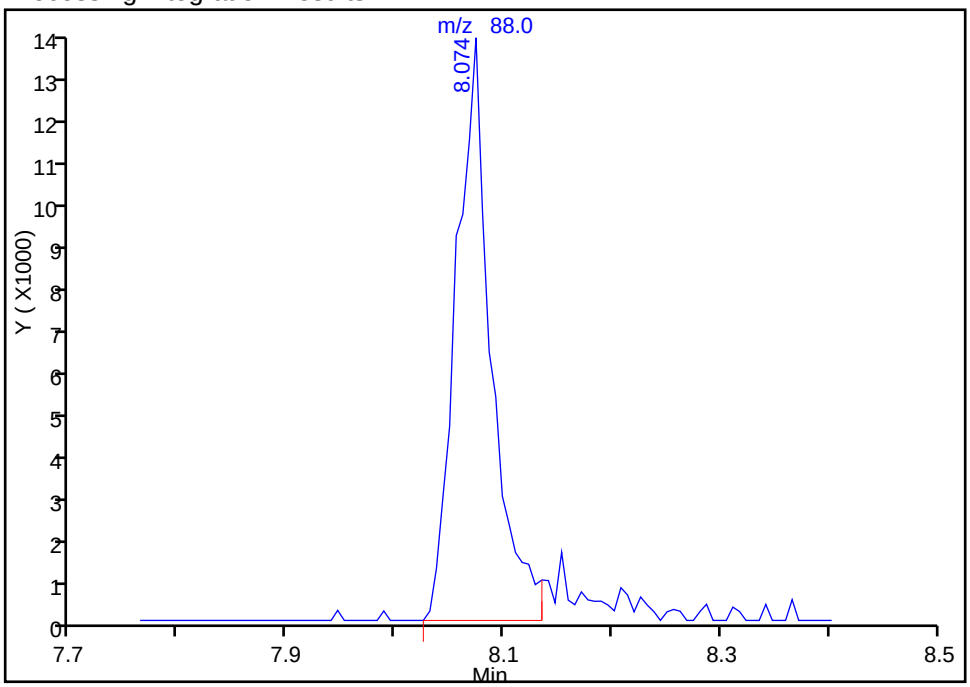
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128009.D
Injection Date: 28-Jan-2015 15:09:30 Instrument ID: CHHP6
Lims ID: IC VSTD15
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

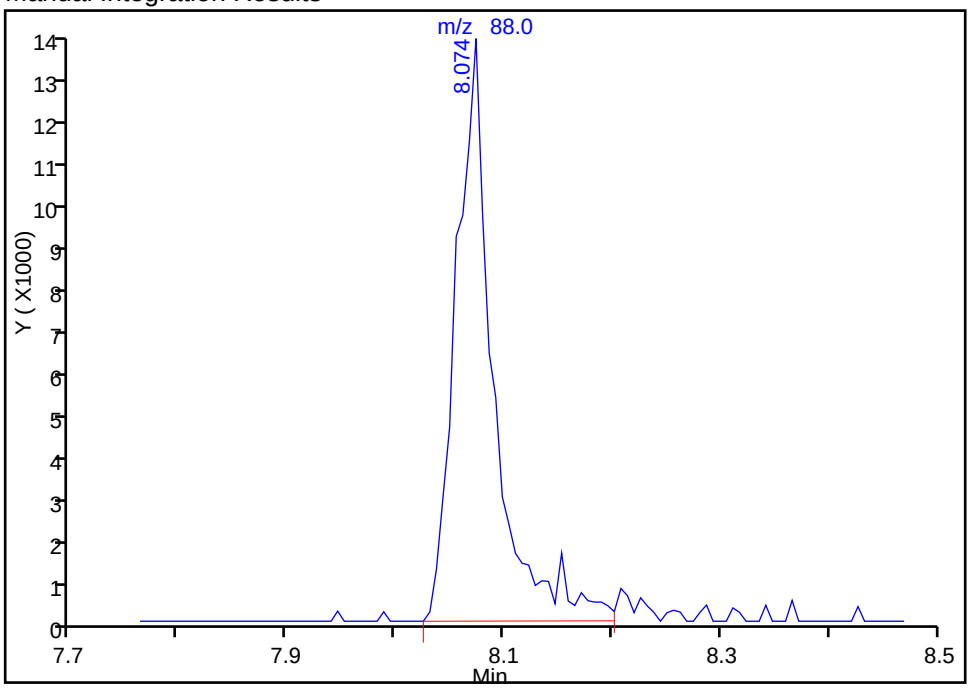
Processing Integration Results

RT: 8.07
Area: 31486
Amount: 1595.6203
Amount Units: ng



Manual Integration Results

RT: 8.07
Area: 33822
Amount: 1665.1175
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:54:39
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 29-Jan-2015 12:59:13 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128010.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Jan-2015 15:33:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD20
Misc. Info.: 180-0005450-010
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:13 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:53:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.278	-0.004	95	175261	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.328	7.326	0.002	98	439145	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.437	10.440	-0.003	94	96726	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.789	0.002	95	152427	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.598	6.596	0.002	93	201508	100.0	101.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.975	6.973	0.002	70	283354	100.0	99.7	
$ 7 Toluene-d8 (Surr)	98	8.983	8.980	0.003	93	779639	100.0	102.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.629	11.627	0.002	83	330292	100.0	101.8	
11 Dichlorodifluoromethane	85	1.604	1.607	-0.003	99	243452	100.0	104.6	
12 Chloromethane	50	1.762	1.759	0.003	99	384421	100.0	107.4	
13 Vinyl chloride	62	1.896	1.893	0.003	98	339939	100.0	107.2	
14 Butadiene	39	1.938	1.936	0.002	91	363197	100.0	107.3	
15 Bromomethane	94	2.242	2.240	0.002	91	133368	100.0	104.8	
16 Chloroethane	64	2.382	2.380	0.002	99	206434	100.0	106.2	
17 Dichlorofluoromethane	67	2.668	2.666	0.002	97	485448	100.0	104.7	
18 Trichlorofluoromethane	101	2.686	2.684	0.002	97	379709	100.0	104.7	
20 Ethyl ether	59	3.064	3.067	-0.003	94	288913	100.0	104.4	
21 Acrolein	56	3.246	3.244	0.002	99	91786	200.0	209.0	
22 1,1-Dichloroethene	96	3.374	3.365	0.009	93	260475	100.0	105.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.429	3.426	0.003	95	269318	100.0	108.0	
24 Acetone	43	3.453	3.451	0.002	99	156961	200.0	202.1	
25 Iodomethane	142	3.581	3.578	0.003	99	377556	100.0	103.4	
26 Carbon disulfide	76	3.678	3.676	0.002	100	770934	100.0	105.6	
29 3-Chloro-1-propene	76	3.964	3.956	0.008	69	167495	100.0	104.6	
30 Methyl acetate	43	3.964	3.962	0.002	98	1006389	500.0	529.3	
31 Methylene Chloride	84	4.171	4.175	-0.004	98	354231	100.0	98.3	
32 2-Methyl-2-propanol	59	4.414	4.412	0.002	95	196865	1000.0	994.0	
33 Acrylonitrile	53	4.542	4.540	0.002	99	1070950	1000.0	1080.3	
34 trans-1,2-Dichloroethene	96	4.609	4.613	-0.004	74	317224	100.0	106.9	
35 Methyl tert-butyl ether	73	4.615	4.613	0.002	98	828973	100.0	106.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.029	5.026	0.003	94	447359	100.0	104.7	
37 1,1-Dichloroethane	63	5.241	5.239	0.002	97	607468	100.0	105.8	
38 Vinyl acetate	43	5.278	5.276	0.002	97	300763	100.0	100.7	
44 2-Butanone (MEK)	43	5.984	5.975	0.009	51	200186	200.0	201.0	
43 cis-1,2-Dichloroethene	96	5.984	5.981	0.003	86	336595	100.0	106.9	
42 2,2-Dichloropropane	77	5.990	5.987	0.003	66	347540	100.0	106.7	
49 Tetrahydrofuran	42	6.282	6.279	0.003	94	146874	200.0	205.3	
48 Chlorobromomethane	128	6.276	6.279	-0.003	94	130848	100.0	104.4	
50 Chloroform	83	6.422	6.419	0.003	94	520205	100.0	105.2	
51 1,1,1-Trichloroethane	97	6.580	6.584	-0.004	97	399010	100.0	105.9	
52 Cyclohexane	56	6.659	6.657	0.002	95	648441	100.0	106.9	
53 Carbon tetrachloride	117	6.762	6.760	0.002	97	317552	100.0	107.7	
54 1,1-Dichloropropene	75	6.768	6.766	0.002	94	397719	100.0	105.8	
55 Isobutyl alcohol	41	6.933	6.936	-0.003	95	166021	2500.0	2841.9	
56 Benzene	78	6.981	6.985	-0.004	98	1144809	100.0	105.0	
57 1,2-Dichloroethane	62	7.067	7.058	0.009	97	373539	100.0	104.3	
59 n-Heptane	43	7.352	7.350	0.002	95	358203	100.0	103.1	
61 Trichloroethene	130	7.724	7.721	0.003	97	256342	100.0	103.2	
63 Methylcyclohexane	83	7.967	7.965	0.002	95	513997	100.0	105.0	
64 1,2-Dichloropropane	63	7.997	7.995	0.002	88	296893	100.0	102.9	
65 1,4-Dioxane	88	8.076	8.074	0.002	43	44901	2000.0	2487.6	M
67 Dibromomethane	93	8.082	8.080	0.002	96	134511	100.0	104.3	
68 Dichlorobromomethane	83	8.277	8.275	0.002	98	313642	100.0	103.7	
71 cis-1,3-Dichloropropene	75	8.721	8.719	0.002	92	373776	100.0	107.7	
72 4-Methyl-2-pentanone (MIBK	43	8.855	8.853	0.002	97	485147	200.0	222.3	
73 Toluene	91	9.050	9.047	0.003	97	1047433	100.0	105.9	
74 trans-1,3-Dichloropropene	75	9.293	9.291	0.002	96	288597	100.0	106.4	
75 Ethyl methacrylate	69	9.348	9.345	0.003	92	276463	100.0	110.8	
76 1,1,2-Trichloroethane	97	9.494	9.491	0.003	92	186391	100.0	103.8	
77 Tetrachloroethene	164	9.567	9.564	0.003	95	185546	100.0	105.1	
78 1,3-Dichloropropane	76	9.646	9.650	-0.004	94	350761	100.0	105.1	
79 2-Hexanone	43	9.689	9.692	-0.004	97	272392	200.0	218.8	
81 Chlorodibromomethane	129	9.871	9.869	0.002	91	164399	100.0	107.9	
82 Ethylene Dibromide	107	9.987	9.984	0.003	98	173425	100.0	106.2	
83 3-Chlorobenzotrifluoride	180	10.431	10.428	0.003	93	343534	100.0	99.9	
84 Chlorobenzene	112	10.467	10.471	-0.004	90	654919	100.0	106.1	
85 4-Chlorobenzotrifluoride	180	10.522	10.520	0.002	97	321428	100.0	100.4	
87 Ethylbenzene	106	10.565	10.568	-0.003	98	393435	100.0	106.2	
86 1,1,1,2-Tetrachloroethane	131	10.565	10.562	0.003	90	235848	100.0	110.8	
88 m-Xylene & p-Xylene	106	10.698	10.702	-0.004	98	495166	100.0	108.3	
89 o-Xylene	106	11.082	11.079	0.003	97	507675	100.0	108.1	
90 Styrene	104	11.100	11.098	0.002	93	743239	100.0	107.5	
91 Bromoform	173	11.288	11.292	-0.004	94	85273	100.0	104.5	
92 2-Chlorobenzotrifluoride	180	11.337	11.341	-0.004	96	373509	100.0	104.1	
93 Isopropylbenzene	105	11.447	11.444	0.003	98	1262379	100.0	109.0	
96 1,1,2,2-Tetrachloroethane	83	11.757	11.755	0.002	96	254135	100.0	105.3	
95 Bromobenzene	156	11.763	11.767	-0.004	98	278729	100.0	104.5	
97 trans-1,4-Dichloro-2-buten	53	11.787	11.791	-0.004	73	77586	100.0	103.4	
98 1,2,3-Trichloropropane	110	11.812	11.815	-0.003	86	81476	100.0	104.3	
99 N-Propylbenzene	120	11.866	11.864	0.002	98	331379	100.0	104.0	
100 2-Chlorotoluene	126	11.958	11.955	0.003	95	293005	100.0	104.3	
101 3-Chlorotoluene	126	12.018	12.022	-0.004	96	292985	100.0	99.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.049	12.047	0.002	94	1105314	100.0	107.9	
103 4-Chlorotoluene	126	12.079	12.083	-0.004	99	300726	100.0	104.3	
104 tert-Butylbenzene	119	12.365	12.363	0.002	92	842934	100.0	105.7	
106 1,2,4-Trimethylbenzene	105	12.426	12.424	0.002	99	1135474	100.0	107.1	
107 1,2-dichloro-4-(trifluorom	214	12.456	12.460	-0.004	97	301633	100.0	101.8	
108 sec-Butylbenzene	105	12.584	12.588	-0.004	96	1323132	100.0	107.3	
109 1,3-Dichlorobenzene	146	12.712	12.710	0.002	95	545480	100.0	104.4	
110 4-Isopropyltoluene	119	12.742	12.740	0.002	95	1069888	100.0	107.0	
111 1,4-Dichlorobenzene	146	12.815	12.813	0.002	90	558588	100.0	103.3	
113 2,4-Dichloro-1-(triflourom	214	12.828	12.831	-0.003	96	295903	100.0	99.5	
114 2,5-Dichlorobenzotrifluori	214	12.870	12.868	0.002	98	347814	100.0	106.1	
116 n-Butylbenzene	91	13.150	13.154	-0.004	96	1045083	100.0	108.7	
117 1,2-Dichlorobenzene	146	13.168	13.166	0.002	93	540869	100.0	103.5	
118 1,2-Dibromo-3-Chloropropan	75	13.953	13.963	-0.010	75	42357	100.0	101.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.105	14.103	0.002	98	1526957	300.0	311.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.519	14.516	0.003	99	1109689	200.0	207.1	
122 1,2,4-Trichlorobenzene	180	14.786	14.784	0.002	93	428696	100.0	105.9	
123 Hexachlorobutadiene	225	14.932	14.930	0.002	96	168186	100.0	106.2	
124 Naphthalene	128	15.048	15.052	-0.004	98	746148	100.0	107.3	
125 1,2,3-Trichlorobenzene	180	15.279	15.277	0.002	95	359783	100.0	106.3	
126 2,4,5-Trichlorotoluene	159	16.046	16.049	-0.003	0	253456	100.0	101.7	
127 2,3,6-Trichlorotoluene	159	16.143	16.147	-0.004	93	223585	100.0	100.7	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		200.0	213.8	
S 131 Xylenes, Total	106				0		200.0	216.4	
S 132 1,3-Dichloropropene, Total	1				0		200.0	214.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	4.00	Units: uL	
voaWeemixpri_00001	Amount Added:	4.00	Units: uL	
voaWVApri Res_00001	Amount Added:	4.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	4.00	Units: uL	
voaWAcropri R_00006	Amount Added:	8.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

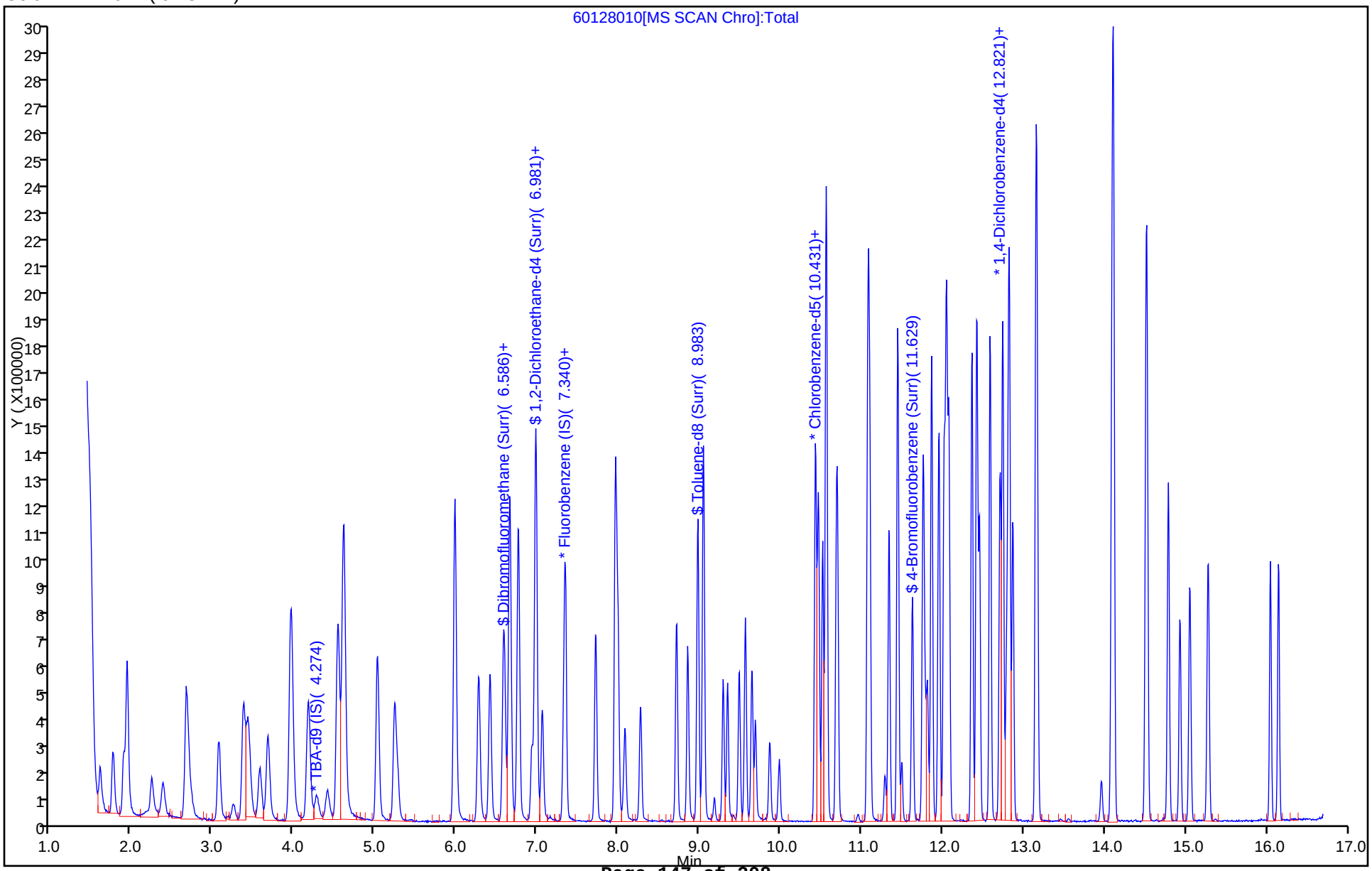
Report Date: 29-Jan-2015 12:59:13 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128010.D

Injection Date:	28-Jan-2015 15:33:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

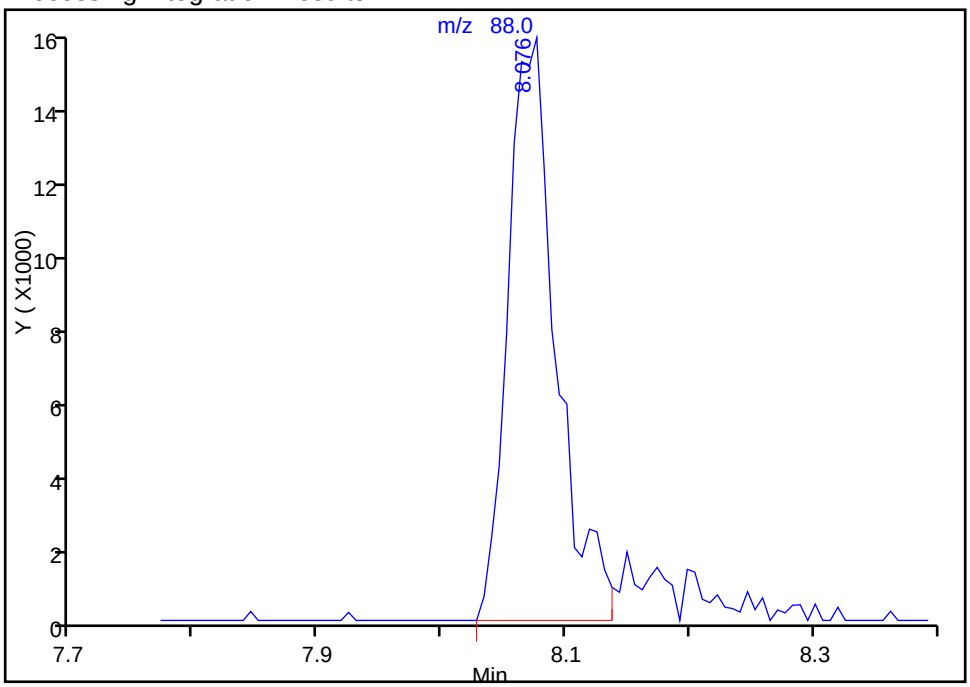
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128010.D				
Injection Date:	28-Jan-2015 15:33:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

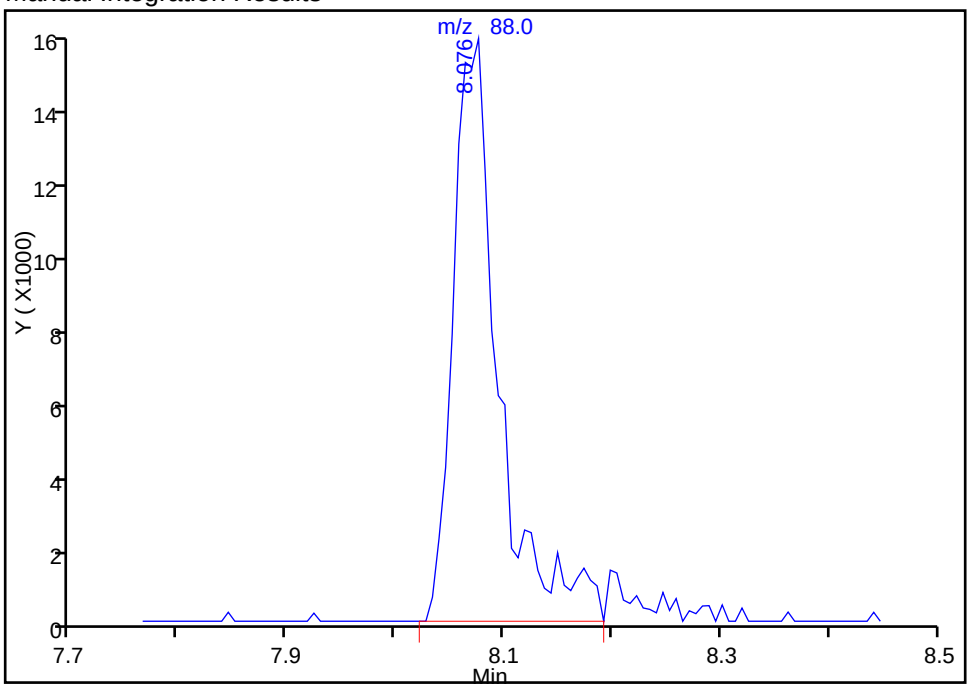
Processing Integration Results

RT: 8.08
Area: 41652
Amount: 2341.8822
Amount Units: ng



Manual Integration Results

RT: 8.08
Area: 44901
Amount: 2487.6456
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:53:28
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128011.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Jan-2015 15:57:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD35
Misc. Info.: 180-0005450-011
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:14 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 10:59:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.280	4.278	0.002	94	166250	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.328	7.326	0.002	98	444059	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.440	-0.004	91	106771	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.789	0.002	95	156653	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.598	6.596	0.002	93	356892	175.0	177.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.975	6.973	0.002	71	492507	175.0	171.3	
$ 7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	93	1290581	175.0	153.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.629	11.627	0.002	83	562972	175.0	157.2	
11 Dichlorodifluoromethane	85	1.609	1.607	0.002	100	399376	175.0	169.7	
12 Chloromethane	50	1.767	1.759	0.008	99	623186	175.0	172.2	
13 Vinyl chloride	62	1.895	1.893	0.002	97	551705	175.0	172.0	
14 Butadiene	39	1.938	1.936	0.002	89	555574	175.0	162.3	
15 Bromomethane	94	2.242	2.240	0.002	91	214591	175.0	166.7	
16 Chloroethane	64	2.382	2.380	0.002	99	335043	175.0	170.4	
17 Dichlorofluoromethane	67	2.662	2.666	-0.004	97	781500	175.0	166.7	
18 Trichlorofluoromethane	101	2.680	2.684	-0.004	97	608185	175.0	165.8	
20 Ethyl ether	59	3.069	3.067	0.002	95	482160	175.0	172.4	
21 Acrolein	56	3.252	3.244	0.008	97	103226	225.0	232.5	
22 1,1-Dichloroethene	96	3.373	3.365	0.008	94	430377	175.0	172.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.426	0.002	96	437728	175.0	173.6	
24 Acetone	43	3.453	3.451	0.002	100	280558	350.0	357.2	
25 Iodomethane	142	3.580	3.578	0.002	98	651846	175.0	176.5	
26 Carbon disulfide	76	3.678	3.676	0.002	100	1309070	175.0	177.3	
29 3-Chloro-1-propene	76	3.957	3.956	0.001	73	292881	175.0	180.9	
30 Methyl acetate	43	3.964	3.962	0.002	97	1703104	875.0	885.9	
31 Methylene Chloride	84	4.170	4.175	-0.005	98	585012	175.0	160.5	
32 2-Methyl-2-propanol	59	4.408	4.412	-0.004	96	335472	1750.0	1785.6	
33 Acrylonitrile	53	4.541	4.540	0.001	98	1763284	1750.0	1758.9	
34 trans-1,2-Dichloroethene	96	4.614	4.613	0.001	74	523513	175.0	174.4	
35 Methyl tert-butyl ether	73	4.614	4.613	0.001	98	1446119	175.0	183.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.028	5.026	0.002	93	739493	175.0	171.2	
37 1,1-Dichloroethane	63	5.241	5.239	0.002	96	1008065	175.0	173.6	
38 Vinyl acetate	43	5.278	5.276	0.002	97	509076	175.0	168.6	
44 2-Butanone (MEK)	43	5.983	5.975	0.008	50	363723	350.0	361.2	
43 cis-1,2-Dichloroethene	96	5.983	5.981	0.002	84	557043	175.0	175.0	
42 2,2-Dichloropropane	77	5.983	5.987	-0.004	65	582789	175.0	177.0	
49 Tetrahydrofuran	42	6.287	6.279	0.008	93	245422	350.0	339.2	
48 Chlorobromomethane	128	6.275	6.279	-0.004	92	225087	175.0	177.6	
50 Chloroform	83	6.415	6.419	-0.004	94	891515	175.0	178.3	
51 1,1,1-Trichloroethane	97	6.586	6.584	0.002	97	690974	175.0	181.4	
52 Cyclohexane	56	6.659	6.657	0.002	95	1042561	175.0	169.9	
53 Carbon tetrachloride	117	6.762	6.760	0.002	96	533960	175.0	179.1	
54 1,1-Dichloropropene	75	6.774	6.766	0.008	95	650661	175.0	171.2	
55 Isobutyl alcohol	41	6.938	6.936	0.002	94	280190	4375.0	4743.2	
56 Benzene	78	6.987	6.985	0.002	99	1858516	175.0	168.6	
57 1,2-Dichloroethane	62	7.066	7.058	0.008	96	620987	175.0	171.5	
59 n-Heptane	43	7.346	7.350	-0.004	93	583751	175.0	166.2	
61 Trichloroethene	130	7.723	7.721	0.002	95	416102	175.0	165.7	
63 Methylcyclohexane	83	7.966	7.965	0.001	95	840990	175.0	170.0	
64 1,2-Dichloropropane	63	7.997	7.995	0.002	88	511401	175.0	175.3	
65 1,4-Dioxane	88	8.076	8.074	0.002	42	66654	3500.0	3652.0	M
67 Dibromomethane	93	8.082	8.080	0.002	96	236358	175.0	181.3	
68 Dichlorobromomethane	83	8.277	8.275	0.002	98	552260	175.0	180.6	
71 cis-1,3-Dichloropropene	75	8.721	8.719	0.002	92	638776	175.0	182.0	
72 4-Methyl-2-pentanone (MIBK	43	8.861	8.853	0.008	96	833434	350.0	346.0	
73 Toluene	91	9.049	9.047	0.002	96	1693226	175.0	155.1	
74 trans-1,3-Dichloropropene	75	9.293	9.291	0.002	97	519690	175.0	173.6	
75 Ethyl methacrylate	69	9.347	9.345	0.002	91	469489	175.0	170.4	
76 1,1,2-Trichloroethane	97	9.493	9.491	0.002	93	318177	175.0	160.5	
77 Tetrachloroethene	164	9.566	9.564	0.002	94	297552	175.0	152.6	
78 1,3-Dichloropropane	76	9.652	9.650	0.002	95	590770	175.0	160.3	
79 2-Hexanone	43	9.694	9.692	0.002	96	471926	350.0	343.4	
81 Chlorodibromomethane	129	9.871	9.869	0.002	92	296438	175.0	176.2	
82 Ethylene Dibromide	107	9.986	9.984	0.002	98	302375	175.0	167.7	
83 3-Chlorobenzotrifluoride	180	10.430	10.428	0.002	93	590382	175.0	155.5	
84 Chlorobenzene	112	10.473	10.471	0.002	89	1077548	175.0	158.2	
85 4-Chlorobenzotrifluoride	180	10.522	10.520	0.002	96	561945	175.0	159.0	
86 1,1,1,2-Tetrachloroethane	131	10.564	10.562	0.002	92	418399	175.0	178.1	
87 Ethylbenzene	106	10.570	10.568	0.002	97	656339	175.0	160.6	
88 m-Xylene & p-Xylene	106	10.698	10.702	-0.004	97	839112	175.0	166.3	
89 o-Xylene	106	11.081	11.079	0.002	97	860280	175.0	165.9	
90 Styrene	104	11.099	11.098	0.001	94	1273143	175.0	166.7	
91 Bromoform	173	11.294	11.292	0.002	95	168078	175.0	186.5	
92 2-Chlorobenzotrifluoride	180	11.343	11.341	0.002	95	622262	175.0	157.1	
93 Isopropylbenzene	105	11.452	11.444	0.008	98	2002206	175.0	156.6	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.755	0.001	95	440302	175.0	165.2	
95 Bromobenzene	156	11.769	11.767	0.002	98	477179	175.0	174.0	
97 trans-1,4-Dichloro-2-buten	53	11.793	11.791	0.002	78	137653	175.0	178.5	
98 1,2,3-Trichloropropane	110	11.817	11.815	0.002	86	139161	175.0	173.4	
99 N-Propylbenzene	120	11.866	11.864	0.002	97	563113	175.0	171.9	
100 2-Chlorotoluene	126	11.957	11.955	0.002	95	493158	175.0	170.8	
101 3-Chlorotoluene	126	12.024	12.022	0.002	95	525597	175.0	174.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.047	0.001	95	1783600	175.0	169.4	
103 4-Chlorotoluene	126	12.079	12.083	-0.004	99	491693	175.0	165.9	
104 tert-Butylbenzene	119	12.365	12.363	0.002	92	1396912	175.0	170.4	
106 1,2,4-Trimethylbenzene	105	12.426	12.424	0.002	98	1838518	175.0	168.7	
107 1,2-dichloro-4-(trifluorom	214	12.456	12.460	-0.004	97	521070	175.0	171.1	
108 sec-Butylbenzene	105	12.590	12.588	0.002	96	2082501	175.0	164.3	
109 1,3-Dichlorobenzene	146	12.712	12.710	0.002	94	914665	175.0	170.3	
110 4-Isopropyltoluene	119	12.748	12.740	0.008	94	1743713	175.0	169.6	
111 1,4-Dichlorobenzene	146	12.815	12.813	0.002	91	944630	175.0	170.0	
113 2,4-Dichloro-1-(triflourom	214	12.827	12.831	-0.004	97	499776	175.0	163.5	
114 2,5-Dichlorobenzotrifluori	214	12.870	12.868	0.002	98	618602	175.0	183.7	
116 n-Butylbenzene	91	13.156	13.154	0.002	96	1667227	175.0	168.7	
117 1,2-Dichlorobenzene	146	13.168	13.166	0.002	94	923690	175.0	172.0	
118 1,2-Dibromo-3-Chloropropan	75	13.965	13.963	0.002	79	82124	175.0	191.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.105	14.103	0.002	96	2518550	525.0	499.6	
121 2,3- & 3,4- Dichlorotoluen	125	14.518	14.516	0.002	97	1844544	350.0	335.0	
122 1,2,4-Trichlorobenzene	180	14.786	14.784	0.002	94	726984	175.0	174.7	
123 Hexachlorobutadiene	225	14.932	14.930	0.002	95	282422	175.0	173.6	
124 Naphthalene	128	15.054	15.052	0.002	98	1297115	175.0	181.4	
125 1,2,3-Trichlorobenzene	180	15.279	15.277	0.002	94	609774	175.0	175.2	
126 2,4,5-Trichlorotoluene	159	16.045	16.049	-0.004	0	451216	175.0	176.2	
127 2,3,6-Trichlorotoluene	159	16.143	16.147	-0.004	94	400428	175.0	175.4	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		350.0	349.4	
S 131 Xylenes, Total	106				0		350.0	332.2	
S 132 1,3-Dichloropropene, Total	1				0		350.0	355.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	7.00	Units: uL	
voaWeemixpri_00001	Amount Added:	7.00	Units: uL	
voaWVApri Res_00001	Amount Added:	7.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	7.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	7.00	Units: uL	
voaWAcropri R_00006	Amount Added:	9.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

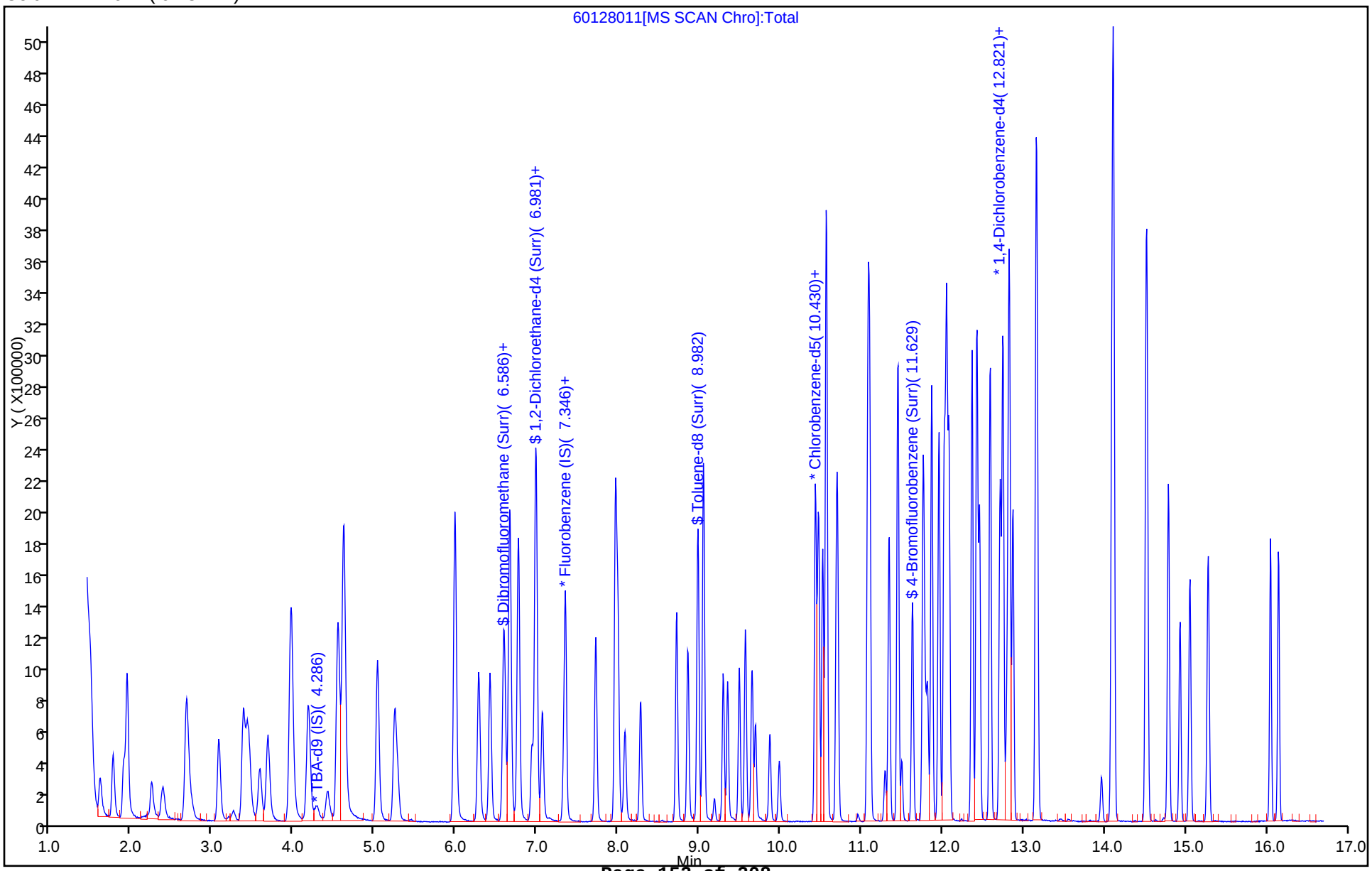
Report Date: 29-Jan-2015 12:59:14 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128011.D

Injection Date:	28-Jan-2015 15:57:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

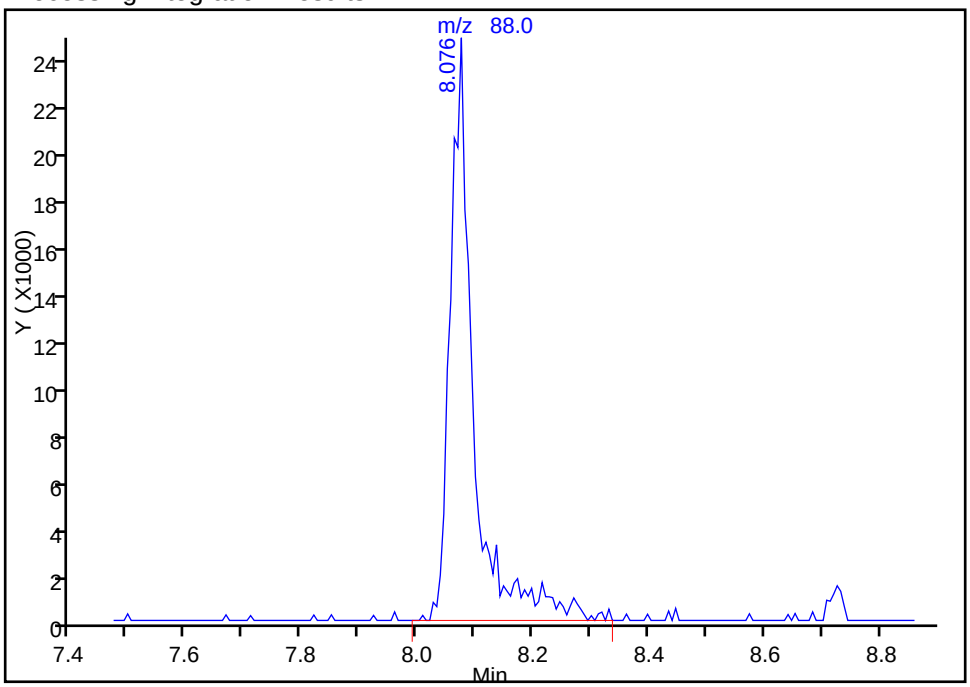
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128011.D				
Injection Date:	28-Jan-2015 15:57:30	Instrument ID:	CHHP6		
Lims ID:	IC VSTD35				
Client ID:					
Operator ID:	001562	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

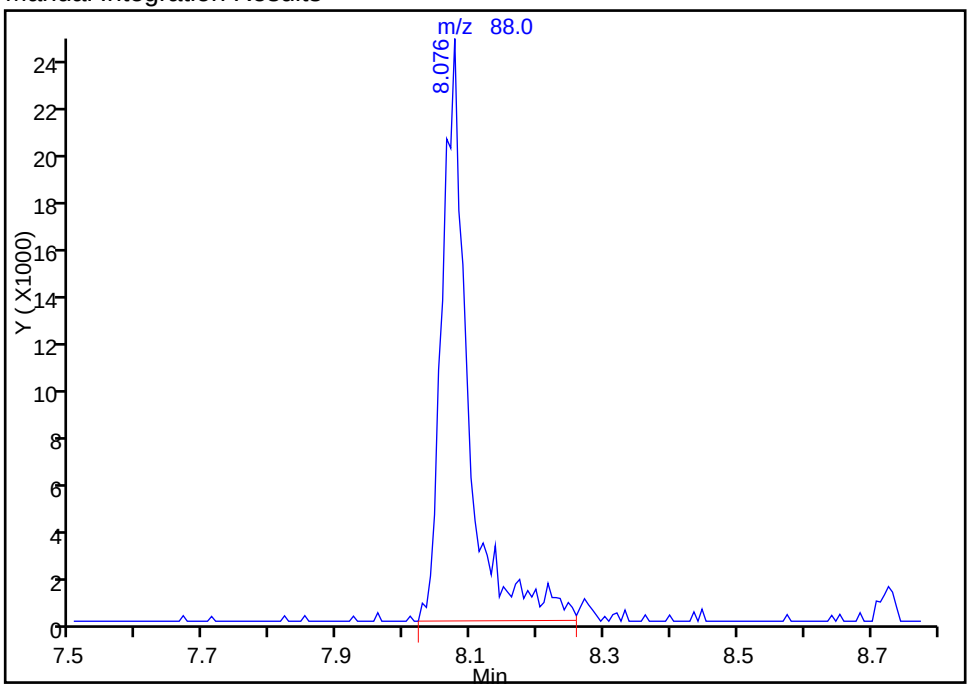
Processing Integration Results

RT: 8.08
Area: 68578
Amount: 3642.8098
Amount Units: ng



Manual Integration Results

RT: 8.08
Area: 66654
Amount: 3651.9598
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 10:59:52
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128012.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Jan-2015 16:21:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD40
Misc. Info.: 180-0005450-012
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:16 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 11:05:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.279	4.278	0.001	95	156228	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.327	7.326	0.001	98	431028	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.442	10.440	0.002	89	102756	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.796	12.789	0.007	96	156005	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.603	6.596	0.007	93	387858	200.0	198.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.973	0.001	69	549644	200.0	197.0	
$ 7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	94	1388779	200.0	171.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.628	11.627	0.001	83	623752	200.0	181.0	
11 Dichlorodifluoromethane	85	1.609	1.607	0.002	99	466774	200.0	204.4	
12 Chloromethane	50	1.773	1.759	0.014	98	698118	200.0	198.7	
13 Vinyl chloride	62	1.901	1.893	0.008	98	630878	200.0	202.7	
14 Butadiene	39	1.943	1.936	0.007	92	663356	200.0	199.6	
15 Bromomethane	94	2.247	2.240	0.007	92	238802	200.0	191.1	
16 Chloroethane	64	2.393	2.380	0.013	100	381411	200.0	199.8	
17 Dichlorofluoromethane	67	2.673	2.666	0.007	97	918274	200.0	201.8	
18 Trichlorofluoromethane	101	2.685	2.684	0.001	98	732912	200.0	205.8	
20 Ethyl ether	59	3.069	3.067	0.002	94	557320	200.0	205.3	
21 Acrolein	56	3.251	3.244	0.007	99	114431	250.0	265.5	
22 1,1-Dichloroethene	96	3.379	3.365	0.014	95	500308	200.0	206.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.434	3.426	0.008	94	494476	200.0	202.0	
24 Acetone	43	3.458	3.451	0.007	100	309648	400.0	406.1	
25 Iodomethane	142	3.580	3.578	0.002	99	740212	200.0	206.5	
26 Carbon disulfide	76	3.677	3.676	0.001	100	1529475	200.0	213.4	
29 3-Chloro-1-propene	76	3.963	3.956	0.007	91	336687	200.0	214.2	
30 Methyl acetate	43	3.969	3.962	0.007	98	1911445	1000.0	1024.3	
31 Methylene Chloride	84	4.182	4.175	0.007	97	657192	200.0	185.7	
32 2-Methyl-2-propanol	59	4.407	4.412	-0.005	96	373469	2000.0	2115.4	
33 Acrylonitrile	53	4.541	4.540	0.001	99	2023857	2000.0	2079.9	
34 trans-1,2-Dichloroethene	96	4.614	4.613	0.001	79	603714	200.0	207.2	
35 Methyl tert-butyl ether	73	4.614	4.613	0.001	98	1583536	200.0	206.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.028	5.026	0.002	93	851374	200.0	203.1	
37 1,1-Dichloroethane	63	5.241	5.239	0.001	96	1157116	200.0	205.3	
38 Vinyl acetate	43	5.277	5.276	0.001	97	631938	200.0	215.6	
44 2-Butanone (MEK)	43	5.977	5.975	0.002	54	404756	400.0	414.1	
43 cis-1,2-Dichloroethene	96	5.983	5.981	0.002	84	638509	200.0	206.6	
42 2,2-Dichloropropane	77	5.983	5.987	-0.004	85	681588	200.0	213.3	
49 Tetrahydrofuran	42	6.287	6.279	0.008	82	271171	400.0	386.1	
48 Chlorobromomethane	128	6.269	6.279	-0.010	92	257539	200.0	209.4	
50 Chloroform	83	6.415	6.419	-0.004	95	995734	200.0	205.2	
51 1,1,1-Trichloroethane	97	6.579	6.584	-0.005	97	785027	200.0	212.3	
52 Cyclohexane	56	6.664	6.657	0.007	95	1203343	200.0	202.1	
53 Carbon tetrachloride	117	6.761	6.760	0.001	96	614377	200.0	212.3	
54 1,1-Dichloropropene	75	6.767	6.766	0.001	94	759338	200.0	205.8	
55 Isobutyl alcohol	41	6.932	6.936	-0.004	95	309707	5000.0	5401.4	
56 Benzene	78	6.986	6.985	0.001	99	2127915	200.0	198.8	
57 1,2-Dichloroethane	62	7.066	7.058	0.008	96	719730	200.0	204.8	
59 n-Heptane	43	7.345	7.350	-0.005	93	681180	200.0	199.8	
61 Trichloroethene	130	7.723	7.721	0.002	95	498060	200.0	204.3	
63 Methylcyclohexane	83	7.966	7.965	0.001	94	996383	200.0	207.4	
64 1,2-Dichloropropane	63	7.996	7.995	0.001	91	576307	200.0	203.5	
65 1,4-Dioxane	88	8.063	8.074	-0.011	95	73473	4000.0	4147.3	M
67 Dibromomethane	93	8.082	8.080	0.002	95	275521	200.0	217.7	
68 Dichlorobromomethane	83	8.276	8.275	0.001	98	647525	200.0	218.1	
71 cis-1,3-Dichloropropene	75	8.714	8.719	-0.005	92	759439	200.0	222.9	
72 4-Methyl-2-pentanone (MIBK	43	8.854	8.853	0.001	97	963310	400.0	415.5	
73 Toluene	91	9.049	9.047	0.002	96	1948278	200.0	185.5	
74 trans-1,3-Dichloropropene	75	9.292	9.291	0.001	96	613591	200.0	213.0	
75 Ethyl methacrylate	69	9.347	9.345	0.002	92	558436	200.0	210.7	
76 1,1,2-Trichloroethane	97	9.493	9.491	0.002	93	370798	200.0	194.4	
77 Tetrachloroethene	164	9.566	9.564	0.002	94	362836	200.0	193.4	
78 1,3-Dichloropropane	76	9.651	9.650	0.001	95	698175	200.0	196.9	
79 2-Hexanone	43	9.694	9.692	0.002	97	548903	400.0	415.0	
81 Chlorodibromomethane	129	9.870	9.869	0.001	91	355583	200.0	219.6	
82 Ethylene Dibromide	107	9.986	9.984	0.002	99	357378	200.0	206.0	
83 3-Chlorobenzotrifluoride	180	10.430	10.428	0.002	93	686787	200.0	187.9	
84 Chlorobenzene	112	10.472	10.471	0.001	89	1247688	200.0	190.3	
85 4-Chlorobenzotrifluoride	180	10.521	10.520	0.001	96	648765	200.0	190.7	
86 1,1,1,2-Tetrachloroethane	131	10.564	10.562	0.002	92	474135	200.0	209.7	
87 Ethylbenzene	106	10.570	10.568	0.002	98	755113	200.0	191.9	
88 m-Xylene & p-Xylene	106	10.697	10.702	-0.005	97	942705	200.0	194.2	
89 o-Xylene	106	11.081	11.079	0.002	96	966416	200.0	193.7	
90 Styrene	104	11.099	11.098	0.001	93	1466119	200.0	199.5	
91 Bromoform	173	11.287	11.292	-0.005	94	195103	200.0	225.0	
92 2-Chlorobenzotrifluoride	180	11.342	11.341	0.001	95	731138	200.0	191.8	
93 Isopropylbenzene	105	11.446	11.444	0.002	99	2269536	200.0	184.5	
96 1,1,2,2-Tetrachloroethane	83	11.756	11.755	0.001	95	506563	200.0	197.5	
95 Bromobenzene	156	11.768	11.767	0.001	97	550534	200.0	201.6	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.791	0.001	76	166844	200.0	217.3	
98 1,2,3-Trichloropropane	110	11.817	11.815	0.002	86	157512	200.0	197.1	
99 N-Propylbenzene	120	11.865	11.864	0.001	97	647166	200.0	198.4	
100 2-Chlorotoluene	126	11.957	11.955	0.002	95	574430	200.0	199.8	
101 3-Chlorotoluene	126	12.018	12.022	-0.004	95	580756	200.0	193.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.048	12.047	0.001	96	2008176	200.0	191.5	
103 4-Chlorotoluene	126	12.078	12.083	-0.005	98	596461	200.0	202.1	
104 tert-Butylbenzene	119	12.364	12.363	0.001	92	1597317	200.0	195.7	
106 1,2,4-Trimethylbenzene	105	12.425	12.424	0.001	98	2073941	200.0	191.1	
107 1,2-dichloro-4-(trifluorom	214	12.456	12.460	-0.004	97	595281	200.0	196.3	
108 sec-Butylbenzene	105	12.589	12.588	0.001	96	2342860	200.0	185.7	
109 1,3-Dichlorobenzene	146	12.711	12.710	0.001	93	1029314	200.0	192.4	
110 4-Isopropyltoluene	119	12.741	12.740	0.001	94	1972986	200.0	192.7	
111 1,4-Dichlorobenzene	146	12.814	12.813	0.001	85	1071549	200.0	193.6	
113 2,4-Dichloro-1-(triflourom	214	12.827	12.831	-0.004	97	570286	200.0	187.4	
114 2,5-Dichlorobenzotrifluori	214	12.869	12.868	0.001	98	695499	200.0	207.4	
116 n-Butylbenzene	91	13.155	13.154	0.001	95	1901534	200.0	193.2	
117 1,2-Dichlorobenzene	146	13.167	13.166	0.001	91	1036802	200.0	193.9	
118 1,2-Dibromo-3-Chloropropan	75	13.958	13.963	-0.005	77	90830	200.0	212.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.104	14.103	0.001	95	2764683	600.0	550.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.518	14.516	0.002	96	2037341	400.0	371.6	
122 1,2,4-Trichlorobenzene	180	14.785	14.784	0.001	94	817434	200.0	197.3	
123 Hexachlorobutadiene	225	14.931	14.930	0.001	96	320466	200.0	197.8	
124 Naphthalene	128	15.053	15.052	0.001	98	1444669	200.0	202.9	
125 1,2,3-Trichlorobenzene	180	15.278	15.277	0.001	94	688354	200.0	198.6	
126 2,4,5-Trichlorotoluene	159	16.045	16.049	-0.004	0	504552	200.0	197.8	
127 2,3,6-Trichlorotoluene	159	16.148	16.147	0.001	94	455993	200.0	200.6	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		400.0	413.8	
S 131 Xylenes, Total	106				0		400.0	387.8	
S 132 1,3-Dichloropropene, Total	1				0		400.0	435.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00029	Amount Added:	8.00	Units: uL	
voaWeemixpri_00001	Amount Added:	8.00	Units: uL	
voaWVApri Res_00001	Amount Added:	8.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	8.00	Units: uL	
voaWAcropri R_00006	Amount Added:	10.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

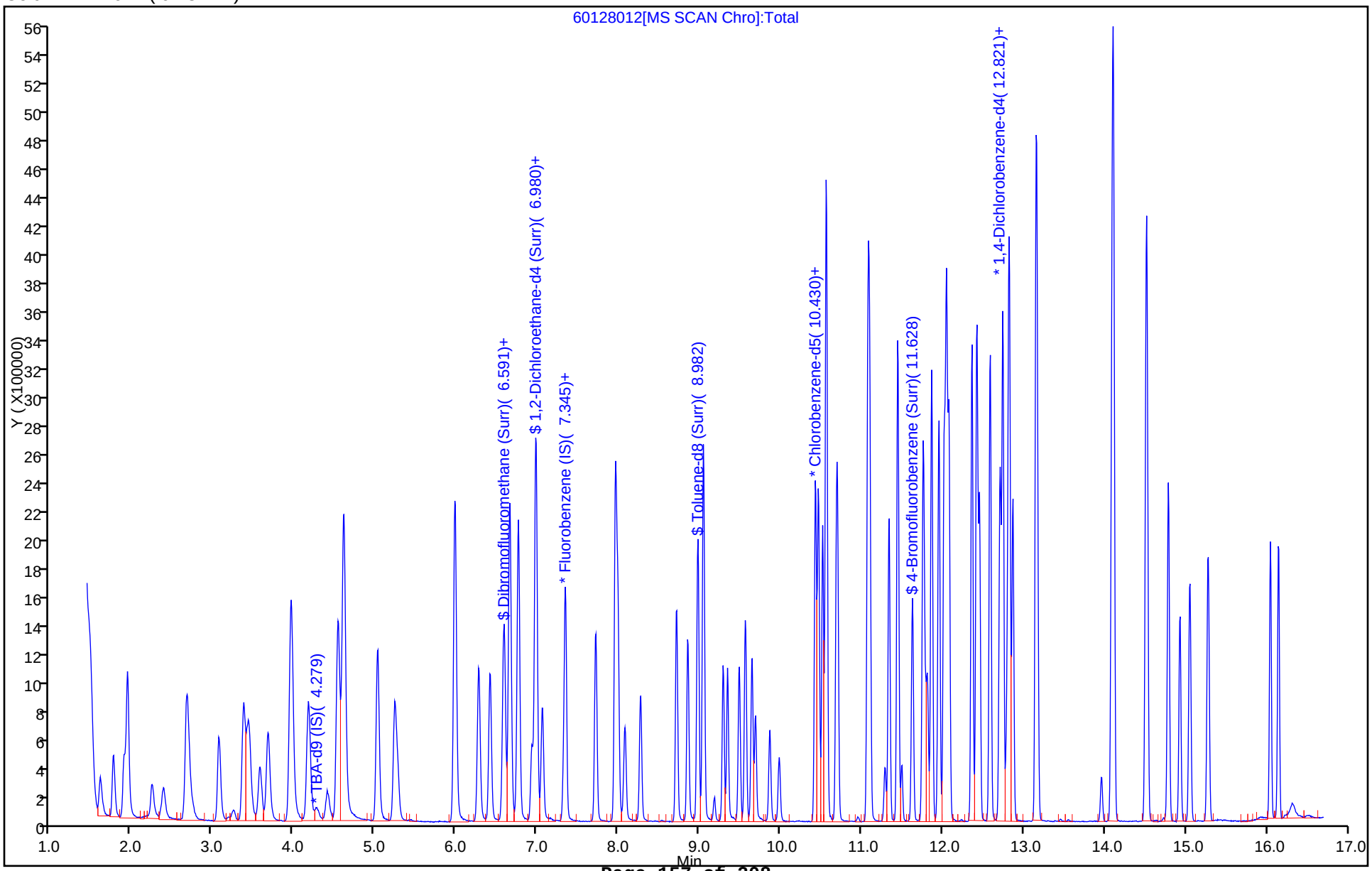
Report Date: 29-Jan-2015 12:59:16 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128012.D

Injection Date:	28-Jan-2015 16:21:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

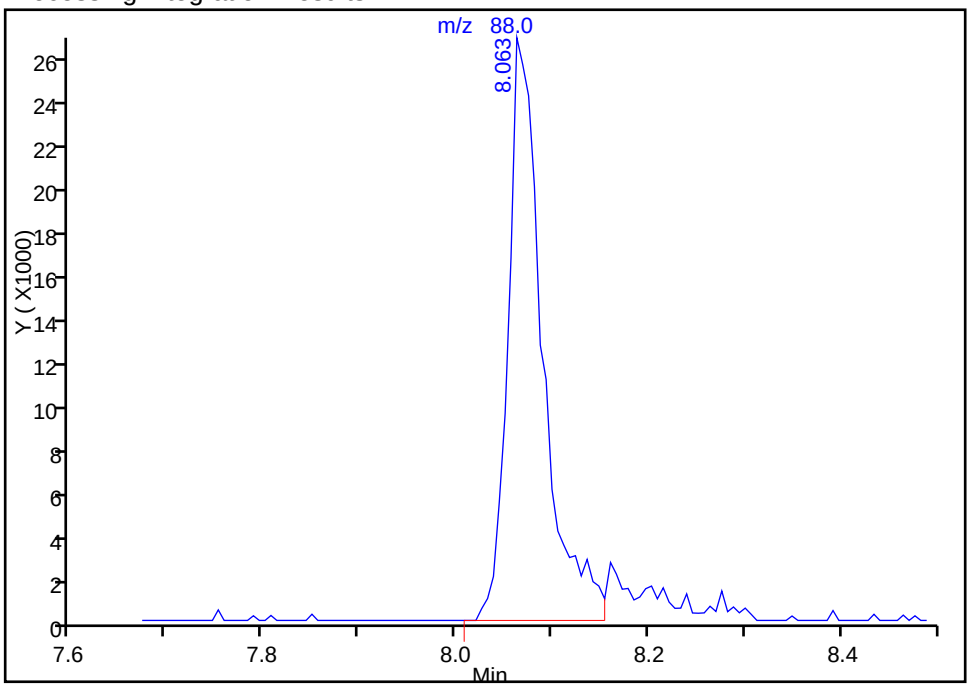
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128012.D
Injection Date: 28-Jan-2015 16:21:30 Instrument ID: CHHP6
Lims ID: IC VSTD40
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

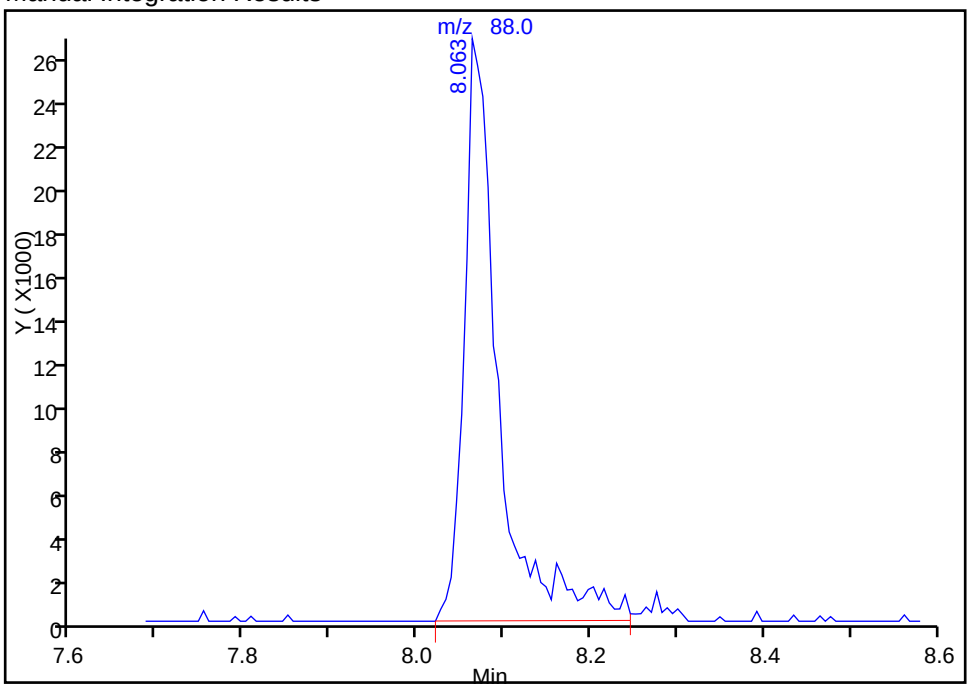
Processing Integration Results

RT: 8.06
Area: 66981
Amount: 3712.8569
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 73473
Amount: 4147.2741
Amount Units: ng



Reviewer: fergusond, 29-Jan-2015 11:12:56
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 28-Jan-2015 16:44:30 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD50
Misc. Info.: 180-0005450-013
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:17 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 29-Jan-2015 11:15:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	97	165623	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	98	445145	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.435	10.440	-0.005	89	112267	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.789	0.000	93	160396	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.596	6.596	0.000	93	498125	250.0	247.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.973	6.973	0.000	70	706731	250.0	245.2	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	94	1782119	250.0	201.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.627	11.627	0.000	83	804742	250.0	213.8	
11 Dichlorodifluoromethane	85	1.608	1.607	0.001	98	543864	250.0	230.6	
12 Chloromethane	50	1.766	1.759	0.007	99	847288	250.0	233.6	
13 Vinyl chloride	62	1.900	1.893	0.007	98	750079	250.0	233.3	
14 Butadiene	39	1.942	1.936	0.006	90	797079	250.0	232.2	
15 Bromomethane	94	2.247	2.240	0.007	90	267917	250.0	207.6	
16 Chloroethane	64	2.387	2.380	0.007	100	453830	250.0	230.2	
17 Dichlorofluoromethane	67	2.672	2.666	0.006	98	1104334	250.0	235.0	
18 Trichlorofluoromethane	101	2.685	2.684	0.001	98	854688	250.0	232.4	
20 Ethyl ether	59	3.074	3.067	0.007	94	701385	250.0	250.1	
21 Acrolein	56	3.244	3.244	0.000	99	125821	275.0	282.7	
22 1,1-Dichloroethene	96	3.372	3.365	0.007	96	603276	250.0	241.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.433	3.426	0.007	95	600973	250.0	237.7	
24 Acetone	43	3.457	3.451	0.006	100	400973	500.0	509.2	
25 Iodomethane	142	3.579	3.578	0.001	99	932274	250.0	251.8	
26 Carbon disulfide	76	3.676	3.676	0.000	100	1916453	250.0	258.9	
29 3-Chloro-1-propene	76	3.956	3.956	0.000	90	417234	250.0	257.0	
30 Methyl acetate	43	3.968	3.962	0.006	98	2346689	1250.0	1217.6	
31 Methylene Chloride	84	4.175	4.175	0.000	97	837610	250.0	229.2	
32 2-Methyl-2-propanol	59	4.412	4.412	0.000	96	475572	2500.0	2540.9	
33 Acrylonitrile	53	4.540	4.540	0.000	97	2458471	2500.0	2446.4	
34 trans-1,2-Dichloroethene	96	4.613	4.613	0.000	74	746155	250.0	248.0	
35 Methyl tert-butyl ether	73	4.613	4.613	0.000	98	1999816	250.0	252.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.027	5.026	0.001	94	1057585	250.0	244.3	
37 1,1-Dichloroethane	63	5.240	5.239	0.001	96	1421566	250.0	244.2	
38 Vinyl acetate	43	5.276	5.276	0.000	97	777050	250.0	256.8	
44 2-Butanone (MEK)	43	5.982	5.975	0.007	50	502816	500.0	498.1	
43 cis-1,2-Dichloroethene	96	5.982	5.981	0.001	84	802357	250.0	251.4	
42 2,2-Dichloropropane	77	5.982	5.987	-0.005	66	842775	250.0	255.3	
49 Tetrahydrofuran	42	6.286	6.279	0.007	91	346093	500.0	477.1	
48 Chlorobromomethane	128	6.280	6.279	0.001	93	324697	250.0	255.6	
50 Chloroform	83	6.414	6.419	-0.005	94	1224156	250.0	244.3	
51 1,1,1-Trichloroethane	97	6.584	6.584	0.000	96	966056	250.0	253.0	
52 Cyclohexane	56	6.663	6.657	0.006	95	1475197	250.0	239.9	
53 Carbon tetrachloride	117	6.761	6.760	0.001	95	766964	250.0	256.7	
54 1,1-Dichloropropene	75	6.773	6.766	0.007	94	930038	250.0	244.1	
55 Isobutyl alcohol	41	6.931	6.936	-0.005	94	377064	6250.0	6367.6	
56 Benzene	78	6.986	6.985	0.001	99	2568317	250.0	232.4	
57 1,2-Dichloroethane	62	7.065	7.058	0.007	97	895039	250.0	246.6	
59 n-Heptane	43	7.345	7.350	-0.005	94	839502	250.0	238.4	
61 Trichloroethene	130	7.722	7.721	0.001	94	593184	250.0	235.6	
63 Methylcyclohexane	83	7.965	7.965	0.000	94	1205068	250.0	242.9	
64 1,2-Dichloropropane	63	7.995	7.995	0.000	89	735181	250.0	251.4	
65 1,4-Dioxane	88	8.075	8.074	0.001	35	86605	5000.0	4733.5	
67 Dibromomethane	93	8.081	8.080	0.001	95	334892	250.0	256.2	
68 Dichlorobromomethane	83	8.275	8.275	0.000	98	803958	250.0	262.2	
71 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	92	940779	250.0	267.4	
72 4-Methyl-2-pentanone (MIBK	43	8.859	8.853	0.006	96	1165825	500.0	460.3	
73 Toluene	91	9.048	9.047	0.001	96	2335981	250.0	203.5	
74 trans-1,3-Dichloropropene	75	9.291	9.291	0.000	96	756557	250.0	240.3	
75 Ethyl methacrylate	69	9.346	9.345	0.001	91	703298	250.0	242.8	
76 1,1,2-Trichloroethane	97	9.492	9.491	0.001	93	457078	250.0	219.3	
77 Tetrachloroethene	164	9.565	9.564	0.001	93	439818	250.0	214.6	
78 1,3-Dichloropropane	76	9.650	9.650	0.000	95	854230	250.0	220.4	
79 2-Hexanone	43	9.693	9.692	0.001	95	682982	500.0	472.6	
81 Chlorodibromomethane	129	9.869	9.869	0.000	90	439418	250.0	248.4	
82 Ethylene Dibromide	107	9.985	9.984	0.001	99	439262	250.0	231.7	
83 3-Chlorobenzotrifluoride	180	10.429	10.428	0.001	94	827969	250.0	207.4	
84 Chlorobenzene	112	10.471	10.471	0.000	89	1544665	250.0	215.6	
85 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	97	789851	250.0	212.6	
86 1,1,1,2-Tetrachloroethane	131	10.563	10.562	0.001	92	607735	250.0	246.1	
87 Ethylbenzene	106	10.569	10.568	0.001	97	946322	250.0	220.2	
88 m-Xylene & p-Xylene	106	10.697	10.702	-0.005	96	1173036	250.0	221.1	
89 o-Xylene	106	11.080	11.079	0.001	96	1190653	250.0	218.4	
90 Styrene	104	11.098	11.098	0.000	93	1790733	250.0	223.1	
91 Bromoform	173	11.293	11.292	0.001	95	250089	250.0	264.0	
92 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	94	883499	250.0	212.1	
93 Isopropylbenzene	105	11.451	11.444	0.007	99	2696635	250.0	200.6	
96 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	95	640819	250.0	228.7	
95 Bromobenzene	156	11.767	11.767	0.000	98	690860	250.0	246.1	
97 trans-1,4-Dichloro-2-buten	53	11.792	11.791	0.001	82	201266	250.0	254.9	
98 1,2,3-Trichloropropane	110	11.816	11.815	0.001	85	203260	250.0	247.4	
99 N-Propylbenzene	120	11.865	11.864	0.001	97	796757	250.0	237.5	
100 2-Chlorotoluene	126	11.956	11.955	0.001	95	719388	250.0	243.4	
101 3-Chlorotoluene	126	12.023	12.022	0.001	95	730727	250.0	236.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.047	12.047	0.000	94	2421330	250.0	224.6	
103 4-Chlorotoluene	126	12.077	12.083	-0.006	98	726677	250.0	239.5	
104 tert-Butylbenzene	119	12.363	12.363	0.000	92	1918630	250.0	228.6	
106 1,2,4-Trimethylbenzene	105	12.424	12.424	0.000	98	2489630	250.0	223.2	
107 1,2-dichloro-4-(trifluorom	214	12.455	12.460	-0.005	96	725838	250.0	232.8	
108 sec-Butylbenzene	105	12.589	12.588	0.000	96	2762118	250.0	212.9	
109 1,3-Dichlorobenzene	146	12.710	12.710	0.000	93	1280853	250.0	232.9	
110 4-Isopropyltoluene	119	12.747	12.740	0.007	93	2335695	250.0	221.9	
111 1,4-Dichlorobenzene	146	12.820	12.813	0.007	86	1322179	250.0	232.4	
113 2,4-Dichloro-1-(triflourom	214	12.832	12.831	0.001	96	757959	250.0	242.3	
114 2,5-Dichlorobenzotrifluori	214	12.868	12.868	0.000	97	791743	250.0	229.6	
116 n-Butylbenzene	91	13.154	13.154	0.000	94	2252239	250.0	222.5	
117 1,2-Dichlorobenzene	146	13.166	13.166	0.000	91	1288639	250.0	234.4	
118 1,2-Dibromo-3-Chloropropan	75	13.963	13.963	0.000	77	111534	250.0	254.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.103	14.103	0.000	94	3312790	750.0	641.9	
121 2,3- & 3,4- Dichlorotoluen	125	14.517	14.516	0.001	95	2461660	500.0	436.7	
122 1,2,4-Trichlorobenzene	180	14.785	14.784	0.001	94	1004110	250.0	235.7	
123 Hexachlorobutadiene	225	14.931	14.930	0.001	96	388561	250.0	233.2	
124 Naphthalene	128	15.052	15.052	0.000	98	1745866	250.0	238.5	
125 1,2,3-Trichlorobenzene	180	15.277	15.277	0.000	93	854020	250.0	239.7	
126 2,4,5-Trichlorotoluene	159	16.044	16.049	-0.005	0	629698	250.0	240.1	
127 2,3,6-Trichlorotoluene	159	16.147	16.147	0.000	93	566962	250.0	242.6	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		500.0	499.4	
S 131 Xylenes, Total	106				0		500.0	439.5	
S 132 1,3-Dichloropropene, Total	1				0		500.0	507.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00029	Amount Added:	10.00	Units: uL	
voaWeemixpri_00001	Amount Added:	10.00	Units: uL	
voaWVApri Res_00001	Amount Added:	10.00	Units: uL	
VOAKETONEPRI_00003	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00097	Amount Added:	10.00	Units: uL	
voaWAcropri R_00006	Amount Added:	11.00	Units: uL	
VOA8260INT_00027	Amount Added:	2.00	Units: uL	Run Reagent

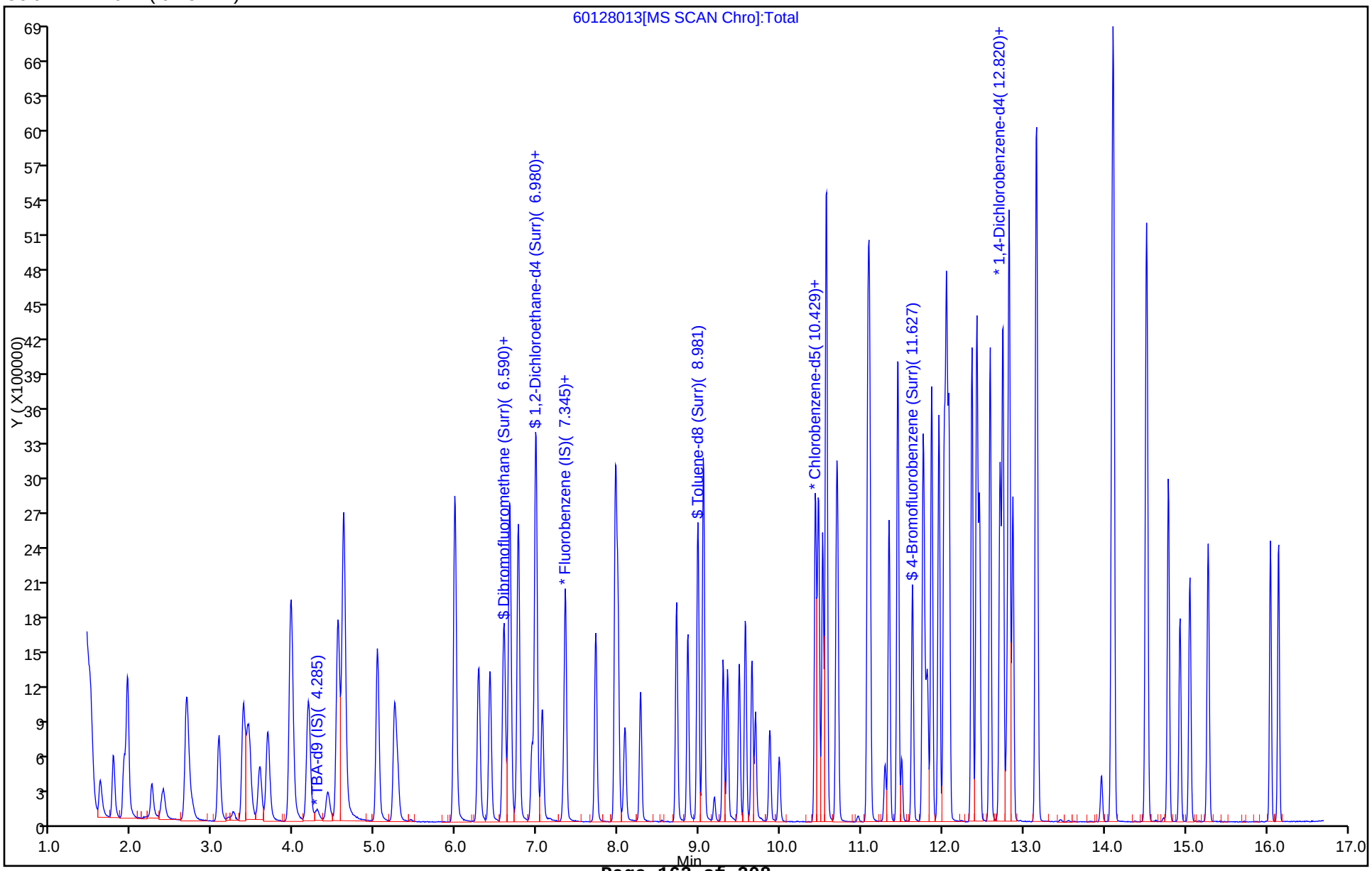
Report Date: 29-Jan-2015 12:59:17 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Injection Date:	28-Jan-2015 16:44:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Lab Sample ID: CCVIS 180-137223/2 Calibration Date: 04/01/2015 11:45

Instrument ID: CHHP6 Calib Start Date: 09/11/2014 11:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/11/2014 13:46

Lab File ID: 60401002.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-Dibromo-3-Chloropropane	Ave	0.1419	0.1471	0.0500	10.8	10.0	3.7	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Apr-2015 11:45:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006281-002
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:55:07 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 12:30:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.280	4.280	0.000	91	178333	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	99	427770	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	88	88386	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.787	0.000	96	153253	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.597	0.000	93	89494	50.0	46.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	71	146545	50.0	52.9	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	93	365605	50.0	52.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.626	11.626	0.000	84	143800	50.0	48.5	
11 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	115049	50.0	50.8	
12 Chloromethane	50	1.762	1.762	0.000	98	114602	50.0	32.9	
13 Vinyl chloride	62	1.896	1.896	0.000	98	120273	50.0	38.9	
14 Butadiene	39	1.938	1.938	0.000	89	121476	50.0	36.8	
15 Bromomethane	94	2.248	2.248	0.000	93	64670	50.0	52.2	
16 Chloroethane	64	2.388	2.388	0.000	99	75019	50.0	39.6	
17 Dichlorofluoromethane	67	2.668	2.668	0.000	97	228183	50.0	50.5	
18 Trichlorofluoromethane	101	2.698	2.698	0.000	95	195630	50.0	55.4	
20 Ethyl ether	59	3.069	3.069	0.000	93	123188	50.0	45.7	
21 Acrolein	56	3.252	3.252	0.000	99	34409	150.0	80.5	
22 1,1-Dichloroethene	96	3.379	3.379	0.000	94	112695	50.0	46.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.428	0.000	95	128209	50.0	52.8	
24 Acetone	43	3.459	3.459	0.000	99	72934	100.0	96.4	
25 Iodomethane	142	3.574	3.574	0.000	98	165369	50.0	46.5	
26 Carbon disulfide	76	3.677	3.677	0.000	99	312762	50.0	44.0	
29 3-Chloro-1-propene	76	3.957	3.957	0.000	59	67705	50.0	43.4	
30 Methyl acetate	43	3.957	3.957	0.000	98	544327	250.0	293.9	
31 Methylene Chloride	84	4.170	4.170	0.000	95	140847	50.0	40.1	
32 2-Methyl-2-propanol	59	4.401	4.401	0.000	94	106313	500.0	527.5	
33 Acrylonitrile	53	4.535	4.535	0.000	99	550550	500.0	570.1	
35 Methyl tert-butyl ether	73	4.608	4.608	0.000	96	361967	50.0	47.6	
34 trans-1,2-Dichloroethene	96	4.614	4.614	0.000	69	137143	50.0	47.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.028	5.028	0.000	92	177295	50.0	42.6	
37 1,1-Dichloroethane	63	5.240	5.240	0.000	97	246884	50.0	44.1	
38 Vinyl acetate	43	5.271	5.271	0.000	98	133373	50.0	45.9	
44 2-Butanone (MEK)	43	5.982	5.982	0.000	55	103786	100.0	107.0	
43 cis-1,2-Dichloroethene	96	5.982	5.982	0.000	83	138216	50.0	45.1	
42 2,2-Dichloropropane	77	5.982	5.982	0.000	58	112515	50.0	35.5	
48 Chlorobromomethane	128	6.274	6.274	0.000	95	63182	50.0	51.8	
49 Tetrahydrofuran	42	6.280	6.280	0.000	87	73629	100.0	105.6	
50 Chloroform	83	6.414	6.414	0.000	94	226920	50.0	47.1	
51 1,1,1-Trichloroethane	97	6.578	6.578	0.000	98	172790	50.0	47.1	
52 Cyclohexane	56	6.663	6.663	0.000	94	246878	50.0	41.8	
53 Carbon tetrachloride	117	6.761	6.761	0.000	91	139094	50.0	48.4	
54 1,1-Dichloropropene	75	6.773	6.773	0.000	95	176888	50.0	48.3	
55 Isobutyl alcohol	41	6.931	6.931	0.000	90	89548	1250.0	1573.6	
56 Benzene	78	6.980	6.980	0.000	97	548997	50.0	51.7	
57 1,2-Dichloroethane	62	7.059	7.059	0.000	99	204274	50.0	58.6	
59 n-Heptane	43	7.345	7.345	0.000	93	141218	50.0	41.7	
61 Trichloroethene	130	7.722	7.722	0.000	94	113483	50.0	46.9	
63 Methylcyclohexane	83	7.965	7.965	0.000	93	205135	50.0	43.0	
64 1,2-Dichloropropane	63	7.995	7.995	0.000	95	123527	50.0	43.9	
65 1,4-Dioxane	88	8.068	8.068	0.000	49	25288	1000.0	1438.3	M
67 Dibromomethane	93	8.074	8.074	0.000	94	69705	50.0	55.5	
68 Dichlorobromomethane	83	8.269	8.269	0.000	99	143036	50.0	48.5	
71 cis-1,3-Dichloropropene	75	8.713	8.713	0.000	93	146664	50.0	43.4	
72 4-Methyl-2-pentanone (MIBK	43	8.859	8.859	0.000	96	180057	100.0	90.3	
73 Toluene	91	9.047	9.047	0.000	99	527464	50.0	58.4	
74 trans-1,3-Dichloropropene	75	9.291	9.291	0.000	94	121321	50.0	49.0	
75 Ethyl methacrylate	69	9.345	9.345	0.000	90	127456	50.0	55.9	
76 1,1,2-Trichloroethane	97	9.485	9.485	0.000	93	103094	50.0	62.8	
77 Tetrachloroethene	164	9.564	9.564	0.000	97	96193	50.0	59.6	
78 1,3-Dichloropropane	76	9.649	9.649	0.000	91	182051	50.0	59.7	
79 2-Hexanone	43	9.692	9.692	0.000	96	170852	100.0	150.2	
81 Chlorodibromomethane	129	9.868	9.868	0.000	91	76823	50.0	55.2	
82 Ethylene Dibromide	107	9.984	9.984	0.000	96	94091	50.0	63.0	
83 3-Chlorobenzotrifluoride	180	10.428	10.428	0.000	95	183713	50.0	58.4	
84 Chlorobenzene	112	10.470	10.470	0.000	92	313335	50.0	55.6	
85 4-Chlorobenzotrifluoride	180	10.519	10.519	0.000	96	166267	50.0	56.8	
86 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	87	101317	50.0	52.1	
87 Ethylbenzene	106	10.568	10.568	0.000	99	179737	50.0	53.1	
88 m-Xylene & p-Xylene	106	10.701	10.701	0.000	99	230775	50.0	55.3	
89 o-Xylene	106	11.078	11.078	0.000	97	227953	50.0	53.1	
90 Styrene	104	11.103	11.103	0.000	95	367452	50.0	58.1	
91 Bromoform	173	11.285	11.285	0.000	97	41809	50.0	56.0	
92 2-Chlorobenzotrifluoride	180	11.340	11.340	0.000	95	182175	50.0	55.6	
93 Isopropylbenzene	105	11.449	11.449	0.000	97	573011	50.0	54.2	
96 1,1,2,2-Tetrachloroethane	83	11.753	11.753	0.000	96	139587	50.0	63.3	
95 Bromobenzene	156	11.766	11.766	0.000	96	123554	50.0	46.1	
97 trans-1,4-Dichloro-2-buten	53	11.790	11.790	0.000	67	34720	50.0	46.0	
98 1,2,3-Trichloropropane	110	11.814	11.814	0.000	82	46327	50.0	59.0	
99 N-Propylbenzene	120	11.863	11.863	0.000	99	147683	50.0	46.1	
100 2-Chlorotoluene	126	11.954	11.954	0.000	94	123065	50.0	43.6	
101 3-Chlorotoluene	126	12.021	12.021	0.000	98	148867	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.045	12.045	0.000	94	512714	50.0	49.8	
103 4-Chlorotoluene	126	12.076	12.076	0.000	99	133542	50.0	46.1	
104 tert-Butylbenzene	119	12.362	12.362	0.000	91	360345	50.0	44.9	
106 1,2,4-Trimethylbenzene	105	12.422	12.422	0.000	98	516829	50.0	48.5	
107 1,2-dichloro-4-(trifluorom	214	12.459	12.459	0.000	98	152425	50.0	51.2	
108 sec-Butylbenzene	105	12.587	12.587	0.000	95	582024	50.0	46.9	
109 1,3-Dichlorobenzene	146	12.708	12.708	0.000	96	251683	50.0	47.9	
110 4-Isopropyltoluene	119	12.745	12.745	0.000	96	457928	50.0	45.5	
111 1,4-Dichlorobenzene	146	12.812	12.812	0.000	90	262064	50.0	48.2	
113 2,4-Dichloro-1-(triflourom	214	12.830	12.830	0.000	95	154265	50.0	51.6	
114 2,5-Dichlorobenzotrifluori	214	12.866	12.866	0.000	96	171111	50.0	51.9	
116 n-Butylbenzene	91	13.152	13.152	0.000	99	454683	50.0	47.0	
117 1,2-Dichlorobenzene	146	13.170	13.170	0.000	94	257221	50.0	49.0	
118 1,2-Dibromo-3-Chloropropan	75	13.961	13.955	0.006	76	22550	50.0	53.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.101	14.101	0.000	100	726883	150.0	147.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.514	14.514	0.000	99	545466	100.0	101.3	
122 1,2,4-Trichlorobenzene	180	14.788	14.788	0.000	94	185869	50.0	45.7	
123 Hexachlorobutadiene	225	14.928	14.928	0.000	96	73929	50.0	46.4	
124 Naphthalene	128	15.050	15.050	0.000	98	420440	50.0	60.1	
125 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	94	170022	50.0	49.9	
126 2,4,5-Trichlorotoluene	159	16.047	16.047	0.000	0	118436	50.0	47.3	
127 2,3,6-Trichlorotoluene	159	16.144	16.144	0.000	93	112895	50.0	50.6	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	108.4	
S 130 1,2-Dichloroethene, Total	96				0		100.0	92.5	
S 132 1,3-Dichloropropene, Total	1				0		100.0	92.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL		
VOAVAPRI_00005	Amount Added:	2.00	Units: uL		
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL		
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL		
VOAACRPRI_00005	Amount Added:	6.00	Units: uL		
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent	

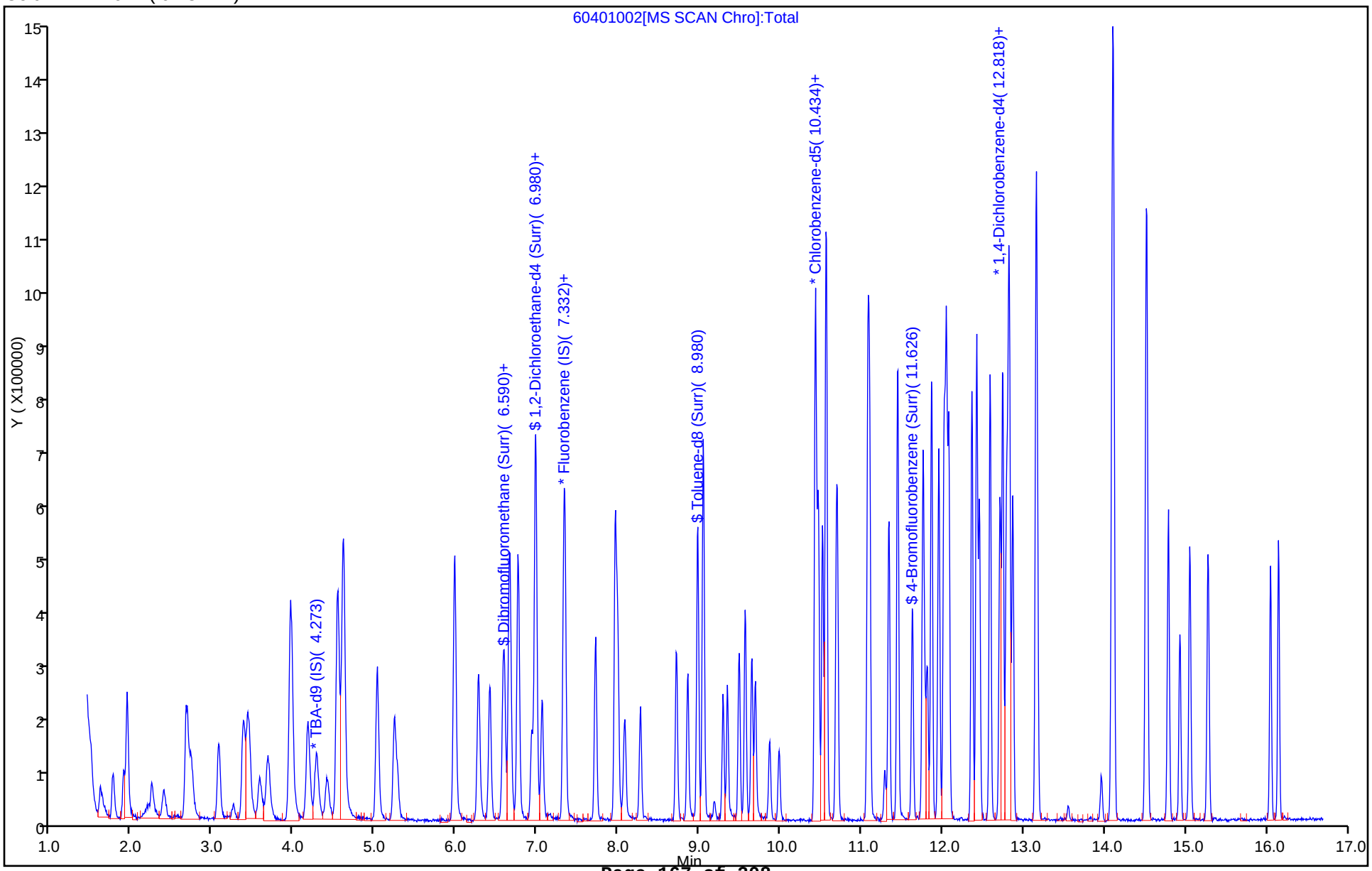
Report Date: 01-Apr-2015 14:55:08 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401002.D

Injection Date:	01-Apr-2015 11:45:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Lab Sample ID: CCVIS 180-137223/2 Calibration Date: 04/01/2015 11:45

Instrument ID: CHHP6 Calib Start Date: 01/28/2015 13:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/28/2015 16:44

Lab File ID: 60401002.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	0.2650	0.2690	0.1000	10.2	10.0	1.5	20.0
Chloromethane	Ave	0.4075	0.2679	0.1000	6.57	10.0	-34.3*	20.0
Vinyl chloride	Ave	0.3611	0.2812	0.1000	7.79	10.0	-22.1*	20.0
Bromomethane	Ave	0.1449	0.1512	0.0500	10.4	10.0	4.3	20.0
Chloroethane	Ave	0.2214	0.1754	0.0500	7.92	10.0	-20.8*	20.0
Dichlorofluoromethane	Ave	0.5279	0.5334	0.0100	10.1	10.0	1.1	20.0
Trichlorofluoromethane	Ave	0.4130	0.4573	0.1000	11.1	10.0	10.7	20.0
Ethyl ether	Ave	0.3150	0.2880	0.0100	9.14	10.0	-8.6	20.0
Acrolein	Ave	0.0500	0.0268	0.0100	16.1	30.0	-46.4*	20.0
1,1-Dichloroethene	Ave	0.2807	0.2635	0.1000	9.38	10.0	-6.2	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2839	0.2997	0.1000	10.6	10.0	5.6	20.0
Acetone	Ave	0.0884	0.0853	0.0500	19.3	20.0	-3.6	20.0
Iodomethane	Ave	0.4159	0.3866	0.0100	9.30	10.0	-7.0	20.0
Carbon disulfide	Ave	0.8315	0.7312	0.1000	8.79	10.0	-12.1	20.0
Allyl chloride	Ave	0.1823	0.1583	0.0100	8.68	10.0	-13.2	20.0
Methyl acetate	Ave	0.2165	0.2545	0.1000	58.8	50.0	17.6	20.0
Methylene Chloride	Ave	0.4104	0.3293	0.1000	8.02	10.0	-19.8	20.0
tert-Butyl alcohol	Ave	1.130	1.192	0.0100	106	100	5.5	20.0
Acrylonitrile	Ave	0.1129	0.1287	0.0100	114	100	14.0	20.0
Methyl tert-butyl ether	Ave	0.8884	0.8462	0.1000	9.52	10.0	-4.8	20.0
trans-1,2-Dichloroethene	Ave	0.3380	0.3206	0.1000	9.49	10.0	-5.1	20.0
Hexane	Ave	0.4863	0.4145	0.0100	8.52	10.0	-14.8	20.0
1,1-Dichloroethane	Ave	0.6538	0.5771	0.2000	8.83	10.0	-11.7	20.0
Vinyl acetate	Ave	0.3399	0.3118	0.0100	9.17	10.0	-8.3	20.0
2,2-Dichloropropane	Ave	0.3707	0.2630	0.0100	7.09	10.0	-29.1*	20.0
2-Butanone (MEK)	Ave	0.1134	0.1213	0.0500	21.4	20.0	7.0	20.0
cis-1,2-Dichloroethene	Ave	0.3585	0.3231	0.1000	9.01	10.0	-9.9	20.0
Bromochloromethane	Ave	0.1427	0.1477	0.0100	10.4	10.0	3.5	20.0
Tetrahydrofuran	Ave	0.0815	0.0861	0.0100	21.1	20.0	5.6	20.0
Chloroform	Ave	0.5629	0.5305	0.2000	9.42	10.0	-5.8	20.0
1,1,1-Trichloroethane	Ave	0.4288	0.4039	0.1000	9.42	10.0	-5.8	20.0
Cyclohexane	Ave	0.6908	0.5771	0.1000	8.35	10.0	-16.5	20.0
Carbon tetrachloride	Ave	0.3357	0.3252	0.1000	9.69	10.0	-3.1	20.0
1,1-Dichloropropene	Ave	0.4279	0.4135	0.0100	9.66	10.0	-3.4	20.0
Isobutyl alcohol	Ave	0.0067	0.0084*	0.0100	315	250	25.9*	20.0
Benzene	Ave	1.242	1.283	0.5000	10.3	10.0	3.4	20.0
1,2-Dichloroethane	Ave	0.4076	0.4775	0.1000	11.7	10.0	17.2	20.0
n-Heptane	Ave	0.3955	0.3301	0.0100	8.35	10.0	-16.5	20.0
Trichloroethene	Ave	0.2828	0.2653	0.2000	9.38	10.0	-6.2	20.0
Methylcyclohexane	Ave	0.5572	0.4796	0.1000	8.61	10.0	-13.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Lab Sample ID: CCVIS 180-137223/2 Calibration Date: 04/01/2015 11:45

Instrument ID: CHHP6 Calib Start Date: 01/28/2015 13:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/28/2015 16:44

Lab File ID: 60401002.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	0.3285	0.2888	0.1000	8.79	10.0	-12.1	20.0
1,4-Dioxane	Ave	0.0021	0.0030*	0.0100	288	200	43.8*	20.0
Dibromomethane	Ave	0.1468	0.1630	0.0100	11.1	10.0	11.0	20.0
Bromodichloromethane	Ave	0.3444	0.3344	0.2000	9.71	10.0	-2.9	20.0
cis-1,3-Dichloropropene	Ave	0.3952	0.3429	0.2000	8.68	10.0	-13.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.128	1.019	0.1000	18.1	20.0	-9.7	20.0
Toluene	Ave	5.112	5.968	0.4000	11.7	10.0	16.7	20.0
trans-1,3-Dichloropropene	Ave	1.402	1.373	0.1000	9.79	10.0	-2.1	20.0
Ethyl methacrylate	Ave	1.290	1.442	0.0100	11.2	10.0	11.8	20.0
1,1,2-Trichloroethane	Ave	0.9282	1.166	0.1000	12.6	10.0	25.7*	20.0
Tetrachloroethene	Ave	0.9129	1.088	0.2000	11.9	10.0	19.2	20.0
1,3-Dichloropropane	Ave	1.726	2.060	0.0100	11.9	10.0	19.3	20.0
2-Hexanone	Ave	0.6436	0.9665	0.1000	30.0	20.0	50.2*	20.0
Dibromochloromethane	Ave	0.7880	0.8692	0.1000	11.0	10.0	10.3	20.0
1,2-Dibromoethane (EDB)	Ave	0.8444	1.065	0.1000	12.6	10.0	26.1*	20.0
3-Chlorobenzotrifluoride	Ave	1.778	2.079	0.0100	11.7	10.0	16.9	20.0
Chlorobenzene	Ave	3.190	3.545	0.5000	11.1	10.0	11.1	20.0
4-Chlorobenzotrifluoride	Ave	1.655	1.881	0.0100	11.4	10.0	13.7	20.0
1,1,1,2-Tetrachloroethane	Ave	1.100	1.146	0.0100	10.4	10.0	4.2	20.0
Ethylbenzene	Ave	1.914	2.034	0.1000	10.6	10.0	6.2	20.0
m-Xylene & p-Xylene	Ave	2.363	2.611	0.1000	11.1	10.0	10.5	20.0
o-Xylene	Ave	2.428	2.579	0.3000	10.6	10.0	6.2	20.0
Styrene	Ave	3.575	4.157	0.3000	11.6	10.0	16.3	20.0
Bromoform	Ave	0.4220	0.4730	0.1000	11.2	10.0	12.1	20.0
2-Chlorobenzotrifluoride	Ave	1.855	2.061	0.0100	11.1	10.0	11.1	20.0
Isopropylbenzene	Ave	5.986	6.483	0.1000	10.8	10.0	8.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.248	1.579	0.3000	12.7	10.0	26.5*	20.0
Bromobenzene	Ave	0.8752	0.8062	0.0100	9.21	10.0	-7.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2461	0.2266	0.0100	9.21	10.0	-7.9	20.0
1,2,3-Trichloropropane	Ave	0.2561	0.3023	0.0100	11.8	10.0	18.0	20.0
N-Propylbenzene	Ave	1.046	0.9637	0.0100	9.22	10.0	-7.8	20.0
2-Chlorotoluene	Ave	0.9215	0.8030	0.0100	8.71	10.0	-12.9	20.0
3-Chlorotoluene	Ave	0.9634	0.9714	0.0100	10.1	10.0	0.8	20.0
1,3,5-Trimethylbenzene	Ave	3.361	3.346	0.0100	9.95	10.0	-0.5	20.0
4-Chlorotoluene	Ave	0.9458	0.8714	0.0100	9.21	10.0	-7.9	20.0
tert-Butylbenzene	Ave	2.616	2.351	0.0100	8.99	10.0	-10.1	20.0
1,2,4-Trimethylbenzene	Ave	3.478	3.372	0.0100	9.70	10.0	-3.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.9718	0.9946	0.0100	10.2	10.0	2.3	20.0
sec-Butylbenzene	Ave	4.045	3.798	0.0100	9.39	10.0	-6.1	20.0
1,3-Dichlorobenzene	Ave	1.715	1.642	0.6000	9.58	10.0	-4.2	20.0
4-Isopropyltoluene	Ave	3.281	2.988	0.0100	9.11	10.0	-8.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Lab Sample ID: CCVIS 180-137223/2 Calibration Date: 04/01/2015 11:45

Instrument ID: CHHP6 Calib Start Date: 01/28/2015 13:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/28/2015 16:44

Lab File ID: 60401002.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	1.774	1.710	0.5000	9.64	10.0	-3.6	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.9753	1.007	0.0100	10.3	10.0	3.2	20.0
2,5-Dichlorobenzotrifluoride	Ave	1.075	1.117	0.0100	10.4	10.0	3.9	20.0
n-Butylbenzene	Ave	3.155	2.967	0.0100	9.40	10.0	-6.0	20.0
1,2-Dichlorobenzene	Ave	1.714	1.678	0.4000	9.79	10.0	-2.1	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.609	1.581	0.0100	29.5	30.0	-1.7	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.757	1.780	0.0100	20.3	20.0	1.3	20.0
1,2,4-Trichlorobenzene	Ave	1.328	1.213	0.2000	9.13	10.0	-8.7	20.0
Hexachlorobutadiene	Ave	0.5193	0.4824	0.0100	9.29	10.0	-7.1	20.0
Naphthalene	Ave	2.282	2.743	0.0100	12.0	10.0	20.2*	20.0
1,2,3-Trichlorobenzene	Ave	1.111	1.109	0.0100	9.99	10.0	-0.1	20.0
2,4,5-Trichlorotoluene	Ave	0.8175	0.7728	0.0100	9.45	10.0	-5.5	20.0
2,3,6-Trichlorotoluene	Ave	0.7286	0.7367	0.0100	10.1	10.0	1.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2262	0.2092		9.25	10.0	-7.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3237	0.3426		10.6	10.0	5.8	20.0
Toluene-d8 (Surr)	Ave	3.941	4.136		10.5	10.0	5.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.677	1.627		9.70	10.0	-3.0	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Apr-2015 11:45:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006281-002
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:55:07 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 12:30:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.280	4.280	0.000	91	178333	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	99	427770	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.440	0.000	88	88386	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.787	0.000	96	153253	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.597	0.000	93	89494	50.0	46.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	71	146545	50.0	52.9	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	93	365605	50.0	52.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.626	11.626	0.000	84	143800	50.0	48.5	
11 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	115049	50.0	50.8	
12 Chloromethane	50	1.762	1.762	0.000	98	114602	50.0	32.9	
13 Vinyl chloride	62	1.896	1.896	0.000	98	120273	50.0	38.9	
14 Butadiene	39	1.938	1.938	0.000	89	121476	50.0	36.8	
15 Bromomethane	94	2.248	2.248	0.000	93	64670	50.0	52.2	
16 Chloroethane	64	2.388	2.388	0.000	99	75019	50.0	39.6	
17 Dichlorofluoromethane	67	2.668	2.668	0.000	97	228183	50.0	50.5	
18 Trichlorofluoromethane	101	2.698	2.698	0.000	95	195630	50.0	55.4	
20 Ethyl ether	59	3.069	3.069	0.000	93	123188	50.0	45.7	
21 Acrolein	56	3.252	3.252	0.000	99	34409	150.0	80.5	
22 1,1-Dichloroethene	96	3.379	3.379	0.000	94	112695	50.0	46.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.428	0.000	95	128209	50.0	52.8	
24 Acetone	43	3.459	3.459	0.000	99	72934	100.0	96.4	
25 Iodomethane	142	3.574	3.574	0.000	98	165369	50.0	46.5	
26 Carbon disulfide	76	3.677	3.677	0.000	99	312762	50.0	44.0	
29 3-Chloro-1-propene	76	3.957	3.957	0.000	59	67705	50.0	43.4	
30 Methyl acetate	43	3.957	3.957	0.000	98	544327	250.0	293.9	
31 Methylene Chloride	84	4.170	4.170	0.000	95	140847	50.0	40.1	
32 2-Methyl-2-propanol	59	4.401	4.401	0.000	94	106313	500.0	527.5	
33 Acrylonitrile	53	4.535	4.535	0.000	99	550550	500.0	570.1	
35 Methyl tert-butyl ether	73	4.608	4.608	0.000	96	361967	50.0	47.6	
34 trans-1,2-Dichloroethene	96	4.614	4.614	0.000	69	137143	50.0	47.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.028	5.028	0.000	92	177295	50.0	42.6	
37 1,1-Dichloroethane	63	5.240	5.240	0.000	97	246884	50.0	44.1	
38 Vinyl acetate	43	5.271	5.271	0.000	98	133373	50.0	45.9	
44 2-Butanone (MEK)	43	5.982	5.982	0.000	55	103786	100.0	107.0	
43 cis-1,2-Dichloroethene	96	5.982	5.982	0.000	83	138216	50.0	45.1	
42 2,2-Dichloropropane	77	5.982	5.982	0.000	58	112515	50.0	35.5	
48 Chlorobromomethane	128	6.274	6.274	0.000	95	63182	50.0	51.8	
49 Tetrahydrofuran	42	6.280	6.280	0.000	87	73629	100.0	105.6	
50 Chloroform	83	6.414	6.414	0.000	94	226920	50.0	47.1	
51 1,1,1-Trichloroethane	97	6.578	6.578	0.000	98	172790	50.0	47.1	
52 Cyclohexane	56	6.663	6.663	0.000	94	246878	50.0	41.8	
53 Carbon tetrachloride	117	6.761	6.761	0.000	91	139094	50.0	48.4	
54 1,1-Dichloropropene	75	6.773	6.773	0.000	95	176888	50.0	48.3	
55 Isobutyl alcohol	41	6.931	6.931	0.000	90	89548	1250.0	1573.6	
56 Benzene	78	6.980	6.980	0.000	97	548997	50.0	51.7	
57 1,2-Dichloroethane	62	7.059	7.059	0.000	99	204274	50.0	58.6	
59 n-Heptane	43	7.345	7.345	0.000	93	141218	50.0	41.7	
61 Trichloroethene	130	7.722	7.722	0.000	94	113483	50.0	46.9	
63 Methylcyclohexane	83	7.965	7.965	0.000	93	205135	50.0	43.0	
64 1,2-Dichloropropane	63	7.995	7.995	0.000	95	123527	50.0	43.9	
65 1,4-Dioxane	88	8.068	8.068	0.000	49	25288	1000.0	1438.3	M
67 Dibromomethane	93	8.074	8.074	0.000	94	69705	50.0	55.5	
68 Dichlorobromomethane	83	8.269	8.269	0.000	99	143036	50.0	48.5	
71 cis-1,3-Dichloropropene	75	8.713	8.713	0.000	93	146664	50.0	43.4	
72 4-Methyl-2-pentanone (MIBK	43	8.859	8.859	0.000	96	180057	100.0	90.3	
73 Toluene	91	9.047	9.047	0.000	99	527464	50.0	58.4	
74 trans-1,3-Dichloropropene	75	9.291	9.291	0.000	94	121321	50.0	49.0	
75 Ethyl methacrylate	69	9.345	9.345	0.000	90	127456	50.0	55.9	
76 1,1,2-Trichloroethane	97	9.485	9.485	0.000	93	103094	50.0	62.8	
77 Tetrachloroethene	164	9.564	9.564	0.000	97	96193	50.0	59.6	
78 1,3-Dichloropropane	76	9.649	9.649	0.000	91	182051	50.0	59.7	
79 2-Hexanone	43	9.692	9.692	0.000	96	170852	100.0	150.2	
81 Chlorodibromomethane	129	9.868	9.868	0.000	91	76823	50.0	55.2	
82 Ethylene Dibromide	107	9.984	9.984	0.000	96	94091	50.0	63.0	
83 3-Chlorobenzotrifluoride	180	10.428	10.428	0.000	95	183713	50.0	58.4	
84 Chlorobenzene	112	10.470	10.470	0.000	92	313335	50.0	55.6	
85 4-Chlorobenzotrifluoride	180	10.519	10.519	0.000	96	166267	50.0	56.8	
86 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	87	101317	50.0	52.1	
87 Ethylbenzene	106	10.568	10.568	0.000	99	179737	50.0	53.1	
88 m-Xylene & p-Xylene	106	10.701	10.701	0.000	99	230775	50.0	55.3	
89 o-Xylene	106	11.078	11.078	0.000	97	227953	50.0	53.1	
90 Styrene	104	11.103	11.103	0.000	95	367452	50.0	58.1	
91 Bromoform	173	11.285	11.285	0.000	97	41809	50.0	56.0	
92 2-Chlorobenzotrifluoride	180	11.340	11.340	0.000	95	182175	50.0	55.6	
93 Isopropylbenzene	105	11.449	11.449	0.000	97	573011	50.0	54.2	
96 1,1,2,2-Tetrachloroethane	83	11.753	11.753	0.000	96	139587	50.0	63.3	
95 Bromobenzene	156	11.766	11.766	0.000	96	123554	50.0	46.1	
97 trans-1,4-Dichloro-2-buten	53	11.790	11.790	0.000	67	34720	50.0	46.0	
98 1,2,3-Trichloropropane	110	11.814	11.814	0.000	82	46327	50.0	59.0	
99 N-Propylbenzene	120	11.863	11.863	0.000	99	147683	50.0	46.1	
100 2-Chlorotoluene	126	11.954	11.954	0.000	94	123065	50.0	43.6	
101 3-Chlorotoluene	126	12.021	12.021	0.000	98	148867	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.045	12.045	0.000	94	512714	50.0	49.8	
103 4-Chlorotoluene	126	12.076	12.076	0.000	99	133542	50.0	46.1	
104 tert-Butylbenzene	119	12.362	12.362	0.000	91	360345	50.0	44.9	
106 1,2,4-Trimethylbenzene	105	12.422	12.422	0.000	98	516829	50.0	48.5	
107 1,2-dichloro-4-(trifluorom	214	12.459	12.459	0.000	98	152425	50.0	51.2	
108 sec-Butylbenzene	105	12.587	12.587	0.000	95	582024	50.0	46.9	
109 1,3-Dichlorobenzene	146	12.708	12.708	0.000	96	251683	50.0	47.9	
110 4-Isopropyltoluene	119	12.745	12.745	0.000	96	457928	50.0	45.5	
111 1,4-Dichlorobenzene	146	12.812	12.812	0.000	90	262064	50.0	48.2	
113 2,4-Dichloro-1-(triflourom	214	12.830	12.830	0.000	95	154265	50.0	51.6	
114 2,5-Dichlorobenzotrifluori	214	12.866	12.866	0.000	96	171111	50.0	51.9	
116 n-Butylbenzene	91	13.152	13.152	0.000	99	454683	50.0	47.0	
117 1,2-Dichlorobenzene	146	13.170	13.170	0.000	94	257221	50.0	49.0	
118 1,2-Dibromo-3-Chloropropan	75	13.961	13.955	0.006	76	22550	50.0	53.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.101	14.101	0.000	100	726883	150.0	147.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.514	14.514	0.000	99	545466	100.0	101.3	
122 1,2,4-Trichlorobenzene	180	14.788	14.788	0.000	94	185869	50.0	45.7	
123 Hexachlorobutadiene	225	14.928	14.928	0.000	96	73929	50.0	46.4	
124 Naphthalene	128	15.050	15.050	0.000	98	420440	50.0	60.1	
125 1,2,3-Trichlorobenzene	180	15.281	15.281	0.000	94	170022	50.0	49.9	
126 2,4,5-Trichlorotoluene	159	16.047	16.047	0.000	0	118436	50.0	47.3	
127 2,3,6-Trichlorotoluene	159	16.144	16.144	0.000	93	112895	50.0	50.6	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	108.4	
S 130 1,2-Dichloroethene, Total	96				0		100.0	92.5	
S 132 1,3-Dichloropropene, Total	1				0		100.0	92.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00108	Amount Added:	2.00	Units: uL		
VOAVAPRI_00005	Amount Added:	2.00	Units: uL		
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL		
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL		
VOAACRPRI_00005	Amount Added:	6.00	Units: uL		
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent	

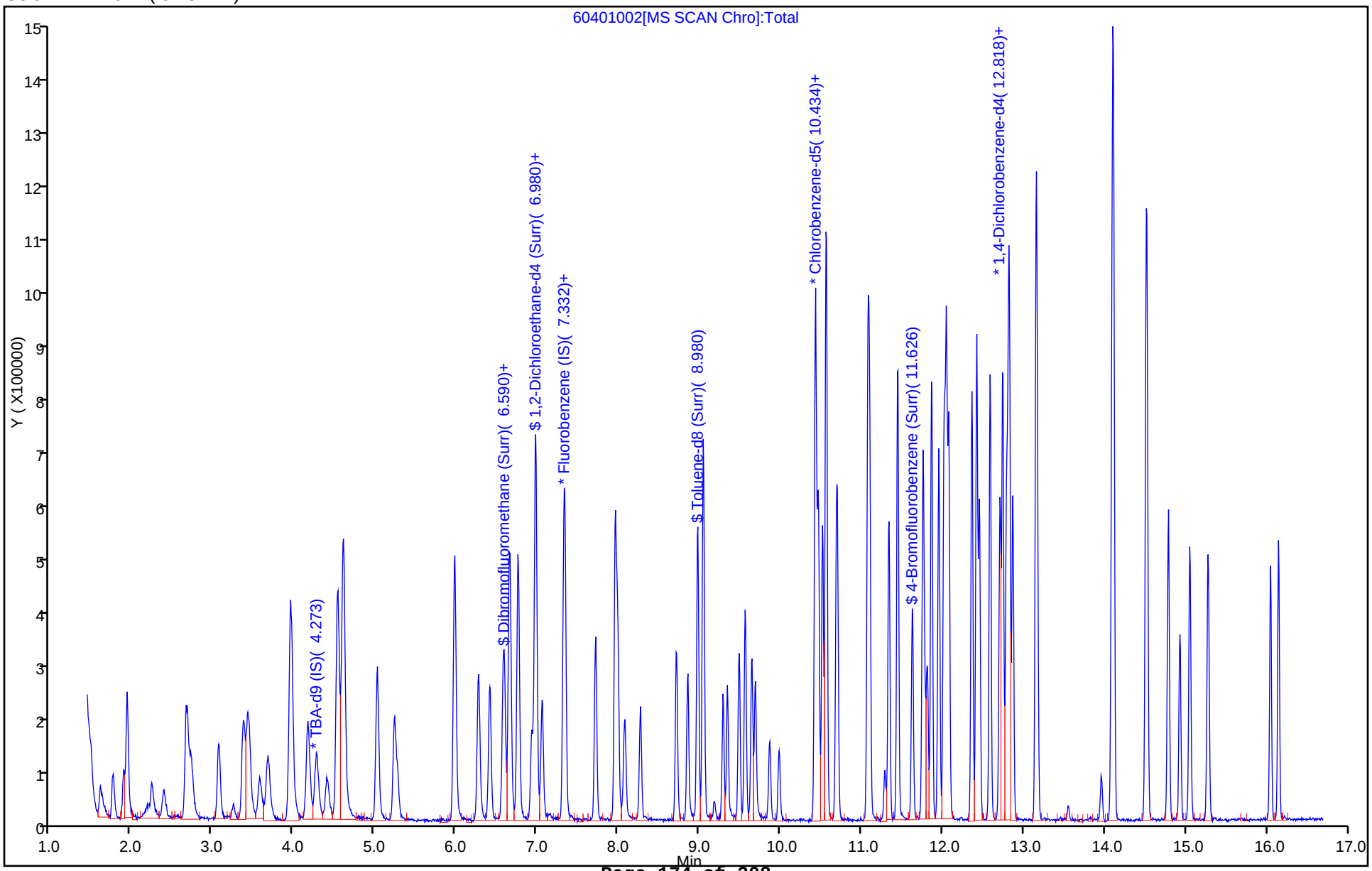
Report Date: 01-Apr-2015 14:55:08 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401002.D

Injection Date:	01-Apr-2015 11:45:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

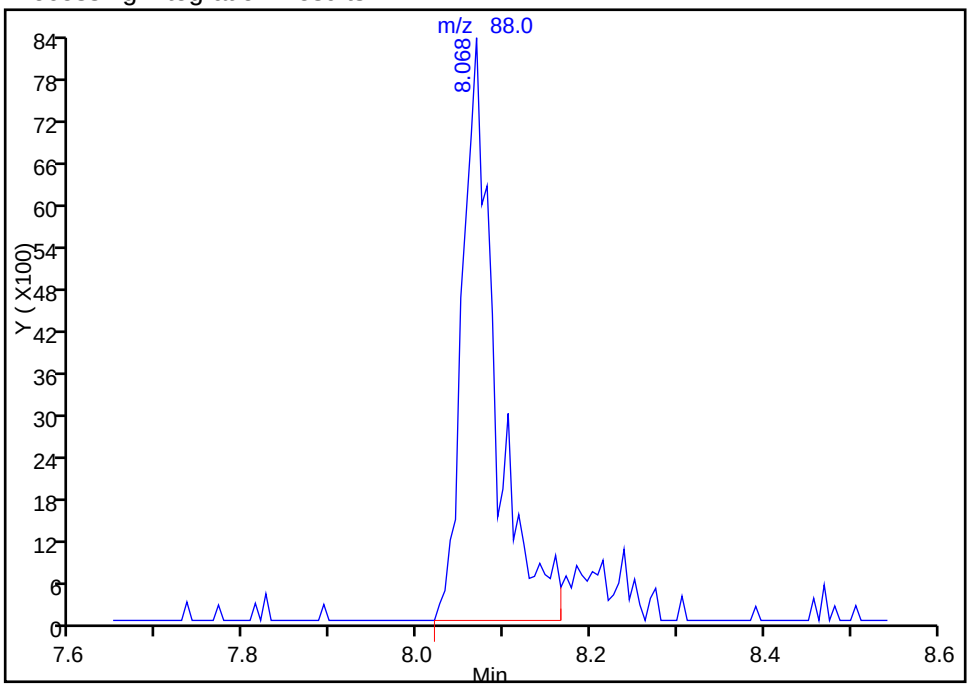
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401002.D
Injection Date: 01-Apr-2015 11:45:30 Instrument ID: CHHP6
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

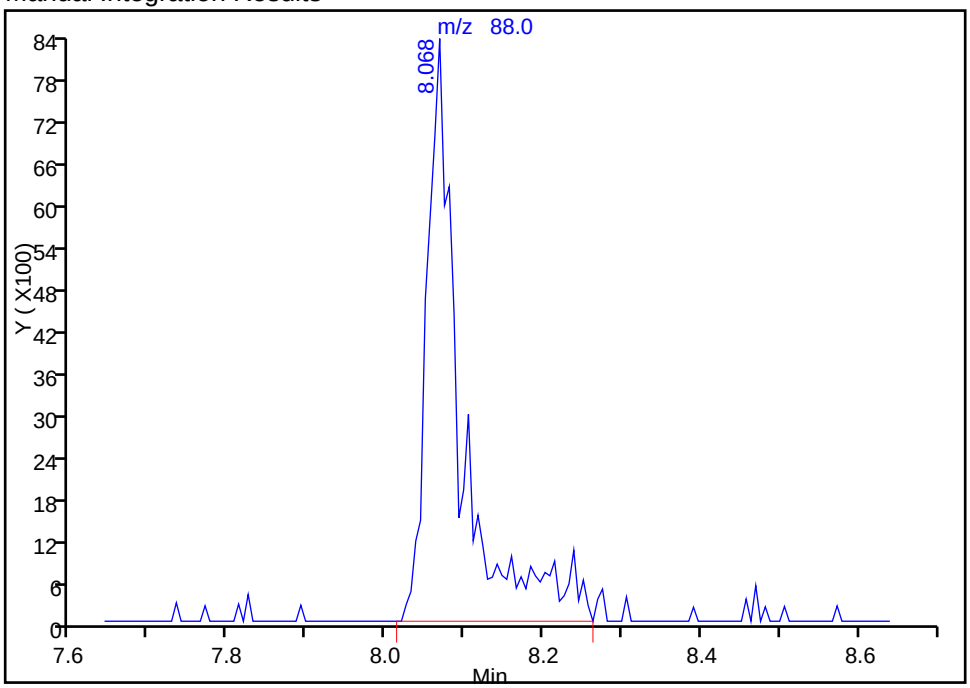
Processing Integration Results

RT: 8.07
Area: 22124
Amount: 1210.2094
Amount Units: ng



Manual Integration Results

RT: 8.07
Area: 25288
Amount: 1438.2838
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 12:30:08
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Jan-2015 11:55:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0005450-004
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Jan-2015 12:59:04 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: fergusond Date: 28-Jan-2015 12:11:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.412	8.412	0.000	0	199884	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

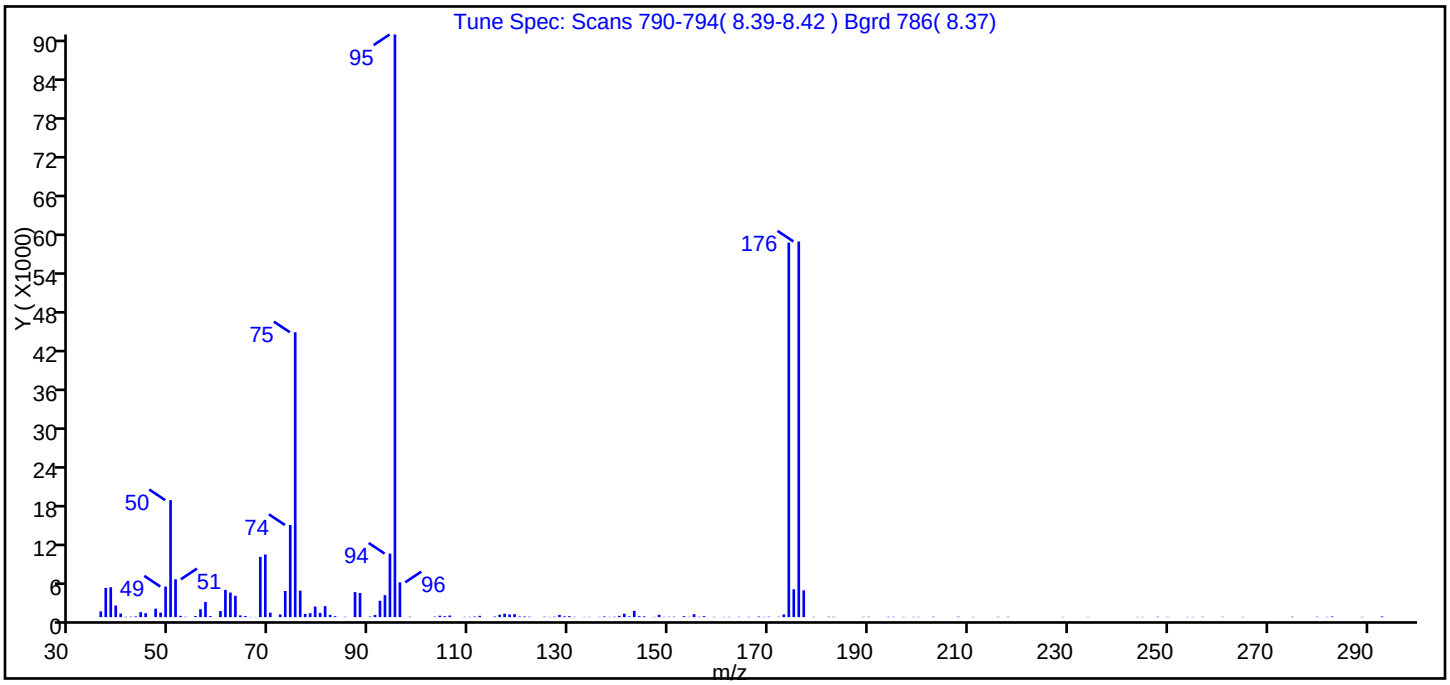
VOABFB25_00058 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D
Injection Date: 28-Jan-2015 11:55:30 Instrument ID: CHHP6
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 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	20.1
75	30 to 60% of m/z 95	48.9
96	5 to 9% of m/z 95	6.0
173	Less than 2% of m/z 174	0.5 (0.7)
174	50 to 120% of m/z 95	64.3
175	5 to 9% of m/z 174	4.8 (7.4)
176	Greater than 95% but less than 101% of m/z 174	64.5 (100.3)
177	5 to 9% of m/z 176	4.6 (7.1)

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 28-Jan-2015 11:55:30
Spectrum: Tune Spec: Scans 790-794(8.39-8.42) Bgrd 786(8.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 146

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	891	77.00	502	128.00	348	175.00	4324
37.00	4531	78.00	605	129.00	124	176.00	58296
38.00	4646	79.00	1644	130.00	152	177.00	4160
39.00	1807	80.00	651	131.00	50	179.00	52
40.00	555	81.00	1709	133.00	41	182.00	63
41.00	56	82.00	356	134.00	46	183.00	55
42.00	70	83.00	146	136.00	46	189.00	53
43.00	107	85.00	61	137.00	103	190.00	57
44.00	769	87.00	3894	138.00	43	194.00	56
45.00	610	88.00	3751	139.00	61	195.00	52
47.00	1314	90.00	90	140.00	200	197.00	43
48.00	705	91.00	349	141.00	534	199.00	40
49.00	4748	92.00	2541	142.00	114	200.00	48
50.00	18152	93.00	3413	143.00	975	203.00	62
51.00	5876	94.00	9860	144.00	138	208.00	68
52.00	208	95.00	90424	145.00	118	211.00	43
53.00	59	96.00	5404	147.00	46	216.00	55
55.00	176	98.00	59	148.00	368	218.00	59
56.00	1231	103.00	79	149.00	41	229.00	40
57.00	2359	104.00	225	150.00	55	234.00	42
58.00	152	105.00	149	151.00	67	244.00	41
60.00	945	106.00	249	153.00	140	245.00	40
61.00	4225	109.00	47	154.00	45	248.00	60
62.00	3811	110.00	49	155.00	450	250.00	48
63.00	3318	111.00	93	156.00	59	254.00	40
64.00	267	112.00	207	157.00	151	255.00	40
65.00	170	115.00	95	159.00	49	257.00	56
66.00	41	116.00	375	161.00	40	261.00	50
67.00	26	117.00	527	162.00	45	265.00	41
68.00	9355	118.00	409	164.00	56	275.00	63
69.00	9719	119.00	460	166.00	56	280.00	60
70.00	700	120.00	94	168.00	91	282.00	47
72.00	421	121.00	98	169.00	40	283.00	95

Report Date: 29-Jan-2015 12:59:04 Chrom Revision: 2.2 15-Jan-2015 13:05:58
Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 28-Jan-2015 11:55:30
Spectrum: Tune Spec: Scans 790-794(8.39-8.42) Bgrd 786(8.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 146

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	4056	122.00	70	170.00	67	289.00	51
74.00	14305	125.00	68	172.00	59	293.00	109
75.00	44208	126.00	40	173.00	418		
76.00	4109	127.00	76	174.00	58128		

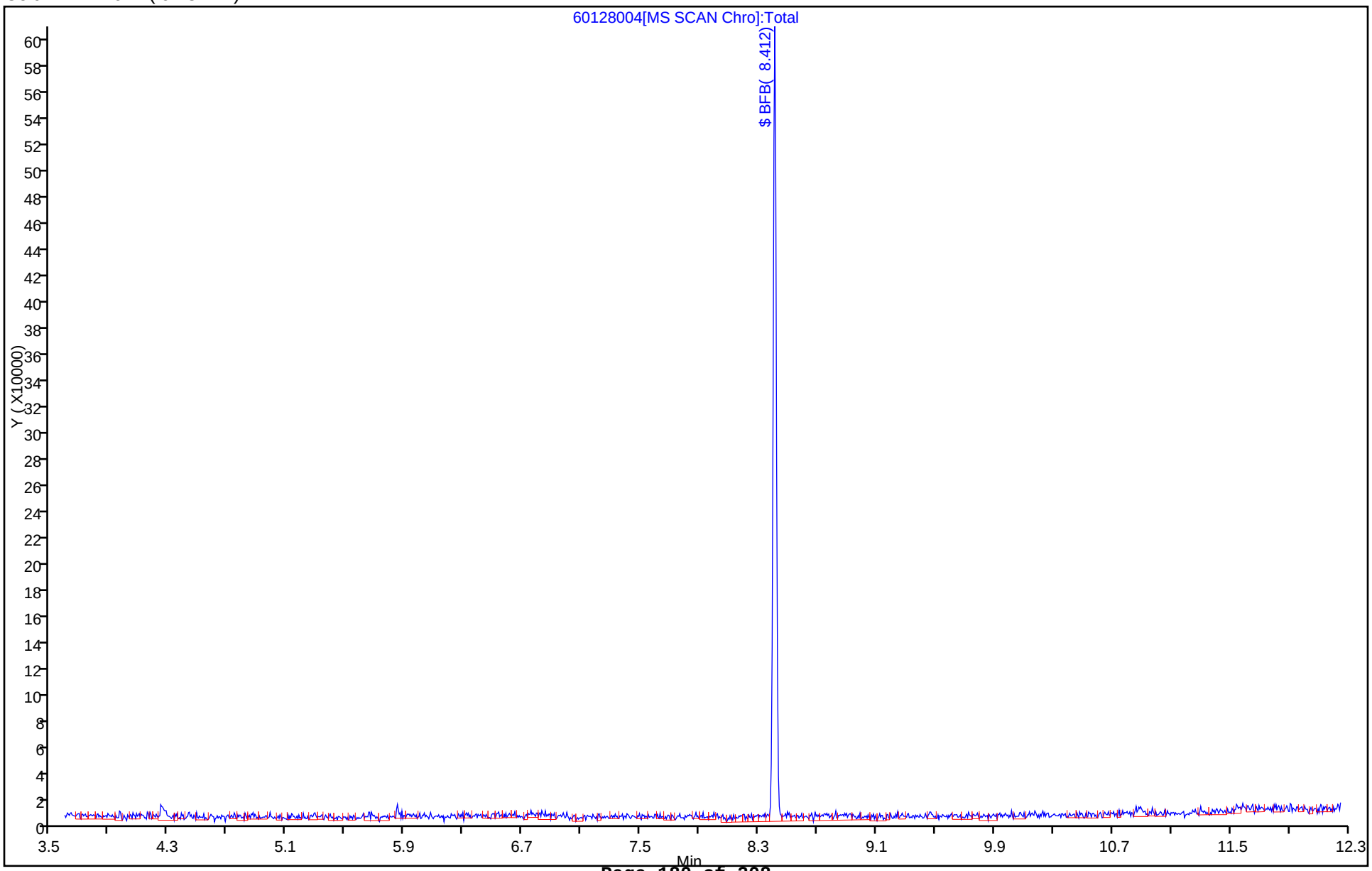
Report Date: 29-Jan-2015 12:59:04 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128004.D

Injection Date:	28-Jan-2015 11:55:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Apr-2015 11:02:30 ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006281-004
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:55:06 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 11:19:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.407	8.407	0.000	0	215779	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

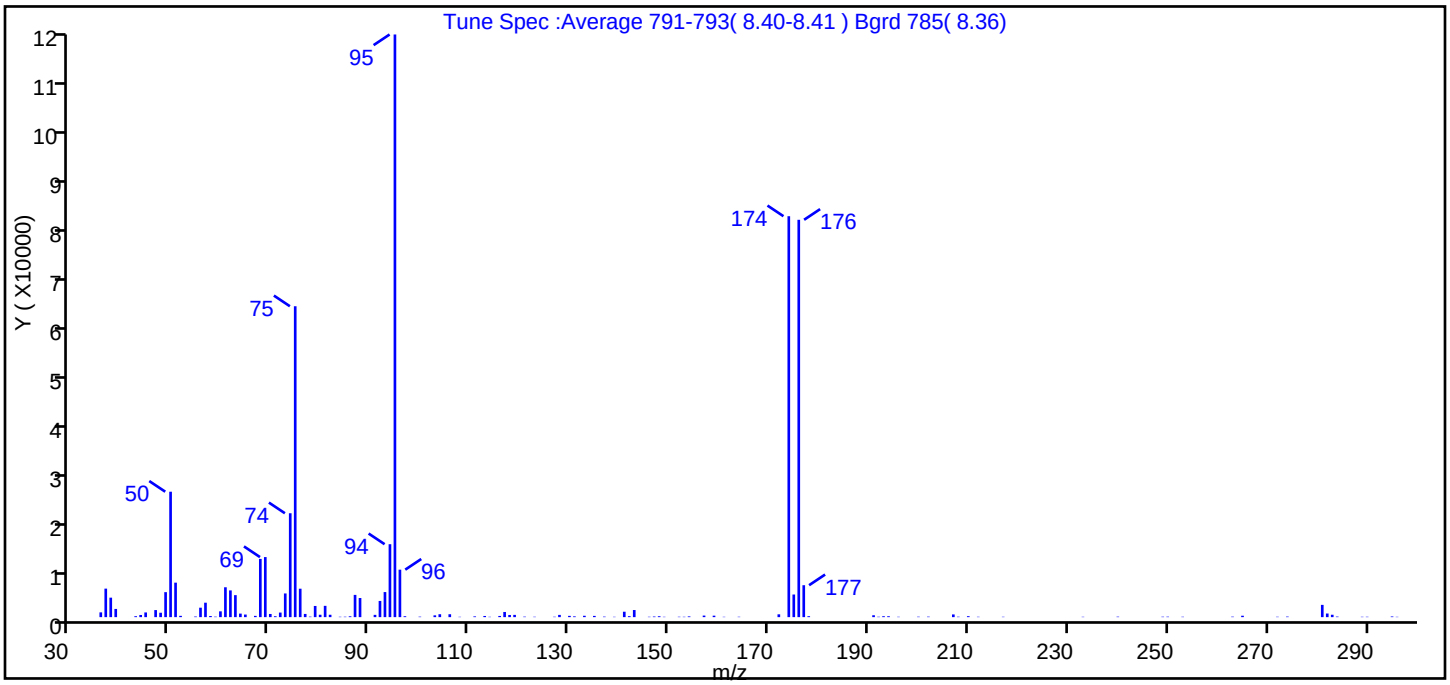
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401004.D				
Injection Date:	01-Apr-2015 11:02:30	Instrument ID:	CHHP6		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	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	21.5
75	30 to 60% of m/z 95	53.4
96	5 to 9% of m/z 95	8.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	68.8
175	5 to 9% of m/z 174	3.9 (5.6)
176	Greater than 95% but less than 101% of m/z 174	68.2 (99.1)
177	5 to 9% of m/z 176	5.5 (8.0)

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401004.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 01-Apr-2015 11:02:30
Spectrum: Tune Spec :Average 791-793(8.40-8.41) Bgrd 785(8.36)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 123

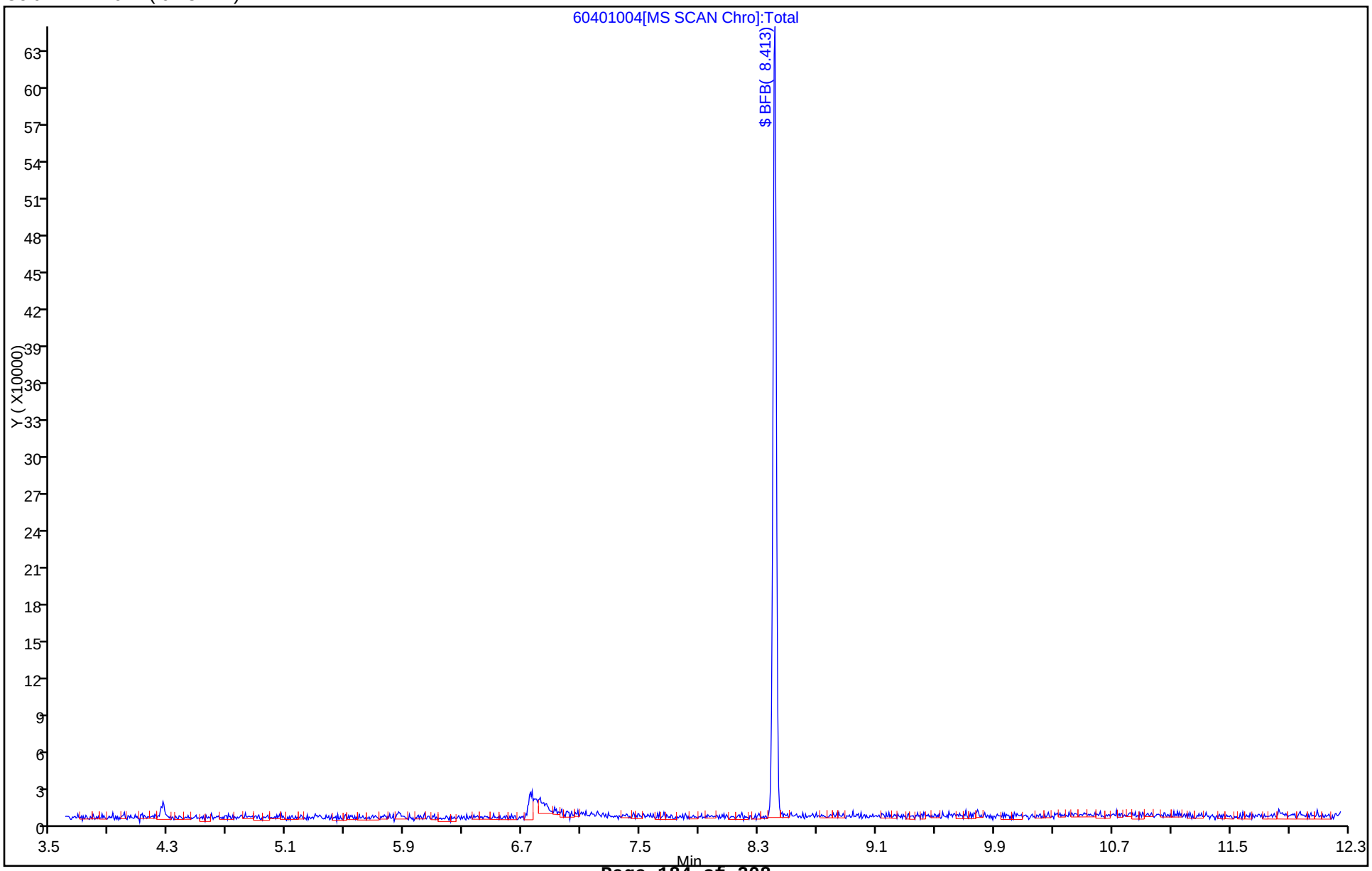
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	970	74.00	21112	118.00	440	178.00	191
37.00	5794	75.00	63176	119.00	459	191.00	384
38.00	3959	76.00	5779	121.00	101	192.00	82
39.00	1667	77.00	652	123.00	78	193.00	184
43.00	190	78.00	101	127.00	83	194.00	181
44.00	437	79.00	2271	128.00	457	196.00	74
45.00	955	80.00	487	130.00	260	200.00	90
47.00	1436	81.00	2295	131.00	158	202.00	100
48.00	894	82.00	485	133.00	278	207.00	550
49.00	5078	84.00	77	135.00	253	208.00	88
50.00	25488	85.00	86	137.00	105	210.00	193
51.00	7009	86.00	173	139.00	70	212.00	76
52.00	266	87.00	4521	141.00	1101	217.00	75
55.00	126	88.00	3887	142.00	195	233.00	72
56.00	1921	91.00	464	143.00	1444	240.00	98
57.00	2934	92.00	3288	146.00	78	249.00	89
58.00	226	93.00	5096	147.00	125	250.00	96
59.00	94	94.00	14821	148.00	183	253.00	80
60.00	1179	95.00	118400	149.00	71	263.00	100
61.00	6070	96.00	9647	152.00	82	265.00	286
62.00	5433	97.00	186	153.00	75	272.00	78
63.00	4471	100.00	98	154.00	152	274.00	113
64.00	721	103.00	366	157.00	318	281.00	2494
65.00	528	104.00	591	159.00	299	282.00	736
67.00	259	106.00	589	161.00	69	283.00	487
68.00	11836	108.00	68	164.00	78	284.00	114
69.00	12204	111.00	152	172.00	574	289.00	75
70.00	646	113.00	237	174.00	81472	290.00	79
71.00	182	114.00	70	175.00	4599	295.00	137
72.00	930	116.00	242	176.00	80744	296.00	68
73.00	4814	117.00	1049	177.00	6488		

Report Date: 01-Apr-2015 14:55:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401004.D				
Injection Date:	01-Apr-2015 11:02:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP6	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.: 180-42445-2

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-137223/5

Matrix: Water | Lab File ID: 60401005.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/01/2015 13:17

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.: 137223 | 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.: 180-42445-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137223/5

Matrix: Water Lab File ID: 60401005.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 13:17

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.: 137223 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)	117		64-135
2037-26-5	Toluene-d8 (Surr)	112		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Apr-2015 13:17:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0006281-005
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 14:57:16 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 14:57:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.280	-0.008	92	230971	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.331	7.326	0.005	98	480605	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.438	10.440	-0.002	88	96601	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.787	0.005	98	153546	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.595	6.597	-0.002	92	113904	50.0	52.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.978	6.974	0.004	70	181918	50.0	58.5	
$ 7 Toluene-d8 (Surr)	98	8.979	8.980	-0.001	93	425030	50.0	55.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.630	11.626	0.004	83	157353	50.0	48.6	
11 Dichlorodifluoromethane	85		1.610					ND	
12 Chloromethane	50		1.762					ND	
13 Vinyl chloride	62		1.896					ND	
14 Butadiene	39		1.938					ND	
15 Bromomethane	94		2.248					ND	
16 Chloroethane	64		2.388					ND	
17 Dichlorofluoromethane	67		2.668					ND	
18 Trichlorofluoromethane	101		2.698					ND	
19 Ethanol	45		2.940					ND	
20 Ethyl ether	59		3.069					ND	
21 Acrolein	56		3.252					ND	
22 1,1-Dichloroethene	96		3.379					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.428					ND	
24 Acetone	43	3.463	3.459	0.004	39	2101		2.47	M
25 Iodomethane	142		3.574					ND	
26 Carbon disulfide	76		3.677					ND	
27 Isopropyl alcohol	45		3.724					ND	
28 Acetonitrile	40		3.889					ND	
29 3-Chloro-1-propene	76		3.957					ND	
30 Methyl acetate	43		3.957					ND	
31 Methylene Chloride	84		4.170					ND	
32 2-Methyl-2-propanol	59		4.401					ND	
33 Acrylonitrile	53		4.535					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.608					ND	
34 trans-1,2-Dichloroethene	96		4.614					ND	
36 Hexane	57		5.028					ND	
37 1,1-Dichloroethane	63		5.240					ND	
38 Vinyl acetate	43		5.271					ND	
40 Isopropyl ether	45		5.330					ND	
39 2-Chloro-1,3-butadiene	53		5.342					ND	
41 Tert-butyl ethyl ether	59		5.804					ND	
43 cis-1,2-Dichloroethene	96		5.982					ND	
42 2,2-Dichloropropane	77		5.982					ND	
44 2-Butanone (MEK)	43		5.982					ND	
45 Propionitrile	54		6.047					ND	
46 Ethyl acetate	43		6.066					ND	
47 Methacrylonitrile	41		6.236					ND	
48 Chlorobromomethane	128		6.274					ND	
49 Tetrahydrofuran	42		6.280					ND	
50 Chloroform	83	6.406	6.414	-0.008	1	1218		0.2251	
51 1,1,1-Trichloroethane	97		6.578					ND	
52 Cyclohexane	56		6.663					ND	
53 Carbon tetrachloride	117		6.761					ND	
54 1,1-Dichloropropene	75		6.773					ND	
55 Isobutyl alcohol	41		6.931					ND	
56 Benzene	78		6.980					ND	
57 1,2-Dichloroethane	62		7.059					ND	
58 Tert-amyl methyl ether	73		7.160					ND	
59 n-Heptane	43		7.345					ND	
60 n-Butanol	56		7.647					ND	
61 Trichloroethene	130		7.722					ND	
62 Ethyl acrylate	55		7.829					ND	
63 Methylcyclohexane	83		7.965					ND	
64 1,2-Dichloropropane	63		7.995					ND	
66 Methyl methacrylate	69		8.060					ND	
65 1,4-Dioxane	88		8.068					ND	
67 Dibromomethane	93		8.074					ND	
68 Dichlorobromomethane	83		8.269					ND	
69 2-Nitropropane	41		8.480					ND	
70 2-Chloroethyl vinyl ether	63		8.565					ND	
71 cis-1,3-Dichloropropene	75		8.713					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.859					ND	
73 Toluene	91	9.045	9.047	-0.002	38	4198		0.4251	M
74 trans-1,3-Dichloropropene	75		9.291					ND	
75 Ethyl methacrylate	69		9.345					ND	
76 1,1,2-Trichloroethane	97		9.485					ND	
77 Tetrachloroethene	164		9.564					ND	
78 1,3-Dichloropropane	76		9.649					ND	
79 2-Hexanone	43		9.692					ND	
80 n-Butyl acetate	43		9.818					ND	
81 Chlorodibromomethane	129		9.868					ND	
82 Ethylene Dibromide	107		9.984					ND	
83 3-Chlorobenzotrifluoride	180		10.428					ND	
84 Chlorobenzene	112		10.470					ND	
85 4-Chlorobenzotrifluoride	180		10.519					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 1,1,1,2-Tetrachloroethane	131		10.562					ND	
87 Ethylbenzene	106		10.568					ND	
88 m-Xylene & p-Xylene	106		10.701					ND	
89 o-Xylene	106		11.078					ND	
90 Styrene	104		11.103					ND	
91 Bromoform	173		11.285					ND	
129 Cyclohexanol	57		11.289					ND	
92 2-Chlorobenzotrifluoride	180		11.340					ND	
93 Isopropylbenzene	105		11.449					ND	
94 Cyclohexanone	55		11.539					ND	
96 1,1,2,2-Tetrachloroethane	83		11.753					ND	
95 Bromobenzene	156		11.766					ND	
97 trans-1,4-Dichloro-2-buten	53		11.790					ND	
98 1,2,3-Trichloropropane	110		11.814					ND	
99 N-Propylbenzene	120		11.863					ND	
100 2-Chlorotoluene	126		11.954					ND	
101 3-Chlorotoluene	126		12.021					ND	
102 1,3,5-Trimethylbenzene	105		12.045					ND	
103 4-Chlorotoluene	126		12.076					ND	
104 tert-Butylbenzene	119		12.362					ND	
105 Pentachloroethane	167		12.402					ND	
106 1,2,4-Trimethylbenzene	105		12.422					ND	
107 1,2-dichloro-4-(trifluorom	214		12.459					ND	
108 sec-Butylbenzene	105		12.587					ND	
109 1,3-Dichlorobenzene	146		12.708					ND	
110 4-Isopropyltoluene	119		12.745					ND	
111 1,4-Dichlorobenzene	146		12.812					ND	
113 2,4-Dichloro-1-(triflourom	214		12.830					ND	
112 1,2,3-Trimethylbenzene	105		12.834					ND	
114 2,5-Dichlorobenzotrifluori	214		12.866					ND	
115 Benzyl chloride	91		12.925					ND	
116 n-Butylbenzene	91		13.152					ND	
117 1,2-Dichlorobenzene	146		13.170					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.955					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.101					ND	
120 1,3,5-Trichlorobenzene	180		14.160					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.514					ND	
122 1,2,4-Trichlorobenzene	180		14.788					ND	
123 Hexachlorobutadiene	225		14.928					ND	
124 Naphthalene	128		15.050					ND	
125 1,2,3-Trichlorobenzene	180		15.281					ND	
126 2,4,5-Trichlorotoluene	159		16.047					ND	
127 2,3,6-Trichlorotoluene	159		16.144					ND	
128 2-Methylnaphthalene	142		16.191					ND	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
148 Isooctane	57		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
147 2,6-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
145 2,3-Dichlorotoluene	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
149 Isopropyl ether TIC	1		0.000					ND	
S 131 Xylenes, Total	106		1.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 132 1,3-Dichloropropene, Total	1		0.000					ND	
T 135 Mesityl oxide TIC	83		0.000					ND	
T 134 Methyl n-amyl ketone TIC	43		0.000					ND	
T 133 Tetrahydrofuran TIC	42		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

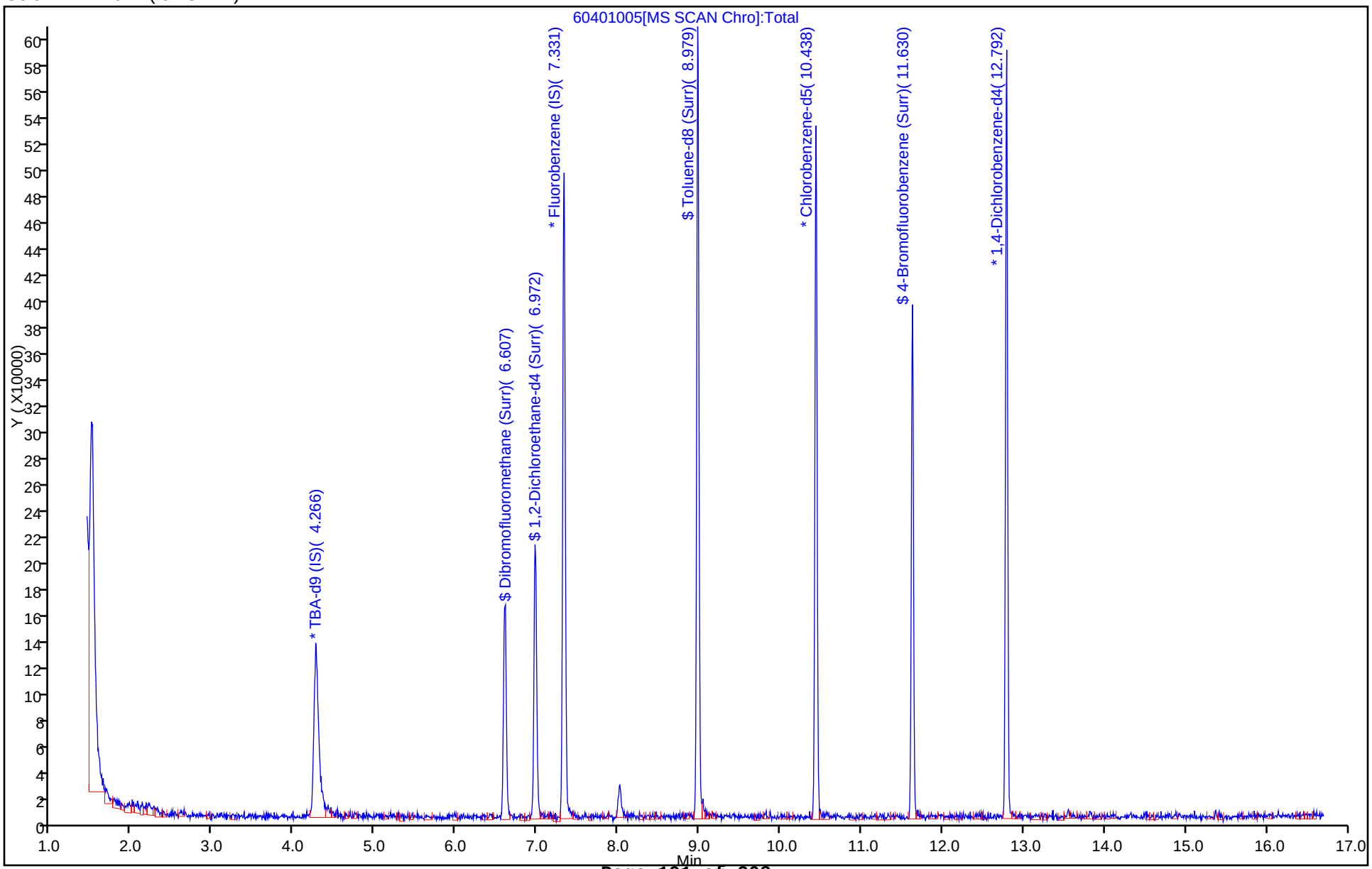
Report Date: 01-Apr-2015 14:57:16 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401005.D

Injection Date:	01-Apr-2015 13:17:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

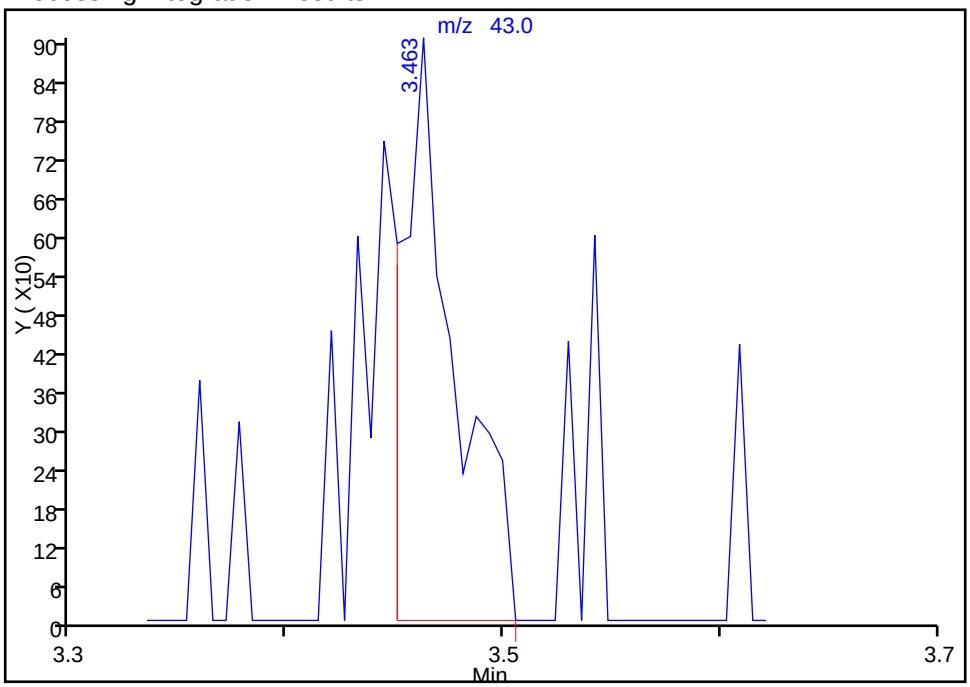
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401005.D				
Injection Date:	01-Apr-2015 13:17:30	Instrument ID:	CHHP6		
Lims ID:	MB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

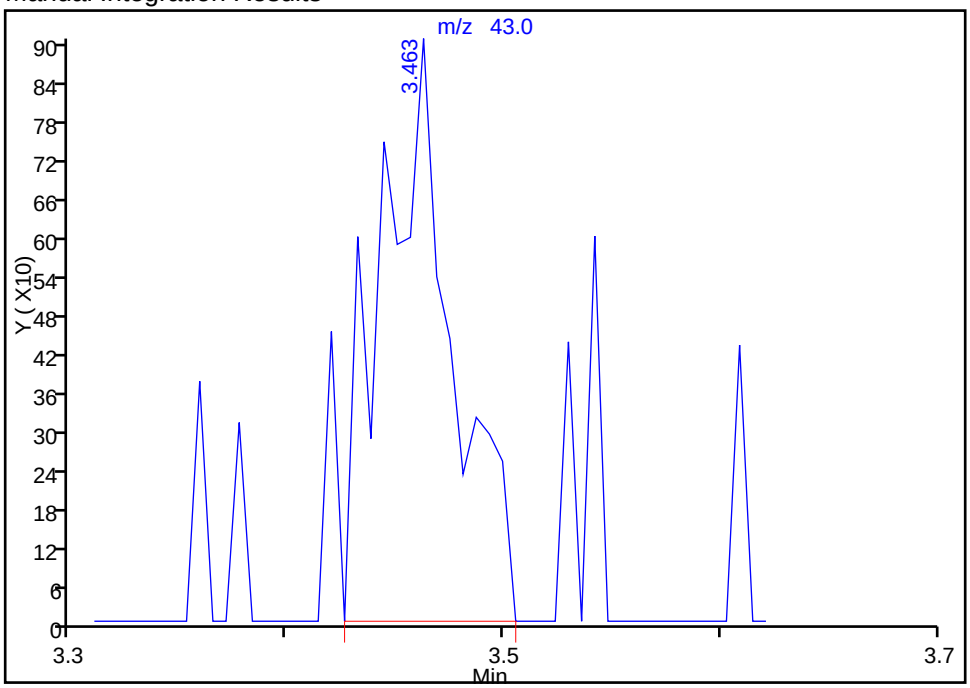
Processing Integration Results

RT: 3.46
Area: 1509
Amount: 1.774923
Amount Units: ng



Manual Integration Results

RT: 3.46
Area: 2101
Amount: 2.471249
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 14:57:16
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

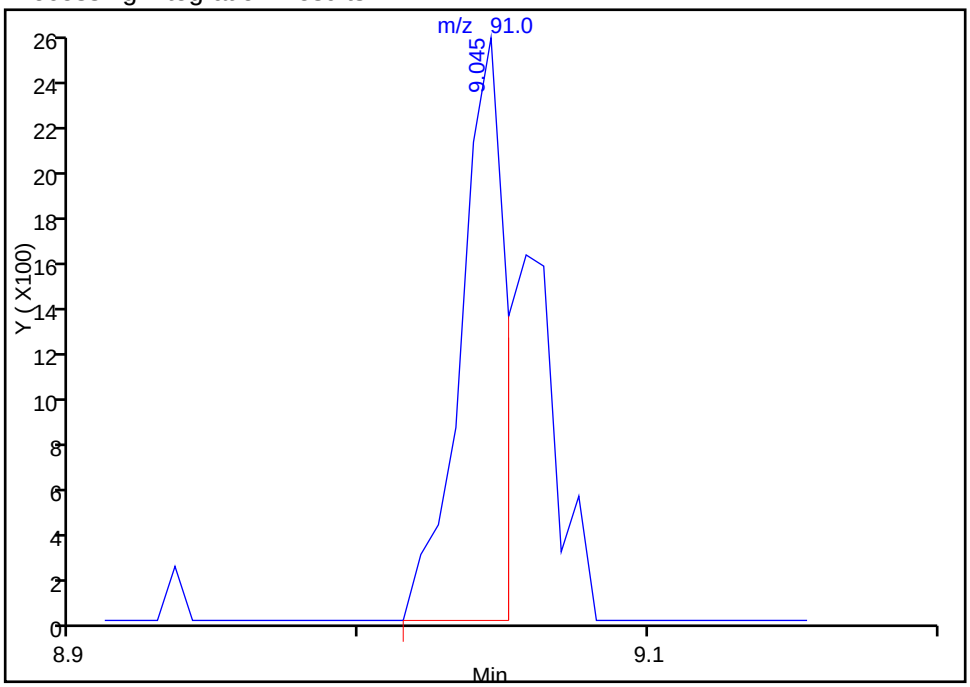
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401005.D
Injection Date: 01-Apr-2015 13:17:30 Instrument ID: CHHP6
Lims ID: MB
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

73 Toluene, CAS: 108-88-3

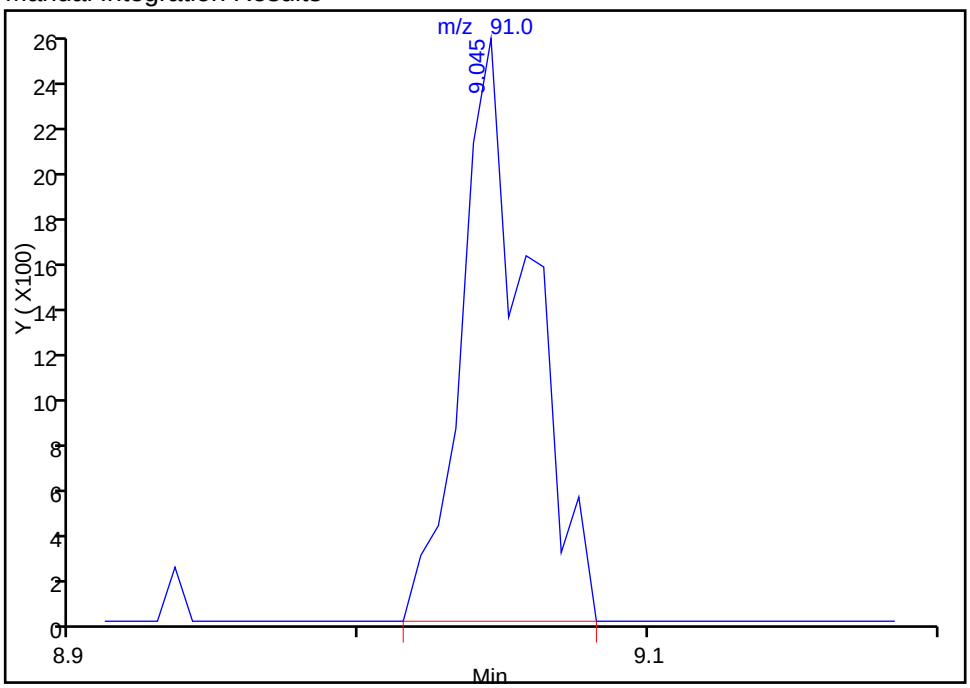
Processing Integration Results

RT: 9.05
Area: 2743
Amount: 0.277745
Amount Units: ng



Manual Integration Results

RT: 9.05
Area: 4198
Amount: 0.425072
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 14:57:16
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137223/8

Matrix: Water Lab File ID: 60401008.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 14:58

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.: 137223 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.16		1.0	0.28
75-01-4	Vinyl chloride	9.52		1.0	0.23
74-83-9	Bromomethane	11.4		1.0	0.31
75-00-3	Chloroethane	9.30		1.0	0.21
75-35-4	1,1-Dichloroethene	8.00		1.0	0.30
67-64-1	Acetone	18.4		5.0	2.5
75-15-0	Carbon disulfide	6.65		1.0	0.21
75-09-2	Methylene Chloride	7.73		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	7.82		1.0	0.17
1634-04-4	Methyl tert-butyl ether	8.58		1.0	0.18
75-34-3	1,1-Dichloroethane	8.21		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	8.34		1.0	0.24
74-97-5	Bromochloromethane	8.58		1.0	0.18
78-93-3	2-Butanone (MEK)	20.9		5.0	0.55
67-66-3	Chloroform	8.36		1.0	0.17
71-55-6	1,1,1-Trichloroethane	7.47		1.0	0.29
56-23-5	Carbon tetrachloride	7.48		1.0	0.14
71-43-2	Benzene	9.52		1.0	0.11
107-06-2	1,2-Dichloroethane	9.99		1.0	0.21
79-01-6	Trichloroethene	8.66		1.0	0.14
78-87-5	1,2-Dichloropropane	8.85		1.0	0.095
75-27-4	Bromodichloromethane	8.58		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.18		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.6		5.0	0.53
108-88-3	Toluene	10.2		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.11		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.5		1.0	0.20
127-18-4	Tetrachloroethene	9.21		1.0	0.15
591-78-6	2-Hexanone	18.7		5.0	0.16
124-48-1	Dibromochloromethane	9.55		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.8		1.0	0.18
108-90-7	Chlorobenzene	9.75		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	8.69		1.0	0.28
100-41-4	Ethylbenzene	9.79		1.0	0.23
1330-20-7	Xylenes, Total	18.8		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.: 180-42445-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137223/8

Matrix: Water Lab File ID: 60401008.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2015 14:58

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.: 137223 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.3		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	12.3		1.0	0.20
107-13-1	Acrylonitrile	117		20	0.55
123-91-1	1,4-Dioxane	294		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)	94		71-118
460-00-4	4-Bromofluorobenzene (Surr)	84		70-118
1868-53-7	Dibromofluoromethane (Surr)	94		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Apr-2015 14:58:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0006281-008
Operator ID: 001562 Instrument ID: CHHP6

Method: \\PITCHROM\ChromData\CHHP6\20150401-6281.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Apr-2015 15:20:10 Calib Date: 28-Jan-2015 16:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP6\20150128-5450.b\60128013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: fergusond Date: 01-Apr-2015 15:20:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.280	4.280	0.000	92	235579	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.326	7.326	0.000	97	535628	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.440	-0.006	90	114547	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.787	0.000	96	186919	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.597	6.597	0.000	93	113316	50.0	46.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.974	6.974	0.000	68	166439	50.0	48.0	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	425525	50.0	47.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.626	11.626	0.000	82	161851	50.0	42.1	
11 Dichlorodifluoromethane	85	1.622	1.610	0.012	99	134596	50.0	47.4	
12 Chloromethane	50	1.768	1.762	0.006	99	178107	50.0	40.8	
13 Vinyl chloride	62	1.902	1.896	0.006	97	184196	50.0	47.6	
14 Butadiene	39	1.944	1.938	0.006	90	175368	50.0	42.5	
15 Bromomethane	94	2.254	2.248	0.006	90	88658	50.0	57.1	
16 Chloroethane	64	2.400	2.388	0.012	99	110240	50.0	46.5	
17 Dichlorofluoromethane	67	2.680	2.668	0.012	97	251775	50.0	44.5	
18 Trichlorofluoromethane	101	2.723	2.698	0.025	81	208275	50.0	47.1	
20 Ethyl ether	59	3.069	3.069	0.000	91	150545	50.0	44.6	
21 Acrolein	56	3.246	3.252	-0.006	99	32958	150.0	61.5	
22 1,1-Dichloroethene	96	3.373	3.379	-0.006	97	120230	50.0	40.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.434	3.428	0.006	96	127247	50.0	41.8	
24 Acetone	43	3.452	3.459	-0.007	99	87203	100.0	92.0	
25 Iodomethane	142	3.592	3.574	0.018	98	171389	50.0	38.5	
26 Carbon disulfide	76	3.696	3.677	0.019	99	296236	50.0	33.3	
29 3-Chloro-1-propene	76	3.957	3.957	0.000	57	64684	50.0	33.1	
30 Methyl acetate	43	3.963	3.957	0.006	97	663756	250.0	286.2	
31 Methylene Chloride	84	4.176	4.170	0.006	93	170032	50.0	38.7	
32 2-Methyl-2-propanol	59	4.407	4.401	0.006	92	131319	500.0	493.3	
33 Acrylonitrile	53	4.541	4.535	0.006	99	708946	500.0	586.3	
35 Methyl tert-butyl ether	73	4.608	4.608	0.000	97	408397	50.0	42.9	
34 trans-1,2-Dichloroethene	96	4.608	4.614	-0.006	70	141484	50.0	39.1	
36 Hexane	57	5.028	5.028	0.000	91	183287	50.0	35.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.234	5.240	-0.006	96	287453	50.0	41.0	
38 Vinyl acetate	43	5.283	5.271	0.012	97	190566	50.0	52.3	
42 2,2-Dichloropropane	77	5.982	5.982	0.000	55	108829	50.0	27.4	
44 2-Butanone (MEK)	43	5.982	5.982	0.000	62	126908	100.0	104.5	
43 cis-1,2-Dichloroethene	96	5.988	5.982	0.006	82	160053	50.0	41.7	
48 Chlorobromomethane	128	6.280	6.274	0.006	95	65566	50.0	42.9	
49 Tetrahydrofuran	42	6.280	6.280	0.000	87	95910	100.0	109.9	
50 Chloroform	83	6.414	6.414	0.000	93	252181	50.0	41.8	
51 1,1,1-Trichloroethane	97	6.578	6.578	0.000	97	171587	50.0	37.4	
52 Cyclohexane	56	6.657	6.663	-0.006	91	254167	50.0	34.3	
53 Carbon tetrachloride	117	6.761	6.761	0.000	92	134461	50.0	37.4	
54 1,1-Dichloropropene	75	6.767	6.773	-0.006	95	199799	50.0	43.6	
55 Isobutyl alcohol	41	6.931	6.931	0.000	93	126014	1250.0	1768.5	
56 Benzene	78	6.986	6.980	0.006	96	632935	50.0	47.6	
57 1,2-Dichloroethane	62	7.059	7.059	0.000	97	218178	50.0	50.0	
59 n-Heptane	43	7.345	7.345	0.000	89	136170	50.0	32.1	
61 Trichloroethene	130	7.722	7.722	0.000	97	131230	50.0	43.3	
63 Methylcyclohexane	83	7.959	7.965	-0.006	92	212307	50.0	35.6	
64 1,2-Dichloropropane	63	7.995	7.995	0.000	95	155646	50.0	44.2	
65 1,4-Dioxane	88	8.068	8.068	0.000	48	32317	1000.0	1467.9	M
67 Dibromomethane	93	8.086	8.074	0.012	94	86330	50.0	54.9	
68 Dichlorobromomethane	83	8.275	8.269	0.006	99	158200	50.0	42.9	
71 cis-1,3-Dichloropropene	75	8.719	8.713	0.006	95	173206	50.0	40.9	
72 4-Methyl-2-pentanone (MIBK	43	8.859	8.859	0.000	96	227418	100.0	88.0	
73 Toluene	91	9.047	9.047	0.000	98	597402	50.0	51.0	
74 trans-1,3-Dichloropropene	75	9.297	9.291	0.006	94	146280	50.0	45.5	
75 Ethyl methacrylate	69	9.345	9.345	0.000	88	166701	50.0	56.4	
76 1,1,2-Trichloroethane	97	9.491	9.485	0.006	90	122243	50.0	57.5	
77 Tetrachloroethene	164	9.564	9.564	0.000	95	96348	50.0	46.1	
78 1,3-Dichloropropane	76	9.649	9.649	0.000	90	219564	50.0	55.5	
79 2-Hexanone	43	9.692	9.692	0.000	93	137828	100.0	93.5	
81 Chlorodibromomethane	129	9.868	9.868	0.000	88	86212	50.0	47.8	
82 Ethylene Dibromide	107	9.984	9.984	0.000	99	104261	50.0	53.9	
83 3-Chlorobenzotrifluoride	180	10.428	10.428	0.000	91	217762	50.0	53.5	
84 Chlorobenzene	112	10.464	10.470	-0.006	91	356236	50.0	48.7	
85 4-Chlorobenzotrifluoride	180	10.525	10.519	0.006	96	197416	50.0	52.1	
86 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	88	109464	50.0	43.4	
87 Ethylbenzene	106	10.568	10.568	0.000	98	214703	50.0	49.0	
88 m-Xylene & p-Xylene	106	10.701	10.701	0.000	100	250501	50.0	46.3	
89 o-Xylene	106	11.078	11.078	0.000	96	265774	50.0	47.8	
90 Styrene	104	11.103	11.103	0.000	96	416530	50.0	50.9	
91 Bromoform	173	11.285	11.285	0.000	94	49792	50.0	51.5	
92 2-Chlorobenzotrifluoride	180	11.340	11.340	0.000	96	228872	50.0	53.9	
93 Isopropylbenzene	105	11.449	11.449	0.000	97	641829	50.0	46.8	
96 1,1,2,2-Tetrachloroethane	83	11.754	11.753	0.001	96	175233	50.0	61.3	
95 Bromobenzene	156	11.766	11.766	0.000	95	134132	50.0	41.0	
97 trans-1,4-Dichloro-2-buten	53	11.790	11.790	0.000	65	45718	50.0	49.7	
98 1,2,3-Trichloropropane	110	11.814	11.814	0.000	84	55114	50.0	57.6	
99 N-Propylbenzene	120	11.863	11.863	0.000	99	164050	50.0	42.0	
100 2-Chlorotoluene	126	11.954	11.954	0.000	94	145193	50.0	42.1	
101 3-Chlorotoluene	126	12.015	12.021	-0.006	97	184915	50.0	51.3	
102 1,3,5-Trimethylbenzene	105	12.045	12.045	0.000	97	580058	50.0	46.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.076	12.076	0.000	98	155941	50.0	44.1	
104 tert-Butylbenzene	119	12.362	12.362	0.000	92	411891	50.0	42.1	
106 1,2,4-Trimethylbenzene	105	12.422	12.422	0.000	97	588598	50.0	45.3	
107 1,2-dichloro-4-(trifluorom	214	12.453	12.459	-0.006	98	172187	50.0	47.4	
108 sec-Butylbenzene	105	12.587	12.587	0.000	95	671060	50.0	44.4	
109 1,3-Dichlorobenzene	146	12.708	12.708	0.000	95	286413	50.0	44.7	
110 4-Isopropyltoluene	119	12.745	12.745	0.000	96	515949	50.0	42.1	
111 1,4-Dichlorobenzene	146	12.812	12.812	0.000	89	296579	50.0	44.7	
113 2,4-Dichloro-1-(triflourom	214	12.824	12.830	-0.006	97	184416	50.0	50.6	
114 2,5-Dichlorobenzotrifluori	214	12.872	12.866	0.006	97	194323	50.0	48.4	
116 n-Butylbenzene	91	13.152	13.152	0.000	98	509431	50.0	43.2	
117 1,2-Dichlorobenzene	146	13.164	13.170	-0.006	93	296022	50.0	46.2	
118 1,2-Dibromo-3-Chloropropan	75	13.961	13.955	0.006	67	28397	50.0	55.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.101	14.101	0.000	99	917648	150.0	152.6	
121 2,3- & 3,4- Dichlorotoluen	125	14.514	14.514	0.000	99	696707	100.0	106.0	
122 1,2,4-Trichlorobenzene	180	14.788	14.788	0.000	93	214007	50.0	43.1	
123 Hexachlorobutadiene	225	14.934	14.928	0.006	96	72663	50.0	37.4	
124 Naphthalene	128	15.050	15.050	0.000	98	515248	50.0	60.4	
125 1,2,3-Trichlorobenzene	180	15.275	15.281	-0.006	95	206890	50.0	49.8	
126 2,4,5-Trichlorotoluene	159	16.047	16.047	0.000	0	130855	50.0	42.8	
127 2,3,6-Trichlorotoluene	159	16.144	16.144	0.000	94	131402	50.0	48.2	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	94.1	
S 130 1,2-Dichloroethene, Total	96				0		100.0	80.8	
S 132 1,3-Dichloropropene, Total	1				0		100.0	86.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

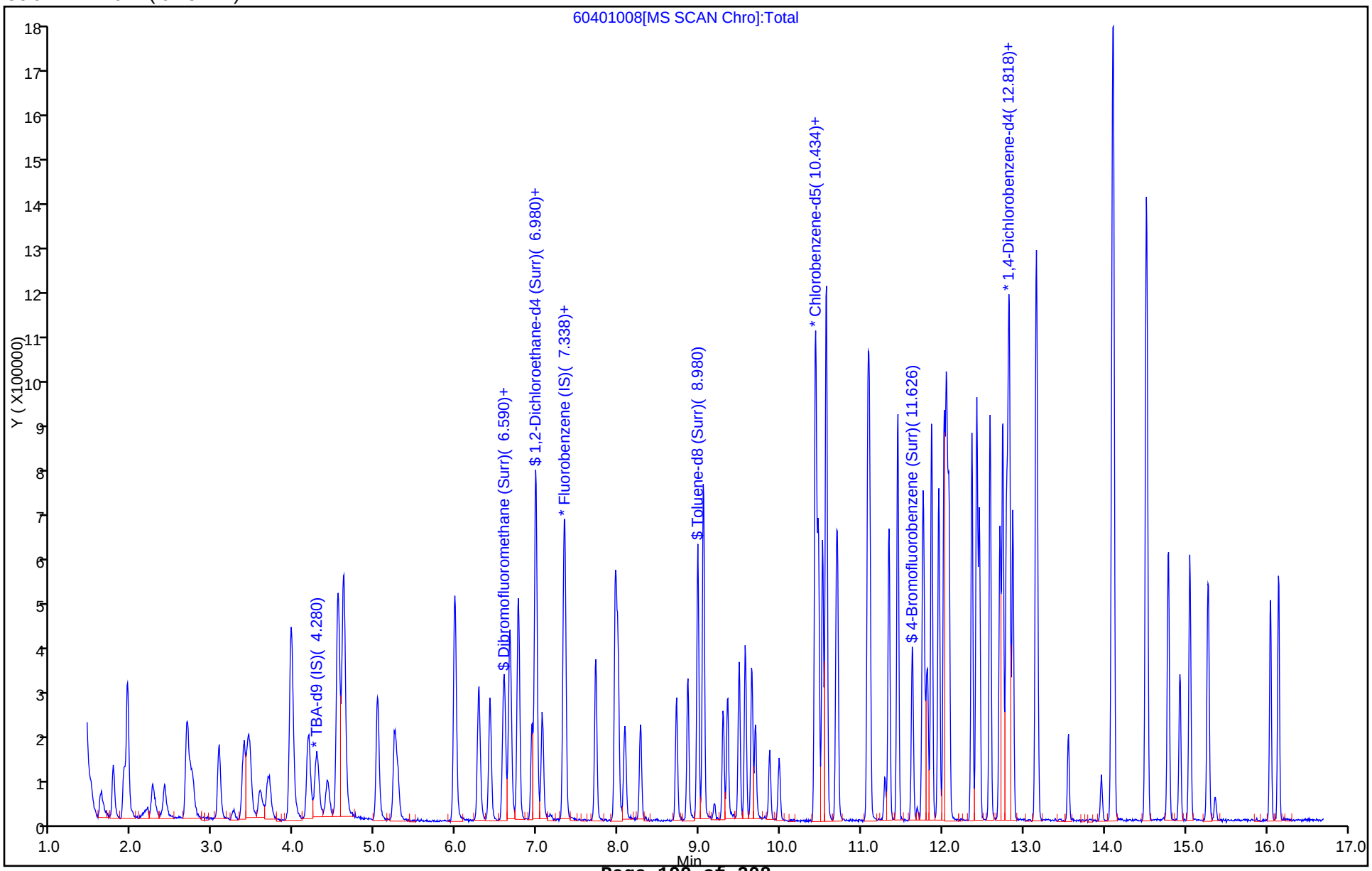
VOA8260VOA2ND_00109	Amount Added:	2.00	Units: uL	
voaWKet2 Rest_00002	Amount Added:	2.00	Units: uL	
voaWVA2nd Res_00006	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00004	Amount Added:	2.00	Units: uL	
VOAACRO2ND_00007	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Apr-2015 15:20:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401008.D				
Injection Date:	01-Apr-2015 14:58:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

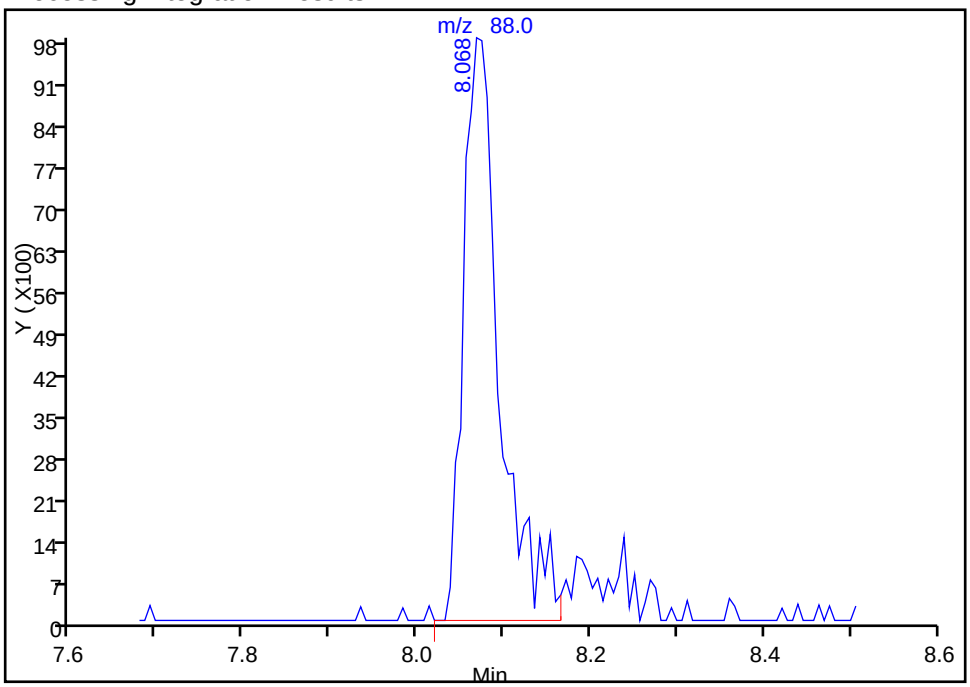
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP6\20150401-6281.b\60401008.D				
Injection Date:	01-Apr-2015 14:58:30	Instrument ID:	CHHP6		
Lims ID:	LCS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

65 1,4-Dioxane, CAS: 123-91-1

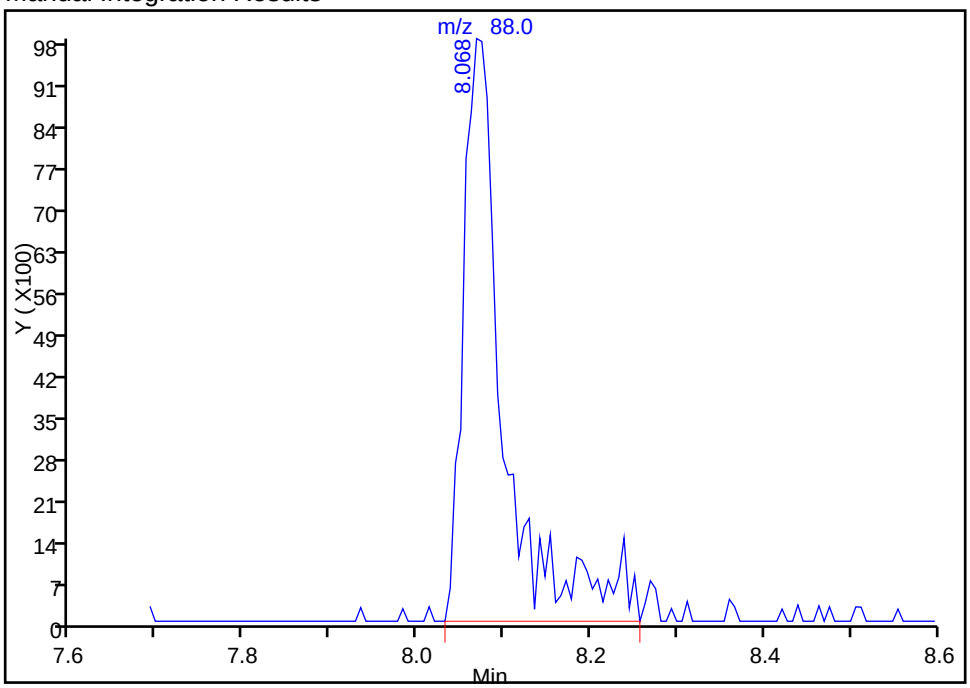
Processing Integration Results

RT: 8.07
Area: 28688
Amount: 1303.0991
Amount Units: ng



Manual Integration Results

RT: 8.07
Area: 32317
Amount: 1467.9397
Amount Units: ng



Reviewer: fergusond, 01-Apr-2015 15:20:10
Audit Action: Manually Integrated
Audit Reason: Peak Tail

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Instrument ID: CHHP6 Start Date: 01/28/2015 11:55

Analysis Batch Number: 131929 End Date: 01/28/2015 18:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-131929/4		01/28/2015 11:55	1	60128004.D	DB-624 0.18(mm)
IC 180-131929/6		01/28/2015 13:58	1	60128006.D	DB-624 0.18(mm)
IC 180-131929/7		01/28/2015 14:21	1	60128007.D	DB-624 0.18(mm)
ICIS 180-131929/8		01/28/2015 14:45	1	60128008.D	DB-624 0.18(mm)
IC 180-131929/9		01/28/2015 15:09	1	60128009.D	DB-624 0.18(mm)
IC 180-131929/10		01/28/2015 15:33	1	60128010.D	DB-624 0.18(mm)
IC 180-131929/11		01/28/2015 15:57	1	60128011.D	DB-624 0.18(mm)
IC 180-131929/12		01/28/2015 16:21	1	60128012.D	DB-624 0.18(mm)
IC 180-131929/13		01/28/2015 16:44	1	60128013.D	DB-624 0.18(mm)
ICV 180-131929/18		01/28/2015 18:43	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42445-2

SDG No.:

Instrument ID: CHHP6 Start Date: 04/01/2015 11:02

Analysis Batch Number: 137223 End Date: 04/01/2015 22:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-137223/4		04/01/2015 11:02	1	60401004.D	DB-624 0.18(mm)
CCVIS 180-137223/2		04/01/2015 11:45	1	60401002.D	DB-624 0.18(mm)
MB 180-137223/5		04/01/2015 13:17	1	60401005.D	DB-624 0.18(mm)
ZZZZZ		04/01/2015 13:56	1		DB-624 0.18(mm)
180-42445-13	HD-QC6-0/1-2	04/01/2015 14:32	1	60401007.D	DB-624 0.18(mm)
LCS 180-137223/8		04/01/2015 14:58	1	60401008.D	DB-624 0.18(mm)
ZZZZZ		04/01/2015 15:22	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 15:46	1		DB-624 0.18(mm)
180-42445-14	HD-MW-167-0/1-0	04/01/2015 16:37	1	60401012.D	DB-624 0.18(mm)
ZZZZZ		04/01/2015 17:01	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 17:25	20		DB-624 0.18(mm)
ZZZZZ		04/01/2015 17:49	12.5		DB-624 0.18(mm)
ZZZZZ		04/01/2015 18:13	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 18:37	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 19:01	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 19:25	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 19:49	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 20:13	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 20:37	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 21:01	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 21:25	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 21:49	1		DB-624 0.18(mm)
ZZZZZ		04/01/2015 22:13	1		DB-624 0.18(mm)

Shipping and Receiving Documents

180-42445 Waybill

D:KPDA (610) 337-9992
ECEIPT
ERICA
1008 WEST 9TH AVE

KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 26MAR15
ACTWGT: 54.0 LB
CAD: 8490299/INET3610

BILL RECIPIENT

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

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

537J1/879A/EE4B

FedEx
Express

J151211F022301uv

3 of 3
MPS# 0263 7732 2673 2325
Mstr# 7732 2673 1031 0201

FRI - 27 MAR 3:00P
STANDARD OVERNIGHT

EV AGCA

15238
PA-US PIT

Uncorrected temp 1.9 °C
Thermometer ID 6
CF 0 Initials RGB
PT-WI-SR-001 effective 7/26/13


ORIGIN ID:KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1008 WEST 9TH AVE
KING OF PRUSSIA, PA 19406
UNITED STATES US
SHIP DATE: 26MAR15
ACTWGT: 38.0 LB
CAD: 8490299/INET3610
BILL RECIPIENT
SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR
PITTSBURGH PA 15238
(412) 963-7058
INV:
PO:
REF:
DEPT:
Uncorrected temp 2.1 °C
Thermometer ID 2
CF 0.0 Initials KB
PT-WI-SR-001 effective 7/26/13
King of Prussia
450
FedEx Express
2 of 3
7732 2673 2141
7732 2673 1031
FRI - 27 MAR 3:
STANDARD OVERNI
0201
AGCA
152
PA-US P
Uncorrected temp
Thermometer ID
F
Initials
1.3 °C
1 of 3
TRK# 0201 7732 2673 1031
MASTER
FRI - 27 MAR 3:00P
STANDARD OVERNIGHT
EV AGCA
15238
PA-US PIT
King of Prussia
450

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: 3/26/2015	COC No: TAP2015032602
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			10012.16.0005
Harrisburg, PA 17110	Calendar (C) or Work Days (W) _____			
(717) 901-8180 Phone	TAT if different from Below: Standard			r No. 2
(717) 657-1611 FAX	■ 2 weeks			
Project Name: Start Up Sampling Event 11	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	☐ 1 day			

180-42445 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Alkalinity (Carb/Bicarb), SO4, Cl, NO3 2320B/300.0	Total Na, Ca, K, and Mg (SW846 6020A)	Sample Specific Notes:
HD-QC5-0/1-2	3/26/15	12:00	Trip Blank	Water	2	X			
HD-MW-96S-0/1-0	3/26/15	9:35	Groundwater	Water	5	X	X	X	
HD-MW-96D-0/1-0	3/26/15	8:55	Groundwater	Water	5	X	X	X	
HD-MW-98I-0/1-0	3/26/15	14:25	Groundwater	Water	5	X	X	X	
HD-MW-98I-0/1-0 MS	3/26/15	14:25	Groundwater	Water	5	X	X	X	
HD-MW-98I-0/1-0 MSD	3/26/15	14:25	Groundwater	Water	5	X	X	X	
HD-MW-98S-0/1-0	3/26/15	13:45	Groundwater	Water	5	X	X	X	
HD-MW-39D-0/1-0	3/26/15	12:20	Groundwater	Water	5	X	X	X	
HD-MW-74S-0/1-0	3/26/15	10:50	Groundwater	Water	5	X	X	X	
HD-MW-50D-0/1-0	3/26/15	10:32	Groundwater	Water	5	X	X	X	
HD-MW-51S-0/1-0	3/26/15	14:42	Groundwater	Water	5	X	X	X	
HD-QC2-0/1-1	3/26/15	8:00	Groundwater	Water	5	X	X	X	
HD-QC1-0/1-3	3/26/15	15:05	Rinse Blank	Water	5	X	X	X	
HD-QC1-0/1-4	3/26/15	15:10	Field Blank	Water	5	X	X	X	
					Number of Containers	3	1	1	
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Unpreserved 7=Zinc Acetate & NaOH						2	1	4	
					Field Filter	N	N	N	

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 ☐ Ve For _____ Months

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

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 3/26/15 15:20	Received by:	Company: T.A	Date/Time: 3/26/15 15:20
Relinquished by:	Company: TA	Date/Time: 3/26/15 1655	Received by: DeMarie Watson	Company: TAP	Date/Time: 3-27-15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time: 0:20

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: 3/26/2015	COC No: TAP2015032601
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.: 10012.26.0005
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			
Project Name: SPBA Sampling	☐ 1 week			SDG No.
Site: Harley-Davidson, York PA	■ 5 days			
Quote # 18000557	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Sample Specific Notes:
HD-QC6-0/1-2	3/26/15	12:01	Trip Blank	Water	2	X	
HD-MW-167-0/1-0	3/26/15	10:10	Groundwater	Water	3	X	5 Day TAT
Number of Containers						3	
Preservation Used: 1=Ice, 2=HCL, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Unpreserved 7=Zinc Acetate & NaOH						2	
Field Filter						N	

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: 3/26/15 15:20	Received by: Barbara Watson	Company: TAP	Date/Time: 3-27-15
Relinquished by:	Company: TA	Date/Time: 3/26/15 1655	Received by:	Company:	Date/Time: 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-42445-2

Login Number: 42445

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Watson, Debbie

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	